



**FREEDMAN**  
Consulting & Development LLC

November 4, 2013

Ms. Alaina Ray, AICP  
Interim Director Planning, Zoning and Building Department  
Town of Longboat Key  
501 Bay Isles Road  
Longboat Key, FL 34228-3196

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
Application Submittal for Site Plan Review

Dear Mr. Meyer:

On behalf of BBC Key, LLC as owner and Jay Tallman, agent, I am hereby submitting an Application for Site Plan Review for the developing the above referenced property. The 5.0 +/- acre property is located at 2251 Gulf of Mexico Drive and is zoned R6MX. The project involves the construction of 16 luxury residential condominiums and one on-site manager's unit (total of 17 units). The existing residential structure will be renovated to be the development's community building as well as house an on-site caretaker's quarters.

This luxury development will be lushly landscaped and appointed and will be an exquisite addition to the Town of Longboat Key. All units will have views of the Gulf of Mexico with easy pedestrian access to the water. An on-site fitness center and swimming pool will be constructed as well as other outdoor passive recreation areas. A free-standing fitness center will be constructed as well.

This package includes revisions to the plan, application and responses that address the comments received by the applicant from the Town dated October 17, 2013. Please see formal response letter to the comments in Attachment C.

## **COMPREHENSIVE PLAN CONSISTENCY**

The subject property is designated as RH-6 (High Density SF/Mixed Residential 6 DU/AC) on the Town's Future Land Use Plan Map. The property is zoned R6MX which is the implementing zone district for that land use classification. The proposed project is being developed at less than the maximum permitted 6 dwelling units per acre and is not requesting any departures from the Town's zoning code.

The west side of Gulf of Mexico Drive in the area of the key where the subject property is located is developed with mid and high-rise condominium buildings. The subject property is proposed to be developed with a mid-rise residential building and is compatible and consistent with the existing development in the area. The proposed project is consistent with the Town's comprehensive plan.

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
Application Submittal for Site Plan Review – Including responses to 10/17/13 DRC Comments

## **SITE PLAN**

The site plan application can be found in Attachment A. This form has been completed as requested and provides the basic information about the proposed project. The Site Plan Application submission information requirements are listed below followed by the applicant's response or direction as to where the information can be found.

### **Section 158.097 – Site Plan Application Review Criteria**

- (A) The character of use and the location and size of the site, including a current land survey with a complete legal description prepared and certified by a registered surveyor.

### **RESPONSE**

The 5.02 +/- acre subject property is located at 2251 Gulf of Mexico Drive. The property is currently developed with a residential structure that was constructed in 1930. The proposed project is to construct 16 luxury condominium units in a new building easterly of the existing structure. An on-site manager's unit (total of 17 units) will be constructed within the renovated existing structure.

The new building will be four stories over internal parking and be within the 50' maximum height limit allowed by the zoning code (See the attached site plan package, including a survey for project details). In addition to the new residential building there will be a free standing building constructed that will house the fitness facility for the development. The existing structure will be renovated to be used as a community building for functions of the owners and the on-site care taker residence.

- (B) Site plan with the title of the project, its lot configuration, finished ground floor elevations, contours (i.e., at six-inch intervals with reference to mean sea level), and designating number of dwelling units, square footage paved areas and open area, and dimensioned setbacks to scale indicating compliance with regulations.

### **RESPONSE**

The requested information can be found on the attached civil engineering plans. See Civil Engineering plan Sheets C0.0 through C12.2.

- (C) Verified statement, including a certificate of ownership, showing each and every individual person having a legal ownership, interest in the subject property except publicly held corporations whose stock is traded on a nationally recognized stock exchange, in which case the name and address of the corporation and principal executive officers will be sufficient.

### **RESPONSE**

Please see Attachment B for requested information.

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
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- (D) The relationship of the site to existing development in the area including streets, utilities, residential and commercial development, and important physical features in and adjoining the project, including ecological features.

RESPONSE

The subject property is located on the west side of Gulf of Mexico Drive between two existing condominium projects; Villa Di Lancia on the south and the Islander Club of Longboat on the north. To the west, across Gulf of Mexico Drive is a portion of the Harborside golf course. All public utilities exist and are adjacent to the subject property within the Gulf of Mexico Drive right-of-way.

- (E) The density or intensity of land use(s) to be allocated to all parts of the site to be developed together with tabulations by acreage and percentage thereof itemized by use and density.

RESPONSE

The requested information can be found in a Data Block included with the attached civil engineering plans. Only residential uses and amenities are proposed. With 17 units developed the density on the site will be 3.38 units per acre. See Civil Engineering plan Sheets C0.0 through C12.2.

- (F) Tabulations by acreage and percentage as to the amount of the site that is uplands and wetlands, indicating those wetlands landward and seaward of the mean high-water line (MHWL). Additional related information should include the extent and type of wetlands in accordance with the town's comprehensive plan.

RESPONSE

The requested information can be found on the civil site plan and in a Data Block included with the attached civil engineering plans. See Civil Engineering plan Sheets C0.0 through C12.2.

- (G) Architectural definitions for buildings in the development including use, height, daylight plane, exterior construction material, exact number of dwelling units, sizes and types of building and dwelling units, together with typical floor plans of each type. The floor plans should indicate uses and square footage of each proposed use within each building or structure and all exterior dimensions of each type of building or structure.

RESPONSE

The requested information can be found on the attached architectural plans. See Architectural plan Sheets A10.00 through A55.09.

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
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- (H) The type and location of all existing trees protected by town regulations, including a plan how the removal of such vegetation would be avoided and/or replanted or replaced.

RESPONSE

The requested information can be found on the attached landscape architectural plans. See Landscape Architectural plan Sheets L2.00 through L7.00.

- (I) Location, design and character of all utilities.

RESPONSE

The requested information can be found on the civil engineering plan. See Civil Engineering plan Sheets C0.0 through C12.2.

- (J) Location, height and general character of perimeter and ornamental walls, fences, landscaping, including berms and other required screening devices and any other plans for protecting adjacent property owners.

RESPONSE

The requested information can be found on the attached landscape architectural plans. See Civil Engineering plan Sheets C0.0 through C12.2 and Landscape Architectural plan Sheets L2.00 through L7.00.

- (K) Location of all pedestrian walks, malls and bike paths.

RESPONSE

The requested information can be found on the attached civil engineering and landscape architectural plans. See Civil Engineering plan Sheets C0.0 through C12.2 and Landscape Architectural plan Sheets L2.00 through L7.00.

- (L) Location and character of recreation areas and facilities and the disposition of all open space indicated on drawings. This information should include calculations, verified by a licensed design professional, indicating how the town's open space requirements are being met. If common facilities (such as recreation areas or structures, private streets, common open space, etc.) are to be provided for the development, statements as to how such common facilities are to be provided and permanently maintained. Such statements may take the form of proposed deed restrictions, deeds of trust, homeowners associations, surety arrangements, or other legal instruments providing adequate guarantees to the town that such common facilities will not become a future liability of the town.

RESPONSE

The requested information can be found on the attached architectural, civil engineering and landscape architectural plans. See Civil Engineering plan Sheets C0.0 through C12.2 and Landscape Architectural plan Sheets L2.00 through L7.00. All common facilities will be controlled by the development's condominium documents. All common facilities will be maintained by the condominium association.

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
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- (M) Location and character of all outside facilities for waste disposal, storage areas or display.

RESPONSE

The requested information can be found on the attached architectural, civil engineering and landscape architectural plans. See Civil Engineering plan Sheets C0.0 through C12.2 and Landscape Architectural plan Sheets L2.00 through L7.00.

- (N) A traffic impact analysis shall be provided, except for involuntary reconstruction and voluntary reconstruction without additional units, to ensure that the adopted levels of service standards are not exceeded before capacity-related improvements are implemented. The locations and dimensions of all curb cuts, driveways, including the number of parking spaces with their location and dimension, details of off-street parking, including interior parking areas and loading areas, all off-street vehicular surfaces available for maneuvering, surface materials, number of employees and number and type of vehicles owned by the establishment shall be provided.

RESPONSE

The applicant retained Michael D. Raysor, P.E. of Raysor Transportation Consulting to review the previously prepared traffic study with the smaller proposed project. His finding was that no impacts will occur as a result of the proposed project. See Attachment C.

- (O) Flood protection elevation data and flood zones delineated. A surface water management plan based on best management practices and in accordance with the sanitary sewer, potable water, solid waste, and drainage element of the town's comprehensive plan.

RESPONSE

The requested information can be found on the civil engineering plan. See Civil Engineering plan Sheets C0.0 through C12.2.

- (P) A soil erosion and sedimentation plan in accordance with of the town's comprehensive plan and best management practices.

RESPONSE

The requested information can be found on the civil engineering plan. See Civil Engineering plan Sheets C0.0 through C12.2.

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- (Q) All applications for permits and supporting documentation, correspondence and any other material submitted to any outside permitting agencies or received from such agencies.

RESPONSE

Please see Attachment D for requested information.

- (R) Such additional data, maps, plans or statements as may be required for the particular use or activity involved.

RESPONSE

No additional information is being submitted at this time.

- (S) Such additional data, as the applicant may believe is pertinent to the site development plan.

RESPONSE

No additional information is being submitted at this time.

- (T) Such additional material and information the town may reasonably require.

RESPONSE

No additional information is being submitted at this time.

- (U) A list of all departures from the supplemental controls set forth in subsection 158.102(L) and a clear description of the nature and extent of the departure and a statement specifically indicating the factual basis for any hardship claimed by the applicant and/or a statement of the facts constituting the basis for a request for a waiver of the supplemental controls as set forth in subsection 158.102 (L).

RESPONSE

No departures from the supplemental controls are being requested.

- (V) If the project is in a planned unit development, utilizing the involuntary reconstruction provisions of section 158.139, or utilizing the voluntary reconstruction provisions of section 158.140, a statement specifically listing any departures, relaxations, modifications and adjustments from provisions of the Code of Ordinances which would otherwise be applicable to the project if the outline development plan process were not applicable.

RESPONSE

The project is not a planned unit development.

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
Application Submittal for Site Plan Review – Including responses to 10/17/13 DRC Comments

**Section 158.102 – Performance Standards for Site Plan Review**

(A) Site Location and Character of Use.

**RESPONSE**

The 5.02 +/- acre subject property is located at 2251 Gulf of Mexico Drive. The property is currently developed with a residential structure that was constructed in 1930. The proposed project is to construct 16 luxury condominium units in a new building easterly of the existing structure. An on-site manager's unit (total of 17 units) will be constructed within the renovated existing structure.

The new building will be four stories over internal parking and be within the 50' maximum height limit allowed by the zoning code (See the attached site plan package, including a survey for project details). In addition to the new residential building there will be a free standing building constructed that will house the fitness facility for the development. The existing structure will be renovated to be used as a community building for functions of the owners and the on-site care taker residence.

A location map and other plans and graphics are provided to demonstrate compliance with this submission requirement.

(B) Appearance of Site and Structures.

**RESPONSE**

See Civil Engineering plan Sheets C0.0 through C12.2, Architectural plan Sheets A10.00 through A55.09 and Landscape Architectural plan Sheets L2.00 through L7.00.

(C) Maximum Floor Area Ratio.

**RESPONSE**

Calculations and graphics have been provided to demonstrate compliance. See Civil Engineering plan Sheets C0.0 through C12.2 Architectural plan Sheets A10.00 through A55.09 and Landscape Architectural plan Sheets L2.00 through L7.00.

(D) Parking, Internal Circulation and Access to Public and Private Streets.

**RESPONSE**

Plans have been provided to demonstrate compliance. See Civil Engineering plan Sheets C0.0 through C12.2, Architectural plan Sheets A10.00 through A55.09 and Landscape Architectural plan Sheets L2.00 through L7.00.

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
Application Submittal for Site Plan Review – Including responses to 10/17/13 DRC Comments

(E) Traffic Impacts.

RESPONSE

The applicant retained Michael D. Raysor, P.E. of Raysor Transportation Consulting to review the previously prepared traffic study with the smaller proposed project. His finding was that no impacts will occur as a result of the proposed project. See Attachment C.

(F) Open Space and Landscape.

RESPONSE

Plans and graphics have been provided to demonstrate compliance. See Civil Engineering plan Sheets C0.0 through C12.2 and Landscape Architectural plan Sheets L2.00 through L7.00.

(G) Wetland Development Restrictions.

RESPONSE

No Wetlands are impacted by the proposed development.

(H) Surface Water Management

RESPONSE

Plans have been provided to demonstrate compliance. See Civil Engineering plan Sheets C0.0 through C12.2. The outside agency permit applications can be reviewed in Attachment D.

(I) Available Potable Water.

RESPONSE

Potable water will be provided by Manatee County through the existing interlocal agreement between the Town of Longboat Key and Manatee County. The appropriate fees will be paid as required by the applicant.

(J) Wastewater Service.

RESPONSE

Wastewater treatment will be provided by Manatee County through the existing interlocal agreement between the Town of Longboat Key and Manatee County. The appropriate fees will be paid as required by the applicant.

(K) Soil Erosion and Sedimentation Control.

RESPONSE

The appropriate plan has been provided. To review it and all site details please see Civil Engineering plan Sheets C0.0 through C12.2.

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(L) Supplemental Controls for Multi-family Residential Uses.

RESPONSE

All supplemental requirements for multi-family developments have been met including building setbacks, distance between buildings, maximum length of buildings, distance between buildings and driveways and off-street parking spaces. No waivers or departures are required. See Civil Engineering plan Sheets C0.0 through C12.2, Architectural plan Sheets A10.00 through A55.09 and Landscape Architectural plan Sheets L2.00 through L7.00.

(M) Other Performance Standards.

RESPONSE

Additional information, studies and findings related to the development project such as stormwater management calculations, soils boring tests, water meter calculations, etc. can be found in Attachment D.

**CONCLUSION**

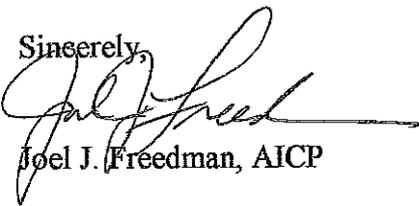
The proposed 17 unit Villa am Meer project will be a wonderful addition to Longboat Key. The project has been designed to be consistent with the Town's Comprehensive Plan and Zoning Code. No departures are being requested.

The project developer is Jay Tallman of Ascentia Development Group. Mr. Tallman has an outstanding record for developing the highest quality condominium projects, having developed Vizcaya and en Provence on Longboat Key. In addition Mr. Tallman developed Beau Ciel in downtown Sarasota and the Orchid Beach Club condominium project on Lido Key.

Early in the design process, Ascentia Development Group recognized the importance of the historical Villa am Meer structure to the Town of Longboat Key. As you will see we are please to be able to plan the proposed project to include a renovated 1930's structure as part of the development.

Thank you for your assistance and please call if you have any questions.

Sincerely,



Joel J. Freedman, AICP

Attachments

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Ms. Alaina Ray, AICP  
November 4, 2013

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
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**ATTACHEMENT A**  
**SITE PLAN APPLICATION**



**Planning, Zoning & Building Department** (941) 316-1966  
**501 Bay Isles Road**  
**Longboat Key, Florida 34228**  
**Fax Number: (941) 373-7938**  
**Web: <http://www.longboatkey.org>**

## APPLICATION FOR SITE PLAN REVIEW

Date: September 16, 2013                      New  \_\_\_\_\_                      Revised \_\_\_\_\_

Name of Development: Villa am Meer

	Applicant	Engineer/Surveyor	Architect
Name	BBC Key, LLC	George F. Young, Inc.	Sntiesteban & Assoc., LLC
Address	555 Skokie Blvd., Suite 555	10540 Portal Crossing, #105	815 S. Howard Avenue
City, State Zip	<u>Northbrook, IL 60062</u>	Bradenton, FL 34211	Tampa, FL 33606
Phone	847-313-6448	941-747-2981	813-251-1884
Fax	847-498-7893	941-747-7234	813-253-0110
Mobile			

Owner: BBC Key, LLC    Agent: Jay Tallman

Site Address: 2251 Gulf of Mexico Drive

Zoning District: R6MX                      Sq. Ft. of Site: 219,012                      % Lot Coverage: 18.82

Total Units: 17                                      Proposed Density: 3.38 units per acre

% Non-Open Space: 30.16                      Max. Density Allowed: 6.00 units per acre

Proposed Development for Existing and New Buildings						
(Circle One)	Building	Building Use	Sq. Ft.	Height	# Floors	1 <sup>st</sup> Floor Elev.
Existing/New	Building A	Residential (16 units)	67,423	45'	4 above parking	23.0'
Existing/New	Building B	Fitness Center	1,740	29.25'	1	15.0'
Existing/New	Building C	Community Bldg. and manager unit	2,777	13.26'	1	12.34'
Existing/New	Building D	Generator Bldg.	549	22'	1	15.0'
Existing/New	Building E					

Parking Spaces Required: 28    Parking Spaces Indicated: 53

**Please check all that apply:**

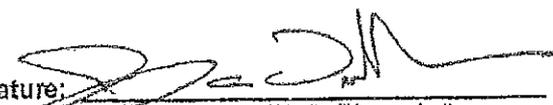
- Attached hereto are the necessary approvals of the federal, state, county and regional agencies.
- Public Hearing Required. If hearing required, comment: P&Z and Town Commission (site plan)
- Proposed site plan complies with the Comprehensive Plan and Zoning Code.
- Proposed site plan complies with the Subdivision Ordinance and Town Code.

Amount of Performance Bond Required: \_\_\_\_\_

Amount of Maintenance Bond Required: \_\_\_\_\_

Date of Pre-application Meeting: October 17, 2013

I hereby certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing the subject type of development will be complied with whether specified herein or not, the granting of a permit does not presume to give authority to violate or cancel the provisions of any other federal, state or local law regulating construction or the performance of construction.

Applicant's Signature:   
(if applicant is not the property owner, a property owner affidavit will be required)

Date: 9/17/13

At the conclusion of your plan review by the Town, you will be billed for additional staff time, Town Attorney cost, cost of advertising, and any other miscellaneous costs incurred with the processing of your application(s).

<b>FOR STAFF USE ONLY</b>	
Application Fee: \$ <u>3000.00</u> deposit*	Receipt # _____
(Application fee will be deducted from deposit)	
Application and Plans Accepted By: _____	Date: _____
File Code/Number: _____	

*\*Deposit required at time of formal submission*

At the conclusion of your plan review by the Town, you will be billed for additional staff time, Town Attorney cost, cost of advertising, and any other miscellaneous costs incurred with the processing of your application(s). Costs will be deducted from initial deposit. If costs exceed the initial deposit, you will be billed for the remaining costs incurred; or you will be refunded the unused portion of the deposit.

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Ms. Alaina Ray, AICP  
November 4, 2013

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
Application Submittal for Site Plan Review – Including responses to 10/17/13 DRC Comments

**ATTACHEMENT B**

**OWNERSHIP INFORMATION**

APPLICATION TO THE TOWN OF LONGBOAT KEY, FL  
FOR SITE PLAN APPLICATION FOR  
VILLA AM MEER PARCEL

VERIFIED STATEMENT AND CERTIFICATE OF OWNERSHIP

Pursuant to Sections 158.067(B) and 158.097(C), Town of Longboat Key Town Code, I am submitting the following Verified Statement and Certificate of Ownership. The Verified Statement and Certificate of Ownership reflects each and every entity and individual person having a legal ownership interest in the subject property except publicly held corporations whose stock is traded on a nationally recognized stock exchange, in which case the name and address of the corporation and principal executive officers will be sufficient.

I hereby verify and certify that as of September 12, 2013, BBC Key, LLC, a Florida limited liability company, is the sole owner of the real property described in Exhibit "A" attached hereto. The address of the subject property is 2251 Gulf of Mexico Drive, Longboat Key, Florida 34228.

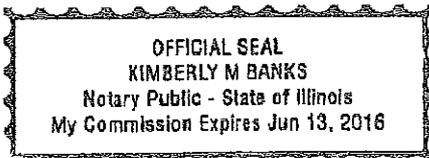
The undersigned does hereby state under oath that the foregoing information is true and correct.

BBC Key, LLC  
A Florida limited liability company

By: [Signature]  
Signature,  
David Williams  
Print name

Authorized Agent  
Title

The foregoing agreement was acknowledged before me this 12<sup>th</sup> day of September, 2013 by David Williams, as Authorized Agent of BBC Key, LLC, on behalf of this entity. He is personally know to me and produced a ILLINOIS driver's license # W452-1677-114105-14-05 as identification.



[Signature]  
Sign name

Kimberly M. Banks  
Type or Print name

Notary Public, State of Illinois  
My commission expires: 6-13-2016

Please print and fax or mail completed form

TOWN OF LONGBOAT KEY  
PLANNING ZONING BUILDING  
561 Bay Isles Road  
Longboat Key, FL 34228  
Phone: 941/316-1966 FAX: 941/316-1970

**Property Owner Affidavit**  
Planning Department  
Authorized Agent

(I)(We) BBC Key, LLC as owner(s) of the property whose address and legal description is 2251 Gulf of Mexico Drive, Longboat Key, FL 34228 hereby appoint James A. Tailman our          agent(s) to act on (my)(our) behalf for the request set forth below. (I)(we) understand that the agent may incur costs and expenses on our behalf in connection with (my)(our) request and agree to pay those fees and expenses in accordance with the Code of Ordinances of the Town of Longboat Key.

The nature of (my)(our) request is Site Plan Approval (Variance, Zoning Determination, Special Exception, etc.)

BBC Key, LLC  
Print or Type Property Owner's Name

David Williams  
Signature of Property Owner

Print or Type Property Owner's Name

Signature of Property Owner

Mailing Address of Property Owner(s): 555 Skokie Blvd., Suite 555, Northbrook, Ill 60062

847-313-6448  
Telephone Number of Property Owner(s)

847-498-7893  
Fax Number of Property Owner(s)

Mailing Address of Agent(s): 1990 Main Street, Suite 750, Sarasota, Florida 34236

(941) 302-0009  
Telephone Number of Agent(s)

Fax Number of Agent(s)

STATE OF ILLINOIS  
COUNTY OF COOK

The foregoing instrument was acknowledged before me this 15<sup>th</sup> day of September, ~~2007~~ <sup>2013</sup> by David Williams, Owner(s) for and on behalf of whom this instrument was executed.



Kimberly M. Banks  
Notary Public State of ILLINOIS  
Typed Name: Kimberly M. Banks  
Commission Expires: 6-13-2016  
Commission No.: 699187

Personally Known   
OR Produced Identification  
Type of Identification Produced

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Re: Villa am Meer – 2251 Gulf of Mexico Drive  
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**ATTACHEMENT C**

**RESPONSE TO TOWN COMMENTS**



## George F. Young, Inc.

*Turning Vision Into Reality*

ARCHITECTURE ■ ENGINEERING ■ ENVIRONMENTAL ■ LANDSCAPE ARCHITECTURE ■ PLANNING ■ SURVEYING ■ UTILITIES

<b>Date:</b>	<b>November 4, 2013</b>
<b>Project:</b>	<b>VAM LBK Development, LLC - 2251 Gulf of Mexico Drive</b>
<b>Review:</b>	<b>Site Development Review Conference</b>
<b>Applicant:</b>	<b>Jay Tallman - BBC Key, LLC</b>
<b>Engineer:</b>	<b>Mark Adler, PE - George F. Young, Inc</b>
<b>Surveyor:</b>	<b>Mark Bassett, PSM - George F. Young, Inc</b>
<b>Architect:</b>	<b>Alcides Santiesteban, Santiesteban &amp; Associates</b>
<b>Reviewer:</b>	<b>Steve Schield, ASLA, AICP - Town Planner</b>

Planning staff reviewed the above referenced development proposal and determined, based on a review of the proposed Villa Am Meer Site Plan, that the following facts of the development, as well as details that need to be considered, included, revised, clarified or expanded:

**ALL PROVISIONS OF ZONING CODE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING, SHALL BE APPLIED TO THE ABOVE-MENTIONED DEVELOPMENT (INCLUDING SECTION 158.102 WITH SUPPLEMENTAL CONTROLS FOR MULTIFAMILY).**

### Planning Comments

1. The property is zoned R-6MX, *High Density Mixed Residential District*. The site area is approximately 5.02 acres, allowing a maximum of 30 dwelling units. 17 dwelling units (16 dwelling units and 1 caretaker unit are proposed. Please reflect the additional caretaker unit on the plans and in the documents.

***The 17 dwelling units is reflected on the revised plans enclosed.***

2. Provide a proposed development schedule indicating the approximate starting and completion dates for the entire project and any phases thereof, together with appropriate identification and description of such phases.

***The project will be completed in a single phase from June of 2014 to December of 2015.***

3. Definitions: "BUILDING, HEIGHT OF." (1) For the purpose of § 158.145, Bulk, Maximum Height, for structures other than single-family residences, the vertical

distance shall be measured from the *minimum* floor elevation, as established by the town, or from the ceiling of a one-level parking garage, occupying at least 75% of the area under the building, whichever is higher, to the highest point of any portion of the building. Section 158.153(B) provides for exceptions to height for elevator shafts, enclosed stairwells and enclosed mechanical equipment not exceeding 15 percent of roof area. Shade or otherwise demonstrate which areas are included to make up the allowed 15 percent. The exception would not allow other structures such as trellis, covered outdoor living, summer kitchen, etc. Please revise plans or show how any additional structures will meet height requirements, including walls, planters, spa and other structures on the roof.

***Building height is 49'-4", above this height we do have enclosed mechanical space above this number that totals 11.7% as demonstrated in diagram form on Sheet A10.07A. In addition we do have mechanical screen walls that are not fully enclosed spaces. We do have trellis's at the roof that are removable and not permanent structures. For trellis details please see sheet A50.11.***

*Section 158.097: Application for site plan review*

4. *Section 158.097 (K):* Call out and show dimensions on the site plan for all proposed pedestrian walks, malls, and bike paths. Please provide the walkway widths on the site plan.

***All walkway widths are shown on the updated site plans attached. See sheet C2.0.***

5. (N) A traffic impact analysis shall be provided, except for involuntary reconstruction and voluntary reconstruction without additional units, to ensure that the adopted level of service standards is not exceeded before capacity-related improvements are implemented. A circulation facilities plan indicating approximate locations and types of proposed streets, bicycle paths, pedestrian walks, and emergency vehicle access points, including all curb cuts, driveways, off-street parking and loading areas and off-street vehicular surfaces available for maneuvering shall be provided. **Please provide an updated traffic impact analysis.**

***The applicant retained Michael D. Raysor, P.E. of Raysor Transportation Consulting to review the previously prepared traffic study with the smaller proposed project. His finding was that no impacts will occur as a result of the proposed project. See attachment for letter from Mr. Raysor.***

*Section 158.102: Performance Standards for Site and Development Plans*

6. *Section 158.102 (B) (5) - Exterior Lighting:* Exterior lighting shall be so arranged as to shield or deflect the light from adjoining properties and public streets. All exterior lighting to be in compliance with Chapter 100 *Sea Turtles*, of the Town Code. An

exterior lighting plan, in compliance with Section 158.102 (B) (5) and Chapter 100 of the Town Code, shall be submitted with site plan. **Adequacy to be determined by other agencies before building permit approval.**

***Acknowledged***

7. *Section 158.102 (C) - Maximum Floor Area Ratio:* The site plan shall show full details for the Floor Area Ratio (FAR) calculations, the Open Space Ratio, Living Space Ratio, and Recreation Space Ratio and all associated calculations. FAR calculations shall be based on exterior dimensions of the buildings. All calculations need to include halls (including connections between buildings), lobbies, stairways, elevator shafts, enclosed porches and balconies, below floor grade areas used for habitation and residential access, excluding garages.

**All ratios need to be presented on the site plan in a comprehensive, itemized manner, listed unit by unit and improvement by improvement.**

***Please see sheet A10.00B for FAR calculation and diagram.***

8. *Section 158.102 (F) - Open Space and Landscape:*
9. Residential open space requirement. All residential development shall preserve a minimum of 50% of the gross land areas as open space. Of the required 50% open space, only a maximum of 60% of the total required open space acreage may be comprised of a golf course. The intent is to maximize usable active and passive open space and recreation area and to require good principles of urban design, including walkway systems, which provide access to unique open spaces, courtyards, sitting areas, and other usable areas near the principal residential structures. Wetlands and landlocked water bodies may be used in calculating open space, as long as minimum of 40% of the upland property is comprised of open space. **Please provide an itemized detailed list of non open space areas and their square footages.**

**Non Open Space Areas:**

<b><i>Main Building –</i></b>	<b><i>31,616 s.f.</i></b>
<b><i>Pool deck, including the bridge to clubhouse –</i></b>	<b><i>13,377 s.f.</i></b>
<b><i>Clubhouse, including the outdoor terrace area –</i></b>	<b><i>3,857 s.f.</i></b>
<b><i>Fitness Center, including the planter –</i></b>	<b><i>3,878 s.f.</i></b>
<b><i>Entry Building (just base that touches ground) –</i></b>	<b><i>80 s.f.</i></b>
<b><i>Generator Building –</i></b>	<b><i>682 s.f.</i></b>
<b><i>Drives and Walks</i></b>	<b><i>25,889 s.f.</i></b>

10. *Section 158.102 (H) - Surface Water Management:* The submitted plans indicate the location of the proposed retention pond. However, sufficient information was not provided to staff regarding whether it meets the applicable state regulations for stormwater and wastewater discharge. All portions of subsection (H) shall be met and

adequate documentation, including all agencies' permits, shall be provided to staff. **Photocopies of all agency permits will be provided to staff before final site plan approval will be given.**

*Copies of permits will be provided upon receipt.*

11. *Section 158.102 (I) - Available Potable Water:* Certification that adequate potable water shall be provided to the redevelopment shall be provided, as stated in Section 158.102 (I). Included in the certification shall be data regarding water pressures and volumes, which shall be reviewed by the Director of Public Works. **Capacity certification shall be provided.**

*Fire hydrant flow and pressures are provided on the attached plans, indicating sufficient fire and domestic flow for the project. The Developer is working with the Town Utility Department regarding Facility Investment Fees, and the Town advises, at this time, that sufficient capacity exists for the project.*

12. *Section 158.102 (J) - Wastewater Service:* Certification that adequate wastewater service shall be provided to the redevelopment shall be provided, as stated in Section 158.102 (J), which shall be reviewed by the Director of Public Works. **Capacity certification shall be provided.**

*Service is being provided by an existing 20" gravity main along Gulf of Mexico drive, which would indicate more than sufficient capacity is available. Developer is working with the Town Utility Dept. regarding Facility Investment Fees, and the town advises at this time, that sufficient capacity exists for the project.*

13. *Section 158.102 (K) - Soil Erosion and Sedimentation Control:* Compliance with Section 158.102 (K), in its entirety, shall be clearly indicated on the development plans. **The applicant shall comply with the requirements of the National Pollution Discharge Elimination System (NPDES) for final site plan approval.**

*Sheets C-10.0 and C-11.0 were added to the construction plan set for erosion control devices.*

*Section 158.102 (L) - Supplemental Controls for Multifamily Residential or Tourism Use:*

14. Please show the required setback as per *Section 158.102 (L) 1,2 and 4.* **The required side setback is 70 percent of the building height. If a waiver is going to be requested from any of the supplemental controls, documentation of a hardship must be provided. Show the setback at the northwest corner of the**

main building. It appears to be shown east of the corner of building, but the building is angled slightly.

*Please see sheet A25.06 for Diagram and calculation of how we are meeting this setback requirement.*

15. *Section 158.102 (L) (3) - Maximum Length:* Show on the revised plans that a 30-degree angle has been utilized to determine the maximum length of all buildings. Please extend the 30-degree angle to a point past the main building.

*Please see sheet A10.00A for diagram showing the maximum length angles.*

#### **Section 158.128: Off-street parking**

16. *Section 158.128 (B) - Minimum Size:* The applicant shall provide a parking and circulation plan indicating the widths, directions, stops, etc. for the development. **Please state the typical minimum width and length (10'x20') of all parking spaces. The site development plan C2.0 shows the parking spaces to be 18'x9'. Please revise.**

*The parking space widths are revised on the current site plan.*

17. *Section 158.128 (D) - Number of [Off-Street Parking] Spaces Required:* In addition to the minimum spaces required for multifamily dwellings, additional off street parking spaces shall be provided for the recreation and clubhouse buildings (1 space for every 200 sq. ft.). **The site development plan, sheet C2.0 states that 45 parking spaces are provided. The site plan application states 46 parking spaces are provided and the site plan shows 49 spaces on the plans. The site plan, sheet A10.00 and the site development plan, sheet C2.0 are not consistent as to the location of the outdoor parking spaces. Please revise the plans to be consistent.**

*53 parking spaces are shown on the attached construction plans, 43 spaces under the building and 10 spaces outside.*

#### *Additional Zoning Code requirements*

18. *Section 158.149 - Maximum Coverage by Buildings:* These calculations need to be to be itemized In accordance with Section 158.145, the maximum building coverage (defined as any structure more than 6-inches above finished grade) for the proposed development is 25-percent of the lot area. **Please show detailed lot coverage calculations for the site showing the individual structures, residential building, clubhouse, fitness center, entry pavilion, emergency generator room and pool deck area raised above grade.**

**Building Coverage:**

<b>Main Building –</b>	<b>31,616 s.f.</b>
<b>Pool deck, including the bridge to clubhouse –</b>	<b>13,377 s.f.</b>
<b>Clubhouse, including the outdoor terrace area –</b>	<b>3,857 s.f.</b>
<b>Fitness Center, including the planter –</b>	<b>3,878 s.f.</b>
<b>Entry Building (just base that touches ground) –</b>	<b>80 s.f.</b>
<b>Generator Building –</b>	<b><u>682 s.f.</u></b>
<b>Total:</b>	<b>53,490 s.f. (24.4% of Site)</b>
	<b>=====</b>

19. Section 158.15KB)-Minimum regulations for accessory structures: In R districts, unattached accessory uses and structures shall not be located in any required street, required waterfront, or required side yards except for walls and fences as provided for in § 158.152(A), (B) and (E). In addition, 158.151 (B)(4) states that no unattached accessory structure shall be located closer to the street than the required street yard setback required for a principal structure in the district in which the accessory structure may be located. The required street yard for an R-6MX is 50 feet to the nearest structure. **Please show the location of the Entry Pavilion, it cannot be located within the 50 feet street yard. Show the side yard setback to the pool deck trellis structure". Please explain and show cross sections of the retaining walls along the southern property line. Any new retaining walls would be required to meet the required 30 foot side setback.**

***The entry pavilion has been moved behind the 50' street yard setback, please see sheet A10.00. The trellis structure at the pool has been moved and rotated to not be within the 30' side yard setback also shown on A10.00.***

20. Section 158.152- Walls, fences, hedges, landscape logs, and berms - (A) Street Yard: All walls and fences within the required street yard shall not exceed three feet in height subject to visibility triangle requirements. (C) Waterfront yards: Walls and fences within a required waterfront yard shall not exceed three feet in height. The retaining wall shown on the plans in the waterfront yard may only be constructed for the purpose of achieving the required four to one slope. The revised plans shall show the height of all walls, fences or hedges within the street, side, and waterfront yards. **The maximum height of a wall located in the street yard is three feet; a six foot wall is shown on the plans. In addition, provide detailed dimensions and construction material for the gate, including evidence that the entry gate will meet the required minimum opacity of 70 percent. A four fence is shown within gulf waterfront yard. No fencing except for a pool protection fence is allowed to be located in the 150 feet required gulf waterfront yard. Please revise. Also please show the location of the historic gate and how it will be placed within the landscape plan.**

***The wall on the street side of the site has been changed to 3' when it is within the 50' streetyard area. Once beyond the 50' setback it does transition up to a 6' wall. Please***

**streetyard area. Once beyond the 50' setback it does transition up to a 6' wall. Please see sheet A10.00 for line denoting where this transition takes place.**

**For the gate design, dimensions, material, and calculation to show the opacity is over the 70% required please see sheet A10.00A.**

**The fencing within the gulf waterfront yard, and side yards is existing. This fence will be maintained and repaired as needed. See sheet A10.00**

**AN ERROR, OMISSION, OR SCRIVENER IN THIS CORRESPONDENCE DOES NOT AUTHORIZE OR JUSTIFY VIOLATION OF THE TOWN OF LONGBOAT KEY ZONING CODES.**

### **Public Works Comments**

**VAM LBK Development, LLC plans review 10-17-13 PW Staff [4 hours staff time]**

1. Need signed and sealed survey and site plans for next submittal  
**Please find attached the requested plans, signed and sealed, for your use.**
2. Is the existing private sewerage station going to be demolished?

**The private lift station and all piping shall be removed, reference demolition plan C1.0. This lift station served the existing septic tank and will be removed from the site along with all appurtenances and a new grinder pump station provided to pump to the on-site gravity system.**

3. Is the existing chain link fence along the rear property line going to be removed?

**No, the existing chain link fence will remain.**

4. Will there be a central solid waste/recycling dumpster? If so denote location on site plan.

**Locations of trash rooms are depicted on Plan C2.0.**

5. On page C4.0 add note: "All buried valves, fitting and piping shall be wrapped in 8 mil plastic."

**Note #10 on sheet C4.0 was added noting the 8 mil plastic, as requested.**

***The wastewater profiles are now included with both existing and proposed information. Adjustments were made for both the sewer collection system and the revised force main for a new lift station which will serve the clubhouse and minimize gravity systems on the site.***

7. Clarify if existing water service will be removed at the main.

***All existing water service lines shall be removed from the entire site. See sheet C4.0 for the note on this removal.***

8. Show on plans the existing waste water service and show removal and plug.

***A note is included in the attached set of plans showing the wastewater service line at the right-of-way to be removed and plugged. Previous service to this lot was by septic tank. The sewer service lines at the septic tank and lift station shall be removed as shown.***

9. On page C7.0 Fire Hydrant Detail: Revise to show a STORTZ connection. Specify Mueller hydrant without weep holes.

***The backflow preventor will not be required to include a stortz connection. According to discussions with Lou Gagliardi, Fire Marshal, the proposed design includes a fire pump with a backflow preventor interior to the pump system. A Stortz connection is provided at the FDC (Fire Department Connection). FDC and Stortz depicted within 20 feet of the hydrant in front of the building.***

10. On page C7.0: Backflow detail shows 1 1/2 inch; on page C4.0 backflow shows a 4 inch. Please correct to proper dimension.

***The potable water service line is 3" and a 3" backflow preventor is included in the attached revised plans. Meter size is also 3 inch.***

11. On page C8.0 detail: "Plan view single service"; is connection to existing or proposed bore?

***The connection is a proposed bore the existing 10" sewer lateral is not low enough to connect our proposed sewer main as designed, so a new lateral will be installed and the old 10" PVC shall be left in place. Connection point provides plenty of clearance between the existing 10" line and 8" core bore.***

12. Developer is responsible to pay "Facility Investment Fee" in accordance with Town Utility Code.

***Acknowledged.***

13. Provide FDOT, FDEP, CCCL, SWFWMD permits will be required before issuance of development order by the Town Commission.

***Permits will be provided upon receipt.***

14. Site completion bonds will be required to be in hand before issuance of a building permit.

***Acknowledged.***

15. Provide utility access forms

***Utility access agreement to be developed following site plan approval.***

16. Provide location of irrigation well

***Irrigation well is shown on plan sheet C4.0. We will utilize the existing well at the site for irrigation. Well has been tested and is sufficient to provide for the irrigation needs of the project.***

17. Provide water & waste water calculations

***Demand and flow contributions provided in FDEP applications. A three (3) inch meter is specified, sizing calculation attached. Lift Station Calculations are attached.***

18. Town requests an access easement for beach maintenance

***Acknowledged***

**Alaina Ray, Planner**  
**Planning, Zoning and Building Department**

**Comments to the Fire Dept.**

1. Sheet C7.0 – Reduced Pressure Backflows subject to flooding use double check – FPC 608.13.2.

***Revised as requested.***

2. Changing Room's in Fitness Center to provide 5' turning space.

***The 5' turning radius has been added to the changing rooms in the fitness center. Please see sheets A10.02, A10.03, or A15.28.***

3. Stairways 2&4 shall comply with the FBC 1022, 23, 27, can not terminate in the garage. Higher degrees of risk.

***Plan has been modified to have stairs 2&4 exiting in to the entry lobbies of the building then directly outside the building.***

#### **Fire Marshal's Office Site Plan Review Comments**

Lou Gagliardi, Fire Marshal

September 25, 2013

After review of the submitted plans for the project, this office has the following requirements:

1. Sheet 2.0: Indicate "No Parking Fire Dept. Emergency Access" signs at 75' intervals from the end of the pavement to the club house.

***No parking signs were added as requested.***

2. Sheet 9.0: Indicate the above signs.

***Signs are shown on sheet C2 as requested.***

3. Sheet C7.0: Do not use a pressure reducing back flow valve on the fire line.

***Changed to dual check valves on the revised plan.***

4. Sheet C7.0: Indicate a stortz connection on the 5 1/2" side of the fire hydrant.

***Stortz connection added on Sheet C4.0 as requested.***

5. Sheet A10.00: Indicate that the faux bridge is rated for 32 ton capacity.

***The Faux bridge does not include any structural elements. They are connected by a 30" RCP pipe for appearance only.***

6. Indicate the point of service for the fire main on the plan in compliance with FS633.019.

***Note was added to the Water and Sewer Plan as requested.***

7. Provide a fire protection plan indicating the following:
  - a. Location of fire department connection, near the structure but outside of the collapse zone.

***The FDC location was added to sheet C4.0 as requested.***

- b. A fire hydrant within 20 feet of the FDC.

***The requested FDC was added to the attached plans; see sheet C4.0 for this information.***

- c. A second hydrant may be required for the club house.

***A second hydrant is noted near the clubhouse for fire protection to this facility as requested.***

- d. A Siamese connection may be required on the back flow preventor.

***The current project includes a fire pump inside the building; therefore a Fire Department Connection (FDC) is being proposed near the fire hydrant in front of the building.***

**Pursuant to the Florida Fire Prevention Code, 2007 edition.**

#### **Utility Dept's Comments**

**VAM LBK Development, LLC Plans Review 10-17-13 Utility Dept's. Consultant Review [6 hours staff time]:**

1. The existing driveway to GMD is being relocated approximately 100 feet to the north west. How is the drainage in the side swale between the existing sidewalk and new driveway will be addressed?

***Driveway revised to provide nominal swale.***

2. There are a number of dry stormwater facilities within this project. Please provide documentation as to the purpose, stage-storage, and connectivity of these facilities.

***Please see the Stormwater Management Plan enclosed for your review along***

**with the chamber locations shown on sheets C12.0 and C12.1**

3. There is a stormwater facility with "Storm Chambers" located at the south east corner of the property. There are no details or any computations to document dimensions and or capacity of this system.

**Please see the added details on sheets C12.0 and C12.1 including StormTech chambers along with the Stormwater Management Plans for the chamber storage calculations.**

4. A corner of the proposed "Storm Chamber System" appears to be right on the property line. Construction and future maintenance of this system may require encroach on the adjacent property. Please provide assurances that no encroachment beyond property lines will be required for construction of this system.

**These chambers were relocated on the site to provide for additional clearance for maintenance of the system.**

5. Please provide stormwater calculations. Calculations should show the treatment volume, stage- storage, and stage-discharge for a 25-yr storm conveyance capability.

**This project is designed to meet the 100 year event with no discharge; therefore, we will not be including a control structure for the outfall. All systems will be contained on the site and percolate into the soil.**

6. Please provide pre- and post-development basin boundaries.

**Pre-Development Basin area is the entire project boundary. Post-Development shall include the basins as noted in the Stormwater Management Plan attached.**

7. Please identify the purpose of large "Stabilized Grass Area" at the south west corner of the project? Is his a dry stormwater facility?

**This area is designated as an open area and will be utilized for a nominal amount of storage of direct rainfall.**

8. It appears that the adjacent property to the south may be at higher elevations than the existing property (north east corner). Please show how the off-site flows currently entering this site will be addressed in the post development conditions.

**Based on our detailed site visit, the site to the southeast and northwest properties are presently developed with no post development discharge to this site except for the sloped areas to existing grade. There is no plan to collect offsite run-off. Grading back to the property line will be kept at a**

***minimum while meeting the embankment slope requirements.***

9. The inlet structures designed for this project appear to be "Curb Inlets", but no curb is shown. Please indicate how you intend to direct the driveway and parking area drainage towards these inlets.

***The present design is for grate inlets to be installed at the edge of the paved drive lanes. These inlets are noted on both the Paving Grading and Drainage plans and details sheets C9 and C9.1. Inflow to these grates is minimal.***

10. Please review the invert for Structure DS-05. Culverts DP-03 appears to have negative slope.

***All stormwater pipes have been revised to reflect the new StormTech chamber design. Please note that the pipe slopes were adjusted throughout the project.***

11. Please check the culvert DP-03 slope.

***All stormwater pipes have been revised to reflect the new StormTech chamber design. Please note that the pipe slopes were adjusted throughout the project.***

12. Please show the location of culvert DP-02 on the plans.

***This culvert was removed from the table and adjusted in the plan sheets.***

13. Pipe extending to the pond from the "Proposed Stormwater Vault Area" maybe in conflict with sanitary sewer main between manholes 7 and 8.

***The sanitary system along the front of the building was removed. All sewer service lines from the condominium will be collected at the east corner as shown on the attached revised plans.***

14. Culvert DP-06 is in conflict with sanitary sewer.

***This system was removed as noted above.***

15. Please show the invert of the MES entering the pond from main "Stormwater Vault".

***The direct connection between the StormTech chambers under the building and the pond was removed. Additional storage is being provided under the building to compensate for the removal of the vault along with additional stormwater chambers behind the pool.***

16. Please show the size of the pipe extending to the pond from the "Stormwater Vault".

***This pipe system was removed.***

17. Please provide adequate enough grades in order to properly evaluate your grading plan.

***Additional grades were added to the plan pursuant to this request.***

18. Cross-sections A and B on Sheet C5.0 do not show any proposed conditions. Please provide.

***Proposed condition was added to the plans as requested.***

19. Please be advised that all proposed slopes to the property lines must meet a minimum of 1V:4H requirements.

***We have created a contour plan to reflect slopes throughout the project. Where potential slopes exceed the 4:1 a retaining wall is being proposed.***

20. Please provide a plan showing the location of erosion protection and sediment control barriers.

***The Erosion Control Plan is included in the attached construction plan set, sheets C10.0 and C11.0.***

21. Note. No. 5 on Sheet C6.0 is not legible.

***This issue was corrected in the revised plans enclosed. Please see sheet C6.0.***

22. Will the entire driveway and parking areas be constructed of interlocking paver blocks?

***The entire project shall utilize brick pavers even in the areas over the chambers under the building. Both parking spaces and drive lanes shall be installed using pavers.***

23. Please provide details for "Grate Inlet" and "FES", or provide references to proper FDOT structures.

***All Grate Inlets shall be Type "C" inlets per FDOT standards. FES detail/reference added to plan.***

24. Please provide a copy of the Geotechnical Report.

***A copy of the geotechnical report is enclosed for your use.***

25. Thank you very much for providing a copy of your ERP application. Please provide a copy of your ERP permit.

***A copy of the ERP permit will be provided upon receipt.***

26. If any of your post development basins drain to FDOT right-of-way, please provide an FDOT Drainage Connection Permit.

***FDOT has indicated that there is no pre-development discharge from this project to FDOT right-of-way; therefore, we are not permitted to discharge to their system.***

**Cc: VAM LBK Development, LLC  
File**

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October 28, 2013

Mr. Jay Tallman  
VAM LBK Development, LLC  
1990 Main Street, Suite 750  
Sarasota, Florida 34236

**Subject: Villa am Meer -- Longboat Key, Florida  
Traffic Analysis Comparative Analysis**

Dear Mr. Tallman,

This letter documents a comparative analysis of the traffic analysis previously prepared for the Villa am Meer project (Avid Engineering, Inc., October 5, 2006), as compared to current conditions in regard to project site trip generation and traffic volumes on the adjacent roadway network.

The above-referenced previously prepared traffic analysis evaluated the proposed development of 24 condominium/townhouse units, which were identified to generate 141 two-way daily trips and 12 two-way PM peak hour trips. That traffic study estimated post-development traffic volumes as identified below, upon which the analysis was based; noting that these volumes do not include project-generated traffic volumes:

- **Gulf of Mexico Drive** from Manatee County to Bay Isle Parkway: 879 vehicles (pm peak hour)
- **Gulf of Mexico Drive** from Bay Isle Parkway to Project Site: 1,064 vehicles (pm peak hour)
- **Gulf of Mexico Drive** from Project Site to Longboat Key Club: 1,313 vehicles (pm peak hour)

The findings of the above-referenced previously prepared traffic analysis were that area roads and intersections were found to have adequate capacity to accommodate the proposed development, no roadway deficiencies were identified, and the project site access connection would operate safely and efficiently (refer to Attachment "A").

The current development proposal consists of 17 condominium/townhouse units. The trip generation for the current development proposal was estimated using trip characteristic data in accordance with *Trip Generation* (Institute of Transportation Engineers [ITE], 9th edition, 2012). The resulting trip generation estimate identified that the currently proposed 17 unit project is estimated to generate 99 two-way daily trips and 9 two-way PM peak hour trips, as documented in Attachment "B".

A review of recent traffic volumes was conducted, as available from two sources, as follows: (1) FDOT historical traffic count data, and (2) traffic volumes documented in a traffic study performed for the Town Shoppes of Longboat Key (RAYSOR Transportation Consulting, September 2, 2011).

The FDOT historical traffic count data is provided in Attachment "C" and indicates that current traffic volumes on Gulf of Mexico Drive are similar to those for the period during which the prior traffic study was prepared.

## RAYSOR Transportation Consulting

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Mr. Jay Tallman  
October 28, 2013  
Page 2 of 2

The traffic volumes documented in the Town Shoppes of Longboat Key traffic study reflect 2012 PM peak hour conditions, upon the redevelopment of the Town Shoppes of Longboat Key, as follows (refer to Attachment "D"):

- **Gulf of Mexico Drive** from Manatee County to Bay Isle Parkway: 893 vehicles (pm peak hour)
- **Gulf of Mexico Drive** from Bay Isle Parkway to Project Site: 1,013 vehicles (pm peak hour)

A comparison of the traffic volumes from both of the referenced traffic studies indicates that current traffic volumes on Gulf of Mexico Drive are similar to those for the period during which the prior traffic study was prepared, supporting this same finding as demonstrated by the FDOT data.

In consideration that the trip generation for the currently proposed development plan is lower than the trip generation analyzed in the previously prepared traffic analysis, and since current traffic volumes on Gulf of Mexico Drive are similar to those for the period during which the prior traffic study was prepared, it is concluded that no further or adverse impacts are anticipated in association with the current 17-unit condominium/townhouse development proposal, as compared to the finding of the prior traffic study which identified that area roads and intersections were found to have adequate capacity to accommodate the proposed development, no roadway deficiencies were identified, and the project site access connection would operate safely and efficiently.

If you should have any questions or comments regarding these materials, please feel free to contact me.

Sincerely,  
RAYSOR Transportation Consulting



Michael D. Raysor, P.E., PTOE  
President

Attachments: A - Previously Prepared Traffic Study Excerpt  
B - Currently Proposed Development Trip Generation Estimate  
C - FDOT Historical Traffic Volume Data  
D - Town Shoppes of Longboat Key Traffic Study Excerpt

# ATTACHMENT "A"

## 7. RECOMMENDATIONS AND CONCLUSIONS

### Recommendations

Since there is no anticipated traffic impact problems for the proposed Villas AmMeer Condominiums, no off-site improvements are recommended. Based on the National Cooperative Highway Research Program Report 457, a northbound left-turn lane is warranted at the site driveway on Gulf of Mexico Drive, and currently exists on the roadway.

### Conclusion

Villas AmMeer Condominiums is expected to generate approximately 141 two-way trips on a daily basis and 12 two-way trips during the PM peak hour. All existing roadways and intersections are projected to have adequate capacity to accommodate the new traffic that is expected to be generated by area growth and the development of the Villas AmMeer Condominiums through buildout. As recommended, the site will provide safe and efficient ingress and egress for patrons.

# ATTACHMENT "B"

## Villa am Meer

### Trip Generation Estimate

ITE LUC	Land Use Description	Size	Weekday		AM Peak Hour			PM Peak Hour				
			Trip Rate	Trips	Trip Rate	Trips	Enter	Exit	Trip Rate	Trips	Enter	Exit
230	Condominium/ Townhouse	17	5.81	99	0.44	7	1	6	0.52	9	6	3

Source: ITE Trip Generation Manual (9th edition, 2012).

# ATTACHMENT "C"

Florida Department of Transportation  
 Transportation Statistics Office  
 2012 Historical AADT Report

County: 17 - SARASOTA

Site: 0028 - SR 789, AT MANATEE/SARASOTA CO LINE LONGBOAT KEY

Year	AADT	Direction 1	Direction 2	*K Factor	D Factor	T Factor
2012	10000 C	N 5000	S 5000	9.00	51.80	3.20
2011	8600 F	N 4300	S 4300	9.00	52.30	5.30
2010	8600 C	N 4300	S 4300	10.80	51.78	5.30
2009	11000 C	N 5500	S 5500	10.76	53.10	3.60
2008	8600 C	N 4300	S 4300	10.84	51.92	4.80
2007	10300 C	N 5100	S 5200	11.00	52.45	3.90
2006	9500 C	N 4800	S 4700	10.30	53.57	4.70
2005	9500 C	N 4800	S 4700	10.50	52.90	2.20
2004	10200 C	N 5100	S 5100	10.40	53.60	2.20
2003	9300 C	N 4700	S 4600	10.10	53.80	5.70
2002	9900 C	N 5000	S 4900	10.00	52.00	3.60
2001	12200 C	N 5700	S 6500	10.20	52.10	3.60
2000	12200 C	N 6200	S 6000	10.10	52.20	4.70
1999	12100 C	N 6400	S 5700	10.10	51.90	4.50
1998	11100 C	N 5500	S 5600	10.30	51.50	4.10
1997	11700 C	N 5900	S 5800	10.40	53.30	3.90

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate  
 S = Second Year Estimate; T = Third Year Estimate; X = Unknown  
 \*K Factor: Starting with Year 2011 is StandardK, Prior years are K30 values

# ATTACHMENT "C"

Florida Department of Transportation  
 Transportation Statistics Office  
 2012 Historical AADT Report

County: 17 - SARASOTA

Site: 0039 - SR 789, 0.1 MI N OF NORTH END OF CLUB RD, LONGBOAT

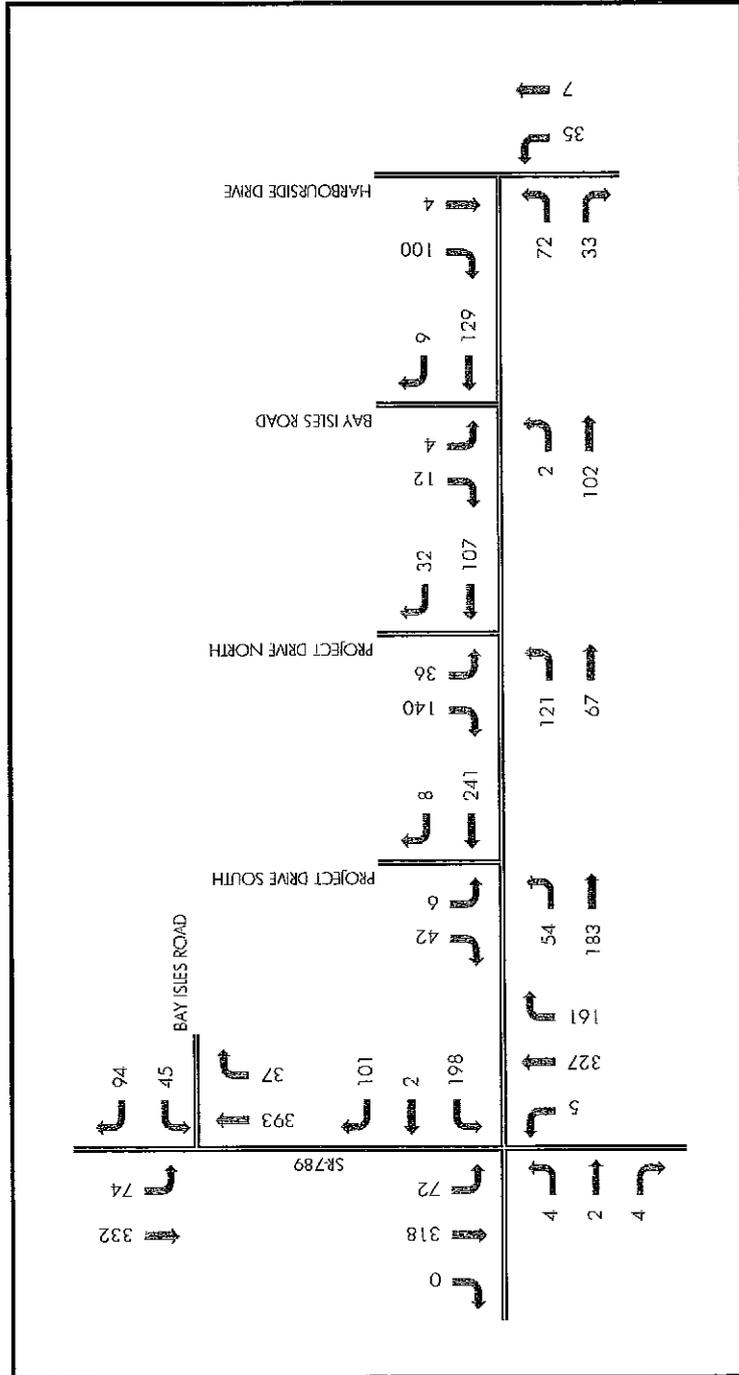
Year	AADT	Direction 1	Direction 2	*K Factor	D Factor	T Factor
2012	15400 C	N 7700	S 7700	9.00	51.80	3.70
2011	11800 F	N 5900	S 5900	9.00	52.30	4.50
2010	11800 C	N 5900	S 5900	10.80	51.78	4.50
2009	11100 C	N 5600	S 5500	10.76	53.10	4.70
2008	12400 C	N 6200	S 6200	10.84	51.92	5.00
2007	15400 C	N 7700	S 7700	11.00	52.45	3.20
2006	14100 C	N 7100	S 7000	10.30	53.57	3.90
2005	12600 C	N 6300	S 6300	10.50	52.90	4.80
2004	18100 C	N 9000	S 9100	10.40	53.60	4.80
2003	14000 C	N 7000	S 7000	10.10	53.80	4.20
2002	16900 C	N 8500	S 8400	10.00	52.00	2.00
2001	18800 C	N 9400	S 9400	10.20	52.10	2.90
2000	17000 C	N 8400	S 8600	10.10	52.20	4.70
1999	15200 C	N 7200	S 8000	10.10	51.90	4.80
1998	15200 C	N 7600	S 7600	10.30	51.50	3.20
1997	15900 C	N 7900	S 8000	10.40	53.30	3.60

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate  
 S = Second Year Estimate; T = Third Year Estimate; X = Unknown  
 \*K Factor: Starting with Year 2011 is StandardK, Prior years are K30 values

# ATTACHMENT "D"

RAYSOR Transportation Consulting

Town Shoppes of Longboat Key  
2012 PM Peak Hour Total Traffic (reflecting new site plan)



Page 40  
Ms. Alaina Ray, AICP  
November 4, 2013

Re: Villa am Meer – 2251 Gulf of Mexico Drive  
Application Submittal for Site Plan Review – Including responses to 10/17/13 DRC Comments

**ATTACHEMENT D**

**OUTSIDE REVIEW AGENCY PERMIT APPLICATIONS  
AND  
ADDITIONAL STUDIES AND INFORMATION**

**BBC KEY, LLC**

555 Skokie Boulevard, Suite 555  
Northbrook, Illinois, 60062

September 13, 2013

TO WHOM IT MAY CONCERN:

This letter shall constitute evidence of the authority of James A. Tallman of VAM LBK Development, LLC to act on behalf of BBC Key, LLC in connection with any and all matters before the Town of Longboat Key, Florida, the FDEP, the FDOT, Sarasota County, Manatee County, and any department, division, agency or board thereof which relate in any manner whatsoever to the permit related activities and/or the construction/development-related activities of said limited liability company in connection with the Villa Am Meer Condominium Development located at 2251 Gulf of Mexico Drive, Longboat Key, Florida.

BBC KEY, LLC

BY: David Williams

State of Illinois

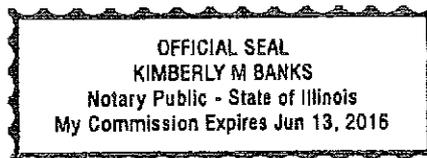
County of Cook

Signed and sworn (or affirmed) to before me on September 13, 2013

\_\_\_\_\_ (date) by David Williams

(name of person making statement).

(seal) Kimberly M Banks  
signature of notary public





# Florida Department of Environmental Protection

Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

## NOTIFICATION/APPLICATION FOR CONSTRUCTING A DOMESTIC WASTEWATER COLLECTION/TRANSMISSION SYSTEM

### PART I - GENERAL

#### Subpart A: Permit Application Type

Permit Application Type (mark one only)	EDUs Served	Application Fee*	"X"
Are you applying for an individual permit for a domestic wastewater collection/transmission system? Note: an EDU is equal to 3.5 persons. Criteria for an individual permit are contained in Rule 62-604.600(7), F.A.C.	≥ 10	\$500	<input checked="" type="checkbox"/>
	< 10	\$300	<input type="checkbox"/>
Is this a Notice of Intent to use the general permit for wastewater collection/transmission systems? Criteria for qualifying for a general permit are contained in Rule 62-604.600(6), F.A.C. Projects not meeting the criteria in Rule 62-604.600(6), F.A.C., must apply for an individual permit.	N/A	\$250	<input type="checkbox"/>

\*Note: Each non-contiguous project (i.e., projects that are not interconnected or are not located on adjacent streets or in the same neighborhood) requires a separate application and fee.

#### Subpart B: Instructions

- (1) This form shall be completed for all domestic wastewater collection/transmission system construction projects as follows:
  - If this is a Notice of Intent to use the general permit, this notification shall be submitted to the Department **at least 30 days prior to initiating construction.**
  - If this is an application for an individual permit, the permit must be obtained prior to initiating construction.
  
- (2) One copy of the completed form shall be submitted to the appropriate DEP district office or delegated local program along with the appropriate fee, and one copy of the following supporting documents. Checks should be made payable to the Florida Department of Environmental Protection, or the name of the appropriate delegated local program.
  - If this is a Notice of Intent to use the general permit, attach a site plan or sketch showing the size and approximate location of new or altered gravity sewers, pump stations and force mains; showing the approximate location of manholes and isolation valves; and showing how the proposed project ties into the existing or proposed wastewater facilities. The site plan or sketch shall be signed and sealed by a professional engineer registered in Florida.
  - If this is an application for an individual permit, one set of plans and specifications shall be submitted with this application, or alternatively, an engineering report shall be submitted. Plans and specifications and engineering reports shall be prepared in accordance with the applicable provisions of Chapters 10 and 20 of *Recommended Standards for Wastewater Facilities*. The plans and specifications or engineering report shall be signed and sealed by a Professional Engineer registered in Florida.
  
- (3) All information shall be typed or printed in ink. Where attached sheets (or other technical documentation) are utilized in lieu of the blank spaces provided, indicate appropriate cross-references on the form. For Items (1) through (4) of Part II of this application form, if an item is not applicable to your project, indicate "NA" in the appropriate space provided.

**PART II – PROJECT DOCUMENTATION**

**(1) Collection/Transmission System Permittee**

Name James A. Tallman Title Managing Member  
 Company Name VAM LBK Development, LLC  
 Address 1990 Main Street Suite 750  
 City Sarasota State FL Zip 10022  
 Telephone 9413095383 Fax 941 Email jtallman@ascentiagr.com

**(2) General Project Information**

Project Name Villa AM Meer  
 Location: County Sarasota City Longboat Key Section 8/17 Township 36S Range 17E  
 Project Description and Purpose (including pipe length, range of pipe diameter, total number of manholes, and total number of pump stations) Installation of XX LF of 8" Gravity sewer to tie into existing manhole along Gulf of Mexico Drive including 5 manholes as shown on the attached drawings  
 Estimated date for: Start of construction July 2014 Completion of construction August 2015  
 Connections to existing system or treatment plant EXISTING SYSTEM

**(3) Project Capacity**

A = Type of Unit	B = Number of Units	C = Population Per Unit	D = Total Population (Columns B x C)	E = Per Capita Flow	F = Total Average Daily Flow (Columns D x E)	G = Peak hour flow
Single-Family Home						
Mobile Home						
Apartment	16	2.5	40	100	4,000	350 GPH
Commercial, Institutional, or Industrial Facility*						
<b>Total</b>					4,000	350 GPH

\* Description of commercial, institutional, and industrial facilities and explanation of method used to estimate per capita flow for these facilities:

**(4) Pump Station Data (attached additional sheets as necessary)**

Location	Type	Estimated Flow to the Station (GPD)			Operating Conditions [GPM @ FT (TDH)]
		Maximum	Average	Minimum	
N/A	N/A	N/A	N/A	N/A	N/A

**(5) Collection/Transmission System Design Information**

A. This information must be completed for all projects by the applicant's professional engineer, and if applicable, those professional engineers in other disciplines who assisted with the design of the project.

If this project has been designed to comply with the standards and criteria listed below, the engineer shall initial in ink before the standards or criteria. If any of the standards or criteria do not apply to this project or if this project has not been designed to comply with the standards or criteria, mark "X" before the appropriate standard or criteria and provide an explanation, including any applicable rule references, in (5)B. below.

Note, if the project has not been designed in accordance with the standards and criteria set forth in Rules 62-604.400(1) and (2), F.A.C., an application for an individual permit shall be submitted. However, if Rules 62-604.400(1) and (2), F.A.C., specifically

allow for another alternative that will result in an equivalent level of reliability and public health protection, the project can be constructed using the general permit.

#### General Requirements

1. The project is designed based on an average daily flow of 100 gallons per capita plus wastewater flow from industrial plants and major institutional and commercial facilities unless water use data or other justification is used to better estimate the flow. The design includes an appropriate peaking factor, which covers I/I contributions and non-wastewater connections to those service lines. [RSWF 11.243]
2. Procedures are specified for operation of the collection/transmission system during construction. [RSWF 20.15]
3. The project is designed to be located on public right-of-ways, land owned by the permittee, or easements and to be located no closer than 100 feet from a public drinking water supply well and no closer than 75 feet from a private drinking water supply well; or documentation is provided in Part II.(5)B., showing that another alternative will result in an equivalent level of reliability and public health protection. [62-604.400(1)(b) and (c), F.A.C.]
4. The project is designed with no physical connections between a public or private potable water supply system and a sewer or force main and with no water pipes passing through or coming into contact with any part of a sewer manhole. [RSFW 38.1 and 48.5]
5. The project is designed to preclude the deliberate introduction of storm water, surface water, groundwater, roof runoff, subsurface drainage, swimming pool drainage, air conditioning system condensate water, non-contact cooling water except as provided by Rule 62-610.668(1), F.A.C., and sources of uncontaminated wastewater, except to augment the supply of reclaimed water in accordance with Rule 62-610.472(3)(c), F.A.C. [62-604.400(1)(d), F.A.C.]
6. The project is designed so that all new or relocated, buried sewers and force mains, are located in accordance with the separation requirements from water mains and reclaimed water lines of Rules 62-604.400(2)(g)(h) and (i) and (3), F.A.C. Note, if the criteria of Rules 62-604.400(2)(g) 4. or (2)(i) 3., F.A.C., are used, describe in Part II.C. alternative construction features that will be provided to afford a similar level of reliability and public health protection. [62-604.400(2)(g), (h), and (i) and (3), F.A.C.]

#### Gravity Sewers

7. The project is designed with no public gravity sewer conveying raw wastewater less than 8 inches in diameter. [RSWF 33.1]
  8. The design considers buoyancy of sewers, and appropriate construction techniques are specified to prevent flotation of the pipe where high groundwater conditions are anticipated. [RSWF 33.3]
  9. All sewers are designed with slopes to give mean velocities, when flowing full, of not less than 2.0 feet per second, based on Manning's formula using an "n" value of 0.013; or if it is not practicable to maintain these minimum slopes and the depth of flow will be 0.3 of the diameter or greater for design average flow, the owner of the system has been notified that additional sewer maintenance will be required. The pipe diameter and slope are selected to obtain the greatest practical velocities to minimize solids deposition problems. Oversized sewers are not specified to justify flatter slopes. [RSWF 33.41, 33.42, and 33.43]
  10. Sewers are designed with uniform slope between manholes. [RWSF 33.44]
  11. Where velocities greater than 15 fps are designed, provisions to protect against displacement by erosion and impact are specified. [RSWF 33.45]
  12. Sewers on 20% slopes or greater are designed to be anchored securely with concrete, or equal, anchors spaced as follows: not over 36 feet center to center on grades 20% and up to 35%; not over 24 feet center to center on grades 35% and up to 50%; and not over 16 feet center to center on grades 50% and over. [RSWF 33.46]
- 
13. Sewers 24 inches or less are designed with straight alignment between manholes. Where curvilinear sewers are proposed for sewers greater than 24 inches, the design specifies compression joints; ASTM or specific pipe manufacturer's maximum allowable pipe joint deflection limits are not exceeded; and curvilinear sewers are limited to simple curves which start and end at manholes. [RSWF 33.5]
-

- \_\_\_\_\_ 14. Suitable couplings complying with ASTM specifications are required for joining dissimilar materials. [RSWF 33.7]
- \_\_\_\_\_ 15. Sewers are designed to prevent damage from superimposed loads. [RSWF 33.7]
- \_\_\_\_\_ 16. Appropriate specifications for the pipe and methods of bedding and backfilling are provided so as not to damage the pipe or its joints, impede cleaning operations and future tapping, nor create excessive side fill pressures and ovalation of the pipe, nor seriously impair flow capacity. [RSWF 33.81]
- \_\_\_\_\_ 17. Appropriate deflection tests are specified for all flexible pipe. Testing is required after the final backfill has been in place at least 30 days to permit stabilization of the soil-pipe system. Testing requirements specify: 1) no pipe shall exceed a deflection of 5%; 2) using a rigid ball or mandrel for the deflection test with a diameter not less than 95% of the base inside diameter or average inside diameter of the pipe, depending on which is specified in the ASTM specification, including the appendix, to which the pipe is manufactured; and 3) performing the test without mechanical pulling devices. [RSWF 33.85]
- \_\_\_\_\_ 18. Leakage tests are specified requiring that: 1) the leakage exfiltration or infiltration does not exceed 200 gallons per inch of pipe diameter per mile per day for any section of the system; 2) exfiltration or infiltration tests be performed with a minimum positive head of 2 feet; and 3) air tests, as a minimum, conform to the test procedure described in ASTM C-828 for clay pipe, ASTM C 924 for concrete pipe, ASTM F-1417 for plastic pipe, and for other materials appropriate test procedures. [RSWF 33.93, 33.94, and 33.95]
- \_\_\_\_\_ 19. If an inverted siphon is proposed, documentation of its need is provided in Part II.C. Inverted siphons are designed with: 1) at least two barrels; 2) a minimum pipe size of 6 inches; 3) necessary appurtenances for maintenance, convenient flushing, and cleaning equipment; and 4) inlet and discharge structures having adequate clearances for cleaning equipment, inspection, and flushing. Design provides sufficient head and appropriate pipe sizes to secure velocities of at least 3.0 fps for design average flows. The inlet and outlet are designed so that the design average flow may be diverted to one barrel, and that either barrel may be cut out of service for cleaning. [RSWF 35]

#### Manholes

- \_\_\_\_\_ 20. The project is designed with manholes at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 400 feet for sewers 15 inches or less and 500 feet for sewers 18 inches to 30 inches, except in the case where adequate modern cleaning equipment is available at distances not greater than 600 feet. [RSWF 34.1]
- \_\_\_\_\_ 21. Design requires drop pipes to be provided for sewers entering manholes at elevations of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches, the invert is designed with a fillet to prevent solids deposition. Inside drop connections (when necessary) are designed to be secured to the interior wall of the manhole and provide access for cleaning. Design requires the entire outside drop connection be encased in concrete. [RSWF 34.2]
- \_\_\_\_\_ 22. Manholes are designed with a minimum diameter of 48 inches and a minimum access diameter of 22 inches. [RSWF 34.3]
- \_\_\_\_\_ 23. Design requires that a bench be provided on each side of any manhole channel when the pipe diameter(s) are less than the manhole diameter and that no lateral sewer, service connection, or drop manhole pipe discharges onto the surface of the bench. [RSWF 34.5]
- \_\_\_\_\_ 24. Design requires: 1) manhole lift holes and grade adjustment rings be sealed with non-shrinking mortar or other appropriate material; 2) inlet and outlet pipes be joined to the manhole with a gasketed flexible watertight connection or another watertight connection arrangement that allows differential settlement of the pipe and manhole wall; and 3) watertight manhole covers be used wherever the manhole tops may be flooded by street runoff or high water. [RSWF 34.6]
- \_\_\_\_\_ 25. Manhole inspection and testing for watertightness or damage prior to placing into service are specified. Air testing, if specified for concrete sewer manholes, conforms to the test procedures described in ASTM C-1244. [RSWF 34.7]
- \_\_\_\_\_ 26. Electrical equipment specified for use in manholes is consistent with Item 46 of this checklist. [RSWF 34.9]

#### Stream Crossings

- \_\_\_\_\_ 27. Sewers and force mains entering or crossing streams are designed to be constructed of ductile iron pipe with mechanical joints or so they will remain watertight and free from changes in alignment or grade. Appropriate materials which will not readily erode, cause siltation, damage pipe during placement, or corrode the pipe are specified to backfill the trench. [RSWF 36.21 and 48.5]
- \_\_\_\_\_ 28. Stream crossings are designed to incorporate valves or other flow regulating devices (which may include pump stations) on the shoreline or at such distances from the shoreline to prevent discharge in the event the line is damaged. [62-604.400(2)(k)5., F.A.C.]
- \_\_\_\_\_ 29. Sewers and force mains entering or crossing streams are designed at a sufficient depth below the natural bottom of the stream bed to protect the line. At a minimum, the project is designed with subaqueous lines to be buried at least three feet below the design or actual bottom, whichever is deeper, of a canal and other dredged waterway or the natural bottom of streams, rivers, estuaries, bays, and other natural water bodies; or if it is not practicable to design the project with less than three-foot minimum cover, alternative construction features (e.g. a concrete cap, sleeve, or some other properly engineered device to insure adequate protection of the line) are described in Part II.C. [62-604.400(2)(k)1., F.A.C., and RSWF 36.11]
- \_\_\_\_\_ 30. Specifications require permanent warning signs be placed on the banks of canals, streams, and rivers clearly identifying the nature and location (including depths below design or natural bottom) of subaqueous crossings and suitably fixed signs be placed at the shore, for subaqueous crossings of lakes, bays, and other large bodies of water, and in any area where anchoring is normally expected. [62-604.400(2)(k)2., F.A.C.]
- \_\_\_\_\_ 31. Provisions for testing the integrity of subaqueous lines are specified. [62-604.400(2)(k)4., F.A.C.]
- \_\_\_\_\_ 32. Supports are designed for all joints in pipes utilized for aerial crossings and to prevent overturning and settlement. Expansion jointing is specified between above ground and below ground sewers and force mains. The design considers the impact of floodwaters and debris. [RSWF 37 and 48.5]
- \_\_\_\_\_ 33. Aerial crossings are designed to maintain existing or required navigational capabilities within the waterway and to reserve riparian rights of adjacent property owners. [62-604.400(2)(k)3., F.A.C.]

#### Pump Stations

- \_\_\_\_\_ 34. In areas with high water tables, pump stations are designed to withstand flotation forces when empty. When siting the pump station, the design considers the potential for damage or interruption of operation because of flooding. Pump station structures and electrical and mechanical equipment are designed to be protected from physical damage by the 100-year flood. Pump stations are designed to remain fully operational and accessible during the 25-year flood unless lesser flood levels are appropriate based on local considerations, but not less than the 10-year flood. [62-604.400(2)(e), F.A.C.]
- \_\_\_\_\_ 35. Pump stations are designed to be readily accessible by maintenance vehicles during all weather conditions. [RSWF 41.2]
- \_\_\_\_\_ 36. Wet well and pump station piping is designed to avoid operational problems from the accumulation of grit. [RSWF 41.3]
- \_\_\_\_\_ 37. Dry wells, including their superstructure, are designed to be completely separated from the wet well. Common walls are designed to be gas tight. [RSWF 42.21]
- \_\_\_\_\_ 38. The design includes provisions to facilitate removing pumps, motors, and other mechanical and electrical equipment. [RSWF 42.22]
-

- \_\_\_\_\_ 39. The design includes provisions for: 1) suitable and safe means of access for persons wearing self-contained breathing apparatus are provided to dry wells, and to wet wells; 2) stairway access to wet wells more than 4 feet deep containing either bar screens or mechanical equipment requiring inspection or maintenance; 3) for built-in-place pump stations, a stairway to the dry well with rest landings at vertical intervals not to exceed 12 feet; 4) for factory-built pump stations over 15 feet deep, a rigidly fixed landing at vertical intervals not to exceed 10 feet unless a manlift or elevator is provided; and 5) where a landing is used, a suitable and rigidly fixed barrier to prevent an individual from falling past the intermediate landing to a lower level. If a manlift or elevator is provided, emergency access is included in the design. [RSWF 42.23]
- \_\_\_\_\_ 40. Specified construction materials are appropriate under conditions of exposure to hydrogen sulfide and other corrosive gases, greases, oils, and other constituents frequently present in wastewater. [RSWF 42.25]
- \_\_\_\_\_ 41. Except for low-pressure grinder or STEP systems, multiple pumps are specified, and each pump has an individual intake. Where only two units are specified, they are of the same size. Specified units have capacity such that, with any unit out of service, the remaining units will have capacity to handle the design peak hourly flow. [RSWF 42.31 and 42.36]
- \_\_\_\_\_ 42. Bar racks are specified for pumps handling wastewater from 30 inch or larger diameter sewers. Where a bar rack is specified, a mechanical hoist is also provided. The design includes provisions for appropriate protection from clogging for small pump stations. [RSWF 42.322]
- \_\_\_\_\_ 43. Pumps handling raw wastewater are designed to pass spheres of at least 3 inches in diameter. Pump suction and discharge openings are designed to be at least 4 inches in diameter. [RSWF 42.33] (Note, this provision is not applicable to grinder pumps.)
- \_\_\_\_\_ 44. The design requires pumps be placed such that under normal operating conditions they will operate under a positive suction head, unless pumps are suction-lift pumps. [RSWF 42.34]
- \_\_\_\_\_ 45. The design requires: 1) pump stations be protected from lightning and transient voltage surges; and 2) pump stations be equipped with lightning arrestors, surge capacitors, or other similar protection devices and phase protection. Note, pump stations serving a single building are not required to provide surge protection devices if not necessary to protect the pump station. [62-604.400(2)(b), F.A.C.]
- \_\_\_\_\_ 46. The design requires 1) electrical systems and components (e.g., motors, lights, cables, conduits, switch boxes, control circuits, etc.) in raw wastewater wet wells, or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors may be present, comply with the National Electrical Code requirements for Class I Group D, Division 1 locations; 2) electrical equipment located in wet wells be suitable for use under corrosive conditions; 3) each flexible cable be provided with a watertight seal and separate strain relief; 4) a fused disconnect switch located above ground be provided for the main power feed for all pump stations; 5) electrical equipment exposed to weather to meet the requirements of weatherproof equipment NEMA 3R or 4; 6) a 110 volt power receptacle to facilitate maintenance be provided inside the control panel for pump stations that have control panels outdoors; and 7) ground fault interruption protection be provided for all outdoor outlets. [RSWF 42.35]
- \_\_\_\_\_ 47. The design requires a sump pump equipped with dual check valves be provided in dry wells to remove leakage or drainage with discharge above the maximum high water level of the wet well. [RSWF 42.37]
- \_\_\_\_\_ 48. Pump station design capacities are based on the peak hourly flow and are adequate to maintain a minimum velocity of 2 feet per second in the force main. [RSWF 42.38]
- \_\_\_\_\_ 49. The design includes provisions to automatically alternate the pumps in use. [RSWF 42.4]
- \_\_\_\_\_ 50. The design requires: 1) suitable shutoff valves be placed on the suction line of dry pit pumps; 2) suitable shutoff and check valves be placed on the discharge line of each pump (except on screw pumps); 3) a check valve be located between the shutoff valve and the pump; 4) check valves be suitable for the material being handled; 5) check valves be placed on the horizontal portion of discharge piping (except for ball checks, which may be placed in the vertical run); 6) all valves be capable of withstanding normal pressure and water hammer; and 7) all shutoff and check valves be operable from the floor level and accessible for maintenance. [RSWF 42.5]
- \_\_\_\_\_ 51. The effective volume of wet wells is based on design average flows and a filling time not to exceed 30 minutes unless the facility is designed to provide flow equalization. The pump manufacturer's duty cycle recommendations were utilized in selecting the minimum cycle time. [RSWF 42.62]

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52. The design requires wet well floors have a minimum slope of 1 to 1 to the hopper bottom and the horizontal area of hopper bottoms be no greater than necessary for proper installation and function of the inlet. [RSWF 42.63]
- 
53. For covered wet wells, the design provides for air displacement to the atmosphere, such as an inverted "j" tube or other means. [RSWF 42.64]
54. The design provides for adequate ventilation all pump stations; mechanical ventilation where the dry well is below the ground surface; permanently installed ventilation if screens or mechanical equipment requiring maintenance or inspection are located in the wet well. Pump stations are designed with no interconnection between the wet well and dry well ventilation systems. [RSWF 42.71]
55. The design requires all intermittently operated ventilation equipment to be interconnected with the respective pit lighting system and the manual lighting/ventilation switch to override the automatic controls. [RSWF 42.73]
56. The design requires the fan wheels of ventilation systems be fabricated from non-sparking material and automatic heating and dehumidification equipment be provided in all dry wells. [RSWF 42.74]
57. If wet well ventilation is continuous, design provides for at least 12 complete 100% fresh air changes per hour; if wet well ventilation is intermittent, design provides for at least 30 complete 100% fresh air changes per hour; and design requires air to be forced into wet wells by mechanical means rather than solely exhausted from the wet well. [RSWF 42.75]
58. If dry well ventilation is continuous, design provides at least 6 complete 100% fresh air changes per hour; and dry well ventilation is intermittent, design provides for at least 30 complete 100% fresh air changes per hour, unless a system of two speed ventilation with an initial ventilation rate of 30 changes per hour for 10 minutes and automatic switch over to 6 changes per hour is used to conserve heat. [RSWF 42.76]
59. Pump stations are designed and located on the site to minimize adverse effects from odors, noise, and lighting. [62-604.400(2)(c), F.A.C.]
60. The design requires pump stations be enclosed with a fence or otherwise designed with appropriate features to discourage the entry of animals and unauthorized persons. Posting of an unobstructed sign made of durable weather resistant material at a location visible to the public with a telephone number for a point of contact in case of emergency is specified. [62-604.400(2)(d), F.A.C.]
61. The design requires suitable devices for measuring wastewater flow at all pump stations. Indicating, totalizing, and recording flow measurement are specified for pump stations with a 1200 gpm or greater design peak flow. [RSWF 42.8]
62. The project is designed with no physical connections between any potable water supplies and pump stations. If a potable water supply is brought to a station, reduced-pressure principle backflow-prevention assemblies are specified. [RSWF 42.9 and 62-555.30(4), F.A.C.]

Additional Items to be Completed for Suction-Lift Pump Stations

63. The design requires all suction-lift pumps to be either self-priming or vacuum-priming and the combined total of dynamic suction-lift at the "pump off" elevation and required net positive suction head at design operating conditions not to exceed 22 feet. For self-priming pumps, the design requires: 1) pumps be capable of rapid priming and repriming at the "lead pump on" elevation with self-priming and repriming accomplished automatically under design operating conditions; 2) suction piping not to exceed the size of the pump suction or 25 feet in total length; and 3) priming lift at the "lead pump on" elevation to include a safety factor of at least 4 feet from the maximum allowable priming lift for the specific equipment at design operating conditions. For vacuum-priming pump stations, the design requires dual vacuum pumps capable of automatically and completely removing air from the suction-lift pumps and the vacuum pumps be adequately protected from damage due to wastewater. [RSWF 43.1]
64. The design requires: 1) suction-lift pump equipment compartments to be above grade or offset and to be effectively isolated from the wet well to prevent a hazardous and corrosive sewer atmosphere from entering the equipment compartment; 2) wet well access not to be through the equipment compartment and to be at least 24 inches in diameter; 3) gasketed replacement plates be provided to cover the opening to the wet well for pump units to be removed for service; and 4) no valving be located in the wet well. [RSWF 43.2]
-

### Additional Items to be Completed for Submersible Pump Stations

65. Submersible pumps and motors are designed specifically for raw wastewater use, including totally submerged operation during a portion of each pump cycle and to meet the requirements of the National Electrical Code for such units. Provisions for detecting shaft seal failure or potential seal failure are included in the design. [RSWF 44.1]
66. The design requires submersible pumps be readily removable and replaceable without dewatering the wet well or disconnecting any piping in the wet well. [RSWF 44.2]
67. In submersible pump stations, electrical supply, control, and alarm circuits are designed to provide strain relief; to allow disconnection from outside the wet well; and to protect terminals and connectors from corrosion by location outside the wet well or through use of watertight seals. [RSWF 44.31]
68. In submersible pump stations, the design requires the motor control center to be located outside the wet well, readily accessible, and protected by a conduit seal or other appropriate measures meeting the requirements of the National Electrical Code, to prevent the atmosphere of the wet well from gaining access to the control center. If a seal is specified, the motor can be removed and electrically disconnected without disturbing the seal. The design requires control equipment exposed to weather to meet the requirements of weatherproof equipment NEMA 3R or 4. [RSWF 44.32]
69. In submersible pump stations, the design requires: 1) pump motor power cords be flexible and serviceable under conditions of extra hard usage and to meet the requirements of the National Electrical Code standards for flexible cords in wastewater pump stations; 2) ground fault interruption protection be used to de-energize the circuit in the event of any failure in the electrical integrity of the cable; and 3) power cord terminal fittings be corrosion-resistant and constructed in a manner to prevent the entry of moisture into the cable, provided with strain relief appurtenances, and designed to facilitate field connecting. [RSWF 44.33]
70. In submersible pump stations, the design requires all shut-off and check valves be located in a separate valve pit. Provisions to remove or drain accumulated water from the valve pit are included in the design. [RSWF 44.4]

### Emergency Operations for Pump Stations

71. Pump stations are designed with an alarm system which activates in cases of power failure, sump pump failure, pump failure, unauthorized entry, or any cause of pump station malfunction. Pump station alarms are designed to be telemetered to a facility that is manned 24 hours a day. If such a facility is not available and a 24-hour holding capacity is not provided, the alarm is designed to be telemetered to utility offices during normal working hours and to the home of the responsible person(s) in charge of the lift station during off-duty hours. Note, if an audio-visual alarm system with a self-contained power supply is provided in lieu of a telemetered system, documentation is provided in Part II.C. showing an equivalent level of reliability and public health protection. [RSWF 45]
72. The design requires emergency pumping capability be provided for all pump stations. For pump stations that receive flow from one or more pump stations through a force main or pump stations discharging through pipes 12 inches or larger, the design requires uninterrupted pumping capability be provided, including an in-place emergency generator. Where portable pumping and/or generating equipment or manual transfer is used, the design includes sufficient storage capacity with an alarm system to allow time for detection of pump station failure and transportation and connection of emergency equipment. [62-604.400(2)(a)1. and 2., F.A.C., and RSWF 46.423 and 46.433]
73. The design requires: 1) emergency standby systems to have sufficient capacity to start up and maintain the total rated running capacity of the station, including lighting, ventilation, and other auxiliary equipment necessary for safety and proper operation; 2) special sequencing controls be provided to start pump motors unless the generating equipment has capacity to start all pumps simultaneously with auxiliary equipment operating; 3) a riser from the force main with rapid connection capabilities and appropriate valving be provided for all pump stations to hook up portable pumps; and 4) all pump station reliability design features be compatible with the available temporary service power generating and pumping equipment of the authority responsible for operation and maintenance of the collection/transmission system. [62-604.400(2)(a)3., F.A.C., and RSWF 46.431]
74. The design provides for emergency equipment to be protected from operation conditions that would result in damage to the equipment and from damage at the restoration of regular electrical power. [RSWF 46.411, 46.417, and 46.432]

- \_\_\_\_\_ 75. For permanently-installed internal combustion engines, underground fuel storage and piping facilities are designed in accordance with applicable state and federal regulations; and the design requires engines to be located above grade with adequate ventilation of fuel vapors and exhaust gases. [RSWF 46.414 and 46.415]
- \_\_\_\_\_ 76. For permanently-installed or portable engine-driven pumps are used, the design includes provisions for manual start-up. [RSWF 46.422]
- \_\_\_\_\_ 77. Where independent substations are used for emergency power, each separate substation and its associated transmission lines is designed to be capable of starting and operating the pump station at its rated capacity. [RSWF 46.44]

Force Mains

- \_\_\_\_\_ 78. Force mains are designed to maintain, at design pumping rates, a cleansing velocity of at least 2 feet per second. The minimum force main diameter specified for raw wastewater is not less than 4 inches. [RSWF 48.1]
- \_\_\_\_\_ 79. The design requires: 1) branches of intersecting force mains be provided with appropriate valves such that one branch may be shut down for maintenance and repair without interrupting the flow of other branches; and 2) stubouts on force mains, placed in anticipation of future connections, be equipped with a valve to allow such connection without interruption of service. [62-604.400(2)(f), F.A.C.]
- \_\_\_\_\_ 80. The design requires air relief valves be placed at high points in the force main to prevent air locking. [RSWF 48.2]
- \_\_\_\_\_ 81. Specified force main pipe and joints are equal to water main strength materials suitable for design conditions. The force main, reaction blocking, and station piping are designed to withstand water hammer pressures and stresses associated with the cycling of wastewater pump stations. [RSWF 48.4]
- \_\_\_\_\_ 82. When the Hazen and Williams formula is used to calculate friction losses through force mains, the value for "C" is 100 for unlined iron or steel pipe for design. For other smooth pipe materials, such as PVC, polyethylene, lined ductile iron, the value for C does not exceed 120 for design. [RSWF 48.61]
- \_\_\_\_\_ 83. Where force mains are constructed of material, which might cause the force main to be confused with potable water mains, specifications require the force main to be clearly identified. [RSWF 48.7]
- \_\_\_\_\_ 84. Leakage tests for force mains are specified including testing methods and leakage limits. [RSWF 48.8]

\*RSWF = *Recommended Standards for Wastewater Facilities* (1997) as adopted by rule 62-604.300(5)(c), F.A.C.

B. Explanation for Requirements or Standards Marked "X" in II(5)A. Above (Attach additional sheets if necessary):

11 - NO VELOCITIES GREATER THAN 15 FPS PROPOSED

12 - NO SLOPES GREATER THAN 20% PROPOSED

19 - NO INVERTED SIPHONS PROPOSED

27-33 - NO STREAM CROSSINGS PROPOSED

34-84 NO PUMP STATIONS OR FORCE MAIN PROPOSED

**PART III - CERTIFICATIONS**

(1) Collection/Transmission System Permittee

I, the undersigned owner or authorized representative\* of Villa AM Meer  
 am fully aware that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. I agree to retain the design engineer or another professional engineer registered in Florida, to conduct on-site observation of construction, to prepare a certification of completion of construction, and to review record drawings for adequacy. Further, I agree to provide an appropriate operation and maintenance manual for the facilities pursuant to Rule 62-604.500(4), F.A.C., and to retain a professional engineer registered in Florida to examine (or to prepare if desired) the manual. I am fully aware that Department approval must be obtained before this project is placed into service for any purpose other than testing for leaks and testing equipment operation.

Signed \_\_\_\_\_ Date \_\_\_\_\_  
 Name James Tallman Title Managing Member

\*Attach a letter of authorization.

(2) Owner of Collection/Transmission System

I, the undersigned owner or authorized representative\* Villa AM Meer certify that we will be the Owner of this project after it is placed into service. I agree that we will operate and maintain this project in a manner that will comply with applicable Department rules. Also I agree that we will promptly notify the Department if we sell or legally transfer ownership of this project.

Signed \_\_\_\_\_ Date \_\_\_\_\_
Name James A. Tallman Title Managing Member
Company Name VAM LBK Development, LLC
Address 1990 Main Street Suite 750
City Sarasota State FL Zip 10022
Telephone 941-309-5383 Fax \_\_\_\_\_ Email jtallman@ascentiagr.com

\* Attach a letter of authorization.

(3) Wastewater Facility Serving Collection/Transmission System\*\*

If this is a Notice of Intent to use a general permit, check here:

[X] The undersigned owner or authorized representative\* of SOUTHWEST WATER RECLAMATION wastewater facility the hereby certifies that the above referenced facility has the capacity to receive the wastewater generated by the proposed collection system; is in compliance with the capacity analysis report requirements of Rule 62-600.405, F.A.C.; is not under a Department order associated with effluent violations or the ability to treat wastewater adequately; and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

If this is an application for an individual permit, check one:

[ ] The undersigned owner or authorized representative\* of wastewater facility the hereby certifies that the above referenced facility has and will have adequate reserve capacity to accept the flow from this project and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

[ ] The undersigned owner or authorized representative\* of wastewater facility the hereby certifies that the above referenced facility currently does not have, but will have prior to placing the proposed project into operation, adequate reserve capacity to accept the flow from this project and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

Name of Treatment Plant Serving Project SOUTHWEST WATER RECLAMATION FACILITY
County MANATEE City BRADENTON
DEP permit number FL A012619 Expiration Date 3/21/15
Maximum monthly average daily flow over the last 12 month period MGD Month(s) used
Maximum three-month average daily flow over the last 12 month MGD Month(s) used
Current permitted capacity 15.0 MGD [ ] AADF [ ] MADF [ ] TMADF
Current outstanding flow commitments (including this project) against treatment plant capacity:

Signed \_\_\_\_\_ Date \_\_\_\_\_
Name SIA MOLLANAZAR, P.E. Title DEPUTY DIRECTOR - ENGINEERING SERVICES
Address 1022 26TH AVE EAST
City BRADENTON State FL Zip 34208
Telephone 941-708-7450 Fax \_\_\_\_\_ Email SIA.MOLLANAZAR@MYMANATBEE.ORG

\* Attach a letter of authorization.

\*\* If there is an intermediate collection system, a letter shall be attached certifying that the intermediate downstream collection system has adequate reserve capacity to accept the flow from this project.

(4) Professional Engineer Registered in Florida

I, the undersigned professional engineer registered in Florida, certify that I am in responsible charge of the preparation and production of engineering documents for this project; that plans and specifications for this project have been completed; that I have expertise in the design of wastewater collection/transmission systems; and that, to the best of my knowledge and belief, the engineering design for this project complies with the requirements of Chapter 62-604, F.A.C.

(Affix Seal)

Signed \_\_\_\_\_  
Date \_\_\_\_\_

Name Timothy A. Dove, PE Florida Registration No. 43268  
Company Name George F. Young Inc.  
Address 10540 Portal Crossing, Suite 105  
City Bradenton State FL Zip 34211  
Telephone 94174729 Fax 941-747-7234 Email tdove@georgefyoung.com  
Portion of Project for Which ALL

(Affix Seal)

Signed \_\_\_\_\_  
Date \_\_\_\_\_

Name \_\_\_\_\_ Florida Registration No. \_\_\_\_\_  
Company Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax \_\_\_\_\_ Email \_\_\_\_\_  
Portion of Project for Which \_\_\_\_\_

(Affix Seal)

Signed \_\_\_\_\_  
Date \_\_\_\_\_

Name \_\_\_\_\_ Florida Registration No. \_\_\_\_\_  
Company Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax \_\_\_\_\_ Email \_\_\_\_\_  
Portion of Project for Which \_\_\_\_\_



# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

INSTRUCTIONS: This notice shall be completed and submitted by persons proposing to construct projects permitted under the "General Permit for Construction of Water Main Extensions for Public Water Systems" in Rule 62-555.405, F.A.C. AT LEAST 30 DAYS BEFORE BEGINNING CONSTRUCTION OF A WATER MAIN EXTENSION PROJECT, complete and submit one copy of this notice to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD) along with payment of the proper permit processing fee. (When completed, Part II of this notice serves as the preliminary design report for a water main extension project, and thus, it is unnecessary to submit a separate preliminary design report or drawings, specifications, and design data with this notice.) All information provided in this notice shall be typed or printed in ink. The DEP permit processing fee for projects requiring the services of a professional engineer during design is \$650, and the DEP permit processing fee for projects not requiring the services of a professional engineer during design is \$500.\* Some ACHDs charge a county permit processing fee in addition to the DEP permit processing fee. Checks for permit processing fees shall be made payable to the Department of Environmental Protection or the appropriate ACHD. NOTE THAT A SEPARATE NOTIFICATION AND A SEPARATE PERMIT PROCESSING FEE ARE REQUIRED FOR EACH NON-CONTIGUOUS PROJECT.†

\* Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more professional engineers licensed in Florida.

† Non-contiguous projects are projects that are neither interconnected nor located nearby one another (i.e., on the same site, on adjacent streets, or in the same neighborhood).

## I. General Project Information

A. Name of Project: Villa Am Meer

B. Description of Project and Its Purpose: Add fire suppression system main line for additional hydrants located at the project site.

### C. Location of Project

1. County Where Project Located: Sarasota

2. Description of Project Location: 2251 Gulf of Mexico Drive, Longboat Key Florida 34228

D. Estimate of Cost to Construct Project: \$25,000.00

E. Estimate of Dates for Starting and Completing Construction of Project: Start July 2014 to be completed by August 2015

### F. Permittee

PWS/Company Name: <u>Villa Am Meer</u>		PWS Identification No.:*	
PWS Type:*	<input checked="" type="checkbox"/> Community	<input type="checkbox"/> Non-Transient Non-Community	<input type="checkbox"/> Transient Non-Community
Contact Person: <u>James A. Tallman</u>		Contact Person's Title: <u>Executive Project Manager</u>	
Contact Person's Mailing Address: <u>1990 Main Street Suite 750</u>			
City: <u>Sarasota</u>		State: <u>Florida</u>	Zip Code: <u>10022</u>
Contact Person's Telephone Number: <u>941-309-5383</u>		Contact Person's Fax Number: <u>-</u>	
Contact Person's E-Mail Address: <u>jtallman@ascentiagr.com</u>			

\* This information is required only if the permittee is a public water system (PWS).

### G. Public Water System (PWS) Supplying Water to Project

PWS Name: <u>Town Of Longboat Key</u>		PWS Identification No.:	
PWS Type:	<input checked="" type="checkbox"/> Community	<input type="checkbox"/> Non-Transient Non-Community	<input type="checkbox"/> Transient Non-Community
PWS Owner: <u>Town Of Longboat Key</u>		Contact Person's Title: <u>Public Works Director</u>	
Contact Person: <u>Juan Florensa</u>			
Contact Person's Mailing Address: <u>600 General Harris St.</u>			
City: <u>Longboat Key</u>		State: <u>Florida</u>	Zip Code: <u>34228</u>
Contact Person's Telephone Number: <u>941-316-1988</u>		Contact Person's Fax Number: <u>941-316-1984</u>	
Contact Person's E-Mail Address: <u>JFLORENZA@LONGBOATKEY.ORG</u>			

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSS

Project Name: Villa Am Meer	Permittee: Villa Am Meer
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**H. Public Water System (PWS) that Will Own Project After It Is Placed into Permanent Operation**

PWS Name: Villa AM Meer		PWS Identification No.:*		
PWS Type:*	<input checked="" type="checkbox"/> Community	<input type="checkbox"/> Non-Transient Non-Community	<input type="checkbox"/> Transient Non-Community	<input type="checkbox"/> Consecutive
PWS Owner: Villa Am Meer				
Contact Person: James A. Tallman		Contact Person's Title: Managing Member		
Contact Person's Mailing Address: 1990 Main Street Suite 750				
City: Sarasota		State: Florida	Zip Code: 10022	
Contact Person's Telephone Number: 941-309-5383		Contact Person's Fax Number:		
Contact Person's E-Mail Address: jtallman@ascentiagr.com				

\* This information is required only if the owner/operator is an existing PWS.

**I. Professional Engineer(s) or Other Person(s) in Responsible Charge of Designing Project\***

Company Name: George F Young, Inc.		
Designer(s): Timothy A. Dove, P.E.		Title(s) of Designer(s): Project Manager
Qualifications of Designer(s):		
<input checked="" type="checkbox"/> Professional Engineer(s) Licensed in Florida – License Number(s): 43268		
<input type="checkbox"/> Public Officer(s) Employed by State, County, Municipal, or Other Governmental Unit of State <sup>†</sup>		
<input type="checkbox"/> Plumbing Contractor(s) Licensed in Florida – License Number(s): <sup>^</sup>		
Mailing Address of Designer(s): 10540 Portal Crossing, Suite 105		
City: Bradenton		State: Fl Zip Code: 34211
Telephone Number of Designer(s): 941-747-2981		Fax Number of Designer(s): 941-747-7234
E-Mail Address(es) of Designer(s): tdove@georgefyoung.com		

\* Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more professional engineers licensed in Florida.

<sup>†</sup> Attach a detailed construction cost estimate showing that the cost to construct this project is \$10,000 or less.

<sup>^</sup> Attach documentation showing that this project will be installed by the plumbing contractor(s) designing this project, documentation showing that this project involves a public water system serving a single property and fewer than 250 fixture units, and a detailed construction cost estimate showing that the cost to construct this project is \$50,000 or less.

**II. Preliminary Design Report for Project\***

**A. Service Area, Water Use, and Service Pressure Information**

**1. Design Type and Number of Service Connections, and Average Daily Water Demands and Maximum-Day Water Demands, in the Entire Area to Be Served by the Water Mains Being Constructed Under this Project:**

A = Type of Service Connection	B = Number of Service Connections	C = Average Daily Water Demand Per Service Connection, gpd	D = Total Average Daily Water Demand <sup>a</sup> , gpd (Columns BxC for Residential Service Connections)	E = Total Maximum-Day Water Demand <sup>b</sup> , gpd
Single-Family Home			0	
Mobile Home			0	
Apartment	16	300	4,800	5,600
Commercial, Institutional, or Industrial Facility <sup>b</sup>			0	
<b>Total</b>	<b>16</b>		<b>4,800</b>	<b>5,600</b>

a. Description of Commercial, Institutional, or Industrial Facilities and Explanation of Method(s) Used to Estimate Average Daily Water Demand for These Facilities: N/A

b. Explanation of Peaking Factor(s) or Method(s) Used to Estimate Maximum-Day Water Demand: TWO TIMES THE AVERAGE DAILY DEMAND.

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Villa Am Meer	Permittee: Villa Am Meer
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2. Explanation of Peaking Factor(s) or Method(s) Used to Estimate Design Peak-Hour Water Demand and, for Small Water Systems that Use Hydropneumatic Tanks or that Are Not Designed to Provide Fire Protection, Peak Instantaneous Water Demand: USING A PEAKING FACTOR OF 4, MAX HOUR WATER DEMAND = 4X DIVIDED BY 24 = 5,600 X 4/24 = 930 GPH

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3. Design Fire-Flow Rate and Duration: 750 GPM PLUS MAX HOUR USE = 765 GPM

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4. Design Service Pressure Range: 50-60 PSI

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**B. Project Site Information**

1. ATTACH A SITE PLAN OR SKETCH SHOWING THE SIZE AND APPROXIMATE LOCATION OF NEW OR ALTERED WATER MAINS, SHOWING THE APPROXIMATE LOCATION OF HYDRANTS, VALVES, METERS, AND BLOW-OFFS IN SAID MAINS, AND SHOWING HOW SAID MAINS CONNECT TO THE PUBLIC WATER SYSTEM SUPPLYING WATER FOR THE PROJECT.
2. Description of Any Areas Where New or Altered Water Mains Will Cross Above or Under Surface Water or Be Located in Soil that Is Known to Be Aggressive: NONE

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**C. Information About Compliance with Design and Construction Requirements**

1. If this project is being designed to comply with the following requirements, initial in ink before the requirements. If any of the following requirements do not apply to this project or if this project includes exceptions to any of the following requirements as allowed by rule, mark "X" before the requirements and complete Part II.C.2 below. *RSWW = Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.
  - \_\_\_\_\_ a. This project is being designed to keep existing water mains and service lines in operation during construction or to minimize interruption of water service during construction. [RSWW 1.3.a; exceptions allowed under FAC 62-555.330]
  - \_\_\_\_\_ b. All pipe, pipe fittings, pipe joint packing and jointing materials, valves, fire hydrants, and meters installed under this project will conform to applicable American Water Works Association (AWWA) standards. [FAC 62-555.320(21)(b), RSWW 8.0, and AWWA standards as incorporated into FAC 62-555.330; exceptions allowed under FAC 62-555.320(21)(c)]
  - \_\_\_\_\_ c. All public water system components, excluding fire hydrants, that will be installed under this project and that will come into contact with drinking water will conform to NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C., or other applicable standards, regulations, or requirements referenced in paragraph 62-555.320(3)(b), F.A.C. [FAC 62-555.320(3)(b); exceptions allowed under FAC 62-555.320(3)(d)]
  - \_\_\_\_\_ d. All pipe and pipe fittings installed under this project will contain no more than 8.0% lead, and any solder or flux used in this project will contain no more than 0.2% lead. [FAC 62-555.322]
  - \_\_\_\_\_ e. All pipe and pipe fittings installed under this project will be color coded or marked in accordance with subparagraph 62-555.320(21)(b)3, F.A.C., using blue as a predominant color. (Underground plastic pipe will be solid-wall blue pipe, will have a co-extruded blue external skin, or will be white or black pipe with blue stripes incorporated into, or applied to, the pipe wall; and underground metal or concrete pipe will have blue stripes applied to the pipe wall. Pipe striped during manufacturing of the pipe will have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90-degree intervals around the pipe, and that will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint will be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe; for pipe with an internal diameter of 24 inches or greater, tape or paint will be applied in continuous lines along each side of the pipe as well as along the top of the pipe. Aboveground pipe will be painted blue or will be color coded or marked like underground pipe.) [FAC 62-555.320(21)(b)3]
  - \_\_\_\_\_ f. All new or altered water mains included in this project are sized after a hydraulic analysis based on flow demands and pressure requirements. ATTACH A HYDRAULIC ANALYSIS JUSTIFYING THE SIZE OF ANY NEW OR ALTERED WATER MAINS WITH AN INSIDE DIAMETER OF LESS THAN THREE INCHES. [FAC 62-555.320(21)(b) and RSWW 8.1]

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Villa Am Meer	Permittee: Villa Am Meer
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- \_\_\_\_\_ g. The inside diameter of new or altered water mains that are included in this project and that are being designed to provide fire protection and serve fire hydrants will be at least six inches. [FAC 62-555.320(21)(b) and RSWW 8.1.2]
- \_\_\_\_\_ h. New or altered water mains that are included in this project and that are not being designed to carry fire flows do not have fire hydrants connected to them. [FAC 62-555.320(21)(b) and RSWW 8.1.5]
- \_\_\_\_\_ i. This project is being designed to minimize dead-end water mains by making appropriate tie-ins where practical. [FAC 62-555.320(21)(b) and RSWW 8.1.6.a]
- \_\_\_\_\_ j. New or altered dead-end water mains included in this project will be provided with a fire or flushing hydrant or blow-off for flushing purposes. [FAC 62-555.320(21)(b) and RSWW 8.1.6.b]
- \_\_\_\_\_ k. Sufficient valves will be provided on new or altered water mains included in this project so that inconvenience and sanitary hazards will be minimized during repairs. [FAC 62-555.320(21)(b) and RSWW 8.2]
- \_\_\_\_\_ l. New or altered fire hydrant leads included in this project will have an inside diameter of at least six inches and will include an auxiliary valve. [FAC 62-555.320(21)(b) and RSWW 8.3.3]
- \_\_\_\_\_ m. All fire hydrants that will be installed under this project and that will have unplugged, underground drains will be located at least three feet from any existing or proposed storm sewer, stormwater force main, pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., or vacuum-type sanitary sewer; at least six feet from any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-10, F.A.C.; and at least ten feet from any existing or proposed "on-site sewage treatment and disposal system." [FAC 62-555.314(4)]
- \_\_\_\_\_ n. At high points where air can accumulate in new or altered water mains included in this project, provisions will be made to remove the air by means of air relief valves, and automatic air relief valves will not be used in situations where flooding of the valve manhole or chamber may occur. [FAC 62-555.320(21)(b) and RSWW 8.4.1]
- \_\_\_\_\_ o. The open end of the air relief pipe from all automatic air relief valves installed under this project will be extended to at least one foot above grade and will be provided with a screened, downward-facing elbow. [FAC 62-555.320(21)(b) and RSWW 8.4.2]
- \_\_\_\_\_ p. New or altered chambers, pits, or manholes that contain valves, blow-offs, meters, or other such water distribution system appurtenances and that are included in this project will not be connected directly to any sanitary or storm sewer, and blow-offs or air relief valves installed under this project will not be connected directly to any sanitary or storm sewer. [FAC 62-555.320(21)(b) and RSWW 8.4.3]
- \_\_\_\_\_ q. New or altered water mains included in this project will be installed in accordance with applicable AWWA standards or in accordance with manufacturers' recommended procedures. [FAC 62-555.320(21)(b), RSWW 8.5.1, and AWWA standards as incorporated into FAC 62-555.330]
- \_\_\_\_\_ r. A continuous and uniform bedding will be provided in trenches for underground pipe installed under this project; backfill material will be tamped in layers around underground pipe installed under this project and to a sufficient height above the pipe to adequately support and protect the pipe; and unsuitably sized stones (as described in applicable AWWA standards or manufacturers' recommended installation procedures) found in trenches will be removed for a depth of at least six inches below the bottom of underground pipe installed under this project. [FAC 62-555.320(21)(b), RSWW 8.5.2]
- \_\_\_\_\_ s. All water main tees, bends, plugs, and hydrants installed under this project will be provided with thrust blocks or restrained joints to prevent movement. [FAC 62-555.320(21)(b) and RSWW 8.5.4]
- \_\_\_\_\_ t. New or altered water mains that are included in this project and that will be constructed of asbestos-cement or polyvinyl chloride pipe will be pressure and leakage tested in accordance with AWWA Standard C603 or C605, respectively, as incorporated into Rule 62-555.330, F.A.C., and all other new or altered water mains included in this project will be pressure and leakage tested in accordance with AWWA Standard C600 as incorporated into Rule 62-555.330. [FAC 62-555.320(21)(b)1 and AWWA standards as incorporated into FAC 62-555.330]
- \_\_\_\_\_ u. New or altered water mains, including fire hydrant leads and including service lines that will be under the control of a public water system and that have an inside diameter of three inches or greater, will be disinfected and bacteriologically evaluated in accordance with Rule 62-555.340, F.A.C. [FAC 62-555.320(21)(b)2 and FAC 62-555.340]
- \_\_\_\_\_ v. New or altered water mains that are included in this project and that will be installed in areas where there are known aggressive soil conditions will be protected through use of corrosion-resistant water main materials, through encasement of the water mains in polyethylene, or through provision of cathodic protection. [FAC 62-555.320(21)(b) and RSWW 8.5.7.d]

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSSs

Project Name: Villa Am Meer	Permittee: Villa Am Meer
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- \_\_\_\_\_ w. New or relocated, underground water mains included in this project will be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed vacuum-type sanitary sewer, storm sewer, stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.; a horizontal distance of at least six feet between the outside of the water main and the outside of any existing or proposed gravity-type sanitary sewer (or a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed gravity-type sanitary sewer if the bottom of the water main will be laid at least six inches above the top of the sewer); a horizontal distance of at least six feet between the outside of the water main and the outside of any existing or proposed pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.; and a horizontal distance of at least ten feet between the outside of the water main and all parts of any existing or proposed "on-site sewage treatment and disposal system." [FAC 62-555.314(1); exceptions allowed under FAC 62-555.314(5)]
- \_\_\_\_\_ x. New or relocated, underground water mains that are included in this project and that will cross any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer will be laid so the outside of the water main is at least six inches above the other pipeline or at least 12 inches below the other pipeline; and new or relocated, underground water mains that are included in this project and that will cross any existing or proposed pressure-type sanitary sewer, wastewater or stormwater force main, or pipeline conveying reclaimed water will be laid so the outside of the water main is at least 12 inches above or below the other pipeline. [FAC 62-555.314(2); exceptions allowed under FAC 62-555.314(5)]
- \_\_\_\_\_ y. At the utility crossings described in Part II.C.1.w above, one full length of water main pipe will be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline or the pipes will be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, storm sewers, stormwater force mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least six feet from all joints in gravity- or pressure-type sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C. [FAC 62-555.314(2); exceptions allowed under FAC 62-555.314(5)]
- \_\_\_\_\_ z. New or altered water mains that are included in this project and that will cross above surface water will be adequately supported and anchored, protected from damage and freezing, and accessible for repair or replacement. [FAC 62-555.320(21)(b) and RSWW 8.7.1]
- \_\_\_\_\_ aa. New or altered water mains that are included in this project and that will cross under surface water will have a minimum cover of two feet. [FAC 62-555.320(21)(b) and RSWW 8.7.2]
- \_\_\_\_\_ bb. New or altered water mains that are included in this project and that will cross under surface water courses greater than 15 feet in width will have flexible or restrained, watertight pipe joints and will include valves at both ends of the water crossing so the underwater main can be isolated for testing and repair; the aforementioned isolation valves will be easily accessible and will not be subject to flooding; the isolation valve closest to the water supply source will be in a manhole; and permanent taps will be provided on each side of the isolation valve within the manhole to allow for insertion of a small meter to determine leakage from the underwater main and to allow for sampling of water from the underwater main. [FAC 62-555.320(21)(b) and RSWW 8.7.2]
- \_\_\_\_\_ cc. This project is being designed to include proper backflow protection at those new or altered service connections where backflow protection is required or recommended under Rule 62-555.360, F.A.C., or in *Recommended Practice for Backflow Prevention and Cross-Connection Control*, AWWA Manual M14, as incorporated into Rule 62-555.330, F.A.C.; or the public water system that will own this project after it is placed into operation has a cross-connection control program requiring water customers to install proper backflow protection at those service connections where backflow protection is required or recommended under Rule 62-555.360, F.A.C., or in AWWA Manual M14. [FAC 62-555.360 and AWWA Manual M14 as incorporated into FAC 62-555.330]
- \_\_\_\_\_ dd. Neither steam condensate, cooling water from engine jackets, nor water used in conjunction with heat exchangers will be returned to the new or altered water mains included in this project. [FAC 62-555.320(21)(b) and RSWW 8.8.2]



# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Villa Am Meer	Permittee: Villa Am Meer
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### III. Certifications

#### A. Certification by Permittee

I am duly authorized to sign this notice on behalf of the permittee identified in Part I.F of this notice. I certify that, to the best of my knowledge and belief, this project complies with Chapter 62-555, F.A.C. I also certify that construction of this project has not begun yet and that, to the best of my knowledge and belief, this project does not include any of the following construction work:

- construction of water mains conveying raw or partially treated drinking water;
- construction of drinking water treatment, pumping, or storage facilities or conflict manholes;
- construction of water mains in areas contaminated by low-molecular-weight petroleum products or organic solvents;
- construction of an interconnection between previously separate public water systems or construction of water mains that create a "new system" as described under subsection 62-555.525(1), F.A.C.; or
- construction of water mains that will remain dry following completion of construction.

(A specific construction permit is required for each project involving any of the above listed construction work.)

I understand that, if this project is designed under the responsible charge of one or more professional engineers (PEs) licensed in Florida, the permittee must retain a Florida-licensed PE to take responsible charge of inspecting construction of this project for the purpose of determining in general if the construction proceeds in compliance with the Department of Environmental Protection construction permit, including the approved preliminary design report, for this project. I understand that the permittee must have complete record drawings prepared for this project. I also understand that the permittee must submit a certification of construction completion to the Department and obtain written approval, or clearance, from the Department before the permittee places this project into operation for any purpose other than disinfection or testing for leaks.

	James A. Tallman	Managing Member
Signature and Date	Printed or Typed Name	Title

#### B. Certification by PWS Supplying Water to Project

I am duly authorized to sign this notice on behalf of the PWS identified in Part I.G of this notice. I certify that said PWS will supply the water necessary to meet the design water demands for this project. As indicated below, the water treatment plant(s) to which this project will be connected has(have) the capacity necessary to meet the design water demands for this project, and I certify that all other PWS components affected by this project also have the capacity necessary to meet the design water demands for this project. I certify that said PWS is in compliance with applicable planning requirements in Rule 62-555.348, F.A.C.; applicable cross-connection control requirements in Rule 62-555.360, F.A.C.; and to the best of my knowledge and belief, all other applicable rules in Chapters 62-550, 62-555, and 62-699, F.A.C.; furthermore, I certify that, to the best of my knowledge and belief, said PWS's connection to this project will not cause said PWS to be in noncompliance with Chapter 62-550 or 62-555, F.A.C. I also certify that said PWS has reviewed the preliminary design report for this project and that said PWS considers the connection(s) between this project and said PWS acceptable as designed.

- Name(s) of Water Treatment Plant(s) to Which this Project Will Be Connected: \_\_\_\_\_
- Total Permitted Maximum Day Operating Capacity of Plant(s), gpd: \_\_\_\_\_
- Total Maximum Day Flow at Plant(s) as Recorded on Monthly Operating Reports During Past 12 Months, gpd: \_\_\_\_\_

	Juan Florensa	PUBLIC WORKS DIRECTOR
Signature and Date	Printed or Typed Name	Title

#### C. Certification by PWS that Will Own Project After It Is Placed into Permanent Operation

I am duly authorized to sign this notice on behalf of the PWS identified in Part I.H of this notice. I certify that said PWS will own this project after it is placed into permanent operation. I also certify that said PWS has reviewed the preliminary design report for this project and that said PWS considers this project acceptable as designed.

	Juan Florensa	PUBLIC WORKS DIRECTOR
Signature and Date	Printed or Typed Name	Title

# NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Project Name: Villa Am Meer	Permittee: Villa Am Meer
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**D. Certification by Professional Engineer(s) in Responsible Charge of Designing Project\***

I, the undersigned professional engineer licensed in Florida, am in responsible charge of designing this project. I certify that, to the best of my knowledge and belief, the design of this project complies with Chapter 62-555, F.A.C. I also certify that, to the best of my knowledge and belief, this project is not being designed to include any of the following construction work:

- construction of water mains conveying raw or partially treated drinking water;
- construction of drinking water treatment, pumping, or storage facilities or conflict manholes;
- construction of water mains in areas contaminated by low-molecular-weight petroleum products or organic solvents;
- construction of an interconnection between previously separate public water systems or construction of water mains that create a "new system" as described under subsection 62-555.525(1), F.A.C.; or
- construction of water mains that will remain dry following completion of construction.

(A specific construction permit is required for each project involving any of the above listed construction work.)

Signature, Seal, and Date:
Printed/Typed Name: Timothy A. Dove
License Number: 43268
Portion of Preliminary Design Report for Which Responsible: ALL

Signature, Seal, and Date:
Printed/Typed Name:
License Number:
Portion of Preliminary Design Report for Which Responsible:

\* Except as noted in paragraphs 62-555.520(3)(a) and (b), F.A.C., projects shall be designed under the responsible charge of one or more professional engineers (PEs) licensed in Florida. If this project is being designed under the responsible charge of one or more PEs licensed in Florida, Part III.D of this notice shall be completed by the PE(s) in responsible charge. If this project is not being designed under the responsible charge of one or more PEs licensed in Florida, Part III.D does not have to be completed.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DRIVEWAY/CONNECTION APPLICATION  
 FOR ALL CATEGORIES**

**OFFICE USE ONLY**

Application Number: \_\_\_\_\_

Category: \_\_\_\_\_

Section/Mile Post: \_\_\_\_\_

Section/Mile Post: \_\_\_\_\_

Received By: \_\_\_\_\_

FDOT STAFF (TYPE OR PRINT)

Date: \_\_\_\_\_

State Road: \_\_\_\_\_

State Road: \_\_\_\_\_

**Instructions – To Applicant**

- Contact the Department of Transportation to determine what plans and other documents you are required to submit with your application.
- Complete this form (some questions may not apply to you) and attach all necessary documents and submit it to the Department of Transportation.
- For help with this form contact your local Maintenance or District Office.
  - Or visit our website at [www.dot.state.fl.us/onestopp permitting](http://www.dot.state.fl.us/onestopp permitting) for the contact person and phone number in your area.
  - You may also email – [driveways@dot.state.fl.us](mailto:driveways@dot.state.fl.us)
  - Or call your District or local Florida Department of Transportation Office and ask for Driveway Permits.

Please print or type

**APPLICANT:**

Check one:

Owner       Lessee       Contract to Purchase

Name: VAM LBK Development, LLC

Responsible Officer or Person: James Tallman

If the Applicant is a Company or Organization, Name: VAM LBK Development, LLC

Address: 1990 Main Street Suite 750

City, State: Sarasota, Florida

Zip: 10022 Phone: 941-309-5383 Fax: -

Email: jtallman@ascentiagr.com

**LAND OWNER:** (If not applicant)

Name: BBC Key LLC

If the Applicant is a Company or Organization, Name: \_\_\_\_\_

Address: 565 Skokie Boulevard Suite 555

City, State: Northbrook, IL

Zip: 60062 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DRIVEWAY/CONNECTION APPLICATION  
 FOR ALL CATEGORIES**

**AUTHORIZED REPRESENTATIVE:** If specified by Applicant to handle, represent, sign, and file the application –  
**NOTE:** A notarized letter of authorization must be provided with the Application.

Name: James A. Tallman  
 Company Name: VAM LBK Development, LLC  
 Address: 1990 Main Street Suite 750  
 City, State: Sarasota, Florida  
 Zip: 10022 Phone: 941-309-5383 Fax: \_\_\_\_\_  
 Email: jtallman@ascentiagr.com

Address of property to be served by permit (if known):  
2251 Gulf of Mexico Drive; Longboat Key, Florida 34228  
 If address is not known, provide distance from nearest intersecting public street (such as, 500 feet south of Main St.)

Check here if you are requesting a  
 new driveway     temporary driveway     modification to existing driveway     safety upgrade

Does the property owner own or have any interests in any adjacent property?  
 No     Yes, if yes – please describe:  
 Are there other existing or dedicated public streets, roads, highways or access easements bordering or within the property?  
 No     Yes, if yes – list them on our plans and indicate the proposed and existing access points.

Local Government Development Review or Approval Information:  
 Local Government Contact: Town of Longboat Key  
 Name: Steve Schield  
 Government Agency: Town of Longboat Key  
 Phone #: 941-316-1966

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DRIVEWAY/CONNECTION APPLICATION**  
**FOR ALL CATEGORIES**

If you are requesting commercial or industrial access, please indicate the types and number of businesses and provide the floor area square footage of each. Use additional sheets if necessary.

Business (Name and Type)	Square Footage	Business (Name and Type)	Square Footage
1. r		3.	
2.		4.	

If you are requesting a residential development access, what is the type (single family, apartment, townhouse) and number of units?

Type	Number of Units
Condominium	16

Provide an estimate of the daily traffic volume anticipated for the entire property at build out. (An individual single family home, duplex, or quad-plex is not required to complete this section).

Daily Traffic Estimate = 67 Trips (Use the latest Institute of Transportation Engineers (ITE) Trip Generation Report)

If you used the ITE Trip Generation Report, provide the land use code, independent variable, and reference page number.

ITE Land Use Code 232	Independent Variable Dwelling Unit	ITE Report page number reference 400 (7 <sup>th</sup> Edition Volume 2 of 3)
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Check with the Florida DOT Office where you will return this form to determine which of the following documents are required to complete the review of your application.

Plans should be 11" x 17" (scale 1" x 50') Note: No plans larger than 24" x 36" will be accepted a) Highway and driveway plan profile b) Drainage plan showing impact to the highway right-of-way c) Map and letters detailing utility locations before and after Development in and along the right of way d) Subdivision, zoning, or development plans e) Property map indicating other access, bordering roads and streets	f) Proposed access design g) Parcel and ownership maps including easements (Boundary Survey) h) Signing and striping plans i) Traffic Control/Maintenance of Traffic plan j) Proof of liability insurance k) Traffic Impact Study l) Cross section of roadway every 100' if exclusive turn lanes are required
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**Important Notices to Applicant Before Signing Application**

**The Department Reserves The Right To Change Traffic Features And Devices In Right Of Way At Any Time**  
 Proposed traffic control features and devices in the right of way, such as median openings and other traffic control devices, are not part of the connection(s) to be authorized by a connection permit. The Department reserves the right to change these features and devices in the future in order to promote safety in the right of way or efficient traffic operations on the highway. Expenditure by the applicant of monies for installation or maintenance of such features or devices shall not create any interest in the maintenance of such features or devices.

**Significant Changes In Property Use Must Undergo Further Review**  
 If an access permit is issued to you it will state the terms and conditions for its use. Significant changes in the use as defined in Section 335.182(3), Florida Statutes, of the permitted access not consistent with the terms and conditions listed on the permit may be considered a violation of the permit.

**All Information I Give Is Accurate**  
 I certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief, such information is true, complete and accurate.

**Starting Work On The Driveway Connection After I Get My Permit Means I Accept All the Conditions In My Permit**  
 I will not begin work on the connection until I receive my Permit and I understand all the conditions of the Permit. When I begin work on the connection, I am accepting all conditions listed in my Permit.

Applicant Name (Printed): James A. Tallman

Applicant's signature: \_\_\_\_\_ Date \_\_\_\_\_

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DRIVEWAY/CONNECTION PERMIT  
FOR ALL CATEGORIES**

**PART 1: PERMIT INFORMATION**

Application Number: \_\_\_\_\_

Permit Category: B Access Classification: 6

Project: Villa AM Meer

Permittee: VAM LBK Development, LLC

Section/Mile Post: 17030 / 6.574 State Road: 789

Section/Mile Post: - State Road: -

**PART 2: PERMITTEE INFORMATION**

Permittee Name: VAM LBK Development, LLC

Permittee Mailing Address: 1990 Main Street Suite 750

City, State, Zip: Sarasota, Florida 10022

Telephone: 941-309-5383

Engineer/Consultant/or Project Manager: George F. Young, Inc. / Timothy A. Dove, PE

Engineer responsible for construction inspection: Timothy A. Dove, PE 43268  
NAME P.E. #

Mailing Address: 10540 Portal Crossing, Suite 105

City, State, Zip: Bradenton, Florida 34211

Telephone: 941-747-2981 Mobile Phone: 941-400-6044

**PART 3: PERMIT APPROVAL**

The above application has been reviewed and is hereby approved subject to all Provisions as attached.

Permit Number: \_\_\_\_\_  
Department of Transportation

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Department Representative's Name: \_\_\_\_\_

Temporary Permit:  YES  NO (If temporary, this permit is only valid for 6 months)

Special provisions attached:  YES  NO

Date of Issuance: \_\_\_\_\_

If this is a normal (non-temporary) permit it authorizes construction for one year from the date of issuance. This can only be extended by the Department as specific in 14-96.007(6).

**See following pages for General and Special Provisions**

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DRIVEWAY/CONNECTION PERMIT  
FOR ALL CATEGORIES****PART 4: GENERAL PROVISIONS**

1. Notify the Department of Transportation Maintenance Office at least 48 hours in advance of starting proposed work.  
Phone: 941-359-7313 \_\_\_\_\_, Attention: ED GIDDENS \_\_\_\_\_
2. A copy of the approved permit must be displayed in a prominent location in the immediate vicinity of the connection of construction.
3. Comply with Rule 14-96.008(1), F.A.C., Disruption of Traffic.
4. Comply with Rule 14-96.008(7), F.A.C., on Utility Notification Requirements.
5. All work performed in the Department's right of way shall be done in accordance with the most current Department standards, specifications and the permit provisions.
6. The permittee shall not commence use of the connection prior to a final inspection and acceptance by the Department.
7. Comply with Rule 14-96.003(3)(a), F.A.C., Cost of Construction.
8. If a Significant Change of the permittee's land use, as defined in Section 335.182, Florida Statutes, occurs, the Permittee must contact the Department.
9. Medians may be added and median openings may be changed by the Department as part of a Construction Project or Safety Project. The provision for a median might change the operation of the connection to be for right turns only.
10. All conditions in NOTICE OF INTENT WILL APPLY unless specifically changed by the Department.
11. All approved connection(s) and turning movements are subject to the Department's continuing authority to modify such connection(s) or turning movements in order to protect safety and traffic operations on the state highway or State Highway System.
12. **Transportation Control Features and Devices in the State Right of Way.** Transportation control features and devices in the Department's right of way, including, but not limited to, traffic signals, medians, median openings, or any other transportation control features or devices in the state right of way, are operational and safety characteristics of the State Highway and are not means of access. The Department may install, remove or modify any present or future transportation control feature or device in the state right of way to make changes to promote safety in the right of way or efficient traffic operations on the highway.
13. The Permittee for him/herself, his/her heirs, his/her assigns and successors in interest, binds and is bound and obligated to save and hold the State of Florida, and the Department, its agents and employees harmless from any and all damages, claims, expense, or injuries arising out of any act, neglect, or omission by the applicant, his/her heirs, assigns and successors in interest that may occur by reason of this facility design, construction, maintenance, or continuing existence of the connection facility, except that the applicant shall not be liable under this provision for damages arising from the sole negligence of the Department.
14. The Permittee shall be responsible for determining and notify all other users of the right of way.
15. Starting work on the State Right of Way means that I am accepting all conditions on the Permit.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DRIVEWAY/CONNECTION PERMIT  
 FOR ALL CATEGORIES**

**PART 5: SPECIAL PROVISIONS**

NON-CONFORMING CONNECTIONS:  YES  NO

If this is a non-conforming connection permit, as defined in Rule Chapters 14-96 and 14-97, then the following shall be a part of this permit.

1. The non-conforming connection(s) described in this permit is (are) not permitted for traffic volumes exceeding the Permit Category on page 1 of this permit, or as specified in "Other Special Provisions" below.
2. All non-conforming connections will be subject to closure or relocation when reasonable access becomes available in the future.

OTHER SPECIAL PROVISIONS:

**PART 6: APPEAL PROCEDURES**

You may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. If you dispute the facts stated in the foregoing Notice of Intended Department Action (hereinafter Notice), you may petition for a formal administrative hearing pursuant to section 120.57(1), Florida Statutes. If you agree with the facts stated in the Notice, you may petition for an informal administrative hearing pursuant to section 120.57(2), Florida Statutes. You must file the petition with:

Clerk of Agency Proceedings  
 Department of Transportation  
 Haydon Burns Building  
 605 Suwannee Street, M.S. 58  
 Tallahassee, Florida 32399-0458

The petition for an administrative hearing must conform to the requirements of Rule 28-106.201(2) or Rule 28-106.301(2), Florida Administrative Code, and be filed with the Clerk of Agency Proceedings by 5:00 p.m. no later than 21 days after you received the Notice. The petition must include a copy of the Notice, be legible, on 8 1/2 by 11 inch white paper, and contain:

1. Your name, address, telephone number, any Department of Transportation identifying number on the Notice, if known, the name and identification number of each agency affected, if known, and the name, address, and telephone number of your representative, if any, which shall be the address for service purposes during the course of the proceeding.
2. An explanation of how your substantial interests will be affected by the action described in the Notice;
3. A statement of when and how you received the Notice;
4. A statement of all disputed issues of material fact. If there are none, you must so indicate;
5. A concise statement of the ultimate facts alleged, including the specific facts you contend warrant reversal or modification of the agency's proposed action, as well as an explanation of how the alleged facts relate to the specific rules and statutes you contend require reversal or modification of the agency's proposed action;
6. A statement of the relief sought, stating precisely the desired action you wish the agency to take in respect to the agency's proposed action.

If there are disputed issues of material fact a formal hearing will be held, where you may present evidence and argument on all issues involved and conduct cross-examination. If there are no disputed issues of material fact an informal hearing will be held, where you may present evidence or a written statement for consideration by the Department.

Mediation, pursuant to section 120.573, Florida Statutes, may be available if agreed to by all parties, and on such terms as may be agreed upon by all parties. The right to an administrative hearing is not affected when mediation does not result in a settlement.

Your petition for an administrative hearing shall be dismissed if it is not in substantial compliance with the above requirements of Rule 28-106.201(2) or Rule 28-106.301(2), Florida Administrative Code. If you fail to timely file your petition in accordance with the above requirements, you will have waived your right to have the intended action reviewed pursuant to chapter 120, Florida Statutes, and the action set forth in the Notice shall be conclusive and final.

SECTION A

FOR AGENCY USE ONLY	
ACOE Application #	DEP/WMD Application #
Date Application Received	Date Application Received
Proposed Project Lat.	Fee Received \$
Proposed Project Long.	Fee Receipt #

**PART 1:**

Are any of the activities described in this application proposed to occur in, on, or over wetlands or other surface waters?  yes  no

Is this application being filed by or on behalf of a government entity or drainage district?  yes  no

**PART 2:**

A. Type of Environmental Resource Permit Requested (check at least one). See Attachment 2 for thresholds and descriptions.

- Noticed General - include information requested in Section B.
- Standard General (Single Family Dwelling) - include information requested in Sections C and D.
- Standard General (all other Standard General projects) - include information requested in Sections C and E.
- Individual (Single Family Dwelling) - include information requested in Sections C and D.
- Individual (all other Individual projects) - include information requested in Sections C and E.
- Conceptual - include information requested in Sections C and E.
- Mitigation Bank Permit (construction) - include information requested in Sections C and F. (If the proposed mitigation bank involves the construction of a surface water management system requiring another permit defined above, check the appropriate box and submit the information requested by the applicable section.)
- Mitigation Bank (conceptual) - include information requested in Sections C and F.

B. Type of activity for which you are applying (check at least one)

- Construction or operation of a new system, other than a solid waste facility, including dredging or filling in, on or over wetlands and other surface waters.
  - Construction, expansion or modification of a solid waste facility.
  - Alteration or operation of an existing system which was not previously permitted by a WMD or DEP.
  - Modification of a system previously permitted by a WMD or DEP.  
 Provide previous permit numbers: \_\_\_\_\_
- |  |  |
|--|--|
| <input type="checkbox"/> Alteration of a system  | <input type="checkbox"/> Extension of permit duration                  |
| <input type="checkbox"/> Abandonment of a system | <input type="checkbox"/> Construction of additional phases of a system |
| <input type="checkbox"/> Removal of a system     |  |

C. Are you requesting authorization to use Sovereign Submerged Lands?

yes  no

(See Section G and Attachment 5 for more information before answering this question.)

D. For activities in, on, or over wetlands or other surface waters, check type of federal dredge and fill permit requested:

- |                                     |  |                                  |
|-------------------------------------|--|----------------------------------|
| <input type="checkbox"/> Individual | <input type="checkbox"/> Programmatic General      | <input type="checkbox"/> General |
| <input type="checkbox"/> Nationwide | <input checked="" type="checkbox"/> Not Applicable |                                  |

E. Are you claiming to qualify for an exemption?  yes  no

If yes, provide rule number if known. \_\_\_\_\_

<b>PART 3: A. OWNER(S) OF LAND</b>	<b>B. ENTITY TO RECEIVE PERMIT (IF OTHER THAN OWNER)</b>
Name James A. Tallman	Name
Title and Company Managing Member / VAM LBK Development, LLC	Title and Company
Address 1990 Main Street Suite 750	Address
City, State, Zip Sarasota, Florida 10022	City, State, Zip
Telephone and Fax 941-309-5383	Telephone and Fax
E-mail Address: (optional) <a href="mailto:jtallman@ascentiagr.com">jtallman@ascentiagr.com</a>	E-mail Address: (optional)
<b>C. AGENT AUTHORIZED TO SECURE PERMIT</b>	<b>D. CONSULTANT (IF DIFFERENT FROM AGENT)</b>
Name	Name Timothy A. Dove, PE
Title and Company	Title and Company Project Manager / George F. Young, Inc.
Address	Address 10540 Portal Crossing, Suite 105
City, State, Zip	City, State, Zip Bradenton, Florida 34211
Telephone and Fax	Telephone and Fax (941) 747-2981
E-mail Address: (optional)	E-mail Address: (optional) <a href="mailto:TDove@georgefyoung.com">TDove@georgefyoung.com</a>
<b>PART 4: (Please provide metric equivalent for federally funded projects):</b>	
A. Name of Project, including phase if applicable: <u>Villa Am Meer</u>	
B. Is this application for part of a multi-phase project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
C. Total applicant-owned area contiguous to the project? <u>5.03</u> ac.; _____ ha.	
D. Total area served by the system: <u>5.03</u> ac.; _____ ha.	
E. Impervious area for which a permit is sought: <u>2.52</u> ac.; _____ ha.	
F. Volume of water that the system is capable of impounding: <u>1.12</u> ac. ft.; _____ m <sup>3</sup>	
G. What is the total area of work in, on, or over wetlands or other surface waters? <u>0.00</u> ac.; _____ ha.; _____ sq. ft.; _____ sq. m.	
H. Total volume of material to be dredged: <u>N/A</u> yd <sup>3</sup> ; _____ m <sup>3</sup>	
I. Number of new boat slips proposed: <u>N/A</u> wet slips; _____ dry slips	

PART 5:

Project location (use additional sheets if needed):

County(ies) Sarasota County

Section(s) 8 Township 36S Range 17E

Section(s) 16 Township 36S Range 17E

Section(s) Township Range

Land Grant name, if applicable: \_\_\_\_\_

Tax Parcel Identification Number: 0008-04-0008

Street Address, Road, or other location: 2251 Gulf of Mexico Drive,

City, Zip Code, if applicable: Longboat Key Florida 34228

PART 6: Describe in general terms the proposed project, system, or activity.

Construction of a multifamily residential 16 unit building on the island of Longboat Key to include an access road, utilities, pool deck and stormwater facility areas including above and below ground storage areas /vaults.

**PART 7:**

A. If there have been any pre-application meetings, including on-site meetings, with regulatory staff, please list the date(s), location(s), and names of key staff and project representatives.

Ft. Myers office meeting on August 8 2013 with Nolin Moon / Lucy Blair / Ajaya Satyal / Tony McNeal / Megan Mills / Mark Adler GFY

B. Please identify by number any MSSW/Wetland Resource/ERP/ACOE Permits pending, issued or denied for projects at the location, and any related enforcement actions. **N/A**

Agency	Date	No./Type of Application	Action Taken
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

C. **Note:** The following information is required for projects proposed to occur in, on or over wetlands that need a federal dredge and fill permit or an authorization to use state owned submerged lands. Please provide the names, addresses and zip codes of property owners whose property directly adjoins the project (excluding application) and/or (for proprietary authorizations) is located within a 500 ft. radius of the applicant's land. Please attach a plan view showing the owner's names and adjoining property lines. Attach additional sheets if necessary. **N/A**

- |    |    |
|----|----|
| 1. | 2. |
| 3. | 4. |
| 5. | 6. |
| 7. | 8. |

PART 8:

A. By signing this application form, I am applying, or I am applying on behalf of the applicant, for the permit and any proprietary authorizations identified above, 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 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 or proprietary authorization 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, or I agree on behalf of the applicant, to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a responsible operation entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

James A. Tallman

Typed/Printed Name of Applicant (If no Agent is used)  
 or Agent (If one is so authorized below)

\_\_\_\_\_  
 Typed/Printed Name of Co-Applicant

\_\_\_\_\_  
 Signature of Applicant/Agent

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Signature of Co-Applicant

\_\_\_\_\_  
 Date

Managing Member

(Corporate Title if applicable)

\_\_\_\_\_  
 (Corporate Title if applicable)

**AN AGENT MAY SIGN ABOVE ONLY IF THE APPLICANT COMPLETES THE FOLLOWING:**

B. I hereby designate and authorize the agent listed above to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and/or proprietary authorization indicated above; and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

_____ Typed/Printed Name of Applicant	_____ Signature of Applicant	_____ Date
--	---------------------------------	---------------

\_\_\_\_\_  
 (Corporate Title if applicable)

Please note: The applicant's original signature (not a copy) is required above.

**PERSON AUTHORIZING ACCESS TO THE PROPERTY MUST COMPLETE THE FOLLOWING:**

C. I either own the property described in this application or I have legal authority to allow access to the property, and I consent, after receiving prior notification, to any site visit on the property by agents or personnel from the Department of Environmental Protection, the Water Management District and the U.S. Army Corps of Engineers necessary for the review and inspection of the proposed project specified in this application. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review and inspection. Further, I agree to provide entry to the project site for such agents or personnel to monitor permitted work if a permit is granted.

James A. Tallman

Typed/Printed Name of Applicant

\_\_\_\_\_  
 Signature of Applicant

\_\_\_\_\_  
 Date

Managing Member

(Corporate Title if applicable)

## SECTION C

### Environmental Resource Permit Notice of Receipt of Application

Note: this form does not need to be submitted for noticed general permits.

This information is required in addition to that required in other sections of the application. Please submit five copies of this notice of receipt of application and all attachments with the other required information. Please submit all information on 8 1/2" x 11" paper.

Project Name: Villa AM Meer  
County: Sarasota County  
Owner: BBC Key LLC  
Applicant: VAM LBK Development, LLC  
Applicant's Address: 1990 Main Street Suite 750; Sarasota Florida 10022

1. Indicate the project boundaries on a USGS quadrangle map. Attach a location map showing the boundary of the proposed activity. The map should also contain a north arrow and a graphic scale; show Section(s), Township(s), and Range(s); and must be of sufficient detail to allow a person unfamiliar with the site to find it.

#### SEE EXHIBIT 3 OF THE ERP APPLICATION PACKAGE

2. Provide the names of all wetlands, or other surface waters that would be dredged, filled, impounded, diverted, drained, or would receive discharge (either directly or indirectly), or would otherwise be impacted by the proposed activity, and specify if they are in an Outstanding Florida Water or Aquatic Preserve:

NONE

3. Attach a depiction (plan and section views), which clearly shows the works or other facilities proposed to be constructed. Use multiple sheets, if necessary. Use a scale sufficient to show the location and type of works.

#### SEE EXHIBIT 2 OF THE ERP APPLICATION PACKAGE AND THE CONSTRUCTION PLANS

4. Briefly describe the proposed project (such as "construct dock with boat shelter", "replace two existing culverts", "construct surface water management system to serve 150 acre residential development"):

#### CONSTRUCT A STORMWATER MANAGEMENT SYSTEM TO SERVE THE CONDOMINIUMS AT VILLA AM MEER

5. Specify the acreage of wetlands or other surface waters, if any, that are proposed to be filled, excavated, or otherwise disturbed or impacted by the proposed activity:

#### NO PROPOSED IMPACTS TO WETLANDS

6. Provide a brief statement describing any proposed mitigation for impacts to wetlands and other surface waters (attach additional sheets if necessary): N/A

#### FOR AGENCY USE ONLY

Application Name:  
Application Number:  
Office where the application can be inspected:

Note to Notice recipient: The information in this notice has been submitted by the applicant, and has not been verified by the agency. It may be incorrect, incomplete or may be subject to change.

## SECTION E

### INFORMATION REQUESTED FOR STANDARD GENERAL, INDIVIDUAL AND CONCEPTUAL ENVIRONMENTAL RESOURCE PERMIT APPLICATIONS NOT RELATED TO A SINGLE FAMILY DWELLING UNIT

Please provide the information requested below if the proposed project requires either a standard general, individual, or conceptual approval environmental resource permit and is not related to an individual, single family dwelling unit, duplex or quadruplex. The information listed below represents the level of information that is usually required to evaluate an application. The level of information required for a specific project will vary depending on the nature and location of the site and the activity proposed. Conceptual approvals generally do not require the same level of detail as a construction permit. However, providing a greater level of detail will reduce the need to submit additional information at a later date. If an item does not apply to your project, proceed to the next item. Please submit all information that is required by the Department on either 8 1/2 in. X 11 in. paper or 11 in. X 17 in. paper. Larger drawings may be submitted to supplement but not replace these smaller drawings.

#### I. Site Information

A. Provide a map(s) of the project area and vicinity delineating USDA/SCS soil types.

**SEE EXHIBIT 5 OF THE APPLICATION PACKAGE**

B. Provide recent aerials, legible for photo interpretation with a scale of 1" = 400 ft, or more detailed, with project boundaries delineated on the aerial.

**SEE EXHIBIT 2 OF THE ERP APPLICATION PACKAGE & THE CONSTRUCTION PLANS.**

C. Identify the seasonal high water or mean high tide elevation and normal pool or mean low tide elevation for each on site wetland or surface water, including receiving waters into which runoff will be discharged. Include dates, datum, and methods used to determine these elevations.

**SEE APPENDIX F OF THE ERP APPLICATION PACKAGE.**

D. Identify the wet season high water tables at the locations representative of the entire project site. Include dates, datum, and methods used to determine these elevations.

**SEE APPENDIX F OF THE ERP APPLICATION PACKAGE.**

#### II. Environmental Considerations

A. Provide results of any wildlife surveys that have been conducted on the site, and provide any comments pertaining to the project from the Florida Game and Fresh Water Fish Commission and the U.S. Fish and Wildlife Service.  
N/A

B. Provide a description of how water quantity, quality, hydroperiod, and habitat will be maintained in on-site wetlands and other surface waters that will be preserved or will remain undisturbed.

N/A

C. Provide a narrative description of any proposed mitigation plans, including purpose, maintenance, monitoring, and construction sequence and techniques, and estimated costs.

N/A

D. Describe how boundaries of wetlands or other surface waters were determined. If there has ever been a jurisdictional declaratory statement, a formal wetland determination, a formal determination, a validated informal determination, or a revalidated jurisdictional determination, provide the identifying number.

N/A

E. Impact Summary Tables:

1. For all projects, complete Tables 1, 2 and 3 as applicable.

N/A

2. For docking facilities or other structures constructed over wetlands or other surface waters, provide the information requested in Table 4.

N/A

3. For shoreline stabilization projects, provide the information requested in Table 5.

N/A

### III. Plans

Provide clear, detailed plans for the system including specifications, plan (overhead) views, cross sections (with the locations of the cross sections shown on the corresponding plan view), and profile (longitudinal) views of the proposed project. The plans must be signed and sealed by an appropriate registered professional as required by law. Plans must include a scale and a north arrow. These plans should show the following:

A. Project area boundary and total land area, including distances and orientation from roads or other land marks;  
**SEE THE ATTACHED CONSTRUCTION PLANS**

B. Existing land use and land cover (acreage and percentages), and on-site natural communities, including wetlands and other surface waters, aquatic communities, and uplands. Use the Florida Land Use Cover & Classification System (FLUCCS)(Level 3) for projects proposed in the South Florida Water Management District, the St. Johns River Water Management District, and the Suwannee River Water Management District and use the National Wetlands Inventory (NWI) for projects proposed in the Southwest Florida Water Management District. Also identify each community with a unique identification number which must be consistent in all exhibits.

**SEE THE ATTACHED CONSTRUCTION PLANS**

C. The existing topography extending at least 100 feet off the project area, and including adjacent wetlands and other surface waters. All topography shall include the location and a description of known benchmarks, referenced to NGVD. For systems waterward of the mean high water (MHW) or seasonal high water lines, show water depths, referenced to mean low water (MLW) in tidal areas or seasonal low water in non-tidal areas, and list the range between MHW and MLW. For docking facilities, indicate the distance to, location of, and depths of the nearest navigational channel and access routes to the channel.

**SEE THE ATTACHED CONSTRUCTION PLANS**

D. If the project is in the known flood plain of a stream or other water course, identify the following: 1) the flood plain boundary and approximate flooding elevations; and 2) the 100-year flood elevation and floodplain boundary of any lake, stream or other watercourse located on or adjacent to the site;

**SEE THE ATTACHED CONSTRUCTION PLANS**

E. The boundaries of wetlands and other surface waters within the project area. Distinguish those wetlands and other surface waters that have been delineated by any binding jurisdictional determination;

N/A

F. Proposed land use, land cover and natural communities (acreage and percentages), including wetlands and other surface waters, undisturbed uplands, aquatic communities, impervious surfaces, and water management areas. Use the same classification system and community identification number used in III (B) above.

**SEE THE ATTACHED CONSTRUCTION PLANS**

G. Proposed impacts to wetlands and other surface waters, and any proposed connections/outfalls to other surface waters or wetlands;

N/A

H. Proposed buffer zones;

N/A

I. Pre- and post-development drainage patterns and basin boundaries showing the direction of flows, including any off-site runoff being routed through or around the system; and connections between wetlands and other surface waters;

**SEE THE ATTACHED CONSTRUCTION PLANS**

J. Location of all water management areas with details of size, side slopes, and designed water depths;

**SEE THE ATTACHED CONSTRUCTION PLANS**

K. Location and details of all water control structures, control elevations, any seasonal water level regulation schedules; and the location and description of benchmarks (minimum of one benchmark per structure);

**SEE THE ATTACHED CONSTRUCTION PLANS**

L. Location, dimensions and elevations of all proposed structures, including docks, seawalls, utility lines, roads, and buildings;

**SEE THE ATTACHED CONSTRUCTION PLANS**

M. Location, size, and design capacity of the internal water management facilities;

**SEE THE ATTACHED CONSTRUCTION PLANS**

N. Rights-of-way and easements for the system, including all on-site and off-site areas to be reserved for water management purposes, and rights-of-way and easements for the existing drainage system, if any;

**SEE THE ATTACHED CONSTRUCTION PLANS**

O. Receiving waters or surface water management systems into which runoff from the developed site will be discharged;

**SEE THE ATTACHED CONSTRUCTION PLANS**

P. Location and details of the erosion, sediment and turbidity control measures to be implemented during each phase of construction and all permanent control measures to be implemented in post-development conditions;

**SEE THE ATTACHED CONSTRUCTION PLANS**

Q. Location, grading, design water levels, and planting details of all mitigation areas;

N/A

R. Site grading details, including perimeter site grading;

**SEE THE ATTACHED CONSTRUCTION PLANS**

S. Disposal site for any excavated material, including temporary and permanent disposal sites;

N/A

T. Dewatering plan details;

**TO BE PROVIDED BY CONTRACTOR IF NEEDED**

U. For marina facilities, locations of any sewage pumpout facilities, fueling facilities, boat repair and maintenance facilities, and fish cleaning stations;

N/A

V. Location and description of any nearby existing offsite features which might be affected by the proposed construction or development such as stormwater management ponds, buildings or other structures, wetlands or other surface waters.

**SEE THE ATTACHED CONSTRUCTION PLANS**

W. For phased projects, provide a master development plan.

N/A

#### IV. Construction Schedule and Techniques

Provide a construction schedule, and a description of construction techniques, sequencing and equipment. This information should specifically include the following:

A. Method for installing any pilings or seawall slabs;

N/A

B. Schedule of implementation of temporary or permanent erosion and turbidity control measures;

**CONTROL MEASURES WILL BE INSTALLED PRIOR TO CONSTRUCTION START AND MAINTAINED THROUGHOUT CONSTRUCTION**

C. For projects that involve dredging or excavation in wetlands or other surface waters, describe the method of excavation, and the type of material to be excavated;

N/A

D. For projects that involve fill in wetlands or other surface waters, describe the source and type of fill material to be used. For shoreline stabilization projects that involve the installation of riprap, state how these materials are to be placed, (i.e., individually or with heavy equipment) and whether the rocks will be underlain with filter cloth;

N/A

E. If dewatering is required, detail the dewatering proposal including the methods that are proposed to contain the discharge, methods of isolating dewatering areas, and indicate the period dewatering structures will be in place (Note: a consumptive use or water use permit may be required);

**TO BE PROVIDED BY CONTRACTOR IF NEEDED**

F. Methods for transporting equipment and materials to and from the work site. If barges are required for access, provide the low water depths and draft of the fully loaded barge;

**TRUCKS/TRAILER WILL UTILIZE PUBLIC ROADS TO DELIVER EQUIPMENT AND MATERIALS TO THE SITE**

G. Demolition plan for any existing structures to be removed; and

**SEE THE ATTACHED CONSTRUCTION PLANS**

H. Identify the schedule and party responsible for completing monitoring, record drawings, and as-built certifications for the project when completed.

**GEORGE F. YOUNG, INC. WILL MONITOR CONSTRUCTION AND PROVIDE RECORD DRAWINGS/CERTIFICATIONS.**

## V. Drainage Information

A. Provide pre-development and post-development drainage calculations, signed and sealed by an appropriate registered professional, as follows:

1. Runoff characteristics, including area, runoff curve number or runoff coefficient, and time of concentration for each drainage basin;  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
2. Water table elevations (normal and seasonal high) including aerial extent and magnitude of any proposed water table draw down;  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
3. Receiving water elevations (normal, wet season, design storm);  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
4. Design storms used including rainfall depth, duration, frequency, and distribution;  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
5. Runoff hydrograph(s) for each drainage basin, for all required design storm event(s);  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
6. Stage-storage computations for any area such as a reservoir, close basin, detention area, or channel, used in storage routing;  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
7. Stage-discharge computations for any storage areas at a selected control point, such as control structure or natural restriction;  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
8. Flood routings through on-site conveyance and storage areas;  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
9. Water surface profiles in the primary drainage system for each required design storm event(s);  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
10. Runoff peak rates and volumes discharged from the system for each required design storm event(s);  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
11. Tail water history and justification (time and elevation); and  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
12. Pump specifications and operating curves for range of possible operating conditions (if used in system).  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**

B. Provide the results of any percolation tests, where appropriate, and soil borings that are representative of the actual site conditions;

C. Provide the acreage, and percentages of the total project, of the following:

1. Impervious surfaces, excluding wetlands;  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
2. Pervious surfaces (green areas, not including wetlands);  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
3. Lakes, canals, retention areas, other open water areas; and  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
4. Wetlands.  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**

D. Provide an engineering analysis of floodplain storage and conveyance (if applicable), including:

1. Hydraulic calculations for all proposed traversing works;  
N/A
2. Backwater water surface profiles showing upstream impact of traversing works;  
N/A
3. Location and volume of encroachment within regulated floodplain(s); and  
N/A
4. Plan for compensating floodplain storage, if necessary, and calculations required for determining minimum building and road flood elevations.  
N/A

- E. Provide an analysis of the water quality treatment system including:
1. A description of the proposed stormwater treatment methodology that addresses the type of treatment, pollution abatement volumes, and recovery analysis; and  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
  2. Construction plans and calculations that address stage-storage and design elevations, which demonstrate compliance with the appropriate water quality treatment criteria.  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**
- F. Provide a description of the engineering methodology, assumptions and references for the parameters listed above, and a copy of all such computations, engineering plans, and specifications used to analyze the system. If a computer program is used for the analysis, provide the name of the program, a description of the program, input and output data, two diskette copies, if available, and justification for model selection.  
**SEE ATTACHED CALCULATIONS IN THE ERP APPLICATION PACKAGE**

## VI. Operation and Maintenance and Legal Documentation

- A. Describe the overall maintenance and operation schedule for the proposed system.  
**SEE PART VI OF THE ERP APPLICATION PACKAGE**
- B. Identify the entity that will be responsible for operating and maintaining the system in perpetuity if different than the permittee, a draft document enumerating the enforceable affirmative obligations on the entity to properly operate and maintain the system for its expected life, and documentation of the entity's financial responsibility for long-term maintenance. If the proposed operation and maintenance entity is not a property owner's association, provide proof of the existence of an entity, or the future acceptance of the system by an entity which will operate and maintain the system. If a property owner's association is the proposed operation and maintenance entity, provide copies of the articles of incorporation for the association and copies of the declaration, restrictive covenants, deed restrictions, or other operational documents that assign responsibility for the operation and maintenance of the system. Provide information ensuring the continued adequate access to the system for maintenance purposes. Before transfer of the system to the operating entity will be approved, the permittee must document that the transferee will be bound by all terms and conditions of the permit.  
**THE OWNER BBC KEY LLC AND VAM LBK DEVELOPMENT LLC WILL OPERATE & MAINTAIN THE SYSTEM.**
- C. Provide copies of all proposed conservation easements, storm water management system easements, property owner's association documents, and plats for the property containing the proposed system.  
N/A
- D. Provide indication of how water and waste water service will be supplied. Letters of commitment from off-site suppliers must be included.  
**THE TOWN OF LONGBOAT KEY CURRENTLY PROVIDES WATER & SEWER TO THE SITE.**
- E. Provide a copy of the boundary survey and/or legal description and acreage of the total land area of contiguous property owned/controlled by the applicant.  
**THE ATTACHED BOUNDARY SURVEYS**

## VII. Water Use

- A. Will the surface water system be used for water supply, including landscape irrigation, or recreation.  
NO
- B. If a Consumptive Use or Water Use permit has been issued for the project, state the permit number.  
N/A
- C. If no Consumptive Use or Water Use permit has been issued for the project, indicate if such a permit will be required and when the application for a permit will be submitted.  
**N/A. AN IRRIGATION WELL IS PROPOSED BUT WILL NOT REQUIRE A CONSUMPTIVE USE PERMIT.**
- D. Indicate how any existing wells located within the project site will be utilized or abandoned.  
**NO EXISTING WELL ON-SITE**









Table 5: SHORELINE STABILIZATION  
 IF YOU ARE CONSTRUCTING A SHORELINE STABILIZATION PROJECT,  
 PLEASE PROVIDE THE FOLLOWING:

Type of Stabilization Being Done	Length (in feet) of New	Length (in feet) of Replaced	Length (in feet) of Repaired	Length (in feet) of Removed	Slope: H: V:	Width of the Toe (in feet)
Vertical Seawall						
Seawall plus Rip-Rap						
Rip-Rap						
Rip-Rap plus Vegetation						
Other Type of Stabilization Being Done:						

Size of the Rip Rap: \_\_\_\_\_

Type of Rip Rap: \_\_\_\_\_

COMMENTS:

# WATER METER CALCULATIONS

Date: 11/4/2013

**Project Name:** VILLA AM MEETZ

**Owner / Contractor:** VAM LBK DEVELOPMENT, LLC

**Address:** \_\_\_\_\_ **Predominately Flush Tank:** Y

**Phone Number:** \_\_\_\_\_ **B.P. Number:** \_\_\_\_\_

Quantity	Fixture Type	Type Supply	Load/Unit	Load
	Water Closet	Flush Valve	10.00	0.00
	Water Closet (3.5 gpf)	Flush Tank	5.00	0.00
90	Water Closet (1.6 gpf)	Flush Tank	2.20	198.00
	Water Closet	Flushometer Tank	2.00	0.00
1	Urinal	Flush Valve	5.00	5.00
	Service Sink (Full Flow)	Faucet	3.00	0.00
	Service Sink (Rest. Flow)	Faucet	1.40	0.00
	Kitchen Sink (Comm. Style)	Faucet	4.00	0.00
22	Kitchen Sink (Res. Style)	Faucet	1.40	30.80
	Dish Machine (Comm. Style)	Automatic	2.00	0.00
17	Dish Machine (Res. Style)	Automatic	1.40	23.80
17	Washing Machine 8# Res.	Automatic	1.40	23.80
	Washing Machine 8# Comm.	Automatic	3.00	0.00
	Washing Machine 16# Comm.	Automatic	4.00	0.00
114	Lavatory (Restricted Flow)	Faucet	1.00	114.00
	Lavatory (Full Flow)	Faucet	2.00	0.00
83	Shower (Restricted Flow)	Faucet	1.40	116.20
	Shower (Full Flow)	Mixing Valve	4.00	0.00
17	Bath Tub	Mixing Valve	4.00	68.00
	Hose Connection 1/2"	Faucet	2.60	0.00
10	Hose Connection 3/4"	Faucet	5.50	55.00
1	Drinking Fountain	3/8" Valve	0.25	0.25

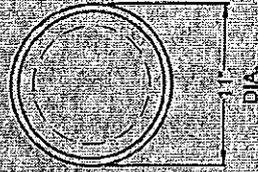
**Total Load Units:** 634.85  
**GPM:** 147.92

Meter Size 100%: 2"  
Meter Size 90%: 3"  
Meter Size 85%: 3"  
Meter Size 80%: 3"

**Comments:**

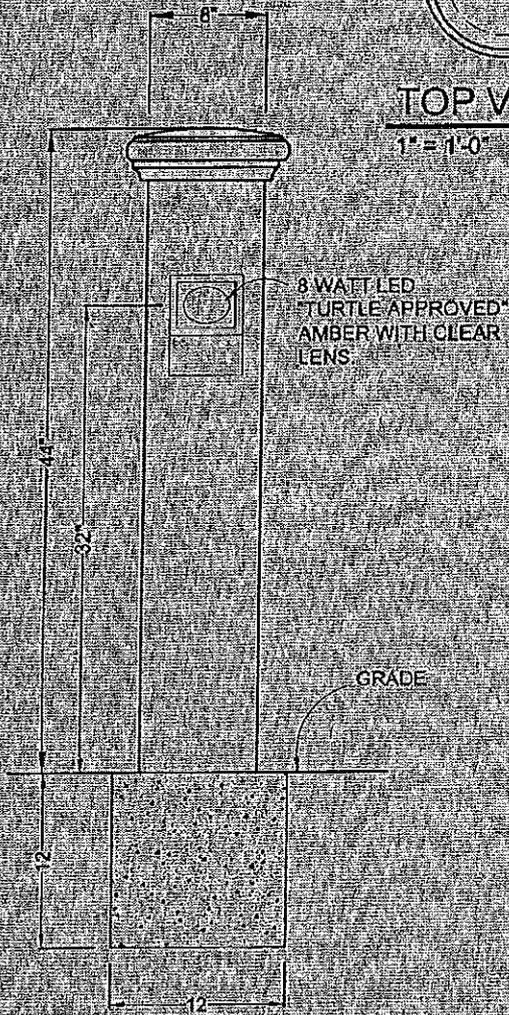
**Authorized Signature:** \_\_\_\_\_

OAI



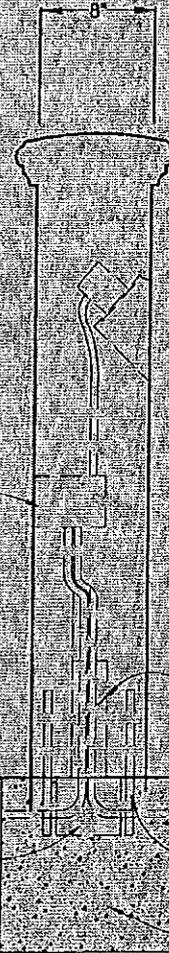
TOP VIEW

1" = 1'-0"



1 FRONT ELEVATION

1" = 1'-0"



2 SECTION

1" = 1'-0"

TURTLE BOLLARD  
8" ROUND CORDOBA



P.O. Box 413005 Naples, FL 34101  
5805 Glencove Drive # 705 Naples, FL 34108  
Tel 239.514.3272 Fax 239.594.7778  
[www.Stonelight.com](http://www.Stonelight.com) [sales@stonelight.com](mailto:sales@stonelight.com)



OBI

IP66

# 4451 STEPLIGHT LED

## DESCRIPTION

Hydrel's 4451 recessed step and wall light is a rugged fixture designed for concrete, block, or brick applications. These heavy wall cast aluminum or bronze lights are completely weatherproof, sealed with silicone gasket, tempered lens, and stainless steel fasteners.

## SPECIFICATIONS

**MATERIAL:** Cast aluminum or cast bronze.

**LED:** 6 LEDs driven at 615 mA with a maximum power consumption of 12 watts. Lumen maintenance of individual light sources have been independently tested to IESNA LM-80 standards.

**LENS:** Diffused, tempered glass for non-louvered door. Clear, tempered glass for louvered door.

**GASKET:** Single piece molded U-shape silicone.

**LED DRIVER:** 12 Watt, MVOLT (120-277 Volt). **Driver Included**

**CONDUIT ENTRIES:** 3/4" NPT side entries standard.

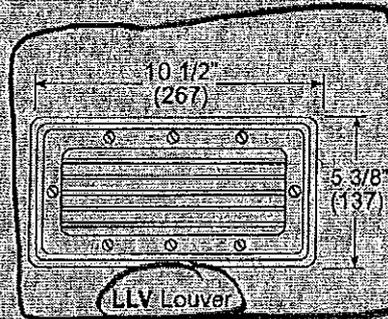
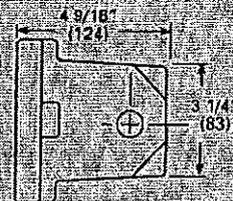
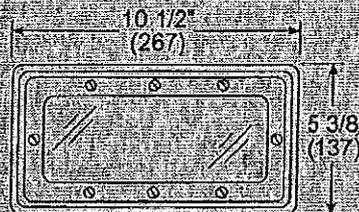
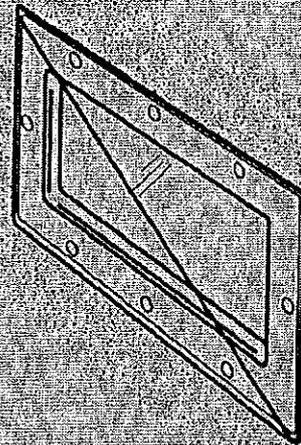
**ACCESSORIES:** LLV Louver door, 45° cut-off.

**FINISH:** Natural cast aluminum or natural bronze standard. Aluminum body black permaherred. See ordering guide for finish options.

**FASTENERS:** Stainless steel.

**LISTING:** CSA, CSA<sub>16</sub>

TYPE	JOB NAME
PART NUMBER	



APPROVALS

OBI



IP66

# 4451 ORDERING INFORMATION

60 Hz Application

Choose the boldface catalog nomenclature that best suits your needs.

PART NO.

### EXAMPLE

Model	Material	LED Array	LED Color	Voltage	Accessories	LED	Finish*
<input type="checkbox"/> 4451	<input type="checkbox"/> A Aluminum <input type="checkbox"/> B Bronze	<b>LED</b> <input type="checkbox"/> LED	<input type="checkbox"/> WHT33K White <input type="checkbox"/> WHT41K White <input type="checkbox"/> WHT30K White <input type="checkbox"/> RED Red <input type="checkbox"/> GRN Green <input type="checkbox"/> BLU Blue	<input type="checkbox"/> MVOLT (120-277)	<b>External</b> <input type="checkbox"/> LLV <sup>1</sup> Louver Door	<input type="checkbox"/> LPI LED Array Included	<input type="checkbox"/> BZ Bronze <input type="checkbox"/> BL Black <input type="checkbox"/> DDB Dark Bronze <input type="checkbox"/> DNA Natural Alum <input type="checkbox"/> GN Green <input type="checkbox"/> GR Gray <input type="checkbox"/> SND Sand <input type="checkbox"/> STG Steel Gray <input type="checkbox"/> TVG Terra Verde <input type="checkbox"/> WH White <input type="checkbox"/> CF Custom

#### Notes:

- <sup>1</sup> LLV Louver Door available with clear lens only.
- \* Finish is natural aluminum or bronze unless finish specified.



An Acuity Brands Company

# 4640 YOKE MOUNT LED ACCENT LIGHT

## DESCRIPTION:

The 4640 yoke mount accent light is uniquely designed with rugged sealed die-cast aluminum construction and an adjustable yoke. A wide range of photometric performances are available with internal and/or external glare control.

## SPECIFICATIONS:

**MATERIAL:** Fixture and Yoke: Die-cast copper-free aluminum alloy A360. All materials are chem-filmed or anodized prior to painting.

**LAMP:** LED: Monochromatic LEDs, 22W max

**VOLTAGE:** See ordering guide

**LIGHT DISTRIBUTION:** See ordering guide

**LENS:** Crowned tempered glass

**POWER SUPPLY:** 120-277 Integral Power Supply

**MOUNTING:** Yoke Mount with a minimum of 10 ft. 18/3 STW Cord. Cord length must be specified.

**FINISH:** See ordering guide

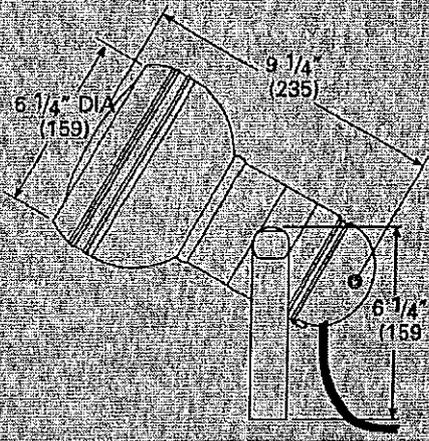
**FASTENERS:** Stainless Steel

**LISTING:** UL, CUL

OCI

  
 IP66 

TYPE		JOB NAME				
PART NUMBER						
Model	Lamp Type	Voltage	Distribution	Mounting	Mounting Options	
Accessories	Cord Set Length	Options	Lamp	Finish	Listing	



For direct mounting  
to wall or other surface

7/8" Mount Hole.  
(Reducing washer for  
3/8" mounting provided)



Yoke Mount Detail

NOTE: HYDREL RESERVES THE RIGHT TO MODIFY SPECIFICATION WITHOUT NOTICE. Any dimension on this sheet is to be assumed as a reference dimension. Used for information purposes only. It does not govern manufacturing or inspection requirements. (ANSI Y14.5-1973)

### APPROVALS

©2012 Acuity Brands Lighting, Inc.  
9/24/12  
4640 YM LED

20660 Nordhoff St., Suite B  
Chatsworth, CA 91311  
Phone: 866.533.9801  
Fax: 866.533.5281  
www.hyrel.com



An Acuity Brands Company

OCI

IP66

# 4640 ORDERING INFORMATION

60 Hz Application

Choose the boldface catalog nomenclature that best suits your needs.

PART NO. \_\_\_\_\_

### EXAMPLE:

4640 18LED WHT41K MVOLT WFL YM SMSA12 FGS10 CSL10 LP BZ

#### Model

- 4640

#### Voltage

- MVOLT

#### Mounting

- YM Yoke Mt

#### Accessories

- Internal**
- IHL Internal Honeycomb Louver
- External**
- GS Glare Shield
  - FGS Full Glare Shield, 8"
  - FGS Full Glare Shield, 8" - 10" or 12" available

#### Lamp

- LP Lamp Installed

#### Lamp Type

- 12LED
- 18LED

#### LED Color

- RED Red
- GNN Green
- BLU Blue
- AMB Amber
- WHT30K 3000°K Color Temp
- WHT41K 4100°K Color Temp
- WHT53K 5300°K Color Temp

#### Distribution

- SP Spot
- NFL Narrow Flood
- MFL Medium Flood
- FL Flood
- WFL Wide Flood
- VWFL Very Wide Flood
- LSD Linear Spread

#### Mounting Options<sup>2</sup>

- JBA Alum J-Box
- JBB Bronze J-Box
- ARJB Architectural J-Box, Alum.
- SMSA 12" - 18" Stanchion Mt, available in 6" increments
- PSSA Pedestal Stanchion Mt.
- WMC Wall Mt Cover
- WMSA Wall Mt with Splice Access
- TRA Tree Mounted J-Box, Alum.
- TRB Tree Mounted J-Box, Bronze
- TRAS Tree Mounted J-Box, Alum, w/mt strap, available with 1 - 4 J-Boxes per strap
- TRBS Tree Mounted J-Box, Bronze, w/mt strap, available with 1 - 4 J-Boxes per strap

#### Cord Set Length

- CSL 10' - 50' of cord, available in 5' increments

#### Finish

- BZ Bronze
- BL Black
- ODB Dark Bronze
- DNA Natural Alum.
- GN Green
- GR Gray
- SND Sand
- STG Steel Gray
- TVG Terra Verde Green
- WH White
- CF Custom Finish

#### Notes:

- <sup>1</sup> 12LED - 12 chip board, 14 watts; 18 LED - 18 chip board, 19 watts
- <sup>2</sup> See individual mounting specification sheets for conduit/drilling options.
- <sup>3</sup> For multiple TRAS boxes, the number of fixture heads and accessories will be equal to the number of boxes ordered.



OCI

# 4640 LED

LIGHT ENGINE	12LED			22LED		
	REBEL	REBEL	REBEL	REBEL	REBEL	REBEL
KELVIN TEMP	3000K	4100K	5300K	3000K	4100K	5300K
MH EQUIVALENT	35W	70W	70W	70W-100W	150W	150W
NUMBER OF LEDS	10	10	10	18	18	18
DRIVE CURRENT	350mA	350mA	350mA	350mA	350mA	350mA
INITIAL LUMENS*	420	700	700	690	1150	1150
INPUT WATTS	13.96	13.96	13.96	19.2	19.2	19.2
LUMENS PER WATT	30	50.3	50.3	35.9	59.9	59.9
CRI	85	70	70	85	70	70

**LED LIFE: L70/50,000 HOURS**  
**OPERATING TEMPERATURE: -30°C THROUGH 40°C**

All Photometry is run to LM79 standards  
 Photometry available at [www.hydrrel.com](http://www.hydrrel.com)

**Notes:**

- \* MH equivalent are approximate and vary by distribution.
- † Initial lumens will vary depending on distribution, consult individual IES files for exact data.

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 9/23/12  
 4640 YM LED

**NOTE: Hydrrel Reserves The Right To Modify Specification Without Notice.** Any dimension on this sheet is to be assumed as a reference dimension. Used for information purposes only. It does not govern manufacturing or inspection requirements. (ANSI Y14.5-1973)

20660 Nordhoff St., Suite B  
 Chatsworth, CA 91311  
 Phone: 888.633.9901  
 Fax: 888.633.5291  
[www.hydrrel.com](http://www.hydrrel.com)



**Lightvault® LTV71**  
 Composite Housing LED  
 revision 2-15-12 • ltv71.pdf

**Type:**  
**Job:**  
**Fixture Catalog number:**  
 LTV71 / / / /  
 Fixture Optics Source Temp Volts Option - order assembled wireture

**Fixture Options:**

Ordered separately from fixture  
 See page 2

**Approvals:**

**Date:**  
**Page:** 1 of 3

**Specifications**

**Lens Ring:** Cast bronze with natural finish. (Optional brushed stainless steel lens ring is also available.) Eight captive 3/8" stainless steel hex-socket cap screws.

**Lens:** Tempered clear soda lime, 3/8" thick, flush with lens ring, slightly crowned. (Optional slip-resistant lens is also available.)

**Lens Gasket:** One-piece molded silicone U-channel wraps completely around lens flange.

**Composite Housing:** High temperature, compression molded fiberglass impregnated, 3/8" min. wall composite. Charcoal gray. No top lip to trap dirt and moisture. Molded-in solid brass knurled inserts to receive socket base screws. Separate driver and splice compartments, individual cast aluminum internal covers with silicone gaskets. Two 1/2" NPT in bottom, 24 cu. in. splice area. Body and driver modules epoxy bonded.

**Electronic Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Driver is rated for -40°F starting.

**Optical Module:** Precision, replaceable MicroEmitters (WW) or optical prisms (SP, NF) are positioned to achieve directional control toward desired task. Available in 3500K and 5100K color temperatures.

**Wiring:** Anti-siphon barrier on wiring to and from splice compartment. All components wire linked for ground, quick-disconnect for removal of optical system.

**Distribution:** Specify "SP" for spot distribution; specify "NF" for narrow flood distribution; specify "WW" for wall wash distribution.

**Drive-Over Durability:** When properly installed and in concrete, the fixture will withstand drive-over traffic up to 35,000 lb. for vehicles traveling up to 15 mph.

**Limited Warranty:** When installed according to Kim Installation Instructions and accepted trade practices, the solid bronze trim rings on LTV Series Kim products are warranted for 25 years, and the composite housings are warranted for 7 years from date of sale, against manufacturing defects and failure due to corrosion. All other fixture options are warranted to be free of defects in material and workmanship for one year from date of sale.

Kim Lighting's LED engine and driver carry a 3-year warranty.

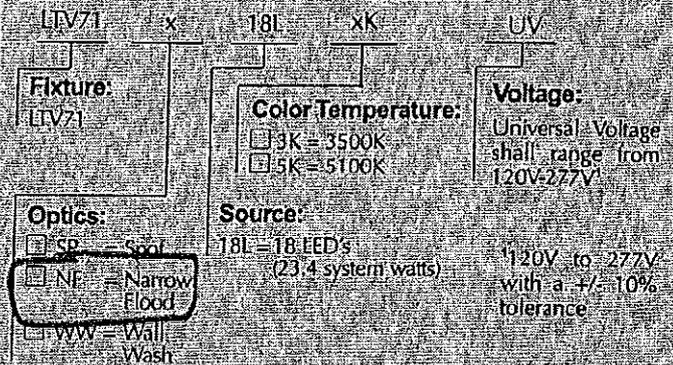
This warranty is void if the product is incorrectly sealed at installation, modified, tampered with, misapplied, poorly installed or subject to abnormal conditions.



Hubbell  
 Lighting Inc.



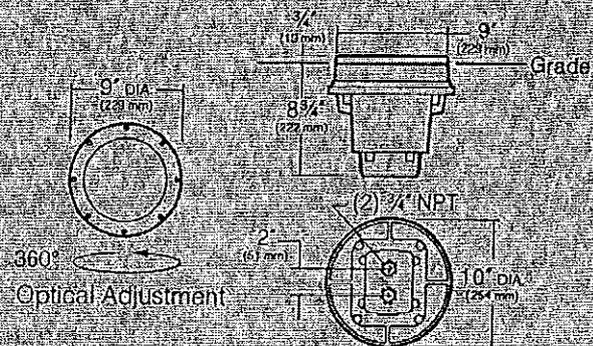
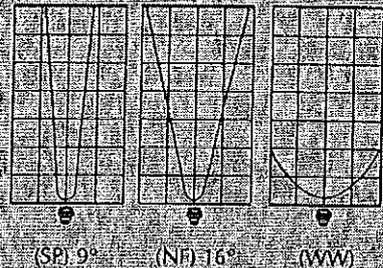
**ORDERING INFORMATION**



**OPTICAL SYSTEMS**



**DISTRIBUTIONS**



**Listings and Ratings**

UL cUL 1598*	IP68 Rated	25°C Ambient
--------------	------------	--------------

\*Suitable for wet locations

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.

OE1



Catalog Number
Notes
Type

## FEATURES & SPECIFICATIONS

### INTENDED USE

Provides years of maintenance-free illumination for outdoor use in residential & commercial applications. Ideal for applications such as lighting walkways and stair ways for safety and security.

### CONSTRUCTION

Cast aluminum housing with corrosion-resistant paint in either dark bronze or white finish.

ADA compliant.

### OPTICS

4000K CCT LEDs.

Polycarbonate lens protects the LED from moisture, dirt and other contaminants.

**LUMEN MAINTENANCE:** The LED will deliver 70% of its initial lumens at 50,000 hour average LED life. See Lighting Facts label on page 2 for performance details.

### ELECTRICAL

MVOLT driver operates on any line voltage from 120-277V.

Operating temperature -30°C to 40°C.

1KV surge protection standard.

### INSTALLATION

Surface mounts to universal junction box (provided by others).

### LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations.

Tested in accordance with IESNA LM-79 and LM-80 standards.

### WARRANTY

Five year limited warranty. Full warranty terms located at [www.ArcoLighting.com/CustomerResources/Terms\\_and\\_Conditions.aspx](http://www.ArcoLighting.com/CustomerResources/Terms_and_Conditions.aspx).

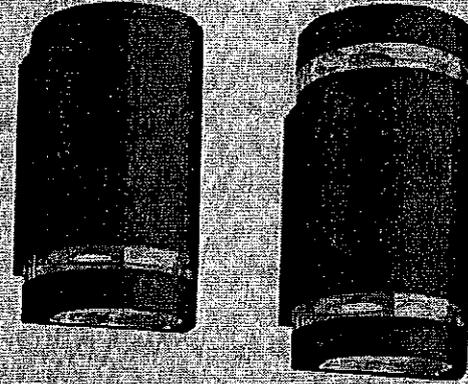
Note: Specifications are subject to change without notice.

Actual performance may differ as a result of end-user environment and application.

Outdoor General Purpose

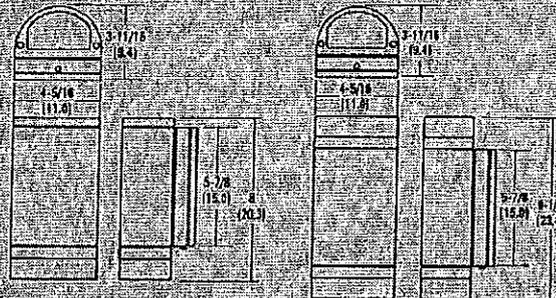
# OLLWD & OLLWU

LED WALL CYLINDER LIGHT



### Specifications

All dimensions are inches (centimeters).



### ORDERING INFORMATION

For shortest lead times, configure products using bolded options.

Example: OLLWD

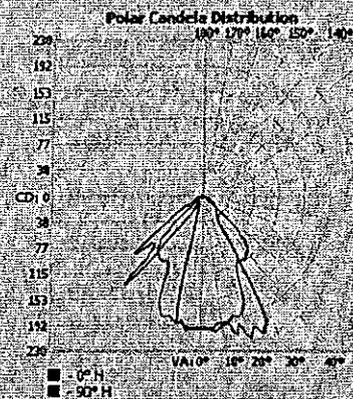
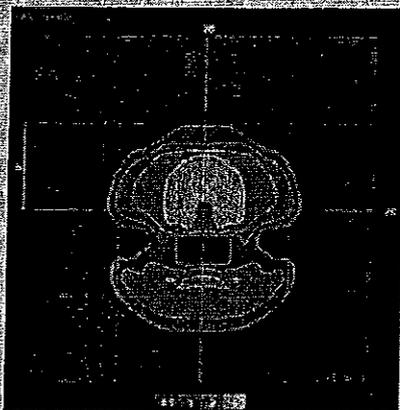
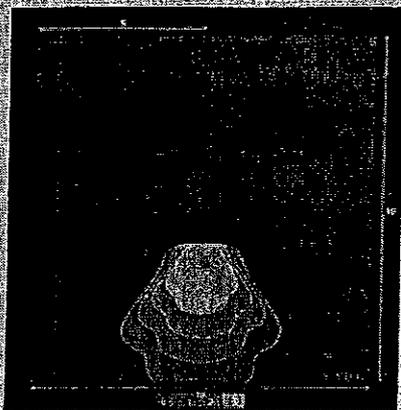
Series	Color temperature (CCT)	Voltage	Finish
OLLWD - Downlight	(blank) 4000K	(blank) MVOLT (120V-277V)	DBS - Dark bronze
OLLWU - Up & downlight			WH - White

# OLLWD & OLLWU LED Wall Cylinder Light

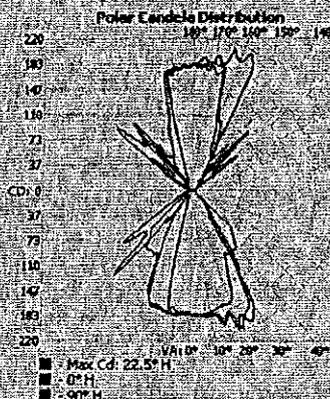
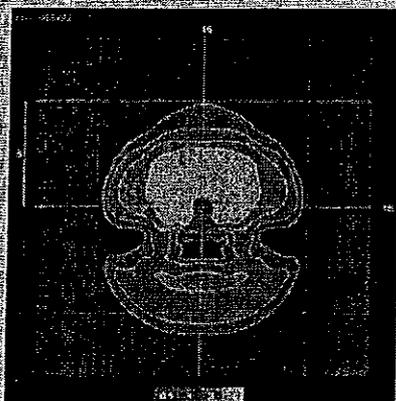
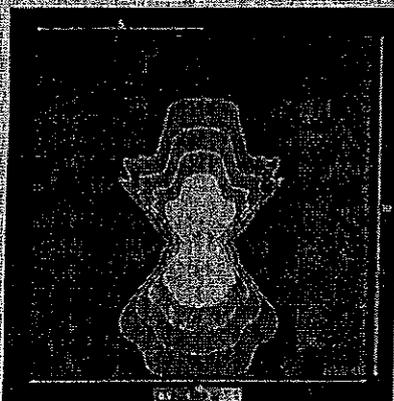
## PHOTOMETRICS

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's Outdoor LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

### OLLWD



### OLLWU



### OLLWD

**LED lighting facts**

Light Output (Lumens)	270
Watts	3
Lumens per Watt (Efficacy)	30

Color Accuracy: **74**

Light Color: **4000 (Bright White)**

View [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

### OLLWU

**LED lighting facts**

Light Output (Lumens)	300
Watts	18
Lumens per Watt (Efficacy)	24

Color Accuracy: **74**

Light Color: **4000 (Bright White)**

View [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

OF1

GI.5.32

# Juno

Project: \_\_\_\_\_  
 Fixture Type: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Contact/Phone: \_\_\_\_\_

## 6" IC 600 LUMEN WARMDIM™ LED DOWNLIGHT NEW CONSTRUCTION

IC22LWDG3 RECESSED HOUSING

LENSED TRIMS



### PRODUCT DESCRIPTION

Dedicated LED Air-Loc® sealed new construction housing with WarmDim™ technology (patent pending) • LED color temperature warms while dimming to emulate the dimming performance of traditional incandescent light sources • Shallow housing allows for fit in 2 x 6 construction • Can be completely covered with insulation • Fully sealed housing stops infiltration and exfiltration of air, reducing heating and air cooling costs without the use of additional gaskets • LED housing is designed to provide 50,000 hours of life and is compatible with many standard Juno trims • 5 year limited warranty on LED components

### ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury
- Comparable light output to 65W BR30 incandescent while consuming less than 15W



### PRODUCT SPECIFICATIONS

**LED Light Engine** Proprietary micro processor controlled light engine emulates dimming performance of incandescent light source • Replaceable light engine integrated to one piece high purity aluminum, thermally conductive housing provides uninterrupted heat transfer to ensure long life of the LEDs • 3000K color temperature at full lumen output • 83 CRI typical

**Optical System** Computer-optimized reflector design with high reflectance while finish coated with a high transmission diffusing lens conceals the LEDs and produces uniform aperture luminance • Wide flood distribution shipped as standard with optional optic accessory available and sold separately

**Aesthetic Trim Selections** Compatible with wide selection of existing Juno trims • Shadow free, knife edge design blends seamlessly into ceiling • Trims are wet location approved for covered ceiling applications

**LED Driver** Dedicated 120 volt driver • Power factor > 0.9 • Dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • For a list of compatible dimmers, see JUNO LEDC36 WARMDIM • Mounted between the i-box and housing for easy access and cool operation

**Life** Rated for 50,000 hours at 70% lumen maintenance

**Labels** UL listed for U.S. and Canada through branch wiring, damp locations • Union made • UL and cUL

**Testing** All reports are based on published industry procedures, field performance may differ from laboratory performance

Product specifications subject to change without notice

### HOUSING FEATURES

**Housing** Designed for use in IC (insulated ceiling) or non-IC construction • Aluminum housing sealed for Air-Loc® compliance • Housing is vertically adjustable to accommodate up to a 2" ceiling thickness

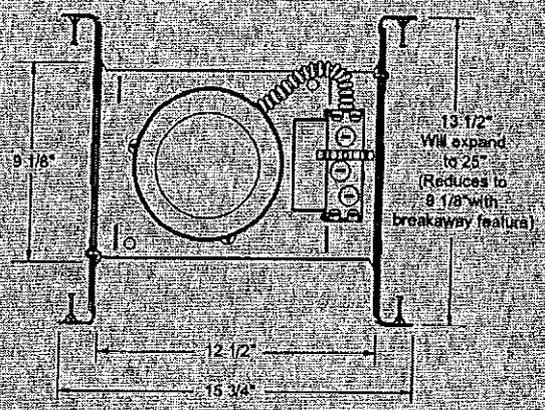
**Junction Box** Pre-wired junction box provided with (5) 1/2" and (1) 3/4" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire • UL listed and cUL listed for through-branch wiring, maximum 8 #12 branch circuit conductors • Junction box provided with removable access plates • Knockouts equipped with pryout slots • Quick connect electrical connectors supplied as standard for fast, secure installation

**Mounting frame** 22 gauge die-formed galvanized steel mounting frame • Rough-in section junction box, mounting frame, housing and bar hangers fully assembled for ease of installation

**Real Nail 3 Bar Hangers** Telescoping Real Nail 3® system permits quick placement of housing anywhere within 24" joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction • Integral E-bar notch and clip for suspended ceilings • Design covered under Patents US5,305,419 and D552,969

\*Patent pending

### DIMENSIONS

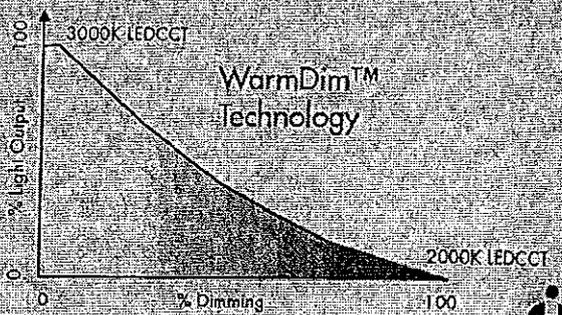


6 7/8" CEILING CUTOUT

### ELECTRICAL DATA

Dedicated 120V Only Driver

120V	
Input Power	14W (+/-5%)
Input Current - Max	0.125A
Frequency	50/60 Hz
EMI/RFI	FCC Title 47 CFR Part 15 Class B (residential)
Minimum starting temp	-20°C





GI.5.32

# 6" IC 600 LUMEN WARMDIM™ \* LED DOWNLIGHT NEW CONSTRUCTION

IC22LWDG3 RECESSED HOUSING  
LENSED TRIMS

**ORDERING INFORMATION:** Housing, trim and accessories each ordered separately.

Example: IC22LWDG3-3K-1

Housing	Color Temperature	Input Voltage
IC22LWDG3	3K 3000K	Dedicated 120V Only (Forward Phase ELY dimmable)

Example: 2330W-WH

Trim/Description	
20-WH 20-PW	Alabine Shower/Closet Light
21-WH 21-PW	Drop Opal Shower/Closet Light
22-WH	Fresnel
239-WH *	Frosted Lens
242-WH 242-3C 242-ABZ	Shower Trim Frosted Lens with Clear Center
243-WH *	Decorative Swirled Etched Opal Glass
2330W-WH *	White Baffle, Regressed Frosted Dome Lens with Reflector
2330B-WH *	Black Baffle, Regressed Frosted Dome Lens with Reflector
6101-ABZ * 6101-3C * 6101-WH *	Beveled Frame - Frosted Dome Lens with Reflector

**ACCESSORIES**

Catalog No.	Description
LEDOPTICG3-M	Medium Flood Optic (50°)

To order, specify catalog number.

\*Patent pending

UK Listed for use in wet location.

\* Do not use reflector shipped with trim for LED housing.

Trim Size: 2330 - 7 1/4" O.D.; 239, 242, 243: 9900 - 7 1/4" O.D.; 6101 - 7 1/4" O.D.; 20, 21, 22 - 8" O.D.

Trim Finish: ABZ - Classic Aged Bronze; 3C - Satin Chrome; WH - White; PW - Matte White (Polycarbonate material shower trim).

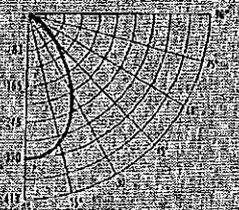
Note: In Canada when insulation is present, Type IC fixtures must be used.

JUNO IC housings meet IECC Energy Code requirements per ASTM E283.

**AIRLOC** AirLoc® rated trims are pre-gasketed for minimum air leakage with IC housings.

**PHOTOMETRIC REPORT**

Test Report #: PT04120901R  
Catalog No: IC22LWDG3-3K  
with 239-WH Trim and Standard Wide Flood Optic  
Luminaire Spacing Criterion: 1.02  
Luminaire LPW: 37



**CANDLEPOWER DISTRIBUTION (Candelas)**

Degrees Vertical	Candelas
0	330
5	325
10	292
15	243
20	164
25	96
30	58
35	34
40	19
45	5
50	0

**AVERAGE INITIAL FOOTCANDLES**

Multiple Units (Square Array/40'x60' room)  
Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0	35	30	27
5.0	23	19	17
6.0	16	14	12
7.0	13	11	10
8.0	10	9	8
9.0	8	7	6
10.0	6	5	4

**INITIAL FOOTCANDLES**

(One Unit, 14.0W, 70.0° Beam)

Distance to Illuminated Plane (feet)	Footcandles Room Center	Room Diameter
4	20.4	5.6
6	9.2	8.4
8	5.2	11.2
10	3.3	14.0

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixture
0-30°	225	N/A	43.9
0-40°	328	N/A	63.9
0-60°	454	N/A	88.5
0-90°	513	N/A	100.0

**LUMINANCE (Average cd/m²)**

Degrees	Average Luminance
45	7108
55	5346
65	4383
75	3949
85	2931

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents baseline of performance for the fixture. Results may vary in the field.



1300 S. Wolf Road • Des Plaines, IL 60018 • Phone (847) 827-9880 • Fax (847) 827-2925  
220 Chrysler Drive • Brampton, Ontario, Canada L6S 6B6 • Phone (905) 792-7335 • Fax (905) 792-0064  
Visit us at [www.junolightinggroup.com](http://www.junolightinggroup.com)

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# PARATA 724 RGB LED Linear Cove

Project \_\_\_\_\_

Qty \_\_\_\_\_

Type \_\_\_\_\_

110-120V AC or 220-240V AC 1.5A 1.25W/ft and 2.5W/ft max power output.

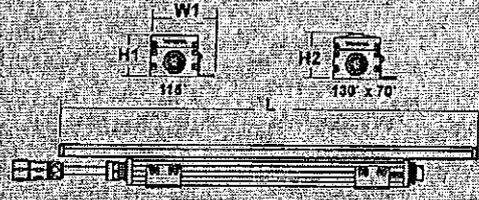
## Specifications

### Length/Weight:

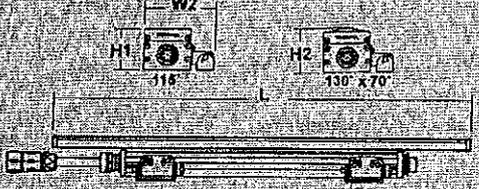
12-9/16" (319 mm)	2.5 lbs (1.1 kg)
24-3/8" (619 mm)	5 lbs (2.3 kg)
36-3/16" (919 mm)	7.5 lbs (3.4 kg)
48" (1219 mm)	10 lbs (4.5 kg)

Width 1:	3-3/4" (95 mm)
Width 2:	4-1/8" (105 mm)
Height 1:	2-3/8" (60 mm)
Height 2:	2-5/8" (67 mm)

### F - Fixed Mount



### A1 - Adjustable Mount



## Introduction

PARATA 700 series cove is a low profile luminaire intended for cove mount applications to wash walls and ceiling with vibrant color. PARATA 724 RGB LED Linear cove is a modular system offered in 1 ft, 2 ft, 3 ft or 4 ft lengths with fixed or adjustable mount options. Each luminaire is factory calibrated for color consistency and specific CCT 2700K, 3000K, 3500K or 4000K personalities may be selected for white light. Remote device management (RDM) capability allows bi-directional communication simplifying installation and providing superior control.

## Ordering Information

EXAMPLE: PLC-724-12-115-RGB-120-27V-F-NAA-STD

PLC	724			RGB	120-27V				
Series	Model	Length	Distribution	LED Code	Voltage	Mount	Finish	Special	
PLC PARATA RGB LED Linear Cove	724 Linear Indoor dry & Damp	12 12 inch 24 24 inch 36 36 inch 48 48 inch	115 115" 13070 130"x70"	RGB	120-27V	A1 Adjustable mount F Fixed mount	NAA Natural anodized aluminum BKT Textured black paint WHT Textured white paint BT Textured silver paint DBT Textured dark bronze paint CPF Custom paint finish	STD Standard MOD Modified	

Winona reserves the right to make design changes to this product at any time without prior notice and such modification will be effective immediately.



### Describe Modification

### Accessories

Controller (Easy1™ Solo / Touch / Pro)	See page 4
DMX Power Integrator (required for installation)	See page 4
Feed Cable (required for installation)	See page 4
Jumper Cable	See page 4
Liquid-Tight Cord Grip	See page 4

### NOTES

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

LEDs	System Watts	Nominal Distribution	Beam Angle		Field Angle		RGB		
			115°	130°	115°	150°	4800	4000K	3000K
48	33	115°	130°	115°	150°	50%	15%	4%	
		130° x 70°	130° x 70°	115°	150°	1694	1534	48	

### Electrical Load

Height	System Load (W)	Current (A)			
		Line	Neutral	Ground	Phase
Cove 4'	33	0.28	0.14	0.12	-
Cove 3'	24	0.20	0.10	0.09	-
Cove 2'	21	0.18	0.09	0.07	-
Cove 1'	10	0.08	0.04	0.04	-

## Photometric Diagrams

### 115° DISTRIBUTION

Test Report: EAU17324  
IES LM 79-08  
PLC-724-48-115-RGB  
Lumens: 1,544  
Wattage: 33W  
Efficacy: 46.8  
Max. Candela: 541



### 130° x 70° DISTRIBUTION

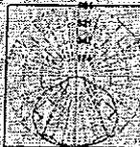
Test Report: BAL17325  
IES LM 79-08  
PLC-724-48-13070-RGB  
Lumens: 1,534  
Wattage: 33W  
Efficacy: 45.5  
Max. Candela: 694



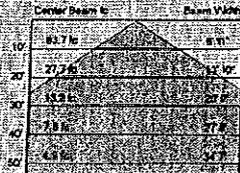
### ISO Candela Plot



### ISO Candela Plot



### Illuminance at a Distance



### Illuminance at a Distance



IES data is available at [www.winonighting.com](http://www.winonighting.com). Always refer to our website for the latest IES file updates.

## FEATURES & SPECIFICATIONS

- Lumens: 305 lm per foot
- Wattage: 6.3 w/ft
- Efficacy: 46.8 LPW
- Voltage: 120 - 277V
- Distribution: 115°, 130° x 70°
- Control System: Easy! DMX512 controller with LCD touchscreen
- Lumen Maintenance: 50,000 hours L70 @ 50°C
- Size: 2.75"W x 2.38"H
- Housing: Extruded aluminum
- Finish: Natural anodized aluminum  
Polyester powder coat painted finish also available
- Lens Material: Extruded acrylic
- Temperature Ranges: -20° to 50°C
- Caratation/Compliance: ETL dry location, cETL dry location
- Weight: 12' - 2.5 lbs / 24' - 5 lbs / 36' - 7.5 lbs / 48' - 10 lbs
- Warranty: 5 years
- Assembled in America. Buy American Act Compliant

### Performance

PARATA 700 Series linear cove luminaires are designed to provide maximum output while consuming minimum energy. Smooth, controlled distribution provides a uniform concentration of saturated color to a target surface. Multiple beam options are available making it simple for the user to select an appropriate distribution for any application.

### Consistent Color

Calibrated and tested to ensure uniform hue and intensity from fixture to fixture regardless of temperature or environment. Factory calibration allows the user to input a specific value and be assured of consistent color. PARATA's unique ratio of red, green and blue LEDs allows for superior architectural white color.



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**George F. Young, Inc.**

*Turning Vision Into Reality*

ARCHITECTURE ■ ENGINEERING ■ ENVIRONMENTAL ■ LANDSCAPE ARCHITECTURE ■ PLANNING ■ SURVEYING ■ UTILITIES

---

**VILLA AM MEER**  
**CITY OF LONGBOAT KEY, FLORIDA**

**LIFT STATION ANALYSIS**

PREPARED FOR

**ASCENTIA DEVELOPMENT GROUP**  
**1990 MAIN STREET, SUITE 750**  
**SARASOTA, FLORIDA 34236**  
**Phone: (941) 309-5383**

PREPARED BY

**GEORGE F. YOUNG, INC.**  
**10540 PORTAL CROSSING, SUITE 105**  
**BRADENTON, FLORIDA 34211**  
**Phone: (941) 747-2981**  
**[www.georgefyoung.com](http://www.georgefyoung.com)**

**NOVEMBER 2013**

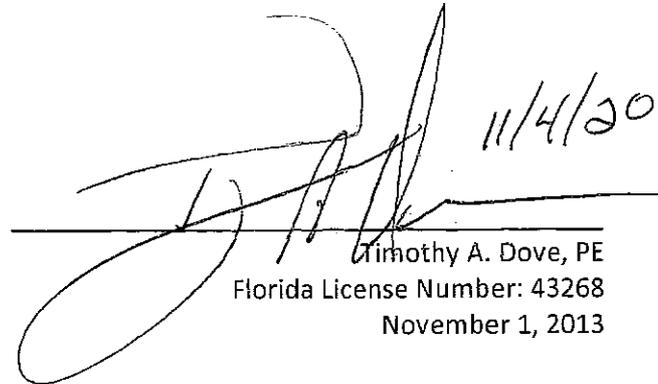
## TABLE OF CONTENTS

- I. ENGINEER'S CERTIFICATION
- II. CAPACITY CALCULTIONS
- III. FORCEMAIN ANALYSIS

**ENGINEER'S CERTIFICATION**

This Lift Station Analysis for Villa Am Meer was performed by me or under my direct supervision.

(SEAL)



11/4/2013

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Timothy A. Dove, PE  
Florida License Number: 43268  
November 1, 2013

# LIFT STATION CALCULATIONS

Project Name: **Villa Am Meer**

Project Number: **13004600LC**

## Lift Station Data:

Design Population	4 People	
GPD / Capita	100 GPD	
Project GPD	400 GPD	
Peak Factor (High)	4 or	1,600 GPD
Peak Factor (Low)	0.25 or	100 GPD

## Lift Station Fill Time:

Wet Well Diameter	3 ft
Pump On Elevator	12.65
Pump Off Elevator	12.35
Height of cycle	0.15
Volume	1.06 Cu Ft.

Fill Time Min:	114 Min
Fill Time Avg:	29 Min
Fill Time Max:	7 Min

## Pump Design and Pump Down

Flow	11.25 GPM
Pump Down time:	0.70 min

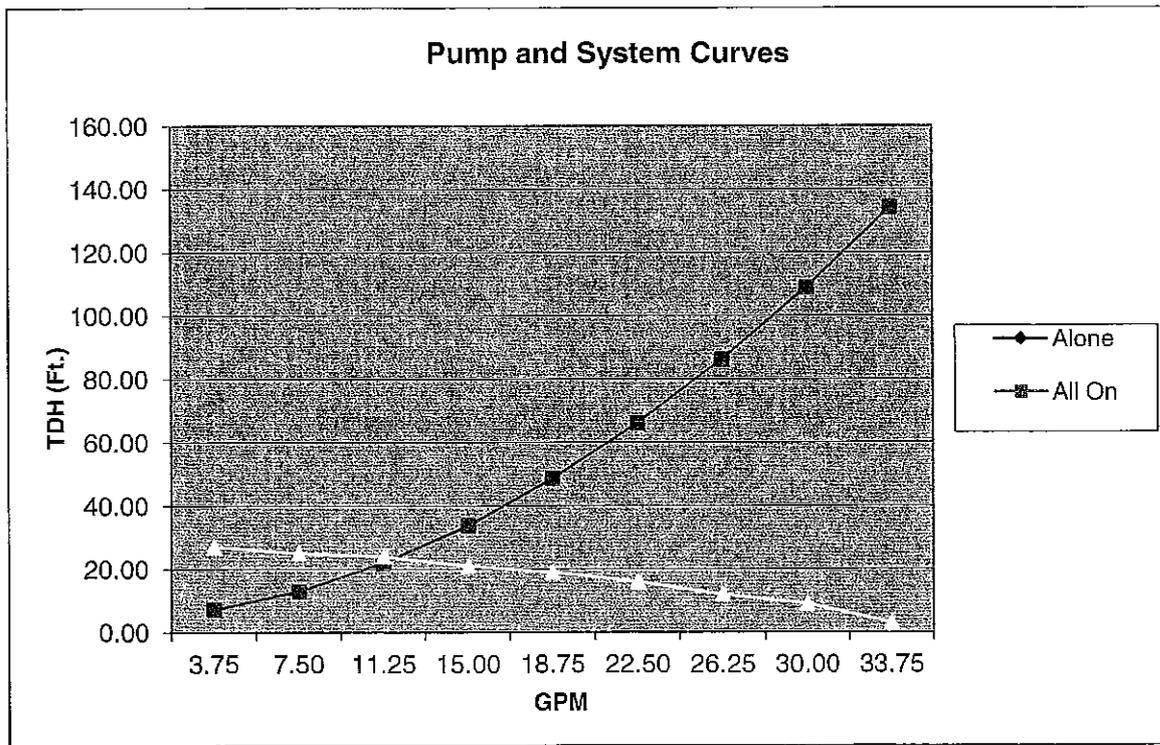
# LIFT STATION CALCULATIONS

## Villa Am Meer

Forcemain Size = 1.25 Inches  
 Forcemain Length = 384 Ft  
 Elevation of Discharge = 2.00 NGVD  
 Elevation of Pump = -3.00 NGVD  
 Static Head = 5.00  
 Forcemain Head = 0 PSI  
     in Feet = 0 Ft  
 Min FM Head = 0 PSI  
     in Feet = 0 Ft  
 Hazen Williams C = 120  
 Interval in GPM = 3.75

### System curve

Flow GPM	Forcemain loss/foot	Friction Loss	Static Head	Forcemain Head Min	TDH Alone	Forcemain Loss	TDH against FM	Velocity	Pump Curve
3.75	0.005754	2.21	5.00	0	7.21	0	7	0.98	27
7.50	0.020770	7.98	5.00	0	12.98	0	13	1.96	25
11.25	0.044011	16.90	5.00	0	21.90	0	22	2.94	24
15.00	0.074981	28.79	5.00	0	33.79	0	34	3.92	21
18.75	0.113352	43.53	5.00	0	48.53	0	49	4.90	19
22.50	0.158882	61.01	5.00	0	66.01	0	66	5.88	16
26.25	0.211378	81.17	5.00	0	86.17	0	86	6.86	12
30.00	0.270682	103.94	5.00	0	108.94	0	109	7.84	9
33.75	0.336662	129.28	5.00	0	134.28	0	134	8.82	3



November 1, 2013

**Coastal Construction Management, LLC**  
1298 North Dixie Freeway, Suite 2  
New Smyrna Beach, Florida 32168

Attention: Mr. Fred Hill  
Project Manager

RE: Report  
Geotechnical Engineering Services  
Villa Am Meer  
Longboat Key, Sarasota, Florida  
PSI Project No. 07571029

Dear Mr. Hill:

In general accordance with our proposal to you dated August 8, 2013, Professional Service Industries, Inc. (PSI) has provided geotechnical engineering services in connection with the referenced project. This report provides an overview of the field work and laboratory testing completed by us on the project, plus it provides recommendations for use in site preparation and foundation design.

### **PROJECT CONSIDERATIONS**

The site under consideration herein is located at 2251 Gulf of Mexico Drive in Longboat Key, Sarasota. The property fronts onto the Gulf of Mexico and occupies a plan area on the order of 5 acres. There is a residence on site that was built in the 1930's. The existing dwelling will be renovated and incorporated into the new project. A site vicinity map is included on **Figure 1**. The base map for this figure is from Google Earth.

From information that you provided to us, new construction will include a luxury condominium development with 16 units that will generally be located in the central area of the property. The units will be contained in a 5-story building (4 residential floors over one level of parking). Based on information from the project structural engineer (Mr. Chris Wright, P.E. of B&W Structural Designs, Inc.), we understand that foundation loads will typically be in the range 350 to 600 kips. A few columns may carry loads as high as 675 kips. An at-grade slab will be used for the ground floor of the garage. Drainage chambers will be provided below the garage floor slab to handle stormwater.

Other new construction will include an entrance drive, pool and deck areas plus landscaping. A pond is to be provided on the east side of the lot, which will in part be used for stormwater management. We understand that stormwater will also be handled in drainage chambers that are

located throughout various areas of the project, including below the garage floor slab as noted earlier. Porous pavers will also be locally provided to minimize stormwater runoff. Given the coastal setting, the building will be supported on piling with augercast piles being the preferred system.

A generalized plan view of the project is included on **Sheet 1**.

### **SITE CONDITIONS**

The site is located at 2251 Gulf of Mexico Drive in Longboat Key. The property is generally rectangular in shape with maximum dimensions on the order of 750 feet (east-west) by 280 feet (north-south). The plan area of the property is approximately 5 acres and there is an existing residence in the west area of the lot.

Based on topographic information provided to us for use on the project, ground surface elevations throughout most of the property range from +3 to +6 feet. The existing residence is elevated and at a finished floor level of +11.3 feet. The ground cover is presently mown grass with palm trees, other landscaping and a driveway to service the residence.

A review of the USDA Soil Survey for Sarasota County as contained on the internet indicates the site is mapped as containing surficial soil group 6, Canaveral fine sand. The typical profile for this soil group is 80 inches of generally clean fine sands (i.e. SP materials). These soils are hydrologic group C with the normal wet season high groundwater table reported to be in the depth interval 1.0 to 3.0 feet below existing grade. These sands are very permeable with the soil survey noting a permeability value in excess of 20 inches per hour.

Given the proximity of the site to the Gulf of Mexico, groundwater levels are generally slightly above sea level and they experience tidal fluctuations on a regular basis.

### **SUBSURFACE CONDITIONS**

#### **General**

To evaluate subsoil conditions at the site, we drilled/sample a series of borings. The borings (6 total) were completed using rotary wash procedures and sampled following Standard Penetration Test (SPT) procedures after ASTM D-1586. The borings were advanced to depths of 50 feet (main building area) and 15 feet (peripheral areas).

SPT samples were recovered continuously in the top 10 feet then at 5 foot intervals thereafter to boring termination. On completion of drilling operations, the boreholes were backfilled and the site generally cleaned up.

The samples recovered from the borings were returned to our Tampa laboratory for visual stratification. Subsoils were visually stratified following guidelines contained in the Unified Soil Classification System (USCS). Records of the materials encountered in the borings are presented as soil profiles on **Sheet 2**. **Sheet 2** includes a legend describing the subsoils in USCS format.

Select samples were tested to determine the percent fines passing the U.S. Standard No. 200 sieve. These tests were carried out following appropriate ASTM procedures. The results of the tests are included with the soil profiles on **Sheet 2**, adjacent to the depth increment of the test specimen.

From near borings B-4 and B-6, Shelby tube samples were recovered for laboratory permeability testing. These tests were performed in a permeameter using falling head procedures. The results of the tests indicated vertical permeabilities on the order of 20 feet per day for sands in the upper 2 to 4 feet.

### **Stratigraphy**

A review of the soil profiles on **Sheet 2** indicates reasonably consistent subsoil conditions at the site. For the purpose of discussion, these conditions have been generalized as follows.

From the ground surface to depths on the order of 37 feet below grade, the building borings disclosed sands. These sands are for the most part clean, grading with shell fragments (SP and SW materials) to depths of 23 to 32 feet below grade. Below the upper cleaner sands is clayey fine sand (SC material) that also locally grades with shells and shell fragments.

Based on SPT blow counts, the sands are for the most part in a medium dense to dense condition. In borings B-1 and B-2, the clayey fine sand at 35 feet below the ground surface was observed to be loose.

At depths of 37 feet to boring termination at 50 feet below grade, limestone was encountered. The limestone is a gray silty/clayey rock that is moderately well to well-cemented. In boring B-3, a partial loss of circulation in the drilling fluid used to maintain borehole stability was experienced at a depth of about 30 feet below grade. This boring was completed with the use of 40 feet of temporary casing.

In the shallower peripheral borings, clean sand with shells and shell fragments was observed to depths of 15 feet. These sands were also in a medium dense condition.

### **Groundwater**

Groundwater level measurements were made in the borings at the time of drilling. These measurements disclosed the water table at depths in the range 1.5 to 3.0 feet below existing grade. Based on topographic information available to us, we estimate that these depth measurements correspond to elevations on the order of +2 feet.

Water levels will fluctuate seasonally in response to rainfall or lack thereof. Additionally, given the proximity of the site to the Gulf of Mexico, there will be a tidal influence on water levels. There was significant rainfall in the area the weeks preceding our field work and we estimate that the normal wet season high groundwater table at the site will be +2 feet, which was close to that observed in the borings drilled in the late August 2013.

### **SITE SUITABILITY**

Based on the results of the borings, it is our opinion that the subsoil conditions are generally suitable for development from a geotechnical engineering perspective. For the support of the main building, we consider pressure grouted augercast piles to be appropriate for the project. Given the anticipated foundation loads as noted earlier, we recommend 14-inch diameter augercast piles with a design compression capacity of 60 tons. These piles should be installed 5 feet into the limestone layer which will result in a tip elevation of approximately 42 feet below existing grade.

Normal site preparation activities should be anticipated in the peripheral areas of the project. To maintain the good drainage characteristics that presently prevail at the site, any new fill required for the project should comprise clean well-draining sand with less than 5 percent by dry weight passing the U.S. Standard No. 200 sieve.

More detailed discussions pertaining to site preparation and foundation design matters follow.

### **SITE PREPARATION CONSIDERATIONS**

At the outset of construction, the site should be cleared of unwanted ground cover. This should include the removal of the grass and topsoil, plus the sidewalks/walkways that are present in the proposed building footprint. Wherever practical, these materials should be removed to a distance of 10 feet beyond the outside edges of the proposed exterior foundations. Associated with the initial site clearing activities, unwanted/conflicting buried utilities should also be removed with the resultant excavations backfilled with suitable granular soils that are thoroughly and uniformly compacted.

Site preparation activities should be carried out with care so as not to disturb existing construction that is to remain. A representative from PSI should be present during site preparation activities to ascertain that the work complies with our recommendations/requirements.

In areas that are to provide structural support, the subgrade soils should be uniformly compacted/densified. Subgrade soils for structural support should be compacted to at least 95 percent of the material's ASTM D-1557 maximum dry density for a depth of one foot. Where the subgrade soils are in drainage areas, we recommend that they not be compacted/densified but rather be left in a generally stable condition.

Any off site fill imported for the project should consist of fine sand with less than 5 percent by dry weight passing the U.S. Standard No. 200 sieve and be free of rubble, organics, clay, debris and other unsuitable material. (The material should be well-draining, particularly for placement in stormwater management areas). Fill should be tested and approved prior to import and placement. Each lift should have a loose thickness not exceeding 12 inches. Density tests should be performed to confirm the required compaction is being achieved prior to placing the next lift.

Prior to beginning compaction, soil moisture conditioning may be required. Soil moisture contents should be controlled in order to facilitate proper compaction. A moisture content within two percentage points of the optimum indicated by the modified Proctor test (ASTM D-1557) is recommended prior to compaction of the natural ground and fill. All engineered fill should be

compacted to at least 95 percent of the material's modified Proctor (ASTM D-1557) maximum dry density. In drainage areas, the fill should be placed in a manner which will enhance rather than inhibit water infiltration.

### PILE FOUNDATION CONSIDERATIONS

The pile system considered best suited for foundation support for this project is an augercast pile, which has been successfully used on Longboat Key in the past. For properly reinforced pressure grouted augercast piles (nominal 14 inch diameter), allowable design capacities as below should be attainable.

Compression	-	60 tons
Tension	-	30 tons
Lateral	-	6 tons

The capacities are based on the piles being installed into the limestone that underlies the site. Based on the results of the borings, we estimate that pile lengths will be on the order of 42 feet long, as measured from existing grade, to adequately support the noted design loads (based on the piles being embedded 5 feet into limestone). Actual pile lengths should be confirmed through a program of load testing as discussed herein.

The lateral capacity assumes a fixed head condition in the pile cap, with some nominal movement (one quarter inch or so) being tolerable. Additional lateral resistance can be provided from the passive resistance developed on the edges of the pile cap. Piles should be installed at a minimum center to center spacing of 35 inches (2.5 times the diameter). At least 6 feet should be maintained between installing/constructing new piles adjacent to piles that are less than 24 hours old.

The results of an L-Pile analysis for 6 tons lateral load and free and fixed head conditions are attached hereto for use by the project structural engineer.

We have found that the compression capacity of augercast piles is very dependent on the contractor selected and the equipment available to him. In this regard, we recommend that only pile contractors with past experience in the installation of piles with similar capacities installed in similar soil/rock conditions be considered for the project.

Augercast piles should be installed to predetermined design tip elevations established by means of a pile load test program. Additionally, the piles should be drilled in one continuous operation to the desired penetration depth. Grouting of augercast piles must similarly be carried out in a continuous operation without intermittent delays. Care should be exercised to provide an adequate supply of fresh grout to the auger tip at all times during casting. Monitoring of auger depth, grout volume/flow, and grout pressures is considered essential to ensure proper construction of augercast piles. All piles which encounter obstructions or delays during installation should be immediately redrilled.

Reinforcement cages may be installed from the ground surface by lowering through fresh grout. Cages should be adequately designed with helical or hoop steel and centralizers to properly locate it within the pile shaft. Single reinforcement bars or bundles can be installed to full depth to provide uplift resistance. We recommend that all piles be provided with at least one full length center bar as a means of assessing pile integrity during construction.

During the performance of our borings, we did experience a partial loss in the circulation of the drilling mud used to maintain borehole stability. Such losses can be experienced in the porous limestone and the pile contractor should be prepared to deal with such conditions during the installation of the test and production piles. Grout factors could be fairly high where piles encounter porous zones in the limestone. As noted earlier, we recommend that you select a pile contractor experienced with installing augercast piles in similar geology and to similar design capacities as presented herein.

To confirm pile capacities, we suggest that a load test program be carried out. In addition to carrying out a static load test, we suggest that several indicator piles be installed throughout the building footprint. The purpose of the indicator piles would be to confirm that the piles can be constructed to the projected tip depths across the full building footprint. Given the size of the building, we suggest that 4 grouted indicator piles be installed throughout the building area during the test program.

At one of the indicator pile locations, a static load test would be completed. The actual test pile should be a throwaway, preferably loaded to failure. Four production piles could be used as reaction for the test frame with these piles being monitored for tension movement. The compression test pile should be provided with strain gauges so that load transfer characteristics can be assessed. The load test should be conducted using the quick test procedures in accordance with ASTM D-1143.

Based on our understanding of building loads as noted herein, we estimate that the total settlement of pile supported foundations will be on the order of one inch or less. Differential settlement movements are anticipated to be one half inch or less. We estimate that the majority of the settlement movement will take place during the construction period as dead load is applied to the foundations.

Augercast piles should be installed by a contractor with demonstrated experience in this type of work. PSI will provide a representative on site to observe and record pile installation for the project. As design proceeds on the project, we can work with you and the Structural Engineer to optimize pile capacities if it is felt that such a design review could possibly provide a savings to the foundation system of the building.

## OTHER CONSIDERATIONS

### Floor Slabs

Slab on grade systems can be used for the ground floor of the building. Such slabs should be supported on compacted structural fill or densified native sands. Material to be placed within 12 inches of the bottom of the slabs should have no single particle greater than three inches. We further recommend that the upper two feet of the subgrade soils within the building pad be compacted to at least 95 percent of the maximum dry density of the soil's modified Proctor (ASTM D-1557). To help avoid potential problems with cracking because of differential loadings, the floor slabs should be liberally jointed and separated from columns and walls.

For building areas that are to receive moisture sensitive floor coverings, we recommend that the floor slab bearing soils be covered by a lapped polyethylene sheeting in order to minimize the potential for floor dampness which can affect the performance of the floor slab. This membrane should consist of a minimum six mil single layer of non-corroding, non-deteriorating sheeting material placed to minimize seams to cover all of the soil below the building floor. Seams should be overlapped a minimum of 12 inches.

We understand that stormwater chambers will be provided below a portion of the building. To enhance drainage, we do not recommend compacting/densifying the subsoils below the chambers, but rather have them left in a generally stable condition. The soils above drainage chambers should be stable and unyielding prior to pouring the floor slab. The drainage chambers should be installed per the supplier/manufacturer's recommendations.

### Earth Pressure on Walls

Retaining walls for the project should be designed to resist pressures exerted by the adjacent soils and hydrostatic head. For walls that are not restrained during backfilling but are free to rotate at the top, active earth pressure can be used in design. Walls that are restrained should be designed assuming at-rest pressures. As noted earlier, we recommend that sand meeting the specification requirements of engineered fill be used as backfill behind walls. Soil parameters for such material are presented below.

Total Unit Weight, $\gamma_b$	=	120 lbs/ft <sup>3</sup>
Angle of Internal Friction, $\phi$	=	30°
Coeff. of Sliding Friction	=	0.40
Active Soil Pressure coeff., $K_a$	=	0.33
At-rest Soil Pressure coeff., $K_o$	=	0.50
Passive Soil Pressure coeff., $K_p$	=	3.00

In order to avoid wall damage due to excessive compaction, hand operated mechanical tampers should be used to densify the wall backfill materials; heavy compaction equipment should not be allowed within five feet of the walls. The soil behind walls should be compacted to approximately 95 percent of the material's modified Proctor maximum dry density (ASTM D-1557).

The recommended pressures assume that adequate drainage is provided behind the walls to prevent the buildup of excess hydrostatic pressures. This can be achieved by installing drains, using geotextiles or backfilling with free draining sand in association with adequate weep holes.

### Excavations

In Federal Register, Volume 54, No. 209 (October 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR, Part 1926, Subpart P". This document was issued to better insure the safety of workmen entering trenches or excavations. It is mandated by this federal regulation that all excavations, whether they be utility trenches, basement excavations or footing excavations, be constructed in accordance with the current OSHA guidelines. It is our understanding that these regulations are being strictly enforced and if not strictly followed, the Owner and the contractor could be liable for substantial penalties.

The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state and federal safety regulations.

We are providing this information solely as a service to our client. PSI is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

### Pavement Areas

New pavements will be provided for the project. We understand that several of these areas will utilize porous pavers to reduce overall stormwater runoff for the project. The subgrade for such paving systems should be prepared as per the paver supplier/manufacturer's specification requirements. The subgrade should be prepared to a stable/unyielding condition.

Below conventional pavements and hardscape areas, the subsoils to a depth of 12 inches should be compacted to at least 95 percent of the material's ASTM D-1557 maximum dry density. Pavement materials should comply with appropriate City/County specification requirements and be placed in accordance with the guidelines of the same.

### Stormwater Management

Three stormwater management areas are proposed for the project, plus we understand that porous pavers will be used to minimize stormwater runoff. One of the stormwater management areas is below the floor slab of the main building, another is in the west of the site and the third in the east. Below the floor slab and in the west infiltration chambers will be used for stormwater management. We understand the easterly area will be a dry retention area. Design of the system is ongoing and some changes may be made.

Based on the results of the borings and the testing carried out by us for the project, we estimate the normal wet season high groundwater table at around elevation +2 feet. The upper sands are permeable and for design, a coefficient of vertical permeability of 20 feet per day can be used with the coefficient of horizontal permeability being 30 feet per day. A soil porosity value of 30 percent may be used in the analysis. The stormwater management system recovery analyses should be carried out using a program such as Modret or Ponds.

The stormwater management areas should be designed/constructed in accordance with Water Management District criteria and guidelines. As design proceeds, we would be pleased to assist the civil engineer in evaluating stormwater issues as necessary.

### REPORT LIMITATIONS

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This company is not responsible for the conclusions, opinions or recommendations made by others based on these data.

The scope of the investigation was intended to evaluate soil conditions within the influence of the proposed structure foundations and does not include an evaluation of potential deep soil problems such as sinkholes. The analysis and recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated. If any subsoil variations become evident during the course of this project, a re-evaluation of the recommendations contained in this report will be necessary after we have had an opportunity to observe the characteristics of the conditions encountered. The applicability of the report should also be reviewed in the event significant changes occur in the design, nature or location of the proposed structure.

The scope of our services does not include any environmental assessment or investigation for the presence or absence of hazardous or toxic materials in the soil, groundwater, or surface water within or beyond the site studied. Any statements in this report regarding odors, staining of soils, or other unusual conditions observed are strictly for the information of our client.

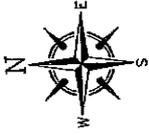


REFERENCE: GOOGLE EARTH  
SCALE: 1"=500'

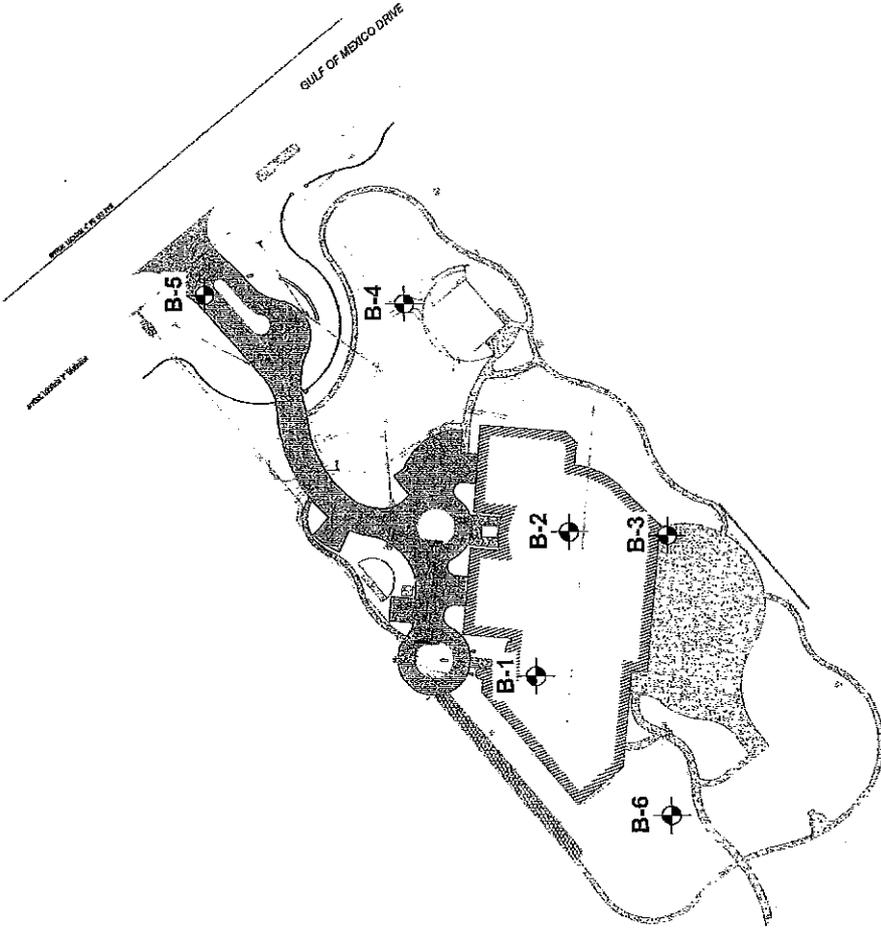
AERIAL MAP  
VILLA AM MEER  
LONGBOAT KEY  
SARASOTA COUNTY, FLORIDA

**psi** Information  
To Build On  
Engineering • Consulting • Testing

DRAWN: DJW	SCALE: NOTED	PROJ. NO: 07571029
CHKD: IK	DATE: 10-14-13	FIGURE: 1



**LEGEND**  
APPROXIMATE LOCATION OF  
STANDARD PENETRATION  
TEST BORING



GULF OF  
MEXICO

**LOCATION PLAN**  
SCALE: 1" = 100'

GEOTECHNICAL ENGINEERING SERVICES  
VILLA AM MEER  
LONGBOAT KEY  
SARASOTA COUNTY, FLORIDA

**psi** *Information*  
**To Build On**  
Engineering • Consulting • Testing

DRAWN: DJW	SCALE: NOTED	PROJECT NO.: 07571028
CHECKED: IK	DATE: 10-11-13	SHEET: 1

**LEGEND**

- ① LIGHT GRAY FINE SAND, (SP)
- ② LIGHT GRAY FINE SAND WITH SHELL FRAGMENTS, (SM)
- ③ GRAY CLAYEY FINE SAND, (SC)
- ④ GRAY CLAYEY FINE SAND WITH SHELL FRAGMENTS, (SC)
- ⑤ GRAY LIMESTONE

A WITH ROOTS/WOOD FRAGMENTS  
 UNIFIED SOIL CLASSIFICATION GROUP SYMBOL

N STANDARD PENETRATION RESISTANCE IN BLOWS PER FOOT

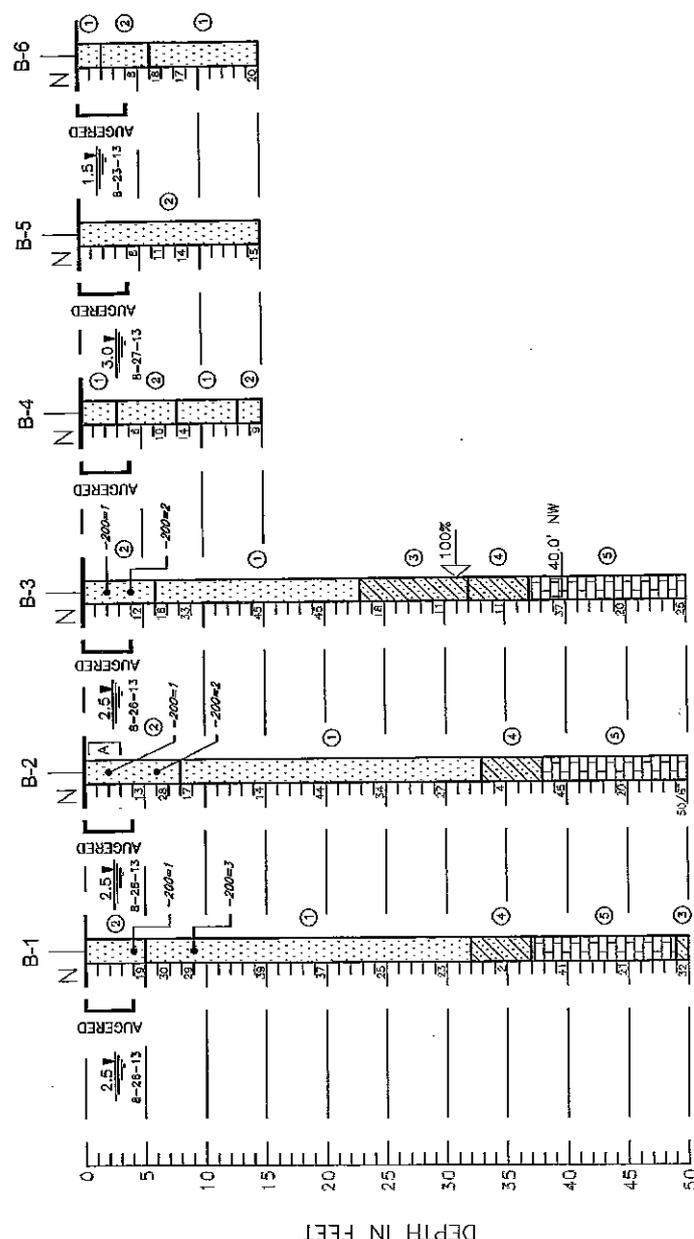
2.5' / 8-25-13 DEPTH TO GROUNDWATER LEVEL IN FEET WITH DATE OF READING

50' / 50' NUMBER OF BLOWS REQUIRED (SO) TO DRIVE SAMPLING SPOON 5 INCHES

40.0' / 40.0' NW DEPTH TO WHICH NW CASING WAS DRIVEN IN FEET

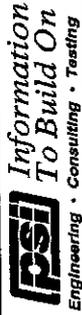
100% CIRCULATION LOSS IN PERCENT

-200 FINES PASSING #200 SIEVE IN PERCENT



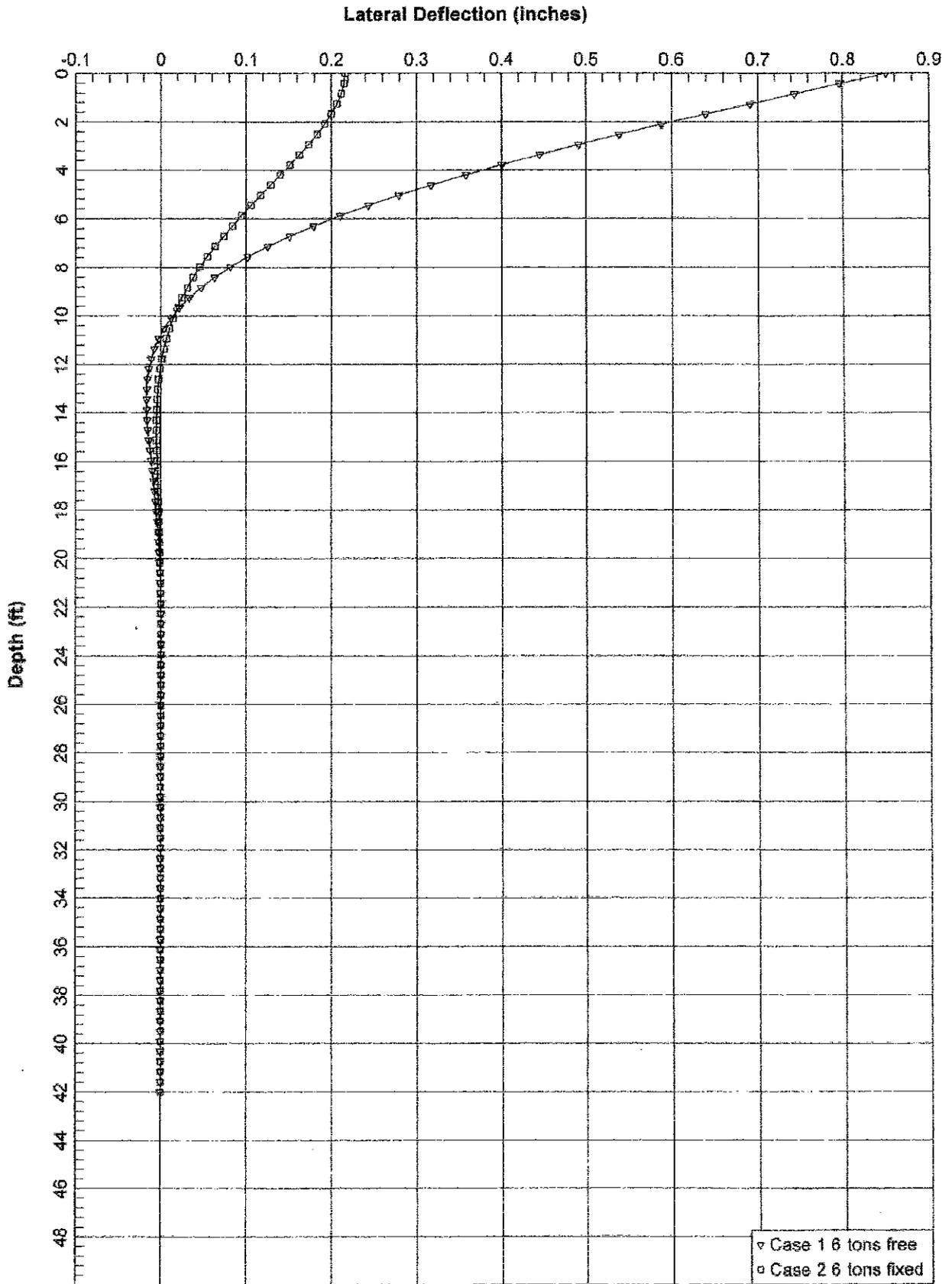
**SOIL PROFILES**  
 SCALE: 1"=10'

GEOTECHNICAL ENGINEERING SERVICES  
 VILLA AM MEER  
 LONGBOAT KEY  
 SARASOTA COUNTY, FLORIDA

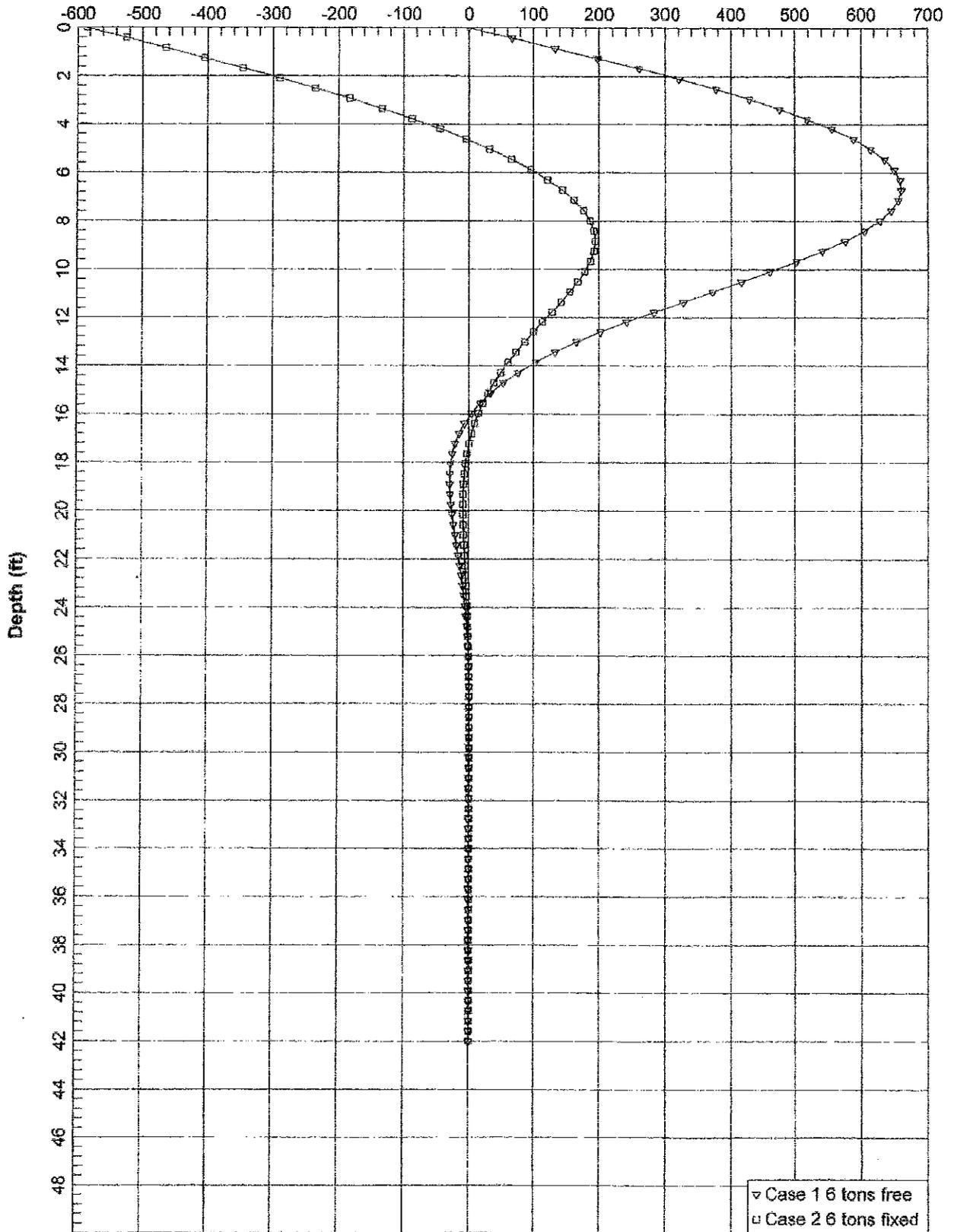


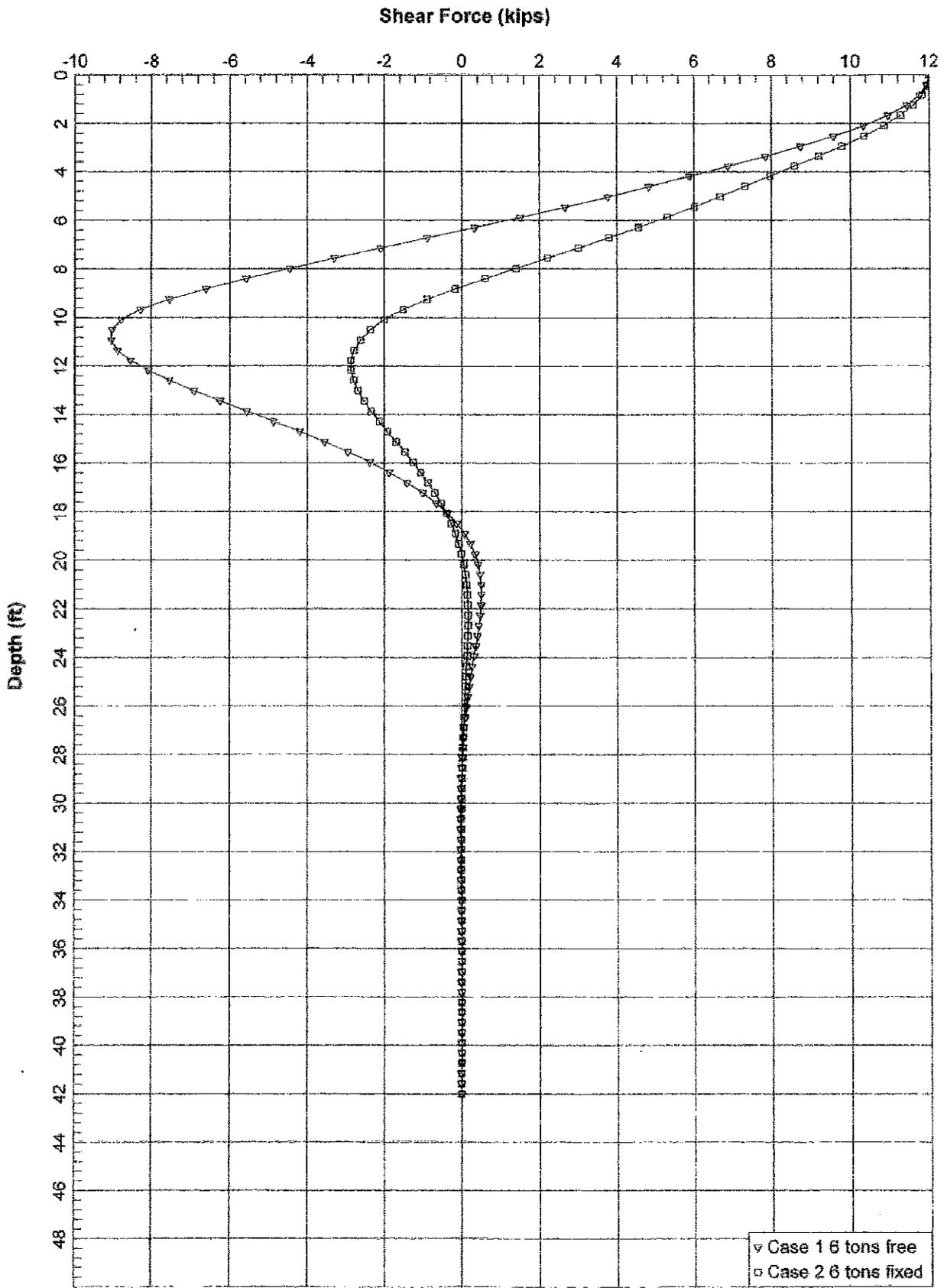
Engineering • Consulting • Testing

DRAWN: DJW	SCALE: NOTED	PROJ. NO: 07571029
CHKD: IK	DATE: 10-11-13	SHEET: 2



Bending Moment (in-kips)







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George F. Young, Inc.

*Turning Vision Into Reality*

ARCHITECTURE ■ ENGINEERING ■ ENVIRONMENTAL ■ LANDSCAPE ARCHITECTURE ■ PLANNING ■ SURVEYING ■ UTILITIES

---

**VILLA AM MEER**  
CITY OF LONGBOAT KEY, FLORIDA

**STORMWATER MANAGEMENT PLAN**

PREPARED FOR

**ASCENTIA DEVELOPMENT GROUP**  
1990 MAIN STREET, SUITE 750  
SARASOTA, FLORIDA 34236  
Phone: (941) 309-5383

PREPARED BY

**GEORGE F. YOUNG, INC.**  
10540 PORTAL CROSSING, SUITE 105  
BRADENTON, FLORIDA 34211  
Phone: (941) 747-2981  
[www.georgefyoung.com](http://www.georgefyoung.com)

**NOVEMBER 2013**

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### APPENDICES

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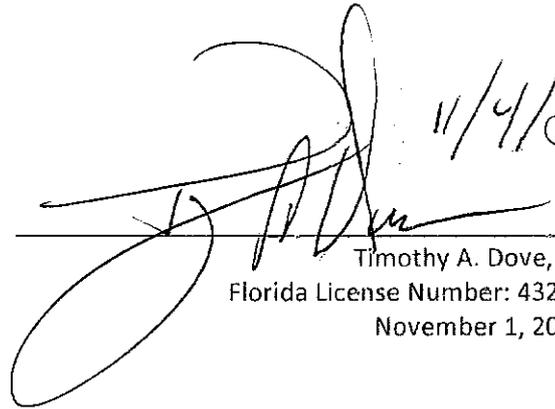
### EXHIBITS

- EXHIBIT 1 LOCATION MAP
- EXHIBIT 2 AERIAL SITE PLAN
- EXHIBIT 3 USGS QUADRANGLE MAP
- EXHIBIT 4 FEMA FIRM MAP
- EXHIBIT 5 NRCS SOILS MAP
- EXHIBIT 6 POST DEVELOPMENT BASIN MAP

I. ENGINEER'S CERTIFICATION

This Standard General Environmental Resource Permit Application Package, excluding the Geotechnical Investigation by others, for Villa Am Meer was performed by me or under my direct supervision.

(SEAL)



11/4/2013

---

Timothy A. Dove, PE  
Florida License Number: 43268  
November 1, 2013

## II. ERP APPLICATION

SECTION A

FOR AGENCY USE ONLY	
ACOE Application #	DEP/WMD Application #
Date Application Received	Date Application Received
Proposed Project Lat.	Fee Received \$
Proposed Project Long.	Fee Receipt #

**PART 1:**  
 Are any of the activities described in this application proposed to occur in, on, or over wetlands or other surface waters?  yes  no  
 Is this application being filed by or on behalf of a government entity or drainage district?  yes  no

**PART 2:**

A. Type of Environmental Resource Permit Requested (check at least one). See Attachment 2 for thresholds and descriptions.

- Noticed General - include information requested in Section B.
- Standard General (Single Family Dwelling) - include information requested in Sections C and D.
- Standard General (all other Standard General projects) - include information requested in Sections C and E.
- Individual (Single Family Dwelling) - include information requested in Sections C and D.
- Individual (all other Individual projects) - include information requested in Sections C and E.
- Conceptual - include information requested in Sections C and E.
- Mitigation Bank Permit (construction) - include information requested in Sections C and E. (If the proposed mitigation bank involves the construction of a surface water management system requiring another permit defined above, check the appropriate box and submit the information requested by the applicable section.)
- Mitigation Bank (conceptual) - include information requested in Sections C and E.

B. Type of activity for which you are applying (check at least one)

- Construction or operation of a new system other than a solid waste facility including dredging or filling in, on or over wetlands and other surface waters
- Construction, expansion or modification of a solid waste facility.
- Alteration or operation of an existing system which was not previously permitted by a WMD or DEP
- Modification of a system previously permitted by a WMD or DEP

Provide previous permit numbers:

<input type="checkbox"/> Alteration of a system	<input type="checkbox"/> Extension of permit duration
<input type="checkbox"/> Abandonment of a system	<input type="checkbox"/> Construction of additional phases of a system
<input type="checkbox"/> Removal of a system	

C. Are you requesting authorization to use Sovereign Submerged Lands?  
 yes  no  
 (See Section G and Attachment 5 for more information before answering this question.)

D. For activities in, on, or over wetlands or other surface waters, check type of federal dredge and fill permit requested:

<input type="checkbox"/> Individual	<input type="checkbox"/> Programmatic General	<input type="checkbox"/> General
<input type="checkbox"/> Nationwide	<input checked="" type="checkbox"/> Not Applicable	

E. Are you claiming to qualify for an exemption?  yes  no  
 If yes, provide rule number if known, \_\_\_\_\_

<b>PART 3:</b>	
<b>A. OWNER(S) OF LAND</b>	<b>B. ENTITY TO RECEIVE PERMIT (IF OTHER THAN OWNER)</b>
Name James A. Tallman	Name
Title and Company Managing Member / VAM LBK Development, LLC	Title and Company
Address 1990 Main Street Suite 750	Address
City, State, Zip Sarasota, Florida 10022	City, State, Zip
Telephone and Fax 941-309-5383	Telephone and Fax
E-mail Address: (optional)	E-mail Address: (optional)
<b>C. AGENT AUTHORIZED TO SECURE PERMIT</b>	<b>D. CONSULTANT (IF DIFFERENT FROM AGENT)</b>
Name	Name Timothy A. Dove, PE
Title and Company	Title and Company Project Manager / George F. Young, Inc
Address	Address 10540 Portal Crossing, Suite 105
City, State, Zip	City, State, Zip Bradenton, Florida 34211
Telephone and Fax	Telephone and Fax (941) 747-2981
E-mail Address: (optional)	E-mail Address: (optional) TDove@georgeyoung.com
<b>PART 4: (Please provide metric equivalent for federally funded projects):</b>	
A. Name of Project, including phase if applicable: <u>Villa Am Meer</u>	
B. Is this application for part of a multi-phase project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
C. Total applicant-owned area contiguous to the project? <u>5.03</u> ac.; _____ ha.	
D. Total area served by the system: <u>5.03</u> ac.; _____ ha.	
E. Impervious area for which a permit is sought: <u>2.52</u> ac.; _____ ha.	
F. Volume of water that the system is capable of impounding: <u>1.12</u> ac. ft. _____ m <sup>3</sup>	
G. What is the total area of work in, on, or over wetlands or other surface waters? <u>0.00</u> ac.; _____ ha.; _____ sq. ft.; _____ sq. m.	
H. Total volume of material to be dredged: <u>N/A</u> yd <sup>3</sup> ; _____ m <sup>3</sup>	
I. Number of new boat slips proposed: <u>N/A</u> wet slips; _____ dry slips	

PART 5:

Project location (use additional sheets if needed):  
County(ies) Sarasota County

Section(s) 8	Township 36S	Range 17E
Section(s) 16	Township 36S	Range 17E
Section(s)	Township	Range

Land Grant name, if applicable: .....

Tax Parcel Identification Number: 0008-04-0008

Street Address, Road, or other location: 2251 Gulf of Mexico Drive,

City, Zip Code, if applicable: Longboat Key Florida 34228

PART 6: Describe in general terms the proposed project, system, or activity.

Construction of a multifamily residential 16 unit building on the island of Longboat Key to include an access road, utilities, pool deck and stormwater facility areas including above and below ground storage areas (vaults).

PART 7:

A. If there have been any pre-application meetings, including on-site meetings, with regulatory staff, please list the date(s), location(s), and names of key staff and project representatives.

Et. Myers office meeting on August 8 2013 with Nolin Moon / Lucy Blair / Ajava Satyal / Tony McNeal / Megan Mills / Mark Adler GFY

B. Please identify by number any MSSW/Wetland Resource/ERP/ACOE Permits pending, issued or denied for projects at the location, and any related enforcement actions. *N/A*

Agency	Date	No. Type of Application	Action Taken

C. Note: The following information is required for projects proposed to occur in, on or over wetlands that need a federal dredge and fill permit or an authorization to use state owned submerged lands. Please provide the names, addresses and zip codes of property owners whose property directly adjoins the project (excluding application) and/or (for proprietary authorizations) is located within a 500 ft. radius of the applicant's land. Please attach a plan view showing the owner's names and adjoining property lines. Attach additional sheets if necessary. *N/A*

- |    |   |
|----|---|
| 1. | 2 |
| 3  | 4 |
| 5  | 6 |
| 7  | 8 |

PART 8:

A. By signing this application form, I am applying, or I am applying on behalf of the applicant, for the permit and any proprietary authorizations identified above, 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 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 or proprietary authorization 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, or I agree on behalf of the applicant, to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a responsible operation entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

James A. Tallman

Typed/Printed Name of Applicant (If no Agent is used)  
 or Agent (If one is so authorized below)

Typed/Printed Name of Co-Applicant

Signature of Applicant Agent

Date

Signature of Co-Applicant

Date

Managing Member

(Corporate Title if applicable)

(Corporate Title if applicable)

**AN AGENT MAY SIGN ABOVE ONLY IF THE APPLICANT COMPLETES THE FOLLOWING:**

B. I hereby designate and authorize the agent listed above to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and or proprietary authorization indicated above; and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Typed/Printed Name of Applicant	Signature of Applicant	Date
---------------------------------	------------------------	------

(Corporate Title if applicable)

Please note: The applicant's original signature (not a copy) is required above.

**PERSON AUTHORIZING ACCESS TO THE PROPERTY MUST COMPLETE THE FOLLOWING:**

C. I either own the property described in this application or I have legal authority to allow access to the property, and I consent, after receiving prior notification, to any site visit on the property by agents or personnel from the Department of Environmental Protection, the Water Management District and the U.S. Army Corps of Engineers necessary for the review and inspection of the proposed project specified in this application. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review and inspection. Further, I agree to provide entry to the project site for such agents or personnel to monitor permitted work if a permit is granted.

<u>James A. Tallman</u>	Signature of Applicant	Date
Typed/Printed Name of Applicant		

Managing Member

(Corporate Title if applicable)

### III. PROJECT OVERVIEW

#### A. OVERVIEW

The project includes the construction of a 16 unit condominium located on a 5 acres parcel. The stormwater management system includes five specific stormwater facility areas that are all designed to naturally filtrate into the existing soil. Located on the existing property is a single residence that was built in the early 1900's. Every effort is being made to keep the residence on the site in the post-development condition as preservation of the historical house. However, to preserve the residence at an existing base floor of 3.0, retention areas are designed to collect the area next to the house at the low elevation while grading the surrounding areas around the building. The project is located in Section 6, Township 39 South, Range 19 East in The City of Longboat Key Florida and is bound by The Gulf of Mexico Drive to the northeast and development areas to the southeast and northwest with the Gulf of Mexico located southwest of the project. The project site is owned and controlled by AGD and will be constructed in one phase as shown in the construction plans.

#### B. EXISTING CONDITIONS

The project area is currently vacant with some vegetation, shell driveway, minimal trees, and existing residence. With new improvements around this project and an elevated berm along the Gulf of Mexico there is no pre-development discharge leaving this site. Therefore, all systems are designed to contain the 100 year event as required by a closed basin. The site slopes toward the existing driveway in front of the house. Another high point is located central to the site with another low area before Gulf of Mexico Drive. Please see sheet S1 for the grading patterns of the existing site.

#### C. POST DEVELOPMENT CONDITIONS

The project includes the construction of a five specific stormwater facility areas. Each area is designed to stand on their own with no proposed interconnection between the systems. The basins for these systems include the following:

Basin Name	Acres	Description
Clubhouse	0.111	Minimized area around the existing residence capturing only that water contributing to the lower level drainage.
Building and Chambers	1.565	This is the primary basin for this project including the pool and Main Building areas along with the Generator building located in the NW corner of the site.
Turnaround	0.731	Labeled as "turnaround" the applicant requested this area to be an open field. It also provides access in the rear of the site for maintenance of the area. This stormwater system is designed to filtrate into the soil as quickly as possible.
Swale	0.336	A minor swale system is designed along the southeast face of the main building capturing a portion of the proposed fitness center.
Chambers and Pond	1.759	In front of the main condominium to the entrance road. This system includes a pond and a dry portion of the pond

		along with chambers to be installed in front of the building.
Offsite:	0.413	The site is built up in all areas which is to be graded back to natural grade. Areas along the southeast property line will be trapped between the existing facility to the southeast and the new added fill. We consider this area to be outside the project collection system and not counted in the model.
Total	4.915	

The required treatment volume will be provided in the same way that attenuation is provided by direct filtration into the water table. Modeling will be accomplished using the POND5 program based on the attached soils report and the contributing area. Each area will be reviewed independently to include weighted CN calculations and stage storage analysis for the chambers. Storage calculations were provided by StormTech which included a conversion from Stage Volume to Stage Area. Please see Appendices A-D and Exhibit 6 - Post Development Basin Map for more information. The modeling for the storage provided in the "Chambers and Pond" basin was accomplished using Ponds to calculate the filtration rate; however, the applicant has requested that a portion of the stormwater facility area be constructed with a liner which prevents stormwater filtration in that area. Therefore, the filtration rate was calculated based on the Ponds model to exclude the lined facility and remodeled using ICPR to calculate the final stage-storage for the system.

#### D. GENERAL DESIGN CRITERIA

The Stormwater Management Plan has been designed in accordance with the Southwest Florida Water Management District and Sarasota County design criteria.

The project is connected to tidal waters therefore there should be no water quantity criteria. However, the project is a closed basin and has no point of post development discharge.

The internal storm sewer system must accommodate the 10 year 24 hour storm event.

#### E. CONCLUSION

The proposed project has been designed to meet SWFWMD's and the City of Longboat Key's criteria for water quality and water quantity and will not adversely affect surrounding properties. Stages for the system are below the peak of storage in all facility areas and recovery of the stormwater run-off is anticipated by the models to be close to 72 hours after the event with only the Building and Chambers basin not recovering the 25 year event in the 72 hour period. Please note that the storage provided in the system will more than sufficiently contain the next 25 year storm event at the 72 hour point.

#### **IV. SOILS AND FLOODPLAIN INFORMATION**

##### **A. EXISTING SOILS**

The USDA Soil Conservation Service Soil Survey of Sarasota County, Florida, indicates that the site is occupied by soils group 6 including Canaveral fine sand Exhibit 5 – NRCS Soils Map for further information. Also, please see Appendix E – Geotechnical Report by Other for more information.

##### **B. FLOODPLAIN**

The property lies in Flood Zone "A13 (11'-12') and V17 (13')", see sheet S1 for exact location. The location of the flood zones were found on the Federal Emergency Management Agency, Flood Insurance Rate Map for City of Longboat Key Community Panel No. 125126 001B, effective date August 15, 1983. Please see Exhibit 4 – FEMA Firm Map for further information.

**V. LEGAL AND INSTITUTIONAL INFORMATION**

**A. SITE ACCESS**

The project site has access from Gulf of Mexico Drive which is a public right-of-way.

**B. UTILITIES**

The City of Longboat Key will provide potable water. Sanitary sewer service to the site is provided by the City of Longboat Key in conjunction with agreements with Manatee County.

**C. OWNERSHIP AND CONTROL**

The project site is owned, controlled and maintained by ADG (Ascentia Development Group)

# APPENDIX A POST DEVELOPMENT HYDROLOGY CN CALCULATIONS

# APPENDIX A POST DEVELOPMENT HYDROLOGY CN CALCULATIONS

**POST DEVELOPMENT  
HYDROLOGY CALCULATIONS  
BASIN POST-Turnaround**

Hydrologic Soil Group	A/B	Canaveral Sand - Beaches			
Ground Cover		Square Feet (SF)	Area (AC)	Curve Number	Runoff Coefficient
Impervious		3,970	0.09	98	0.95
Open Areas/Landscaping		27,853	0.64	74	0.2
Open Water		25	0.00	100	1
Total DCIA			0.00		
Total Non DCIA			0.09		
DCIA %			0.00%		
<b>Total Basin Area</b>		<b>31,848</b>	<b>0.731</b>		
Weighted Curve Number of Non DCIA				<b>77.01</b>	
Weighted Curve Number				<b>77.01</b>	
Weighted Runoff Coefficient for Non DCIA					<b>0.29</b>
Weighted Runoff Coefficient					<b>0.29</b>

**REQUIRED TREATMENT VOLUME**

Treatment Volume Area =

0.73 AC

Treatment Volume based on presumptive criteria = The first 0.50" of runoff =

1327 C.F. or 0.030 A.F.

**POST DEVELOPMENT  
HYDROLOGY CALCULATIONS  
BASIN POST-Clubhouse**

Hydrologic Soil Group	A/B	Canaveral Sand - Beaches			
Ground Cover		Square Feet (SF)	Area (AC)	Curve Number	Runoff Coefficient
Impervious		2,128	0.05	98	0.95
Open Areas/Landscaping		2,725	0.06	74	0.2
Open Water			0.00	100	1
Total DCIA			0.00		
Total Non DCIA			0.05		
DCIA %			0.00%		
<b>Total Basin Area</b>		<b>4,853</b>	<b>0.111</b>		
<b>Weighted Curve Number of Non DCIA</b>				<b>84.52</b>	
<b>Weighted Curve Number</b>				<b>84.52</b>	
<b>Weighted Runoff Coefficient for Non DCIA</b>					<b>0.53</b>
<b>Weighted Runoff Coefficient</b>					<b>0.53</b>

**REQUIRED TREATMENT VOLUME**

Treatment Volume Area = 0.11 AC  
 Treatment Volume based on presumptive criteria = The first 0.50" of runoff = 202 C.F. or 0.005 A.F.

**POST DEVELOPMENT  
HYDROLOGY CALCULATIONS  
BASIN POST-swale**

Hydrologic Soil Group	A/B	Canaveral Sand - Beaches			
Ground Cover		Square Feet (SF)	Area (AC)	Curve Number	Runoff Coefficient
Impervious		2,868	0.07	98	0.95
Open Areas/Landscaping		10,517	0.24	74	0.2
Open Water		1,270	0.03	100	1
Total DCIA			0.00		
Total Non DCIA			0.09		
DCIA %			0.00%		
<b>Total Basin Area</b>		<b>14,655</b>	<b>0.336</b>		
<b>Weighted Curve Number of Non DCIA</b>				<b>80.78</b>	
<b>Weighted Curve Number</b>				<b>80.95</b>	
<b>Weighted Runoff Coefficient for Non DCIA</b>					<b>0.41</b>
<b>Weighted Runoff Coefficient</b>					<b>0.42</b>

**REQUIRED TREATMENT VOLUME**

Treatment Volume Area = 0.34 AC  
 Treatment Volume based on presumptive criteria = The first 0.50" of runoff = 611 C.F. or 0.014 A.F.

**POST DEVELOPMENT  
HYDROLOGY CALCULATIONS  
BASIN POST-Building and Chambers**

Hydrologic Soil Group	A/B	Canaveral Sand - Beaches			
Ground Cover		Square Feet (SF)	Area (AC)	Curve Number	Runoff Coefficient
Impervious		45,170	1.04	98	0.95
Open Areas/Landscaping		23,013	0.53	74	0.2
Open Water		0	0.00	100	1
Total DCIA			0.00		
Total Non DCIA					
DCIA %			0.00%		
<b>Total Basin Area</b>		<b>68,183</b>	<b>1.565</b>		
Weighted Curve Number of Non DCIA				<b>24.98</b>	
Weighted Curve Number				<b>89.90</b>	
Weighted Runoff Coefficient for Non DCIA					<b>0.07</b>
Weighted Runoff Coefficient					<b>0.70</b>

**REQUIRED TREATMENT VOLUME**

Treatment Volume Area =

1.57 AC

Treatment Volume based on presumptive criteria = The first 0.50" of runoff =

2841 C.F. or 0.065 A.F.

**POST DEVELOPMENT  
HYDROLOGY CALCULATIONS  
BASIN POST-chamber-pond**

Hydrologic Soil Group	A/B	Canaveral Sand - Beaches			
Ground Cover		Square Feet (SF)	Area (AC)	Curve Number	Runoff Coefficient
Impervious		25,243	0.58	98	0.95
Open Areas/Landscaping		38,828	0.89	74	0.2
Open Water		12,541	0.29	100	1
Total DCIA			0.00		
Total Non DCIA			0.00		
DCIA %			0.00%		
<b>Total Basin Area</b>		<b>76,612</b>	<b>1.759</b>		
<b>Weighted Curve Number of Non DCIA</b>				<b>37.50</b>	
<b>Weighted Curve Number</b>				<b>86.16</b>	
<b>Weighted Runoff Coefficient for Non DCIA</b>					<b>0.10</b>
<b>Weighted Runoff Coefficient</b>					<b>0.58</b>

**REQUIRED TREATMENT VOLUME**

Treatment Volume Area =

1.76 AC

Treatment Volume based on presumptive criteria = The first 0.50" of runoff =

3192 C.F. or 0.073 A.F.

**APPENDIX B**  
**POST DEVELOPMENT POND AND CHAMBER VOLUME**  
**CALCULATIONS**

basin

## BUILDING AND CHAMBERS

	Input Parameters
Number of chambers -	384
Voids in the stone (porosity) -	0.30
Base of stone elevation -	2.50 ft
Amount of stone above chambers	6 in
Amount of stone below chambers	6 in



### StormTech SC 740 Cumulative Storage Volumes

Height of System (in)	Incremental Chamber (ft <sup>3</sup> )	Incremental Stone (ft <sup>3</sup> )	Incremental Ch & St (ft <sup>3</sup> )	Cumulative Chamber (ft <sup>3</sup> )	Cumulative System (ft <sup>3</sup> )	Elevation	Volume /stage	SF Prorate	
42	0.00	0.85	0.85	67.66	25981	6.00	325	3894	6.000
41	0.00	0.85	0.85	66.81	25657	5.92	325	3894	5.917
40	0.00	0.85	0.85	65.97	25332	5.83	325	3894	5.833
39	0.00	0.85	0.85	65.12	25008	5.75	325	3894	5.750
38	0.00	0.85	0.85	64.28	24683	5.67	325	3894	5.667
37	0.00	0.85	0.85	63.43	24359	5.58	325	3894	5.583
36	0.05	0.83	0.88	62.59	24034	5.50	339	4072	5.500
35	0.16	0.80	0.96	61.71	23695	5.42	368	4420	5.417
34	0.28	0.76	1.04	60.75	23327	5.33	400	4804	5.333
33	0.60	0.66	1.27	59.70	22926	5.25	487	5842	5.250
32	0.80	0.60	1.41	58.44	22440	5.17	540	6480	5.167
31	0.95	0.56	1.51	57.03	21900	5.08	580	6961	5.083
30	1.07	0.52	1.60	55.52	21319	5.00	613	7360	5.000
29	1.18	0.49	1.67	53.92	20706	4.92	642	7702	4.917
28	1.27	0.47	1.73	52.25	20064	4.83	665	7977	4.833
27	1.36	0.44	1.79	50.52	19400	4.75	689	8265	4.750
26	1.45	0.41	1.86	48.73	18711	4.67	715	8585	4.667
25	1.52	0.39	1.91	46.86	17995	4.58	734	8812	4.583
24	1.58	0.37	1.95	44.95	17261	4.50	750	8998	4.500
23	1.64	0.35	1.99	43.00	16511	4.42	766	9192	4.417
22	1.70	0.34	2.03	41.00	15745	4.33	781	9376	4.333
21	1.75	0.32	2.07	38.97	14964	4.25	796	9548	4.250
20	1.80	0.30	2.11	36.90	14168	4.17	809	9709	4.167
19	1.85	0.29	2.14	34.79	13359	4.08	823	9878	4.083
18	1.89	0.28	2.17	32.65	12536	4.00	833	10001	4.000
17	1.93	0.26	2.20	30.48	11703	3.92	844	10133	3.917
16	1.97	0.25	2.23	28.28	10858	3.83	855	10265	3.833
15	2.01	0.24	2.25	26.05	10003	3.75	865	10377	3.750
14	2.04	0.23	2.28	23.80	9138	3.67	874	10491	3.667
13	2.07	0.22	2.30	21.52	8264	3.58	882	10587	3.583
12	2.10	0.21	2.32	19.22	7381	3.50	890	10684	3.500
11	2.13	0.21	2.34	16.90	6491	3.42	898	10771	3.417
10	2.15	0.20	2.35	14.57	5594	3.33	903	10842	3.333
9	2.18	0.19	2.37	12.21	4690	3.25	910	10917	3.250
8	2.20	0.19	2.38	9.84	3780	3.17	915	10985	3.167
7	2.21	0.18	2.39	7.46	2865	3.08	918	11014	3.083
6	0.00	0.85	0.85	5.07	1947	3.00	325	3894	
5	0.00	0.85	0.85	4.23	1623	2.92			
4	0.00	0.85	0.85	3.38	1298	2.83			
3	0.00	0.85	0.85	2.54	974	2.75			
2	0.00	0.85	0.85	1.69	649	2.67			
1	0.00	0.85	0.85	0.85	325	2.58			

BASIN

**CLUBHOUSE**

Chamber Model -

SC-310

Units -

Imperial [Click Here for](#)

Number of chambers -

68

Voids in the stone (porosity) -

30 %

Base of Stone Elevation -

1.50 ft

Amount of Stone Above Chamber

6 in

Amount of Stone Below Chamber

6 in

Height of System (inches)	Incremental Single Chamber (cubic feet)	Incremental Total Chamber (cubic feet)	Incremental Stone (cubic feet)	Incremental Ch & St (cubic feet)	Cumulative Chamber (cubic feet)	Elevation (feet)	Volume /stage	Area Proration	Volume Prorata	
28	0.00	0.00	40.33	40.33	1831.76	4.33	40.33	484	1589.793	3.833
27	0.00	0.00	40.33	40.33	1791.43	4.25	40.33	484	1549.465	3.750
26	0.00	0.00	40.33	40.33	1751.10	4.17	40.33	484	1509.137	3.667
25	0.00	0.00	40.33	40.33	1710.78	4.08	40.33	484	1468.809	3.583
24	0.00	0.00	40.33	40.33	1670.45	4.00	40.33	484	1428.482	3.500
23	0.00	0.00	40.33	40.33	1630.12	3.92	40.33	484	1388.154	3.417
22	0.06	4.00	39.13	43.13	1589.79	3.83	43.13	518	1347.826	3.333
21	0.15	10.52	37.17	47.69	1546.67	3.75	47.69	572	1304.699	3.250
20	0.27	18.08	34.90	52.98	1498.97	3.67	52.98	636	1257.007	3.167
19	0.54	37.05	29.21	66.26	1445.99	3.58	66.26	795	1204.024	3.083
18	0.70	47.87	25.97	73.84	1379.73	3.50	73.84	886	1137.764	3.000
17	0.82	56.07	23.51	79.58	1305.89	3.42	79.58	955	1063.924	2.917
16	0.92	62.87	21.47	84.34	1226.32	3.33	84.34	1012	984.3488	2.833
15	1.01	69.02	19.62	88.64	1141.98	3.25	88.64	1064	900.0121	2.750
14	1.09	74.43	18.00	92.43	1053.34	3.17	92.43	1109	811.3705	2.667
13	1.15	78.49	16.78	95.27	960.91	3.08	95.27	1143	718.942	2.583
12	1.21	82.62	15.54	98.16	865.64	3.00	98.16	1178	623.6704	2.500
11	1.27	86.69	14.32	101.01	767.48	2.92	101.01	1212	525.5115	2.417
10	1.32	90.07	13.31	103.38	666.47	2.83	103.38	1241	424.4994	2.333
9	1.36	92.82	12.48	105.30	563.09	2.75	105.30	1264	321.1223	2.250
8	1.40	95.54	11.67	107.21	457.79	2.67	107.21	1286	215.8212	2.167
7	1.43	97.55	11.06	108.62	350.58	2.58	108.62	1303	108.6156	2.083
6	0.00	0.00	40.33	40.33	241.97	2.50				
5	0.00	0.00	40.33	40.33	201.64	2.42				
4	0.00	0.00	40.33	40.33	161.31	2.33				
3	0.00	0.00	40.33	40.33	120.98	2.25				
2	0.00	0.00	40.33	40.33	80.66	2.17				
1	0.00	0.00	40.33	40.33	40.33	2.08				

Basin:

**CHAMBER - POND**

Chamber Model - SC-310  
 Units - Imperial [Click Here for](#)

Number of chambers -	52
Voids in the stone (porosity) -	30 %
Base of Stone Elevation -	2.50 ft
Amount of Stone Above Cham	.6 in
Amount of Stone Below Cham	.6 in

**StormTech SC-310 Cumulative Statistics**

Height of System (inches)	Incremental Single Chamber (cubic feet)	Incremental Total Chamber (cubic feet)	Incremental Stone (cubic feet)	Incremental Chamber (cubic feet)	Cumulative Chamber (cubic feet)	Volume / Stage (cubic feet)	Area Poration (sq ft)	Volume Poration (cubic feet)	Area SWF		STAGE Elev.	AREA	Area SWF plus chambers	
									without wet area (SF)	with wet area (SF)			filtration (SF)	plus chambers w/wet (SF)
28	0.00	0.00	30.84	30.84	1400.76	30.84	370	1215.72	4979	17594	5.500	4979	4979	17594
27	0.00	0.00	30.84	30.84	1369.92	30.84	370	1184.88	4940	17383	5.417	4940	4940	17383
26	0.00	0.00	30.84	30.84	1339.08	30.84	370	1154.05	4901	17173	5.333	4901	4901	17173
25	0.00	0.00	30.84	30.84	1308.24	30.84	370	1123.21	4862	16962	5.250	4862	4862	16962
24	0.00	0.00	30.84	30.84	1277.40	30.84	370	1092.37	4823	16752	5.167	4823	4823	16752
23	0.00	0.00	30.84	30.84	1246.56	30.84	370	1061.53	4783	16541	5.083	4783	4783	16541
22	0.06	3.06	29.92	32.98	1215.72	4.33	396	1030.69	4744	16331	5.000	4744	4744	16331
21	0.15	8.05	28.43	36.47	1182.74	4.25	438	997.71	4705	16120	4.917	4705	4705	16120
20	0.27	13.82	26.69	40.52	1146.27	4.17	486	961.24	4666	15910	4.833	4666	4666	15910
19	0.54	28.33	22.34	50.67	1105.76	4.08	608	920.72	4627	15699	4.750	4627	4627	15699
18	0.70	36.61	19.86	56.47	1055.09	4.00	678	870.06	4588	15489	4.667	4588	4588	15489
17	0.82	42.88	17.98	60.85	998.62	3.92	730	813.59	4549	15278	4.583	4549	4549	15278
16	0.92	48.08	16.42	64.49	937.77	3.83	774	752.74	4510	15068	4.500	4510	4510	15068
15	1.01	52.78	15.00	67.78	873.28	3.75	813	688.24	4471	14857	4.417	4471	4471	14857
14	1.09	56.92	13.76	70.68	805.49	3.67	848	620.46	4431	14646	4.333	4431	4431	14646
13	1.15	60.02	12.83	72.85	734.81	3.58	874	549.78	4392	14436	4.250	4392	4392	14436
12	1.21	63.18	11.89	75.06	661.96	3.50	901	476.92	4353	14225	4.167	4353	4353	14225

No Storage Volume above chambers



**APPENDIX C**  
**POST DEVELOPMENT PONDS ANALYSIS FOR**  
**DRAWDOWN TIMES**

**PONDS Version 3.3.0276**  
**Retention Pond Recovery - Refined Method**  
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**Project Data**

Project Name: Villa Am Meer  
Simulation Description: Turn Around  
Project Number: 13004600LC  
Engineer : Timothy A. Dove  
Supervising Engineer: Mark Adler, PE  
Date: 11-01-2013

**Aquifer Data**

Base Of Aquifer Elevation, [B] (ft datum): -7.00  
Water Table Elevation, [WT] (ft datum): 2.00  
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 30.00  
Fillable Porosity, [n] (%): 30.00  
Vertical infiltration was not considered.

**Geometry Data**

Equivalent Pond Length, [L] (ft): 102.0  
Equivalent Pond Width, [W] (ft): 93.0  
Ground water mound is expected to intersect the pond bottom

**Stage vs Area Data**

<u>Stage</u> <u>(ft datum)</u>	<u>Area</u> <u>(ft<sup>2</sup>)</u>
5.00	25.0
5.50	6195.0
6.00	9145.0

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**Retention Pond Recovery - Refined Method**  
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**Scenario Input Data**

*Scenario 2 :: Area Turn Around (100-24)*

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing:	Routed with infiltration
Initial Groundwater Table:	default
Initial Pond Stage:	default
Boundary Condition:	default (constant head)
Repetitions:	1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes):	10
Computational time step (minutes):	1
Duration of simulation (hours):	92

Contributing Basins

Number of contributing basins: 1

*Basin 1*

Basin Name	Dry Turn Around Basin 1
Basin Area (acres)	0.731
Time Of Concentration (minutes)	15
DCIA (%)	0
Curve Number	77
Design Rainfall Depth (inches)	10
Design Rainfall Duration (hours)	24
Shape Factor	UHG 256
Rainfall Distribution	SCS Type II Florida Modified

Ugradient Inflows

Number of upgradient inflow nodes: 0

*Scenario 3 :: Area Turn Around (25-24)*

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing:	Routed with infiltration
Initial Groundwater Table:	default
Initial Pond Stage:	default
Boundary Condition:	default (constant head)
Repetitions:	1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes):	10
Computational time step (minutes):	1
Duration of simulation (hours):	96

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**Retention Pond Recovery - Refined Method**  
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**Scenario Input Data (cont'd.)**

Contributing Basins

Number of contributing basins: 1

*Basin 1*

Basin Name	Dry Turn Around Basin 1
Basin Area (acres)	0.731
Time Of Concentration (minutes)	15
DCIA (%)	0
Curve Number	77
Design Rainfall Depth (inches)	8
Design Rainfall Duration (hours)	24
Shape Factor	UHG 256
Rainfall Distribution	SCS Type II Florida Modified

Ugradient Inflows

Number of upgradient inflow nodes: 0

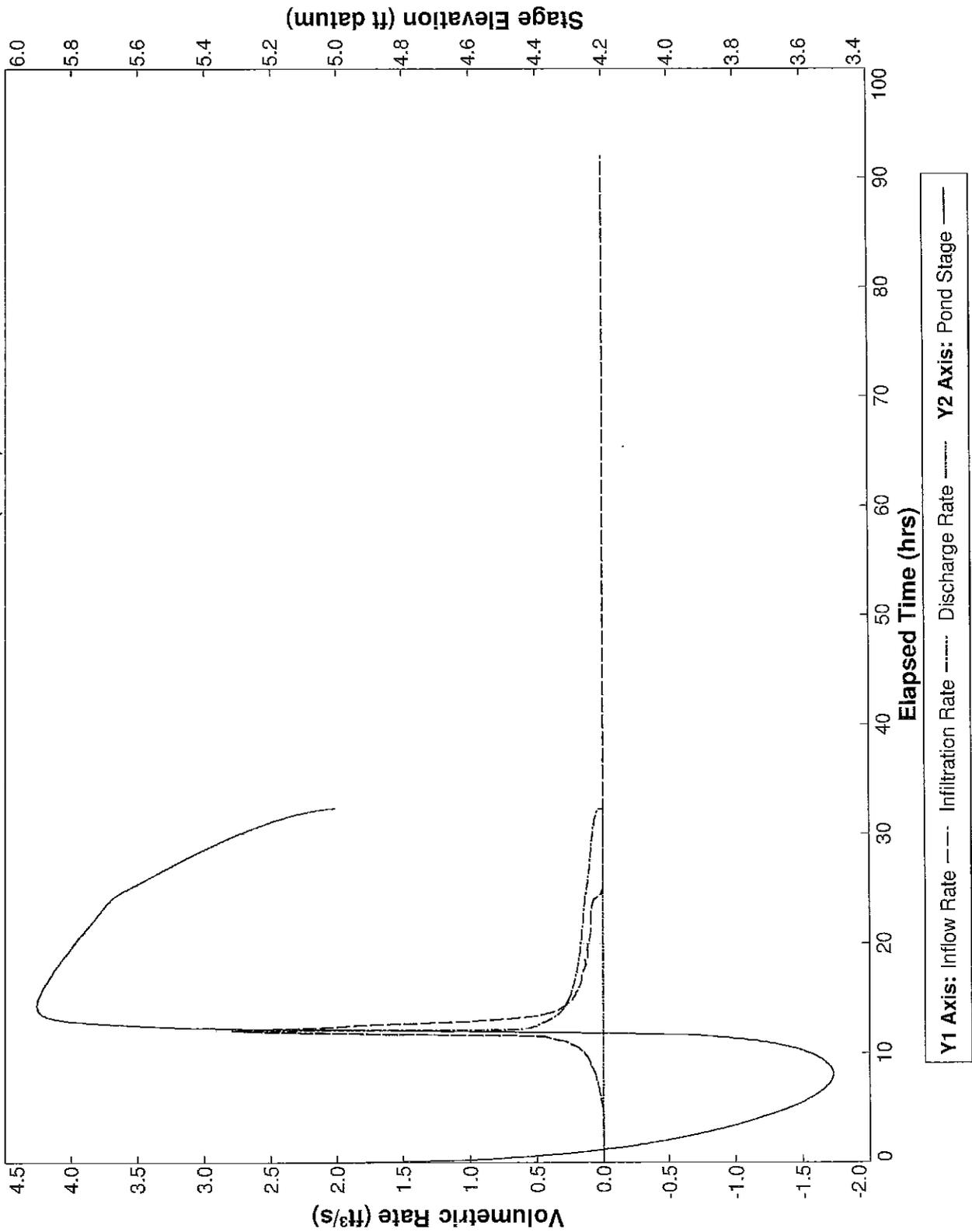
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**Retention Pond Recovery - Refined Method**  
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**Summary of Results** :: Scenario 2 :: Area Turn Around (100-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	8.100	3.51		
Maximum	14.317	5.90		
<b>Inflow</b>				
Rate - Maximum - Positive	12.083		2.7951	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.483			18928.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			18928.6
<b>Infiltration</b>				
Rate - Maximum - Positive	12.083		2.7913	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	32.333			18928.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			18928.6
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

**Plot of Flow Rates and Pond Stage vs Elapsed Time**

Scenario 2 :: Area Turn Around (100-24)



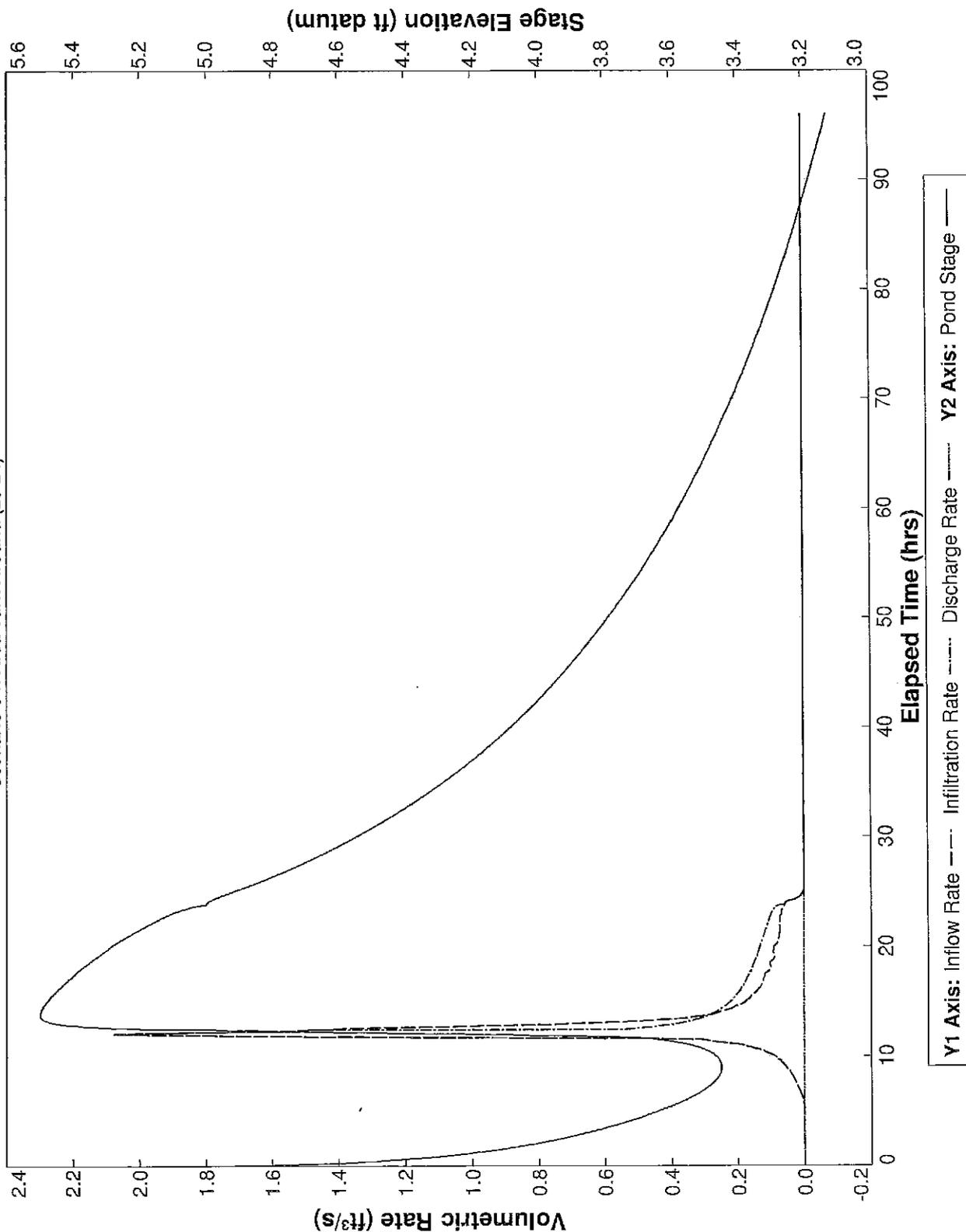
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**Retention Pond Recovery - Refined Method**  
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**Summary of Results** :: Scenario 3 :: Area Turn Around (25-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	96.000	3.12		
Maximum	13.800	5.50		
<b>Inflow</b>				
Rate - Maximum - Positive	12.083		2.0774	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.483			13991.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			13991.0
<b>Infiltration</b>				
Rate - Maximum - Positive	12.083		2.0745	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.483			13991.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			13991.0
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

**Plot of Flow Rates and Pond Stage vs Elapsed Time**

Scenario 3 :: Area Turn Around (25-24)



**PONDS Version 3.3.0276**  
**Retention Pond Recovery - Refined Method**  
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**Project Data**

Project Name: Villa Am Meer  
Simulation Description: Clubhouse  
Project Number: 13004600LC  
Engineer : Timothy A. Dove  
Supervising Engineer: Mark Adler, PE  
Date: 11-01-2013

**Aquifer Data**

Base Of Aquifer Elevation, [B] (ft datum): -7.00  
Water Table Elevation, [WT] (ft datum): 1.80  
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 30.00  
Fillable Porosity, [n] (%): 30.00  
Vertical infiltration was not considered.

**Geometry Data**

Equivalent Pond Length, [L] (ft): 130.0  
Equivalent Pond Width, [W] (ft): 15.0  
Ground water mound is expected to intersect the pond bottom

**Stage vs Area Data**

Stage (ft datum)	Area (ft <sup>2</sup> )
2.00	1303.0
2.25	1264.0
2.50	1178.0
2.75	1064.0
3.00	886.0
3.25	572.0
3.50	484.0
3.75	484.0

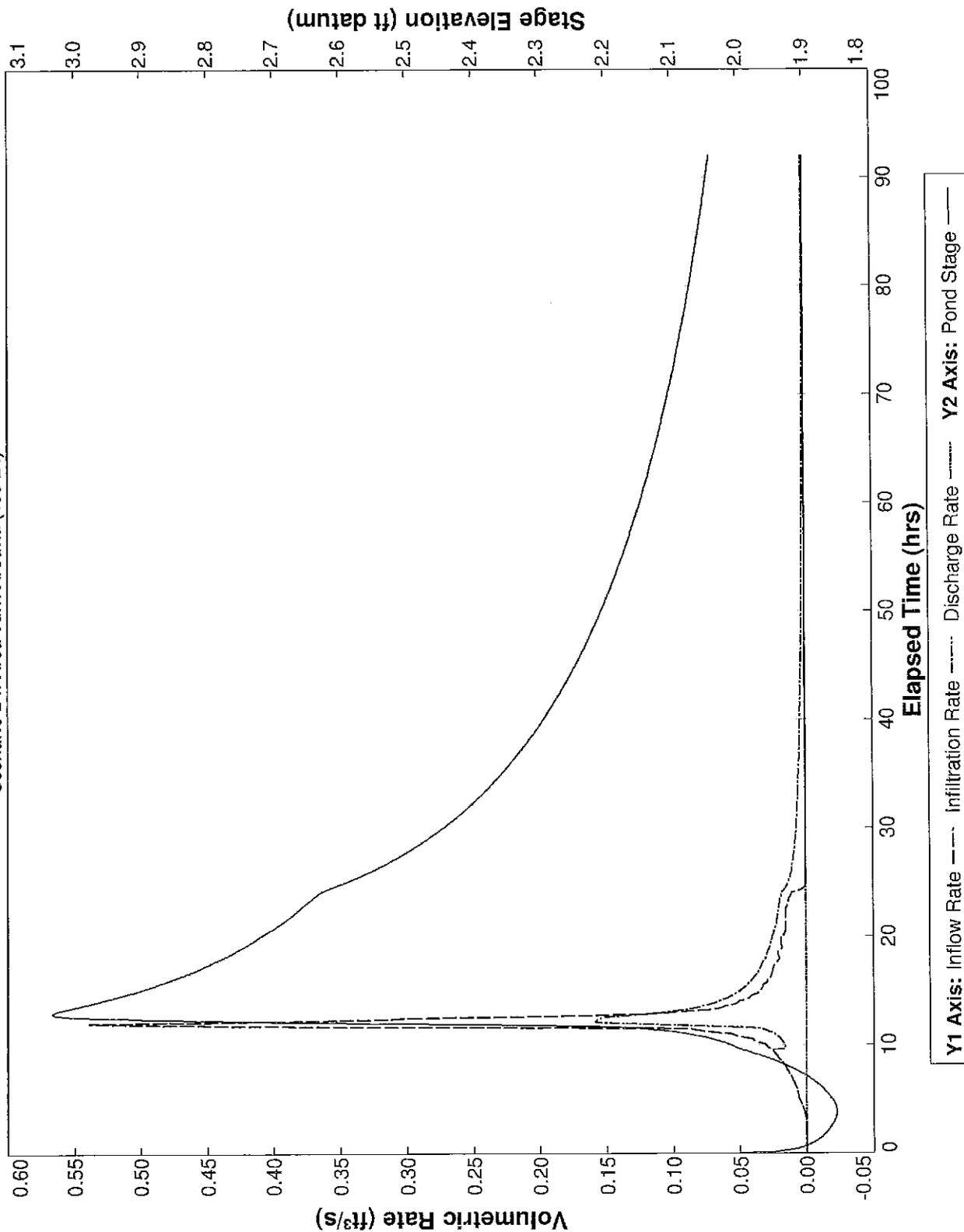
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**Summary of Results** :: Scenario 2 :: Area Turn Around (100-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	3.817	1.85		
Maximum	12.900	3.03		
<b>Inflow</b>				
Rate - Maximum - Positive	12.033		0.5393	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.983			3257.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			3257.9
<b>Infiltration</b>				
Rate - Maximum - Positive	12.183		0.1586	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	92.000			3205.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			3205.3
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

**Plot of Flow Rates and Pond Stage vs Elapsed Time**

Scenario 2 :: Area Turn Around (100-24)



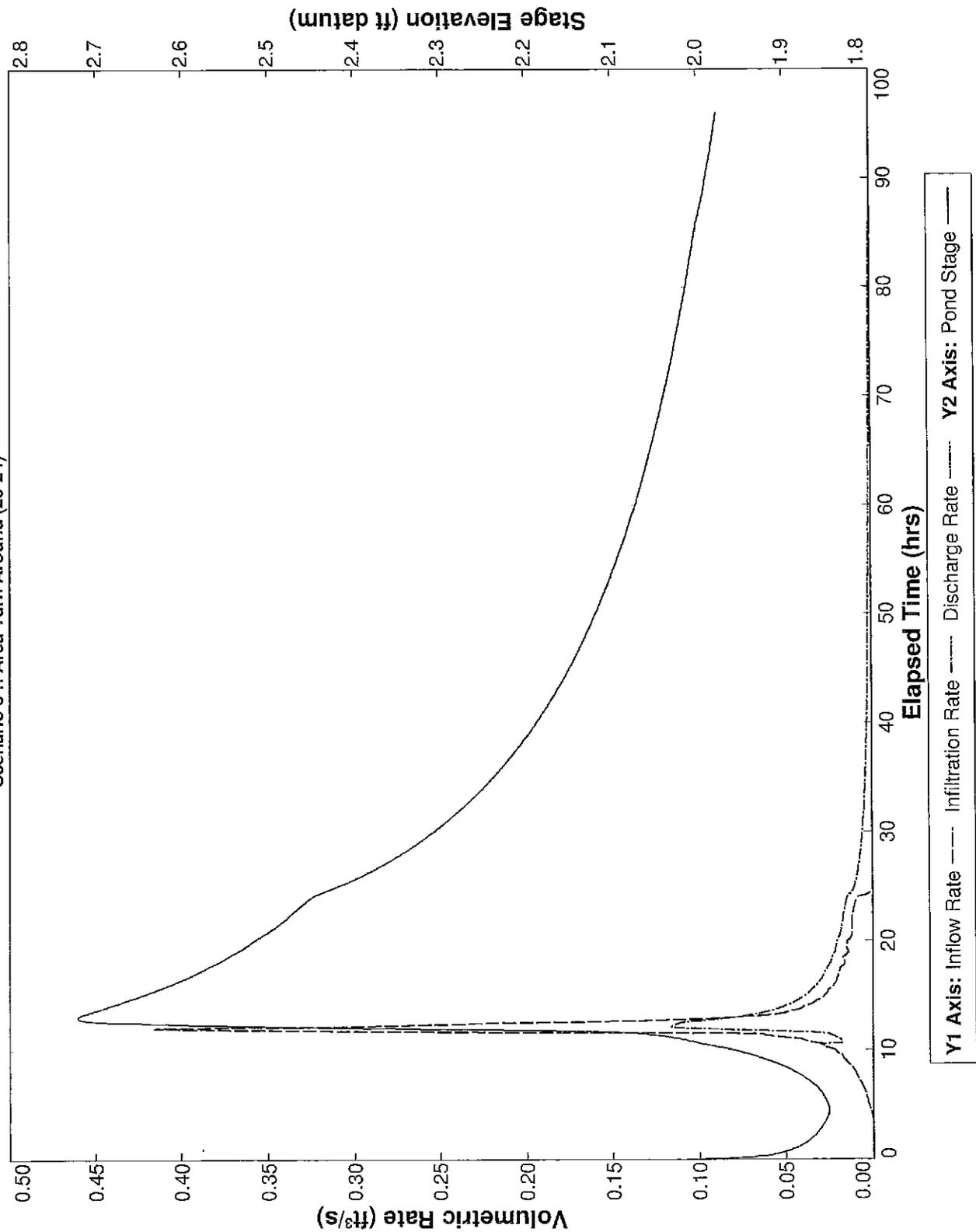
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**Retention Pond Recovery - Refined Method**  
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**Summary of Results** :: Scenario 3 :: Area Turn Around (25-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	4.533	1.85		
Maximum	13.000	2.72		
<b>Inflow</b>				
Rate - Maximum - Positive	12.033		0.4156	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.983			2477.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			2477.8
<b>Infiltration</b>				
Rate - Maximum - Positive	12.167		0.1163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	85.883			2477.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			2477.8
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

**Plot of Flow Rates and Pond Stage vs Elapsed Time**

Scenario 3 :: Area Turn Around (25-24)



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**Retention Pond Recovery - Refined Method**  
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**Project Data**

Project Name: Villa Am Meer  
Simulation Description: Swale  
Project Number: 13004600LC  
Engineer : Timothy A. Dove  
Supervising Engineer: Mark Adler, PE  
Date: 11-01-2013

**Aquifer Data**

Base Of Aquifer Elevation, [B] (ft datum): -7.00  
Water Table Elevation, [WT] (ft datum): 2.00  
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 30.00  
Fillable Porosity, [n] (%): 30.00  
Vertical infiltration was not considered.

**Geometry Data**

Equivalent Pond Length, [L] (ft): 175.0  
Equivalent Pond Width, [W] (ft): 40.0  
Ground water mound is expected to intersect the pond bottom

**Stage vs Area Data**

Stage (ft datum)	Area (ft <sup>2</sup> )
4.50	1270.0
6.00	3549.0

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**Scenario Input Data**

*Scenario 2 :: Area Turn Around (100-24)*

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing:	Routed with infiltration
Initial Groundwater Table:	default
Initial Pond Stage:	default
Boundary Condition:	default (constant head)
Repetitions:	1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes):	10
Computational time step (minutes):	1
Duration of simulation (hours):	92

Contributing Basins

Number of contributing basins: 1

*Basin 1*

Basin Name	Swale
Basin Area (acres)	0.336
Time Of Concentration (minutes)	10
DCIA (%)	0
Curve Number	80.5
Design Rainfall Depth (inches)	10
Design Rainfall Duration (hours)	24
Shape Factor	UHG 256
Rainfall Distribution	SCS Type II Florida Modified

Ugradient Inflows

Number of upgradient inflow nodes: 0

*Scenario 3 :: Area Turn Around (25-24)*

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing:	Routed with infiltration
Initial Groundwater Table:	default
Initial Pond Stage:	default
Boundary Condition:	default (constant head)
Repetitions:	1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes):	10
Computational time step (minutes):	1
Duration of simulation (hours):	96

Scenario Input Data (cont'd.)

Contributing Basins

Number of contributing basins: 1

*Basin 1*

Basin Name	Swale
Basin Area (acres)	0.336
Time Of Concentration (minutes)	10
DCIA (%)	0
Curve Number	80.4
Design Rainfall Depth (inches)	8
Design Rainfall Duration (hours)	24
Shape Factor	UHG 256
Rainfall Distribution	SCS Type II Florida Modified

Ugradient Inflows

Number of upgradient inflow nodes: 0

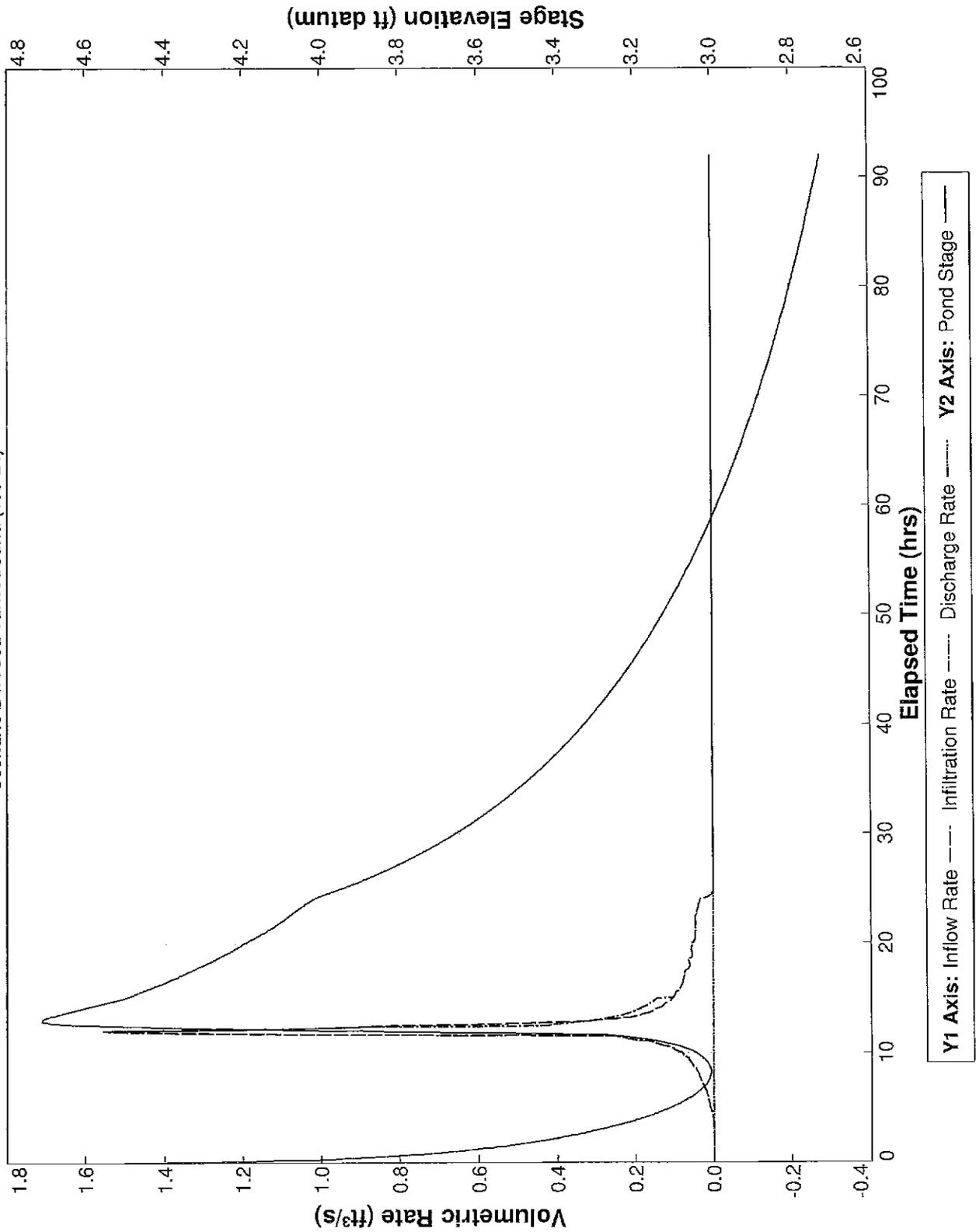
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**Summary of Results** :: Scenario 2 :: Area Turn Around (100-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	92.000	2.72		
Maximum	12.983	4.71		
<b>Inflow</b>				
Rate - Maximum - Positive	12.033		1.5549	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.983			9240.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			9240.3
<b>Infiltration</b>				
Rate - Maximum - Positive	12.033		1.5521	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.983			9240.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			9240.3
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

**Plot of Flow Rates and Pond Stage vs Elapsed Time**

Scenario 2 :: Area Turn Around (100-24)



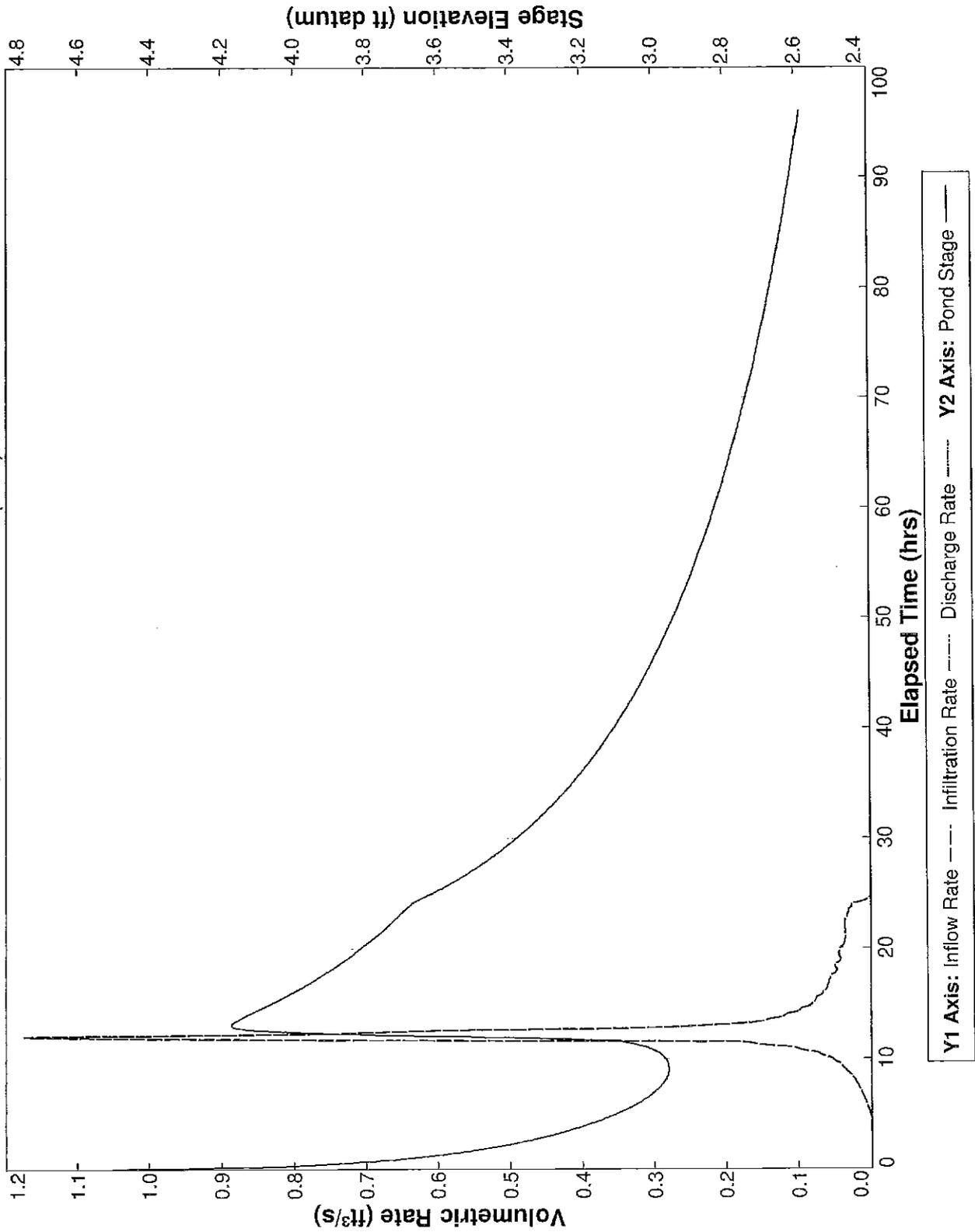
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**Summary of Results** :: Scenario 3 :: Area Turn Around (25-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	96.000	2.58		
Maximum	0.000	4.50		
<b>Inflow</b>				
Rate - Maximum - Positive	12.033		1.1761	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.983			6909.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			6909.9
<b>Infiltration</b>				
Rate - Maximum - Positive	12.033		1.1740	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.983			6909.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			6909.9
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

**Plot of Flow Rates and Pond Stage vs Elapsed Time**

Scenario 3 :: Area Turn Around (25-24)



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**Project Data**

Project Name: Villa Am Meer  
Simulation Description: Under Building and Chambers behind pool  
Chamber reduction  
Project Number: 13004600LC  
Engineer : Timothy A. Dove  
Supervising Engineer: Mark Adler, PE  
Date: 11-01-2013

**Aquifer Data**

Base Of Aquifer Elevation, [B] (ft datum): -7.00  
Water Table Elevation, [WT] (ft datum): 2.00  
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 30.00  
Fillable Porosity, [n] (%): 30.00  
Vertical infiltration was not considered.

**Geometry Data**

Equivalent Pond Length, [L] (ft): 352.0  
Equivalent Pond Width, [W] (ft): 100.0  
Ground water mound is expected to intersect the pond bottom

**Stage vs Area Data**

Stage (ft datum)	Area (ft <sup>2</sup> )
3.00	11014.0
3.25	10917.0
3.50	10684.0
3.75	10377.0
4.00	10001.0
4.25	9548.0
4.50	8998.0
4.75	8265.0
5.00	7360.0
5.25	5842.0
5.50	4072.0
5.75	3894.0
6.00	3894.0

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**Scenario Input Data**

*Scenario 2 :: Chambers Under building (100-24)*

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing: Routed with infiltration  
Initial Groundwater Table: default  
Initial Pond Stage: default  
Boundary Condition: default (constant head)  
Repetitions: 1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes): 10  
Computational time step (minutes): 1  
Duration of simulation (hours): 92

Contributing Basins

Number of contributing basins: 1

*Basin 1*

Basin Name Chambers Under Building/Pool  
Basin Area (acres) 1.565  
Time Of Concentration (minutes) 15  
DCIA (%) 0  
Curve Number 89.9  
Design Rainfall Depth (inches) 10  
Design Rainfall Duration (hours) 24  
Shape Factor UHG 256  
Rainfall Distribution SCS Type II Florida Modified

Ugradient Inflows

Number of upgradient inflow nodes: 0

*Scenario 3 :: Chambers Under Building (25-24)*

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing: Routed with infiltration  
Initial Groundwater Table: default  
Initial Pond Stage: default  
Boundary Condition: default (constant head)  
Repetitions: 1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes): 10  
Computational time step (minutes): 1  
Duration of simulation (hours): 96

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Scenario Input Data (cont'd.)

Contributing Basins

Number of contributing basins: 1

*Basin 1*

Basin Name	Chambers Under Building/Pool
Basin Area (acres)	1.565
Time Of Concentration (minutes)	15
DCIA (%)	0
Curve Number	89.9
Design Rainfall Depth (inches)	8
Design Rainfall Duration (hours)	24
Shape Factor	UHG 256
Rainfall Distribution	SCS Type II Florida Modified

Ugradient Inflows

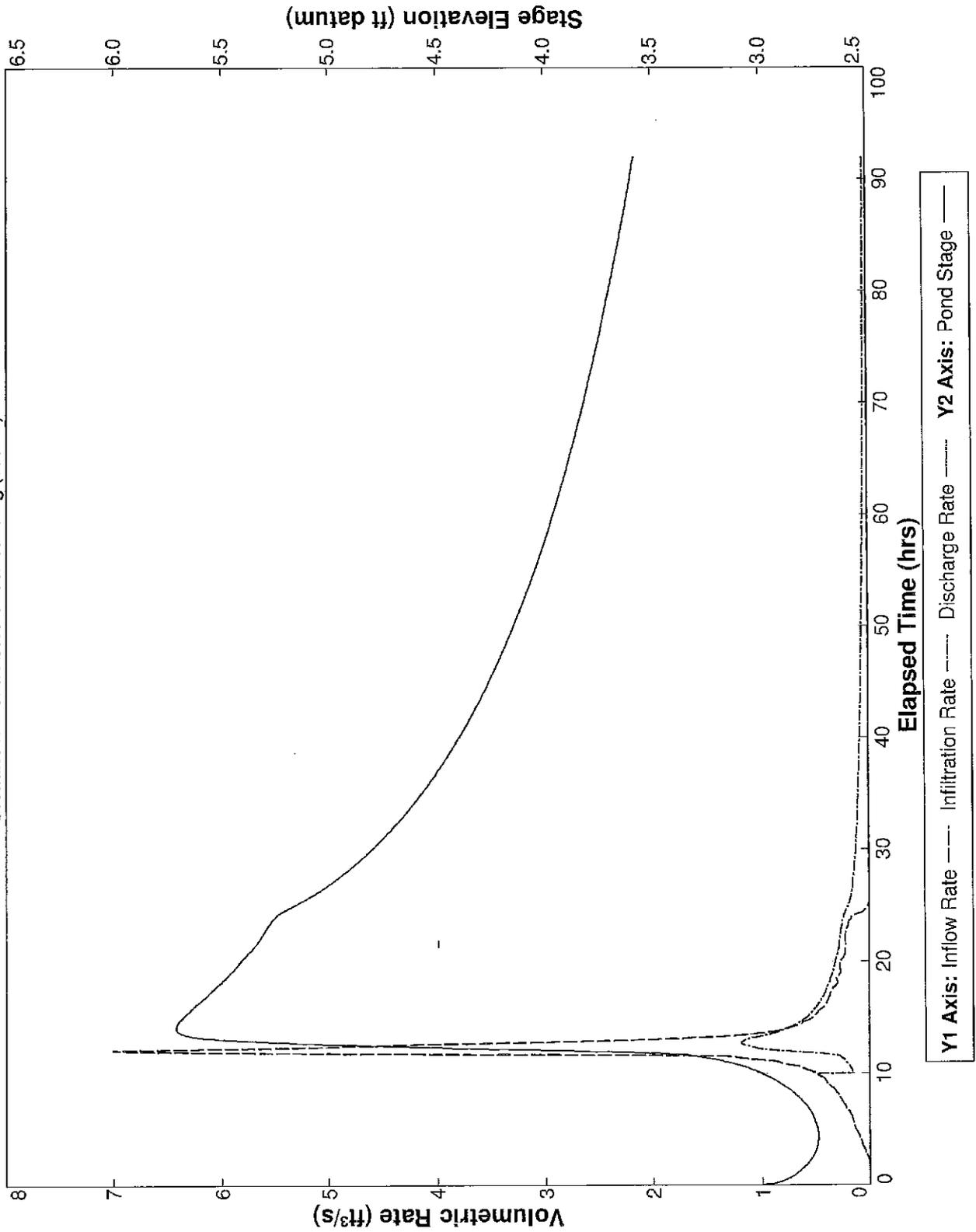
Number of upgradient inflow nodes: 0

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**Summary of Results** :: Scenario 2 :: Chambers Under building (100-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	4.350	2.74		
Maximum	14.133	5.71		
<b>Inflow</b>				
Rate - Maximum - Positive	12.067		7.0128	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.483			49792.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			49792.1
<b>Infiltration</b>				
Rate - Maximum - Positive	12.700		1.1911	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	92.000			43563.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			43563.7
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

**Plot of Flow Rates and Pond Stage vs Elapsed Time**  
 Scenario 2 :: Chambers Under building (100-24)

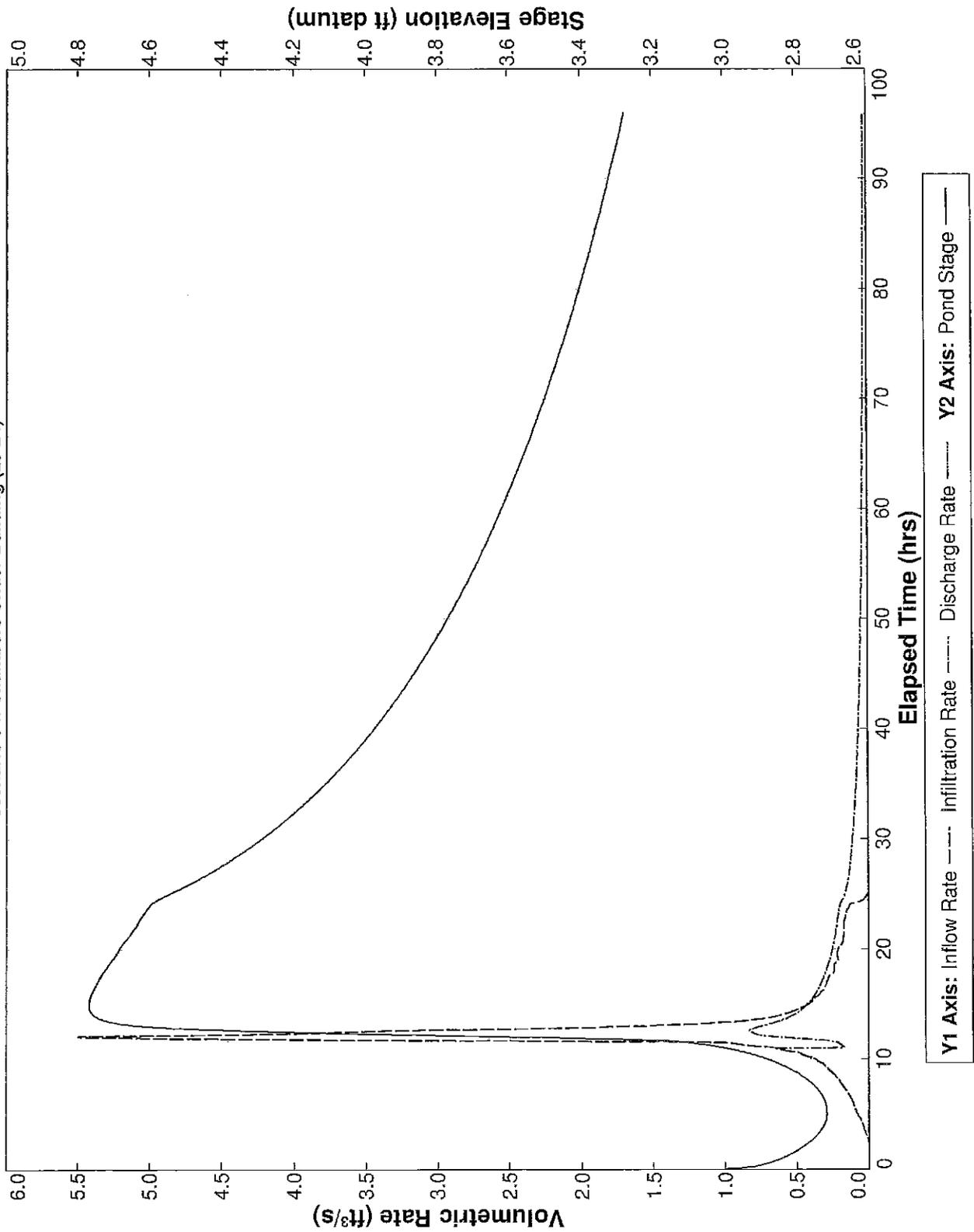


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**Summary of Results** :: Scenario 3 :: Chambers Under Building (25-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	5.000	2.71		
Maximum	14.817	4.77		
<b>Inflow</b>				
Rate - Maximum - Positive	12.067		5.5008	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.483			38581.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			38581.8
<b>Infiltration</b>				
Rate - Maximum - Positive	12.617		0.8301	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	96.000			35567.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			35567.4
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

**Plot of Flow Rates and Pond Stage vs Elapsed Time**  
Scenario 3 :: Chambers Under Building (25-24)



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**Project Data**

Project Name: Villa Am Meer  
Simulation Description: Front area excluding lined pond for Filtration Analysis  
Project Number: 13004600LC  
Engineer : Timothy A. Dove  
Supervising Engineer: Mark Adler, PE  
Date: 11-01-2013

**Aquifer Data**

Base Of Aquifer Elevation, [B] (ft datum): -7.00  
Water Table Elevation, [WT] (ft datum): 2.00  
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 30.00  
Fillable Porosity, [n] (%): 30.00  
Vertical infiltration was not considered.

**Geometry Data**

Equivalent Pond Length, [L] (ft): 200.0  
Equivalent Pond Width, [W] (ft): 50.0  
Ground water mound is expected to intersect the pond bottom

**Stage vs Area Data**

Stage (ft datum)	Area (ft <sup>2</sup> )
3.00	997.0
3.42	927.0
3.50	4941.0
3.83	4970.0
4.25	4830.0
4.50	4880.0
4.75	4997.0
4.83	5036.0
5.00	4744.0
5.25	4862.0
5.50	4979.0

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**Scenario Input Data**

*Scenario 2 :: Chamber - Pond(100-24)*

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing:	Routed with infiltration
Initial Groundwater Table:	default
Initial Pond Stage:	default
Boundary Condition:	default (constant head)
Repetitions:	1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes):	10
Computational time step (minutes):	1
Duration of simulation (hours):	92

Contributing Basins

Number of contributing basins: 1

*Basin 1*

Basin Name	Chamber Pond
Basin Area (acres)	0.68
Time Of Concentration (minutes)	15
DCIA (%)	0
Curve Number	86.16
Design Rainfall Depth (inches)	10
Design Rainfall Duration (hours)	24
Shape Factor	UHG 256
Rainfall Distribution	SCS Type II Florida Modified

Ugradient Inflows

Number of upgradient inflow nodes: 0

*Scenario 3 :: Chamber - Pond(25-24)*

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing:	Routed with infiltration
Initial Groundwater Table:	default
Initial Pond Stage:	default
Boundary Condition:	default (constant head)
Repetitions:	1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes):	10
Computational time step (minutes):	1
Duration of simulation (hours):	96

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**Scenario Input Data (cont'd.)**

Contributing Basins

Number of contributing basins: 1

*Basin 1*

Basin Name	Chamber - Pond
Basin Area (acres)	0.68
Time Of Concentration (minutes)	15
DCIA (%)	0
Curve Number	86.16
Design Rainfall Depth (inches)	8
Design Rainfall Duration (hours)	24
Shape Factor	UHG 256
Rainfall Distribution	SCS Type II Florida Modified

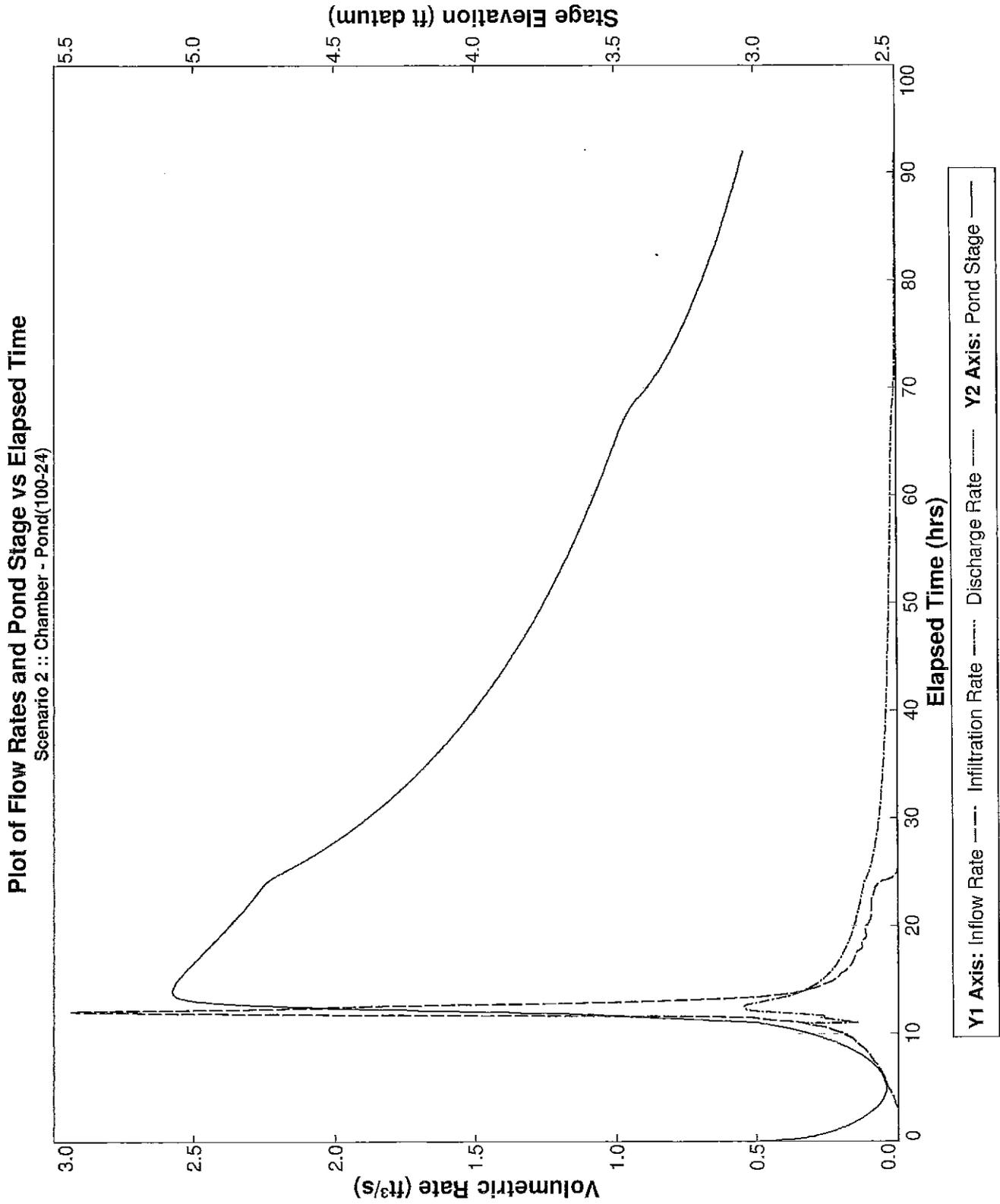
Ugradient Inflows

Number of upgradient inflow nodes: 0

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**Summary of Results** :: Scenario 2 :: Chamber - Pond(100-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	4.850	2.54		
Maximum	13.950	5.07		
<b>Inflow</b>				
Rate - Maximum - Positive	12.067		2.9419	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.483			20483.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			20483.6
<b>Infiltration</b>				
Rate - Maximum - Positive	12.517		0.5433	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	92.000			20449.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			20449.2
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	92.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.



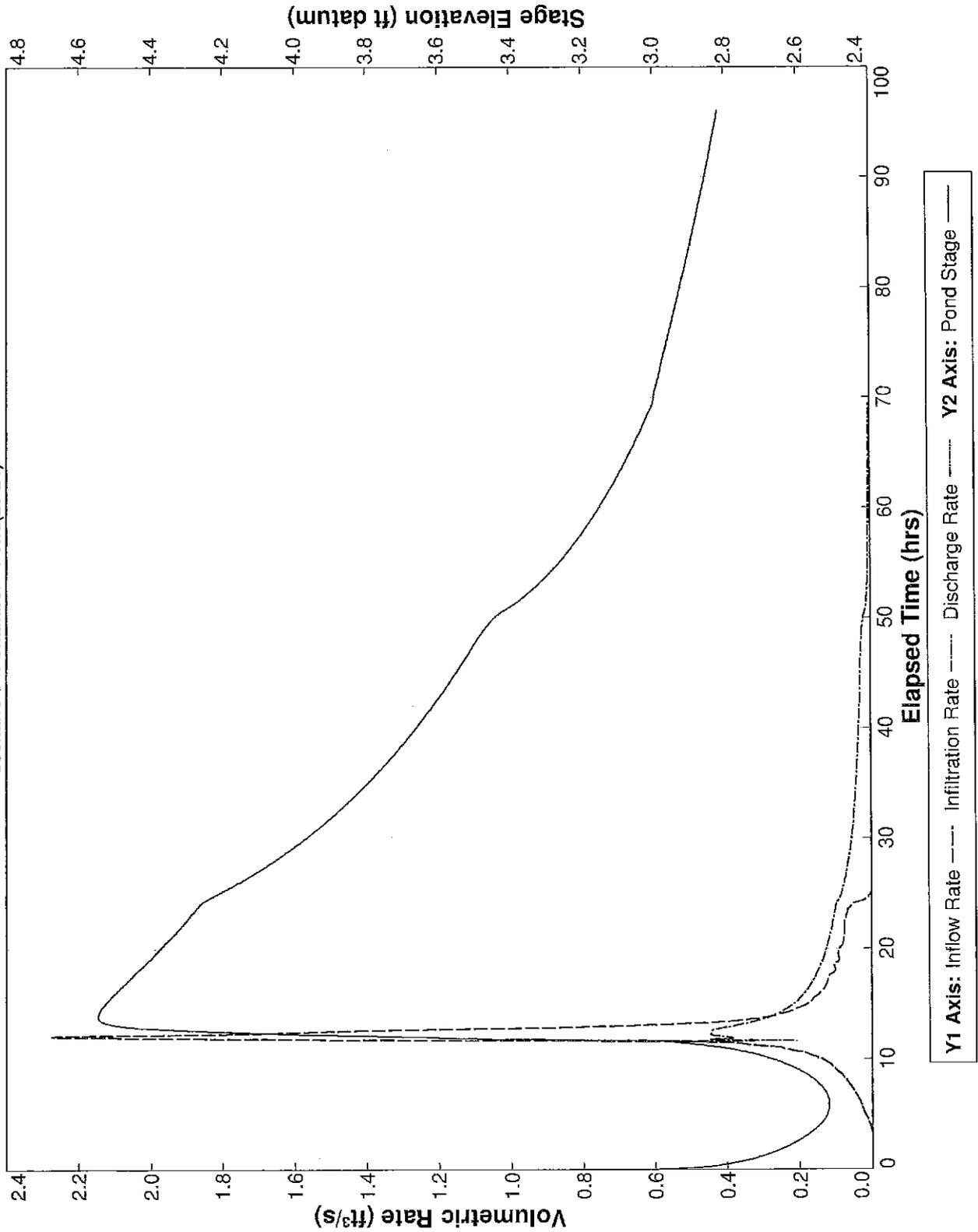
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**Summary of Results** :: Scenario 3 :: Chamber - Pond(25-24)

	Time (hours)	Stage (ft datum)	Rate (ft <sup>3</sup> /s)	Volume (ft <sup>3</sup> )
<b>Stage</b>				
Minimum	5.867	2.52		
Maximum	13.833	4.55		
<b>Inflow</b>				
Rate - Maximum - Positive	12.067		2.2766	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	25.483			15669.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			15669.9
<b>Infiltration</b>				
Rate - Maximum - Positive	11.617		0.6432	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	69.467			15669.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			15669.9
<b>Combined Discharge</b>				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
<b>Discharge Structure 1 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 2 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Discharge Structure 3 - inactive</b>				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
<b>Pollution Abatement:</b>				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

### Plot of Flow Rates and Pond Stage vs Elapsed Time

Scenario 3 :: Chamber - Pond(25-24)



Villa Am Meer

Basin: Chamber and Pond

Ponds output from filtration calculations for use in the rating curve ICPR

25-24		100-24	
3.00187	0.42894	3.00606	0.1858
3.03802	0.20785	3.0182	0.14081
3.07781	0.24371	3.03006	0.14817
3.1214	0.27909	3.04175	0.15437
3.16882	0.31454	3.05338	0.15984
3.21998	0.35034	3.06502	0.16487
3.27478	0.38661	3.07677	0.16967
3.33305	0.42334	3.08868	0.17439
3.39461	0.44932	3.10084	0.1791
3.44298	0.44813	3.11326	0.18384
3.46704	0.43052	3.12594	0.1886
3.48587	0.414	3.1389	0.19338
3.50228	0.40106	3.15211	0.19817
3.51857	0.39255	3.16557	0.20294
3.53561	0.38775	3.17925	0.20769
3.55334	0.38557	3.19314	0.2124
3.57171	0.38531	3.20721	0.21706
3.59069	0.38645	3.22146	0.22166
3.61021	0.38865	3.23585	0.2262
3.63026	0.39166	3.25039	0.23067
3.6508	0.39531	3.26504	0.23506
3.67179	0.39945	3.2798	0.23937
3.69321	0.40396	3.29466	0.24362
3.71501	0.40871	3.3096	0.24779
3.73709	0.41355	3.32462	0.25191
3.75936	0.41836	3.33972	0.25595
3.78173	0.42304	3.35489	0.25994
3.80408	0.42744	3.37012	0.26386
3.82627	0.43143	3.3854	0.26772
3.84816	0.43491	3.40073	0.27156
3.8696	0.4378	3.41616	0.27337
3.89051	0.4401	3.4287	0.27139
3.91085	0.44188	3.43817	0.26762
3.93058	0.4432	3.44663	0.26418
3.94974	0.44413	3.45475	0.26158
3.96834	0.44475	3.46291	0.25995
3.9864	0.44511	3.47137	0.25939
4.00396	0.44529	3.48029	0.25982
4.02107	0.44532	3.48977	0.26101
4.03775	0.44525	3.49977	0.26317
4.05404	0.44511	3.51069	0.2667

Villa Am Meer

Basin: Chamber and Pond

Ponds output from filtration calculations for use in the rating curve ICPR

25-24		100-24	
4.06997	0.44493	3.52302	0.27163
4.08559	0.44473	3.53674	0.27772
4.10091	0.44454	3.55178	0.28471
4.11597	0.44436	3.56808	0.29243
4.13079	0.44419	3.58558	0.30072
4.14537	0.44402	3.60419	0.30946
4.15973	0.44385	3.62385	0.31855
4.17388	0.4437	3.6445	0.32791
4.18783	0.44356	3.66606	0.33746
4.2016	0.44343	3.68846	0.34714
4.2152	0.44332	3.71165	0.35693
4.22864	0.44323	3.73558	0.36679
4.24192	0.44311	3.7602	0.37671
4.25501	0.44294	3.78549	0.38669
4.26788	0.44267	3.81141	0.3967
4.28051	0.44227	3.83793	0.40676
4.29287	0.44171	3.86505	0.4169
4.30491	0.44094	3.89277	0.4271
4.3166	0.43993	3.92106	0.43735
4.32788	0.43865	3.94989	0.44761
4.33871	0.4371	3.9792	0.45777
4.34909	0.43531	4.00888	0.46773
4.35901	0.4333	4.03882	0.47738
4.36848	0.4311	4.0689	0.48662
4.37751	0.42875	4.09896	0.49529
4.38612	0.42628	4.12884	0.50324
4.39433	0.42372	4.15833	0.51031
4.40216	0.42108	4.18722	0.51641
4.40963	0.41839	4.21537	0.52156
4.41676	0.41566	4.24274	0.52584
4.42356	0.41292	4.26929	0.52932
4.43006	0.41016	4.29499	0.5321
4.43628	0.40741	4.31986	0.53429
4.44223	0.40466	4.34396	0.53602
4.44791	0.40192	4.36734	0.53738
4.45335	0.39918	4.39004	0.53845
4.45855	0.39646	4.41213	0.5393
4.46353	0.39374	4.43365	0.53998
4.46828	0.39104	4.45464	0.54054
4.47282	0.38835	4.47517	0.54102
4.47716	0.38568	4.49528	0.54145

Villa Am Meer

Basin: Chamber and Pond

Ponds output from filtration calculations for use in the rating curve ICPR

25-24		100-24	
4.48131	0.38302	4.51499	0.54182
4.48526	0.38038	4.53431	0.54212
4.48903	0.37775	4.55326	0.54237
4.49263	0.37514	4.57187	0.54258
4.49605	0.37254	4.59015	0.54275
4.49931	0.36996	4.60812	0.5429
4.5024	0.36739	4.62581	0.54303
4.50534	0.36482	4.64322	0.54314
4.50811	0.36227	4.66038	0.54324
4.51072	0.35971	4.67728	0.54329
4.51319	0.35717	4.6939	0.54325
4.5155	0.35465	4.71023	0.54309
4.51768	0.35214	4.72623	0.54277
4.51972	0.34966	4.74186	0.54224
4.52164	0.3472	4.75708	0.54145
4.52343	0.34476	4.77184	0.54035
4.52511	0.34235	4.78608	0.5389
4.52667	0.33997	4.79975	0.53711
4.52814	0.33762	4.81284	0.535
4.5295	0.3353	4.82535	0.53262
4.53077	0.33302	4.83729	0.53005
4.53196	0.33077	4.84873	0.52734
4.53307	0.32857	4.85969	0.52452
4.5341	0.3264	4.87018	0.52161
4.53506	0.32426	4.88023	0.51863
4.53595	0.32217	4.88986	0.51558
4.53679	0.32012	4.89909	0.5125
4.53757	0.3181	4.90793	0.50938
4.53829	0.31613	4.91641	0.50625
4.53897	0.31421	4.92454	0.50312
4.53962	0.31233	4.93235	0.49998
4.54022	0.31049	4.93985	0.49683
4.5408	0.30869	4.94704	0.49369
4.54134	0.30693	4.95393	0.49054
4.54184	0.3052	4.96055	0.4874
4.54231	0.30349	4.96688	0.48426
4.54275	0.30181	4.97296	0.48112
4.54316	0.30015	4.97878	0.47799
4.54352	0.2985	4.98435	0.47487
4.54385	0.29687	4.98968	0.47175
4.54414	0.29526	4.99478	0.46864

Villa Am Meer

Basin: Chamber and Pond

Ponds output from filtration calculations for use in the rating curve ICPR

25-24		100-24	
4.5444	0.29366	4.99965	0.46554
4.54462	0.29209	5.00429	0.46243
4.5448	0.29053	5.00871	0.45932
4.54496	0.28899	5.01291	0.45621
4.54509	0.28748	5.0169	0.45309
4.54519	0.28599	5.02067	0.44997
		5.02423	0.44685
		5.02759	0.44373
		5.03076	0.44063
		5.03374	0.43754
		5.03654	0.43447
		5.03917	0.43143
		5.04164	0.42841
		5.04396	0.42543
		5.04613	0.42247
		5.04816	0.41956
		5.05006	0.41668
		5.05185	0.41384
		5.05351	0.41105
		5.05508	0.40831
		5.05654	0.40561
		5.05791	0.40296
		5.05919	0.40035
		5.06039	0.3978
		5.06151	0.3953
		5.06257	0.39284
		5.06357	0.39045
		5.06451	0.38811
		5.06541	0.38583
		5.06626	0.3836
		5.06707	0.38141
		5.06784	0.37925
		5.06856	0.37714
		5.06923	0.37505
		5.06986	0.37298
		5.07044	0.37093
		5.07096	0.36891
		5.07144	0.3669
		5.07187	0.36491
		5.07226	0.36295
		5.0726	0.36101

Villa Am Meer

Basin: Chamber and Pond

Ponds output from filtration calculations for use in the rating curve ICPR

25-24	100-24	
	5.0729	0.3591
	5.07316	0.35721
	5.07339	0.35536
	5.07358	0.35353
	5.07374	0.35173
	5.07388	0.34996
	5.07399	0.34823
	5.07408	0.34653
	5.07415	0.34485
	5.0742	0.34321
	5.07424	0.3416
	5.07426	0.34002
	5.07427	0.33848
	5.07427	0.33696
	5.07426	0.33547

=====  
 Basins  
 =====

Name: Chamber - Pond                    Node: Chamber - Pond                    Status: Onsite  
 Group: BASE                                Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256                    Peaking Factor: 256.0  
 Rainfall File: Flmod                    Storm Duration(hrs): 24.00  
 Rainfall Amount(in): 8.000              Time of Conc(min): 15.00  
     Time Shift(hrs): 0.00  
 Area(ac): 1.759                          Max Allowable Q(cfs): 999999.000  
 Curve Number: 86.16  
 DCIA(%): 0.00

=====  
 Nodes  
 =====

Name: Chamber - Pond                    Base Flow(cfs): 0.000                    Init Stage(ft): 3.000  
 Group: BASE                                Warn Stage(ft): 6.000  
 Type: Stage/Area

Stage(ft)	Area(ac)
3.000	0.2660
3.333	0.2080
3.417	0.2900
3.500	0.3090
3.667	0.3170
3.750	0.3210
4.000	0.3320
4.250	0.3410
4.500	0.3540
4.833	0.3740
5.000	0.3750
5.250	0.3890
5.500	0.4040

Name: Post-Perc                          Base Flow(cfs): 0.000                    Init Stage(ft): 2.000  
 Group: BASE                                Warn Stage(ft): 3.000  
 Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	2.000
180.00	2.000

=====  
 Operating Tables  
 =====

Name: 100-24 Perc                        Group: 100-24  
 Type: Rating Curve  
 Function: US Stage vs. Discharge

US Stage(ft)	Discharge(cfs)
0.0000	0.00
3.0000	0.19
3.1000	0.18
3.2500	0.23
3.3100	0.25
3.4000	0.27
3.5000	0.26
3.7360	0.37
4.0100	0.47
4.2420	0.53
4.4950	0.54
4.7570	0.54
5.0040	0.46
5.0500	0.42
5.0740	0.34

Name: 25-24 PErc                    Group: 25-24  
 Type: Rating Curve  
 Function: US Stage vs. Discharge

US Stage (ft)	Discharge (cfs)
0.0000	0.00
3.0000	0.43
3.2200	0.35
3.5020	0.40
3.7590	0.42
4.0040	0.45
4.2420	0.44
4.5020	0.37
4.5410	0.31

==== Rating Curves =====

Name: Post-Perc 100                    From Node: Chamber - Pond                    Count: 1  
 Group: 100-24                            To Node: Post-Perc                            Flow: Positive

TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1: 100-24 Perc	0.000	0.000
#2:	0.000	0.000
#3:	0.000	0.000
#4:	0.000	0.000

Name: Post-Perc 25                    From Node: Chamber - Pond                    Count: 1  
 Group: 25-24                            To Node: Post-Perc                            Flow: Positive

TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1: 25-24 Perc	0.000	0.000
#2:	0.000	0.000
#3:	0.000	0.000
#4:	0.000	0.000

==== Hydrology Simulations =====

Name: 100-24  
 Filename: E:\Villa Am Meer\ICPR\100-24.R32

Override Defaults: Yes  
 Storm Duration(hrs): 24.00  
 Rainfall File: Flmod  
 Rainfall Amount(in): 10.00

Time (hrs)	Print Inc (min)
30.000	5.00

Name: 25-24  
 Filename: E:\Villa Am Meer\ICPR\25-24.R32

Override Defaults: No

Time (hrs)	Print Inc (min)
30.000	5.00

==== Routing Simulations =====

Name: 100-24                            Hydrology Sim: 100-24  
 Filename: E:\Villa Am Meer\ICPR\100-24.I32

Execute: Yes                            Restart: No                            Patch: No  
 Alternative: No

Max Delta Z(ft): 1.00                            Delta Z Factor: 0.00500  
 Time Step Optimizer: 10.000  
 Start Time(hrs): 0.000                            End Time(hrs): 24.00

Min Calc Time(sec): 0.5000  
Boundary Stages:

Max Calc Time(sec): 60.0000  
Boundary Flows:

Time (hrs)	Print Inc (min)
999.000	15.000
Group	Run
100-24	Yes
BASE	Yes

-----  
Name: 25-24                      Hydrology Sim: 25-24  
Filename: E:\Villa Am Meer\ICPR\25-24.I32

Execute: Yes                      Restart: No                      Patch: No  
Alternative: No

Max Delta Z (ft): 1.00                      Delta Z Factor: 0.00500  
Time Step Optimizer: 10.000  
Start Time (hrs): 0.000                      End Time (hrs): 24.00  
Min Calc Time(sec): 0.5000                      Max Calc Time(sec): 60.0000  
Boundary Stages:                      Boundary Flows:

Time (hrs)	Print Inc (min)
999.000	15.000
Group	Run
25-24	Yes
BASE	Yes

---

Basin Name: Chamber - Pond  
Group Name: BASE  
Simulation: 100-24  
Node Name: Chamber - Pond  
Basin Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256  
Peaking Fator: 256.0  
Spec Time Inc (min): 2.00  
Comp Time Inc (min): 2.00  
Rainfall File: Flmod  
Rainfall Amount (in): 10.000  
Storm Duration (hrs): 24.00  
Status: Onsite  
Time of Conc (min): 15.00  
Time Shift (hrs): 0.00  
Area (ac): 1.759  
Vol of Unit Hyd (in): 1.000  
Curve Number: 86.160  
DCIA (%): 0.000  
  
Time Max (hrs): 12.10  
Flow Max (cfs): 8.348  
Runoff Volume (in): 8.298  
Runoff Volume (ft3): 52985.821

---

Basin Name: Chamber - Pond  
Group Name: BASE  
Simulation: 25-24  
Node Name: Chamber - Pond  
Basin Type: SCS Unit Hydrograph

Unit Hydrograph: Uh256  
Peaking Fator: 256.0  
Spec Time Inc (min): 2.00  
Comp Time Inc (min): 2.00  
Rainfall File: Flmod  
Rainfall Amount (in): 8.000  
Storm Duration (hrs): 24.00  
Status: Onsite  
Time of Conc (min): 15.00  
Time Shift (hrs): 0.00  
Area (ac): 1.759  
Vol of Unit Hyd (in): 1.000  
Curve Number: 86.160  
DCIA (%): 0.000  
  
Time Max (hrs): 12.10  
Flow Max (cfs): 6.467  
Runoff Volume (in): 6.348  
Runoff Volume (ft3): 40534.144

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
Chamber - Pond	BASE	100-24	18.60	5.369	6.000	0.0050	17257	12.08	8.932	12.34	0.541
Chamber - Pond	BASE	25-24	17.03	4.682	6.000	0.0050	15896	12.08	6.451	12.35	0.445
Post-Perc	BASE	100-24	0.00	2.000	3.000	0.0000	0	12.34	0.541	0.00	0.000
Post-Perc	BASE	25-24	0.00	2.000	3.000	0.0000	0	12.35	0.445	0.00	0.000

Name	Group	Simulation	Max Time Flow hrs	Max Flow cfs	Max Delta Q cfs	Max Time US Stage hrs	Max US Stage ft	Max Time DS Stage hrs	Max DS Stage ft	Max Stage ft
Post-Perc 100	100-24	100-24	12.34	0.541	0.186	18.60	5.369	0.00	2.000	2.000
Post-Perc 25	25-24	25-24	12.35	0.445	0.409	17.03	4.662	0.00	2.000	2.000

**APPENDIX D**  
**SWFWMD PRE-APPLICATION MEETING NOTES**

**VILLA AM MEER**  
**FDEP ERP PRE-APPLICATION MTG NOTES - 8/8/13 - 10:00AM**  
**FT. MYERS**

The following attended the referenced meeting:

Name	Representing	E-Mail	Phone
Nolin Moon, P.E.	FDEP-Permitting Engineer Water Resource Management	<a href="mailto:Nolin.Moon@dep.state.fl.us">Nolin.Moon@dep.state.fl.us</a> 2295 Victoria Avenue, Ste 364 PO Box 2549 Fort Myers, FL 33902-2549	239- 344-5672
Lucy Blair	FDEP-Environmental Administrator Submerged Lands and Environmental Resource Permitting	<a href="mailto:Lucy.Blair@dep.state.fl.us">Lucy.Blair@dep.state.fl.us</a> 2295 Victoria Avenue, Ste 364 PO Box 2549 Fort Myers, FL 33902-2549	239-344-5618
Ajaya K. Satyal	FDEP-Environmental Environmental Administrator	<a href="mailto:Ajaya.Satyal@dep.state.fl.us">Ajaya.Satyal@dep.state.fl.us</a> 2295 Victoria Avenue, Ste 364 PO Box 2549 Fort Myers, FL 33902-2549	239-344-5689
Tony McNeal (Via phone call-in)	FDEP-Beaches and Coastal System, Statewide, Tallahassee	3900 Commonwealth Boulevard M.S. 49 Tallahassee, Florida 32399	(850) 921-7745
Megan Mills	FDEP-Environmental Consultant	<a href="mailto:Megan.Mills@dep.state.fl.us">Megan.Mills@dep.state.fl.us</a>	239-344-5670
Mark Adler, P.E.	George F. Young, Inc., Senior V.P. Engineering	<a href="mailto:adler@georgefyoung.com">adler@georgefyoung.com</a>	941-747-2981

The purpose of the meeting was to discuss the stormwater design and Environmental Resource Permitting (ERP). The following items were discussed:

1. Project Site Area - 5 Acres – Town of Longboat Key, Sarasota County
2. 16 Unit Condo Development – Single Building – 4 Stories over parking. Existing 1930's house will be retained.
3. Also will be filing an FDEP CCCL Permit Application directly to Tallahassee to Tony McNeal, Tallahassee.

- 3a) Dune system will be reviewed
  - 3b) 30 year erosion projection analysis will be required
  - 3c) Mark Adler noted that Brett Moore will be the Coastal Consultant on that Permit Application. Tony has worked with Brett before.
  - 3d) FWC – Lighting comments coordination between Tallahassee and Ft. Myers offices would be ideal, rather than having to address two sets of comments. Suggest including each office's permits numbers on each set of review comment responses.
- 4. Stormwater treatment area only needs to be redeveloped area, not entire site.
  - 5. Note: Proposed rule change that may, or may not, impact stormwater design is anticipated for late September early October criteria. Need to check to see.
  - 6. Wet detention or dry retention with percolation are both being considered. Not sure yet. Typically dry retention on LBK. Owner and LA would like wet. This may be a challenge.
  - 7. Discharges will be into Gulf of Mexico Drive and possibly into the dunes and the Gulf. We have achieved this before on Lido and Longboat Key. These would probably be emergency overflows only due to the typical high infiltration rates of the soils. We will confirm with the Geotechnical Study. The infiltration will be factored into the model. Tony McNeal said the discharge into the Gulf may be discouraged, but will review.
  - 8. Nolin Moon suggested another meeting at 60 to 90% final design. (This could be a phone conference).
  - 9. The ERP will be an individual permit. A \$420 application fee S.I. 7 Permit
  - 10. Expected application submittal date is early October.

**APPENDIX E**  
**GEO TECHNICAL INVESTIGATION BY OTHERS**

# APPENDIX F OWNERSHIP INFORMATION

**BBC KEY, LLC**

555 Skokie Boulevard, Suite 555  
Northbrook, Illinois, 60062

September 13, 2013

TO WHOM IT MAY CONCERN:

This letter shall constitute evidence of the authority of James A. Tallman of VAM LBK Development, LLC to act on behalf of BBC Key, LLC in connection with any and all matters before the Town of Longboat Key, Florida, the FDEP, the FDOT, Sarasota County, Manatee County, and any department, division, agency or board thereof which relate in any manner whatsoever to the permit related activities and/or the construction/development-related activities of said limited liability company in connection with the Villa Am Meer Condominium Development located at 2251 Gulf of Mexico Drive, Longboat Key, Florida.

BBC KEY, LLC

BY: *[Signature]*

State of Illinois

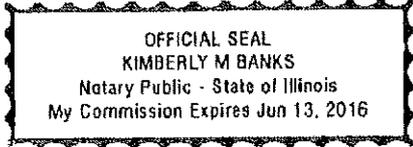
County of Cook

Signed and sworn (or affirmed) to before me on September 13, 2013

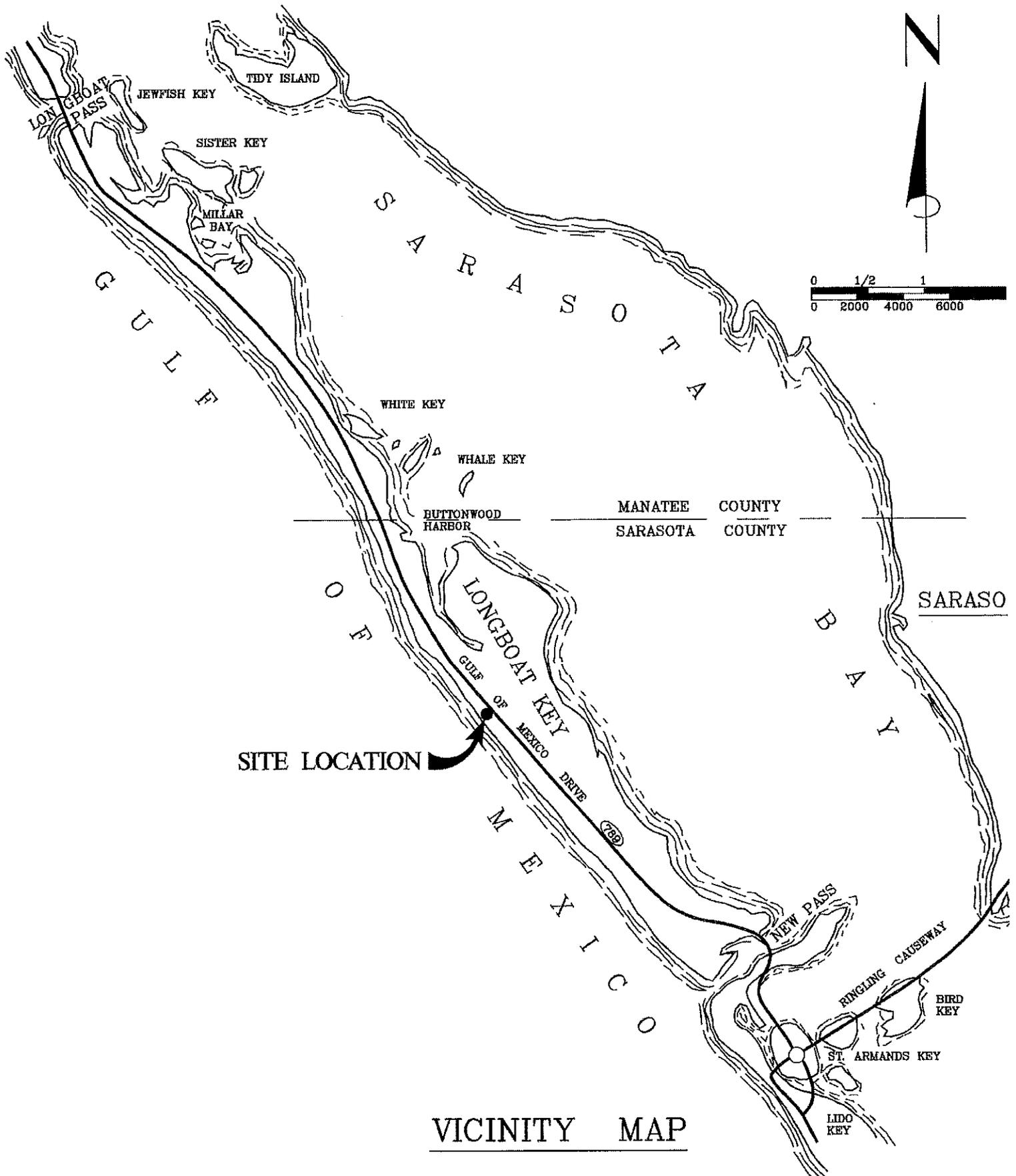
(date) by David Williams

(name of person making statement)

(seal) *[Signature]*  
signature of Notary public



# EXHIBIT 1 LOCATION MAP



VICINITY MAP

**EXHIBIT 2**  
**AERIAL SITE PLAN**

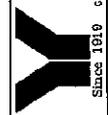


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PRELIMINARY "NOT FOR CONSTRUCTION"

NO.	BY	DATE	DESCRIPTION
1			
2			
3			
4			
5			
6			

PREPARED FOR:  
**ASCENTIAL DEV. GROUP**  
 1396 W. WINDY HILL  
 SUITE 750  
 (941) 308-8283



**George F. Young, Inc.**  
 1921 PALM EAST BOULEVARD, TAMPA, FLORIDA 33613  
 ENGINEERING, ARCHITECTURE, LANDSCAPE PLANNING, SURVEYING, UTILITY DESIGN  
 GAINESVILLE, LAKEWOOD RANCH-ORLANDO-PAUL BUCHER GARDENS, ST. PETERSBURG, TAMPA, FLORIDA

DATE: \_\_\_\_\_  
 No. 42585  
 Timothy A. Dove

**VILLA AM MEER**  
**AERIAL SITE MAP**  
 SECTION 8, TOWNSHIP 36 S., RANGE 17 E.

JOB NO. 130046006  
 SHEET NO. EX 2



APPROXIMATE SCALE  
 900 0 900 FEET

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
 FLOOD INSURANCE RATE MAP

TOWN OF  
 LONGBOAT KEY,  
 FLORIDA  
 MANATEE AND SARASOTA  
 COUNTIES

PANEL 10 OF 10  
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
 125126 0010 B

MAP REVISED:  
 AUGUST 15, 1983



Federal Emergency Management Agency

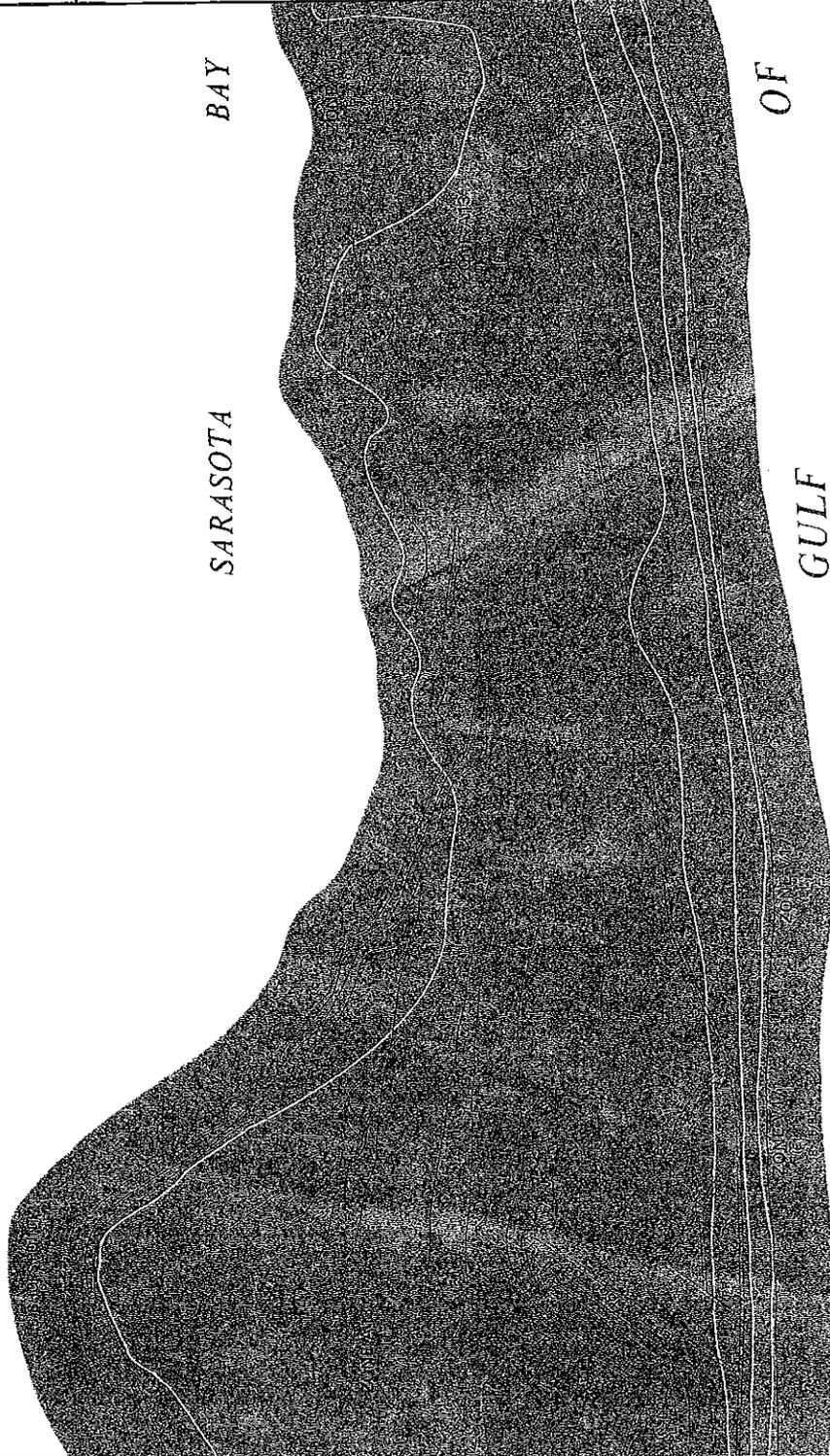
This is an unaltered copy of a portion of the above referenced flood map. It was extracted using FEMA's On-Line. This map does not reflect changes or amendments which may have been made subsequent to the original map. For more information on the National Flood Insurance Program, flood maps, check the FEMA Flood Map Store at [www.fema.gov](http://www.fema.gov)

SARASOTA BAY

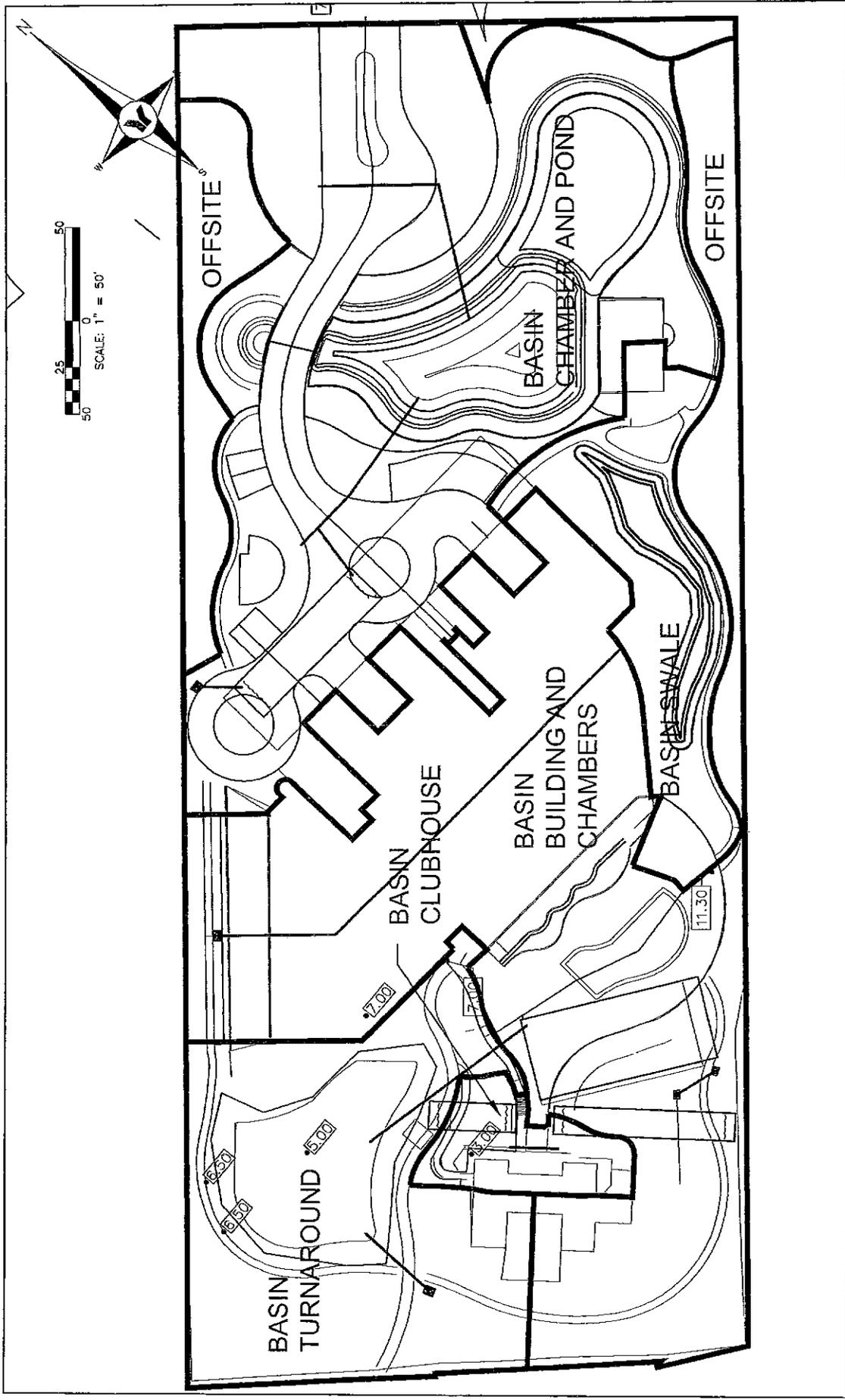
OF

GULF

CORPORATE LIMITS



PRELIMINARY "NOT FOR CONSTRUCTION"



NO. BY DATE	DESCRIPTION	INITIALS	DATE	PREPARED FOR	<b>George F. Young, Inc.</b> 1819 GANESVILLE LANE, SUITE 100 GANESVILLE, FLORIDA 32608 PHONE (407) 328-1427 ENGINEERING - ENVIRONMENTAL LANDSCAPE PLANNING - SURVEYING - UTILITIES ARCHITECTURE - DESIGN - CONSTRUCTION MANAGEMENT - PLANNING - SURVEYING - UTILITIES SINCE 1919 GANESVILLE, FLORIDA 32608	VILLA AM MEER BASIN MAP SECTION 8, TOWNSHIP 38S., RANGE 17E	JOB NO. 13004600c SHEET NO. EX 2
1	DESIGN	MD	11/14/15	ASCENTRAL DEV. GROUP 1900 MAIN STREET SUITE 750 (811) 308-5383			
2	DRAWN	MD	11/14/15				
3	CHECKED						
4	QUALITY CHECK						
5	SCALE		1" = 100'				
6	REVISION						

Timothy A. Dove  
No. 43268  
DATE