

<b>PA-06-TX-4223-PW-00953(0)</b> <span style="color: red;">P</span>	
Applicant Name:	Application Title:
HIDALGO (COUNTY)	HID010C - Damaged Roads / Asphalt and Caliche
Period of Performance Start:	Period of Performance End:
05-29-2015	11-29-2016

Bundle Reference # (Amendment #)	Date Awarded
PA-06-TX-4223-PW-00953(923)	01-26-2016

### Subgrant Application - FEMA Form 90-91

**Note:** The Effective Cost Share for this application is 75%

FEDERAL EMERGENCY MANAGEMENT AGENCY PROJECT WORKSHEET				
DISASTER	PROJECT NO.	PA ID NO.	DATE	CATEGORY
FEMA 4223 - DR -TX	HID010C	215-99215-00	12-21-2015	C
APPLICANT: HIDALGO (COUNTY)			WORK COMPLETE AS OF: 12-11-2015 : 0 %	
Site 1 of 8				
DAMAGED FACILITY:			COUNTY: Hidalgo	
Location 22				
LOCATION:			LATITUDE:	LONGITUDE:
PA-06-TX-4223-PW-00953(0): Site # 22 Lat.: 26.32083 Long -98.08547 to Lat.: 26.32427 Long.: -98.08487 North Tower Road starting at address 2994 and travelling north to address 3377. See attached pictures labelled as Site 21 photos.			26.32083 26.32427	-98.08547 -98.08487
Current Version:				
DAMAGE DESCRIPTION AND DIMENSIONS:				
PA-06-TX-4223-PW-00953(0): DDD During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Twelve (12) Weeks. Water saturated the base material (Caliche) which caused the road wear surface (Asphalt) to severely undulate, rut and delaminate. To restore the road to pre event form and function, the Applicant will the need to replace the following:				
<ul style="list-style-type: none"> <li>• Caliche - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 283.95 CY</li> <li>• Asphalt Wear Surface - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 142.83 CY</li> </ul>				
This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3). End of DDD				
Current Version:				
SCOPE OF WORK:				
PA-06-TX-4223-PW-00953(0): SOW Work to Be Completed The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material				

requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project. This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (l).

#### Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 283.95 CY
- Asphalt Wear Surface - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 142.83 CY

#### Demo and Haul Away

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	20	20.28	
Asphalt	10	10.20	
Total	30	6	

Pick up materials from vendor locations and haul to site, Install and grade base (4 Inch deep Caliche) which will restore to a 4 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	20.28	20.28	
Asphalt	10.20	10.20	
Total	30	6	

Total Truck Hours Needed per truck (Demo and Install) 12.19

#### Estimated Costs

##### Material

- Caliche - Actual F/A Cost - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 283.95 CY @ 3,500 Lbs./CY => 496.91 Tons @ \$3.25 = \$1,614.95
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 142.83 CY @ 4,212 Lbs./CY => 300.81 Tons @ \$58.50 = \$17,597.26

#### Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep  
2.3 Hrs. Labor @ \$28.72 = \$66.06  
2.3 Hrs. FA Equip @ 84.00 = \$193.20
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep  
3.6 Hrs. Labor @ \$20.06 = \$72.22  
3.6 Hrs. FA Equip @ 135.00 = \$486.00
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Using F/A Equipment (Dump Truck # 4 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Using F/A Equipment (Dump Truck # 5 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55

12.19 Hrs. FA Equip @ 75.00 = \$914.25

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
2.3 Hrs. Labor @ \$19.40 = \$44.62  
2.3 Hrs. FA Equip @ 28.75 = \$66.13

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
2.1 Hrs. Labor @ \$19.40 = \$40.74  
2.1 Hrs. FA Equip @ 33.75 = \$70.88

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
4.2 Hrs. Labor @ \$21.21 = \$89.08  
4.2 Hrs. FA Equip @ 74.50 = \$312.90

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.  
2 Hrs. Labor @ \$19.89 = \$39.78  
2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.  
3.6 Hrs. Labor @ \$20.80 = \$74.88  
3.6 Hrs. FA Equip @ 51.25 = \$184.50

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
6.2 Hrs. Labor @ \$18.44 = \$114.33

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
6.2 Hrs. Labor @ \$20.28 = \$125.74

Summary of Estimated Costs

F/A Labor \$2,008.58  
F/A Equipment \$6,046.65  
F/A Materials \$19,212.21

Total this Project: \$27,267.44  
End of SOW

Current Version:

Site 2 of 8

DAMAGED FACILITY:

COUNTY: Hidalgo

Location 23

LOCATION:

LATITUDE:  
26.32129  
26.322883

LONGITUDE:  
-98.09669  
-98.096429

PA-06-TX-4223-PW-00953(0):  
Site # 23 Lat.: 26.32129 Long.: -98.09669 to Lat.: 26.322883 Long.: -98.096429 Penelope Drive from Rogers travelling north to dead end. See attached pictures labelled as Site 23 photos.

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00953(0):  
DDD  
During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer

than Six (6) Weeks. Water saturated the base material (Caliche) which caused the road wear surface (Asphalt) to severely undulate, rut and delaminate. To restore the road to pre event form and function, the Applicant will need to replace the following:

- Caliche - Dimensions 820 Ft. long by 28 Ft. Wide by 0.330 Ft. (4 inch) deep = 280.62 CY
- Asphalt - Dimensions 820 Ft. long by 28 Ft. Wide by 0.166 Ft. (2 inch) deep = 141.16 CY

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

End of DDD

Current Version:

**SCOPE OF WORK:**

PA-06-TX-4223-PW-00953(0):

SOW

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, in a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project. This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 820 Ft. long by 28 Ft. Wide by 0.330 Ft. (4 inch) deep = 280.62 CY
- Asphalt Wear Surface - Dimensions 820 Ft. long by 28 Ft. Wide by 0.166 Ft. (2 inch) deep = 141.16 CY

**Demo and Haul Away**

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	20	20.04	
Asphalt	10	10.08	
<b>Total</b>	<b>30</b>	<b>6</b>	

Pick up materials from vendor locations and haul to site, Install and grade base (4 Inch deep Caliche) which will restore to a 4 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	20.04	20.04	
Asphalt	10.08	10.08	
<b>Total</b>	<b>30</b>	<b>6</b>	

Total Truck Hours Needed per truck (Demo and Install) 12.00

**Estimated Costs**

Material

- Caliche - Actual F/A Cost - Dimensions 820 Ft. long by 28 Ft. Wide by 0.330 Ft. (4 inch) deep = 280.62 CY @ 3,500 Lbs./CY => 491.09 Tons @ \$3.25 = \$1,596.04
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 820 Ft. long by 28 Ft. Wide by 0.166 Ft. (2 inch) deep = 141.16 CY @ 4,212 Lbs/CY => 297.29 Tons @ \$58.50 = \$17,391.24

**Equipment and Labor**

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 820 Ft. long by 28 Ft. Wide by 0.330 Ft. (4 inch) deep  
2.3 Hrs. Labor @ \$28.72 = \$66.06  
2.3 Hrs. FA Equip @ 84.00 = \$193.20
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 820 Ft. long by 28 Ft. Wide by 0.166 Ft. (2 inch) deep  
3.6 Hrs. Labor @ \$20.06 = \$72.22  
3.6 Hrs. FA Equip @ 135.00 = \$486.00
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

12 Hrs. Labor @ \$20.80 = \$249.60  
 12 Hrs. FA Equip @ 75.00 = \$900.00

- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

12 Hrs. Labor @ \$20.80 = \$249.60  
 12 Hrs. FA Equip @ 75.00 = \$900.00

- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

12 Hrs. Labor @ \$20.80 = \$249.60  
 12 Hrs. FA Equip @ 75.00 = \$900.00

- Using F/A Equipment (Dump Truck # 4 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

12 Hrs. Labor @ \$20.80 = \$249.60  
 12 Hrs. FA Equip @ 75.00 = \$900.00

- Using F/A Equipment (Dump Truck # 5 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.

12 Hrs. Labor @ \$20.80 = \$249.60  
 12 Hrs. FA Equip @ 75.00 = \$900.00

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.98 = \$35.96  
 2 Hrs. FA Equip @ 19.95 = \$39.90

- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801

2 Hrs. Labor @ \$17.98 = \$35.96  
 2 Hrs. FA Equip @ 19.95 = \$39.90

- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 820 Ft. long by 28 Ft. Wide by 0.500 Ft. (6 inch) deep

2.3 Hrs. Labor @ \$19.40 = \$44.62  
 2.3 Hrs. FA Equip @ 28.75 = \$66.13

- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 820 Ft. long by 28 Ft. Wide by 0.500 Ft. (6 inch) deep

2 Hrs. Labor @ \$19.40 = \$38.80  
 2 Hrs. FA Equip @ 33.75 = \$67.50

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 820 Ft. long by 28 Ft. Wide by 0.500 Ft. (6 inch) deep

4.1 Hrs. Labor @ \$21.21 = \$86.96  
 4.1 Hrs. FA Equip @ 74.50 = \$305.45

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.

2 Hrs. Labor @ \$19.89 = \$39.78  
 2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

3.6 Hrs. Labor @ \$20.80 = \$74.88  
 3.6 Hrs. FA Equip @ 51.25 = \$184.50

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

6.2 Hrs. Labor @ \$18.44 = \$114.33

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

6.2 Hrs. Labor @ \$20.28 = \$125.74

#### Summary of Estimated Costs

F/A Labor \$1,984.76  
 F/A Equipment \$5,964.58  
 F/A Materials \$18,987.27

Total this Project: \$26,936.61

End of SOW

Current Version:

Site 3 of 8

DAMAGED FACILITY:

COUNTY: Hidalgo

Location 24

LOCATION:

LATITUDE:

LONGITUDE:

26.29697

-98.10298

26.29995

-98.10245

PA-06-TX-4223-PW-00953(0):  
Site # 24 Lat.: 26.29995 Long.: -98.10245 to Lat.: 26.29697 Long.: -98.10298 Fresno Drive starting at Richardson travelling South and ending at address 407. See attached pictures labelled as Site 24 photos.

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00953(0):

DDD

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) which caused the road wear surface (Asphalt) to severely undulate, rut and delaminate. To restore the road to pre event form and function, the Applicant will the need to replace the following:

- Caliche - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 283.95 CY
- Asphalt Wear Surface - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 142.83 CY

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

End of DDD

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00953(0):

SOW

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, in a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project. This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 283.95 CY
- Asphalt Wear Surface - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 142.83 CY

Demo and Haul Away

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	20	20.28	
Asphalt	10	10.20	
Total	30	6	

Pick up materials from vendor locations and haul to site, Install and grade base (4 Inch deep Caliche) which will restore to a 4 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	20.28	20.28	
Asphalt	10.20	10.20	
Total	30	6	

Total Truck Hours Needed per truck (Demo and Install) 12.19

## Estimated Costs

## Material

- Caliche - Actual F/A Cost - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 283.95 CY @ 3,500 Lbs./CY => 496.91 Tons @ \$3.25 = \$1,614.95
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 142.83 CY @ 4,212 Lbs./CY => 300.81 Tons @ \$58.50 = \$17,597.26

## Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep  
2.3 Hrs. Labor @ \$28.72 = \$66.06  
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- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep  
3.6 Hrs. Labor @ \$20.06 = \$72.22  
3.6 Hrs. FA Equip @ 135.00 = \$486.00
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Using F/A Equipment (Dump Truck # 4 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Using F/A Equipment (Dump Truck # 5 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
12.19 Hrs. Labor @ \$20.80 = \$253.55  
12.19 Hrs. FA Equip @ 75.00 = \$914.25
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
2.3 Hrs. Labor @ \$19.40 = \$44.62  
2.3 Hrs. FA Equip @ 28.75 = \$66.13
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
2.1 Hrs. Labor @ \$19.40 = \$40.74  
2.1 Hrs. FA Equip @ 33.75 = \$70.88
- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 1056 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
4.2 Hrs. Labor @ \$21.21 = \$89.08  
4.2 Hrs. FA Equip @ 74.50 = \$312.90
- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.  
2 Hrs. Labor @ \$19.89 = \$39.78  
2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.

3.6 Hrs. Labor @ \$20.80 = \$74.88  
 3.6 Hrs. FA Equip @ 51.25 = \$184.50

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

6.2 Hrs. Labor @ \$18.44 = \$114.33

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

6.2 Hrs. Labor @ \$20.28 = \$125.74

Summary of Estimated Costs

F/A Labor \$2,008.58  
 F/A Equipment \$6,046.65  
 F/A Materials \$19,212.21

Total this Project: \$27,267.44  
 End of SOW

Current Version:

Site 4 of 8

DAMAGED FACILITY:

COUNTY: Hidalgo

Location 25

LOCATION:

LATITUDE:

LONGITUDE:

PA-06-TX-4223-PW-00953(0):  
 Site # 25 Lat.: 26.31114 Long.: -98.11984 to Lat.: 26.31205 Long.: -98.11968 North Kenyon Road starting at address 1611 and ending at address 1602. See attached pictures labelled as Site 25 photos.

26.31114  
 26.31205

-98.11984  
 -98.11968

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00953(0):  
 DDD

During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Three (3) Weeks. Water saturated the base material (Caliche) and caused the road wear surface (Asphalt) to severely undulate, rut and delaminate resulting in the need to replace the following:

- Caliche - Dimensions 500 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 134.44 CY
- Asphalt Wear Surface - Dimensions 500 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 67.63 CY

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

End of DDD

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00953(0):  
 SOW

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project. This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (1).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 500 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 134.44 CY
- Asphalt Wear Surface - Dimensions 500 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 67.63 CY

Demo and Haul Away		
Truck Loads	Dump Truck Hours	Hours Per Each of 3 Trucks
Caliche 10	9.60	
Asphalt 5	4.83	
Total 14	5 rounded up	

Pick up materials from vendor locations and haul to site, Install and grade base (4 Inch deep Caliche) which will restore to a 4 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (2 Inch of Hot Asphalt Wear Surface)

Mobilize Pick up and deliver material in place		
Truck Loads	Dump Truck Hours	Hours Per Each of 3 Trucks
Caliche 9.60	9.60	
Asphalt 4.83	4.83	
Total 14	5 rounded up	

Total Truck Hours Needed per truck (Demo and Install) 9.62 actual

Estimated Costs  
Material

- Caliche - Actual F/A Cost - Dimensions 500 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 134.44 CY @ 3,500 Lbs./CY => 235.28 Tons @ \$3.25 = \$764.65
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 500 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 67.63 CY @ 4,212 Lbs./CY => 142.43 Tons @ \$58.50 = \$8,332.04

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 500 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep  
1.6 Hrs. Labor @ \$28.72 = \$45.95  
1.6 Hrs. FA Equip @ 84.00 = \$134.40
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 500 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep  
2.2 Hrs. Labor @ \$20.06 = \$44.13  
2.2 Hrs. FA Equip @ 135.00 = \$297.00
- Using F/A Equipment (Dump Truck # 1 - (14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
9.62 Hrs. Labor @ \$20.80 = \$200.10  
9.62 Hrs. FA Equip @ 75.00 = \$721.50
- Using F/A Equipment (Dump Truck # 2 - (14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
9.62 Hrs. Labor @ \$20.80 = \$200.10  
9.62 Hrs. FA Equip @ 75.00 = \$721.50
- Using F/A Equipment (Dump Truck # 3 - (14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
9.62 Hrs. Labor @ \$20.80 = \$200.10  
9.62 Hrs. FA Equip @ 75.00 = \$721.50
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 500 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
1.6 Hrs. Labor @ \$19.40 = \$31.04  
1.6 Hrs. FA Equip @ 28.75 = \$46.00
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and

smooth base and road surfaces. - Dimensions 500 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
 1.5 Hrs. Labor @ \$19.40 = \$29.10  
 1.5 Hrs. FA Equip @ 33.75 = \$50.63

- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 500 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
 2.5 Hrs. Labor @ \$21.21 = \$53.03  
 2.5 Hrs. FA Equip @ 74.50 = \$186.25

- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.  
 2 Hrs. Labor @ \$19.89 = \$39.78  
 2Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Caliché and Asphalt for Tack Coating) to road base materials and surfaces.  
 2.2 Hrs. Labor @ \$20.80 = \$45.76  
 2.2 Hrs. FA Equip @ 51.25 = \$112.75

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
 4 Hrs. Labor @ \$18.44 = \$73.76

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
 4 Hrs. Labor @ \$20.28 = \$81.12

Summary of Estimated Costs

F/A Labor \$1,117.34  
 F/A Equipment \$3,153.33  
 F/A Materials \$9,096.69

Total this Project: \$13,367.35  
 End of SOW

Current Version:

Site 5 of 8

DAMAGED FACILITY:

Location 26

COUNTY: Hidalgo

LOCATION:

PA-06-TX-4223-PW-00953(0):  
 Site # 26 Lat.: 26.39488 Long.: -98.16129 to Lat.: 26.39423 Long.: -98.15694 Cactus Lane starting at Seminary Road traveling east ending at Jarritas Rd. See attached pictures labelled as Site 26 photos.

LATITUDE:

26.39423  
 26.39488

LONGITUDE:

-98.15694  
 -98.16129

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00953(0):  
 DDD

During the Declared event period, running floodwaters scoured and rutted this Caliche Road wear surface. Additionally, ditches along both sides of this section of road (a total of 3168 LF) filled with road materials and needs to be cleaned out. After the initial rush of running floodwater, standing waters at a depth of 2 Ft. submerged this section of roadway for a period of longer than Two (2) Weeks. Water saturated the road material (Caliche) and caused the road wear surface to severely undulate and rut resulting in the need to replace the following:

- Caliche - Dimensions 1584 Ft. long by 20 Ft. Wide by 0.330 Ft. (4 inch) deep = 387.20 CY
- Additional work needed
- Ditch Cleaning - 3168 LF

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; this road surface remained even planed, adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been exposed to running floodwaters and submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).  
 End of DDD

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00953(0):

SOW

Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project. This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will utilize Caliche for future use as patch and fill materials) This cost included in FEMA CC for ditch cleaning:

- Caliche - Dimensions 1584 Ft. long by 20 Ft. Wide by 0.330 Ft. (4 inch) deep = 387.20 CY (Materials sitting in ditches that washed off the road)

Pick up new materials from vendor locations and haul to site, Install and grade material (4 Inch deep Caliche) which will restore to a 4 Inch depth that preexisted the event, Compact and roll in Cliché.

Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per	Each of 3 Trucks
Caliche 27.7	28.00		

Total 27.7 5.53

Total Truck Hours Needed per truck (Install) 5.53

Estimated Costs

Material

- Caliche - Actual F/A Cost - Dimensions 1584 Ft. long by 20 Ft. Wide by 0.330 Ft. (3.96 inch) deep = 387.20 CY @ 3,500 Lbs./CY => 677.60 Tons @ \$3.25 = \$2,202.20

Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft, Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 1584 Ft. long by 20 Ft. Wide by 0.330 Ft. (4 inch) deep  
2.8 Hrs. Labor @ \$28.72 = \$80.42  
2.8 Hrs. FA Equip @ 84.00 = \$235.20
- Using F/A Equipment (Dump Truck # 1 - (14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
5.53 Hrs. Labor @ \$20.80 = \$115.02  
5.53 Hrs. FA Equip @ 75.00 = \$414.75
- Using F/A Equipment (Dump Truck # 2 - (14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
5.53 Hrs. Labor @ \$20.80 = \$115.02  
5.53 Hrs. FA Equip @ 75.00 = \$414.75
- Using F/A Equipment (Dump Truck # 3 - (14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
5.53 Hrs. Labor @ \$20.80 = \$115.02  
5.53 Hrs. FA Equip @ 75.00 = \$414.75
- Using F/A Equipment (Dump Truck # 4 - (14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
5.53 Hrs. Labor @ \$20.80 = \$115.02  
5.53 Hrs. FA Equip @ 75.00 = \$414.75
- Using F/A Equipment (Dump Truck # 5 - (14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
5.53 Hrs. Labor @ \$20.80 = \$115.02  
5.53 Hrs. FA Equip @ 75.00 = \$414.75

- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1584 Ft. long by 20 Ft. Wide by 0.330 Ft. (4 inch) deep  
2.8 Hrs. Labor @ \$19.40 = \$54.32  
2.8 Hrs. FA Equip @ 28.75 = \$80.50
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 1584 Ft. long by 20 Ft. Wide by 0.330 Ft. (4 inch) deep  
2.4 Hrs. Labor @ \$19.40 = \$46.56  
2.4 Hrs. FA Equip @ 33.75 = \$81.00
- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.  
2 Hrs. Labor @ \$19.89 = \$39.78  
2Hrs. FA Equip @ 41.00 = \$82.00
- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Caliche and Asphalt for Tack Coating) to road base materials and surfaces.  
4.6 Hrs. Labor @ \$20.80 = \$95.68  
4.6 Hrs. FA Equip @ 51.25 = \$235.75
- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
7.8 Hrs. Labor @ \$18.44 = \$143.83
- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
7.8 Hrs. Labor @ \$20.28 = \$158.18
- Clean out Ditches [(both sides of the road) FEMA CC 3070]  
3168 LF @ \$3.40 LF = \$10,771.20

Summary of Estimated Costs

F/A Labor \$1379.69  
 F/A Equipment \$3262.85  
 F/A Materials \$2202.20  
 Ditch Cleaning \$10771.20  
 Total this Project: \$17615.94  
 End of SOW

Current Version:

Site 6 of 8

DAMAGED FACILITY:

COUNTY: Hidalgo

Location 27

LOCATION:

LATITUDE:  
26.34589  
26.36227

LONGITUDE:  
-98.18645  
-98.18342

PA-06-TX-4223-PW-00953(0):  
 Site # 27 Lat.: 26.34589 Long.: -98.18645 to Lat.: 26.36227 Long.: -98.18342 Rio Grande Care Road starting at address 4058 and ending at address 5143. See attached pictures labelled as Site 27 photos.

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00953(0):  
 DDD  
 During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Seven (7) Weeks. Water saturated the base material (Caliche) which caused the road wear surface (Asphalt) to severely undulate, rut and delaminate. This road section is 5,862 Ft. Long with approximately Eighty Per cent (80 %) event related damage. Therefore, 4,690 Ft. Long x 22 Ft. Wide is recommended to be eligible damages. To restore the road to pre event form and function, the Applicant will the need to replace the following:

## Federal Emergency Management Agency E-Grants

- Caliche - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 1,261.09 CY
- Asphalt Wear Surface - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 634.37 CY

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).

Current Version:

## SCOPE OF WORK:

PA-06-TX-4223-PW-00953(0):

## SOW

## Work to Be Completed

The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, in a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project. This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

## Scope Items

Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials):

- Caliche - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 1,261.09 CY
- Asphalt Wear Surface - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 634.37 CY

## Demo and Haul Away

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	90	90.08	
Asphalt	45	45.31	
Total	135	27	

Pick up materials from vendor locations and haul to site, Install and grade base (4 Inch deep Caliche) which will restore to a 4 Inch base that preexisted the event, Compact base, install Tack Coat (emulsified asphalt), install, and roll in wear surface (2 Inch of Hot Asphalt Wear Surface)

## Mobilize Pick up and deliver material in place

	Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks
Caliche	90.08	90.08	
Asphalt	45.31	45.31	
Total	135	27	

Total Truck Hours Needed per truck (Demo and Install) 54.16

## Estimated Costs

## Material

- Caliche - Actual F/A Cost - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 1,261.09 CY @ 3,500 Lbs./CY => 2,206.91 Tons @ \$3.25 = \$7,172.44
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 634.37 CY @ 4,212 Lbs./CY => 1,335.97 Tons @ \$58.50 = \$78,154.52

## Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep  
6.9 Hrs. Labor @ \$28.72 = \$198.17  
6.9 Hrs. FA Equip @ 84.00 = \$579.60
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep  
12.7 Hrs. Labor @ \$20.06 = \$254.76  
12.7 Hrs. FA Equip @ 135.00 = \$1,714.50
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
54.16 Hrs. Labor @ \$20.80 = \$1,126.53  
54.16 Hrs. FA Equip @ 75.00 = \$4,062.00

<https://isource.fema.net/emmie/internalIntegration?applicationId=392775>

2/2/2016

- Using F/A Equipment (Dump Truck # 2 – 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
54.16 Hrs. Labor @ \$20.80 = \$1,126.53  
54.16 Hrs. FA Equip @ 75.00 = \$4,062.0
- Using F/A Equipment (Dump Truck # 3 – 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
54.16 Hrs. Labor @ \$20.80 = \$1,126.53  
54.16 Hrs. FA Equip @ 75.00 = \$4,062.0
- Using F/A Equipment (Dump Truck # 4 – 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
54.16 Hrs. Labor @ \$20.80 = \$1,126.53  
54.16 Hrs. FA Equip @ 75.00 = \$4,062.0
- Using F/A Equipment (Dump Truck # 5 – 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
54.16 Hrs. Labor @ \$20.80 = \$1,126.53  
54.16 Hrs. FA Equip @ 75.00 = \$4,062.0
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
6.9 Hrs. Labor @ \$19.40 = \$133.86  
6.9 Hrs. FA Equip @ 28.75 = \$198.38
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
5.7 Hrs. Labor @ \$19.40 = \$110.58  
5.7 Hrs. FA Equip @ 33.75 = \$192.38
- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 4690 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
15.1 Hrs. Labor @ \$21.21 = \$320.27  
15.1 Hrs. FA Equip @ 74.50 = \$1,124.95
- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.  
2 Hrs. Labor @ \$19.89 = \$39.78  
2 Hrs. FA Equip @ 41.00 = \$82.00
- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.  
12.7 Hrs. Labor @ \$20.80 = \$264.16  
12.7 Hrs. FA Equip @ 51.25 = \$650.88
- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
20.8 Hrs. Labor @ \$18.44 = \$383.55
- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
20.8 Hrs. Labor @ \$20.28 = \$421.82

## Summary of Estimated Costs

F/A Labor \$7,832.98  
F/A Equipment \$24,932.48  
F/A Materials \$85,326.96

Total this Project: \$118,092.41  
End of SOW

Current Version:

Location 28	COUNTY: Hidalgo																															
LOCATION: PA-06-TX-4223-PW-00953(0): Site # 28 Lat.: 26.348095 Long.: -98.2308 to Lat.: 26.358061 Long.: -98.228959 Rooth Road starting at FM 1925 travelling north and ending at GPS Coordinates for end point. See attached pictures labelled as Site 28 photos.	LATITUDE: 26.348095 26.358061	LONGITUDE: -98.2308 -98.228959																														
Current Version: DAMAGE DESCRIPTION AND DIMENSIONS: PA-06-TX-4223-PW-00953(0): DDD During the Declared event period, standing floodwaters at a depth of 2 Ft. submerged this section of paved roadway for a period of longer than Two (2) Weeks. Water saturated the base material (Caliche) which caused the road wear surface (Asphalt) to severely undulate, rut and delaminate. This road section is 3,696 Ft. Long x 22 Ft. Wide with approximately Twenty - Five Per cent (25%) event related damage. The balance of the damage (75 %) is attributed to heavy mechanical wear cause by heavy Farm machinery and implements that frequently travel this section of roadway. Therefore, 924 Ft. Long x 22 Ft. Wide is recommended to be eligible damages. To restore the road to pre event form and function, the Applicant will the need to replace the following: <ul style="list-style-type: none"> <li>• Caliche - Dimensions 924 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 248.45 CY</li> <li>• Asphalt Wear Surface - Dimensions 924 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 124.98 CY</li> </ul> This road, while in fair condition is nonetheless recommended as eligible damages, the rational for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these asphalt wear surfaces remained even planed, adhered to the base material; and, intact in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages at are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3). End of DDD Current Version:																																
SCOPE OF WORK: PA-06-TX-4223-PW-00953(0): SOW Work to Be Completed The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, In a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project. This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I). Scope Items Remove and Haul existing materials for repurposing to Applicants Storage Yard facility (Applicant will mill broken asphalt and Caliche for future use as patch materials): <ul style="list-style-type: none"> <li>• Caliche - Dimensions 924 Ft. long by 22 Ft. Wide by 0.330 Ft. (4 inch) deep = 248.45 CY</li> <li>• Asphalt Wear Surface - Dimensions 924 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 124.98 CY</li> </ul> <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td colspan="3">Demo and Haul Away</td> </tr> <tr> <td style="padding-right: 10px;">Truck Loads</td> <td style="padding-right: 10px;">Dump Truck Hours</td> <td>Hours Per Each of 5 Trucks</td> </tr> <tr> <td>Caliche 18</td> <td>17.75</td> <td></td> </tr> <tr> <td>Asphalt 9</td> <td>8.93</td> <td></td> </tr> <tr> <td>Total 27</td> <td>5</td> <td></td> </tr> </table> <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td colspan="3">Mobilize Pick up and deliver material in place</td> </tr> <tr> <td style="padding-right: 10px;">Truck Loads</td> <td style="padding-right: 10px;">Dump Truck Hours</td> <td>Hours Per Each of 5 Trucks</td> </tr> <tr> <td>Caliche 18</td> <td>17.75</td> <td></td> </tr> <tr> <td>Asphalt 9</td> <td>8.93</td> <td></td> </tr> <tr> <td>Total 27</td> <td>5</td> <td></td> </tr> </table> <p style="margin-left: 20px;">Total Truck Hours Needed per truck (Demo and Install) 10.67</p>			Demo and Haul Away			Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks	Caliche 18	17.75		Asphalt 9	8.93		Total 27	5		Mobilize Pick up and deliver material in place			Truck Loads	Dump Truck Hours	Hours Per Each of 5 Trucks	Caliche 18	17.75		Asphalt 9	8.93		Total 27	5	
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Total 27	5																															

## Estimated Costs

## Material

- Caliche - Actual F/A Cost - Dimensions 924 Ft. long by 22 Ft. Wide by 0.333 Ft. (4 inch) deep = 250.71 CY @ 3,500 Lbs./CY => 438.75 Tons @ \$3.25 = \$1,425.92
- Asphalt including emulsified tack coat - Actual F/A Cost - Dimensions 924 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep = 124.98 CY @ 4,212 Lbs./CY => 263.21 Tons @ \$58.50 = \$15,397.61

## Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 924 Ft. long by 22 Ft. Wide by 0.333 Ft. (4 inch) deep  
2.2 Hrs. Labor @ \$28.72 = \$63.18  
2.2 Hrs. FA Equip @ 84.00 = \$184.80
- Using F/A Equipment (Paver - FEMA CC 8432) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 924 Ft. long by 22 Ft. Wide by 0.166 Ft. (2 inch) deep  
3.3 Hrs. Labor @ \$20.06 = \$66.20  
3.3 Hrs. FA Equip @ 135.00 = \$445.5
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
10.67 Hrs. Labor @ \$20.80 = \$221.94  
10.67 Hrs. FA Equip @ 75.00 = \$800.25
- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
10.67 Hrs. Labor @ \$20.80 = \$221.94  
10.67 Hrs. FA Equip @ 75.00 = \$800.25
- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
10.67 Hrs. Labor @ \$20.80 = \$221.94  
10.67 Hrs. FA Equip @ 75.00 = \$800.25
- Using F/A Equipment (Dump Truck # 4 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
10.67 Hrs. Labor @ \$20.80 = \$221.94  
10.67 Hrs. FA Equip @ 75.00 = \$800.25
- Using F/A Equipment (Dump Truck # 5 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
10.67 Hrs. Labor @ \$20.80 = \$221.94  
10.67 Hrs. FA Equip @ 75.00 = \$800.25
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 924 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
2.2 Hrs. Labor @ \$19.40 = \$42.68  
2.2 Hrs. FA Equip @ 28.75 = \$63.25
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 924 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
1.9 Hrs. Labor @ \$19.40 = \$36.86  
1.9 Hrs. FA Equip @ 33.75 = \$64.13
- Using F/A Equipment (Front End Loader - 5 CY Capacity - FEMA CC 8395) and F/A Labor (actual hourly rate including fringes), scrape up road surface and load dump trucks. - Dimensions 924 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
3.8 Hrs. Labor @ \$21.21 = \$80.60  
3.8 Hrs. FA Equip @ 74.50 = \$283.10
- Using F/A Equipment (Haul Truck with trailer- FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.  
2 Hrs. Labor @ \$19.89 = \$39.78  
2 Hrs. FA Equip @ 41.00 = \$82.00

- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials and surfaces.  
3.3 Hrs. Labor @ \$20.80 = \$68.64  
3.3 Hrs. FA Equip @ 51.25 = \$169.13
- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
5.7 Hrs. Labor @ \$18.44 = \$105.11
- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)  
5.7 Hrs. Labor @ \$20.28 = \$115.60

Summary of Estimated Costs

F/A Labor \$1,801.70  
F/A Equipment \$5,372.95  
F/A Materials \$16,823.53

Total this Project: \$23,998.18  
End of SOW

Current Version:

Site 8 of 8

DAMAGED FACILITY:

COUNTY: Hidalgo

Location 29

LOCATION:

LATITUDE:  
26.44154  
26.44317

LONGITUDE:  
-98.24211  
-98.2418

PA-06-TX-4223-PW-00953(0):  
Site # 29 Lat.: 26.44154 Long.: -98.24211 to Lat.: 26.44317 Long.: -98.24180 North Wallace Road.  
See attached pictures labelled as Site 29 photos.

Current Version:

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-06-TX-4223-PW-00953(0):  
DDD

During the Declared event period, running floodwaters washed away this Caliche road to a depth of 6 inches of lost road material. The Caliche went into a lake adjacent to the road. Additionally, there is some sporadic shoulder loss as well. The allowance to a Six (6) Inch depth will afford sufficient materials to repair the shoulder and the road. The damaged road section is 600 Ft. Long x 22 Ft. Wide. To restore the road to pre event form and function, the Applicant will need to replace the following:

- Caliche - Dimensions 600 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep = 244.44 CY

This road, while in fair condition is nonetheless recommended as eligible damages, the rationale for this recommendation is based on the FEMA TAC Technical Specialists' Inspection, assessment and observations of road sections along this road that were not submerged; these other surfaces remained even planed and intact; in spite of exhibiting signs of fair condition throughout. Had this damaged section of road not been submerged for a protracted period of time, the likelihood is it would have remained intact. Therefore the damages are recommended as eligible in accordance with 44 CFR §206.223 (a) (1) (2) (3).  
End of DDD

Current Version:

SCOPE OF WORK:

PA-06-TX-4223-PW-00953(0):  
SOW

Work to Be Completed  
The Applicant will use Force Account Labor [using actual hourly rates (including Fringes)], Force Account Equipment (using FEMA Cost Codes), and Force Account Materials [using recent local historical costs (current contracts for Force Account Material vendors and invoices attached)] to perform and execute the Work to Be Completed. The FEMA TAC Technical Specialist formulating this Project and Sub Grant Application has worked closely with The Applicants Director of Roads and Bridges to benchmark Labor, Equipment and Material requirements based on production rates obtained from recent historical data supplied by the Applicant for similar work in scope and volume using Force Account assets; and, after concurring that the Scope, Labor, Equipment and Material quantities and costs were reasonable, in a unified effort, estimated the costs of all work tasks contained in this Scope of work. A copy of the estimate formulated for this site is attached to this Project. This Scope of Work and associated estimated Costs are recommended as eligible in accordance with 44 CFR §206.228 (a) (ii) (iii) (2) (I).

Scope Items:

Pick Up from Vendor, Haul and deliver to site, Grade and compact in place

- Caliche - Dimensions 600 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep = 244.44 CY

Pick up materials from vendor locations and haul to site, Install and grade road (6 Inch deep Caliche) which will restore to a 6 Inch road that preexisted the event, Compact base, install, and roll in Caliche wear surface  
Mobilize Pick up and deliver material in place

Truck Loads	Dump Truck Hours	Hours Per Each of 3 Trucks
Caliche 17.46	17.46	
Total 17.6		

Total Truck Hours Needed per truck (Demo and install) 6.00

#### Estimated Costs Material

- Caliche - Actual F/A Cost - Dimensions 600 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep = 244.44 CY @ 3,500 Lbs./CY => 427.78 Tons @ \$3.25 = \$1,390.28

#### Equipment and Labor

- Using F/A Equipment (Grader with 14 Ft. Moldboard - FEMA CC 8331) and F/A Labor (actual hourly rate including fringes), grade road surface. - Dimensions 600 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
1.7 Hrs. Labor @ \$28.72 = \$48.82  
1.7 Hrs. FA Equip @ 84.00 = \$142.8
- Using F/A Equipment (Dump Truck # 1 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
6 Hrs. Labor @ \$20.80 = \$124.80  
6 Hrs. FA Equip @ 75.00 = \$450.00
- Using F/A Equipment (Dump Truck # 2 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
6 Hrs. Labor @ \$20.80 = \$124.80  
6 Hrs. FA Equip @ 75.00 = \$450.00
- Using F/A Equipment (Dump Truck # 3 - 14 CY Capacity - FEMA CC 8725) and F/A Labor (actual hourly rate including fringes), load, haul and dump.  
6 Hrs. Labor @ \$20.80 = \$124.80  
6 Hrs. FA Equip @ 75.00 = \$450.00
- Pickup Truck 1 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Pickup Truck 2 - 1/2 Ton - FEMA CC 8801  
2 Hrs. Labor @ \$17.98 = \$35.96  
2 Hrs. FA Equip @ 19.95 = \$39.90
- Using F/A Equipment (Compactor - Vibratory Drum Roller - FEMA CC 8222) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 600 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
1.7 Hrs. Labor @ \$19.40 = \$32.98  
1.7 Hrs. FA Equip @ 28.75 = \$48.88
- Using F/A Equipment (Pneumatic Roller - 9 wheels - FEMA CC 8223) and F/A Labor (actual hourly rate including fringes), compact and smooth base and road surfaces. - Dimensions 600 Ft. long by 22 Ft. Wide by 0.500 Ft. (6 inch) deep  
1.6 Hrs. Labor @ \$19.40 = \$31.04  
1.6 Hrs. FA Equip @ 33.75 = \$54.00
- Using F/A Equipment (Haul Truck with trailer - FEMA CC 8795) and F/A Labor (actual hourly rate including fringes), for transporting, compactors, rollers, back hoes and front end loaders to and from jobsite.  
2 Hrs. Labor @ \$19.89 = \$39.78  
2 Hrs. FA Equip @ 41.00 = \$82.00
- Using F/A Equipment (Water Tanker Truck - 4000 Gal. Capacity - FEMA CC 8781) and F/A Labor (actual hourly rate including fringes), to transport water and emulsified asphalt to jobsite and apply liquids (water to Cliché and Asphalt for Tack Coating) to road base materials

and surfaces.

2.5 Hrs. Labor @ \$20.80 = \$52.00

2.5 Hrs. FA Equip @ 51.25 = \$128.13

- Traffic Safety - Flagman # 1 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

4.4 Hrs. Labor @ \$18.44 = \$81.14

- Traffic Safety - Flagman # 2 (F/A Labor (actual hourly rate including fringes) controlling ingress and egress of vehicles and providing safety monitoring at jobsites)

4.4 Hrs. Labor @ \$20.28 = \$89.23

#### Summary of Estimated Costs

F/A Labor \$ 822.77

F/A Equipment \$1,885.60

F/A Materials \$1,390.28

Total this Project: \$4,098.65

End of SOW

#### Project Notes:

-- DIRECT ADMINISTRATIVE COSTS (ESTIMATED): Direct Administrative Costs (Sub Grantee) 9901 has been estimated from the DAC Spreadsheet (Attached). These costs were calculated based on the total project value. The Sub Grantee has been notified that back-up documentation will be requested at close-out which supports all costs incurred for assistance in formulating or administering this project assistance grant.

-- FEDERAL AID ROADS: Project Specialist has validated that none of the sites in this project are listed on the Federal Functional Classification System as Major Collectors, Minor Arterials, Principal Arterials, or Interstate, receiving federal funding.

-- ROAD PROJECTS (FIRMette Requirement): Any road being repaired to pre-disaster design, function, capacity that does not include a hazard mitigation proposal, will not require a FIRMette. If any work to repair the road requires work outside the original footprint a FIRMette will be required.

-- SMALL PROJECTS, ANY CATAGORY: For small projects FEMA pays based on the actual or estimated cost in order to expedite the funds (Digest pg. 121.) FEMA does not perform final inspections on small projects; however, the state must certify compliance. The applicant does have the ability to request a small project netting (appeal) if/when significant net small over-runs occur. This process will involve a review of all documentation for all small projects and an adjustment will be made for the total actual eligible dollars spent (over-run/under-run). A final Project Worksheet will then be required in EMMIE to capture all the eligible PA costs for the small projects.

-- SMALL PROJECT CHANGE REQUEST: Change requests to small project worksheets will not be approved unless there is a change in the approved scope of work. This change must be approved prior to the construction. If after completion of all small projects the applicant incurs a significant net small project overrun, the applicant must file an appeal within 60 day of completion of the applicant's last small project. All requests must be submitted through the grantee.

- WORK TO BE COMPLETED: Upon completion, this site will be returned to its original design, function, and capacity within the original footprint. Acquiring all necessary Federal, State, and local permits is required for Federal Funding. Noncompliance with this requirement may jeopardize the receipt of Federal funds.

-- PROCUREMENT: The Applicant was advised by FEMA PAC and/or Project Specialist that in the seeking of proposals and letting of contracts for eligible work, the Applicant must comply with its Local, State and/or Federal procurement laws, regulations, and procedures as required by 2 CFR 317-326.

-- RECORD RETENTION: As described in 2 CFR 200.33 Sub Grantee must maintain all work-related records for a period of three (3) years from Sub Grantee closure (final payment), all records relative this project worksheet 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.

-- PERMITS: Federal Funding is contingent upon acquiring all necessary Federal, State and Local permits. Noncompliance with this requirement may jeopardize the receipt of federal funds. The applicant is responsible for obtaining all required permits prior to the commencement of work.

-- ENVIRONMENTAL AND HISTORIC PRESERVATION: Applicant must comply with all applicable environmental and historic preservation laws. Federal funding is contingent upon acquiring all necessary Federal, State and Local permits. Noncompliance with this requirement may jeopardize the receipt of federal funds.

-- CHANGES TO SCOPE OF WORK DESCRIBED IN THIS PW/SA (SUBGRANT APPLICATION): The applicant shall comply with all applicable codes and standards in the completion of eligible work to repair or replace damaged public facilities. Any change to the approved scope of work on a Project Worksheet (PW/SA) must be reported and approved before work begins. Failure to report changes may jeopardize Federal and State funding. In the case of a change in scope of work, the applicant should immediately notify Wendell Allen, Section Administrator, Texas Department of Emergency Management prior to starting work.

-- INSURANCE REVIEW: The applicant is aware that all projects are subject to an insurance review as stated in 44 C.F.R. Sections 206.252 and 206.253. If applicable, an insurance determination will be made either as anticipated proceeds or actual proceeds in accordance with the applicant's insurance policy which may affect the total amount of the project. Approval of this project may result in an obtain/maintain insurance requirement. The Sub Grantee must comply with insurance reviewer terms and conditions upon receipt of sub-grant from the State.

-- COST BASIS FOR LABOR, EQUIPMENT AND MATERIALS: Costs used to formulate this project were based on: [select all that apply and include data dates]

- Unit Costs provided by Applicant - Force Account Labor Rates (including Fringes)

- FEMA cost codes - For Force3 Account Equipment

- Local material cost – Force Account Material Costs

-- AUDIT STATEMENT: All documentation related to this project worksheet is subject to audit and must reflect disaster – related work and project – specific cost. The applicant has been advised of responsibility to maintain supporting documentation (records). The type of records to be maintained is specified in FEMA policy 2 CFR Subpart F, Audit Requirements. Records must be maintained for three 3 years from the date the last project was completed or from the date final payment was received, whichever is later.

-- 75% FEDERAL FUNDING: In accordance with FEMA policy 9523.9 and current disaster declaration determinations, this project worksheet will be funded with the Federal Cost share at 75% of all eligible costs.

-- By accepting this grant the Applicant to the best of their ability acknowledges that all damages described within this Sub-grant Application and all associated costs being claimed were a direct result of the declared event, and in connection with the incident period of 05/04/2015 thru 06/22/2015 with the exception of requests for alternate or improved projects.

-- HAZARD MITIGATION PROPOSAL: Hazard Mitigation under section 406 has been considered for this project and due to the type of work or project, effective mitigation is not feasible within the requirements of 44 CFR 206.226(c).  
End of Project

Current Version:

Does the Scope of Work change the pre-disaster conditions at the site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Special Considerations included? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Hazard Mitigation proposal included? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Is there insurance coverage on this facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**PROJECT COST**

ITEM	CODE	NARRATIVE	QUANTITY/UNIT	UNIT PRICE	COST
*** Version 0 ***					
Work To Be Completed					
1	9888	Site 1 Location 22 Work To Be Completed	1/LS	\$ 27,267.44	\$ 27,267.44
2	9888	Site 2 Location 23 Work To Be Completed	1/LS	\$ 26,936.61	\$ 26,936.61
3	9888	Site 3 Location 24 Work To Be Completed	1/LS	\$ 27,267.44	\$ 27,267.44
4	9888	Site 4 Location 25 Work To Be Completed	1/LS	\$ 13,367.36	\$ 13,367.36
5	9888	Site 5 Location 26 Work To Be Completed	1/LS	\$ 17,615.94	\$ 17,615.94
6	9888	Site 6 Location 27 Work To Be Completed	1/LS	\$ 118,092.42	\$ 118,092.42
7	9888	Site 7 Location 28 Work To Be Completed	1/LS	\$ 23,998.18	\$ 23,998.18
8	9888	Site 8 Location 29 Work To Be Completed	1/LS	\$ 4,098.65	\$ 4,098.65
Direct Subgrantee Admin Cost					
9	9888	Site 1 Location 22 Direct Subgrantee Admin Cost	1/LS	\$ 576.00	\$ 576.00
10	9888	Site 2 Location 23 Direct Subgrantee Admin Cost	1/LS	\$ 576.00	\$ 576.00
11	9888	Site 3 Location 24 Direct Subgrantee Admin Cost	1/LS	\$ 576.00	\$ 576.00
12	9888	Site 4 Location 25 Direct Subgrantee Admin Cost	1/LS	\$ 284.00	\$ 284.00
13	9888	Site 5 Location 26 Direct Subgrantee Admin Cost	1/LS	\$ 489.00	\$ 489.00
14	9888	Site 6 Location 27 Direct Subgrantee Admin Cost	1/LS	\$ 1,312.00	\$ 1,312.00
15	9888	Site 7 Location 28 Direct Subgrantee	1/LS	\$ 489.00	\$ 489.00

		Admin Cost			
16	9888	Site 8 Location 29 Direct Subgrantee Admin Cost	1/LS	\$ 141.00	\$ 141.00
				<b>TOTAL COST</b>	\$ 263,087.04
PREPARED BY CHARLES M LOIHLE			TITLE	SIGNATURE	<i>Charles M Loihle</i>
APPLICANT REP. Ramon Garcia			TITLE Hidalgo County Judge	SIGNATURE	

