LOCAL PLANNING AGENCY
THURSDAY, DECEMBER 19, 2024 – 2:00 PM
10451 GULF BOULEVARD TREASURE ISLAND, FL 33706

Commission Chambers - 2nd Floor City Hall

MEETING NOTICE AND AGENDA

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1. **MEETING CALLED TO ORDER BY PRESIDING OFFICER**
2. **PLEDGE ALLEGIANCE**
3. **CELL PHONE ANNOUNCEMENT**
4. **ROLL CALL**
5. **APPROVAL OF MINUTES**
6. **PRESENTATION OF ITEMS**

6.A Request to approve Resolution 2024-09 recommending adoption of Ordinance 2024-27.

Resolution 2024-09 LPA Ordinance 2024-27 (chapter 68 Hurricane) (02780885).pdf
Ordinance 2024-27 (amending chapter 68 hurricane relief) Revised BMO (02780875-3).pdf
2024 1217 COTI - Business Impact Estimate Ord 2024-27.pdf

6.B Request to approve Resolution 2024-05 to Adopt the Terrain Modification / Fill Program.
Res 2024-05 LPA re TMP (02744915).pdf
ORDINANCE 2024-11 Section A (adopting Appendix B - Terrain Modification Manual) (02712774-2).pdf
Ordinance 2024-11 SECTION B TI_Terrain Modification Manual.pdf
Ordinance 2024-12 (amending chapter 8) (02711020-11) x.pdf
Ordinance 2024-13 (amending chapter 54) (02738848-3).pdf
Ordinance 2024-14 (amending chapter 66) (02711314-11).pdf
Ordinance 2024-15 (amending chapter 68) (02743163-5).pdf
Ordinance 2024-16 (amending chapter 69) (02733701-5) x.pdf
Ordinance 2024-17 (amending chapter 75) (02738860-3).pdf

Ordinance 2024-18 (amending chapter 76) (02741664-3).pdf

7. **LOCAL PLANNING AGENCY ISSUES, COMMENTS, OR DISCUSSION**
8. **REPORTS OF CITY ATTORNEY, STAFF AND BOARD MEMBERS**
9. **NEXT LPA MEETING**
10. **PUBLIC COMMENTS**
11. **ADJOURNMENT**

AGENDA ITEM NO. 6.A

Item Cover Page

LOCAL PLANNING AGENCY AGENDA ITEM REPORT

DATE: December 19, 2024

SUBMITTED BY: Kathryn Younkin, Community Development

ITEM TYPE: Resolutions

AGENDA SECTION: PRESENTATION OF ITEMS

SUBJECT:

Request to approve Resolution 2024-09 recommending adoption of Ordinance 2024-27.

BACKGROUND:

In response to the extreme damage caused to structures in the city in the wake of three hurricanes in 2024, and two major hurricanes which damaged most structures in the city, staff has recommended the changes outlined below to enhance the ability to reconstruct and elevate structures while providing certainty to the applicants.

POLICY/PURPOSE:

To align the Land Development Regulations with the Florida Building Code and Local Floodplain regulations and to provide relief to property owners in the post storm / reconstruction environment.

STRATEGIC PLAN RELEVANCE:

Goal 1: Foster a vibrant business community

Objective 2: Implement the Economic Development Vision

Bold Action 1: Perform a review of local ordinances and Land Development Regulations

Bold Action 2: Update the City's Comprehensive Plan, local ordinances, and Land Development Regulations

ANALYSIS/DISCUSSION:

This is the same Ordinance reviewed by the Board on

November 21, 2024 and recommended for approval. Due to an error in numbering the Ordinance this item is being brought back to the Board with a new Resolution number and Ordinance number.

Staff has brought forward four sections of code for your review.
The proposed changes to Chapter 68 include:

Amending 68-460 “Minimum Yard Regulations for Accessory Structures” To Rename It “Minimum Yard Regulations for Accessory Structures and Accessory Equipment” In order to make the requirements for mechanical equipment consistent with the local floodplain ordinance and the Florida Building Code. Under the codes mechanical equipment is now required to be elevated on freestanding or attached stands and that may increase the distance from the building and will increase the height.

Amending section 68-482 “accessory uses generally” to allow certain accessory uses to remain for a specific time period under specific conditions. These are docks, lifts, pools and pool equipment which are considered accessory uses. Under our code an accessory use cannot be in place without the principal use. In a time when many buildings are being demolished in advance of having a permit submitted for reconstruction, staff wanted to create a code provision to allow those uses to remain while still protecting the public by fencing them off and requiring power to pool pumps, so that the pools and docks are secured from the public and do not become a nuisance.

Amending section 68-512 “regulation” to clarify the language regarding nonconforming residential and hotel/motel density and square footage for structures damaged by natural disaster; to clarify that the number of units and the square footage may be based on the condition existing as of 1995, or the current code, whichever is more favorable.

Creating section 68-542 “allowable encroachments” to allow for the stairs and meter platforms necessary to access an existing structure when it is being elevated to be installed in the setbacks or to allow the meter stair and platform to be installed in the setbacks if the building code requires the elevation of the meter.

FUNDING: No funding is requested at this time.

MOTION:

I move to approve Resolution 2024-09 recommending that the

City Commission approve Ordinance 2024-27.

ATTACHMENTS:
Resolution 2024-09 LPA Ordinance 2024-27 (chapter 68 Hurricane) (02780885).pdf
Ordinance 2024-27 (amending chapter 68 hurricane relief) Revised BMO (02780875-3).pdf
2024 1217 COTI - Business Impact Estimate Ord 2024-27.pdf

LOCAL PLANNING AGENCY
RESOLUTION NO. 2024-09

A RECOMMENDATION TO THE CITY OF TREASURE ISLAND CITY COMMISSION FOR THE APPROVAL OF AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 68 "ZONING REGULATIONS" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES, BY AMENDING SECTION 68-460 "MINIMUM YARD REGULATIONS FOR ACCESSORY STRUCTURES" TO RENAME THE SECTION "MINIMUM YARD REGULATIONS FOR ACCESSORY STRUCTURES AND ACCESSORY EQUIPMENT" AND BY ADDING LANGUAGE TO RECOGNIZE THE ELEVATION REQUIREMENTS FOR EQUIPMENT IN THE CURRENT FLORIDA BUILDING CODE AND THE CITY'S CHAPTER 66; AMENDING SECTION 68-482 "ACCESSORY USES GENERALLY" TO ADD A TIME LIMITED EXEMPTION TO ALLOW DOCKS, LIFTS, POOLS AND POOL EQUIPMENT TO REMAIN ON SITE WITHOUT A PRINCIPAL USE UNDER SPECIFIC CONDITIONS; AMENDING SECTION 68-512 "REGULATION'' TO CLARIFY THAT WHEN NONCONFORMING RESIDENTIAL OR HOTEL/MOTEL STRUCTURES ARE ALLOWED TO REPAIR OR RECONSTRUCT TO REFLECT THAT EITHER THE NUMBER OF UNITS OR SQUARE FOOTAGE THAT EXISTED AS OF SEPTEMBER 19, 1995 OR THE CURRENT DENSITY OR SQUARE FOOTAGE IS ALLOWED, WHICHEVER IS GREATER; ADDING SECTION 68-542 "ALLOWABLE ENCROACHMENTS" TO PROVIDE FOR RELIEF FROM THE SETBACK REQUIREMENT FOR EXISTING STRUCTURES BEING ELEVATED OR NEW METERS ON EXISTING STRUCTURES TO BE ELEVATED TO MEET THE CODE AND FL BUILDING CODE AS A MINIMAL ENCROACHMENT INTO THE SETBACKS; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Section 163.3174, Fla. Stat., provides for the establishment of a "local planning agency"; and

WHEREAS, Section 163.3174, Fla. Stat., describes the duties and responsibilities of a Local Planning Agency, which include preparing and making recommendations of comprehensive plan amendments and proposed land development regulation amendments; and

WHEREAS, on November 21, 2024, the Planning and Zoning Board, sitting as the Local Planning Agency, reviewed the proposed amendments provided herein and found the amendments consistent with the Treasure Island Comprehensive Plan and its elements; and

WHEREAS, on November 21, 2024, the Planning and Zoning Board, sitting as the Local Planning Agency, held a public hearing on Ordinance 2024-12 amending Chapter 68, Zoning Regulations and has considered the information received at said public hearing; and

WHEREAS, on November 21, 2024, the Planning and Zoning Board, sitting as the Local Planning Agency, recommended approval of Ordinance 2024-12 to the City Commission; and

WHEREAS, on December 19, 2024, the Planning and Zoning Board, sitting as the Local Planning Agency, was presented with the same Ordinance as reviewed on November 21, 2024 which now has corrected Ordinance number 2024-27, and now recommended approval of Ordinance 2024-27 to the City Commission; and

NOW, THEREFORE, BE IT RESOLVED by the Local Planning Agency of the City of Treasure Island, Florida, in a public meeting assembled:

The City of Treasure Island Local Planning Agency hereby transmits to the City Commission the proposed amendments to the Land Development Regulations, as set forth in Exhibit “A”, Ordinance 2024-27, with the recommendation to approve said amendments.

PASSED AND DULY ADOPTED BY THE CITY OF TREASURE ISLAND LOCAL PLANNING AGENCY, 19th Day of DECEMBER 2024.

TREASURE ISLAND LOCAL PLANNING AGENCY

_____ _____

Richard Harris, Chair Date
Local Planning Agency

ORDINANCE 2024-27

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 68 "ZONING REGULATIONS" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES, BY AMENDING SECTION 68-460 "MINIMUM YARD REGULATIONS FOR ACCESSORY STRUCTURES" TO RENAME THE SECTION "MINIMUM YARD REGULATIONS FOR ACCESSORY STRUCTURES AND ACCESSORY EQUIPMENT" AND BY ADDING LANGUAGE TO RECOGNIZE THE ELEVATION REQUIREMENTS FOR EQUIPMENT IN THE CURRENT FLORIDA BUILDING CODE AND THE CITY'S CHAPTER 66; AMENDING SECTION 68-482 "ACCESSORY USES GENERALLY" TO ADD A TIME LIMITED EXEMPTION TO ALLOW DOCKS, LIFTS, POOLS AND POOL EQUIPMENT TO REMAIN ON SITE WITHOUT A PRINCIPAL USE UNDER SPECIFIC CONDITIONS; AMENDING SECTION 68-512 "REGULATION'' TO CLARIFY THAT WHEN NONCONFORMING RESIDENTIAL OR HOTEL/MOTEL STRUCTURES ARE ALLOWED TO REPAIR OR RECONSTRUCT TO REFLECT THAT EITHER THE NUMBER OF UNITS OR SQUARE FOOTAGE THAT EXISTED AS OF SEPTEMBER 19, 1995 OR THE CURRENT DENSITY OR SQUARE FOOTAGE IS ALLOWED, WHICHEVER IS GREATER; ADDING SECTION 68-542 "ALLOWABLE ENCROACHMENTS" TO PROVIDE FOR RELIEF FROM THE SETBACK REQUIREMENT FOR EXISTING STRUCTURES BEING ELEVATED OR NEW METERS ON EXISTING STRUCTURES TO BE ELEVATED TO MEET THE CODE AND FL BUILDING CODE AS A MINIMAL ENCROACHMENT INTO THE SETBACKS; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, in August, September and October of 2024 the City of Treasure Island ("City") was been affected by three hurricanes, two of which caused major structure damage throughout the City; and

WHEREAS, the City wished to provide relief from some of the existing City Code of Ordinances and Land Development Regulations ("Code"), in this time of substantial repair, elevation, and reconstruction; and

WHEREAS, the City wishes to encourage rebuilding and elevating construction to meet the floodplain regulations of the Code and Florida Building Code by removing buildings from the floodplain thereby reducing risk of future building flooding; and

WHEREAS, the City evaluated the setback requirements in Sec. 68-460 for allowances for mechanical equipment and wishes to bring the zoning code into compliance with the Code, including its floodplain regulations, and the Florida Building Code; and

WHEREAS, the City noted that obtaining financing, designs, and contractors for reconstruction may add to the timeline for rebuilding in this post-storm recovery period and that the current requirements for accessory uses (specifically docks, lifts, pools with pool equipment) in Sec. 68-482 require a principal use, and therefore, the City desires allow these three specific accessory use items to remain for a two-year during the post-storm period recovery period while having with certain provisions to protect the public; and

WHERESAS, the Code contains specific provisions for residential and hotel/motel structures damaged or destroyed by hurricane that allow them to retain the number of units and square footage that existed as of September 19, 1995, and the City wishes to clarify that this option would also include the ability to use the current number of units or the current square footage, whichever is greater, in order to reduce the non-conformity and encourage reconstruction and elevation of structures to meet current regulations; and

WHEREAS, the Code does not currently have any provisions to allow building elements such as stairs, landings, and meter platforms to encroach into the setbacks and there are a substantial number of existing structures seeking to elevate the structure already constructed at the setback line or encroaching into the setbacks. In order to meet current flood elevations, those elevated existing structures would be required to provide stairs, landings, and meter platforms, and therefore the City desires to provide relief to the setbacks in order to encourage the elevation of structures; and

WHEREAS, the Code does not currently have any provisions to allow new meters and meter platforms to encroach into the setbacks, there are a substantial number of existing structures that need new elevated meters, but the structure is already constructed at the setback line or encroach into the setbacks. In order to meet current flood elevations the City desires to provide relief to the setbacks; and

WHEREAS, the Local Planning Agency met on December 19, 2024, and recommended approval of the following revisions to the Land Development Regulations; and

WHEREAS, the City Commission has reviewed City's Comprehensive Plan and finds that revisions are consistent with the City's Comprehensive Plan; and

WHEREAS, the City Commission has reviewed the relevant current Code provisions of the City of Treasure Island and finds that certain modifications are necessary and desirable; and

WHEREAS, the City Commission determines that the adoption of this Ordinance is in the interest of the public health, safety and welfare of the City and its residents.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND DOES ORDAIN:

SECTION 1. *The above recitals are true, correct, and incorporated by reference.*

SECTION 2. That Section 68-460 of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-460. Minimum yard regulations for accessory structures and accessory equipment.

Accessory structures in residential zoning districts without kitchen or bathroom facilities and accessory equipment may be erected in accordance with the following requirements:

(1) Accessory structures other than those exempted pursuant to section 68-457 shall comply with all setback requirements of the principal structure.

(2) Air conditioning units, pool equipment, water softening units, and propane gas tanks and similar mechanical equipment may be located within a required side or rear yard; provided, however, that such equipment shall be located adjacent to the principal structure and no closer than three feet to any lot line. Such equipment, including mounting pad, shall not exceed 60 inches above finished grade level, unless a greater height is required under chapter 8, chapter 66 or the Florida Building Code. If required to be elevated by chapter 8, chapter 66 or the Florida Building Code this equipment may encroach further into the setback only if required in order to elevate the equipment. This height limitation shall not apply to restrict the installation of air conditioning units to more than 60 inches above existing grade when the installation of such air conditioning unit is required by chapter 66.

(3) Reserved.

SECTION 3. That Section 68-482 of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Accessory uses shall be clearly supplementary and incidental to the principal use of the lot and shall be located on the same lot as the principal use to which it is

subordinate. All such incidental services shall be located within the principal building and no part thereof shall have an exclusive entrance to the street or public way.

Accessory uses exemption. In response to the number of structures damaged by Hurricane Helene and Hurricane Milton in September and October of 2024, the specific accessory uses of docks, lifts and pools with pool equipment shall be allowed to remain through October 8, 2026, without a principal use constructed on the property. In order to be retained a separate permit for a safety barrier which meets the requirements of F.S. § 515.29 must be installed and maintained so as to ensure that there is no access to seawater or pool water. If pool equipment or a lift is retained on the property, then a permit to install a temporary power pole is required.

SECTION 4. That Section 68-512 of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

No existing building or premises devoted to a nonconforming use shall be enlarged, extended, reconstructed, substituted or structurally altered, except when changed to a conforming use or when required to do so by law and as follows:

(1) *Restoration.* Any nonconforming structure which has been damaged or made unsafe or unusable to an extent less than 50 percent of its fair market value may be restored or reconstructed for its intended use provided the floor area of such use, building or structure shall not exceed the floor area which existed prior to such damage. All repairs shall be substantially completed within one year after damages occur or such use shall not be rebuilt except as a conforming use.

(2) *Repairs.* Normal maintenance, repair, and incidental alteration of a structure containing a nonconforming use is permitted, provided that it does not extend the area or volume of space occupied by the nonconforming use. It is the intent of these regulations to encourage the conservation, maintenance, and rehabilitation of existing residential land uses. Therefore, a building or other structure containing nonconforming residential uses may be altered in any way to improve interior livability; provided that no structural alterations shall be made which would increase the number of dwelling units.

(3) *Site alterations.* Site alterations, including but not limited to off-street parking rearrangement or enlargement of nonbuilding recreational facilities of a nonconforming use are permitted, provided that the proposed alterations do not increase the degree of nonconformity. In order to encourage rehabilitation or redevelopment of an existing nonconforming use, the planning and zoning board may approve a site plan which includes an increase in gross floor area of up to ten percent of the existing gross floor area (not to exceed the maximum allowable under the property's designated zoning district), subject to a finding by the board that the overall degree of nonconformity on the site is significantly reduced and that additional adverse impacts will not be created. In conjunction

with this site plan approval, the board may grant an exemption from variance requirements for any and all remaining nonconformities. These site plan and variance exemption provisions may be applied only once to any specific property.

(4) *Exception.* Restoration, repairs and site alterations can be made to existing single-family dwellings in zoning districts which allow such single-family dwellings, provided that such restorations, repairs or site alterations do not increase the number of dwelling units, increase density, increase the degree of the nonconformity, or result in a different type of nonconformity from that which is already considered to be grandfathered.

(5) *Nonconforming density.* Existing residential dwelling, tourist dwelling, and hotel/motel uses which are nonconforming as to density shall not require a variance to permit the otherwise allowable addition or alteration to the building or site, provided that the density is not increased.

(6) *Repair and reconstruction of existing commercial, residential, and hotel/motel structures and uses.*

a. Residential structures/uses and their permitted accessory uses are grandfathered in the RU-75, RM-15, RFM-30, RFH-50, and CG zoning districts.
b. Hotel/motel structures/uses and their permitted accessory uses are grandfathered in the RFM-30, RFH-50, and CG zoning districts.
c. In the event that any residential or hotel/motel structure is damaged or destroyed by a hurricane, tornado, fire, flood, wind, storm or other natural disaster, it can be repaired or reconstructed in a manner which guarantees that each unit and all permitted accessory uses can be restored to the same square footage which existed as of September 19, 1995. <u>If the F.A.R allowed in the current Code is greater than the September 19, 1995 level, then the square footage or F.A.R. may increase up to the currently allowed maximum so long as the project meets all provisions of the Code</u>. <u>If the number of units allowed in the current Code is greater than the September 19, 1995 level, then the number of units may increase up to the currently allowed maximum so long as the project meets all other provisions of the Code.</u> Repairs and reconstruction shall adhere to all flood management regulations in effect. In the event that such flood regulations require the elevation of a structure, the city shall permit the height of the structure to be increased the minimum necessary to accommodate the required flood elevation. If the repairs or reconstruction cannot be made in accordance with these Code provisions, the city shall grant the owners relief from such Code provisions to permit the grandfathered units and all existing legally permitted accessory uses to be restored without creating a greater nonconformity than existed prior to the disaster.
d. Nothing contained in this section shall relieve the owner/developer of the obligation to restore the damaged structure in compliance with the building

code as adopted in section 64-1 and Life Safety Code as adopted in section 64-1. Except as provided above in subsection c. , n~~N~~othing contained herein shall be construed to permit more dwelling units or an increase in square footage of the structure than existed prior to September 19, 1995. The burden of proof as to what existed prior to September 19, 1995, shall rest with the property owner based upon a site plan on file at city hall. If no site plan is presently on file, each property owner shall provide the city with a site plan, as-built surveys, or architecturally-sealed floor plans. The plans or surveys shall provide enough information to determine the existing legally permitted development on the site. Single-family and two-family structures are exempt from the site plan requirements.

e. Commercial structures/uses and their permitted accessory uses are grandfathered in the RFM-30, RFH-50, and CG zoning districts.

SECTION 5. That Section 68-542 of the Code of Ordinances of the City of Treasure Island, Florida, is hereby added to read as follows:

68-542. - Allowable encroachments.

There are two instances when the city permits encroachments into the required setbacks provided in sections 68-541 and 68-561 to meet the floodplain elevation requirements of the Florida Building Code and Chapter 66 of the Code.

a) Existing structure being elevated. An encroachment to the setbacks provided in sections 68-541 and 68-561 is allowed specifically when existing structures are elevated to meet the floodplain elevation requirements of the Florida Building Code and Chapter 66 of the Code. One set of stairs, which may include the required meter platform and stairs for meter access, is allowed to encroach into the setbacks. In all cases this encroachment must be designed to be the minimum encroachment necessary to allow access to the building and meter. The encroachment for the stairs shall be located as far from adjacent properties as possible. The maximum width for the stairs and landing is 3-feet clear and the maximum for the meter landing portion is 5-foot clear, unless a greater width is mandated by the Florida Building Code.

b) Existing structure is required to install a new elevated meter. An encroachment to the setbacks provided in sections 68-541 and 68-561 is allowed specifically when existing structures must install a new elevated meter and meet the floodplain elevation requirements of the Florida Building Code and Chapter 66 of the Code. One set of the stairs for meter access and the required meter platform is allowed to encroach into the setbacks. In all cases this encroachment must be designed to be the minimum encroachment necessary to allow access to the meter. The encroachment for the stairs shall be located as far from adjacent properties as possible. The maximum width for the stairs is 3-feet clear and the maximum for the meter landing portion is 5-foot clear, unless a greater width is mandated by the Florida Building Code.

SECTION 6. SEVERABILITY.
It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the ordinance shall not be affected.

SECTION 7. CONFLICT.
All ordinance or portions of ordinances in conflict with or inconsistent with this ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 8. CODIFICATION.
Sections 2 - 5 of this ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 9. EFFECTIVE DATE.

This Ordinance shall take effect immediately upon its final passage.

FIRST READING and PUBLIC HEARING on the ___ day of _____ , 202_.

SECOND READING and PUBLIC HEARING on the ___ day of _____, 202_.

PUBLISHED in the Tampa Bay Times on the ___ day of _____, 202_

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ___ day of _____, 202_ by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk

City of Treasure Island
Business Impact Estimate

This form should be included in the agenda packet for the item under which the proposed ordinance is to be considered and must be posted on the City's website by the time notice of the proposed ordinance is published.

Proposed ordinance's title/reference: **ORDINANCE 2024-27**

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 68 "ZONING REGULATIONS" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES, BY AMENDING SECTION 68-460 "MINIMUM YARD REGULATIONS FOR ACCESSORY STRUCTURES" TO RENAME THE SECTION "MINIMUM YARD REGULATIONS FOR ACCESSORY STRUCTURES AND ACCESSORY EQUIPMENT" AND BY ADDING LANGUAGE TO RECOGNIZE THE ELEVATION REQUIREMENTS FOR EQUIPMENT IN THE CURRENT FLORIDA BUILDING CODE AND THE CITY'S CHAPTER 66; AMENDING SECTION 68-482 "ACCESSORY USES GENERALLY" TO ADD A TIME LIMITED EXEMPTION TO ALLOW DOCKS, LIFTS, POOLS AND POOL EQUIPMENT TO REMAIN ON SITE WITHOUT A PRINCIPAL USE UNDER SPECIFIC CONDITIONS; AMENDING SECTION 68-512 "REGULATION" TO CLARIFY THAT WHEN NONCONFORMING RESIDENTIAL OR HOTEL/MOTEL STRUCTURES ARE ALLOWED TO REPAIR OR RECONSTRUCT TO REFLECT THAT EITHER THE NUMBER OF UNITS OR SQUARE FOOTAGE THAT EXISTED AS OF SEPTEMBER 19, 1995 OR THE CURRENT DENSITY OR SQUARE FOOTAGE IS ALLOWED, WHICHEVER IS GREATER; ADDING SECTION 68-542 "ALLOWABLE ENCROACHMENTS" TO PROVIDE FOR RELIEF FROM THE SETBACK REQUIREMENT FOR EXISTING STRUCTURES BEING ELEVATED OR NEW METERS ON EXISTING STRUCTURES TO BE ELEVATED TO MEET THE CODE AND FLORIDA BUILDING CODE AS A MINIMAL ENCROACHMENT INTO THE SETBACKS; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

This Business Impact Estimate is provided in accordance with section 166.041(4), Florida Statutes.

Question 1. Does the proposed ordinance meet one or more of the exceptions listed below? If so, then please check the applicable exception below and move to Question 2. If one or more boxes are checked below, this means the City is of the view that a business impact estimate is not required by section 166.041(4), Florida Statutes, for the proposed ordinance. If there is no applicable exception, proceed with completing the business impact estimate at Question 3.

- ☐ The proposed ordinance is required for compliance with Federal or State law or regulation;
- ☐ The proposed ordinance relates to the issuance or refinancing of debt;
- ☐ The proposed ordinance relates to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget;
- ☐ The proposed ordinance is required to implement a contract or an agreement, including, but not limited to, any Federal, State, local, or private grant or other financial assistance accepted by the municipal government;
- ☐ The proposed ordinance is an emergency ordinance;
- ☐ The ordinance relates to procurement; or
- ☐ The proposed ordinance is enacted to implement the following:
    a. Development orders and development permits, as those terms are defined in section 163.3164, Florida Statutes, and development agreements, as authorized by the Florida Local Government Development Agreement Act under sections 163.3220-163.3243, Florida Statutes;
    b. Comprehensive plan amendments and land development regulation amendments initiated by an application by a private party other than the City;
    c. Sections 190.005 and 190.046, Florida Statutes, regarding community development districts;
    d. Section 553.73, Florida Statutes, relating to the Florida Building Code; or
    e. Section 633.202, Florida Statutes, relating to the Florida Fire Prevention Code.

Question 2. Based on the exception you selected above and in accordance with the provisions of the controlling law, please provide an explanation below of why the ordinance meets the exception(s).

The Ordinance changes to Chapter 68 do not fall under an exception.

Question 3. If there is no applicable exception, proceed with completing the below Business Impact Estimate. This Business Impact Estimate may be revised following its initial posting. In accordance, the City hereby publishes the following information:

A.

- The purpose of the proposed ordinance Section 68-460 is to add exceptions to the height requirements for accessory equipment locations in order to make the zoning code height allowances consistent with the city code and the Florida Building Code and to allow this equipment when required to be elevated to encroach into the normal setbacks when it would be required to be in a specific location by the Florida Building Code.

- The purpose of proposed ordinance Section 68-482 is to provide a temporary allowance for accessory structures in the wake of the hurricanes allowing them to remain for a two year period when meeting certain conditions as obtaining financing, designs, and contractors for reconstruction may add to the timeline for rebuilding a principal use in this post-storm recovery period and that the current requirements for accessory uses (specifically docks, lifts, pools with pool equipment) in Sec. 68-482 require a principal use.
- The purpose of the proposed ordinance Section 68-512 is to clarify language in the existing code, the code contains specific provisions for residential and hotel/motel structures damaged or destroyed by hurricane that allow them to retain the number of units and square footage that existed as of September 19, 1995, and the City wishes to clarify that this option would also include the ability to use the current number of units or the current square footage, whichever is greater, in order to reduce the non-conformity and encourage reconstruction and elevation of structures to meet current regulations.
- The purpose of the proposed ordinance for new Section 68-542 (a) the current code does not currently have any provisions to allow building elements such as stairs, landings, and meter platforms to encroach into the setbacks and there are a substantial number of existing structures seeking to elevate the structure already constructed at the setback line or encroaching into the setbacks. In order to meet current flood elevations, those elevated existing structures would be required to provide stairs, landings, and meter platforms, and therefore the City desires to provide relief to the setbacks in order to encourage the elevation of structures. Section 68-542 (b) addresses the location of meter platforms and allows these stairs and platforms to encroach into the setbacks when the equipment is required to be elevated by the city code and the Florida Building Code.

B. An estimate of the direct economic impact of the proposed ordinance on private, for-profit businesses in the City, including the following, if any:

(1) An estimate of direct compliance costs that businesses may reasonably incur if the ordinance is enacted; None

(2) Identification of any new charge or fee on businesses subject to the proposed ordinance, or for which businesses will be financially responsible; None

(3) An estimate of the City's regulatory costs, including an estimate of revenues from any new charges or fees that will be imposed on businesses to cover such costs. None

(4) Any other direct economic impacts of the proposed ordinance on private, for-profit businesses in the City that are not covered by (1), (2), or (3): The proposed ordinance would provide a benefit to businesses by avoiding the cost of a zoning variance, avoiding the costs to remove and replace pools and docks, allowing the greatest density and square footage available in the zoning district, and providing for an allowance for elevated access without a variance.

C. Good faith estimate of the number of businesses likely to be impacted by the ordinance: All businesses in Treasure Island would be affected if rebuilding.

D. Additional information the governing body deems useful (if any): None

Section 68-460 allows businesses to comply with the current Florida Building Code and avoid the need for a zoning variance when elevating equipment in compliance with the Florida Building Code.
Section 68-482 allows businesses to retain amenities for a certain time while arranging to rebuild, rather than having to remove and rebuild accessory structures such as pools and docks.
Section 68-512 clarifies the allowance for building back grandfathered structures leading to certainty in the development process.
Section 68-542 allows businesses to comply with the current Florida Building Code and avoid the need for a zoning variance when elevating structures or providing access to electrical equipment in compliance with the Florida Building Code and local utility requirements.

AGENDA ITEM NO. 6.B

Item Cover Page

LOCAL PLANNING AGENCY AGENDA ITEM REPORT

DATE: December 19, 2024

SUBMITTED BY: Kathryn Younkin, Community Development

ITEM TYPE: Resolutions

AGENDA SECTION: PRESENTATION OF ITEMS

SUBJECT: Request to approve Resolution 2024-05 to Adopt the Terrain Modification / Fill Program.

BACKGROUND:

Why did the City Commission direct staff to develop the Terrain Modification Program?

The purpose of the Terrain Modification Program was not to simply allow for the use of fill on private properties, the purpose was to carry out the goals and recommendations of the 2021 adopted Watershed Management Plan. The objective is to continue to be able to drain stormwater using mostly gravity conveyance in lieu of mostly pump stations, while providing guidelines to ensure that fill is being used correctly. Several areas of the city are already experiencing severe drainage impacts due to sea level rise. In fact, many residents experience inundation from tidal flooding throughout the year. When the tide is above the road, a gravity drainage system does not function. Therefore, to continue to drain stormwater via gravity under even moderate sea level rise projections, roadway elevation is required.

To elevate roads to the full height needed in the year 2100, adjacent private properties need to be elevated first. It is important to ensure that runoff from private properties continues to be collected in the roadway, which is why program guidelines maintain this roadway-private property elevation relationship. Roads can be elevated to some extent today when they are scheduled to be reconstructed anyhow, only if the additional funds are available and budgeted to do so. The cost to elevate roads is dependent on several factors, including

the height to be achieved. The city can be elevated incrementally over time to preserve the function of the community, but the longer we wait to implement mitigation measures, the more costly they will become.

Terrain modification is using fill material to elevate the ground beneath and around residential and commercial structures, seawalls, and public infrastructure (including roads) to become higher than the tide and thereby allowing for gravity conveyance systems, which is the preferred method of stormwater management. The program consists of several ordinances and a technical manual to address the continued impact that sea level rise will have on our roadway network and stormwater systems. The manual was developed to serve as the rulebook for builders, engineers, developers and City personnel on how to properly design, permit, and construct terrain modification projects within our community. It outlines a series of review criteria to mitigate for impacts to adjacent properties and overall site functionality. This manual is needed because a haphazard use of fill can have damaging consequences.

The 2021 Treasure Island Watershed Management Plan

The city received funding through the Southwest Florida Water Management District's Cooperative Funding Initiative program to perform a City-wide evaluation of the City's stormwater system through the development and utilization of a stormwater model. The evaluation identified where stormwater capital improvements are needed to improve the level of service and the quality of water discharged to the Gulf of Mexico and Boca Ciega Bay. The resulting Watershed Management Plan (WMP) was adopted early 2021 to replace the City's former 1996 Master Drainage Plan and provide planning and management strategies to enhance the City's resilience to sea level rise.

The WMP identifies resiliency measures to mitigate for the impacts of sea level rise to the barrier island. With some localized areas under elevation 2.0 feet (NAVD88), mean sea level projections in the Year 2100 would result in drastic impacts to quality of life within the community. Citywide terrain modifications, to achieve a roadway lowest point elevation of 5.1 feet (NAVD88), will mitigate for this risk while facilitating the use of conventional stormwater collection and management techniques. Implementing this resiliency measure will fundamentally alter how development is designed, permitted and constructed within the city. As a "no fill" City, current regulations specifically restrict the use of fill material for public

and private improvements. The development guidelines in the Terrain Modification Manual would require the use of fill material by establishing minimum low-floor elevations for structures and terrain modification goals for public infrastructure.

WMP Key Recommendations:

Elevation of low-lying sections of the city and roadway network to the highest achievable terrain modification goal: immediate, intermediate or long-term. This was the ultimate recommendation of the WMP to address sea level rise. The Commission concurred with this recommendation which spurred the development of the Terrain Modification Program.

- Elevation of low-lying sections of the City and roadway network to the highest achievable terrain modification goal: immediate, intermediate or long-term. This was the ultimate recommendation of the WMP to address sea level rise;
- Expansion of water quality requirements within the Land Development Regulations;
- Pursuit of additional Community Rating System (CRS) creditable activities;
- A continuation of the City's outfall maintenance program and the incorporation of existing outfalls into future projects;
- Strategic implementation of backflow prevention technology; and
- Promotion of low impact development (LID) projects, such as relying more on green infrastructure (ex. swales).

As a barrier island, Treasure Island faces unique and imminent challenges. Successful implementation of the WMP was identified as a crucial path forward to help ensure that the city is given the opportunity to thrive into the future. While the Implementation Plan will provide an achievable location-specific tiered approach, a successful outcome relies on thorough and strategic consideration of the use of fill throughout the city.

What are the mitigation options for sea level rise?

There are four approaches that the city can take to mitigate for the impacts of high tides and sea level rise:

- Do nothing
- Relocate away from the city
- Rely heavily on stormwater pump stations and walls/damming systems, which are extremely expensive and are unreliable during storms

- Use fill material to elevate the city over time

Previous Public Meetings/Engagement

Earlier this year, a survey was posted to the website and social media and drew the following conclusions. The full survey responses are available on the ElevateTI.com webpage:

- 73% of respondents agree or strongly agree that sea level rise is a serious problem affecting the long-term quality of life for those who live and work in Treasure Island.
- 78% of respondents agree or strongly agree that the city should take action against sea level rise.
- 84% of respondents agree or strongly agree that changes to how residents and businesses construct buildings, roads, seawalls and other infrastructure are necessary to address sea level rise in Treasure Island.

Meetings/Workshops

In addition to the Elevate TI website that was created to provide program information, more than 16 meetings/workshops have been held to review and discuss the formerly proposed program requirements and to solicit feedback:

- 2018 to 2021 Meetings with the City Commission and Local Planning Agency to Review/Adopt the WMP
- Peer Review Presentation March 23, 2023
- Rotary Presentation October 24, 2023
- LPA Workshop December 21, 2023 – Overall concepts of Terrain Modification Manual
- LPA Workshop LPA March 7, 2024 – Revisions Ch. 8 Building & Ch. 66 Floodplain Management
- LPA Workshop LPA March 22, 2024 – Revisions to Ch. 69 Marine Structures (Seawalls)
- April 5, 2024 - Seawall Contractor Meeting
- LPA Workshop April 18, 2024 - Concepts of Terrain Modification, Ch. 54 Utilities, Ch. 75 Potable Water Sanitary Sewer and Reclaimed Water and 76 Stormwater, and Cumulative Substantial Improvement
- Tampa Bay Regional Planning Council Regional Resiliency Summit Presentation May 10, 2024
- May 15, 2024 - Architect/Engineer Contractor Meeting
- LPA Workshop May 30, 2024 – Ch. 8 and 66 in Ordinance format
- June 13, 2024 - Real Estate Professionals Meeting
- City Commission Workshop July 30, 2024 – Program Overview
- City Commission Workshop August 20, 2024 -

Discussion of Program Ordinances

- City Commission Meeting October 1, 2024 – Commission requested that staff expedite a program to allow for the use of fill material in post-storm reconstruction.
- City Commission Meeting December 3, 2024 - Commision requested that staff expedite the Terrain Modification Program as written with two changes:
  - Remove the Cumulative Substantial Improvement threshold
  - Retain the 50% threshold for Substantial Improvement/Substantial Damage rather than the 49% recommended in the program

Furthermore, several work authorization requests to support the program came before the City Commission at public meetings for review and approval.

POLICY/PURPOSE:

The purpose of this item is to present the ordinances for Terrain Modification Program for review and discussion of the program.

STRATEGIC PLAN RELEVANCE:

Strategic Plan: Goal 1 of the Environmental Sustainability Roadmap of the City's Strategic Plan is to "become an environmentally sustainable and resilient community". Object 2 under this goal is to "rise above seal-level challenges".

Comprehensive Plan: Policy 1.15.2 "...encourage climate resilient construction practices by (d) incorporating design specifications that increase resilience to sea level rise and more frequent or intense storm events." Policy 1.8.7 "...encourage terrain modification for developments with respect to projected sea level rise scenarios and flooding potential when practical."

ANALYSIS/DISCUSSION:

August 20, 2024 City Commission Workshop

At the December 3, 2024 Commission Workshop to review the program ordinances, the Commission asked for modifications to the Terrain Modification Program to include:

- Removal of the Cumulative Substantial Improvements threshold
- Removal of the change from 50% to 49% for substantial improvements
- Retain the requirement to use fill for new or elevated structures in compliance with the standards in order to expedite the adoption process

The standards in the Terrain Modification Manual outline when

and how fill is used. This option preserves the integrity of the program and remains in compliance with the 2021 adopted Watershed Management Plan and the City's Comprehensive Plan policies.

Eight Ordinances

Seven chapters of the City's code are proposed for revision to support the Program. An ordinance is also required to adopt the Treasure Island Terrain Modification Manual. Here are some key proposed changes in each of the sections. The Rerrain Modification Manual and the Appendix are included in Ordinance 2024-11.

Chapter 54 Utilities - Ordinance 2024-13

Formerly there were two Utilities Chapters: Ch. 54 and Ch. 75. Chapter 75 is proposed to be renamed for clarity. The revised Ch. 54 encompasses utility fees and billing, and water conservation. Specifically, revisions to Chapter 54 deleted Article II Stormwater Management from Ch. 54 and moved Article II relating to sanitary sewer charges, fees and billing from Ch. 75 to Ch. 54.

Chapter 75 Formerly Utilities, Renamed Potable Water, Sanitary Sewer and Reclaimed Water - Ordinance 2024-17

Chapter 75 was renamed for clarity to avoid having two chapters with the same name. Revisions were made to move all stormwater to Ch. 76 and all references to billing and fees to Ch. 54. Specifically, Article II Division 4, Sect. 75-121 - 75-123 Charges, Fees and Billing was moved to Chapter 54 Utilities.

Article III Drainage, Sect. 75-151 - 75-209 was deleted.

Chapter 76 Stormwater - Ordinance 2024-18

This is a new Chapter with new content. New stormwater requirements are proposed to align with new State stormwater requirements, to incorporate best practices and to reference the Terrain Modification Program requirements.

Chapter 8 Building - Ordinance 2024-12

Ch. 8 was updated to reflect current Florida statutes and to move all local floodplain requirements to Chapter 66. Specifically, Sect. 8-1, Building Codes Adopted was revised to remove references to specific years (ex. FL Building Code 2020 Edition) and to flood resistance amendments to the building code that were moved to Ch. 66. Owner builder provisions were revised in accordance with Florida statutes.

Sect. 8-72 Florida Fire Prevention Code – Adopted was revised to clarify adoption of the entire code and remove references to specific years (ex. National Electric Code 2020 Edition). Sect. 8-88 – Appendices B, E, and G OF NFPA 1, Fire Prevention Code was deleted. For application of Sect. 1612 reference is made to Ch. 66 for design requirements and limitations. General cleanup was performed as required by the State.

Chapter 66 Floodplain Management - Ordinance 2024-14

Revised to contain all local floodplain regulatory requirements and to reference the requirements in the Terrain Modification Manual. Updates were made as required by the State. Specifically, Sect. 66-102.3, Basis for Establishing Flood Hazard Areas was revised to update the address of City Hall. Sections 66-104.1, Permit Required, 66-302.1, Minimum Requirements, 66-303.1, Minimum Requirements, and 66-307.4, Other Development in Coastal High Hazard Areas (Zone V) and Coastal Zones were revised to reference the Terrain Modification Manual. Sect. 66-104.3, Application for a Permit or Approval was revised to update requirements for applications for floodplain development permits. Sect. 66-105.1, Information for Development in Flood Hazard Areas was revised to update site plan requirements and construction document requirements. Article II, Definitions was revised.

Chapter 68 Zoning - Ordinance 2024-15

Definitions were revised and added for consistency throughout the code and consistency with the Treasure Island Terrain Modification Manual. New regulations are provided to address retaining walls and to address views. Terrain Modification Height and Setback Adjustment Factors were added to allow for an applicant to recover the height and space lost due to the terrain modification process. Specifically, Sect. 68-34, Pre-Development Review Committee was revised to include reference to the Terrain Modification Height Adjustment Factor, Sect. 68-152, Adopted Levels of Service and 68-159 Appeals, were revised to reference the Watershed Management Plan. Sect. 68-195 Application of Zoning District Regulations was revised to require permits. Sect. 68-224 Design Standards and Sect. 68-225 Exemptions was deleted as they are now addressed in Ch. 76. Sect. 68-410.09 Setbacks, Sect. 68-410.38 Setbacks, Sect. 68-410.68 Signage, Sect. 68-483 Swimming Pools, and Sect. 68-561 Alternate Setback System Procedures were revised to define grades as natural or finished. Sect. 68-431, Schedule of Lot and Bulk Regulations and Sect. 68-541, Setback Classification were revised to reference the terrain modification height adjustment

factor. Sect. 68-458, Garden Walls, Retaining Walls, Fences and Hedges was revised and renamed to address retaining walls, guards and fence revisions.

Chapter 69 Marine Structures - Ordinance 2024-16

This chapter is being updated to allow for the elevation of seawalls and to require elevation when 12 inches or more can be achieved. Seawall elevation is proposed to be required during substantial improvements to the structure or major repairs to the seawall. Design specifications were updated for seawalls and living shorelines. Specifically, Sect 69-31, General Requirements was revised to clarify coastal armoring restrictions along the Gulf of Mexico. Definitions were added or revised as needed. Sect. 69-51, Application Requirements for seawalls and living shorelines and structural calculations were revised. A portion of Sect. 69-53, Permit Expiration for repairs to seawalls was removed.. Sect. 69-72, Seawalls was revised to include seawall construction requirements. Sect. 69-74, Construction Materials was revised to significantly revise requirements for various types of seawalls and living shorelines. Sect. 69-75, Maintenance & Repair of Seawalls was revised to add requirements for major seawall repairs. Sect. 69-77, Supplemental Criteria was added for additional requirements related to seawall construction.

Frequently Asked Questions

Why is a Technical Manual needed when allowing for the use of fill within the floodplain?

There is a reason why it is uncommon to find Florida codes from jurisdictions that reside within the floodplain that allow for the use of fill material. There are many liabilities that should be considered when allowing for the use of fill, which does not follow the State's model floodplain management ordinance.

Technical specifications are required to:

- Avoid impacts to the City's ability to participate in the National Flood Insurance Program (NFIP)
- Avoid adversely impacting the City's ability to drain stormwater and drainage onto adjacent private properties
- Maintain appropriate driveway slopes for access to structures and to preserve a sense of community
- The manual outlines program tenets that must be adhered to when using fill and provides a predictable and repeatable process for all projects that makes it easier on developers and permit reviewers, while accommodating

the City's stormwater management goals.

In today's code, it is required that properties are not altered in a manner that allows additional stormwater drainage onto other properties. However, there are many instances where this provision has been proven to be insufficient, even with the limited use of fill which is derived from altering the existing site.

Isn't a manual burdensome to developers, architects and engineers?

Designs are easier to develop and review when standards are available. The manual appears to be a large document because it was structured so that the designer can go directly to the section that represents the type of development they are pursuing. For this reason, there is duplication throughout, but the manual was structured for ease of use.

Why require the use of fill material on properties when owners choose to reconstruct or elevate their structures?

Developers are purchasing Treasure Island properties at a record rate and developers that do not work for future homeowners are unlikely to consider the stormwater needs of the neighborhood or the access needed to future property owners during high tide events. They are unlikely to develop using fill material, if they have no attachment to the future of the property or the community. If the opportunity is missed to incorporate fill on properties when they are redeveloped, it will take a much longer time before the road can be elevated to a height needed to withstand future tidal levels.

Why even discuss the elevation of roads at this time?

Roads throughout the City can be elevated today, albeit most of them cannot be elevated to the full goal height without the prior elevation of adjacent properties. As first outlined in the WMP back in 2021, roads are proposed to be elevated incrementally (i.e. over multiple rehabilitation cycles). Road elevation work is performed only when the road is in need of reconstruction. Unfortunately, recent hurricanes will cause a heightened need for road reconstruction due to the storm surge inundation and heavy vehicle construction traffic. Additionally, roads may require reconstruction with utility repairs are made beneath them.

What is the cost to raise roads or properties when they are planned to be reconstructed anyhow?

The cost to raise properties is highly variable. Pre-storm cost opinions were developed for the following circumstances:

- A new $2M home in a Coastal A or a V zone: $62,125 in additional costs to include engineering services and fill material, which represents approximately 3% of the total project cost. Structures in Coastal A or V zones are limited by FEMA on the amount of fill and the construction of retaining walls.
- A new $2.5M home in the AE zone: $197,100 in additional costs to include engineering services, retaining walls, guards, and fill material, which represents approximately 7% of the total project cost.

The cost to raise roadways is also highly variable, depending on the roadway height to be achieved, the type of road, extent of property impacts, retaining walls, right-of-way width and adjacent land uses. The cost to construct a mile of roadway without using fill is estimated to be approximately $7.5M. To add fill components to this mile of roadway, you would add a cost in the range of an additional $1.1M (15%) to $3M (40%).

Why raise City roads for stormwater when the State may not raise Gulf Boulevard?

The Florida Department of Transportation (FDOT) adopted a Resiliency Action Plan (Resilience Action Plan (fdot.gov) that was filed with the legislature in 2023. In this plan, the State recognized that elevating roadways a potential method to address sea level rise and identified the intent to work with local communities to address tidal impacts on state roads, and specifically identified Gulf Blvd. as a high priority.

Does the fill program address storm surge, or is it only addressing the impacts of rainfall and sea level rise?

Unfortunately, storm surge can be higher than the goal fill elevation for structures that is outlined in the program. The goal elevation is 7.6 feet for a low floor (such as a garage). That said, the storm surge for Hurricane Helene was measured at 7.04 by the St. Petersburg gauge and 7.13 feet by the Clearwater Beach tidal gauge. Thus, developing properties to the proposed standards would potentially avoid impacts to structures from similar storms.

Was the original Elevate TI program meant to force people out of their homes?

The intent of the cumulative substantial improvements (CSI) proposal within the initial version of the program was to keep people in their homes by helping property owners avoid substantial damage to their structures. The idea was to give property owners the knowledge and options to elevate their

properties when they choose to perform substantial improvements. City staff provided education at workshops regarding the process of substantial damage determinations, the importance of obtaining private appraisals to be able to perform additional improvements to structures and having structures re-valued higher once improvements are made.

The purpose of formerly proposing a CSI program and going from 50 to 49% was to limit those structures that would be substantially damaged in a flood event. This type of strategy has shown to have significant positive impacts on communities when implemented in a pre-damage environment. Considering a substantially damaging event has occurred prior to adoption of this standard, staff does not believe it would be prudent to pursue CSI in a post-storm environment. It should be noted, however, that CSI differs from substantial damage assessments in that substantial damage assessments require a determination of the cost to make all of the repairs to a structure at one time to bring the structure back to its pre-storm condition.

FUNDING:

No funding is requested at this time.

MOTION:

I move to approve Resolution 2024-05 which recommends adoption of the Terrain Modification Program as outlined in Ordinances 2024-11, 2024-12, 2024-13, 2024, 14, 2024-15, 2024-16, 2024-17 and 2024-18.

ATTACHMENTS:

Res 2024-05 LPA re TMP (02744915).pdf
ORDINANCE 2024-11 Section A (adopting Appendix B - Terrain Modification Manual) (02712774-2).pdf
Ordinance 2024-11 SECTION B TI_Terrain Modification Manual.pdf
Ordinance 2024-12 (amending chapter 8) (02711020-11) x.pdf
Ordinance 2024-13 (amending chapter 54) (02738848-3).pdf
Ordinance 2024-14 (amending chapter 66) (02711314-11).pdf
Ordinance 2024-15 (amending chapter 68) (02743163-5).pdf
Ordinance 2024-16 (amending chapter 69) (02733701-5) x.pdf
Ordinance 2024-17 (amending chapter 75) (02738860-3).pdf
Ordinance 2024-18 (amending chapter 76) (02741664-3).pdf

LPA RESOLUTION NO. 2024-05

A RESOLUTION OF THE LOCAL PLANNING AGENCY OF THE CITY OF TREASURE ISLAND, FLORIDA, RECOMMENDING APPROVAL OF THE ATTACHED ORDINANCES 2024-11, 2024-12, 2024-13, 2024-14, 2024-15, 2024-16, 2024-17 AND 2024-18 WHICH ADOPT CHANGES REQUIRED TO IMPLEMENT THE TERRAIN MODIFICATION PROGRAM AND RELATED ORDINANCES OF THE CITY OF TREASURE ISLAND; AND STATING THE INTENT OF THE LOCAL PLANNING AGENCY TO RECOMMEND THE CITY COMMISSION APPROVAL; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Section 163.3174, Fla. Stat., provides for the establishment of a "local planning agency"; and

WHEREAS, Section 163.3174, Fla. Stat., describes the duties and responsibilities of a Local Planning Agency, which include preparing and making recommendations of comprehensive plan amendments and proposed land development regulation amendments; and

WHEREAS, on December 19, 2024, the Planning and Zoning Board, sitting as the Local Planning Agency, reviewed the proposed amendments provided herein and found the amendments consistent with the Treasure Island Comprehensive Plan and its elements; and

WHEREAS, on December 19, 2024, the Planning and Zoning Board, sitting as the Local Planning Agency, held a public hearing with due public notice to receive public comments on the proposed amendments to the following City Code Ordinances, including Ordinance 2024-11 adding the City of Treasure Island Terrain Modification Manual to the City's Land Development Regulations, Ordinance 2024-12 amending Chapter 8 Building Regulations and Fire Code, Ordinance 2024-13 amending Chapter 54 Utilities, Ordinance 2024-14 amending Chapter 66 Floodplain Management of the City's Land Development Regulations, Ordinance 2024-15 amending Chapter 68 Zoning Regulations of the City's Land Development Regulations, Ordinance 2024-16 amending Chapter 69 Marine Structures and Commercial Fishing of the City's Land Development Regulations, Ordinance 2024-17 amending Chapter 75 of the City's Land Development Regulations, and Ordinance 2024-18 Creating Chapter 76 Stormwater of the City's Land Development Regulations and has considered the information received at said public hearing; and

WHEREAS, the Treasure Island Local Planning Agency reviewed the proposed ordinances, considered the public testimony received at that Public Hearing and desires to move forward in the adoption process.

NOW, THEREFORE, BE IT RESOLVED by the Local Planning Agency of the City of Treasure Island, Florida, in a public meeting assembled:

The City of Treasure Island Local Planning Agency hereby transmits to the City Commission the attached Ordinances 2024-11, 2024-12, 2024-13, 2024-14, 2024-15, 2024-16, 2024-17, and 2024-18 as set forth in Exhibit "A", which adopts changes required to implement the terrain modification program, with the recommendation to approve said amendments.

PASSED AND DULY ADOPTED BY THE CITY OF TREASURE ISLAND LOCAL PLANNING AGENCY, THIS 19TH DAY OF DECEMBER, 2024.

TREASURE ISLAND LOCAL PLANNING AGENCY

The foregoing Resolution was offered during Regular Session of the Local Planning Agency of the City of Treasure Island, Florida, sitting on the 19TH day of DECEMBER 2024 by Board Member _____ who moved its adoption; was seconded by Board Member _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
Richard Harris, Chairman

ATTEST:

_____

Celine Kidwell, City Clerk

Exhibit A

Ordinances

2024-11 Section A and 2024-11 Section B

2024-12

2024-13

2024-14

2024-15

2024-16

2024-17

2024-18

ORDINANCE 2024-11

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, ESTABLISHING THE CITY'S TERRAIN MODIFICATION MANUAL AND ADOPTING "APPENDIX B" AS THE CITY OF TREASURE ISLAND TERRAIN MODIFICATION MANUAL AND PART OF THE CITY'S LAND DEVELOPMENT REGULATIONS; SUPERSEDING ORDINANCES OR PARTS THEREOF IN CONFLICT WITH HEREWITH; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, sea level rise represents a great threat to a barrier island resulting in more frequent and severe flooding events which can lead to erosion, habitat degradation for marine and terrestrial species, and impact quality of life; and

WHEREAS, the National Oceanic and Atmospheric Administration (NOAA), the United Stated Army Corps of Engineers and other federal agencies project sea levels to increase throughout this century; and

WHEREAS, increases in sea level rise will create a shift in coastal flooding throughout the next century by causing tide heights to increase and reach further inland; and

WHEREAS, the National Oceanic and Atmospheric Administration (NOAA) specifically states "the impacts of sea level rise are here, and are not a problem that can be pushed off to the next planning cycle, or onto the shoulders of future decision makers."; and

WHEREAS, the City of Treasure Island ("City") is a barrier island on the west coast of Florida, who desires to become more resilient and prepare for these future challenges; and

WHEREAS, "rising above" sea-level challenges was a stated Objective within the City's Strategic Plan; and

WHEREAS, updating building and site development standards to account for current and future climate impacts was a stated Objective within the Tampa Bay Regional Planning Council's Regional Resiliency Action Plan; and

WHEREAS, the City desires to maintain a specific stormwater level of service as sea level rise continues to impact the barrier island community; and

WHEREAS, the City previously adopted the Watershed Management Plan, which was developed based on a city-wide stormwater model so that it could begin to address vulnerabilities and sea level rise impacts, and demonstrates that this stormwater level of service cannot be maintained if certain sea level rise projections come to fruition; and

WHEREAS, the Watershed Management Plan evaluated structural and non-structural measures to combat the threat of sea level rise and determined that a holistic terrain modification program was needed to better preserve the City and its residents' quality of life; and

WHEREAS, the use of gravity-based stormwater systems was identified as the primary method of stormwater discharge as sea level rise continues to impact the barrier island community, which will require that the terrain within the City be elevated above future tide elevations; and

WHEREAS, modifying the terrain of the City will require that fill material used for new development; and

WHEREAS, using fill in future development must be done in a manner that complies with the National Flood Insurance Program; and

WHEREAS, establishing elevation goals for development is needed to support future roadway elevation efforts; and

WHEREAS, the Terrain Modification Manual, along with revisions to the City's Land Development Regulations, will guide developers, residents, and permit reviewers in being able to successfully use fill to be better protected from flooding events and support future roadway elevation efforts, and

WHEREAS, the City Commission deems it appropriate and in the best interest of the public to provide for terrain modification; and

WHEREAS, the City Commission finds that terrain modification encourages best practices in development and development that may reduce in losses due to flooding; and

WHEREAS, this ordinance revises the land development regulations and therefore, pursuant to s. 166.041(4)(c), Fla. Stat., this ordinance is exempt from the business impact estimate requirement of s. 166.041(4)(a), Fla. Stat.; and

WHEREAS, the Local Planning Agency has held several public workshops and meetings regarding the Terrain Modification Manual and recommends adoption of this ordinance; and

WHEREAS, the State of Florida, Division of Emergency Management, Office of Financial Management has reviewed and approved these revisions; and

WHEREAS, the City Commission has reviewed City's Comprehensive Plan and finds that revisions are consistent with the City's Comprehensive Plan; and

WHEREAS, the City Commission has determined that it is in the best interest of the City and its citizens that the Terrain Modification Manual be adopted as part of the City's Land Development Regulation.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND DOES ORDAIN:

SECTION 1. The recitals set forth in the "Whereas" clauses above are ratified and confirmed as true and correct and are hereby adopted as legislative findings by the City Commission of the City of Treasure Island, Florida for the adoption of this Ordinance.

SECTION 2. That the "Appendix B" a Terrain Modification Manual as set forth herein be adopted for implementation by the various City of Treasure Island departments and is hereby established, authorized and adopted by the City Commission.

SECTION 3. SEVERABILITY. It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the ordinance shall not be affected.

SECTION 4. CONFLICT. All ordinance or portions of ordinances in conflict with or inconsistent with this ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 5. CODIFICATION. Section 2 of this ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 6. EFFECTIVE DATE. This ordinance shall take effect upon the first day of the month immediately following the adoption of the ordinance.

FIRST READING and PUBLIC HEARING on the ____ day of _____, 2025.

SECOND READING and PUBLIC HEARING on the ____ day of _____, 2025.

PUBLISHED in the Tampa Bay Times on the ____ day of _____, 2025.

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ____ day of _____, 2025 by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk

TREASURE ISLAND
FLORIDA

Terrain Modification Manual



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TABLE OF CONTENTS

Preface ..... **i**

Section 1 - Introduction **1-1**
1.1 Preparing for Future Challenges 1-1
1.2 The City's Path Forward 1-1
1.3 Program & Purpose 1-2
1.4 Objectives 1-2
1.5 Role of the City in Development 1-3

Section 2 – General Information **2-1**
2.1 Scope, Applicability & Use 2-1
2.2 Other Permitting Agencies 2-1
2.3 Procedural Requirements 2-1
2.4 Governing Regulations 2-2
2.5 Definitions 2-2

Section 3 – Basis of Design **3-1**
3.1 Sea Level Rise Projections 3-1
3.2 Impacts of Sea Level Rise 3-2
3.3 Recommended Resiliency Measure 3-2
3.4 Totality of Resiliency Measures 3-4

Section 4 – Program Overview **4-1**
4.1 Program Structure 4-1
4.2 Establishment of Program Tenets 4-2
4.3 Maintain National Flood Insurance Program (NFIP) Compliance (Tenet T.1) 4-2
4.4 Conserve Floodplain Storage (Tenet T.2) 4-3
4.5 Hold Overland Flow Transfer Points (Tenet T.3) 4-4
4.6 Preserve Sense of Community (Tenet T.4) 4-5
4.7 Requirement Summary 4-5
4.8 Development Classifications 4-6
4.9 Regulated Activities 4-7
4.10 Site Grading Requirements of the Florida Building Code 4-9

Section 5 – Terrain Modification (Single-Family and Two-Family Dwellings) **5-1**
5.1 Applicability & Use 5-1
5.2 Summary of Development Classification D.1 5-1
5.3 Goal (Development Classification D.1) 5-2
5.4 Summary of Requirements (Development Classification D.1) 5-3
5.5 Requirement Compliance Review Process 5-4
5.6 Requirement Schedule (Development Classification D.1) 5-6

Section 6 – Terrain Modification (Commercial and Multi-Family Development) 6-1
6.1 Applicability & Use 6-1
6.2 Summary of Development Classification D.2 6-1
6.3 Goal (Development Classification D.2) 6-2
6.4 Summary of Requirements (Development Classification D.2) 6-4
6.5 Requirement Compliance Review Process 6-4
6.6 Requirement Schedule (Development Classification D.2) 6-7

Section 7 – Terrain Modification (Public Infrastructure) 7-1
7.1 Applicability & Use 7-1
7.2 Summary of Development Classification D.3 7-1
7.3 Goal (Development Classification D.3) 7-2
7.4 Summary of Requirements (Development Classification D.3) 7-3
7.5 Requirement Compliance Review Process 7-3
7.6 Requirement Schedule (Development Classification D.3) 7-6

Section 8 – Terrain Modification (Coastal Erosion Structures) 8-1
8.1 Applicability & Use 8-1
8.2 Summary of Development Classification D.4 8-1
8.3 Goal (Development Classification D.4) 8-2
8.4 Summary of Requirements (Development Classification D.4) 8-3
8.5 Requirement Compliance Review Process 8-3
8.6 Requirement Schedule (Development Classification D.4) 8-6

Section 9 – Program Maintenance Recommendations 9-1
9.1 Expand Scope of Permit Tracking 9-1
9.2 Perform Regular Program Audits 9-2
9.3 Maintain a Current Watershed Management Plan (WMP) 9-6

Section 10 – Program Implementation Recommendations 10-1
10.1 Establish Maintenance Dredging Program 10-1
10.2 Develop Project Evaluation Rubric 10-1
10.3 Assemble Standard Details 10-2
10.4 Continue Public Outreach 10-2
10.5 Follow Finance Plan Recommendations 10-2
10.6 Create Legal Framework for Property Access and Structure Adaptability 10-3

SUMMARY OF FIGURES

Figure 1-1 Path to Resiliency 1-1
Figure 3-1 Summary of Sea Level Rise Predictions from Various Government Agencies 3-1
Figure 3-2 Year 2100 Limits of Flooding (Elevation 4.10') 3-3
Figure 4-1 Program Overview 4-1
Figure 5-1 Requirement Compliance Review Process 5-4
Figure 5-2 Requirement (D.1) T.1-01/-02 5-10
Figure 5-3 Requirement (D.1) T.2-01 (Floodplain Elevation Match Line) 5-14
Figure 5-4 Requirement (D.1) T.2-01 (Driveway Section) 5-15
Figure 5-5 Requirement (D.1) T.2-02 5-19
Figure 5-6 Requirement (D.1) T.3-02 5-23
Figure 5-7 Requirement (D.1) T.4-02 5-29
Figure 5-8 Requirement (D.1) T.4-02 (Section View) 5-29
Figure 5-9 Requirement (D.1) T.4-03 5-35
Figure 5-10 Requirement (D.1) T.4-03 (Section View) 5-36
Figure 6-1 Requirement Compliance Review Process 6-5
Figure 6-2 Requirement (D.2) T.1-01/-02 6-11
Figure 6-3 Requirement (D.2) T.3-02 6-19
Figure 6-4 Requirement (D.2) T.4-02 6-25
Figure 6-5 Requirement (D.2) T.4-02 (Section View) 6-25
Figure 6-6 Requirement (D.2) T.4-03 6-30
Figure 6-7 Requirement (D.2) T.4-03 (Section View) 6-30
Figure 6-8 Requirement (D.2) T.4-04 6-33
Figure 7-1 Requirement Compliance Review Process 7-4
Figure 8-1 Requirement Compliance Review Process 8-4
Figure 8-2 Requirement (D.4) T.4-05 8-15

SUMMARY OF TABLES

Table 4-1 Summary of Requirements (Tenet T.1) 4-3
Table 4-2 Summary of Requirements (Tenet T.2) 4-4
Table 4-3 Summary of Requirements (Tenet T.3) 4-4
Table 4-4 Summary of Requirements (Tenet T.4) 4-5
Table 4-5 Tenet / Requirement Crosswalk 4-6
Table 5-1 Summary of Requirements (Development Classification D.1) 5-3
Table 5-2 Restricting Conditions (D.1) T.1-01 5-7
Table 5-3 Modified Goal (D.1) T.1-01 5-8
Table 5-4 Restricting Conditions (D.1) T.2-01 5-16
Table 5-5 Design Exceptions (D.1) T.2-01 5-17
Table 5-6 Restricting Conditions (D.1) T.2-02 5-20
Table 5-7 Design Exceptions (D.1) T.2-02 5-20
Table 5-8 Restricting Conditions (D.1) T.4-01 5-25
Table 5-9 Modified Goals (D.1) T.4-01 5-27
Table 5-10 Restricting Conditions (D.1) T.4-02 5-30
Table 5-11 Design Exceptions (D.1) T.4-02 5-30

Table 5-12 Restricting Conditions (D.1) T.4-03 5-33
Table 5-13 Design Exceptions (D.1) T.4-03 5-34
Table 6-1 Summary of Requirements (Development Classification D.2) 6-4
Table 6-2 Restricting Conditions (D.2) T.1-01 6-8
Table 6-3 Modified Goal (D.2) T.1-01 6-9
Table 6-4 Restricting Conditions (D.2) T.2-03 6-16
Table 6-5 Design Exceptions (D.2) T.2-03 6-17
Table 6-6 Restricting Conditions (D.2) T.4-01 6-22
Table 6-7 Modified Goals (D.2) T.4-01 6-23
Table 6-8 Restricting Conditions (D.2) T.4-02 6-26
Table 6-9 Design Exceptions (D.2) T.4-02 6-26
Table 6-10 Restricting Conditions (D.2) T.4-03 6-28
Table 6-11 Design Exceptions (D.2) T.4-03 6-29
Table 6-12 Sea Level Rise Adjustment Factors (D.2) T.4-04 6-33
Table 6-13 Restricting Conditions (D.2) T.4-04 6-34
Table 6-14 Design Exceptions (D.2) T.4-04 6-34
Table 7-1 Summary of Requirements (Development Classification D.3) 7-3
Table 7-2 Restricting Conditions (D.3) T.1-01 7-7
Table 7-3 Modified Goal (D.3) T.1-01 7-7
Table 7-4 Restricting Conditions (D.3) T.2-04 7-12
Table 7-5 Design Exceptions (D.3) T.2-04 7-13
Table 7-6 Restricting Conditions (D.3) T.4-01 7-18
Table 7-7 Design Exceptions (D.3) T.4-01 7-18
Table 7-8 Sea Level Rise Adjustment Factors (D.3) T.4-04 7-22
Table 7-9 Restricting Conditions (D.3) T.4-05 7-24
Table 7-10 Modified Goal (D.3) T.4-05 7-24
Table 8-1 Summary of Requirements (Development Classification D.4) 8-3
Table 8-2 Restricting Conditions (D.4) T.1-01 8-7
Table 8-3 Modified Goal (D.4) T.1-01 8-8
Table 8-4 Restricting Conditions (D.4) T.3-04 8-12
Table 8-5 Modified Goal (D.4) T.3-04 8-13
Table 8-6 Restricting Conditions (D.4) T.4-05 8-15
Table 8-7 Modified Goal (D.4) T.4-05 8-16

PREFACE

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REVISION HISTORY

Updating the Terrain Modification Manual is an ongoing process and revisions will be issued intermittently. The addition of new, or the modification of existing, information through the revision process does not imply that existing features are deficient.

Revision Date	*Effective Date*	*Nature of Revision (Major/Minor)*	*Section(s) Revised*	*Revision Description*

1.0 INTRODUCTION

1.1 PREPARING FOR FUTURE CHALLENGES

Becoming an environmentally sustainable and resilient community is a stated goal within the City's Strategic Plan. Achieving this goal requires environmental stewardship while also recognizing and accounting for the future environmental challenges that could impact the daily activities of the City's residents and visitors. As a barrier island community, sea level rise represents the greatest threat to the City's built and natural environment.

Sea level rise is expected to have a range of impacts on coastal communities. The City's local topography will result in more frequent and severe flooding events. Erosion and coastal land loss can lead to the degradation of habitat for marine and terrestrial species. These predicted physical effects could intensify the corresponding impacts to public health and overall quality of life. Life on the island may fundamentally change without swift and purposeful action.



The need to prepare for these future challenges is evident. From a local perspective, the City is responsible for the protection of people and property within its jurisdictional limits. From a regional perspective, the City is a recreation destination and is part of the economic engine that drives Pinellas County's $10.3 billion tourism industry. Preparing for sea level rise today increases the chances of the City maintaining economic viability in the future.

1.2 THE CITY'S PATH FORWARD

The development of the Terrain Modification Program is a milestone on the City's path to resiliency. Authorizing the City of Treasure Island Watershed Management Plan launched this journey as the City recognized that construction of a City-wide stormwater model was needed to accurately assess sensitivities to changes in tidal conditions. Coupling these projections with storm event simulations shed light on the depth and breadth of sea level rise impacts as it pertains to stormwater management and the navigability of the City's roadway network.

The Watershed Management Plan evaluated an array of structural and non-structural measures to combat the threat of sea level rise. Terrain modification, or elevating low lying public and private lands, was identified as a critical strategy to be implemented in future development. The City-wide terrain

modification goal would not be accomplished in a single project but rather segmentally through the organic development and redevelopment cycles that occur within any community. Through adoption of the Watershed Management Plan in early 2021, the City recognized that new development guidelines would be needed to support the use of fill material.

Promoting terrain modification in communities where fill has historically been restricted presents a unique set of challenges. These challenges vary from regulatory restrictions (most notably the National Flood Insurance Program) to technical challenges associated with floodplain impacts. However, of particular concern was ensuring that the City's sense of community was preserved.

It was recognized early on that developing a suite of design tools and strategies was needed to successfully implement this recommendation. The aforementioned design tools must be supported by the City's Land Development Regulations (LDRs). As such, the City has commissioned revisions to the LDRs to codify the practices proposed within this Manual. The Terrain Modification Program is centered around these two (2) critical elements, the development of the Terrain Modification Manual and the corresponding code revisions.

Creation of the Program is merely the initial step. Maintenance of the Program will be essential to its longevity and relevance in future years. Program Goals will need to be revisited based upon the latest scientific findings pertaining to sea level rise projections, pertaining to both timing of impacts and resulting tidal elevations. Revisions may also be needed as development patterns change and community preferences become more defined.

1.3 PROGRAM & PURPOSE

The City of Treasure Island Terrain Modification Program provides the framework to accomplish the City's terrain modification goals. The Terrain Modification Manual documents the steps needed to successfully execute the Program. This Manual will serve to guide designers, engineers and permit review professionals in properly incorporating terrain modification on public and private development projects throughout the City. Design methodologies and standards are integrated into this single source document. Development of this Manual reflects a coordinated effort between the design, permitting and construction community to promote the use of fill in future development.

1.4 OBJECTIVES

The City's Strategic Plan, adopted by Resolution No. 20-17, outlines specific goals and objectives for future growth and development. Therefore, for all pursuits undertaken by the City, it is critical that there is direct relevance to the Strategic Plan to ensure adherence to the overarching principles contained within.

Development of the Program and this Manual is directly relevant to the goals outlined with the City's Strategic Plan. Becoming an environmentally sustainable and resilient community is a goal desired by residents and personnel of the City. Addressing challenges associated with sea

level rise, specifically "rising above" said challenge, is an explicitly stated objective within this critical document.

The City's Comprehensive Plan (completed in 2023) identifies goals, objectives and policies for City infrastructure as well as the Capital Improvements Program. The Program supports the following policies presented within the Comprehensive Plan:

Future Land Use Element, Objective 1.15: Resiliency Planning

- Policy 1.15.2
- Policy 1.15.3
- Policy 1.15.4

Capital Improvements Element, Objective 1.1: Capital Improvements Planning

- Policy 1.1.1
- Policy 1.1.6

Infrastructure Element, Objective 4.1: Stormwater

- Policy 4.1.1
- Policy 4.1.14

1.5 Role of the City in Development

Maintaining level of service (LOS) standards for owned roadways and stormwater infrastructure is a critical responsibility of the City's. Furthermore, the City is the responsible authority for ensuring that proposed development activities do not adversely impact the community. Therefore, with future regulations posed to mandate terrain modification to prepare for the impacts of sea level rise, the City is the appropriate entity to oversee this effort.

2.0 General Information

2.1 Scope, Applicability & Use

This Manual outlines procedures for development within the City in an effort to standardize the design and permitting of construction in a new environment where the use of fill is required. Included in this Manual are policies, guidelines, and instructions for performing specific activities associated with the design, permitting and construction of new development within the jurisdictional boundaries of the City. This Manual is for use by all City of Treasure Island personnel, its representatives and the general public.

The City may delegate certain responsibilities within this Manual, however, the City is responsible for the permitting of all development within their jurisdictional limits. Policies and procedures set forth in the Manual are generally applicable to the types of projects typically reviewed and approved by the City. However, this Manual does not intend cover all projects nor each element of any one project. It shall be the applicant's responsibility to implement the policies and procedures outlined within this Manual in a manner that aligns with the Program Tenets and goals identified herein.

2.2 Other Permitting Agencies

Development will likely require authorization from other agencies with jurisdictional authority within the City. These agencies include, but are not limited to, the following:

- United States Army Corps of Engineers (USACOE)
- United States Fish and Wildlife Service (USFWS)
- Federal Emergency Management Agency (FEMA)
- Southwest Florida Water Management District (SWFWMD)
- Florida Department of Environmental Protection (FDEP)
- Florida Department of Transportation (FDOT)
- Pinellas County Environmental Management (PCEM)

Adherence to the requirements set forth within this Manual does not alleviate the Owner from obtaining the necessary permissions for development. Provisions of this Manual shall not be deemed to nullify any provision of state or Federal law.

2.3 Procedural Requirements

Development approvals shall be obtained through the process outlined within the Code of Ordinances of the City of Treasure Island, Florida. This Manual does not propose modification to the permit submission and approval process outlined within the applicable Governing Regulations.

2.4 GOVERNING REGULATIONS

This Manual serves to guide future development within the City in a manner that increases resiliency to sea level rise and other high water events. Applicants shall note that the below regulations shall take precedence:

44 CFR Parts 59, 60, 65 and 70, National Flood Insurance Program (NFIP) Regulations

Florida Statutes Section 161.053, Coastal construction and excavation; regulation on county basis

Florida Statutes Section 553.73, Florida Building Code

Florida Statutes Section 604.50, Nonresidential farm buildings; farm fences; farm signs

Florida Administrative Code Section 62-330, Environmental Resource Permitting

2.5 DEFINITIONS

Term	*Definition*
"Building"	Any structure used or intended for supporting or sheltering any use or occupancy.
"Coastal A Zone"	Area within the *Special Flood Hazard Area* (SFHA) landward of a V zone without mapped *coastal high hazard areas*. The inland limits of the coastal A zone is the Limit of Moderate Wave Action delineated on a Flood Insurance Rate Map (FIRM).
"Coastal High Hazard Area"	Area within the the *Special Flood Hazard Area* (SFHA) extending offshore to the inland limits of a primary dune along an open coast and any other area that is subject to high-velocity wave action from storms or seismic sources, and shown on a Flood Insurance Rate Map (FIRM) or other flood hazard map as velocity Zone V, VO, VE or V1-30 It is recognized that the State of Florida defines the Coastal High Hazard Area as the area below the category 1 storm surge line as defined by the SLOSH model. However, when the term "Coastal High Hazard Area" is used within the Manual, the above definition shall be used.
"City"	The City of Treasure Island, or the City of Treasure Island's authorized representatives.
"Code"	Code of Ordinances for the City of Treasure Island, Florida

Term	*Definition*
"Contiguous Land"	Parcels of land, under common ownership, that touch at one or more points or share a common border. Areas of land that are divided by public or private roads or rights-of-way are considered contiguous if such areas are under common ownership or control. For the purposes of this definition, a master homeowner's association and building-specific homeowner's association is considered common ownership.
"Design Exception"	An authorization that allows for Guideline compliance to be achieved in an alternate manner.
"Development"	Any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, tanks, temporary structures, temporary or permanent storage of equipment or materials, mining, dredging, filling, grading, paving, excavations, drilling operations or any other land altering or land disturbing activities.
"Exclusion Zones"	Locations on private property where, after *terrain modification*, the finished grade is less than elevation 6.00' and the placement of permanent structures is not permitted.
"Fill"	Material including but not limited to soil, gravel, or crushed stone that is placed in an area to increase ground elevations (see Structural Fill) [Also defined in ASCE 24, Section 1.2.]
"Finished Grade"	The finished elevation of a site after all fill, land balancing or site preparations have been completed. The finished elevation shall be inclusive of all grasses, landscaping, decks, patios, slabs or other ground coverings.
"Floodable Park"	A green space specifically designed to accommodate and manage floodwaters.
"Floodplain Elevation Match Line"	A reference line that establishes the point of intersection between the *pluvial floodplain* and a driveway.
"Floor, Base"	An enclosed or non-enclosed area beneath an elevated building used for parking, storage or access. This may be referred to as either the "top of bottom floor" or "attached garage" on a FEMA Elevation Certificate.
"Floor, Lowest"	The lowest floor of the lowest enclosed area, including basement, but excluding any unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of Section 1612 of the Florida Building Code.
"Goal"	The development classification-specific minimum resulting elevation after terrain modification has been performed.

Term	*Definition*
"Grading Plan"	An engineering plan representing the *finished grade* elevations throughout the extents of a development. This plan shall contain sufficient spot elevations to determine the direction of flow and ensure that minimum slopes are achieved. Elevations identifying the *finished grade* elevation shall be provided not more than twenty-five feet apart. *Natural grade* elevations identified on the *survey* shall also be shown.
"Low Road"	The lowest edge of pavement elevation along a section of roadway.
"Manual"	The Terrain Modification Manual (current edition)
"MS4"	The City of Treasure Island's Municipal Separate Storm Sewer System which is a system of stormwater conveyances (pipes, ditches, etc.) designed to collect and discharge stormwater.
"Natural Grade"	The grade unaffected by construction techniques such as fill, landscaping or berming
"NAVD88"	North American Vertical Datum of 1988. All stated elevations reference this datum.
"Nonstructural Fill"	*Fill* that does not serve to support or protect a structure. This may include but not be limited to *fill* used below parking slabs, decks and patios. Material shall be similar to the natural soils in the area, free of large rocks and debris, and have no tendencies to excessively compact.
"Owner"	The entity in responsible charge for a project. This may also be deemed the applicant.
"Overland Flow Transfer Point"	Any point along a local basin boundary, located within the right-of-way or on private property, where the *natural grade* surface could support the transfer of water across the land surface.
"Overland Flow Transfer Point, Active"	An *overland flow transfer point* that resides below the *pluvial floodplain* elevation of any basin encumbering or abutting the project boundaries. When a project is located beyond the study limits of the Watershed Management Plan, all overland flow transfer points shall be considered active.
"Pluvial Floodplain"	The area of land inundated by floodwater for the 100-Year / 24-Hour rainfall event (using present day tailwater conditions) as presented within the Watershed Management Plan and subsequent revisions. The term floodplain is not intended to refer to the Special Flood Hazard Area (SFHA).
"Program"	The Terrain Modification Program
"Reconstruction, Roadway"	Roadway improvements that entail the physical removal and replacement of roadway foundation material throughout the entire length of a project.
"Record Drawings"	Detailed drawings, signed and sealed by a Florida-registered Professional Land Surveyor, documenting the post-construction condition and *finished grades*. These drawings shall reflect any differences from the original construction drawings in the same level of detail and units of dimension.

Term	*Definition*
"Rehabilitation, Roadway"	Roadway improvements that are not considered resurfacing or reconstruction.
"Requirement"	A specific, measurable and verifiable means of ensuring adherence to a Program Tenet.
"Restricting Condition"	The formal recognition that certain site-specific conditions are present which impacts an applicant's ability to comply with a *Requirement*.
"Resurfacing, Roadway"	Roadway improvements that entail the removal and replacement of the wearing surface with identical or similar material.
"Retaining Wall"	A vertical or near-vertical structure built out of rock, block, wood or other similar material and used to either directly support retained material or to serve as a facing of a cut slope. The definition includes, but is not limited to, other systems designed to retain earth or other materials such as a geosynthetic-reinforced wall. The f*inished grade* of the retained material shall be no more than 6" below the top of structure.
"Sea Level Rise"	An observed increase in the average local sea level or global sea level trend. This may also be referred to as SLR.
"Special Flood Hazard Area"	The land area subject to flood hazards and shown on a Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE or V1-30.
"Stormwater Model"	The hydrologic and hydraulic model associated with the Watershed Management Plan and subsequent revisions.
"Structural Fill"	*Fill* placed and compacted to a specified density to provide structural support or protection to a structure.[Also defined in ASCE 24, Section 1.2.]
"Survey"	A map documenting the elevation of the land and location of natural and manmade features which meets the technical standards of Florida Administrative Code 5J-17.052 and is signed and sealed by a Florida Professional Surveyor mapper (PSM). This map shall depict the *natural grade* of the project at one-foot contour intervals and with the existing drainage patterns clearly established inclusive of any *overland flow transfer points*. Natural grade elevations shall be obtained at a minimum interval of twenty-five feet and extend a minimum of 25-feet beyond the project boundary.
"Tailwater"	Static water level at the point of a discharge for stormwater system.
"Tenet"	An overarching guiding principal of the Terrain Modification Program.
"Terrain Modification"	The use of *fill* for *development* activities to increase site elevations utilizing the procedures and requirements outlined in the *Manual*.
"Yard"	An open area of a lot or parcel which is provided as a setback and is unoccupied by any building.
"Yard, Waterfront"	A *yard* or any portion thereof on lots abutting a waterfront and extending across the full width of the lot.

3.0 Basis of Design

3.1 Sea Level Rise Projections

Sea level rise will produce long-term and persistent negative impacts to quality of life, real property and hinder the ability of the City's economy to grow. While the impacts of sea level rise are widely agreed upon, the degree and timeline for these impacts are not. Multiple governmental and scientific agencies have published time / stage estimates for use in project planning.

This Manual presents projections derived by three (3) governmental entities that publish sea level rise predictive projections; the Florida Department of Transportation (FDOT), the U.S. Army Corps of Engineers (USACOE) and the National Oceanic and Atmospheric Administration (NOAA). A single projection is put forth by the FDOT while the USACOE and NOAA identify upper, middle and lower sea level rise ranges. Figure 3-1 compiles these projections into a single view for comparison purposes.

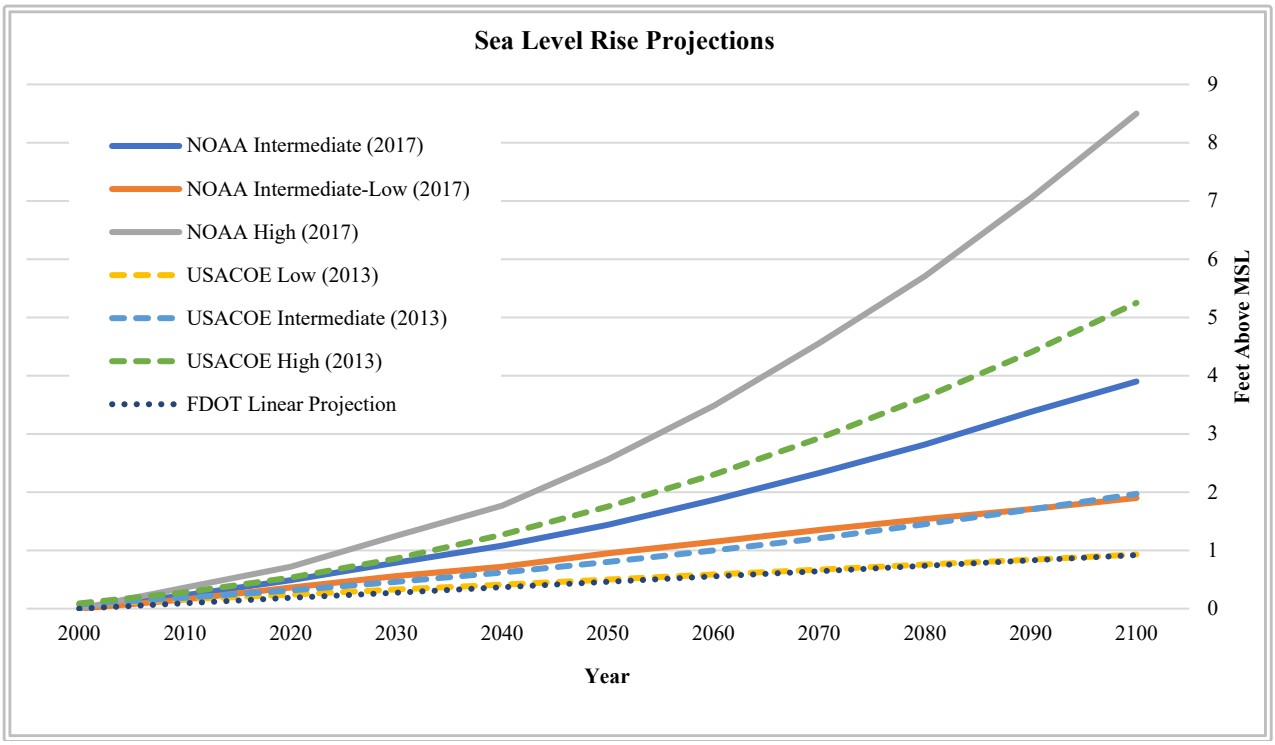


Figure 3-1 *Summary of Sea Level Rise Predictions from Various Government Agencies*

To incorporate sea level rise projections, a target planning date must first be selected. The City of Treasure Island Watershed Management Plan adopted the Year 2100 as the target planning date for resiliency planning purposes. As such, the Goals of the Program incorporate the environmental conditions associated with this timeline.

Agency-specific projections for sea level rise are shown to vary. The Tampa Bay Climate Science Advisory Panel (CSAP), a network of scientists and resource managers working in the Tampa Bay area, utilized the NOAA projections as the basis for their guidance document titled *Recommended Projections of Sea Level Rise in the Tampa Bay Region*. This report, dated April 2019, is intended to assist governmental entities in accounting for sea level rise in future planning efforts. With the City a member government of the Council responsible for preparation of the regionally-specific sea level rise guidance document, the recommended projections within said document have been utilized (NOAA). Within the subset of projections, three (3) different scenarios are presented for consideration. The Intermediate scenario is the basis of the City's Goals as this is reported as being the scenario which covers the high end of the likely range should greenhouse gas emissions continue their current trends (Representative Path Concentration (RCP) 8.5).

The City of Treasure Island Watershed Management Plan identified mean high-water trends present with tidal gauge recordings for the latest Tidal Datum Epoch (2002-2020). Section 2.4, titled *Boundary Waters*, discussed the incorporation of an adjustment factor to published tidal benchmarks based upon the 1983-2001 Tidal Datum Epoch. This process derived a Year 2100 tailwater elevation of 4.10' which will serve as the basis for future infrastructure planning and anticipated sea level rise impacts.

3.2 Impacts of Sea Level Rise

Elevation fluctuations throughout the four (4) islands which comprise the community are relatively minor. However, projected tidal elevations incorporating sea level rise projections would not have a uniform impact on the City. Sunset Beach, one of the more low-lying areas of the City, would experience the brunt of this environmental change. Comparatively, impacts experienced on portions of the Isle of Capri would not be as significant. Figure 3-2 illustrates the pre-precipitation tidal inundation limits projected by the Year 2100.

3.3 Recommended Resiliency Measure

Day-to-day operations of the City, as well as normal economic activity, are untenable in the above-presented scenario. To account for these conditions, the City of Treasure Island Watershed Management Plan presented an assortment of mitigation strategies for consideration. Please reference Section 7.2 of the Watershed Management Plan, *Resiliency Alternatives*, for additional discussion.

Flood barriers, either static or dynamic, would represent a more regional solution that would need to be initiated by a Federal or State entity. Maintaining present-day terrain elevations and converting to a pump-based stormwater system presents unique risk elements in addition to extensive operational and maintenance costs. The use of backflow preventors as the sole means of protecting against sea level rise would not meet the City's level of service goals. As such, terrain modification was identified as a critical tool that was needed to prepare against the impacts of sea level rise.



Figure 3-2 *Year 2100 Limits of Flooding (Elevation 4.10')*

Achieving a minimum low road elevation of 5.10' facilitates the continued function of the City's gravity-based MS4 at times of elevated tidal conditions. However, a majority of the City's roadway network resides below this elevation threshold. Terrain modification, or the segmental process of elevating existing grades within the City, is needed to address the elevation deficit present between the desired and current roadway elevations.

Increasing the elevation of the City's roadway network cannot be successfully implemented unilaterally nor immediately. The City must continue to support public and private development while ensuring that improvements facilitate future roadway elevations. To do so, the Program establishes Goals for each type of development or improvement likely to be done within the City. These development-specific Goals directly correlate to the low road elevation desired by the City.

Subsequent sections of this Manual outline the development classifications governed by this Manual and the corresponding target elevation. However, as stated in Section 4, these Goals must always be achieved while simultaneously complying with the Tenets of the Terrain Modification Program. *Adherence to the Tenets of the Program will always be prioritized over a project meeting its Goal.*

3.4 Totality of Resiliency Measures

A City's resilience is typically evaluated by looking at economic, societal, governance and environmental factors. The Terrain Modification Program does not intend to represent the totally of resiliency measures being pursued by the City but rather focus on how to transition from a no-fill City to one that requires the use of fill. Furthermore, it is recognized that the use of fill may be coupled with other strategies to prepare for the impacts of sea level rise. Backflow valves, stormwater pumping stations and similar types of systems may be needed as projects are tailored to specific challenges present within the City. However, the use of fill will be a foundational tool the City utilizes moving forward.

4.0 PROGRAM OVERVIEW

4.1 PROGRAM STRUCTURE

Goals, established for each classification of development, are set forth in later sections of this Manual and establish the long-term vision of a community looking to "rise above" the threat of sea level rise. Wholesale implementation of these goals as part of a significant construction effort would find the terrain of the City essentially replicated at a higher elevation stratum. However, pursuit of these goals in an instantaneous (and simultaneous) manner is not feasible when considering the vast property use / ownership and budgetary challenges that such an effort would need to overcome. These goals need to be achieved in a phased manner, location by location, following the organic cycle of development and improvement within the City. With the goals outlined focused on Year 2100 sea level projections, it is believed that a significant amount of terrain modification can be accomplished within the next seven plus decades.

Improvements can happen segmentally or in clusters. Single family development is more prone to sporadic improvements based upon a property owner's personal goals and financial situation. Commercial or multi-family developments can also be segmented but have the unique opportunity to transform large swaths of the City. Regardless of the type of development, concentration of the work or location, it is recognized that improvements implementing the recommendations contained within this Manual will abut properties in their original state in many locations.

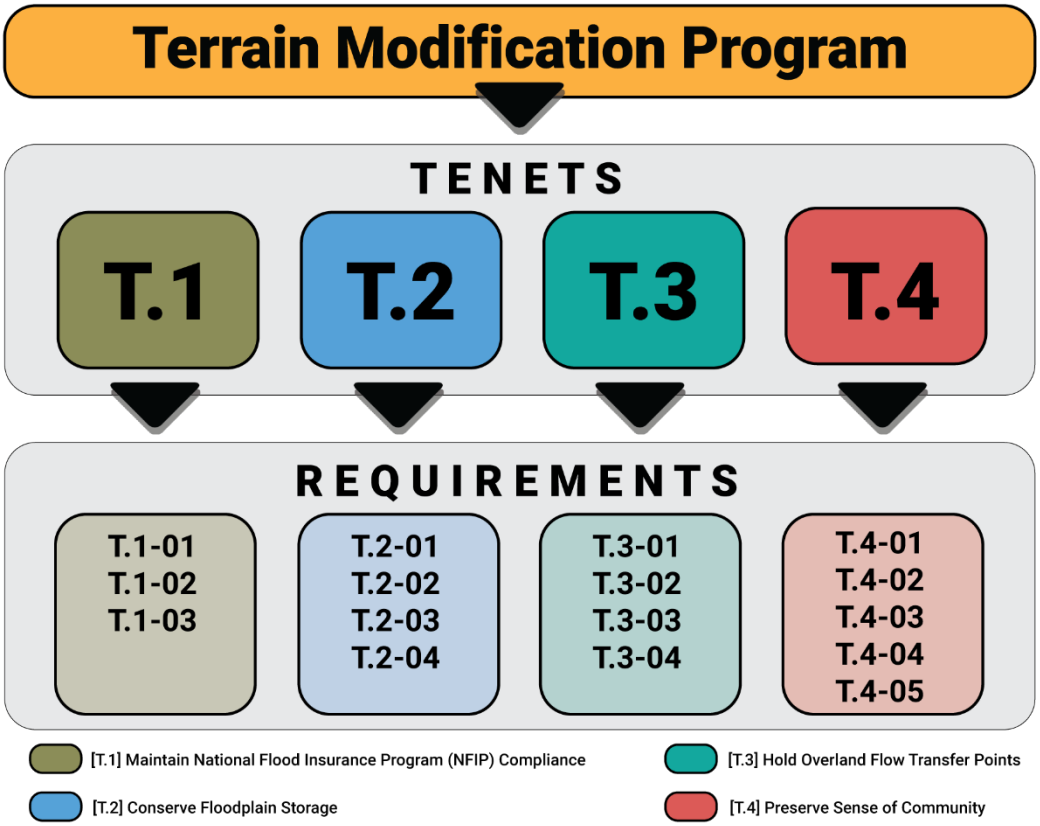


Figure 4-1 *Program Overview*

It is imperative that core principles be established to guide the City's Terrain Modification Program throughout execution and anticipated maintenance cycles. These core principles have been identified as the Program Tenets. Adherence to these Tenets is critical for the long-term success of the Program. Requirements, which correlate to each Tenet, serve as a means to confirm adherence to these guiding principles. Figure 4-1, as seen on the prior page, provides a graphical representation of the Program.

4.2 Establishment of Program Tenets

The intermixed nature of new development (regardless of type) and existing structures could result in adverse impacts should the a Goal be pursued while disregarding certain guiding principles. It is for this reason that Tenets have been identified to highlight specific concerns as it pertains to the segmental modification of terrain. The below listing represents the foundational principles of this program:

1. Maintain National Flood Insurance Program (NFIP) Compliance [**T.1**]
2. Conserve Floodplain Storage [**T.2**]
3. Hold Overland Flow Transfer Points [**T.3**]
4. Preserve Sense of Community [**T.4**]

Adherence to these Tenets provides a degree of checks and balances by ensuring that the pursuit of the Goals does not result in any unwanted changes to the City's regulatory standing, functionality of the built environment or sense of community.

Each type of development will have a prescribed method of documenting adherence to these Tenets, defined as Requirements. Requirements, which can be either development-specific or applied globally, provide a designer, permit reviewer or contractor specific components to be considered to determine Program compliance.

The long-term health of the Program is tied to the ability to adhere to the Program Tenets. As such, all projects subject to the conditions of this Program must adhere to the Tenets. This may result in Goals not being fully realized if restricting conditions are present. Certain Requirements outline mitigation strategies to achieve a modified version of the Goal. With this being said, the City will improve its resiliency to sea level rise by achieving established or modified Goals.

4.3 Maintain National Flood Insurance Program (NFIP) Compliance (Tenet T.1)

The ability for property owners to obtain flood insurance is essential for the longevity of the City. As a participating community, the City must adhere to the rules and regulations set forth by the National Flood Insurance Program (NFIP). Noncompliance with these legislative standards could place the City's participation status in question which would have disastrous results to both public and privately held land.

Adherence to the core requirements of the NFIP represents the least acceptable degree of floodplain management. The program recognizes that each individual community has the opportunity to go beyond these core requirements through the adoption of more stringent development rules. Reductions on flood insurance premiums can be realized through this process by participating in the voluntary Community Rating System (CRS). The City is currently a good standing member of this program.

It is essential that the Goals be pursued in a manner that complies with the core requirements of the NFIP. In certain situations, CRS program updates will be needed to capture the current terrain modification efforts. Below are the Requirements associated with this Program Tenet:

Summary of Requirements (Program Tenet T.1)	
Requirement Identification No.	**Requirement Name**
T.1-01	Fill Thresholds, Coastal Zones
T.1-02	Slope Thresholds, Coastal Zones
T.1-03	Slope Thresholds, Non-Coastal Zones

Table 4-1 *Summary of Requirements (Tenet T.1)*

The Coastal High Hazard Area (CHHA) represents the most restrictive SFHA designation while the AE zone represents the least restrictive SFHA designation.

Please note that these Requirements may not be applicable for all types of development.

4.4 CONSERVE FLOODPLAIN STORAGE (TENET T.2)

For the purposes of this Manual, floodplain references pertain to the pluvial floodplain in lieu of the Special Flood Hazard Area (SFHA) identified by FEMA (see Section 2.5, Definitions). The pluvial floodplain derived at the time of Watershed Management Plan (WMP) preparation was based upon the current terrain of the City. As terrain is modified (specifically elevated), storage volume is lost at the lower elevation strata of the pluvial floodplain.

Pursuit of the Goals shall be done in a manner that recognizes the functional relationship between pluvial floodplain volume and watershed performance. The following Requirements have been identified to either lessen, mitigate for or reduce the impacts to the pre-improvement pluvial floodplain:

Summary of Requirements (Tenet T.2)	
Requirement Identification No.	**Requirement Name**
T.2-01	Tiered Driveway Slopes
T.2-02	Grading Termination Points
T.2-03	Maintenance of Pluvial Floodplain Volume
T.2-04	Reduction of Pluvial Floodplain Boundaries

Table 4-2 *Summary of Requirements (Tenet T.2)*

Please note that these Requirements may not be applicable for all types of development.

4.5 HOLD OVERLAND FLOW TRANSFER POINTS (TENET T.3)

The City's MS4 can provide a reasonable level of service for certain design storm events. At times when rainfall intensity exceeds the system conveyance capabilities, water surface elevations begin to increase at the point of collection. Stages continue to rise until they reach the extents of the localized depressional area (or basin). A continued rise in stage will result in water overtopping low points (or saddles) along the basin boundaries thereby transferring flows to adjacent basins. In certain locations, excess water will be discharged directly to the City's boundary waters.

This transfer of flows, via overland means, is a phenomenon that is directly attributed to rainfall intensity, MS4 efficiencies and the watershed's terrain. Changes to the terrain, as proposed within this Manual, can alter the location and intensity of these discharges experienced during larger storm events. The following Requirements have been identified to ensure that terrain modification does not result in changes to the location and extent of overland flow transfer:

Summary of Requirements (Tenet T.3)	
Requirement Identification No.	**Requirement Name**
T.3-01	Flow Transfer Point Identification
T.3-02	Flow Equivalence
T.3-03	Stage Equivalence
T.3-04	Flow Transfer Accommodations

Table 4-3 *Summary of Requirements (Tenet T.3)*

Please note that these Requirements may not be applicable for all types of development.

4.6 PRESERVE SENSE OF COMMUNITY (TENET T.4)

Preserving sense of community focuses on incorporating the Goals in a manner that yields little change to the fundamental aspects of the City. This pertains to how property is accessed, impacts to adjacent property and the performance of the City's infrastructure. Below are the Requirements associated with this Tenet:

Summary of Requirements (Tenet T.4)	
Requirement Identification No.	**Requirements Name**
T.4-01	Access Management
T.4-02	Property Harmonization
T.4-03	Terrain Modification Accommodation
T.4-04	Sea Level Rise Considerations
T.4-05	Elevation Relationships

Table 4-4 *Summary of Requirements (Tenet T.4)*

Please note that these Requirements may not be applicable for all types of development.

This Program has been developed in response to the threat posed by sea level rise. Therefore, all Requirements presented within the Manual are framed around this central theme. The Tenet / Requirement Crosswalk (Table 4-5) highlights that Requirement T.4-04, Sea Level Rise Considerations, is not applicable for Type D.1 and D.4 developments. This does not suggest that sea level rise considerations are ignored for these classifications. Rather, this Requirement pertains to incorporating sea level rise projections into specific stormwater calculations which are not utilized in design of D.1 and D.4 developments.

4.7 REQUIREMENTS SUMMARY

Subsequent sections of this Manual discuss the applicable Requirements associated with each development type. Each Requirement will identify the information required for a substantive review, the specific method of review and design exceptions that may be needed based upon the unique characteristics of a site.

Of particular importance is where the specific Requirement resides within the hierarchy of the approval process. In many cases, an improvement may meet the criteria of the specific Requirement and the Goal can be achieved. However, certain Requirements (most notably those related to NFIP compliance) take precedence over the Goals due to higher-level regulatory restrictions or functionality concerns. Design exceptions, when authorized, can be utilized to increase the likelihood of achieving a Goal.

As noted above, Requirements vary in applicability depending on the type of development proposed by the permit applicant. Please reference the below crosswalk table to view a list of Requirements as they pertain to development types.

Tenet / Requirement Crosswalk		Single Family and Two-Family Dwellings	Multi-Family & Commercial Development	Public Infrastructure	Coastal Erosion Structures
Req. ID	**Requirement Name**	**Development Type D.1**	**Development Type D.2**	**Development Type D.3**	**Development Type D.4**
Tenet T.1 - Maintain National Flood Insurance Program (NFIP) Compliance					
T.1-01	Fill Thresholds, Coastal Zones	X	X	X	X
T.1-02	Slope Thresholds, Coastal Zones	X	X	X	X
T.1-03	Slope Thresholds, Non-Coastal Zones	X	X		
Tenet T.2 – Conserve Floodplain Storage					
T.2-01	Tiered Driveway Slopes	X			
T.2-02	Grading Termination Points	X			
T.2-03	Maintenance of Pluvial Floodplain Volume		X		
T.2-04	Reduction of Pluvial Floodplain Boundaries			X	
Tenet T.3 – Hold Overland Flow Transfer Points					
T.3-01	Flow Transfer Point Identification			X	
T.3-02	Flow Equivalence	X	X		
T.3-03	Stage Equivalence			X	
T.3-04	Flow Transfer Accommodations				X
Tenet T.4 – Preserve Sense of Community					
T.4-01	Access Management	X	X	X	
T.4-02	Property Harmonization	X	X	X	
T.4-03	Terrain Modification Accommodation	X	X		
T.4-04	Sea Level Rise Considerations		X	X	
T.4-05	Elevation Relationships			X	X

Table 4-5 *Tenet / Requirement Crosswalk*

4.8 DEVELOPMENT CLASSIFICATIONS

The City reviews thousands of permits on a yearly basis covering a wide array of construction activities. The ability to achieve the desired resiliency goal may not be within the purview for many of the projects pursued by the local community. For example, electrical improvements within a residence or the installation of a non-residential garage door would not be an activity that would warrant pursuit of the goals identified within this Manual. It is believed that the resiliency measure set forth by the City will focus on the following types of improvements:

1. Single Family and Two-Family Dwellings [**D.1**]
2. Commercial and Multi-Family Development [**D.2**]
3. Public Infrastructure [**D.3**]
4. Coastal Erosion Structures [**D.4**]

Improvement types were not developed within a focus on zoning, future land use or other classifications typically referenced in the development process. Rather, this improvement classification placed an emphasis on uniformity of permitting, design professional involvement, available mitigation opportunities and other relevant factors.

Subsequent sections expand upon development classifications, Goals associated with each development classification and the specific Requirements that must be adhered to in order to comply with the Tenets of the program.

It shall be noted that the scope of certain projects may result in the need to adhere to the Requirements associated with multiple development classifications. For example, many single family home (Development Classification D.1) builds may include the construction of a new seawall (Coastal Erosion Structures D.4). Therefore, Requirements associated within Development Classifications D.1 and D.4 would be in force. Similarly, larger commercial or multi-family projects may include a roadway element for concurrency purposes. In these situations, the project would need to adhere to the Requirements associated within Development Classifications D.2 & D.3.

Goals identified for each Development Classification are explicitly stated as an exact elevation or a minimum elevation. Where minimum elevations are identified, the goal may be exceeded in a manner that complies with all Requirements. Where exact elevations are identified, the Goal may not be exceeded.

4.9 Regulated Activities

Terrain modification shall be required for all new development, redevelopment and substantially improved buildings. When required for Development Classifications D.1 & D.2, terrain modification shall be performed throughout the entirety of the site, inclusive of the right-of-way, and on all contiguous lands under common ownership or control. When required for Development Classification D.3, terrain modification shall be performed throughout the right-of-way and all private lands on which easements have been granted. When required for Development Classification D.4, terrain modification shall be performed through the yard and waterfront yard to the extent necessary to meet the requirements of the Manual.

Public and private utility infrastructure is often located within the right-of-way. Terrain modification will require that said facilities are adjusted vertically in a manner that provides an identical level of access when compared to the pre-improvement condition. This work shall be performed by the applicant utilizing the standards and specifications established by the utility owner.

Terrain modification shall not be limited to the immediate project area. The City may, at their sole discretion, reduce the area of contiguous lands subject to terrain modification should a unique hardship be present such as:

A. The presence of an existing building on the parcel, proposed to remain in its current state, which is comparable in size, use or occupancy as the new or substantially improved building or has an appraised value of more than $50,000.00.

B. The presence of an existing building on an adjacent parcel, proposed to remain in its current state, which currently functions independently of the subject parcel and will continue to function independently of the subject parcel once the development is complete. Independent function will consider factors such as shared infrastructure, physical separation, environmental management practices and overall operational autonomy.

C. The development area, inclusive of all buildings and other new development features, is less than or equal to twenty-five percent of the total parcel acreage.

D. The presence of recreational lands that are available for use as a floodable park in the future. A drainage easement must be obtained for land not owned by the city.

Increased costs to satisfy the requirements or inconvenience does not constitute a hardship.

The following activities shall be exempt from the requirements of this Manual:

1. Work not deemed a substantial improvement per Chapter 66, Floodplain Management, of the Code of Ordinances. Elevating, lifting, raising or changing the elevation of any portion of an existing structure in any way shall require adherence to the Manual regardless of whether the improvement surpasses the substantial improvement threshold outlined within Chapter 66, Floodplain Management.

2. Site improvements such as parking lots, sidewalks, landscaping, lighting, signage, fencing, recreational facilities and shade structures performed on a parcel with an existing building that is not substantially improved

3. Resurfacing or rehabilitation of existing paved roadways including the removal and reconstruction of curbing to meet minimum longitudinal slope requirements.

4. Grading of existing unpaved roadways provided there are no substantive changes to the road surface elevations.

5. The paving of unpaved roads provided that the number of travel lanes do not increase.

6. Safety improvements along roadways including, but not limited to, shoulder stabilization, vegetation clearing, the addition of turn lanes, roadway widening in a manner that does not create additional traffic lanes, and other work required to meet safety standards.

7. Construction of public safety and recreational improvements and that are not subject to vehicular use such as sidewalks, shared use paths and other pedestrian facilities.

8. Public recreation improvements limited to:

    - Regrading, contouring or altering pervious or semi-pervious recreational lands in a manner that does not change the land use.
    - Structures whose sole purpose is public recreation including but limited to picnic pavilions, play structures, maintenance sheds, concession buildings and other similar structures.

9. Any activity strictly related to maintenance and repair of existing facilities.

10. Temporary housing and associated facilities installed after a natural disaster.

11. The installation and/or repair of docks, piers and boat ramps.

12. The removal, repair, replacement or installation of public and private utilities.

13. Any seawall repair that is not a seawall major repair.

14. Development where the applicant can clearly demonstrate, through the submission of signed & sealed construction plans, that the finished grades using terrain modification would be lower than the natural grades.

Terrain modification shall not alter or reduce the buildable area of the lowest floor.

4.10 Site Grading Requirements of the Florida Building Code

Site grading requirements identified within the Florida Building Code supersede the site grading requirements outlined in the Manual, specifically as it pertains to foundation protection.

5.0 Terrain Modification (Single-Family and Two-Family Dwellings)

5.1 Applicability & Use

Section 4 of this Manual outlines the tenets of the City's Terrain Modification Program. Requirements identify certain principles and / or strategies which are to be used in the design of new improvements to reinforce adherence to a program tenet. The applicability and scope of each Requirement varies based upon the type of development being performed. Development classifications are also outlined within the prior Section. Four (4) distinct classifications were identified and assigned a unique alpha-numeric designator (D.1, D.2, etc.).

This Section serves to define single family residences and and two-family dwellings (Development Classification D.1), establish the Goal for D.1 development and outline the method of incorporation for each Requirement. Please note that a unique numeric identifier is assigned to each Requirement in an effort to streamline future communication and documentation efforts associated with the review process.

It shall be noted that the below Requirements are associated with the Goal outlined within this Manual and are not intended to be all inclusive nor representative of all considerations needed to issue a permit in accordance with the City's Code of Ordinances. Furthermore, adherence to a Requirement is not intended to replace, revise or invalidate any requirement identified elsewhere within the Land Development Regulations (LDRs).

5.2 Summary of Development Classification D.1



Development Classification D.1 consists of detached one and two-family dwellings and any other residential building goverened by the *Florida Building Code, Residential*. Not only do these types of projects represent the majority of work permitted by the City, this type of development comprises the majority of the City's developable land.

Applicability to Resiliency

Habitable structures represent the core development of any community. As environmental conditions change, the ability of their dwelling units to withstand (or adapt) to these changes is a direct reflection of the community's resiliency.

Access to these structures is provided by the roadway network proposed to be elevated through this Program. It is imperative that the appropriate relationship with the roadway be maintained for drainage, accessibility, and general function.

Future Land Use (Zoning) Correlation

Single-family residences and associated residential development are limited to two (2) designations:

- Residential Urban (RU-75)
- Residential Medium (RM-15)

It shall be noted that the Residential Medium future land use designation (and RM-15 zoning district) can support development densities greater than those classified in this improvement category.

Other Involved Permitting Agencies

These types of improvements are often exempt from permitting through the Southwest Florida Water Management District (SWFWMD). Barring any unique site conditions or environmental considerations, the City is typically the only entity involved in the permitting of these improvements.

5.3 GOAL (DEVELOPMENT CLASSIFICATION D.1)

Lowest floor elevations for this type of development are established using the Federal Emergency Management Agency (FEMA) floodplain elevations in conjunction with freeboard requirements outlined within the City's Code of Ordinances. This Manual will not impact lowest floor elevation requirements for this classification of improvement but rather establish a minimum elevation for a structure's base floor (see Section 2.5, Definitions). When considering lowest floor requirements and the City's low-lying terrain, the base floor is typically used for the parking of vehicles, building access, storing materials or a combination of the three (3).

The Goal for type D.1 development shall be achieving a base floor elevation of 7.60'.

Achieving the Goal for the roadway network will result in significant changes to a roadway's longitudinal profile. This profile will route runoff to the points of stormwater collection likely located at or near the proposed low road elevation. However, positive fall within the parkway is preferred along all segments of a new roadway. Therefore, base floor elevations for single family and atwo-family dwellings shall facilitate positive fall to all (i.e. low points and high) points on a newly elevated roadway. When utilizing projected average longitudinal slopes for an improved City roadway, it is apparent that establishing a minimum base floor elevation is needed.

This Manual recognizes that achieving the Goal for D.1 developments can alter the terrain of a site and the manner in which it is graded. It is for this reason that the Requirements extent beyond the immediate purview of a structure's base floor.

5.4 Summary of Requirements (Development Classification D.1)

The following Requirements are applicable to development activities classified as D.1:

Summary of Requirements	
Requirement Identification No.	**Requirement Name**
Maintain National Flood Insurance Program (NFIP) Compliance (Tenet T.1)	
(D.1) T.1-01	Fill Thresholds, Coastal Zones
(D.1) T.1-02	Slope Thresholds, Coastal Zones
(D.1) T.1-03	Slope Thresholds, Non-Coastal Zones
Conserve Floodplain Storage (Tenet T.2)	
(D.1) T.2-01	Tiered Driveway Slopes
(D.1) T.2-02	Grading Termination Points
Hold Overland Flow Transfer Points (Tenet T.3)	
(D.1) T.3-02	Flow Equivalence
Preserve Community Function (Tenet T.4)	
(D.1) T.4-01	Access Management
(D.1) T.4-02	Property Harmonization
(D.1) T.4-03	Terrain Modification Accommodation

Table 5-1 *Summary of Requirements (Development Classification D.1)*

Further discussion will be held on the Requirements associated with type D.1 developments.

5.5 Requirement Compliance Review Process

As part of the permit review process, each Requirement would be reviewed for applicability and compliance. For example, certain Requirements pertaining to development within coastal zones (CHHA and CAZ) would not be applicable if the project was located in an AE zone. Subsequent parts of this Section highlight critical information associated with each Requirement including:

- Applicability to Tenet
- Review Materials
- Compliance Determination
- Goal Attainment Strategies
- Restricting Conditions
- Design Exceptions
- Goal Modifications

- Related Requirements

The below figure outlines the process that is used to determine compliance with a specific Requirement.

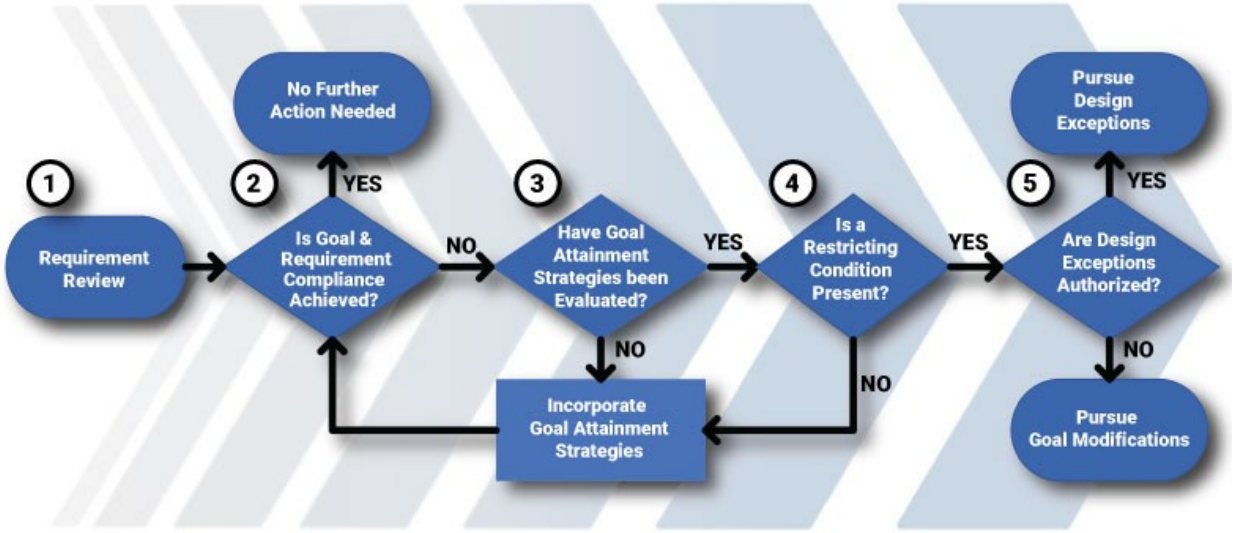


Figure 5-1 *Requirement Compliance Review Process*

Prior to assessing Requirement compliance, it is important to understand the correlation between the Requirement and the Tenet. The Program Tenets, or overarching principles, guide the review of each corresponding Requirement. Certain elements of a site are tied to certain Requirements resulting in the need to be provided with the proper review materials. As such, a specific listing of the information needed to complete a review is provided within the Requirement schedule.

The "Compliance Determination" component of each Requirement states the specific factors to be reviewed. The applicant shall start the design process by utilizing the Goal elevation associated with the development classification and assess compliance with the first Requirement listed herein. If compliant, the elevation is carried forward and used as the basis of evaluation for the subsequent Requirement. This assessment continues sequentially until all requirements have been met. A separate review is needed for all Requirements associated with a development type.

D.1 developments will vary in size and scope throughout the island community. Similarly, the methods used to become compliant may also differ. Goal attainment strategies are presented for each Requirement outlining prescribed measures to be used to achieve the D.1 Goal in a compliant manner. The use of goal attainment strategies must be considered and deemed either impractical or not constructable before consideration of a Restricting Condition is given.

A Restricting Condition is recognized when specific site constraints are present which either a.) will not support the Goal or b.) result in the need to pursue Requirement compliance in a revised manner. As stated above, a Restricting Condition will not be recognized prior to illustrating that implementing the prescribed goal attainment strategies would not be possible. Multiple Restricting Conditions may be present on a single site.

The presence of a Restricting Condition requires either modification of the Goal or the pursuit of a Design Exception. The Restricting Conditions Summary Table associated with each Requirement identifies which path is to be pursued.

Authorization of a Design Exception allows for the Requirement to be assessed using an alternate evaluation approach or through a different evaluation lens. Each Design Exception directly correlates to the similarly numbered Restricting Condition. The presence of multiple Restricting Conditions would permit the use of multiple Design Exceptions.

Where Design Exceptions are not authorized, Goal modification is needed. A specific calculation approach is provided when modified goals are to be pursued. For certain Requirements, multiple modified goals may be listed in sequential order. This order represents the hierarchy of goals in which the designer shall pursue. For example, Requirement compliance would first be assessed using Modified Goal No. 1 in conjunction with the prescribed goal attainment strategies. If the Requirement is still not met, then the designer would continue to Modified Goal No. 2. This process is then repeated until Requirement compliance is achieved.

The resultant elevation is then used as the basis of evaluation and the compliance review process restarts with the initial Requirement. This iterative process is repeated until a single elevation can satisfy all Requirements associated with the development classification. For a project to meet the requirements set forth within this Manual, the improvements must be compliant with all applicable Requirements.

5.6 Requirement Schedule (Development Classification D.1)

5.6.1 Tenet T.1 - Maintain NFIP Compliance
Requirement (D.1) T.1-01
Fill Thresholds, Coastal Zones

Applicability to Tenet

The Goal for type D.1 improvements, which establishes a base floor elevation, is identified within Section 5.3. To achieve this Goal, fill must be imported to the site. However, two (2) areas within the City's Special Flood Hazard Area (SFHA), the Coastal High Hazard Area (CHHA) and Coastal A Zone (CAZ), have NFIP-defined thresholds that are recognized as having no adverse impacts. The term fill pertains to nonstructural fill (see Section 2.5, Definitions) for this Requirement. The use of structural fill is not permitted within these zones.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
3. Intermediate Construction Survey (if required by the City during construction) *

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The most restrictive flood zone that encumbers a parcel shall be utilized when determining compliance with this Requirement. No further action is needed if the project is located outside of the Coastal High Hazard Area (CHHA) or Coastal A Zone (CAZ).

No more than 24" of fill (inclusive of the thickness of any flooring system) shall be used to establish the Goal. Survey shall document the natural grade elevations along the limits of the base floor. Interpolation between existing elevations shall be minimized. The base floor elevation shall be sited in a manner to where the finished grade elevations are no greater than 24" above natural grade elevation at the same location.

Nonstructural fill placement shall be limited to only those locations where fill is needed to elevate the base floor, transition to natural grade or address other Requirements.

A similar fill threshold evaluation shall also be performed outside of the immediate limits of the base floor. Natural and finished grades shall be compared along the access drive (i.e. driveway) and at grade transitions to ensure that the fill threshold (24") is not exceeded.

Goal Attainment Strategies

There is a direct correlation between the existing topography of a site (located within a CHHA or CAZ) and the ability to achieve the Goal. As such, base floors shall be sited in a strategic manner to utilize higher elevations that are present within the project's boundaries.

When a building is present in the pre-improvement condition, the lowest floor or existing base floor often times represents the highest elevation on the site. Place the base floor within the footprint (i.e. perimeter) of the existing building.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.1) T.1-01 (Fill Thresholds, Coastal Zones) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Pre-Improvement Elevations		x

Table 5-2 *Restricting Conditions (D.1) T.1-01*

Restricting Condition No. 1 Pre-Improvement Elevations

With fill thresholds present, natural grades limit what base floor elevation can be realized for properties encumbered by the CHHA / CAZ.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.1) T.1-01 (Fill Thresholds, Coastal Zones) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Base Floor Elev. = Natural Grade Elev. + 24"	Site new base floor 24" above natural grade.

Table 5-3 *Modified Goal (D.1) T.1-01*

It shall be noted that this fill threshold represents an absolute maximum in perpetuity. Additional fill will not be permitted once this threshold is reached.

Related Requirements

(D.1) T.1-02 Slope Thresholds, Coastal Zones
(D.1) T.2-01 Tiered Driveway Slopes
(D.1) T.4-01 Access Management

5.6.2 TENET T.1 - MAINTAIN NFIP COMPLIANCE REQUIREMENT (D.1) T.1-02 SLOPE THRESHOLDS, COASTAL ZONES

Applicability to Tenet

Elevating base floors within the CHHA and CAZ as discussed in Requirement (D.1) T.1-01 will be needed to support future terrain modification efforts. However, in a similar manner to the fill thresholds, the NFIP identifies slope thresholds for CHHA and CAZ applications.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections through front, side and rear yard depicting slope
3. Foundation Calculation(s) Identified within ASCE 24-14 (if needed)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Cross Sections revised to reflect constructed conditions

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The most restrictive flood zone that encumbers a parcel shall be utilized when determining compliance with this Requirement. No further action is needed if the project is located outside of the Coastal High Hazard Area (CHHA) or Coastal A Zone (CAZ).

Excessive transition slopes can serve to increase wave ramp up and alter wave reflection patterns. To mitigate for such impacts, transition slopes shall be softened to the maximum extent practical. It is recognized that property lines, setbacks, drainage patterns and connecting elevations are all factors that will impact the extends and steepness of these slopes.

Utilize slopes of 20% (1V : 5H) to transition from the natural grade to finished grade. , Reduced slopes shall be used only when the base floor Goal elevation is achieved, when the base floor elevation yields a fill thickness of 24” or when the use of 1V:5H slopes will impact overland flow transfer point capabilities.

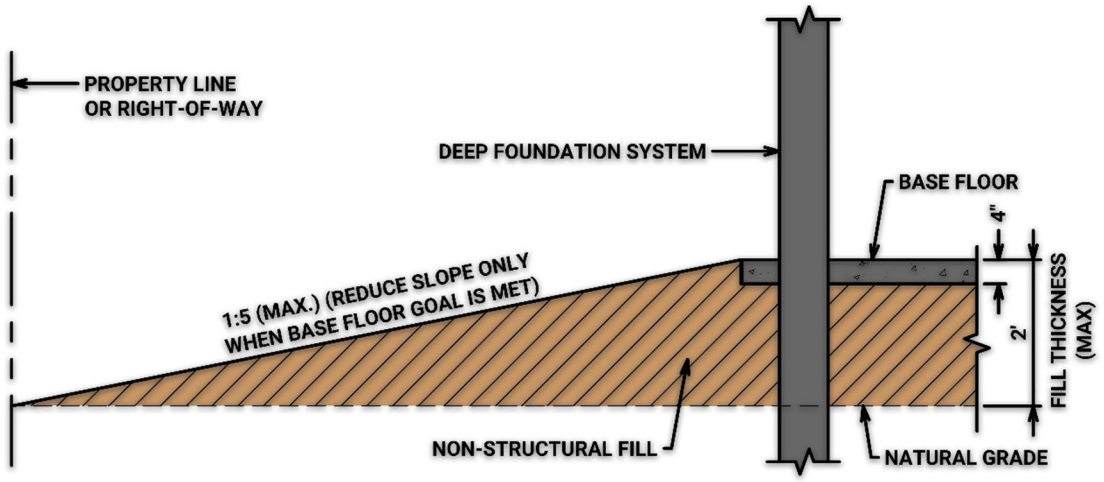


Figure 5-2 *Requirement (D.1) T.1-01/-02*

Goal Attainment Strategies

Should connecting slopes deviate from the above-stated threshold, extend the grading limits to the property line and continue within the right-of-way where applicable.

For CHHA applications, reduce base floor dimensions as needed until the 24" fill threshold is realized. This may result in the base floor being offset from the building's lowest floor. The maximum required base floor offset from the property setback shall be 5'. For CAZ applications, the use of stem walls shall be required if slope thresholds are exceeded.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.1) T.1-01 Fill Thresholds, Coastal Zones
(D.1) T.2-01 Tiered Driveway Slopes
(D.1) T.3-02 Flow Equivalence
(D.1) T.4-01 Access Management
(D.1) T.4-02 Property Harmonization

5.6.3 TENET T.1 - MAINTAIN NFIP COMPLIANCE REQUIREMENT (D.1) T.1-03 SLOPE THRESHOLDS, NON-COASTAL ZONES

Applicability to Tenet

Elevating base floors within non-coastal zones will be needed to support future terrain modification efforts within the right-of-way. While slope thresholds are present for non-coastal zones, these restrictions are associated with transition slopes where structural fill is proposed.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections through front, side and rear yard depicting slope rise/run
3. Foundation Calculation(s) Identified within ASCE 24-14 (if needed)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Cross Sections revised to reflect constructed conditions

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The most restrictive flood zone that encumbers a parcel shall be utilized when determining compliance with this Requirement.

Structural fill slopes, where proposed within non-coastal zones, shall be no steeper than 50% (1V : 2H). Vegetation will be permitted as the sole means of slope stabilization for slopes equal to or less than 33% (1V : 3H). Turf reinforcement matting, geogrids or similar devices shall be used for slope stabilization (in addition to vegetation) when slopes exceed 33% (1V : 3H).

Goal Attainment Strategies

Should connecting slopes deviate from the above-stated threshold, extend the grading limits to the property line.

The use of retaining walls or other means of structural fill retention is required if slope thresholds are exceeded.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.1) T.2-01 Tiered Driveway Slopes
(D.1) T.3-02 Flow Equivalence
(D.1) T.4-01 Access Management
(D.1) T.4-02 Property Harmonization

5.6.4 TENET T.2 - CONSERVE FLOODPLAIN STORAGE REQUIREMENT (D.1) T.2-01 TIERED DRIVEWAY SLOPES

Applicability to Tenet

Elevating base floors will result in the need to elevate the predominant means of access to said location; the driveway. Driveways bridge the elevation divide between the preferred point of stormwater collection (i.e. the roadway) and the building.

In certain locations, the pluvial floodplain may encumber a portion or the entirety of the proposed driveway. Constructing the driveway at a uniform slope between existing roadway elevations and the desired base floor elevation would typically place this section of driveway above natural grade. The fill material needed to bridge this elevation difference reduces pluvial floodplain storage.

To address pluvial floodplain storage loss concerns, this Requirement requires that driveway slopes be tiered in a manner that reduces (or minimizes) the degree of fill placed within the pluvial floodplain.

It is recognized that sidewalks often traverse driveways. When present, sidewalk cross slopes shall adhere to cross slope thresholds identified within the City's Land Development Regulations (2%).

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Pluvial Floodplain Boundary
    d. Floodplain Elevation Match Line (see below)
    e. Profile along driveway centerline depicting natural and finished grade as well as the pluvial floodplain boundary

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Pluvial Floodplain Boundary
    d. Profile along driveway centerline depicting natural and finished grade as well as the pluvial floodplain boundary

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Provide a tiered driveway profile that limits the use of fill within the pluvial floodplain. For initial driveway segments, utilize a constant slope between the roadside connection and location where the pluvial floodplain boundary intersects the driveway (referred to as the Floodplain Elevation Match Line). The driveway's finished grade shall be identical to natural grade at the Floodplain Elevation Match Line. The slope of the initial driveway segment is established through this process. For remaining driveways segments, utilize a constant slope from the Floodplain Elevation Match Line to the base floor.

The following guidance is offered on establishing the Floodplain Elevation Match Line:It is recognized that pluvial floodplain boundaries will not cross driveways in a uniform manner. Therefore, a Floodplain Elevation Match Line shall be delineated on the construction plans. This reference line shall be constructed by first identifying the point of intersection between the pluvial floodplain boundary and centerline of the driveway. A line shall then be projected from this point of intersection at a bearing that is perpendicular to the centerline of the driveway until said line intersects with the driveway boundaries.

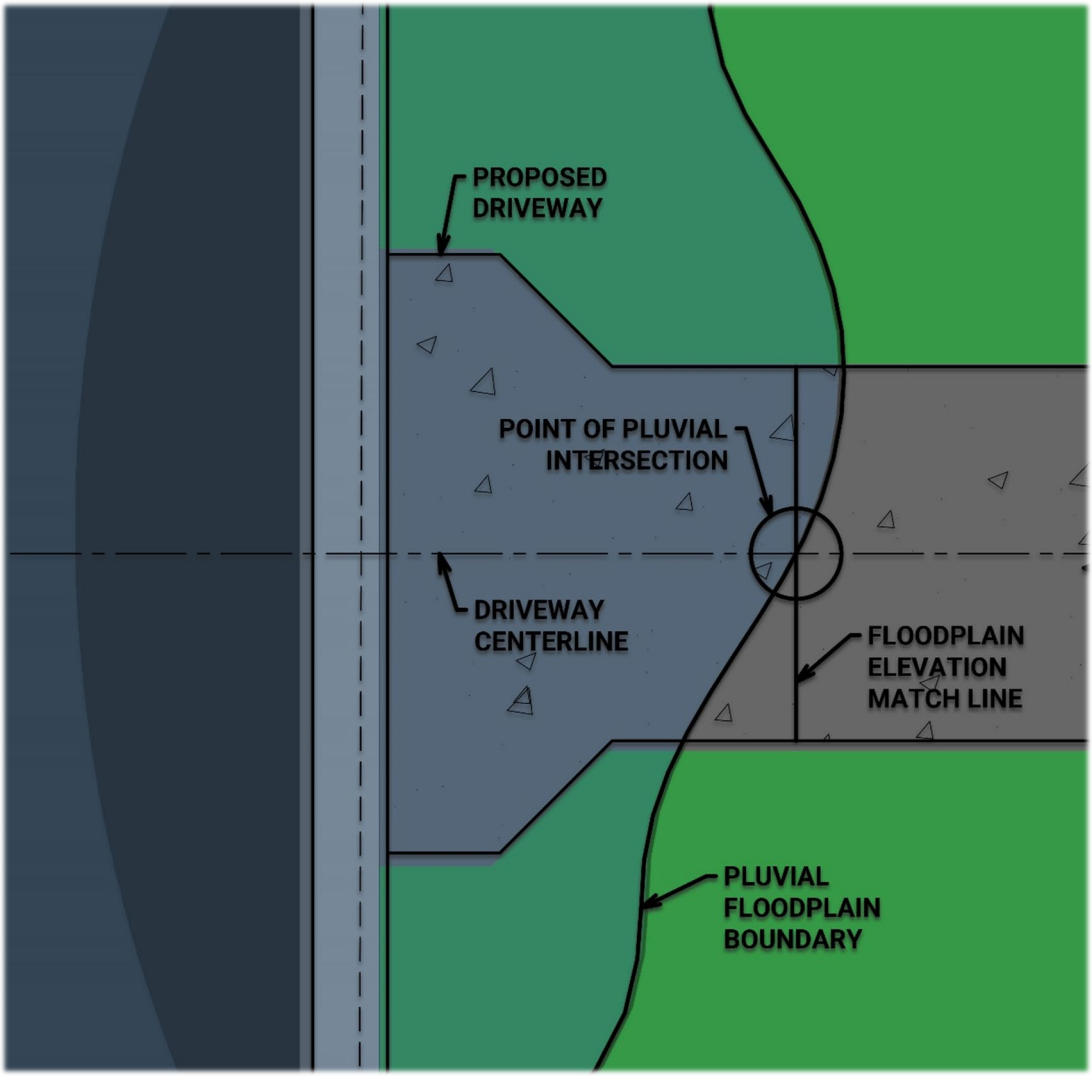


Figure 5-3 *Requirement (D.1) T.2-01 (Floodplain Elevation Match Line)*

Creation of the Floodplain Elevation Match Line demarks where the use of fill material is permitted for driveway construction. The City reserves the right to modify the methodology used to establish the Floodplain Elevation Match Line in order to best represent the site-specific conditions.

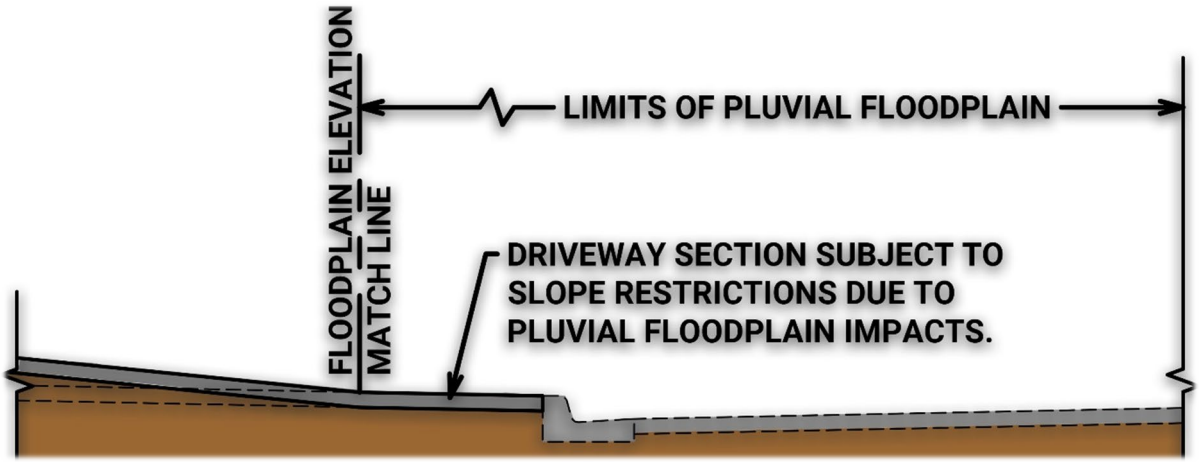


Figure 5-4 *Requirement (D.1) T.2-01 (Driveway Section)*

Slope differentials, or grade break, refers to the algebraic difference in grade percentages between any two (2) connected driveway segments. The maximum grade break shall not exceed 14%. Maximum driveway slopes are governed by Requirement (D.1) T.4-01, Access Management.

Goal Attainment Strategies

Driveways shall be sited in a strategic manner to utilize higher elevations that are present within the project's boundaries and avoid pluvial floodplain impacts. Reconfigure the building as needed to support a revised driveway placement.

Lengthen the driveway, by altering the alignment, where slope threshold or grade break concerns are present. Reconfigure building as needed.

Utilize maximum driveway slopes and slope differentials, stated elsewhere within this Manual, where needed.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.1) T.2-01 (Tiered Driveway Slopes) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Minimal Driveway Slope	x	
2	Excessive Grade Break	x	
3	Significant Pluvial Floodplain Encumbrance	x	

Table 5-4 *Restricting Conditions (D.1) T.2-01*

Restricting Condition No. 1 Minimal Driveway Slope

In certain locations, the slope of the initial driveway segment may be insufficient . Insufficient slope is defined a slope less than 2% as measured along the centerline of the driveway. Restricting Condition No. 1 is recognized when this condition is present.

Restricting Condition No. 2 Excessive Grade Break

A maximum slope differential, or grade break, is defined elsewhere within the Manual. Where driveway slopes developed using the above-described approach result in grade breaks exceeding the established threshold, Restricting Condition No. 2 is recognized.

Restricting Condition No. 3 Significant Pluvial Floodplain Encumbrance

For certain properties, the Floodplain Elevation Match Line may extend beyond the limits of the right-of-way and onto private property. In these circumstances, Restricting Condition No. 3 is recognized.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.1) T.2-01 (Tiered Driveway Slopes) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Maintain Minimum Driveway Slope	The applicant will be permitted to increase finished grade at the Floodplain Elevation Match Line, only as needed to support a 2% driveway slope when Restricting Condition No. 1 be recognized.
2	Grade Break Mitigation	The applicant will be permitted to add fill at the Floodplain Elevation Match Line only to the extent needed to resolve grade break threshold exceedances. When adding 12" or less of fill within the pluvial floodplain, use 1V:6H sloped grade transitions or a retaining wall i. When fill depths exceed 12" within the pluvial floodplain, use retaining walls or other earth retention systems in lieu of sloped grade transitions for projects located outside the CHHA or CAZ.
3	Floodplain Elevation Match Line Location Revision	The applicant will be permitted to shift the Floodplain Elevation Match Line from the point of intersection with the pluvial floodplain to the right-of-way line. Reassess Requirement compliance with new location. Design Exceptions 1 &, 2 may be utilized in combination with this Design Exception.

Table 5-5 *Design Exceptions (D.1) T.2-01*

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.1) T.2-02 Grading Termination Points
(D.1) T.4-01 Access Management
(D.1) T.4-02 Property Harmonization

5.6.5 TENET T.2 - CONSERVE FLOODPLAIN STORAGE REQUIREMENT (D.1) T.2-02 GRADING TERMINATION POINTS

Applicability to Tenet

Base floor elevation will result in the need for grades to transition back to the existing terrain. Terminating these slopes at the existing pluvial floodplain boundaries will maintain pre-improvement floodplain volumes. This Requirement requires that grade transition slopes be terminated at or beyond the limits of the pluvial floodplain.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Pluvial Floodplain Boundary

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Pluvial Floodplain Boundary

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Grade transition slopes shall terminate at or outside the pluvial floodplain boundaries that may be present on or adjacent to a project. It is recognized that pluvial floodplain boundaries will not cross properties in a uniform manner. The development of an elevation match line is not needed as connections to natural grade shall follow the boundary of the pluvial floodplain . Grade transition slopes shall terminate at or beyond the non-uniform pluvial floodplain boundary.

Specific slope thresholds are not identified for this Requirement as they are established elsewhere in this Manual.

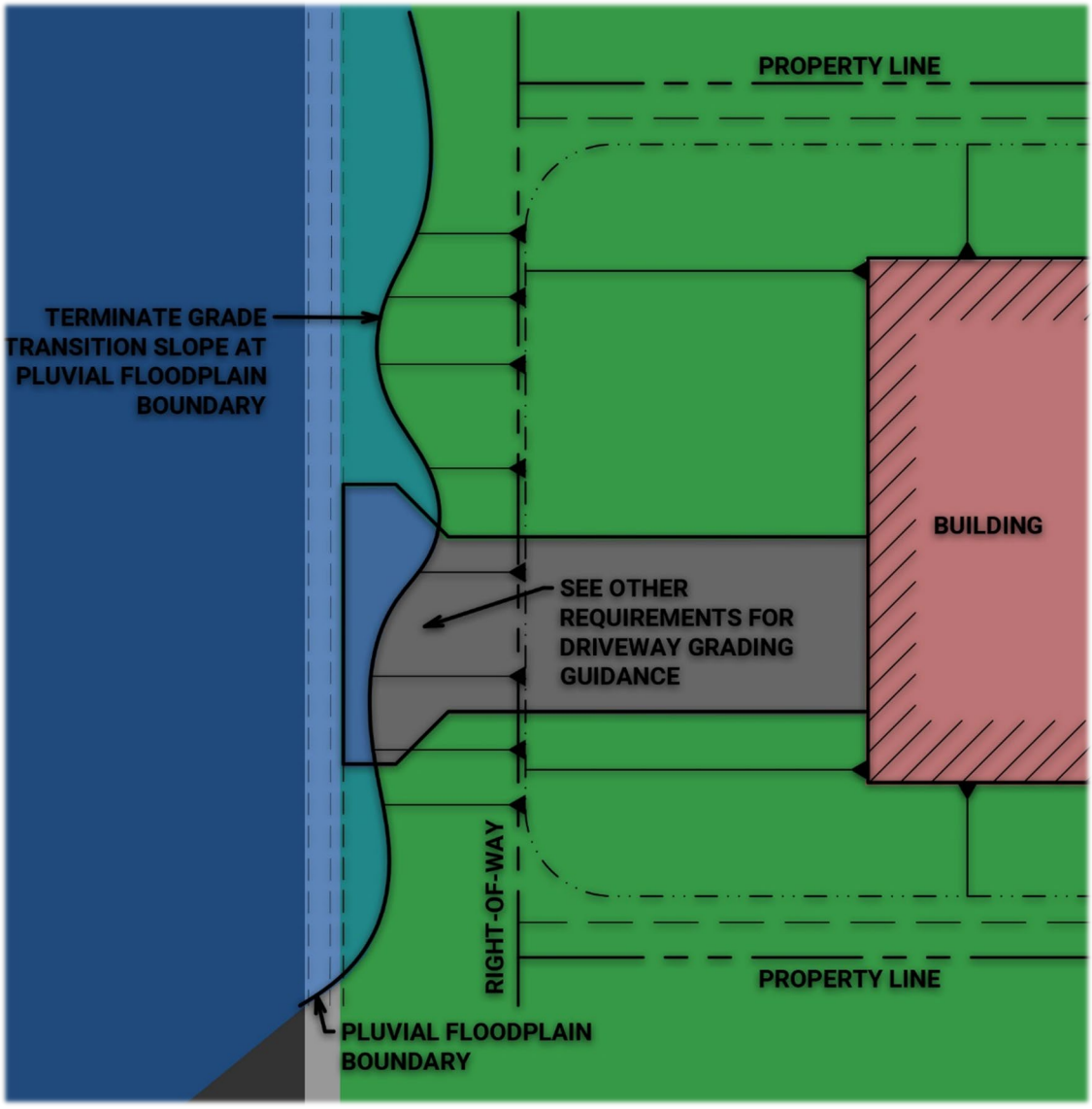


Figure 5-5 *Requirement (D.1) T.2-02*

Goal Attainment Strategies

For projects located outside the CHHA and CAZ, retaining walls or other earth retention systems shall be used on private property if needed to properly terminate grade transition slopes.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.1) T.2-02 (Grading Termination Points) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Significant Pluvial Floodplain Encumbrance	x	

Table 5-6 *Restricting Conditions (D.1) T.2-02*

Restricting Condition No. 1 Significant Pluvial Floodplain Encumbrance

Terminating grade transition slopes at the pluvial floodplain boundary is not possible if the pluvial floodplain extends beyond the right-of-way. When the pluvial floodplain encroaches into private property, , Restricting Condition No. 1 is recognized.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.1) T.2-02 (Grading Termination Points) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Grading Termination Point Location Revision	When Restricting Condition No. 1 is recognized, the location of the point of grade termination shifts from the pluvial floodplain boundary to the right-of-way line.

Table 5-7 *Design Exceptions (D.1) T.2-02*

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.1) T.2-01 Tiered Driveway Slopes
(D.1) T.3-02 Flow Equivalence
(D.1) T.4-02 Property Harmonization

5.6.6 TENET T.3 – HOLD OVERLAND FLOW TRANSFER POINTS REQUIREMENT (D.1) T.3-02 FLOW EQUIVALENCE

Applicability to Tenet

Maintaining overland flow transfer points allows for pre-improvement flow patterns to be replicated throughout the terrain modification process. For Type D.1 development, this flow transfer typically occurs on the side lot line. Altering the flow capabilities of overland flow transfer points has the capability to shift the wetted footprint of flows further into lands not owned by the applicant. This Requirement requires that equivalent overland flow capabilities be provided to ensure no adverse impacts to adjacent property owners.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections with pre-improvement and post-improvement weir cross sectional areas through all overland flow transfer points (active and inactive) and pluvial floodplain elevation(s)
    d. Location of overland flow transfer points

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Execution of a hydrologic and hydraulic (H&H) model will not be required to document adherence to this Requirement. An applicant will demonstrate overland flow equivalence by providing identical cross sectional area(s) for overland flow conveyances. It shall be noted that cross section area calculations will utilize the pluvial floodplain elevation associated with the parcel as the basis of wetted area.

The flow capabilities of the existing overland flow transfer point must first be evaluated utilizing natural grade. These overland flow transfers occur on the side lot lines as well as in the front and rear yard. Survey shall be used to determine the physical location of the overland transfer point and generate an existing cross section extending from the applicant's structure to the adjacent structure (or other fixed point). The pluvial floodplain elevation associated with the applicant's parcel shall then be plotted on the cross section. This effort will serve to develop polygons and weir geometry for the pre-improvement condition. The wetted area, defined as the area below the pluvial floodplain, of the overland flow transfer point shall then be calculated for the applicant side only. Property lines shall demark the applicant's side (A_{PRE}). Where the pluvial floodplain elevation results in the A_{PRE} polygon extending into the building setback, trim the polygon along the setback line.

Where a pluvial floodplain elevation is not published for a property, the applicant shall assume that all overland flow transfer points are active. An engineering study may be conducted to determine the presence of active overland flow transfer points where there are no published pluvial floodplain elevations. This engineering study shall utilize evaluation techniques and assumptions identical to those made within the City's Watershed Management Plan.

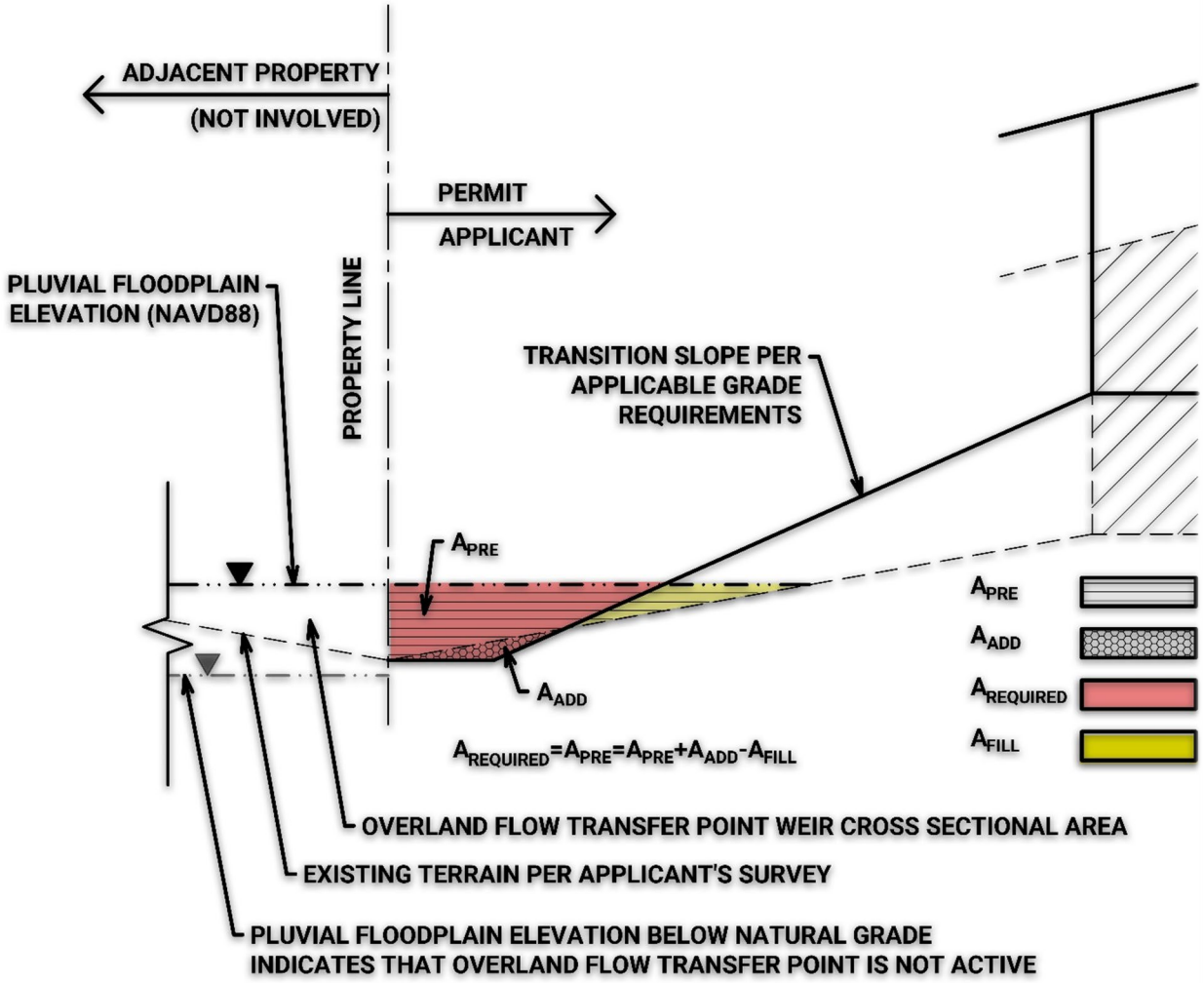


Figure 5-6 *Requirement (D.1) T.3-02*

Finished grades shall then be used to develop the proposed cross section. Utilizing the same pluvial floodplain elevation, the added area (A_{ADD}) and removed area (A_{FILL}) shall be calculated. The proposed grading shall yield a weir cross sectional area ($A_{REQUIRED}$) identical to or greater than the pre-improvement condition when an active overland flow transfer point is present.

For active overland flow transfer points, maintain grade transition slopes and retaining wall offsets utilized in the equivalent weir cross section along the extents of the subject property line. Ensure positive longitudinal slope is provided along the subject property line to and from active overland flow transfer points.

When the pluvial floodplain elevation resides below natural grade, the overland flow transfer point is not active. No further action is needed if all overland flow transfer points are found to be inactive.

Finished grades shall not result in additional land area draining to the City's MS4.

Goal Attainment Strategies

For projects located outside the CHHA and CAZ , the use of retaining walls or other earth retention systems shall be considered if resulting slopes exceed thresholds established elsewhere in this Manual. Offset walls from property lines, as needed, to provide equivalent overland flow capabilities.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.1) T.1-02 Slope Thresholds, Coastal Zones
(D.1) T.1-03 Slope Thresholds, Non-Coastal Zones
(D.1) T.2-02 Grading Termination Points
(D.1) T.4-02 Property Harmonization
(D.1) T.4-03 Terrain Modification Accommodation

5.6.7 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.1) T.4-01 ACCESS MANAGEMENT

Applicability to Tenet

Maintaining accessibility to properties is key in ensuring minimal disruption to day-to-day activities. For work classified as a D.1 improvement, access management concerns will focus on reviewing maximum driveway slopes and slope differentials

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Profile along driveway centerline depicting existing and proposed elevations
2. Structural calculations to document structure adaptability

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Profile along driveway centerline depicting proposed and constructed elevations

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Requirement compliance is documented through adherence to maximum driveway slope criteria. Assessment will require that the applicant provide a profile through the centerline of the driveway showing elevations, roadway offsets and slope percentages for each segment. This profile shall begin at the crown of the roadway (to determine roadway cross slope) and extend through the base floor (and depict the intended slope of this area).

Maximum driveway slopes shall not exceed 20% (1V:5H). At sidewalk crossings, the maximum driveway slope shall not exceed 2% (1V:50H)

Slope differentials, or grade break, refers to the algebraic difference in grade percentages between any two (2) connected driveway segments. Maximum grade breaks are governed by Requirement (D.1) T.2-01, Tiered Driveway Slopes.

Goal Attainment Strategies

Lengthen the driveway, by altering the alignment, where slope threshold or grade break concerns are present. Reconfigure building as needed..

Utilize maximum grade breaks, stated elsewhere within this Manual, if the base floor Goal elevation or other Manual Requirements are not met.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.1) T.4-01 (Access Management) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Spatial Constraints		x

Table 5-8 *Restricting Conditions (D.1) T.4-01*

Restricting Condition No. 1 Spatial Constraints

With driveway slope and slope differential thresholds established, it is recognized that the ability to achieve the Goal directly correlates to the existing elevation of the connecting roadway and proposed structure offset. For smaller lots, low-lying areas, or a combination of the two (2), proposing the base floor at the Goal elevation may not be possible considering these special constraints. Restricting Condition No. 1 is recognized when these constraints are present.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.1) T.4-01 (Access Management) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Base Floor Elev. = 7.60' – 12"	Site new base floor 12" below the Goal elevation.
2	Base Floor Elev. = 7.60' – 18"	Site new base floor 18" below the Goal elevation.
3	Base Floor Elev. = 7.60' – 24"	Site new base floor 24" below the Goal elevation.
4	Base Floor Elev. = 7.60' – 30"	Site new base floor 30" below the Goal elevation.
5	Base Floor Elev. = 7.60' – 36"	Site new base floor 36" below the Goal elevation.

Table 5-9 *Modified Goals (D.1) T.4-01*

Use of a modified goal will require that a building be adaptable to future elevation changes proposed within the roadway. Adaptability shall be demonstrated as follows:

1. Minimum vertical clearances outlined in the Florida Building Code, Residential shall be maintained with a future base floor elevation of 7.60'.
2. The base floor shall be structurally independent of the parent building to promote removal and reconstruction at a later date.
3. All headers, studs, plates and other structural framing elements associated with egress locations shall support a future base floor elevation of 7.60'.
4. Exterior and interior wall systems shall be designed to withstand additional earth loads associated with a future base floor elevation of 7.60'.

Related Requirements

(D.1) T.1-01 Fill Thresholds, Coastal Zones
(D.1) T.1-02 Slope Thresholds, Coastal Zones
(D.1) T.2-01 Tiered Driveway Slopes
(D.1) T.2-02 Grading Termination Points
(D.1) T.4-02 Property Harmonization

5.6.8 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.1) T.4-02 PROPERTY HARMONIZATION

Applicability to Tenet

The overall aesthetics of a project implementing the Goals set forth within this Manual is critical to the long-term success of the Program. Neighborhood appearance is an important element to be considered when assessing impacts on community function. Steep transition slopes can be viewed as abrupt and may not blend well with surrounding landscapes. Gentler slopes generally result in improved aesthetics when transitioning from an elevated segment of land to existing grade. As such, the need to harmonize new work with the existing terrain is recognized. This Requirement focuses on grading efforts associated with unpaved / pervious areas where nonstructural fill is used.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections through all slopes to be evaluated

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Cross Sections through all slopes to be evaluated

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

No further action is needed if the project is located within the Coastal High Hazard Area (CHHA) or Coastal A Zone (CAZ).

For locations outside of the CHHA and CAZ, grading within private property shall be done in a manner so that slopes do not exceed 33% (1V : 3H). Grading within the right-of-way shall be done in a manner so that slopes do not exceed 10% (1V : 10H). Slopes greater than or equal to 1V:10H will be permitted within the right-of-way for driveways. Slopes greater than or equal to 1V:10H will also be permitted within the right-of-way for grade transitions associated with driveways when Restricting Condition No. 2 is recognized for Requirement (D.1) T.2-01.

The above-stated slope thresholds are not associated with structural fill (See Requirement (D.1) T.1-03).

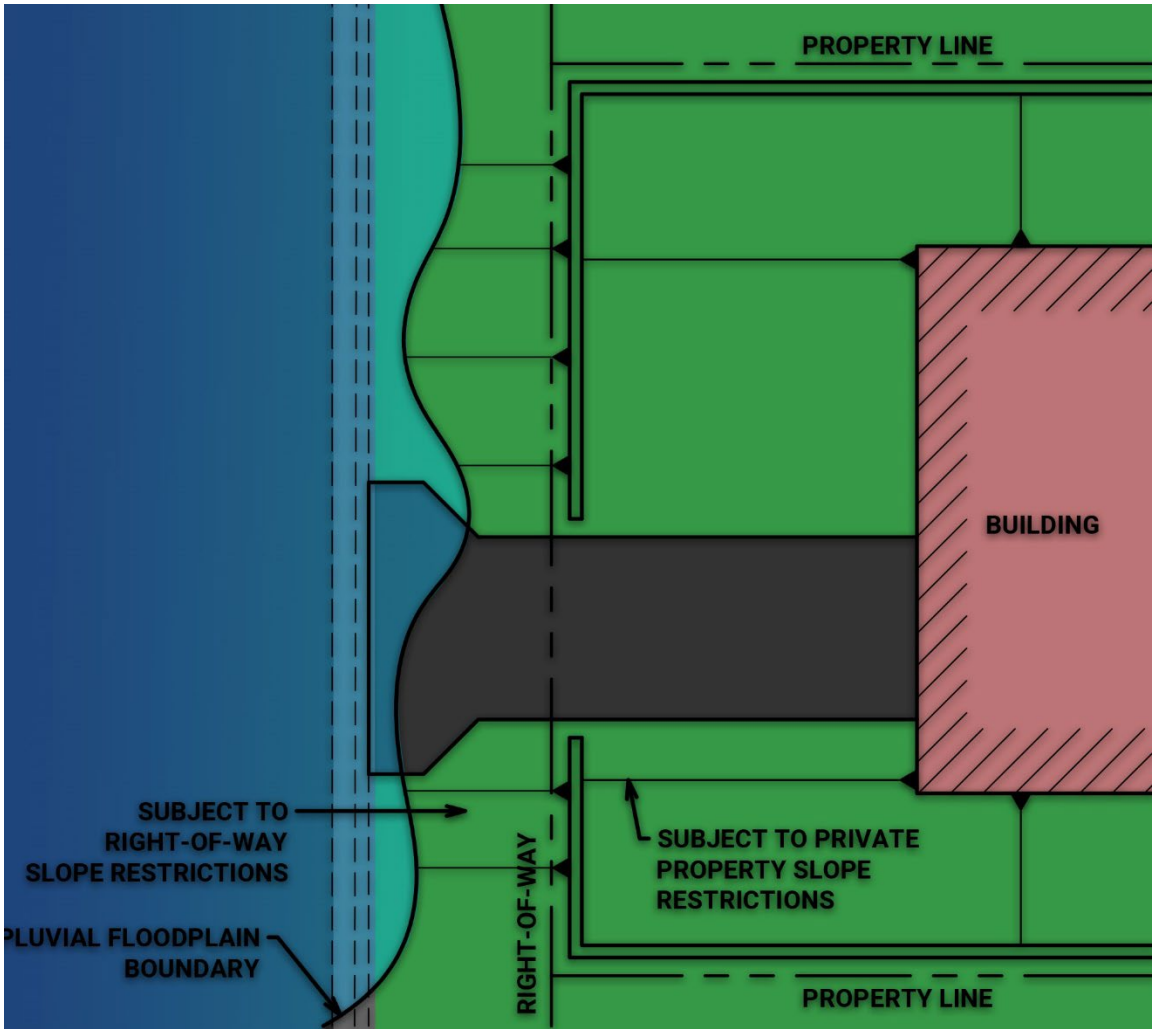


Figure 5-7 *Requirement (D.1) T.4-02*

A section view can be seen below depicting slope thresholds for both private property and the right-of-way.

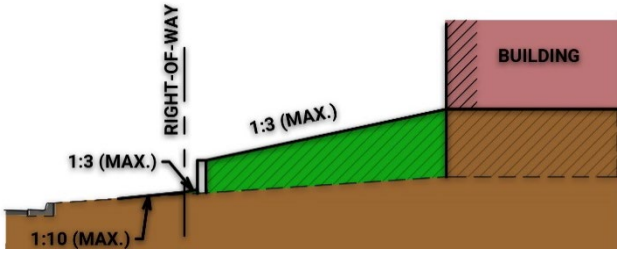


Figure 5-8 *Requirement (D.1) T.4-02 (Section View)*

Goal Attainment Strategies

Use retaining walls or other earth retention systems if slope threshold exceedances are proposed. Locate structures outside of right-of-way.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.1) T.4-02 (Property Harmonization) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Negligible Aesthetic Impacts	x	

Table 5-10 *Restricting Conditions (D.1) T.4-02*

Restricting Condition No. 1 Negligible Aesthetic Impacts

The use of retaining walls or other earth retention systems shall be considered where slope thresholds stated within this Requirement are exceeded. This is based upon the assumption that a steep slope can be viewed as harsh or unpleasing. However, in certain locations, these steep slopes are not visible to the general public or adjacent properties and therefore would not be subject to the same scrutiny. Restricting Condition No. 1 will be recognized when these conditions are present.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.1) T.4-02 (Property Harmonization) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Slope Threshold Exceedances	When Restricting Condition No. 1 is recognized, the slope thresholds associated with this Requirement may be exceeded. However, exceeding these slope thresholds shall not present any slope stability concerns nor impact the ability to adhere to other Requirements..

Table 5-11 *Design Exceptions (D.1) T.4-02*

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.1) T.1-02 Slope Thresholds, Coastal Zones
(D.1) T.1-03 Slope Thresholds, Non-Coastal Zones
(D.1) T.2-02 Grading Termination Points

5.6.9 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.1) T.4-03 TERRAIN MODIFICATION ACCOMMODATION

Applicability to Tenet

Achieving the Goal for type D.1 development is a step towards community resiliency. However, incorporating terrain modification into future public infrastructure improvements projects is also a critical part of the equation. The resulting unintended impacts or unexpected inconveniences to residents as a result of future terrain modification can have a drastic impact on community function. It is for this reason that this Requirement establishes criteria to ensure that newly constructed D.1 developments can accommodate future terrain modification efforts performed within the public right-of-way.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Pre-Improvement Flow Patterns
    d. Post-Improvement Flow Patterns
    e. Demarcation of overland flow transfer points

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Post-Improvement Flow Patterns
    d. Demarcation of overland flow transfer points

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Maintaining local drainage capabilities will be a key component of any type D.3 terrain modification project. However, it is recognized that, while these projects may encroach beyond the right-of-way, the improvement footprint would not extend beyond the areas immediately abutting the right-of-way. Therefore, more isolated locations where access is limited (such as side and rear yards) shall be designed and constructed in a manner where local drainage can be maintained once the City's Goal has been achieved for type D.3 development.

No further action is needed if the roadway(s) abutting the subject property has been modified to achieve the City's Goal.

The finished grades shall support positive drainage towards the right-of-way assuming a future elevation of 6.00'.

Finished grades shall not result in additional land area draining to the City's MS4.

Flow patterns on pervious surfaces shall have a minimum longitudinal slope of 0.5% (1V:200H). Impervious surfaces shall have a minimum longitudinal slope of 0.3% (1V:333H).

Goal Attainment Strategies

Install privately-owned and maintained drainage collection system if a suitable longitudinal slope cannot be provided. Conveyance systems shall be designed in accordance with Chapter 76 (Stormwater) of the Code of Ordinances.

Elevate yard as needed to meet the longitudinal slope requirements. Retaining walls or similar systems shall be constructed where needed for projects located outside the CHHA and CAZ.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.1) T.4-03 (Terrain Modification Accommodation) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Adherence to Other Requirements	x	

Table 5-12 *Restricting Conditions (D.1) T.4-03*

Restricting Condition No. 1 Adherence to Other Requirements

Adherence to other Requirements within Manual may result in the need to "hold" certain elevations below 6.00'. In these situations, Restricting Condition No. 1 is recognized.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.1) T.4-03 (Terrain Modification Accommodation) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Elevation Restrictions Associated with Tenet T.1	Requirements associated with Tenet T.1 place restrictions on the degree of elevation change permitted on a site. Therefore, adherence may result in the inability to meet the requirements of this Requirement. Design Exception No. 1 allows for the use of T.1-compliant elevations to establish the upstream elevation of all flow paths.
2	Elevation Restrictions Associated with Tenet T.3	Requirements associated with Tenet T.3 require that overland flow transfer points be held. These transfer points occur at a specific ground elevation that must be held to ensure flow equivalence. Where adherence to Tenet T.3 requires that natural grade elevations be held, Design Exception No. 2 allows for the use of T.3-compliant elevations to establish the upstream elevation of all flow paths. For projects located outside the CHHA & CAZ, offset retaining walls or similar structures only to the extent needed to maintain active overland flow transfer points.
3	Elevation Restrictions Associated with Tenet T.4	Requirements associated with Tenet T.4 may allow for the modification of base floor Goals. A reduction in the base floor may result in the inability to meet Florida Building Code site grading requirements as it pertains to foundation protection. When base floor Goal Modifications are authorized through Tenet T.4 compliance, Design Exception No. 3 is authorized. Maintain a maximum of 18" elevation difference between the base floor and top of retaining walls or similar structures (for projects located outside the CHHA & CAZ).

Table 5-13 *Design Exceptions (D.1) T.4-03*

When Design Exception No. 1, 2 or 3 is authorized, the applicant shall identify exclusion zones abutting the right-of-way and other properties that reside below elevation 6.00'. These areas will be subject to future modification at the time terrain modification is performed and shall promote the use of fill after project completion.

The applicant shall not allow for the presence of permanent or immovable objects (such as a wall systems, stairways, hardwood trees, etc.) within the exclusion zone that would impact the ability to perform terrain modification at a future date. Retaining walls, or similar structures, are only permitted within an exclusion zone if Design Exception No. 3 is authorized.

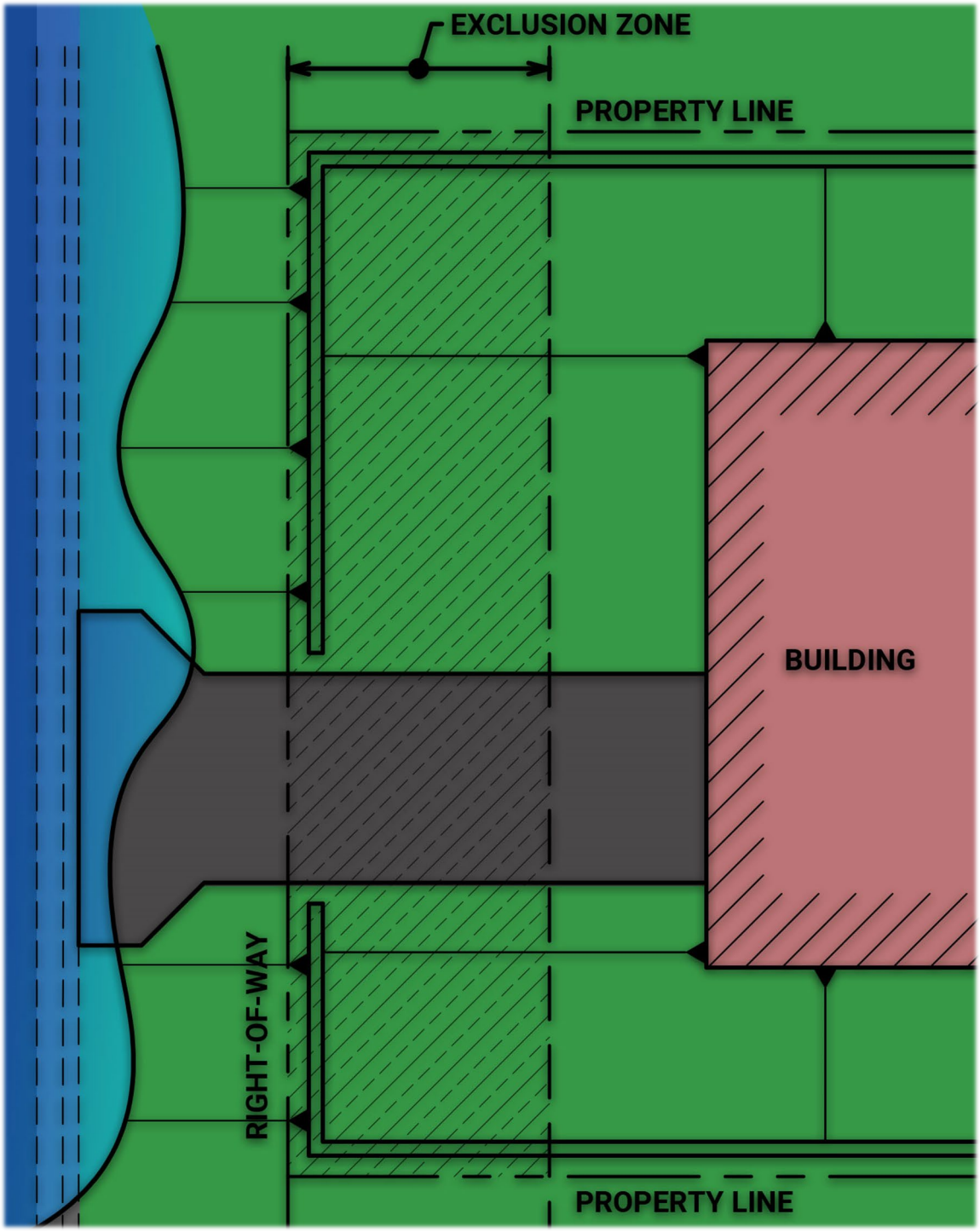


Figure 5-9 *Requirement (D.1) T.4-03*

A section view can be seen on the subsequent page depicting the relationship between finished grade and the exclusion zone. Exclusion zones may also be present along side property lines when finished grade is below elevation 6.00'.

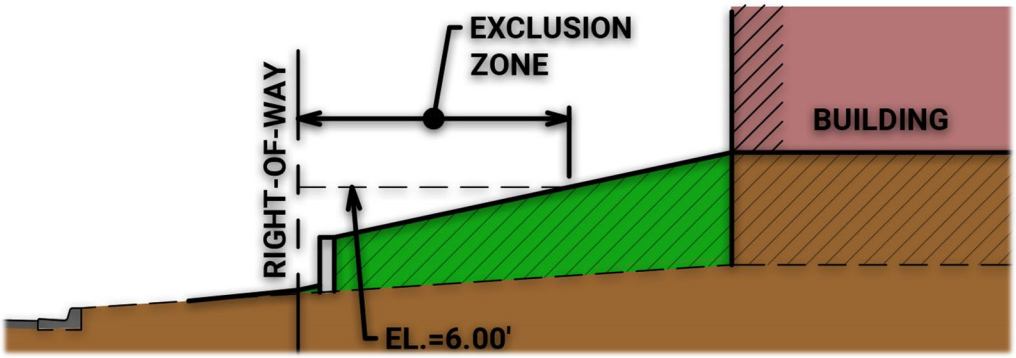


Figure 5-10 *Requirement (D.1) T.4-03 (Section View)*

Exclusion zones are not a substitute for terrain modification. Exclusion zones are to be used in conjunction with terrain modification activities and established only after all Goal Attainment strategies have been implemented.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.1) T.1-01 Fill Thresholds, Coastal Zones
(D.1) T.1-02 Slope Thresholds, Coastal Zones
(D.1) T.1-03 Slope Thresholds, Non-Coastal Zones
(D.1) T.2-02 Grading Termination Points
(D.1) T.3-02 Flow Equivalence
(D.1) T.4-02 Property Harmonization

6.0 Terrain Modification (Commercial and Multi-Family Development)

6.1 Applicability & Use

Section 4 of this Manual outlines the tenets of the City's Terrain Modification Program. Requirements identify certain principles and / or strategies which are to be used in the design of new improvements to reinforce adherence to a program tenet. The applicability and scope of each Requirement varies based upon the type of development being performed. Development classifications are also outlined within the prior Section. Four (4) distinct classifications were identified and assigned a unique alpha-numeric designator (D.1, D.2, etc.).

This Section serves to define commercial and multi-family development (Development Classification D.2), establish the Goal for D.2 development and outline the method of incorporation for each Requirement. Please note that a unique numeric identifier is assigned to each Requirement in an effort to streamline future communication and documentation efforts associated with the review process.

It shall be noted that the below Requirements are associated with the Goal outlined within this Manual and are not intended to be all inclusive nor representative of all considerations needed to issue a permit in accordance with the City's Code of Ordinances. Furthermore, adherence to a Requirement is not intended to replace, revise or invalidate any requirement identified within the Land Development Regulations (LDRs).

6.2 Summary of Development Classification D.2



Projects within this improvement category can drastically differ from project to project. Whether comprising of a single structure or numerous buildings, multi-family and commercial developments typically require the services of a multifaceted design team to address the drainage, utility and transportation elements of the project. Often times, these types of projects are some of the more visible signs of development within a community.

Applicability to Resiliency

Similar to single family buildings, access to these developments would be provided by the (to be) elevated roadway network. However, this access would typically lead to a parking area which would support

usage of the site. Slope criteria may be in force for certain areas proposed to be frequented by pedestrians.

As it pertains to multi-family development, the prior improvement category discusses housing's role in a resilient community. Similarly, commercial development, included within this improvement category, is the backbone of daily function. Ensuring accessibility to these structures in changing environmental conditions maximizes the likelihood that day-to-day life remains relatively unchanged.

Future Land Use (Zoning) Correlation

Commercial and multi-family development encompass multiple land use classifications:

- Residential Medium (RM-15)
- Resort Facilities Medium (RFM-30)
- Resort Facilities High (RFH-50)
- Commercial General (CG)
- Institutional (I)
- Transportation /Utility (T/U)
- Planned Redevelopment Mixed-Use (PR-MU)

As stated in Section 5, Residential Medium land uses may also support development categorized as D.1. Transportation / Utility (T/U) future land usage is inclusive of certain governmental facilities that support public infrastructure (wastewater handling, garages, etc.). These sites that support public infrastructure, or contain specific public infrastructure, shall be classified under this improvement category.

Other Involved Agencies

Multiple entities may be involved the permitting of these types of developments as access permissions, utility connection needs and the scope of waterward improvements can drastically differ from project to project. However, in a typical sense, the City and the SWFWMD are the predominant entities involved in the permit approval process

6.3 GOAL (DEVELOPMENT CLASSIFICATION D.2)

In a similar manner to improvement category D.1, the Goal set forth for this type of development is not intended to alter the lowest floor requirements set forth within the City's Code of Ordinances. However, where lowest floor variations would follow the special flood hazard area (SFHA) elevations for D.1 structures, greater fluctuations are anticipated for this classification.

The City's Code of Ordinances, as well as the Florida Building Code, permits dry floodproofing of nonresidential buildings in lieu of building elevation. This allowance supports the construction of structures at grade when appropriate dry floodproofing techniques are utilized. Such an improvement could result in a nonresidential structure being constructed at an elevation that would be contrary to Program Goals. Therefore, D.2 development Goals need to be modified to support these dry floodproofing provisions. Parking areas that serve nonresidential

and commercial buildings shall be constructed at an elevation that will support future roadway elevation as discussed in later Sections of this Manual. When a nonresidential building's lowest floor is sited in a manner that does not require dry floodproofing, the base floor Goal shall be elevation 7.60 ft.

The Goal for type D.2 development shall be achieving a base floor elevation of 7.60'. When the lowest floor is not elevated above finished grade, , the minimum lowest floor elevation shall be 7.60'.

When a base floor is proposed for a type D.2 development, the base floor shall meet the Goal regardless of whether dry floodproofing is utilized.

Existing buildings classified as type D.2 developments may be substantially improved without elevating. Any substantially improved buildings remain subject to the requirements of this Manual as outlined within Section 4. When dry floodproofing is independently utilized to bring a substantially improved building into compliance, terrain modification shall be performed at all locations outside of the building's immediate footprint. Initial design efforts shall center around Requirement (D.2) T.4-03, Terrain Modification Accommodation, compliance. The grading plan, and the resulting finished grades, shall then be reviewed for adherence with each Requirement using the procedure identified elsewhere in this section.

Throughout Section 6.6 (Requirement Schedule), references are made to a structure's base floor. It shall be noted that, when the lowest floor is not elevated above finished grade, base floor references shall pertain to the building's lowest floor.

6.4 SUMMARY OF REQUIREMENTS (DEVELOPMENT CLASSIFICATION D.2)

The following Requirements are applicable to development activities classified as D.2:

Summary of Requirements	
Requirement Identification No.	**Requirement Name**
Maintain National Flood Insurance Program (NFIP) Compliance (Tenet T.1)	
(D.2) T.1-01	Fill Thresholds, Coastal Zones
(D.2) T.1-02	Slope Thresholds, Coastal Zones
(D.2) T.1-03	Slope Thresholds, Non-Coastal Zones
Conserve Floodplain Storage (Tenet T.2)	
(D.2) T.2-03	Maintenance of Pluvial Floodplain Volume
Hold Overland Flow Transfer Points (Tenet T.3)	
(D.2) T.3-02	Flow Equivalence
Preserve Community Function (Tenet T.4)	
(D.2) T.4-01	Access Management
(D.2) T.4-02	Property Harmonization
(D.2) T.4-03	Terrain Modification Accommodation
(D.2) T.4-04	Sea Level Rise Considerations

Table 6-1 *Summary of Requirements (Development Classification D.2)*

Further discussion will be held on the Requirements associated with type D.2 developments.

6.5 REQUIREMENT COMPLIANCE REVIEW PROCESS

As part of the permit review process, each Requirement would be reviewed for applicability and compliance. For example, certain Requirements pertaining to development within coastal zones (CHHA and CAZ) would not be applicable if the project was located in an AE zone. Subsequent parts of this Section highlight critical information associated with each Requirement including:

- Applicability to Tenet
- Review Materials
- Compliance Determination
- Goal Attainment Strategies
- Restricting Conditions
- Design Exceptions
- Goal Modifications
- Related Requirements

Figure 6-1 outlines the process that is used to determine compliance with a specific Requirement.

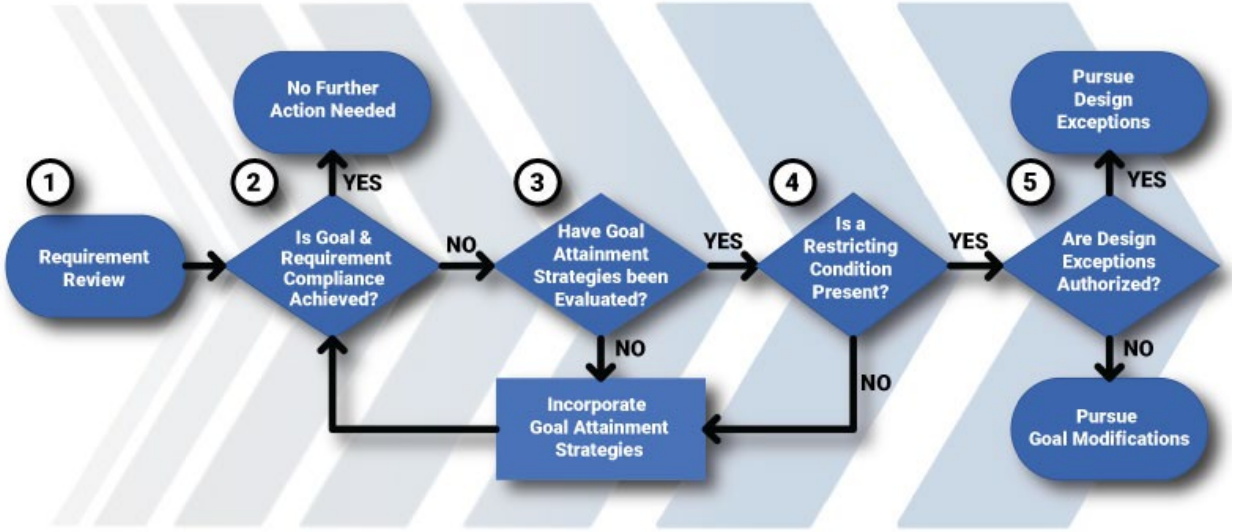


Figure 6-1 *Requirement Compliance Review Process*

Prior to assessing Requirement compliance, it is important to understand the correlation between the Requirement and the Tenet. The Program Tenets, or overarching principles, guide the review of each corresponding Requirement. Certain elements of a site are tied to certain Requirements resulting in the need to be provided with the proper review materials. As such, a specific listing of the information needed to complete a review is provided within the Requirement schedule.

The "Compliance Determination" component of each Requirement states the specific factors to be reviewed. The applicant shall start the design process by utilizing the Goal elevation associated with the development classification and assess compliance with the first Requirement listed herein. If compliant, the elevation is carried forward and used as the basis of evaluation for the subsequent Requirement. This assessment continues sequentially until all requirements have been met. A separate review is needed for all Requirements associated with a development type.

D.2 developments will vary in size and scope throughout the island community. Similarly, the methods used to become compliant may also differ. Goal attainment strategies are presented for each Requirement outlining prescribed measures to be used to achieve the D.2 goal in a compliant manner. The use of goal attainment strategies must be considered and deemed either impractical or not constructable before consideration of a Restricting Condition is given.

A Restricting Condition is recognized when specific site constraints are present which either a.) will not support the Goal or b.) result in the need to pursue Requirement compliance in a revised manner. As stated above, a Restricting Condition will not be recognized prior to illustrating that implementing the prescribed goal attainment strategies would not be possible. Multiple Restricting Conditions may be present on a single site.

The presence of a Restricting Condition requires either modification of the Goal or the pursuit of a Design Exception. The Restricting Conditions Summary Table associated with each Requirement identifies which path is to be pursued.

Authorization of a Design Exception allows for the Requirement to be assessed using an alternate evaluation approach or through a different evaluation lens. Each Design Exception

directly correlates to the similarly numbered Restricting Condition. The presence of multiple Restricting Conditions would permit the use of multiple Design Exceptions.

Where Design Exceptions are not authorized, Goal modification is needed. A specific calculation approach is provided when modified goals are to be pursued. For certain Requirements, multiple modified goals may be listed in sequential order. This order represents the hierarchy of goals in which the designer shall pursue. For example, Requirement compliance would first be assessed using Modified Goal No. 1 in conjunction with the prescribed goal attainment strategies. If the Requirement is still not met, then the designer would continue to Modified Goal No. 2. This process is then repeated until Requirement compliance is achieved.

The resultant elevation is then used as the basis of evaluation and the compliance review process restarts with the initial Requirement. This iterative process is repeated until a single elevation can satisfy all Requirements associated with the development classification. For a project to meet the requirements set forth within this Manual, the improvements must be compliant with all applicable Requirements.

6.6 Requirement Schedule (Development Classification D.2)

6.6.1 Tenet T.1 - Maintain NFIP Compliance
Requirement (D.2) T.1-01
Fill Thresholds, Coastal Zones

Applicability to Tenet

The Goal for type D.2 improvements, which establishes a minimum base floor elevation, is identified within Section 6.3. To achieve this goal, fill must be imported to the site. However, two (2) areas within the City's Special Flood Hazard Area (SFHA), the Coastal High Hazard Area (CHHA) and Coastal A Zone (CAZ), have NFIP-defined thresholds that are recognized as having no adverse impacts. The term fill pertains to nonstructural fill (see Section 2.5, Definitions) for this Requirement. The use of structural fill is not permitted within these zones.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
3. Intermediate Construction Survey (if required by the City during construction) *

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The most restrictive flood zone that encumbers a parcel shall be utilized when determining compliance with this Requirement. No further action is needed if the project is located outside of the Coastal High Hazard Area (CHHA) or Coastal A Zone (CAZ).

No more than 24" of fill (inclusive of the thickness of any flooring system) shall be used in pursuit of the Goal. Survey shall document the natural grade elevations along the limits of the base floor . Interpolation between existing elevations shall be minimized. The base floor elevation shall be sited in a manner to where the finished grade elevations are no greater than 24" above natural grade elevation at the same location.

Nonstructural fill placement shall be limited to only those locations where fill is needed to elevate the base floor, transition to natural grade or address other Requirements.

A similar fill threshold evaluation shall also be performed outside of the immediate limits of the base floor. Natural and finished grades shall be compared along the access drive (i.e. driveway) and at grade transitions to ensure that the fill threshold (24") is not exceeded. This fill threshold evaluation will serve as the basis of compliance when a building is substantially improved without elevating.

Goal Attainment Strategies

There is a direct correlation between the existing topography of a site (located within a CHHA or CAZ) and the ability to achieve the Goal. As such, base floors shall be sited in a strategic manner to utilize higher elevations that are present within the project's boundaries.

When a building is present in the pre-improvement condition, the lowest floor or existing base floor often times represents the highest elevation on the site. Place the base floor within the footprint (i.e. perimeter) of the existing building.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.2) T.1-01 (Fill Thresholds, Coastal Zones) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Pre-Improvement Elevations		x

Table 6-2 *Restricting Conditions (D.2) T.1-01*

Restricting Condition No. 1 Pre-Improvement Elevations

With fill thresholds present, natural grades limit what low floor elevation can be realized for properties encumbered by the CHHA / CAZ.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.2) T.1-01 (Fill Thresholds, Coastal Zones) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Base Floor Elev. = Natural Grade Elev. + 24"	Site new base floor 24" above natural grade.

Table 6-3 *Modified Goal (D.2) T.1-01*

It shall be noted that this fill threshold represents an absolute maximum in perpetuity. Additional fill will not be permitted once this threshold is reached.

Related Requirements

(D.2) T.1-02 Slope Thresholds, Coastal Zones
(D.2) T.2-03 Maintenance of Pluvial Floodplain Volume
(D.2) T.4-01 Access Management

6.6.2 TENET T.1 - MAINTAIN NFIP COMPLIANCE REQUIREMENT (D.2) T.1-02 SLOPE THRESHOLDS, COASTAL ZONES

Applicability to Tenet

Elevating base floors within the CHHA and CAZ as discussed in Requirement (D.2) T.1-01 will be needed to support future terrain modification efforts. However, in a similar manner to the fill thresholds, the NFIP identifies slope thresholds for CHHA and CAZ applications.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections through front, side and rear yard depicting slope
3. Foundation Calculation(s) Identified within ASCE 24-14 (if needed)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Cross Sections revised to reflect constructed conditions

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The most restrictive flood zone that encumbers a parcel shall be utilized when determining compliance with this Requirement. No further action is needed if the project is located outside of the Coastal High Hazard Area (CHHA) or Coastal A Zone (CAZ).

Excessive transition slopes can serve to increase wave ramp up and alter wave reflection patterns. To mitigate for such impacts, transition slopes shall be softened to the maximum extent practical. It is recognized that property lines, setbacks, drainage patterns and connecting elevations are all factors that will impact the extends and steepness of these slopes.

Utilize slopes of 20% (1V : 5H) to transition from the natural grade to finished grade. Reduced slopes shall be used only when the base floor Goal elevation is achieved, when the base floor elevation yields a fill thickness of 24” or when the use of 1V:5H slopes will impact overland flow transfer point capabilities.

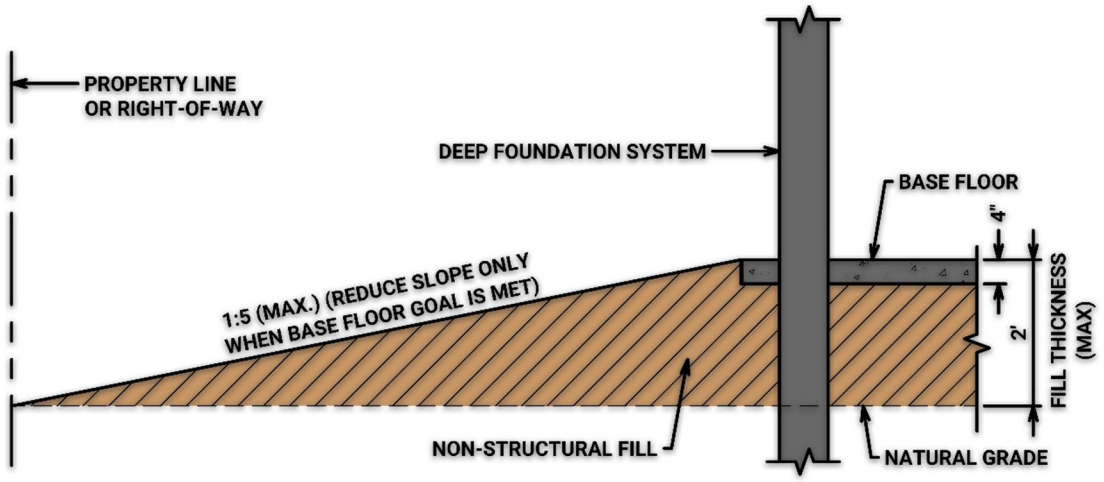


Figure 6-2 *Requirement (D.2) T.1-01/-02*

Goal Attainment Strategies

Should connecting slopes deviate from the above-stated threshold, extend the grading limits to the property line and continue within the right-of-way where applicable.

For CHHA applications, reduce base floor dimensions as needed until the 24" fill threshold is realized. This may result in the base floor being offset from the building's lowest floor. The maximum required base floor offset from the property setback shall be 5'. Reductions of the lowest floor dimensions will not be required.

For CAZ applications, the use of stem walls will be required if slope thresholds are exceeded.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.2) T.1-01 Fill Thresholds, Coastal Zones
(D.2) T.2-03 Maintenance of Pluvial Floodplain Volume
(D.2) T.3-02 Flow Equivalence
(D.2) T.4-01 Access Management
(D.2) T.4-02 Property Harmonization

6.6.3 TENET T.1 - MAINTAIN NFIP COMPLIANCE REQUIREMENT (D.2) T.1-03 SLOPE THRESHOLDS, NON-COASTAL ZONES

Applicability to Tenet

Elevating base floors within non-coastal zones will be needed to support future terrain modification efforts within the right-of-way. While slope thresholds are present for non-coastal zones, these restrictions are associated with transition slopes where structural fill is proposed.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections through front, side and rear yard depicting slope rise/run
3. Foundation Calculation(s) Identified within ASCE 24-14 (if needed)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Cross Sections revised to reflect constructed conditions

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The most restrictive flood zone that encumbers a parcel shall be utilized when determining compliance with this Requirement.

Structural fill slopes, where proposed within non-coastal zones, shall be no steeper than 50% (1V : 2H). Vegetation will be permitted as the sole means of slope stabilization for slopes equal to or less than 33% (1V : 3H). Turf reinforcement matting, geogrids or similar devices shall be used for slope stabilization (in addition to vegetation) when slopes exceed 33% (1V : 3H).

Goal Attainment Strategies

Should connecting slopes deviate from the above-stated threshold, extend the grading limits to the property line and continue within the right-of-way where applicable.

The use of retaining walls or other means of structural fill retention is required if slope thresholds are exceeded.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.2) T.2-03 Maintenance of Pluvial Floodplain Volume
(D.2) T.3-02 Flow Equivalence
(D.2) T.4-01 Access Management
(D.2) T.4-02 Property Harmonization

6.6.4 TENET T.2 - CONSERVE FLOODPLAIN STORAGE REQUIREMENT (D.2) T.2-03 MAINTENANCE OF PLUVIAL FLOODPLAIN VOLUME

Applicability to Tenet

Conserving volume within the pluvial floodplain is a Tenet of the City's Terrain Modification Program. The terrain modification Goal associated with type D.2 development could result in a reduction of available volume should the necessary measures not be in place. It is recognized that this classification of development typically requires the services of a multifaceted design team to design and permit the improvements. Therefore, in lieu of using presumptive or prescriptive criteria to mitigate for pluvial floodplain impacts, this Requirement takes a performance pathway to document compliance.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Pluvial Floodplain Boundary
    d. Cross Sections Through Site
2. Calculations Package documenting
    a. Loss of Pluvial Floodplain Capacity
    b. Compensatory Storage
    c. Stormwater Modeling Results (if applicable)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Pluvial Floodplain Boundary
    d. Cross Sections Through Site
2. Calculations Package documenting
    a. Loss of Pluvial Floodplain Capacity (Actual)
    b. Compensatory Storage (Actual)
    c. Stormwater Modeling Results (if applicable)

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Compensation for pluvial floodplain encroachment shall be performed in accordance with Southwest Florida Water Management (SWFWMD) "cup-for-cup" criteria outlined within the ERP Applicant's Handbook Volume II. Pluvial floodplain compensation areas shall be sited in location(s) that intersect the floodplain.

Conventionally, floodplain compensation areas would be adjacent to the right-of-way as this would typically be the means of floodwater entry into the site. When sited in this manner, compensation areas shall facilitate future terrain modification efforts within the right-of-way.

Goal Attainment Strategies

Site layout and building siting shall be done in a manner that minimizes floodplain impacts.

When space limitations are present, utilize below-grade storage Above and below-grade storage shall be provided if needed to properly compensate for pluvial floodplain impacts.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.2) T.2-03 (Maintenance of Pluvial Floodplain Volume) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Significant Pluvial Floodplain Encumbrance	x	

Table 6-4 *Restricting Conditions (D.2) T.2-03*

Restricting Condition No. 1 Significant Pluvial Floodplain Encumbrance

Providing pluvial floodplain compensation on a site where significant encumbrances are reported may present specific challenges. When the pluvial floodplain encumbers more than 20% of the buildable area, Restricting Condition No. 1 is recognized.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.2) T.2-03 (Maintenance of Pluvial Floodplain Volume) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Confirm No Adverse Impacts	Compensatory storage for pluvial floodplain impacts outside of the buildable area is required when this Design Exemption is authorized. Demonstrating that encroachments within the buildable footprint will not result in adverse impacts, through the execution of a hydrologic and hydraulic (H&H) watershed model, will be permitted if Restricting Condition No. 1 is recognized. Pursue Design Exemption No. 2 where adverse impacts are present.
2	Offsite Improvements	The pursuit of offsite drainage improvements to mitigate for pluvial floodplain impacts will be permitted should Restricting Condition No. 1 be recognized. Offsite improvements would be subject to City's design standards and specifications in place at the time of permit application.

Table 6-5 *Design Exceptions (D.2) T.2-03*

The use of a Design Exemption will not alleviate the applicant from demonstrating no adverse impacts when encroachments within the pluvial floodplain occur.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.2) T.1-01 Fill Thresholds, Coastal Zones
(D.2) T.4-02 Property Harmonization
(D.2) T.4-03 Terrain Modification Accommodation

6.6.5 TENET T.3 – HOLD OVERLAND FLOW TRANSFER POINTS REQUIREMENT (D.2) T.3-02 FLOW EQUIVALENCE

Applicability to Tenet

Maintaining overland flow transfer points allows for pre-improvement flow patterns to be replicated throughout the terrain modification process. For Type D.2 development, this flow transfer typically occurs on the side lot line. Altering the flow capabilities of overland flow transfer points has the capability to shift the wetted footprint of flows further into lands not owned by the applicant. This Requirement requires that equivalent overland flow capabilities be provided to ensure no adverse impacts to adjacent property owners.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations* Documenting
    b. Proposed Post-Improvement Elevations
    c. Cross Sections with pre-improvement and post-improvement weir cross sectional areas through all overland flow transfer points (active and inactive) and pluvial floodplain elevation(s)
    d. Location of overland flow transfer points

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Execution of a hydrologic and hydraulic (H&H) model will not be required to document adherence to this Requirement. An applicant will demonstrate overland flow equivalence by providing identical cross sectional area(s) for overland flow conveyances. It shall be noted that cross section area calculations will utilize the pluvial floodplain elevation associated with the parcel as the basis of wetted area.

The flow capabilities of the existing overland flow transfer point must first be evaluated utilizing natural grade. These overland flow transfers occur on the side lot lines as well as in the front and rear yard. Survey shall be used to determine the physical location of the overland transfer point and generate an existing cross section extending from the applicant's structure to the adjacent structure (or other fixed point). The pluvial floodplain elevation associated with the applicant's

parcel shall then be plotted on the cross section. This effort will serve to develop polygons and weir geometry for the pre-improvement condition. The wetted area, defined as the area below the pluvial floodplain, of the overland flow transfer point shall then be calculated for the applicant side only. Property lines shall demark the applicant's side (A_{PRE}). Where the pluvial floodplain elevation results in the A_{PRE} polygon extending into the building setback, trim the polygon along the setback line.

Where a pluvial floodplain elevation is not published for a property, the applicant shall assume that all overland flow transfer points are active. An engineering study may be conducted to determine the presence of active overland flow transfer points where there are no published pluvial floodplain elevations. This engineering study shall utilize evaluation techniques and assumptions identical to those made within the City's Watershed Management Plan.

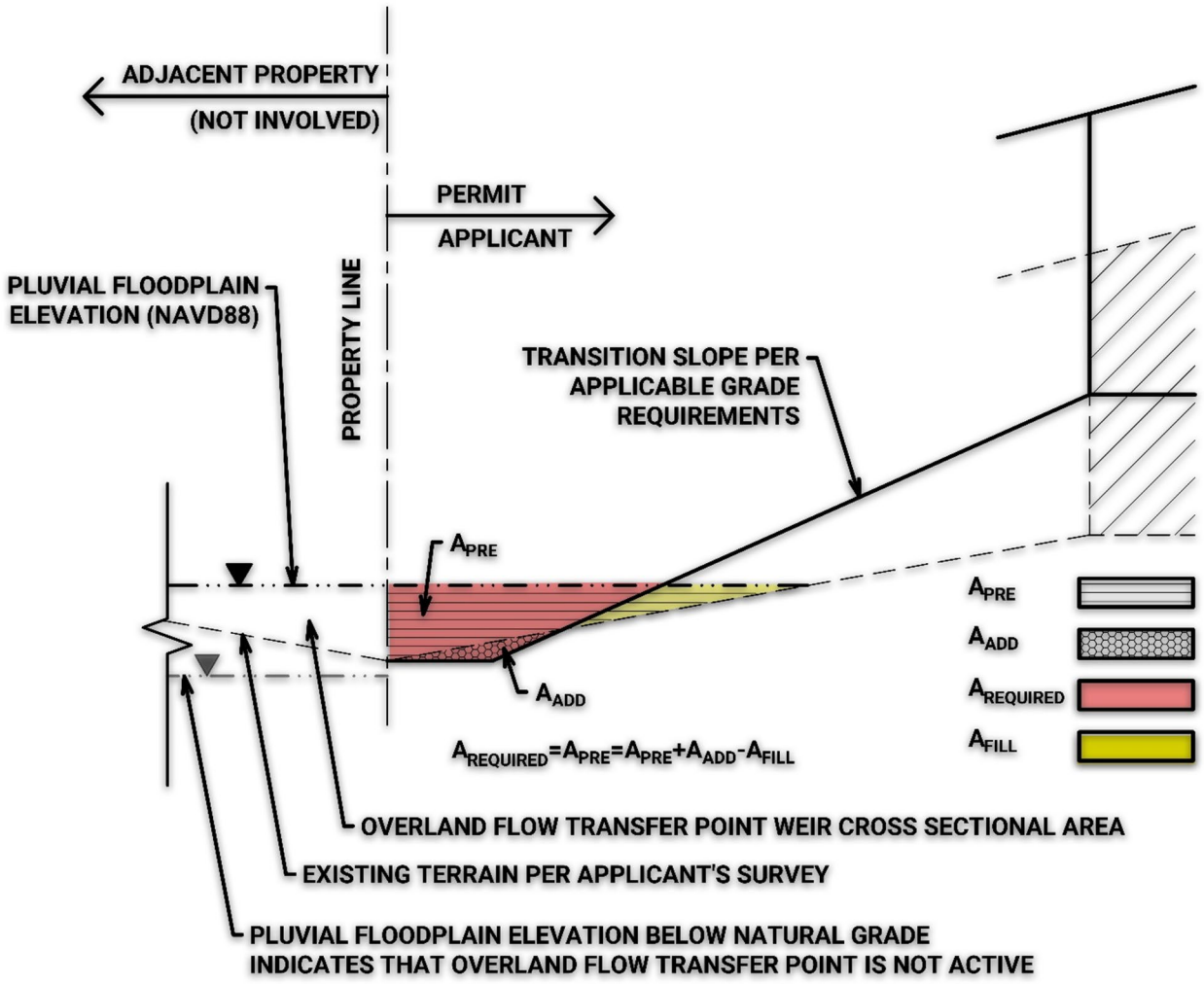


Figure 6-3 *Requirement (D.2) T.3-02*

Finished grades shall then be used to develop the proposed cross section. Utilizing the same pluvial floodplain elevation, the added area (A_{ADD}) and removed area (A_{FILL}) shall be calculated.

The proposed grading shall yield a weir cross sectional area ($A_{REQUIRED}$) identical to or greater than the pre-improvement condition when an active overland flow transfer point is present.

For active overland flow transfer points, maintain grade transition slopes and retaining wall offsets utilized in the equivalent weir cross section along the extents of the subject property line. Ensure positive longitudinal slope is provided along the subject property line to and from active overland flow transfer points.

When the pluvial floodplain elevation resides below natural grade, the overland flow transfer point is not active. No further action is needed if all overland flow transfer points are found to be inactive.

Finished grades shall not result in additional land area draining to the City's MS4.

Goal Attainment Strategies

For projects located outside the CHHA and CAZ , the use of retaining walls or other earth retention systems shall be considered if resulting slopes exceed thresholds established elsewhere in this Manual. Offset walls from property lines, as needed, to provide equivalent overland flow capabilities.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.2) T.1-02 Slope Thresholds, Coastal Zones
(D.2) T.1-03 Slope Thresholds, Non-Coastal Zones
(D.2) T.2-03 Maintenance of Pluvial Floodplain Volume
(D.2) T.4-02 Property Harmonization
(D.2) T.4-03 Terrain Modification Accommodation

6.6.6 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.2) T.4-01 ACCESS MANAGEMENT

Applicability to Tenet

Maintaining accessibility to properties is key in ensuring minimal disruption to day-to-day activities. For work classified as a D.2 improvement, access management concerns will focus on reviewing maximum driveway slopes and slope differentials.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Profile along driveway centerline depicting existing and proposed elevations
    2. Structural calculations to document structure adaptability

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Profile along driveway centerline depicting proposed and constructed elevations

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Requirement compliance is documented through adherence to maximum driveway slope criteria. Assessment will require that the applicant provide a profile through the centerline of the driveway showing elevations, roadway offsets and slope percentages for each segment. This profile shall begin at the crown of the roadway (to determine roadway cross slope) and extend through the entrance to the site.

Maximum driveway slopes shall not exceed 10% (1V:10H) for driveway connections to Gulf Blvd. & 107th Avenue. For all other locations, maximum driveway slopes shall not exceed 20% (1V:5H). At sidewalk crossings, the maximum driveway slope shall not exceed 2% (1V:50H)

Slope differentials, or grade break, refers to the algebraic difference in grade percentages between any two (2) connected driveway segments. The maximum grade break shall not exceed 14%.

Goal Attainment Strategies

Lengthen or relocate the driveway, by altering the alignment, where slope threshold or grade break concerns are present. Reconfigure building layout as needed.

Utilize maximum grade breaks, stated above, shall be utilized if the base floor Goal elevation or other Manual Requirements are not met.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.2) T.4-01 (Access Management) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Spatial Constraints		x

Table 6-6 *Restricting Conditions (D.2) T.4-01*

Restricting Condition No. 1 Spatial Constraints

With driveway slope and slope differential thresholds established, it is recognized that the ability to achieve the Goal directly correlates to the existing elevation of the connecting roadway and proposed site parking and / or building offsets. For smaller lots, low-lying areas, or a combination of the two (2), proposing the base floor at the specified elevation may not be possible considering these spatial constraints. Restricting Condition No. 1 is recognized when these constraints are present.

This Restricting Condition is also recognized when emergency access needs cannot be met on the site as solely determined by the Treasure Island Fire Department.

This Restricting Condition is not recognized for buildings whose lowest floor is not elevated above finished grade.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.2) T.4-01 (Access Management) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Low Floor Elev. = 7.60' – 12"	Site new low floor 12" below the elevation identified within the Goal.
2	Low Floor Elev. = 7.60' – 18"	Site new low floor 18" below the elevation identified within the Goal.
3	Low Floor Elev. = 7.60' – 24"	Site new low floor 24" below the elevation identified within the Goal.
4	Low Floor Elev. = 7.60' – 30"	Site new low floor 30" below the elevation identified within the Goal.

Table 6-7 *Modified Goals (D.2) T.4-01*

Use of a modified goal will require that a building be adaptable to future elevation changes proposed within the roadway. Adaptability shall be demonstrated as follows:

1. Minimum vertical clearances outlined in the Florida Building Code shall be maintained with a future base floor elevation of 7.60'.
2. The base floor shall be structurally independent of the parent building to promote removal and reconstruction at a later date.
3. All headers, studs, plates and other structural framing elements associated with egress locations shall support a future base floor elevation of 7.60'.
4. Exterior and interior wall systems shall be designed to withstand additional earth loads associated with a future base floor elevation of 7.60'.

Building adaptability will not be required for buildings that are substantially improved without being elevated.
The use of a modified goal will not be permitted for buildings whose lowest floor is not elevated above finished grade.

For buildings that are substantially improved without being elevated, modified goals are not applicable. Utilize Goal Attainment strategies discussed above.

Related Requirements

(D.2) T.1-01 Fill Thresholds, Coastal Zones
(D.2) T.1-02 Slope Thresholds, Coastal Zones
(D.2) T.2-03 Maintenance of Pluvial Floodplain Volume
(D.2) T.4-02 Property Harmonization

6.6.7 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.2) T.4-02 PROPERTY HARMONIZATION

Applicability to Tenet

The overall aesthetics of a project implementing the Goals set forth within this Manual is critical to the long-term success of the Program. Community appearance is an important element to be considered when assessing impacts on community function. Steep transition slopes can be viewed as abrupt and may not blend well with surrounding landscapes. Gentler slopes generally result in improved aesthetics when transitioning from an elevated segment of land to existing grade. As such, the need to harmonize new work with the existing terrain is recognized. This Requirement focuses on grading efforts associated with unpaved / pervious areas where non-structural fill is used.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections through all slopes to be evaluated

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Cross Sections through all slopes to be evaluated

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

No further action is needed if the project is located within the Coastal High Hazard Area (CHHA) or Coastal A Zone (CAZ).

For locations outside of the CHHA and CAZ, grading within private property shall be done in a manner so that slopes do not exceed 33% (1V : 3H). Grading within the right-of-way shall be done in a manner so that slopes do not exceed 10% (1V : 10H). Slopes greater than or equal to 1V:10H will be permitted within the right-of-way for driveways.

The above-stated slope thresholds are not associated with structural fill (See Requirement (D.2) T.1-03).

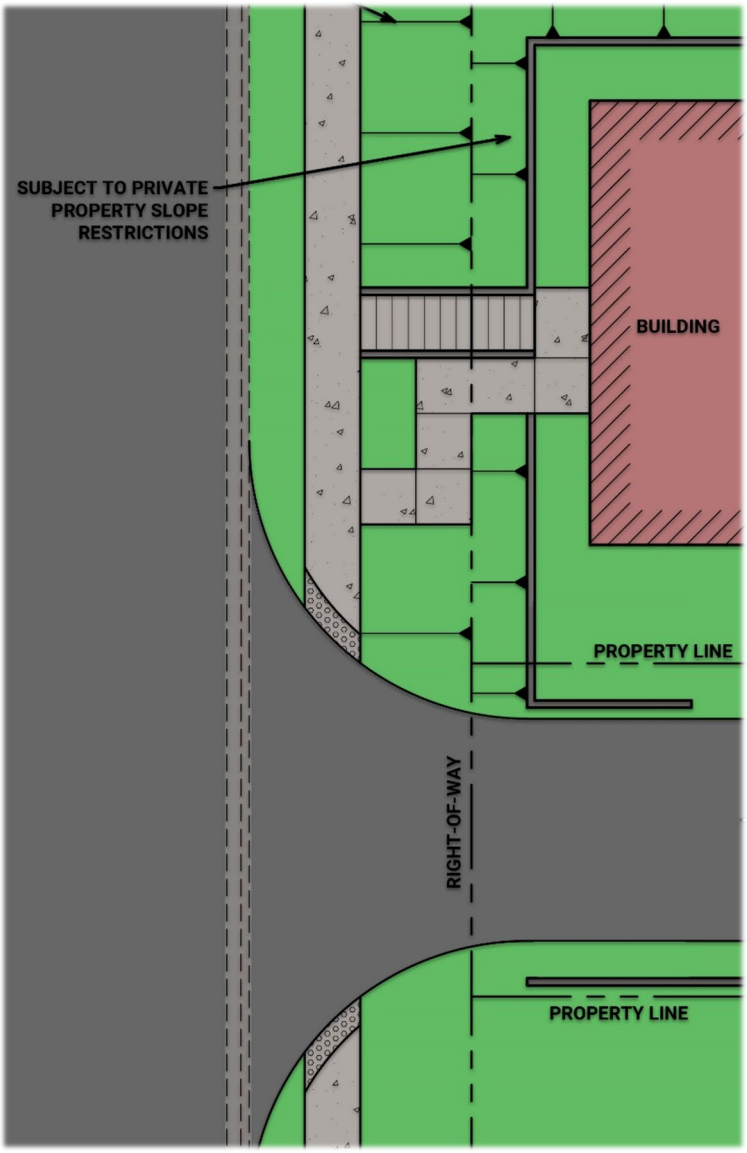


Figure 6-4 *Requirement (D.2) T.4-02*

A section view can be seen below depicting slope thresholds for both private property and the right-of-way.

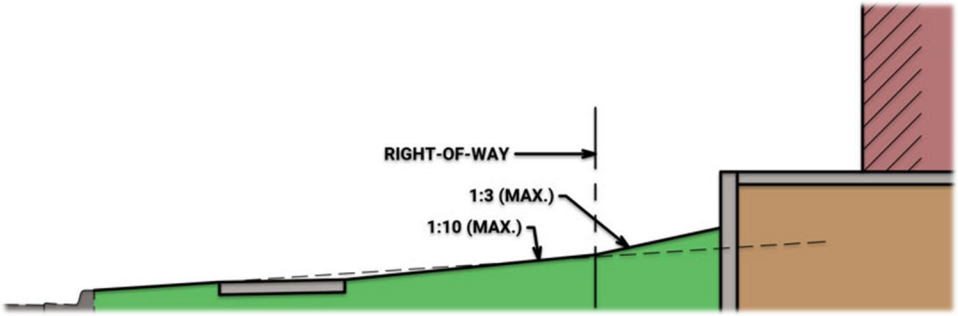


Figure 6-5 *Requirement (D.2) T.4-02 (Section View)*

Goal Attainment Strategies

Use retaining walls or other earth retention systems if slope threshold exceedances are proposed. Locate structures outside of right-of-way.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.2) T.4-02 (Property Harmonization) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Negligible Aesthetic Impacts	x	

Table 6-8 *Restricting Conditions (D.2) T.4-02*

Restricting Condition No. 1 Negligible Aesthetic Impacts

The use of retaining walls or other earth retention systems shall be considered where slope thresholds stated within this Requirement are exceeded. This is based upon the assumption that a steep slope can be viewed as harsh or unpleasing. However, in certain locations, these steep slopes are not visible to the general public or adjacent properties and therefore would not be subject to the same scrutiny. Restricting Condition No. 1 will be recognized when these conditions are present.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.2) T.4-02 (Property Harmonization) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Slope Threshold Exceedances	When Restricting Condition No. 1 is recognized, the slope thresholds associated with this Requirement may be exceeded. However, exceeding these slope thresholds shall not present any slope stability concerns nor impact the ability to adhere to other Requirements.

Table 6-9 *Design Exceptions (D.2) T.4-02*

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.2) T.1-02 Slope Thresholds, Coastal Zones
(D.2) T.1-03 Slope Thresholds, Non-Coastal Zones

6.6.8 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.2) T.4-03 TERRAIN MODIFICATION ACCOMMODATION

Applicability to Tenet

Achieving the Goal for type D.2 development is a step towards community resiliency. However, incorporating terrain modification into future public infrastructure improvements projects is also a critical part of the equation. The resulting unintended impacts or unexpected inconveniences to property owners as a result of future terrain modification can have a drastic impact on community function. It is for this reason that this Requirement establishes criteria to ensure that newly constructed D.2 developments can accommodate future terrain modification efforts performed within the public right-of-way.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Pre-Improvement Flow Patterns
    d. Post-Improvement Flow Patterns
    e. Demarcation of overland flow transfer points

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Post-Improvement Flow Patterns
    d. Demarcation of overland flow transfer points

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Maintaining local drainage capabilities will be a key component of any type D.3 terrain modification project. However, it is recognized that, while these projects may encroach beyond the right-of-way, the improvement footprint would not extend beyond the areas immediately abutting the right-of-way. Therefore, more isolated locations where access is limited (such as side and rear lot locations) shall be designed and constructed in a manner where local drainage can be maintained once the City's Goal has been achieved for type D.3 development.

No further action is needed if the roadway(s) abutting the subject property has been modified to achieve the City's Goal.

The finished grades shall support positive drainage towards the right-of-way assuming a future elevation of 6.00' inclusive of permanent site features such as vehicle use areas, stormwater management facilities and utilities.

Stormwater management and conveyance systems shall demonstrate the ability to maintain their permitted function assuming a future right-of-way elevation of 6.00'.

Finished grades shall not result in additional land area draining to the City's MS4.

Flow patterns on pervious surfaces shall have a minimum longitudinal slope of 0.5% (1V:200H). Impervious surfaces shall have a minimum longitudinal slope of 0.3% (1V:333H).

Goal Attainment Strategies

Install a privately-owned and maintained drainage collection system if suitable longitudinal slope cannot be provided. Conveyance systems shall be designed in accordance with Chapter 76 (Stormwater) of the Code of Ordinances.

Elevate yard as needed to meet the longitudinal slope requirements. Retaining walls or similar systems shall be constructed where needed for projects located outside the CHHA and CAZ. .

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.2) T.4-03 (Terrain Modification Accommodation) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Adherence to Other Requirements	x	

Table 6-10 *Restricting Conditions (D.2) T.4-03*

Restricting Condition No. 1 Adherence to Other Requirements

Adherence to other Requirements within Manual may result in the need to "hold" certain elevations below 6.00'. In these situations, Restricting Condition No. 1 is recognized.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.2) T.4-03 (Terrain Modification Accommodation) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Elevation Restrictions Associated with Tenet T.1	Requirements associated with Tenet T.1 place restrictions on the degree of elevation change permitted on a site. Therefore, adherence may result in the inability to meet the requirements of this Requirement. Design Exception No. 1 allows for the use of T.1-compliant elevations to establish the upstream elevation of all flow paths.
2	Elevation Restrictions Associated with Tenet T.3	Requirements associated with Tenet T.3 require that overland flow transfer points be held. These transfer points occur at a specific ground elevation that must be held to ensure flow equivalence. Where adherence to Tenet T.3 requires that natural grade elevations be held, Design Exception No. 2 allows for the use of T.3-compliant elevations to establish the upstream elevation of all flow paths. For projects located outside the CHHA & CAZ, offset retaining walls or similar structures only to the extent needed to maintain active overland flow transfer points.
3	Elevation Restrictions Associated with Tenet T.4	Requirements associated with Tenet T.4 may allow for the modification of base floor Goals. A reduction in the base floor may result in the inability to meet Florida Building Code site grading requirements as it pertains to foundation protection. When base floor Goal Modifications are authorized through Tenet T.4 compliance, Design Exception No. 3 is authorized. Maintain a maximum of 18" elevation difference between the base floor and top of retaining walls or similar structures (for projects located outside the CHHA & CAZ).

Table 6-11 *Design Exceptions (D.2) T.4-03*

When Design Exception No. 1, 2 or 3 is authorized, the applicant shall identify exclusion zones abutting the right-of-way and other properties that reside below elevation 6.00'. These areas will be subject to future modification at the time terrain modification is performed and shall promote the use of fill after project completion.

The applicant shall not allow for the presence of permanent or immovable objects (such as a wall systems, hardwood trees, etc.) within the exclusion zone that would impact the ability to perform terrain modification at a future date. Retaining walls, or similar structures, are only permitted within an exclusion zone if Design Exception No. 3 is authorized.

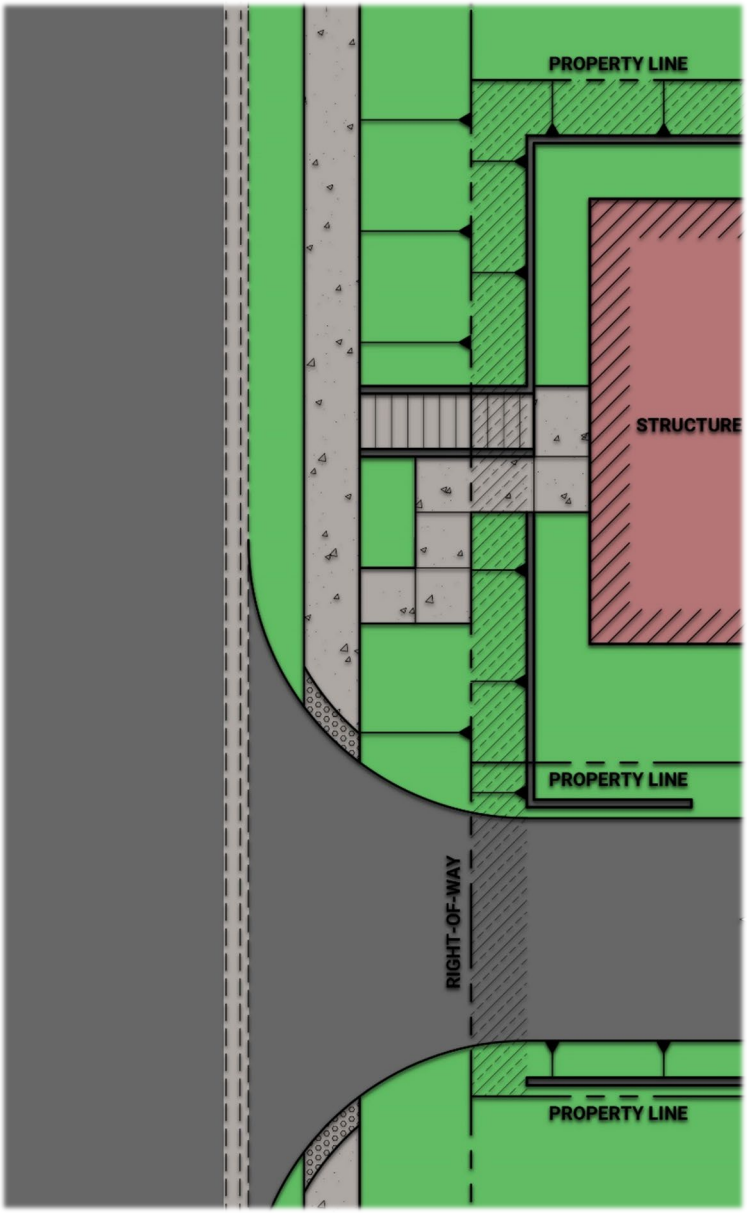


Figure 6-6 *Requirement (D.2) T.4-03*

A section view can be seen below depicting the relationship between site elevations and the exclusion zone.

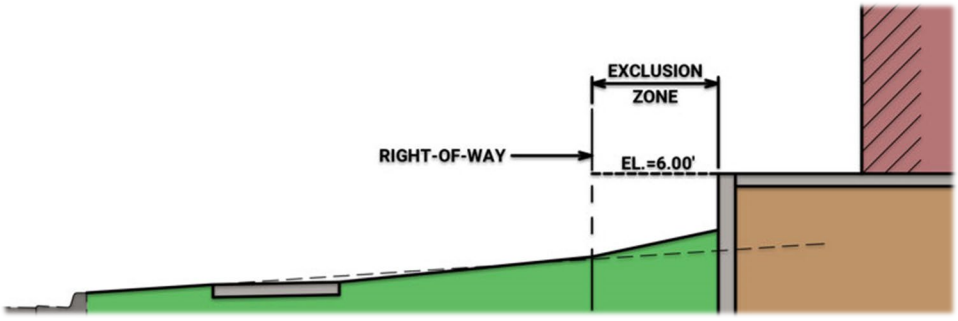


Figure 6-7 *Requirement (D.2) T.4-03 (Section View)*

Exclusion zones are not a substitute for terrain modification. Exclusion zones are to be used in conjunction with terrain modification activities and established only after all Goal Attainment strategies have been implemented.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.2) T.1-01 Fill Thresholds, Coastal Zones
(D.2) T.1-02 Slope Thresholds, Coastal Zones
(D.2) T.1-03 Slope Thresholds, Non-Coastal Zones
(D.2) T.2-03 Maintenance of Pluvial Floodplain Volume
(D.2) T.3-02 Flow Equivalence
(D.2) T.4-02 Property Harmonization

6.6.9 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.2) T.4-04 SEA LEVEL RISE CONSIDERATIONS

Applicability to Tenet

The Terrain Modification Program is centered around the anticipated community impacts resulting from sea level rise. This Manual identities goals to increase the likelihood that the City will thrive as these changes become more prevalent. However, the effectiveness of these goals are diminished if the stormwater collection and management systems associated with a D.2 improvement do not account for these projected environmental conditions.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections Through Stormwater Management Systems (SWS)
    d. Profiles Through Stormwater Conveyance Systems
2. Calculations Package documenting
    a. SWS Performance Incorporating SLR Adjustments
    b. Conveyance System Performance Incorporating SLR Adjustments

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Cross Sections Through SWF
    d. Profiles Through Stormwater Conveyance Systems

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Gravity-based stormwater conveyance systems and stormwater management systems shall meet level of service requirements with a starting tailwater condition that accounts for sea level rise. Additionally, when geologic variables are an element of the stormwater analysis (typically required for treatment volume recovery), considerations shall be made for elevated groundwater conditions associated with SLR.

To incorporate SLR projections into these variables, a structure life cycle must first be determined. The applicant shall report on the anticipated service life for the proposed improvement. Fifty (50) years shall be the minimal allowable service life. The service life (in years) shall then be added to current date to determine the degree of sea level rise consideration required.

Requirement (D.2) T.4-04 (Sea Level Rise Considerations) Sea Level Rise Adjustment Factor Summary Table	
End Date of Service	**Adjustment Factor (ft.)**
2070	+ 1.55'
2080	+2.05'
2090	+2.70'
2100	+3.40'

Table 6-12 *Sea Level Rise Adjustment Factors (D.2) T.4-04*

For example, if a project submitted for permitting in 2025 has an anticipated service life of 55 years, it is expected to be in service in 2080. Therefore, the building's supporting stormwater infrastructure will need to be functional in an environment where the mean sea level has increased by 2.05'. As such, the adjustment factor associated with the end date of service shall be incorporated into the analysis of stormwater system performance and considered the design condition for the site.

Applicants shall round to the nearest decade when the end date of service is not depicted in Table 6-12.

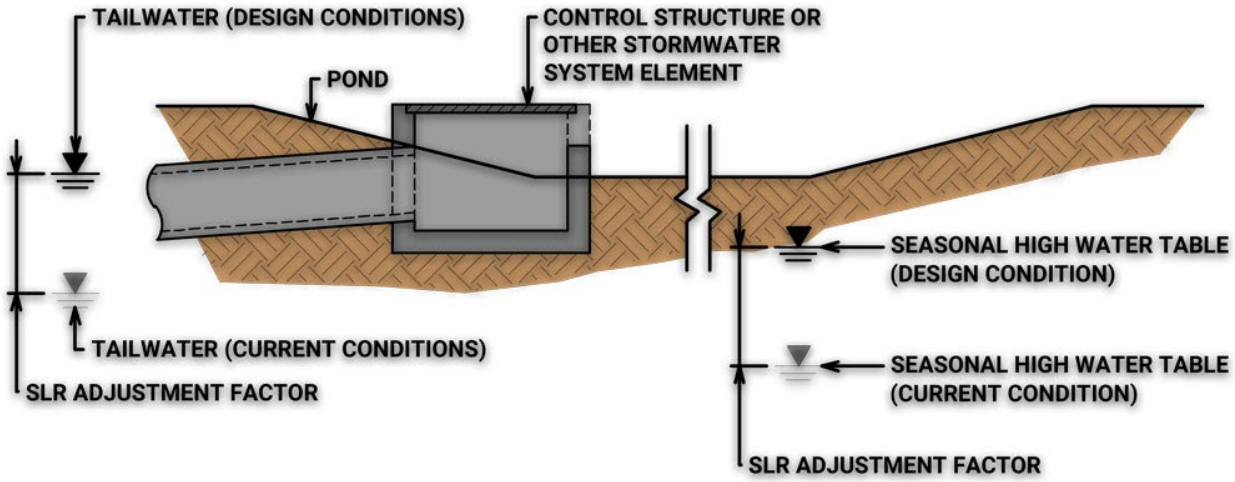


Figure 6-8 *Requirement (D.2) T.4-04*

Goal Attainment Strategies

With this Requirement based on stormwater system performance, low impact development (LID) measures shall be taken in an effort to reduce runoff volume and rates.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.2) T.4-04 (Sea Level Rise Considerations) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Limited Fill Thickness	x	

Table 6-13 *Restricting Conditions (D.2) T.4-04*

Restricting Condition No. 1 Limited Fill Thickness

Adherence to Requirements within the Manual will result each site having a unique average fill thickness. The average fill thickness over the project may be greater than the SLR adjustment factor. When the SLR adjustment factor is greater than the average fill thickness, Restricting Condition No. 1 is recognized.

For buildings that are substantially improved without elevating, Restricting Condition No. 1 is recognized.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.2) T.4-04 (Sea Level Rise Considerations) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Average Fill Thickness	Design Exception No. 1 allows for the average fill thickness over the project area to be used as the adjustment factor to determine future condition drainage evaluation variables. The applicant shall provide cross sections at 10-foot intervals along the length of the property to determine the fill thickness at various locations. Natural and finished grade shall be depicted on these sections.

Table 6-14 *Design Exceptions (D.2) T.4-04*

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.2) T.2-03 Maintenance of Pluvial Floodplain Volume
(D.2) T.4-02 Property Harmonization
(D.2) T.4-03 Terrain Modification Accommodation

7.0 TERRAIN MODIFICATION (PUBLIC INFRASTRUCTURE)

7.1 APPLICABILITY & USE

Section 4 of this Manual outlines the tenets of the City's Terrain Modification Program. Requirements identify certain principles and / or strategies which are to be used in the design of new improvements to reinforce adherence to a program tenet. The applicability and scope of each Requirement varies based upon the type of development being performed. Development classifications are also outlined within the prior Section. Four (4) distinct classifications were identified and assigned a unique alpha-numeric designator (D.1, D.2, etc.).

This Section serves to define public infrastructure (Development Classification D.3), establish the Goal for D.3 development and outline the method of incorporation for each Requirement. Please note that a unique numeric identifier is assigned to each Requirement in an effort to streamline future communication and documentation efforts associated with the review process.

It shall be noted that the below Requirements are associated with the Goal outlined within this Manual and are not intended to be all inclusive nor representative of all considerations needed to issue a permit in accordance with the City's Code of Ordinances. Furthermore, adherence to a Requirement is not intended to replace, revise or invalidate any requirement identified within the Land Development Regulations (LDRs).

7.2 SUMMARY OF DEVELOPMENT CLASSIFICATION D.3



Public infrastructure, constructed and maintained within public rights-of-way, is categorized within this improvement category. Pinellas County, the Florida Department of Transportation (FDOT) and the City are the public utility owners present within the City's jurisdictional boundaries. This Manual will specifically focus on implementing terrain modification within the City's roadway network and the corresponding stormwater system.

Applicability to Resiliency

Elevation of the roadway network within the City was identified as the predominant resiliency measure to mitigate for future environmental changes (most notably sea level rise). The roadway system serves as the point of stormwater collection throughout the City meaning it often resides at the lowest elevation. By elevating the point of collection, day-to-day impacts associated with tidal inundation of roadways can be minimized.

Future Land Use (Zoning) Correlation

With this improvement category covering work within public rights-of-way, a future land use (nor zoning) classification is not assigned for these lands.

As previously stated, certain future land use classifications (most notably Transportation / Utility) may be assigned to parcels that serve a public infrastructure function. However, improvements to these sites would be classified as a D.2 improvement.

Other Involved Agencies

This improvement category represents the greatest degree of outside agency involvement. SWFWMD, the Florida Department of Environmental Protection (FDEP), United States Army Corps of Engineers (USACOE) and Pinellas County Environmental Management (PCEM) could all be involved in a project where the public infrastructure Goal is implemented. While the City leads these types of projects, internal permitting has not historically been mandated.

7.3 GOAL (DEVELOPMENT CLASSIFICATION D.3)

Section 3 identifies terrain modification as the predominant resiliency measure to mitigate the threat of sea level rise. This Section also discussed the low road elevation needed to successfully support a gravity-based MS4 at the times of elevated tidal conditions. As such, the Goal for type D.3 development mirrors the overall goal of the City's Terrain Modification Program.

The Goal for type D.3 development shall be achieving a minimum low road elevation of 5.10'.

7.4 SUMMARY OF REQUIREMENTS (DEVELOPMENT CLASSIFICATION D.3)

The following Requirements are applicable to development activities classified as D.3:

Summary of Requirements	
Requirement Identification No.	**Requirement Name**
Maintain National Flood Insurance Program (NFIP) Compliance (Tenet T.1)	
(D.3) T.1-01	Fill Thresholds, Coastal Zones
(D.3) T.1-02	Slope Thresholds, Coastal Zones
Conserve Floodplain Storage (Tenet T.2)	
(D.3) T.2-04	Reduction of Pluvial Floodplain Boundaries
Hold Overland Flow Transfer Points (Tenet T.3)	
(D.3) T.3-01	Flow Transfer Point Identification
(D.3) T.3-03	Stage Equivalence
Preserve Community Function (Tenet T.4)	
(D.3) T.4-01	Access Management
(D.3) T.4-02	Property Harmonization
(D.3) T.4-04	Sea Level Rise Considerations
(D.3) T.4-05	Elevation Relationships

Table 7-1 *Summary of Requirements (Development Classification D.3)*

Further discussion will be held on the Requirements associated with type D.3 developments.

7.5 REQUIREMENT COMPLIANCE REVIEW PROCESS

As part of the permit review process, each Requirement would be reviewed for applicability and compliance. For example, certain Requirements pertaining to development within coastal zones (CHHA and CAZ) would not be applicable if the project was located in an AE zone. Subsequent parts of this Section highlight critical information associated with each Requirement including:

- Applicability to Tenet
- Review Materials
- Compliance Determination
- Goal Attainment Strategies
- Restricting Conditions
- Design Exceptions
- Goal Modifications
- Related Requirements

The below figure outlines the process that is used to determine compliance with a specific Requirement.

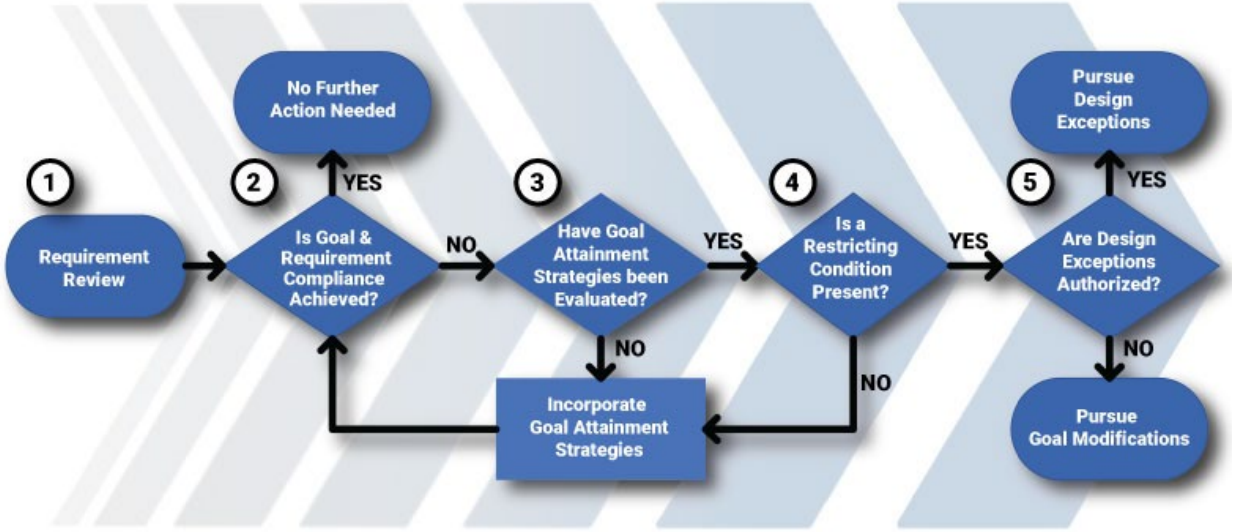


Figure 7-1 *Requirement Compliance Review Process*

Prior to assessing Requirement compliance, it is important to understand the correlation between the Requirement and the Tenet. The Program Tenets, or overarching principles, guide the review of each corresponding Requirement. Certain elements of a site are tied to certain Requirements resulting in the need to be provided with the proper review materials. As such, a specific listing of the information needed to complete a review is provided within the Requirement description.

The "Compliance Determination" component of each Requirement states the specific factors to be reviewed. The applicant shall start the design process by utilizing the Goal elevation associated with the development classification and assess compliance with the first Requirement listed herein. If compliant, the elevation is carried forward and used as the basis of evaluation for the subsequent Requirement. This assessment continues sequentially until all requirements have been met. A separate review is needed for all Requirements associated with a development type.

D.3 developments will vary in size and scope throughout the island community. Similarly, the methods used to become compliant may also differ. Goal attainment strategies are presented for each Requirement outlining prescribed measures to be used to achieve the D.3 Goal in a compliant manner. The use of goal attainment strategies must be considered and deemed either impractical or not constructable before consideration of a Restricting Condition is given.

A Restricting Condition is recognized when specific site constraints are present which either a.) will not support the Goal or b.) result in the need to pursue Requirement compliance in a revised manner. As stated above, a Restricting Condition will not be recognized prior to illustrating that implementing the prescribed goal attainment strategies would not be possible. Multiple Restricting Conditions may be present on a single site.

The presence of a Restricting Condition requires either modification of the Goal or the pursuit of a Design Exception. The Restricting Conditions Summary Table associated with each Requirement identifies which path is to be pursued.

Authorization of a Design Exception allows for the Requirement to be assessed using an alternate evaluation approach or through a different evaluation lens. Each Design Exception directly correlates to the similarly numbered Restricting Condition. The presence of multiple Restricting Conditions would permit the use of multiple Design Exceptions.

Where Design Exceptions are not authorized, goal modification is needed. A specific calculation approach is provided when modified goals are to be pursued. For certain Requirements, multiple modified goals may be listed in sequential order. This order represents the hierarchy of goals in which the designer shall pursue. For example, Requirement compliance would first be assessed using Modified Goal No. 1 in conjunction with the prescribed goal attainment strategies. If the Requirement is still not met, then the designer would continue to Modified Goal No. 2. This process is then repeated until Requirement compliance is achieved.

The resultant elevation is then used as the basis of evaluation and the compliance review process restarts with the initial Requirement. This iterative process is repeated until a single elevation can satisfy all Requirements associated with the development classification. For a project to meet the requirements set forth within the City's Terrain Modification Program, the improvements must be compliant with all applicable Requirements.

7.6 Requirement Schedule (Development Classification D.3)

7.6.1 Tenet T.1 - Maintain NFIP Compliance
Requirement (D.3) T.1-01
Fill Thresholds, Coastal Zones

Applicability to Tenet

The Goal for type D.3 improvements, which establishes a minimum low road elevation, is identified within Section 7.3. To achieve this goal, fill must be imported to the site. However, two (2) areas within the City's Special Flood Hazard Area (SFHA), the Coastal High Hazard Area (CHHA) and Coastal A Zone (CAZ), have NFIP-defined thresholds that are recognized as having no adverse impacts.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Roadway Plan & Profile including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
3. Intermediate Construction Survey (if required by the City during construction) *

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

No more than 24" of fill shall be used in pursuit of the Goal. Survey shall document the natural grade throughout the limits of the project to the greatest extent possible. Interpolation between existing elevations shall be minimized. The roadway shall be graded in a manner to where finished grade is no greater than 24" above an existing elevation at the same location.

This fill threshold evaluation shall also be performed outside of the immediate roadway's limits. Natural and finished grades shall be compared at driveways, parkway areas and other surfaces that abut the improvements to ensure that the fill thresholds (24") are not exceeded.

Goal Attainment Strategies

There is a direct correlation between the existing topography of a project site (located within a CHHA or CAZ) and the ability to achieve the Goal. The terrain of the City's roadway network is relatively well-defined. Therefore, shifts in alignment increase the likelihood of exceeding these fill thresholds. Existing alignments shall be maintained where feasible.

Where terrain modifications within the parkway result in filling greater than 24", utilize curb sections with a lower profile.

Existing points of stormwater collection shall be held where needed to meet this Requirement.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.3) T.1-01 (Fill Thresholds, Coastal Zones) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Pre-Improvement Elevations		x

Table 7-2 *Restricting Conditions (D.3) T.1-01*

Restricting Condition No. 1 Pre-Improvement Elevations

With fill thresholds present, natural grade elevations limit what low road elevation can be realized for properties encumbered by the CHHA / CAZ.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.3) T.1-01 (Fill Thresholds, Coastal Zones) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Low Road Elev. = Natural Grade Elev. + 24"	Site new roadway 24" above natural grade.

Table 7-3 *Modified Goal (D.3) T.1-01*

It shall be noted that this fill threshold represents an absolute maximum in perpetuity. Additional fill will not be permitted once this threshold is reached.

Related Requirements

(D.3) T.1-02 Slope Thresholds, Coastal Zones
(D.3) T.4-01 Access Management

7.6.2 TENET T.1 - MAINTAIN NFIP COMPLIANCE REQUIREMENT (D.3) T.1-02 SLOPE THRESHOLDS, COASTAL ZONES

Applicability to Tenet

The NFIP identifies slope thresholds for CHHA and CAZ applications. Modifying the terrain of the existing roadway network will typically result in existing parkway slopes being reduced. However, while exceedance of the aforementioned slope threshold is unlikely, confirming adherence to this Requirement is still needed to ensure Tenet T.1 is upheld.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Roadway Plan & Profile and Cross Sections including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
3. Intermediate Construction Survey (if required by the City during construction) *

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Excessive transition slopes can serve to increase wave ramp up and alter wave reflection patterns. To mitigate for such impacts, transition slopes shall be softened to the maximum extent practical. It is recognized that property lines, setbacks, drainage patterns and connecting elevations are all factors that will impact the extends and steepness of these slopes.

Utilize slopes of 20% (1V : 5H) to transition from the natural grade to finished grade. Reduced slopes shall be used only when the Goal elevation is achieved

Goal Attainment Strategies

In locations where parkway slopes exceed the slope threshold, utilize curb sections with a higher profile.

Points of stormwater collection shall be shifted in a manner that reduces parkway slopes where exceedances are present.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.3) T.1-01 Fill Thresholds, Coastal Zones
(D.3) T.4-01 Access Management
(D.3) T.4-02 Property Harmonization

7.6.3 TENET T.2 - CONSERVE FLOODPLAIN STORAGE REQUIREMENT (D.3) T.2-04 REDUCTION OF PLUVIAL FLOODPLAIN BOUNDARIES

Applicability to Tenet

Conserving volume within the pluvial floodplain is a Tenet of the City's Terrain Modification Program. Achieving the Goal associated with type D.3 development will likely result in a reduction of available volume within the pluvial floodplain. Improvements to the City's MS4 done in conjunction with terrain modification serve as the vehicle to mitigate for this volumetric encumbrance thereby ensuring Tenet T.2 is upheld. Additionally, optimization opportunities are to be pursued when pluvial floodplain boundaries extend beyond the limits of the right-of-way.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Roadway Plan & Profile and Cross Sections including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Pluvial Floodplain Boundary (Pre-Improvement)
    d. Pluvial Floodplain Boundary (Post-Improvement)
2. Calculations Package documenting
    a. Stage-Storage Calculations (Post-Improvement)
    b. Compliance Tailwater Condition
    c. Stormwater Modeling Results

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Pluvial Floodplain Boundary (Pre-Improvement)
    d. Pluvial Floodplain Boundary (Post-Improvement)
    e. Cross Sections Through Site

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

By the nature of the activity itself, performing terrain modification within the right-of-way will result in removal of storage within the pluvial floodplain. Re-establishing or compensating for lost volume is not proposed. Therefore, floodplain mitigation is to be accomplished through improved hydraulic efficiency of the MS4.

Filling within the pluvial floodplain shall not result in adverse impacts. For purposes of this Requirement, an adverse impact will be defined as an expansion of the pluvial floodplain boundaries beyond the pre-improvement limits. Documentation shall be provided depicting the boundaries of the pre-improvement pluvial floodplain in relation to the post-improvement pluvial floodplain.

In locations where pluvial floodplains extend beyond the limits of the right-of-way, replicating existing pluvial floodplain boundaries would not adhere to this Requirement. MS4 improvements shall result in pluvial floodplain boundaries that wholly reside within the right-of-way. Doing so will remove certain challenges associated with the design of D.1, D.2 & D.4 improvements.

When opportunities are present, evaluate the volumetric impacts associated with the final built out scenario for D.1 and D.2 developments within the project area. MS4 improvements shall result in a replication of the pre-improvement pluvial floodplain boundaries when all projected future volume encumbrances are incorporated into the evaluation.

Goal Attainment Strategies

MS4 improvements may provide an opportunity to consolidate outfalls. In lieu of abandonment, existing outfalls shall remain in-service and be connected to new collection systems in order to improve conveyance abilities during the 100-Year/24-Hour storm event.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.3) T.2-04 (Reduction of Pluvial Floodplain Boundaries) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Significant Offsite Flows	x	

Table 7-4 *Restricting Conditions (D.3) T.2-04*

Restricting Condition No. 1 Significant Offsite Flows

It is recognized that the design storm associated with the floodplain (as defined in Section 2.5) may overwhelm existing collection systems resulting in overland flow transfer points being active. These overland flow conveyances can adversely impact locations proposed for improvement within a project's boundary. When offsite flows transfer into a site via an overland flow transfer point, collection efforts can be cost-prohibitive if not impractical. In these situations, Restricting Condition No. 1 is recognized.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.3) T.2-04 (Reduction of Pluvial Floodplain Boundaries) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Pluvial Floodplain Maintenance	Should Restricting Condition No. 1 be recognized, reducing pluvial floodplain boundaries in the manner described above will not be required. Authorization of this Design Exception does not permit expansion of the pre-improvement pluvial floodplain.

Table 7-5 *Design Exceptions (D.3) T.2-04*

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.3) T.1-01 Fill Thresholds, Coastal Zones
(D.3) T.3-01 Flow Transfer Point Identification
(D.3) T.3-03 Stage Equivalence

7.6.4 TENET T.3 – HOLD OVERLAND FLOW TRANSFER POINTS REQUIREMENT (D.3) T.3-01 FLOW TRANSFER POINT IDENTIFICATION

Applicability to Tenet

In order to ensure that existing overland flow transfer points are not impacted throughout the terrain modification process, said locations of active transfer must first be identified. Proper identification and tracking of pre-improvement / post-improvement flow rates provides assurances that adverse impacts will not be felt within and adjacent to the project area.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Calculations Package documenting
    a. Weir Inventory
    b. Pre-Improvement Maximum Weir Flows
    c. Post-Improvement Maximum Weir Flows

Compliance Determination

This Requirements focuses on identifying overland flow transfer points (active and inactive) that reside within and immediately adjacent to the project area. Weirs shall be identified using the alpha-numeric descriptor used within the WMP.

Goal Attainment Strategies

Goal attainment strategies are not needed for this Requirement.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.3) T.3-03 Stage Equivalence

7.6.5 TENET T.3 – HOLD OVERLAND FLOW TRANSFER POINTS REQUIREMENT (D.3) T.3-03 STAGE EQUIVALENCE

Applicability to Tenet

Ensuring that overland flow transfer capabilities are not impacted by proposed terrain modifications is a critical element of the City's Program. Improvements classified as D.1, D.2 & D.4 are assigned a two-step process to first identify the presence of overland flow transfers and then incorporate flow transfer capabilities within the design. This process provides a path to confirm flow equivalence without needing to perform watershed-wide hydrologic and hydraulic (H&H) modeling. However, for public infrastructure projects, this modeling will be necessary.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Roadway Plan & Profile and Cross Sections including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
2. Calculations Package documenting
    a. Compliance Tailwater Condition
    b. Stormwater Modeling Results

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Cross Sections Through Site

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Providing flow equivalence allows for an applicant to confirm that their improvement does not result in adverse impacts as replicating flow capabilities ensures that water surface elevations do not increase. However, in certain situations, slight changes could seen in overland flow rates with no change in water surface elevations. No adverse impacts can be claimed in such a condition.

For D.3 improvements, this Manual prioritizes replicating the maximum water surface elevations over matching overland flow rates. Therefore, the applicant will be required to demonstrate that water surface elevations do not increase as a result of a project in which the terrain is modified. The scope of review shall focus both within the immediate project area and unimproved areas outside of the project's boundary.

Goal Attainment Strategies

Conventional resolution techniques shall be used when adverse impacts are observed.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.3) T.2-04 Reduction of Pluvial Floodplain Boundaries
(D.3) T.3-01 Flow Transfer Point Identification

7.6.6 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.3) T.4-01 ACCESS MANAGEMENT

Applicability to Tenet

Maintaining a reasonable degree of accessibility to properties is key in ensuring minimal disruption to day-to-day activities. Maximum slope thresholds are identified for D.1 and D.2 developments as terrain modification associated with these improvements would generally steepen access slopes considering a site is being elevated in relation to the connecting roadway. Conversely, terrain modification associated with D.3 developments will typically result in existing slopes being reduced. Therefore, this Requirement focuses on ensuring that a minimum slope is maintained to ensure positive drainage towards the roadway.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Driveway Half Sections including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
    c. Driveway Half Sections

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Requirement compliance is documented through adherence to minimum and maximum driveway slope criteria.

Maximum driveway slopes shall be as outlined within the Access Management Requirement for each development classification.

Minimum driveway slopes shall not exceed 0.5% (1V : 200H) for commercial and residential applications.

Slope differentials, or grade break, refers to the algebraic difference in grade percentages between any two (2) connected driveway segments. The maximum grade break shall be in accordance with grade break criteria outlined elsewhere in this Manual.

Goal Attainment Strategies

Conventional resolution techniques shall be used when proposed slopes reside above or below identified thresholds.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.3) T.4-01 (Access Management) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Adherence to Other Requirements	x	

Table 7-6 *Restricting Conditions (D.3) T.4-01*

Restricting Condition No. 1 Adherence to Other Requirements

With driveway slope thresholds established, it is recognized that the ability to achieve the Goal (or a modified goal) directly correlates to the existing elevations of the surrounding properties. A Restricting Condition is not recognized when the maximum slope thresholds are exceeded. However, a Restricting Condition is recognized when minimum slope thresholds cannot be met due to the need to adhere to other Requirements.

Design Exceptions

Design Exceptions will be authorized for this Requirement as identified below:

Requirement (D.3) T.4-01 (Access Management) Design Exceptions Summary Table		
Design Exception No.	**Design Exception**	**Description**
1	Negative Slopes	When minimum slope thresholds cannot be met, negative slopes may be utilized. Negatively sloped sections of a driveway shall terminate at a collection structure (typically a trench drain). Maximum grade break criteria shall remain in force.

Table 7-7 *Design Exceptions (D.3) T.4-01*

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.3) T.4-02 Property Harmonization
(D.3) T.4-05 Elevation Relationships

7.6.7 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.3) T.4-02 PROPERTY HARMONIZATION

Applicability to Tenet

The overall aesthetics of a project implementing the resiliency goals set forth within this Manual is critical to the long-term success of the Program. Neighborhood appearance is an important element to be considered when assessing impacts on community function. Minimally sloped grade transitions are anticipated as a result of terrain modification associated with D.3 improvements. These minimal slopes can present drainage and erosion concerns oftentimes leading to reduced property function. As such, the need to harmonize new work with the existing terrain in a manner that mitigates for these concerns is recognized. This Requirement focuses on grading efforts associated with unpaved / pervious areas and replicating the point of stormwater collection as it exists in the pre-improvement scenario (where possible).

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Roadway Plan & Profile and Cross Sections including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Demarcation of Area Draining to Right-of-Way
    d. D.1 and D.2 Development Exclusion Zones

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Parkway elevations shall support runoff collection within the roadway by ensuring that positive slope is provided between private property and the back of curb / edge of pavement. For pervious surfaces, parkway slopes shall be a minimum of 0.5% (1V : 200H). For impervious surfaces, parkway slopes shall be a minimum of 0.3% (1V : 333H).

Terrain modification activities shall not encroach within ten (10) feet of a structure.

Goal Attainment Strategies

Where permitted, extending the limits of grading beyond the right-of-way may be needed to match existing grade at a higher elevation.

Restricting Conditions

Restricting Conditions will not be recognized for this Requirement:

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.3) T.1-01 Fill Thresholds, Coastal Zones
(D.3) T.4-01 Access Management
(D.3) T.4-05 Elevation Relationships

7.6.8 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.3) T.4-04 SEA LEVEL RISE CONSIDERATIONS

Applicability to Tenet

The Terrain Modification Program is centered around the anticipated community impacts resulting from sea level rise. This Manual identifies goals to increase the likelihood that the City will thrive as these changes become apparent. However, the effectiveness of these goals is diminished if the stormwater collection system associated with the roadway network meets its level of service goals without consideration of these projected environmental conditions.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Roadway Plan & Profile including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Level of Service Tailwater Condition
2. Calculations Package documenting
    a. Level of Service Tailwater Condition
    b. Stormwater Management System (SMS) Performance
    c. Conveyance System Performance

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

Gravity-based stormwater conveyance systems and SMSs shall achieve their level of service goals utilizing a tailwater condition that accounts for sea level rise. Additionally, when geologic variables are an element of the stormwater analysis (typically required for treatment volume recovery), considerations shall be made for elevated groundwater conditions associated with SLR. The City's level of service goals shall be achieved using the level of service tailwater condition.

The method used to calculate the level of service tailwater condition will vary based upon the type of stormwater system associated with the project. Two distinct types of stormwater systems are recognized; stormwater systems with conveyance piping and SMS(s) and stormwater systems with only conveyance piping.

When a SMS is proposed, this facility will be assigned an anticipated service life of 50-years. The service life (in years) shall then be added to current date to determine the degree of sea level rise consideration required.

Requirement (D.3) T.4-04 (Sea Level Rise Considerations) Sea Level Rise Adjustment Factor Summary Table	
End Date of Service	**Adjustment Factor (ft.)**
2070	+ 1.55’
2080	+2.05’
2090	+2.70’
2100	+3.40’

Table 7-8 *Sea Level Rise Adjustment Factors (D.3) T.4-04*

For example, if a project designed in 2030 has an anticipated service life of 50 years, it is expected to be in service in 2080. Therefore, the facility will need to be functional in an environment where the mean sea level has increased by 2.05’. As such, the adjustment factor associated with the end date of service shall be incorporated into the analysis of SMS performance and considered the design condition for the site.

Applicants shall round to the nearest decade when the end date of service is not depicted in Table 7-8.

When a stormwater system consists of only conveyance piping, the low road elevation will dictate the level of service tailwater condition. System design shall assume a tailwater condition that is 12” below the low road elevation.

Goal Attainment Strategies

With this Requirement based on stormwater system performance, low impact development (LID) measures shall be incorporated into the design in an effort to reduce runoff volume and rates.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.3) T.4-05 Elevation Relationships

7.6.9 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.3) T.4-05 ELEVATION RELATIONSHIPS

Applicability to Tenet

While pursuit of the City's Goal will result in changes to how improvements are designed and permitted within the City, the need to harmonize new work with the existing terrain is recognized. This element focuses on maintaining a prescribed elevation relationship between a roadway's crown and surrounding structures.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Roadway Plan & Profile including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Building Base Floor or Lowest Floor Elevation (plotted on profile)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

This Requirement focuses on maintaining a specific elevation relationship between a roadway's crown elevation and a building's lowest floor (or base floor) elevation. Proposed roadway crown elevations shall typically be 12" below the lowest floor (or base floor) elevation of an adjacent structure. A minimum relationship of 6" is required. Evaluation of this elevation relationship shall be performed throughout the limits of the structure.

Goal Attainment Strategies

Conventional resolution techniques associated with roadway design shall be considered when elevation thresholds are not met.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.3) T.4-05 (Elevation Relationships) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Low Lying Buildings		x

Table 7-9 *Restricting Conditions (D.3) T.4-05*

Restricting Condition No. 1 Low Lying Buildings

The presence of low-lying buildings may hinder an applicant's ability to achieving the Goal in a manner that is compliant with this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.3) T.4-05 (Elevation Relationships) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Low Road Elev. = Base Floor (or Lowest Floor) Elev. - 6" – Cross Slope where Low Road Elev. > 3.25'	Site low road using existing building base floor (or lowest floor) elevations as basis of profile. When this modified goal is used, elevation relationships shall not exceed 12".
2	Low Road Elev. = 3.25'	Pursuit of this modified goal will require wholesale configuration of the right-of-way. In certain locations, the use of an inverted roadway section and/or considerable roadway width reductions shall be considered. In other locations, the strategic use of stormwater pump stations shall be evaluated. When the use of this modified goal is needed, significant development of the surrounding area may be required to achieve the Goal.

Table 7-10 *Modified Goal (D.3) T.4-05*

Related Requirements

(D.3) T.4-01 Access Management

8.0 Terrain Modification (Coastal Erosion Structures)

8.1 Applicability & Use

Section 4 of this Manual outlines the tenets of the City's Terrain Modification Program. Requirements identify certain principles and / or strategies which are to be used in the design of new improvements to reinforce adherence to a program tenet. The applicability and scope of each Requirement varies based upon the type of development being performed. Development classifications are also outlined within the prior Section. Four (4) distinct classifications were identified and assigned a unique alpha-numeric designator (D.1, D.2, etc.).

This Section serves to define coastal erosion structures (Development Classification D.4), establish the Goal for D.4 development and outline the method of incorporation for each Requirement. Please note that a unique numeric identifier is assigned to each Requirement in an effort to streamline future communication and documentation efforts associated with the review process.

It shall be noted that the below Requirements are associated with the Goal outlined within this Manual and are not intended to be all inclusive nor representative of all considerations needed to issue a permit in accordance with the City's Code of Ordinances. Furthermore, adherence to a Requirement is not intended to replace, revise or invalidate any requirement identified within the Land Development Regulations (LDRs).

8.2 Summary of Development Classification D.4

Coastal erosion can occur on both gradual and accelerated timelines triggered by natural water currents or severe storm events. To withstand these forces, and the resulting loss of upland property, coastal erosion structures are erected or constructed. Seawalls, constructed utilizing concrete, vinyl, aluminum, steel, composite panels or other alternate materials, constitute the large majority of coastal erosion structures present within the City.



Applicability to Resiliency

Coastal erosion structures represent the initial interface between the marine and upland environments. Not only do they retain upland soils certain types of coastal erosion structures can assist in dissipating energy resulting from wave action. The height of these structures can impact the extents of tidal and rainfall-based flooding. Assuming the proper relationship between the point of overland transfer, these structures can support the relief of upland areas where

stormwater conveyances cannot suitably handle excess rainfall. Conversely, coastal erosion structures constructed at a suitable elevation can restrict tidal waters from encroaching into adjacent upland areas reducing the likelihood of soil loss and fluidization.

While not necessarily a coastal erosion structure, living shorelines provide similar upland retention and energy dissipation benefits. Living shorelines can be combined with coastal erosion structures or implemented independent of any "gray" infrastructure. For the purposes of this Manual, living shorelines will be categorized under D.4 since they serve a similar purpose (to coastal erosion structures).

Future Land Use (Zoning) Correlation

Coastal erosion structures are present along nearly all of the City's coastal properties. Therefore, these structures are present along all future land uses present within the City.

As previously stated, certain future land use classifications (most notably Transportation / Utility) may be assigned to parcels that serve a public infrastructure function. However, improvements to these sites would be classified as a D.2 improvement.

Other Involved Agencies

The City has developed a thorough permitting program for coastal erosion structures (more specifically, seawalls). Permitting is also required through Pinellas County Environmental Management (PCEM). Larger projects may require permitting through State or Federal entities.

8.3 GOAL (DEVELOPMENT CLASSIFICATION D.4)

Coastal erosion structures are present on nearly all properties that abut the City's waterfront. Therefore, as goals are incorporated into future development, the coastal erosion structures that abut these areas must also elevated. The Tampa Bay Regional Planning Council (TBRPC) developed model ordinance language establishing minimum elevations for these types of structures. As such, the Goal for D.4 development follows this recommendation.

The Goal for type D.4 development shall be achieving a minimum top of structure elevation of 5.00'.

The above-stated Goal is applicable for D.4 development regardless of the presence of new or substantially improved structures.

8.4 SUMMARY OF REQUIREMENTS (DEVELOPMENT CLASSIFICATION D.4)

The following Requirements are applicable to development activities classified as D.4:

Summary of Requirements	
Requirement Identification No.	**Requirement Name**
Maintain National Flood Insurance Program (NFIP) Compliance (Tenet T.1)	
(D.4) T.1-01	Fill Thresholds, Coastal Zones
(D.4) T.1-02	Slope Thresholds, Coastal Zones
Hold Overland Flow Transfer Points (Tenet T.3)	
(D.4) T.3-04	Flow Transfer Accommodations
Preserve Community Function (Tenet T.4)	
(D.4) T.4-05	Elevation Relationships

Table 8-1 *Summary of Requirements (Development Classification D.4)*

Further discussion will be held on the Requirements associated with type D.4 developments.

8.5 REQUIREMENT COMPLIANCE REVIEW PROCESS

As part of the permit review process, each Requirement would be reviewed for applicability and compliance. For example, certain Requirements pertaining to development within coastal zones (CHHA and CAZ) would not be applicable if the project was located in an AE zone. Subsequent parts of this Section highlight critical information associated with each Requirement including:

- Applicability to Tenet
- Review Materials
- Compliance Determination
- Goal Attainment Strategies
- Restricting Conditions
- Design Exceptions
- Goal Modifications
- Related Requirements

The below figure outlines the process that is used to determine compliance with a specific Requirement.

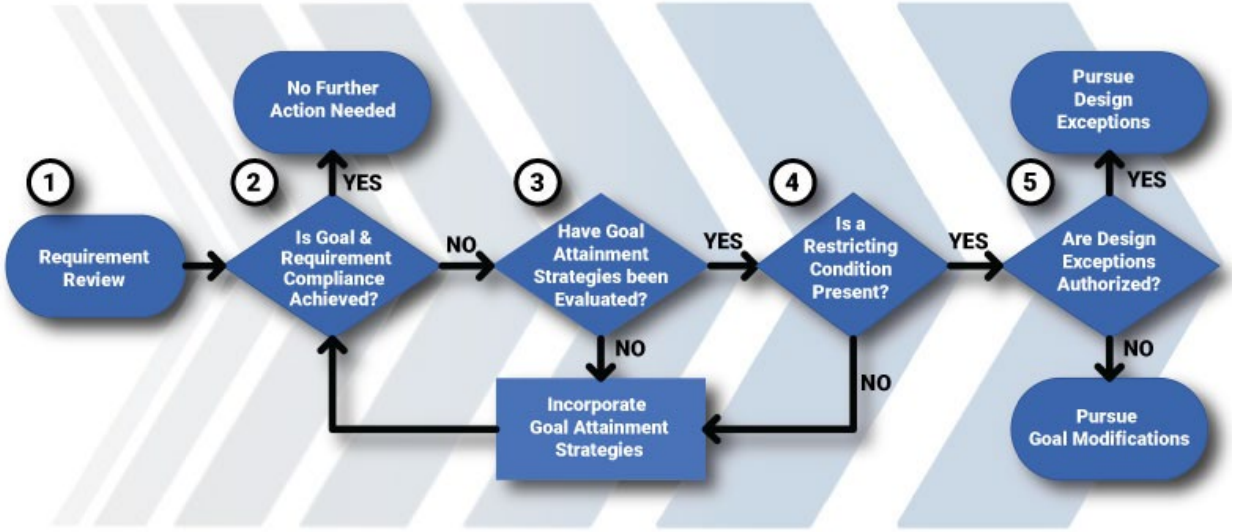


Figure 8-1 *Requirement Compliance Review Process*

Prior to assessing Requirement compliance, it is important to understand the correlation between the Requirement and the Tenet. The Program Tenets, or overarching principles, guide the review of each corresponding Requirement. Certain elements of a site are tied to certain Requirements resulting in the need to be provided with the proper review materials. As such, a specific listing of the information needed to complete a review is provided within the Requirement description.

The "Compliance Determination" component of each Requirement states the specific factors to be reviewed. The applicant shall start the design process by utilizing the Goal elevation associated with the development classification and assess compliance with the first Requirement listed herein. If compliant, the elevation is carried forward and used as the basis of evaluation for the subsequent Requirement. This assessment continues sequentially until all requirements have been met. A separate review is needed for all Requirements associated with a development type.

D.4 developments will vary in size and scope throughout the island community. Similarly, the methods used to become compliant may also differ. Goal attainment strategies are presented for each Requirement outlining prescribed measures to be used to achieve the D.4 Goal in a compliant manner. The use of goal attainment strategies must be considered and deemed either impractical or not constructable before consideration of a Restricting Condition is given.

A Restricting Condition is recognized when specific site constraints are present which either a.) will not support the Goal or b.) result in the need to pursue Requirement compliance in a revised manner. As stated above, a Restricting Condition will not be recognized prior to illustrating that implementing the prescribed goal attainment strategies would not be possible. Multiple Restricting Conditions may be present on a single site.

The presence of a Restricting Condition requires either modification of the Goal or the pursuit of a Design Exception. The Restricting Conditions Summary Table associated with each Requirement identifies which path is to be pursued.

Authorization of a Design Exception allows for the Requirement to be assessed using an alternate evaluation approach or through a different evaluation lens. Each Design Exception directly correlates to the similarly numbered Restricting Condition. The presence of multiple Restricting Conditions would permit the use of multiple Design Exceptions.

Where Design Exceptions are not authorized, goal modification is needed. A specific calculation approach is provided when modified goals are to be pursued. For certain Requirements, multiple modified goals may be listed in sequential order. This order represents the hierarchy of goals in which the designer shall pursue. For example, Requirement compliance would first be assessed using Modified Goal No. 1 in conjunction with the prescribed goal attainment strategies. If the Requirement is still not met, then the designer would continue to Modified Goal No. 2. This process is then repeated until Requirement compliance is achieved.

The resultant elevation is then used as the basis of evaluation and the compliance review process restarts with the initial Requirement. This iterative process is repeated until a single elevation can satisfy all Requirements associated with the development classification. For a project to meet the requirements set forth within the City's Terrain Modification Program, the improvements must be compliant with all applicable Requirements.

8.6 Requirement Schedule (Development Classification D.4)

8.6.1 Tenet T.1 - Maintain NFIP Compliance
Requirement (D.4) T.1-01
Fill Thresholds, Coastal Zones

Applicability to Tenet

The Goal for type D.4 improvements, which establishes a top of structure elevation, is identified within Section 8.3. To achieve this goal, fill must be imported to the site. However, two (2) areas within the City's Special Flood Hazard Area (SFHA), the Coastal High Hazard Area (CHHA) and Coastal A Zone (CAZ), have NFIP-defined thresholds that are recognized as having no adverse impacts. The term fill pertains to nonstructural fill (see Section 2.5, Definitions) for this Requirement. The use of structural fill is not permitted within these zones.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
3. Intermediate Construction Survey (if required by the City during construction) *
4. Elevation Worksheet (see Supporting Data Document C)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
2. Elevation Worksheet

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The most restrictive flood zone that encumbers a project shall be utilized when determining compliance with this Requirement. No further action is needed if the project is located outside of the Coastal High Hazard Area (CHHA) or Coastal A Zone (CAZ).

No more than 24" of fill (inclusive of the thickness of any top structural cap or beam) shall be used to establish the Goal. Survey shall document natural grade along the limits of the coastal erosion structure and adjacent areas. Interpolation between existing elevations shall be minimized. The structure's top elevation shall be sited in a manner to where the finished grade elevation is no greater than 24" above natural grade at the same location landward of the new structure.

Nonstructural fill placement shall be limited to only those locations where fill is needed to transition natural grade to the top of the new structure or address other Requirements.

Nonstructural fill placement will also be permitted to backfill landward (i.e. behind) of a coastal erosion structure.

A similar fill threshold evaluation shall also be performed beyond the extent of the structure. Existing and proposed grades shall be compared in all locations where nonstructural fill is placed on the site.

Goal Attainment Strategies

In locations where coastal erosion structures are not present, consideration of terraced or sloped systems (i.e. living shorelines) shall be given.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.4) T.1-01 (Fill Thresholds, Coastal Zones) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Pre-Improvement Elevations		x

Table 8-2 *Restricting Conditions (D.4) T.1-01*

Restricting Condition No. 1 Pre-Improvement Elevations

With fill thresholds present, natural grade elevations limit what top of structure elevation can be realized for properties encumbered by the CHHA / CAZ.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.4) T.1-01 (Fill Thresholds, Coastal Zones) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Top of Structure Elev. =Existing Top of Structure + 24"	Site new structure 24" above existing structure. When no structure is present in the pre-improvement condition, site new structure 24" above natural grade

Table 8-3 *Modified Goal (D.4) T.1-01*

Related Requirements

(D.4) T.1-02 Slope Thresholds, Coastal Zones
(D.4) T.3-04 Flow Transfer Accommodations
(D.4) T.4-05 Elevation Relationships

8.6.2 TENET T.1 - MAINTAIN NFIP COMPLIANCE REQUIREMENT (D.4) T.1-02 SLOPE THRESHOLDS, COASTAL ZONES

Applicability to Tenet

Achieving the top of structure elevation associated with the City's Goal will require elevation modifications. When elevating coastal erosion structures, slope transitions will be needed to connect to existing grade. In a similar manner to the fill thresholds, slope limitations are present for CHHA and CAZ applications.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
    c. Cross Sections through front, side and rear yard depicting slope
3. Intermediate Construction Survey (if required by the City during construction) *
4. Elevation Worksheet (see Supporting Data Document C)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
2. Elevation Worksheet

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The most restrictive flood zone that encumbers a parcel shall be utilized when determining compliance with this Requirement. No further action is needed if the project is located outside of the Coastal High Hazard Area (CHHA) or Coastal A Zone (CAZ).

Excessive transition slopes can serve to increase wave ramp up and alter wave reflection patterns. To mitigate for such impacts, transition slopes shall be softened to the maximum extent practical. It is recognized that property lines, setbacks, drainage patterns and connecting elevations are all factors that will impact the extents and steepness of these slopes.

Utilize slopes of 20% (1V : 5H) to transition from natural grade to the top of structure. Slopes less than 20% may be used only when the top of structure Goal elevation is achieved.

Goal Attainment Strategies

Should connecting slopes deviate from the above-stated threshold, extend the grading limits to the property line and continue within the right-of-way where applicable.

Restricting Conditions

Restricting Conditions are not recognized for this Requirement.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will not be authorized for this Requirement.

Related Requirements

(D.4) T.1-01 Fill Thresholds, Coastal Zones
(D.4) T.3-04 Flow Transfer Accommodations
(D.4) T.4-05 Elevation Relationships

8.6.3 TENET T.3 – HOLD OVERLAND FLOW TRANSFER POINTS REQUIREMENT (D.4) T.3-04 FLOW TRANSFER ACCOMMODATION

Applicability to Tenet

Maintaining overland flow transfer points allows for pre-improvement flow patterns to be replicated throughout the terrain modification process. In coastal applications, these transfer points also represent the overall service boundary of the City's MS4. Therefore, runoff that is generated outside of the City's MS4 service boundary must be able to discharge to open waters. The proposed top of structure elevation of a coastal erosion structure plays an integral part in supporting this drainage pattern.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
3. Intermediate Construction Survey (if required by the City during construction) *
4. Elevation Worksheet (see Supporting Data Document C)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
2. Elevation Worksheet

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

It is recognized that the pluvial floodplain elevations associated with a basin may not indicate the presence of active overland flow transfer points. However, for this specific Requirement, all overland flow transfer points will be considered active. For new or substantially improved structures, utilize the proposed/finished grade elevations resulting from the larger grading effort to determine compliance.

Ensuring that overland flow transfer points can maintain their pre-improvement functionality first requires the preparation of profiles. Profiles shall depict the natural grades from the overland flow transfer point to the existing top of structure. Finished grades shall be depicted on this same profile demonstrating a positive gradient towards the new coastal erosion structure.

Flow patterns on pervious surfaces shall have a minimum longitudinal fall of 0.5% (1V : 200H). Impervious surfaces shall have a minimum longitudinal fall of 0.3% (1V : 333H).

Goal Attainment Strategies

The installation of a privately-owned and maintained stormwater collection and conveyance systems shall be pursued if a suitable longitudinal slope (as defined above) cannot be provided from the overland flow transfer points to the coastal erosion structure. Conveyance systems shall be designed in accordance with Chapter 76 (Stormwater) of the Code of Ordinances.

Elevating yards and waterfront yards will be needed to support the longitudinal slope requirements. Retaining walls or similar earth retention systems shall be constructed where needed for AE zones only. Grading activities shall not alter the elevation of any active overland flow transfer point.

Reconstruct yard features as outlined in Section 69-77 (i) of the Code of Ordinances.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.4) T.3-04 (Hold Overland Flow Transfer Points) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Substandard Elevations		x

Table 8-4 *Restricting Conditions (D.4) T.3-04*

Restricting Condition No. 1 Substandard Elevations

The top of structure shall always reside below the corresponding overland flow transfer point elevation. Where an overland flow transfer point is below elevation 5.00', this restricting condition will be recognized.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.4) T.3-04 (Hold Overland Flow Transfer Points) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Top of Structure Elev. = Overland Flow Transfer Point Elevation – Minimum Allowable Slope	Identify the new top of structure elevation by utilizing the minimum allowable slope as described above.

Table 8-5 *Modified Goal (D.4) T.3-04*

Related Requirements

(D.4) T.1-01 Fill Thresholds, Coastal Zones
(D.4) T.1-02 Slope Thresholds, Coastal Zones
(D.4) T.4-05 Elevation Relationships

8.6.4 TENET T.4 – PRESERVE COMMUNITY FUNCTION REQUIREMENT (D.4) T.4-05 ELEVATION RELATIONSHIPS

Applicability to Tenet

While pursuit of the City's goals will result in changes to how improvements are designed and permitted within the City, the need to harmonize new work with the existing terrain is recognized. This element focuses on maintaining a series of elevation relationships with surrounding features.

Review Materials

The following review materials are required to evaluate adherence to this Requirement:

1. Project Location Map Depicting SFHA (to determine Requirement applicability)
2. Grading Plan including
    a. Pre-Improvement Elevations*
    b. Proposed Post-Improvement Elevations
3. Intermediate Construction Survey (if required by the City during construction) *
4. Elevation Worksheet (see Supporting Data Document C)

The following review materials are required to document adherence to this Requirement at the time of project completion:

1. Record Drawings including
    a. Pre-Improvement Elevations*
    b. Post-Improvement Elevations*
2. Elevation Worksheet

* Elevations shall be obtained by a Florida-registered Professional Land Surveyor (PLS).

Compliance Determination

The Goal for Type D.4 development is identified earlier in this Section. However, achieving this Goal shall be done in a manner that satisfies multiple conditions pertaining to elevation relationships.

Condition 1 → The top of structure elevation shall be no higher than 30" above directly adjacent sections of coastal erosion structures.

Condition 2 → The top of structure elevation shall reside below the lowest floor, base floor, and top of (existing) pool wall / coping elevations. Positive gradient shall be defined as a minimum slope of 2% (1V : 50H). Florida Building Code minimum slopes associated with foundation drainage shall govern.

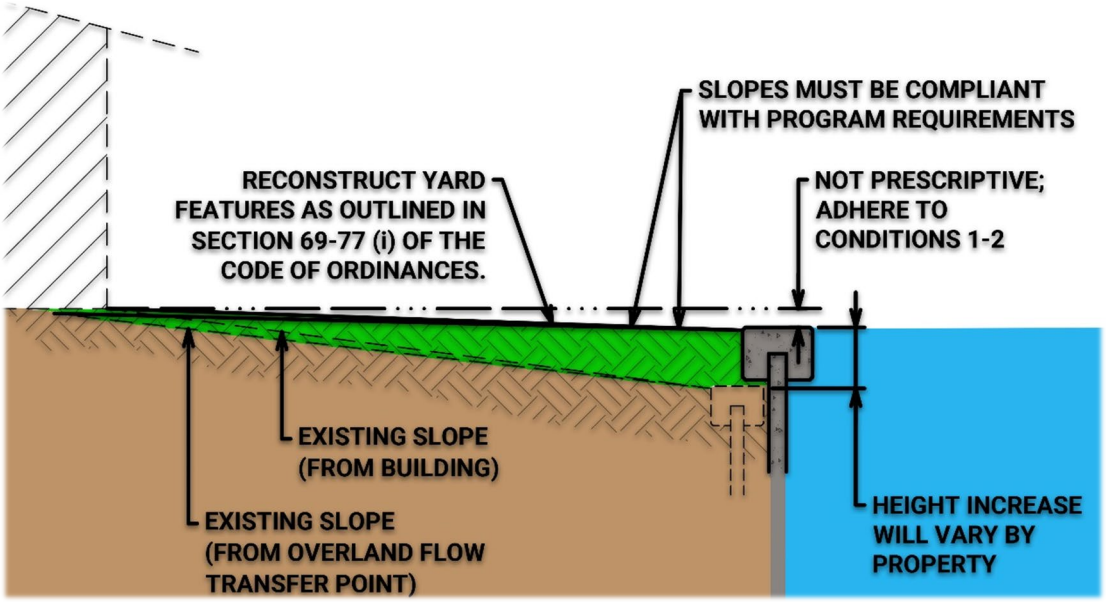


Figure 8-2 *Requirement (D.4) T.4-05*

Goal Attainment Strategies

Conditions 1 is associated with fixed elevations not controlled by the applicant. Goal attainment strategies associated with Requirement (D.4) T.3-04 shall be referenced in locations when Condition 2 criteria is the limiting factor.

Restricting Conditions

The following Restricting Conditions are recognized for this Requirement:

Requirement (D.4) T.4-05 (Elevation Relationships) Restricting Conditions Summary Table			
Restricting Condition No.	**Restricting Condition Description**	**Design Exception**	**Goal Modification**
1	Condition Adherence		x

Table 8-6 *Restricting Conditions (D.4) T.4-05*

Restricting Condition No. 1 Condition Adherence

Adherence to Conditions 1-2 may result in the need to reduce the top of coastal erosion structure elevation. In these situations, Restricting Condition No. 1 is recognized.

Design Exceptions

Design Exceptions will not be authorized for this Requirement.

Goal Modifications

Goal modifications will be authorized for this Requirement as identified below:

Requirement (D.4) T.4-05 (Elevation Relationships) Goal Modifications		
Modified Goal No.	**Modified Goal**	**Description**
1	Top of Erosion Control Structure Elev. = Elevation Compliant with Conditions 1-2	The carried forward elevation shall be modified to be compliant with Conditions 1-2. The highest elevation that complies with Conditions 1-2 shall be used as the top of structure elevation when Restricting Condition No. 1 is recognized.

Table 8-7 *Modified Goal (D.4) T.4-05*

Related Requirements

(D.4) T.1-01 Fill Thresholds, Coastal Zones
(D.4) T.1-02 Slope Thresholds, Coastal Zones
(D.4) T.3-04 Flow Transfer Accommodation

9.0 PROGRAM MAINTENANCE RECOMMENDATIONS

Achieving the City's terrain modification goals will require continued adherence to the Tenets of the Program. As development organically occurs throughout the community, it is imperative that the series of checks and balances outlined within the Terrain Modification Manual be a focal point of future design and permitting efforts.

This Manual provides a framework to begin preparing for sea level rise impacts today. Elevation targets have been based upon current day scientific findings and projections. As with any field, technological advancements and milestones in research can alter the way we tackle certain challenges. This Manual should be considered a living document and the Program shall be adaptable to changing environmental conditions.

A series of Program Maintenance Recommendations have been outlined below.

9.1 EXPAND SCOPE OF PERMIT TRACKING

The City utilizes an Online Permitting and Planning Services (OPPOS) system to support the City's permit application, review and inspection program. This platform's "back end" likely provides the City a degree of permit tracking as required for regulatory programs such as the Community Rating System (CRS) and the National Pollutant Discharge Elimination System (NPDES). Additional functionality may be needed to provide the degree of tracking needed for Program success.

Tenet T.1 centers around maintaining good standing with the National Flood Insurance Program (NFIP). A specific Requirement is established that focuses on the amount of fill being utilized in Coastal High Hazard Areas and Coastal A Zones. Fill depths of 24" are identified as the allowable threshold for terrain modifications in these areas. This requirement is cumulative and thresholds are in force perpetually. Phasing or sequencing fill to go beyond this 24" threshold is not permitted and could result in unwanted administrative action. It is recommended that the City develop a specific identifier for parcels that have reached the ceiling of their allowable fill use.

The City has historically been a no-fill City. Therefore, current day terrain could be considered the baseline for all fill activities moving forward. Special Flood Hazard Areas (SFHA) were developed using the existing terrain as the basis of zone identification which would support using existing terrain as the starting point for terrain modification moving forward.

Program success will ultimately be evaluated by the amount of projects that achieve the terrain modification goal. As the Program is audited, it is likely that certain trends will be recognized whether they be associated with specific land uses or unique to certain regions of the City. Those involved in future Program updates will need to understand how these factors impact the ability of a project to reach its goals. It is recommended that, for any project permitted under the Program, key elements of the Program be recorded for each permit:

Development Classification

Classification as outlined in Section 4 of the Manual. Alpha-numeric identifiers to be used (i.e. a seawall project would populate this field with "D.4")

Terrain Modification Goal

This would be the goal that directly correlates to the type of development covered by the permit. An elevation would be reported referencing the NAVD 88 datum.

Modified Terrain Modification Goal

The Manual outlines the procedures when the pursuit of modified Goals are justified. When applicable, the elevation associated with the modified Goal shall be noted and reported as an elevation referencing the NAVD 88 datum. The corresponding alpha-numeric modified Goal shall also be noted. For example, (D.4) T.4-05, MG1 would signify that modified Goal No. 1 was authorized for Requirement T.4-05 (Elevation Relationships) for a Type D.4 development.

Restricting Conditions

Restricting Conditions present on a site shall be recorded. The alpha-numeric designation associated with the Restricted Condition shall be used. For example, (D.1) T.2-01, RC2 would signify that Restricting Condition No. 2 was recognized for Requirement T.2-01 (Tiered Driveway Slopes) for a Type D.1 development. It shall be noted that multiple Restricting Conditions may be recorded.

Design Exceptions

Similar to the above, Design Exceptions authorized shall be recorded using the appropriate alpha-numeric identifier. For example, (D.2) T.4-02, DE1 would signify that that Design Exception No. 1 was authorized for Requirement T.4-02 (Property Harmonization) for a Type D.2 development.

This itemization of Terrain Modification Program permit data would provide a high-level synopsis of the certain challenges each project faced and its ability to achieve the desired outcome.

9.2 Perform Regular Program Audits

The Terrain Modification Program is focused on preparing for the impacts of sea level rise. Outlined within the Program are a series of criteria intended to be rigid enough to support the City's long-term goals but adaptable to the unique characteristics of each site. Certain aspects of the Program will likely remain unchanged, most notably the framework that guides the design process towards the eventual goal and overarching themes of Tenet adherence. Opportunities will also be present to make improvements based upon lessons learned during the initial launch. It is highly recommended that the City utilize regular audits as a tool to evaluate Program effectiveness.

Audit Frequency

Transitioning away from no-fill policies will represent a significant change to how improvements are designed and permitted within the City. Abandoning practices that have been successful under older regulations will undoubtably frustrate some, likely leading to speculation on the need, or feasibility of the Program. This is to be expected and the City anticipates an intensive public outreach effort during the launch.

It is also true that the first year represents the greatest opportunity for Program growth. As such, it is recommended that the initial audit occur one year after launch. A second audit is to be performed three years after launch. The audit frequency would then standardize with a Program review being performed every five years thereafter.

Committee Composition

Each audit should involve a diverse group of professionals who are directly involved with permitting under the Program or those instrumental in initial development. At a minimum, it is recommended that the audit committee consist of

- A representative from City Administration
- A representative from the Community Development Department
- A representative from the Public Works Department
- A Professional Engineer directly involved with the review of permit applications
- A representative from the City or private practice directly involved with the development of the Program

Audit Objectives

Objective 1 → Evaluate updates to sea level rise projections and determine if adjustments to the terrain modification goals are needed.

The terrain modification goals presented within the Manual directly correlate to the anticipated sea level rise impacts in the Year 2100. Section 3 outlines the representative path and scenario utilized for the Program. The Tampa Bay Climate Science Advisory Panel (CSAP) working group issues regionally adjusted versions of the sea level rise curves developed by the National Oceanic and Atmospheric Administration (NOAA). At the time of each Program audit, the availability of updated CSAP-issued projections should be confirmed.

Year 2100 mean sea levels identified in any future updates should be compared against those presented within the 2019 regionally-adjusted projections. Consequential increases will trigger the need to reevaluate the terrain modification goals. It is recommended that outside assistance be sought when changes to these goals are thought to be needed. Any such change would require intense scrutiny and an understanding of overall feasibility and Program impact.

Objective 2 → Review current regulations and technical standards to confirm Program compliance.

The Program was developed utilizing industry-recognized technical standards and working within the confines of existing higher-authority regulations. Updates to this suite of documents occur on a regular basis. It is imperative that any changes to a code or standard that takes precedent over a local regulation be reviewed to ensure that Program compatibility is maintained. At a minimum, the following shall be reviewed:

- 44 CFR Parts 59, 60, 65 and 70 (NFIP Regulations)
- FEMA Technical Bulletin 5, Free-of-Obstruction Requirements (2020)
- FEMA Technical Bulletin 10, Reasonably Safe from Flooding Requirement for Building on Filled Land (2023)
- ASCE 24 – Flood Resistant Design and Construction (2014)
- Florida Building Code (2020)
- Pinellas Gulf Beaches Coastal Construction Code

Tenet T.1 signifies the importance of NFIP compliance to the long-term health of the program and the City. Therefore, it is possible that NFIP revisions of consequence could result in Program revisions outside of a scheduled audit.

Objective 3 → Determine whether terrain modification goals are being met.

In a vacuum, Program performance would directly correlate to the number of improvements that are able to meet the terrain modification goals. As a no-fill City the community's terrain has remained relatively unchanged for decades. Expecting immediate transformation is not practical and should not be expected.

It is recommended that Program data be presented to the audit committee in the following manner:

	Permits Issued (Overall, Program Related)	Permits Issued (Goal Achieved)	Percent Achievement
Citywide			
BY DISTRICT			
District 1			
District 2			
District 3			
District 4			
BY DEVELOPMENT CLASSIFICATION			
D.1			
D.2			
D.3			
D.4			
BY SFHA DESIGNATION			
V Zone			
Coastal A Zone			
A Zone			

There are multiple factors that will impact a project's ability to reach the goal(s). Compiling year-over-year data will allow for the audit committee to evaluate trends and obtain a better understanding of what site characteristics present the greatest challenges. Initial audits, performed early in the program, will have a limited pool of data to draw from. Individual permit evaluation may be needed in these scenarios.

Objective 4 → Assess opportunities to simplify or streamline certain aspects of the Program.

This Program represents a fundamental change in how projects are designed and constructed within the City. As such, an inherent change to how projects are permitted within the City is required. Lessons learned during the permitting process, both on the design and review end, should be captured and incorporated into future Program updates.

Opportunities may be present to consolidate Requirements for certain development classifications. Conversely, new Requirements may need to be developed to address unanticipated outcomes. Goal attainment strategies will become more diverse as the design community adapts to this new approach to development. We also may find that Restricting Conditions unrecognized at the time of Program construction may be present. Evolution is necessary for long-term sustainability of the Program and the approach we use to make compliance determinations should adapt as new information is obtained.

When assessing opportunities for improvement, internal permitting records should not be considered the only data source. The City is not alone addressing this challenge as many other communities across the region foresee impacts from sea level rise. Concepts or procedures being

successfully used elsewhere should be evaluated. Lessons learned from similar programs also provide an opportunity for Program betterment.

Recommendations

It is assumed that a list of recommendations would be developed upon completion of the audit. Certain recommendations may center around minor improvements while others may be more impactful. The need to formally amend the Program will need to be determined on a case-by-case basis.

9.3 Maintain a Current Watershed Management Plan (WMP)

Tenet T.2 highlights the need to conserve floodplain storage. Derived from a recent WMP update, the precipitation-based floodplain boundaries are key set of technical criterion needed to administer the Program. It is recommended that updates to this WMP be done at a certain frequency to keep the plan and floodplain information current. At a minimum, the WMP should be revisited every 5-7 years when considering that the City will be promoting fill within the floodplain.

However, certain factors may warrant revisiting the plan on a more frequent basis. Naturally, technological advances and changes to stormwater evaluation techniques could result in the need to update the plan. Other circumstances which may trigger a WMP update may include:

- Significant permitted activity not included within the stormwater model.
- Terrain modification that may drastically reduce storage volume within the watershed.
- Improvements pursued by the Florida Department of Transportation (FDOT).
- Land use changes.
- Changes in environmental conditions.

It shall be noted that future WMP updates will likely vary in size and scope as the action that generated the updated will likely determine the degree of assessment required.

10.0 Program Implementation Recommendations

Pursuit of the goals outlined within this Manual will present an opportunity for the City to "rise above" the threat of sea level rise. Doing so will require revisions to standard operating procedures and developing additional tools to ensure Program success. A series of Program Implementation Recommendations are presented below. These recommendations do not focus on a specific development classification and are intended to support all proposed work under this Program.

10.1 Establish Maintenance Dredging Program

For public infrastructure (Type D.3) improvements, the City will be addressing the loss of floodplain storage through expansion of the MS4. This will generally require the use of larger stormwater culverts which oftentimes increase overall system depth. In many locations, outfalls will reside below the bed elevation at the point of discharge. Functionality concerns will not be present immediately upon construction but the migration of sediment over time will likely impact system performance.

It is recommended that the City establish an outfall maintenance dredging program to mitigate for performance impacts associated with sediment buildup. Dredging can initially be pursued on an annual basis. The frequency of subsequent cycles would be dependent upon specific site conditions.

Opportunities may be present to develop an annual contract in-house or utilize an existing active contract executed with another governmental entity. Such a program may not be immediately necessary. However, as the City constructs stormwater systems in compliance with the Manual, the need for routine dredging may become more apparent.

10.2 Develop Project Evaluation Rubric

The City has an established track record of pursuing public infrastructure improvements in a logical and strategic manner. With this new approach to public infrastructure improvements, additional project evaluation factors must be considered. It will be important for the City to establish priorities and identify target areas. For example, the City could focus on addressing low-lying areas of the City understanding that terrain modification goals will not be met in the initial project due to the finished floors of the surrounding structures. An alternate approach could be identifying locations where terrain modifications could be met immediately.

Other City initiatives should be considered when developing project evaluation metrics. Secondary improvements, such as stormwater or utility work, may necessitate certain locations being prioritized. It is recommended that the City develop a method of project development and prioritization prior to the preparation of the FY25-26 budget.

10.3 Assemble Standard Details

Work performed by private industry will have an impact on certain public infrastructure elements. When a Type D.1 or D.2 development is constructed, the Manual outlines the procedures for performing terrain modification within the right-of-way. It is likely that at some point City-owned infrastructure, such as a stormwater or sanitary sewer manhole, will need to be adjusted to match the new grade elevation. Type D.2 developments are also afforded the opportunity to address significant floodplain encumbrances through offsite improvements.

When private industry performs public infrastructure work, it is imperative that materials and construction procedures be outlined in great detail. This is typically handled through the development of Standard Details, a set of construction drawings which provide detailed information on the expectations of the City. Through the various projects completed over the years, there are many system elements that have already been detailed in a suitable manner. Remaining assembly tasks would focus on data gaps and packaging of the standards.

10.4 Continue Public Outreach

The City's pursuit of terrain modification should be celebrated. Many communities face the same challenges as Treasure Island but have not acted with swift and decisive action. Deviating from historical norms often times can create public uproar. This is why it is important for the City to properly message the Program to ensure the most accurate information is being disseminated to the community and private industry.

Elevate Treasure Island is a public awareness campaign centered around the Terrain Modification Program. Videos, renderings and other information is being compiled for distribution at the time of Manual preparation. It is recommended that the City continue public outreach throughout the Program launch and through the time of the initial Program audit.

10.5 Follow Finance Plan Recommendations

The Tampa Bay Regional Planning Council (TBRPC) is a regional leader in resiliency planning. In late 2022, the Regional Resiliency Action Plan (RRAP) was developed to address challenges faced by many Tampa Bay governmental entities. A series of priority actions are provided within the RRAP intended to improve resiliency within the area. The Terrain Modification Program aligns with Objective 4.4 (update land use policies and regulations to account for current and future climate impacts and discourage displacement) and 4.5 (update building and site development standards to account for current and future climate impacts) of this plan.

Objective 3.3 centers around incorporating sea level rise mitigation strategies (such as terrain modification) into local financial management practices. The TBRPC may be able to assist in conducting an analysis to identify the feasibility of new funding mechanisms to implement terrain modification projects (for public infrastructure). These may include, but are not limited to, impact fees, Tax Increment Financing (TIF) and bonds.

Long-term solutions will require significant capital over the coming decades. It is reasonable to assume that Federal and State assistance will be integral to the pursuit of the City's goals. However, upon request of outside funds, a match will likely be outright required or needed to provide a competitive funding request. As such, this financing plan would position the City to stockpile matching funds for future projects.

10.6 Create Legal Framework for Property Access and Structure Adaptability

A Requirement of the Program specifically mandates that private development be performed in a manner that accommodate future terrain modification activities performed within the right-of-way. The Manual also recognizes that certain site characteristics may hinder compliance with this Requirement. Exclusion zones are identified in these locations to ensure that immovable or permanent objects are not sited within areas that will need to be modified once certain site limitations are addressed.

It is recommended that, when exclusion zones are defined, easements be sought over these areas. This easement would be for the sole use of the City to place fill during a terrain modification project done adjacent to the lot. Upon achieving the desired elevations, these easements could be abandoned as access to these portions of private property would no longer be needed.

Similar private property cooperation will be needed when access management concerns are present at the time of initial development. With a fixed base floor elevation established City-wide, it is believed that connecting to a low-lying roadway would be the predominant driver of steeper than desired slopes. The Manual recommends that, when such a condition is present, structures be adaptable. In the event the structure was not adaptable, an existing low road elevation may hinder the City's ability to achieve the terrain modification goals in perpetuity.

Structure adaptability is defined as the ability to increase a base floor elevation after construction is completed. Conventionally, this would entail an initial post-construction condition where the height between the base floor and above structural member is suitable to facilitate a secondary increase in the base floor elevation. Increasing the base floor elevation post-construction directly coincides with the low road elevations that can be achieved.

Many logistical matters would need to be addressed to pursue structure adaptability. At the time of permitting, the applicant would need to design with this goal in mind. At the time of roadway improvements, the owner would need a suitable amount of time to prepare (both from a financial and construction timing standpoint) for the upcoming work. It is assumed that this procedure would need to be outlined and committed to prior to obtaining the necessary permits for initial construction.

Acquiring easements over exclusion zones and providing a framework for structure adaptability will only improve the chances of the City achieving the terrain modification goals. The Manual currently recommends these practices. It may be beneficial to develop the legal strategy to require these actions prior to the Program's initial audit.

ORDINANCE 2024-12

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 8 "BUILDING REGULATIONS AND FIRE CODE" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES BY REVISING SECTION 8-1, "BUILDING CODES-ADOPTED", TO REMOVE REFERENCES TO SPECIFIC YEARS AND REFERENCE THE FLOOD RESISTANT AMENDMENTS TO THE BUILDING CODE THAT WERE MOVED TO CHAPTER 66 OF THE CODE AND TO REVISE THE OWNER BUILDER PROVISIONS IN ACCORDANCE WITH FLORIDA STATUTES; SECTION 8-72 "FLORIDA FIRE PREVENTION CODE – ADOPTED" TO CLARIFY ADOPTION OF THE ENTIRE CODE AND REMOVE REFERENCES TO SPECIFIC YEARS, SECTION 8-88 – "APPENDICES B, E AND G OF NFPA 1, FIRE PREVENTION CODE ADOPTED" IS DELETED; PROVIDING FOR A FISCAL IMPACT STATEMENT; PROVIDING FOR TRANSMISSION TO THE FLORIDA BUILDING COMMISSION; PROVIDING FOR CONFLICT, PROVIDING FOR CODIFICATION, AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Chapter 8 of the City Code of Ordinances ("Code"), entitled "Building Regulations and Fire Code," regulates the applicable Florida Building Code and Florida Fire Code provisions in the City; and

WHEREAS, the Florida legislature recently revised Chapter 553 of the Florida Statutes (the "Florida Building Code") to provide that administrative or technical amendments to the Florida Building Code related to flood resistance in order to implement the National Flood Insurance Program or incentives do not have to follow the same process as the traditional administrative or technical amendments to the Florida Building Code; and

WHEREAS, the City desires to make the revisions contained in this Ordinance to reference the flood resistant Florida Building Code amendments moved to Chapter 66 of the Code and revise the owner builder provisions in accordance with Florida Statutes; and

WHEREAS, the revisions contained in this Ordinance are not discriminatory against materials, products or construction techniques of demonstrated capabilities and do not introduce a new subject not already addressed in the Florida Building Code; and

WHEREAS, the references to the Florida Building Code and Florida Fire Prevention Code have been revised to remove the specifically adopted year and to reflect that the year is as amended; and

WHEREAS, the City is adopting the entire Florida Fire Prevention Code and not also limited sections of the Fire Prevention Code; and

WHEREAS, the City Commission has reviewed the relevant current Code provisions of the City of Treasure Island and finds that certain modifications are necessary and desirable to revise various requirements in the Code; and

WHEREAS, the State of Florida, Division of Emergency Management, Office of Financial Management through its Federal Emergency Management Agency ordinance consultant has reviewed and approved these revisions; and

WHEREAS, the City Commission determines that the adoption of this Ordinance is in the interests of the public health, safety and welfare of the City and its residents.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND, FLORIDA DOES ORDAIN:

SECTION 1. The recitals set forth in the "Whereas" clauses above are ratified and confirmed as true and correct and are hereby adopted as legislative findings by the City Commission of the City of Treasure Island, Florida, for the adoption of this Ordinance.

SECTION 2. That section 8-1, Building codes-Adopted, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 8-1. Building codes—Adopted.

(a) The city hereby adopts and incorporates by reference herein the Florida Building Code, and all specific volumes and standards contained therein, promulgated by the state building commission pursuant to F.S. ch. 553, pt. IV, as amended from time to time. The provisions of this section shall govern the administration and enforcement of the Florida Building Code within the municipal limits of the city. The codes are hereby adopted by reference as if set out at length in this section.

(1) Florida Building Code—Building~~, 2020 Edition,~~ as may be amended from time to time.

(2) Florida Building Code—Residential~~, 2020 Edition,~~ as may be amended from time to time.

(3) Florida Building Code—Plumbing~~, 2020 Edition,~~ as may be amended from time to time.

(4) Florida Building Code—Mechanical~~, 2020 Edition,~~ as may be amended from time to time.

(5) Florida Building Code—Existing Building~~, 2020 Edition,~~ as may be amended from time to time.

(6) Florida Building Code—Fuel Gas~~, 2020 Edition,~~ as may be amended from time to time.

(7) Florida Building Code—Accessibility~~, 2020 Edition,~~ as may be amended from time to time.

(8) Florida Building Code—Energy Conservation~~, 2020 Edition,~~ as may be amended from time to time.

(9) National Electrical Code~~, 2020 Edition~~ (NFPA 70)~~,~~ as may be amended from time to time.

a. *Approval required prior to connection to energy source.* It shall be unlawful for any person to make a connection from a supply of electricity or to supply electricity to any electrical equipment the installation of which requires or required an electrical permit or which has been disconnected or ordered to be disconnected by the building official, before the connection or re-connection has been authorized in writing by the building official.

b. *Authority to grant temporary connections.* A 30-day temporary electrical service connection may be granted by the building official if the service wiring is found to be in a safe operating condition and provided an urgent necessity for electrical current exists.

c. *Disconnection of hazardous wiring.* The building official is authorized to disconnect any wiring deemed to be hazardous to life or property. Any violation of this article or the electrical code shall be prima facie evidence of a condition hazardous to life or property.

d. *Equipment grounding.* All raceways shall contain an equipment grounding conductor sized in accordance with Table 392.7B of the National Electric Code as amended.

e. *Surge arresters, number required.* Surge arrestors shall be installed on all service equipment. Where used at a point on a circuit, a surge arrestor shall be connected to each ungrounded conductor. A single installation of such surge arrestors shall be permitted to protect a number of interconnected circuits provided that no circuit is exposed to surges while disconnected from the surge arrestors.

(b) *Local administrative amendments to the Florida Building Code-Building~~, 2020 Edition,~~* as amended from time to time Florida Building Code, Chapter 1, Administration is hereby amended and shall be applicable to all codes (a)(1)—(9). The following sections supplement the Florida Building Code:

(1) *Permitting and inspection.*

a. The inspection or permitting of any building, structure or plan under the requirements of this building code shall not be construed in any court as a warranty of the physical condition of such building or the adequacy of such plan.

b. *Liability.* No employee charged with the responsibility of enforcing or implementing this building code shall be personally liable for any damages for any defective or hazardous or illegal condition or inadequacy in such building, structure or plan, nor for any failure of any component of such building or structure which may occur subsequent to such inspection or permitting. The building official, when discharging the duties required by this building code or other pertinent law or ordinance, shall not be personally liable for any damages that may accrue to persons or property as a result of an act or by reason of an act or omission in the discharge of such duties.

This building code shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any building or structure for any damages to persons or property caused by defects, nor shall the community improvement department, as described in subsection (2)a. or the city assume any such liability by reason of the inspections authorized by this building code or any permits or certificates issued under this building code.

(2) *Community improvement department.*

a. The community improvement department is hereby designated as the building code enforcement agency under the direction of the building official. This shall not prohibit other authorized persons from enforcing violations of the building code.

b. *General.* The building official is hereby authorized and directed to enforce all the provisions of this building code. For such purposes, the building official shall have all the powers provided for the building official as set forth in the Florida Building Code, state statutes, this Code and any other applicable law. The building official shall have the power to render interpretations of this building code and to adopt and enforce rules and supplemental regulations to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformance with the intent and purpose of this building code. This shall not prohibit other authorized persons from enforcing building violations of the building code.

c. *Inspectors.* The building official may appoint inspectors and other employees as shall be authorized from time to time. Persons appointed by the building official shall have the powers delegated to them by the building official.

(3) *Powers and duties of building official.*

a. *Right of entry.* Where it is necessary to make an inspection to enforce the provisions of this building code, or when the building official has reasonable cause to believe that there exists in a building or structure, or upon a premises or property a condition that is contrary to or in violation of this building code which makes the building, structure, premises, or property, or any electrical, gas, mechanical, or plumbing systems unsafe, dangerous or hazardous, the building official may enter the building,

structure, premises or property at reasonable times to inspect or to perform any duties imposed by this building code. If such building, structure, premises or property are occupied, the building official shall present identification to the occupant and request entry. If such building, structure premises or property are unoccupied, the building official shall make a reasonable effort to locate the owner or other person having charge or control of the building, structure, premises or property and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.

b. *Inspection warrant.* When the building official shall have first obtained an inspection warrant or other authorization provided by law to secure entry, no owner or occupant or any persons having charge, care or control of any building, structure, or premises, or property shall fail or neglect, after request is made, to promptly permit entry by the building official for the purpose of inspection and examination pursuant to this building code.

c. *Stop work notice.* Whenever any building, structure, electrical, gas, mechanical, plumbing or other construction related work is being done contrary to the provisions of this building code, or other laws or ordinances implemented through the enforcement of this building code, or contrary to the condition of a permit, or in a dangerous or unsafe manner, the building official shall require the work stopped by posting a written notice in a conspicuous place on the site or served on any persons engaged in the doing or causing such work to be done. Such persons shall immediately cease and desist the identified work until authorized by the issuance of a new permit, issuance of a revised permit, or when authorized in writing by the building official to proceed with the work. Such notice shall be posted on the site or given either to the owner of the property, or to his agent, or to the person doing the work. Where an emergency exists, the building official may provide verbal notice and shall not be required to give written notice prior to stopping the work but shall provide such written notice within a reasonable time after stopping the work. Failure to cease work after receipt of either the verbal or written notice provided herein shall be a violation of this section. Stop work notices may be issued for all or a portion of the work performed on a site or pursuant to a permit.

d. *Rejection, suspension, revocation.* The building official is authorized to reject a permit application and to suspend or revoke any approval or permit issued under the provisions of this building code whenever the application or approval was made or permit issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation, or any provision of this building code.

e. *Violation of code provisions.* The building official is authorized to suspend or revoke a permit upon determination that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the building, structure, electrical, gas, mechanical or plumbing systems for

which a permit was issued is in violation of, or not in conformity with, the provisions of this building code or the conditions of the permit.

f. *Unsafe buildings, structures, or systems.* All buildings, structures or systems (electrical, gas, mechanical, plumbing) regulated by this building code that are structurally unsafe or not provided with adequate egress, or that constitute a fire hazard, or are otherwise dangerous to human life are, for the purpose of this section, unsafe. Any use of buildings or structures or systems constituting a hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is, for the purpose of this section, an unsafe use. Parapet walls, cornices, spires, towers, tanks, statuary and other structural members that are supported by, attached to, or a part of a building or structure or systems and that are in deteriorated condition or otherwise unable to sustain the design loads that are specified in this building code are hereby designated as unsafe.

All unsafe buildings, structures, or systems are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedures set forth in chapter 2, administration, article III, code enforcement as amended. The building official may initiate any action to prevent, restrain, correct or abate the public nuisance.

g. *Requirements not covered by code.* The building official may impose any additional requirements necessary for the strength, stability, safety or proper operation of an existing or proposed building, structure, electrical, gas, mechanical or plumbing system, or for the public safety, health and general welfare, not specifically required by this or the other technical codes.

h. *Occupancy violations.* Whenever any building, structure, premises or equipment regulated by this building code is being used in violation of the provisions of chapter 8 "Building Regulations and Fire Code", the building official may order such use discontinued and the structure, or portion thereof, vacated by serving written notice on any person causing such use (e.g., the owner, tenant, occupant or their agents) until such use complies with the requirements of this building code. Such person shall discontinue the use within the time prescribed by the building official after receipt of such notice.

i. *Modifications.* When there are practical difficulties involved in carrying out the provisions of this building code, the building official may grant modifications for individual cases. The building official shall first find that specific reasons make the strict letter of this building code impractical and that the modification is in conformance with the intent and purpose of this building code and that such modification does not lessen any fire-protection requirements or any degree of structural integrity. The details of any action granting modifications shall be in writing and recorded and entered in the files of the building official. The building official shall

coordinate with the floodplain administrator to review requests submitted to the building official that seek approval to modify the strict application of the flood resistant construction requirements of the Florida Building Code to determine whether such requests require the granting of a variance pursuant to Section 117 of the ~~2020~~ Florida Building Code.

j. *Tests and surveys.* Whenever there is insufficient evidence of compliance with any of the provisions of this building code or evidence that any material work or construction does not conform to the requirements of this building code or the approved plan or permit, the building official may require tests or surveys to be made at no cost to the city to ensure compliance. Test methods shall be as specified by this building code or by other recognized test standards. If there are no recognized and accepted test methods, the building official shall determine acceptable test methods.

All tests or surveys shall be made by an entity or person approved by the building official. Reports of such tests shall be retained by the building official for the period required for the retention of public records.

k. *Cooperation of other officials and officers.* The building official may request, and shall receive, the assistance and cooperation of other officials including but not limited to police, fire, utilities, codes and public works so far as is required in the discharge of the duties required by this building code or other pertinent law or ordinance.

l. *Owner-builder permits.* The building official may deny the issuance of a permit to an owner if the building official determines that the owner is not capable of performing the work. The building official may determine that an owner is not capable of performing the work if an owner is unable to understand basic construction principles and practices or is unable to effectively understand the basic principles to obtain a construction permit. Owner-builder permits will be processed in accordance with section 489.103, Fla. Stat.

~~1. Owners of residential property, constructing or improving one- or two-family, attached or detached, dwelling or accessory structures on such property for the occupancy or use of such owners and not offered for sale or lease (except for a two-family dwelling, one dwelling may be leased) and when acting as their own contractor and providing direct, onsite supervision themselves of all work not performed by licensed contractors, shall be exempt from the requirement that work be performed by a licensed contractor and the owner may obtain required permits except as provided above.~~

~~2. Owners of property, constructing or improving buildings not included in subsection (b)(3)l.1., excluding electrical work, penetrations of fire related assemblies, installation of fire safety components, or work affecting the means of egress, on such property for the occupancy or use of such owners at a total cost not to exceed $500.00, and not offered for sale or~~

lease and when acting as their own contractor and providing direct, onsite supervision themselves of all work not performed by licensed contractors, shall be exempt from the requirement that work be performed by a licensed contractor and the owner may obtain required permits except as provided above. An owner/contractor will be subject to penalties pursuant to F.S. ch. 489, as amended.

3. In an enforcement action brought under this part, proof of the sale or lease, or offering for sale or lease, of any such building by the owner within one-year after completion of the work or issuance of a certificate of occupancy, whichever is later, creates a presumption that the construction was undertaken for purposes of sale or lease and shall be a violation of this section. This subsection does not exempt any person who is employed by or has a contract with such owner and who acts in the capacity of a contractor.

   The owner may not delegate the owner's responsibility to directly supervise all work to any other person unless that person is registered or certified under this part and the work being performed is within the scope of that person's license.

4. Any owner of property convicted of violating this section shall be prohibited from obtaining a permit pursuant to this exemption for a period of two years from the approval date of all required final inspections or the conviction or, if appealed, the date of the final appellate decision, whichever is later.
5. To qualify for exemption under this subsection, a property owner must personally appear and sign the permit application. The building official may accept a notarized permit application if the property owner is unable to personally appear and sign the permit application. The building official shall provide the property owner with a disclosure statement in substantially the following form:

   OWNER/BUILDER AFFIDAVIT
   Disclosure Statement

   State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have a license.

   As Owner/Builder you must provide direct, on-site supervision of the construction yourself. You may build or improve a one-family or two-family residential dwelling. You may also build or improve a commercial building, provided your costs do not exceed five hundred dollars ($500.00). The building or residential dwelling must be owned by you and for your own use or occupancy. The building or residential

~~dwelling may not be built or substantially improved with the intent to sell or lease. If you sell or lease a building you have built or substantially improved yourself within one year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption.~~

~~As Owner/Builder, you must provide direct, onsite supervision of the construction yourself. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law.~~

~~As owner/builder, your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations. You are responsible for acquiring all permits, approvals, plan submittal approvals and required inspections. You may be ordered to obtain an existing condition survey of the property and or a site plan locating the proposed work.~~

m. *Certificate of occupancy, exception.* A certificate of occupancy shall not be required for:

1. A change of ownership or tenancy in a building, for which a certificate of occupancy was issued, provided there has been no remodeling or alterations to the building to change its approved use. This exemption shall not apply to indoor or outdoor eating or drinking establishments (e.g., restaurants, bars, lounges) or to residential rental property which has not paid a local business tax for more than two years.

2. Home occupations. This section shall not prohibit the building official or fire chief from conducting inspections that are necessary to protect the health, safety and welfare of the occupants and the general public.

n. *Violations and penalties.* The city may pursue code enforcement actions against any person who violates any provision of this building code or fail to comply therewith or with any of the requirements thereof or any order of the building official, or who shall erect, construct, alter, demolish or move any structure, or has caused or allowed to be erected, constructed, altered, repaired, moved or demolished a building or structure in violation of this building code, as provided in chapter 2, administration, article III, code enforcement. The imposition of a fine does not prevent the

revocation or suspension of a license, permit or franchise, or the imposition of civil fines or other administrative actions, including action pursuant to F.S. ch. 162, as amended.

For violation(s) of the requirements of the flood provisions of the Florida Building Code, the building official may take action as cited within this Code and, if the violation is not resolved or corrected, such action may include submitting a request to the federal emergency management agency (FEMA) to remove the respective property's eligibility for flood insurance coverage through the national flood insurance program.

o. *Appeals.* Any person aggrieved by a ruling of the building official or fire chief may file a written appeal to the county construction licensing — board of appeals ("board") or its successor as provided in Laws of Florida Chapter 75-489, as amended, provided such ruling is within the appellate jurisdiction of such board.

(4) *Severability.* If any section, subsection, sentence, clause or phrase of this building code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this building code.

(c) ~~[~~Administrative and Technical amendments—Florida Building Code, Building.~~]~~

(1) For application of ~~Modify~~ Section 110.3, Required Inspections, see Chapter 66, Section 66-301.5, for required certification forms. ~~as follows:~~

~~**[A] 110.3 Required Inspections.** The building official upon notification from the permit holder or his or her agent shall make the following inspections and shall either release that portion of the construction or shall notify the permit holder or his or her agent of any violations which must be corrected in order to comply with the technical codes. The building official shall determine the timing and sequencing of when inspections occur and what elements are inspected at each inspection.~~

~~**Building** [partial shown]~~

~~1.1. In flood hazard areas, upon placement of the lowest floor, including basement, and prior to further vertical construction, the FEMA Elevation Certificate shall be submitted to the authority having jurisdiction.~~

~~6.1. In flood hazard areas, as part of the final inspection, a final FEMA Elevation Certificate of the lowest floor elevation shall be submitted to the authority having jurisdiction.~~

~~(2)~~ ~~Add a new~~ For application of Section 1612~~.4.3~~, see Chapter 66, Section~~.~~ 66-301.5 for required certification forms, and Section 66-301.6 for additional design requirements and limitations for building elevations and enclosures. ~~As follows:~~

~~**1612.4.3 Additional design requirements.** The following additional design requirements apply:~~

1. Structural fill and solid foundation walls, including backfilled stem walls, shall not be used to support or elevate buildings.

2. The minimum elevation requirements shall be as specified in ASCE 24 or the base flood elevation plus 2 feet (610 mm), whichever is higher.

3. Enclosures below elevated buildings shall not be partitioned or finished into separate rooms except for stairwells, ramps, and elevators, unless required by the fire code.

Modify Section 1612.5 as follows:

1612.5 Flood hazard documentation. The following documentation shall be prepared and sealed by a registered design professional and shall be submitted to the building official:

For construction in flood hazard areas not subject to high-velocity wave action:

1.1. The elevation of the lowest floor, including basement, as required by the lowest floor elevation inspection in Section 110.3, Building, 1.1 and for the final inspection in Section 110.2, Building, 5.1.

1.2. For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.7.2.1, ASCE 24, construction documents shall include a statement that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.7.2.2 of ASCE 24.

1.3. For dry floodproofed nonresidential buildings, construction documents shall include a FEMA Floodproofing Certificate (FEMA Form 086-34) to certify that the dry floodproofing is designed in accordance with ASCE 24.

Remainder unchanged

(d) *[Technical amendments—Florida Building Code, Residential.]*

For the application of Modify Section R322.2.1 as follows:, see Chapter 66, see:

(1) Sections 66-301.5 and 66-301.6(2), for certification documentation and requirements for building elevations.

(2) Section 66-301.6(3), for requirement for certification of foundation design.

(3) Section 66-301.6(4), requirements and limitations on enclosures.

R322.2.1 Elevation requirements.

1. Buildings and structures in flood hazard areas not designated as Coastal A Zones shall have the lowest floors elevated to or above the base flood elevation plus 2 feet or the design flood elevation, whichever is higher.

2. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including basement) elevated to a height above the highest adjacent grade of not less than the depth number specified in feet (mm) on the FIRM plus 2 feet, or not less than 4 feet if a depth number is not specified.

3. Basement floors that are below grade on all sides shall be elevated to or above the base flood elevation plus 2 feet or the design flood elevation, whichever is higher.

4. Elevation of buildings and structures shall be achieved by use of pilings or columns; structural fill and solid foundation walls shall not be permitted.

Exception: Enclosed areas below the design flood elevation, including basements whose floors are not below grade on all sides, shall meet the requirements of Section R322.2.2.

Modify Section R322.2.2as follows:

R322.2.2 Enclosed areas below design flood elevation. Enclosed areas, including crawl spaces, that are below the design flood elevation shall:

1. Be used solely for parking of vehicles, building accessor storage. The interior portion of such enclosed areas shall not be partitioned or finished into separate rooms except for stairwells, ramps, and elevators, unless required by the fire code.

2. Be provided with flood openings that meet the following criteria:

2.1. There shall be a minimum of two openings on different sides of each enclosed area; if a building has more than one enclosed area below the design flood elevation, each area shall have openings on exterior walls.

2.2. The total net area of all openings shall be at least 1 square inch (645 mm^2) for each square foot (0.093 m^2) of enclosed area, or the openings shall be designed and the construction documents shall include a statement by a registered design professional that the design of the openings will provide for equalization of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters as specified in Section 2.6.2.2 of ASCE 24.

2.3. The bottom of each opening shall be 1 foot (305 mm) or less above the adjacent ground level.

2.4. Openings shall be not less than 3 inches (76 mm) in any direction in the plane of the wall.

2.5. Any louvers, screens or other opening covers shall allow the automatic flow of floodwaters into and out of the enclosed area.

2.6. Openings installed in doors and windows, that meet requirements 2.1 through 2.5, are acceptable; however, doors and windows without installed openings do not meet the requirements of this section.

Modify Section R322.2.3 as follows:

Section R322.2.3 Foundation design and construction.

Foundation walls for buildings and structures erected in flood hazard areas shall be pilings or columns, shall be designed by a registered design professional to resist flood loads, and shall meet the requirements of Chapter 4.

Add a new Section R322.2.6

322.2.6 Construction documents. The construction documents shall include documentation that is prepared and sealed by a registered design professional that the design and methods of construction to be used meet the applicable criteria of this section.

Modify Section R322.3.2, as follows:

R322.3.2 Elevation requirements.

1. Buildings and structures erected within coastal high-hazard areas and Coastal A Zones, shall be elevated so that the bottom of the lowest of horizontal structural members supporting the lowest floor, with the exception of, piling, pile caps, columns, grade beams and bracing, is elevated to or above the base flood elevation plus 2 feet or the design flood elevation, whichever is higher.
2. Basement floors that are below grade on all sides are prohibited.
3. The use of fill for structural support is prohibited.
4. Minor grading, and the placement of minor quantities of fill, shall be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.
5. Walls and partitions enclosing areas below the design flood elevation shall meet the requirements of Sections R322.3.5 and R322.3.6.

Modify Section R322.3.3 as follows:

R322.3.3 Foundations. Buildings and structures erected in coastal high-hazard areas and Coastal A Zones shall be supported on pilings or columns and shall be adequately anchored to such pilings or columns. The space below the elevated building shall be either free of obstruction or, if enclosed with walls, the walls shall meet the requirements of Section R322.3.5. Pilings shall have adequate soil penetrations to resist the combined wave and wind loads (lateral and uplift). Water-loading values used shall be those associated with the design flood. Wind-loading values shall be those required by this Code. Pile embedment shall include consideration of decreased resistance capacity caused by scour of soil strata surrounding the piling. Pile systems design and installation shall be certified in accordance with Section R322.3.9. Spread footing, mat, raft or other foundations that support columns shall not be permitted where soil investigations that are required in accordance with Section R401.4 indicate that soil material under the spread footing, mat, raft or other foundation is subject to scour or erosion from

wave-velocity flow conditions. If permitted, spread footing, mat, raft or other foundations that support columns shall be designed in accordance with ASCE 24.

Modify Section R322.3.5 as follows:

R322.3.5 Walls below design flood elevation. Walls are permitted below the elevated floor, provided that such walls are not part of the structural support of the building or structure and:

1. Electrical, mechanical, and plumbing system components are not to be mounted on or penetrate through walls that are designed to break away under flood loads; and
2. Are constructed with insect screening or open lattice; or
3. Are designed to break away or collapse without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. Such walls, framing and connections shall have a design safe loading resistance of not less than 10 (470 Pascals) and no more than 20 pounds per square foot (958 Pascals); or
4. Where wind loading values of this Code exceed 20 pounds per square foot (958 Pascals), the construction documents shall include documentation prepared and sealed by a registered design professional that:

4.1. The walls below the design flood elevation have been designed to collapse from a water load less than that which would occur during the design flood.

4.2. The elevated portion of the building and supporting foundation system have been designed to withstand the effects of wind and flood loads acting simultaneously on all building components (structural and nonstructural). Water loading values used shall be those associated with the design flood. Wind loading values used shall be those required by this Code.

5. Walls intended to break away under flood loads as specified in Item 3 or 4 have flood openings that meet the criteria in Section R322.2.2, Item 2.

Modify Section R322.3.6 as follows:

R322.3.6 Enclosed areas below the design flood elevation. Enclosed areas below the design flood elevation shall be used solely for parking of vehicles, building access or storage. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms except for stairwells, ramps, and elevators, unless required by the fire code.

SECTION 3. That section 8-72, Florida Fire Prevent Code-Adopted, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 8-71. Florida Fire Prevention Code—Adopted.

The city hereby adopts and incorporates by reference the Florida Fire Prevention Code and all specific volumes and standard contained in the Florida Fire Prevention Code, as adopted by the State Fire Marshal pursuant to F.S. § 633.302, F~~(2010 Edition)~~, as amended from time to time. Except those portions as are specifically hereinafter deleted, modified or amended by this chapter, which codes are attached hereto and incorporated herein as if fully set forth herein, are hereby adopted as the fire codes for the city, and shall be controlling within the limits of the city. The Florida Fire Prevention Code includes NFPA 1, Uniform Fire Code, (Florida Edition) and the NFPA 101, Life Safety Code, (Florida Edition).

SECTION 4. That section 8-88, Appendices B, E and G of NFPA 1, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby deleted:

~~Sec. 8-88. - Appendices B, E and G of NFPA 1, Fire Prevention Code adopted.~~

~~Appendices B, E and G of NFPA 1, Fire Prevention Code of the National Fire Protection Association, are hereby adopted and included as part of the fire code of the city, except for any provisions which are specifically deleted, modified or amended. Any other appendices thereof are specifically not adopted.~~

SECTION 5. FISCAL IMPACT STATEMENT. In terms of design, plan application review, construction and inspection of buildings and structures, the cost impact as an overall average is negligible in regard to the local technical amendments because all development has been subject to the requirements of the local floodplain management ordinance adopted for participation in the National Flood Insurance Program and the owner-builder revisions are merely to reflect current statutes. In terms of lower potential for flood damage, there will be continued savings and benefits to consumers.

SECTION 6. TRANSMISSION TO THE FLORIDA BUILDING COMMISSION. The City Commission directs the clerk to transmit this ordinance to the Florida Building Commission within thirty (30) days of its adoption in accordance with section 553.73, Fla. Stat.

SECTION 7. SEVERABILITY. It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the Ordinance shall not be affected.

SECTION 8. CONFLICT. All ordinance or portions of ordinances in conflict with or inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 9. CODIFICATION. Sections 2-4 of this Ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to

renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 10. EFFECTIVE DATE. This ordinance shall take effect upon the first day of the month immediately following the adoption of the ordinance.

FIRST READING and PUBLIC HEARING on the ____ day of _____, 2025.

SECOND READING and PUBLIC HEARING on the ____ day of _____, 2025.

PUBLISHED in the Tampa Bay Times on the ____ day of _____, 2025.

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ____ day of _____, 2025 by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk

ORDINANCE 2024-13

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 54 "UTILITIES" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES BY DELETING ARTICLE II, STORMWATER MANAGEMENT FROM CHAPTER 54; MOVING ARTICLE II FROM CHAPTER 75 TO CHAPTER 54; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Chapter 54 of the City Code of Ordinances ("Code"), entitled "Utilities" regulates the utility deposits, stormwater management and utility, and water conservation within the City; and

WHEREAS, the City is a barrier island community seeking to improve resilience to coastal flooding resulting from high-tide events and related impacts to sea level rise; and

WHEREAS, the City has adopted the Terrain Modification Manual and the changes in this ordinance are necessary to continue the implementation of the Terrain Modification Manual; and

WHEREAS, the City desires to have the regulation of its utilities within Chapter 54 and move any regulations relating to land development into the Land Development Code; and

WHEREAS, the City Commission has reviewed the relevant current Code provisions of the City of Treasure Island and finds that certain modifications are necessary and desirable to revise various requirements in the Code; and

WHEREAS, the City Commission determines that the adoption of this Ordinance is in the interests of the public health, safety and welfare of the City and its residents.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND, FLORIDA DOES ORDAIN:

SECTION 1. The recitals set forth in the "Whereas" clauses above are ratified and confirmed as true and correct and are hereby adopted as legislative findings by the City Commission of the City of Treasure Island, Florida, for the adoption of this Ordinance.

SECTION 2. That Article II, Stormwater Management (sections 54-31 through 54-70), of the Code of Ordinances of the City of Treasure Island, Florida, is hereby deleted in its entirety from Chapter 54.

SECTION 3. That Article II, Sewer Charges, Fees and Billing, of the Code of Ordinances of the City of Treasure Island, Florida, is moved from Chapter 75, Division 4, and is hereby created to read as follows:

Article II. SEWER CHARGES, FEES AND BILLING

Sec. 54-31. Definitions.

For the purposes of this article, the following terms are defined as follows:

Fixture means a toilet, lavatory, urinal, slop sink, set-tub or any other fixture of like character which feeds into the sewer.

Unit means a bathroom and a kitchen, or where there is no kitchen, a bathroom.

Sec. 54-32. Schedule of sewer service charges.

The city commission shall by resolution after public hearing establish a schedule of monthly service charges for users of the city's sanitary sewer system which shall be on file in the city clerk's office and provided in appendix A. The charges shall be payable in advance and shall be enforced against and collected from all users of the city sewer system and owners, tenants or occupants of any property served or to be served by the sewer system.

Sec. 54-33. Nonpayment of service charges; cut-off of county water required.

If any purchaser of sewerage facilities shall fail, neglect or refuse to pay to the city the charges for such purchase or purchases within ten days after written notice so to do, the city shall have and is hereby invested with the right, power and authority to immediately request discontinuance of further service of water by the county water commission to such purchaser until the sewer utility bill shall be paid in full and notice of such payment has been given to the water commission.

Secs. 54-34 – 54-70 reserved.

SECTION 4. SEVERABILITY. It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the Ordinance shall not be affected.

SECTION 5. CONFLICT. All ordinance or portions of ordinances in conflict with or inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 6. CODIFICATION. Sections 2-3 of this Ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 7. EFFECTIVE DATE. This ordinance shall take effect upon the first day of the month immediately following the adoption of the ordinance.

FIRST READING and PUBLIC HEARING on the ____ day of _____, 2025.

SECOND READING and PUBLIC HEARING on the ____ day of _____, 2025.

PUBLISHED in the Tampa Bay Times on the ____ day of _____, 2025.

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ____ day of _____, 2025 by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk

ORDINANCE 2024-14

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 66 "FLOODPLAIN MANAGEMENT" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES BY REVISING SECTION 66-102.3, "BASIS FOR ESTABLISHING FLOOD HAZARD AREAS", TO UPDATE THE ADDRESS OF CITY HALL; REVISING SECTIONS 66-104.1, "PERMIT REQUIRED', SECTION 66-303.1, "MINIMUM REQUIREMENTS, SECTION 66-301.1, MINIMUM REQUIREMENTS", AND 66-307.4, "OTHER DEVELOPMENT IN COASTAL HIGH HAZARD AREAS (ZONE V) AND COASTAL A ZONES" TO REFERENCE THE CITY'S TERRAIN MODIFICATION MANUAL; REVISING SECTION 66-104.3, "APPLICATION FOR A PERMIT OR APPROVAL", TO UPDATE THE REQUIREMENTS FOR APPLICATIONS FOR FLOODPLAIN DEVELOPMENT PERMITS; REVISING SECTION 66-105.1, "INFORMATION FOR DEVELOPMENT IN FLOOD HAZARD AREAS", TO UPDATE REQUIREMENTS FOR SITE PLANS AND CONSTRUCTION DOCUMENTS FOR DEVELOPMENTS SUBJECT TO THE CHAPTER; REVISING ARTICLE II, "DEFINITIONS', TO UPDATE THE APPLICABLE DEFINITIONS FOR TERMS USED IN THE CHAPTER; CREATING SECTION 66-301.5, "FLORIDA BUILDING CODE, ADMINISTRATIVE AMENDMENT" TO REQUIRE THE SUBMITTAL OF A CERTIFICATION FORM FOR CERTAIN ELEVATIONS OF BUILDINGS IN FLOOD HAZARD AREAS; CREATING SECTION 66-301.6, "FLORIDA BUILDING CODE, TECHNICAL AMENDMENTS", TO PROVIDE CERTAIN LIMITATIONS ON BUILDINGS IN FLOOD HAZARD AREAS; REVISING SECTION 66.303-5, "LIMITATIONS ON PLACEMENT OF FILL", TO SUBSTANTIVELY REVISE THE CITY'S REGULATION OF FILL; REVISING SECTION 66-304.1, "GENERAL", TO REVISE THE DEFINITION OF MANUFACTURED HOMES IN THE SECTION; REVISING SECTION 66-306.1, "UNDERGROUND TANKS", TO REQUIRE PROTECTIVE MEASURES WHEN SUBMERGING UNDERGROUND TANKS; REVISING SECTION 66-306.2, "ABOVE-GROUND TANKS, NOT ELEVATED", TO REQUIRE PROTECTIVE MEASURES WHEN SUBMERGING ABOVE-GROUND TANKS; REVISING SECTION 66-307.2, "CONCRETE SLABS USED AS PARKING PADS, ENCLOSURE FLOORS, LANDINGS,

DECKS, WALKWAYS, PATIOS AND SIMILAR NONSTRUCTURAL USES IN COASTAL HIGH HAZARD AREAS (ZONE V) AND COASTAL A ZONES", TO REQUIRE THAT SUCH SLABS HAVE NO TURNED DOWN OR THICKENED EDGES; REVISING SECTION 66-307.3, "DECKS AND PATIOS IN COASTAL HIGH HAZARD AREAS (ZONE V) AND COASTAL A ZONES", TO REVISE THE REGULATION OF CERTAIN DECKS AND PATIOS; DELETING SECTION 66.307.5, "NONSTRUCTURAL FILL IN COASTAL HIGH HAZARD AREAS (ZONE V) AND COASTAL A ZONES" IN ITS ENTIRETY; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Chapter 66 of the City Code of Ordinances ("Code"), entitled "Floodplain Management," regulates the management of floodplains within the City; and

WHEREAS, the City has adopted its Terrain Modification Manual desires to make the revisions contained in this Ordinance update the City's regulations; and

WHEREAS, the City had cumulative substantial improvements over the life of property in the 1970s, and then, in accordance with a change in state law, the City adopted a 5-year cumulative substantial improvement definition between 1995 and 1998; and

WHEREAS, in 1998 the City removed its 5-year cumulative substantial improvements in accordance with a change in state law and went back to a cumulative substantial improvements over the life of property; and

WHEREAS, in 2011 the City revised its definition of substantial improvement to remove the lifetime cumulative restriction to be consistent with the National Flood Insurance Program's minimum requirements; and

WHEREAS, the Florida legislature recently revised Chapter 553 of the Florida Statutes (the "Florida Building Code") to provide that administrative or technical amendments to the Florida Building Code related to flood resistance in order to implement the National Flood Insurance Program or incentives do not have to follow the same process as the traditional administrative or technical amendments to the Florida Building Code; and

WHEREAS, the City desires to make the revisions contained in this Ordinance to incorporate administrative or technical amendments to the Florida Building Code related to flood resistance; and

WHEREAS, the City is a barrier island community seeking to improve resilience to coastal flooding resulting from high-tide events and related impacts to sea level rise; and

WHEREAS, the City desires to revise its land development regulations to support both public and private protection of facilities and services; and

WHEREAS, the City has adopted the Terrain Modification Manual and the changes in this ordinance are necessary to continue the implementation of the Terrain Modification Manual; and

WHEREAS, the Local Planning Agency has held several public workshops and meetings to discuss these revisions and recommends approval of such revisions; and

WHEREAS, the State of Florida, Division of Emergency Management, Office of Financial Management has reviewed and approved these revisions; and

WHEREAS, this ordinance revises the land development regulations and therefore, pursuant to s. 166.041(4)(c), Fla. Stat., this ordinance is exempt from the business impact estimate requirement of s. 166.041(4)(a), Fla. Stat.; and

WHEREAS, the City Commission has reviewed City's Comprehensive Plan and finds that revisions are consistent with the City's Comprehensive Plan; and

WHEREAS, the City Commission has reviewed the relevant current Code provisions of the City of Treasure Island and finds that certain modifications are necessary and desirable to revise various requirements in the Code; and

WHEREAS, the City Commission determines that the adoption of this Ordinance is in the interests of the public health, safety and welfare of the City and its residents.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND, FLORIDA DOES ORDAIN:

SECTION 1. The recitals set forth in the "Whereas" clauses above are ratified and confirmed as true and correct and are hereby adopted as legislative findings by the City Commission of the City of Treasure Island, Florida, for the adoption of this Ordinance.

SECTION 2. That section 66-102.3, Basis for establishing flood hazard areas, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-102.3 Basis for establishing flood hazard areas.

The flood insurance study for the county and incorporated areas dated August 24, 2021 and all subsequent amendments and revisions, and the accompanying flood insurance rate maps (FIRM), and all subsequent amendments and revisions to such maps, are adopted by reference as a part of this chapter and shall serve as the

minimum basis for establishing flood hazard areas. Studies and maps that establish flood hazard areas are on file at the Community Improvement Department of the City of Treasure Island, 10451 Gulf Boulevard ~~120 108th Avenue~~, Treasure Island, Florida 33706.

SECTION 3. That section 66-104.1, Permits required, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-104.1 Permits required.

Any owner or owner's authorized agent (hereinafter "applicant") who intends to undertake any development activity within the scope of this chapter, including buildings, structures and facilities exempt from the Florida Building Code, which is wholly within or partially within any flood hazard area shall first make application to the floodplain administrator, and the building official if applicable, and shall obtain the required permit(s) and approval(s). No such permit or approval shall be issued until compliance with the requirements of this chapter, city's Terrain Modification Manual located in appendix B, unless otherwise expressly exempted, and all other applicable codes and regulations has been satisfied.

SECTION 4. That section 66-104.3, Application for a permit or approval, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-104.3 Application for a permit or approval.

To obtain a floodplain development permit or approval the applicant shall first file an application in writing on a form furnished by the community. The information provided shall:

(1) Identify and describe the development to be covered by the permit or approval.

(2) Describe the land on which the proposed development is to be conducted by legal description, street address or similar description that will readily identify and definitively locate the site.

(3) Indicate the use and occupancy for which the proposed development is intended.

(4) Be accompanied by a site plan or construction documents as specified in division 5 of article I, chapter 66.

(5) State the valuation of the proposed work.

(6) Provide documentation to support substantial damage and substantial improvement determinations. When providing this documentation, applicants should review FEMA guidance publications on substantial improvement and substantial damage determinations.

(~~6~~7) Be signed by the applicant or the applicant's authorized agent.

(~~7~~8) Give such other data and information as required by the floodplain administrator.

(9) FEMA Elevation Certificate and FEMA Dry Floodproofing Certificate as required.

SECTION 5. That section 66-105.1, Information for development in flood hazard areas, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-105.1 Information for development in flood hazard areas.

The site plan or construction documents for any development subject to the requirements of this chapter shall be drawn to scale and shall include, as applicable to the proposed development:

(1) Delineation of flood hazard areas and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development.

(2) Location of the proposed activity and proposed structures, and locations of existing buildings and structures; in coastal high hazard areas (zone V), coastal A zones, and A/AE flood zones, new buildings shall be located landward of the reach of mean high tide.

(3) Location, extent, amount, and proposed ~~final~~ finished grades of any filling, grading, or excavation.

(4) Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose.

(5) In the regulatory floodplain, the construction documents shall include all information required within Section 1803.5.8 of the Florida Building Code (shallow foundation bearing on compacted fill) and demonstrate appropriate protection from erosion and scour. When performing geotechnical investigations to develop fill specifications, investigation procedures shall adhere to Section 1803.4 of the Florida Building Code. A fully qualified representative shall be onsite as required by Section 1803.4 of the Florida Building Code.

(~~5~~6) Delineation of the coastal construction control line or notation that the site is seaward of the coastal construction control line, if applicable; delineation of the 1968 Treasure Island Mean High Water Line, as well as any established erosion control line on the site.

(~~6~~7) Extent of any proposed alteration of sand dunes or mangrove stands provided such alteration is approved by the state department of environmental protection.

(~~7~~8) Other information required by the city's Terrain Modification Manual located in appendix B.

The floodplain administrator is authorized to waive the submission of site plans, construction documents, and other data that are required by this chapter but that are not required to be prepared by a registered design professional if it is found that the nature of the proposed development is such that the review of such submissions is not necessary to ascertain compliance with this chapter.

SECTION 6. That article II of chapter 66, Definitions, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Accessory structures. A structure on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure. For floodplain management purposes, the term includes only accessory structures used for parking and storage.

Appeal. A request for a review of the floodplain administrator's interpretation of any provision of this chapter.

ASCE 24. A standard titled Flood Resistant Design and Construction that is referenced by the Florida Building Code. ASCE 24 is developed and published by the American Society of Civil Engineers, Reston, VA.

Base flood. A flood having a one-percent chance of being equaled or exceeded in any given year. [Also defined in FBC, B, Section 202.] The base flood is commonly referred to as the "100-year flood" or the "one-percent-annual chance flood."

Base flood elevation. The elevation of the base flood, including wave height, relative to the national geodetic vertical datum (NGVD), North American vertical datum (NAVD) or other datum specified on the flood insurance rate map (FIRM). [Also defined in FBC, B, Section 202.]

Basement. The portion of a building having its floor subgrade (below ground level) on all sides. [Also defined in FBC, B, Section 202.]

Breakaway wall. A partition or wall that is independent of supporting structural members and that is intended to withstand design wind forces but to collapse from a water load less than that which would occur during the base flood, without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system.

Building. Any structure used or intended for supporting or sheltering any use or occupancy.

Coastal A zone. Area within a special flood hazard area, landward of a V zone or landward of an open coast without mapped coastal high hazard areas. In a coastal A zone, the principal source of flooding must be astronomical tides, storm surges, seiches or tsunamis, not riverine flooding. During the base flood conditions, the potential for breaking wave height shall be greater than or equal to one and one-half feet (457 mm).

The inland limit of the coastal A zone is (a) the limit of moderate wave action if delineated on a FIRM, or (b) designated by the authority having jurisdiction.

Coastal construction control line. The line established by the state pursuant to F.S. § 161.053, and recorded in the official records of the community, which defines that portion of the beach-dune system subject to severe fluctuations based on a 100-year storm surge, storm waves or other predictable weather conditions.

Coastal high hazard area. A special flood hazard area extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Coastal high hazard areas are also referred to as "high hazard areas subject to high velocity wave action" or "V zones" and are designated on flood insurance rate maps (FIRM) as zone V1-V30, VE, or V. [Also defined in FBC, B, Section 202.]

Design flood. The flood associated with the greater of the following two areas: [Also defined in FBC, B, Section 202.]

(1) *Area with a floodplain subject to a one-percent* or *greater chance of flooding in any year; or*

(2) Area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

Design flood elevation. The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as zone AO, the design flood elevation shall be the elevation of the highest ~~existing~~ natural grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal to two feet. [Also defined in FBC, B, Section 202.]

Development. Any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, tanks, temporary structures, temporary or permanent storage of equipment or materials, mining, dredging, filling, grading, paving, excavations, drilling operations or any other land altering or land disturbing activities.

Encroachment. The placement of fill, excavation, buildings, permanent structures or other development into a flood hazard area which may impede or alter the flow capacity of riverine flood hazard areas.

Existing building and *existing structure.* Any buildings and structures for which the "start of construction" commenced before May 7, 1971. [Also defined in FBC, B, Section 202.]

Federal emergency management agency (FEMA). The federal agency that, in addition to carrying out other functions, administers the national flood insurance program.

FEMA Elevation Certificate. Form issued by FEMA for documentation and certification of elevations and other information for buildings in flood hazard areas.

When used to certify ground and building elevations referenced to datum, the forms shall be prepared, signed, and sealed by Florida licensed professional surveyors or registered design professionals qualified to perform elevation surveys.

FEMA Dry Floodproofing Certificate for Non-residential Structures. Form issued by FEMA for certification of design of dry floodproofing measures, certification of ground elevations and the elevation of at-built dry floodproofing measures, and certification that the measures were constructed as designed.

Fill. Material including but not limited to soil, gravel, or crushed stone that is placed in an area to increase ground elevations (see *Structural Fill)* [Also defined in ASCE 24, Section 1.2.]

Finished grade. The finished elevation of a site after all fill, land balancing or site preparations have been completed. The finished elevation shall be inclusive of all grasses, landscaping, decks, patios, slabs or other ground coverings.

Flood or *flooding.* A general and temporary condition of partial or complete inundation of normally dry land from: [Also defined in FBC, B, Section 202.]

(1) The overflow of inland or tidal waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood damage-resistant materials. Any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair. [Also defined in FBC, B, Section 202.]

Flood hazard area. The greater of the following two areas: [Also defined in FBC, B, Section 202.]

(1) the area within a floodplain subject to a one-percent or greater chance of flooding in any year.

(2) the area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

Flood insurance rate map (FIRM). The official map of the community on which the Federal Emergency Management Agency has delineated both special flood hazard areas and the risk premium zones applicable to the community. [Also defined in FBC, B, Section 202.]

Flood insurance study (FIS). The official report provided by the federal emergency management agency that contains the flood insurance rate map, the flood boundary and floodway map (if applicable), the water surface elevations of the base flood, and supporting technical data. [Also defined in FBC, B, Section 202.]

Floodplain administrator. The office or position designated and charged with the administration and enforcement of this chapter (may be referred to as the floodplain manager).

Floodplain development permit or *approval.* An official document or certificate issued by the community, or other evidence of approval or concurrence, which

authorizes performance of specific development activities that are located in flood hazard areas and that are determined to be compliant with this chapter.

Florida Building Code. The family of codes adopted by the Florida Building Commission, including: Florida Building Code, Building; Florida Building Code, Residential; Florida Building Code, Existing Building; Florida Building Code, Mechanical; Florida Building Code, Plumbing; Florida Building Code, Fuel Gas.

Freeboard means a level higher than the base flood elevation. It is a factor of safety usually expressed in feet above a flood level for purposes of flood plain management. Freeboard compensates for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action or the hydrological effect of urbanization on the watershed.

Functionally dependent use. A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, including only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities; the term does not include long-term storage or related manufacturing facilities.

Highest adjacent grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls or foundation of a structure.

Historic structure. Any structure that is determined eligible for the exception to the flood hazard area requirements of the Florida Building Code, Existing Building, chapter 12 historic buildings.

Letter of map change (LOMC). An official determination issued by FEMA that amends or revises an effective flood insurance rate map or flood insurance study. Letters of map change include:

(1) *Letter of map amendment (LOMA).* An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective flood insurance rate map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

(2) *Letter of map revision (LOMR).* A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

(3) *Letter of map revision based on fill (LOMR-F).* A determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

(4) *Conditional letter of map revision (CLOMR).* A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective flood

insurance rate map or flood insurance study; upon submission and approval of certified as-built documentation, a letter of map revision may be issued by FEMA to revise the effective FIRM.

Light-duty truck. As defined in 40 C.F.R. 86.082-2, any motor vehicle rated at 8,500 pounds gross vehicular weight rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less, which is:

(1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or

(2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or

(3) Available with special features enabling off-street or off-highway operation and use.

Limit of moderate wave action. Line shown on FIRMs to indicate the inland limit of the one and one-half-foot (457 mm) breaking wave height during the base flood.

Lowest floor. The lowest floor of the lowest enclosed area of a building or structure, including basement, but excluding any unfinished or flood-resistant enclosure, other than a basement, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of the non-elevation requirements of the Florida Building Code or ASCE 24. [Also defined in FBC, B, Section 202.]

Lowest horizontal structure member. Any shore-parallel structural member which supports floor, wall or column loads and transmits them to the pile or column foundation.

Market value. The value of buildings and structures, excluding the land and other improvements on the parcel. Market value is the actual cash value of the structure before the start of construction (like-kind replacement cost depreciated for age, wear and tear, neglect, and quality of construction), determined by a qualified independent appraiser, or the "Just Value" of the structure, developed by the Pinellas County Property Appraiser's Office (PAO) for Ad Valorem taxation purposes, adjusted to approximate market value, as determined by the PAO. In the case of repair, the market value shall be the actual cash value of the structure before the damage occurred as determined by a qualified independent appraiser, or the “Just Value” of the structure, developed by the Pinellas County Property Appraiser’s Office (PAO) for Ad Valorem taxation purposes, adjusted to approximate market value, as determined by the PAO.

Natural grade. The grade unaffected by construction techniques such as fill, landscaping or berming.

New construction. For the purposes of administration of this chapter and the flood resistant construction requirements of the Florida Building Code, structures for which the "start of construction" commenced on or after May 7, 1971 and includes any subsequent improvements to such structures.

Nonstructural fill. Fill that does not serve to support or protect a structure. This may include but not be limited to fill used below parking slabs, decks and patios.

Park trailer. A transportable unit which has a body width not exceeding 14 feet and which is built on a single chassis and is designed to provide seasonal or temporary living quarters when connected to utilities necessary for operation of installed fixtures and appliances. [Defined in F.S. § 320.01]

Recreational vehicle. A vehicle, including a park trailer, which is: [See F.S. § 320.01)

(1) Built on a single chassis;

(2) Four hundred square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light-duty truck; and

(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Sand dunes. Naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Special flood hazard area. An area in the floodplain subject to a one percent or greater chance of flooding in any given year. Special flood hazard areas are shown on FIRMs as zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V. All of the city is located in a special flood hazard area. [Also defined in FBC, B, Section 202.]

Start of construction. The date of issuance of permits for new construction and substantial improvements, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement is within 180 days of the date of the issuance. The actual start of construction means either the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns.

Permanent construction does not include land preparation (such as clearing, grading, or filling), the installation of streets or walkways, excavation for a basement, footings, piers, or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main buildings. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building. [Also defined in FBC, B, Section 202.]

Structural fill. Fill placed and compacted to a specified density to provide structural support or protection to a structure.[Also defined in ASCE 24, Section 1.2.]

Structure. That which is built or constructed,

Substantial damage. Damage of any origin sustained by a building or structure whereby the cost of restoring the building or structure to its before-damaged condition

would equal or exceed 50 percent of the market value of the building or structure before the damage occurred. [Also defined in FBC, B, Section 202.]

Substantial improvement. Any repair, reconstruction, rehabilitation, alteration, addition, or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

(1) any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.

(2) any alteration of a historic structure provided the alteration will not preclude the structure's continued designation as a historic structure.

Variance. A grant of relief from the requirements of this chapter, or the flood resistant construction requirements of the Florida Building Code, which permits construction in a manner that would not otherwise be permitted by this chapter or the Florida Building Code.

SECTION 7. That section 66-301.5, Florida Building Code, administrative amendment, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby created to read as follows:

Sec. 66-301.5 Florida Building Code, administrative amendment.

(1) Certification forms.

a. Where elevations of buildings in flood hazard areas are specified in applications, and where certification of the elevation of buildings in flood hazard areas is required, the FEMA Elevation Certificate and survey shall be submitted as follows:

1. At time of application, Construction Drawing Elevation Certificate and Pre-Construction Survey;
2. At time of placement of the lowest floor, Under Construction Elevation Certificate and Tie-In Survey;
3. At completion of construction as part of final inspection and prior to Certificate of Occupancy, Finished Construction Elevation Certificate and Final Survey.

b. Where certifications of the design of dry floodproofed non-residential buildings in flood hazard areas are required and where certification of the elevation of dry floodproofing is required, the FEMA Dry Floodproofing Certificate for Non-residential Structures shall be submitted.

SECTION 8. That section 66-301.6, Florida Building Code, technical amendments, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby created to read as follows:

Sec. 66-301.6 Florida Building Code, technical amendments.

(1) Minimum building elevations.

a. The minimum elevation for buildings within the scope of the Florida Building Code, Building, shall be as specified in ASCE 24, the base flood elevation plus two (2) feet, or the design flood elevation, whichever is higher.

b. The minimum elevation for one- and two-family dwellings and townhouses within the scope of the Florida Building Code, Residential, shall be the base flood elevation plus two (2) feet or the design flood elevation, whichever is higher.

(2) Foundation design requirements for one- and two-family dwellings. Construction documents for one- and two-family dwellings in flood hazard areas shall include documentation prepared and sealed by a registered design professional that the foundation design accounts for site-specific flood loads.

(3) Enclosures below required elevations for buildings in flood hazard areas. Enclosed areas below the required elevation for buildings in flood hazard areas shall be limited as follows:

a. The interior portion of such enclosed areas shall not be partitioned or finished into separate rooms except for stairwells, ramps, and elevators unless a partition is required by the fire code.

Exception: The limitation on partitions does not apply to dry floodproofed areas in nonresidential structures and non-residential areas in mixed-use structures.

b. Where perimeter walls are permitted, the limitation on partitions does not apply to load-bearing walls interior to perimeter wall (crawlspace) foundations.

SECTION 9. That section 66-302.1 Minimum requirements, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-302.1 Minimum requirements.

Subdivision proposals shall be reviewed to determine that:

(1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;

(2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and

(3) Adequate drainage is provided to reduce exposure to flood hazards, in all special flood hazards areas adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

(4) The requirements of the city's Terrain Modification Manual located in appendix B have been met.

SECTION 10. That section 66-303.1 Minimum requirements, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-303.1 Minimum requirements.

All proposed new development shall be reviewed to determine that:

(1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;

(2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and

(3) Adequate drainage is provided to reduce exposure to flood hazards in all special flood hazard areas. Adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

(4) The requirements of the city's Terrain Modification Manual located in appendix B have been met.

SECTION 11. That section 66-303.5 Limitations on placement of fill, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-303.5 Limitations on placement of fill.

Subject to the limitations of this chapter, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour.

(1) In coastal high hazard areas (zone V) and coastal A zones:

(a) The use of structural fill is prohibited.

(b) The use of minor quantities of nonstructural fill of up to twenty-four inches thick shall be permitted for landscaping and for drainage purposes, under and around buildings and beneath parking slabs, decks and patios. Nonstructural fill depths greater than twenty-four inches shall not be permitted. Nonstructural fill shall not contain large rocks and debris and shall be similar to and compatible with natural soils in the area. Fill depths shall

be calculated by subtracting the natural grade elevations from the finished grade elevations.

(c) Nonstructural fill with finished slopes that are steeper than one unit vertical to five units horizontal shall not be permitted.

(d) Where authorized by the state department of environmental protection or applicable local approval, sand dune construction and restoration of sand dunes under or around elevated buildings are permitted without additional engineering analysis or certification of the diversion of floodwater or wave runup and wave reflection if the scale and location of the dune work is consistent with local beach-dune morphology and the vertical clearance is maintained between the top of the sand dune and the lowest horizontal structural member of the building.

(e) The use of nonstructural fill shall adhere to the requirements of the city's Terrain Modification Manual located in appendix B.

(2) In areas not identified as coastal high hazard areas (zone V) and coastal A zones:

(a) The use of structural fill shall comply with the requirements of the Florida Building Code.

(b) The use of structural and nonstructural fill shall adhere to the requirements of the city's Terrain Modification Manual located in appendix B.

~~The use of structural fill is not permitted. Non-structural, uncompacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out during storm surge flooding prior to generating excessive loading forces, wave ramping effects, or wave deflection. The floodplain administrator shall approve plans for landscaping/aesthetic fill only after the applicant has provided an analysis prepared by a Florida licensed engineer, registered architect, and/or soil scientist, which demonstrates that the following factors have been fully considered:~~

~~(1) Particle composition of fill material does not have a tendency for excessive natural compaction;~~

~~(2) Volume and distribution of fill will not cause wave deflection to adjacent properties; and~~

~~(3) Slope of fill will not cause wave run-up or wave ramping~~

SECTION 12. That section 66-304.1, General, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-304.1 General.

Manufactured homes, defined in 15C-1.0101, F.A.C., are not a permitted use in the City of Treasure Island.

SECTION 13. That section 66-306.1, Underground tanks, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-306.1 Underground tanks.

Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty. Protective measures shall be in place to restrict the release of tank contents when submerged.

SECTION 14. That section 66-306.2, Above-ground tanks, not elevated, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-306.2 Above-ground tanks, not elevated.

Above-ground tanks that do not meet the elevation requirements of section 66-306.3 shall:

(1) Be permitted in flood hazard areas (zone A) other than coastal high hazard areas (zone V), provided the tanks are anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris.

(2) Not be permitted in coastal high hazard areas (zone V) and coastal A zones.

(3) Incorporate protective measures to restrict the release of tank contents when submerged.

SECTION 15. That section 66-307.2, Concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios and similar nonstructural uses in coastal high hazard areas (zone V) and coastal A zones, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-307.2 Concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios and similar nonstructural uses in coastal high hazard areas (zone V) and coastal A zones.

In coastal high hazard areas (zone V) and coastal A zones, concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios and similar nonstructural uses are permitted beneath or adjacent to buildings and structures provided the concrete slabs are designed and constructed to be:

(1) Structurally independent of the foundation system of the building or structure;

(2) Frangible and not reinforced, so as to minimize debris during flooding that is capable of causing significant damage to any structure; and

(3) Have a maximum slab thickness of not more than four inches.

(4) Have no turned down or thickened edges.

SECTION 16. That section 66-307.3, Decks and patios in coastal high hazard areas (zone V) and coastal A zones, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-307.3 Decks and patios in coastal high hazard areas (zone V) and coastal A zones.

In addition to the requirements of the Florida Building Code, in coastal high hazard areas (zone V) and coastal A zones decks and patios shall be located, designed, and constructed in compliance with the following:

(1) A deck that is structurally attached to a building or structure shall have the bottom of the lowest horizontal structural member at or above the design flood elevation and any supporting members that extend below the design flood elevation shall comply with the foundation requirements that apply to the building or structure, which shall be designed to accommodate any increased loads resulting from the attached deck.

(2) A deck or patio that is located below the design flood elevation shall be structurally independent from buildings or structures and their foundation systems, and shall be designed and constructed either to remain intact and in place during design flood conditions or to break apart into small pieces to minimize debris during flooding that is capable of causing structural damage to the building or structure or to adjacent buildings and structures.

(3) The top of a deck or patio located below the design flood elevation shall be no more than 24” above natural grade.

(~~3~~a) A deck or patio that has a vertical thickness of more than 12 inches ~~or that is constructed with more than the minimum amount of fill necessary for site drainage~~ shall not be approved unless an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to the building or structure or to adjacent buildings and structures.

(4b) A deck or patio that has a vertical thickness of 12 inches or less, some of which may be below the adjacent finished grade, ~~and that is at natural grade or on nonstructural fill material that is similar to and compatible with local soils and is the minimum amount necessary for site drainage~~ may be approved without requiring analysis of the impact on diversion of floodwaters or wave runup and wave reflection.

SECTION 17. That section 66-307.4, Other development in coastal high hazard areas (zone V) and coastal A zones, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 66-307.4 Other development in coastal high hazard areas (zone V) and coastal A zones.

In coastal high hazard areas (zone V) and coastal A zones, development activities other than buildings and structures shall be permitted only if also authorized by the appropriate federal, state or local authority; if located outside the footprint of, and not structurally attached to, buildings and structures~~; and if analyses prepared by qualified registered design professionals demonstrate no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures~~ and constructed in compliance with the city's Terrain Modification Manual located in appendix B. Such other development activities include but are not limited to:

(1) Bulkheads, seawalls, retaining walls, revetments, and similar erosion control structures;

(2) Solid fences and privacy walls, and fences prone to trapping debris, unless designed and constructed to fail under flood conditions less than the design flood or otherwise function to avoid obstruction of floodwaters; and

(3) On-site sewage treatment and disposal systems defined in 64E-6.002, F.A.C., as filled systems or mound systems.

SECTION 18. That section 66-307.5, Nonstructural fill in coastal high hazard areas (zone V) and coastal A zones, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby deleted in its entirety.

SECTION 19. SEVERABILITY. It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the Ordinance shall not be affected.

SECTION 20. CONFLICT. All ordinance or portions of ordinances in conflict with or inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 21. CODIFICATION. Sections 2-18 of this Ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 22. EFFECTIVE DATE. This ordinance shall take effect upon the first day of the month immediately following the adoption of the ordinance.

FIRST READING and PUBLIC HEARING on the ____ day of _____, 2025.

SECOND READING and PUBLIC HEARING on the ____ day of _____, 2025.

PUBLISHED in the Tampa Bay Times on the ____ day of _____, 2025.

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ____ day of _____, 2025 by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk

ORDINANCE 2024-15

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 68 "ZONING REGULATIONS" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES BY AMENDING SECTION 68-2, "DEFINITIONS" TO REVISE THE DEFINITIONS OF BUILDING, BUILDING HEIGHT, DEVELOPMENT, FENCE, GRADE, PERVIOUS AREA, STRUCTURE, AND CREATE DEFINITIONS FOR OPEN FENCE, BASE FLOOR, LOWEST FLOOR, NATURAL GRADE, GUARD, PORTABLE, RETAINING WALL, TERRAIN MODIFICATION HEIGHT ADJUSTMENT FACTOR, TERRAIN MODIFICATION SETBACK ADJUSTMENT FACTOR, TERRAIN MODIFICATION MANUAL, AND WALL; AMENDING SECTIONS 68-34, "PRE-DEVELOPMENT REVIEW COMMITTEE", 68-431, "SCHEDULE OF LOT AND BULK REGULATIONS" AND 68-541, "SETBACK CLASSIFICATION" TO RECOGNIZE THE TERRAIN MODIFICATION ADJUSTMENT FACTOR; AMENDING SECTIONS 68-152, "ADOPTED LEVELS OF SERVICE" AND 68-159, "APPEALS" TO UPDATE THE REFERENCE TO THE TREASURE ISLAND WATERSHED MANAGEMENT PLAN; AMENDING SECTION 68-195 "APPLICATION OF ZONING DISTRICT REGULATIONS" TO REQUIRE PERMITS; DELETING SECTIONS 68-224 "DESIGN STANDARDS", 68-255 "EXEMPTIONS", AND 68-410.69 "STORM WATER" BECAUSE THOSE ARE NOW ADDRESSED IN CHAPTER 76; AMENDING SECTIONS 68-410.09 "SETBACKS", 68-410-38 "SETBACKS", 68-410.68 "SIGNAGE", 68-483 "SWIMMING POOLS" AND 68-561 "ALTERNATE SETBACK SYSTEM PROCEDURES" TO DEFINE GRADE AS NATURAL OR FINISHED; AMENDING AND RENAMING SECTION 68-458, "GARDEN WALLS, RETAINING WALLS, FENCES AND HEDGES" TO ADDRESS RETAINING WALLS, GUARDS, AND REVISIONS TO FENCES; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Chapter 68 of the City Code of Ordinances ("Code"), entitled "Zoning Regulations," regulates zoning within the City; and

WHEREAS, the City is a barrier island community seeking to improve resilience to coastal flooding resulting from high-tide events and related impacts to sea level rise; and

WHEREAS, the City desires to revise its land development regulations to support both public and private protection of facilities and services; and

WHEREAS, the City has adopted the Terrain Modification Manual and the changes in this ordinance are necessary to continue the implementation of the Terrain Modification Manual; and

WHEREAS, the Local Planning Agency has held several public workshops and meetings to discuss these revisions and recommends approval of such revisions; and

WHEREAS, this ordinance revises the land development regulations and therefore, pursuant to s. 166.041(4)(c), Fla. Stat., this ordinance is exempt from the business impact estimate requirement of s. 166.041(4)(a), Fla. Stat.; and

WHEREAS, the City Commission has reviewed City's Comprehensive Plan and finds that revisions are consistent with the City's Comprehensive Plan; and

WHEREAS, the City Commission has reviewed the relevant current Code provisions of the City of Treasure Island and finds that certain modifications are necessary and desirable to revise various requirements in the Code; and

WHEREAS, the City Commission determines that the adoption of this Ordinance is in the interests of the public health, safety and welfare of the City and its residents.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND, FLORIDA DOES ORDAIN:

SECTION 1. The recitals set forth in the "Whereas" clauses above are ratified and confirmed as true and correct and are hereby adopted as legislative findings by the City Commission of the City of Treasure Island, Florida, for the adoption of this Ordinance.

SECTION 2. That Section 68-2, Definitions, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-2. Definitions.

Unless specifically defined below or in the specific article in which they appear, words or phrases used in these regulations shall be interpreted so as to give them the meaning they have in common usage, and to give these regulations their most

reasonable application. For the purpose of enforcing and administering this chapter, the following words shall have the definitions and meanings as herein set forth.

Abutting means to physically touch or border upon, or to share a common property line.

Access, vehicular means the principal means of vehicular ingress and egress to property from a right-of-way or easement.

Accessory use or structure means a use or a structure subordinate to the principal use or building on the same lot and serving a purpose customarily incidental to the use of the principal building, provided any such structure is built with or after the construction of the principal building.

Adjacent means property that touches or is directly across a street, access easement, alley, or right-of-way (except those properties separated by an arterial or collector street) from the subject property.

Adult entertainment establishment means a site or premises, or portion thereof, upon which certain adult use activities or operations are conducted, such as, but not limited to adult arcade, adult bookstore, adult booth, adult theater, special cabarets, physical culture establishments, and adult photographic or modeling studios, including any business establishment whose primary business stock in trade is dependent upon the activities relating to specified sexual activities or specified anatomical areas.

Alcoholic beverage establishment means any establishment devoted primarily to the retail sale of alcoholic beverages for consumption on the premises.

Alley means a public right-of-way which affords only a secondary means of access to abutting property.

Alteration means any change, rearrangement, enlargement, extension, reduction of any structure or part thereof or moving on the same site.

Amortization means the installment costs of a use or structure extended throughout a predetermined life of such use or structure.

Ancillary nonresidential use means off-street parking, drainage retention areas, and open space buffer areas for adjacent, contiguous nonresidential uses.

Animal hospital means any building or portion thereof designed or used for the veterinary care, surgical procedures or treatment of animals, but not boarding of well animals.

Antenna means any exterior transmitting or receiving device used in communications that radiates or captures electromagnetic waves, digital signals, analog signals, radio frequencies (excluding radar), wireless communications signals or other communication signals.

Arcade means a series of arches supported by columns, piers, or pillars, either freestanding or attached to a wall to form a covered passageway.

Architect means a person licensed by the state to practice architecture.

Artist studio means a worker's workroom for an individual and their employees for the purposes of activities including but not limited to painting, drawing, ceramics, sculpture, jewelry making, photography, graphic design, dance, glass blowing, film-making, video or film production.

Assembly occupancies means occupancies that include, but are not limited to all buildings or portions of buildings used for gatherings of persons, for such purposes as seminars, conventions, conferences, deliberation, entertainment, dining, religious institution use, amusement facilities or awaiting transportation.

Automobile gas station means any building, structure or land used primarily for the dispensing, sale or offering for sale at retail of any automotive fuels or oils.

Automobile service station means any building, structure or land used primarily for the dispensing, sale or offering for sale at retail of any automobile fuels, oils or accessories, but not including major repair work such as motor overhaul, body and fender repair or spray painting. An automobile service station may provide for minor repair of vehicles and rental of automobiles or trailers.

Availability/available with regard to the provisions of facilities and services concurrent with the impacts of development, means that at a minimum the facilities and services will be provided in accordance with the standards set forth in F.A.C. 9J-5.0055(2).

Awning means an accessory structure, either temporary or permanent, which is supported by an open framework and is covered by material such as but not limited to cloth, plastic, fiberglass, or metal.

Bar. (See "alcoholic beverage establishment.")

Base flood elevation means the elevation of the flood having a one percent chance of being equaled or exceeded in a year as depicted on the flood insurance rate map (FIRM).

Beach shelter means an accessory structure temporary or permanent, consisting of one or more columns and a roof and not including walls or a floor or facilities of any type.

Board of adjustment, for the purposes of this Code, shall mean the planning and zoning board.

Boarding house (rooming house) means a building other than a hotel or motel where lodging with or without meals for three or more persons not of the immediate family is provided for compensation.

Buffer area means a natural or landscaped area or strip of land, with or without such physical separation devices as a fence or wall, established to separate and insulate one type of use from another use; or to shield or block noise, lights or other considerations; or to separate development from a natural feature so as to reduce the incompatibility between uses or features and protect the integrity of each.

Building means any structure ~~having a roof supported by columns or walls designed or built for the support, enclosure, shelter or protection of persons, animals, chattels, or property of any kind~~ used or intended for supporting or sheltering any use or occupancy.

Building height means the vertical distance from the base flood elevation plus 2 feet of freeboard ~~average finished grade of all exterior corners~~ to the highest point of the building, not including those structures specifically permitted to extend beyond the height of the building, as may be modified by the Terrain Modification Height Adjustment Factor. ~~On any site where construction is required to adhere to the base flood elevation, as established for the National Flood Insurance Act of 1968, the building height is the vertical distance from the first living level or the tidal floodplain, whichever is lower, to the highest point of the building not including those structures specifically permitted to extend beyond the height of the building.~~

Building setback line means the required minimum horizontal distance between the front, rear or side lines of the lot and the front, rear or side lines of the building.

Building site means that part of a parcel of land designed to be occupied by the principal building and such accessory buildings or uses customarily incidental to it.

Bus shelter means a covered structure, usually having three walls, located on or adjacent to the right-of-way of a street and designed primarily for the protection and convenience of bus passengers.

Bush means a woody plant, smaller than a tree and having many stems branching out low instead of one main stem or trunk; shrub.

Cafeteria. (See "restaurant.")

Car wash means an establishment for the washing, cleaning, waxing and polishing of the exterior surface of passenger vehicles; and for the incidental cleaning and vacuuming of the interior passenger sections.

Child day care center means a licensed facility which provides, for any portion of the day, care-giving services to three or more persons under the age of 18, who are not related to the owner or operator.

City means the City of Treasure Island located within Pinellas County, Florida.

City manager means the city manager of the city.

Clinic, medical means a facility which does not provide for overnight accommodations wherein professional services concerning personal health of humans are administered by medical doctors, chiropractors, osteopaths, optometrists, dentists or any other such profession, which may lawfully be practiced in the state.

Clinic, veterinary means a facility which provides for care of animals wholly within a soundproof, air conditioned structure and wherein overnight boarding of animals is accommodated for medical reasons.

Club, private means building and facilities owned or operated by a corporation, association, person or persons for social, educational or recreational purpose, but not primarily for profit or to render a service which is customarily carried on as a business.

Commercial means a use or other activity, involving the sale or offering, of goods or services for any and all kinds of vocations, occupations, professions, trades, enterprises, establishments, and all other kinds of activities and matters, together with all devices, machines, private, for profit or not, whether salaried or unsalaried, either directly or indirectly, on any premises in this city, or anywhere else within its jurisdiction.

Commercial property means a building, site, or portion of a structure where commercial use activities occur.

Commercial recreation use means a use of the property for a commercial purpose for a per use fee, where the use of the property by the customer is for a recreational use, such as a miniature golf course, a fishing pier or a commercial swimming pool.

Common lot line means a line dividing one lot or parcel from another.

Community residential home, as defined in F.S. § 419.001, means "a dwelling unit licensed to serve clients of the state department of children and family services, which provides a living environment for seven to 14 unrelated residents who operate as the functional equivalent of a family, including such supervision and care by supportive staff as may be necessary to meet the physical, emotional, and social needs of the residents." This term may include adult congregate living facilities (ACLFs), assisted living facilities (ALFs), and other comparable care and rehabilitative facilities meeting the statutory definition. This category is restricted to persons who do not require special provisions for emergency evacuation.

Comprehensive plan means the comprehensive plan as defined by F.S. ch. 163 "Community Planning Act" as adopted by the city and which may consist of several maps, data and other descriptive matter, for the physical development of the city or any portion thereof, including any amendments, extensions or additions thereto, indicating the general location for major streets, parks, public utilities, land use or other similar information.

Concurrency means that the necessary public facilities and services to maintain the adopted level of service standards are available when the impacts of development occur.

Concurrency management system means the procedures and/or process that the city will utilize to assure that development orders and permits are not issued unless the necessary facilities and services are available concurrent with the impacts of development.

Condo-hotel means a hotel or motel comprised of units that are owned by an individual, corporation, or any other legal entity having mandatory membership into an association comprised of all owners within the same development, and is a building or buildings, collectively, "facility", containing individual guest rooms, units or efficiencies for which daily, weekly or monthly lodging is provided as transient accommodations.

Condominium means a form of ownership as defined by state statutes.

Contiguous means the same as abutting.

County means Pinellas County, Florida.

Coverage. (See "lot coverage.")

Density means the number of dwelling units and hotel or motel units permitted on a particular lot or parcel of property. In determining the number of units permitted on a lot or parcel of land, any fraction of a unit in excess of eight-tenths shall be considered to be a whole unit.

Developer means any party seeking to alter the pre-existing conditions on a lot or parcel of land through such activities as the grading, excavation, dredging, filling, paving, construction of new buildings or accessory structures, expansion of existing buildings or accessory structures, total or partial demolition of existing buildings or accessory structures, connection to public utilities, and other activities commonly associated with the improvement of real property.

~~*Development* means any construction, structures, creation of structures or alteration of the land surface or natural resources which requires authorization by the city through issuance of a development order.~~

~~*Development activity* means any of the following activities:~~

Development means any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, tanks, temporary structures, temporary or permanent storage of equipment or materials, mining, dredging, filling, grading, paving, excavations, drilling operations or any other land altering or land disturbing activities. For example development includes:

(1) Construction, clearing, filling, excavating, grading, paving dredging, mining, drilling or otherwise significantly disturbing the soil of a site.

(2) Building, installing, enlarging, replacing or substantially restoring a structure, impervious surface, or water management system, and including the long-term storage of materials.

(3) Subdividing land into two or more parcels.

(4) A tree removal for which authorization is required under this Code.

(5) Erection of a sign for which authorization is required under this Code.

(6) Alteration of a historic property for which authorization is required under this Code.

(7) Changing the use of a site so that the need for parking is increased.

(8) Construction, elimination or alteration of a driveway onto a public street.

Development order means any order granting, denying or granting with conditions an application for a development permit.

Development permit means any one of the following:

(1) Building permit;

(2) Site plan;

(3) Final plat;

(4) Special exception;

(5) Variance;

(6) Development orders for developments of regional impact as defined in F.S. § 380.06; and

(7) Any other official action of the city having the effect of permitting the development of land.

Development rights means the number of dwelling units or the amount of commercial square footage which may be constructed on a particular parcel or lot as specified in the zoning regulations.

Director means the city manager of the city and/or those to whom he has charged the enforcement or interpretation of the land development regulations or selected provisions thereof.

District means any certain described area to which these regulations apply and within which the zoning regulations are uniform.

Dwelling, multiple-family means a building designed for and/or containing three or more dwelling units.

Dwelling, residential means a single-family, two-family (duplex), or multiple-family dwelling which is not a tourist dwelling.

Dwelling, single-family means a building designed for and/or containing only one dwelling unit.

Dwelling, tourist means a single-family, two-family or multifamily dwelling which is used as a tourist dwelling. A residential dwelling shall be considered a tourist dwelling according to the following criteria:

(1) If the single-family, two-family or multifamily dwelling is subject to or operates under any arrangement plan or design whereby the use of the dwelling or unit in the dwelling has been segmented over time so that owners, lessees or holders (regardless of the form of ownership or the form in which the right to use is expressed) of such unit has a recurring exclusive right to use either that dwelling or unit or another unit in the same dwelling according to a predetermined fixed schedule and only if the schedule would permit in any one year a change or turnover of occupancy six or more times, it shall be considered a tourist dwelling.

(2) If the single-family, two-family or multifamily dwelling operates under or is subject to an arrangement plan or design whereby sleeping accommodations and sanitary facilities in the dwelling or in a unit in the dwelling are offered to the public or reserved to private parties, or are advertised as being available, and the use thereof by members of the public or private parties is primarily on

a daily, weekly, monthly or seasonal basis, it shall be considered a tourist dwelling. Provided that when the dwelling or unit in the dwelling is the legal domicile, and/or the sole permanent residence of the occupant, occupants, and/or guest(s), a rebuttable presumption arises that the dwelling or unit in the dwelling is not being used as a tourist dwelling. Provided further that if the turnover in occupancy of such dwelling or unit in the dwelling does not change more frequently than six times or more in any continuous 12-month period, then a rebuttable presumption shall arise that the dwelling or unit in the dwelling is not being used as a tourist dwelling. In determining whether a property is used as a tourist dwelling, such determination shall be made without regard to the form of ownership of the dwelling or unit in the dwelling, or whether the occupant, or occupants, has or have a direct or indirect ownership interest in the dwelling or unit; and without regard to whether the right of occupancy arises from a rental agreement other agreement, or the payment of consideration.

(3) In addition to the above, if a single-family dwelling located in the RU-75 zoning district is operated or used in such a way that it has a turnover in occupancy of more than two times in any one year, it shall create a rebuttable presumption that such single-family dwelling is a tourist dwelling.

Dwelling, two-family (duplex) means a building designed for and/or containing two dwelling units.

Dwelling unit (d.u.) means a single unit consisting of not less than 500 square feet of living area providing complete, independent living facilities for one family, including permanent provisions for living, sleeping, eating, cooking and sanitation, but not including recreation vehicles, tents, hotels, motels or boardinghouses.

Easement means a grant of a right to use land for specified purposes. It is an interest in land granted for limited use.

Educational facilities means a location used for instruction in any branch of knowledge, and including the following: elementary, middle, and high schools, whether public or private; colleges, community colleges and universities; vocational and professional schools giving instruction in vocational, professional, technical, industrial, musical, dancing, dramatic, artistic, linguistic, scientific, religious or other special subjects.

Effluent means the emission of pollutants from any source.

Engineer means a person professionally licensed by the state to practice engineering.

Essential services means public utility facilities above ground which are related to the water, sanitary sewer, storm drainage, solid waste, telephone, cable television, gas and electrical collection or distribution systems that service the city but not including buildings housing employees; or administrative or recreational facilities.

Excavations means removal of 100 cubic yards or more of earth material for purposes other than that incidental to and on the site of authorized construction.

Exhibit hall means an indoor facility for the display of items, art, or materials to the public. This facility may also serve as a place of assembly for lectures or instruction.

FAA means the Federal Aviation Administration.

Fair market value means the value of property or structures, as used in the definition of substantial improvement, as determined by the county property appraiser, or M.A.I. or S.R.A. appraisal, either before the improvement was started, or if the structure has been damaged and is being restored, before the damage occurred.

Family means one or more persons permanently occupying a dwelling unit and living together as a single, nonprofit household unit (excluding section 68-493 pertaining to home occupations). Family does not include any society, club, fraternity, sorority, association, or like organization. This definition does not include any group of individuals whose association is temporary or seasonal or similar to a tourist dwelling, resort, boardinghouse, motel or hotel. This definition shall be construed to include those individuals protected as a family unit by the Fair Housing Act or other applicable laws that do not result in a fundamental alteration of the city's local zoning regulations.

FCC means the Federal Communications Commission.

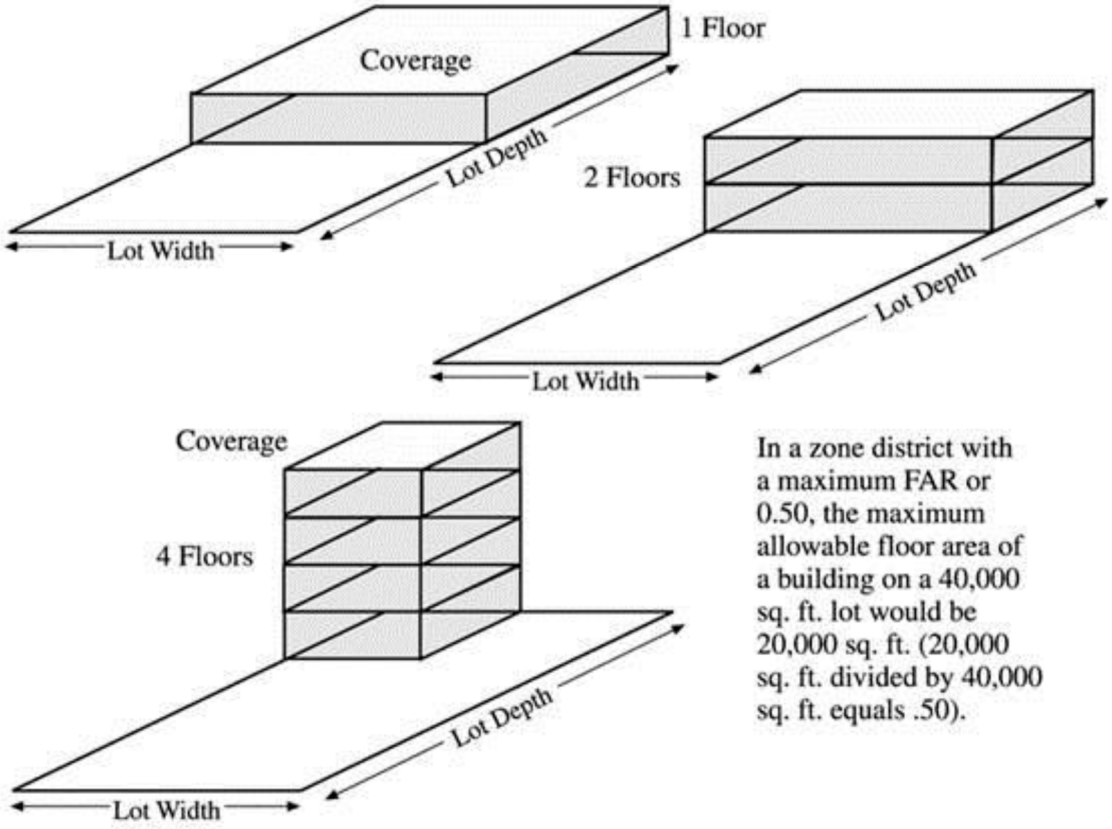
Fence ~~(garden wall)~~ means any construction of wood, metal, plastic, chain link ~~wire mesh, masonry~~ or other industry standard fence materials, erected for the purpose of privacy, protection or ornamentation.

Fence, open means a fence with horizontal or vertical openings not less than 3.5-inches and such that a 4-inch-diameter sphere cannot pass through any opening, between intermediate pickets not greater than 1-1/2-inch cross sections. Any solid perimeter supporting rails shall not exceed 6-inches.

Final development order means a development permit as defined.

Floor area (gross/total) means the sum of the square footage of the floor area of a structure above the base flood elevation plus the square footage of floor area below the base flood elevation that is enclosed measured from the exterior face of the exterior walls or from the centerline of a wall separating two buildings, but not including interior parking spaces or loading space for motor vehicles.

Floor area ratio (FAR) means a measurement of the intensity of building development on a site. A floor area ratio is the relationship between the gross floor area on a site and the net land area. The FAR is calculated by adding together the gross floor areas of all buildings on the site and division by the net land area.

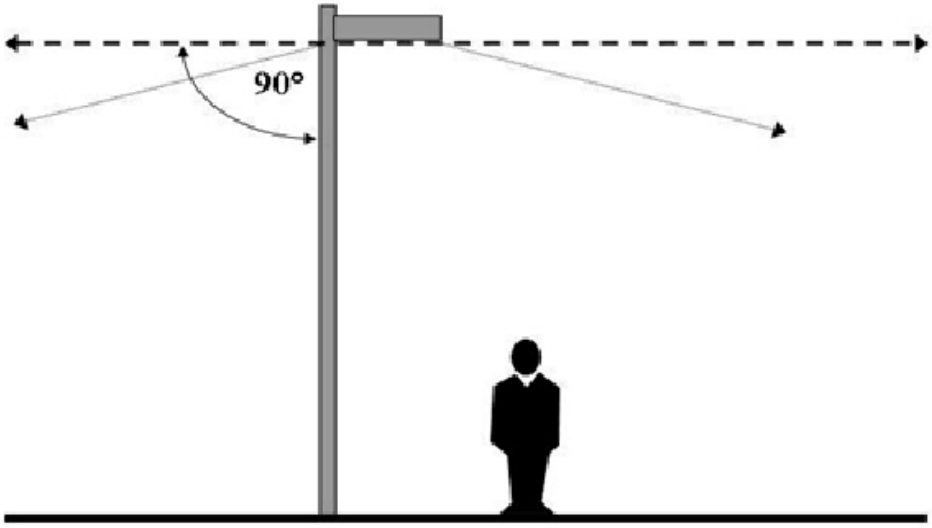


NOTE: Variations may occur if upper floors are stepped back from ground level lot coverage.

		Gross Building Area (All Floors)
Floor Area Ratio (FAR)	=	
		Lot Area

Floor, base means an enclosed or non-enclosed area beneath an elevated structure used for parking, storage or access.

Floor, lowest means the lowest floor of the lowest enclosed area of a building or structure, including basement, but excluding any unfinished or flood-resistant enclosure, other than a basement, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of the non-elevation requirements of the Florida Building Code or ASCE 24. [Also defined in FBC, B, Section 202.]



Footcandle means a unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot.

Full cutoff fixture means a type of light fixture with no light emitted above the horizontal no light dispersion or direct glare shines above a 90-degree, horizontal plane from the base of the fixtures.

Frontage means the length of the property line for a parcel which runs parallel to, and along, a road right-of-way or public or approved private street, exclusive of alleyways.

Governing body means the city commission of the city as legally constituted.

Grade, ~~(finished)~~ means the finished elevation of a site after all fill, land balancing or site preparations have been completed. ~~Finished grade shall not exceed the base flood elevation. The first inch of rainfall must be contained on-site.~~ The finished elevation shall be inclusive of all grasses, landscaping, decks, patios, slabs or other ground coverings.

Grade, natural means the grade unaffected by construction techniques such as filling, landscaping or berming.

Grandfather clause means a clause creating an exemption based on circumstances previously existing.

Gross usable area means that area which is considered to be the total floor area of a building, minus specified storage areas. The gross usable area shall include all service, kitchen, and outdoor areas used for the purposes of the business.

Group home, as licensed by the state department of children and family services, means a residential family living environment with supervision for six or less people. This is not considered a commercial use. Such a home is for persons who do not require special provisions for emergency evacuation. In addition, no such home may be located within 1,000 feet of another existing group home, with the said distance to be measured in a straight line from the nearest point of the property line of the existing

home to the nearest point of the property line of the proposed home, except as provided by law

Guard means a required railing as defined by the Florida Building Code.

Hedge means a dense row of shrubs or bushes forming a boundary.

Height means, when referring to a tower, antenna or other structure, the distance measured from the finished grade of the parcel to the highest point on the tower or other structure, even if the highest point on the tower or structure is an antenna.

Home occupation means the occupation of an individual and/or members of his immediate family conducted entirely in their dwelling when such dwelling is the principal use of the property and all the conditions of this Code, for home occupations, can be affirmatively evidenced and complied with.

Hotel or motel means a building or buildings, collectively, "facility," containing individual guest rooms, units or efficiencies for which daily, weekly or monthly lodging is provided as transient accommodations.

Hotel or motel unit means a room or group of rooms within a hotel or motel, as defined, with individual sleeping facilities having one entrance door.

Impervious surface means a surface that has been compacted or covered with a layer of material so that it is highly resistant to or prevents infiltration by stormwater. It includes surfaces such as compacted limerock, or clay, as well as ~~most~~ conventionally surfaced streets, roofs, sidewalks, parking lots and other similar surfaces, *a*nd all other artificial or non-natural surfaces.

Impervious surface ratio (ISR) means a measure of the intensity of hard surfaced development on a site. An impervious surface ratio is the relationship between the total impervious surface area on a site and the net land area. The ISR is calculated by dividing the square footage of the area of all impervious surfaces on the site by the square footage of the net land area.

Indoor entertainment facility means a location which provides for activities within the confines of a building. Such uses shall include but not be limited to arcade games, miniature golf, movie theater, music, playground equipment, bowling, archery, skating, batting cages, etc. This may also be a location for an exercise facility, martial arts, theater arts, and dance instruction. These facilities generally provide an accessory snack or beverage bar for their patrons.

Junk means inoperative, dilapidated, abandoned or wrecked materials, including but not limited to automobiles, trucks, tractors, wagons, boats and other kinds of vehicles and parts thereof, scrap materials, scrap building material, scrap contractors' equipment, tanks, casks, cans, barrels, boxes, drums, piping, bottles, glass, old iron, machinery and the like.

Junkyard means a place where junk, waste, discarded or salvaged materials are bought, sold, exchanged, stored, baled, packed, disassembled or handled, including automobile wrecking yards where vehicles are dismantled or wrecked and the used

parts are stored and/or sold, house wrecking, and structural steel materials and equipment but not including the purchase or storage of used furniture and household equipment, used cars in operable condition, used or salvaged materials as a part of manufacturing operations.

Kennel means an establishment where domestic animals are bred, boarded or sold.

~~*Land balancing* means any operation such as cut and fill, cutting and scraping or similar procedures involving 100 cubic yards or more of material wherein a parcel, lot, tract or building site topography is altered.~~

Land Use means the development that has occurred on the land, the development that is proposed on the land, or the use that is permitted or permissible on the land, under an adopted comprehensive plan or element or portion thereof and land development regulations.

Landfill (earth, soil and hard materials) means addition of 100 yards or more of earth, topsoil, sand, gravel, rock, concrete products or bricks to any lot or parcel other than that incidental to and on the site of authorized construction.

Landscape architect means a person licensed by the state to practice landscape architecture.

Landscape area or green space means an area or areas including beautification strips, consisting of those materials, such as, but not limited to hedges, trees, planted ground cover, sodded and grassed areas and planted floral installations, all of which must be composed of natural plantings only, as distinguished from artificially manufactured planting reproductions.

Liner building means a shallow storefront at ground level, but may extend to the second story and above, used to block the appearance of vehicles in a parking garage along the principal streets.

Live-work unit means a building in which offices, studios, or other commercial uses are located on the first floor and a residential dwelling unit is located above the first floor.

Living level means the number of floors in a building above the base flood elevation.

Loading space (berth) means a space which provides for the loading or unloading of service vehicles and has a minimum size of 12 feet in width, 30 feet in length and 14 feet in height.

Lot means a parcel of land occupied or intended for occupancy by a use permitted in these regulations, including all structures, required yards, parking spaces, and open space and having frontage upon a public or private street right-of-way or easement for ingress and egress purposes. (See "parcel.")

Lot area means the horizontal plane area within the lot lines expressed in these regulations in square feet or acres exclusive of public or private dedications.

Lot, corner means a lot abutting upon two or more streets at their intersection or at a street corner having an interior angle not greater than 135 degrees. All boundaries abutting streets shall be considered front yards, all other boundaries shall be considered side yards. (See Attachment One).

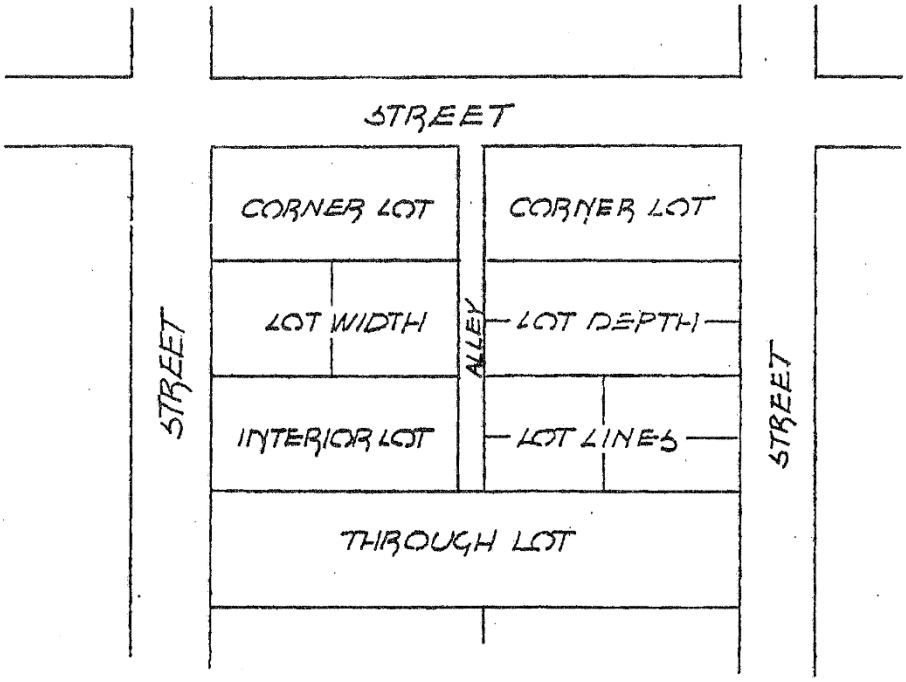
Lot coverage means the area of the lot expressed as a percentage of the total lot area covered by the ground floor of all principal and accessory uses and structures, including all areas covered by the roof of such uses and structures measured along the exterior faces of the walls or along the foundation wall line or between the exterior faces of supporting columns or from the centerline of walls separating two buildings or a combination of the foregoing whichever produces the greatest total ground coverage for such uses and structures.

Lot depth means the horizontal distance between the front and rear lot lines measured in the mean direction of the side lines of the lot from the midpoint of the front lot line to the midpoint of the opposite mean rear line of the lot.

Lot, interior means a lot other than a corner lot with frontage on one street only. (See Attachment One).

Lot line means the line bounding a lot as herein defined as established by ownership except that where a lot line lies within a private street or waterway the edge of the private street right-of-way or waterway shall be considered to be the lot line for the purposes of calculating density, lot, yard and bulk requirements.

Lot, through (double frontage) means an interior lot which has street frontages at opposite boundaries of the lot excluding alleys. (See Attachment One).



Lot width means the horizontal distance between the side lot lines measured along the front building setback line of the lot as determined by the prescribed front yard requirements of the zoning district.

Lumen means the unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire (as distinct from "watt," a measure of power consumption).

Luminaire means the complete lighting unit (fixture), consisting of a lamp, or lamps and ballast(s) (when applicable), together with the parts designed to distribute the light (reflector, lens, diffuser), to position and protect the lamps, and to connect the lamps to the power supply.

Marina, boat yard means a site or commercial establishment which provides minor repair, maintenance or sale of boats, marine engines, marine equipment and marine services of all kinds; including but not limited to rental of covered or uncovered boat slips, dock space, enclosed dry storage space, marine railways or lifting or launching services.

Mean high water means the average height of the high waters over a 19-year period; or for shorter periods of observations, the average height of the high waters after corrections are applied to eliminate known variations and to reduce the result to the equivalent of a mean 19-year value as defined in state statutes.

Mean high waterline means the intersection of the tidal plane of mean high water with the shore as defined in state statutes.

Medical marijuana treatment center means an entity defined in Article X, Section 29 of the Florida Constitution, that acquires, cultivates, possesses, processes (including development of related products such as food, tinctures, aerosols, oils, or ointments), transfers, transports, sells, distributes, dispenses, or administers marijuana, products containing marijuana, related supplies, or educational materials to qualifying patients or their caregivers and is registered by the Florida Department of Health.

Medical marijuana treatment center dispensing facilities means a facility that is established or operated by a medical marijuana treatment center where medical marijuana or any product derived therefrom is dispensed at retail.

Mixed use means a combination of uses on a single property.

Mixed-use building means a building that contains two or more of the following major use types: residential dwelling units, tourist dwelling units, office, or retail establishments.

Mixed-use development means a building, site, or structure whose use will be for two or more of the following major use types: residential dwelling units, tourist dwelling units, office, or retail establishments.

Motel. (See "hotel or motel.")

Net usable area means the area accessible to the public, excluding rest rooms, hallways, kitchens, areas behind bars, but including customer waiting areas, exterior patios and decks that are used for customer service.

Noise means a subjective description to an undesirable or unwanted sound. (See "sound.")

Nonresidential use or property means a building, site, or structure which use does not provide for single-family, two family (duplex), or multifamily dwellings.

Nonconforming lot means a single lot, tract or parcel of land shown on either a recorded or unrecorded map, plat, drawing or survey, where such map, plat, drawing or survey was in existence at the time of the adoption of Ordinance 78-18, adopted on February 1, 1979, such lot failing to meet the requirements for area, width and/or depth for any permitted use within the zoning district in which it is located.

Nonconforming structure or use means a structure or land use legally existing at the time of the passage of this Code or amendment thereto, which does not conform to the provisions, requirements, and regulations of the zoning districts in which it is located.

Nursery school or kindergarten means any premises or portion thereof used for educational work or parental care of nonresident children of less than the age required for enrollment in the public school system whether or not for compensation as licensed by the state.

Nursing home or convalescent home means a home for the aged or infirm in which three or more persons not of the immediate family are received, kept or provided with food and shelter or care for compensation, but not including hospitals, clinics, or similar establishments devoted primarily to the diagnosis and treatment of the sick or injured as licensed by the state.

Occupants means the total number of persons that may occupy a building or portion thereof or other areas designated for occupancy or use at any one time. The term "other areas designated for occupancy or use" shall be deemed to include, but not be limited to, decks, patios, piers, wharves, or other improved areas of the site for use by the patrons.

Odor means an objectionable smell response in a human being.

Off-site means located outside the lot or parcel lines of the principal use.

Office means a building, room or space where clerical or administrative activities are performed or wherein specialized services such as the offices of a doctor, dentist, lawyer, engineer, architect, chiropractor, osteopath, insurance agent or real estate broker are provided.

Official land use map also known as the official future land use map means the official land use map of the city which depicts the future land use classifications of the comprehensive plan. Such map is herewith adopted by reference and shall not be changed except by order of the city commission as provided for herein.

Official zoning map means the map of all zoning districts, delineating the boundaries of the zoning districts, together with all matters and things shown on such maps, as they are updated and amended from time to time, collectively constitute the "official zoning map." The official zoning map is incorporated by reference and made a part of the land development regulations.

Open space means undeveloped land which is suitable for passive recreation, preservation, or conservation uses.

Outdoor dining means an unenclosed, open air area that contains tables, chairs and other similar facilities which is accessory to a licensed and operating restaurant, bakery, café, candy, confectionary and ice cream stores where food and beverage are served and consumed for pay. Outdoor dining shall not include the preparation of food or beverages, cooking, storage or placement of equipment of any kind, except the temporary placement of implements associated with the service of food. Outdoor dining does not include open air market, outdoor display, outdoor storage, mobile food vending vehicles or any use of property that does not provide a permanent structure for restrooms and kitchen facilities.

Outdoor display means the placement of merchandise, commodities, equipment, materials or articles outside of a building for the purposes of attracting customers and displaying examples of items that are for sale within a building. Display shall be limited to the placement of sample items for sale within the building.

Outdoor occupied space means an area that is not enclosed, but is designed and intended for use on an occasional or more frequent basis. Outdoor occupied space may include patios at restaurants, outdoor garden centers, decks for outdoor music, children's play areas, etc. if the space is intended for use in connection with the principal use.

Outdoor storage means the accumulation of merchandise, commodities, equipment, materials, containers, semi-trailers, inoperable vehicles, or articles outside of a building either used as stock in trade or related to the use of the site. This term does not include outdoor display.

Parcel means a tract of land which may be described by metes and bounds or plat. (See "lot.")

Parking area means any public or private land area designated and used for parking motor vehicles including parking lots, garages, private driveways, and legally designated areas of public streets.

Parking lot means an off-street, ground level area improved for the temporary storage of licensed operable motor vehicles. Does not include an area used exclusively for the display of motor vehicles for sale as part of an automobile dealership (all references to parking lot may be commercial, private, valet, and/or public in nature unless otherwise specified).

Parking lot, accessory means a parking lot that is located on the same lot as the permitted or special exception use and is subordinate to such use.

Parking lot, off-site means located outside the lot or parcel lines of the principal use.

Parking lot, shared means parking facilities that may be used jointly with parking facilities for other uses when operations are not normally conducted during the same hours, or when hours of peak use vary, or when excess parking is available; joint use of a parking lot or area for more than one principal use.

Parking lot or structure, commercial means a lot or parcel of land or portion thereof, which is not accessory to any other use of the same or any other lot or parcel, and contains parking space rented to the general public for a fee.

Parking lot or structure, private means a parking lot or structure for the exclusive use of the owners, tenants, lessees, or occupants of the lot or parcel on which the parking area is located or their customers, employees, or whomever else they permit to use the parking area.

Parking lot or structure, public means a parking lot or structure available to the public with or without payment of a fee.

Parking lot, temporary means a parking lot established for a fixed period of time. The use will terminate automatically upon expiration of the fixed time period unless permission to conduct the use is renewed.

Parking lot, valet means the parking of vehicles where a fee may or may not be charged by an attendant provided by the establishment for which the parking is provided.

Parking, off-street means a parking area improved for licensed motor vehicles, temporarily stored in connection with a use requiring same. It includes parking spaces, aisles, access drives, landscaped areas, and vehicular access to a public street.

Parking, on-street means the storage space for a licensed motor vehicle that is located within the street right-of-way.

Parking, remote means a parking lot or structure on a site other than the property it serves, usually at a substantial distance, and often connected by a shuttle bus, but located on Treasure Island.

Parking space means an area, enclosed or unenclosed, sufficient in size to store one motor vehicle and permitting the necessary ingress and egress of a motor vehicle.

Parking, special event means parking for a recurring or non-recurring special event activity.

Parking, stacked means the parking of cars in a parallel line, one in back of the other on private property.

Parking structure means a structure designed to accommodate vehicular parking spaces that are fully or partially enclosed or located on the deck surface of a building. This definition includes parking garages and parking decks.

Pedestrian friendly zone means an area on private property, at least four-foot wide, adjacent and parallel to the public right-of-way. The area is meant to expand the sidewalk for the public to utilize.

Permitted use means the specific purposes for which lands or buildings are maintained in accordance with the zoning district regulations of this Code.

Personal service store means an establishment which provides personal services directly to the consumer, such as barbershop, beauty shop and dry cleaning, but which does not have as its primary function the sale of retail goods.

Pervious area~~—Open space~~ means any portion of lot or parcel not required, designated or encumbered by either principal or accessory uses, buildings and structures and other site uses. ~~Such open~~ Pervious area ~~may~~ shall be landscaped or retained in the natural state~~;~~. Other materials may count as partially pervious as outlined in Chapter 76. ~~— however, no improvements or alterations will be permitted which would hinder the area's natural percolation of rain water or stormwater runoff~~.

Planning and zoning board means the advisory body to the city commission of the city as legally established and referenced in this Code.

Plat means a map depicting the division or subdivision of land into lots, blocks, parcels, tracts or portions thereof; however the same may be designated.

Plat of record means a plat which conforms to all the requirements of the applicable laws of the state and this Code and has been filed and recorded in the office of the clerk of the circuit court for the county.

Portable means able to be moved or carried about by two persons.

Preliminary development order is one of the following:

(1) Rezoning;

(2) Special exception;

(3) Preliminary plat approval.

Premises means any lot and/or all buildings and structures thereon.

Principal use or structure means a use or a structure in which is conducted the predominant or primary function or activity of the lot upon which it is located.

Private yacht club means a site of at least six acres or more which contains at least 20 boat slips contiguous thereto, owned by its members, which members pay dues assessed on no less than an annual basis, the use of which is restricted predominantly to the members and owners, and the use of which is primarily devoted to the promotion of private yachting and boating activities, tennis and other outdoor sports and social activities related thereto.

Professional planner means a person who is a full member of the American Institute of Certified Planners and may be registered by the state as a professional planner.

Professional services means business, including but not limited to, providing the following: medical, veterinary, and other health care services; legal services; consulting, engineering and architectural services; and accounting, auditing, and bookkeeping services in an office setting.

Property line. (See "lot line.")

Property owners' association means a nonprofit organization recognized as such under the laws of the state operated under recorded land agreements through which each owner of a portion of a subdivision, be it a lot, home, property or any other interest, is automatically subject to a charge for a prorated share of expenses either direct or indirect for maintaining common properties within the subdivision, such as roads, parks, recreational areas, common areas or other similar properties. Within the text of this Code, a property owners' association is considered a single entity for property ownership.

Public boardwalk means a public walkway constructed on public lands, which include right-of-ways, easements, and properties owned by the city. The public walkway may extend up to the entire length of the property and may extend over water up to seven (7) feet from the centerline of the seawall. A public boardwalk provides public access for purpose of public recreation and gathering.

Public facilities and services means those covered by the city comprehensive plan required by F.S. § 163.3177, and for which level of service standards must be adopted. These are:

(1) Roads;

(2) Sanitary sewer;

(3) Solid waste;

(4) Drainage;

(5) Potable water;

(6) Parks and recreation.

Public notice means the legal advertisement given of an action or proposed action of the city commission as set forth in these regulations or applicable statute of the state.

Public, semi-public uses means those primary and secondary uses listed under the P (Preservation), R/OS (Recreation/Open Space), I (Institutional), and T/U (Transportation/Utility) zoning districts.

Rear lines means those lines adjoining lots or alleys in the rear.

Recreation area or space (private) means an accessory use consisting of one or more areas, enclosed with a structure and/or open, devoted to the active and/or passive recreational enjoyment of one or more persons residing within the principal use to which it is accessory. When developed and/or equipped for various recreational pursuits, the areas shall not be allowed for any other required site uses except open and/or rear building setback areas.

Religious institution use means a site, premise, or location that is used principally, primarily, or exclusively for the purposes of religious exercise as protected by the Religious Land Use and Institutionalized Persons Act.

Residential structure means a structure whose use will be for a single-family home, two-family (duplex), three-family dwelling units, or multifamily dwellings inclusive of apartment house, a townhouse, a condominium, or any type of dwelling unit.

Residential use or property means a building, site, or structure whose use will be for a single-family, two-family (duplex), three-family dwelling or multifamily dwellings.

Restaurant means an establishment where food is ordered from a menu, prepared and served for pay, for consumption on the premises but not a drive-in restaurant.

Restaurant, drive-in means any food or beverage dispensing operation at retail to the general public where the public is served while remaining in automobiles or other motor vehicles.

Retail establishment means any facility where the primary use is the sale of goods or merchandise to the general public. Limited processing or assembly may be permitted as accessory to the selling activity.

Retaining wall means a vertical or near-vertical structure built out of rock, block, wood or other similar material and used to either directly support retained material or to serve as a facing of a cut slope. The definition includes other systems designed to retain earth or other materials such as a geosynthetic-reinforced wall. A retaining wall shall be constructed so that it does not drain onto adjacent private property. The finished grade of the retained material shall be no more than 6" below the top of structure.

Rezoning, an amendment to the zoning map which changes the zoning classification of a parcel or parcels of land.

Right-of-way means the area of a highway, road, street, way or parkway or other such strip of land reserved for public use, whether established by prescription, easement, dedication, gift, purchase, eminent domain or any other legal means.

Satellite antenna means any parabolic or spherical antenna which receives television or other signals from orbiting satellites or other devices. The height of a ground-mounted antenna shall be the maximum height to which it is capable of being raised and shall be measured from the highest point of the natural or finished grade of the roof adjacent to the structure. A satellite antenna shall be considered as an accessory structure when it is not part of a public utility. A web or mesh type antenna is an antenna primarily constructed of a web or mesh material so that it does not substantially impair visibility. A ground mounted or "short pole" installation denotes a pole of nine feet or less in height. A "long pole" installation denotes a pole of greater than nine feet in height which is braced to the side of a building for added rigidity.

Sediment means the mineral or organic particulate material that is in suspension or has settled in surface waters or groundwaters.

Service station. (See "automobile gas station and automobile service station.")

Shrub means a low growing perennial, woody or evergreen plant with persistent stems.

Side lines means those lines between lots facing the same street or alley.

Special care facility means an institution such as a hospital, nursing home, or similar type of facility established for the care of non-ambulatory patients or clients who require special provisions for emergency evacuation. Community residential homes providing care for non-ambulatory clients requiring special provisions for emergency evacuation are specifically included in this definition for regulatory purposes.

Special event means an approved activity that can be either recurring or non-recurring. Such event is usually for a short duration of time and is usually an entertainment, education, cultural, or neighborhood event including, but not limited to, activities such as organized neighborhood yard sales, neighborhood block parties, wedding receptions on the beach, spaghetti dinners, special beach events, beach clean-ups, outdoor concerts and movies, outdoor morning markets, bazaars, parades,

and carnivals. Such events extend beyond the normal uses and standards allowed by the land development regulations of the city.

Special exception means a use that would not be appropriate generally or without restriction throughout the zoning district, but which, if controlled as to number, area, location, and relation to the neighborhood, would promote the public health, safety, welfare, order, comfort, convenience, appearance or prosperity and is permissible. Such uses may be in accordance with the procedures as set forth in this Code.

State means the State of Florida and all its duly appointed agencies.

Statement of zoning compliance means a statement issued by the city manager or designated representative of the city setting forth that the permitted construction has been completed in compliance with the approved plans and specifications and conforms with all provisions of the land development regulations.

Store, convenience means a small retail establishment which sells a general line of goods and products intended for the convenience of surrounding residents and whose gross floor area does not exceed 3,000 square feet.

Store, retail means an establishment which sells goods or products directly to the public for compensation.

Stormwater means ~~the flow of water which results from, and that occurs immediately following a rainfall~~ any stormwater runoff, and surface runoff and drainage.

Stormwater management system, *stormwater management*, or *stormwater system* has the same meaning within this article and means all facilities, manmade structures, all natural watercourses used for collecting, treating, storing and conducting stormwater to, through and from drainage areas to, and including points of final outlet. A stormwater management system may include but is not limited to any or all of the following: inlets, conduits, valves, creeks, lakes, channels, catch basins, ditches, streams, drainage wells, gulches, gullies, flumes, culverts, siphons, retention or detention basins, dams, flood walls, levies, spillways, pumping stations, and appurtenant features to all of the foregoing. ~~means the system, or combination of systems, designed to treat stormwater, or collect, convey, channel, hold, inhibit, or divert the movement of stormwater on, through and from a site~~.

~~*Stormwater runoff* means that portion of the stormwater that flows from the land surface of a site either naturally, in manmade ditches, or in a closed conduit system.~~

Street means any thoroughfare, street, avenue, boulevard, highway, parkway or space which may or may not be dedicated or deeded to the public for use and which affords the principal means of access to abutting property for the purposes of vehicular travel.

Street, arterial (major) means streets and highways serving major metropolitan activity centers, the highest traffic volume corridors, the longest trip desires, and a high proportion of total urban area travel on a minimum of mileage. Service to abutting land should be subordinate to the provision of travel service to major traffic movements. This

system carries the major portion of trips entering and leaving an urban area, as well as the majority of through movements desiring to bypass the central city, and normally will carry important intra-urban as well as intercity bus routes.

Street, arterial (minor) means streets and highways interconnecting with and augmenting the urban principal arterial system and providing service to trips of moderate length at a somewhat lower level of travel mobility. The system places more emphasis on land access and distributes travel to geographic areas smaller than those identified with the higher system. It includes all arterials not classified as major.

Street, collector means streets penetrating neighborhoods, collecting traffic from local streets in the neighborhoods, and channeling it onto the arterial system. A minor amount of through traffic may be carried on collector streets, but the system primarily provides land access service and carries local traffic movements within residential neighborhoods, commercial and industrial areas. It may also serve local bus routes.

Street, expressway means a street which is to be used only for the movement of vehicles providing for no vehicular or pedestrian access to abutting property except at permitted, authorized and controlled points. The acquisition of right-of-way for expressways includes the acquisition of access rights thereto.

Street, limited access means a highway or freeway which does not permit access except at authorized and controlled points. The acquisition of right-of-way for such highways or freeways usually includes the acquisition of access rights thereto. Access may also be limited through methods other than acquisition of access rights.

Street, local means streets not classified in a higher system, primarily providing direct access to abutting land and access to the higher systems. They offer the lowest level of mobility and usually carry no bus routes. Service to through traffic is deliberately discouraged.

Street, marginal access means a street which is parallel and adjacent to an expressway, arterial or limited access street or in the immediate vicinity of such streets and which has as its principal purpose of relieving such street from local service of abutting property by providing protection from conflicts with through traffic. A marginal access street may also be called a frontage street.

Street, private means any street existing prior to or at the time of adoption of this Code which has not been dedicated for public use and not accepted for ownership or maintenance by the appropriate public agency. After adoption of the ordinance from which this chapter was derived, private streets shall be limited to property under single ownership or a property owners' association.

Street, public means any street designed to serve more than one property owner which is dedicated to the public use and accepted for ownership and maintenance by the appropriate public agency; includes any street right-of-way dedicated to the public prior to or at the time of adoption of the ordinance from which this chapter was derived. Streets controlled by a property owners' association may be retained as private streets by the association as long as the association accepts the obligation for complete control

and maintenance. A street designed to serve more than one property owners' association must be public.

Street wall means the part of a building that faces the street, but it generally refers to how and where several buildings line up to define a proper walking environment. At the most basic level, buildings should be set back an equal distance so that facades are even for as far as a pedestrian can see. A street wall helps to promote walking over automobile use by fostering a feeling of safety. Because the upper floors of urban buildings define an enclosed visual space for the pedestrian, they expand the view down the street.

Structural alteration means any change, except the repair or replacement, in the supporting members of a building such as bearing walls, columns, beams or girders; or the rearrangement of interior partitions and/or space affecting more than 20 percent of the total floor area of the building.

Structure means that which is built or constructed ~~a walled and roofed building that is principally above ground, a manufactured home or other manmade facilities or infrastructures including, but not limited to fences, billboards, swimming pools, docks, poles, pipelines, transmission lines, tracks and advertising signs.~~ A lawfully permitted mailbox, as provided for in subsection 68-458(e), shall not be deemed to be a structure.

Subdivision means the division of real property into two or more lots, parcels, tracts, tiers, blocks, sites, units or any other division of land, or if the establishment of new streets and alleys is involved, any division of such parcel. The term includes resubdivisions and, when appropriate to the text, relates to the process of subdividing or to the lands or area subdivided; however, the following shall be exempt:

(1) The public acquisition of strips of land for the widening of existing streets;

(2) The combination or recombination of portions of previously platted lots where no new parcels or residual parcels smaller than any of the original lots are created;

(3) The division of land into parcels greater than one and one-fourth acres where no new streets or easements of access are planned;

(4) The transference of part of one lot or tract to an adjacent lot or tract provided the transference does not reduce any lot or tract to an area or width less than the minimum specified in this chapter.

Submerged land means the land area situated below the mean high water line of a standing body of water, including ocean, estuary, lake, pond, river or stream. For the purpose of this definition retention areas that are a function of development and wetlands shall not be considered submerged land.

Survey, certified means a survey, sketch, plan, map or other exhibit containing a written statement regarding its accuracy or conformity to specified standards certified and signed by the registered surveyor under whose supervision the survey was prepared.

Surveyor means a person licensed by the state to practice land surveying.

Temporary means a time period of not more than 90 days.

Terrain Modification Height Adjustment Factor means the mathematical difference between the highest natural grade on a property and the resultant base floor when incorporating the requirements of the City of Treasure Island Terrain Modification Manual located in appendix B.

Terrain Modification Setback Adjustment Factor means the mathematical difference between the highest natural grade on a property and the resultant base floor when incorporating the requirements of the City of Treasure Island Terrain Modification Manual located in appendix B.

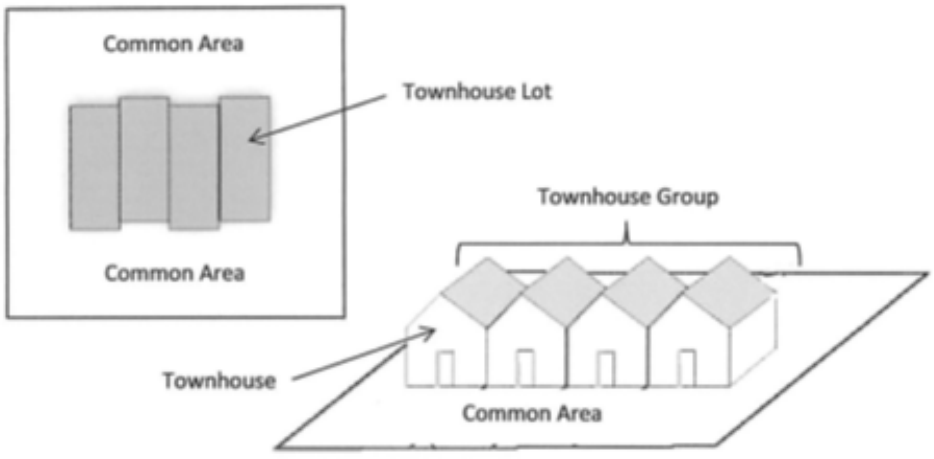
Terrain Modification Manual means the manual currently adopted into the city's Code located in appendix B.

Tower means any structure that is designed and constructed primarily for the purpose of supporting one or more antennas, including self-supporting lattice towers, guyed towers or monopole towers. The term includes radio and television transmission/relay towers, microwave towers, common-carrier towers, cellular telephone towers, alternative tower structures and the like. The term includes the structure and any support thereto.

Townhouse or *townhouse unit* means an attached, privately owned single-family dwelling unit which is a part of and adjacent to other similarly owned single-family dwelling units that are connected to but separated from one another by no more than two party walls having no doors, windows, or other provisions for human passage or visibility. A townhouse or townhouse unit may only be developed with one dwelling unit.

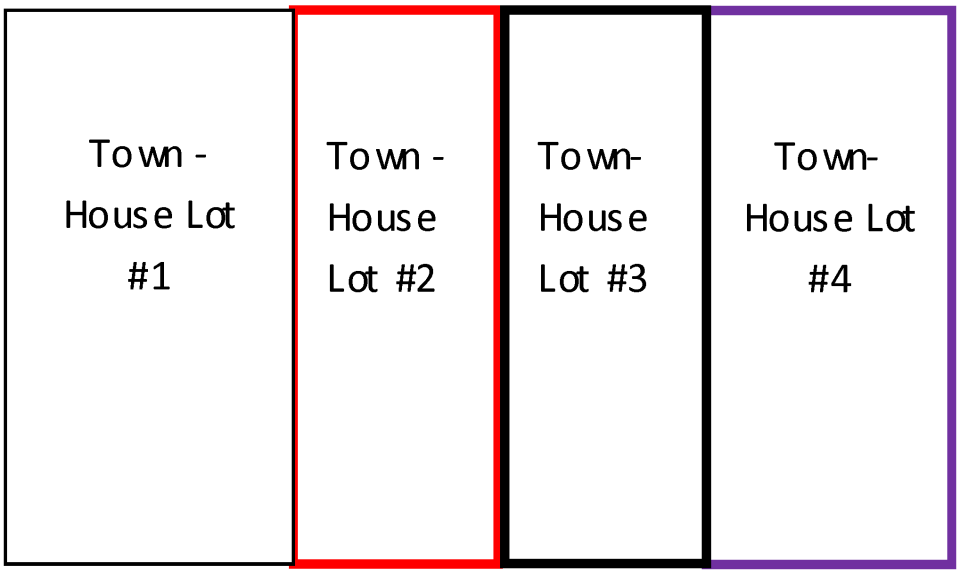
Townhouse development means a site for the design and development of townhouse group(s) that allow for individual ownership of a townhouse or townhouse unit.

Example #1: Townhouse Development with Common Areas



Example #2: Townhouse Development without Common Area.

The individual townhouse lots encompass all of the land in the townhouse development. Typically, there are easements recorded with the townhouse lots to ensure utility services and ingress/egress access is provided to each townhouse lot.



Townhouse group means a cluster or grouping of townhouse units containing no less than three and no more than ten townhouse dwelling units contiguous to one another. A townhouse group or groups are located in a townhouse development. The townhouse group consists of the attached townhouse units in one structure.

Townhouse lot means a recorded and deeded lot upon which a townhouse or townhouse unit is developed. Only one townhouse unit may be constructed on a townhouse lot.

Use, accessory. (See "accessory use.")

Use, principal. (See "principal use.")

Vehicle means a conveyance for persons or materials, as may be licensed by the state.

Wall means when used in the context of the fence, wall, retaining wall and hedge regulations a wall that is masonry with a stucco finish or has a finish of natural materials, such as brick or stone, or has a finish which is accepted for use in the industry.

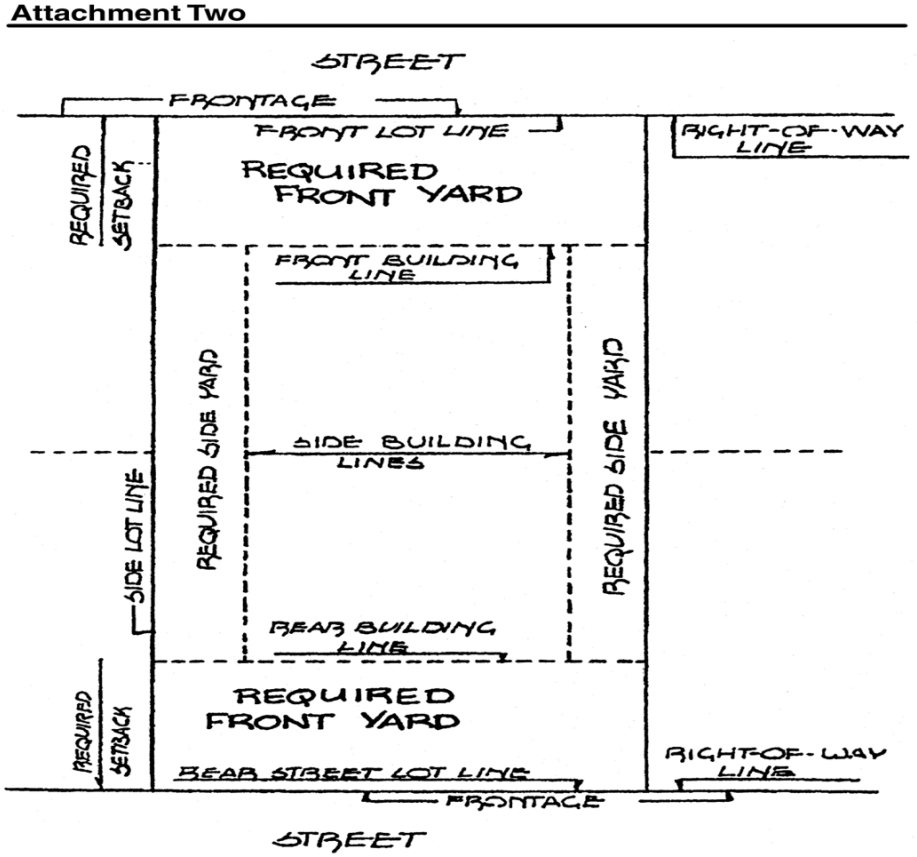
Yard means that open area of a lot or parcel which is provided as a setback and is unoccupied by any structure.

Yard, required front means a yard extending across the full width of the lot or parcel measured along the frontage from the building setback line. (See Attachment Two.)

Yard, required rear means a yard extending across the full side line width of the lot or parcel and measured between the rear line of the lot or parcel and the building setback line. (See Attachment Two).

Yard, required side means a yard extending along and parallel to the side line and building setback line and located between the required front, rear or waterfront yards. (See Attachment Two).

Attachment Two



Yard, waterfront means a yard or any portion thereof on lots abutting a waterfront and extending across the full width of the lot or any portion thereof or parcel and measured from the mean high water line, property line or seawall, whichever is closer and the building setback line.

Zoning means the division of land within a jurisdiction into separate districts within which uses are permitted, prohibited or permitted as a special exception. Brief definitions of the different types of uses and structures as relates to zoning are explained in the article VI. Zoning establishes site regulations, such as building heights, density, floor area ratio, setbacks, building coverage, impervious surface ratio, etc.

Zoning districts are established to promote compatible patterns of land use within the city limits. Zoning districts also establish site development regulations and performance standards appropriate to the purposes and the uses allowed in each district. Distinct zoning districts exist for residential, resort, commercial, recreation/open space, etc. uses.

SECTION 3. That Section 68-34, Pre-development review committee, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-34. Pre-development review committee.

The intent of this section is to create a pre-development review committee in order to expedite permitting and plan approvals by reviewing site and building plans prior to permit application submittal and may serve as the required pre-application meeting, required in this Code. The pre-development review committee is a staff administrative and technical committee which reviews policy and technical issues raised by development and redevelopment projects within the city. The pre-development review committee's review is not an approval or denial and will not serve as a recommendation for approval or denial of the application. Digital plans shall be submitted no later than close of business one week before the scheduled DRC meeting and those plans must include:

(1) Construction plans with scale showing site dimensions, structure location, setbacks, parking areas, interior floor plans with overall dimensions; and building elevations with heights, shown from base flood elevation inclusive of the Terrain Height Modification Adjustment Factor. Plans may be unsigned and unsealed; and

(2) Site plan or survey showing existing structures.

The city manager or designee may waive any of these submittal requirements.

SECTION 4. That Section 68-152, Adopted levels of service, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-152. Adopted levels of service.

The level-of-service (LOS) standards for roads, sanitary sewer, solid waste, drainage, potable water, coastal management, and parks and recreation facilities shall be those most recently adopted in the capital improvements element of the city comprehensive plan, ~~and~~ the Treasure Island Watershed Management Plan, and provisions of the Code~~Master Drainage Plan (stormwater management and flood control levels of service only)~~.

SECTION 5. That Section 68-159, Appeals, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-159. Appeals.

(a) A denial of a certificate of concurrency may be appealed by the applicant to the planning and zoning board. A notice of appeal specifying each and every ground in support of granting the certificate of concurrency shall be submitted by the applicant to the city manager or his/her designee, within 20 days from the date of the written denial of the certificate of concurrency. The city manager or his/her designee, shall schedule the appeal to be heard at a public meeting by the planning and zoning board, and shall transmit to the planning and zoning board all papers constituting the record upon which the action appealed from was taken.

The city manager or his/her designee, shall notify the applicant in writing of the date, time and location of the planning and zoning board meeting at which the appeal shall be heard. During the appeal proceeding, the applicant may appear in person or be represented by an agent or attorney. Applicants may be required to assume such reasonable costs as the city commission may determine by resolution, in setting fees to be charged for appeals.

(b) The applicant shall have the burden of proof to establish by the presentation of substantial competent evidence to the planning and zoning board:

(1) That there was an error in the technical determination made by the city manager to deny the certificate of concurrency; or

(2) That one or more of the conditions in section 68-156 are satisfied such that the necessary public facilities and services will be available concurrent with the impact of the development.

(c) Before recommending issuance of a certificate of concurrency, the planning and zoning board shall make specific findings that the certificate of concurrency satisfies subsections 68-156(b)(1) or (b)(2). The affirmative vote of six members of the planning and zoning board shall be necessary to recommend issuance of a certificate of concurrency. Action taken by the planning and zoning board to adopt, amend or rescind the administrative decision to deny the certificate of concurrency shall be documented in writing in the form of a resolution, signed by the chairman or vice-chairman, specifying the grounds therefore. The written decision of the planning and zoning board shall be submitted by the city clerk or his/her designee to the city commission for final action. The city clerk or his/her designee shall give written notice to the applicant of the date, time and location of the city commission meeting considering the certificate of concurrency. The city commission, upon reviewing the record and findings of the planning and zoning board, may adopt, amend or rescind the decision of the planning and zoning board. If deemed necessary by the city commission, in order to supplement the record, the city commission may receive additional testimony and may make inquiry of the

applicant and administrative staff. The decision of the city commission shall be reduced to writing in the form of a resolution and shall be final upon the date of execution of the resolution by the mayor.

EXHIBIT A
SUBMISSION REQUIREMENTS FOR APPLICATION AND METHODOLOGY FOR CALCULATING PROJECTED DEMAND FOR CERTIFICATES OF CONCURRENCY

(1) *Purpose.* The purpose of this Exhibit is to set forth the minimum submission requirements necessary for the city to review proposed developments for concurrency, as well as to provide a methodology for calculating the projected demand of a proposed project.

(2) *Submission requirements.* The applicant must supply the following information along with a reasonable fee, as may be amended from time to time by the city commission to defray the cost of the review:

a. Name of owner and/or agent/applicant.

b. Current address of owner and/or agent/applicant.

c. Phone number of owner and/or agent/applicant.

d. Legal description of site.

e. Proposed land use(s).

f. Acreage of site.

g. Square footage of proposed building(s).

h. Number of residential units (if applicable).

i. Number of employees, for commercial or industrial use (if applicable).

j. Any expected special service demands generated by the proposed development (such as solid/hazardous waste demands of a hospital).

k. Data as required by subsequent sections of this Exhibit.

(3) *Facility/service demand calculations.* The projected public facility/service demands of the proposed project described in an application for concurrency review shall be calculated using the conversion factors and formulae listed below, and the adopted levels of service (LOS) in the capital improvements element of the city comprehensive plan. Nonresidential uses are included in the adopted LOS. The calculations are listed by public facility and service type. Whenever the term "city" shall appear herein, it shall mean the city manager or his/her designee authorized to review calculations for the concurrency management system. The information necessary to enable the city to perform and/or verify the facility/service demand calculations in paragraphs (3)a. through (3)f. shall be provided by the applicant.

a. *Potable Water*

Adopted LOS = as adopted in the capital improvements element in the city comprehensive plan

Adopted LOS (gallons/person/day) × 1.84 persons/unit × number of units = demand (gallons/day)

b. *Sanitary Sewer*

Adopted LOS = as adopted in the capital improvements element in the city comprehensive plan

Adopted LOS (gallons/person/day) × 1.84 persons/unit × number of units = demand (gallons/day)

c. *Stormwater Management (Drainage)*

Adopted LOS = as adopted in the capital improvements element in the city comprehensive plan, and the Treasure Island ~~Master Drainage~~ Watershed Management Plan (flood control only), and the Code.

d. *Solid Waste*

Adopted LOS = as adopted in the capital improvements element in the city comprehensive plan adopted LOS (pounds/day/person) × 1.84 persons/unit × number of units = demand (pounds/day)

e. *Recreation*

Adopted open space LOS = as adopted in the capital improvements element in the city comprehensive plan

Project population = number of dwelling units × 1.84 persons/unit

Project population × adopted LOS (acres/person) = demand (total acres)

f. *Transportation*

Adopted LOS = as adopted in the capital improvements element in the city comprehensive plan

1. Determine the number of trips generated by the proposed project during the p.m. peak hour, using the most recent edition of the Institute of Traffic Engineers trip generation report, or other recognized source of data, with no adjustment for internal capture or passerby trips.
2. If the total number of daily trips is equal to or greater than 450 trips, a transportation study shall be done. The study shall be signed and/or sealed by a registered Professional Engineer.

    i. If no transportation study is required, the applicant is required to provide only the existing peak hour traffic volumes and level of service for the roadway link(s) to which the project driveways connect. This information shall include project traffic.

ii. The data shall be in conformance with Notes 2.(a) and 2.(b) of "Existing Conditions" below.

(4) *Performance of transportation study*

If a transportation study is required, it shall be obtained and submitted to the city by the applicant for a development permit at the applicant's sole expense. Should the city not have the expertise to review the transportation study or should it have justification to claim that the methodology and/or results of the initial transportation study are biased, untrue or otherwise inadequate, a third party consultant shall be hired by the city at the applicant's sole expense, to verify the initial transportation study. The city shall select the third party consultant from a list of consultants retained by the city for this purpose. The applicant shall reimburse the city for the total fee charged by the third party consultant to perform the transportation study, to include city administrative costs.

The transportation study shall be performed in accordance with the requirements set forth in paragraph (5) hereof. Projects which are required to undergo development of regional impact review pursuant to F.S. § 380.06 shall be exempt from the requirements of this transportation study and instead shall submit a copy of the application for development approval to the city as required by state statutes.

(5) *Requirements of transportation study*

a. *Pre-Application Meeting*

A pre-application meeting between the city and the applicant is required. The purpose of this meeting will be to review the methodology and procedure, establish the study area, and to determine the study period.

b. *Define Study Area*

The study area is defined as those roadways and intersections impacted by the project to an extent of one percent or more of peak-hour capacity at the level of service (LOS) adopted in the capital improvements element of the city comprehensive plan. In addition, other variables such as distance from site (e.g., five-mile radius for a DRI project) may also be used.

c. *Existing Conditions*

The following existing conditions shall be provided:

1. Existing daily and peak hour traffic volumes and level of service on all arterials and collectors within the study area.
2. Existing LOS at all impacted intersections.

Notes:

(a) The above required data shall be no older than the previous calendar year. Roadway volumes shall be adjusted to reflect annual

conditions using current FDOT seasonal adjustment factors for the county or other adjustment factors approved by the city.

(b) The above required level(s) of service for roadways shall be determined in accordance with current FDOT Generalized Level of Service volume tables and procedures presented in the most current Level of Service Standards and Guidelines Manual, or by use of other accepted traffic operations models subject to approval in the pre-application meeting.

(c) The above required intersection levels of service shall be determined using computer software based on the most recent edition of the Highway Capacity Manual, Special Report 209, Transport Research Board, National Research Council.

d. *Projection of Background Traffic*

Volume(s) shall be projected for all phases of the development as well as the year of the project completion. Volumes can be determined using one of the following procedures:

1. Multiplying existing volumes by an annual growth factor provided by the city. Traffic generated by any major project approved since the traffic counts were conducted shall be included as background traffic.
2. Multiply existing volumes by an annual growth factor developed by the applicant and approved by the city. This growth factor must be based on data collected on five roadways in the vicinity of the project over the last ten years. Traffic generated by any major project approved since the traffic counts were conducted shall be included as background traffic.
3. Projected roadway volumes resulting from a travel demand computer model of the area.

e. *Project Traffic Generation*

The following procedures and information shall be provided:

1. To determine project traffic generation, the current edition of ITE Trip Generation Report shall be used.
2. Identify all zoning districts, amount of development and trip rates.
3. Trip rates may be obtained from studies of comparable sites in the city or using data from previous traffic generation studies, and are subject to the approval of the city.
4. Any proposed reduction factors for capture of trips between land uses of a mixed use project or for passerby trips shall be provided by the applicant at the methodology meeting and approved by the city.

f. *Project Traffic Distribution*

1. If the project generates fewer than 100 peak hour trips, the distribution can be developed based on those of similar projects.
2. For any project, manual gravity model distribution can be developed. The travel-time method described in Chapter 3 of ITE Transportation and Land Development may be used.
3. For any project, computerized distribution models, such as FSUTMS or QRSII, can be developed.

g. *Alternative Demand Calculations*

If the applicant claims the standards provided in the demand calculations are not applicable to the proposed project, the applicant shall submit appropriate documentation supporting the proposed alternative demand calculation to the city. Any alternative calculation standard shall be subject to the approval of the city.

SECTION 6. That Section 68-195, Application of zoning district regulations, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby created to read as follows:

Sec. 68-195. - Application of zoning district regulations

Except as hereinafter provided:

(1) *Use.* No building, structure or land shall hereinafter be used or occupied, and no building or structure or part thereof shall hereafter be erected, constructed, reconstructed, moved or structurally altered unless in conformity with all of the regulations specified in the city's comprehensive plan and this chapter for the zoning district in which such structure is located.

(2) *Height.* No structure shall be erected, nor shall any existing structure be moved, reconditioned or structurally altered so as to exceed in height the limits established in this chapter, or amendments thereto, for the zoning district in which such structure is located, unless a variance is granted.

(3) *Percent of lot occupancy.* No structure shall be erected, nor shall any existing structure be moved, altered, enlarged or rebuilt, nor shall any open space surrounding any structure be encroached upon or reduced in any manner, except in conformity with the building site requirements and the area, parking space and yard regulations established by this chapter, or amendments thereto, for the zoning district in which such structure is located.

(4) *Residential density.* No structure shall be erected, occupied, or used so as to cause a greater residential density (dwelling units per acre) than is allowed, consistent with the city's comprehensive plan and under the terms of this chapter for the zoning district in which the structure is located.

(5) *Open space use limitation.* No yard or other open space provided about any structure for the purpose of complying with the zoning requirements of this chapter, or amendments thereto, shall be considered as providing a yard or open space for any other structure(s).

(6) *Required lot and occupancy.* Every structure hereafter erected shall be located on a lot or parcel as defined in this chapter.

(7) *Mixed uses.* When more than one use is located on a single lot or parcel, such mixed uses shall not exceed, in combination, the respective number of units per acre and floor area ratio permitted, when allocated in their respective proportion to the net area of the property.

(8) *Permits.* No building or structure shall be erected, constructed, reconstructed, moved or structurally altered unless permits are obtained in accordance with the Code.

SECTION 7. That Sections 68-224, Design Standards, and 68-225 Exemptions, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby deleted in their entirety.

SECTION 8. That Section 68-410.09, Setbacks, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-410.09. Setbacks.

To encourage pedestrian movement, there will be three zones:

(a) *"Utility zone"* is the area within the right-of-way which is used for sidewalks, street furnishings, street signage, traffic control devices, public sidewalk and light poles.



(b) *"Pedestrian friendly zone"* is a four-foot wide improved walkway constructed by the property owner on private property which is adjacent and parallel to the utility zone. Any awning or structure shall be built at a minimum of ten feet above natural or finished grade, whichever is higher. There may be a sign, lighting and/or fan which may be hung from the underside of structure. There must be eight-feet of vertical clearance. This shall be an unobstructed pedestrian walkway which extends the entire width of the property.

(c) *"Dining area/outside display zone"* is an area eight-foot wide adjacent and parallel to the front building façade and the pedestrian zone. Any awning or arcade structure shall be built a minimum of ten feet above natural or finished grade, whichever is higher. There may be a sign, lighting and/or fan which may be hung from the underside of the structure. There must be eight feet of vertical clearance. This zone extends the entire width of the lot. This area may be used for landscaping, dining, and outside display of merchandise sold within the store.



With the redevelopment of each site, the property owner shall build:

The arcade/awning(s) serve to protect pedestrians from the elements. (i.e. sun, rain, etc.)

Front setbacks:

107th Avenue

Gulf Boulevard (State Route 699), 104th , 106th and 108th Avenues.

Side setbacks: The side setbacks shall be zero in order to establish a continuous street wall for the downtown activity center.

Rear setbacks: The rear setback shall be zero when the rear alley or alley/cross-easement is 24 feet in width. Where there is not a 24 feet wide alley or cross-easement, the rear setback shall be varied to provide the necessary distance to accommodate the 24 feet, a two-way vehicular travel width at the rear of the property.



Example of one awning placed over the pedestrian and dining/outside display zone. The awning provides protection for the pedestrians but limits the development from having the ability to build gross floor area above the pedestrian and dining/outside display zone.



Example of multiple awnings placed over the pedestrian and dining/outside display zone. The awnings provide some protection for the pedestrians but limit the development from having the ability to build gross floor area above the pedestrian and dining and outside display zone.

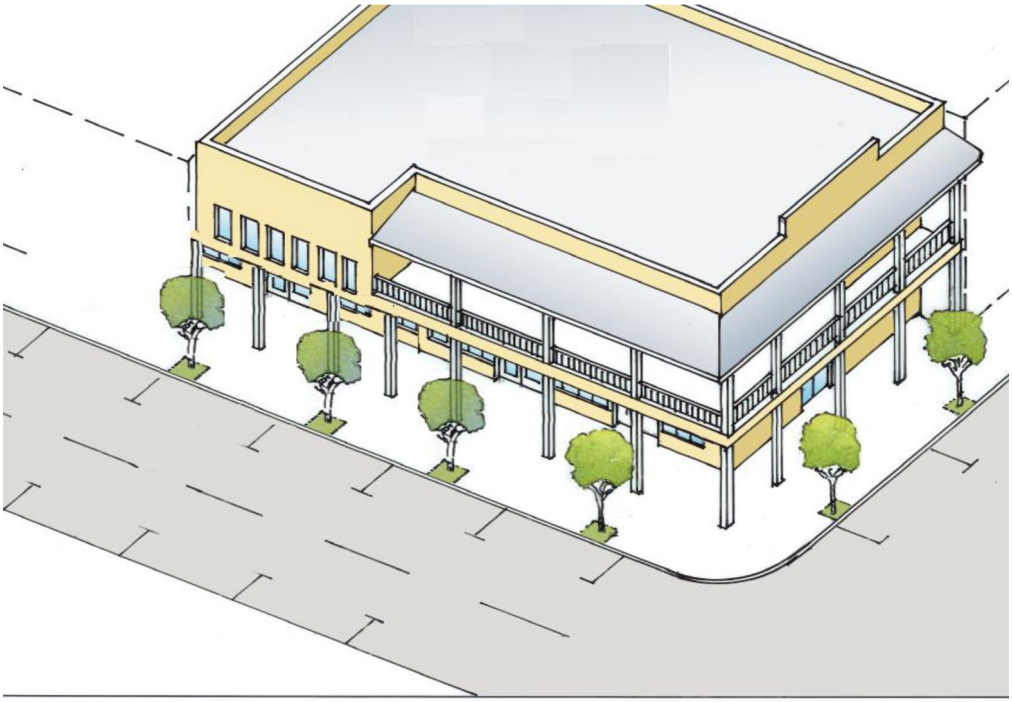


The 2nd floor is stepped back from the front façade of the ground floor.

The step back area on the 2nd floor may be used for a deck/balcony.

The center structure may be a live-work unit.

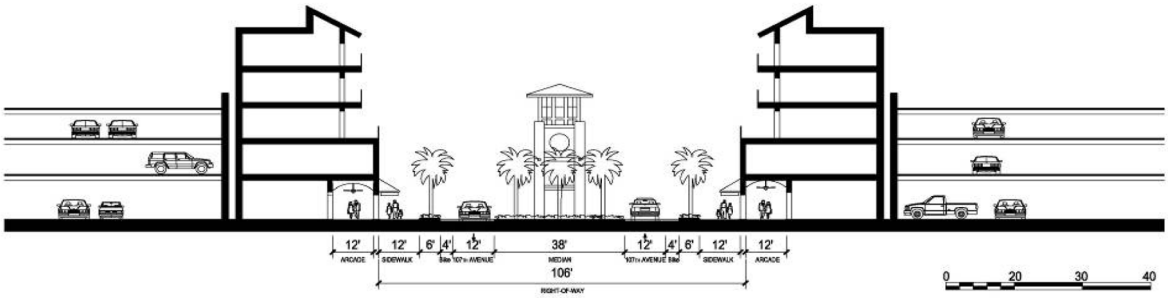
It is preferable to have the buildings create a continuous street-wall to ensure the arcade is continuous for pedestrians. Note in the photograph above that the front facades are established at different setbacks.



A commercial building with an arcade along both street frontages. The second floor area above the dining/display area is used as a balcony for the second floor uses.



Recessed entrance is emphasized with overhead awnings, planters and a change in pavement appearance.



107th Avenue Streetscape design looking eastbound from Gulf Boulevard (State Route 699) Note the second floor usable space extends above the pedestrian zone and the dining/display area.

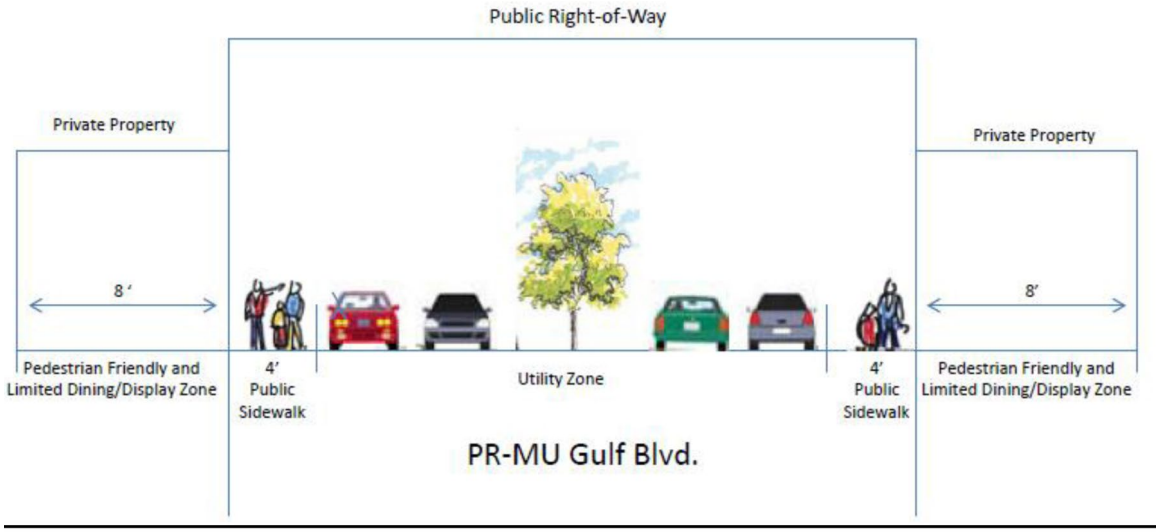
SECTION 9. That Section 68-410.38, Setbacks, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-410.38. Setbacks.

To encourage pedestrian movement, there will be two zones:

(1) *"Utility zone"* is the area within the Gulf Boulevard (State Route 699) right-of-way which is used for street furnishings, street signage, traffic control devices, public sidewalk and light poles.

(2) *"Pedestrian friendly and limited dining/display zone"* is an eight-feet wide improved walkway and a minimum of ten feet tall constructed by the property owner on private property which is adjacent and parallel to the utility zone limited to dining/display area and shall be reviewed during the site plan review process. Any awning or structure shall be built at a minimum of ten feet above natural or finished grade, whichever is higher. There may be a sign, lighting and/or fan which may be hung from the underside of structure. There must be eight-feet of vertical clearance. This zone shall extend the entire width of the property.



Front setback: At ground level at least 25 feet of the property owner's building façade will be built eight feet from Gulf Boulevard (State Route 699) right-of-way line and be aligned parallel to Gulf Boulevard (State Route 699) right-of-way.

Within the redevelopment of each site, the property owner will build an arcade eight feet deep to cover the pedestrian zone. The arcade or awning will be built ten feet in height directly adjacent to the front building facade. There may be a sign, lighting and/or fan which may be hung from the underside of the arcade structure. There must be a minimum of eight-feet of vertical clearance.

The second story and above of each building may have a zero setback.

On corner lots, the setback to the secondary street will be the same as the front setback.

The setback along Park Place and all other streets in the zoning district shall be a minimum of eight feet.

Side setback: The side setbacks shall be zero.

Rear setback: The rear setback along Boca Ciega Bay shall be 25 feet. Preferably, the parking for these buildings shall be on the side of the structure to preserve the bay view and offer the opportunity for outdoor dining in the rear waterfront yard.

The rear setback for non-waterfront lots in the zoning district shall be eight feet.

Two examples of an eight-foot wide "pedestrian friendly and limited dining/display zone"




HARRY'S
BAR

SECTION 10. That Section 68-410.68, Signage, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-410.68. Signage.

[(a)] *Purpose.* The purpose of these sign regulations is to enhance the pedestrian environment in a manner that enhances the public realm, creates an interesting and comfortable shopping and dining district, and maintains and improves the city's sense of place and property values.

[(b)] *Generally.* The sign regulations for the PR-MU Core District and PR-MU Gulf Boulevard District differ from the city-wide sign regulations found in the land development regulations in the following manner:

(1) *Wall signage or window signage—Permitted.*

a. The bottom of any sign projecting from a building structure shall be no less than ten feet above the higher of natural or finished grade at any point.

b. One attached wall sign shall be allowed on the first floor level and shall not exceed 75 square feet in area and 16 feet in height. In the event the parcel contains a multi-tenant development, each individual business use may have one attached sign.

c. One permanent wall or window sign shall be allowed on the second floor level and shall not exceed 50 square feet in area and 25 feet in height. In the event the parcel contains a multi-tenant development on the second floor level, each individual business use may have one attached sign.

d. The thickness of the projecting sign shall not exceed two inches, the height of the projecting sign shall not exceed 12 inches in height, and the width of the principal faces of any projecting sign shall not exceed 36 inches.

e. All signs erected within the district or now existing in the district shall comply with all other provisions of this section (including total sign area limits) and the Florida Building Code as to safety, except as is otherwise specifically accepted or modified.

(2) *Directory signs.* Directory signs may assist in directing patrons to individual shops of a multi-tenant building:

a. Up to two directory signs may be permitted on each multiuse/multi-tenant building.



Directory Sign

b. Directory signs should be limited to approximately 12 square feet in size, and lettering should not exceed a maximum of six inches in height.

c. Copy should be limited to the names of tenants and businesses, and suite or address number.

d. Directory signs may be affixed to the building façade or freestanding on private property within the dining or outside display zones.

(3) *Sign prohibition.*

a. No private signage is permitted on public property without prior approval of the city commission.

b. Any sign projecting into the airspace of the public right-of-way without prior approval of the city commission shall be removed with no right of compensation to the owner or tenant for such removal.

(4) *Signage in the public right-of-way.*

a. Should the city choose to install way-finding signs, those may be placed in the public right-of-way.

SECTION 11. That Section 68-410.69, Storm water, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby deleted in its entirety.

SECTION 12. That Section 68-431, Schedule of lot and bulk regulations, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-431. Schedule of lot and bulk regulations.

The restrictions and controls intended to regulate the property development characteristics of each zoning district are set forth in the following schedule of lot and bulk regulations supplemented by other sections of this chapter:

Zoning District/Land Use	Minimum Lot Width (Feet)	Minimum Lot Depth (Feet)	Minimum Lot Area (Square Feet)	Maximum Density Dwelling Units (Per Acre)	Maximum Building Height (Above BFE +2 feet of freeboard + Terrain Height Modification Adjustment Factor)	Floor Area Ratio (%)
RU-75/Residential Urban						
Dwelling, Residential						
Single-family	65	100	7,500	7.5	35	—
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—RU-75: 70%						
RM-15/Residential Medium						
Dwelling, Residential						
Single-family	40	90	4,500	9	35	—
Two-family	50	90	6,000	11	35	—
Multiple-family	70	90	9,000	15 (2 living levels max.)	35	—
Group Homes (licensed) (Excl. ACLF's)	70	90	9,000	15 (2 living levels max.)	35	—
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—RM-15: 70%						
RFM-30/Resort Facilities Medium						

Dwelling, Residential and Dwelling, Tourist						
Single-family	40	90	4,500	9	35	—
Two-family	50	90	6,000	11	35	—
Multiple-family	70	90	9,000	15 (5 living levels max.)	60	—
Hotel/Motel	70	90	9,000	30 (5 living levels max.)	60	65
Public Administration Facilities	90	90	10,000	—	45	65
Commercial Use	70	90	9,000	—	45	65
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—RFM-30:		Multifamily residential: 70% Nonresidential uses: 85%				
RFH-50/Resort Facilities High						
Dwelling, Residential and Dwelling, Tourist						
Single-family	40	90	4,500	9	35	—
Two-family	50	90	6,000	11	35	—
Multiple-family	70	90	9,000	15 (5 living levels max.)	60	—
Hotel/Motel	70	90	9,000	50 (5 living levels max.)	60	120
Public Administration Facilities	90	90	10,000	—	45	120
Commercial Use	70	90	9,000	—	45	120
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—RFH-50:		Multifamily residential: 70% Nonresidential uses: 95%				
CG/Commercial General						
Commercial Use						
Retail/Pers. Service	70	90	9,000	—	45	55

All Others	70	90	9,000	—	45	55
Hotel/Motel	70	90	9,000	22 (5 living levels max.)	60	55
Public Administration Facilities	90	90	10,000	—	45	55
Private Club	90	90	10,000	—	35	55
Auto Service Station	90	90	9,000	—	35	55
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—CG: Retail/Pers. Service: 90%, All others: 75%						
R/OS/Recreation/Open Space	—	—	—	—	—	25
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—R/O: 60%						
P/Preservation	—	—	—	—	—	10
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—P: 20%						
I/Institutional	90	90	10,000	—	40	55
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—I: 85%						
T/U/Transportation/Utility	90	90	10,000	—	40	55
Maximum lot coverage in all districts: 50%						
Impervious surface ratio—T/U: 85%						
PR-MU Core/Planned Redevelopment-Mixed Use-Core						
Residential dwellings (only permitted as part of a mixed use development project)				24 (5 living levels max.)	Maximum 60 ft.	
Tourist lodging units				22 (5 living levels max.)	Maximum 60 ft.	100
Commercial use					Minimum 26 ft. and shall be 2 stories	100

Impervious surface ratio—PR-MU-Core: 90%						
PR-MU Gulf Blvd/Planned Redevelopment-Mixed Use-Gulf Blvd.						
Residential dwellings (only permitted as part of a mixed use development project)				15 (5 living levels max.)	Maximum 60 ft.	
Tourist Lodging Units				22 (5 living levels max.)	Maximum 60 ft.	55
Commercial use					Minimum 26 ft. and shall be 2 stories	55
Impervious surface ratio—PR-MU Gulf Blvd.: 90%						

SECTION 13. That Section 68-458, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-458. Garden walls, retaining walls, fences and hedges.

(a) *Generally.* All ~~garden~~ walls, retaining walls and fences shall be located completely within the limits of the property lines. ~~and~~ Walls and fences shall have equal architectural treatment on both sides; i.e. the side facing abutting properties, streets, etc., shall be finished. See also section 68-462, Screening regulations. All fees pursuant to this section, shall be set by the city commission in appendix A.

In all cases the height is measured from the lowest of the two adjacent grades, based on natural or finished grade, whichever is lower as determined by a survey. Adjacent shall mean in the case of a retaining wall, the finished grade at the wall face.

Retaining wall height is limited to 6-inches above finished grade. In any case where a fence or wall is allowed to exceed the retaining wall height, the retaining wall plus the fence or wall as outlined below may be combined to meet the maximum height allowed.

Where a guard is required by the Florida Building Code, the combined height of the retaining wall and guard may exceed the maximum fence and wall height shown below. If the guard exceeds the allowable height shown below, then the guard shall meet the spacing requirements for an open fence.

All hedges shall be maintained at or below the maximum height shown and in compliance with the landscaping standards of this code. For this section's purpose, vegetation is considered a hedge when planted and maintained to create an open space less than two-feet wide by seven-feet high between each plant.

All walls, retaining walls, fences and hedges must meet the visibility triangle requirements of this code.

(b) ~~*Front*~~ *Street Side yard.*

1. ~~Decorative w~~ Walls and fences, ~~hedges~~ within the required ~~front~~ street side yard shall not exceed ~~36 inches~~ 3-foot solid or 4-foot open fence. ~~above finished grade.~~

2. Chain link type fences are specifically prohibited in ~~front~~ street side yards.

3. Hedges shall not exceed 4-feet in height.

4. Guards must meet the spacing requirements for an open fence.

(c) Secondary street side yards.

1. For purposes of this section only, on a lot with one or more street side yards, the secondary street side yards may have lesser setbacks. The primary yard will be the one matching the predominant front yard pattern on the block face of the streets.

2. On a secondary street side yard the wall, retaining wall or fence setback to be used will be half of the normally required street side yard setback shown in Sec. 68-541.

(~~c~~d) Side and nonwaterfront rear yards.

1. All ~~garden~~ walls, fences or hedges located within the required side or nonwaterfront rear yard shall not exceed seven feet in height ~~above finished grade~~.

2. Guards may be solid.

(~~d~~e) *Waterfront yards.*

1. All ~~garden~~ walls or fences~~, hedges~~ within a waterfront yard shall not exceed ~~30 inches~~ 3-foot solid or 4-foot open fence. ~~in height above the finished grade level; provided, however, that a chain link or an open fence with openings not less than 3⅝ inches between intermediate uprights which are not greater than 1½-inch cross sections may extend up to four feet in height. Decorative post caps may be installed on structural posts of the fence but shall not extend more than ten inches above the top rail.~~

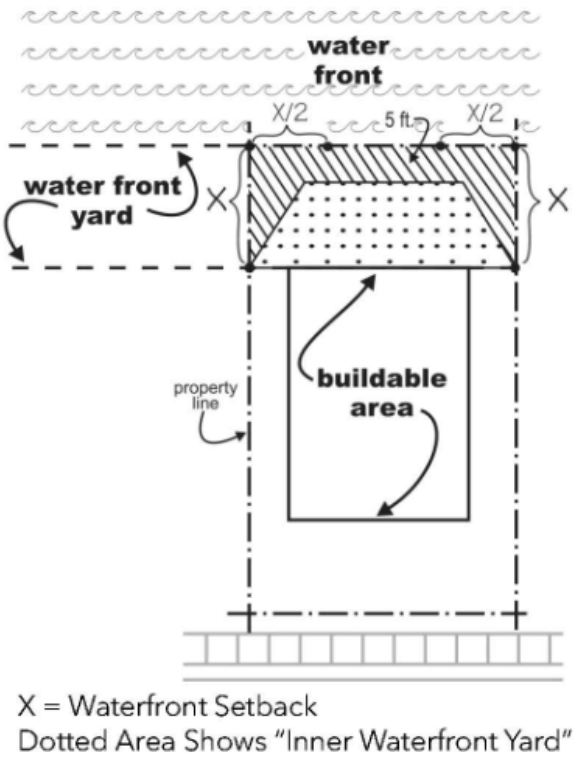
2. Retaining walls in the waterfront yard are limited to 30 inches in height.

3. Guards must meet the spacing requirements for an open fence.

4. Exception for fence height within the inner waterfront yard. Within the dotted area shown in Exhibit A below, fence heights are measured from lowest adjacent grade

at the fence location. The Inner waterfront yard is within the waterfront yard setback, and measured as follows: 1) 5 feet from the waterfront property line and 2) measuring from each side property line at the waterfront and extending across waterfront property line at least 1/2 the distance of the waterfront setback, then from that point extending to the point where the side property line meets the waterfront setback line, as shown in Exhibit A below.

Exhibit A – Waterfront Yard View Setback Line



(~~e~~f) All yards.

1. Decorative post caps may be installed on structural posts of the fence but shall not extend more than ten inches above the top rail.

2. Decorative gate may be installed, but shall not exceed more than 10 inches above the top rail of the abutting fence.

(~~f~~g) *Right-of-way.*

(1) No walls or fences are permitted to be constructed within or upon any dedicated right-of-way. ~~Railroad tie type P~~lanters and decorative rocks not exceeding two-feet ~~six inches~~ in height, and mailboxes as excluded from the definition of "structure" in section 68-2, shall be permitted upon the untraveled

(2) Vegetation and ornamental plantings are permitted upon the untraveled portion of the dedicated right-of-way beyond front yard setback areas so long as such vegetation or landscaping does not obstruct visibility and hedges do not exceed 30-inches in height.

(3) A mailbox, as allowed and permitted for by this section, shall not be deemed a structure, and when permitted, shall be allowed to be placed in the right-of-way. Such mailbox shall be supported by nothing stronger than a single four-inch by four-inch wooden support post, or shall be designed to be of breakaway material, in order not to be a hazard to vehicles or pedestrians. Such mailbox shall be a total height of no more than 60 inches, a total width of no more than 20 inches, and a total depth of no more than 32 inches. An applicant for any mailbox who desires such mailbox not to be considered a structure when such mailbox otherwise would be considered a structure, shall obtain a permit for such mailbox from the building department, and shall include with such application for permit a survey or sketch of the property, showing the location of such mailbox. Such mailbox shall be allowed only in locations where the mailbox would not obstruct visibility or traffic.

(f) *Temporary fences.* The city ~~manager~~ may ~~upon application being made~~ grant a permit for the placement of a temporary construction fence to be erected during the period of construction and maintained until the issuance of a certificate of occupancy. Such fence may be erected on the lot line of the property upon which construction is being maintained and which shall be reasonably designed to protect the public from intrusion upon the construction site. Under no circumstances shall a certificate of occupancy be issued until the temporary construction fence is removed.

SECTION 14. That Section 68-483, Swimming Pools, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-483. Swimming pools.

Swimming pools may be constructed within yard areas except the front yard, provided however, that no part of the pool structure may protrude more than 12 inches above the higher of natural or finished grade level and that the outside of the pool walls shall be at least ten feet from all lot lines except where a greater setback is required under the building code as set out in chapter 64. In determining the percentage of coverage of a lot by buildings, swimming pools which are not enclosed shall not be counted in such computation. In calculating required pervious space swimming pools shall be considered impervious.

SECTION 15. That Section 68-541, Setback Classification, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-541. Setback classifications.

No building shall be erected, converted, enlarged, reconstructed or structurally altered, unless it shall comply with the following setback classifications.

Terrain Modification Setback Adjustment Factor: A setback encroachment is allowed for stairs not more than 8-feet wide. This is calculated using the mathematical difference between the highest natural grade on a property and the resultant base floor when incorporating the requirements of the City of Treasure Island Terrain Modification Manual located in appendix B. This setback encroachment equals the Terrain Modification Height Adjustment Factor divided by 0.63.

(1) Class A:

Lots less than 3,001 square feet:

Street: 10 feet

Side: 5 feet

Rear: 5 feet

Lots 3,001 or more square feet:

Street: 10 feet

Side: 7½ feet

Rear: 10 feet

(2) Class B:

Street: 20 feet

Side: None

Rear: None

(3) Class C:

Street: 25 feet

Side: None

Rear: None

(4) Class D:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

Waterfront: 20 feet

(5) Class E:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

Waterfront: 25 feet

(6) Class F:

Street: 10 feet

Side: 5 feet

Rear: 5 feet

(7) Class G:

Street: 20 feet

Side: 10 feet

Rear: 25 feet

SUNSET BEACH

West Gulf Boulevard from 77th Avenue to north side of Lot 4, Sunset Beach Sub. Unit No. 4 (between 81st Avenue and 82nd Avenue):

West side: B

West Gulf Boulevard from south side of Lot 3, Sunset Beach Sub. Unit No. 4 (between 81st Avenue and 82nd Avenue) to north side of O'Connell's Replat (West Gulf Boulevard near south end of Harrell Avenue):

West side: A, except street side, 20 feet

West Gulf Boulevard from 77th Avenue to 87th Avenue:

East side: A, except street side, 20 feet

West Gulf Boulevard from south side of Lot 9, Block 12, Sawyer and Harrell's Addition to Boca Ciega Pass, (Weckesser Park) to Gulf Boulevard:

West side: C

West Gulf Boulevard from 87th Avenue to 90th Avenue:

East side:

Street: 20 feet

Side: None

West Gulf Boulevard from 90th Avenue to Gulf Boulevard:

East side:

Street: 25 feet

Side: None

Rear: Lot 3, Block 9 South side, 5 feet

Bay Plaza: A, except waterfront, 20 feet from seawall

Bayshore Drive from 77th Avenue to West Gulf Boulevard: A, except street, 20 feet; waterfront 20 feet from seawall

Blind Pass Drive: A, except waterfront, 20 feet from seawall

East Bay Drive: A, except waterfront, 20 feet from seawall

Harrell Avenue from 87th Avenue to 90th Avenue:

East side:

Street: 10 feet

Side: 7½ feet

West side:

Street: 10 feet

Side: None

Harrell Avenue from 90th Avenue to Gulf Boulevard:

East side:

Street: 15 feet

Side: 7½ feet

West side:

Street: 15 feet

Side: None

77th Avenue: A

78th Avenue: A

79th Avenue: A

79th Terrace: A

80th Avenue: A

80th Terrace: A

81st Avenue: A

82nd Avenue: A

83rd Avenue: A

84th Avenue: A

85th Avenue: A, except waterfront, 20 feet

86th Avenue: A

86th Terrace: A

87th Avenue: A

88th Avenue: A and Herron's Sub. No. 4, waterfront, 20 feet

89th Avenue: A and Herron's Sub. No. 4, waterfront, 20 feet

90th Avenue: A and Herron's Sub. No. 5, waterfront, 20 feet

91st Avenue: A and Herron's Sub. No. 2, waterfront, 20 feet

92nd Avenue: A and T. W. Harrell's Sub., waterfront, 20 feet

93rd Avenue: A and Reuer Sub., waterfront, 20 feet

94th Avenue: A and Addie B. Harrell Sub., waterfront, 20 feet

95th Avenue: A and Herron's Sub. No. 1, waterfront, 20 feet

BLIND PASS BRIDGE TO JOHN'S PASS BRIDGE

Gulf Boulevard—Blind Pass Bridge to West Gulf Boulevard or First Street East:

Street: 25 feet

Side: None

Rear: 10 feet

Gulf Boulevard from West Gulf Boulevard or First Street East to 99th Avenue:

West side: C

East side:

Street: 25 feet

Side: None

Waterfront: 20 feet from seawall

Gulf Boulevard from 99th Avenue to section line between 103rd and 104th Avenues:

West side:

Street: 25 feet

Side: 7½ feet

East side:

Street: 25 feet

Side: 5 feet

Waterfront: 20 feet from seawall

Gulf Boulevard from section line between 103rd and 104th Avenues to south line St. Petersburg's Public Beach:

West side:

Street: 20 feet

Side: 7½ feet

Gulf Boulevard from section line between 103rd and 104th Avenues to 106th Avenue (except Cargill Replat Lots 1 & 2 - aka 10359 Gulf Blvd.):

East side:

Street: 20 feet

Side: None

Gulf Boulevard, City of Treasure Island, Block 14, Lot 7 to 112th Avenue - aka 11165 Gulf Blvd.

East side:

Street: 20 feet

Side: 7½ feet

Rear: 25 feet

Gulf Boulevard from north side of St. Petersburg's Public Beach to 119th Avenue:

West side:

Street: 25 feet

Side: 7½ feet

Gulf Boulevard from 112th Avenue to 119th Avenue:

East side:

Street: 25 feet

Side: 7½ feet

Waterfront: 20 feet

Rear: 5 feet

Gulf Boulevard from 119th Avenue to 127th Avenue:

East and west sides:

Street: 25 feet

Side: 5 feet

Rear: 5 feet

Gulf Boulevard from 127th Avenue to John's Pass:

West side:

Street: 25 feet

Side: 5 feet

Rear: 5 feet

Waterfront: 25 feet

97th Avenue:

Street: 10 feet

Side: None

Rear: None

98th Avenue:

Street: 10 feet

Side: 7½ feet

Rear: 10 feet

99th Avenue:

Street: 10 feet

Lot south of east end of 99th-Waterfront: 20 feet

100th Avenue:

Street: 10 feet

101st Avenue:

Street: 10 feet

102nd Avenue:

Street: 10 feet

103rd Avenue:

Street: 10 feet

104th Avenue: (except Cargill Replat, Lots 3 & 4 - aka 111 104th Avenue)

Street: 15 feet, except Block 11

Street: 10 feet in Block 11

Side: 10 feet in Block 1, Lots 5 through 24

Side: None in Blocks 11, 2, 4, Block 1, Lots 1, 3 and 4

Waterfront: 25 feet

Rear: None in Block 11

107th Avenue (Treasure Island Causeway):

North side:

Street: 15 feet in Block 9

Side: 10 feet in Block 9

Waterfront: 25 feet in Block 9

108th Avenue:

North side: (except City of Treasure Island, Block 8, Lot 1 - aka 10801 Gulf Blvd.)

Street: 15 feet

Side: 10 feet

Waterfront: 25 feet

112th Avenue:

Street: 20 feet

116th Avenue from Gulf Boulevard to Capri Isle Bridge: D

117th Avenue from Gulf Boulevard to Capri Isle Bridge: D

118th Avenue:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

119th Avenue:

South side:

Street: 10 feet

Side: 7½ feet

Rear: 10 feet

North side: F

120th Avenue: F

121st Avenue: F

122nd Avenue: F

123rd Avenue: F

124th Avenue: F

125th Avenue: F

126th Avenue: F

127th Avenue:

Gulf Boulevard to Gulf: F

Gulf Boulevard to Bay:

South side: F

North side:

Street: 10 feet

Side: None

Rear: 5 feet

Harrell Avenue - Gulf Boulevard to north end:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

Waterfront: 20 feet

1st Street East from Gulf Boulevard to cul-de-sac:

West side:

Street: 15 feet

Side: None

East side:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

Waterfront: 20 feet

1st Street East from 106th Avenue to 108th Avenue:

Street: 15 feet

Side: None

1st Street East from 116th Avenue to 119th Avenue: D

1st Street West:

West side:

Street: 15 feet

Side: 5 feet

Rear: 15 feet

East side:

Street: 15 feet

Side: 5 feet

Rear: 5 feet

Kingfish Drive:

West side:

Street: 10 feet

Side: None

Rear: 5 feet

Waterfront: 25 feet

East side:

Street: 10 feet

Side: None

Rear: 5 feet

Waterfront: 25 feet

Lagoon Lane:

East side:

Street: 15 feet

Side: 5 feet

Waterfront: 20 feet

West side:

Street: 10 feet

Sunshine Lane:

Street: 10 feet

Side: 5 feet

Rear: 5 feet

Waterfront: 25 feet

PARADISE ISLAND

Paradise Boulevard:

West side (from Treasure Lane to Yacht Club Drive):

Street: 40 feet

Side: 10 feet

Rear: 20 feet

Waterfront: 30 feet

East side (from Treasure Island Causeway to corner of Plaza Seville Court):

Street: 40 feet

Treasure Lane:

Street: 40 feet

Side: 10 feet

Waterfront: 30 feet

Paradise Lane:

Street: 15 feet

Side: 10 feet

Waterfront: 30 feet

Treasure Island Causeway - east of Paradise Boulevard

South side:

Street: 40 feet

Side: 10 feet

Waterfront: 30 feet

Dolphin Drive:

Bay side:

Street: 40 feet

Side: 10 feet

Waterfront: 30 feet

Inside lots:

Street: 20 feet

Side: 10 feet

Rear: 15 feet

Tarpon Drive:

Bay side:

Street: 40 feet

Side: 10 feet

Waterfront: 30 feet

Blocks 2, 3, 4, and 5:

Street: 30 feet

Side: 10 feet

Rear: 20 feet

(All corner lots on Tarpon Drive and Yacht Club Drive shall have the same setbacks as their adjoining inside lots with the exception that the side facing such drives shall set back 25 feet from such drives.)

Yacht Club Drive:

Same as Tarpon Drive

2nd Street East (Paradise Island):

Street: 30 feet

Side: 10 feet

Rear: 20 feet

3rd Street East (Paradise Island):

Same as 2nd Street East

4th Street East (Paradise Island):

Same as 2nd Street East

Marina Terrace (Paradise Island, 3rd addition):

Lots 1—9 and 16—23:

Street: 30 feet

Side: 10 feet

Waterfront: 30 feet

Except Lots 10—15, inclusive:

Street: 15 feet

Side: 10 feet

Waterfront: 30 feet

South Yacht Club Drive (Paradise Island 4th addition):

Lots 1—6, 10—16, and 19—21:

Street: 20 feet

Side: 10 feet

Waterfront: 20 feet

Lots 7—9, 17 and 18:

Street: 15 feet

Side: 10 feet

Waterfront: 20 feet

Lots 22—33:

Street: 20 feet

Side: 10 feet

Rear: 20 feet

Island Drive (Paradise Island 5th Addition-east side of Paradise Boulevard from corner of Plaza Seville Court to corner of Marina Terrace):

Lots 1, 2, 3, 27 and 28:

Street: 25 feet

Side: 10 feet

Waterfront: 30 feet

Lots 6—13 and 18—24:

Street: 30 feet

Side: 10 feet

Waterfront: 30 feet

Lots 14—17:

Street: 25 feet

Side: 10 feet

Waterfront: 30 feet

On lots 14—17 only, if otherwise acceptable plan is submitted, rear corners (street side) may extend 7½ feet to side party line.

Lots 4, 5, 25, 26, 29, 30:

Street: 25 feet

Side: 10 feet

Waterfront: 10 feet

Paradise Island 6th Addition (east side of Paradise Boulevard from corner of Marina Terrace south to, and including Bellevue Drive):

Lots 1—9 and Lots 15—32:

Street: 30 feet

Side: 7½ feet

Waterfront: 25 feet

Lots 10—14:

Street: 20 feet

Side: 7½ feet

Waterfront: 25 feet

ISLE OF PALMS

110th Avenue (Isle of Palms):

South side:

Street: 20 feet

Side: 7½ feet

Waterfront: 20 feet

North side:

Street: 20 feet

Side: 7½ feet

Rear: 10 feet

112th Avenue A:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

112th Avenue B:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

115th Avenue (Isle of Palms) between 1st Street E. and 3rd Street E:

North side:

Street: 20 feet

Side: 7½ feet

Waterfront: 20 feet

South side:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

115th Avenue (Isle of Palms) from 3rd Street East to 9th Street East: G

1st Street East (Isle of Palms):

West side:

Street: 20 feet

Side: 7½ feet

Rear: 20 feet

East side:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

2nd Street East (Isle of Palms):

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

3rd Street East (Isle of Palms):

West side:

Street: 15 feet

Side: 7½ feet

Rear: 10 feet

East side:

Street: 20 feet

Side: 7½ feet

Waterfront: 20 feet

4th Street East (Isle of Palms): G

5th Street East (Isle of Palms): G

6th Street East (Isle of Palms): G

7th Street East (Isle of Palms): G

8th Street East (Isle of Palms): G

9th Street East (Isle of Palms): G

ISLE OF CAPRI

116 Avenue from Isle of Capri Bridge to 3rd Street East: E

125th Avenue (Isle of Capri): E

126th Avenue between 2nd Street East and 3rd Street East (Isle of Capri): E

Capri Boulevard: E

Capri Circle: E

Capri Circle South: E

Capri Circle North: E

Key Capri: E

2nd Street East (Isle of Capri): E

3rd Street East (Isle of Capri): E

4th Street East (Isle of Capri): E

5th Street East (Isle of Capri): E

6th Street East (Isle of Capri): E

7th Street East (Isle of Capri): E

116th Avenue (Isle of Capri): E

119th Avenue (Isle of Capri): E

123rd Avenue (Isle of Capri): E

126th Avenue (Isle of Capri): E

SECTION 16. That Section 68-561, Alternate setback system procedures, of Chapter 68, Zoning Regulations, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 68-561. Alternate setback system procedures.

(a) *Application and exceptions.*

(1) This article shall be the alternative methods of determining all building setback requirements. The section or subsection which results in the greatest amount of setback shall apply for any given property.

(2) The following categories are exempt from the application of the vertical ratio setback system set out in this article:

a. Single-family dwellings, including townhouses;

b. Duplex dwellings;

c. All totally commercial buildings located in the CG zoning districts.

d. All buildings located in the PR-MU Core zoning districts

e. All buildings located in the PR-MU Gulf Blvd. zoning district.

(b) *Vertical setback ratio.* All buildings, not otherwise excepted from this article, shall be set back from all property lines 30 percent of the height of building above the higher of natural or finished grade. Notwithstanding this provision, the minimum setback from the waterfront property line on properties bordering the Gulf of Mexico or the public beach shall be five feet.

(c) *Properties bordering on the Gulf of Mexico or public beach.* For properties bordering on the Gulf of Mexico or public beach, the following additional building setback and open space requirements shall be applicable:

(1) The minimum required setback shall be five feet from the waterfront property line. No construction shall be permitted seaward of the coastal construction control line except by permit from the state department of environmental protection and the city.

(2) Total open space between side lot lines shall be not less than 30 percent of the width of the lot but no less than the minimum designated in the setback chart, article VIII.

(3) Interior open space between buildings or towers shall equal a distance of 30 percent of the combined height above the higher of natural or finished ~~existing~~ grade of the two structures or towers.

SECTION 17. SEVERABILITY. It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the Ordinance shall not be affected.

SECTION 18. CONFLICT. All ordinance or portions of ordinances in conflict with or inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 19. CODIFICATION. Sections 2-16 of this Ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 20. EFFECTIVE DATE. This ordinance shall take effect upon the first day of the month immediately following the adoption of the ordinance.

FIRST READING and PUBLIC HEARING on the ____ day of _____, 2025.

SECOND READING and PUBLIC HEARING on the ____ day of _____, 2025.

PUBLISHED in the Tampa Bay Times on the ____ day of _____, 2025.

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ____ day of _____, 2025 by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk

ORDINANCE 2024-16

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 69 "MARINE STRUCTURES AND COMMERICAL FISHING" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES BY REVISING SECTION 69-31, "GENERAL REQUIREMENTS" TO ADDRESS COASTAL ARMORING REQUIREMENTS; REVISING SECTIONS 69-32, "DEFINITIONS" TO INCLUDE DEFINITIONS OF TERMS INTRODUCED TO CHAPTER 69 BY THIS ORDINANCE AND REVISING THE DEFINITION OF REPAIR FOR SEAWALLS; REVISING SECTION 69-51, "APPLICATION" TO REVISE REQUIREMENTS FOR APPLICATIONS FOR SEAWALL AND LIVING SHORELINES AND STRUCTURAL CALCULATION REQUIREMENTS; REVISING SECTION 69-53, "EXPIRATION" TO REMOVE LANGUAGE RELATING TO PERMITS FOR REPAIRS TO SEAWALLS; REVISING SECTION 69-72, "SEAWALLS" TO INCLUDE LANGUAGE RELATING TO SEAWALL CONSTRUCTION REQUIREMENTS; REVISING SECTION 69-74, "CONSTRUCTION MATERIALS" TO SIGNIFICANTLY REVISE REQUIREMENTS FOR VARIOUS TYPES OF SEAWALLS AND LIVING SHORELINES; REVISING 69-75, "MAINTENANCE AND REPAIR OF SEAWALLS" ADD REQUIREMENTS RELATED TO MAJOR SEAWALL REPAIRS; CREATING SECTION 69-77, "SUPPLEMENTAL CRITERIA" TO CREATE ADDITIONAL REQUIREMENTS RELATED TO SEAWALL CONSTRUCTION; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Chapter 69 of the City Code of Ordinances ("Code"), entitled "Marine Structures and Commercial Fishing," regulates the construction on or near waterways and commercial fishing activities within the City; and

WHEREAS, the City determined clarification was needed relating seawall repairs; and

WHEREAS, the City has adopted its Terrain Modification Manual desires to make the revisions contained in this Ordinance update the City's regulations; and

WHEREAS, the City is a barrier island community seeking to improve resilience to coastal flooding resulting from high-tide events and related impacts to sea level rise; and

WHEREAS, the City desires to revise its land development regulations to support both public and private protection of facilities and services; and

WHEREAS, the City has adopted the Terrain Modification Manual and the changes in this ordinance are necessary to continue the implementation of the Terrain Modification Manual; and

WHEREAS, the Local Planning Agency has held several public workshops and meetings to discuss these revisions and recommends approval of such revisions; and

WHEREAS, the City Commission has reviewed City's Comprehensive Plan and finds that revisions are consistent with the City's Comprehensive Plan; and

WHEREAS, the City Commission has reviewed the relevant current Code provisions of the City of Treasure Island and finds that certain modifications are necessary and desirable to revise various requirements in the Code; and

WHEREAS, the City Commission determines that the adoption of this Ordinance is in the interests of the public health, safety and welfare of the City and its residents.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND, FLORIDA DOES ORDAIN:

SECTION 1. The recitals set forth in the "Whereas" clauses above are ratified and confirmed as true and correct and are hereby adopted as legislative findings by the City Commission of the City of Treasure Island, Florida, for the adoption of this Ordinance.

SECTION 2. That section 69-31, General requirements, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-31 General requirements.

No seawall, groin, jetty, dock, or boat lift, or any part thereof, or any projection of any kind into the waterways of Boca Ciega Bay shall hereafter be built or constructed except in conformity with the provisions of this article, nor shall the same be razed, altered, moved, extended or built upon in any manner that would be in violation with the provisions of this article unless by a licensed marine or general contractor as required by state statutes. No project which is likely to negatively impact any existing marine sea grass bed shall be permitted. All projects which are likely to inhibit tidal circulation shall include mitigation measures to maintain tidal circulation and flushing. All dredge and fill activities in Boca Ciega Bay are restricted under, and subject to, the provisions of F.S. § 258.396 (Boca Ciega Bay Aquatic Preserve) and the permitting requirements and criteria of the Pinellas County Water and Navigation ~~Control Authority~~ Regulations (Chapter 58, Article XV. ~~Sections 166-356 through 358~~, Pinellas County Code).

~~Seawalls shall be prohibited on the Gulf of Mexico, and when existing seawalls on the Gulf of Mexico are damaged, they shall not be replaced.~~

Seawalls shall be prohibited on the Gulf of Mexico. Any repairs and replacements of existing seawalls on the Gulf of Mexico are prohibited. Coastal armoring on private property located on the Gulf of Mexico shall meet the following requirements:

(1) Coastal armoring waterward of the Coastal Construction Line is prohibited except as permitted by the Florida Department of Environmental Protection in meeting Florida Department of Environmental Protection coastal armoring regulations.

(2) Coastal armoring landward of the Coastal Construction Line will only be permitted landward of the waterfront setback.

SECTION 3. That section 69-32, Definitions, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-32 Definitions.

The following words, terms and phrases when used in this article shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Boat means any manmade item which floats and is designed to be propelled by oars, paddles, sail, motorized power or by any other means. Proof of title along with registration as a vessel in accordance with F.S. ch. 327 and 328 shall be required. Personal watercraft are exempted from consideration as a boat as defined herein.

Boat lift means a device for lifting boats out of the water for storage over the water. Boat lifts shall be inclusive of all four post lifts and service catwalks, but exclusive of davits where the davit base is not within the waters of the city.

Building means any structure used or intended for supporting or sheltering any use or occupancy.

Cap means the top of a seawall which is usually formed and poured with concrete and rebar.

Catwalk means a narrow dock with a minimum width of 24 inches and a maximum width of 36 inches.

Coastal Armoring means manmade structures designed to either prevent erosion of the upland property or protect eligible structures from the effects of coastal wave and current action. Examples include seawalls, revetments, geotextiles, dune scour protection or other similar structures.

Coastal Construction Control Line means the line established by the state pursuant to F.S. § 161.053, and recorded in the official records of the community, which defines that portion of the beach-dune system subject to severe fluctuations based on a 100-year storm surge, storm waves or other predictable weather conditions.

Commercial dock means any dock which will be used in connection with or owned by a hotel, motel, restaurant, social or fraternal club or organization or commercial enterprise of any type whatsoever.

Construction means completely new work, repairs, replacements and extensions to existing structures, except that it shall not include the repair or replacement of decking, stringers, railings, lower landings or the patching or reinforcing of existing pilings on a private, commercial or multi-use private dock for which a permit was originally issued.

Crest means the highest portion of a shoreline feature.

Dock means any structure, otherwise known as a pier, wharf or loading platform which is constructed on piling over open water or which is supported by floatation on the water.

*Dock, adjacent to an inside corner lot m*eans a dock located on a property immediately adjacent to an inside corner lot as depicted in Section 69-71 in Exhibit A – Lots 1 and 4. Generally adjacent to an inside corner lot docks occur in Isle of Capri.

Dock, inside corner lot means a dock located on a lot at the inside corner of a canal, where the property lines of the abutting properties at the waterfront, if extended into the water would meet at an angle of approximately 90 degrees as depicted in Section 69-71 in Exhibit A – Lot No. 3. Generally inside corner lot docks occur in Isle of Capri.

Dock, pie shaped corner lot means a dock located on a lot, where the property lines, if extended into the water would meet at a point within 200 feet of the waterfront property line as depicted in Section 69-71, Exhibit B1 and B2.

Floating boat lift means a boat lift that floats at all times in the water.

Fill means material including but not limited to soil, gravel, or crushed stone that is placed in an area to increase ground elevations (see *Structural Fill)* [Also defined in ASCE 24, Section 1.2.].

Finished grade means the finished elevation of a site after all fill, land balancing or site preparations have been completed. The finished elevation shall be inclusive of all grasses, landscaping, decks, slabs or other ground coverings.

Floating dock means any dock supported by flotation devices and influenced by the daily ebb and flow of the tide. Incidental movement or the capability of movement upon water shall not preclude a structure from classification as a floating dock. Registration of the structure as a vessel in accordance with F.S. ch. 327 shall not preclude a structure from classification as a floating dock. This definition shall not apply to a floating boat lift or floating vessel platform permitted by the Florida Department of Environmental Protection pursuant to chapter 403, Florida Statutes.

Floating vessel platform means a structure that floats at all times in the water and is used solely for the purpose of supporting a vessel so that the vessel is out of the water when not in use.

Living shorelines means a suite of shoreline protection techniques that incorporate habitat restoration alone or in combination with some type of built infrastructure to provide coastal protective services. Living shorelines use native vegetation alone or in conjunction with low sills, encompassing riprap, oyster bag arrays, in front of low elevation Seawalls or Bulkheads to stabilize the shoreline. The top of bank elevation for a living shoreline shall comply with the Terrain Modification Manual.

Mean high water means the average height of the high waters over a 19-year period; or for shorter periods of observations, the average height of the high waters after corrections are applied to eliminate known variations and to reduce the results to the equivalent of a mean 19-year value as defined in state statues.

Multi-use private dock means any dock owned in common or used jointly by the residents of an apartment house (more than two units), condominium or cooperative apartment.

Natural disaster means an act of God, including but not limited to hurricane, lightening, storm tornado, flood, severe wave action.

Natural grade means the grade unaffected by construction techniques such as fill, landscaping or berming.

*Nonstructural fill m*eans *fill* that does not serve to support or protect a structure. This may include but not be limited to fill used below parking slabs, decks and patios.

Permanent mooring means the docking of a boat for in excess of 72 hours in any seven-day period. Any extension to this time period may be granted for extenuating circumstances by approval of the city manager.

Personal watercraft means any inboard powered vessel less than 16 feet in length which is propelled by a jet drive. It is designed to carry from one to three persons, and be operated by a person sitting, standing, or kneeling on the vessel, rather than the conventional manner of sitting or standing inside the vessel. Its use is subject to all local, state and federal regulations governing the operation of powerboats of similar size.

Private dock dwelling, single-family means any dock which will be used by an individual owner, his family and friends, or means any single structure dock facility which provides dockage for a duplex type residential unit. This definition is not to include docks servicing zero lot line attached units. A private dock shall not be used for the production of income.

Repair, Dock means replacing ~~of~~ less than:

(1) 50 percent of the piling or support system of a dock or lift~~;~~

Repair, Seawall means any repair to a seawall that is not a *Seawall Major Repair.*

Repair, Seawall Major means a repair utilizing new seawall panels for more than fifty percent (50%) of the length of the property's shoreline.

Replacement, Dock means replacing more than:

(1) 50 percent or more of the pilings or support system of a dock or lift;

Seawall means a vertical or near-vertical, substantially impermeable structure typically made of concrete, vinyl or steel, that provides shoreline protection from waves while retaining upland soils. The elevation of the top of a seawall must comply with the Terrain Modification Manual to ensure protection of adjacent property, public right-of-way or other public infrastructure from flooding associated with currently realized and expected future sea level rise. This definition specifically excludes upland retaining walls. ~~means any hardening of the shore by the installation of a vertical wall where such structure is toed in within the waters of the city. This definition specifically excludes upland retaining walls located outside the waters of the city.~~

Seawall line means that line established by the city under authority of its charter.

Service catwalk means a structure on pilings over open water similar to a dock. The service catwalk shall be a minimum of two feet wide, a maximum of three feet wide and used solely in conjunction with a boat lift for servicing the boat and lift. This structure shall the considered part of the boat lift.

Structure means that which is built or constructed.

Structural fill means *fill* placed and compacted to a specified density to provide structural support or protection to a structure.[Also defined in ASCE 24, Section 1.2.].

Tiepoles shall include dolphins or mooring poles which are placed to provide anchorage, mooring or space for a ship or boat.

Work means any project, activity, alteration, construction, maintenance, repair, placement or replacement of or with respect to any dock, dock related structure, or floating dock.

SECTION 4. That section 69-33, Specifications and materials, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-33 Specifications and materials.

All docks, boat lifts, and attendant structures shall be constructed in accordance with and in conformity to the requirements of the Pinellas County Water and Navigation Regulations. All materials used in the construction of such structure shall likewise conform to the requirements of the building department for the city, Pinellas County and all state and federal agencies having jurisdiction. In addition thereto, no dock or wharf, pier or other structure contemplated by this article shall be enclosed or covered by any means, either permanent or temporary. No covered boathouse shall be built.

SECTION 5. That section 69-51, Application, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-51. Application.

(a) It shall be unlawful to construct, alter, repair, remove or demolish any seawall, dock, or boat lift within the city until application for a permit therefor has been filed, payment of prescribed fees has been made, and a permit for such work has been obtained pursuant to these regulations.

(1) Replacement of deck boards, only, shall not require the issuance of a permit from the city. All deck boards shall meet the minimum construction criteria as required by Pinellas County and any applicable manufacturer product specifications.

(b) Application for permits shall be submitted to the building department, together with detailed plans and specifications for such structure, together with such other information, plans and structural drawings as may be reasonably required by the building official. Any project which could change tidal circulation patterns shall provide hydrographic information sufficient to allow an accurate evaluation of the potential impacts.

(c) Such applications shall be sworn to by the applicant, reciting the full name, residence or business address of the owner, the address or location of the premises upon which the structure is to be erected, altered or removed, the cost of the proposed work, and the name and address of the contractor or other person or firm authorized by the owner to perform the contemplated work. All typical plans and specifications for seawalls, docks or boat lifts shall be approved by the building official.

(d) The overall permitting process will be subject to the current Florida Building Code and will be coordinated with the Pinellas County Water and Navigation Regulations.

(e) Applications for seawalls and living shorelines shall be submitted with detailed plans and specifications, be signed and sealed by a Professional Engineer registered in the State of Florida, and include all information required of the city's Terrain Modification Manual located in Appendix B.

(f) Structural calculations, signed and sealed by a Professional Engineer registered in the State of Florida, shall be submitted to document adherence to Section 69-77(f) when the cap elevation is less than 5.00 feet above mean sea level (North American Vertical Datum 1988).

(g) Structural calculations, signed and sealed by a Professional Engineer registered in the State of Florida, shall be submitted to document adherence to Section 69-77(g) when the construction of a new cap is proposed to meet seawall cap elevation requirements.

SECTION 6. That section 69-53, Expiration, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-53. - Expiration

Permits for construction shall expire six months from the date of the original approval or issuance. This limitation shall not apply when work thereunder has begun and has been carried on with reasonable diligence and continuity, but in no event for a period longer than one year from the original approval or issuance thereof. Should construction be delayed after the original start, the building official must be notified prior to proceeding with the work. ~~Permits for repairs to seawalls shall expire 60 days from the date of issuance subject to commencement and continuation of construction as set out in this section for new structures.~~

SECTION 7. That section 69-71, Docks, davits, boat lifts and boats, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby created to read as follows:

Sec. 69-71. Docks, davits, boat lifts and boats.

(a) *Maximum width, length and position of* docks*, davits, boat lifts and tiepoles.*

(1) Setbacks: All docks to be constructed on waterfront property of less than 60-foot frontage must be located so that no portion of the proposed dock is closer to either extended property line than one-third of the waterfront measurement. All docks to be constructed on waterfront property of more than 60-foot frontage must be located so that no portion of the proposed dock is less than 20 feet from either adjacent extended property line. An inside corner lot dock and a pie shaped corner lot dock may be located not closer than five feet from either adjacent extended property line. An adjacent to an inside corner lot dock is prohibited from being located on 50% of the lot closest to the inside corner lot, including tiepoles.

(2) Width: All docks, not to include boatlifts and davits, shall be constructed so that the width of same shall not exceed 25 percent of the width of the property involved at the waterfront. Residential docks and boat lifts shall be limited to a combined maximum width of 35 feet. Catwalks shall have a minimum width of 24 inches and a maximum width of 36 inches. If more than one multi-use private dock is allowed on a property, the docks may be combined so long as their combined width does not exceed the maximum allowable width of 25 percent of the width of the property.

Length: The length of all docks shall not exceed a maximum length of 50 feet, including tiepoles. An inside corner lot dock and an adjacent to an inside corner lot dock is limited to a length of half of the waterfront width. A pie shaped corner lot dock may not encroach into the extended property lines of abutting properties, or within 10-feet of the terminus of the extended property lines.

Catwalks: Catwalks shall have a minimum width of 24 inches and a maximum width of 36 inches.

(3) All davits and lifts shall comply with all setback and locational requirements of docks.

(4) All tiepoles shall be located within the extension of the side property lines, project not farther above the surface of the water than is reasonably necessary for

their use, and in no case higher than ten feet above mean high water. Tiepoles shall be located no more than 50 feet from the seawall.

(5) Docks shall be constructed so that no portion of the deck projects above the level of the seawall cap more than 12 inches.

(6) The location of docks, including the measurements, limitations and restricted area in which docks are not permitted, shall be in accordance with the requirements of Exhibit A, attached hereto and incorporated herein, which, along with its locations, measurements, limitations and restricted area is incorporated in this Code. The location of all pie shaped corner lot docks, including the measurements, limitations and restricted area in which docks are not permitted, shall be in accordance with the requirements of Exhibits B1 and B2, attached hereto and incorporated herein, which, along with its locations, measurements, limitations and restricted area is incorporated in this Code.

(7) All docks, davits, lifts or tiepoles, as permitted, shall be located so as not to interfere with the riparian rights of adjacent properties.

(8) All boats and personal watercrafts moored at a private dock shall be located so as not to interfere with the riparian rights of adjacent properties.

(b) *Disrepair or dilapidated* docks*.* If any dock is permitted to fall into disrepair so as to become a dangerous structure involving risks to the safety and well being of the community or individual members thereof, such structure must be either removed or replaced as to conform with the requirements of these regulations. Dock repairs may be made to nonconforming docks and lifts.

(c) *Repair of* docks *damaged by natural disaster.* Dock owners shall be permitted to repair or replace docks that have been damaged by a natural in the same configuration as the original permitted dock.

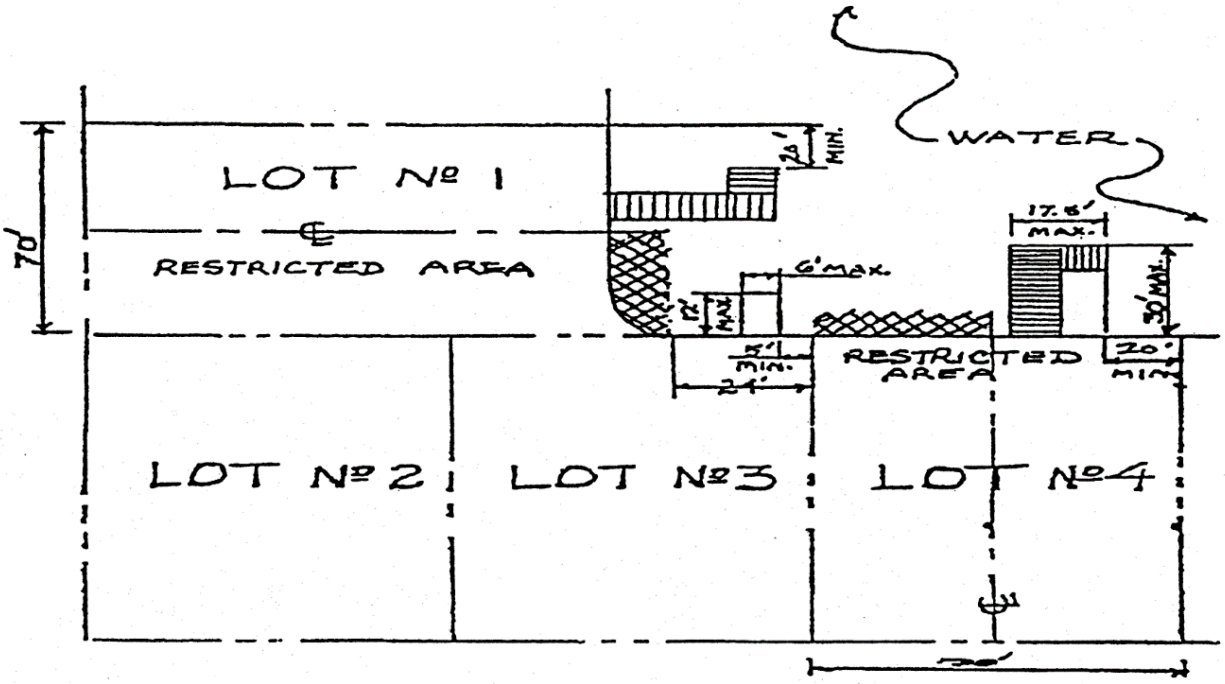
(d) *Number of* docks*.*

(1) *Private* docks*.* A private dock shall not be used to accommodate more than two boats for permanent mooring. No more than one dock structure shall be located at any dwelling, single-family, with the exception of service catwalks. Catwalks and service catwalks will be considered part of the private dock and shall be included in the width calculations for the total dock structure.

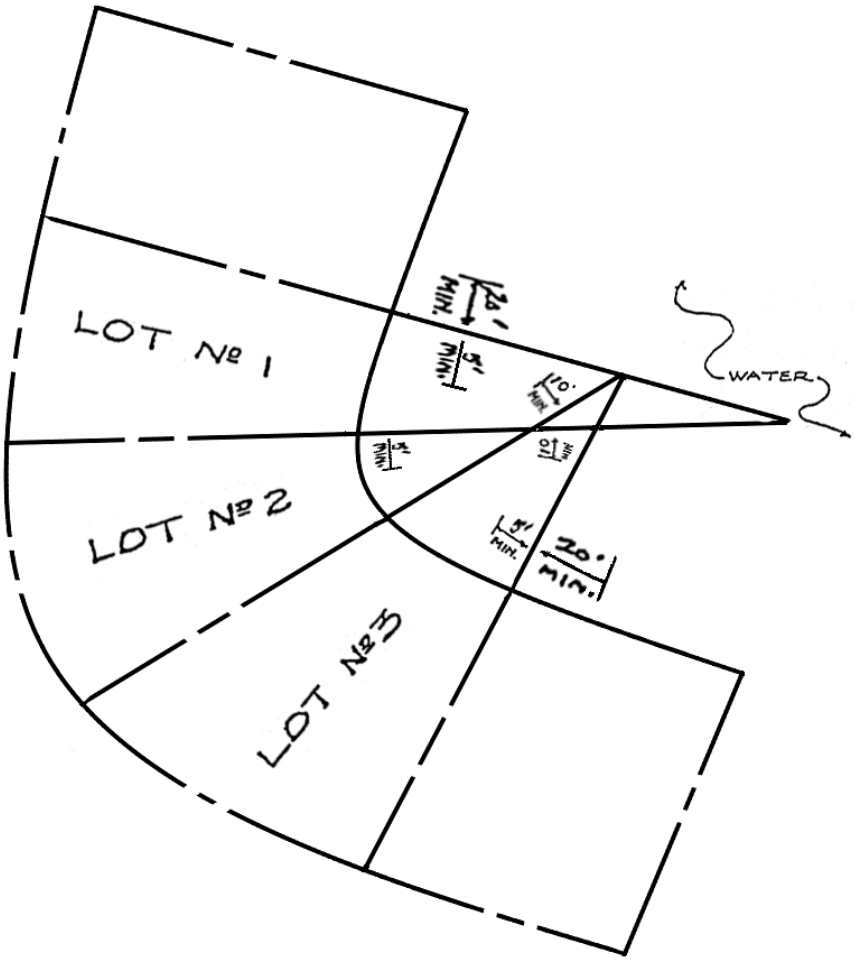
(2) *Multi-use private* docks*.* There shall be no more than one multi-use private dock for every two dwelling units.

(3) *Commercial* docks*.* The number of commercial docks shall be permitted by locational requirements.

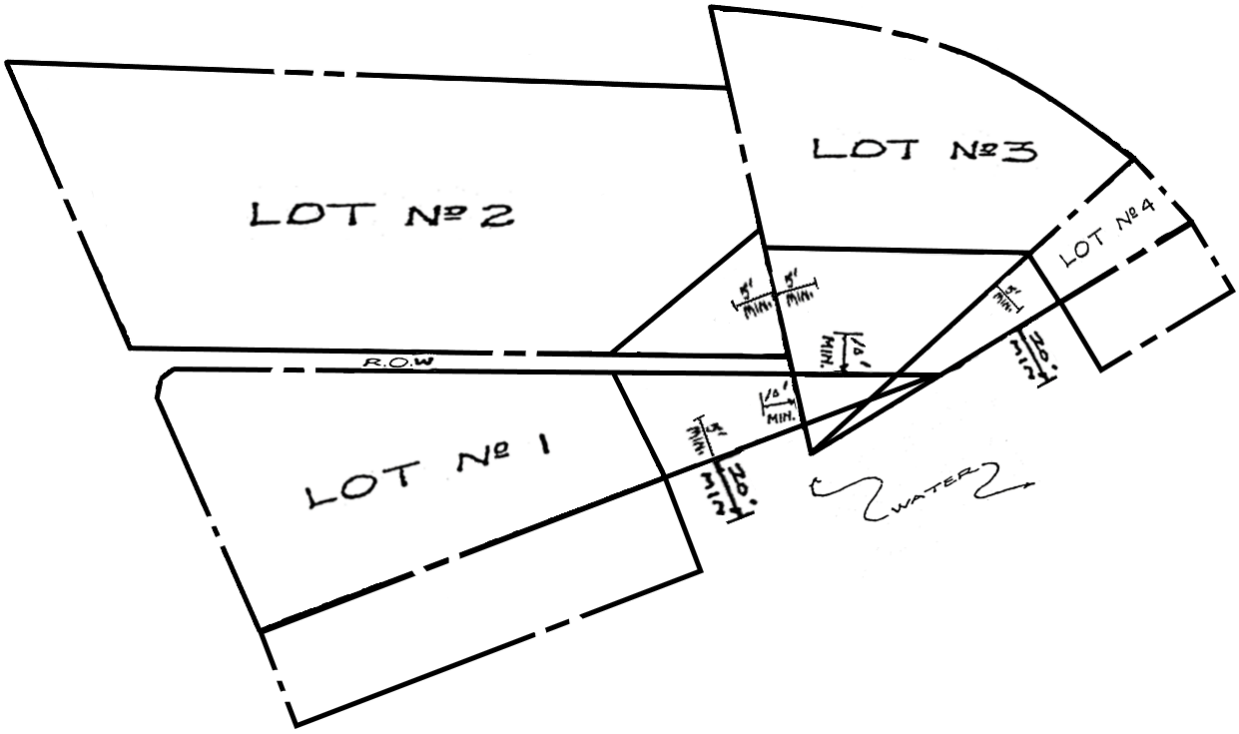
69-71. EXHIBIT A
MEASUREMENT AND
DOCK LOCATION REQUIREMENTS
INSIDE CORNER LOT DOCKS AND
ADJACENT TO AN INSIDE CORNER LOT DOCKS



69-71. EXHIBIT B1
MEASUREMENT AND
DOCK LOCATION REQUIREMENTS – PIE SHAPED CORNER LOT DOCKS



69-71. EXHIBIT B2
MEASUREMENT AND
DOCK LOCATION REQUIREMENTS – PIE SHAPED CORNER LOT DOCKS



SECTION 8. That section 69-72, Seawalls, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-72. Seawalls.

All seawalls within the city shall be erected on the property line closest to the water. This line shall be designated as the seawall line and applies to all recorded plats at the time of the passing of the ordinance from which this article was derived and all plats to be recorded in the future within the corporate limits.

A new seawall shall be constructed in accordance with this Chapter in conjunction with any new or substantially improved building or when a Seawall Major Repair is required, except as required in Section 69-77(g).

(a) A new seawall will not be required when the highest existing seawall elevation is less than 12” below the top of the seawall elevation required by the Terrain Modification Manual.

(b) When a new seawall is not required and calculations submitted with a previously issued permit demonstrate that the existing seawall panel and anchoring systems can accommodate a minimum cap elevation of 5.00 feet, construction of a new seawall cap at elevation 5.00 feet shall be required.

SECTION 9. That section 69-74, Construction materials, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-74. Seawall and Living Shoreline Construction ~~Materials~~.

~~(a) All seawalls constructed or altered, projected or prolonged on or adjacent to waters subject to tidal action shall be of concrete or aluminum construction in compliance with the following minimum standards:~~

Any deviation from the following regulations shall be submitted to the building department. The building department shall require the signature and seal of a professional engineer currently registered in the state upon the plans.

(a) Seawalls shall meet the following requirements:

All seawalls constructed, improved, modified, repaired, rehabilitated, or altered, projected or prolonged on or adjacent to waters subject to tidal action shall be in compliance with the following minimum standards. The penetration of each seawall panel or pile into firm ground shall be equal to 0.67 times the height of the wall above the ground line, or 0.4 times the total length of the panel or pile, whichever is greater:

At the seawall property line the finished grade running parallel to the seawall must be the same as the seawall cap. Finished grades may be sloped or terraced upward from the seawall property line to the rear waterfront setback line, but must include provision to avoid drainage to adjacent property that is lower than the grade line being installed.

Seawall panels shall meet the following requirements:

(1) *Concrete seawalls.*

a. Concrete seawalls panels shall be pre-cast off-site, cast on-site, or poured-in-place utilizing the tongue and groove, or other approved method of sheet pile-type construction.

b. The concrete shall have a minimum 28-day compressive strength of 4,000 psi and shall utilize Type II Portland cement with ultra-fine fly ash or slag cement.

c. The concrete sheet piling shall have a minimum thickness of 5⅝ inches and contain vertical steel reinforcement equivalent in cross-sectional area to one #4 deformed reinforcing bar spaced at eight inches on center. Each slab shall have two #4 steel hairpins extending into the cap at minimum of three inches.

d. All reinforcing steel shall be covered with a minimum of three-inches of concrete.

e. In no case shall the seawall panel be of shorter length than eight feet.

a. All seawalls, retaining walls and bulkheads may be of concrete, utilizing the tongue and groove, or other approved method of sheet pile-type construction, with poured-in-place concrete cap and tie-back anchors. The concrete shall have a minimum test strength of 3,500 psi at 28 days, and all reinforcing steel shall be covered with a minimum of two-inch concrete.

b. The concrete sheet piling shall have a minimum thickness of 5⅝ inches and contain vertical steel reinforcement equivalent in cross-sectional area to one #4 deformed reinforcing bar spaced at eight inches on center. Each slab shall have two #4 steel hairpins extending into the cap at minimum of three inches.

c. The poured-in-place concrete cap shall not be less than 9½ inches in thickness, nor less than 16 inches in width.

d. The cap shall contain continuous horizontal steel reinforcement equivalent in cross-sectional area to four #4 deformed reinforcing bars. All splices shall be lapped not less than 40 diameters; provided, however, that the steel shall not be continuous through expansion joints. Expansion joints shall normally be provided every 40 feet.

e. All tieback rods shall be steel and have a cross-sectional area equal to or greater than a #8 reinforcing bar. All such rods shall be spaced not more than ten feet on center and shall have two or more coats of an approved protection material or treated by a hot dipped galvanized process. The length of all tie rods shall be equal to or greater than two times the height of the seawall slab projecting above the ground line. In no case shall the tie rods be of shorter length than 12 feet.

f. All anchors shall be poured-in-place concrete, containing not less than nine cubic feet of concrete and have not less than 4.5 square feet of vertical surface perpendicular to the alignment of the tie rod. Each anchor shall contain vertical and horizontal steel reinforcement equivalent in cross-sectional area to two #4 deformed reinforcing bars per square foot, in each direction.

g. The penetration of each seawall slab into firm ground shall be equal to 0.67 times the height of the wall above the ground line or 0.4 times the total length of the slab, whichever is greater. In no case shall the seawall slab be of shorter length than eight feet.

h. The elevation for all seawalls, bulkheads and retaining walls fronting on the Bay shall be equal to, or greater than, elevation five feet U.S.C. & G.S. datum mean sea level.

(2) *Aluminum seawalls.*

a. Aluminum seawalls shall not have an exposed height of more than five feet.

b. Sheet piles shall be fabricated from aluminum alloy 6061-T6, conforming to ASTM designation B209 alloy 6061 for chemical composition, having a minimum thickness of 0.125 inches and minimum tensile strength of 35,500 PSI. Corrugations shall have nominal nine-inch pitch and nominal 2½-inch depth. ~~The penetration into firm ground shall be equal to 0.67 times the height of the wall above the ground line or 0.4 times the total length of the sheet, whichever is greater.~~

c. In no case shall the total sheet be less than six feet in length. Where sheet lengths required are more than 8.5 feet, and when soil conditions, surcharges and other factors exceed the scope of these standard specifications, a special design shall be submitted, signed and sealed by a state registered engineer.

~~c. Cap and joint extrusion shall be fabricated from aluminum alloy 6063-T6, conforming to ASTM designation B221 alloy 6063 for chemical composition, having a minimum thickness of 0.15 inches and a minimum tensile strength of 30,000 PSI. The cap shall be a minimum of six inches wide and 5.75 inches deep.~~

~~D. Anchor rods and deadman anchor plates shall be fabricated from aluminum alloy 6061-T6, conforming to ASTM designation B221 alloy 6061 for chemical composition, having a minimum thickness of anchor plates 0.10 inches and minimum tensile strength of 38,000 PSI. The anchor plates shall be not less than 1.5 by 2.5 feet, equipped with a three-inch by 2.25-inch backing channel 0.25 inches thick and 1.5 feet long. Anchor plates shall be placed with the top at least two feet below the elevation of the wall cap. The anchor rods shall be not less than 0.75 inches in diameter and equipped with a rod sleeve, nut and curved washer where it passes through the cap. Anchor rods shall be installed continuously along the wall at a maximum spacing of 6.5 feet. The normal length shall be 12 feet. One tieback system shall be constructed at each end of the wall and thereafter one tieback system shall be constructed six feet, six inches on centers throughout. All tie rods shall be pre-tensioned after placement of backfill around anchor plates, but before final backfill sheeting. Such pre-tensioning shall not tend to move the sheets or anchors. Tie rods shall be placed in the coping so that the anchor pull brings the coping in direct contact with a bayside corrugation of the wall sheeting.~~

De. ~~Surcharge from fill behind the wall shall be controlled by limiting the slope to a maximum of ten degrees, and prohibiting objects other than landscaping to be located closer than five feet from the wall cap.~~ The minimum standards described above assume sandy soil with an angle of repose of 30 degrees for soil against the wall. They also assume that the environment is not highly alkaline or acidic. If conditions require a design

in excess of limitations specified in this subsection, the wall shall be of concrete construction in accordance with subsection (a)(1) of this section.

Ef. If the aluminum material is brought in contact with mortar or concrete, a coating of clear methacrylate lacquer shall be applied to the aluminum contact surface to prevent corrosion. There shall be no dissimilar metals or metal systems bonded to the wall.

(3) *Vinyl Seawalls*

a. Vinyl sheet piles shall be manufactured from rigid, high impact, UV stabilized polyvinyl chloride (PVC) with a minimum tensile strength of 6,300 psi (ASTM D-638), a minimum Initial Elastic Modulus of 380,000 psi (ASTM D-638), and a maximum allowable bending stress of 3,200 psi. Vinyl sheet piles shall meet the requirements of US Army Corp of Engineers Engineer Manual (EM) No. 1110-2-2502.

b. The sheeting shall have an external layer of virgin material with a minimum ASTM D4216 cell classification of 1-42443-33.

c. Each section of sheet piling shall interlock an adjacent sheet when installed.

d. Vinyl profile to be selected by a Professional Engineer registered in the State of Florida.

(4) *Fiber Reinforced Polymer (FRP) Seawalls*

a. FRP composite sheet pile shall be pultruded.

b. The resin for the FRP sheet pile shall be either polyester or vinyl ester. Resin shall contain U.V. stabilizers to provide sufficient resistance to ultra violet light degradation.

c. The glass fiber shall be in the form of continuous roving, woven roving or stitched fabrics, and surface matting.

d. Each section of sheet piling shall interlock an adjacent sheet when installed.

e. FRP profile to be selected by a Professional Engineer registered in the State of Florida.

(b) Seawall caps shall meet the following requirements:

(1) The poured-in-place concrete cap shall not be less than 9½ inches in thickness, nor less than 16 inches in width.

(2) The concrete shall have a minimum 28-day compressive strength of 4,000 psi and shall utilize Type II Portland cement with ultra-fine fly ash or slag cement.

(3) The cap shall contain continuous horizontal steel reinforcement equivalent in cross-sectional area to four #4 deformed reinforcing bars. All splices

shall be lapped not less than 40 diameters; provided, however, that the steel shall not be continuous through expansion joints. Expansion joints shall normally be provided every 40 feet.

(4) Exclusion of a seawall cap will require City approval to ensure compatibility with adjacent properties and structural suitability.

(c) Seawall anchoring systems shall meet the following requirements:

(1) All tieback rods shall be steel and have a cross-sectional area equal to or greater than a #8 reinforcing bar. All such rods shall be spaced not more than ten feet on center and shall have two or more coats of an approved protection material or treated by a hot dipped galvanized process. The length of all tie rods shall be equal to or greater than two times the height of the seawall slab projecting above the ground line. In no case shall the tie rods be of shorter length than 12 feet.

(2) All anchors shall be poured-in-place concrete, containing not less than nine cubic feet of concrete and have not less than 4.5 square feet of vertical surface perpendicular to the alignment of the tie rod. Each anchor shall contain vertical and horizontal steel reinforcement equivalent in cross-sectional area to two #4 deformed reinforcing bars per square foot, in each direction.

(3) The use of properly-sized driven earth anchors will be permitted.

(d) All steel reinforcement shall conform to the requirements of ASTM A615, Grade 60.

(e) Preformed joint filler material for expansion joints shall meet the requirements of ASTM D1751 or ASTM D1752, Type I, Type II, or Type III.

(f) Perforated PVC pipe for weep hole drainage shall be schedule 40 with a 0.020" slot width and shall incorporate geotextile fabric. The perforated PVC pipe must extend a minimum of one-foot into the native soil beyond the back-face of the existing wall.

(g) When constructing new seawall in front of existing seawall, flowable fill shall be placed between the new and existing walls. Alternative non-compressible materials may be utilized subject to the review and approval of the City Engineer based upon the suitability of the proposed material and installation methods.

~~(b) The Standard Specifications of the Florida State Road Department for Road and Bridge Construction dated edition of 1986, or latest revision or superseded publication shall govern covering materials and workmanship where applicable.~~

~~(c) Any deviation from the preceding regulations shall be submitted to the building department. If deemed necessary, the building department may require the signature and seal of a civil engineer currently registered in the state upon the plans.~~

~~(d) No tiebacks shall be cut or removed in connection with the construction of other facilities, or otherwise, without making provisions in some manner to secure the stability of the installation; and such plans shall be approved by the building inspector prior to the cutting or removing of any tiebacks.~~

(h) Living shorelines shall meet the following requirements:

(1) Living shorelines shall meet County, Federal and State permitting guidelines.

(2) The living shoreline shall meet the elevation requirements outlined within the city's Terrain Modification Manual located in Appendix B.

(3) Seawalls or other coastal structures may supplement living shorelines.

(4) Living shorelines shall not encroach upon adjacent parcels and shall not impact the navigability of the adjacent water body.

SECTION 10. That section 69-75, Maintenance and repair of seawalls, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-75. Maintenance and repair of seawalls.

(a) It shall be unlawful for any person to have, keep, maintain or permit within the city any seawall which will impede the normal flow of boat traffic, will become hazardous to swimming or other water sports, or which constitutes a hazard to other seawalls or property.

(b) It shall be the duty of the city manager, or his designated representative, to periodically inspect the condition of all seawalls in the waters within the city; and should he find any of the seawalls or any portion thereof to be hazardous to public safety, boating or swimming, or to constitute a hazard to other seawalls or property, he shall give notice to the owner to repair or reconstruct the hazardous seawall. Hazardous to public safety may include but is not limited to seawall failures or erosion of an area directly behind or adjacent to the seawall which could cause imminent failure of a seawall or other structure. The notice shall specify the nature of the defect and in general terms the repairs or reconstruction required of the seawall. The notice shall further provide that the repairs or reconstruction of the seawall shall be accomplished within 30 days of the date of notice. The city manager, or his representative, is authorized to grant an extension of an additional 30 days upon the showing of a reasonable cause for the extension.

(c) If the property owner to whom notice was given pursuant to subsection (b) of this section has not commenced with the repairs or reconstruction of the seawall within the time allowed, the city manager shall so report to the city commission and request the adoption by the city commission of a resolution authorizing the work to be done and the cost assessed against the abutting property in accordance with the procedure for levying special assessments. At the public hearing of the confirmation of the ordering resolution, the property owner may present evidence that the repairs or reconstruction

specifications of the seawall are not necessary or that the condition of the seawall does not constitute a hazard.

(d) Seawall Major Repairs shall not be permitted, except as description in subsection (1) below. Should a modification, repair or rehabilitation be deemed major at the time of permit application, a new seawall or living shoreline must be constructed in accordance with this Chapter for the continuous length of the property.

(1) A new seawall or living shoreline will not be required when the highest existing seawall elevation is less than 12 inches below the top of structure elevation required by the Terrain Modification Manual.

SECTION 11. That section 69-77, Supplemental Criteria, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby created to read as follows:

Sec. 69-77. Supplemental criteria.

(a) The Standard Specifications of the Florida State Road Department for Road and Bridge Construction dated edition of 2023, or latest revision or superseded publication shall govern covering materials and workmanship where applicable.

(b) No tiebacks shall be cut or removed in connection with the construction of other facilities, or otherwise, without making provisions in some manner to secure the stability of the installation; and such plans shall be approved by the building inspector prior to the cutting or removing of any tiebacks.

(c) It shall be the Professional Engineer's responsibility to confirm that the material requirements set forth in 69-74 are suitable for the specific site. Nothing in this Chapter shall be construed to alleviate the need for location-specific structural evaluation.

(d) Seawall design shall account for surcharged loads where present.

(e) Seawall cap and living shoreline top of structure elevations shall comply with the requirements of the city's Terrain Modification Manual located in Appendix B.

(f) Seawall panel (or pile), cap and anchoring systems shall be designed using the resultant earthen load associated with a cap elevation of 5.00 feet above mean sea level (North American Vertical Datum 88) or the proposed cap elevation, whichever is greater. The design of the seawall shall account for the loads resulting from the additional weight of seawall cap material necessary to achieve a minimum cap elevation of 5.00 feet.

(g) Construction of a new seawall cap to meet the elevations specified in the Terrain Modification Manual shall be permitted. Detailed calculations must be submitted to demonstrate that the existing seawall panel and anchoring systems are capable of

supporting the increased earthen loads and additional weight from the new seawall cap.

(h) Seawall cap elevations shall support positive site runoff over the cap. The landward face of the seawall cap shall not be visible or exposed. Finished grades shall be equal to the seawall cap elevations along the landward face.

(i) The seawall cap elevation shall be set below the lowest floor, as defined within Chapter 66, or base floor, as defined within Appendix B, elevation. Seawall cap elevations shall be set below the top of pool walls or pool coping elevations. Decks, patios, pergolas, gazebos, garden structures, walkways, pathways, sheds, storage units and other similar yard features shall be reconstructed or reset to meet seawall cap elevation requirements.

(j) Replacement seawalls can be placed no further than one foot in front of the face of an existing seawall. Construction for living shorelines may exceed this limitation as approved by the city and other jurisdictional agencies including Pinellas County, the Southwest Florida Water Management District and Army Corps of Engineers.

SECTION 12. That section 69-92, Exemptions, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby amended to read as follows:

Sec. 69-92. Dock Exemptions.

Private docks for single- and two-family properties to be constructed within the jurisdiction of the city may be exempted from the side yard setback requirements provided that a signed, notarized statement of no objection from the property owner(s) to be encroached upon has been submitted to the city. In addition, the city shall require that the affected abutting property owner sign the dock plans being proposed. Such proposed dock structure shall be located as not to interfere with the riparian rights of the adjacent property(ies). Applicants unable to secure affected property owner's signature shall be subject to the provisions of section 69-91.

SECTION 13. SEVERABILITY. It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the Ordinance shall not be affected.

SECTION 14. CONFLICT. All ordinance or portions of ordinances in conflict with or inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 15. CODIFICATION. Sections 2-12 of this Ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 16. EFFECTIVE DATE. This ordinance shall take effect upon the first day of the month immediately following the adoption of the ordinance.

FIRST READING and PUBLIC HEARING on the ____ day of _____, 2025.

SECOND READING and PUBLIC HEARING on the ____ day of _____, 2025.

PUBLISHED in the Tampa Bay Times on the ____ day of _____, 2025.

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ____ day of _____, 2025 by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk

ORDINANCE 2024-17

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, AMENDING CHAPTER 75 "UTILITIES" TO RETITLE AS "POTABLE WATER, SANITARY SEWER AND RECLAIMED WATER" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES AND BY DELETING ARTICLE II DIVISION 4 (SECTIONS 75-121 THROUGH 75-123) FROM CHAPTER 75 AND MOVING TO CHAPTER 54; DELETING ARTICLE III, DRAINAGE (SECTIONS 75-151 THROUGH 75-209), FROM CHAPTER 75; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Chapter 75 of the City Code of Ordinances ("Code"), entitled "Utilities," regulates sanitary sewers and drainage within the City; and

WHEREAS, the City desires to handle drainage and stormwater in a separate newly created Chapter 76; and

WHEREAS, the City is a barrier island community seeking to improve resilience to coastal flooding resulting from high-tide events and related impacts to sea level rise; and

WHEREAS, the City desires to revise its land development regulations to support both public and private protection of facilities and services; and

WHEREAS, the City has adopted the Terrain Modification Manual and the changes in this ordinance are necessary to continue the implementation of the Terrain Modification Manual; and

WHEREAS, the Local Planning Agency has held several public workshops and meetings to discuss these revisions and recommends approval of such revisions; and

WHEREAS, this ordinance revises the land development regulations and therefore, pursuant to s. 166.041(4)(c), Fla. Stat., this ordinance is exempt from the business impact estimate requirement of s. 166.041(4)(a), Fla. Stat.; and

WHEREAS, the City Commission has reviewed City's Comprehensive Plan and finds that revisions are consistent with the City's Comprehensive Plan; and

WHEREAS, the City Commission has reviewed the relevant current Code provisions of the City of Treasure Island and finds that certain modifications are necessary and desirable to revise various requirements in the Code; and

WHEREAS, the City Commission determines that the adoption of this Ordinance is in the interests of the public health, safety and welfare of the City and its residents.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND, FLORIDA DOES ORDAIN:

SECTION 1. The recitals set forth in the "Whereas" clauses above are ratified and confirmed as true and correct and are hereby adopted as legislative findings by the City Commission of the City of Treasure Island, Florida, for the adoption of this Ordinance.

SECTION 2. That Division 4, Charges, Fees and Billing (sections 75-121 through 75-123), of the Code of Ordinances of the City of Treasure Island, Florida, is hereby deleted in its entirety from Chapter 75 and moved to Article II of Chapter 54.

SECTION 3. That Article III, Drainage (sections 75-151 through 75-209), of the Code of Ordinances of the City of Treasure Island, Florida, is hereby deleted in its entirety from Chapter 75.

SECTION 4. SEVERABILITY. It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the Ordinance shall not be affected.

SECTION 5. CONFLICT. All ordinance or portions of ordinances in conflict with or inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 6. CODIFICATION. Sections 2-3 of this Ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 7. EFFECTIVE DATE. This ordinance shall take effect upon the first day of the month immediately following the adoption of the ordinance.

FIRST READING and PUBLIC HEARING on the ____ day of _____, 2025.

SECOND READING and PUBLIC HEARING on the ____ day of _____, 2025.

PUBLISHED in the Tampa Bay Times on the ____ day of _____, 2025.

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ____ day of _____, 2025 by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk

ORDINANCE 2024-18

AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, CREATING CHAPTER 76 "STORMWATER" OF THE CITY OF TREASURE ISLAND CODE OF ORDINANCES BY CREATING ARTICLE I "IN GENERAL" TO PROVIDE DEFINITIONS TO BE USED THROUGHOUT THE CHAPTER,; CREATING ARTICLE II "STORMWATER MANAGEMENT"; MOVING ARTICLE II (SECTION 75-201 THROUGH 75-209) TO ARTICLE III, "STORMWATER AND SURFACE WATER POLLUTION" SECTIONS 76-71 THROUGH 76-79; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Chapter 75 of the City Code of Ordinances ("Code"), entitled "Utilities," regulates sanitary sewers and drainage within the City; and

WHEREAS, the City desires to handle drainage and stormwater in a separate newly created Chapter 76; and

WHEREAS, the City is a barrier island community seeking to improve resilience to coastal flooding resulting from high-tide events and related impacts to sea level rise; and

WHEREAS, the City desires to revise its land development regulations to support both public and private protection of facilities and services; and

WHEREAS, the City has adopted the Terrain Modification Manual and the changes in this ordinance are necessary to continue the implementation of the Terrain Modification Manual; and

WHEREAS, the City desire to align its regulations with the new statewide stormwater Rules; and

WHEREAS, the City recognizes that stormwater runoff direct impacts the water quality of Boca Ceiga Bay, which is a Outstanding Florida Water and an impaired waterbody; and

WHEREAS, the Local Planning Agency has held several public workshops and meetings to discuss these revisions and recommends approval of such revisions; and

WHEREAS, this ordinance revises the land development regulations and therefore, pursuant to s. 166.041(4)(c), Fla. Stat., this ordinance is exempt from the business impact estimate requirement of s. 166.041(4)(a), Fla. Stat.; and

WHEREAS, the City Commission has reviewed City's Comprehensive Plan and finds that revisions are consistent with the City's Comprehensive Plan; and

WHEREAS, the City Commission has reviewed the relevant current Code provisions of the City of Treasure Island and finds that certain modifications are necessary and desirable to revise various requirements in the Code; and

WHEREAS, the City Commission determines that the adoption of this Ordinance is in the interests of the public health, safety and welfare of the City and its residents.

NOW, THEREFORE, THE CITY OF TREASURE ISLAND, FLORIDA DOES ORDAIN:

SECTION 1. The recitals set forth in the "Whereas" clauses above are ratified and confirmed as true and correct and are hereby adopted as legislative findings by the City Commission of the City of Treasure Island, Florida, for the adoption of this Ordinance.

SECTION 2. That Article I, Chapter 76, Stormwater, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby created to read as follows:

Chapter 76 STORMWATER

ARTICLE I. IN GENERAL

Sec. 76-01. Definitions

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Authorized official means any employee or agent of the city authorized in writing by the city manager to administer or enforce the provisions of this article.

Basin, Closed means a drainage basin in which the runoff does not have a piped connection to a surface water.

Basin, Open means a drainage basin not meeting the definition of a closed basin.

Best management practices or *BMPs* as stated in FAC 62-621.300(4)(a) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

City Manager means the city manager or an authorized official.

Construction means any on-site activity which will result in soil disturbance, including but not limited to the building, assembling, expansion, modification or alteration of the existing property, the erection of buildings or other structures, or any part thereof, or land clearing.

Discharge means any direct or indirect introduction of any solid, liquid or gaseous matter into the separate storm sewer system or to any receiving waters of the city. This includes discharges from non-point sources, diffuse runoff, leaching and atmospheric deposition.

Finished grade. The finished elevation of a site after all fill, land balancing or site preparations have been completed. The finished elevation shall be inclusive of all grasses, landscaping, decks, patios, slabs or other ground coverings.

Impervious area means area of the impervious surface in a parcel of real property that prevents or severely restricts infiltration of stormwater into the earth.

Impervious surface means a surface that has been compacted or covered with a layer of material so that it is highly resistant to or prevents infiltration by stormwater. It includes surfaces such as compacted limerock, or clay, as well as conventionally surfaced streets, roofs, sidewalks, parking lots and any other similar surfaces, and all other artificial or non-natural surfaces.

Illicit discharge means any discharge to the separate storm sewer system that is not composed entirely of stormwater except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the separate storm sewer system) and discharges resulting from firefighting activities.

Municipal separate storm sewer system or *MS4 or separate storm sewer system* as stated in FAC 62-624.200(8) means a system of conveyances used for collecting, storing, and transporting stormwater regardless of ownership. Such conveyances may include but are not limited to roads with stormwater systems, storm drains, catch basins, curbs, gutters, ditches, constructed channels, or ponds.

Natural grade. The grade unaffected by construction techniques such as fill, landscaping or berming.

NPDES means the National Pollutant Discharge Elimination System; a program established by the Environmental Protection Agency under the Clean Water Act.

Parcel means a tract of land which may be described by metes and bounds or plat.

Record Drawings are detailed drawings, signed and sealed by a Florida-registered Professional Land Surveyor, documenting the post-construction condition and *finished grades*. These drawings shall reflect any differences from the original construction drawings in the same level of detail and units of dimension.

Redevelopment, as it pertains solely to this Chapter, means development on sites having existing commercial, industrial, institutional, roadway or residential land uses, where the existing land use has not been previously permitted under Part IV of Chapter 373 F.S., where all or part of the existing impervious surface is removed and replaced

with new impervious surface, which has the same or lesser area as the existing impervious surface, and the same or less intense land use, based on respective event mean concentration (EMC) values.

Site of industrial activity means any area or facility used for manufacturing, processing or raw materials storage, as defined under 40 CFR 122.26(b)(14) of regulations of the U.S. Environmental Protection Agency, as amended.

Stormwater means any stormwater runoff, and surface runoff and drainage.

Stormwater management or *stormwater system* has the same meaning within this article and means all facilities, manmade structures, all natural watercourses used for collecting, treating, storing and conducting stormwater to, through and from drainage areas to, and including points of final outlet. A stormwater management system may include but is not limited to any or all of the following: inlets, conduits, valves, creeks, lakes, channels, catch basins, ditches, streams, drainage wells, gulches, gullies, flumes, culverts, siphons, retention or detention basins, dams, flood walls, levies, spillways, pumping stations, and appurtenant features to all of the foregoing.

Stormwater treatment system means a component of a stormwater management system specifically designed, constructed, or implemented to reduce the discharge of pollutants in stormwater by incorporating methods to collect convey, store, absorb, treat, use, or harvest stormwater.

Secs. 76-02 – 76-30 Reserved

SECTION 3. That Article III, Chapter 76, Stormwater, of the Code of Ordinances of the City of Treasure Island, Florida, is hereby created to read as follows:

ARTICLE II. STORMWATER MANAGEMENT

Sec. 76-31. Intent and purpose.

It is the intent and purpose of this Article to implement the goals, objectives, and policies of the City of Treasure Island by providing standards for the design, construction, and operation of stormwater management systems in conformance with the best overall management practices for the control of runoff volume and treatment of stormwater runoff for the protection of surface water and groundwater quality, and for the control and prevention of erosion, sedimentation, and flooding. The city is a built-out urban environment and most future land activity will occur as redevelopment.

Sec. 76-32. Use of innovative approaches to stormwater management

Innovative approaches to stormwater management shall be encouraged. The city has authority to approve, in whole or in part, alternate methods of meeting the objectives of these technical guidelines and regulations. The applicant bears sole responsibility to demonstrate equivalency. The city also has the express authority to reject, in whole or in part, an innovative or alternate solution proposed by the applicant.

The following elements will be evaluated when evaluating innovative or alternate solutions:

(1) Site-specific effectiveness

(2) Required maintenance

(3) Performance limitations associated with a lack of, or reduced, maintenance

(4) Successful applications in similar communities

Sec. 76-33. Use of green infrastructure.

Green Infrastructure elements shall be utilized, independently or in conjunction with, conventional stormwater detention / retention facilities. The following represents a listing of green infrastructure elements recognized by the city:

(1) Bioswales and Treatment Swales

(2) Pervious Pavement Systems

(3) Green Roofs

(4) Rainwater & Stormwater Harvesting

(5) Biosorption Activated Media and Soil Amendments

(6) Rain Gardens

(7) Tree Wells and Tree Boxes

Sec. 76-34. Applicability.

The requirements of this Chapter shall apply to all locations within the city, inclusive of right-of-ways, easements, and other areas hydrologically or hydraulically connected to the city's watershed and/or jurisdictional boundaries. Any activity that would impact said watershed and/or jurisdictional areas shall be subject to the requirements of this Chapter. Activities governed by this Chapter include, but are not limited to, the following: development, redevelopment, the erection of any new building, substantial improvements to an existing building, an increase in impervious area coverage, land clearing, alteration, modification, contouring or grading, or changes in vegetation cover. Should an activity be subject to the requirements of this Chapter, the applicant shall be responsible for adherence for the entire project area and other contiguous areas owned or controlled by the applicant. However, grading must avoid stormwater runoff onto adjacent lots.

Sec. 76-35. Exemptions.

The following activities shall be exempt from the requirements of this Chapter. Regardless of whether a development or redevelopment activity is exempt from the requirements of this Chapter, no activity shall result in adverse impacts, the routing of stormwater runoff to adjacent properties or a change to surface drainage patterns to the detriment of neighboring properties. Furthermore, all roof drains and / or downspouts shall not be directly connected to stormwater conveyance systems if the opportunity to

route the discharge over a pervious surface is present. No activities shall be exempt from the requirements of Section 76-43, Erosion and Sediment Control.

(1) Development or redevelopment of less than 3,000 square feet of impervious and semi-impervious surface. The cumulative development / redevelopment area and activity will be tracked based upon the project or parcel. The applicant will only be allowed to apply this threshold to a cumulative construction area not exceeding 3,000 square feet. For purposes of this exemption, gravel or shell, uncompacted and not subject to vehicular use, is not included in determining the area of impervious and semi-impervious surface.

(2) Renovations to the exterior surfaces of existing buildings such as roofs or facades.

(3) Resurfacing or rehabilitation of existing paved roadways including the removal and reconstruction of curbing to meet minimum longitudinal slope requirements.

(4) Restriping or repaving an existing paved parking lot or vehicle use area provided that the work does not change pre-improvement elevations or drainage patterns.

(5) Grading of existing unpaved roadways provided there are no substantive changes to the road surface elevations.

(6) The paving of unpaved roads provided that the number of travel lanes do not increase.

(7) Safety improvements along roadways including, but not limited to, shoulder stabilization, vegetation clearing, the addition of turn lanes, roadway widening in a manner that does not create additional traffic lanes, and other work required to meet safety standards.

(8) Construction of impervious surfaces associated with public safety and recreational improvements that are not subject to vehicular use such as sidewalks, shared use paths and other pedestrian facilities. Pedestrian facilities shall be maximum of 8-feet in width and shared use paths shall have a maximum width of 14'. The paths are not intended for use by motorized vehicles powered by internal combustion engines or electric-powered roadway vehicles, except when needed for maintenance or emergency purposes.

(9) Regrading, contouring or altering pervious or semi-pervious recreational lands in a manner that does not change the land use.

(10) Any activity strictly related to maintenance and repair of existing facilities.

(11) Temporary housing and associated facilities installed after a natural disaster.

(12) Any project that is part of a larger common plan of development provide said that development has been approved by the city.

(13) The installation and/or repair of docks, piers and boat ramps.

(14) The repair or replacement of existing stormwater pipes and culverts provided that equivalent hydraulic capacity is provided and existing inverts are not changed.

(15) The repair or replacement of existing stormwater structures.

(16) Detached one-and two-family dwellings not part of a larger plan of development. The following will be required for this type of development:

a. Lot grading shall maintain historical flow paths and prevent the accumulation of water or excessive runoff onto adjacent parcels.

b. Perimeter swales shall be used so as to not exceed the pre-improvement rate of stormwater discharge.

1. Perimeter swales shall be sized based upon a 10-year return frequency. At a minimum, swales shall be 6" deep.

2. The owner shall ensure that there is not the accumulation of vegetation, debris or sediment to interfere with the free flow of water or function of the swale. The owner of such properties must clear and remove the obstruction(s) to permit the swale to function as intended.

c. A drainage plan, signed and sealed by a Florida-registered professional engineer, shall be provided with the permit application. Provide information required in Section 76-37.

(17) The replacement or installation of coastal erosion structures such as seawalls or retaining walls. The following will be required for this type of development:

a. A drainage plan, signed and sealed by a Florida-registered professional engineer, shall be provided with the permit application. Provide information required in Section 76-37.

(18) The demolition of an existing structure. A drainage plan, signed and sealed by a Florida-registered professional engineer, shall be provided with the permit application. Provide information required in Section 76-37.

Sec. 76-36. Documents incorporated by reference.

All stormwater system elements shall meet the performance criteria outlined within this Chapter. In addition, the following documents are incorporated herein as part of this Code by reference, for supplemental standards and methodologies for use in design, implementing, and maintaining stormwater system elements and erosion and sediment control systems. Specific modifications, revisions or additions identified within this Chapter shall govern:

(1) Chapter 62-330, Florida Administrative Code (F.A.C.), Environmental Resource Permitting

(2) Chapter 62-624, Florida Administrative Code (F.A.C.), Municipal Separate Storm Sewers

(3) The Florida Stormwater, Erosion and Sedimentation Control Inspector's Manual, State of Florida Department of Environmental Protection (Tier I and II)

(4) The Southwest Florida Water Management District ERP Applicant Handbook Volume II

(5) The Treasure Island Terrain Modification Manual located in appendix B

(6) The Treasure Island Watershed Management Plan

(7) The Pinellas County Stormwater Manual

(8) The Florida Department of Transportation Drainage Manual

Sec. 76-37. Required information.

The following information and supporting data must be included with the applicant's submission:

(1) Construction Plans

(2) Project Boundary

(3) A topographic survey of the area subject to development impact certified to the appropriate entity that meets the technical standards of Florida Administrative Code 5J-17.052 and is signed and sealed by a Florida Professional Surveyor mapper (PSM). The survey shall depict the natural grade of the project at one-foot contour intervals with the existing drainage patterns clearly established inclusive of any overland flow transfer points. Natural grade elevations shall be obtained at minimum interval of twenty-five feet

(4) Surveys for Gulf-front properties must include the 1968 Treasure Island Mean High Water Line or Erosion Control Line and the Coastal Construction Control line.

(5) Additional off-site topographical information may be needed to adequately identify drainage patterns, extending a minimum of one hundred feet beyond the applicant's parcel limits. These limits shall be extended as required to identify the full extent of offsite drainage patterns. For one- and two-family dwelling units that are not part of a common plan of development, off-site topographic survey may only extend twenty five feet beyond the applicant's project limits

(6) The drainage boundary of the area of any lands outside the project limits contributing runoff to the project for both pre-development and post-development;

(7) Existing and proposed (or post development) 100-year floodplains and/or floodways;

(8) A plan of the proposed land use and land cover, including acreage and percentage of impervious surfaces;

(9) Description of vegetative cover, locations of any wetlands, surface waters or other known conservation areas;

(10) Proposed construction phases;

(11) Rights-of-way, common areas, and/or platted and unplatted easement locations;

(12) Location of existing and proposed stormwater management facilities, including size, design capacity, 25-year and 100-year flood elevation, side slopes, depth of pond, retained and/or detained runoff volumes, and treatment volumes. Where open conveyances are proposed, provide suitable elevation information to confirm minimum slope thresholds have been met;

(13) Cross section views of stormwater management facilities including 25-year and 100-year flood elevation, side slopes, depth of pond, seasonal high water table (as encountered), seasonal high water table (adjusted value), tailwater conditions (as encountered), tailwater conditions (adjusted value);

(14) Proposed stormwater structure callouts including type, size, special coatings, access type and invert elevations.

(15) Proposed stormwater culvert callouts including material, length and percent slope.

(16) Detailed grading plan with sufficient spot elevations to determine the direction of flow and ensure that minimum slopes are achieved. Elevations identifying the finished grade elevation shall be provided not more than twenty-five feet apart;

(17) An erosion and sedimentation control plan which provides reasonable assurance that water quality standards will not be violated during the construction process. This plan shall include the location of all proposed erosion and sediment control measures as well as installation and maintenance details and / or instructions.

(18) A Stormwater Pollution Prevention Plan (SWPPP), meeting Florida Department of Environmental Protection requirements, when required per Section 403.0885, Florida Statutes;

(19) Cross section views of stormwater management facilities

(20) All other information required by the Treasure Island Terrain Modification Program Manual for regulated activities.

Calculations Package including

(21) Written narrative discussing the stormwater management plan, information on impacted drainage areas, previously permitted improvements, construction phasing, future improvements proposed at the subject location, proposed conveyance and water quality improvement approach

(22) Hydrologic and hydraulic modeling information including, but not limited to, input parameters, supporting calculations and figures for input parameters,

summary tables and output reports for the pre-improvement and post-improvement conditions

(23) Pipe sizing calculations utilizing the Florida Department of Transportation's (FDOT) Storm Drain Tabulation Form, or other city-approved format.

(24) Site-specific water quality calculations identifying pollutant loadings for the pre-improvement and post-improvement conditions, pollutant removal efficiencies of the selected stormwater management facility, and all other required information to confirm water quality requirements have been met

(25) Stormwater management facility recovery calculations

(26) Site-specific geotechnical investigation identifying conductivity rates, soil classification(s), seasonal high groundwater table elevation(s), confining layers and other relevant information.

(27) Operation and Maintenance Plan identifying required maintenance procedures and frequencies and the name, company, title, phone number and email address of the responsible entity for future operation and maintenance.

(28) All other information required by the Treasure Island Terrain Modification Manual for regulated activities

Other regulatory approvals including:

(29) Southwest Florida Water Management District Environmental Resource Permit. If a project is deemed exempt, an applicant shall provide formal documentation that a permit is not required for the proposed activities.

(30) Florida Department of Environmental Protection approvals through the State 404 program where surface water and/or wetland impacts are proposed.

(31) Florida Department of Transportation approvals for drainage connections.

(32) Construction General Permit for discharges associated with construction activities, when applicable.

Sec. 76-38. Design requirements, general.

No person shall engage in any development or redevelopment activity that causes changes in the predevelopment rate, volume, quality or direction of stormwater flow entering or leaving the development.

No person shall change the contours, topography, use or vegetation cover of land owned or controlled by such person unless stormwater runoff and sedimentation are controlled.

All stormwater management, conveyance and treatment systems constructed shall incorporate the anticipated impacts of sea level rise as outlined within the Treasure Island Treasure Island Terrain Modification Manual if deemed to be a regulated activity. The minimum tailwater elevation utilized in stormwater facility design shall be the published Mean High Water elevation.

The post-development location of stormwater discharged from a development shall occur at the same location stormwater is discharged in the pre-improvement condition, whether said runoff is discharged via a stormwater culvert, overland flow or other means. The city reserves the right to identify alternative connection locations in the event capacity limitations are present, perceived or anticipated. Offsite flows which entered a site in the pre-improvement condition may be routed to the existing discharge location if located within public-right-of-way using stormwater culvert(s), swales, or other means acceptable to the city.

A positive stormwater outfall shall be provided. Infiltration-based systems shall not be considered a positive outfall. The stormwater outfall shall be a piped conveyance if an existing stormwater structure and / or stormwater culvert is immediately present to the site. Discharge of sheet flow will only be permitted where said system(s) are not present within fifty-feet of the applicant's parcel. No discharge will be permitted on the beach. When discharge via sheet flow is permitted, a sidewalk, multi-use trail or other pedestrian facility shall not be present between the point of discharge and the end point of stormwater collection.

All facilities associated with stormwater collection, transmission, management and treatment shall be located in a manner that is conducive to future maintenance, repair and operational procedures. Where equipment access is required, a 10' maintenance path shall be present from the roadway to the subject stormwater element. Where only human / handheld equipment access is required (for example, mowing operations), a 4' minimum maintenance path shall be present from the roadway to the subject stormwater element.

This chapter specifically allows for the construction of off-site and/or regional facilities to address the water quality and quantity requirements addressed herein. It shall be the applicant's responsibility to document confirmation of the following within the Construction Plans and/or Calculation Package :

(1) That the project resides within the proposed service boundary of the regional facility.

(2) That the applicant's post-improvement pollutant loads do not exceed the post-development pollutant loads anticipated at the time of regional facility construction. Any excess pollutant loadings shall be addressed onsite in accordance with the requirements of this Chapter.

(3) That the applicant's post-improvement stormwater discharge rate does not exceed the post-development discharge rate anticipated at the time of regional facility construction. This applies for both the conveyance system upstream of the regional facility and the regional facility itself. Any excess discharge shall be addressed onsite in accordance with the requirements of this Chapter.

(4) That the regional facility has been operated and maintained in accordance with the operation and maintenance requirements established at the time of initial facility construction.

Sec. 76-39. Design requirements, water quantity.

For stormwater systems located within an open basin, the maximum allowable discharge shall be as follows: the historic discharge (as defined in the Southwest Florida Water Management District ERP handbook, volume 2, page 15), which is the peak rate at which runoff leaves a parcel of land under existing site conditions, for the 10-Year / 24-Hour and 25-Year / 24-Hour storm events, or the allowable discharge per the last legally approved site plan at the time of application for the 10-Year / 24-Hour and the 25-Year / 24-Hour storm events.

For stormwater systems located within a closed basin, the maximum allowable discharge shall be as follows: the required retention volume shall be the post-development runoff volume less the pre-development runoff volume computed using the Southwest Florida Water Management District's 24-Hour/100-Year rainfall map and the Natural Resources Conservation Service type II Florida Modified 24-Hour rainfall distribution with an antecedent moisture condition II. The total post development volume leaving the site shall be no more than the total pre-development volume leaving the site for the design 100-Year storm. The rate of runoff leaving the site shall not cause adverse off-site impacts.

In no case shall the proposed surface water management system be required to account for storm events less frequent than the 25-Year event in an open basin or the 100-Year event in a closed basin.

In no case shall the discharge rates of a stormwater management system exceed the capacity of the outfall conveyance facility.

As it pertains to water quality, the volume encumbered by the water quality volume 36-Hours after the storm shall not be considered available for attenuation.

Sec. 76-40. Design requirements, water quality.

The stormwater treatment system shall provide a level of sufficient treatment to accomplish:

(1) A 95-percent reduction of average annual loading of total nitrogen and total phosphorus from the proposed project and

(2) A reduction such that the post-development condition average annual loading of nutrients does not exceed the predevelopment condition nutrient loading; and

(3) A post development condition average annual loading, of those pollutants not meeting water quality standards, that is less than that of the predevelopment condition.

(4) For Redevelopment, the stormwater treatment system shall accomplish a 90-percent reduction of average annual loading of total phosphorus and a 60-percent reduction of average annual loading of total nitrogen from the project area and demonstrate a post-development average annual loading that is less than that of the predevelopment condition.

(5) Water quality volumes shall be recovered within the timelines outlined within the documents incorporated by reference in Section 76-36.

Sec. 76-41. Design requirements, stormwater conveyances.

Stormwater conveyances shall be designed in accordance with the following performance standards:

(1) Piped conveyances servicing locations interior to a site, inclusive of parking areas, shall be designed for the 10-Year return period.

(2) Piped conveyances servicing public roadways and rights-of-way shall be sized in accordance with the requirements set forth within the Treasure Island Watershed Management Plan.

(3) Physical pipe slopes shall produce a minimum full flow velocity of 2.5 feet-per-second. Where outfall connection elevation(s) and conventional minimum cover thresholds render this slope impractical, physical pipe slopes shall be maximized to the greatest degree possible.

(4) For piped conveyances, hydraulic sizing calculations shall begin at the elevation associated with the crown of the pipe at the outfall connection, or tailwater condition, whichever is higher.

(5) Open conveyances shall be provided with permanent erosion protection. All slopes shall be stabilized to prevent erosion.

Sec. 76-42. Design requirements, stormwater collection.

Stormwater collection structures shall be designed in accordance with the following performance standards:

(1) Inlet type, location and spacing shall be as required by the Florida Department of Transportation Drainage Manual.

Sec. 76-43. Construction requirements, erosion and sediment control.

Erosion and sediment control Best Management Practices (BMPs) shall be installed and maintained in a manner which ensures that any discharges from the site do not exceed State turbidity standards (29 NTU above background or 0 NTU above background in an Outstanding Florida Water (OFW)).

A Stormwater Pollution Prevention Plan (SWPPP) and/or erosion and sediment control plan shall be contained within the approved plans. The SWPPP and/or erosion and sediment control plan shall be executed throughout the duration of construction and/or earth disturbing activities. This shall include the maintenance and repair of erosion and sediment control measures. Supplemental measures shall be incorporated in order to meet State turbidity standards as determined by the site contractor or authorized official. The removal of BMPs shall not occur until final stabilization has been achieved.

Sec. 76-44. Construction requirements, stormwater facilities used to meet water quantity and water quality requirements.

The city recognizes the Pinellas County Stormwater Manual as a document whose requirements and procedures align with the city's goals for effective stormwater management. Furthermore, the city recognizes that aligning with the requirements of the Pinellas County Stormwater Manual simplifies regulatory compliance and promotes a unified approach to stormwater management. As such, all stormwater facilities constructed in order to adhere to the water quantity and quality standards set forth within this Article shall meet the construction criteria outlined within Part B, Best Management Practice (BMPs), of this document.

City-specific deviations from and supplements to the Pinellas County Stormwater Manual, Part B are as follows:

(1) Seasonal High Groundwater Table

(a) An adjustment factor shall be added to the encountered seasonal high groundwater table elevation as outlined within the Terrain Modification Manual for regulated activities.

(b) The bottom, or lowest elevation, of stormwater facilities used to meet water quality and water quantity requirements shall reside at least 12" above the seasonal high groundwater table. For activities regulated by the Terrain Modification Manual, provide 12" clearance from the bottom of the stormwater facilities and seasonal high groundwater table as adjusted per Section 76-44(1)(a).

(2) Geometric and Siting Considerations

The following applies to Best Management Practices (BMPs) that utilize depressional storage such as retention basins, bioswales, raingardens, etc.

(a) Depressional storage facilities shall be of an irregular shape. Parallel sides will not be permitted.

(b) Side bank slopes shall be stabilized and no steeper than 4:1 (horizontal: vertical) out to a depth of two-feet below the control elevation.

1. Slopes steeper than 4:1 shall be reinforced.
2. Side bank slopes steeper than 4:1 will require fencing, or other protection devices, to prevent accidental incursion into the facility.
    i. Fencing will not be required for side bank slopes up to 3:1 if the overall depth of the facility is less than two-feet.
3. Vertical walls will not be permitted around more than 75-percent of the perimeter of dry or wet detention facilities.

(3) Excessive Compaction

On surfaces where infiltration is to occur, compaction to a degree that would impact the design infiltration rate shall be avoided. These areas shall not be within the direct travel path of heavy equipment during construction. Material and equipment storage will not be permitted within these areas.

(4) Appearance

(a) For depressional storage facilities, an area equivalent to twenty-five (25) percent of the open basin shall be landscaped using native vegetation, excluding sod. All vegetation and sod shall be visibly weed free.

(b) Where fencing or other protection device is required due to an exceedance of side bank slope thresholds, the fencing utilized shall be compliant with other sections of the Code of Ordinances.

(5) Discharge Structures

(a) A baffle or skimmer shall be used to encourage discharge from the center of the water column thereby preventing debris, oil and grease discharge.

(b) The baffle or skimmer shall be constructed of material suitable for use in coastal environments.

(c) The baffle or skimmer shall not represent a restriction to discharge. The flow area under the skimmer shall be one and a half times greater than the flow area of the corresponding weir(s).

(d) The baffle or skimmer shall be of suitable strength to withstand the hydraulic forces it will experience. Stiffeners and supports shall be used where needed.

(e) The baffle or skimmer shall extend a minimum of three-inches beyond the corresponding weir.

(f) The bottom of the baffle or skimmer shall reside no lower than six-inches above the bottom of the facility.

Sec. 76-45. Construction requirements, stormwater conveyances.

Stormwater conveyance systems shall be constructed in accordance with the following requirements:

(1) Culvert

(a) Allowable culvert materials shall be steel-reinforced round concrete pipe (meeting the requirements of ASTM C76), steel-reinforced elliptical concrete pipe (meeting the requirements of ASTM C507), polyvinyl-chloride pipe (meeting the requirements of AWWA C900), corrugated polyvinyl-chloride pipe (meeting the requirements of ASTM F949) and corrugated polyethylene pipe (meeting the requirements of AASHTO M 294).

(b) The minimum culvert size shall be 12-inches in diameter.

(c) Culvert shall be installed with suitable cover. Culvert shall be able to withstand expected loading considering anticipated vehicular traffic patterns and culvert material.

(d) All culvert joints shall be watertight and gasketed.

(e) A proposed culvert's alignment shall attempt to minimize or negate adverse impacts to existing trees where possible.

(f) Where a culvert does not connect to a structure, suitable end treatment shall be provided. Flared end sections, mitered end sections, straight concrete endwalls and winged concrete endwalls are acceptable end treatments. A seawall shall be considered a straight concrete endwall and therefore suitable end treatment. A beveled or mitered cut to an exposed culvert end is not considered a suitable end treatment.

(g) For culverts that directly discharge to the Gulf of Mexico, Boca Ciega Bay or other tidal and non-tidal water bodies:

i. Energy dissipation measures shall be incorporated to protect against undesirable scour.

ii. Impacts to existing seagrass and/or native vegetation shall be avoided.

iii. For culverts that directly discharge to tidally influenced waters, protective treatments shall be used to prevent the entry of manatees. These protection devices shall not result in a flow restriction. Construction materials for protection devices shall be suitable for long-term use within marine environments.

(2) Structures

(a) Structures shall be able to withstand expected loading considering anticipated vehicular traffic patterns and structure material.

(b) All pipe to structure connections shall be watertight.

(c) Structures shall be placed at 400-foot intervals or at culvert bends.

(d) Access to all structures shall be provided through manhole covers or grates. Points of access shall be equal to the adjacent ground elevation.

(e) In locations where the hydraulic grade line of the system exceeds the top of structure elevation, a means to secure the manhole cover or grate shall be provided.

(f) For structures utilizing a grate, openings shall have traversable slots where bicycle traffic is anticipated.

(g) Structures located within the public right-of-way may be subject to additional requirements.

Sec. 76-46. Maintenance requirements.

Stormwater management systems and stormwater systems shall continue to function as originally intended at the time of permit acquisition. In order to ensure continued function, proper maintenance will be required. No modifications, alterations or improvements will be permitted without first receiving a permit from the city. This includes, but is not limited, the addition of obstructive vegetation, the placement of additional fill and altering slopes or elevations within or adjacent to the facility.

Maintenance requirements are as follows:

(1) Stormwater Systems Used to Meet Water Quantity and Water Quality Requirements

(a) Facilities shall follow the inspection and maintenance requirements set forth within the Pinellas County Stormwater Manual, Part B, Best Management Practice (BMPs).

(2) Stormwater Conveyances

(a) Stormwater conveyances shall be maintained as outlined within the approved Operation and Maintenance Plan.

(3) Exempt Activities

(a) Stormwater systems associated with exempt activities shall be maintained such that they continue to function as originally designed at the time of permit issuance.

Sec. 76-47. Same—Agreement bonds.

Upon approval of any drainage facilities, but prior to the issuance of a building permit, there shall be executed by the owner or developer and submitted with the application, an agreement to construct such required physical improvements as are located within public rights-of-way or easements, or as are connected to any public facility in form and substance as approved by the city. Such agreement shall be accompanied by a bond with surety or condition acceptable to the city in the amount of 110 percent of the estimated cost of the required physical improvements, as determined by the applicant and confirmed by the city.

Sec. 76-48. Determination of bond adequacy.

The determination of the adequacy of all required bonds under the provisions of this section, shall be the responsibility of the city commission after receipt of a recommendation by the city manager and city attorney.

Secs. 76-49—75-70. Reserved.

SECTION 4. That Article IV, Chapter 76, Stormwater, of the Code of Ordinances of the City of Treasure Island, Florida, is moved from Chapter 75 (Article III, Division 3) and is hereby created to read as follows:

ARTICLE III. STORMWATER AND SURFACE WATER POLLUTION

Sec. 76-71. Intent and purpose.

This article is adopted by the city for the purpose of maintaining efficient, economic and safe operation of the separate storm sewer system, and for the protection of the health, safety and general welfare of the public within all of the city. This article is intended to prevent and abate pollution through the regulation and control of connections and discharges to the separate storm sewer system and to limit the use of the separate storm sewer system to the collection, conveyance, treatment and disposal of stormwater through appropriate regulations and enforcement. The prohibitive discharge standards contained in this article were developed under the authority of section 5 of the Clean Water Act and 40 CFR 122, applicable DEP, SWFWMD regulations and applicable home rule powers.

Sec. 76-72. Industrial activity.

(a) *General prohibitions.* Any discharge into the separate storm sewer system in violation of any federal, state, water management district, county, municipal or other law, rule, regulation or permit is prohibited.

(b) *Specific prohibitions.* By adoption of industrial activity stormwater regulations or by issuance of industrial activity stormwater permits, or both, the city manager may impose reasonable limitations as to the quality of stormwater (including without limitation the designation of maximum levels of pollutants) discharged into the separate storm sewer system from sites of industrial activity. Any promulgation of such regulations and issuance of permits by the city manager shall be in accordance with applicable law.

(c) *NPDES permits.* Any person who holds a National Pollutant Discharge Elimination System (NPDES) permit shall provide a copy of such permit to the city manager no later than the later of 60 calendar days after the effective date of this article or 60 calendar days after issuance.

Sec. 76-73. Illicit discharges.

(a) *General prohibitions.* Except as set forth under subsection (c) of this section or as in accordance with a valid NPDES permit, any discharge to the separate storm sewer system that is not composed entirely of stormwater is prohibited.

(b) *Specific prohibitions.* In addition to the general prohibitions set forth in subsection (a) of this section, any discharge to the separate storm sewer system or to any receiving waters of the county containing any chemicals, petroleum products, automotive fluids of any kind, sewage, industrial waste, sediment, construction or building materials, yard waste or other waste materials, or containing any materials in violation of federal, State, county, municipal, or other laws, rules, regulations, orders or permits, or which causes or contributes to a violation of State water quality standards contained in Chapter 62, Florida Administrative Code, in the waters of the United States, is prohibited.

(c) *Authorized exceptions.* Unless the city manager determines that it is not properly managed or otherwise is not acceptable, the following discharges are exempt from the general prohibition set forth under subsection (a) of this section provided they meet State water quality standards as provided in Rule 62-302, F.A.C. :

(1) Flows from firefighting, water line flushing and other contributions from potable water sources.

(2) Landscape irrigation and lawn watering.

(3) Irrigation water.

(4) Diverted stream flows.

(5) Rising groundwater.

(6) Direct infiltration to the separate storm sewer system.

(7) Uncontaminated pumped groundwater.

(8) Foundation and footing drains.

(9) Water from crawl space pumps.

(10) Air conditioning condensation.

(11) Springs.

(12) Individual residential car washings. .

(13) Flows from riparian habitats and wetlands.

(14) Non-particulate filter backwash from residential swimming pools

(15) Wash water resulting from street sweeping activities being performed by or on behalf of the city.

(d) *Illicit connections.* No person may maintain, use or establish any direct or indirect connection to the separate storm sewer system that results in any discharge in violation of this article. This prohibition applies to connections made in the past, regardless of whether made under a permit or other authorization, or whether

permissible under laws or practices applicable or prevailing at the time the connection was made.

Sec. 76-74. Spills and dumping.

(a) *General prohibitions.* Except as set forth under subsection 76-33(c) or as in accordance with a valid NPDES permit, any discharge to the separate storm sewer system that is not composed entirely of stormwater is prohibited.

(b) *Specific prohibitions.* Any discharge to the separate storm sewer system containing any sewage, industrial waste or other waste materials, or containing any materials in violation of federal, state, county, city or other laws, rules, regulations, orders or permits, is prohibited.

(c) *Notification of spills.* As soon as any person has knowledge of any discharge to the separate storm sewer system in violation of this article, such person shall immediately notify the city manager or authorized official; and if such person is directly or indirectly responsible for such discharge, they shall also take immediate action to ensure the containment and cleanup of such discharge and shall confirm such telephone notification in writing to the city manager via email to CityManager@myTreasureIsland.org within three calendar days.

Sec. 76-75. Construction site discharges.

Construction sites must be contained to the maximum extent practicable using BMPs to prevent vehicle track out, accidental discharge or run-off of construction materials, including but not limited to sediment, mud, soil, sand, rubble, concrete, or any other building or site materials.

Sec. 76-76. Inspections and monitoring.

(a) *Authority for inspections*. Whenever necessary to make an inspection to enforce any provisions of this article, or regulation or permit issued under this article, or whenever an authorized official has reasonable cause to believe there exists any condition constituting a violation of any of the provisions of this article or a condition that could lead to a violation of any provisions of this article, or regulation or permit issued under this article, any authorized official may enter any property, building or facility at any reasonable time to inspect the same or to perform any duty related to enforcement of the provisions of this article or any regulations or permits issued under this article; provided, that:

(1) If such property, building or facility is occupied, such authorized official shall first present proper credentials and request permission to enter; and

(2) If such property, building or facility is unoccupied, such authorized official shall make a reasonable effort to locate the owner or other person having charge or control of the property, building or facility, and shall request permission to enter.

Any request for permission to enter made under this section shall state that the owner or person in control has the right to refuse entry, and that in such event that entry is refused, the authorized official may enter to make inspection only upon issuance of an inspection warrant by a court of competent jurisdiction. If the owner or person in control refuses permission to enter after such request has been made, the authorized official is hereby authorized to seek assistance from any court of competent jurisdiction in obtaining entry. Routine or area-wide inspections shall be based upon such reasonable selection processes as may be necessary to carry out the purposes of this article, including but not limited to random sampling and sampling in areas with evidence of stormwater contamination, non-stormwater discharges, or similar factors. Inspection fees shall be set by the city commission in appendix A and shall be paid by the property owner.

(b) Authority for monitoring and sampling. Any authorized official may install and maintain such devices as are necessary to conduct sampling or monitoring of discharges to the separate storm sewer system. During any inspections made to enforce the provisions of this article, or regulations or permits issued under this article, any authorized official may take any samples deemed necessary.

(c) Requirements for monitoring. The city manager may require any person engaging in any activity or owning any property, building or facility, including but not limited to a site of industrial activity, to undertake reasonable monitoring of any discharge to the separate storm sewer system and to furnish periodic reports.

(d) State inspections. As part of the NPDES program, FDEP officials may also at any given time, request permission to inspect any site or facility for NPDES compliance.

Sec. 76-77. Administrative order.

The city manager may issue an order to any person to immediately cease any discharge, or eliminate any connection to the separate storm sewer system, determined by the city manager to be in violation of any provision of this article or in violation of any regulation or permit issued under this article.

Sec. 76-78. Penalties.

Failure to comply with the requirements of this article or any permit or approval granted or authorized under this article shall constitute a violation of this article. Violations of the provisions of this article shall be subject to punishment as provided in section 1-15.

Sec. 76-79. Civil remedies.

In addition to the penalties provided in section 76-78, the city is authorized to institute any appropriate action or proceeding, including suit for injunctive relief, in order to prevent or abate violations of this article. The city commission is also authorized in accordance with the county environmental enforcement act to impose and recover a civil penalty for each violation of this article in an amount not more than $5,000.00 for

each offense. If a violation is continued, each day of such violation shall constitute a separate offense.

Secs. 76-80—76-100. Reserved.

SECTION 5. SEVERABILITY. It is the intention of the City Commission that each provision hereof be considered severable, and, if any section, subsection, sentence, or provision of this ordinance is held invalid, the remainder of the Ordinance shall not be affected.

SECTION 6. CONFLICT. All ordinance or portions of ordinances in conflict with or inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency or conflict.

SECTION 7. CODIFICATION. Sections 2-4 of this Ordinance shall be codified in the Code of Ordinances for the City of Treasure Island, Florida. The codifier is authorized to renumber or reclassify such other provision of the Code of Ordinance to accomplish such intention. The codifier is also authorized to make editorial changes not affecting the substance of this Ordinance in the substitution of article, ordinance, section, paragraph, or such other appropriate word or phrase in order to accomplish such intention.

SECTION 8. EFFECTIVE DATE. This ordinance shall take effect upon the first day of the month immediately following the adoption of the ordinance.

FIRST READING and PUBLIC HEARING on the ____ day of _____, 2025.

SECOND READING and PUBLIC HEARING on the ____ day of _____, 2025.

PUBLISHED in the Tampa Bay Times on the ____ day of _____, 2025.

The foregoing ordinance was offered during the meeting of the City Commission of the City of Treasure Island, Florida, sitting on the ____ day of _____, 2025 by Commissioner _____ who moved its adoption; was seconded by Commissioner _____ and upon roll call, the vote was:

YEAS:

NAYS:

ABSENT OR ABSTAINING:

_____
John Doctor, Mayor

ATTEST:

_____
Celine Kidwell, City Clerk