Department of Homeland Security
Federal Emergency Management Agency

General Info

Project #	105720 **P/W #** 10040	**Project Type**	Specialized
Project Category	G - Parks, Recreational Facilities, and Other Items	**Applicant**	Local Redevelopment Authority For Roosevelt Roads (000-UVI93-00)
Project Title	MLRA020 - Pier 3, Bulkhead D	**Event**	4339DR-PR (4339DR)
Project Size	Large	**Declaration Date**	9/20/2017
Activity Completion Date	9/20/2024	**Incident Start Date**	9/17/2017
		Incident End Date	11/15/2017
Process Step	Obligated		

Damage Description and Dimensions

The Disaster # 4339DR, which occurred between *09/17/2017* and *11/15/2017*, caused:

Damage #152541; Other Facilities - Pier 3 - MER Group

General Facility Information:

- **Facility Type:** Parks, Cemeteries, and Recreational Facilities
- **Facility:** Pier 3
- **Facility Description:** Pier 3 is approximately 1209 feet long and 120 feet wide with a bent spacing of 20 feet.
- **Year Built:** 1966
- **Location Description:** Roosevelt Roads Naval Base, Marina Dr. end, Ceiba, Puerto Rico
- **Start GPS Latitude/Longitude:** 18.22462, -65.61667
- **End GPS Latitude/Longitude:** 18.22286, -65.61959

General Damage Information:

- **Date Damaged:** 9/20/2017
- **Cause of Damage:** Damages due to hurricane category 4-5 with strong winds, severe ocean waves, wind driven rain, and flooding.

Facility Damage:

Area affected by the barge:

- Piers, 42.25 CY of Concrete for deck repair (reconstruction). Dimensions are, 117 FT long x 9.75 FT wide x 1 FT high, Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The southeast section of the pier was destroyed due to the violent impacts of the Seven Polaris barge, 0% work completed.
- Piers, 3.009 CY of concrete for Pier Bulkhead / Curb repair (reconstruction). Dimensions are, 117 FT long x 0.8333 FT wide x 0.8333 FT high, Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The southeast section of the pier was destroyed due to the violent impacts of the Seven Polaris barge., 0% work completed.
- Piers, 2 each of 100 Tons load capacity Bollards. The bollards disappeared when the

southeast section of the wharf was destroyed by the violent impacts of the Seven Polaris barge., Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The southeast section of the pier was destroyed due to the violent impacts of the Seven Polaris barge., 0% work completed.

- Piers, 22.469 CY of concrete to repair two (2) bases of 100 Tons load capacity Bollards. Dimensions of one base are, 7.5833 FT long x 4 FT wide x 10 FT high, Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The south-east section of the pier was destroyed due to the violent impacts of the Seven Polaris barge., 0% work completed.
- Piers, 2 each of Potable water manifold, include one of 4 inches Y strainer w/ flange connections, one of 4 inches Backflow preventer similar to Watts model LF-009, two of 4 inches OSY (outside stem yoke) gate valves w/flange connection, one of 8 inches long x 4 inches diameter reducer - nipple type w/flange connection, three of 4 inches elbow @ 90 degrees schedule 40 w/flange connection. All components are made of carbon steel or cast iron. One of the potable water manifolds disappeared while hurricane pass over Puerto Rico, the other was seriously damage., Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The southeast section of the pier was destroyed due to the violent impacts of the Seven Polaris barge., 0% work completed.
- Piers, 2 each of Access door for potable water manifold box. Made of galvanized Steel Tread Plate, Ga-11. One of the potable water manifolds disappeared while hurricane pass over Puerto Rico, the other was seriously damage Dimensions are, 14.9166 FT long x 2.6666 FT wide, Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The southeast section of the pier was destroyed due to the violent impacts of the Seven Polaris barge., 0% work completed.
- Piers, 2 each of Reinforced concrete box for potable water backflow preventer manifold - One of the potable water manifold disappeared while hurricane passed over Puerto Rico , the other was seriously damaged. The walls are 6 inches thick. Dimensions are, 16.33 FT long x 4.0833 FT wide x 1.8333 FT high, About 1.317 CY of concrete are required for each box to be rebuilt in pre-disaster conditions. Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The south-east section of the pier was destroyed due to the violent impacts of the Seven Polaris barge., 0% work completed.
- Piers, 2 each of Vertical Steel Pontoon Camel, include two sets of 7 vertical pontoons of 18 inches diameter x 45 FT long and W beam frame supporting vertical camels together. Dimension is, 18 FT wide, One of the Pontoon camel disappeared while hurricane passed over Puerto Rico, the other was seriously damaged. Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The south-east section of the pier was destroyed due to the violent impacts of the Seven Polaris barge., 0% work completed.
- Piers, 3 each of Piles cap. These caps are constructed of reinforced concrete. Dimensions are, 120 FT long x 33 IN wide x 36 IN high, approximately 36.66 CY of concrete are required to re-build each cap to pre-disaster conditions. Cause of Damage: Others- The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The south-east section of the pier was destroyed due to the violent impacts of the Seven Polaris barge., 0% work completed.
- Piers, 1 each of Disconnected safety switch, Cutler Hammer, NEMA 4X enclosure, include galvanized steel frame and safety bollards. , Cause of Damage: Other - The Seven Polaris barge ship was docked when hurricane landfall. The most affected section of pier was the south-east including the bulkhead and utilities. The southeast section of the pier was destroyed due to the violent impacts of the Seven Polaris barge, 0% work completed.

Fenders:

- Piers, 7 each of Timber Pile Cluster (Vertical Timber Fenders pack of 5 units). Both Cluster are located at the offshore corners of pier. Dimensions are , 45 FT long x 14 IN in diameter, Cause of Damage: Others- Storm surge ebb, severe ocean waves and floating debris impact, 0% work completed.

- Piers, 220 each of Wales (Horizontal Timber fenders). Wales run along of pier perimeter. Dimensions are, 8.666 FT long x 1 FT wide x 1 FT high, Cause of Damage: Others- Storm surge ebb, severe ocean waves and floating debris impact., 0% work completed.
- Piers, 154 each of Timber fenders piles (vertical units). Timber fenders piles are among the wales along the perimeter of the pier. Dimensions are, 45 FT long x 14 IN in diameter, Cause of Damage: Others- Storm surge ebb, severe ocean waves and floating debris impact., 0% work completed.
- Piers, 5 each of V-Fender- rubber type. Taper shape from 21 inches at the base to 10 inches at the striking side. Dimension is , 4 FT long, Cause of Damage: Others- Storm surge ebb, severe ocean waves and floating debris impact., 0% work completed.
- Piers, 32 each of Tubular Fenders (floating foam filled). Dimensions are, 13 FT long x 5.5 FT wide, Cause of Damage: Others- Storm surge ebb, severe ocean waves and floating debris impact. , 0% work completed.

Mooring:

- Piers, 4 each of 10 Tons load capacity Cleats. It looks structurally in good condition, but the surface has worn and rusty paint., Cause of Damage: windblown debris and floating debris impact, 0% work completed.
- Piers, 15 each of 150 Tons Bollard. It looks structurally in good condition, but has worn paint., Cause of Damage: Windblown debris and floating debris impact., 0% work completed.
- Piers, 5 each of Bollards 100 Tons capacity, (25.3323 CF EA) 126.3323 CF total, concrete pads. Concrete cracks and spalling are observed, it is possible that it is structurally compromised. Trapezoid footprint shape., 7.6 FT long x 4 FT wide x 0.8333 FT high, Cause of Damage: Others- Storm surge ebb, severe ocean waves and floating debris impact, 0% work completed.

Structural:

- Piers, 0.1131 CY of 2 EA Cleat base concrete spall. Dimensions are, 44 IN long x 10 IN wide x 6 IN high, Cause of Damage: Others- Floating debris impact., 0% work completed.
- Piers, Bulkhead / Curb / Bullrail with multiple cracks, spalls or severe damage to the entire perimeter of the pier. Excluding the affected area, the entire perimeter of the pier dimensions are , 2,650 FT long, x 0.833 ft wide x 0.833 ft depth. Cause of Damage: Others- Storm surge, floating debris impact, 0% work completed.
- Piers, 320 each of (20 piles per bent on 16 pile bents) H steel piles full length encased on 36" diameter concrete and grout jackets. Concrete Piles square dimensions are 18 inches x 18 inches with 7.5 ft diameter concrete and grout jacket. Length is approximately 45 ft., Cause of Damage: Undetermined. This damage is under the dock and underwater, but the applicant claims it. This damage was reported in the MARAD report as preexisting long before the hurricane. However, The Applicant indicates that the storm surge, severe ocean waves and the violent impacts of the barge worsen the pre-existing conditions., 0% work completed.
- Piers, 38 each of (20 piles per bent on 16 pile bents), H steel piles full length encased on 36" diameter concrete and grout jackets of Concrete Batter Piles square dimensions are 18 inches x 18 inches with 7.5 ft diameter concrete and grout jacket. Length is around 45 ft., Cause of Damage: Undetermined. This damage is under the dock and underwater, but the applicant claims it. This damage was reported in the MARAD report as preexisting long before the hurricane. However, The Applicant indicates that the storm surge, severe ocean waves and the violent impacts of the barge worsen the pre-existing conditions., 0% work completed.
- Piers, 21 each of Concrete Piles square. Dimensions are 18 inches x 18 inches, prestressed concrete piles. Length is approximately 45 ft., Cause of Damage: Undetermined. This damage is under the dock and underwater, but the applicant claims it. This damage was reported in the MARAD report as preexisting long before the hurricane. However, The Applicant indicates that the storm surge, severe ocean waves and the violent impacts of the barge worsen the pre-existing conditions., 0% work completed.
- Piers, 2 each of Concrete Batter Piles square 18 inches x 18 inches, prestressed concrete piles. Length is approximately 45 ft., Cause of Damage: Undetermined. This damage is under the dock and underwater, but the applicant claims it. This damage was reported in the MARAD report as preexisting long before the hurricane. However, The Applicant indicates that the storm surge, severe ocean waves and the violent impacts of the barge

worsen pre-existing conditions., 0% work completed.

Utilities:

- Piers, 14 each of Access door for potable water manifold box. Made of galvanized Steel Tread Plate, Ga-11. Dimensions are, 14.91 FT long x 2.66 FT wide, Cause of Damage: High winds, Others- Storm surge ebb, severe ocean waves and floating debris impact., 0% work completed.
- Piers, Sewer pipe, Cast Iron, Sch-40 w/ hub , included main line and branches, sewer line run along the under pier deck. Dimensions are, 1,245 FT long x 4 IN in diameter, Cause of Damage: Others- Storm surge ebb, severe ocean waves and floating debris impact., 0% work completed.
- Piers, Potable water pipe feeder line - PVC Sch-80. Water line run under the pier deck. Dimensions are , 1,800 LF long x 8 IN in diameter, Cause of Damage: Others- Storm surge ebb, severe ocean waves and floating debris impact, 0% work completed.
- Piers, 14 each of Potable water manifold, include one of 4 inches Y strainer w/ flange connections, one of 4 inches Backflow preventer similar to Watts model LF-009, two of 4 inches OSY (outside stem yoke) gate valves w/flange connection, one of 8 inches long x 4 inches diameter reducer - nipple type w/flange connection, three of 4 inches elbow @ 90 degrees schedule 40 w/flange connection. All components are made of carbon steel or cast iron. , Cause of Damage: Others- Undetermined . There are no clear evidence of damage., 0% work completed.

Damage #152547; Other Facilities - D - Bulkhead D

General Facility Information:

- **Facility Type:** Other
- **Facility:** Bulkhead D (Delta) Wharf
- **Facility Description:** Bulkhead D wharf (also known as Bulkhead D1 and D2 or Bulkhead Delta) extends from north-west to south-east approximately 865.84 ft (263.91 M) long by approximately 60 foot wide. Pier 3 extends from the middle of Bulkhead D
- **Year Built:** 1964
- **Location Description:** Roosevelt Roads Naval Base, Ceiba, PR
- **Start GPS Latitude/Longitude:** 18.22545, -65.61722
- **End GPS Latitude/Longitude:** 18.22347, -65.61586

General Damage Information:

- **Date Damaged:** 9/20/2017
- **Cause of Damage:** Damaged due to hurricane category 4-5 with strong winds, severe ocean waves, wind driven rain, floating debris and flooding.

Facility Damage:

Utilities:

- Fenders, 12 each of HDP D Shape with D bore Fender. Required to replace missed units. D fenders are installed in an angle pattern along bulkhead sheet pile cap. Dimensions are, 8 FT long x 12 IN high, Cause of Damage: High winds, severe ocean waves and storm surge with floating debris. , 0% work completed.

End of DDD

DI 152547

Final Scope

152541 Other Facilities - Pier 3 - MER Group

****Some damages were deemed ineligible for DI#152541 as per Determination Memo DM-PRJ-19555 and will not be part of the SOW.****

Work to be completed

The applicant will utilize contracts and (or) force accounts for repairs to Other Facilities - Pier 3 - MER Group to restore facilities back to pre-disaster design, function, and capacity within the existing footprint.

Facility Damage: Roosevelt Roads Naval Base, Marina Dr. end, 355 Roosevelt Roads, Ceiba, Puerto Rico 00735

Start GPS Latitude/Longitude: 18.22462, -65.61667

End GPS Latitude/Longitude: 18.22286, -65.61959

Eligible Work:

Area affected by the barge:

A. Remove and replace in-kind, Deck, 42.25 CY of concrete, 117 FT long x 9.75 FT wide x 1 FT high. (See Scope Note #1)

B. Remove and replace or reconstruct in-kind, Pier Bulkhead/ Curb repair/ reconstruction, 3.01 CY of concrete, 117 FT long x 0.8333 FT wide x 0.8333 FT high

C. Remove and replace in-kind, 2 Each, 100 Ton load capacity Bollards.

D. Remove and replace in-kind, 22.469 CY of concrete, 2 bases of 100 Ton capacity Bollards x 7.5833 FT long x 4 FT wide x 10 FT high.

E. Remove and repair or replace in-kind, 2 each of Potable water manifolds, one 4 inches Y strainer w/ flange connections, one of 4 inches Backflow preventer, two 4 inches OSY (outside stem yoke) gate valves w/flange connection, one 8 inches long x 4 inches diameter reducer - nipple type w/flange connection, three 4 inches elbow @ 90 degrees schedule 40 w/flange connection.

F. Remove and replace in-kind, 2 Each, Access doors for potable water manifold box, 2 x 14.9166 FT long x 2.6666 FT wide.

G. Remove and replace in-kind, 2 Each, 2.634 CY of concrete, Reinforced concrete box for potable water backflow preventer manifold, 16.33 FT long x 4.0833 FT wide x 1.8333 FT high x walls thickness 6 IN.

H. Remove and replace in-kind, 2 Each, Steel Pontoons, 18 IN diameter x 45 Long.

I. Remove and replace in-kind, 3 Each Pile Caps, 110.00 CY of concrete, 120 FT long x 33 IN wide x 36 IN high (See Scope Note #1)

J. Remove and replace in-kind, 1 Each, Disconnect safety switch.

Fenders:

A. Remove and replace in-kind, 7 Each, Timber Pile, 14 IN diameter x 45 FT long.

B. Remove and replace in-kind, 220 Each, Wales (Horizontal timber fenders) 8.667 FT long x 1 FT wide x 1 FT high.

C. Remove and replace in-kind, 154 Each, Vertical timber fenders, 14 IN diameter x 45 FT long.

D. Remove and replace in-kind, 5 Each, V-fenders, Rubber Type, 4 FT long.

E. Remove and replace in-kind, 32 Each, Tubular fenders, Floating foam filled, 13 FT long x 5.5 FT wide.

Mooring:

F. Clean, prepare, and paint in-kind, 4 Each, 10 Tons capacity Cleats.

G. Clean, prepare, and paint in-kind, 15 Each, 150 Tons capacity Cleats.

H. Remove and replace in-kind, 0.935 CY of concrete, 100 Ton capacity bollard pad.

Structural:

I. Remove and replace in-kind, 2 Each, 0.113 CY of concrete, 44 IN long x 10 IN wide x 6 IN high.

J. Clean and repair spall in-kind, 1,838.81 CF of concrete, 2,650 FT long x 0.833 FT wide x 0.833 FT deep.

Ineligible Work: (See Scope Note #2)

Piers: (See Scope Note #3)

K. Clean, prepare, and repair in-kind, 320 Each, 84,823.00 CF of concrete, Concrete Piles Square,18 IN x 18 IN with 7.5 FT diameter concrete and grout jackets.

L. Clean, prepare, and repair in-kind, 30 Each, 1,590.43 CF of concrete, Concrete Battered Piles Square, 18 IN x 18 IN with 7.5 FT diameter concrete and grout jackets.

M. Clean, prepare, and repair in-kind, 21 Each, Concrete Piles Square, 18 IN x 18 IN x 45 FT Length.

N. Clean, prepare, and repair in-kind, 3 Each, Concrete Batter Piles, Square,18 inches x 18 inches x 45 FT Length.

Eligible Work:

Utilities:

O. Remove and replace in-kind, 14 Each, Access doors for potable water manifold box, 14 x 14.91 FT long x 2.6666 FT wide.

P. Remove and replace in-kind, Sewer Pipe, 1,245 FT long x 4 IN diameter, Cast iron.

Q. Remove and replace in-kind, Potable water feeder line, 1,800 FT long x 8 IN diameter, PVC.

Ineligible Work: (See Scope Note #2)

Piers:

R. Remove and repair or replace in-kind, 14 each of Potable water manifold, include one of 4 inches Y strainer w/ flange connections, one of 4 inches Backflow preventer similar to Watts model LF-009, two of 4 inches OSY (outside stem yoke) gate valves w/flange connection, one of 8 inches long x 4 inches diameter reducer - nipple type w/flange connection, three of 4 inches elbow @ 90 degrees schedule 40 w/flange connection.

Work to be Completed Total DI #152541: **$ 3,646,701.71**

Work to be Completed CEF Total DI #152541: **$ 8,996,335.14**

Determination Memo (DM-PRJ-19555) Deduction: -**$ 2,150,360.42**
Determination Memo (DM-PRJ-19555) Deduction CEF Total: -**$ 5,257,210.00**

Work to be Completed Total DI #152541(Eligible): $ 1,496,341.29

Work to be Completed CEF Total DI #152541 (Eligible): $ 3,739,125.14

Work to be Completed Project Total: **$ 1,506,930.93**

Work to be Completed CEF Project Total: **$ 3,765,587.00**

Determination Memorandum: This project contains an official Determination Memo for a total amount of **$5,257,210.00** ***(updated as of 3/25/2022)*** that's been determined ineligible. For all information to this determination memo see document titled; ***DM19555 4339LocalRedevelopmentAuthRooseveltRoads105720 DM 20211119.pdf.***

Scope Notes:

1. It is assumed and understood that the deck and pile caps will be removed and replaced together at the same time.

2. Please refer to document labeled:

"DM19555 4339LocalRedevelopmentAuthRooseveltRoads105720 DM 20211119.pdf" for determination memo details.

3. The quantity is amended per RFI Response, as applicable. (See Document: *Answers to CRC DI # 152541 Pier3.xlsx*).

4. The ineligible SOW items set forth in the Determination Memo referenced in note #2 above, became official on March 19, 2022, when the Recipient's appeal period expired. Therefore, although the project was changed from section 428 to 406, the ineligible items in the SOW do not change, but the cost estimate total is updated as of 3/25/2022 and according to the parameters of the section 406.

Project Notes:

1. All site estimates for work to be completed were generated using RS means Software Data/Year 2022 Quarter 1 – PUERTO RICO / URBAN (PRU). See document labeled; ***SP-105720-DR4339PR-CEF (406)-R.1.xlsx*** *and* ***SP-105720-DR4339PR-CEF (406)-Ineligible Items-R.1.xlsx***.

2. Cost Estimating Formats (CEF) have been created for eligible and ineligible items for this project, see attachments labeled; See document labeled; ***SP-105720-DR4339PR-CEF (406)-R.1.xlsx*** *and* ***SP-105720-DR4339PR-CEF (406)-Ineligible Items-R.1.xlsx***.

3. GPS coordinates have been checked for accuracy.

4. For work to be completed, the applicant is required to obtain any necessary Federal, State, and Local permits (including environmental), prior to the start of construction.

5. Please look for Maintenance Records in applicant's section. See document labeled: Maintenance Record Rev May 20 ICS-RLB (002).pdf.

6. All procurement documents attached have been reviewed and will be in accordance with state and federal requirements. See attached document labeled: Procurement Policy - LRA.pdf.

7. This project contains an official Determination Memo for a total amount of **$5,257,210.00** ***(updated as of 3/25/2022)*** that's been determined ineligible. For all information to this determination memo see document titled; ***DM19555 4339LocalRedevelopmentAuthRooseveltRoads105720 DM 20211119.pdf*.** The cost was updated as per applicant request to change from section 428 to 406.

8. To qualify as "in-kind repair/replacement," work must be done to match all physical and visual aspects of the original elements, including design, color, texture, hardware, profile, and workmanship. Should the Applicant decide not to repair/replace in-kind, then a revised scope of work must be submitted to FEMA for approval and additional EHP review.

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406 HMP Scope

(I) Hazard Mitigation Proposal (HMP) Scope of Work:

In order to prevent or reduce future damages from similar events, the applicant proposed the following mitigation measures:

1. Mitigation measure for construction activities identified in the DDD is to provide the following materials: Concrete forms, epoxy coated rebars including installation. For the epoxy coated rebars please avoid coating it, in case touch it with vendor epoxy paint to avoid corrosion.

2. The following construction equipment are included: Barge, 50 tons Cherry Picker to be mounted on the barge, tubular scaffolding, 1,000 feet of floating boom to contain any spill.

3. Provide and apply two (2) gallons per each 100 Tons bollards of Rust Inhibitor Paint. Color by USA Coast Guard Codes.

4. One (1) explosion proof Safety Switch is provided for safety in the Pier.

5. Provide and install 83 hangers for the 1245 lineal feet of ductile iron sewage cast iron pipe every 15 feet center to center.

6. Provide and install 180 hangers for the 1800 lineal feet of 10" PVC pipe at 10'-0" center to center to avoid sagging.

The total mitigation cost is $762,586.80

(II) Hazard Mitigation Proposal (HMP) Cost

Total Net Hazard Mitigation Cost (Base Cost) =	$ 255,388.29
+ HM CEF Cost =	$ 507,198.51
Net Hazard Mitigation cost + HM CEF Cost = Hazard Mitigation Total Cost =	$ 762,586.80

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(III) HMP Cost-Effectiveness Calculations

HMR = (Total Net Hazard Mitigation Cost / Project Net In-Kind Repair Cost) x 100

HMR = ($255,388.29/ $707,198.14) x 100 = **36.11 %**

The cost of this Hazard Mitigation Proposal (HMP) is **36.11 %** of the repair or restoration costs and is deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April2018, Chapter 2, VII., Section C, **100% Rule.** This Hazard Mitigation Proposal meets eligible repair and restoration cost effective requirements.

***Cost effective calculation should be taken before CEF Factors, Soft Costs, or other Factors.**

**** See the HMP Cost estimate for a more detailed breakdown of HMP costs and cost effectiveness calculation(s).**

*****See Mitigation Profile Documents Tab in Grants Manager for complete version of this HMP and supporting documents.** ***(HMP, HMP cost estimate, Supporting documents file)***

152547 Other Facilities - D - Bulkhead D

Work to be completed

The applicant will utilize contracts and (or) force accounts for repairs to Other Facilities - D - Bulkhead D to restore facilities back to pre-disaster design, function and capacity (in-kind) within the existing footprint.

Facility Damage: Roosevelt Roads Naval Base, Marina Dr. end, 355 Roosevelt Roads, Ceiba, Puerto Rico 00735

Start GPS Latitude/Longitude: 18.22545, -65.61722

End GPS Latitude/Longitude: 18.22347, -65.61586

Utilities:

A. Remove and replace in kind, 12 Each, D Shape Fender, 8 FT long x 12 IN high.

Work to be Completed Total DI #152547**: $ 10,589.64**

Work to be Completed CEF Total DI #152547**: $ 26,461.86**

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406 HMP Scope

(I) Hazard Mitigation Proposal (HMP) Scope of Work:

In order to prevent or reduce future damages from similar events, the applicant proposed the following mitigation measures:

1.Mitigation measure for construction activities identify in the DDD is to provide and install tubular scaffold for the removal and installation of 12 fenders HDP D shape with D bore fender.

2.The Barge, 50 tons Cherry Picker to be mounted on the barge, 1,000 feet of floating boom to contain any spill can be used for this activity

The total mitigation cost is $6,640.73

(II) Hazard Mitigation Proposal (HMP) Cost

Total Net Hazard Mitigation Cost (Base Cost) =	$ 1, 864.75
+ HM CEF Cost =	$ 4,775.98
Net Hazard Mitigation cost + HM CEF Cost = Hazard Mitigation Total Cost =	$ 6,640.73

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(III) HMP Cost-Effectiveness Calculations

HMR = (Total Net Hazard Mitigation Cost / Project Net In-Kind Repair Cost) x 100

HMR = ($1,864.75/ $7,872.79) x 100 = **23.69 %**

The cost of this Hazard Mitigation Proposal (HMP) is **23.69 %** of the repair or restoration costs and is deemed cost effective per FEMA Public Assistance Program and Policy Guide (PAPPG) V3.1 April2018, Chapter 2, VII., Section C, **100% Rule.** This Hazard Mitigation Proposal meets eligible repair and restoration cost effective requirements.

Cost

Code	Quantity	Unit	Total Cost	Section
9000 (CEF Cost Estimate - (DM Reduction as per DM-PRJ-19555))	1.00	Lump Sum	($5,257,210.00)	Uncompleted
9000 (CEF Cost Estimate)	1.00	Lump Sum	$8,996,335.14	Uncompleted
9000 (CEF Cost Estimate)	1.00	Lump Sum	$26,461.86	Uncompleted

CRC Gross Cost	$3,765,587.00
Total 406 HMP Cost	$769,227.53
Total Insurance Reductions	$0.00
CRC Net Cost	$4,534,814.53
Federal Share (90.00%)	$4,081,333.08
Non-Federal Share (10.00%)	$453,481.45

Award Information

Version Information

Version #	Eligibility Status	Current Location	Bundle Number	Project Amount	Cost Share	Federal Share Obligated	Date Obligated
0	Eligible	Awarded	PA-02-PR-4339-PW-10040(11847)	$4,534,814.53	90 %	$4,081,333.08	6/3/2022

Drawdown History

EMMIE Drawdown Status As of Date	IFMIS Obligation #	Expenditure Number	Expended Date	Expended Amount
8/23/2023	4339DRPRP00100401	20172Y02-08222023	8/21/2023	$1,020,333.27

Obligation History

Version #	Date Obligated	Obligated Cost	Cost Share	IFMIS Status	IFMIS Obligation #

Subgrant Conditions

- As described in Title 2 Code of Federal Regulations (C.F.R.) § 200.333, financial records, supporting documents, statistical records and all other non-Federal entity records pertinent to a Federal award must be retained for a period of three (3) years from the date of submission of the final expenditure report or, for Federal awards that are renewed quarterly or annually, from the date of the submission of the quarterly or annual financial report, respectively, as reported to the Federal awarding agency or pass-through entity in the case of a subrecipient. Federal awarding agencies and pass-through entities must not impose any other record retention requirements upon non-Federal entities. Exceptions are stated in 2 C.F.R. §200.333(a) – (f)(1) and (2). All records relative to this project are subject to examination and audit by the State, FEMA and the Comptroller General of the United States and must reflect work related to disaster-specific costs.
- In the seeking of proposals and letting of contracts for eligible work, the Applicant/Subrecipient must comply with its Local, State (provided that the procurements conform to applicable Federal law) and Federal procurement laws, regulations, and procedures as required by FEMA Policy 2 CFR Part 200, Procurement Standards, §§ 317-326.
- The Recipient must submit its certification of the subrecipient's completion of this project, the final claim for payment, and supporting documentation within 180 days from the date that the applicant completes the scope of work, or the project deadline, whichever occurs first. FEMA reimburses Large Projects (those with costs above the large project threshold) based on the actual eligible final project costs. Therefore, during the final project reconciliation (closeout), the project may be amended to reflect the reconciliation of actual eligible costs.
- When any individual item of equipment purchased with PA funding is no longer needed, or a residual inventory of unused supplies exceeding $5,000 remains, the subrecipient must follow the disposition requirements in Title 2 Code of Federal Regulations (C.F.R.) § 200.313-314.
- The terms of the FEMA-State Agreement are incorporated by reference into this project under the Public Assistance award and the applicant must comply with all applicable laws, regulations, policy, and guidance. This includes, among others, the Robert T. Stafford Disaster Relief and Emergency Assistance Act; Title 44 of the Code of Federal Regulations; FEMA Policy No. 104-009-2, Public Assistance Program and Policy Guide; and other applicable FEMA policy and guidance.
- The DHS Standard Terms and Conditions in effect as of the declaration date of this emergency declarations or major disaster, as applicable, are incorporated by reference into this project under the Public Assistance grant, which flow down from the Recipient to subrecipients unless a particular term or condition indicates otherwise.
- The Uniform Administrative Requirements, Cost Principles, and Audit Requirements set forth at Title 2 Code of Federal Regulations (C.F.R.) Part 200 apply to this project award under the Public Assistance grant, which flow down from the Recipient to all subrecipients unless a particular section of 2 C.F.R. Part 200, the FEMA-State Agreement, or the terms and conditions of this project award indicate otherwise. See 2 C.F.R. §§ 200.101 and 110.
- The subrecipient must submit a written request through the Recipient to FEMA before it makes a change to the approved scope of work in this project. If the subrecipient commences work associated with a change before FEMA approves the change, it will jeopardize financial assistance for this project. See FEMA Policy No. 104-009-2, Public Assistance Program and Policy Guide.
- Pursuant to section 312 of the Stafford Act, 42 U.S.C. 5155, FEMA is prohibited from providing financial assistance to any entity that receives assistance from another program, insurance, or any other source for the same work. The subrecipient agrees to repay all duplicated assistance to FEMA if they receive assistance for the same work from another Federal agency, insurance, or any other source. If an subrecipient receives funding from another federal program for the same purpose, it must notify FEMA through the Recipient and return any duplicated funding.

Insurance

Additional Information

4/20/2022

GENERAL INFORMATION

Event: 4339-DR-PR

Project: SP105720

Category of Work: Cat G - Parks, Recreation, Misc

Applicant: LOCAL REDEVELOPMENT AUTHORITY FOR ROOSEVELT ROADS

Event Type: Hurricane / Maria

Cause of Loss: Wind & Flood

Incident Period: 9/17/2017 to 11/15/2017

Total Public Assistance Amount: $4,534,814.53 (Repair Amount $3,765,587.00 + HMP Amount $769,227.53)

COMMERCIAL INSURANCE INFORMATION

Does the Applicant have a Commercial Policy: No

NUMBER OF DAMAGED INVENTORIES INCLUDED IN THIS PROJECT: (2)

Damaged Inventory (DI) #152541:

Other Facilities - Pier 3 - MER Group

Number of damaged locations included in this DI: (1)

Location Description: Roosevelt Roads Naval Base, Marina Dr. end, Ceiba, Puerto Rico

GPS Coordinates: 18.22462, -65.61667 to 18.22286, -65.61959

Cause of Loss: Wind & Flood

SOV / Schedule #: Not Insured; See *"Applicant Insurance Coverage Letter.pdf"*

SOV or Schedule Amount: $0.00

Applicable Deductible Amount: $0.00

Damage Inventory Amount: $4,501,711.94 (Repair Amount $3,739,125.14 + HMP Amount $762,586.80)

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Does the Applicant's Commercial Policy extend any coverage for this facility: No

Is the Facility located in a Special Flood Hazard Area (SFHA)? Yes

Zone: VE

FIRM Date: 11/18/2009

Is there a Mandatory National Flood Insurance Program (NFIP) Reduction being made to this project: No.

Does the Applicant have a Standard Flood Insurance Policy (SFIP) that provides coverage for this specific location: No

Reduction(s):

No reduction is being made to this facility.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for Other Facilities - Pier 3 - MER Group because facility does not meet the definition of building, equipment, contents, or vehicle.

Damaged Inventory (DI) #152547:

Other Facilities - D - Bulkhead D

Number of damaged locations included in this DI: (1)

Location Description: Roosevelt Roads Naval Base, Ceiba, Puerto Rico

GPS Coordinates: 18.22545, -65.61722 to 18.22347, -65.61586

Cause of Loss: Wind & Flood

SOV / Schedule #: Not Insured; See *"Applicant Insurance Coverage Letter.pdf"*

SOV or Schedule Amount: $0.00

Applicable Deductible Amount: $0.00

Damage Inventory Amount: $33,102.59 (Repair Amount $26,461.86 + HMP Amount $6,640.73)

Prior Obtain and Maintain Requirement:

No prior insurance requirements were found for this facility.

Does the Applicant's Commercial Policy extend any coverage for this facility: No

Is the Facility located in a Special Flood Hazard Area (SFHA)? Yes

Zone: VE

FIRM Date: 11/18/2009

Is there a Mandatory National Flood Insurance Program (NFIP) Reduction being made to this project: No.

Does the Applicant have a Standard Flood Insurance Policy (SFIP) that provides coverage for this specific location: No

Reduction(s):

No reduction is being made to this facility.

Obtain and Maintain Requirement:

No Obtain & Maintain Requirement is being mandated for Other Facilities - D - Bulkhead D because facility does not meet the definition of building, equipment, contents, or vehicle.

Insurance Proceeds Statement:

FEMA's Recovery Policy FP 206-086-1, Public Assistance Policy on Insurance (June 29, 2015), requires applicants to take reasonable efforts to recover insurance proceeds that it is entitled to receive from its insurers. FEMA will consider final insurance settlements that may be less than the insurance policy limits when an applicant demonstrates that it has taken reasonable efforts to recover insurance proceeds that it is entitled on a case-by-case basis.

Standard Insurance Comments

A. Duplication of Benefits. FEMA cannot provide assistance for disaster-related losses that duplicate benefits available to an applicant from another source, including insurance.

1. Before FEMA approves assistance for a property, an applicant must provide FEMA with information about any actual or anticipated insurance settlement or recovery it is entitled to for that property.

2. FEMA will reduce assistance to an applicant by the amount of its actual or anticipated insurance proceeds.

3. Applicants must take reasonable efforts to recover insurance proceeds that they are entitled to receive from their insurer(s).

Mangual Gonzalez, Wilfredo, PA Insurance Specialist

CRC Atlantic, Guaynabo, PR

O&M Requirements

There are no Obtain and Maintain Requirements on **MLRA020 - Pier 3, Bulkhead D**.

406 Mitigation

There is no additional mitigation information on **MLRA020 - Pier 3, Bulkhead D**.

Environmental Historical Preservation

Is this project compliant with EHP laws, regulations, and executive orders? No

EHP Conditions

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize funding.

- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archaeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.
- NEPA Determination: This project has been prepared to document disaster damages to an eligible facility, develop a reasonable scope of work to return the facility to its pre-disaster design, function, and capacity, and agree upon a fixed cost estimate. Therefore, EHP review of the project will not be complete at the time of obligation and the project must be versioned and resubmitted for EHP review. Work may not begin until EHP review of the project is complete and documented in a Record of Environmental Consideration (REC) that is attached in Grants Manager. Failure to version the project at the close of the A&E phase will result in a project that is not compliant with laws and executive orders, which may jeopardize funding, may affect eligibility, and could result in the project becoming ineligible for federal funding.

EHP Additional Info

There is no additional environmental historical preservation on **MLRA020 - Pier 3, Bulkhead D**.

Final Reviews

Final Review

Reviewed By DIAZ-PABON, PEDRO J. **Reviewed On** 05/02/2022 11:56 AM AST

Review Comments

To the best of my knowledge, this project is ready to continue the review process and comply with all policies & regulations. Project will move forward.

Recipient Review

Reviewed By Arguelles, Alejandro **Reviewed On** 05/10/2022 1:12 PM AST

Review Comments

Recipient review limited to; spot-checking the DDD, SOW, HMP, costs and factors, codes/standards; review for post-award or closeout challenges; review of concerns communicated by the Subrecipient. The Subrecipient is responsible to fully review the project to ensure all aspects of project formulation are accurate and properly captured, including but not limited to: DDD; SOW necessary for repair/replacement of the disaster-caused damages; proper application of codes and standards including the consensus-based codes and standards, if applicable; 406 mitigation and BCA; cost estimate, or actual costs for work completed, necessary to complete the eligible scope of work, including all necessary costs such as engineering design services when appropriate; 50% repair versus replacement calculation including necessary back up documentation; insurance reductions based on actual or anticipated insurance proceeds; insurance obtain and maintain requirements; EHP reviews and conditions.

Project Signatures

Signed By Lizardi, Ramon **Signed On** 05/17/2022