# STORMWATER MANAGEMENT REGULATIONS, STANDARDS, PROCEDURES AND DESIGN CRITERIA

## **ADOPTED AUGUST 12, 2020**

## CENTRAL BROWARD WATER CONTROL DISTRICT BROWARD COUNTY, FLORIDA

## **BOARD OF COMMISSIONERS**

Angie Leto, Chair, Zone 5
Judy Ann Bunce, Vice Chair, Zone 1
Mark Flynt, Zone 2
Douglas R. Bell, Zone 3
Leslie Schroeder, Zone 4
David Donzella, Zone 6

## **DISTRICT SECRETARY/MANAGER**

Michael Crowley

## **DISTRICT ENGINEER**

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Hans Murzi, P.E., R.J. Behar & Company, Inc.

## **DISTRICT ATTORNEY**

Julie F. Klahr, Goren, Cherof, Doody & Ezrol, P.A.



#### CENTRAL BROWARD WATER CONTROL DISTRICT

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#### **EXHIBITS INCORPORATED HEREIN BY REFERENCE:**

Α	Central Broward Water Control District Boundary Area
В	CBWCD Document Submittal Requirements
С	Paving and Drainage Check List for Applicants
D	100-Year Flood Elevation Map
E	10-Year Flood Elevation Map
F	Florida Department of Transportation 3-Year Storm Zone 10
G	Exfiltration Trench System
Н	Headwall Detail
I	Typical Perimeter Berm Details
J	General Notes
K	Construction Tolerances
L-1	Subdivider's Completion Agreement
L-2	Subdivider's Completion Bond
M	Release of Subdivider's Completion Agreement
N-1	Canal Easement Agreement
N-2	Canal Maintenance Easement Agreement
N-3	Drainage, Flowage and Storage Easement Agreement
N-4	Lake Maintenance Easement Agreement
N-5	Drainage Easement Agreement
N-6	Ingress/Egress Easement Agreement
0	District Variance Sign Detail
Р	Maintenance Agreement
Q	Application for Stormwater Management Permit
R	Boat Ramp Detail
S	Dock and Deck Agreement
Т	Suggested Wetland and Aquatic Plants and Planting Depth Ranges
U	Not used
V	Stormwater Certification Report
W	Checklist for Single Family Homes Plan Approval
X	Bleed Down Time for Retention Systems Sample Problem
Υ	Typical Wetland Preserve Area Sign
Z	Surface Water Management Designation and Declaration of Restrictive Covenant
AA	Stormwater Management Works Permit Form

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#### 1. GENERAL

#### **1.01 SCOPE**

The provisions of these regulations and criteria shall apply to all existing and future development, construction, or reconstruction within the boundaries of the Central Broward Water Control District (District or CBWCD). District boundaries are shown in the Exhibits. For the purpose of these regulations and criteria development, construction or reconstruction shall be defined as any work which would affect the flow or level of water, whether surface or subterranean in origin; the alteration of ground elevations and/or dredging or filling activities.

#### 1.02 PURPOSE

The purpose of these regulations and criteria are to promote the general health, safety, welfare, convenience, and economic well-being of the citizens within the Central Broward Water Control District by minimizing flooding and ensuring proper water management.

These regulations and criteria have been developed to provide engineers, surveyors and mappers, architects, and land planners with requirements for the design of all projects within the District.

#### 1.03 AUTHORITY

These regulations and criteria have been prepared under the authority of the Central Broward Water Control District (District) as provided by an act of the State Legislature in 1982 describing the District boundary and authority, and additionally that authority vested and granted by the Water Resources Act, Chapter 61-1969, Laws of Florida and Chapter 2009-257, Laws of Florida, as amended.

#### 1.04 REQUIREMENTS

All projects within the regulatory area of the District shall require that a Licensed Professional Engineer submit to the District a permit application for approval of the paving, grading, drainage and storm water management and discharge into the District's Waterway. The project information, documentation details, standard, and engineering analysis shall conform in content to the requirements stipulated in these regulations and criteria.

The permit holder shall be responsible for ensuring the constructed project meets the District's design criteria at the time of permit approval. The applicant shall submit sufficient details and avoid errors and omissions in the plans and supporting documentation to ensure the project is constructed in accordance with District criteria. The permit holder shall correct any deviations from District criteria in the constructed project unless specifically exempted by a variance.

Submittal of a permit application and permitting by the District shall in no way eliminate the applicant's responsibility to conform to the Florida Building Code, Florida Building Code - Accessibility, Florida Fire Prevention Code, and the rules, regulations, policies or permitting requirements of other regulatory agencies such as: U.S. Army Corps of Engineers (USACE), Florida Department of Environmental Protection (FDEP), Florida Department of Transportation (FDOT), South Florida Water Management District (SFWMD), Broward County Environmental Protection and Growth Management Department (EPGMD), and the Applicable Unit of Local Government.

If the permitted plans include work that is outside of the project property limits, then the applicant must acquire written permission from the affected property owner(s) to perform such work and shall provide proper documentation (agreements, easements, approvals, etc.) to the District to work outside the limits of the applicant's property. Final acceptance of record drawings and release of bonds shall be contingent upon receiving no objections from affected property owner(s) within 30 days of initial Board action.

The criteria herein set forth by the District are the minimum criteria which must be met by an applicant in order to seek approval of the commission. Nothing herein shall prevent the District's Commission from imposing more stringent requirements than set forth by the criteria as circumstances may warrant on a case-by-case basis to protect the health, safety, and welfare of the residents of the District.

#### 1.04.1 EXISTING ROADWAYS

Projects that abut a public road or street where there is no existing drainage, shall address this problem for the prevention of standing water.

#### 1.04.2 EXISTING CANALS

Projects with property having a common border with a District canal that is adjacent to a roadway must provide guardrail along the canal for the length of the affected property boundary. This also applies when the property abuts a roadway and the District canal is located on the opposite side of the road.

#### 1.04.3 CANAL RIGHTS-OF-WAY

Where the District requires canal Rights-of-Way, the Developer shall dedicate such right-of-way, and in addition shall dedicate a minimum twenty-foot (20') strip of land from the top of bank of the canal for a maintenance easement.

#### 1.04.4 DRAINAGE EASEMENTS

All projects within the District, shall dedicate to the District, drainage easements as the District deems necessary for the project; to provide for adjacent property and for conformance with the District's Water Control Plan.

#### 1.04.5 IMPROVEMENTS AND DISTRICT EASEMENTS

Except as provided for herein and in Section 2.14 of this criteria, all canal rights-of-way, canal easements, canal maintenance easements, drainage, flowage and storage easements, lake maintenance easements, and drainage easements shall be kept free and clear of all improvements, trees, plants, or encroachments.

The following improvements are allowed within a drainage, drainage, flowage and storage, lake maintenance, and ingress/egress easement to be dedicated to the District subject to providing adequate access: asphalt/concrete/paver pavement; curbing; sidewalks and hardscape; chain link fencing; and guardrail.

Ingress/egress easements that are coincident with a private road or entrance from the public right-of-way are allowed improvements within the easement limits provided the improvements do not block vehicular access to other easements to be dedicated to the District. The ingress/egress easement shall provide for a minimum 12-foot clear vehicular access path from the public right-of-way to other easements to be dedicated to the District.

Ingress/egress easements not coincident with a private road or entrance from the public right-of-way must be kept free and clear of all improvements, trees, plants, or encroachments, except as provided above. No utilities shall be placed in any District easement or right-of-way without approval by the District, and the utility system owner entering into a hold harmless and indemnification agreement with the District.

#### 1.05 MAINTENANCE

Unless otherwise provided, all drainage easements dedicated to the District shall be maintained by the property owner or a property owners' association.

1.05.1 Drainage within the Rights-of-Way of public streets is the maintenance responsibility of the unit of local government responsible for the maintenance of the street.

- 1.05.2 Maintenance of lakes/ponds and water bodies is the responsibility of the property owner abutting, or a property owners association.
- 1.05.3 Notwithstanding the above, the District retains the right to enter into and perform such maintenance as it feels necessary to protect the District's drainage system.

In the event the District performs such maintenance, it will assess the property owner(s) for the costs involved and will lien the property as necessary.

#### 1.06 RENEWALS

District Operating permits shall be valid for a period not to exceed five (5) years from the date that project as-built drawings are approved. Renewal applications shall be submitted to the District 60 days prior to permit expiration.

Paving and drainage plans and maintenance agreements approved by the District prior to renewal requirements shall submit renewal applications within 120 days of receiving notification by the District. Such surface water management works shall comply with all conditions and requirements at the time of District approval.

Each renewal application shall be accompanied by the applicable fee, a log of the operation and maintenance schedules for all the components of the stormwater management system, and a stormwater certification report (Exhibit V) signed and sealed by a Licensed Professional Engineer certifying that the components of the stormwater management system are functioning as permitted. Refer to Exhibit V, Stormwater Certification Report, for minimum list of stormwater management system components that must be certified with each renewal cycle. If required, the property owner shall upgrade the drainage system to ensure proper operation for water quality and drainage as required and in place at the time of the original approval.

#### 1.07 EXISTING DEVELOPMENT

All water management works for which permits, approved paving and drainage plans, and/or maintenance agreements have been issued by the District shall continue to comply with all conditions and requirements at the time of District approval. If such water management works are determined to have caused, are causing, or will cause an immediate adverse impact on the public, the property owner shall be required to modify the portion of the water management works which is causing or will cause the adverse impact.

Existing development and water management works constructed prior to the requirement for permits and District approved paving and drainage plans, shall

be exempt from the requirements of these regulations and criteria. If it is determined that the existing works (or lack of water management works) have caused, are causing, or are predicted to cause an immediate adverse impact on the public, the property owner shall be required to modify the portion of the water management work which is causing or will cause the adverse impact to meet the District's current criteria to the extent practical and in the discretion of the District.

#### 2. ENGINEERING CRITERIA

#### 2.01 GENERAL

The following regulations and criteria will be utilized by the District in the review of plans, plats, as-builts, or other submittals.

#### 2.01.1 DEFINITIONS

Definition and terms that are not defined below shall be given their ordinary and customary meaning or usage of the trade or will be defined using published, generally accepted dictionaries, together with any rules and statutes of the Agencies that have additional authority over the regulated activities.

"Aquatic plant" or "aquatic vegetation" means a plant, including the roots, which typically floats on water or requires water for its entire structural support, or which will desiccate outside of water. Also see "prohibited aquatic plant" definition.

"As-Built Drawings" means plans that accurately represent the constructed condition of the permitted facility that is certified by a Licensed Professional Surveyor and Mapper, including identifying any substantial deviations from the permitted design.

"Canal" means an artificial ditch utilized for confining surface water to a defined channel, the purpose of which is to receive runoff from adjacent land and to convey flows downstream to another canal, river or natural water body. Canals in this context refer to the primary canals owned and maintained by the SFWMD, the secondary canals maintained by the CBWCD, and canals on private property. Canals also include those defined in § 403.803(2), F.S.

"Common Area" means real property which is subject to the common ownership of a single party for the benefit of all of the property owners which is responsible for such ownership, unified control, monitoring, operation, and maintenance of the drainage facilities located in the common area.

"Construction commencement" means the actual on-site, continuous and systematic activity of land surface alteration, construction and fabrication of a facility in accordance with a stormwater management works permit authorizing construction of the project in conformance with the terms and conditions of the permit. Minor clearing, dredging, or filling with an apparent purpose of keeping the permit active will not be considered to meet this requirement.

"Detention" means the collection and temporary storage of stormwater in an impoundment in such a manner as to provide for treatment through physical, chemical, and biological processes with subsequent gradual release of the stormwater.

"Discharge" means to allow or cause water to flow.

"Development" means: 1) the division of a plat, tract, parcel or lot of land into two (2) or more parcels that requires platting or re-platting by the municipality having jurisdiction or by Broward County; 2) the meaning given in §380.04, F.S.

"District Canal" or "District Waterway" means the canals, waterways, easements, rights and reservations, rights-of-way, maintenance strips, swales, and all and every work or facility appurtenant or adjacent to or utilized by the Central Broward Water District (the District) in connection with the functioning of its waterways.

"Exotic plant species" means a plant species introduced to Florida, purposefully or accidentally, from a natural range outside of Florida, including naturalized exotic species (an exotic plant that sustains itself outside cultivation) and invasive exotic species (an exotic plant that not only has naturalized, but is expanding on its own in Florida native plant communities). Exotic plant species are defined by the "Florida Exotic Pest Plant Council" (EPPC), and include cattails, melaleuca, Brazilian pepper, Australian pine, laurel fig (ficus) and other nuisance species that are not native to Florida, exhibit rapid growth, out compete native vegetation, and can clog lakes/ponds and canals. Additional information on Florida's exotic plant species is available at: http://www.fleppc.org/.

"Filling" or "fill" means the deposition or to deposit, by any means, of materials in a lake/pond, wetland, canal, or other waterway.

"Licensed Professional" means an engineer, land surveyor and mapper, architect, landscape architect, or geologist licensed by the State of Florida practicing under Chapter 471, 472, 481, or 492, F.S., respectively, and includes any of the following designations: "licensed engineer"; "licensed professional engineer"; "professional engineer"; "registered engineer"; "registered professional engineer"; and similar "licensed...", "licensed...professional", "professional...", "registered...", or "registered professional..." regarding surveyors, architects, landscape architects, and geologists licensed under Chapter 472, 481, or 492, F.S.

"NAVD 88" means North American Vertical Datum of 1988.

"NGVD 29" means National Geodetic Vertical Datum of 1929.

"Nuisance plant species" means any species of flora or fauna, including exotic plant species, prohibited aquatic plants, and invasive nonnative plants whose noxious characteristics or presence in sufficient number, biomass, or areal extent that prevents, or interferes with, uses or management of resources, and which are native or naturalized in the area where it occurs. See § 369.251, F.S. for a list of invasive nonnative plants:

http://www.leg.state.fl.us/Statutes/index.cfm?App\_mode=Display\_Statute&Search\_String=&URL=0300-0399/0369/Sections/0369.251.html

"Positive outfall" means discharge via a device or devices designed to convey discharges of stormwater from the applicant's property across downstream properties and ultimately into a District canal by means of a system consisting of one or a combination of pipes, culverts, canals, swales, or ditches in a concentrated and not diffuse manner.

"Pre-development" means the land use immediately previous to submittal of an application for paving and drainage approval if no District water management works permit was issued for the property, or the land use and storm water management design described in the latest District approved water management works permit for the property.

"Prohibited aquatic plant" means any of the aquatic plants designated by the Florida Department of Agriculture and Consumer Services on the prohibited aquatic plant list in Rule 5B-64.011, F.A.C., or in an emergency order issued under Rule 5B-64.012, F.A.C.

See https://www.flrules.org/gateway/ruleno.asp?id=5B-64.011

"Record drawing" means plans certified by a Licensed Professional that accurately represent the constructed condition of an activity, including identifying any substantial deviations from the permitted design that are based on the As-built drawings submitted by the contractor and certified by a Licensed Professional Surveyor and Mapper.

"Retention" means a system designed to prevent the discharge of a given volume of stormwater runoff into surface waters in the state by complete on-site storage. Examples are systems such as excavated or natural depression storage areas, pervious pavement with subgrade, or above ground storage areas.

"Stormwater Management Facility" means a facility that is designed to treat, collect, convey, channel, hold, inhibit, or divert the movement of stormwater runoff on, through, and from a property. Such facilities are utilized to control or manage the path, storage, or rate of release of stormwater runoff. Such facilities may include canals, channels, culverts, inlet or outlet structures, lakes/ponds, retention and detention areas, spillways, storm sewers, swales, or other similar facilities.

"Structural slab-on-ground" means a slab that is cast directly on the ground and is a required part of a load path which transmits vertical or lateral loads to the ground and must conform to applicable structural building codes. Non-structural slabs-onground serve only as an architectural wearing surface and are not subject to structural building code requirements and are not subject to the six inches (6") above berm elevation requirement.

"Substantial Damage" means damage of any origin sustained by a structure (i.e., a building, storm sewer, culvert, or bridge) whereby the cost of restoring the

structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before damage occurred.

"Substantial Improvement" means any repair, reconstruction, rehabilitation, alteration, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. The term does not, however, include any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official having jurisdiction and that is the minimum necessary to assure safe living conditions.

"Swale" means a manmade trench that: (a) Has a top width to depth ratio of the cross-section equal to or greater than 6:1, or side slopes equal to or greater than 3H:1V (horizontal:vertical); (b) Contains contiguous areas of standing or flowing water only following a rainfall event; (c) Is planted with vegetation suitable for soil stabilization, stormwater treatment, and nutrient uptake; (d) is designed to take into account the soil erodibility, soil percolation, slope, slope length, and drainage area so as to prevent erosion and reduce pollutant concentration of any discharge; and (e) has a channel invert no lower than one (1) foot above the water control elevation. The top of bank of the swale must be an observable and distinct break in slope between the toe of slope or swale invert and areas landward of the outer edge of the swale.

"Water Control Elevation" equals elevation: 0.4' NAVD 88 east of the Turnpike; 1.4' NAVD 88 south of the C-11 Canal between the Turnpike and Palm Avenue; 1.4' NAVD 88 north of the C-11 Canal between the Turnpike and the N-17 Canal; 2.4' NAVD 88 south of the C-11 Canal and west of Palm Avenue; and 2.4' NAVD 88 north of the C-11 Canal and west of the N-17 Canal. The District's standard differential between NAVD 88 and NGVD 29 datums for purposes of calculating the water control elevation and elevation references in these regulations is 1.60' (e.g., 0.0' NGVD 29 -1.6' = (-)1.6' NAVD 88). [Revised on 9/10/20 to correct scrivener's error regarding the stated WCE elevations.]

#### 2.01.2 VERTICAL DATUM

Elevation data in engineering documents and construction drawings submitted to the District shall be based on the NAVD 88 datum. Requests for modifications to permits issued prior to the updated FEMA Flood Insurance Rate Maps that took effect on August 18, 2014 shall include on the paving, drainage and grading drawings the site-specific conversion factor between NGVD 29 and NAVD 88 data for historical record keeping purposes.

#### 2.02 FINISHED FLOOR, 100 YEAR ELEVATIONS

All habitable structures shall be set at or above the higher of:

2.02.1 Federal Emergency Management Act (FEMA) Flood Studies

#### 2.02.2 Broward County 100 Year Flood Studies, latest edition

2.02.3 Eighteen inches (18") above the highest crown of road of the internal traffic circulation element bordering the structure. The traffic circulation element can be a public or private street, or an internal drive aisle. If the roadway is not crowned, or has an inverted crowned section, then the highest edge of pavement eross section nearest bordering the structure shall apply. In subdivision lots, the elevation shall be based on the highest crown of road along each lot frontage.

- 2.02.4 Stage storage calculations for the 100-year, 3-day rainfall with zero discharge
- 2.02.5 Florida Building Code in accordance with the American Society of Civil Engineers Standard 24 Flood Resistant Design and Construction (ASCE 24), latest edition

Nonresidential structures shall be set at or above the higher of Criterion 2.02.1, 2.02.2, and 2.02.4 enumerated herein and six inches (6") above the nearest crown of road of the adjacent roadway, whichever is higher.

Applicants shall verify that structural slabs-on-ground elevations are at least six inches (6") above the proposed berm elevation.

#### 2.03 ROAD FLOOD CRITERIA

All roadways (public and private) and parking lots (public and private) shall have a minimum crown elevation (normal or inverted) set at the higher elevation of:

- 2.03.1 10-year flood criteria map of Broward County
- 2.03.2 Peak stage storage calculations for the 10-year, 1-day rainfall

The minimum crown elevation for inverted road sections shall refer to the center of the roadway and the minimum crown elevation for parking lots shall refer to the centerline of each drive aisle.

Rims of drainage structures may be set no more than six inches (6") below the edge of the roadway, parking lot or drive aisle provided the structure is located outside of the limits of the driving surface (e.g., inside a green area adjacent to the driving surface).

#### 2.04 EXCAVATIONS

All lake/pond, wetland, canal, or other waterway excavations shall be in accordance with South Florida Water Management District (SFWMD) Environmental Resource Permit (ERP) rules for Storage Areas unless specified herein.

- 2.04.1 CRITERIA COMMON TO LAKES/PONDS, WETLANDS, CANALS, OR WATERWAYS
  - 2.04.1.1 All side slopes of excavations shall be stabilized with a suitable vegetative cover to provide stability against erosion in conformance with these criteria.
  - 2.04.1.2 All lake/pond, wetland, canal, or other waterway maintenance areas shall be cleared of all trees and plants and no new trees or plants shall be planted.
  - 2.04.1.3 Nuisance plant species shall not be planted in lakes/ponds, wetlands, canals, waterways, District property, or easements dedicated to the District.
  - 2.04.1.4 The applicant shall provide evidence of site specific geotechnical investigations in a engineering report that documents the type and extent of soils found within areas to be excavated for water quantity or water quality storage purposes (e.g., Unified Soil or AASHTO Soil classification, standard penetration tests, sieve analyses, etc.). Soil borings shall be taken to a minimum depth of five feet (5') below the water control elevation for each ½ acre of storage area or fraction thereof. Deleterious soils shall be removed and filled with permeable material that will allow the stored water to infiltrate into the ground water. Locations of known deleterious soils such as muck layers shall be depicted on the construction drawings along with the appropriate notes requiring removal and disposal.
  - 2.04.1.5 All lakes/ponds, canals or other waterways shall have stabilized maintenance easements that are twenty feet (20') in width, measured from the top of bank. Canal and waterway maintenance easements shall either be sloped up to a continuous 5% slope away from the canal, or up to a 10% slope that creates an inverted section at the midpoint of the access way. In either case, the maintenance way shall be sloped away (i.e., downward) from the top of bank of the canal or waterway to create a ridge along the top of bank.

These twenty feet (20') shall be considered a setback for any buildings, structures, or water bodies and shall be suitable for vehicular traffic. For

the purpose of this paragraph, structure is defined as any installed, or erected object on or in the ground.

2.04.1.6 The top of bank must be an observable and distinct break in slope between the toe of slope and areas landward of the lake/pond, wetland, canal or waterway, including any freeboard, and coincides with the inner edge of the maintenance easement.

#### 2.04.2 CANALS AND WATERWAYS

- 2.04.2.1 Canal excavation shall have a side slope that provides stability against erosion from the top of bank (minimum elevation equal to 3.4' NAVD88 east of Palm Avenue/SW100th Ave/Nob Hill Road and 4.4' NAVD88 west of Palm Avenue/SW100th Ave/Nob Hill Road three feet (3') below the water control elevation.
- 2.04.2.2 Canal side slopes shall be no steeper than 4H:1V from top of bank to three feet (3') below the water control elevation. Below this point, side slopes shall be as the material permits, but no steeper than 2H:1V unless a steeper slope can be justified based on supporting engineering and geotechnical information.
- 2.04.2.3 Canals shall be excavated to provide a minimum of ten feet (10') of depth below the water control elevation, or shallower at the discretion of the District Manager.
- 2.04.2.4 Existing District canals adjacent to properties applying for a water management works permit or plat approval shall be brought to the design standards of the District, including provision of a 20-foot (20') canal maintenance easement, and removal of all trees, plants, nuisance plant species, and encroachments from canal under the water surface, or on the banks, slopes, or maintenance easements.
- 2.04.2.5 Canal banks down to the water control elevation and canal maintenance easements shall be sodded.

#### 2.04.3 LAKES/PONDS AND WETLANDS

A surface water body that provides attenuation, floodplain storage or water quality detention or retention storage shall be considered a lake/pond or wetland. All three are referred to as a lake/pond in the following sections.

2.04.3.1 All lake/pond shorelines shall be planted with aquatic vegetation in littoral zones around the entire perimeter of the pond excavation near the water's edge to create an average minimum littoral zone width of twenty feet (20').

- 2.04.3.2 As an alternative to planting all shorelines, an equivalent area of aquatic vegetation may be concentrated along one or more banks of one or more lakes/ponds, or the center of one or more lakes/ponds as an island or as an anchored floating treatment wetland.
- 2.04.3.3 Littoral zones shall be planted with aquatic vegetation from no higher than one foot (1') above to no lower than two feet (2') below the water control elevation or as recommended by the applicant's biologist, ecologist, landscape architect or environmental engineer. Exhibit "T" provides a list of suggested species and planting depths. Littoral zones not covered by aquatic plants above the water control elevation shall be seeded to prevent erosion due to bare soil.
- 2.04.3.4 The area planted shall have hydric soils suitable for wetland plants. A minimum hydric top soil (i.e., muck) depth of 0.5' shall be provided. 2.04.3.5 For shorelines planted with aquatic vegetation, side slopes shall be no steeper than 4H:1V from the top of bank down to the landward edge of the littoral shelf and from the waterward edge of the littoral shelf down to three feet (3') below the water control elevation. Beyond that point, side slopes shall be as the material permits, but no steeper than 2H:1V unless a steeper slope can be justified based on supporting engineering and geotechnical information.
- 2.04.3.6 The littoral shelf shall be no steeper than 8H:1V. Any combined width of 4H:1V bank and littoral shelf can be used to provide the twenty-foot (20') wide average minimum littoral zone.
- 2.04.3.7 Aquatic plantings adjacent to residential homes shall not exceed four feet (4') in height for mature plants as measured from the water control elevation.
- 2.04.3.8 For shorelines not planted with aquatic vegetation, side slopes shall be no steeper than 5H:1V from the top of bank to a depth of three feet (3') below the water control elevation. Beyond that point, side slopes shall be as the material permits, but no steeper than 2H:1V unless a steeper slope can be justified based on supporting engineering and geotechnical information. Grade transitions from 4H:1V to 5:1V banks must be gradual, continuous, and not steeper than 4H:1V. Shorelines shall be sodded or seeded from the top of bank down to the water control elevation.
- 2.04.3.9 The minimum top of lake/pond bank elevation shall be:
  - 2.4' NAVD 88 east of the Turnpike
  - 3.4' NAVD 88 south of the C-11 Canal from the Turnpike to Palm Avenue

- 3.4' NAVD 88 north of the C-11 Canal from the Turnpike to the N-17 Canal
- 4.4' NAVD 88 south of the C-11 Canal and west of Palm Avenue
- 4.4' NAVD 88 north of the C-11 Canal and west of the N-17 Canal

2.04.3.10 Lake/pond excavations shall have a minimum depth of ten feet (10') below the water control elevation and a maximum depth as governed by SFWMD Environmental Resource Permit (ERP) Applicant's Handbook Volume II or a bottom elevation of (-) 41.6' NAVD 88, whichever is less.

- 2.04.3.11 Permanent signs shall be visibly posted adjacent to lake/pond banks planted with aquatic vegetation to prevent removal of aquatic plants or spraying with harmful chemicals. The sign panel must be visible above the expected mature height of aquatic plantings. Exhibit "Y" provides a typical detail for the required signage. At least one (1) sign is required along each planted side of a lake/pond. Additional sign locations and spacing may be required by the District.
- 2.04.3.12 Restoration or repair of lake/pond and wetland slopes shall require plans, specifications, and supporting documentation submitted to the District Manager for review and approval. The District Manager may require any such plans to be signed and sealed by a Licensed Professional Engineer. Restoration or repair of slopes and banks shall utilize gradual slopes and erosion control products made of natural fibers, and the slopes sodded or seeded. For severe erosion, stabilization shall be accomplished using a combination of geofabrics and hardened materials such as interlocking concrete blocks, rip rap, etc., with appropriate soil stabilization measures.
- 2.04.3.13 The replacement of existing seawalls, bulkheads, and retaining walls is discouraged. However, if a seawall, bulkhead, or retaining wall is proposed to replace an existing one, the top of such wall shall be constructed no higher than 1 foot above the water control elevation and shall be aesthetically consistent with the established pattern of existing seawalls, bulkheads, and retaining walls within the lake/pond. Plans for seawalls, bulkheads, and retaining walls shall be signed and sealed by a Licensed Professional Engineer in conformance with the structural design criteria of the Florida Building Code, latest edition.
- 2.04.3.14 Where a conservation easement is in place or proposed to be dedicated to Broward County and/or South Florida Water Management District the twenty-foot (20') Lake Maintenance Easement (LME) may be reduced to a ten-foot (10') LME to allow for foot traffic only. However, the twenty-foot (20') setback to any building shall still apply. In addition, proper easements for maintenance and access shall be provided for any drainage structures or culverts. Lake maintenance easement areas that

are reduced to ten feet (10') adjacent to conservation easements may be planted with appropriate ground cover plants such as sedges and rushes in lieu of sodding.

2.04.3.15 All lakes/ponds shall be provided with a concrete boat ramp from the top of bank to two feet (2') below the water control elevation. The ramp shall be twelve feet (12') in width. A stabilized ingress/egress easement twelve feet (12') in width shall be provided from the nearest roadway or parking lot drive aisle to the ramp. Ramp locations must be designed to allow reasonable turning movements of truck and trailer completely inside the limits of the required ingress/egress or lake maintenance easement. Boat ramps are not required for lakes/ponds that are less than 0.25 acres in area as measured at the water control elevation.

#### 2.04.4 DRY DETENTION OR RETENTION AREAS

- 2.04.4.1 Dry detention or retention areas shall have a side slope of 4H:1V below the top of bank and shall be excavated no deeper than one foot (1') above the water control elevation. The banks and bottom of dry detention or retention areas shall be sodded or seeded.
- 2.04.4.2 Walls shall not be allowed within detention or retention areas except for areas abutting perimeter retaining walls which shall be located in accordance with the Alternate Retaining Wall Detail in Exhibit "I". In this case, the outer limit of the drainage, flowage and storage easement shall coincide with the inner face of the retaining wall. Plans for retaining walls shall signed and sealed by a Registered Florida Professional Engineer in conformance with the structural design criteria of the Florida Building Code, latest edition.
- 2.04.4.3 The required drainage, flowage and storage easement must coincide with the top of bank. The top of bank must be an observable and distinct break in slope between the toe of slope and areas landward of the the outer edge of the detention or retention area, including any freeboard.
- 2.04.4.4 The applicant shall provide evidence of site specific geotechnical investigations in a geotechnical engineering report that documents (e.g., Unified Soil or AASHTO Soil classification, standard penetration tests, sieve analyses, etc.) the type and extent of soils found within areas to be excavated for water quantity or water quality storage purposes. Soil borings shall be taken to a minimum depth of five feet (5') below the water control elevation for each ½ acre of storage area or fraction thereof. Deleterious soils shall be removed and filled with permeable material that will allow the stored water to infiltrate into the ground water. Locations of known deleterious soils such as muck layers

shall be depicted on the construction drawings along with the appropriate notes requiring removal and disposal.

#### 2.04.5 UNDERGROUND STORAGE

A variance in accordance with Section 7, Variance and Appeals, shall be required for underground or vault storage systems proposed for flood control or floodplain compensation storage. The District will only consider these requests when a hardship is proven and when open storage systems (wetlands, lakes/ponds, other waterways, or dry detention and retention areas) are not feasible to meet the criteria of the District. Land use plans that satisfy the criteria of other agencies but do not comply with District criteria do not satisfy the test of whether an open storage system is not feasible.

- 2.04.5.1 Underground storage systems shall provide for diversion of the first flush into isolated chambers with observation ports and full maintenance access with the intent of capturing at least 75% of sediments, or as required by the Statewide Environmental Resource Permit regulations. These chambers shall be accessible for periodic cleaning using readily available equipment.
- 2.04.5.2 The applicant shall provide evidence of site specific geotechnical investigations in a geotechnical engineering report that documents (e.g., Unified Soil or AASHTO Soil classification, standard penetration tests, sieve analyses, etc.) the type and extent of soils found within areas to be excavated for water quantity or water quality storage purposes. Soil borings shall be taken to a minimum depth of five feet (5') below the water control elevation for each ½ acre of storage area or fraction thereof. Deleterious soils shall be removed and filled with permeable material that will allow the stored water to infiltrate into the ground water. Locations of known deleterious soils such as muck layers shall be depicted on the construction drawings along with the appropriate notes requiring removal and disposal.
- 2.04.5.3 Underground storage shall amount to 100% of the required storage for vault storage and 200% of the required storage for seepage systems as determined by routing calculations. For underground storage in seepage systems, the SFWMD ERP Exfiltration Trench formula parameter " $V_{add}$ " shall equal the flood control or floodplain compensation volume and the Factor of Safety, FS, shall be 2.0 (i.e.,  $V_{add}$  x FS = 200% of required storage volume). Refer to the SFWMD ERP Information Manual, Part III References and Design Aids, Appendix G, Exfiltration Trenches, Equation 7 and 8.

- 2.04.5.4 A 3-year letter of credit or 3-year bond for 110% of the value of the underground system shall be provided as a condition of approval of the variance and water management works permit.
- 2.04.5.5 The water management works permit shall be renewed annually in accordance with Section 1.06, Renewals, as a condition for final release of the 3-year bond or letter of credit.
- 2.04.5.6 Minimum operation, inspection and maintenance procedures and schedules shall be depicted and annotated on the record drawings.

#### 2.04.6 LAKE/POND, WETLAND, CANAL, OR WATERWAY FILLING

- 2.04.6.1 No natural or artificial lake/pond, wetland, canal, or other waterway— collectively referred to herein as a water body- shall be partially filled unless the remaining portion of the water body is hydraulically connected to a proposed water body and the storage volume of the proposed water body is greater than the volume of the existing water body to be filled. Partial filling of a waterbody that includes storage volume compensation described herein does not require a variance from these regulations. See Section 2.04.6.3 for additional submittal requirements.
- 2.04.6.2 Except as allowed per Section 2.04.6.1, no water body shall be filled unless a variance is granted by the Board of Commissioners of the Central Broward Water Control District. This section does not apply to the filling of water bodies having a bottom elevation higher than the elevation depicted in the Broward County Water Table Map for Average Wet Season, or the construction of culverts within the secondary system as covered under Section 2.12, Culverts.
- 2.04.6.3 Any water body to be filled, excluding the construction of culverts within the secondary system as covered under Section 2.12 shall be accompanied by the following.
- A. Survey and engineering data to include:
  - a. area at top of bank, water control elevation, and bottom of water body to be filled
  - b. maximum/minimum depth from top of bank to bottom of water body
  - c. cross sections (top-of-bank to top-of-bank) every 100' of perimeter at top of bank
  - d. volume of fill to be placed from the District water control elevation to the 100-year flood stage at the top of bank
  - e. volume of fill to be placed from the District water control elevation to the bottom of the water body

- f. volume of material to be dredged above and below the District water control elevation
- B. Biological report showing no adverse impacts to aquatic life as a result of the proposed work. The report must include:
  - a. the methodology and data sources used to assess aquatic life (both flora and fauna) present, or could potentially be present, at the subject site(s).
  - b. an assessment of flora and fauna present, or could potentially be present, at the subject site(s).
  - c. a determination with respect to whether the proposed work will adversely affect aquatic life at the subject site(s). If the determination concludes that the proposed work could adversely affect aquatic life, then it must include the proposed measures necessary to mitigate the impacts resulting from the proposed work at each site.

#### 2.05 WATER QUALITY RETENTION VOLUME

All projects shall provide on-site retention for one inch of run off from the total project area, or  $2^{1/2}$ " times SFWMD ERP percent impervious, whichever is greater.

The District shall require dry pretreatment for the first one half inch  $(\frac{1}{2})$  of runoff for commercial projects, industrial sites, roadway projects, and other projects where the impervious area exceeds 60% of the total area. Water surface and roofed areas can be deducted from the site area only for the purpose of water quality pervious/impervious calculations.

All retention areas (dry, wet, and underground) must be capable of percolating the water quality design retention volume within 72 hours. One "open hole test" in accordance with SFWMD ERP Applicant's Handbook Volume II, shall be performed for each 500 feet or fraction thereof of retention area perimeter to determine the hydraulic conductivity of the soil. Copies of test results along with hydraulic calculations (Exhibit "X") shall be submitted to the District along with the permit application.

Projects located upstream of a secondary canal where the canal flow or elevation is controlled by a District operated control structure are exempt from the water quality retention requirement described in 2.05 provided: 1) the CBWCD has a valid Environmental Resource Permit that expressly allows the permit exemption described herein, and 2) with the exception that dry pretreatment shall be provided on-site for commercial and industrial projects, roadway projects, and other projects where the impervious area exceeds 60% of the total area.

Any water quality treatment mechanism or system allowed under the Statewide Environmental Resource Permit regulations (Ch. 62-330, F.A.C. and Ch. 40E,

F.A.C.) may be used to satisfy the required water quality retention or pre-treatment volume as modified herein. The treatment mechanism must be capable of retaining the required water quality retention and pre-treatment volume in vaults, chambers, seepage systems, or filtration units that are isolated upstream from the remainder of the underground storage components. Pollution retardant baffle(s) shall be placed on the influent side of all drainage structures leading to the isolated vault(s), chamber(s), filtration unit(s).

#### 2.06 ADJACENT PROPERTY

In addition to the grant of easement required in Section 1.04 of this criteria, applicants shall be required to design and/or construct the drainage system so as not to preclude existing upstream drainage from reaching a District facility.

- 2.06.1 No developed property shall shed water on adjacent land. The applicant shall erect either a wall or berm, or combination thereof, to retain the runoff from the twenty-five-year, three-day storm event.
- 2.06.2 Perimeter berms shall be designed in accordance with Exhibit "I". Retaining walls and foundations shall be located sufficiently away from the applicant's property line to permit construction of the wall without encroaching into adjacent property, unless the applicant secures a written letter of no objection from the affected property owner to construct the wall prior to construction commencement.
- 2.06.3 Perimeter berm elevations shall be 6 inches (6") below structural slab elevations.

#### 2.07 DISCHARGE CRITERIA

The maximum allowable discharge into the District's canals is outlined in SFWMD ERP Applicant's Handbook Volume II and is repeated herein. In the west C-11 basin (west of SW 100th and/or Palm Avenue) maximum discharge is three quarters of one inch (3/4") per day, or 20 CSM (cubic feet per second per square mile). In the east C-11, maximum discharge is one and one-half inches per day, or 40 CSM. Maximum allowable discharge is computed on the twenty-five-year, three-day event.

Projects located upstream of a secondary canal where the canal flow or elevation is controlled by a District operated control structure are exempt from the maximum discharge requirement.

2.07.1 Project discharge shall be the sum of individual discharge values determined for the project. In determining allowable discharge, the capacity of all elements in the control structure (notches, orifices, etc.) shall be considered.

- 2.07.2 Discharge shall be evaluated at the control elevations established herein.
- 2.07.3 Minimum allowable orifice size shall be the equivalent of a 3-inch (3") diameter for circular orifices, or the equivalent for other geometries.
- 2.07.4 All properties shall provide for a positive outfall with the capacity to discharge the allowable discharge.

#### 2.08 RUNOFF

Ground storage capacity may be taken into account in determining total runoff volume. Storage capacity of soils are described in the SFWMD ERP Applicant's Handbook Volume II. For the purpose of determining soil storage, the wet season water table shall be the water control elevations established by the District.

#### 2.08.1 ROOF RUNOFF

Roof runoff from roofs of 2500 square feet or more, and from zero lot line housing, shall be specifically addressed on the plans as it relates to erosion and protection of adjacent property. Details shall be provided which indicate points at which runoff will be collected and the method utilized to control it.

Drainage easements in accordance with Section 3.04 of these criteria shall be required.

2.08.2 Pervious, porous or permeable pavements such as porous concrete, porous asphalt, permeable interlocking concrete pavers, etc. specifically fabricated, engineered and designed to infiltrate surface runoff through the pavement section may be considered as pervious area for the purpose of ground storage and runoff calculations. The pavement must have sufficient porosity and permeability high enough to allow water to readily pass and thus significantly influence hydrology.

Regarding the in-situ soils to remain under the pervious pavement, the applicant shall provide evidence of site specific geotechnical investigations in a geotechnical engineering report that documents (e.g., Unified Soil or AASHTO Soil classification, standard penetration tests, sieve analyses, etc.) the type and extent of soils found. Soil borings shall be taken to a minimum depth of five feet (5') below the water control elevation for each ½ acre of pervious pavement or fraction thereof. Deleterious soils shall be removed and filled with permeable material that will allow the stored water to infiltrate into the ground water. Locations of known deleterious soils such as muck layers shall be depicted on the construction drawings along with the appropriate notes requiring removal and disposal.

#### 2.09 GRADING

Grade slopes away from structures to be protected and toward drainage facilities. A grading plan shall be prepared and submitted to the District; said plan shall clearly indicate that no runoff from the applicant's project shall discharge or flow onto adjacent property (refer also to 2.06 this criteria).

- 2.09.1 Roadways and roadway swale sections shall have a minimum gradient of three tenths of one percent (0.3%) or .003 foot per foot. A maximum run of three hundred feet (300') between high point and low point shall be permitted. No roadway swale shall be permitted which has an elevation less than one foot above the District's Water Control Elevation.
- 2.09.2 In addition to a longitudinal gradient herein specified, all roadways and parking lots shall have a minimum cross pitch (transverse gradient) of one eight of an inch per foot (1/8" per foot) or one percent (1.0%), and a maximum gradient of five percent (5.0%).
- 2.09.3 Swales utilized for water quality treatment and conveyance purposes may have a longitudinal gradient of zero percent (0%) and include downstream ditch blocks or raised inlets to retain the treatment volume. This type of swale must be located in Common Areas within a drainage, flowage and storage easement. The paving and drainage application must include engineering calculations and soil percolation tests demonstrating drawdown of the swale within the required time described in Section 2.05.
- 2.09.4 Swales utilized solely for conveyance purposes (i.e., "conveyance-only swales") must not have standing water after the end of a three-year one-hour rainfall event. Conveyance-only swales that remain flooded beyond one (1) hour due to a hydraulic connection to another stormwater management facility are not permissible. The paving and drainage application must include engineering calculations and soil percolation tests demonstrating drawdown of the swale within the required time.

#### 2.10 DRAINAGE SYSTEMS

All roadways and parking lots shall have a drainage system designed to convey the runoff from a three-year rainfall event. The rational formula, Q = CIA, shall be used for design. The rainfall intensity (I) shall be obtained from the Florida Department of Transportation (FDOT) Zone 10 Intensity-Duration-Frequency curve described in Exhibit F. The starting time of concentration shall be ten (10) minutes. Design of the drainage system shall be such that the energy grade line is no higher than the lowest edge of pavement nearest each drainage structure in the system.

#### 2.10.1 Minimum drain pipe diameter in the District:

- "Building Storm Drains" and "Building Storm Sewers" (as defined in the Florida Building Code) downstream to first yard drain, catch basin, or manhole: size according to the Florida Building Code – Plumbing – Storm Drainage chapter, latest edition
- Pipes that: convey runoff from greater than 0.25 acres of contributory drainage area, or; form part of a storm sewer main trunk line that discharges into a stormwater detention or retention facility, or outfall: 15" minimum
- Perforated or slotted pipe in exfiltration trenches, excluding under drain systems in detention/retention areas: 15" minimum
- Lake/pond interconnecting pipes: 48" minimum or the minimum diameter necessary to result in a head loss of less than or equal to 0.1', whichever is greater.
- 2.10.1.1 The maximum pipe spacing between structures shall be as follows:

Spacing (feet)
300'
400'
500'

- 2.10.2 Any drainage pipe material permitted by the Florida Department of Transportation (FDOT) or Broward County is acceptable. The Manning Roughness Coefficient "n" shall be per the FDOT *Drainage Design Guide*. Pipes under roadways in public rights-of-way shall be reinforced concrete pipe unless other pipe materials are allowed by the entity that owns the right-of-way.
- 2.10.3 Hydraulic design of storm sewers shall utilize a static tailwater elevation equal to the design head over the outlet weir in an exfiltration trench network, the stage inside the on-site point of discharge to a wet pond or dry detention/retention area corresponding to hour 12 of a 3-year 1-day rainfall event, or the design head over any intermediate control structure(s), whichever is higher.
- 2.10.4 Catch basins and drainage collection structures shall be designed with an eighteen inch (18") vertical sump from the invert elevation (or bottom of baffle) to the bottom of the structure. In addition, a twelve-inch (12") diameter open sump, filled with washed grade rock, no larger than one and one-half inches  $(1^{1}/_{2}")$  shall be placed in the base of the structure. Prior to discharge to any body of water or any seepage trench, a pollution retardant baffle shall be installed.
- 2.10.5 All outfalls shall be protected with an appropriately designed headwall of either concrete or rip-rap. In the case of rip-rap, a six inch (6") poured concrete cap is required (Exhibit "H"). Mitered end sections (M.E.S.) may be

utilized only in dry detention or retention areas. The invert of the M.E.S. shall be no lower than the bottom of the detention/retention area.

- 2.10.5.1 The top of the headwall shall be set one foot (1') above the water control elevation for culvert crossings of the secondary canals (Exhibit "H") and project outfalls to secondary canals. Each existing and proposed headwall for pipes discharging into a District canal shall include a permanent benchmark stamped with the corresponding NGVD29 and NAVD88 elevation.
- 2.10.5.2 The crown of pipe(s) shall be set no higher than the water control elevation (Exhibit "H") for lake/pond outfalls.

At the discretion of the District Manager or Engineer, headwalls of deep outfalls to lakes/ponds may be replaced with a metal pipe attached to a concrete jacket in accordance with FDOT design standards.

- 2.10.6 When routing stormwater to a wet detention treatment facility, inlets to the facility shall be directed to the opposite side of the facility from the discharge structure.
- 2.10.7 Pipes interconnecting lake/pond systems shall be sized to comply with all the provisions of this Section 2, Engineering Criteria. Stage-storage routing shall be performed to demonstrate that interconnected lakes/ponds comply with the criteria for all design storm events (3-year, 10-year, 25-year, and 100-year).

#### 2.11 SEEPAGE SYSTEMS

Seepage systems may be used for purposes of water quality retention but shall not be used for purposes of flood control. The storage and exfiltration capacity of a seepage system shall not be credited to pipe routing calculations. The storage and exfiltration capacity of seepage systems may be credited toward stage-storage routing calculations, provided that the maximum amount of credit shall not exceed the water quality design volume of the seepage system. Excess seepage system capacity beyond the required water quality design volume shall not be credited toward stage-storage routing calculations.

On-site subsurface retention, seepage system, or french drain shall be considered as being a perforated pipe system (fifteen-inch (15") minimum diameter) surrounded by three quarter of an inch (3/4") washed rock and protected on four (4) sides by a pervious geotextile (Mirafi, Typar, etc.).

2.11.1 Design and length of seepage systems shall be in accordance with SFWMD ERP Information Manual, Part III – References and Design Aids, Appendix G, Exfiltration Trenches. An applicant may include the parameter "Vadd" to determine the length of exfiltration trench required to store any additional volume beyond the required water quality treatment volume only if the applicant receives approval for the use of underground storage in accordance with Section 2.04.11.

- 2.11.2 One standard open hole falling head percolation test shall be taken for each five hundred feet (500') or fraction thereof of seepage system designed, copies of which shall be submitted to the District with hydraulic calculations.
- 2.11.3 Depth to water table shall be from finished grade to the District Water Control Elevation.
- 2.11.4 No seepage system shall be considered as dry retention unless the invert of the perforated pipe is at or above the District Water Control Elevation.
- 2.11.5 Maintenance structures shall be placed at the terminal ends of all french drains/seepage systems and pollution retardant baffles shall be placed on the drain field side of all drainage inlets.

#### 2.12 CULVERTS

Culverts shall be installed where roadways and driveways cross District canals. The size of new culverts or culvert replacements shall be determined by the District Engineer, but in no case shall be less than required to pass the allowable discharge for the basin or 48 inches in diameter, whichever is higher. The applicant shall provide calculations to demonstrate that the proposed culvert will pass the 100-year peak design flows with a head loss under 0.1 feet including entrance losses; or has the equivalent hydraulic capacity of 110% of the design cross-section of the channel as determined by the District. Additionally, the applicant will be required to excavate the canal to two feet (2') below the proposed culvert invert for a distance of fifty feet (50') upstream and downstream of the crossing. No driveway culvert shall be installed within fifty feet (50') of an existing culvert. As a condition of permitting, the District may require dedication of a roadway easement for adjacent property owners.

- 2.12.1 Notwithstanding the provisions of this section, no additional culverts will be permitted in the District's S-35 canal (Hancock Road), N-27 canal (Boy Scout Road), N-25 canal (SW 136 Avenue), S-22 canal (SW 106 Avenue), S-24 canal (SW 48 Street), and S-25 canal (Hiatus Road). All future crossings on these canals shall be made by a bridge with a clear span of 15 feet (15') and a minimum bottom of structure elevation of 6.0' NGVD 29 [4.4' NAVD 88]. An applicant may utilize a concrete culvert, box culvert, or arch culvert in lieu of a bridge crossing provided the culvert creates no more than 0.01' of total head loss (including form, entrance and exit losses) and meets the other requirements of this Section. The District may impose additional conditions such as improving the conveyance capacity of existing nearby culverts as mitigation for anticipated head loss resulting from the addition of a culvert in the Canals referenced in this sub-section.
- 2.12.2 No culverts in the secondary canal system shall exceed 100 feet without a variance.

- 2.12.3 All culverts in the secondary canal system shall be made of reinforced concrete.
- 2.12.4 The culvert crown elevation shall be set at the District's Water Control Elevation.
- 2.12.5 A minimum safety factor of 12 inches (12") shall be added to the minimum calculated culvert size.
- 2.12.6 Culvert replacements and driveway culverts on Secondary Canals that provide access to buildings undergoing substantial improvement shall conform to the design requirements of new culverts.

#### 2.13 UTILITY CROSSINGS

- 2.13.1 Overhead power, telephone, cable, and other utility crossings must have a minimum vertical clearance of twenty-five feet (25') between low wire elevation and the elevation of the maintenance berm or natural ground.
- 2.13.2 Over water crossings shall be supported on piling with a minimum spacing between piles of twenty feet (20'). A clear height of six feet (6') from the District control elevation to the underside of any portion of the structure shall be provided.
- 2.13.3 Submarine or subaqueous crossings of any nature shall be laid to a depth of three feet (3') below the depth and cross section of the District's canal's ultimate or design bottom elevation. The subaqueous crossing length shall be the full width of the canal if utilizing a horizontal directional drilling installation method, the minimum clearance between the canal bottom and the outside of the pipe shall be three feet (3'). The applicant shall install an object marker with the appropriate message along the centerline of the crossing and within five feet (5) of the top of bank on both sides of the canal. The message shall describe the type of utility crossing (e.g., Gas, Electric, Sewer, Cable, etc.)
- 2.13.4 Notwithstanding the provisions of this section, the utility system owner which owns or will own the utility, shall be required to enter into a hold harmless and indemnification agreement, indemnifying and holding the District harmless from any and all damages as a result of the utility line being constructed in the District's property.

#### 2.14 DOCKS, DECKS, AND OTHER STRUCTURES

2.14.1 Docks and Decks may be erected in a drainage, flowage and storage easement, or lake maintenance easement with permission of the District.

- 2.14.1.1 In order to obtain permission the property owner shall be required to enter into an agreement with the District. The agreement is described in Exhibit "S", Dock and Deck Agreement.
- 2.14.2 No structure of any nature (refer to 2.04.6) shall be erected which would encroach into a canal, canal right-of-way, canal easement, or canal maintenance easement.

#### 2.15 SINGLE FAMILY HOMES

Single family home sites not covered under a District approved stormwater management permit shall, at a minimum, comply with the following requirements. Compliance with other provisions of the engineering criteria shall be at the discretion of the District Manager.

- 2.15.1 Prior to initiating any construction activity, including clearing grubbing, or earth moving operations, applicants shall submit two sets of plans and the information in Exhibit "W", Checklist for Single Family Homes Plan Approval, for review and approval by the District Manager. The plans and water management calculations must depict the proposed and planned ultimate or future build-out areal extent of buildings, building extensions, structures, decks, pools, site filling, and any other encroachment that would reduce floodplain storage below the required minimum volume.
- 2.15.2 No developed property shall shed water on adjacent land. The applicant will be required to erect either a wall or berm, or combination thereof, to retain the runoff from the twenty-five year three-day storm event.
- 2.15.3 At a minimum, thirty percent (30%) of the site shall remain at existing grade to provide for storage of the 25-year, 3-day rain storm event. Proposed grade shall be one foot above the water control elevation. Higher proposed elevations may be allowed provided that ground elevations in the general area are naturally higher and that the proposed grade elevation is no higher than ground elevations of adjacent properties.

The surface water management area (30% of the site) shall be designated and recorded with the Broward County Board of County Commissioners, County Records Division, Recording Section, 115 South Andrews Avenue, Room 114, Fort Lauderdale, FL 33301, utilizing the forms provided in Exhibit "Z".

- 2.15.4 If offsite discharges are designed to occur during 25-year and lesser storms, the applicant shall utilize best management practices, in accordance with these engineering criteria, to reduce pollutant discharges.
- 2.15.5 Prior to receiving the Certificate of Occupancy, the applicant shall submit as-built drawings in accordance with the Checklist for Single Family Homes Plan Approval (Exhibit "W") for the review and approval of the District

Manager. Applicant shall grant District staff access to the property for the purpose of conducting visual inspections.

2.15.6 Refer to Section 1.08 regarding enforcement of violations and imposition of penalties.

#### 2.16 FLOODPLAIN ENCROACHMENT

No net encroachment into the floodplain shall be allowed that adversely affects the existing rights of others. With regard to runoff storage, the volume of useful storage available to the basin shall not be decreased as a result of proposed development or redevelopment. The area subject to no net encroachment shall extend from the peak 100-year 3-day water surface elevation for the nearest District canal to the water control elevation. Calculations to demonstrate no net floodplain encroachment shall follow the same guidelines as the SFWMD ERP Applicant's Handbook Volume II. In addition, the applicant shall provide calculations demonstrating that the allowable storage to the basin has not been reduced at the District 100-year flood encroachment elevation. The District 100-year flood encroachment elevation shall be provided by the District Engineer.

A request for a variance from this Section does not require demonstrating a genuine hardship with respect to Sub-Section 7.02.1 of the Criteria. Any variance requested shall be the minimum necessary deviation from the Criteria to afford relief considering the flood heights or flood hazard. In lieu of demonstrating a genuine hardship, the District may require alternative mitigation measures be provided as part of any request for variance. Alternative measures include, but not necessarily limited to, upgrading existing secondary canal culverts, providing additional off-site flood plain storage, or providing a basin-specific capital improvement or maintenance project.

- 2.16.1 Applicants have the option of performing floodplain encroachment calculations using the guidelines of the SFWMD ERP Applicant's Handbook Volume II or providing a lake/pond size of 25% of the area of the property for properties exceeding 10 acres in size, or 15% of the property for properties of 10 acres or less. In either case, these percentages are the maximum lake/pond area required after the applicant demonstrates to the District Engineer that the site grading has been lowered to the maximum extent practicable. Lake/pond areas shall be measured at the top of bank.
- 2.16.2 If selecting the 15%/25% options, applicants may utilize a lake/pond, a detention or retention area, or vault-style underground storage provided that the site storage of the detention/ retention area(s) or vault(s) is no less than the site storage provided by the required lake/pond area, as measured from the water control elevation proceeding upward to the lake's/pond's top of bank elevation up to the 100-year water surface elevation of the nearest District canal. The use of vault-style underground storage for floodplain compensation does not include seepage systems described in Section 2.11.

2.16.3 Projects located upstream of a secondary canal where the canal flow or elevation is controlled by a District operated control structure shall maintain predevelopment flood plain storage volumes on—site or provide the necessary flood plain storage volume based on a site-specific engineering analysis that complies with District criteria, whichever is greater.

#### 2.17 LANDSCAPING

Stormwater management permit applications shall include a landscape plan identifying proposed vegetation and existing vegetation to remain along with a legend identifying all species. The landscape plan shall show the location of all vegetation in relation to existing or proposed easements, rights-of-way, stormwater management systems, drainage structures, and overall site plan.

Except as provided for herein and in Section 1.04.5 of this criteria, easements dedicated to the District (canal easements, canal maintenance easements, drainage, flowage and storage easements, lake maintenance easements, and drainage easements) shall be cleared of all trees, plants, and nuisance plant species, and no new trees or plants shall be planted.

- 2.17.1 Trees where the lateral extent of the drip line of the canopy at mature height is expected to encroach within ten (10) feet of the near edge of a storm sewer shall require the following pipe protection measures.
- 2.17.1.1 Trees should be limited to the following species: Lysiloma Bahamensis (Wild Tamarind); Ilex cassine (Dahoon Holly); Tabebuia heterophylla (Pink Tabebuia); or Coccoloba diversifolia (Pigeon Plum); native (i.e., "Florida Friendly") palm species that develop non-invasive roots. Other species may be utilized if found to be acceptable by the District Engineer with respect to safeguarding the integrity of the storm sewer.
- 2.17.1.2 All storm sewer pipes within an easement shall be installed such that the outside top of pipe is at least one (1) foot below the water control elevation. Root barrier shall be installed in the same trench excavated for the storm sewer pipe from below the invert of the storm sewer pipe to one half (1/2) inch above finished grade if the outside top of pipe is less than one (1) foot below the water control elevation,
- 2.17.2.4 Trees shall be planted with a minimum three (3) feet offset from the tree centerline to the near edge of a twenty (20) feet drainage easement that encompasses a storm sewer pipe. For drainage easement widths greater than twenty (20) feet, the tree may be planted just outside the easement boundary.

#### 2.18 EXHIBITS

Exhibits referenced in these regulations and criteria form a part thereof and are incorporated by reference. In the case of conflict, the more stringent shall apply. Copies of the exhibits are available at the District's office and on the District's web site:

http://centralbrowardwcd.org/documents/exhibits/

# 3. PLAT CRITERIA

#### 3.01 GENERAL

The following criteria will be utilized by the District in the review of all plats. Variances to these criteria may be granted by the District's Board of Commissioners at their discretion.

- 3.01.1 The submittal and review process shall be as outlined in Section 4 and as detailed herein.
- 3.01.2 References to plats that were recorded in the official records of "Dade County" shall be referenced as "Miami-Dade County".

#### 3.02 CONCEPTUAL DRAINAGE PLAN

Applications for plat approval shall be supported with a submission of conceptual paving and drainage plans. If no plan exists, the conceptual plan may be replaced with a report that outlines the following:

- 3.02.1 Allowable land use and zoning of the property. Identify the existing or proposed land use designation (i.e. A-1) along with a brief description of the zoning designation.
- 3.02.2 How drainage will be handled for the project.
- 3.02.3 A designation of whether drainage easements will be required.
- 3.02.4 How drainage easements will be provided.
- 3.02.5 A signed statement by the property owner, or the owner's agent, and the engineer of record affirming the future development will comply with District rules at the time of submittal of a paving and drainage application.

The conceptual plan, if submitted, shall show the preliminary layout of the project with proposed methods to achieve compliance with District's standards. Applicants should note that compliance with Section 2.16, Floodplain Encroachment, should be reviewed because of its impact on-site storage requirements and stormwater management facilities.

The conceptual paving and drainage plan or report shall be signed and sealed by a Licensed Professional Engineer.

Approval of a plat, with or without a conceptual plan, does not grant approval of the plan or report as submitted. Compliance with District's standards at the time of permit approval of drainage plans and calculations may require adjustments to water management facilities shown on the conceptual plans and plat.

#### 3.03 CANAL RIGHT-OF-WAY

The District will review the plat and inform the applicant of the need to provide by dedication additional canal Rights-of-Way.

#### 3.04 EASEMENTS

The District shall require the dedication of easements for canals, canal maintenance, drainage, flowage and storage, lake maintenance, drainage, and ingress/egress. The provisions of this Section shall also apply to Paving and Drainage Plan submittals. Any easement to be dedicated to the District shall be recorded in the official records of Broward County prior to any lot or unit sales within the property served by the stormwater management facility, or upon completion of construction of the facilities, whichever occurs first. The District, at the discretion of the District Secretary/Manager, may require the recordation of easements prior to initial permit approval.

- 3.04.1 Twenty feet (20') maintenance easements are required for lakes/pondsand canals. The twenty feet (20') is measured landward from the top of bank.
- 3.04.2 Lake/pond, canal, and boat ramp access shall be by ingress/egress easement a minimum of twelve feet (12') in width from the closest traveled way.
- 3.04.3 Drainage piping shall have a minimum easement width in accordance with the following:

Pine Diameter (inches)

Fipe Diameter (inches)	Diamage Lasement Width (leet)
Building storm drains or	No easement required
Building storm sewers	
downstream to first	
manhole or catch basin.	
Pipes less than 15"	No easement required if located in a common area
Pipes (any size) for	No easement required upstream
secondary drainage	of first structure outside of field
systems surrounding	perimeter
sports fields	
15" to less than 36"	20'

Drainage Fasement Width (feet)

36" to 54" 30' 60" or larger 40'

#### 3.04.4 Drainage Easement for Swales:

- 3.04.4.1 Swales shall have a maximum width of twenty feet (20') from top of bank to top of bank.
- 3.04.4.2 Swales that convey stormwater runoff from the front or rear yard, side yard, or between buildings of multi-family residential subdivisions do not require an easement provided that the swale or pipe: 1) is wholly within the "common area" under the control of the homeowners' association; 2) does not include the passage of drainage from off-site upstream areas; 3) is not utilized to store or treat any portion of the required water quality treatment volume; and 4) conveys runoff from less than or equal to 0.25 acres of contributory drainage area, including roof area.
- 3.04.4.3 Swales that convey stormwater runoff from contributory drainage areas greater than 0.25 acres shall have a minimum drainage easement width that coincides with the top-of-bank to top-of-bank limits of the swale or twenty feet (20'), whichever is less.
- 3.04.5 Stormwater management facilities shall be enclosed within a drainage or drainage, flowage and storage easement. Where these areas allow drainage from upstream areas to pass through, a drainage, flowage and storage easement twenty feet (20') in width shall be provided, or wider if piped as required per Section 3.04.3.
- 3.04.6 All developments, including platted single-family subdivisions, shall include the following stormwater management facilities in common areas:
  - Wet detention and retention lakes/ponds up to the top of bank
  - Dry detention and retention areas up to the top of bank
- 3.04.7 Drainage, maintenance, flowage, storage, and ingress/egress easements shall be dedicated to the District. Retention, detention, and stormwater management facilities shall be dedicated by easement to the District, with perpetual maintenance the responsibility of the property owner or homeowners' association.
- 3.04.8 Easements dedicated during plat approval shall be considered preliminary and subject to change pending review and approval of drainage plans, reports, and calculations.
- 3.04.9 Easements shall be provided to allow proper access to all District easements from an adjacent public right-of-way or access easement.
- 3.04.110 Easements shall be provided for future outfall connections as determined by the Board.

3.04.111 Any easement to be dedicated to the Central Broward Water Control District that overlaps with a proposed conservation easement shall be dedicated and recorded in the public records of Broward County prior to the recordation of the conservation easement. The conservation easement shall not prevent the use of the CBWCD easement for drainage purposes as contemplated in the appropriate CBWCD form of easement.

#### 3.05 STANDARD PLAT LANGUAGE

The following standard plat language shall be included in plats submitted for District approval:

# 3.05.1.a DEDICATION (ONLY IF EASEMENTS WILL BE DEDICATED AT TIME OF PLAT APPROVAL):

"All [insert specific type(s) of easement(s) described in the plat plan that will be dedicated to the District] easements are hereby dedicated to the Central Broward Water Control District with perpetual maintenance the responsibility of the property owner or homeowners' association."

"No improvements, trees or encroachments including utilities (except for overhead power, cable or telephone lines with a minimum 25 foot clearance) or landscaping are allowed within easements dedicated to the Central Broward Water Control District without the approval of and a permit from the Central Broward Water Control District and the utility system owner entering into a hold harmless and indemnification agreement with the Central Broward Water Control District. It is the intent of this provision that all utilities (except for overhead power, cable or telephone lines with a minimum 25 foot clearance) proposed to be constructed within utility easements that cross or coincide with easements dedicated to the Central Broward Water Control District must be reviewed and permitted by the Central Broward Water Control District.

# 3.05.1.b DEDICATION (ONLY IF EASEMENTS WILL NOT BE DEDICATED AT TIME OF PLAT APPROVAL):

"No improvements, trees or encroachments including utilities (except for overhead power, cable or telephone lines with a minimum 25 foot clearance) or landscaping are allowed within easements dedicated to the Central Broward Water Control District without the approval of and a permit from the Central Broward Water Control District and the utility system owner entering into a hold harmless and indemnification agreement with the Central Broward Water Control District. It is the intent of this provision

that all utilities (except for overhead power, cable or telephone lines with a minimum 25 foot clearance) proposed to be constructed within utility easements that cross or coincide with easements dedicated to the Central Broward Water Control District must be reviewed and permitted by the Central Broward Water Control District.

3.05.2	SIGNATURE BLO	CK:		
	"Central Broward V	Vater Control D	strict":	
	Central Broward owner shall conta	Water Con, 2 act the Centra Iditional easem	hereby approved and trol District this _ Prior to development of Broward Water Corents and/or other dedicated Water Control District	Day of of this property, ntrol District for ations which may
	"This plat was appr following dates":	roved by the Ce	entral Broward Water Co	ontrol District the
	Ву:	E	Ву:	
	Chair	Date	District Manager	Date

#### 3.06 SIGNATURE

All plats shall provide for the signature of the Chair, Vice Chair, or acting Chair of the District Board of Commissioners, and the Secretary/Manager of the District, or a Second Commissioner.

3.06.1 Chair, Vice Chair, or acting Chair of the Board of Commissioners, and the District Secretary/Manager will sign the original plat following its approval by the Board of Commissioners.

# 3.07 REVISIONS

If, in the opinion of the District Secretary or the Second Commissioner of the District, revisions to the plat as originally approved may affect drainage, the plat shall be resubmitted to the District for re-review and approval.

# 3.08 RECORDATION

The applica	ant shall furnish	a print of the	recorded pla	at to the Distr	ict for its file	S.

# 4. PERMIT APPROVAL

#### 4.01 GENERAL

The Central Broward Water Control District Board of Commissioners meets regularly the second and fourth Wednesday of each month. The Board of Commissioners meeting is held at the District office located at 8020 Stirling Road, Hollywood, Florida 33024. See the calendar on District's web site for meeting dates and times:

# http://centralbrowardwcd.org/calendar/

- 4.01.1 All questions involving fees, schedules, agendas, meetings, or bonding shall be directed to the District Secretary/Manager.
- 4.01.2 All questions regarding preparation of paving, grading, and drainage plans, which involve engineering criteria or clarification to the District's Standard Criteria, shall be directed to the District's Engineer.

#### 4.02 REQUIREMENTS

All plans submitted shall be prepared under the direction of and signed and sealed by the appropriate licensed professional engineer, licensed professional surveyor and mapper, or licensed professional landscape architect licensed by the State of Florida Department of Business and Professional Regulations, Board of Professional Engineers. Refer to Exhibit C for the minimum required documentation.

4.02.1 All plans submitted shall be on standard 22" X 34" (full-size), 24" X 36" (full-size), or 11" X 17" (half-size) sheets with a maximum scale of 1' = 100' on full-size sheets for overall exhibits and 1" = 40' for paving, grading, drainage plans. All text must be large enough to be legible on half-size sheets or annotated with a font size greater than or equal to 0.080", or equivalent to Arial 8 point. Any plans submitted on oversized sheets will be returned without comment. The District may also require plans to be submitted (or transmitted) in digital format.

- 4.02.2 As a minimum, plans submitted for District approval shall provide:
  - 4.02.2.1 Location sketch at 1" = 300' accurately relating the project to section lines and/or corners.
  - 4.02.2.2 North arrow and scale and legal description of the property.
  - 4.02.2.3 Acreage of the project with a schedule of pervious/impervious areas, stormwater management facilities, all electro-mechanical equipment such as transformers, irrigation assemblies, air-

conditioning equipment pads, light poles, etc. and building coverage, including future build-out limits of all buildings, decks, patios, and pools.

4.02.2.4 A recent (i.e., last date of field data collection is less than 6 months from date of initial application submittal) topographic and boundary survey of the project and surrounding area showing where appropriate section lines, rights-of-way, recorded easements, property lines, reservations, references to official records, etc., all properly depicted and annotated.

In lieu of providing a survey that is less than 6 months old from the date of initial submittal, provide a properly signed and sealed survey to be accompanied by a Florida registered Surveyor and Mapper's notarized affidavit affirming no additions or changes to the property have been made since the date shown on the submitted survey.

For District canals adjacent to the property, locate right-of-way (ROW), easements, edge of water, and top of bank. Provide cross-sections of District canals every hundred feet (100') of property frontage to include all grade breaks from top of bank to top of bank.

- 4.02.2.5 Paving, grading and drainage plans are to include:
  - 4.02.2.5.1 Existing ground elevations at no greater than a 100-foot grid extending 100 feet beyond the boundaries of the development, existing buildings, roadways, and other permanent structures; and location and elevations of existing drainage facilities within 150 feet of the project boundary.
  - 4.02.2.5.2 Proposed development layout with horizontal and vertical control. The paving and drainage plan(s) must graphically depict the future build-out limits of all buildings, decks, patios, and pools in addition to a detailed geometry of the currently proposed improvements.
  - 4.02.2.5.3 Drainage structures, stormwater management facilities, drainage piping, and culverts with grate and invert elevations, and pipe sizes.
  - 4.02.2.5.4 Direction of flow in swales and other transmission facilities with control elevations.
  - 4.02.2.5.5 Typical sections for roads, canals, lakes/ponds, drain fields, and drainage structures. Lot grading plan(s).
  - 4.02.2.5.6 Specifications of material to be utilized for roadway and drainage construction.

- 4.02.2.5.7 Proposed easements for stormwater management facilities.
- 4.02.2.5.8 Percolation test reports to support design of seepage trench systems.
- 4.02.2.5.9 Routing of the 10-year, 1-day; 25-year, 3-day; and 100-year, 3-day zero discharge storm events to support pavement elevation, perimeter berm, and finished floor elevations.
- 4.02.2.5.10 Details of project control structure including stage/discharge rating curves.
- 4.02.2.5.11 Pipe routing calculations for the 3-year storm to support pipe sizes and catch basin rim elevations.
- 4.02.2.5.12 Central Broward Water Control District General Notes (see Exhibit J).
- 4.02.2.5.13 Completed check list. Projects submitted without check list will be returned without comment.
- 4.02.2.5.14 Other information as required by the District's Engineer.
- 4.02.2.6 For existing developments that do not have a CBWCD water management works permit, provide a log of the operation and maintenance schedules for all the components of the stormwater management system to remain, and a stormwater certification report (Exhibit V) signed and sealed by a Licensed Professional Engineer certifying that the components of the stormwater management system are functioning as designed.

# 4.03 SUBMITTAL

One (1) original set of the application form, drawings, supporting information, and the requisite fees, shall be submitted to the District Secretary at the District Office, located at 8020 Stirling Road, Hollywood, Florida 33024, prior to the close of business no later than three (3) weeks before the next scheduled meeting of the Board of Commissioners, for which the applicant would like to have his project considered.

4.03.1 Two (2) copies of the application form, checklist, and signed/sealed drawings and supporting information shall be submitted directly to the District's Engineer's office on the same day. Electronic submittal of digitally or electronically signed/sealed/dated plans, specifications, reports or other documents will be accepted for initial and interim submittals provided the document is signed and sealed in accordance with the digital or electronic signing and sealing requirements and rules of the registered professional in responsible charge. For engineering documents, see Ch. 61G15-23.004, F.A.C. and 61G15-23.005, F.A.C. For survey maps, see Ch. 5J-17.062, F.A.C. For

landscape architecture work, see Ch. 61G10-11.011, F.A.C. Final submittal documents must be physically signed, sealed and dated.

4.03.2 Requests for permit application forms can be made in person, by letter or by phone, directly to the Central Broward Water Control District office at 8020 Stirling Road, Hollywood, FL 33024, 954-432-5110. There is no charge for issuance of an application form for a permit.

#### 4.04 ENGINEER REVIEW

The District's Engineer will review all submittals for conformity to the District's Design Standards and general acceptable engineering standards. The Engineer will convey comments and/or remarks, if any, to the applicant in a timely manner so that revisions (if any) can be made for board submittal. The Engineer's review findings or the District's acceptance of the proposed work shall not be construed as an approval of a violation of the provisions of these criteria or of other rules and regulations of authorities having jurisdiction. The applicant, through their design professionals, is solely responsible for complying with the rules and regulations of other authorities having jurisdiction.

4.04.1 An appeal of the District's Engineer's requirements may be presented to the District's Board of Commissioners at the applicants request through the District Secretary/Manager.

#### 4.05 BOARD SUBMITTAL

Once the application is deemed complete, the Applicant shall submit eight (8) copies of the revised application form, drawings (11" X 17"), one (1) set of full size signed/sealed construction drawings, and supporting information to the District Secretary/Manager at the District Office located at 8020 Stirling Road, Hollywood, Florida 33024 prior to the close of business no later than two (2) weeks before the next scheduled meeting of the Board of Commissioners. In addition, the District may require the drawings and supporting information to be submitted (or transmitted) in digital format.

4.05.1 Two (2) revised copies of the application form, signed/sealed drawings (24" X 36") and supporting information shall be submitted directly to the District's Engineer's office on the same day. All drawings and calculations submitted to the District Engineer shall be signed and sealed by a Licensed Professional Engineer. If the Board approved drawings and supporting information differs from the information submitted prior to the

Board meeting, the applicant shall resubmit all required information within three weeks of Board approval.

#### 4.06 BOND BEFORE CONSTRUCTION

If any construction is started prior to District Board approval of the plans and receipt by applicant of signed Water Management Works Permit, or after approval and permit issuance; but before a bond is posted in an acceptable manner, the District Attorney will secure an injunction to halt construction. The costs of bringing said action including attorney's fees shall be borne by the Developer.

4.06.1 A certificate of the District's Engineer or District Secretary shall be prima facie evidence of non-compliance of the Developer with these criteria. The court may issue a temporary injunction upon the showing of non-compliance without a further need to show damage to the health, safety, or welfare of the residents of the District.

#### 4.07 EXPIRATION

All approvals expire after twenty-four (24) months from the date of issuance.

- 4.07.1 Permits will become invalid two (2) years from date of issuance if work has not begun on a permitted project unless other provisions have been made with the District. The District must be notified in writing before construction commences or re-commences after a period of construction suspension longer than sixty (60) days after initial construction commencement. Permits will become invalid upon suspension of work in excess of one hundred eighty (180) days on any permitted work unless an extension has been granted by the District.
- 4.07.2 If the permittee wishes to begin, continue, or resume work after permit expiration, a new permit must be obtained which will be reviewed in accordance with all current conditions and regulations, and which will require new plan approval. The construction phase of the permit will expire upon completion of the permitted work and acceptance of the record drawings of the installation.
- 4.07.3 An extension of time may be granted by the Board of District Commissioners at their discretion.
- 4.07.4 The declaration of a state of emergency issued by the Governor of Florida for a natural emergency tolls the period remaining to exercise the rights under a permit or

other authorization for the duration of the emergency declaration subject to the provisions in § 252.363, Florida Statutes.

#### 4.08 TRANSFER OF OWNERSHIP

The permittee shall notify the District by letter within five (5) days of any sale, conveyance, or other transfer of ownership or control of a permitted water management works or the real property on which the permitted works is located. The permittee shall remain liable for performance in accordance with the permit and for corrective actions that may be required as a result of any violations prior to the transfer.

Any new owner of a permitted water management works shall apply by letter for a transfer of permit within (5) days after sale or legal transfer. The new owner shall be liable for performance in accordance with the permit after the transfer.

# 5. BONDS AND INSPECTION

#### 5.01 GENERAL

Upon District Board of Commissioners approval of plans, but before construction can commence, the following items must be complied with:

- **5.**01.1 Bond (cash or surety), in the District's favor, must be posted in the amount of 110 percent of the Developer's Engineer's (Engineer of Record) estimate of cost of construction of the paving and drainage works. (Subject to approval of the cost estimate by the District Secretary/Manager.)
- 5.01.3 Upon compliance with the conditions required by the Board for approval, and receipt of approved plans from the District Engineer, the District Secretary/Manager will mark the plans "Approved", sign same and retain one (1) set in the District files.
- 5.01.4 The District's Bond Form is the only form approved for use, and it shall be a recorded instrument. Release or reduction from the recorded instrument shall be the responsibility of the applicant.
- 5.01.5 Bonds shall be provided by the principals of developments only. Contractor or Sub-Contractor bonds are not acceptable.

#### 5.02 INSPECTION

When construction is in progress, the District's inspector will inspect the installation of drainage works, according to an inspection schedule established by the Board of Commissioners. Inspection must be made by District personnel of all underground storm drain facilities before backfilling; call 954-432-5110 for an inspection appointment a minimum of twenty-four (24) hours in advance. All costs of periodic inspections of construction by the District shall be borne by the Developer.

# 5.03 SEPARATE BOND FOR EXCAVATION

Swales, lake/pond banks, slopes, canals, and other excavations, including aquatic plantings in the required littoral zones shall be bonded separately from other drainage improvements and will be held by the District until successful completion. The amount of

this separate bond will be determined by the District Board of Commissioners and by recommendation of the District Secretary/Manager.

A portion of the bond for excavation shall be held by the District until each excavated water body with a littoral zone(s) achieves an 80% coverage or appropriate survival rate for planted and recruited species and no more than 5% nuisance or exotic plant species coverage following the one (1) year anniversary of the approved as-built drawings. If the survival requirement is not met, the applicant, or his successors and/or assigns, shall plant and maintain each site until the 80% coverage or survival rate is achieved.

#### 5.04 RECORD DRAWING

Record drawings certified by the Engineer of Record based on as-built drawings certified by a Florida Registered Professional Surveyor and Mapper will be required before release of performance bonds. Both certifications must appear on each sheet of the record drawing.

#### 5.05 BOND RELEASE

Subject to the provisions stated herein, upon successful completion of construction and acceptance of "As-Builts", the amount of the performance bond as determined by the District Board may be reduced. The balance of the bond shall remain in full force and effect for the minimum of an additional twelve (12) months after final inspection and approval, unless supplemented by a new bond form in the required amounts and as approved by the District Secretary/Manager. The procedure for reduction and/or release of bonds shall include the following:

5.05.1 At least three (3) weeks prior to the Meeting of the Board of Commissioners the request for a reduction or release of bond is to be considered by the District Board of Commissioners, the developer shall provide to the District's Secretary/Manager, a current list of the names and addresses of all property owners owning property within the development for which the bond is requested to be either reduced or released.

5.05.2 Upon receipt of the list of property owners, the District Secretary/Manager shall mail by certified mail, return receipt requested, notification to all property owners in substantially the following form:

The developer of (<u>name of development</u>) has requested a (reduction) (release) of the developments construction performance bond in the amount of \$\_\_\_\_\_ which is being held by the Central Broward Water Control District to assure completion of

construction of paving and drainage improvement within (name of development) of which
the District has been advised you have acquired a part of. This bond in the amount of \$
will be considered for (reduction) (release) at the District's Board of
Commissioners Meeting scheduled for the _day of
, 2 @ PM at 8020 Stirling Road (Davie), Hollywood, Florida 33024. If you
have any questions regarding the reduction or release of this bond you may contact the
District's Secretary/Manager at 954-432-5110 or present your comments to the District
Board of Commissioners at the District's Meeting.

# 6. RECORD DRAWINGS

#### 6.01 GENERAL

Prior to the release of any bond or surety, the Developer, through his Engineer, shall submit "Record" drawings to the District for review and approval.

- 6.01.1 The submittal and review process shall be as outlined in Section 4 and as detailed herein.
- 6.01.2 As-built drawings must accurately reflect site conditions and be no older than six (6) months from the date of submittal to the District or six (6) months from the last date of field data acquisition by the Surveyor of Record, whichever is older.
- 6.01.3 One CD containing electronic files of plat, paving and grading plans, reports, other supporting information, and the final version of as-builts drawings shall be submitted to the District's Engineer's office on the same day. The CD shall contain an index file with a brief description of CD file contents, and shall be labeled with project name, company name, and point of contact. Documents and spreadsheets shall be submitted in either MS Word, Word Perfect, Excel, Lotus, or another format approved by the engineer. Drawings shall be submitted in AutoCAD, AutoCAD compatible file type, or another format approved by the District's Engineer.
- 6.01.4 All easements, deed restrictions, maintenance agreements, deeds, and water management works permit as required by the Board shall be presented to the District Secretary/Manager and Attorney for approval before recordation. All costs of recording the applicable instrument will be borne by the developer.

#### 6.02 SIGNATURE AND SEAL

All record drawings shall be signed and sealed by the Engineer of Record. The Record drawings shall be based on as-built drawings certified by a Licensed Professional Surveyor and Mapper and must contain the signature and seal of the Licensed Professional Engineer of Record as well as the signature and seal of the Licensed Professional Surveyor and Mapper of Record. Such signature shall evidence that he has reviewed the information, finds it in substantial accordance with the design; and where deviations from the design exist, that said deviations are not to the detriment of the project or the District. The record drawing must include the following certification statement on each drawing and be signed/sealed by the Engineer of Record:

I HEREBY CER	TIFY THAT	THE STC	RMWATER	MANAGEMEN	Τ
FACILITIES FOR	THIS PRO	JECT HAVE	BEEN CO	NSTRUCTED I	Ν
SUBSTANTIAL AC	CCORDANCE	WITH THE	<b>DESIGN APP</b>	ROVED BY TH	Ε
CENTRAL BROW	ARD WATE	R CONTRO	L DISTRICT	, AND HEREB	Υ
AFFIX MY SEAL 7	ΓHIS	DAY OF		_, 20	
<b></b>					
(SEAL)					

#### 6.03 DRAWINGS

As-Built information shall be superimposed on the original design drawings. All references to "proposed" shall be struck through and replaced with the appropriate text acknowledging the constructed facility.

#### 6.04 INFORMATION TO BE SUPPLIED

- 6.04.1 Roadway elevations crown edge of pavement, swale, and right-of-way line at 100' intervals; and at the high and low points of the road.
  - 6.04.1.1 If roadway elevations are not the finished pavement, a note detailing the stage of construction when the elevations were taken, i.e. top of rock first lift of asphalt, etc.
- 6.04.2 Drainage structures shall show rim and grate elevations, invert elevations of all pipes along with their size, material, and length, top and invert of headwalls, and the elevations of the control structure, including weir size and length, notches, and orifices.
- 6.04.3 Lake/pond, canal, and/or waterways shall be cross sectioned at 100-foot (100') intervals. The cross section shall be referenced to the easement line, shall show with annotations the top of bank, sodded area, edge of water, planted wetland vegetation, slope breakpoints, bottom, their elevations, and all slopes annotated as a ratio of H:V. The design template shall be shown on each section.

- 6.04.4 Perimeter berms and walls shall be cross sectioned at 100-foot (100') intervals. The cross sections shall be referenced to the property line and show the elevations of the top of berm, top of wall, property line, toe of berm, and top berm width.
- 6.04.5 Drainage swales shall have flowline elevations shown at 100-foot (100') intervals or fraction thereof.
- 6.04.6 Dry detention or retention areas shall show top of bank and bottom elevations at 100-foot (100') grid points, and limits of bottom area and grade break at top of bank.
- 6.04.7 Average width and total area of aquatic plantings in littoral zones.
- 6.04.8 Results of video inspection of pipe and structure cleaning up to the first existing structure beyond the first existing pipe run upstream and downstream of any new connections depicted in the approved drawings. Additional lengths of existing pipe and structures may be required to be cleaned, inspected and televised if determined to be necessary by the District Engineer or District Manager.
- 6.04.9 Permanent benchmark elevation data (NGVD29 and NAVD88) for headwalls installed in District canals shall be annotated on the record drawing.

#### 6.05 CONSTRUCTION TOLERANCES

Variations in horizontal and vertical dimensions for non-critical stormwater management facility or site improvement components may be allowed at the discretion of the District Engineer or District Manager in accordance with generally accepted good engineering practices and standards recognized in Broward County.

Any portion of a critical stormwater management facility that is not within the acceptable tolerance described in Exhibit K must be reconstructed, re-inspected by the engineer of record, and resurveyed prior to submittal of as-built and record drawings.

# 7. VARIANCES AND APPEALS

#### 7.01 GENERAL

The Board of the District Commissioners, at their discretion and as hereinbefore provided, may grant a variance to the District Criteria.

#### 7.02 VARIANCE

In exercising the powers and duties under 7.02 the Central Broward Water Control District Commission shall not grant a variance unless and until the following has been demonstrated:

- 7.02.1 A letter from the applicant outlining the variance request which demonstrates that the following prerequisites to the granting of variance have been met:
  - A. Special conditions and circumstances affect the land, building or structure concerning which the variance is sought.
  - B. The existing conditions and circumstances are not the result of the actions of the applicant or his agents.
  - C. Strict application of the provisions of this District's criteria would deprive the applicant of reasonable use of said land, building or structure and that a genuine hardship exists provided, however, previously granted variances shall not be considered grounds for issuance of a variance.
  - D. Alternative measures are proposed to mitigate not complying fully with the subject criterion and that the variance proposed is the minimum variance that will make possible the reasonable use of the land, building or structure.
  - E. The Board of Commissioners shall find that the granting of the variance will be in harmony with the general purpose and intent of the District's variance criteria

	F. The variance to District Criteria will not adversely affect adjacent private property not owned by the applicant or adjacent public property and right-of-ways.
rig by	A sketch and a legal description of the property showing all easements and hts-of-way. If the property fronts a water body, the sketch shall clearly show the location dimension of the top of bank and edge of water. The elevation of the top of bank and ter at time of survey shall be shown.
	A sketch of encroaching structure (existing or proposed), if applicable, shall furnished. Said sketch shall show the amount of encroachment.
	Other information as may be required by the District Manager/Secretary, or the Board of District Commissioners, to properly evaluate the request.
ар	The District Manager/Secretary will make the determination that the plication is complete and shall schedule the application on the next available Board of mmissioners meeting.
the ind All ba ea	Fourteen (14) days prior to the Board of Commissioners meeting date for a variance request, a sign shall be posted by the applicant on the subject property licating that the subject property is the subject of a variance request before the District. signs shall be eighteen inches by twenty-four inches, double sided with a yellow ckground and shall be made of weather resistant material. Signs shall be posted along ch street frontage of the subject property and shall be visible from the street. All signs all contain the following information:
	<ul> <li>General Description of the Variance Request (i.e.: "This property will be the subject of a variance request on before the Central Broward Water Control Board to")</li> </ul>
	Project Name
	Date, time, and location of the District Board meeting.
	Telephone number and contact name for additional information.
	signs shall be removed by the applicant within seven days after the District Board eeting.
his pre	In granting a variance request, the District shall require that the applicant, successors, and assigns, indemnify and hold harmless the District. The cost of eparing said indemnification and hold harmless agreement, including attorney fees and cording, shall be borne by the applicant.

# 7.03 APPEAL

Appeal of the District's Engineer's application, or interpretation of District Criteria, shall be submitted by letter to the District Manager/Secretary.

# 7.04 PLAN APPROVAL WITH VARIANCE

An application for development approval, which requires a variance to District Criteria, will not be heard by the Board of District Commissioners prior to the Board acting on the variance request.

# 8. FEES

# 8.01 GENERAL

The District will collect fees to be utilized to defray the cost of review and processing applications for development. The fees include, but are not necessarily limited to:

8.01.1	Plat Review
8.01.2	Plan Review
8.01.3	Variance
8.01.4	Culvert Installations
8.01.5	Permit Renewal Culvert Installations
8.01.6	Single Family Home Plan Approval
8.01.7	After-the-Fact Permit Approval
8.01.8	Pre-application Conference
8.01.9	District Engineer Cost Recovery
8.01.10	Enforcement Compliance Cost Recovery
8.01.11	Use of District Easements

#### 8.02 FEE AMOUNT

Fees charged by the District may be varied from time to time, and the applicant is cautioned to contact the District Secretary at the District office (8020 Stirling Road, Hollywood, Florida 33024) at 954-432-5110 to determine the fee amount.

#### 8.03 FEE REMITTANCE

8.03.1 An application will not be considered complete without the remittance of the necessary fees.

8.03.2 Permit and review fees for permits and review of paving and drainage plans, plats and other matters which are submitted to the District by religious organizations and schools shall not be waived.

# 8.04 LEGAL FEES

Costs incurred by the District for the preparation and/or review of indemnification agreements, easement dedications, vacations, bond reductions or the calling of a bond, enforcement of District Criteria, or as required by the Board of District Commissioners as part of the approval and permitting process, shall be paid by the applicant.

# 9. RULES OF CENTRAL BROWARD WATER CONTROL DISTRICT REGARDING PERMITS FOR WORK WITHIN DISTRICT RIGHTS-OF-WAY

# 9.01 GENERAL

The Board has the power to establish a code of general specifications for the obtainment of a permit; and for hearings in connection therewith before the Board of Commissioners for approval of plans for any construction or work done, which comes into, over, onto, or through any of the waterways of the District created hereby. Waterways for the purposes of these requirements are hereby defined as "the waterways, easements, rights and reservations, rights-of-way, maintenance strips, swales, and all and every work or facility appurtenant or adjacent to, or utilized by the District in connection with the functioning of its waterways.

# 9.02 POLICY OF THE DISTRICT IN CONSIDERING AND ISSUING PERMITS

- 9.02.1 No permit will be granted for any use of a District's works that will adversely affect such works, or interfere with, or impose hardships upon the District's operation, maintenance, or construction activities.
- 9.02.2 No permit will be granted for any use of District's works when granting such would be inconsistent with the comprehensive plans for the District.
- 9.02.3 The District reserves the rights to: (a) change, regulate, and limit discharges into, or withdrawals from, District works, and (b) amend or change any of its policies, practices, procedures, regulations, or fees; and such action shall not constitute any claim for damages, nor become the basis for legal suit by any permittee.
- 9.02.4 In the event that the District exercises its rights reserved in 9.02.3 (a) and (b) above, the permit holder will be required to comply by alteration or otherwise, as required.

#### 9.03 APPLICATION FOR PERMIT

9.03.1 Requests for application for permit forms can be made in person, by letter, or by phone, directly to the Central Broward Water Control District office at 8020 Stirling Road, Hollywood, Florida 33024, (954) 432-5110. There is no charge for issuance of an application for a permit.

# 9.03.2 PREPARING THE APPLICATION

- 9.03.2.1 Simply state what use is intended; bridge crossing, culvert connection, beautification of right-of-way, etc.
- 9.03.2.2 Location of work to be done, stating County, Section, Township, Range, Block, Lot, Subdivision, where pertinent.
- 9.03.2.3 Name or project number of canal or levee involved.
- 9.03.2.4 Name of owner of proposed work or structure, and address.
- 9.03.2.5 Area proposed to be served.
- 9.03.2.6 Date of commencement of work contemplated in application, and date of completion of work.

# 9.03.3 PREPARATION OF THE SKETCH

- 9.03.3.1 Drawings are to be submitted on letter size paper (8 1/2" X 11"), in duplicate.
- 9.03.3.2 The sketch should locate the installation or construction by referencing it to a section line, a road, or some obvious and/or permanent land mark.
- 9.03.3.3 The sketch should clearly portray the construction in its relationship to the channel and/or right-of-way. Elevations must be indicated.

#### 9.04 EMERGENCY PERMITS

A letter of authorization for emergency use of the District's facilities can be obtained prior to the issuance of a permit at the Board's discretion, if the delay of normal permit procedure would cause extreme hardship, or endanger lives or property; provided, however, an application for permit is regularly filed.

#### 9.05 TEMPORARY PERMITS

Installation based upon seasonal requirements such as irrigation, pump connections, or semi-permanent facilities subject to relocation or modification such as temporary power lines, may be authorized under a temporary permit. Said temporary permits are to be issued for the use of District facilities for a period not exceeding ninety (90) days. However, should a use of installation approved under temporary status be desired for a period in excess of the maximum period allowed under the temporary status, a reasonable time extension may be applied for, or an application for regular permit may be made.

#### 9.06 USE OF DISTRICT EASEMENTS

For the purpose of this section "Utility", "Utility Work" or "Utility Crossings" shall refer to any work (aerial, trenching, directional boring, buried, subaqueous, pavement cuts, etc.) involving potable water mains, force mains, sanitary sewer mains, water re-use lines, irrigation, gas, electric, telephone, cable TV, communications systems, fiber optics, internet cable, traffic signals, cameras, conduits, meters, junction boxes, access structures, or other similar work.

For proposed Utility Work or placement of communications facilities within CBWCD's property, rights-of-ways and easement areas, including, but not limited to Canal and Lake Maintenance Easements, the District shall require an initial user fee plus an annual user fee, which will become due one (1) year after the Utility Work or communications facilities are installed and completed and every year thereafter for as long as the utility and communications systems remain within CBWCD's property, rights-of-ways or easement areas. These funds may be used by the District for any expenses incurred by the District. In addition, the utility provider (or communications services provider) shall enter into a non-exclusive Agreement with CBWCD whereby the District is indemnified and held harmless from any and all damages that are caused as a result of the Utility Work installation or operation of the communications system, and may require a surety bond or letter of credit for Utility Work or placement of communications facilities within CBWCD's property, rights-of-ways or easement areas that may be withdrawn by the District to restore damaged or abandoned facilities within such areas. If the user of CBWCD's property, rights-of-ways or easement areas violates any terms or requirements of an Agreement or District Criteria, or fails to correct said violation, District may remove the utility or communications system placed within the property, rights-of-ways or easement areas and shall be reimbursed for all costs and expenses incurred by District in removing the said systems. District may terminate an Agreement for failure to cure such violations. These costs and expenses shall include, but not be limited to, reasonable attorney's fees and legal expenses incurred by the District.

# 9.07 MODIFICATION OR RELOCATIONS OF WORK UNDER PERMIT

Modifications to existing works under permit can be made without applying for a new permit; this also applies to the relocation of structures or facilities to a new site; provided, however, that the Board shall be advised in writing of the intent to do so, and shall consent thereto by a letter of approval.

A letter of request to amend the existing permit, in duplicate, accompanied by adequate drawings, also in duplicate, should be submitted to the District. Approval of the requested change will be granted in the form of a letter of acceptance.

#### 9.08 TRANSFER OF PERMITS

By a separate agreement, the holder of a District permit may allow a third party the use of his permitted facility; but such agreement must be made known to the District in writing. Permits are not assignable without the specific consent of the District. A valid permit, upon request, can be transferred from one owner to a new owner. Request must be made in a letter form by the new owner, with the consent of the previous owner shown therein.

# 9.09 CONDITIONS UPON WHICH PERMITS ARE ISSUED ARE AS FOLLOWS:

- 9.09.1 Abidance by the terms and conditions of the permit issued to the holder.
- 9.09.2 The maintenance of any work or structures, the title to which remains with the permittee, in good and safe conditions.
- 9.09.3 The holding and saving of the District and its successors harmless from any and all damages, claims, or liabilities, which may arise by reason of the construction, operation, maintenance, of the use, of the work or structure involved in the permit.
- 9.09.4 Permitting inspection at any time by the District, its agents, servants, or employees, of any works and structures established under the permit.
- 9.09.5 The prevention of the discharge of debris and/or aquatic growth into any District works should the construction be a culvert, open channel, or pump connection.
- 9.09.6 Conformance with any alterations of, or amendments to the requirements of minimum standards of construction that may be deemed necessary by the District.
- 9.09.7 If in the event the Board requires our Engineer's approval, said costs shall be fully reimbursed by the applicant.
- 9.09.8 The granting of a permit does not convey to the permittee any property rights, nor any rights or privileges other than those specified in the permit.

# 9.10 **BOND**

Where deemed necessary by the District, a bond in an amount to be set by the District, may be required to insure compliance with the terms of the permit.

# 9.11 FEE

A fee will be charged for the issuance of the permit, which shall cover the cost of one inspection if necessary.

You are cautioned to call the District Secretary/Manager at 954-432-5110 for the current fee schedule as the Board of Commissioners may periodically update it

# **BIBLIOGRAPHY**

The following is a list of publications incorporated by reference in this Document.

The use of certain transcripts, verbiage, and exhibits from these publications is acknowledged.

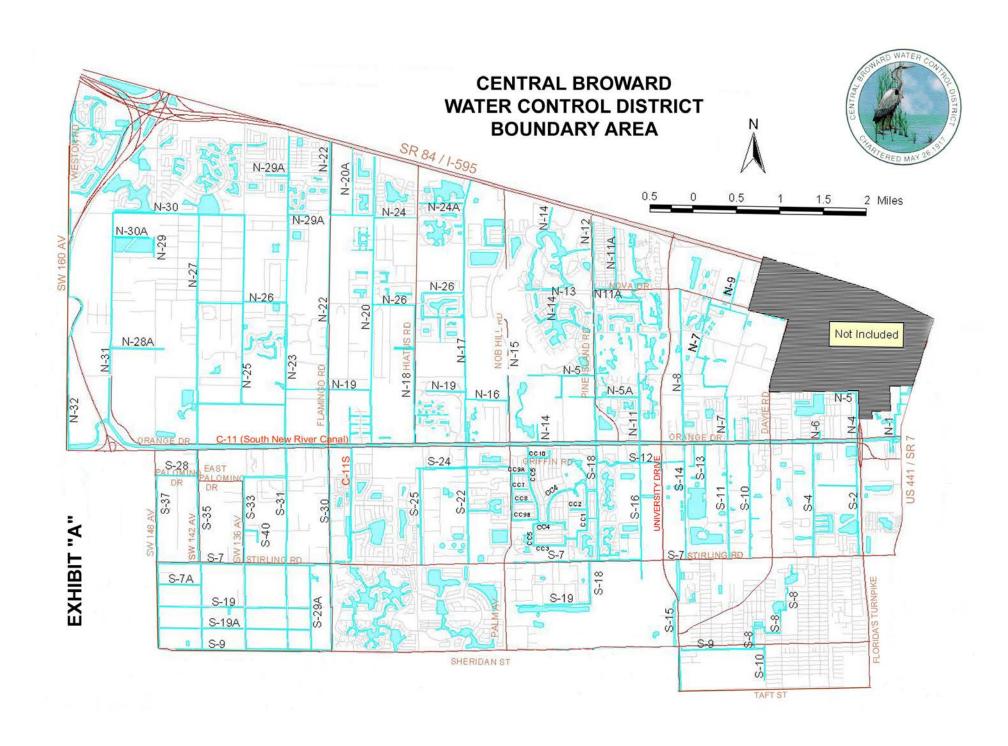
Florida Building Code with Broward County amendments, latest edition

Rules of the South Florida Water Management District related to the Environmental Resource Permit program

SFWMD Environmental Resource Permit (ERP) Permit Information
Manual, Applicant's Handbook - Volumes I and II, and Part III – References
and Design Aids, latest edition

Florida Department of Transportation, Drainage Manuals, latest editions.

Broward County, Florida - Code of Ordinances, Chapter 27, Pollution Control, Article V, "Water Resource Management," latest edition.



# **CBWCD DOCUMENT SUBMITTAL REQUIREMENTS**

PLEASE SEND ALL PACKAGES SEPARATELY TO THE DISTRICT AND TO THE DISTRICT ENGINEER (DE)

	INIT	IAL	RE-SUBM	IITTALS**	FINAL	**
	CBWCD	DE	CBWCD	DE	CBWCD*	DE
PLAT SUBN	MITTAL C		-			•
PLAI SUBIN	III IALS					
		Number o	of sets to Dis	trict and D	istrict Engineer	
Transmittal Page	1	2	1	2	1	2
Application	1	2	1	2	1	2
Plat Request Letter Signed by Owner	1	2	1	2	-	-
S/S Boundary & Topographic Survey	1	2	1	2	-	-
Recorded ORB docs (paper copies & PDF)	1	2	1	2	-	-
Other pertinent documents	1	2	1	2	-	-
Legal Description	-	1	-	1	-	-
CD w/ CADD (AutoDesk®) and PDF files of Survey & Draft Plat	-	1	-	1	-	1
Draft Plat***	1	2	1	2	8 – 11X17 1 – Full Size	2 Full Size
PAVING & DRAINAG	E SUBMITT	ALS				
Transmittal Page	1	2	1	2	1	2
Application	1	2	-	-	-	-
Application Fee	1	-	-	-	-	-
CBWCD Criteria Manual Exhibit C Checklist completed	1	2	-	-	-	-
Legal Description	-	1	-	1	-	-
S/S Boundary & Topographic Survey	1	2	1	2	-	-
S/S Engineering Report	1	2	1	2	-	-
Recorded ORB docs (paper copies & PDF)	1	2	1	2	-	-
Other pertinent documents	1	2	1	2	-	-
CD w/ CADD (AutoDesk®) and PDF files of Engineering Report,		4		4		4
Survey, Civil & Landscape Drawings	-	1	-	1	-	1
S/S Civil Engineering Drawings ***		•	,		8 – 11X17	2
(final sets to CBWCD do not have to be S/S)	1	2	1	2	1 – Full Size	Full Size
S/S Landscape Architecture Drawings ***	1 1	0	4	0	8 – 11X17	2
(final sets to CBWCD do not have to be S/S)	1	2	1	2	1 – Full Size	Full Size
AS-BUILT / RECORD DRA	AWING SUB	MITTALS				
Transmittal Page	1	2	1	2	1	2
Water Management Works Form [get permit # from District]	1	2	1	2	-	-
Executed Easement Form(s) [must use District's form(s)]	1	2	1	2	-	-
Esmt. Exhibit "A" Legal Description (8 1/2" x 11")	-	1	-	1	-	-
Esmt. Exhibit "B" S/S Sketch & Descriptions (8 1/2" X 11")	1	2	1	2	-	-
S/S Stormwater Certification Report ("5-Yr Recert") for exist. systems	1	2	1	2	-	-
Other pertinent documents	1	2	1	2	-	-
Recorded Easement(s) (PDF and hard copy)	-	-	-		1	1
CD w/ CADD (AutoDesk®) & PDF files of As-built/Record Dwgs	- 1	1	-	1	-	1
S/S As-built / Record Drawings***		2	1	2	8 – 11X17	2
(final sets to CBWCD do not have to be S/S)	1	2	1	2	1 – Full Size	Full Size

S/S = signed/sealed/dated by surveyor /civil engineer /landscape architect of record

<sup>&</sup>lt;sup>†</sup> Digital and paper versions of initial and final submittals of all survey, engineering and landscape architecture documents must signed/dated/sealed by the appropriate licensed professional. Interim PDF & paper copies of all documents, except for easement sketches with accompanying legal descriptions, do not have to be digitally/electronically signed/dated/sealed.

<sup>\*</sup> Only re-submit [all pages] if any portion of the document was updated or modified.

<sup>\*\*</sup> Please do not submit final documents to the District until the application is deemed complete by the DE.

<sup>\*\*\*</sup> Ensure that fonts for all text are large enough to be legible when sheets are reduced to 11"X17" or half size.

#### **EXHIBIT "C"**

#### PAVING AND DRAINAGE CHECK LIST FOR APPLICANTS

This checklist is provided to assist the applicant in providing the appropriate information to the District. It must be completed and included with the initial submittal package. When a question is answered NO or N/A, submit a brief statement as to why this information is not provided. This check list is not all-inclusive. Additional information may be required to confirm compliance with District regulations, standards, procedures, and design criteria.

#	Submittal Item Description	Yes	No	N/A
1. F	PROPERTY AND PROJECT INFORMATION			
1.1	Boundary and topographic survey with:			
	Legal description including property area			
	Existing improvements			
	<ul> <li>Existing grades at no greater than a 100' grid extending sufficiently beyond the property boundaries to determine direction of off-site flows</li> </ul>			
	<ul> <li>Vertical elevation datum and site-specific algebraic difference between NAVD88 and NGVD29</li> </ul>			
	FEMA FIRM panel number and flood zone			
	All easements of record and known encumbrances			
	<ul> <li>Section lines, rights-of-way, property lines, reservations with references to official record book and page number or instrument number</li> </ul>			
	<ul> <li>For District canals adjacent to or adjoining the property (includes canals on the opposite side of the adjacent right-of-way): all grades from top of bank to top of bank including any intermediate grade breaks in plan view and cross sections spaced 100' apart with grades and slopes</li> </ul>			
1.2	PDF of all recorded easements and reservations			
1.3	Current and proposed zoning			
1.4	Current and proposed land use			
1.5	Development area in acres (total and for each phase)			
2. E	ENGINEERING DOCUMENTS			
2.1	Narrative of existing land use and drainage conditions			
2.2	Narrative of proposed development and stormwater management plan			
2.3	Engineering analyses:			
	<ul> <li>Land use breakdown (building, green, dry detention, pavement, lake/pond)</li> </ul>			
	<ul> <li>Pervious/impervious land cover breakdown based on maximum impervious coverage that accounts for future phases and building expansion such as decks, patios and pools</li> </ul>			
	Water quality and exfiltration trench storage calculations			
	72-Hour drawdown or bleed-down calculations			
	Soil storage calculations			
	Existing and proposed stage-area-storage table by land use or land cover			
	Floodplain encroachment (SFWMD Importer/Exporter) calculations			

#	Submittal Item Description	Yes	No	N/A
	Site-specific maximum allowable discharge calculation			
	Discharge rating curves			
	Pre- and Post-Development Runoff computations			
	Surface water management model input and output data for 10-Year 1-Day, 25-Year 3-Day, and 100-Year 3-Day Zero Discharge design events			
	Storm sewer pipe sizing and hydraulic grade line calculations with map of contributory areas			
	<ul> <li>Supporting documents and exhibits such as FEMA FIRM panel, SFWMD isohyetal maps, County flood maps, TR-55 Curve Number table, culvert sizing nomographs, FDOT intensity/duration/frequency curves, product-specific cut sheets or technical data, NRCS Soil Survey, etc.</li> </ul>			
2.4	Geotechnical engineering report with:			
	Results of sub-surface exploration			
	Report and map of core borings			
	Laboratory testing results (sieve analyses, in-situ standard penetration test, usual openhole test, double-ring infiltrometer, etc.)			
	Unified or AASHTO soil classification for each soil strata to a minimum depth of 5' below the water control elevation			
	Engineering evaluations and recommendations			
3. \$	SUPPORTING DOCUMENTS			
3.1	Biological assessment report			
3.2	Special geotechnical or hydrogeological investigation reports such as an ASTM Phase I or II Environmental Site Assessment for properties with known or suspected soil or groundwater contamination			
3.3	Remedial Action Plan when the results of a Phase I or Phase II assessment includes recommendations for site-specific remediation of soil or groundwater			
4. (	CONSTRUCTION DRAWINGS			
	struction drawings no larger than 24" x 36" (full size) and no smaller than 11" x 17" (half size) dramaller than 1"=40'	rawn t	o sca	le
4.1	Civil Engineering miscellaneous drawings:			
	Key sheet with legal description, location map with scale and location of District			
	canal(s), north arrow and sheet index			
	<ul> <li>canal(s), north arrow and sheet index</li> <li>Specifications for paving, embankment materials, storm sewer materials, drainage</li> </ul>			
	<ul> <li>canal(s), north arrow and sheet index</li> <li>Specifications for paving, embankment materials, storm sewer materials, drainage structure materials, and as-built requirements</li> </ul>			
	<ul> <li>canal(s), north arrow and sheet index</li> <li>Specifications for paving, embankment materials, storm sewer materials, drainage structure materials, and as-built requirements</li> <li>CBWCD General Notes</li> </ul>			
	<ul> <li>canal(s), north arrow and sheet index</li> <li>Specifications for paving, embankment materials, storm sewer materials, drainage structure materials, and as-built requirements</li> <li>CBWCD General Notes</li> <li>Demolition plan</li> </ul>			
	<ul> <li>canal(s), north arrow and sheet index</li> <li>Specifications for paving, embankment materials, storm sewer materials, drainage structure materials, and as-built requirements</li> <li>CBWCD General Notes</li> <li>Demolition plan</li> <li>Phasing plan</li> </ul>			

#	Sub	omittal Item Description	Yes	No	N/A
	•	Construction phasing limits			
	•	Stormwater management design data table (see page 5)			
	•	Existing and proposed topography sufficient to identify high/low points and ridges			
	•	Location of District canals and proposed outfall			
	•	All stormwater management facilities depicted and annotated			
	•	Existing and proposed building limits with minimum finished floor elevation			
	•	Roof runoff controls (e.g., gutters connected to storm sewer structures)			
	•	Lot grading plan depicting maximum building footprint (including pools, decks, and patios)			
	•	Roadway gradients (or slopes) and elevations at sag and crest points			
	•	Location of drainage structures with rim (if manhole) or grate (if catch basin or yard drain) elevation, invert elevations, and pollution retardant baffle for each corresponding pipe invert included in structure callouts			
	•	Pipe type, size, and length to include overall length from center of structure and separate length of exfiltration trench			
	•	Overland flow arrows			
	•	"Treatment Swales" and/or "Conveyance Swales" with flow arrows, top of bank and channel invert elevations and locations. Provide at least 15% change in slope at top of bank transition between swale bank and areas landward of the outer edge of swale.			
	•	Roof runoff control details (e.g., type and size of rain leaders)			
	•	Wet detention/retention limits of lake maintenance easement, top of bank and contours at each grade break down to bottom, area at water control elevation, and aquatic planting required vs. provided area			
	•	Dry detention/retention area limits of top of bank and contours at each grade break down to bottom. Provide at least 8% and 11% change in slope at the top of bank transition from 1:5 and 1:4 banks, respectively, to areas landward of the outer edge of the detention/retention area.			
	•	Existing and proposed guardrail limits			
	•	Proposed easements to be dedicated to the District depicted and annotated			
	•	Location of adjacent properties that will require accommodation for bypass drainage conveyance through the subject property			
	•	Location of air conditioner pads, electrical transformers, light poles, irrigation pump housing and control panels, and any other pad mounted electro-mechanical equipment			
	•	Perimeter berm alignment			
	•	Note prohibiting trees and plants within District easements			
4.3		ical sections depicting grades, slopes, fencing, and CBWCD easement limits, if licable, for:			
	•	Roads			
	•	Drive aisles			
	•	Parking spaces			
	•	Canals			

#	Sul	omittal Item Description	Yes	No	N/A
	•	Lakes/ponds with minimum/maximum slope ratios, minimum lake depth, top of bank annotated, aquatic planting notes, and muck layer			
	•	Dry detention/retention areas with top of bank, toe of slope, and water control elevation annotated			
	•	Lot grading			
	•	Perimeter berm			
4.4	Civ	il Engineering Paving, Grading, and Drainage plan details:			
	•	Paving such as pavement section			
	•	Grading details such as trench excavations			
	•	Drainage details such as typical manhole and catch basin details:  o Inner and outer structure dimensions o Sump callout with minimum depth O Pollution Retardant Baffle (PRB) material and mounting details with minimum 24" separation between outside of PRB and interior wall or adjacent PRB Inverted PRB material and mounting details			
	•	Control structure details:			
	•	Exfiltration trench details: <ul> <li>Width, height and minimum cover over trench</li> <li>Elevations of top, bottom, pipe invert, and water control elevation</li> <li>Material specifications and installation instructions</li> </ul>			
	•	Specialty stormwater system component details (e.g., underground stormwater storage vaults), operation and maintenance requirements and inspection schedules			
	•	Boat ramp details			
	•	Headwall details with minimum top of cap elevation			
	•	Retaining wall schematics with the appropriate statements regarding compliance with the Florida Building Code			
4.5	Lar	ndscape Architecture drawings:			
	•	Tree disposition plan			
	•	Planting plan depicting easements to be dedicated to CBWCD			
	•	Planting notes and details including root barrier and details			
	•	Note regarding no trees or plant materials to be installed inside easements to be dedicated to the District			

#### DESIGN DATA TABLE REQUIRED ON FIRST PAVING & DRAINAGE CONSTRUCTION DRAWING\*

STORMWATER MANAGEMENT DESIGN DATA TABLE		
ITEM	ELEVATION IN FEET	
	REQUIRED	PROVIDED
ELEVATIONS IN THESE DRAWINGS ARE BASED ON:	Α	
NGVD29 TO NAVD88 CONVERSION FACTOR	0.00 NGVD29 = (-) <b>B.BB</b>	
	NAVD88	
MINIMUM FINISHED FLOOR ELEVATION CRITERIA		
FEMA MIN. BASE FLOODPLAIN ELEVATION WITH ASCE 24	С	D
MODIFIER		
BROWARD COUNTY 100-YEAR FLOOD ELEVATION	E	D
100-YEAR 3-DAY ZERO DISCHARGE PEAK STAGE	F	D
18" ABOVE NEAREST ROAD CROWN ELEVATION –	G	D
RESIDENTIAL STRUCTURES		
6" ABOVE NEAREST ROAD CROWN ELEVATION –	Н	D
NON-RESIDENTIAL STRUCTURES		
MINIMUM CROWN OF ROAD ELEVATION CRITERIA		
BROWARD COUNTY 10-YEAR FLOOD ELEVATION		D
10-YEAR 1-DAY PEAK STAGE	F	D
MINIMUM PERIMETER BERM ELEVATION		
25-YEAR 3-DAY PEAK STAGE	F	D

# Data insertion guidelines

**A**: Insert either "NGVD29" or "NAVD88"

B.BB: Insert value to two decimal places after the minus sign "(-)"

- C: Insert the minimum FEMA Base Flood Elevation or Design Flood Elevation, including any adjustments per ASCE 24 (latest edition per the Florida Building Code)
- **D**: Insert the minimum elevation provided. NOTE: The Provided minimum elevation must be the greater of all relevant criteria.
- E: Insert the minimum elevation based on the Broward County 100-year Flood Map in CBWCD Criteria Manual Exhibit D, or latest Broward County 100-Year flood elevation map
- **F**: Insert the peak stage from the site-specific engineering calculations
- **G**: Insert the elevation of the crown of road nearest the lowest building entrance, or "N/A" if it is not a residential structure
- **H**: Insert the elevation of the crown of road nearest the lowest building entrance, or "N/A" if it is not a non-residential structure
- I: Insert the minimum elevation based on the Broward County 10-year Flood Map in CBWCD Criteria Manual Exhibit E, or latest Broward County 10-Year flood elevation map

<sup>\*</sup>See Section 2.02, Central Broward Water Control District Criteria Manual, latest edition

## BROWARD **BROWARD COUNTY 100 YEAR FLOOD ELEVATIONS** RYBLVD 7.5 (9) **PLANTATION** 7.5 (9) W BROWARD BLVD 6.5 (8) 8 (9.5) 7 (8:5) 6.5 (8) SW 136T TERS RD HILL SBOR O-BEACH. 6.5(8)ROYAL PALM BLVD SW 30TH ST DAVIE BETH ST 6 (7.5) 100TH 6(7.5)NS. CH SOUTHWEST RANCHES DALE-SEA SEM COOPER 75 TRIB CITY 6.5(8)8 1 SHERIDANST SHERIDAN ST 7.5 (9 **PLANTATION** 5 (9) FORT LAUDERDALI 6.5 (8) 7 (8:5) 6.5 (8) WESTON DAVIE 6 (7.5 6 (7.5) DANIA BEACH 6.5 (8) SOUTHWEST SEMINOLE COOPER 6.5 (8) 5.5 (7) 6.1 (7.6) 5 (6.5) PEMBROKE PINES PEMBROKE PARK HALLANDALE BEACH WEST 8.5 (10) PARK MIRAMAR 6.5 (8) 5.8 (7.3) BROWARD Of Section Of

100 Year Flood Contours NAVD (NGVD) Example: 6.5 (8)

EXHIBIT "D" 100-YEAR FLOOD MAP

This map is for conceptual purposes only and should not be used for legal boundary determinations.

# **EXHIBIT E**

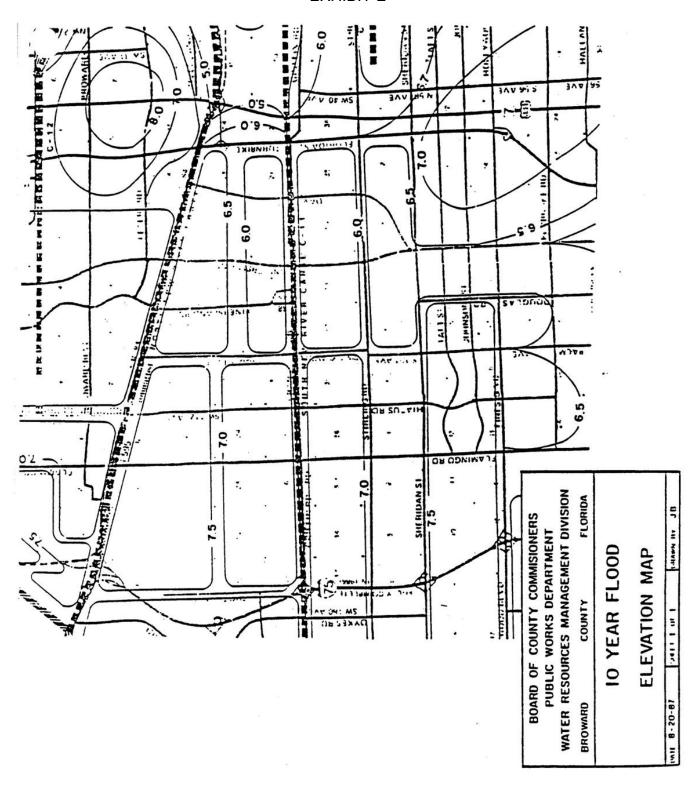
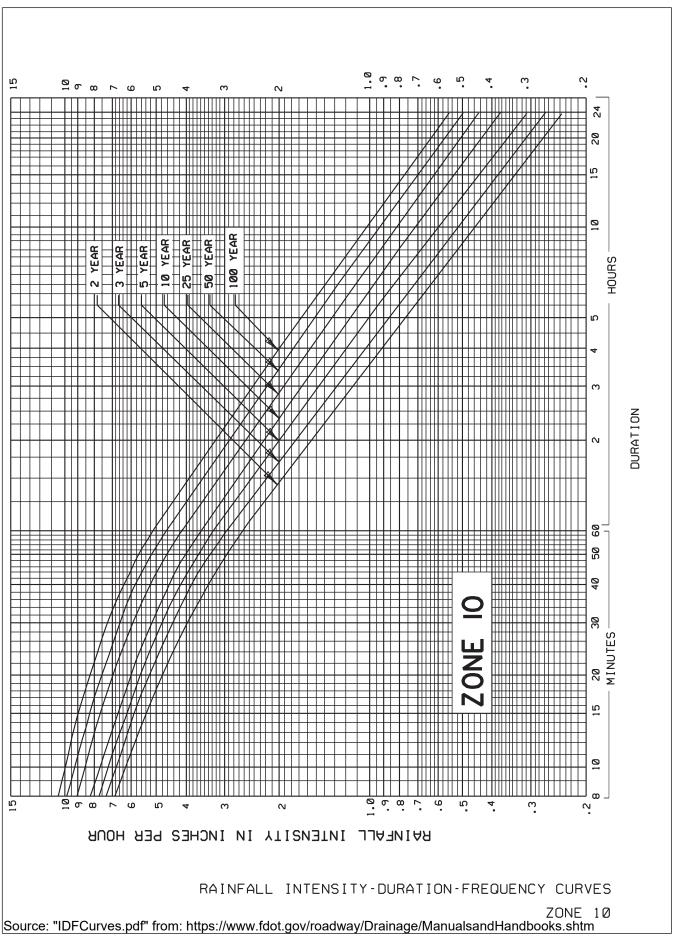
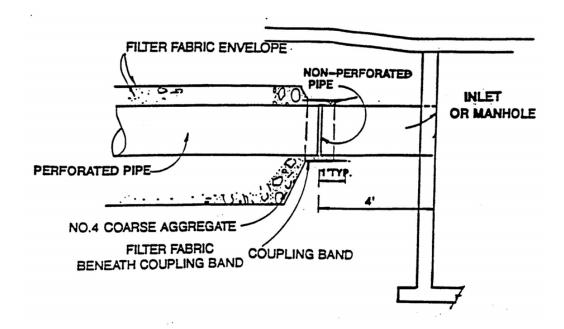


EXHIBIT E 10 YEAR FLOOD MAP

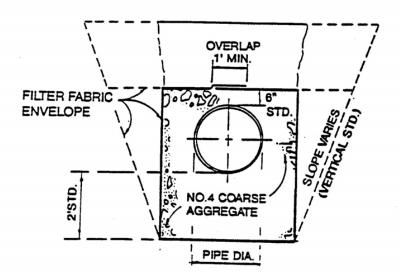


CBWCD: Updated 10/9/19

## **EXHIBIT G**



# LONGITUDINAL SECTION

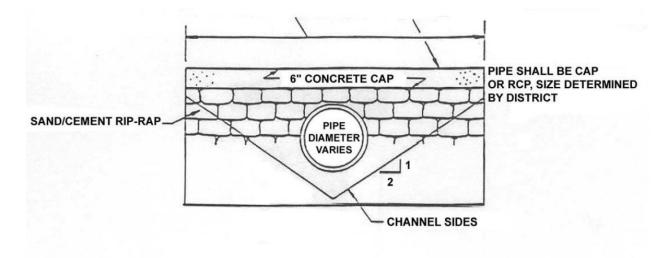


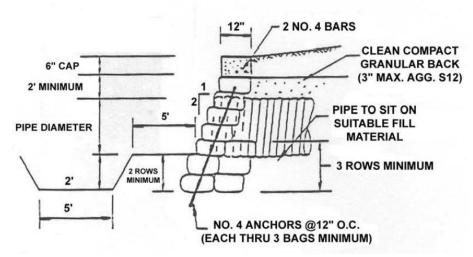
# STANDARD CROSS SECTION

# **EXFILTRATION TRENCH**

EXHIBIT G EXFILTRATION TRENCH DETAIL

### **EXHIBIT "H" – HEADWALL DETAIL**

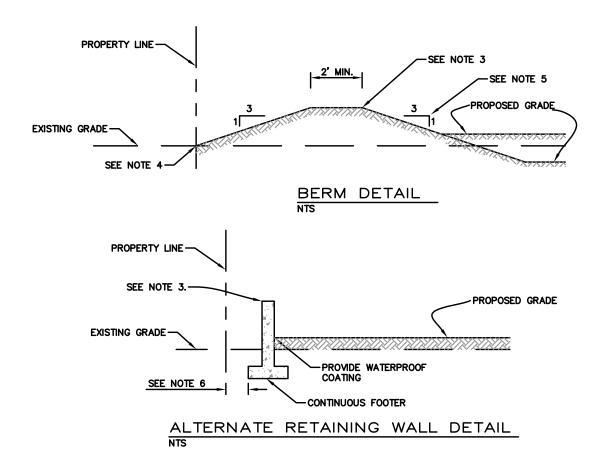




- 1. Owner shall retain a registered professional engineer licensed in the State of Florida to inspect and certify the installation.
- 2. Owner's engineer shall supply record drawings showing the invert(s), top of headwall, and upstream and downstream cross sections of excavated canal.
- 3. Headwalls shall include winged endwalls similar to the FDOT "Winged Concrete Endwalls" detail [FDOT Standard Plans Index No. 430-040, latest edition] for precast headwalls or the Town of Davie "Rip Rap Headwall" detail [TOD Standard Paving and Drainage Detail D-6, latest edition] for rip rap headwalls.
- 4. Pre-case or cast-in-place concrete headwall may be installed as an alternative to a rip-rap headwall. Owner's engineer shall provide signed/sealed design drawings for the appropriate installation type.
- 5. For headwalls installed in lakes/lakes, the maximum crown of pipe shall be the District's water control elevation.
- 6. For headwalls installed in District canals, the top of headwall shall be set at 1' above the District's water control elevation.
- 7. Provide 1 NAVD88 and 1 NGVD29 stable and permanent benchmark at each headwall in a District Canal. Refer to the CBWCD Criteria Manual for required information.

# EXHIBIT I

# TYPICAL PERIMETER BERM DETAILS



## NOTES:

- BERM TO BE CONSTRUCTED OF SUITABLE FILL MATERIAL. NO MUCK OR OPEN GRADED SILICA (SUGAR) SAND WILL BE ACCEPTABLE.
- 2. BERM TO BE COMPACTED TO 92% DENSITY AND SODDED OR STABILIZED IN AN APPROVED METHOD TO PREVENT EROSION.
- 3. TOP OF BERM OR WALL TO BE CONSTRUCTED TO A MINIMUM ELEVATION EQUAL TO THE PROJECTED 25 YEAR EVENT STORM.
- 4. NO TEMPORARY OR PERMANENT GRADING WORK SHALL ENCROACH ON ADJACENT PROPERTY.
- 5. SLOPES MUST BE 4H:1V OR SHALLOWER WHEN BANK IS PART OF A DRY DETENTION/RETENTION AREA.
- PROVIDE ADEQUATE SEPARATION FROM PROPERTY LINE TO AVOID ABOVE OR BELOW GROUND ENCROACHMENTS ONTO ADJACENT PROPERTY DURING AND AFTER CONSTRUCTION.
- 7. WALLS SHALL BE DESIGNED PER THE STRUCTURAL DESIGN CRITERIA OF THE FLORIDA BUILDING CODE, LATEST EDITION.

## **EXHIBIT "J"**

The following general notes shall be placed on all paving and drainage plans submitted to the District.

# **CBWCD GENERAL NOTES**

- 1) The following General Notes are required by Central Broward Water Control District. They are not meant to be all inclusive, and it is the Engineer of Records' responsibility to add any notes which will inform the Owner and the Contractor of any additional requirement of the Central Broward Water Control District.
- 2) Any revisions to these plans must be approved by the Central Broward Water Control District prior to construction.
- 3) Bonds: Upon District Board of Commissioners approval of plans, <u>but before</u> construction can commence, the following items must be complied with:
  - A) Bond (cash or surety), in the District's favor, must be posted in the amount of 110 percent of the developer's Engineer of Record's estimate of cost of construction of the paving and drainage works. (Subject to approval of the cost estimate by the District Secretary/Manager or District Engineer.)
  - B) Swales, lake/pond banks, slopes, canals, and other excavations shall be bonded separately from other drainage improvements and will be held by the District until successful completion. The amount of this separate bond will be determined by the District Board of Commissioners and by recommendation of the District Secretary/Manager.
  - C) The District's Bond Form is the only form approved for use, and it shall be a recorded instrument. Release or reduction from the recorded instrument shall be the responsibility of the applicant.
  - D) Bonds shall be provided by the principals of development only. Contractor or Sub-Contractor bonds are not acceptable.
  - E) Upon successful completion of construction, and acceptance of "As-Builts/Record Drawings" by the District Board of Commissioners, a percentage of the performance bond as determined by the District may be released. The balance of bond shall remain in full force and effect for an additional twelve (12) months after final inspection and approval, unless supplemented by new bond forms in the required amounts and approved by

the District Attorney.

- 4) Inspections: When construction is in progress, the District's Inspector will inspect the installation of drainage works, according to an inspection schedule established by the Board of Commissioners. Inspection must be made by District personnel before backfilling of any storm drain structures, pipes, exfiltration trenches, work in District canals, and before placement of asphalt or concrete pavement. Call (954) 432-5110 for an inspection appointment a minimum of twenty-four (24) hours in advance. All costs of periodic inspections of construction by the District shall be borne by the developer.
- 5) Limerock base course shall conform to the requirements of Section 911 of Florida Department of Transportation Standard Specifications, except the minimum percentage of carbonates of calcium and magnesium shall be sixty percent (60 %).
- 6) All muck and deleterious soils shall be removed from the top of bank to top of bank limits of dry detention/retention areas, and exfiltration trenches down to a minimum of five feet (5') below the water control elevation and replaced with suitable well-draining soils.
- 7) All nuisance vegetation shall be removed from within the project limits and within the portion of the CBWCD canal that falls within the property boundary. This also applies when the property abuts a roadway and the District canal is located on the opposite side of the road with respect to the property. In this case, nuisance vegetation shall be removed from the canal bank nearest the property line.
- 8) Existing storm sewers shall be cleaned from the point of connection with new storm sewers or drainage structures to the first existing structure upstream and downstream of the point of connection. Television inspection of the pipes shall be reviewed and certified that they are clean by the Engineer of Record prior to submittal of as-built drawings to the District.
- 9) The limits of any easement to be dedicated to the District shall be staked prior to installing trees to be located within three (3) feet of a District easement. The stakes shall remain in place until the site or landscape contractor verifies the intended plant location does not encroach into a District easement.
- 10) The District Secretary/Manager and District Engineer shall be notified prior to the submittal of as-built/record drawings of any encroachment within a District easement not expressly approved by the District Board of Commissioners.
- 11) As-Built Survey and Record Drawing: "As-Built" plans from the Surveyor of Record must be certified as "Record Drawings" by the Engineer of Record. The Surveyor's certification shall include the last date of field data acquisition. The Engineer's certification shall include the CBWCD permit compliance statement. As-Builts shall

be provided as an overlay on the approved construction drawings at the same scale for comparison purposes. All references to "proposed" shall be struck through and replaced with the as-built condition. As-Built submittals shall follow the same format of general review as described in the Central Broward Water Control District's Stormwater Management Regulations, Standards, Procedures, and Design Criteria Manual.

- 12) Lake/pond, canal, and dry detention/retention area as-builts will be cross-sectioned showing the designed section as dashed, as-built section as solid, and have the top of bank reference to the Lake/Canal Maintenance Easement. Spacing between each cross-section shall be such as to provide enough data to determine if the lake/pond/canal/dry detention/retention area was constructed as designed. The maximum spacing between cross sections shall be 100'.
- 13) The contractor shall provide stable and permanent elevation benchmarks on the top of each headwall cap for pipes discharging into District canals and driveway culverts along District canals. The benchmark elevation shall be based on North American Vertical Datum of 1988 (NAVD88) and include the datum reference using National Geodetic Survey benchmarks or Florida Department of Transportation benchmarks in NAVD88 and only converted back to National Geodetic Vertical Datum of 1929 (NGVD29). The other shall be based on NGVD29 and include the datum reference. Each headwall shall have one (1) NAVD88 and one (1) NGVD29 benchmark. Culverts connecting District canals only require one (1) benchmark per each pair of headwalls.
- 14) The Surveyor of Record shall annotate the benchmark elevations on the as-built drawing in the format provided by the District Engineer. The benchmark data shall also include a Northing/Easting coordinate at the center of each headwall. The horizontal datum shall be based on State Plane, Florida East Zone, North American Datum of 1983/1990 (NAD83/90).

# EXHIBIT K [NEW EXHIBIT] CONSTRUCTION TOLERANCES

Any portion of a stormwater management facility that is not within the allowable tolerance described below must be reconstructed, re-inspected by the engineer of record, and re-surveyed prior to submittal of as-built and record drawings. Maximum slope means the steepest allowable slope. All slope ratios are based on horizontal unit to vertical unit (H:V).

CRITICAL STORMWATER MANAGEMENT FACILITY OR PROJECT COMPONENT	TOLERANCE
CANALS AND WET DETENTION/RETENTION LAKES/PONDS	
Minimum average slope in any 100' section of waterfront for banks designed at a 4H:1V slopes	≥ 3.8:1
Minimum bank slope for banks designed at a 4H:1V slopes	≥ 3.60:1
Minimum average slope in any 100' section of waterfront for banks designed at a 5H:1V slopes	≥ 4.8:1
Minimum bank slope for banks designed at a 5H:1V slopes	≥ 4.60:1
Deviation from top of bank elevation	(-) 0.2'
Deviation above required grade break at transition from shallow to steep slope at 3' below the water control elevation	(+) 0.2'
Deviation from required area at the water control elevation	(-) 1.0%
Minimum slope in any 100' section of canal or lake maintenance easement slope	≥ 18.0:1
DRY DETENTION/RETENTION AREAS	
Minimum average slope in any 100' section of banks designed at a 4H:1V slopes	≥ 3.8:1
Minimum bank slope for banks designed at a 4H:1V slopes	≥ 3.60:1
Deviation from top of bank	-0.2'
Deviation from bottom of dry detention/retention area	(+) to (-) 0.2'
CONTROL STRUCTURES AND EXFILTRATION TRENCHES	
Cast-in-place, pre-cast, pre-fabricated, or fabricated-in-place orifices and weirs (including grates if designed as an overflow weir or orifice) regarding elevations, lengths, widths, circumferences, or other design geometry. Includes components constructed using concrete, masonry, metallic, or non-metallic materials.	(+) to (-) 0.0417'
Exfiltration trench pipe invert	(-) 0.1'
PERIMETER BERMS AND FINISHED GRADES	
Minimum front and back side slope	≥ 2.70:1
Top width	(-) 0.2'
Minimum top of berm elevation	(-) 0.2'
Swale channel invert	(-) 0.2'
Deviation from minimum & maximum roadway, drive aisle, and parking space elevations	(+) to (-) 0.1'

Please return to: Central Broward Water Control District 8020 Stirling Road Hollywood, FL 33024

# CENTRAL BROWARD WATER CONTROL DISTRICT SUBDIVIDER'S COMPLETION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

That,
Hereinafter called "Principal", whether one or more and,
a corporation duly authorized to issue letters of credit within the State of Florida, hereinafter called
Bank", are held and firmly bound unto the CENTRAL BROWARD WATER CONTROL DISTRICT,
a political subdivision of the State of Florida, hereinafter called the "District", for the use of said
District in connection with improvements described in Exhibit "A", attached hereto and
ncorporated herein in its entirety, (which improvements may consist of, but are not necessarily
imited to paving, curb and gutter grading, excavation, embankment, drainage culverts, and
appurtenances, or other similar improvements, whether specifically mentioned herein or not, and
whether or not particularly described by any attached documents) in the sum of
(\$) , lawful money of the United States of America. Said sum being one hundred
en per cent (110%) of the estimated construction cost of the improvements described in Exhibit
'A" and which shall be prepared by a registered professional engineer in the State of Florida. Said
estimate being part of Exhibit "A", to be paid unto said District, its successors and assigns, to
which payment well and truly to be made we bind ourselves, our heirs, personal representatives,
successors and assigns, jointly and severally, firmly by these presents.
WHEREAS, the Bank has issued Letter of Credit No in the amount of \$
dated on behalf of Principal, hereinafter called "Letter of Credit".

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall in all respects fully comply with, carry out, construct, erect and build the improvements referred to in Exhibit "A" hereof, in accordance with the aforesaid regulations of the District, the plans, specifications and schedules covering said work, and such improved additions, amendments or alterations as may be made in the plans, specifications and schedules for said work (it being understood that the Principal shall remain bound under this Agreement although not informed of any such additions, amendments or alterations), and shall complete all of said work on or before , and shall pay all costs as incurred and billed by the District in connection with the investigation, approval, and inspection of the improvements referred to in Exhibit "A" hereof; then the Principal of this Agreement shall promptly repair or replace any of said improvements to the original condition required by said District or any ordinances and regulations thereof, as amended, should the same because of defective material, engineering and/or faulty workmanship, require such repair or replacement within twelve (12) months after final inspection and approval of said improvements by the District, then this obligation shall be void, otherwise remaining in full force and effect. And the Principal on this Agreement, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the work or to the plans, specifications and schedules covering the same, or in the term or mode of payment for the same shall in any way affect the liability of payment under this Agreement, and it does hereby waive notice of any and all changes, extensions of time, alterations and additions to the work or to the plans, specifications and schedules covering said work.

This Agreement shall be for the use and benefit of the District if it shall elect to proceed with said work upon the failure or refusal of the Principal to do so by the date hereinabove specified, or any subsequent extension date agreed to by the Principal and the District, or in the event the Principal for any reason fails to complete the improvements described in Exhibit "A" to this Agreement and may be enforced by the District in the manner authorized by law.

The Bank further agrees to notify the District a minimum of thirty (30) days prior to cancellation or termination of the Letter of Credit. The Principal further agrees to notify the District of any change in ownership of all or part of the property described in Exhibit "B" to this Agreement.

That the District will have the right and authority to enter upon and cross over the property described in Exhibit "B" hereto for the purpose of inspecting these improvements, and in the event that the District determines that the improvements are not being timely completed by the Principal, notice will be given by the District to the Principal and the Principal will be given a period of fifteen

(15) days from and after the mailing of such notice within which to commence construction of the improvements or obtain from the District, in writing, an extension, for good cause shown, of the time within which the improvements will be completed, failing which the District may at its option complete the improvements described in Exhibit "A" for and on behalf of the Principal.

That in the event the District is required to complete the improvements described in Exhibit "A" on behalf of the Principal, then and in such event, the District shall be deemed to have a lien against the property described in Exhibit "B" which lien shall be inferior only to any existing first mortgage then encumbering said property, ad valorem taxes and such other liens, impositions and assessments as may be given priority by applicable statutes, and said liens shall be for all such costs incurred by the District together with interest thereon computed at ten per cent (10%) per annum. In the further event that the District is required to foreclose this lien, then and in such event, the District will be entitled to payment of any costs or attorney's fees incurred in connection with such foreclosure or collection proceedings, whether suit be brought or not; and the Principal and Bank, jointly and severally, shall be liable for same.

Should the Principal subdivide the property described in Exhibit "B" hereto, the Principal's obligations under this Agreement to complete the improvements in Exhibit "A" shall devolve upon the individual purchasers of the subdivided parcels, their heirs, successors and assigns, and shall be a covenant to run with the land. Regardless of whether or not the Principal subdivides the property described in Exhibit "B" hereto, their obligation to complete the improvements described in Exhibit "A" hereto shall be binding upon its heirs, successors and assigns, regardless of how their heirs, successors or assigns came into ownership and shall be a covenant running with the land. If construction of the improvements described in Exhibit "A" attached hereto is not substantially commenced within one (1) year from the date of this Agreement, the Principal shall submit, prior to this one (1) year period, revised cost estimates to the District for review. Following this review, if the District so requires, the Principal shall submit a revised Subdivider's Letter of Credit based on the revised cost estimate. If the Principal fails to comply with this paragraph, this Agreement shall be null and void and of no further force and effect and all previous approvals of the District shall be cancelled effective one (1) year from the date of the Letter of Credit.

This agreement shall be governed by the laws of the State of Florida.

This agreement shall be placed upon the public records of Broward County, Florida, the Principal to bear the cost.

IN WITNESS WHEREOF, the Principal and	Bank have caused these presents to be duly
executed on this day of, 20	<u></u> .
	Dringing
Corporate Seal	Principal
Attact	Ву:
Attest:	
	Bank
Corporate Seal	Dv.
Attast:	Ву:

# FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was acknowl	edged before me by means of □ physical presence or
☐ online notarization, this (date)	by (name of person
acknowledging)	,who is personally
known to me or who has produced (typ	pe of identification)
as identification.	
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

# FOR A CORPORATION: STATE OF \_\_\_\_\_ COUNTY OF The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date) \_\_\_\_\_ by (name of officer or agent, title of officer or agent) of (name of corporation acknowledging)\_\_\_\_\_\_\_\_,a (state or place of formation)\_\_\_\_\_ corporation, on behalf of the corporation. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ \_\_\_\_\_ as identification. (Continued on next page) (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# STATE OF \_\_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date) \_\_\_\_\_\_ by (name of member, manager, officer or agent, title of member, manager, officer or agent) \_\_\_\_\_\_, of (name of corporation acknowledging) \_\_\_\_\_\_, a (state or place of formation) \_\_\_\_\_\_ limited liability company, on behalf of the company, who is personally known to me or who has produced (type of identification) \_\_\_\_\_\_ as identification. (Signature of person taking acknowledgment) \_\_\_\_\_\_ (Name typed, printed or stamped)

(Serial number, if any)

FOR A PARTNERSHIP:							
STATE OF							
COUNTY OF							
The foregoing instrument was acknowledge	d before me by r	means of	□ pl	hysical p	rese	nce or	
☐ online notarization, this (date)		_ by (nan	ne of	partner	or aç	gent)	
	,	partner	(or	agent)	on	behalf	of
(name of partnership)				a partn	ershi	p.	
He/She is personally known to me or has pr	oduced (type of	identificat	tion)				
as identification	on.						
	(Signature of	person ta	king	acknow	ledgr	ment)	
	(Name typed,	printed o	r sta	mped)			
	(Title or rank)						
	(Serial number	r, if any)					

Please return to: Central Broward Water Control District 8020 Stirling Road Hollywood, FL 33024

# CENTRAL BROWARD WATER CONTROL DISTRICT SUBDIVIDER'S COMPLETION BOND

KNOW ALL MEN BY THESE PRESENTS:

That,
Hereinafter called "Principal", whether one or more and
located at,
a corporation duly authorized to operate a surety business within the State of Florida,
hereinafter called "Surety", are held and firmly bound unto the CENTRAL BROWARD WATER
CONTROL DISTRICT, a political subdivision of the State of Florida, hereinafter called the
"District", for the use of said District in connection with improvements described in Exhibit "A",
attached hereto and incorporated herein in its entirety, (which improvements may consist of, but
are not necessarily limited to paving, curb and gutter grading, excavation, embankment,
drainage culverts, and appurtenances, or other similar improvements, whether specifically
mentioned herein or not, and whether or not particularly described by any attached documents)
in the sum of
(\$), lawful money of the United States of America. Said sum being one
hundred ten per cent (110%) of the estimated construction cost of the improvements described
in Exhibit "A" and which shall be prepared by a registered professional engineer in the State of
Florida. Said estimate being part of Exhibit "A", to be paid unto said District, its successors and
assigns, to which payment well and truly to be made we bind ourselves, our heirs, personal
representatives, successors and assigns, jointly and severally, firmly by these presents.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall in all respects fully comply with, carry out, construct, erect and build the improvements referred to in Exhibit "A" hereof, in accordance with the aforesaid regulations of the District, the plans, specifications and schedules

covering said work (it being understood that the Surety shall remain bound under this Bond), and such improved additions, amendments or alterations as may be made in the plans, specifications and schedules for said work (it being understood that the Principal shall remain bound under this Agreement although not informed of any such additions, amendments or alterations), and shall complete all of said work on or before \_\_\_\_ shall pay all costs as incurred and billed by the District in connection with the investigation, approval, and inspection of the improvements referred to in Exhibit "A" hereof; then the Principal of this Bond shall promptly repair or replace any of said improvements to the original condition required by said District or any ordinances and regulations thereof, as amended, should the same because of defective material, engineering and/or faulty workmanship, require such repair or replacement within twelve (12) months after final inspection and approval of said improvements by the District, then this obligation shall be void, otherwise remaining in full force and effect. And the Surety on this Bond, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the work or to the plans, specifications and schedules covering the same, or in the term or mode of payment for the same shall in any way affect the liability of payment under this Bond, and it does hereby waive notice of any and all changes, extensions of time, alterations and additions to the work or to the plans, specifications and schedules covering said work.

This Bond shall be for the use and benefit of the District if it shall elect to proceed with said work upon the failure or refusal of the Principal to do so by the date hereinabove specified, or any subsequent extension date agreed to by the Principal and the District, or in the event the Principal for any reason fails to complete the improvements described in Exhibit "A" to this Agreement and may be enforced by the District in the manner authorized by law.

The Surety further agrees to notify the District a minimum of thirty (30) days prior to cancellation or termination of the Bond. The Principal further agrees to notify the District of any change in ownership of all or part of the property described in Exhibit "B" to this Agreement.

That the District will have the right and authority to enter upon and cross over the property described in Exhibit "B" hereto for the purpose of inspecting these improvements, and in the event that the District determines that the improvements are not being timely completed by the Principal, notice will be given by the District to the Principal and Surety and the Principal and/or Surety will be given a period of fifteen (15) days from and after the mailing of such notice within which to commence construction of the improvements or obtain from the District, in writing, an extension, for good cause shown, of the time within which the improvements will be

completed, failing which the District may at its option complete the improvements described in Exhibit "A" for and on behalf of the Surety.

That in the event the District is required to complete the improvements described in Exhibit "A" on behalf of the Principal and Surety, then and in such event, the District shall be deemed to have a lien against the property described in Exhibit "B" which lien shall be inferior only to any existing first mortgage then encumbering said property, ad valorem taxes and such other liens, impositions and assessments as may be given priority by applicable statutes, and said liens shall be for all such costs incurred by the District together with interest thereon computed at ten per cent (10%) per annum. In the further event that the District is required to foreclose this lien, then and in such event, the District will be entitled to payment of any costs or attorney's fees incurred in connection with such foreclosure or collection proceedings, whether suit be brought or not; and the Principal and Surety, jointly and severally, shall be liable for same.

Should the Principal subdivide the property described in Exhibit "B" hereto, the Principal's obligations under this Bond to complete the improvements in Exhibit "A" shall devolve upon the individual purchasers of the subdivided parcels, their heirs, successors and assigns, and shall be a covenant to run with the land. Regardless of whether or not the Principal subdivides the property described in Exhibit "B" hereto, their obligation to complete the improvements described in Exhibit "A" hereto shall be binding upon its heirs, successors and assigns, regardless of how their heirs, successors or assigns came into ownership and shall be a covenant running with the land.

If construction of the improvements described in Exhibit "A" attached hereto is not substantially commenced within one (1) year from the date of this Bond, the Principal shall submit, prior to this one (1) year period, revised cost estimates to the District for review. Following this review, if the District so requires, the Principal shall submit a revised Subdivider's Completion Bond based on the revised cost estimate to the District for review. If the Principal fails to comply with this paragraph, this Bond shall be null and void and of no further force and effect and all previous approvals of the District shall be cancelled effective one (1) year from the date of the Bond.

This Subdivider's Completion Bond shall be governed by the laws of the State of Florida. Venue shall be in Broward County, Florida for any dispute.

This Subdivider's Completion	Bond shall be placed upon the public records of Broward
County, Florida, the Principal to bear	the cost.
IN WITNESS WHEREOF, the Prince executed on this day of	cipal and Surety have caused these presents to be duly, 20
Corporate Seal	Principal
	Ву:
Attest:	
Corporate Seal	Surety
	By: PRINT Address Telephone
Attest:	

# FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was ackno	wledged before me by means of $\Box$ physical
presence or $\square$ online notarization, this (	(date)by (name of
person acknowledging)	,who is personally
known to me or who has produced (type	e of identification)
as identification.	
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

# FOR A CORPORATION: STATE OF \_\_\_\_\_ COUNTY OF The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of officer or agent, title of officer or agent)\_\_\_\_\_ or place of formation)\_\_\_\_\_ corporation, on behalf of the corporation. He/She is personally known to me or has produced (type of identification) as identification. (Continued on next page) (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# FOR A LIMITED LIABILITY COMPANY:

STATE OF	
COUNTY OF	
The foregoing instrument was a	cknowledged before me by means of □ physical
presence or $\square$ online notarization,	this (date) by (name of member,
manager, officer or agent, title of m	nember, manager, officer or agent)
	, of (name of corporation
acknowledging)	, a (state or
place of formation)	limited liability company, on behalf of the
company, who is personally known	to me or who has produced (type of identification)
	as identification.
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

# FOR A PARTNERSHIP: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of partner or agent) \_\_\_\_\_, partner (or agent) on behalf of (name of partnership) a partnership. He/She is personally known to me or has produced (type of identification) as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

Prepared By:
Return to:
RELEASE OF SUBDIVIDER'S COMPLETION AGREEMENT
KNOW ALL MEN BY THESE PRESENTS:
That CENTRAL BROWARD WATER CONTROL DISTRICT, a political subdivision existing under the laws of the State of Florida, the owner and holder of a certain Subdivider's Completion Agreement executed by
Hereby acknowledges that all obligations under the aforestated Subdivider's Completion Agreement have been satisfied and that said Subdivider's Completion Agreement is hereafter of no force and effect.

caused these presents to be ex	ecuted	said CENTRAL BROWARD WATER CONTROL DISTRICT has in its name and its official seal affixed hereto by its proper officers day of
Corporate Seal	CENT	TRAL BROWARD WATER CONTROL DISTRICT
	BY:	Secretary
Signed, sealed and delivered		
in the presence of:		
presence or □ online nota	t was	acknowledged before me by means of □ physical n, this day of
(name of person) a	s / in	(type of authority e.g. fact) for CENTRAL BROWARD WATER CONTROL
		(Signature of Notary Public - State of Florida)
	(Print	, Type, or Stamp Commissioned Name of Notary Public)
Personally Known Produced Identification Type of Identification Produced		

Prepared by and return to: Central Broward Water Control District 8020 Stirling Road Hollywood, FL 33024 954-432-5110

**FOLIO NO.:** 

# **CANAL EASEMENT**

d	ay of	20	_by
a		Compa	any,
			_,
BROWARI	WATER CONT	TROL DIST	Γ <b>RICT</b> , a
ited at 8020	Stirling Road,	(Davie) Ho	llywood,
-			
	a BROWARI	BROWARD WATER CONT ted at 8020 Stirling Road,	BROWARD WATER CONTROL DIST

## WITNESSETH

That the Grantor, for and in consideration of the sum of TEN DOLLARS (\$10.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, does hereby grant and convey:

To District, its successors and assigns, a perpetual and non-exclusive canal easement over, across, through and upon a portion of the following described real property located in the Central Broward Water Control District, County of Broward, State of Florida, to wit:

SEE EXHIBIT "A" ATTACHED ("Grantor's Property").

together with the right to construct, reconstruct, remove, maintain, operate, improve, add to, and repair such facilities and appurtenances in or on said real property which may be required for the full enjoyment of the rights herein granted; the right of ingress and egress to personnel and equipment to the canal and abutting real property at all times; the right to keep the land cleared of obstructions within the easement area; and further providing that the Grantor shall not erect or place any building, tree or other improvement on the above-described real property.

The portion of Exhibit "A" comprising the easement is described in Exhibit "B" attached ("Canal Easement").

Grantor hereby acknowledges that he/she/it is the fee simple owner of the real property as described in Exhibit "A".

Grantor may, for its own purposes, utilize the easement area and shall retain a right of free ingress and egress under, over and upon the easement area; provided that, in no event, shall any of the rights of ingress and egress reserved to Grantor impede the easement herein granted or restrict the exercise of the rights of use there under by District.

The provision of the easement shall be binding on the parties hereto and their respective successors and assigns as a covenant running with the land and binding upon the servient estate.

The easement shall not be released or amended without consent of the District as evidenced by a document signed with the same formalities as this document.

This document shall be recorded in the Public Records of Broward County, Florida, the Grantor to bear the cost. Grantor shall bear the cost of attorney and engineering fees incurred by District in the application for this easement.

IN WITNESS WHEREOF, Grantor h	as executed this instrument on the	day of,
20		
Signed, sealed and		
delivered in the presence of:	GRANTOR	
Witnesses:		
Sign above, print name below	By:	
	Print Name:	
Sign above, print name below	Date:	

# FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	edged before me by means of □ physical presence or
□ online notarization, this (date)	by (name of person
acknowledging)	,who is personally
known to me or who has produced (type	e of identification)
as identification.	
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(T)
	(Title or rank)
	(Oaristaanskan if ana)
	(Serial number, if any)

# FOR A CORPORATION:

STATE OF	
COUNTY OF	
The foregoing instrument was acknowledge	ed before me by means of □ physical presence or
☐ online notarization, this (date)	by (name of officer or agent,
title of officer or agent)	_,
	, a (state
or place of formation)	corporation, on behalf of the corporation.
He/She is personally known to me or has p	roduced (type of identification)
as identification.	
	(Continued on next page)
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

# FOR A LIMITED LIABILITY COMPANY:

STATE OF						
COUNTY OF						
The foregoing instrument was acknowledg	ed before me by means of □ physical presence or					
□ online notarization, this (date)	by (name of member,					
manager, officer or agent, title of member,	manager, officer or agent)					
	, of (name of corporation					
acknowledging)	, a (state or					
place of formation)	limited liability company, on behalf of the					
company, who is personally known to me of	or who has produced (type of identification)					
	as identification.					
	(Signature of person taking acknowledgment)					
	(Name typed, printed or stamped)					
	(Title or rank)					
	(Serial number, if any)					

# STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date) \_\_\_\_\_\_ by (name of partner or agent) \_\_\_\_\_\_, partner (or agent) on behalf of (name of partnership) \_\_\_\_\_ a partnership. He/She is personally known to me or has produced (type of identification) \_\_\_\_\_\_ as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

Prepared By and Return To: Central Broward Water Control District 8020 Stirling Road Hollywood, FL 33024 954-432-5110

Folio No.:

## **CANAL MAINTENANCE EASEMENT**

	THIS CAI	NAL MAINTEN	ANCE EA	SEMENT is	s granted t	his	_day <u>of</u>		
	_, 20	, by							, a
		С	ompany,	whose addr	ess is				
				hereinaf	ter referre	ed to as	"Grantor"	to C	ENTRAL
BROV	WARD WA	TER CONTRO	DL DISTI	RICT, a po	litical sub	division	of the Sta	ate of	f Florida,
locate	ed at 8020	Stirling Road,	(Davie)	Hollywood,	Florida 3	3024, he	ereinafter	referr	ed to as
"Distri	ict".								

## WITNESSETH:

That the Grantor, for and in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, does hereby grant and convey:

To District, its successors and assigns, a perpetual and non-exclusive canal maintenance easement for ingress, egress and access to and maintenance of an adjacent canal together with any appurtenances incidental and necessary thereto, over, across, through and upon the real property, owned in fee simple by Grantor and located in the Central Broward Water Control District, County of Broward, State of Florida, to wit:

SEE EXHIBIT "A" ATTACHED ("Grantor's Property").

for the purposes necessary, convenient or incidental to or in connection with the construction and operation of drainage system and appurtenances thereto. This easement is inclusive of the right to traverse with equipment across the eased area to accomplish said maintenance.

The portion of Exhibit "A" comprising the easement is described in Exhibit "B", attached, ("Canal Maintenance Easement Area").

This Easement is subject to the following terms, conditions and covenants:

- 1. Although the easement granted to the District herein is non-exclusive, should any easement over the Canal Maintenance Easement Area be granted, subsequent to the date of this easement, the holder of any such subsequent easement shall be required to obtain approval from the District for the use of the Canal Maintenance Easement Area. Such approval by the District shall not be unreasonably withheld, denied or delayed.
- 2. No improvements, trees, landscaping or encroachments including utilities shall be placed within the Canal Maintenance Easement Area without the approval of and a permit from District, which approval will not be unreasonably withheld or delayed.
- 3. The rights granted herein to the District may be released or modified by a written, recordable release or modification approved by the Grantor and executed by the District.
- 4. Grantor acknowledges that Grantor and Grantor's successors and assigns shall be responsible for maintenance or repair of the Canal Maintenance Easement Area, including the canal bank slope and that District shall have the right, but not the obligation, to maintain or repair said Canal Maintenance Easement Area.
- 5. Grantor acknowledges that in the event the District incurs any expenses in maintaining or repairing the Canal Maintenance Easement Area or the adjacent canal area as a result of Grantor's failure to maintain or repair such area, Grantor and Grantor's successors and assigns shall reimburse District for reasonable expenses including attorney's fees and costs to collect said expenses. However, before incurring any expenses, except in an emergency, District shall provide written notice to Grantor at least five (5) working days prior to performing any work to maintain or repair the Canal Maintenance Easement Area or the adjacent canal area. During such period of time, Grantor or Grantor's successors and assigns may perform the work proposed by District or notify District that Grantor will perform said work to District's requirements in a reasonable period of time.
- 6. At the request of the Grantor, District shall provide an estoppel letter from time to time confirming whether any outstanding amounts are due by Grantor to District under this Easement.

NOTE: This Canal Maintenance Easement is subject to the terms and provisions of a Maintenance and Indemnification Agreement between the Grantor and District that will be recorded in the Broward County Public Records.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be signed in its name by its proper officer, the day and year above written.

Signed, sealed and delivered in the presence of:

		"Grantor"
Witness Signature		
Witness Printed Name	Ву:	
Witness Signature		Name and Title
Witness Printed Name		

### FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was ackr	nowledged before me by means of $\square$ physical
presence or $\square$ online notarization, this	s (date) by (name of person
acknowledging)	,who is personally
known to me or who has produced (ty	pe of identification)
as identification.	
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

# FOR A CORPORATION: STATE OF COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of $\square$ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of officer or agent, title of officer or agent)\_ or place of formation) corporation, on behalf of the corporation. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ \_\_\_\_\_ as identification. (Continued on next page) (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# STATE OF \_\_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date) \_\_\_\_\_\_ by (name of member, manager, officer or agent, title of member, manager, officer or agent) \_\_\_\_\_\_\_, of (name of corporation acknowledging) \_\_\_\_\_\_\_, a (state or place of formation) \_\_\_\_\_\_ limited liability company, on behalf of the company, who is personally known to me or who has produced (type of identification) \_\_\_\_\_\_ as identification. (Signature of person taking acknowledgment) \_\_\_\_\_\_ (Name typed, printed or stamped) \_\_\_\_\_\_\_ (Title or rank)

(Serial number, if any)

# FOR A PARTNERSHIP: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of $\square$ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of partner or agent) \_\_\_\_\_, partner (or agent) on behalf of (name of partnership)\_\_\_\_\_\_ a partnership. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ \_\_\_\_\_ as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

Prepared By and Return To: Central Broward Water Control District 8020 Stirling Road Hollywood, FL 33024 954-432-5110

Folio No.:

### DRAINAGE, FLOWAGE AND STORAGE EASEMENT

THIS DRAINAGE, FLOWAGE AND STORAGE EA	ASEMENT is granted this day
of, 20, by	a
Company, whose address is	
	_hereinafter referred to as "Grantor"
to CENTRAL BROWARD WATER CONTROL DISTRICT	, a political subdivision of the State of
Florida, located at 8020 Stirling Road (Davie) Hollywood,	Florida 33024, hereinafter referred to
as "District".	

### WITNESSETH:

That the Grantor, for and in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, does hereby grant and convey:

To District, its successors and assigns, a perpetual and non-exclusive Drainage, Flowage and Storage Easement for the drainage, flowage and storage of stormwater, and construction and maintenance of a lake/pond, together with any necessary appurtenances incidental and necessary thereto, over, across and through the real property, owned by Grantor in fee simple and legally described in Exhibit "A" attached hereto and made a part hereof, ("Grantor's Property"), together with ingress and egress across said Drainage, Flowage and Storage Easement Area for the purpose of constructing, maintaining and repairing the lake/pond, drainage system and appurtenances contained therein and to make a proper and adequate drainage system that District, its successors and assigns may establish.

The portion of Exhibit "A" comprising the easement is described in Exhibit "B", attached, ("Drainage, Flowage and Storage Easement").

This Easement is subject to the following terms, conditions and covenants:

- 1. Although the easement granted to the District herein is non-exclusive, should any easements over the Drainage, Flowage and Storage Easement Area be granted, subsequent to the date of this easement, the holder of any such subsequent easement shall be required to obtain approval from the District for the use of the Drainage, Flowage and Storage Easement Area. Such approval by the District shall not be unreasonably withheld or delayed.
- 2. Grantor acknowledges that the Drainage, Flowage and Storage Easement Area will be used for drainage from Grantor's property and for drainage of property adjacent thereto.
- 3. No improvements, trees, landscaping or encroachments including utilities shall be placed within the Drainage, Flowage and Storage Easement Area without the approval of and a permit from the District, which approval shall not be unreasonably withheld, denied or delayed.
- 4. The rights granted herein to the District may be released or modified by a written, recordable release or modification approved by the Grantor and executed by the District.
- 5. Grantor acknowledges that Grantor and Grantor's successors and assigns shall be responsible for construction, maintenance, and repair of the lake/pond and all drainage facilities constructed within the Drainage, Flowage and Storage Easement Area and that District shall have the right but not the obligation to maintain or repair said lake/pond, drainage facilities within the Drainage, Flowage and Storage Easement Area.
- 6. Grantor acknowledges and affirms that Grantor shall be responsible for maintaining the lake/pond bank slope located within the limits of the Exhibit "A" property and on the Exhibit "B" property from the Exhibit "B" property to the lake/pond deep cut line, which is defined as the bank slope beginning at three feet below the District's water control elevation. Any erosion or change in grade of the lake/pond bank slope from design grade within the limits of the Exhibit "B" property and lake/pond deep cut line shall be repaired/corrected by the Grantor to the satisfaction of the District.
- 7. Grantor acknowledges that in the event the District incurs any expenses in maintaining the lake/pond and/or drainage facilities within the Drainage, Flowage and Storage Easement Area, Grantor and Grantor's successors and assigns shall reimburse District for said expenses including attorney's fees and costs to collect said expenses. However, before incurring any

Exhibit N-3 August 12, 2020 expenses, except in an emergency, District shall provide written notice to Grantor at least five (5) working days prior to performing any work to maintain or repair said drainage facilities. During this period of time, Grantor and Grantor's successors and assigns may perform the work proposed by District or notify District that Grantor will perform said work to District's requirements in a reasonable period of time.

- 8. This Easement is subject to the Drainage, Flowage and Storage Easement Area remaining in perpetuity as a lake/pond area.
- 9. At the request of the Grantor, District shall provide an estoppel letter from time to time confirming whether any outstanding amounts are due by Grantor to District under this Easement.

NOTE: This Drainage, Flowage and Storage Easement is subject to the terms and provisions of a Maintenance and Indemnification Agreement between the Grantor and District that will be recorded in the Broward County Public Records.

IN WITNESS WHEREOF, the said Grantor has caused this presents to be signed in its name by their proper officer, the day and year above written.

Signed, sealed and delivered in the presence of:	"Grantor"		
Witness Signature			
Witness Printed Name	By:		
Witness Signature	Name and Title		
Witness Printed Name			

### FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was acknowledged	nowledged before me by means of $\Box$ physical
presence or $\ \square$ online notarization, thi	s (date) by (name of person
acknowledging)	,who is personally
known to me or who has produced (ty	pe of identification)
as identification.	
	(Circumstance of the control of the
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Ossial assertance if any)
	(Serial number, if any)

## FOR A CORPORATION: STATE OF \_\_\_\_\_ COUNTY OF The foregoing instrument was acknowledged before me by means of $\square$ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of officer or agent, title of officer or agent)\_\_\_\_\_ or place of formation)\_\_\_\_\_ corporation, on behalf of the corporation. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ as identification. (Continued on next page) (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# STATE OF \_\_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date) \_\_\_\_\_\_ by (name of member, manager, officer or agent, title of member, manager, officer or agent) \_\_\_\_\_\_, of (name of corporation acknowledging) \_\_\_\_\_\_, a (state or place of formation) \_\_\_\_\_ limited liability company, on behalf of the company, who is personally known to me or who has produced (type of identification) \_\_\_\_\_ as identification. (Signature of person taking acknowledgment) \_\_\_\_\_ (Name typed, printed or stamped) \_\_\_\_\_\_ (Title or rank)

(Serial number, if any)

# FOR A PARTNERSHIP: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_ The foregoing instrument was acknowledged before me by means of $\square$ physical presence or □ online notarization, this (date)\_\_\_\_\_\_ by (name of partner or agent) \_\_\_\_\_\_, partner (or agent) on behalf of (name of partnership) a partnership. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ \_\_\_\_\_ as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

Prepared By and Return To: Central Broward Water Control District 8020 Stirling Road Hollywood, FL 33024 954-432-5110

Folio No.:

### LAKE MAINTENANCE EASEMENT

	THIS LA	KE MAINTENANCE EASEMENT is granted thisday of
20	, by	, a
	(	ompany, whose address is
		, hereinafter referred to as "Grantor" to CENTRAL BROWARD WATER
CON	ITROL DIS	TRICT, a political subdivision of the State of Florida, located at 8020 Stirling
Roa	d, (Davie) H	ollywood, Florida 33024, hereinafter referred to as "District".

### WITNESSETH:

That the Grantor, for and in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, does hereby grant and convey:

To District, its successors and assigns, a perpetual and non-exclusive lake maintenance easement for ingress, egress and access to and maintenance of an adjacent lake/pond together with any appurtenances incidental and necessary thereto, over, across, through and upon the real property, owned in fee simple by Grantor and located in the Central Broward Water Control District, County of Broward, State of Florida, to wit:

SEE EXHIBIT "A" ATTACHED for the purposes necessary, convenient or incidental to or in connection with the construction and operation of the drainage system and appurtenances thereto. This easement is inclusive of the right to traverse with equipment across the eased area to accomplish said maintenance. The portion of Exhibit "A" comprising the easement is described in Exhibit "B", attached, ("Lake Maintenance Easement Area").

This Easement is subject to the following terms, conditions and covenants:

- 1. Although the easement granted to the District herein is non-exclusive, should any easement over the Lake Maintenance Easement Area be granted, subsequent to the date of this easement, the holder of any such subsequent easement shall be required to obtain approval from the District for the use of the Lake Maintenance Easement Area. Such approval by the District shall not be unreasonably withheld, denied or delayed.
- 2. No improvements, trees, landscaping or encroachments including utilities shall be placed within the Lake Maintenance Easement Area without the approval of and a permit from District, which approval will not be unreasonably withheld or delayed.
- 3. The rights granted herein to the District may be released or modified by a written, recordable release or modification approved by the Grantor and executed by the District.
- 4. Grantor acknowledges that Grantor and Grantor's successors and assigns shall be responsible for maintenance or repair of the Lake Maintenance Easement Area including the lake/pond bank slope and that District shall have the right but not the obligation to maintain or repair said Lake Maintenance Easement Area.
- 5. Grantor acknowledges that in the event the District incurs any expenses in maintaining or repairing the Lake Maintenance Easement Area or the adjacent lake/pond area as a result of Grantor's failure to maintain or repair such area, Grantor and Grantor's successors and assigns shall reimburse District for reasonable expenses including attorney's fees and costs to collect said expenses. However, before incurring any expenses, except in an emergency, District shall provide written notice to Grantor at least five (5) working days prior to performing any work to maintain or repair the Lake Maintenance Easement Area or the adjacent lake/pond area. During such period of time, Grantor or Grantor's successors and assigns may perform the work proposed by District or notify District that Grantor will perform said work to District's requirements in a reasonable period of time.
- 6. At the request of the Grantor, District shall provide an estoppel letter from time to time confirming whether any outstanding amounts are due by Grantor to District under this Easement.

NOTE: This Lake Maintenance Easement is subject to the terms and provisions of a Maintenance and Indemnification Agreement between the Grantor and District that will be recorded in the Broward County Public Records.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be signed in its name by its proper officer, the day and year above written.

Signed, sealed and delivered in the presence of:

	"Grantor"
Witness Signature	
	Ву:
Witness Printed Name	·
Witness Signature	Name and Title
Witness Printed Name	

### FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	edged before me by means of □ physical presence or
□ online notarization, this (date)	by (name of person acknowledging)
	,who is personally known to me or who has
produced (type of identification)	as identification.
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

FOR A CORPORATION:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknowledge	ged before me by means of □ physical presence or
☐ online notarization, this (date)	by (name of officer or agent,
title of officer or agent)	
of (name of corporation acknowledging)	, a (state
or place of formation)	corporation, on behalf of the corporation.
as identification.	
	(Continued on next page)
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

# FOR A LIMITED LIABILITY COMPANY: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date) \_\_\_\_\_ by (name of member, manager, officer or agent, title of member, manager, officer or agent) (name of corporation \_\_\_\_, a (state or acknowledging)\_\_\_\_ place of formation)\_\_\_\_\_ limited liability company, on behalf of the company, who is personally known to me or who has produced (type of identification) as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

FOR A PARTNERSHIP:					
STATE OF					
COUNTY OF					
The foregoing instrument was acknowledged	d before me by m	neans of □	l physical	presence	or
□ online notarization, this (date)					
(name of partnership)					
as identification	On.  (Signature of p	person taki	ng acknov	vledgmen	t)
	(Name typed,	printed or s	stamped)		
	(Title or rank)				
	(Serial number,	if any)			

Prepared By and Return To: Central Broward Water Control District 8020 Stirling Road Hollywood, FL 33024 954-432-5110

Folio No.:

### DRAINAGE EASEMENT AGREEMENT

	THIS DRAINAGE EASEMENT is granted this day of
20	_, by, a
	Company, whose address is
	, hereinafter referred to as "Grantor"
to CE	NTRAL BROWARD WATER CONTROL DISTRICT, a political subdivision of the State of
Florid	a, located at 8020 Stirling Road, (Davie) Hollywood, Florida 33024, hereinafter referred to
as "Di	istrict".
	WITNESSETH.

### WITNESSETH:

That the Grantor, for and in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, does hereby grant and convey:

To District, its successors and assigns, a perpetual and non-exclusive drainage easement for the construction and maintenance of drainage facilities, together with any necessary appurtenances incidental and necessary thereto, over, across, upon and through a portion of the following described real property, owned in fee simple by the Grantor and located in the Central Broward Water Control District, County of Broward, State of Florida, to wit:

SEE EXHIBIT "A" ATTACHED ("Grantor's Property").

together with the right to construct, reconstruct, remove, maintain, operate, improve, add to and repair the drainage system and appurtenances contained therein.

The portion of Exhibit "A" comprising the easement is described in Exhibit "B", attached, ("Drainage Easement Area").

**Exhibit N-5** August 12, 2020 This Easement is subject to the following terms, conditions and covenants:

- 1. Although the easement granted to the District herein is non-exclusive, should any easements over the Drainage Easement Area be granted, subsequent to the date of this easement, the holder of any such subsequent easement shall be required to obtain approval from the District for the use of the Drainage Easement Area. Such approval by the District shall not be unreasonably withheld, denied or delayed.
- 2. Grantor acknowledges that the Drainage Easement Area will be used for drainage from Grantors property which is further described on Exhibit "A", attached hereto, and for drainage of property adjacent thereto.
- 3. No improvements, trees, landscaping or encroachments, including utilities, shall be placed within the Drainage Easement Area without the approval of and a permit from the District, which approval shall not be unreasonably withheld, denied or delayed.
- 4. The rights granted herein to the District may be released or modified by a written, recordable release or modification approved by the Grantor and executed by the District.
- 5. Grantor acknowledges that Grantor and Grantor's successors and assigns shall be responsible for construction, maintenance, and repair of all drainage facilities constructed within the Drainage Easement Area and that District shall have the right but not the obligation to construct, maintain, or repair said drainage facilities and Drainage Easement Area.
- 6. Grantor acknowledges that in the event the District incurs any expenses in constructing, maintaining or repairing the drainage facilities within the Drainage Easement Area, Grantor and Grantor's successors and assigns shall reimburse District for said expenses including attorney's fees and costs to collect said expenses. However, before incurring any expenses, except in an emergency, District shall provide written notice to Grantor at least five (5) working days prior to performing any work to construct, maintain or repair said drainage facilities. During this period of time, Grantor or Grantor's successors and assigns may perform the work proposed by District or notify District that Grantor will perform said work to District's requirements.
- 7. At the request of the Grantor, District shall provide an estoppel letter from time to time confirming whether any outstanding amounts are due by Grantor to District under this Easement.

NOTE: This Drainage Easement is subject to the terms and provisions of a Maintenance and Indemnification Agreement between the Grantor and District that will be recorded in the Broward County Public Records.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be signed in its name by its proper officer, the day and year above written.

Signed, sealed and delivered in the presence of:

	"Grantor"
Witness Signature	
Witness Printed Name	Ву:
Witness Signature	Name and Title
Witness Printed Name	

### FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	edged before me by means of □ physical presence
or □ online notarization, this (date)	by (name of person
acknowledging)	"who is personally
known to me or who has produced (typ	e of identification)
as identification.	
	(Cinnet us of passes taking a sky and days at)
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

## FOR A CORPORATION: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date)\_\_\_\_\_\_ by (name of officer or agent, title of officer or agent)\_\_\_\_\_\_\_, or place of formation)\_\_\_\_\_ corporation, on behalf of the corporation. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ as identification. (Continued on next page) (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# STATE OF \_\_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date) \_\_\_\_\_\_ by (name of member, manager, officer or agent, title of member, manager, officer or agent) \_\_\_\_\_\_\_, of (name of corporation acknowledging) \_\_\_\_\_\_\_, a (state or place of formation) \_\_\_\_\_\_ limited liability company, on behalf of the company, who is personally known to me or who has produced (type of identification) \_\_\_\_\_\_ as identification. (Signature of person taking acknowledgment) \_\_\_\_\_\_ (Name typed, printed or stamped) (Title or rank) \_\_\_\_\_\_ (Serial number, if any)

FOR A PARTNERSHIP:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	dged before me by means of □ physical presence
or □ online notarization, this (date)	by (name of partner or agent)
	, partner (or agent) on behalf of
(name of partnership)	a partnership.
	as produced (type of identification)
as ic	dentification.
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

### **INGRESS/EGRESS EASEMENT**

	THIS INGRESS/EGRESS EASEMENT is granted thisday of
20	_, by
	Company, whose address is
	, hereinafter referred to as "Grantor" to CENTRAL
BRO	WARD WATER CONTROL DISTRICT, a political subdivision of the State of Florida,
locate	d at 8020 Stirling Road, (Davie) Hollywood, Florida, 33024, hereinafter referred to as
"Distr	ct".

### WITNESSETH:

That the Grantor, for and in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration in hand paid by District, the receipt whereof is hereby acknowledged, does hereby grant and convey:

To District, its successors and assigns, a non-exclusive ingress/egress easement for access to and, as may be the case, from the Drainage Easement, Drainage, Flowage and Storage Easement, Lake Maintenance Easement, Canal Easement and Canal Maintenance Easement dedicated to District and located on or adjacent to the property, owned in fee simple by the Grantor, located in the Central Broward Water Control District, County of Broward, State of Florida, to wit:

SEE EXHIBIT "A" ATTACHED ("Grantor's Property") over, across and through the property described on Exhibit "A" together with ingress, egress and regress across said lands for the purpose of obtaining access to and from the aforedescribed easements and drainage/stormwater management improvements contained therein. The portion of Exhibit "A" comprising the easement is described in Exhibit "B", attached ("Ingress/Egress Easement Area").

NOTE: This Ingress/Egress Easement is subject to the terms and provisions of a Maintenance and Indemnification Agreement between the Grantor and District that will be recorded in the Broward County Public Records.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be signed in its name by its proper officer, the day and year above written.

Signed, sealed and delivered in the presence of:	
	Grantor:
Witness signature	By:
Witness printed name	Name and Title
Witness signature	
Witness printed name	

### FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was ack	knowledged before me by means of $\Box$ physical
presence or $\square$ online notarization, the	nis (date) by (name of person
acknowledging)	,who is personally
known to me or who has produced (t	type of identification)
as identification.	
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(1 3 7 7 2 3, 7 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
	(Title or rank)
	(Serial number, if any)

## FOR A CORPORATION: STATE OF \_\_\_\_\_ COUNTY OF \_ The foregoing instrument was acknowledged before me by means of $\square$ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of officer or agent, title of officer or agent)\_\_\_\_\_ or place of formation)\_\_\_\_\_ corporation, on behalf of the corporation. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ as identification. (Continued on next page) (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# STATE OF \_\_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date)\_\_\_\_\_\_ by (name of member, manager, officer or agent, title of member, manager, officer or agent)\_\_\_\_\_\_\_, of (name of corporation acknowledging)\_\_\_\_\_\_\_, a (state or place of formation)\_\_\_\_\_\_ limited liability company, on behalf of the company, who is personally known to me or who has produced (type of identification) \_\_\_\_\_\_ as identification. (Signature of person taking acknowledgment) \_\_\_\_\_\_ (Name typed, printed or stamped)

(Serial number, if any)

# FOR A PARTNERSHIP: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_ The foregoing instrument was acknowledged before me by means of $\square$ physical presence or □ online notarization, this (date)\_\_\_\_\_\_ by (name of partner or agent) \_\_\_\_\_, partner (or agent) on behalf of (name of partnership) a partnership. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ \_\_\_\_\_ as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# THIS PROPERTY WILL BE THE SUBJECT OF A VARIANCE REQUEST ON (ENTER DATE) BEFORE THE CENTRAL BROWARD WATER CONTROL DISTRICT TO (DESCRIBE THE VARIANCE). (PROJECT NAME) (DATE, TIME AND LOCATION OF THE DISTRICT BOARD MEETING) FOR ADDITIONAL INFORMATION CONTACT

DISTRICT ENGINEER
(NAME)
(TELEPHONE NUMBER)

www.centralbrowardwcd.org

**EXHIBIT O** 

### CBWCD VARIANCE SIGN DETAIL

### NOTES:

- 1. THE SIGNS SHALL BE DOUBLE SIDED AND MADE OF WEATHER RESISTANT MATERIAL ON A YELLOW BACKGROUND.
- SIGNS SHALL BE POSTED ALONG EACH STREET FRONTAGE OF THE SUBJECT PROPERTY AND SHALL BE VISIBLE FROM THE STREET.
- 3. THE SIGNS SHALL BE POSTED BY THE APPLICANT ON THE SUBJECT PROPERTY FOURTEEN (14) DAYS PRIOR TO THE BOARD OF COMMISSIONERS MEETING DATE FOR THE VARIANCE REQUEST.
- 4. ALL SIGNS SHALL BE BE REMOVED BY THE APPLICANT WITHIN SEVEN (7) DAYS AFTER THE BOARD OF COMMISIONERS MEETING DATE.

PLEASE RETURN TO: Central Broward Water Control District 8020 Stirling Road Hollywood, Florida 33024

### **MAINTENANCE AGREEMENT**

CBWCD Pe	ermit No.: W		
CBWCD Ap	pplication No.:		
by and betw	EEMENT made and entered into this	NTROL DISTRICT	
	Florida, hereinafter referred to as "The D	•	
	do business in the State of Florida hereir		
REC	CITAL		
A.	The District is a political subdivision responsibility of effecting drainage within		•
B.	The Developer is aknown as,situated entirely within the geographica	······································	which development is
C.	As a part of the development of install lakes/ponds, canals, underground retention/detention areas, drainage pipe water management including floodplain	und storage and the sand other types of	treatments systems, dry of water courses for storm
D.	The District requires that such storm was Developer has agreed to affect such m such agreement to writing.	•	

NOW, THEREFORE, in consideration of the mutual promises each to the other running, and other good and valuable consideration, the parties agree as follows:

A. The Developer shall be responsible for and shall bear the cost of maintaining in good condition, as the same is hereinafter defined, all lakes/ponds, canals, swales, retention/detention areas, berms, grading, exfiltration trenches, control structures, catch basins, manholes, headwalls, underground storage systems, sodded banks, aquatic plants, retaining walls, drainage pipes and drainage channels, hereinafter

Exhibit P

August 12, 2020 Page 1 of 12

PLEASE RETURN TO: Central Broward Water Control District 8020 Stirling Road Hollywood, Florida 33024

- collectively referred to as "storm water facilities", which may be on or about the real property described on Exhibit "A" attached hereto.
- B. The Developer shall also be responsible for the constant maintenance and care for areas designated for RETENTION, DETENTION, and TREATMENT quantitatively described in Exhibit "B" attached hereto. Said Exhibit "B" shall be prepared by a registered Professional Engineer in the State of Florida.
- C. That "good condition" shall be that standard of care and maintenance as may be established from time to time by the District and shall be deemed to include, but not limited to, the control of weeds and other nuisance and invasive vegetation, control of erosion, and the maintenance of slopes, depth, aquatic vegetation, sodded slopes, and percolation capacity of seepage areas.
- D. That the District will have the right and authority to enter upon and cross over the property described on Exhibit "A" hereto for the purpose of inspecting the storm water facilities, and in the event that the District determines that the maintenance of said storm water facilities do not meet the standards established by the District, notice will be given by the District, to the Developer and the Developer will be given a period of 15 days from and after the mailing of such notice within which to remedy such defect or obtain from the District, in writing, an extension, for good cause shown, of the time within which to remedy such defect, failing either of the foregoing, the District may, at its option, correct such defect for and on behalf of the developer.
  - E. That in the event that the District is required to perform such maintenance on behalf of the Developer, then and in such event, the District shall be deemed to have a lien against the Developer's property, which lien will be inferior only to any existing first mortgage then encumbering said property, ad valorem taxes, and such other liens, impositions and assessments as may be given priority by applicable statues, and said liens shall be for all reasonable costs incurred by the District together with interest thereon computed at 18 percent (18%) per annum. Any lien pursuant to this paragraph shall be effective upon recording in the Broward County Public Records. In the further event that the District is required to foreclose its lien, the and in such event, the District will be entitled additionally to receive its reasonable attorney fees and costs expended in connection with such foreclosure or collection procedure.

PLEASE RETURN TO: Central Broward Water Control District 8020 Stirling Road Hollywood, Florida 33024

- F. The Developer has acquired the stormwater management permits as required by the District and acknowledges that said permits shall be renewed every five years from the date the permit is issued pursuant to the District's regulations and any amendments thereto based on the following inspection schedule:
  - a. Above-ground wet and dry retention/detention systems, drainage structures and piping, water control structures, outfall structures, perimeter berms and aquatic vegetation: every five years
  - b. Underground storage systems, exfiltration trenches, and other seepage systems: every year.

Each inspection shall be performed by a registered Professional Engineer. The fiveyear renewal shall include a certification statement from the Professional Engineer and include the appropriate documentation from each inspection event per the frequencies described above. Actual inspection and reporting frequencies will be documented in the permit conditions as necessary based on site-specific operational and maintenance requirements.

- G. Should the Developer subdivide the property described on Exhibit "A" hereto, the Developer's obligation to maintain shall devolve upon the individual purchasers or the subdivided parcels, their heirs, successors, and assigns, and shall be a covenant to run with the land. Regardless of whether or not the Developer subdivides such property, their obligation to maintain shall be binding upon its heirs, successors, and assigns, and shall be a covenant running with the land.
- H. Whenever either party desires to give notice unto the other, it must be given by written notice, sent by registered United States mail, with return receipt requested, addressed to the party for whom it is intended, at the place last specified, and the place for giving notice shall remain such until it shall have been changed by written notice in compliance with the provisions of this Article. For the present, the parties designate the following as the respective places for giving of notice, to-wit:

For the Developer:

For the District:
Mike Crowley, District Manager
Central Broward Water Control District
8020 Stirling Road
Hollywood, Florida 33024

- Amendment. No modification, amendment, or alteration of the terms and conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.
- J. Assignment. The Developer shall not transfer, assign or subcontract the activities provided for in this Agreement without the prior written consent of the District.
- K. Compliance with Laws. The Developer shall, without additional expense to the District, be responsible for obtaining any necessary licenses and for complying with any and all applicable federal, state, county and municipal laws, codes and regulations in connection with the performance of the activities described herein.
- L. Third Party Beneficiaries. Neither the Developer nor the District intend to directly or substantially benefit a third party by this Agreement. Therefore, the parties agree that there are no third-party beneficiaries to this Agreement and that no third party shall be entitled to assert a claim against either of them based upon this Agreement. The parties expressly acknowledge that it is not their intent to create any rights or obligations in any third person or entity under this Agreement.
- M. Waiver of Breach. Failure by either party to enforce any provision of this Agreement shall not be deemed a waiver of such provision or modification of this Agreement. A waiver of any breach of a provision of this Agreement shall not be deemed a waiver of any subsequent breach and shall not be construed to be a modification of the terms of this Agreement.

Exhibit P

August 12, 2020 Page 4 of 12

- N. Indemnification. Developer agrees to indemnify and hold District harmless, to extent provided by law, from any and all liability incurred now or in the future as a result of any injury, death or property damages because of the existence of or the failure to maintain the encroachment.
- O. Severance. In the event this Agreement or a portion of this Agreement is found by a court of competent jurisdiction to be invalid, the remaining provisions shall continue to be effective unless either party elects to terminate this Agreement. The election to terminate this Agreement based upon this provision shall be made within seven (7) days after the finding by the court becomes final.
- P. Joint Preparation. The parties hereto acknowledge that they have sought and received whatever competent advice and counsel as was necessary for them to form a full and complete understanding of all rights and obligations herein and that the preparation of this Agreement has been a joint effort of the parties, the language has been agreed to by parties to express their mutual intent and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than the other.
- Q. Prior Agreements. This document incorporates and includes all prior negotiations, correspondence, conversations, agreements, and understandings applicable to the matters contained herein and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, the parties agree that no deviation from the terms hereof shall be predicated upon any prior representations or agreements, whether oral or written.
- R. Applicable Law and Venue. This Agreement shall be interpreted and construed in accordance with and governed by the laws of the State of Florida. Any controversies or legal problems arising out of this Agreement and any action involving the enforcement or interpretation of any rights hereunder shall be submitted to the jurisdiction of the State courts of the Seventeenth judicial Circuit of Broward County, Florida. By entering into this Agreement, the parties hereby expressly waive any rights either party may have to a trial by jury of any civil litigation related to, or arising

Exhibit P

August 12, 2020 Page 5 of 12

out of this Agreement. In any action to enforce the terms of this Agreement, whether suit be brought or not, the prevailing party shall be entitled to reasonable attorney's fees and costs.

S. This agreement shall be placed of record among the Public Records of Broward County, Florida, the Developer to bear the cost.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written.

Witness by: CENTRAL BR	ROWARD WATER CONTROL DISTRICT
	By Manager/Secretary and/or Chair/Vice Chair
	(SEAL)
As to District	
WITNESSES:	
As to Developer	By President
	(SEAL)
	AttestSecretary

FOR AN INDIVIDUAL ACTING IN HIS OF	R HER OWN RIGHT:			
STATE OF				
COUNTY OF				
The foregoing instrument was acknowle	edged before me by mear	ns of 🗆 p	hysic	cal presence
or □ online notarization, this (date)		by	(nam	ne of persor
acknowledging)		,who	is	personally
known to me or who has produced (typ	e of identification)			
as identification.				
	(Signature of person ta	aking ack	nowle	dgment)
	/Name typed printed a		الم	
	(Name typed, printed o	ir stampe	ea)	
	(Title or rank)			
	(Title of farily)			
	(Serial number, if any)			

FOR A CORPORATION:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	ged before me by means of □ physical presence
or □ online notarization, this (date)	by (name of officer or agent,
title of officer or agent)	
of (name of corporation acknowledging)_	,a (state
or place of formation)	corporation, on behalf of the corporation.
He/She is personally known to me or has	s produced (type of identification)
as identifica	tion.
	(Continued on next page)
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

FOR A LIMITED LIABILITY COMPANY:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknow	ledged before me by means of □ physical presence
or □ online notarization, this (date)_	by (name of member,
	nber, manager, officer or agent)
	, of (name of corporation
acknowledging)	, a (state or
place of formation)	limited liability company, on behalf of the
	me or who has produced (type of identification)
	as identification.
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

FOR A PARTNERSHIP:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	dged before me by means of □ physical presence
or □ online notarization, this (date)	by (name of partner or agent)
	, partner (or agent) on behalf of
(name of partnership)	a partnership.
	s produced (type of identification)
as ic	lentification.
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

EXHIBIT "A" ATTACHED TO AND MADE A PART OF THAT CERTAIN MAINTENANCI
AGREEMENT BY AND BETWEEN CENTRAL BROWARD WATER CONTROL DISTRICT ANI
, DATED, 20
LEGAL DESCRIPTION

<u>EXHIBIT</u>	<u>"B"</u>
CBWCD Permit No.:	
CBWCD Application No.:	
RETENTION/DETENTION AREAS, AS DESIGNATED AND DRAINAGE PLANS, SHALL BE MAINTAINED AT volume from top of bank to Water Control Elevation	A MINIMUM VOLUME OF [insert storage
Certified by:	
Signature	Print Name
Date of Certification:	
State of Florida Professional Engineer License Num	nber:

APPLICATION NO.
PERMIT NO.
For District Use Only

### APPLICATION FOR STORMWATER MANAGEMENT PERMIT

CENTRAL BROWARD WATER CONTROL DISTRICT

TO: **Board of Commissioners** 

Central Broward Water Control District

8020 Stirling Road Hollywood, Florida 33024 Phone: (954) 432-5110 (954) 432-8603 Fax:

TYPE OF PERMIT REQ	UESTED: [	] Plat [ ] N	lew Stormwater I	Management (SWM) Perr	nit
[ ] Modification of Exist	ing SWM Per	mit [ ] SV	VM Permit Renev	wal [ ] Work within Distr	rict Right-of-Way
PROJECT TITLE					
LOCATION: 1/4 Section	Sec	ction	Township	Range	
Plat Book_	Page_	Fol	io Number(s)		
PURPOSE			ZONING		
(Residential, Ag	ricultural, Comm	ercial, etc.)			
JURISDICTION					
	Town of, etc.)				
PROJECT SIZE (Acres)			Total A	cres (Per Survey)	
PROPERTY OWNER					
ADDRESS					
				PHONE	
FAX	_ EMAIL				
APPLICANT					
ADDRESS					
				PHONE	
FAX	_ EMAIL				
FINANCIAL RESPONSII	BILITY FOR I	BILLING			
ADDRESS					
				PHONE	
FAX	_ EMAIL				
PROJECT ENGINEER_ CBWCD – 8/12/20		Page 1	1 of 12		

AGENCY CO	RPORATION				
ADDRESS					
CITY		STATE	ZIP	PHONE	<del></del> -
FAX	EMA	L			
PROPOSED	RESPONSIBLE	OPERATION &	MAINTENANG	CE ENTITY AFTER	CONSTRUCTION
ADDRESS					
CITY		STATE	ZIP	PHONE	
FAX	EMA	L			
PROJECT IS:	: PROPOSE	D EXISTING	TO BE M	ODIFIED	
PROJECT CO	ONSTRUCTION T	O BE PHASED Y	_ N LAK	E/POND EXISTING C	N SITE Y N
DATE CONST	TRUCTION/ALTE	RATION IS EXPECT	ED TO STAR	Т	
ownership ar Standards, Predition. Cor approval; otl	nd the supporting rocedures, and D nstruction of thi herwise a new s	g documentation re esign Criteria manu s project must be tormwater manage	quired by the cal of the Cen commence ment permit	form must be attached Stormwater Manage tral Broward Water Code within 18 months application and perford Water Control Discrete.	ement Regulations, control District, latest from the date of mit application fee
		RMS THE PROPOS CT RIGHT-OF-WAY:		T, SYSTEM, OR AC	TIVITY; INCLUDING

[If the owner or applicant is a non-individual entity required by statute or rule to register with the State of Florida Secretary of State, it must be registered, and the person signing the application must have the legal authority to bind the entity with the terms, conditions, and liabilities associated with such application and subsequent permit, if issued. Further, any such entity must maintain their registration with the State of Florida Secretary of State for the duration of the permitted activities.]

By signing this application form, I am applying for the permit according to the supporting data and other incidental information filed with this application. I am familiar with the information contained in this application and represent that such information is true, complete and accurate. I agree to provide entry to the project site for employees of the Central Broward Water Control District and employees of the District Engineer's company with proper identification or documents from the Central Broward Water Control District for the purpose of making preliminary on-site analyses. Further, I agree to provide entry to the project site for such employees to monitor permitted work if a permit is granted. I understand this is an application and not a permit, and that work prior to approval is a violation. I understand that this application and any permit issued pursuant thereto does not relieve me of any obligation for obtaining any other required federal, state, water management district, or local permit prior to commencement of construction. I agree to operate and maintain the permitted system unless the District authorizes transfer of the permit to a responsible operation entity.

(signature)	(printed name)
or Applicant or Authorized Agent	
Applicant or Authorized Agent(signature)	(pinted name)
(Complete the Agent Authorization section)	
FOR AN INDIVIDUAL ACTING IN HIS	OR HER OWN RIGHT:
STATE OF	
COUNTY OF	
The foregoing instrument was acknow	rledged before me by means of □ physical presence
or □ online notarization, this (date)	by (name of person
acknowledging)	,who is personally
known to me or who has produced (ty	pe of identification)
as identification.	
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

Owner

FOR A CORPORATION:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	lged before me by means of □ physical presence
or □ online notarization, this (date)	by (name of officer or agent, title
of officer or agent)	,
	, a (state
or place of formation)	corporation, on behalf of the corporation.
He/She is personally known to me or has	produced (type of identification)
as identifica	tion.
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

FOR A LIMITED LIABILITY COMPANY:
STATE OF
COUNTY OF
The foregoing instrument was acknowledged before me by means of □ physical presence
or □ online notarization, this (date) by (name of member, manager
officer or agent, title of member, manager, officer or agent)
, of (name of corporation acknowledging, a (state or place of
formation) limited liability company, on behalf of the company, who
is personally known to me or who has produced (type of identification)
as identification.
(Signature of person taking acknowledgment)
(Name typed, printed or stamped)
(Title or rank)
(Serial number, if any)

FOR A PARTNERSHIP:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknowledged before	me by means of □ physical presence
or □ online notarization, this (date)	by (name of partner or agent)
	, partner (or agent) on behalf of
(name of partnership)	
He/She is personally known to me or has produced (	(type of identification)
as identification.	
(Signature	of person taking acknowledgment)
(Name typ	ed, printed or stamped)
(Title or ra	nk)
(Serial nur	mber, if any)

### AFFIDAVIT AS TO OWNERSHIP OF PROPERTY

STATE OF	FLORIDA	)				
COUNTY	OF BROWARD	)ss. )				
	ME,		undersigned , who,		personally sworn, deposes	
ollowing:			,	3 ,	, <b>,</b>	
1.						,
2.			ign this affidavit rega	•		
3.	situated in Bro	oward Coun	ty, Florida, in the geo	ographical bound	aries of the Centr	lying, being, and al Broward
4.			of the aforestated pr			
5.	encumbrance	s affecting t	uals or entities are ho	operty (List name	e, address, and d	escription of

- 6. That no other individuals or entities have any ownership interest in the above-described real property except for those named herein and signing this affidavit.
- 7. That the undersigned acknowledges that the Central Broward Water Control District has or will be relying on the contents of this affidavit regarding the ownership of the aforedescribed property and encumbrances thereon in the preparation of permits, maintenance agreements and other agreements which have been or will be entered into between the owner(s) and the Central Broward Water Control District.
- 8. That the owner(s) will be developing the property described herein and until the improvements on this property have been completed and accepted by the Central Broward Water Control District, the undersigned acknowledges that they will notify the Central Broward Water Control District of any changes in ownership of the property described herein within five (5) days of such change in ownership.
- 9. That the undersigned acknowledges that this affidavit may be recorded in the Public Records of Broward County, Florida and that prior to the acceptance of any improvements constructed on the property described herein, the owner and its successors, assigns, and grantees shall keep the Central Broward Water Control District notified of the status of ownership of this property.

FU	RTHER AFFIANT	SAYETH NAUGHT.						
IN	WITNESS	WHEREOF,				,	as	the
		of						
		erty described herein	have hereunt	to set their	hand(s) an	d seal(s)	) the	day
of .		, 20						
Signed, se In the pres	aled, and delivered ence of:			OWNER				
			_	Ву:				_ _
COUNTY Sworn to		— d subscribed befo day of	-			-		□ 01
		i)				_	•	
			Florida	a	otary Pub Stamp Co			— 
				ary Publ	•			
Pro	rsonally Known oduced Identifica dentification Pro							

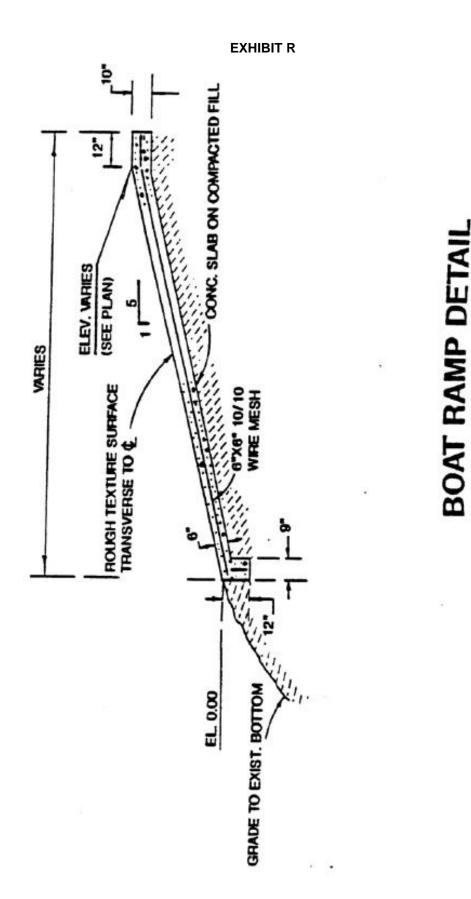
AGENT AUTHORIZATION	SECTION					
AGENT'S NAME						
COMPANY						
ADDRESS	STATE	7IP	Pi	HONE		
FAX	EMAIL			10112		
I authorize the agent lis and accept or assent to			ns or rev	visions, whe	n nec	cessary,
Owner's Signature				Date		
Owner's Name						
Agent's Signature Agent's Name						
STATE OF		S OR HER OWN	RIGHT:			
COUNTY OF						
The foregoing instrume		_	-	-	-	-
or □ online notarizatio						•
acknowledging)				,who	is	personally
known to me or who ha	as produced (ty	pe of identification	າ)		_	
as identification.						
		(Signature of	person	taking ackn	owle	dgment)
		(Name typed,	nrinted	or stampe	<u>4)</u>	
		(reame types,	printed	or stampe	u)	
		(Title or rank)				
		(Serial numbe	er, if anv	<u>')</u>		

CBWCD - 8/12/20

FOR A CORPORATION:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	lged before me by means of □ physical presence
or □ online notarization, this (date)	by (name of officer or agent, title
of officer or agent)	,
of (name of corporation acknowledging)_	, a (state
or place of formation)	corporation, on behalf of the corporation.
He/She is personally known to me or has	produced (type of identification)
as identifica	tion.
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

FOR A LIMITED LIABILITY COM	PANY:
STATE OF	
	nowledged before me by means of □ physical presence
	by (name of member, manager, nanager, officer or agent)
	, of (name of corporation acknowledging), a (state or place of
formation)	limited liability company, on behalf of the company, who
is personally known to me or who	has produced (type of identification)
	as identification.
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

FOR A PARTNERSHIP:	
STATE OF	
COUNTY OF	
The foregoing instrument was acknowledged before me	e by means of □ physical presence
or □ online notarization, this (date)	_ by (name of partner or agent)
	partner (or agent) on behalf of
(name of partnership)	a partnership.
He/She is personally known to me or has produced (type	oe of identification)
as identification.	
(Signature of	person taking acknowledgment)
(Name typed	, printed or stamped)
(Title or rank)	
(Serial number, if any)	



NTS

### **DOCK & DECK AGREEMENT**

### **AGREEMENT**

THIS AGREEMENT, made and entered into thisday of,
20, by and between CENTRAL BROWARD WATER CONTROL DISTRICT, a political
subdivision of the State of Florida, hereinafter referred to as "District", and
, hereinafter referred to as "Property Owners".
WITNESSETH:
WHEREAS, District is a political subdivision of the State of Florida charged with the
responsibility of effecting drainage and water management within its geographical boundaries
and approving all subdivision plats and development plans affecting lands within its
geographical boundaries; and
WHEREAS, Property Owners are the owners of the property described in Exhibit "A"
attached hereto and incorporated herein in its entirety, hereinafter referred to as "Subject
Property" and which is further identified by Broward County Property Appraiser Folio No.
WHEREAS, Subject Property lies completely within the geographical boundaries of
District; and
WHEREAS, a lake maintenance/drainage easement dedicated to the District is located
on the Subject Property which is adjacent to a lake/pond/water body over which by the District

WHEREAS, a lake maintenance/drainage easement dedicated to the District is located on the Subject Property which is adjacent to a lake/pond/water body over which by the District has a drainage, flowage and storage easement, lake easement, and/or other easement rights and which the District has the right to maintain, and

WHEREAS, District has established, in accordance with its rule making authority, that no improvements can be placed or constructed in or over any drainage, flowage and storage easement, maintenance easement, drainage easement, or other property owned by the District or over which the District has permitting authority (hereinafter collectively referred to as "easement") without approval and authorization by the District; and

WHEREAS, District has established, in accordance with its rule making authority, a minimum building set back of twenty (20) feet (hereinafter referred to as "setback") from any waterway, drainage, flowage and storage easement, or canal easement lying within District; and

Exhibit S

August 12, 2020 Page 1 of 13

WHEREAS, Property Owners desire approval from District for themselves, their successors, assigns and heirs for the purpose of obtaining a permit to construct a wood deck and/or dock (hereinafter referred to as "Improvements"), within the easement; and

WHEREAS, as a condition of approval of the Improvements within the easement and setback, District requires that certain minimum criteria be complied with and that Property Owners enter into a hold harmless agreement indemnifying District from any and all claims, losses, damage and expenses, arising out of the construction of the Improvements within the easement and setback; and

WHEREAS, District has determined and approved by Central Broward Water Control District Resolution No. 92-1 that Property Owners owning property adjacent to lakes/ponds/ponds and certain other water bodies within the District may obtain a permit without Board approval for construction of Improvements within the District's easement and setback so long as the Improvements comply with all of the following criteria:

- A. Property Owners submit a copy of warranty deed or other acceptable document stating that Property Owners are the owners of Subject Property.
- B. Property Owners submit a current survey dated no earlier than one (1) year prior to submittal date of the permit/approval request. This survey shall show for the Easement and Subject Property at a minimum, the following data:
  - Edge of water on date of survey.
- ii. Elevation of water on date of survey and water control elevation for the affected water body.
- iii. Drawings, plat, or other acceptable documentation for all platted and recorded easements according to the Broward County Public Records within ten (10) feet of the proposed improvements.
- iv. All structures located on or within the easement and setback which the improvements are proposed to be constructed within.
- v. All underground drainage culverts and other utilities which have been constructed within the easement and setback.
  - vi. Top of bank for adjacent lake/pond with elevation of top of bank.

- C. Property Owners shall submit a sketch of the proposed Improvements which shows the Subject Property, easement and setback.
  - D. The Improvements must further comply with the following criteria:
- i. Maximum dimensions of twenty (20) feet along the water and twelve (12) feet wide.
- ii. The Improvements shall not extend beyond more than four (4) feet beyond the water side of the shoreline as shown by the survey. However, in no event shall the location of the Improvements be based on a shoreline which is lower than two (2) feet below the established control elevation for the lake/pond or water body that the Improvements are constructed over.
- iii. The lowest horizontal structural member shall be a minimum of three (3) feet above the water elevations shown by the survey.
- iv. The Improvements shall not be constructed closer than ten (10) feet to any side yard property line.
- v. No encroachments of the Improvements shall be allowed over any platted and/or recorded easements, except as provided by this agreement and shown on the attached drawing/sketch.
- vi. No part of the Improvements structure shall extend above the floor surface except handrails or built-in seating.
- vii. Only material approved by the Broward County edition of the South Florida building Code and the District will be allowed for the Improvements.

WHEREAS, District and Property Owners are desirous of entering into an agreement to provide for approval of a permit for construction of the Improvements within the easement and setback; and

NOW, THEREFORE, in consideration of the premises and Ten and No/100 (\$10.00) Dollars and other good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged by District and Property Owners, each intending to be legally bound, do hereby represent, warrant, covenant and agree as follows:

Exhibit S August 12, 2020

Page 3 of 13

- 1. The foregoing statements are true and correct and are incorporated herein by reference as though set forth verbatim.
- 2. District agrees to issue a permit and approval to Property Owners permitting construction of Improvements within the easement and setback, provided Property Owners first submit to District for approval, construction plans which are in substantial compliance with the minimum engineering design specifications and criteria established by District and as stated above. The proposed plans or sketch for these Improvements are attached to this agreement as Exhibit "B".
- 3. All subsequent owners of Subject Property shall be bound by this Agreement which shall be a covenant running with the land.
- 4. Property Owners do hereby agree for themselves and their successors, assigns and heirs, with respect to Subject Property on which the Improvements are constructed within the easement and setback, to indemnify District and hold it harmless from any claims, losses, damages or expenses, specifically and exclusively arising out of the construction of the Improvements within the easement and setback and also following construction of the Improvements. This indemnification includes, but is not limited to any and all personal injuries which may be suffered by any individuals or property damage which may be incurred by any individuals or entities as a result of the construction of the Improvements within the easement and setback. Property Owners agree to indemnify District from any and all liability, loss or damage District may suffer as a result of such claims, demands, costs or judgments and further agree to take over and defend any such claims brought or actions filed against District with respect to the subject of the indemnity contained in this Agreement. The foregoing indemnity shall include reasonable attorney's fees and court costs incurred by District including court costs and reasonable attorney's fees incurred at the trial and all appellate levels. Nothing contained herein shall be deemed, however, to constitute a waiver by District of any limitations of its liability that may be accorded District by virtue of Section 768.28 Florida Statutes, or any subsequently enacted similar law.
- 5. Property Owners shall on the easement, setback and lake/pond property adjacent to Subject Property, restore the lake/pond bank to its original condition or District criteria as it exists on the date of this Agreement should construction of the Improvements within the easement and setback result at any time in the collapse of the lake/pond bank or any other damage to the lake/pond bank.

Exhibit S August 12, 2020 In the event the Property Owners fail to restore the lake/pond bank within thirty (30) days of receiving written notice from District, then District may undertake to perform such lake/pond bank restoration as may be deemed by it to be necessary and Property Owners shall fully reimburse District for the cost of all such lake/pond bank restoration work within thirty (30) days of receiving a bill.

- 6. Property Owners agree that during and following construction of the Improvements within the easement and setback, they shall take all reasonable and necessary steps to prevent pollution or damage to the adjacent lake/pond as a result of said construction. In addition, Property Owners agree to be responsible for and reimburse District for all expenses arising out of pollution or damage to the adjacent lake/pond resulting from said construction.
- 7. Property Owners agree to maintain the Improvements built by Property Owners or with their permission, in or on the easement and setback and Property Owners agree to fully and completely indemnify and hold harmless District, its successors and assigns for damages because of bodily injury or death resulting therefrom, sustained by any person or persons, or because of any damage to real property or personal property of District or of any entity due to any act or omission of Property Owners, their employees, subcontractors, designees, or agents and in or on the easement and setback.
- 8. It is the intent of Paragraph No. 7 of this Agreement that if the improvements approved and permitted by this Agreement deteriorate to a condition which requires maintenance or repairs, in the sole discretion of the District, that Property Owner will restore and repair the improvements to at least the condition as originally approved and permitted by the District. If the repairs are not completed within sixty (60) days following notification by District, the District may remove the improvements as provided by this Agreement.
- 9. Property Owners agree that in the event District shall have a reasonable permanent use of the easement and setback area, that within thirty (30) days notice by District, Property Owners shall remove the Improvements within the easement and setback and constructed pursuant to this agreement. In this event, the lake/pond bank shall be restored to its original condition or District criteria as it exists on the date of this agreement. Notwithstanding the foregoing, in the event there is not a permanent need for said property but there is a temporary basis which need is reasonable for reasonable use of the easement District shall use all reasonable means to avoid the necessity of removing any part of the Improvements. If after attempts to use said property temporarily without removing the Improvements fail or are reasonably determined to be impossible or unreasonably inconvenient, then and in that event, Exhibit S

August 12, 2020 Page 5 of 13

upon the giving of thirty (30) days notice to the then owner of Subject Property, Property Owners shall remove so much of the Improvements as may be reasonably necessary to permit District to effectuate the temporary use. Thereafter, and upon notice from District that said temporary need or use has been fulfilled and is no longer necessary, Property Owners shall be permitted to replace so much of the Improvements which were removed, so long as the construction necessary to complete the replacement complies with District's criteria and requirements of this agreement.

10. Notwithstanding the provisions of Paragraph No. 9 of this Agreement, if an emergency condition or situation arises, as solely determined by the District, District may effect such repairs or remove such portion of the Improvements as required to alleviate said emergency condition or situation without being liable to the Property Owner for any damage which may occur to the improvements.

Notwithstanding the foregoing, District shall make a reasonable effort to contact the Property Owners to give Property Owners the opportunity to effect said repairs or removal of the Improvements.

- 11. Property Owners agree that if it is necessary for District to remove the Improvements constructed pursuant to this agreement and to restore the lake/pond bank, that Property Owners will reimburse District for any and all costs incurred to effect said removal and restoration, including attorney's fees and costs expended in connection with such removal and restoration.
- 12. Any expenses including reasonable attorney's fees incurred by District as a result of the indemnification contained in this agreement and/or in removing the Improvements and restoring the lake/pond bank shall be paid to District by Property Owners within thirty (30) days after receiving a bill. In the event payment is not received within thirty (30) days of billing, then the District shall be entitled to file a lien in the Broward County Public Records upon Subject Property for all expenses including reasonable attorney's fees, together with interest thereon at 18 percent per year or the highest nonusurious rate allowed by law, whichever is less and all costs of collection, including reasonable attorney's fees at all trial and appellate levels. In the further event that District is required to foreclose its lien, then and in such event, District will be entitled additionally to receive its reasonable attorney's fees and costs expended in connection with such foreclosure or collection procedure.

13. Property Owners by signing this agreement acknowledge that District is only

permitting occupancy of the easement and setback by the Improvements, that District has not

reviewed and will not review, acknowledge, or comment on the structural integrity or sufficiency

of the Improvements and that Property Owners are solely responsible for the structural integrity

and sufficiency of the Improvements.

14. Property Owners further acknowledge that the Improvements will be constructed

in substantial compliance with the sketch or plans attached to this Agreement as Exhibit "B".

15. No changes, additions, or modifications to the Improvements as approved by this

Agreement shall be permitted without approval of the District Board of Commissioners.

16. All notices of request, demand, and other communications hereunder shall be

addressed to the parties as follows:

As to District

Central Broward Water Control District

Attn: District Manager/Secretary

8020 Stirling Road

Hollywood, Florida 33024

As to Property Owners:

Name:

Address:

and/or to the record owner of Subject Property according to the Broward County Property

Appraiser's Office if the original Property Owner is no longer the owner of the Subject Property;

unless the address is changed by the party by notice given to the other parties. Notice shall be

in writing, mailed certified mail, return receipt requested, postage prepaid and shall be deemed

delivered when mailed or upon hand delivery to the address indicated. Notwithstanding the

foregoing, notices, requests, or demands or other communications referred to in this agreement

may be sent by telegraph or private courier, but shall be deemed to have been given when

received.

17. No waiver of any provision of this agreement shall be effective unless it is in

writing, signed by the party against whom it is asserted and any such written waiver shall only

Exhibit S

August 12, 2020 Page 7 of 13 be applicable to the specific instance to which it relates and shall not be deemed to be a continuing or future waiver.

- 18. This agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which will constitute one and the same agreement.
- 19. This agreement shall inure to the benefit of and shall be binding upon the parties hereto and their respective heirs, personal representatives, successors, assigns, and grantees.
- 20. This agreement shall be construed and interpreted according to the laws of the State of Florida and the venue with respect to any litigation with respect to this Agreement shall be Broward County, Florida.
- 21. All terms and words used in this agreement, regardless of the number and gender in which used, shall be deemed to include any other gender or number as the context or the use thereof may require.
- 22. This agreement shall not be modified (and no purported modification thereof shall be effective unless in writing and signed by the party to be charged.
- 23. The exhibits hereto contain additional terms of this agreement. Typewritten or handwritten provisions inserted in this agreement or exhibit (and initialed by the parties) shall control all printed provisions in conflict therewith.
- 24. Whenever approvals of any nature are required by either party to this agreement, it is agreed that same shall not be unreasonably withheld.
- 25. This agreement shall be severable and if any part or portion of this agreement shall be found to be invalid or unenforceable, such findings shall not affect the remainder of this agreement.
- 26. Property Owners shall reimburse District and pay for any and all costs incurred by District incidental to entering into the terms of this agreement, including but not limited to engineering fees, surveying costs, attorney's fees, recording costs, and any other necessary expenses.
- 27. This agreement merges and supersedes any and all previous agreements on this subject matter between the parties, whether oral or written, and constitutes the entire agreement between the parties.

Exhibit S

August 12, 2020 Page 8 of 13

28. This agreement shall be recorded in the public records of Broward County, Florida with Property Owners to pay the full cost thereof.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written

Signed, sealed, and delivered in the presence of:	PROPERTY OWNERS
WITNESS	SIGNATURE
Print Name	Print Name
WITNESS	SIGNATURE
Print Name:	Print Name:

AS TO PROPERTY OWNER:

### FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was acknown	owledged before me by means of $\Box$ physical
presence or $\ \square$ online notarization, this	(date) by (name of person
acknowledging)	,who is personally
known to me or who has produced (typ	e of identification)
as identification.	
	(Circulations of manager talking a salus and advancent)
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Title or rank)
	(Serial number, if any)

# FOR A CORPORATION: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_ The foregoing instrument was acknowledged before me by means of $\square$ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of officer or agent, title of officer or agent)\_\_\_\_\_ or place of formation)\_\_\_\_\_ corporation, on behalf of the corporation. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ \_\_\_\_\_ as identification. (Continued on next page) (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

## 

(Serial number, if any)

# FOR A PARTNERSHIP: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of $\square$ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of partner or agent) \_\_\_\_\_, partner (or agent) on behalf of (name of partnership) a partnership. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

#### **EXHIBIT T**

## Suggested Wetland and Aquatic Plants and Planting Depth Ranges

The following table is a suggested list of Florida native aquatic plants suitable for planting along lake/pond and canal shorelines at or below the control water surface elevation. These plants create a natural habitat that provide slope stabilization and protection, provide water quality benefits, and create a natural aesthetic shoreline.

The criteria for selection of these plants is that they are wetland plants native to south Florida, they are easily obtained and installed, are not highly invasive, and are low growing plants with no woody stems (herbaceous). Planting of other plants which meet these criteria but are not listed in the table is encouraged.

Additional information may be obtained from the following references:

John D. Tobe, Kary C. Burks, Richard W. Cantrell, Florida Wetland Plants: An Identification Manual. University of Florida/The Institute of Food and Agricultural Sciences • Ricthey Bell and Bryan J. Taylor. 1982. Florida Wildflowers and Roadside Plants. Laurel Hill Press

The following is a sample list of suitable aquatic plants; it is not mean to be all-inclusive.

The applicant should consult with a wetland ecologist, biologist or landscape architect to select the appropriate plant types and planting zones.

PLANT		
Common Name	<b>Botanical Name</b>	PLANTING DEPTH
Fakatchee grass	Tripsacum	6" above control elevation and
	dactoloides	higher (special bushy grass to 5 feet
		tall for erosion control in special
		situations)
Lizards tail	Saururus cernuus	Wet soil; water to 6" deep
Water pennywort	Hydrocotyl spp.	Wet soil; water to 8" deep
Iris	Iris spp.	Wet soil; water to 12" deep
Arrowhead	Sagitaria larifolia	Wet soil; water to 12" deep
Spike rush	Eleocharis spp.	Wet soil; water to 12" deep
White bulrush	Scirpus albescens	Wet soil; water to 12" deep
Thalia	Thalia geniculata	Wet soil; water to 24" deep
Floating-heart	Nymphoides peltata	Water 4" to 12" deep
Pickerel weed	Pontederia cordata	Water 6" to 18" deep
Spadderdock	Nuphar luteum	Water 6" to 24" deep
Lotus	Nelumbo spp.	Water 6" to 24" deep
Water Lilies	Nymphaea spp.	Water 6" to 24" deep

Note: Planting depths based on control elevation.

## CENTRAL BROWARD WATER CONTROL DISTRICT STORMWATER CERTIFICATION REPORT

Submit two copies of this form to the Central Broward Water Control District		
PERMIT NUMBER:		
PROJECT NAME:		
PROJECT ADDRESS/LOCATION:		
INSPECTION DATE(S):		
INVENTORY OF STORMWATER MANAGEMENT FACILITY COMPONENTS	S INSPECTED	
Component	Inspected	N/A
Wet detention/retention lake(s)/pond(s)		
Dry detention/retention area(s)		
Underground storage system(s)		
Exfiltration trench(es)		
Control structure(s) & outfall(s)		
Storm sewer(s) and drainage structure(s)		
Swales		
Perimeter berm or perimeter retaining wall		
All other pervious areas are stabilized/sodded		
Encroachments or trees/plants in CBWCD dedicated easements		
Other:		
Other:		
Other:		
The following maintenance was conducted since the last inspection (a needed):	ttach additional	pages if

## CERTIFICATION STATEMENT BY FLORIDA LICENSED PROFESSIONAL ENGINEER

of the stormwater management system at the above	
FUNCTIONING IN CONFORMANCE with the paving, gra that no structural modifications have been made to the sys current time. I have prepared a list of necessary maintena	stem; and that the system is well maintained at the
I hereby certify that I, or my designee under my of the stormwater management system at the above re FUNCTIONING IN CONFORMANCE with the paving, gra I have prepared a list of deficiencies (attached), and have more as appropriate):	ding, and drainage plans approved by the District.
(A) that the system does not appear to be functio as determined by the District.	ning properly and that monitoring may be required
	system into compliance, and that if maintenance stem into compliance, the system may have to be d subsequent to District's approvals.
	n into compliance, and that if the repairs are not ince, the system may have to be replaced or an o District's approvals.
Engineer's Name:	
Engineer's License Number	
Engineer's Email Address	
Company Name	
Company Engineering Business License No.	
Company Address	
City, State, Zip Code	Affix Signature, Date, and Seal
Telephone Number	
Report Reviewed by Owner/Permittee:	
Name of Owner/Permittee:	Title:
Signature of Owner/Permittee:	Date:

# EXHIBIT W CENTRAL BROWARD WATER CONTROL DISTRICT CHECK LIST FOR SINGLE FAMILY HOMES PLAN APPROVAL

Single family home sites not covered under a District approved stormwater management permit shall provide two sets of plans to the Central Broward Water Control District, and provide the following information:

- A. The applicant shall provide a detailed cross-section of the berm to include onsite and existing offsite elevations.
- B. The applicant shall clearly show on the plans existing and proposed grading at no greater than 100-foot grid points extending 25 feet beyond the boundaries of the property.
- C. Plans shall clearly show lot dimensions and square footage
- D. Plans shall indicate the exact location of the building and other proposed structures
- E. Plans shall delineate all existing drainage easements and proposed easements for drainage and/or water management
- F. If offsite discharge is provided, applicant shall indicate what best management practices will be incorporated in the design to reduce pollutant discharges, and shall provide applicable details in the plans.
- G. The applicant shall provide supporting drainage calculations justifying the elevation of the berm and demonstrating that sufficient storage is available to retain the 25-year, 3-day, storm event within the property. The applicant shall tabulate the ground elevation, area, and accumulated storage of available open space, starting at the lowest elevation of the property and at each half-foot increment up to the elevation of the berm. The following sample calculation is provided as guidance:

	Partial		Accumulated
Elevation	Area	Storage	Storage
(feet NGVD 29)	(acres)	(acre-ft)	(acre-ft)
5.25 (low elevation)	0.05	0.00	0.00
5.50	0.16	0.026	0.026
6.00	0.21	0.093	0.119
6.50	0.27	0.12	0.239
7.00	0.31	0.145	0.384
7.25 (berm elevation)	0.35	0.066	0.45

Partial storage is calculated:  $0.093 = (0.21+0.16) \times (6.00-5.50) / 2$ Accumulated storage is calculated: 0.119 = 0.026+0.093

## **EXHIBIT X**

# BLEED DOWN TIME FOR RETENTION SYSTEMS SAMPLE PROBLEM

SECTION 2.05: "All retention areas (dry and wet) must be capable of percolating the design storage volume within 72 hours..."

This criterion applies to all dry retention areas and wet retention areas with no discharge. The objective is to release the captured retention volume and free up retention storage to capture runoff from future storm events. An acceptable approach to estimate the time required to exfiltrate the design volume relies on a modified version of the following equation from the SFWMD Environmental Resource Permit Information Manual, Part III – References and Design Aids, Appendix G, Exfiltration Trenches:

$$L=V/[K(H_2W+2H_2D_u-D_u^2+2H_2D_s)+(1.39x10^{-4})WD_u]$$
 (1)

where  $V = FS[(\%WQ)(V_{wq}) + V_{add}]$  as described in the SFWMD ERP Information Manual

This equation calculates the length of exfiltration trench required to exfiltrate a given runoff volume in one hour. The total runoff volume captured by the trench accounts for the following: (1) the volume of water exfiltrated out the trench bottom; (2) the volume of water exfiltrated out the trench storage capacity.

For its application to dry and wet retention areas, terms related to trench storage and bottom exfiltration were removed, since exfiltration occurs almost exclusively through the sides of the retention area. In addition, a factor of 0.5 is applied since retention areas exfiltrate along their perimeter (one side) as oppose to two sides. The resulting modified equation is as follows:

$$V = L^*[K(2H_2D_u-D_u^2+2H_2D_s)]$$
2

For retention areas,  $H_2$  and  $D_u$  take on the same value. The saturated depth ( $D_s$ ) will vary depending on the nature of the reservoir. For dry retention areas,  $D_s$  will generally assume the value of one foot (the distance between the bottom of the retention area and the water control elevation). For wet detention areas,  $D_s$  will be equal to the depth of the lake/pond as measured from the water control elevation.

An example of the use of this formula is as follows:

Given

B. Dry Retention Area 
$$= 0.5$$
 acres

E. Hydraulic Conductivity = 
$$1.75 \times 10^{-4} \text{ cfs/ft}^2 - \text{ft}$$

Using the revised formula,

$$V = L[K(2H_2D_u - Du^2 + 2H_2D_s)]$$
2

V = Volume of water treated in one hour (ac-in)

$$K = 1.75 \times 10^{-4} \text{ cfs/ft}^2 - \text{ft}$$

$$H^2=D_u=2\;ft$$

$$D_{\text{\tiny S}}=1 \text{ ft}$$

$$L = 600 \text{ ft}$$

Solving for V gives,

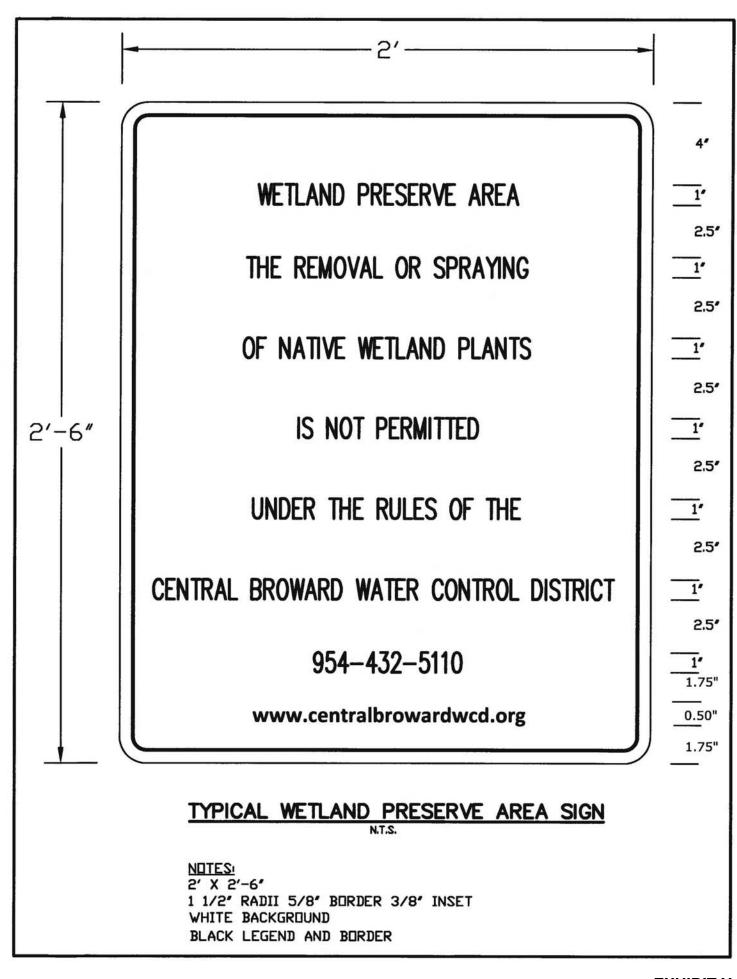
V = .42 Ac-in/hr, when the retention area is full

Average 
$$V = (0.0 + 0.42)/2 = 0.21$$
 acre-in

Time to drain retention volume,

$$\frac{T= 12 \text{ ac-in}}{.21 \text{ ac-in/hr}} = 57.2 \text{ hrs}$$

57.2 hrs < 72 hrs; therefore, the design meets the 72-hour bleed down criterion



# SURFACE WATER MANAGEMENT DESIGNATION AND DECLARATION OF RESTRICTIVE COVENANTS

mada	this			_	ient Design						
made 	triis		-				-				hose
addres	ss is										
herein	after re	ferred t	o as "Prop	perty Ow	vner"						
WITNE	ESSET	H:									
					s the fee t ty, Florida, a						•
and ma	ade a p	art here	eof, hereir	ıafter ref	ferred to as	"Property"	and which	ı is als	o know	n by Bro	ward
County	y Prope	erty App	raiser's F	olio No.		; ;	and,				
	pment	which v	will confor	m to the	seeks to e level of se apter 5, Art	ervice for d	rainage as	s requ	ired by	the Bro	ward
	WHER	REAS,	the					_ is	relyinç	g upon	this
design	ation a	nd cove	enant in iss	suance c	of a building	permit for t	he proper	ty and	the Ce	ntral Bro	ward
Water	Contro	l Distric	t ("District	t") is rely	ing upon th	nis designa	tion and c	ovena	nt in re	presenti	ng to
the					th	at the prop	osed dev	/elopm	nent m	eets Bro	ward
County	y's leve	l of serv	vice for dr	ainage;	NOW, THE	REFORE,					
	The P	roperty	Owner he	reby dec	clares that t	he Property	y shall her	eafter	be hek	d, mainta	ined,
transfe covena		sold, co	onveyed,	and owi	ned subjec	ct to the fo	ollowing d	esigna	ation a	nd restri	ictive
	1.	REST A.		e water	managem			•		•	
					meet Brow	•	•				
				•	lished over		•	•			
			Property	/ describ	oed in Attac	hment "B" (	("Water M	anage	ment A	∖rea").	

- B. Property Owner acknowledges that the Property Owner is responsible for maintenance of the entire surface water management area designated by this document and that this area shall be designed, developed and maintained in accordance with the requirements of the District to ensure that the water management area provides for the retention/detention of surface water to meet the applicable level of service standards.
- 2. **COVENANT RUNNING WITH THE LAND**: this Restriction and Declaration shall run with the land described in Attachments "A" and "B" and shall be binding on all parties and all persons acquiring title to the Property.

ENFORCEMENT: The through its
, its successors and assigns, and the
District are the beneficiaries of this Declaration and Restriction; and as
such, either the County, the District or the municipality, or any of them, may
enforce the terms of this Declaration by an action at law or in equity against
any person or persons, entity or entities, violating or attempting to violate
said terms. Furthermore, violations of this Designation and restriction shall
be contrary to the development permit issued for the development of the
Property, and as such, shall constitute a violation of Chapter 5, Article IX,
the Broward County Land Development Code, Broward County Code of
Ordinances, and may be enforced in any manner that a violation of a county
ordinance may be enforced.

4. <u>AMENDMENT:</u> This Designation and Restriction may be released in part or in whole by the District upon a determination that the applicable level of service has been reduced or that the construction of additional drainage facilities reduces the need for on-site surface water management applicable level of service has been reduced or that the construction of additional drainage facilities reduces the need for on-site surface water management areas. IN WITNESS WHEREOF, we have hereunto set our hands and seals the day and year first above written. Signed, sealed and delivered in the presence of:

	PROPERTY OWNER
Witness signature	Signature
Witness printed name	Printed Name
Witness signature	-
Witness printed name	-
Witness signature	Signature
Witness printed name	Printed Name
Witness signature	-
Witness printed name	-

## FOR AN INDIVIDUAL ACTING IN HIS OR HER OWN RIGHT:

STATE OF	
COUNTY OF	
The foregoing instrument was acknowled	edged before me by means of □ physical presence
or □ online notarization, this (date)	by (name of person
acknowledging)	,who is personally
known to me or who has produced (typ	pe of identification)
as identification.	
	(0)
	(Signature of person taking acknowledgment)
	(Name typed, printed or stamped)
	(Hame types, printed of stampes)
	(Title or rank)
	(Serial number, if any)

# FOR A CORPORATION: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date)\_\_\_\_\_\_ by (name of officer or agent, title of officer or agent)\_\_\_\_\_\_\_\_, of (name of corporation acknowledging)\_\_\_\_\_\_\_,a (state or place of formation) corporation, on behalf of the corporation. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ \_\_\_\_\_ as identification. (Continued on next page) (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# STATE OF \_\_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date)\_\_\_\_\_\_ by (name of member, manager, officer or agent, title of member, manager, officer or agent)\_\_\_\_\_\_, of (name of corporation acknowledging)\_\_\_\_\_\_, a (state or place of formation)\_\_\_\_\_\_ limited liability company, on behalf of the company, who is personally known to me or who has produced (type of identification)\_\_\_\_\_ as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

# FOR A PARTNERSHIP: STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_\_ The foregoing instrument was acknowledged before me by means of □ physical presence or □ online notarization, this (date)\_\_\_\_\_ by (name of partner or agent) \_\_\_\_\_, partner (or agent) on behalf of (name of partnership) a partnership. He/She is personally known to me or has produced (type of identification)\_\_\_\_\_ as identification. (Signature of person taking acknowledgment) (Name typed, printed or stamped) (Title or rank) (Serial number, if any)

## **ATTACHMENT "A"**

(LEGAL DESCRIPTION OF PROPERTY BEING DEVELOPED)

## **ATTACHMENT "B"**

## (LEGAL DESCRIPTION OF SURFACE WATER MANAGEMENT AREA)

As shown on the attached sketch.

## STORMWATER MANAGEMENT WORKS PERMIT

## CENTRAL BROWARD WATER CONTROL DISTRICT

8020 Stirling Road Hollywood, Florida 33024

Phone: (954) 432-5110; Fax (954) 432-8603

		EXP	PERMIT NO.: W ISSUE DATE: PIRATION DATE:	
Permittee: Permittee's address:				
Project Name:				
Authorizing:		and operation of wate	er management works to se	rve:
Project Location:				
	Section(s):	Township:	South Range:	East
Jurisdiction:			, Broward County,	Florida
perform the work and operat specifications, as submitted The plans, specifications, CBWCD Application No	te the facility shown of by the permittee, and and supporting do	on the approved drawing d made a part hereof an cuments prepared by:	amed permittee, is hereby authgs(s), plans, documents, and d specifically described as foll	
Permittee's Engineer	r <u>.</u>			
Firm Engineer's Address	1: 			
Emai	l:			
Permit Number Syntax: W-XXX	, where XXX is the seq	uential CBWCD file numbe	er	
Application Number Syntax: YY	′MMDD-Z-B			
	in was received (2-digit sion zone number C-11 "W" or "E" Basin	year, 2-digit month, 2-digi	t date)	

EXAMPLE: 190109-6-W is for an application received on January 9<sup>th</sup>, 2019 that is within Commission Zone 6 in the C-11 West Basin.

### **GENERAL CONDITIONS:**

- 1. The terms, conditions, requirements, limitations and restrictions set forth herein are accepted by the permittee and enforceable by the Central Broward Water Control District (CBWCD) pursuant to the CBWCD Charter and the Stormwater Management Regulations, Standards, Procedures, and Design Criteria (RSPDC) manual of the CBWCD, latest edition. The CBWCD will review this permit periodically and may revoke the permit, initiate administrative and/or judicial action for any violation of the conditions by the permittee, its agents, employees, servants, representatives, or principals.
- 2. This permit is valid only for the specific use set forth in the permit application and any deviation from the approved uses may constitute grounds for revocation and enforcement action by the CBWCD.
- 3. In the event the permittee is temporarily unable to comply with any of the conditions of the permit, the permittee shall notify CBWCD within twelve (12) hours. Within five (5) working days of the event, the permittee shall submit a written report to CBWCD that describes the incident, its cause, the measures being taken to correct the problems and prevent its reoccurrence, the owner's intention toward repair, replacement, and reconstruction of destroyed facilities, and a schedule of events leading toward operation within the permit conditions.
- 4. The issuance of this permit does not convey property rights, any vested rights or exclusive privileges, other than those specified herein, nor does it authorize any injury to public or private property or any invasion of personal rights, or any violations of federal, state or local laws or regulations.
- 5. This permit must be available for inspection on permittee's premises during the entire life of the permit.
- 6. By accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, that are submitted to the CBWCD, may be used by the CBWCD as evidence in any enforcement proceeding arising under CBWCD's Charter, RSPDC, and/or Chapter 27 of the Broward County Code of Ordinances except where such use is prohibited by Section 403 .111, Florida Statutes.
- 7. The permittee agrees to comply with CBWCD's RSPDC.
- 8. Any new owner of a permitted facility shall apply by letter for a transfer of permit within five (5) days after sale or legal transfer. The transferor shall remain liable for performance in accordance with the permit until the transferee applies for, and is granted a transfer of permit. The transferee shall also be liable for performance in accordance with the permit.
- 9. The permittee, by acceptance of this permit, specifically agrees to allow access to the permitted source at reasonable times by CBWCD personnel for the purposes of inspection and testing to determine compliance with this permit and the RSPDC.
- 10. This permit does not constitute a waiver of or approval of any other permit that may be required for other aspects of the total project.
- 11. If the permittee wishes to renew the permit or extend its terms, he shall make application sixty (60) days prior to its expiration. Expired permits are not renewable.
- 12. In addition to the general conditions set forth above, each permit issued by the CBWCD shall contain specific conditions determined by site conditions and requirements pursuant to the regulations as determined by the CBWCD. Permittee agrees that specific conditions are enforceable by the CBWCD for any violation thereof.

- 13. The permittee shall hold and save the CBWCD harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance or use of any facility authorized by the permit.
- 14. No construction authorized by the permit shall commence until a responsible entity acceptable to the CBWCD has been established and has agreed to operate and maintain the efficiency of the system and has executed a maintenance agreement with the CBWCD. The entity must be provided with sufficient ownership so that it has control over all water management facilities authorized therein. Upon receipt of written evidence of the satisfaction of this condition, the CBWCD will issue authorization to commence the construction.
- 15. The permit for construction shall expire twenty-four (24) months after the date of Board approval unlessan extension of time is granted by the Board of District Commissioners.
- 16. The operation or construction will be in accordance with be approved plans submitted with the application. Any modification must be submitted to the CBWCD in writing and receive prior approval.
- 17. The permittee shall comply with all applicable local land use and subdivision regulations and other local requirements. In addition, the permittee shall obtain all necessary Federal, State, County, and CBWCD authorizations prior to the start of any construction alteration of works authorized by this permit.
- 18. The permittee shall prosecute the work authorized in a manner so as to minimize any adverse impact of the works on fish, wildlife, natural environmental values, and water quality. The permittee shall institute necessary measures during the construction period, including fill compaction of any fill material placed around newly installed structures, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters. Any erosion, shoaling or deleterious discharges due to permitted actions will be corrected promptly at no expense to the CBWCD.
- 19. Offsite discharges during construction and development shall be made only through the facilities authorized by this permit. Water discharged from the project shall be through structures having a mechanism for regulating upstream water stages. Stages may be subject to operating schedules satisfactory to the appropriate regulatory agency.
- 20. The area under permit will be maintained in a safe and operating condition at all times. Equipment will be promptly removed from the right-of-way or easement and the right-of-way or easement will be restored to its original or better condition within a reasonable time on termination of the authorized use.
- 21. The permittee shall allow authorized personnel of the CBWCD, municipality, Broward County and state agencies to conduct such inspections at reasonable hours, as are necessary to determine compliance with the requirements of the permit and the approved plans and specifications.
- 22. The permittee shall notify the CBWCD in writing within twenty-four (24) hours of the start, finish, suspension, and/or abandonment of any construction or alteration of works authorized by this permit.
- 23. The stormwater management system must be inspected by the CBWCD to verify compliance with the approved drawings and Specific Conditions of the permit. CBWCD has requested that Broward County or the municipal agency charged with issuing a certificate of occupancy (CO), shall not issue a CO until notified of the CBWCD approval.

24. Upon completion of the construction of a stormwater management system or phase thereof permitted by the CBWCD, it is a requirement of the issuance of the permit, and hence transfer that a Florida-registered licensed professional engineer must furnish certified record drawings for approval by CBWCD. The engineer shall certify that the stormwater management system was constructed as permitted and include the following on each sheet of the record drawing:

(SEAL)					
DISTRICT, AND HEREBY AFFIX MY SE					\OI
I HEREBY CERTIFY THAT THE STORM <del>REFERENCED</del> PROJECT REFERENCE ACCORDANCE WITH THE DESIGN API	D HEREIN H	IAVE BEEN CO	ONSTRUCTED	IN SUBSTANT	

- 25. All stormwater management facilities required for flood protection and water quality treatment must be provided prior to occupancy of any building or residence.
- 26. Water Management areas shall be legally reserved to the operation entity and for that purpose by dedication on the plat, deed restrictions, easements, etc., so that subsequent owners or others may not remove such areas from their intended use. Management areas, including maintenance easements, shall he be connected to a public road or other location from which operation and maintenance access is legally and physically available.
- 27. Any permit which grants any entity the permission to place a structure on property which is owned by the CBWCD or upon which the CBWCD has an easement shall be construed to create a revocable permit for that structure to remain on the property. CBWCD may require removal of such a structure at no cost to the CBWCD.
- 28. No beautification, or erection of any structure that will prohibit or limit access of maintenance equipment or vehicles in the right-of-way or easements will be allowed.
- 29. The responsible entity shall agree to maintain the operating efficiency of the water management works. Except in cases where the responsible entity is a governmental agency, the agreement shall further require that if the water management works is not adequately maintained, the CBWCD may undertake the required work and bill all associated costs to the responsible entity. If the payment for such obligations is not satisfied within 30 days, said obligation shall become a lien against the property associated with the water management works. Where ownership of the water management works is separate from property ownership, the CBWCD shall require these agreements to be recorded in the official records of Broward County, Florida.
- 30. The permittee shall keep a log of the operation and maintenance schedule for all components of the stormwater management system.
- 31. Monitoring may be required for sites with high pollutant generating potential, such as industrial sites, Class I and II solid waste disposal sites, sites that have undergone or are under active remediation of contaminated groundwater or soils that due to the presence of hazardous materials, and projects discharging to areas identified in Section 27-200(b)(1)o of the Broward County Code of Ordinances. Such monitoring will be under the cognizance of the CBWCD and/or Broward County.
- 32. The CBWCD reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.
- 33. Permit The operation phase of the permit commences with approval of the as-built/record drawing by the Central Broward Water Control District, at which time the permit is converted from a permit to construct to an operating permit.
- 34. The operating permit shall be valid for a specific period of time not to exceed five (5) years from the date the permit is issued or renewed. The permit shall be renewed every five (5) years in accordance with the Stormwater Management Regulations, Standards, Procedures, and Design Criteria manual of the CBWCD, latest edition.

SPECIFIC CONDIT	IONS	
1.		
Issued this	day of	,20
Central Broward Wa	ater Control District	
Mike Crowley, Distri	ict Manager	