

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES 1 13
2. AMENDMENT/MODIFICATION NUMBER A001	3. EFFECTIVE DATE 03/08/2022	4. REQUISITION/PURCHASE REQUISITION NUMBER HFLCEO220072PR	5. PROJECT NUMBER (If applicable) NV FLAP US50(1)	
6. ISSUED BY CODE	6905001	7. ADMINISTERED BY (If other than Item 6) CODE		
FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION 12300 WEST DAKOTA AVENUE, SUITE 360 LAKEWOOD, COLORADO 80228 ATTENTION: CONTRACT SPECIALIST NAME				
8. NAME AND ADDRESS OF CONTRACTOR (Number, street, county, State and ZIP Code)		(X)	9A. AMENDMENT OF SOLICITATION NUMBER 6982AF22B000005	
		(X)	9B. DATED (SEE ITEM 11) 02/17/2022	
			10A. MODIFICATION OF CONTRACT/ORDER NUMBER	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 15, and returning _____^{0*} copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NUMBER AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NUMBER IN ITEM 10A.
<input type="checkbox"/>	
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
<input type="checkbox"/>	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not is required to sign this document and return *See Item 14 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

IFB

Remove and replace pages E-43 through E-53 with the attached pages E-43 through E-54.

*FAILURE TO ACKNOWLEDGE THIS AMENDMENT IN BLOCK 19 OF THE SF 1442 BY THE DESIGNATED DATE AND HOUR SPECIFIED IN THE SOLICITATION MAY RESULT IN REJECTION OF YOUR BID (REFER TO ITEM 11.)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR		16B. UNITED STATES OF AMERICA	
15C. DATE SIGNED		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)		_____ (Signature of Contracting Officer)	

Previous edition unusable

STANDARD FORM 30 (REV. 11/2016)

Prescribed by GSA FAR (48 CFR) 53.243

Section 625. — TURF ESTABLISHMENT**Description**

625.01 Delete the first sentence and substitute the following:

This work consists of soil preparation, watering, seeding, and mulching.

Material

625.02 Delete the text and substitute the following:

Conform to the following Subsections:

Agricultural limestone	713.02
Mulch	713.05
Seed	713.04
Tackifiers	713.11
Water	725.01(b)

Construction Requirements

625.03 General. Delete the first sentence and substitute the following:

Perform all seeding between October 1 and October 31, prior to first snowfall.

Add the following at the end of the section:

Use seed stock from a local high elevation seed source.

Conform to all laws and regulations pertaining to the sale and shipment of seed required by the Nevada Department of Agriculture and the Federal Seed Act. Ensure that all seed has been tested within twelve (12) months prior to application date. Confirm that seed tags reflect the most recent test date.

Deliver seed to the project site in sealed bags with proper labeling. Weed seed shall not exceed 0.15% of the pure live seed (PLS) specified and shall not include any seed of cheatgrass (*Bromus tectorum*) or sweet clovers (*Melilotus officinalis*, *M. alba*). Crop seed shall not exceed 0.25%.

625.04 Preparing Seedbed. Add the following: For all seeding methods, scarify any disturbed or compacted soils to a depth of 4 inches prior to seeding.

625.06 Fertilizing. Delete the Subsection and substitute the following:

Do not use fertilizer.

Measurement

625.11 Delete the second sentence and substitute the following:

When measuring turf establishment and supplemental applications by the acre (hectare) or square yard (square meter), measure on the ground surface.

**Section 629. — ROLLED EROSION CONTROL PRODUCTS
AND CELLULAR CONFINEMENT SYSTEMS**

Construction Requirements

629.05 (a) Slope Installations. Delete the text and substitute the following:

(a) Slope Installations. At the top of the slope, anchor the RECP by using an anchor trench.

(1) Anchor trench. Construct a 6- by 6-inch (150- by 150-millimeter) trench. Extend the upslope terminal end of the RECP 36 inches (900 millimeters) past the trench. Use staples on 12-inch (300-millimeter) centers to fasten the RECP into the trench. Backfill the trench and compact the soil. Secure the terminal end with a single row of staples on 12-inch (300-millimeter) centers and cover the end with soil. Apply turf establishment to trench.

Securely fasten all RECP to the soil by installing staples according to the manufacturer's recommendations.

Section 633. — PERMANENT TRAFFIC CONTROL

Material

633.02 Add the following:

Painting	563
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Construction Requirements

633.04 Sign Posts. Add the following:

Treat all galvanized material on sign posts with a weathering agent according to Section 563.

633.05 Sign Panels. Add the following:

Treat all galvanized material on the backs of signs with a weathering agent according to Section 563.

Section 634. — PERMANENT PAVEMENT MARKINGS**Construction Requirements**

634.05 Waterborne Traffic Paint (Type B and C). Delete the Subsection and substitute the following:

Apply paint when the pavement and air temperature are at 50°F (10°C) and rising.

(a) Type B. Do not heat the paint above 120°F (49°C). Apply paint at a rate of 100 square feet per gallon (2.5 square meters per liter).

Apply Type 1 glass beads on the paint at a rate of 6 pounds per gallon (0.72 kilograms per liter) of paint.

Apply two applications of paint and glass beads. Apply the second coat in the opposite direction of the first application. Apply the second application after the first is tack free.

(b) Type C. Do not heat the paint above 120°F (49°C). Apply paint at a rate of 70 square feet per gallon (1.7 square meters per liter).

Apply glass beads using two dispensers. Apply Type 3 glass beads on the paint at a rate of 8 pounds per gallon (0.96 kilograms per liter) immediately followed by Type 1 glass beads at a rate of 6 pounds per gallon (0.72 kilograms per liter).

Measurement

634.12 Add the following after the first paragraph:

When two applications of paint are required, measure each application.

Delete the second paragraph and substitute the following:

When pavement markings are measured by the linear foot (meter), measure the length of line applied along the centerline of each line applied regardless of color or line width. Measure broken or dotted pavement lines from end to end of the line including gaps. Measure solid pavement lines from end to end of each continuous line. For wide lines (12 inches (300 millimeters) in width or greater), adjust the measured length of line in the ratio of the required width to 4 inches (100 millimeters).

Section 635. — TEMPORARY TRAFFIC CONTROL**Description****635.01** Delete the second paragraph and substitute the following:

Arrow board, portable changeable message sign, barricade, and warning light types are designated in the MUTCD.

Material**635.02** Delete the Subsection and substitute the following:**635.02** Conform to the MUTCD and the following Sections and Subsections:

Concrete barrier (temporary)	618
Delineator and object marker retroreflectors	718.08
Guardrail (temporary)	617
Retroreflective sheeting	718.01
Sign panels	718.03
Sign posts	718.04
Sign hardware	718.06
Temporary plastic fence	710.11
Temporary pavement markings	718.16

Construction Requirements**635.07 Construction Signs.** Delete the first paragraph and substitute the following:

Fabricate and install sign panels according to Subsection 633.05. Use Type III, IV, VIII, IX, or XI prismatic retroreflective sheeting. Use fluorescent sheeting for orange signs. For roll-up signs, use fluorescent Type VI retroreflective sheeting.

Add the following:

Provide the same type of sheeting on all post-mounted construction signs that pertain to the project.

Use crashworthy posts within the traversable area adjacent to traffic.

635.09 Flaggers. Add the following:

Perform the work described under MUTCD Part 6. Use fluorescent retroreflective sheeting on the “SLOW” side of the flagger paddle.

635.13 Temporary Pavement Markings and Delineation. Add the following:

For seasonal suspensions, apply the permanent pavement marking pattern with temporary traffic paint.

(d) Delineation for Unmarked Pavements with Vehicle Positioning Guides. For unmarked pavements, install signing and vehicle positioning guides as indicated in the plans. Use vehicle positioning guides that meet the requirements of Subsection 718.16(b), pavement markers.

Remove all vehicle positioning guides before placing additional pavement layers. Remove all vehicle positioning guides from the surface course before placing permanent pavement markings.

635.13 Temporary Pavement Markings and Delineation. Add the following to the last paragraph:

If permanent pavement markings are not placed within 14 days, provide, at no cost to the contract, additional temporary delineation equivalent to the permanent pavement marking pattern required by the contract.

Measurement

635.24

Add the following:

Measure flaggers, for each hour a person is actually performing the work. Do not measure time required to set up and take down required signage.

Delete the second paragraph and substitute the following:

When measuring temporary traffic control pay items, measure only one time even if relocated or replaced.

Delete the first four sentences in the sixth paragraph and substitute the following:

Measure temporary pavement markings by the mile along the centerline of the roadway. Measure temporary pavement markings as a single measurement, inclusive of all markings, from end to end regardless of color, material type, or number of lines. Do not deduct for standard gaps between stripes.

Add the following:

Measure vehicle positioning guides used at the option of the Contractor in lieu of temporary markings as equivalent temporary pavement markings. When vehicle positioning guides exceed the period of use stated in the plans, provide additional temporary or permanent pavement markings at no cost to the Government. Measure vehicle positioning guides by the mile along the centerline of the roadway. Measure as a single measurement, inclusive of all markings, from

end to end regardless of material type, gaps or number of lines. Measure only one application of vehicle positioning guides per lift. “DO NOT PASS”, “PASS WITH CARE”, and “NO CENTER STRIPE” signs required to be used with vehicle positioning guides are subsidiary to the temporary pavement marking item. Do not measure these signs as construction signs.

Section 702. — ASPHALT MATERIAL

702.01 Asphalt Binder. Delete the Subsection and add the following:

702.01 Asphalt Binder. Conform to M 320, Table 1.

In AASHTO M 320, Table 1 replace footnote *g* with the following:

^g If the creep stiffness is below 300 MPa, the direct tension test is not required. If the creep stiffness is between 301 and 600 MPa, the creep stiffness value shall be used. The *m*-value requirement must be satisfied in both cases.

702.01 Asphalt Binder. Add the following:

Asphalt binder for the asphalt concrete pavement will be Grade PG 64-28NV conforming to Table 702-2. Blend the PG 64-28NV at the source of the supply and deliver as a completed mixture to the job site.

Table 702-2
Asphalt Binder Grade PG 64-28NV

Test	Test Method	Requirement
Tests on Original Binder:		
Flash point, °C	AASHTO T 48	230 Min.
Viscosity @ 135°C, Pa·s	AASHTO T 316	3.00 Max.
Dynamic Shear, G*/sin δ, Test Temp 64°C @ 10 rad/s, kPa	AASHTO T 315	1.00 Min.
Ductility @ 4°C, 5 cm/min, cm	AASHTO T 51	50 Min.
Toughness @ 25°C, in-lbs	ASTM D 5801	110 Min.
Tenacity @ 25°C	ASTM D 5801	75 Min.
Tests on Residue from R.T.F.O., AASHTO T 240:		
Mass Loss, %	AASHTO T 240	1.00 Max.
Dynamic Shear, G*/sin δ, Test Temp 64°C @ 10 rad/s, kPa	AASHTO T 315	2.20 Min.
Ductility @ 4°C, 5 cm/min, cm	AASHTO T 51	25 Min.

Tests on Residue from Pressure Aging Vessel, AASHTO R28 @ 100°C:		
Dynamic Shear, $G^* \sin \delta$, Test Temp 22°C @ 10 rad/s, kPa	AASHTO T 315	5000 Max.
Creep Stiffness, S, Test Temp -18°C @ 60 sec, MPa	AASHTO T 313 ⁽²⁾	300 Max.
Creep Stiffness, m-value, Test Temp -18°C @ 60 sec	AASHTO T 313 ⁽²⁾	0.300 Min.

Section 703. — AGGREGATE**703.01** Add the following:**703.01 Fine Aggregate for Concrete.**

- (c) Sand equivalent value, AASHTO T 176, 75 min.
Alternate Method No. 2

703.05 Subbase, Base, and Surface Course Aggregate.**(a) General.** Delete the following:

- (3) Durability index (coarse), AASHTO T 210 35 min.
(4) Durability index (fine), AASHTO T 210 35 min.

(b) Subgrade or Base aggregate. Delete line (2) and substitute the following:

- (2) Liquid limit, AASHTO R 58 and T 89 25 max

(c) Surface Course Aggregate. Add the following:

- (4) Dust ratio: $\frac{\% \text{ passing } \#200}{\% \text{ passing } \#40}$ 2/3 max.

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary. Fine aggregate, material passing the No. 4 sieve, will consist of natural or crushed sand and fine mineral particles.

Delete Table 703-3 and substitute the following:

Table 703-3
Target Value Ranges for
Surface Course Gradation and Plasticity Index

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)
¾ inch (19 mm)	100 ⁽¹⁾
No. 4 (4.75 mm)	41-71 (6)
No. 40 (425 µm)	12-28 (4)
No. 200 (75 µm)	9-16 (3)
Plasticity Index (PI)	8 (4)

⁽¹⁾ Statistical procedures do not apply.

() Allowable deviations (+/-) from the target values.

Section 704. — SOIL

704.04 Structural Backfill. Delete line (c) and add the following:

- (c) Plastic index, AASHTO R 58 and T 90 6 max.
 (d) Liquid limit, AASHTO R 58 and T 89 30 max.

704.07 Select Borrow. Delete line (b) and add the following:

- (b) Liquid limit, AASHTO R 58 and T 89 30 max.
 (c) Plastic index, AASHTO R 58 and T 90 6 max.

704.08 Select Granular Backfill.

(a) Quality requirements. Delete lines (2) and (4) and substitute the following:

(2) Peak shear maximum angle of internal friction 34° min.
 on the portion passing the No. 4 sieve, AASHTO T 236

(4) Plastic index, AASHTO R 58 and T 90 6 max.

(a) Quality requirements. Add line (6):

(6) Liquid limit, AASHTO R 58 and T 89 30 max.

(b) Electrochemical requirements for MSE walls with metallic reinforcements. Delete the Note and substitute the following:

Note: Tests for sulfate and chloride content are not required when the pH is between 6.0 and 8.0 and resistivity is greater than 5000 ohm centimeters.

Add the following Subsection:

704.09 Slope Fill. Furnish sound, durable, granular soil free from organic matter or other deleterious material (such as shale or other soft particles with poor durability). Conform to the following:

(a) Quality requirements.

(1) Gradation	Table 704-3
(2) Sodium sulfate soundness loss (5 cycles)	15% max.
(3) Liquid limit, AASHTO R 58 and T 89	40 max.
(4) Plastic index, AASHTO R 58 and T 90	20 max.

**Table 704-3
Slope Fill Gradation**

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)
4 inch	100
No. 4	20–100
No. 40	0 – 60
No. 200	0 – 35

Section 705. — ROCK

705.02 Riprap. Add the following:

Submit rock color sample to CO for approval prior to purchase of riprap. All rock material (gravel, cobble, and boulders) shall be clean and thoroughly washed prior to arrival at the site to ensure that the rock is free of any silt or clay particles.

Section 710. — FENCE AND GUARDRAIL

710.06 Rail Elements.

(a) Metal beam rail. Delete the first sentence and substitute the following:

Furnish guardrail posts conforming to the Task Force 13 *Guide to Standardized Roadside Safety Hardware*.

710.07 Guardrail Posts. Delete the first sentence and substitute the following:

Furnish guardrail posts conforming to the Task Force 13 *Guide to Standardized Roadside Safety Hardware*.

710.09 Guardrail Nuts, Bolts, and Cables.

(b) Weathering nuts and bolts. Delete the second sentence and substitute the following:

Furnish bolts conforming to ASTM F3125, Type 3.

710.10 Guardrail Hardware. Delete the first sentence and substitute the following:

Furnish guardrail posts conforming to the Task Force 13 *Guide to Standardized Roadside Safety Hardware*.

Add the following:

Furnish a flexible hinged guardrail delineator which allows the reflector to fold down and spring back to an upright position after impact. Furnish retroreflective sheeting conforming to ASTM D4956, including supplementary requirements. Use type IV or XI retroreflective sheeting permanently adhered to 0.090-inch minimum thick body.

Section 713. — ROADSIDE IMPROVEMENT MATERIAL

713.03 Fertilizer. Delete the Subsection and substitute the following:

Do not use fertilizer.

713.04 Seed. Add the following:

Apply the following seed mix at 35lbs/acre. Alternate seed mixes must be approved by the CO.

Common Names	Botanical Name	PLS lb/acre
YARROW	ACHILLEA MILLEFOIUM	0.10
WESTERN NEEDLEGRASS	ACHNATHERUM OCCIDENTALIS	1.00
ANNUAL RYEGRASS	LOLIUM MULTIFLORUM	5.00
CALIFORNIA BROME	BROMUS CARINATUS	3.00
SQUIRRELTAIL	ELYMUS ELYMOIDES	5.50
INTERMEDIATE WHEATGRASS	ELYTRIGIA INTERMEDIA	3.00
WILD RYE BLUE	ELYMUS GLAUCUS	4.50
SILVERY LUPINE	LUPINUS ARGENTEUS	3.00
SANDBERG BLUEGRASS 'SHERMAN'	POA SECUNDA	1.00
SIERRA WILDFLOWER MIX		1.00

BLUE FLAX	LINUM LEWISII	0.10
	TOTAL	27.2

Section 718. — TRAFFIC SIGNING AND MARKING MATERIAL

718.01 Retroreflective Sheeting. Add the following:

Furnish fluorescent type sheeting for all signs and all devices specifying an orange or a yellow background.

Section 725. — MISCELLANEOUS MATERIAL

725.04 Pozzolans. Delete line (a) and substitute the following:

- (a) **Fly ash.** Conform to AASHTO M 295 4.5 percent max
Class C or Class F.
When used to mitigate alkali-silica reactivity,
also available alkalies as equivalent Na₂O

Add the following:

725.19 Weathering agent. Furnish a weathering agent that colors rock, cementitious, and galvanized surfaces to a brownish earth tone, and contains no pigments. Furnish a material that contains chemical components that have no adverse reactions or effects on soils, plants, or animals. The material cannot contain corrosive by-products once the product has been applied.

Permeon™ and Natina® Rock are acceptable products for coloring rock surfaces; Permeon™ and Natina® Concrete are acceptable products for coloring cementitious surfaces; and Natina® Steel is an acceptable product for coloring galvanized surfaces. Identification by brand name is intended to be descriptive, not restrictive, and is intended to indicate the quality and characteristics of products that will be satisfactory. Submit “or equal” products meeting the following salient characteristics to the CO for approval.

- (a) A soluble solution that contains organic acids and natural oxidizers.
- (b) All coloring developed through a reactionary process that etches surfaces, producing a finish that’s resistant to fading from exposure to sunlight, with an expected performance life exceeding 10 years in nonaggressive climates.
- (c) A product that causes negligible zinc coating losses when applied to galvanized surfaces.

Acceptable products include:

E-54

NV FLAP US50(1)
Round Hill Pines Access

Permeon™
manufactured by Soil-Tech
6420 South Cameron, Suite 207
Las Vegas, NV 89118
702-873-2023
www.soil-tech.com

Natina® Rock; Natina® Concrete; Natina® Steel
manufactured by Natina Products, LLC
1577 First Street
Coachella, CA 92236
877-762-8462
www.natinaproducts.com