COMPREHENSIVE PROJECT AGREEMENT SAMPLE

United States Department of the Interior / National Park Service

Bonnie Claire and Ubehebe Roads
NPS PMIS No.s 89910, 89926, 90026 & 89924
FHWA Projects CA PRA DEVA 11(1a), 11(1), 11(2) & 109(1)

This is an agreement between Death Valley National Park (DEVA), Pacific West Region (PWR), FHWA-Central Federal Lands Highway Division (FHWA-CFLHD) and the Denver Service Center (DSC). It describes specific project requirements to be fulfilled and duties to be performed by all parties to produce or supply the services and products as agreed to below.

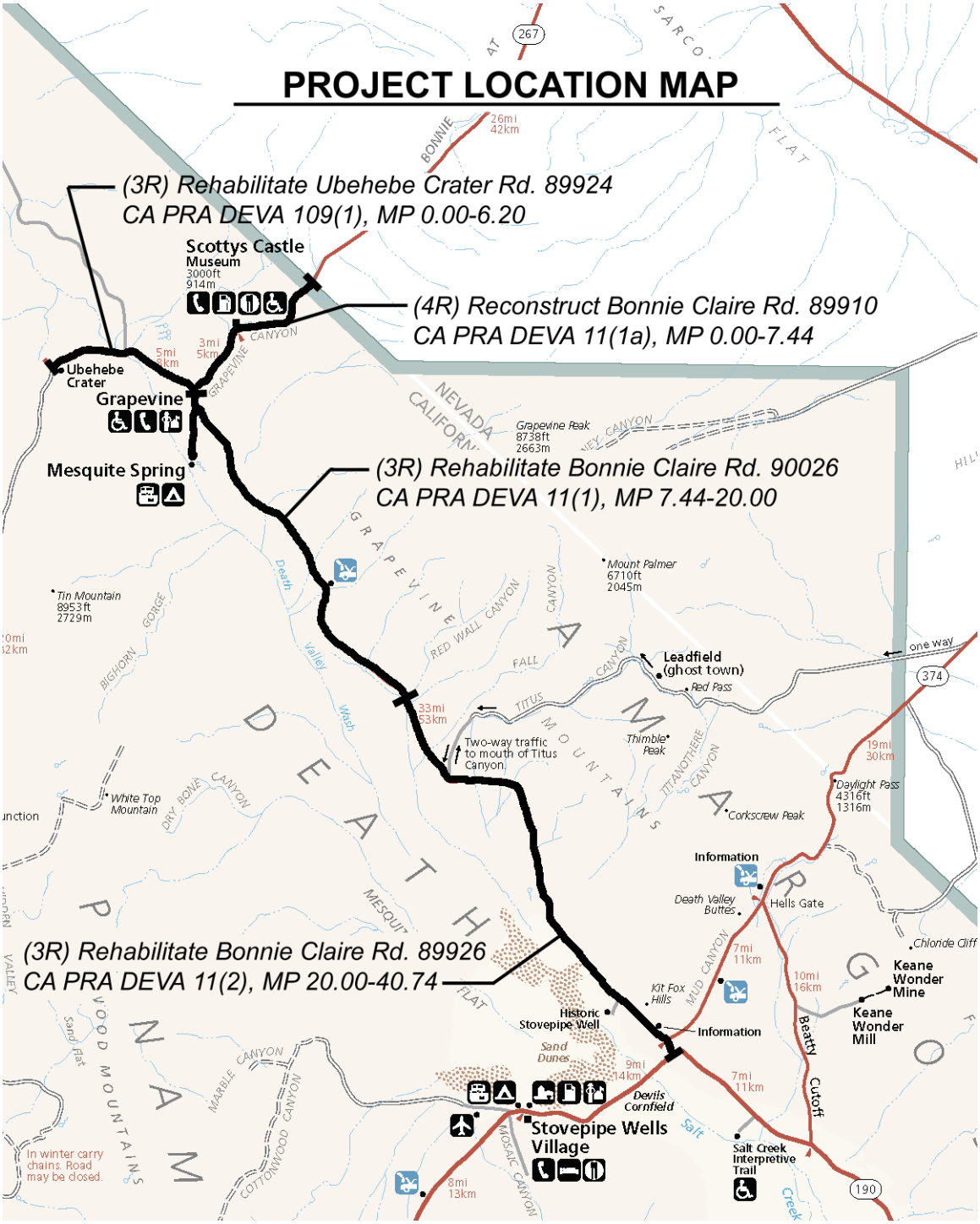
AGREED:

/s/ ***Jan Burton*** ***10/25/04***
Project Manager, Denver Service Center, NPS — Date

/s/ ***Patrick Flynn*** ***10/25/04***
Project Manager, Central Federal Lands Highway Division — Date

/s/ ***J.T. Reynolds*** ***05/17/05***
Superintendent, Death Valley National Park — Date

/s/ Cynthia Ip (Acting Regional Director) **05/23/05**
Jonathan B. Jarvis, Regional Director, Pacific West Region — Date


PROJECT LOCATION MAP
(3R) Rehabilitate Ubehebe Crater Rd. 89924
CA PRA DEVA 109(1), MP 0.00-6.20
(4R) Reconstruct Bonnie Claire Rd. 89910
CA PRA DEVA 11(1a), MP 0.00-7.44
(3R) Rehabilitate Bonnie Claire Rd. 90026
CA PRA DEVA 11(1), MP 7.44-20.00
(3R) Rehabilitate Bonnie Claire Rd. 89926
CA PRA DEVA 11(2), MP 20.00-40.74
Scottys Castle
Museum
3000ft
914m
Ubehebe
Crater
Grapevine
Mesquite Spring
Grapevine Peak
8738ft
2663m
Mount Palmer
6710ft
2045m
Tin Mountain
8953ft
2729m
Leadfield
(ghost town)
Red Pass
Two-way traffic
to mouth of Titus
Canyon.
Thimble
Peak
Corkscrew Peak
Daylight Pass
4316ft
1316m
White Top
Mountain
Information
Death Valley
Buttes
Hells Gate
Chloride Cliff
Keane
Wonder
Mine
Keane
Wonder
Mill
Kit Fox
Hills
Historic
Stovepipe Well
Information
Sand
Dunes
Devils
Cornfield
Stovepipe Wells
Village
Salt Creek
Interpretive
Trail
In winter carry
chains. Road
may be closed.
one way
267
374
190
DEATH VALLEY
NEVADA
CALIFORNIA

PROJECT BACKGROUND

This project consists of the rehabilitation (3R) of several road segments within Death Valley National Park, as well as reconstruction (4R) of one road segment. The 4R reconstruction work consists of the 7.4-mile segment of Bonnie Claire Road that runs through the Grapevine Canyon, from the park boundary at the Nevada state line to the junction with Ubehebe Crater Road. Portions of this roadway segment will be rehabilitated without 4R-type reconstruction (3R+). The remainder of Bonnie Claire Road will be rehabilitated from mile post 7.4 at the junction of Ubehebe Crater Road to mile post 40.7 at the junction with California State Highway 190. Ubehebe Crater Road (6.2 miles) will also be rehabilitated.

These projects are tentatively scheduled in the Regional FLHP Multi-year Program for obligation of construction funds in FY 2007 and FY 2009. However, future funding levels remain uncertain because of delays in the passing of new highway funding legislation. Once program funding levels are set, this project agreement will be amended so that these projects can be repackaged to obligate funds in the most cost effective and timely manner. Preliminary design and environmental compliance will be completed for all sections of road identified in this project agreement by the end of FY 2006.

The January 1999 Road Inventory (RI) for Death Valley National Park, and the December 1996 Road Systems Evaluation (RSE) provide the following assessments:

A. (4R) Reconstruct Bonnie Claire Road 89910, CA PRA DEVA 11(1a) – MP 0.00 – 7.44

- In the RI two miles of roadway are listed in poor condition and the remainder of the project is listed as being in fair condition.
- The RSE lists this project as Priority #4. (Priorities # 1 through #3 have already been completed or designed.) The RSE also identifies several safety and operational problems with this roadway segment, including inconsistent and insufficient roadway width, poor sight distances, and minimal super-elevation on curves.

B. (3R) Rehabilitate Bonnie Claire Road 90026, CA PRA DEVA 11(1), MP 7.44 – 20.00

- In the RI one mile of roadway is listed in poor condition and the remainder of the project is listed as being in fair condition.
- The RSE does not list this project as one of the top 11 priorities.

C. (3R) Rehabilitate Bonnie Claire Road 89926, CA PRA DEVA 11(2), MP 20.00– 40.74

- In the RI this entire project is listed as being in fair condition.
- The RSE lists a portion of this project as Priority #7.

D. (3R) Rehabilitate Ubehebe Crater Road 89924, CA PRA DEVA 109(1), MP 0.00 to 6.20

- In the RI 4.2 miles of roadway are listed in poor condition and the remainder of the project is listed as being in fair condition.
- The RSE lists this project as Priority #5.

PROJECT PURPOSE

A. General

The existing paved roads are narrow and in poor condition, and need to be resurfaced and widened to a consistent width to ensure public safety, enhance the visitor experience, and protect the government investment. The existing 20-foot paved width on Bonnie Claire and Ubehebe Crater Roads is insufficient for the volume and type of traffic using these roads. There is little or no curve widening on horizontal curves, and most horizontal curves have little super-elevation and insufficient run out lengths. Raveling of pavement edges has narrowed the travel lanes, forcing drivers with large wheel-base vehicles to drive on gravel shoulders. As a result shoulder drop offs are created which cause steering problems and unsafe driving conditions to park visitors and staff.

B. (4R) Reconstruct Bonnie Claire Road 89910, CAPRA DEVA 11(1a), MP 0.00 - 7.44

The general conditions described above are exacerbated on this segment by long, steep downhill grades and some very tight curves. Buses and other large-wheel-base vehicles cross the centerline into the oncoming lane on tight curves, with rear wheels often tracking on the pavement edges and unpaved shoulders. As a result, pavement edges ravel and shoulder material is pulled onto the paved roadway, creating a hazard for other vehicles, and motorcyclists in particular. Sight distance is mostly fair, but there are sections in Grapevine Canyon where it is extremely poor. Sharp horizontal curves combined with minimal vertical curve lengths, steep rock cut slopes and large cottonwood trees near the shoulder at Cottonwood Wash (M.P. 5.0) drastically reduce sight distance. Many curves have minimal super-elevation and insufficient run-out lengths.

There is heavy local traffic between the Grapevine residential area and Scotty's Castle. Most tour buses travel to Scotty's Castle via Furnace Creek, and return the same way. The existing paved surface is typically 20-22 feet wide, with sections as narrow as 17 feet. Extensive raveling has occurred on the road edge and most of the road has areas of severe rutting and cracking. The road will be reconstructed at a consistent 22' width plus curve widening.

Compliance issues include numerous archeological resources near the existing road prism; an historic fence within the Scotty's Castle Historic District, a National Register Property; visual impacts associated with the District; and natural resources including wetlands and sensitive rare plants and animals at Cottonwood Wash.

Preliminary design work on this road segment attempted to accommodate a consistent design speed (35 mph, the current posted speed limit). However, the project team felt that the associated large slope cuts and impacts to the historic fence line along the Historic District were unacceptable. The design is being refined to reduce the size and number of slope cuts, and to greatly reduce or eliminate altogether impacts to the historic fence. This has been accomplished in part by designing the roadway for varying speeds (as low as 20 mph) as it winds through the tighter sections of Grapevine Canyon. The design will allow large vehicles to pass over this road without crossing into the oncoming lane on tight curves.

C. (3R) Rehabilitate Bonnie Claire Road 89926 and 90026: CA PRA DEVA 11(2), MP 20.00 - 40.74; and CA PRA DEVA 11(1) MP 7.44 - 20.00

This pair of road segments begins at the California State Highway 190 junction with Route 011, at M.P. 40.74, and proceeds in a northerly direction to M.P. 7.44 just south of the Ubehebe Crater Road junction. This roadway serves as an important and heavily traveled link for park visitors and staff traveling to Titus Canyon, Mesquite Campground, Grapevine, Ubehebe Crater, Scotty's Castle, Scotty's Junction, as well as to other popular scenic locations and backcountry destinations like the Racetrack playa. . This road is classified as a Functional Class I, Principal Park road. It shares the typical problems of aging pavement and deteriorated edges that appear on most of the park's paved roads. There are few paved pullouts.

There is adequate base and asphalt pavement to utilize in-place cold recycling or pulverizing techniques with an asphalt overlay applied to the recycled material. Due to wide graded shoulders, nearly all rehabilitation work should be confined to the existing disturbed road corridor. This project will include paved pullouts at various locations along this segment. The rehabilitation of Mesquite Campground Road (Route No. 212, 3.0 miles) is also included in this project scope. Grapevine Ranger Station parking area will also be rehabilitated, and asphalt aprons will be constructed at all roadways connecting to this route (including Mud Canyon, Titus Canyon Exit and Sand Dunes).

D. (3R) Rehabilitate Ubehebe Crater Road 89924, CA PRA DEVA 109(1), MP 0.00 - 6.20

This segment is the roadway leading to Ubehebe Crater scenic overlook and access to backcountry areas within DEVA. This roadway begins at the intersection with Bonnie Claire road (M.P. 0.0) and proceeds in a northwest direction, past Big Pine access (M.P. 2.8) point, across Death Valley wash (M.P. 3.1), then to the one-way loop (M.P. 5.5) leading to the parking facility at Ubehebe Crater(M.P. 7.0). Access to Racetrack Valley is obtained through the Ubehebe Crater parking area.

The roadway is constructed on volcanic cinders and the pavement surface has deteriorated. The road exhibits sections of severe cracking and raveling. After heavy rains and flooding, ongoing maintenance is required to repair the pavement section at the low water crossing at Death Valley Wash. The southbound approach to Bonnie Claire road includes a sharp curve combined with a steep grade which results in limited sight distance. There have been numerous complaints from park visitors regarding the condition and hazards of this road segment.

This project will recycle/overlay the existing 20-foot wide 6.2 mile long road and widen to a consistent 22-foot roadway paved width. Ubehebe Crater overlook parking lot will be reconstructed with new paving and concrete curbs and sidewalks. The Death Valley Wash crossing and other wash crossings will be reconstructed with inlet and outlet protection devices. It would make a more cost-effective contract if this project is combined with one of the Bonnie Claire Road projects.

OVERALL PROJECT SCOPE

- Rehabilitate and Reconstruct Bonnie Claire Road from MP 0.00 to MP 7.44. The existing 17- to 22-foot wide roadway will be reconstructed at a consistent 22-foot width, consisting of two ten-foot lanes with one-foot shoulders. Improve the existing horizontal and vertical alignment to provide a consistent design speed, with exceptions in the Grapevine Canyon segment of Bonnie Claire Road to minimize impacts to resources. Four design alternatives will be prepared and analyzed through the EA, and design Value Analysis (VA) resulting in the preferred alternative.
- Rehabilitate Bonnie Claire Road MP 7 to MP 20 and MP 20 to MP 40, including Mesquite Campground Road and the Grapevine Ranger Station parking area.
- Rehabilitate Ubehebe Crater Road, including the overlook parking area.
- Existing berms along the roadway, created by maintenance activities, will be reduced where possible, with minimal resource impacts, to provide a more natural appearance and to improve drainage conditions.
- The staging area for the construction will be the Grapevine Mixing Table, which is located near the Grapevine Entrance Station. Other areas such as pullouts and road shoulders will be identified later in the design process as additional staging locations.
- Bonnie Claire Road will remain open with traffic controls during construction. Ubehebe Crater Road may be closed during construction.
- These projects will be sequenced to minimize construction traffic on newly rehabilitated roads.

PRODUCTS AND SERVICES

FHWA:

- Develop PS & E documents.
- Produce engineering studies and reports.
- Advertise and award construction contract.
- Administration of construction contract.

DEVA:

- Plan and compliance document review and recommendations for approval.
- Provide assistance regarding resource protection and traffic management during construction.

DSC:

- Administer environmental work for BA, Determination of Eligibility (DOE), EA and FONSI, including resource surveys required to support NHPA and NEPA. These surveys include park, state, and federal species of concern for birds, small mammals, vertebrates, amphibians, reptiles, invertebrates, botanical and a wetland determination/delineation.
- Administer A/E consultants to survey and map noxious, exotic, sensitive and T&E plant species within project work limits. Oversee the development and administration of a weed control plan before during and up to two years after construction. Administer plant salvage and replanting of T&E or other sensitive or valuable plants within construction limits as needed.
- Conduct SHPO consultation under Section 106 of the NHPA, U.S. Fish and Wildlife Service consultation under Section 7 of the Endangered Species Act, and Native American consultations as required. Compliance work will be completed for all segments of road described in this PA.
- Administer A/E consultant's work to prepare and produce a Historic Road Characterization Study for the 7.4 miles of the Bonnie Claire Road 11(1a) that leads to and from Scotty's Castle Historic District.
- Administer A/E consultant's work to prepare and produce "before and after" photo simulations of selected resource sensitive areas along the Bonnie Claire Road near Scotty's Castle. Coordinate with FHWA, the park and region to select appropriate locations and provide technical input to the A/E.
- Coordinate and facilitate Value Analysis/Choosing by Advantages (VA/CBA), and preparation of materials for DAB as needed
- Coordinate plan reviews and approvals.
- Coordinate project scheduling requirements.
- Administer A/E consultants to educate contractors and monitor T&E species and or cultural resources if needed during construction
- Provide oversight during construction, review and approval of submittals, and draft letter of final acceptance for the Superintendent's signature.

ROLES AND RESPONSIBILITIES:

The roles and responsibilities of the project team are defined as follows:

Park point of contact (POC) Responsibilities: Functions as primary park contact on a day-to-day basis to address project questions and issues, provide timely input of project information, and provide consolidated comments on the project documents on behalf of the park.

NPS Regional Coordinator: Acts as a liaison with the National Park Service Washington Office (WASO) on applicable matters; coordinates and/or participates in necessary project reviews; monitors and approves project funding. Ensures project compliance with regional and national guidelines, policies, and standards. Functions as primary regional project contact to ensure a quality product meeting all NPS requirements.

Project Manager (PM): Functions as a project liaison between the park, region and the FLHD in order to ensure overall coordination and execution of project development and construction activities within scope, on schedule and within budget as identified in this document.

NPS: The NPS PM is responsible as the primary NPS point of project contact for maintaining clear communications with their FHWA counterpart throughout the life of the project. The NPS PM is responsible for developing the Project Agreement, distribution of all review documents and consolidation of all NPS comments for presentation to the FHWA. In addition, the NPS PM is responsible for the landscape architectural elements of the design, including the review and comment of the 30%, 50%, 70% and the PS&E submittals, reviewing all components of the design such as the horizontal and vertical cross sections, layout, clearing limits, grading, drainage, erosion control, details, revegetation, parking areas and associated site elements, structures and furnishings such as walks, fences, walls, lighting, signs, etc., as these elements affect the overall NPS project investment. In addition, the NPS PM is responsible for providing the overall coordination within the NPS for achieving project compliance milestones and providing review of all natural and cultural resource issues to ensure that the Park Mission, NPS goals and park road standards are maintained.

FLHD: The emphasis of the FLHD PM will be in the area of highway design and construction. This includes the coordination of all project development and construction issues associated with highway design including the full gamut of technical areas needed to complete these projects (geometric, geotechnical, safety, materials, etc).

NOTE: Both PM's are responsible for fulfilling the primary function of project management as stated above, regardless of their areas of emphasis.

Environmental Manager: As agreed to by this document, functions as the primary contact for coordinating the development and completion of environmental documentation and permit acquisition**.** Prepares the environmental work plan that defines the steps, timelines and resources needed to comply with environmental project requirements.

Any other major roles or responsibilities required for the project can be added on an as needed basis. The following matrix summarizes the responsibilities described above and provides contact information for this project:

ACTIVITY	ORGANIZATION	INDIVIDUAL/PHONE No.
Compliance Arch Survey Environmental Management Project Agreement	 PARK DSC DSC	 Archeologist (999) 888-7777 Compliance Spec. (999) 888-6666 Project Mgr. (999) 888-5555
Design Lead Designer/AE review Project Manager/AE Mgr Reveg Plan	 FHWA FHWA DSC	 ETC…
Overall Project Management Project Budget Project Schedule Project Funding Points of Contact FHWA Region Park DSC	DSC DSC FHWA/DSC IMR	ETC…

PROJECT MILESTONES, RESPONSIBILITIES, and PROJECTED SCHEDULE

The following Project Milestones, Responsible Office and Dates of Completion are required for reporting purposes. These milestones should be utilized as required by a project and those not required should be left blank (i.e: a simple overlay may not require extensive field reviews or compliance processes, etc.). Additional milestones may always be added depending on the project requirements. Those shown below are generally required for most projects. The definitions for these milestones are listed below.

Milestone	**Responsible Office**	**Date of Completion**
Begin Project Scoping and Compliance	DSC	M/Y
Comprehensive PA Completion	DSC	M/Y
Determination of Cat. Ex or EA (3R)	DSC	M/Y
Determination of EA or EIS (4R)	DSC	M/Y
DAB Approval	DSC	M/Y

30% Field Review	FHWA	M/Y
Release **Draft** NEPA Doc.(Internal)	DSC	M/Y
Release NEPA Doc. for Public Review	DSC	M/Y
NEPA Complete (FONSI or ROD)	DSC	M/Y
70% Field Review	FHWA	M/Y
All Permits Received	FHWA	M/Y
Final Design Review (95%)	FHWA	M/Y
Prepare and Sign Contract Documents	FHWA	M/Y
Advertise	FHWA	M/Y
Award Construction Contract	FHWA	M/Y
Preconstruction Conference	FHWA	M/Y
Notice to Proceed	FHWA	M/Y
Begin Construction	FHWA	M/Y
Final Project Acceptance	PARK/REGION	M/Y

Milestone Definitions:

- **Begin Project Scoping and Compliance:** The scheduled on-site meeting or initial field review, when the scope is discussed, the project walked and the Environmental Screening Form (ESF) begun.
- **Comprehensive Project Agreement Completion:** The date for completion of the fully endorsed agreement.
- **Determination of Cat. Ex. or EA:** (Usually for 3R projects) the target date when the compliance path has clearly been determined and work towards that goal can begin in earnest.
- **Determination of EA or EIS:** (Usually for 4R projects) the target date when the compliance path has clearly been determined and work towards that goal can begin in earnest.
- **DAB Approval:** Date for when the DAB presentation/approval is scheduled.
- **30% Field Review:** The scheduled start date of the on-site meeting for review of 30% plans.
- **Release Draft NEPA Document (Internal):** Date of release of the NEPA document for internal review.

- **Release NEPA Document for Public Review:** Date of release of the NEPA document for the public review period.
- **NEPA Complete (FONSI or ROD):** Date of the endorsement of the FONSI or ROD.
- **70% Field Review:** The scheduled start date of the on-site meeting for review of the 70% plans.
- **All Permits Received:** Date by when all permits are expected to be in hand.
- **Final Design Review (95%):** The date 95% plans are made available for review.
- **Prepare and Sign Contract Documents:** Point of obligation.
- **Advertise:** Date when the project is advertised.
- **Award Construction Contract:** Date when the construction contract is awarded.
- **Preconstruction Conference:** Date when the preconstruction conference is scheduled.
- **Notice to Proceed:** Date when the contractor has met all obligations and can proceed with construction.
- **Begin Construction:** Date when construction actually begins.
- **Final Project Acceptance:** Date when the project work is accepted by the government and warranty period begins.

1. Funding availability will determine how project segments are contracted for construction. The natural and cultural resource compliance will be complete for all sections of road identified in this project agreement. An environmental assessment will be completed for all project segments based on the 30% design level or beyond depending on resource survey findings. Design of the southern 20-mile segment of Bonnie Claire Road (package number 89926) will be carried through the 30% level in order to complete the environmental assessment, but will not be carried through final design until a later date, when future funding levels have been determined.

2. Survey needs being determined and Environmental Screening Form (ESF) being completed by resource staff at Park

FUNDING

Funding Source: PWR FLHP Category I, 3R & 4R
Programmed Net Construction:

- 89910 - $5,482,510 Program Year FY 07
- 89924 - $3,100,000 Assumed FY07
- 90026 - $6,911,000 Assumed FY07
- 89926 - $9,733,223 Program Year FY08 or later

Total $25,226,733

COST ESTIMATES

CAT.	FHWA	DSC	Park
PE Total PE	FY 03 -$180,000 FY 04 - $300,000 FY 05 - $ $480,00 FY 06 – $480,00 FY 07 - $320,000 FY 08 - $160,000 **$1,920,000**	• **FY04** = $265,767; includes DSC & A/E contracts for EA/BA/DOE, Nat. Res. Surveys, HRCS & Photo Simulations *(May need add. Funds in FY05 to award all A/E TO's)* • **FY05**- $164,041 Includes VA & weed survey & control plan *(Includes all A/E TO's + $25k gov. est. for NPS-/WACC to do archeological survey)* • **FY06**-$146,000* includes T&E/Cult Res. monitoring *Weed survey, control & reveg. will need to be estimated based on construction schedules and is **not included in the FY06 estimates**. Current estimate for all 4 segments for FY06-08 is between $170 to $190 up to $985k to $1.09 million + 5% inflation/year if planting is included. • **$575,808. Total PE (w/out reveg. FY06)**	Cultural compliance. $4,400 –PTATS FY04 **FY05 -** $33,500 for JOTR staff to complete all resource surveys except wetlands and birds **$37,900**
CE $	$1,920,000	• **FY07** - $153,350* includes T&E/ Cult Res. monitoring • **FY08** - $161,100* includes T&E/ Cult Res. Monitoring *Weed survey, control & reveg. will need to be estimated based on construction schedules and is **not included in the FY07- 08 estimates**. Current estimate for all 4 segments for FY06-08 is between $170 to $190 up to $985k to $1.09 million + 5% inflation/year if planting is included. • **$314,450 total CE (w/out reveg)**	**$0**
PE +CE $	**$3, 840,000**	**$890,258. (w/out reveg)**	**$37,900**
CONSTR	**$25,226,733**		
TOTAL $	**$29,066,733.**		

Preliminary Engineering (PE), including both FHWA, DSC, DEVA & WACC costs, is 10.05% of construction amount. Construction Engineering (CE) for both FHWA & DSC is 8.86 % of construction amount.

PROJECT AGREEMENT AMENDMENT PROCESS

The project agreement may be amended by any party to the agreement, subject to the concurrence by all original signatories. Circumstances that may result in an amendment to this agreement include any major changes in scope, schedule, products, budgets, milestone dates, and key positions. Amendments will be in the form of revisions to the original agreement or changes documented through standard correspondence or electronic mail. Distribute project agreement amendments to all signatories of the original agreement.

CONFLICT RESOLUTION ESCALATION MATRIX

FHWA	NPS	Time to Resolve
Lead Designer Project Engineer	Park Coordinator - Badder DSC – Project Specialist	5 Working Days
Project Manager - Flynn Construction Operations Engineer – DePaula	DSC - Project Manager – Burton FLHP - Coordinator – De Santis Park Superintendent - Reynolds	5 Working Days
Project Development Engineer - Holder Construction Engineer – Greenwell	Deputy Regional Director - Neubacher. DSC - Chief, Park Roads & Parkways Branch	5 Working Days
CFLHD Division Engineer – Smith	Regional Director - Jarvis DSC – Chief, Transportation Division	5 Working Days