

**RESOLUTION No. 17-138**

**A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, PURSUANT TO SECTION 2-323(2) OF THE CITY CODE OF ORDINANCES, APPROVING THE ENGAGEMENT OF AMEC FOSTER WHEELER ENVIRONMENTAL AND INFRASTRUCTURE, INC. TO PROVIDE COMMUNITY RATING SYSTEM PROGRAM SUPPORT AND MODIFICATION VISIT ASSISTANCE SERVICES TO THE CITY TO IMPROVE THE COMMUNITY RATING SYSTEM CLASS RATING FROM 7 TO 6, IN AN AMOUNT NOT TO EXCEED \$18,750.00; AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND ENTER INTO AN AGREEMENT, SUBJECT TO APPROVAL BY THE CITY ATTORNEY AS TO FORM AND LEGAL SUFFICIENCY, AND TO EXPEND FUNDS IN FURTHERANCE HEREOF; PROVIDING FOR IMPLEMENTATION; AND PROVIDING FOR AN EFFECTIVE DATE**

**WHEREAS**, the National Flood Insurance Program's ("NFIP") Community Rating System ("CRS") was implemented in 1990 as a voluntary program to recognize and encourage communities in full compliance with the NFIP's floodplain management requirements to adopt floodplain management activities that exceeds the NFIP's minimum standards; and

**WHEREAS**, as of May 2016, an estimated 3.8 million policyholders in 1,391 communities in the country are active participants in the CRS by implementing local mitigation, floodplain management, and outreach activities that exceed the minimum NFIP requirements; and

**WHEREAS**, the CRS uses a Class rating system similar to fire insurance rating where flood insurance premium reduction is based on a point system from 9 (lowest rating) to 1 (highest rating). Furthermore, each CRS Class represents a five (5) percent discount in flood insurance premiums for all flood policies; and

**WHEREAS**, in 2008, the City of Doral (the “City”) entered the CRS program; and

**WHEREAS**, on May 17, 2017, the City’s rating improved from a Class 8 to Class 7;

and

**WHEREAS**, overall, SFHA residents in the City are going to experience a 15% discount in their flood insurance policy, and 10% if they are located outside the SFHA;

and

**WHEREAS**, as of June 22, 2017, the City had 3,312 active flood insurance policies with an estimated value of \$954.0 million dollars; and

**WHEREAS**, the City administration is recommending the City Council to authorize the engagement of Amec Foster Wheeler Environmental and Infrastructure, Inc. and authorize the City Manager to negotiate and enter into an agreement with Amec Foster Wheeler Environmental and Infrastructure, Inc. to provide CRS program support and Modification Visit Assistance services to the city to improve the CRS Class rating from 7 to 6; and

**WHEREAS**, the professional consulting services to be provided by Amec Foster Wheeler Environmental and Infrastructure, Inc. shall not exceed \$18,750. Funding will be from Account # 001.40005.500310

**NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, AS FOLLOWS:**

**Section 1. Recitals.** The foregoing recitals are confirmed, adopted, and incorporated herein and made a part hereof by this reference.

**Section 2. Approval.** Pursuant to section 2-323(2) of the City Code of Ordinance, the engagement of Amec Foster Wheeler Environmental and Infrastructure,

Inc., to provide the City with CRS Program Support and Modification Visit Assistance services to improve the CRS Class rating in an amount not to exceed \$18,750 is hereby authorized. The scope of service is attached as Exhibit "A", which is incorporated herein and made a part hereof by this reference.

**Section 3. Authorization.** The City Manager is authorized to negotiate and, subject to approval by the City Attorney as to form and legal sufficiency, enter into an agreement with Amec Foster Wheeler Environmental and Infrastructure, Inc. The City Manager is further authorized to expend budgeted funds in furtherance hereof.

**Section 4. Implementation.** The City Manager and the City Attorney are hereby authorized to take such further action as may be necessary to implement the purpose and provisions of this Resolution.

**Section 5. Effective Date.** This Resolution shall take effect immediately upon adoption.

The foregoing Resolution was offered by Councilmember Rodriguez who moved its adoption. The motion was seconded by Councilmember Mariaca and upon being put to a vote, the vote was as follows:

|                                  |     |
|----------------------------------|-----|
| Mayor Juan Carlos Bermudez       | Yes |
| Vice Mayor Pete Cabrera          | Yes |
| Councilwoman Christi Fraga       | Yes |
| Councilwoman Claudia Mariaca     | Yes |
| Councilwoman Ana Maria Rodriguez | Yes |

PASSED AND ADOPTED this 9 day of August, 2017.

  
\_\_\_\_\_  
JUAN CARLOS BERMUDEZ, MAYOR

ATTEST:

  
\_\_\_\_\_  
CONNIE DIAZ, CMC  
CITY CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY  
FOR THE USE AND RELIANCE OF THE CITY OF DORAL ONLY:

  
\_\_\_\_\_  
WEISS, SEROTA, HELFMAN, COLE & BIERMAN, P.L.  
CITY ATTORNEY

# EXHIBIT “A”



Proposal for  
**Community Rating System  
Program Services**  
**City of Doral, FL**

**July 10, 2017**



**Submitted to:**  
City of Doral, FL  
Planning & Zoning Department  
8401 NW 53rd Terrace  
Doral, Florida 33166

**Submitted by:**  
Amec Foster Wheeler  
Environment & Infrastructure, Inc.  
4021 Stirrup Creek Drive, Suite 100  
Durham, NC 27703

July 10, 2017

Mr. Julian Perez  
Director, Planning & Zoning  
8401 NW 53<sup>rd</sup> Terrace  
Doral, Florida 33166



**Community Rating System Program Support and Modification Visit Assistance**

Dear Mr. Perez:

The Community Rating System (CRS) is a program that helps to reduce damage to insurable buildings, saves lives, and reduces the cost of flood insurance for policy holders. Amec Foster Wheeler Environment & Infrastructure, Inc. is pleased that the City of Doral recognizes the importance of this program to ensure residents are better protected and the cost of flood insurance is reduced even further. As such we have prepared a proposal to provide CRS Program Support and Modification Visit Assistance services for the City.

Amec Foster Wheeler has unparalleled experience and a qualified staff to begin assisting the City of Doral. Our Project Manager, David Stroud, CFM has over 25 years of CRS experience. For 18 years, he worked directly for FEMA's CRS Program as the Flood Training Coordinator and lead hazard mitigation planner and for the last eight years, Mr. Stroud has remained as a consultant to the CRS providing technical support and services. The strength of Amec Foster Wheeler includes:

- ✓ **Direct CRS experience.** For 16 years, our Project Manager, David Stroud, taught the CRS Class (E-278) at the FEMA's National Emergency Training Center (N.E.T.C) which means we are uniquely qualified to approach the work with a full understanding of the complete CRS Program. This experience is further supported by FEMA's CRS program who has tasked Mr. Stroud with developing the new guidance manual for Activity 510 – Repetitive Loss Area Analysis (RLAA).
- ✓ **Current involvement in CRS Program.** Mr. Stroud holds a current contract with FEMA and ISO for reviewing floodplain management and hazard mitigation plans under the CRS Program and providing other technical support to the program. In addition, Mr. Stroud recently conducted national CRS webinars on CRS Activity 510. Mr. Stroud was also actively involved in changes to the new 2017 CRS Schedule.
- ✓ **CRS experience with other local governments.** The Amec Foster Wheeler team has experience providing CRS Program assistance to other local governments to reach lower CRS classifications through a variety of activities and programs. Our assistance includes cities and counties with complex programs, large flood insurance policy bases and high CRS classifications. The table on the following page represents Amec Foster Wheeler's most recent floodplain management, NFIP and CRS program assistance to local governments across the U.S.

| Municipality              | Year of Service | Floodplain Management and CRS Success                                                  |
|---------------------------|-----------------|----------------------------------------------------------------------------------------|
| City of Beaufort, SC      | 2017            | CRS Program Improvement                                                                |
| City of South Miami, FL   | 2017            | CRS Program Improvement                                                                |
| Town of Miami Lakes, FL   | 2016            | CRS Program Improvement                                                                |
| City of Miramar, FL       | 2015            | CRS Program Improvement                                                                |
| City of Westminster, CO   | 2015            | CRS Cycle Verification Visit                                                           |
| Baltimore County, MD      | 2015            | CRS Application                                                                        |
| City of Wilson, NC        | 2015            | Improved from CRS Class 6 to Class 5                                                   |
| City of Charleston, SC    | 2012-2014       | Improved from CRS Class 7 to Class 6 (4.9 million in overall NFIP savings)             |
| City of Savannah, GA      | 2014            | Improved from CRS Class 6 to Class 4                                                   |
| Town of Cutler Bay, FL    | 2014            | Met Activity 510 CRS Planning Requirements (Ongoing CRS Program Improvement for 2015)  |
| Collier County, FL        | 2014            | Prepared Activity 510 CRS Floodplain Management Plan                                   |
| City of Savannah, GA      | 2014            | Prepared Activity 510 CRS Floodplain Management Plan and Repetitive Loss Area Analysis |
| Sutter County, CA         | 2014            | Met Activity 510 CRS Planning Requirements                                             |
| Knox County, FL           | 2012            | Maintained CRS Class 8                                                                 |
| City of Alexandria, VA    | 2012            | Improved from CRS Class 7 to Class 6                                                   |
| City of Raleigh, NC       | 2012            | Improved from CRS Class 7 to Class 6                                                   |
| Seminole County, FL       | 2011            | Improved from CRS Class 7 to Class 6                                                   |
| City of Sacramento, CA    | 2011            | Improved from CRS Class 4 to Class 3                                                   |
| City of St. Augustine, FL | 2011            | Improved from CRS Class 8 to Class 7                                                   |
| Kershaw County, SC        | 2013            | New Application CRS Class 9/Floodplain Management Assistance                           |
| Lexington County, SC      | 2012-2013       | Floodplain Management and CRS Program Assistance                                       |
| City of Waveland, MS      | 2013            | Met Activity 510 CRS Planning Requirements                                             |

Amec Foster Wheeler has staff with direct experience working for FEMA's CRS Program which enables us to fully develop CRS Activities that will meet the intent of the CRS Schedule and all necessary submittal and documentation requirements. Amec Foster Wheeler prides itself with providing communities with the latest guidance, information, and tools to deliver sound recommendations in the CRS program. Our experience assisting other local governments in improving their CRS classifications will prove valuable to the City of Doral.

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.



**Andrew Hadsell, PE, CFM**  
Senior Associate Engineer - Unit Manager



**David Stroud, CFM**  
Project Manager



## Proposal for CRS Program Services

Amec Foster Wheeler is prepared to assist the City of Doral, FL in their desire to improve their CRS classification under the guidance of the 2017 CRS Coordinator's Manual. Amec Foster Wheeler is extremely familiar with the changes made in the 2017 CRS Coordinator's Manual and the impact these changes have on local programs. Since Amec Foster Wheeler was involved in developing the 2013 Manual and since Amec Foster Wheeler has represented communities utilizing the 2017 standards, we understand the changes that have been made, including areas where credit points are most at risk and areas of new opportunities for earning credit.

The following steps provide an overview of Amec Foster Wheeler's approach for the project tasks to be performed for the City of Doral:

1. Assist the City of Doral to improve their current CRS rating from Class 7 to Class 6.

The City of Doral is currently classified as a CRS Class 7 community, which provides a 15% discount for its policy holders. As of June 22, 2017, the City has 3,312 active policies (over \$954M insurance in force). A look at FEMA's "What-If" statement for the City of Doral is shown below. An improvement from a CRS Class 7 to a CRS Class 6 would result in an overall annual savings of over **\$240,000** for the City's flood insurance policy holders (**\$73 per policy**).

CRS What-If

Application

CRS Count

DisPOC

Activity Points

Chronology

Comments

What If

GIS

Community:

DORAL, CITY OF

State:

FLORIDA

County:

MIAMI-DADE COUNTY

CID:

120041

Current CRS Class = 8

[Printable Version]

|  |                 | TOTAL       | SFHA *      | X-STD/AR/A99 ** | PRP ***   |
|--|-----------------|-------------|-------------|-----------------|-----------|
|  | PIF             | 3,312       | 2,609       | 11              | 692       |
|  | PREMIUM         | \$1,401,224 | \$1,083,783 | \$17,612        | \$299,829 |
|  | AVERAGE PREMIUM | \$423       | \$415       | \$1,601         | \$433     |

| CRS Class |               |           |           |         |     |
|-----------|---------------|-----------|-----------|---------|-----|
| 09        | Per Policy    | \$18      | \$23      | \$84    | \$0 |
|           | Per Community | \$61,137  | \$60,211  | \$927   | \$0 |
| 08        | Per Policy    | \$37      | \$46      | \$84    | \$0 |
|           | Per Community | \$121,348 | \$120,421 | \$927   | \$0 |
| 07        | Per Policy    | \$55      | \$69      | \$84    | \$0 |
|           | Per Community | \$181,556 | \$180,629 | \$927   | \$0 |
| 06        | Per Policy    | \$73      | \$92      | \$169   | \$0 |
|           | Per Community | \$242,693 | \$240,839 | \$1,854 | \$0 |
| 05        | Per Policy    | \$91      | \$115     | \$169   | \$0 |
|           | Per Community | \$302,904 | \$301,050 | \$1,854 | \$0 |
| 04        | Per Policy    | \$110     | \$138     | \$169   | \$0 |
|           | Per Community | \$363,114 | \$361,260 | \$1,854 | \$0 |
| 03        | Per Policy    | \$128     | \$162     | \$169   | \$0 |
|           | Per Community | \$423,322 | \$421,468 | \$1,854 | \$0 |
| 02        | Per Policy    | \$146     | \$185     | \$169   | \$0 |
|           | Per Community | \$483,533 | \$481,679 | \$1,854 | \$0 |
| 01        | Per Policy    | \$164     | \$208     | \$169   | \$0 |
|           | Per Community | \$543,743 | \$541,889 | \$1,854 | \$0 |

Amec Foster Wheeler believes in providing realistic opportunities for communities to achieve success in the CRS. Amec Foster Wheeler will not identify elements of credits or new activities where the cost of implementation outweighs the benefits.



Amec Foster Wheeler will determine which activities and elements are most appropriate for the City to implement successfully and where Amec Foster Wheeler can help develop other activities for additional credit points. The following is a summary of feasible activities which the City can benefit from under the 2017 schedule and potentially improve from CRS Class 7 to Class 6:

**Activity 310 – Elevation Certificates:** The City currently earns 34 points for maintaining elevation certificates on all new and substantially improved buildings. Up to **48 additional points** could be earned for Maintaining Elevation Certificates for Post-FIRM Buildings (ECPO) by maintaining ECs on all buildings built after the date of the City’s initial FIRM but before the City participated in the CRS program.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 34             | 116                 | 82               |

**Activity 330 – Outreach Projects:** Amec Foster Wheeler will revise the current outreach projects administered by the City to conform to the 2017 Schedule by adding 4 additional topics which can be included with the development of a Program for Public Information (PPI). Amec Foster Wheeler proposes expanding current outreach projects with the creation of Flood Response Preparations (FRP) projects, which must be used during and/or after a flood and reviewed annually. The FRP projects will generate an additional **50 points** under Activity 330. Amec Foster Wheeler also advocates the creation of a PPI. The PPI provides a 40% multiplier on all Activity 330 credits as well as a 30% multiplier for each activity with an identified stakeholder. Together, these PPI activities could generate up to **100 additional points** under Activity 330. It will also supplement credits in other Activities such as 320, 350, 360 and 370 as detailed below. Amec Foster Wheeler will guide the City in the creation of a PPI committee which must include a real estate agent, an insurance agent and the City’s Public Information Officer for maximum credit.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 198            | 350                 | 152              |

**Activity 340 – Hazard Disclosure:** The City of Doral can earn a possible **37 points** for actions related to the disclosure of flood-related hazards to potential buyers. There is potential for the City to earn credit for the provision of a Real Estate Agents’ Brochure (REB) to all potential buyers with information how to research flood hazard for a property and for incorporating this brochure in a PPI. Amec Foster Wheeler also proposes examining the potential for any qualifying regulations for Other Disclosure Requirements (ODR), which mandate hazard disclosure by law. An additional 43 points are available for Disclosure of the Flood Hazard (DFH) and Disclosure of Other Hazards (DOH), but these credits are dependent upon the participation of the Miami-Dade County Multiple Listing Service.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 0              | 80                  | 80               |

**Activity 350 – Flood Protection Information:** The City currently receives credit for having documents related to floodplain management available in the Miami-Dade County Library and for displaying floodplain information on the City’s website. This Activity provides 10 points for having local



flood risk and floodplain management documents in the public library, 10 points for adding the latest FEMA publications to the library reference section, 47 points for providing detailed flood protection messages related to Activity 330 outreach projects, 10 points for posting real-time flood gage information, and 20 points for providing elevation certificates on the City's website. The City could therefore increase its Activity 350 credits by at least **18 points**. An additional **28 points** are available if the website is incorporated in a PPI as a project.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 79             | 125                 | 46               |

**Activity 360 – Flood Protection Assistance:** The City currently receives 55 points for Activity 360: 25 points for offering one-on-one Property Protection Advice (PPA) and 30 points for providing advice following a Site Visit (PPV). The City can earn **15 points** under the Flood Assistance Advice (FAA) element for have someone on staff with expertise in pre- and post-flood financial assistance, including local, state, and federal grant programs. An additional **30 points** are available if these activities are incorporated as part of a PPI (discussed under Activity 330, above).

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 34             | 116                 | 82               |

**Activity 370 – Flood Insurance Promotion:** The City of Doral does not currently receive credit for this Activity. Amec Foster Wheeler proposes that the City earn Activity 370 credits by undertaking a PPI, which will include, at minimum, a Flood Insurance Coverage Assessment (FIA) for **15 points**. The PPI can also include the remaining Activity 370 credits for a Coverage Improvement Plan (CP) for additional **15 points**.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 0              | 110                 | 110              |

**Activity 410 – Floodplain Mapping:** Credit for a cooperating technical partnership with FEMA is no longer available in the 2017 CRS Coordinator's Manual and will be lost at the City's next Verification Visit. The only way to earn credit under this Activity is to conduct a flood study outside the regulated FIRM.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 11             | 850                 | 839              |

**Activity 420 – Open Space Preservation:** The City of Doral currently receives 101 points for preserving approximately 6% of the Special Flood Hazard Area (SFHA) as open space, protecting open space land with deed restrictions, and preserving open space land in a natural state. Amec Foster Wheeler will take a detailed look at the credit currently provided under the Open Space Preservation (OSP) element and use GIS analysis to examine Doral's current land use and ensure that all qualifying land uses are being counted so that the maximum credit is being earned for Doral's



existing open spaces. Amec Foster Wheeler proposes an examination of the following elements for additional credit:

- **Natural Functions Open Space (NFOS)** – Up to 350 points for OSP-credited parcels that are preserved in or restored to their natural state;
- **Special Flood-Related Hazards Open Space (SHOS)** – Up to **150 points** if areas of special flood hazards (such as land subsidence) are covered by low-density zoning regulations;
- **Open Space Incentives (OSI)** – Up to **250 points** for preserving flood-prone portions of new development through incentives such as density transfers, cluster development, and setback rules. Amec Foster Wheeler will examine whether any regulations are already in place that include qualifying incentives for credit under this element.

It is most likely that the City of Doral can expect credit under OSP and OSI under Activity 420; however, Amec Foster Wheeler will exhaust all efforts to gain as many credit points as is possible under all elements.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 101            | 2,870               | 2,769            |

**Activity 430 – Higher Regulatory Standards:** Amec Foster Wheeler proposes an examination of and potential improvement to existing City regulations in order to gain additional points under the following elements of Activity 430:

- **Development limitations (DL)** – Up to **1,330 points** for prohibiting fill, buildings, and/or storage of materials in the SFHA.
- **Protection of Critical Facilities (PCF)** – Up to **80 points** for protecting facilities that are critical to the community.
- **Special Flood-Related Hazards Regulations (SHR)** – Up to **100 points** for enforcing appropriate construction standards in areas subject to a special flood-related hazard.
- **Other Higher Standards (OHS)** – Up to **100 points** for other regulations.

Amec Foster Wheeler will examine all potential higher standards in order to recommend to the City of Doral only those that make sense for the City to consider for implementation.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 324            | 2,462               | 2,138            |

**Activity 440 – Flood Data Maintenance:** The City of Doral already earns 81 points for its existing Geographic Information Systems (GIS) data. The City can consider upgrading its system with additional attributes for up to **79 additional points**.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 81             | 222                 | 141              |

**Activity 450 – Stormwater Management:** The City of Doral can enact more stringent stormwater management regulations in order to earn credit under the following elements of Activity 450:



- **Stormwater Management Regulations (SMR)** – Up to **380 points** for regulation development on a case-by-case basis to ensure no net increase in peak flow post-development. These points are divided between the following sub-elements:
  1. Size of development regulated (SZ): Up to 110 points.
  2. Design storms used in regulations (DS): Up to 225 points.
  3. Low-impact development (LID): Up to 25 points.
  4. Public maintenance of required facilities (PUB): Up to 20 points.
- **Erosion and Sedimentation Control Regulations (ESC)** – Up to **40 points** for regulations to minimize erosion from land disturbed due to construction;
- **Water Quality Regulations (WQR)** – Up to **20 points** for regulations to improve runoff quality.

Additionally, Amec Foster Wheeler will examine existing regulations to determine whether the City already has any qualifying stormwater management regulations, or propose standard stormwater regulations that would qualify for CRS credit.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 55             | 755                 | 700              |

**Activity 510 – Floodplain Management Planning:** Amec Foster Wheeler proposes the preparation of a Repetitive Loss Area Analysis (RLAA), which can earn the City up to **140 points**. The City of Doral has 67 repetitive loss properties as of June 28, 2017. Repetitive loss properties are those that have had 2 or more claims against the NFIP in any rolling 10-year period. If unmitigated, these properties, as well as any historical claims properties (those with only 1 current loss) or properties with similar flood conditions, represent one of the largest areas of risk in a community. Developing an RLAA entails preparing a detailed mitigation plan for repetitive loss areas in the City. Our communities have received full credit on their RLAA's. Another option for the City to consider is development of a Floodplain Management Plan which can generate up to 382 points of credit.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 207            | 622                 | 415              |

**Activity 520 – Acquisition & Relocation:** The City of Doral does not receive any credit under Activity 520. If the City has or is considering the acquisition or relocation of any buildings in the SFHA, on the repetitive loss list, on the severe repetitive loss list, or that serve as critical facilities for the community, credit may be earned.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 0              | 2,250               | 2,250            |

**Activity 530 – Flood Protection:** The City of Doral does not receive any credit under Activity 530. There may be two ways to receive credit under this Activity. First, if the City knows of any structures located in the SFHA that have been elevated above the BFE, credit can be earned for these structures. Second, the City can implement Flood Control Projects—such as elevation, floodproofing, channel modifications, or storage facilities—designed to protect buildings to at least the 25-year flood level. Amec Foster Wheeler does not recommend pursuing these credits as a cost-beneficial action.



| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 0              | 1,600               | 1,600            |

**Activity 540 – Drainage System Maintenance:** The City of Doral currently earns 185 points for inspecting the drainage system inspections, maintaining problem sites, enforcing dumping regulations, and correcting drainage problems through the Capital Improvement Plan. Amec Foster Wheeler does not recommend any modifications to this Activity because the 2017 CRS Coordinator’s Manual only credits natural drainage systems. Some of the credit could be lost following the City’s next Verification Visit. Amec Foster Wheeler recommends proactively identifying additional credits through this Modification process to compensate for the credits that will be lost under this Activity in the future.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 185            | 470                 | 285              |

**Activity 610 – Flood Warning and Response:** The City of Doral currently earns 269 points for flood warning and response activities. This credit is provided through the Miami-Dade County Emergency Management Department. Amec Foster Wheeler will work with the Miami-Dade County Emergency Manager to try to increase credit under this Activity. The City has the option to apply for StormReady credit under this activity which could add an additional 25 points.

| Current Credit | 2017 Maximum Credit | Potential Credit |
|----------------|---------------------|------------------|
| 269            | 395                 | 126              |

Note: Amec Foster Wheeler will also examine all other CRS Activities to determine the potential for additional credits.

Based on the above assessment of potential credit, Amec Foster Wheeler emphasizes the importance preparing a Program for Public Information (PPI) and a Repetitive Loss Area Analysis (RLAA) as key elements in successfully raising the City of Doral from a Class 7 to a Class 6 rated community.

The following table summarizes the above analysis of potential CRS credit by Activity. Activities highlighted in green have points available and possible and are recommended for pursuit. Activities highlighted in yellow have points available and may be possible. Activities highlighted in red either do not have points available or are not possible.

The credits shown under “Potential Credit” are those we consider to be realistically possible for the City to earn and do not include all available credits under each CRS Activity.

| Summary of Current and Potential CRS Credits |                |                  |              |
|----------------------------------------------|----------------|------------------|--------------|
| Activity/Name                                | Current Credit | Potential Credit | Total Credit |
| 310 Elevation Certificates                   | 34             | 48*              | 34           |
| 320 Map Information Service                  | 90             | 0                | 90           |
| 330 Outreach Projects                        | 198            | 150              | 348          |
| 340 Hazard Disclosure                        | 0              | 37*              | 0            |



| Summary of Current and Potential CRS Credits |                |                  |                |
|----------------------------------------------|----------------|------------------|----------------|
| Activity/Name                                | Current Credit | Potential Credit | Total Credit   |
| 350 Flood Protection Information             | 79             | 46*              | 46             |
| 360 Flood Protection Assistance              | 55             | 50               | 105            |
| 370 Flood Insurance Promotion                | 0              | 15               | 15             |
| 410 Floodplain Mapping                       | 11             | 0                | 11             |
| 420 Open Space Preservation                  | 101            | Unknown          | 101            |
| 430 Higher Regulatory Standards              | 324            | Unknown          | 324            |
| 440 Flood Data Maintenance                   | 81             | 79               | 160            |
| 450 Stormwater Management                    | 55             | Unknown          | 55             |
| 510 Floodplain Management                    | 207            | 140              | 347            |
| 520 Acquisition & Relocation                 | 0              | 0                | 0              |
| 530 Flood Protection                         | 0              | 0                | 0              |
| 540 Drainage System Maintenance              | 185            | 0                | 185            |
| 610 Flood Warning and Response               | 269            | Unknown          | 269            |
| <b>Total</b>                                 | <b>1689</b>    | <b>565</b>       | <b>2,090**</b> |

\*Activities which may increase in credit

\*\*Does not include additional credits from activities where increase in points is not presently known and does not reflect the additional CGA for the 400 series of Activities

## 2. Prepare for the Modification visit and develop a verification manual.

Amec Foster Wheeler will assist each City department in the preparation of documentation to support credit for each CRS activity. This includes working with the CRS Coordinator and various department representatives. Cooperation must be required from each department that is providing supporting documentation. Amec Foster Wheeler will prepare a verification manual “electronic file” organized by CRS activity which provides every piece of documentation required to support credit, such as community statements, forms, pages from regulations, maps, etc. Amec Foster Wheeler will mark up the documentation to show the element of credit that is being applied and provide the appropriate acronym in the margin as required by ISO.

Amec Foster Wheeler will be engaged and will speak up if/when the ISO/CRS Specialist requires something that is not explicitly spelled out in the documentation requirements or the Manual. Additionally, Amec Foster Wheeler will answer any questions in support of documentation, procedures or calculations on behalf of Doral.

We will provide modification visit guidance in the following areas (even those credits already verified by ISO) so that we look comprehensively at all of the City’s potential credits under the CRS Program. The preparation for a modification visit will include the following:

- Review and examine Elevation Certificates to identify any deficiencies (Even those already reviewed by ISO).
- Review all current CRS documentation submitted under the 2015 Verification Visit.
- Work with CRS Coordinator to select appropriate CRS Activities for implementation.
- Assist CRS Coordinator to organize Visit files on each activity.
- Assist departmental personnel to prepare key documents and to prepare Visit briefing points as necessary.
- Assist CRS Coordinator on special map requirements, including the impact adjustment.
- ISO is trying to go paperless in their verification visits, so if possible, most of the



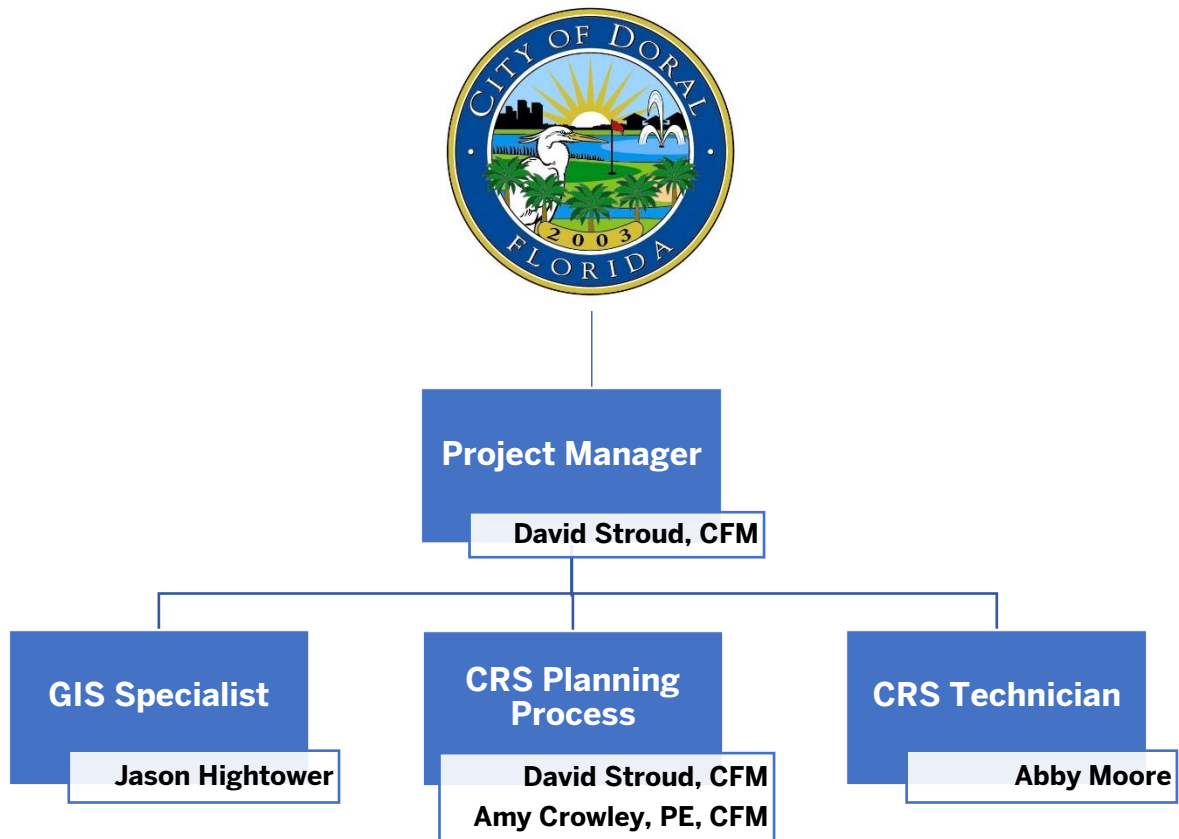
**documentation should be in electronic format.**

- **Attend the City's Modification visit to provide guidance on how to respond to questions from ISO and to bring up scoring and documentation issues which may arise during that visit.**
- **Assist the City in follow-up documentation required to satisfy the ISO 30-day letter.**



## Project Personnel

The organizational chart below shows key staff assisting our Project Manager, David Stroud. Amec Foster Wheeler believes that project success hinges on the qualifications and expertise of the project team. Our team consists of professionals with extensive experience, skills, and abilities who are readily capable of meeting project requirements.



## Project Schedule

Amec Foster Wheeler has prepared a work schedule below that will provide CRS program support services for the City's Modification application and Modification Visit. This schedule can be refined to meet the City's need's during the project kick-off meeting.

| Project                                                           | 2017 |     |     |     | 2018 |     |     |     |     |     |     |     |
|-------------------------------------------------------------------|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
|                                                                   | Sep  | Oct | Nov | Dec | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug |
| Project Kick-Off and CRS Program Assessment                       |      |     |     |     |      |     |     |     |     |     |     |     |
| Task 1: Assist City to improve CRS rating from Class 7 to Class 6 |      |     |     |     |      |     |     |     |     |     |     |     |
| Task 2: Attend Modification Visit*                                |      |     |     |     |      |     |     |     |     |     |     |     |

\* Note: ISO Modification Visit timeframe is an estimation and dependent on the ISO/CRS Specialist.

## Project Cost

Amec Foster Wheeler will perform all CRS program support services for the lump sum cost of \$18,750 (which includes preparation of a Program for Public Information (PPI) which includes 3 committee meetings and development of a Repetitive Loss Area Analysis (RLAA) report which includes visiting and collecting data on all buildings in the identified repetitive loss areas – most likely more than 150 buildings and preparation of the plan document). The overall cost can be refined based on the individual CRS activities the City chooses to implement.

We look forward to the opportunity to meet with you to discuss and refine our proposed scope of work and associated fee to meet your needs.