

Exhibit "A"

Amendments to the City of Marco Island Construction Standards Handbook for Work Within the Public Right-of-Way

15. DRIVEWAY WIDTH

Narrowest width of driveway measured at the property line/right-of-way line.

16. FACILITY

Any (existing or proposed) hole, excavation, obstruction, growth, material, construction, disturbance of ground surface or structures or compaction of the soil in City public right-of-way or easements. Facility also means any (existing or proposed) plant, equipment or material, including but not limited to sewer, gas, water, electric, storm drainage, communications, and other types of facilities, cables or conduit, ducts, fiber optics, poles, antennae, converters, splice boxes, cabinets, hand holes, manholes, vaults, inlets, drains, catch basins, water management devices or systems, surface location markers, appurtenances, roadway, sidewalk, pathway and other improvements or construction work placed or maintained or to be placed or maintained in right-of-way or easements of the City. A Facility may be temporary or permanent.

17. FLORIDA FRIENDLY LANDSCAPE (FFL)

FFL means using low maintenance plants and environmentally sustainable practices that reduce maintenance and save money. The nine principles of FFL are: (1) Right Plant, Right Place; (2) Water Efficiently; (3) Fertilize appropriately; (4) Mulch; (5) Attract Wildlife; (6) Manage Yard Pests; (7) Recycle; (8) Reduce Storm Water Runoff; and (9) Protect Waterfront

18. FRONTAGE

The length of the front yard, rear yard or side yard property line, which lies along a public right-of-way or easement.

19. FRONTAGE ROAD

A street or highway constructed adjacent to a higher classification street or other roadway network for the purpose of serving adjacent property or for the control of access.

20. HORIZONTAL CLEARANCE

Lateral distance from edge of a motor vehicle travel lane to a roadside object or feature.

21. INTERSECTION

The general area where two or more streets, highways or related transportation facilities join or cross.

22. INVERT ELEVATION

Surface flow line elevation of a drainage pipe or drainage facilityAn invert elevation is defined as the elevation of the inside bottom of a pipe, trench, culvert, or tunnel.

usage.

44. SIDEWALK

A sidewalk is a minimum 5ft. wide continuous concrete pedestrian walkway within the public right of way separated from vehicular traffic by elevated curbing, concrete barricades, or by a minimum physical horizontal distance of 4ft. Means the portion of a street right-of-way for preferential or exclusive use by pedestrians.

45. SIDEWALK/BIKE PATH (OR SHARED USE PATH)

An 8ft. or wider sidewalk within a public right of way that accommodates pedestrians, bicyclists, skaters, runners, and others separated from vehicular traffic by elevated curbing, concrete barricades, or by a minimum physical horizontal distance of 4ft. Means the combined use of a portion of a street right-of-way for both pedestrians and bicycles.

46. SLOPES

Slopes for the purpose of this Public Right-of-Way Construction Standards Handbook and authorizing Ordinance are expressed as a ratio of horizontal to vertical (H:V).

47. STATE ROAD

Any right-of-way and improvements thereupon, which is under the jurisdiction of the Florida Department of Transportation (FDOT).

48. SWALE

An open drainage feature along a roadway used for Stormwater conveyance. The swale area is the area between the edge of the pavement of a roadway, or curb, and the inside edge of the sidewalk or right-of-way boundary if no sidewalk is present.

49. TRAFFIC CONTROL DEVICES

All signs, traffic signals, markings and devices, placed or erected by or under direction of a public body or official having legal jurisdiction for the purpose of regulating, warning or guiding vehicular or pedestrian traffic.

50. TRAVELED WAY

The portion of the roadway for the movement of vehicles exclusive of shoulders.

51. TURNOUT

Driveway entrance widening at the junction with a roadway edge of pavement of a travel lane.

52. UNDESIGNATED BIKE LANE

SECTION 3: PUBLIC UTILITY EXEMPTION

1. All right-of-way permitting actions by the City for proposed work and Facilities by public utility owners shall ~~be accorded~~ be in accordance with the provisions set forth in this Handbook, subject to applicable provisions of franchise agreements and Florida law.
2. Public utility owners operating under a City of Marco Island contract or franchise agreement may be exempted from the requirement for initial roadway density testing and initial roadway repairs if the construction work or improvement within City right-of-way or easement is being accomplished under an emergency situation declared by the utility owner or if a public emergency is declared by the City of Marco Island City Council or the City Manager or authorized assignee. The exempted utility companies performing construction work or improvements because of a declared emergency must obtain an after the fact right-of-way construction permit, and the activities in progress and completed work will be subject to periodic inspections and final approvals.
3. Any utility company performing work under this exemption shall remain responsible and liable for any future roadway failure, unacceptable repairs or unsatisfactory restorative activities of any City Facility attributable to performance of the original work.
4. The foregoing exemption is not applicable when the utility construction work or improvement is proposed within collector and arterial roadway right-of-way within the City limits concurrently with a City roadway or drainage/utility improvement project.
5. Upon submittal of a permit application, an annual "Blanket Permit" serving as an official right-of-way construction permit shall be issued to all publicly regulated or franchised utility companies and private utility companies operating under a City of Marco Island contract or franchise agreement along with a waiver of permit fees under any of the following conditions:
 - a. Where overhead power or communication lines cross the public right-of-way and there is no physical construction in the right-of-way.
 - b. For any construction in utility easements or for adding or replacing utility poles in an existing utility line, unless the easement is a combined utility/drainage easement.
 - c. When underground secondary or service cables are to be installed having a length of less than 300 feet, and on roadway crossings where conduits or casings exist under the street pavement.
 - d. For installing streetlights in the public right-of-way that have been requested by the City.

- r. It shall be the permittee's responsibility to locate and protect from damage all existing utilities both aerial and underground.
- s. The permittee shall obtain necessary rights-of-entry for construction and maintenance when required right-of-way for public use has not been dedicated and accepted by City of Marco Island.
- t. A right of way permit is required for all improvements, construction, repairs, modifications, or replacements of driveways, sidewalks, drainage, swales, irrigation, sod/ground cover, grading, or landscape planting. The permittee will be required to bring existing non-conforming improvements within the right of way such as sidewalks, driveways, drainage, ground cover, landscaping, or grading into conformance with the requirements of this handbook. Existing non-conforming improvements will not be permitted to remain except that the following repairs or work will not require remediation of non-conformities:
 - i. Sidewalk repairs amounting to less than 50% of the property's right of way frontage.
 - ii. Driveway repairs amounting to less than 50% of the driveway apron area within the right of way for each driveway.
 - iii. Telecommunications, electricity, and gas installations by service providers or their contractors.
 - iv. Storm drainage improvements by the City.
 - v. Other minor repairs or work as determined by the Public Works Director.
- u. Gravel, stone, river rock, and artificial turf are prohibited in the right of way except for the two (2) ft. of gravel at the bottom of exfiltration swales that contain perforated drainage pipe and filter fabric.
- v. Driveway culvert sump inlet box systems such as type "X" inlets will only be permitted as deemed necessary by the Public Works Director where a mitered end cannot be constructed.

2. Requirements for Crossings:

- a. The preferred methods for crossings under pavement or other roadway facilities are jacking/boring and directional boring. Jacking and boring operations and directional boring operations shall comply with FDOT Standards Specifications. (See FDOT Section 555-Directional Boring, and FDOT Section 556-Jack and Bore) The permittee shall be responsible for the appropriateness and success of the methods and standards used. Open cutting of existing pavement shall only be authorized when directional boring and jacking/boring methods are not feasible. Open cutting pavement operations when authorized by the City shall be in accordance with FDOT Standard Index No. 307, Utility Cut. (Other FDOT Indexes, such as Index No. 505 Embankment Utilization, may apply) No underground crossing operation shall begin until the City's inspector is on-site and agrees that all proper

or ditch including invert elevations; (4) Proposed fill material and source; (5) Catch basin or clean-out arrangements, if applicable; and (6) Joint connections, if applicable.

f. Materials and Construction:

- i. Reinforced Concrete Pipe: Reinforced concrete pipe shall meet the requirements of Section 430 and 941 of the FDOT Standard Specifications. Construction shall be in accordance with Section 125 and 430 of the FDOT Standard Specifications.
- ~~ii. Corrugated Steel Pipe and Pipe Arch: Corrugated steel pipe and pipe arch shall meet the requirements of Section 430 and 943 of the FDOT Standard Specifications. Construction shall be in accordance with Section 125 and Section 430 of the FDOT Standard Specifications.~~
- ~~iii. Corrugated Aluminum Pipe and Pipe Arch: Corrugated aluminum pipe and pipe arch shall meet the requirements of Section 430 and 945 of the FDOT Standard Specifications. Construction shall be in accordance with Section 125 and Section 430 of the FDOT Standard Specifications.~~
- ii. Corrugated Polypropylene Pipe shall meet the requirements of Sections 430 and 948 of the FDOT Standard Specifications. Construction shall be in accordance with sections 125 and 430 of the FDOT Standard Specifications.
- ~~iv.iii.~~ Corrugated Polyethylene Pipe: Corrugated polyethylene (unslotted) shall conform to AASHTO M294 "Interim Specification for Corrugated Polyethylene Pipe, 12" to 24" Diameter" and ASTM F-667 "Standard Specification for Large Diameter Corrugated Polyethylene Tubing and Fittings" (8", 10", 12", 18" and 24") or approved equal. Construction shall be in accordance with Section 125 and Section 430 of the FDOT Standard Specifications.
- ~~v.iv.~~ Inlets, Manholes and Junction Boxes: Inlets, manholes and junction boxes shall meet the requirements of Section 400, 415, and 425 of the FDOT Standard Specifications.
- ~~vi.v.~~ If the storm drainage improvements, including swales, are not installed correctly, final Public Works Department approval will be withheld until corrected.
- ~~vii.vi.~~ Six months will be the maximum time allowable for temporary culverts to be incorporated with the drainage ways of the City unless otherwise specified by the City Public Works Director.

SECTION 13: SOD & APPROVED GROUNDCOVER SPECIES PLACEMENT

1. Sod and other approved groundcover plant species placement requirements in public right-of-way and easements:
 - A. The permittee or appropriately licensed contractor, if designated as an authorized agent, must apply for a right-of-way construction permit to perform sod or other approved ground cover plant species (Perennial Peanut, Sunshine Mimosa and Frog Fruit) installation work and / or maintenance thereof in public right-of-way. Appropriate design drawings or sketches are required and shall be submitted containing the following minimum information:
 - i. Distances from centerline of the roadway, driveway or traveled way to the front yard property line / right-of-way line.
 - ii. Distances from the edge of pavement of the roadway to the swale or ditch flow line and invert.
 - iii. Final finish ground surface grades of all disturbed areas to receive sod or other approved ground cover plant species.
 - iv. Distances from the edge of sidewalks to the swale or ditch flow line and invert.
 - v. Location of all drainage inlets and related structures.
 - vi. Location of all existing utilities.
 - vii. The extent or amount of excavation to be undertaken.
 - viii. Distances from edge of pavement of a roadway or driveway of any abutting property to all side yard and rear yard property lines / right-of-way lines.
 - ix. Width of all driveways and distances to front yard and side yard side property lines.
 - x. Lot, Block, Unit number and street name and number.
 - B. Grass sod shall be Centipede, Bahia grass, Zoysa, or St. Augustine type and shall be well matted with grass roots, except that where sodding will adjoin or be in sufficiently close proximity to private lawns, the existing type of sod must be used. Materials and construction methods of sodding shall meet the requirements of Section 570 of the FDOT Standard Specifications.

Shared Use Paths shall extend to the pedestrian crosswalk(s) within the roadway pavement. Additionally, sidewalks / bikeways / Shared Use Paths shall extend from edge of pavement to edge of pavement between intersecting streets, alleys, etc. to provide a continuous facility between same unless otherwise recommended or approved by the City Public Works Department.

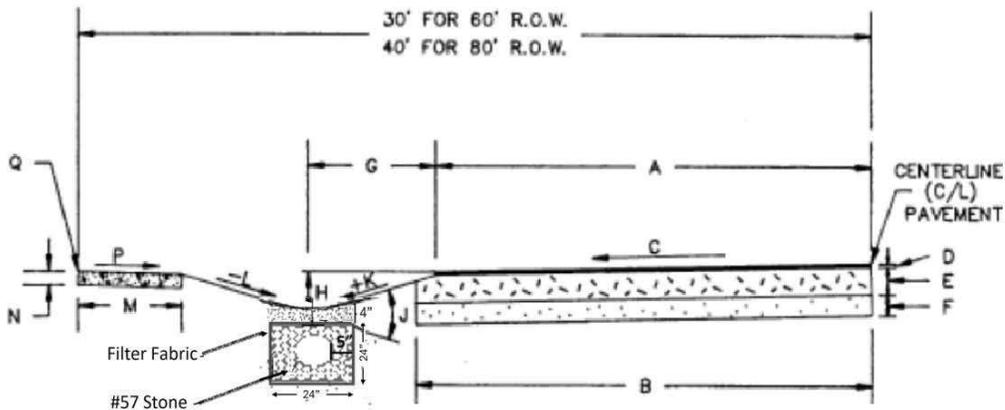
- vi. Unless otherwise waived by the City for justified requests documented by a permit applicant accounting for unique circumstances or unusual site conditions, all concrete sidewalks and Shared Use Paths within the right-of-way shall be extended and constructed through the entire widths of existing or proposed driveways. Each sidewalk and Shared Use Path project at driveway locations shall be constructed as a singular and continuous surface not ending on an approach side of a driveway and restarting on the departure side of a driveway.
- vii. All proposed concrete sidewalks and Shared Use Paths within the right-of-way, which must connect onto an existing similar facility with an elevation differential, shall be transitioned with a “ramp” with a maximum slope of 12:1 slope to match the existing adjacent facility.
- viii. The proposed back of sidewalk and Shared Use Path elevations running longitudinally along City right-of-way and the roadway shall be at relatively flat or gradually ascending and descending grades in lieu of abrupt “berming up” or short vertical curves at proposed driveways.

b. Concrete:

- i. The concrete sidewalks, Shared Use Paths and bikeways where appropriate shall be a minimum of ~~six (6)~~four (4) inches thick, except that at alley intersections and driveways the concrete shall be six (6) inches thick with wire mesh. All concrete construction and surface finish work shall be in conformance with Section 522 (Concrete Sidewalks) of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.

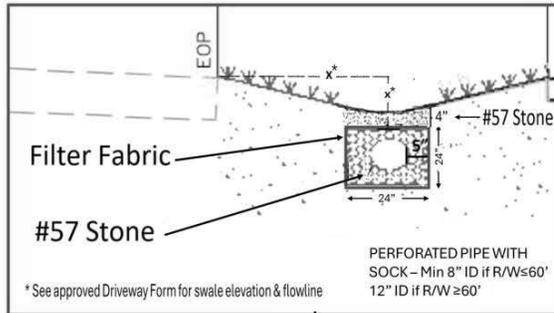
c. Asphalt:

- i. Proposed asphalt design sidewalks, Shared Use Paths, bikeways where appropriate and various access paths if approved for construction by the City shall be constructed to specific engineering designs and specifications established by the City Public Works Department.
- ii. In general, authorized asphalt sidewalks, Shared Use Paths, bikeways where appropriate and various access paths shall be no less than four (4) inches of compacted limerock base over an



PERFORATED PIPE WITH
SOCK - Min 8" ID if R/W ≤ 60'
12" ID if R/W ≥ 60'

EXFILTRATION SWALE →



PERFORATED PIPE WITH
SOCK - Min 8" ID if R/W ≤ 60'
12" ID if R/W ≥ 60'

* See approved Driveway Form for swale elevation & flowline

RECOMMENDED CRITERIA

CROSS SECTION ELEMENTS	LOCAL STREET	COLLECTOR STR
A 1/2 OF PAVEMENT WIDTH		
B 1/2 OF BASE WIDTH	10' ^a	13'
C PAVEMENT CROSS SLOPE	11'	14'
D TYPE II ASPHALTIC CONCRETE THICKNESS	1 1/4" / FT ^b	1 1/4" / FT ^b
E LIMEROCK BASE THICKNESS	1"	1 1/4"
F STABILIZED SUBGRADE THICKNESS	6"	8"
G C/L SWALE TO EDGE OF PAVEMENT	12"	12"
H SWALE DEPTH		
J ALGEBRAIC DIFFERENCE IN SWALE GRADES		
K SWALE GRADE NEAR PAVEMENT		
L SWALE GRADE NEAR SIDEWALK		
M CONCRETE SIDEWALK WIDTH		
N CONCRETE SIDEWALK THICKNESS		
P CONCRETE SIDEWALK CROSS SLOPE		
Q BACK OF SIDEWALK ELEVATION		
	TBD during Permitting	

NOTES:

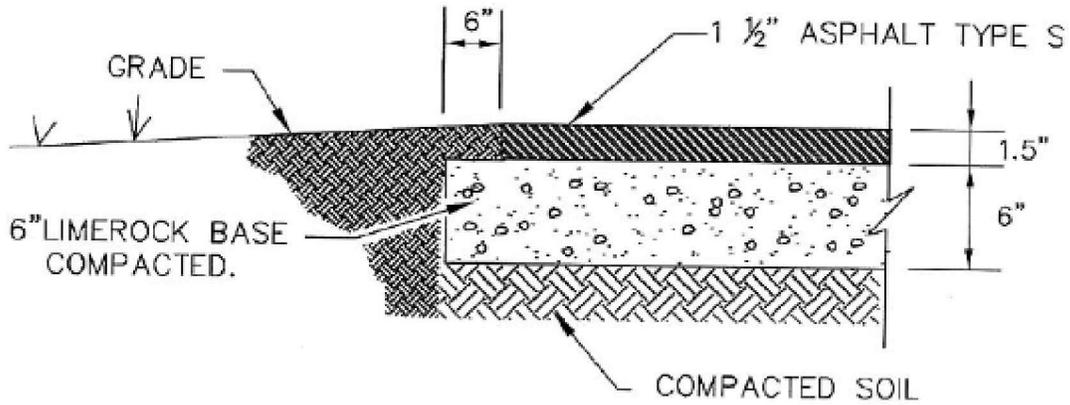
- a MIN 9' IN RESURFACING PROJECTS
- b MIN 1/8" / FT AND MAX 1/2" / FT IN RESURFACING PROJECTS
- c REFER ITE "RECOMMENDED GUIDELINES FOR SUBDIVISION STREETS". 1984, SECTION 2.03.18
- d 8' IN CERTAIN CASES; REFER TYPICAL SIDEWALK DETAIL, SHEET 8
- e 6" THICK CONCRETE SIDEWALK WITH WIRE MESH (AT ALLEY INTERSECTION AND DRIVEWAYS)

City of Marco Island Public Right-of-Way Construction Standards Handbook



Swale Cross-Section Detail

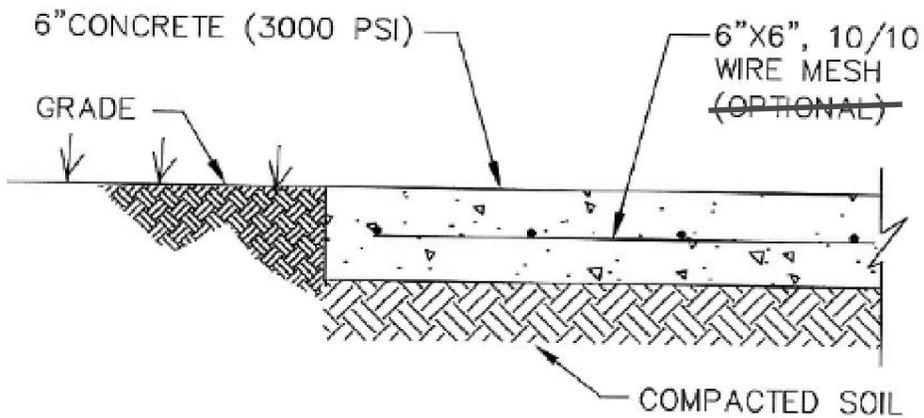
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ASPHALT ONLY PERMITTED FOR COMMERCIAL DRIVEWAYS ABUTTING ALLEYS

ASPHALT DRIVE DETAIL

N.T.S.



CONCRETE DRIVE DETAIL

N.T.S.



**City of Marco Island
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Driveway Construction Details

Sheet No. 10
of
Drawing No.
Date: