



VILLAGE OF KEY BISCAIYNE

Office of the Village Manager



Village Council

Mayra P. Lindsay, *Mayor*
Franklin H. Caplan, *Vice Mayor*

Luis F de la Cruz
Gary R. Gross
Allison McCormick
Brett G. Moss
Katie Petros

MEMORANDUM

DATE: November 14, 2017
TO: Honorable Mayor and Council Members
FROM: John C. Gilbert, Village Manager
RE: D Squared Engineering

RECOMMENDATION

It is recommended that the Village Council approve the attached Resolution authorizing the Village Manager to enter into an agreement with D Squared Engineering for consulting services relating to sustainability.

BACKGROUND

The Green Committee presented the Sustainability Plan to the Village Council at the May 27, 2015 Council Meeting. The Plan was created to help the Village government development and implement policies and initiatives consistent with responsible stewardship of Key Biscayne's environment and infrastructure.

D Squared's goal over the next year is to work on three key components of the Village's Sustainability Plan: (1) Energy Conservation; (2) Waste Reduction, Reuse & Recycling and (3) Green Building. D Squared will be conducting baseline analysis in all three target areas. Digital dashboards will be established to track key performance indicators.

Reviewed by Ms. Jihan Soliman from Weiss Serota Helfman Cole & Bierman, P.L. as to form and legal sufficiency. Funds for this service are in the Village Manager's Professional Services line item.

RESOLUTION NO. 2017- _____

A RESOLUTION OF THE VILLAGE COUNCIL OF THE VILLAGE OF KEY BISCAYNE, FLORIDA, APPROVING D SQUARED ENGINEERING, CORP. FOR CONSULTING SERVICES RELATING TO SUSTAINABILITY OF THE VILLAGE; PROVIDING FOR AUTHORIZATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Village of Key Biscayne (“Village”) desires to be pro-active in lowering its costs and implementing environmental-friendly policies; and

WHEREAS, D Squared Engineering, Corp. (“Consultant”) is a consulting firm that focuses on advising municipalities of best practices to implement eco-friendly policies; and

WHEREAS, the Consultant has provided a proposal, attached as Exhibit “A,” for advising the Village on best policies and practices that are eco-friendly while possibly lowering Village costs over a period of time (the “Services”); and

WHEREAS, the Village Council desires to authorize the Village Manager to enter into an agreement with the Consultant for the Services consistent with the proposal attached as Exhibit “A;” and

WHEREAS, the Village Council finds that this Resolution is in the best interest and welfare of the residents of the Village.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE VILLAGE OF KEY BISCAYNE, FLORIDA, AS FOLLOWS:

Section 1. Recitals Adopted. That each of the recitals stated above is hereby adopted and confirmed.

Section 2. Approval. That the Village Council hereby approves the Consultant for the Services consistent with the proposal attached hereto as Exhibit “A.”

Section 3. **Authorization.** That the Village Manager is hereby authorized to enter into an agreement with the Consultant for the Services consistent with the proposal attached hereto as Exhibit "A" in an amount not to exceed \$45,000.00, subject to the Village Attorney's approval as to form, content and legal sufficiency.

Section 4. **Effective Date.** That this Resolution shall be effective immediately upon adoption hereof.

PASSED and ADOPTED this ____ day of November, 2017.

MAYOR MAYRA PEÑA LINDSAY

ATTEST:

JENNIFER DUQUE, CMC
VILLAGE CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

VILLAGE ATTORNEY



D SQUARED
ENGINEERING

Village of Key Biscayne

Sustainability Consultant





ENGINEERED 4 TOMORROW™



A Message From The President

"As the scale of resource availability tips less and less in our favor, choices need to be made and technologies implemented that will have a drastic impact on existing operational conditions. Concepts such as resource management, alternative energy and sustainable solutions must not only become part of our vernacular, but also part of our moral fiber."

Derek Duzoglou | Founder & CEO

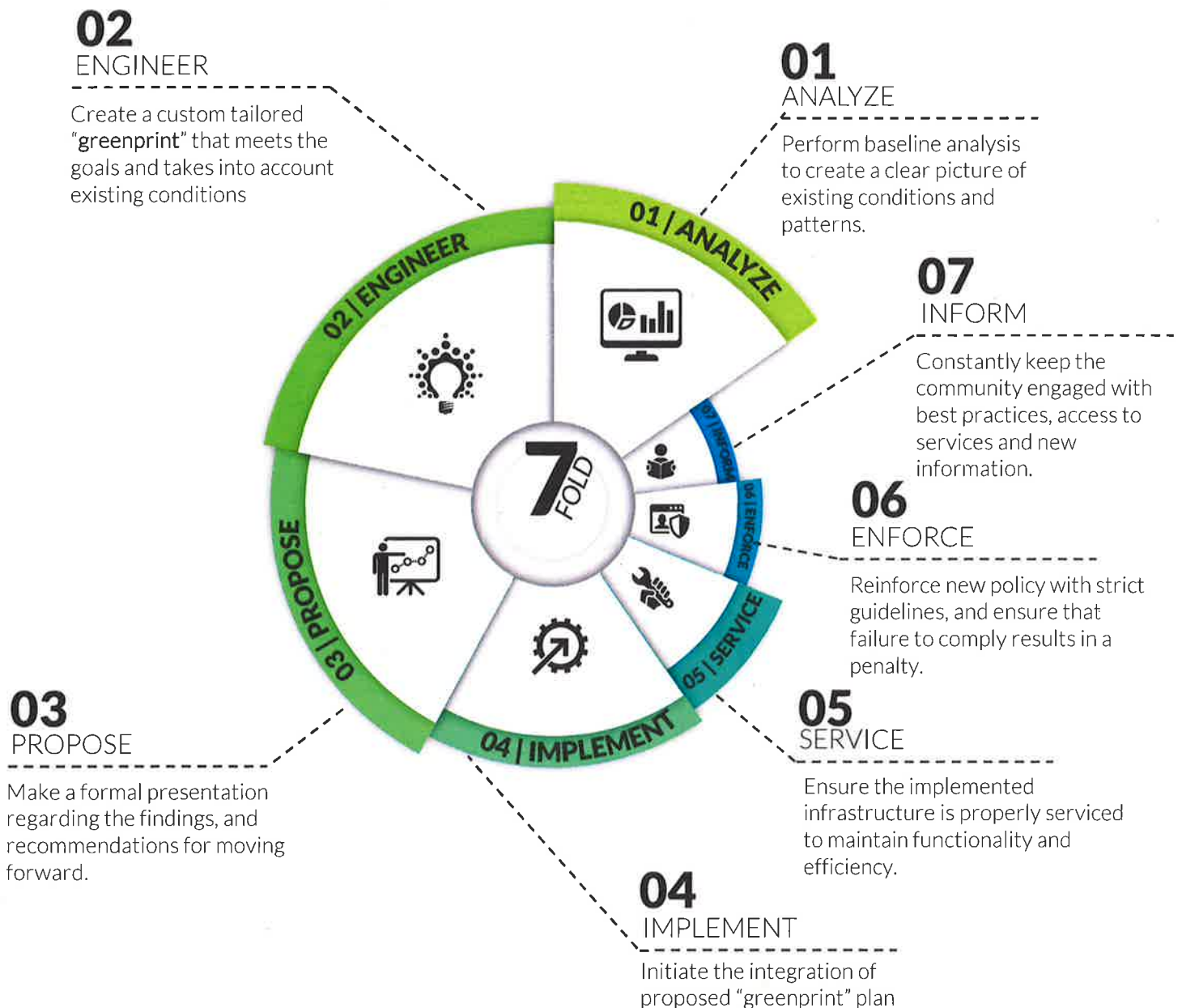


The Goal

Over the course of the next year, our goal is to tackle three key components of the Village's Sustainability Plan:

1. **Energy Conservation**
2. **Waste Reduction, Reuse & Recycling**
3. **Green Building**

This is done utilizing our integrated project delivery platform, known as **7 FOLD**.



D Squared Engineering

Sustainability Matrix Checklist



Matrix Foundation Key

I	DS	D Squared	Responsibility belongs to D Squared Engineering, Corporation
II	SN	Strategic Network	Responsibility belongs to Strategic Network
III	VN	Village Network	Responsibility belongs to the Village of Key Biscayne
IV	OE	Ongoing Effort	Task represents an ongoing effort that should be continually monitored and updated
V	TP	Task Progress	Percentage of the task that has been completed to date

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I	II	III	IV	V	1. Waste Reduction, Reuse & Recycling	
DS	SN	VN	OE	TP	Short Term Goals	

✓	✓				1	Perform a baseline analysis of waste activities including quantities, composition (if available), end market data for recyclables and compost materials, existing contractors, scope of services, and accessibility to waste/recycling services.
✓	✓				2	Design a comprehensive waste management program (living document) to cover residential, commercial and municipal entities - including a performance metrics interface for data collection and tracking, and educational component for Village.
✓	✓				3	Provide a formal proposal with findings and objectives to the Village, focusing on immediate activities to reduce waste.
		✓	✓		4	Implement the comprehensive waste management program.
		✓	✓		5	Provide the necessary infrastructure to properly service the waste management system.
		✓	✓		6	Enforce waste practices so that they clearly support the successful integration of the waste management program.
✓		✓	✓		7	Inform the community with an outreach platform for staff, vendors, residents and business owners - highlighting current policies, goals and best practices for waste reduction.

I	II	III	IV	V	2. Energy Conservation	
DS	SN	VN	OE	TP	Short Term Goals	

✓	✓				1	Perform a baseline analysis of utilities (for municipal buildings and services) to have a clear understanding of existing expenditures and patterns.
✓	✓				2	Design a comprehensive energy conservation program (living document) for municipal entities (eventually expanded to entire Village) - including a performance metrics interface for data collection and tracking, and educational component for Village.
✓	✓				3	Provide a formal proposal with findings and objectives to the Village, focusing on immediate activities to reduce energy consumption (i.e. motion sensors, computer run-time settings, programmable HVAC controls, procurement criterion, etc.).
		✓	✓		4	Implement the comprehensive energy conservation program.
		✓	✓		5	Provide the necessary infrastructure to properly service & implement the comprehensive energy conservation program.
		✓	✓		6	Enforce best energy practices so that they clearly support the successful integration of the energy conservation program.
✓		✓	✓		7	Inform the community with an outreach platform for staff, vendors, residents and business owners - highlighting current policies, goals and best practices for energy conservation.

I	II	III	IV	V	3. Green Building	
DS	SN	VN	OE	TP	Short Term Goals	

✓	✓				1	Evaluate current Village properties to determine what changes would be required to obtain LEED certification for existing buildings.
✓	✓				2	Review approaches adopted by other communities to determine the changes that would incentivize green building practices for residential, commercial and municipal structures (i.e. photovoltaic systems, rainwater cisterns, green roofs, pervious materials, etc.).
✓	✓				3	Provide a formal proposal with findings and objectives to the Village, outlining a blueprint for "greening" the building code.
		✓	✓		4	Implement the incentives for green building practices that have been selected, and begin implementation immediately (applicable to commercial, residential and municipal structures).
		✓	✓		5	Regularly service equipment and infrastructures to ensure the most efficient operating conditions.
		✓	✓		6	Enforce green building practices so that they clearly support the successful integration of the objectives proposed and implemented.
✓		✓	✓		7	Educate the community with an outreach platform for staff, vendors, residents and business owners - highlighting green operations/maintenance practices and protocol.



Contract
Overview
& **C**ost

Our goal is to uncover the potential that exists in creating sustainable practices and efficiency optimization protocol within daily operations.

Sustainability Consulting

As a starting point, we will be conducting baseline analyses in all three target areas to get a pulse on existing conditions. Digital dashboards will be established to track KPIs (Key Performance Indicators), and allow for transparency across all departments in regards to energy and waste expenditures.

The contract is for fiscal year 2017/2017, and for an amount equal to \$45,000. Payments are to be made on a monthly basis, in the amount of \$3,750.00, with checks made payable to D Squared Engineering, Corp.

Creating **Champions**
for **Sustainable**
communities...



D SQUARED
ENGINEERING

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