Statement of Work

Ottawa National Wildlife Refuge (ONWR) Visitor Center Parking Lot Maintenance
West Parking Lot & RV Parking Lot, 14000 W State Route 2, Oak Harbor, OH 43449

PART 1 — GENERAL INFORMATION

Contractor shall provide all labor and materials to clean, crack fill, sealcoat, and restripe two existing parking lots located at the Ottawa National Wildlife Refuge Visitor Center.

1.1 Description of Work

The Contractor shall furnish all labor, materials, equipment, supervision, tools, and incidentals necessary to perform asphalt preventive maintenance and pavement marking services at the Ottawa National Wildlife Refuge Visitor Center West Parking Lot and RV Parking Lot. Work includes: surface cleaning, vegetation control at pavement joints/edges, hot-pour rubberized asphalt crack sealing, asphalt emulsion sealcoating (one coat), and pavement striping within the work area and in accordance with applicable standards and guidance (ASTM D6690; FHWA MUTCD 11th Edition; ADA 2010 Standards).

1.2 Background

The West and RV Lots require routine preventive maintenance to extend pavement life and refresh critical markings for visitor safety and compliance. The approximate quantities are estimates and should be correctly and accurately reflected in the contractors bid:

- West Lot: clean; vegetation control; crack sealing (~ 3,900 LF, targeting cracks 1/4–3/4 inch); single-coat sealcoat (~26,000 sq ft); restripe lines “as laid out.”
- RV Lot: clean; vegetation control; crack sealing (≈ 5,200 LF); single-coat sealcoat (~34,568 sq ft); restripe lines “as laid out.”

1.3 Objectives

- Deliver cost-effective, industry-standard pavement preservation to extend service life, improve appearance, and ensure safe/clear guidance for drivers and pedestrians.

- Refresh and standardize stall striping, accessible parking, EV charging stall markings, directional arrows, crosswalk(s), and no-parking areas per MUTCD/ADA or as currently exists within the work areas.
- Contractor shall identify any areas that are not structurally sound such as alligatored spider-web areas. Contractor shall remove and replace the damaged asphalt layer and any failed sub-based materials beneath in accordance with applicable standards and guidance (ASTM D6690; FHWA MUTCD 11th Edition; ADA 2010 Standards).
- Period of Performance: September 1, 2026 – October 31, 2026.

1.4 Scope

Work includes two parking lots (West Lot & RV/Bus Lot); no structural pavement replacement is included. Quantities listed are approximate and provided for planning; the Contractor shall verify in the field during the pre-bid meeting and bid should reflect accurate quantities. More advanced alligatored spider-web areas identified in the existing scope areas shall be identified by the contractor during the pre-bid walk through. Such spider-web areas should not be crack sealed as it is not suitable because it does not address the underlying structural issues.

1.5 Period of Performance

September 1, 2026 – October 31, 2026 with all field work scheduled during suitable weather (see §5.6) and days and hours to minimize operational disruptions. (Seasonal application windows reflect industry guidance for emulsion sealers and MUTCD-conforming striping.)

1.6 General Information

Quality Control (Contractor): Maintain a project-specific QC plan addressing materials, mix design, application rates, weather checks, layout verification, and stripe tolerances (see §5.8).

Recognized Holidays: Work shall not be performed on Federal holidays unless otherwise approved by the Contracting Officer.
Hours of Operation: 7:00 a.m.–9:00 p.m. Eastern unless otherwise authorized by the

Contracting Officer.
Place of Performance: ONWR Visitor Center—West Lot & RV/Bus Parking Lots.
Post-Award Conference / Progress Meetings: The Contractor shall attend a post-award kickoff and periodic status meetings as requested by COR.
Key Personnel: Project Manager/Site Superintendent with demonstrable experience in asphalt maintenance and MUTCD/ADA-compliant striping.

PART 2 — DEFINITIONS & ACRONYMS

MUTCD: Manual on Uniform Traffic Control Devices (FHWA, 11th Edition, effective Jan. 18, 2024).
ADA 2010 Standards: 2010 ADA Standards for Accessible Design—parking requirements (counts, dimensions, aisles, signage).
ASTM D6690: Standard Specification for hot-applied joint and crack sealants for concrete and asphalt pavements.

PART 3 — Work

1. Pre-bid/Preconstruction site walk through meetings are required and delineation of work areas.
2. Identification of any refuge-specific environmental constraints (e.g., sensitive habitats adjacent to lots).
3. Acceptance of submittals and layout plans.
4. Inspection/acceptance of completed work.

PART 4 — CONTRACTOR-FURNISHED ITEMS & RESPONSIBILITIES

- Materials:
    - Crack Sealant: Hot-pour, rubberized asphalt meeting ASTM D6690, Type II or III (moderate to most climates).
    - Sealcoat: Mineral-filled asphalt emulsion pavement sealer meeting manufacturer specs; submittals shall demonstrate conformance with recognized test methods (e.g., ASTM D2939 test methods) and current technical data. (SealMaster PMM/Ultra specs accepted if proposed; temperature & cure limitations apply.)

    - Traffic Paint: Waterborne acrylic pavement marking paint that meets federal performance references (e.g., TT-P-1952 types) or state DOT equivalents; include manufacturer TDS and VOC data.

- Equipment: Sweepers/blowers, crack-seal kettles with calibrated thermostatic controls, spray/squeegee sealcoating equipment, striping machines capable of consistent line widths and arrow templates, stencils for ADA and EV legends, and traffic control devices per MUTCD Part 6 (temporary traffic control).
- Traffic Control: Provide and maintain necessary cones, barricades, and detours to protect workers and the public; coordinate closures with the Refuge Manager and COR.

PART 5 — SPECIFIC TASKS

5.1 Project Areas & Feature Counts

West Parking Lot (Visitor Center):

- ~69 total stalls; 2 EV charging–designated stalls; 4 pedestrian crosswalks; ~4 accessible stalls to be restriped. *(Counts provided by Government, contractors shall confirm exact numbers during pre-bid and reflect on bid sheet.)*
- Vendor quote indicates approx. ~3,900 LF of crack sealing (1/4–3/4") and ~26,000 sq ft single-coat sealcoat (quantities are estimates and should be updated to accurately reflect the scope of work during the pre-bid and shown on the bid sheet).

RV Parking Lot:

- ~43 total stalls; ~10 directional arrows; ~1 pedestrian crosswalk; ~2 designated NO PARKING areas. *(Counts provided by Government, contractors must confirm exact numbers during pre-bid and reflect on bid sheet.)*
- Vendor quote indicates approx. ~5,200 LF of crack sealing and ~34,568 sq ft single-coat sealcoat (quantities are estimates and should be updated to accurately reflect the scope of work during the pre-bid and shown on the bid sheet.

5.2 Submittals (Prior to Field Work)

- Materials list & TDS: crack sealant (ASTM D6690 type), sealer product and mix design, traffic paint, beads (if used), and herbicide data sheet if applied.

- Layout plan: stall and aisle dimensions; accessible stalls and aisles per ADA; crosswalk and arrow locations; EV stall markings and sign plan per MUTCD; “NO PARKING” hatch areas.
- Work schedule with daily closures, phasing, and weather contingency plan (see §5.6).
- QC plan detailing tests/inspections, application rates, and acceptance tolerances.

5.3 Pre-Construction Meeting & Site Preparation

- Conduct a kickoff meeting with the COR; verify limits, phasing, and staging.
- Cleaning: Mechanical sweeping and high-velocity, oil-free air blowing to remove dust/debris prior to crack seal and sealcoat. (as identified in the bid sheet/contract award.)
- Vegetation control: Remove vegetation at joints and edges by mechanical means and/or application of a non-selective glyphosate herbicide per label and refuge policy.

5.4 Crack Sealing (Hot-Pour Rubberized Asphalt)

- Scope: Seal cracks from 1/4" to 3/4" using ASTM D6690 hot-applied sealant; do not seal alligatored “spider-web” areas. Crack sealing is not suitable for alligatored spider-web areas of an existing asphalt because it does not address the underlying structural issues. Spider-web cracking indicates that the pavement structure has been overstressed and is not strong enough to support the weight and frequency of vehicle use.
- Preparation: Clean/dry cracks; heat per manufacturer; maintain kettle temperature within recommended ranges; apply with overband (≤2" width) only where needed for adhesion.
- Quantities (approx.): West ≈ 3,900 LF; RV ≈ 5,200 LF; field verify and report variances to COR.

5.5 Sealcoating (Asphalt Emulsion, One Coat)

- Scope: Single-coat seal of ≈26,000 sq ft (West Lot) and ≈34,568 sq ft (RV Lot), applied to manufacturer specifications; do not apply over fresh crack seal until properly set.
- Materials: Polymer-modified asphalt emulsion pavement sealer; submit TDS and mix design (water, aggregate, additives).

- Application & Rates: Apply uniformly by spray or squeegee at rates consistent with manufacturer guidance for one coat (typical parking lot coverage per coat is ~85–95 sq ft/gal mixed, depending on product and aggregate; Contractor to propose exact rate in submittals).
- Weather & Cure: Do not apply if ambient or surface temperature <50°F within 24 hours post-application or if rain is forecast; allow sufficient cure time before opening to traffic and before striping.

5.6 Pavement Markings & Signage (Re-Striping)

All markings shall conform to MUTCD 11th Edition (Part 3 — Markings; Part 7 — School Areas if applicable) and manufacturer recommendations for line widths and durability.

West Lot:

- Stalls: Repaint 69 stalls in white with consistent dimensions and offsets; aisles delineated per layout plan. *(Count provided by Government.)*
- Accessible Parking: Restripe ~4 accessible stalls and aisles to meet ADA 2010 dimensions (car space ≥96" wide with 60" aisle; van space either 132" with 60" aisle or 96" with 96" aisle or using existing layouts and dimensions). At least 1 of the 4 shall be van-accessible; mark access aisles to discourage parking.
- EV Charging Stalls: Re-mark 2 EV-designated stalls; word legends and/or plaques and any regulatory signs shall comply with MUTCD and FHWA guidance (e.g., R7-113 “No Parking Except While Charging,” or agency-approved legend).
- Crosswalks: Re-stripe 4 pedestrian crosswalks using high-visibility patterns (e.g., ladder/continental) or two transverse lines as directed by COR; width and spacing per MUTCD Part 3.

RV Lot:

- Stalls: Repaint 43 stalls in white; verify any oversized stall dimensions for RVs per COR. *(Count provided by Government; contractor to verify and bid should reflect current parking area layout.)*
- Directional Arrows: Apply 10 directional arrows sized for lot speed (typ. 8–12 ft length; conforming arrow style per MUTCD); color white unless otherwise directed.
- Crosswalk: Re-stripe 1 crosswalk as per West Lot approach.

- NO PARKING Areas: Stripe 2 zones with diagonal hatch/chevrons in contrasting color; wording legends if required by COR; locate to maintain clearance sightlines and pedestrian routes.

Materials & Visibility:

- Paint: Waterborne acrylic traffic paint; submit color schedule (white stalls/arrows/crosswalks; blue ADA stall symbol/background as directed); dry and recoat times per TDS.
- Retroreflectivity: Where night visibility is specified, apply drop-on glass beads per AASHTO M247 at rates recommended by the paint manufacturer; review MUTCD §3A.05 retroreflectivity guidance for agency needs.
- EV Wayfinding/Regulatory Signs (if requested by COR): Conform to MUTCD 11th Edition and FHWA EV signage guidance; finalize legends and plaques with COR (e.g., R7-113; time-limit plaques per policy).

5.7 Environmental Protection

Protect adjacent habitat, landscaping, drains, and structures from overspray, materials tracking, and runoff; plug/cover storm drains during application as needed; collect all waste and dispose per regulations and manufacturer guidance. (Sealcoating and paint VOC and stormwater considerations apply.)

5.8 Quality Control / Acceptance

- Crack sealant: Verify material type (ASTM D6690) and kettle temps; perform adhesion checks; ensure no tracking and proper fill.
- Sealcoat: Confirm mix design and application rates; verify cure prior to traffic; uniform appearance without streaks/ridges.
- Striping: Verify line widths (e.g., 4" typical stalls; 6" crosswalk bars/transverse lines unless ladder bars specified), alignment, color, and legends; confirm ADA stall/aisle dimensions and signage; confirm arrow shape/size per MUTCD.
- Documentation: Daily logs of quantities and weather; photographs before/after; materials tickets and batch/mix records.

5.9 Warranty

Provide one-year warranty on workmanship and materials for crack sealing, sealcoat, and striping, excluding damage due to abnormal loads, snowplow abrasion, or chemical spills.

PART 6 — APPLICABLE PUBLICATIONS (Current Editions)

- FHWA MUTCD — 11th Edition (Dec. 2023; effective Jan. 18, 2024).
- ADA 2010 Standards (Parking & Restriping Guidance).
- ASTM D6690 — Hot-Applied Joint and Crack Sealants.
- AASHTO M247 — Glass Beads Used in Pavement Markings.
- SealMaster PMM/Ultra Technical Specifications (example manufacturer references for asphalt emulsion sealcoat and application conditions).
- FHWA Memorandum: Regulatory Signs for EV Charging & Parking Facilities (R7-series).

PART 7 — ATTACHMENTS / TECHNICAL EXHIBIT

Technical Exhibit 1 — Performance Requirements

Performance Objective	Standard	Performance Threshold	Method of Surveillance
PRS #1 — Submittals & Schedule The Contractor shall	All required documents submitted and approved prior to mobilization; kickoff held before field work.	Zero late submittals; schedule meets PoP and weather window.	Periodic surveillance; COR review and approval.
PRS #2 — Crack Sealing Perform crack	Cracks 1/4–3/4" sealed; uniform adhesion; no tracking; no spider-web areas sealed.	Zero defects beyond minor touch-ups; temperatures documented; quantities match plan ±10%.	Field inspection during/after application; daily logs.
PRS #3 — Sealcoating Apply single-coat asphalt	Uniform finish; cure time observed; no	Zero applications below minimum temperature/cure	Field inspection; TDS

Performance Objective	Standard	Performance Threshold	Method of Surveillance
emulsion sealcoat per §5	puddling, ridging, or contamination.	requirements; uniformity acceptable to COR.	& batch tickets; photos.
PRS #4 — Pavement Markings Stripe stalls, ADA, EV, arrows, crosswalks, and NO PARKING per §	Dimensions, colors, and legends meet MUTCD/ADA; accessible counts & signage verified; arrows and crosswalks correctly placed.	Zero deviations from ADA critical dimensions; ±1/4" tolerance on stripe widths; legends readable/consistent.	Final inspection; tape measure verification; photos; signage checklists.
PRS #5 — Safety & Environmental Protection Implement traffic control and protect adjacent	Proper barricades; no overspray/runoff; storm drains protected; clean site.	Zero safety violations; zero environmental incidents.	Daily observation; incident reporting.

Execution & Scheduling Notes (Weather Window & Access)

- Seasonal window: Target May–October in NW Ohio; confirm forecast and temperatures (≥ 50°F through cure) before each application day; identify rain dates in the schedule.
- Staging & closures: Coordinate phasing to keep visitor access; lots may be closed in sections to maintain refuge operations.

References Used

- Standards: ASTM D6690 (crack sealant), MUTCD 11th Edition (markings/signage), ADA 2010 (accessible parking), AASHTO M247 (glass beads), and representative sealcoat manufacturer specifications.