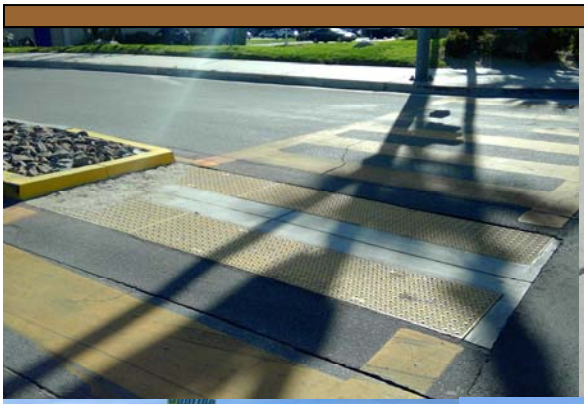
City of

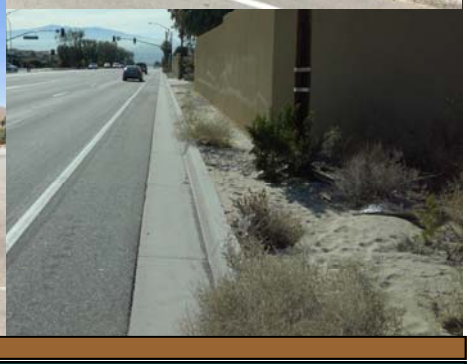
Desert Hot Springs

PUBLIC WORKS

PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES FOR PALM DRIVE BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT PIERSON BLVD. TO MISSION LAKES BLVD.





Civil Engineering Design
Construction Management
Infrastructure Management
GIS Mapping & Data Systems
Inspection

OMNIS INCORPORATED

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October 1, 2019

Daniel Porras, Director of Public Works
Public Works Department
City of Desert Hot Springs
65-950 Pierson Boulevard
Desert Hot Springs, CA 92240

Subject: Proposal to Provide Engineering and Design Services
Palm Drive Safety Improvement Project from
Pierson Blvd. to Mission Lakes Blvd.

Dear Mr. Porras:

Omnis Inc. (Omnis) is pleased to present this proposal for engineering and design services for the subject improvements. We have the resources in place to meet the City's needs and we are ready to begin work with your authorization.

We look forward to again working with you and the City of Desert Hot Springs. I can be reached at directly at 909-631-8335 should you have any questions or require additional information regarding this proposal.

Sincerely,

Omnis Inc.

John Gabor
Project Manager

PROJECT UNDERSTANDING

This project will include the design of safety improvements along Palm Drive from Pierson Boulevard to Mission Lakes Boulevard, a distance of approximately 5,300 lineal feet.

The safety improvements will include:

- Installing missing segments of sidewalks
- Upgrading existing curb ramps and driveway approaches to meet current ADA guidelines
- Installing raised medians at Palm Drive and Eighth Street with solar-powered flashing stop signs
- New buffered bike lane striping
- New street lights
- Perform a Multi-Way Stop analysis for Palm Drive at Twelfth Street and install stop signs if recommended
- Additional pedestrian and bicycle safety signage and markings throughout the project area

These improvements will provide a safer pedestrian and bicycle access route to various schools, parks, transit route stops, commercial areas, and residential neighborhoods. This project would connect and extend the previously awarded 2017 Bicycle Pedestrian Safety Program Project – Palm Drive Streel Light Project.

ADA Improvements

We inventoried approximately 50 existing curb ramps that either do not meet current ADA guidelines, or are missing altogether from curb returns, and will need to be at a minimum modified but more likely removed and reconstructed.

Example of existing curb ramp that does not meet current ADA guidelines.

We noted from our site review that there are approximately 25 driveway approaches that will not meet ADA guidelines for path of travel after the new sidewalks are installed and these driveway approaches will need to be removed and reconstructed. Each driveway approach will need to a special detail to describe how the new approach with join with the existing private driveway. Due to the grade difference between the Palm Drive roadway surface and the finished floors of the garages at homes north of Twelfth Street, retaining curb and/or small retaining walls will likely be necessary at the back of the new sidewalks at these locations to retain the private yards.

Example of existing driveway approach that does not meet current ADA guidelines and will need to be removed and reconstructed, with the installation curb, gutter, and sidewalk. Retaining curbs and/or walls will likely be needed to retain the existing yards at the new back of walk.

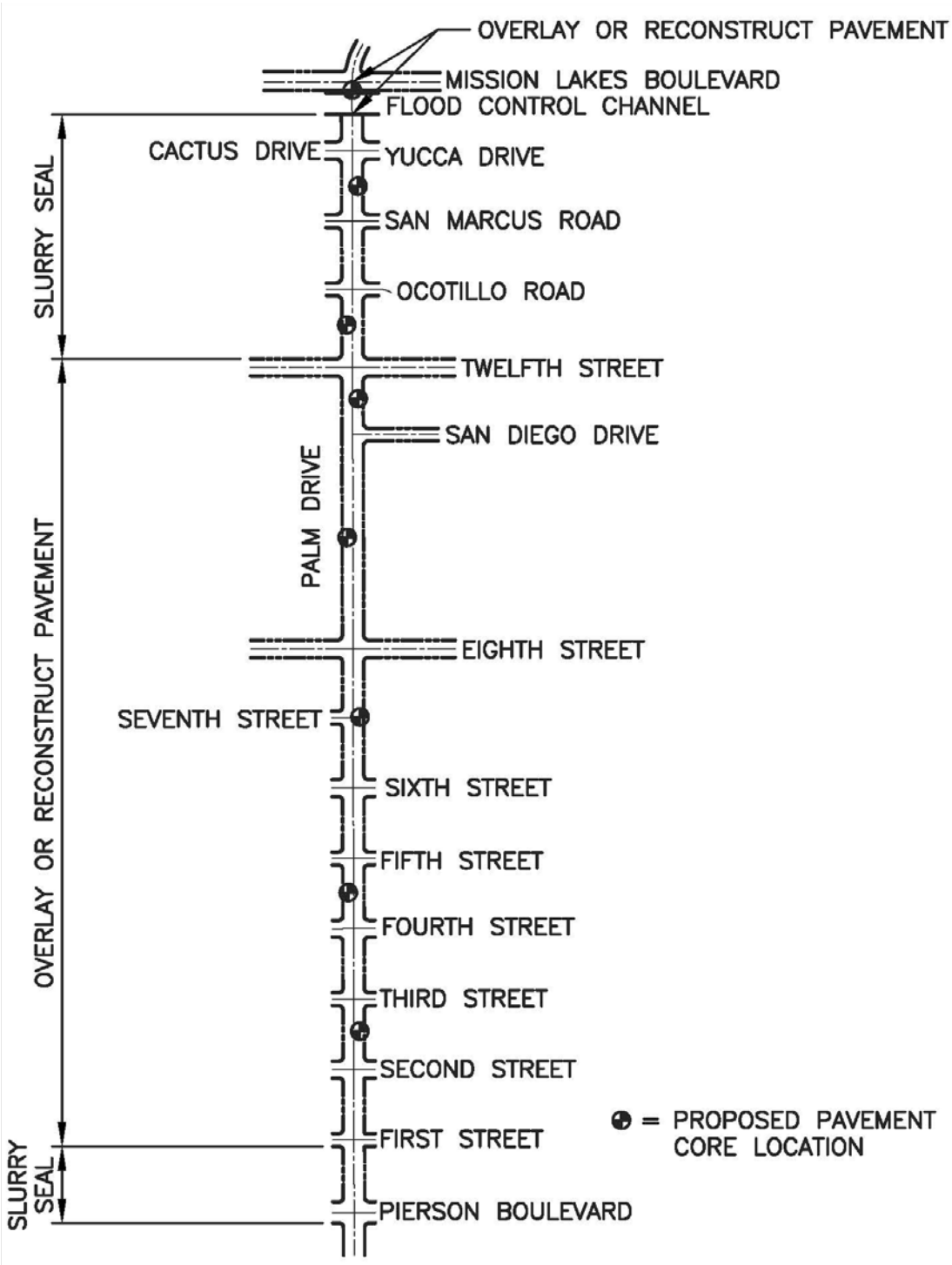
We have included in our Scope of Services the proper topographic survey and level of effort to design and prepare details for the ADA improvements described.

Pavement Rehabilitation

Upon our site review, it was noted that a majority (approximately 70 percent) of the existing pavement is in very poor condition and is in need of either an asphalt concrete overlay or full reconstruction.

We have included in our Scope of Services the design of pavement rehabilitation improvements from First Street to Twelfth Street and from the Flood Control R/W to Mission Lakes Boulevard. We assume that the portions of pavement that are in good condition will receive a slurry seal to provide a new wearing surface for the new buffered bike lane striping. To properly design the pavement rehabilitation, we have included eight (8) pavement cores in the existing pavement.

See the map exhibit below delineating the approximate limits of the proposed pavement improvements and locations of the proposed pavement cores.

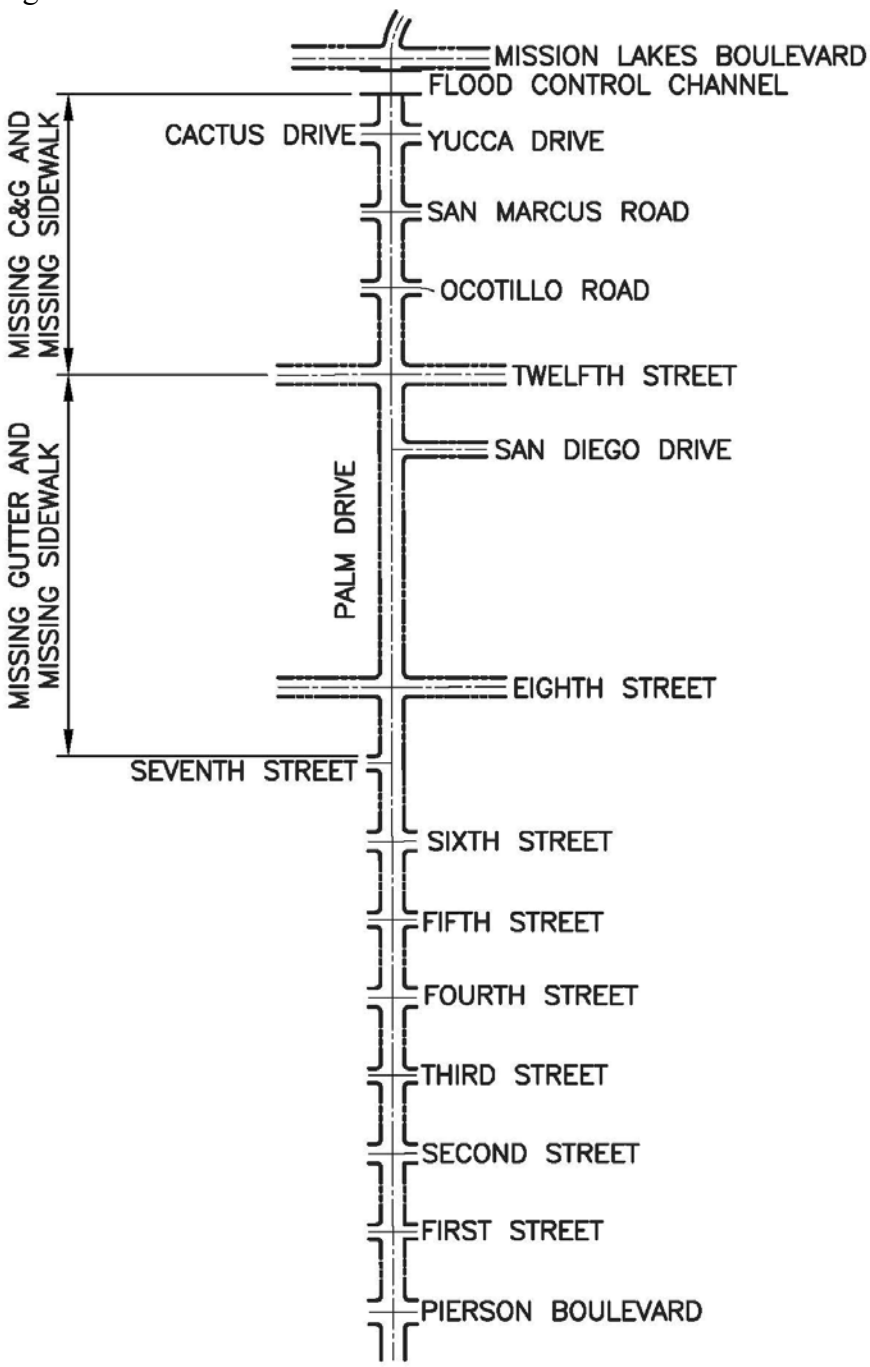


Anticipated pavement rehabilitation design.

We have included in our Scope of Services the proper topographic survey, pavement cores, and level of effort to design the pavement rehabilitation improvements described above.

Concrete Improvements

In addition to the ADA upgrades described above, there are many locations within the project limits where there is missing curb and/or gutter and sidewalk (generally north of Seventh Street). Many existing cross gutters within the project limits are damaged and/or incomplete. The design of new curb and/or gutter (plan and profile), cross gutters, and sidewalk is included in our design level of effort. See the map exhibit below delineating the approximate limits of the missing curb and/or gutter and sidewalk.



Missing curb and/or gutter and sidewalk.

Street Lighting

There are approximately 17 existing street lights on Palm Drive from Pierson Boulevard to Mission Lakes Boulevard. To comply with the City's standard for street light spacing (150 feet, staggered), there should be approximately 35 street lights on this reach of Palm Drive. Our level of effort will include inventorying the existing street lights, the layout of new street light locations, and the preparation of the street lighting base map in SCE's format for SCE to design the new street light system(s).

SCOPE OF SERVICES

Task 1.0 Project Management

1.1 Meetings

Our project manager will attend meetings as necessary with City staff to present our design of the proposed improvements in an effort to expedite the review process and efficiently complete the design and specifications for bidding by the City. We have estimated our level of effort based on the typical number of meetings required for this size and type of project based on our experience. However, Omnis recognizes that additional meeting time may or may not be required to properly complete the project in a timely manner and Omnis will not pursue any additional compensation for meeting hours over our estimate.

Deliverables: Meeting agenda and meeting minutes if required.

1.2 Utility Coordination

Omnis will send out initial utility notifications to all utility companies that have facilities within the City making them aware of the upcoming construction activities and requesting copies of their maps, plans, and/or sketches of their existing and/or proposed facilities within the project limits. We will send out copies of progress submittals to affected utility companies and notify them of the approximate project construction schedule.

Omnis staff will follow-up with utility companies that do not reply to initial requests by telephone and in person if necessary. Copies of the design plans will be sent to the utility companies for their review and comment and to obtain any special requirements to protect their facilities.

Deliverables: Copies of all correspondence and utility log.

Task 2.0 Preliminary Investigation

2.1 Multi-Way Stop Analysis

Omnis' subconsultant (George Dunn Engineering) will perform a multi-way stop analysis in accordance with Chapter 2B of the California Manual on Uniform Traffic Control Devices for the intersection of Palm Drive and Twelfth Street and will prepare a memorandum summarizing the results of the analysis and provide recommendations.

Deliverable: Memorandum regarding Multi-way Stop Analysis with summary of findings and recommendations.

2.2 Topographic Survey

Omnis' subconsultant will provide topographic survey including the following:

- Topographic survey and cross-sections
  - Pierson Boulevard to First Street: Topographic survey only, no cross-sections
  - First Street to Eighth Street: Topographic survey and cross-sections from back of walk; cross-sections at all curb returns and at 50-foot max interval
  - Eighth Street to Mission Lakes Boulevard: Topographic survey and cross-sections from 30 feet beyond curb/berm face; cross-sections at all curb returns and at 50-foot max interval
- Survey to extend a minimum of 25 feet beyond curb returns on all side streets unless otherwise noted
- Survey detail all curb returns and existing curb ramps (approximately 50 total)
- Survey detail at non-ADA compliant driveway approaches (approximately 25 total)
- Collect survey monumentation and establish centerline and R/W per record maps
- Collect all surface utilities, trees, landscape features, signs, mailboxes, walls, fences, pavement striping and markings, etc. within the project limits
- Establish vertical control using local city or county benchmark

Deliverable: There will be no separate deliverable of the topographic survey. However, the survey information will be shown on the design plans.

2.3 Pavement Investigation

Omnis' subconsultant will perform eight (8) pavement cores along Palm Drive to determine:

- Existing asphalt concrete thickness and layers
- Existing aggregate base thickness
- Subgrade in-situ moisture content
- Subgrade maximum dry density and optimum moisture content

- Subgrade R-value (minimum 4 locations)
- Recommended replacement pavement section options (AC/AB) for T.I.=8.0

Deliverables: Letter report summarizing findings and recommendations including core logs, laboratory test results, and recommendations for a replacement pavement section.

2.4 Site Investigations and Base Plans

Omnis will review the project site in detail in the field to ensure that all surface culture pertinent to the design of the proposed improvements is inventoried and design constraints will be identified and noted.

Base plans will be prepared by Omnis staff from the topographic survey. Existing utilities will be plotted from record plans provided by utility agencies. The base plans will be prepared on City-standard titleblock at a scale of 1"=40'.

Deliverables: There will be no separate deliverable of the base plans. However, the base plan information will be shown on the design plans.

Task 3.0 Improvement Plans

Anticipated plan set:
Title sheet..... 1 sheet
Street Improvements ..... 5 sheets
Construction Details..... 3 sheets
Signing & Striping ..... 3 sheets

Total plan set..... 12 sheets

3.1 Street Improvement Plans

The street improvement plans will include plan and profile sheets to describe the new pavement crown profile for the reaches that will be reconstructed and for the new curb and/or gutters and median curbs. The street improvement plans will also include limits of concrete improvements such as curb ramps, curbs, gutters, cross gutters, sidewalks, and driveway approaches.

Special details and sections will be prepared for driveway approaches to meet ADA guidelines and for private driveway modifications to join the on private property. This will likely include retaining curbs, or small retaining walls, at the back of the new sidewalk for the properties north of Twelfth Street.

Omnis will prepare a base plan in SCE's format showing the proposed street light locations for use in SCE's design of the new lighting system(s). The proposed street

light locations will be shown on the street improvement plans with reference to the street lighting plans prepared by SCE.

3.2 Signing and Striping Plans

Omnis will prepare signing and striping plans that include new crosswalk striping, new buffered bike lane striping along Palm Drive, and additional pedestrian and bicycle safety signage and markings throughout the project area. If the multi-way stop is recommended at Twelfth Street, additional solar-powered flashing stop signs will be included in the design at Twelfth Street.

3.3 Specifications and Estimate

Omnis will prepare the project specifications from a boilerplate provided by the City. We will include the appropriate detailed project descriptions, bid schedules, bid item descriptions, payment methods, special provisions, and technical provisions for the work. A construction cost estimate will be prepared from the items and quantities shown on the bid schedule and using bid prices from recent projects.

Task 4.0 Bid and Construction Period Services

Omnis will be available to respond to questions during the bid period and issue addenda required to clarify the plans and specifications. Omnis will be available during construction for technical oversight as required by City staff.

Deliverables: Responses to questions during bidding regarding the plans and specifications and addenda required to clarify the plans and specifications.

Task 5.0 Contingency Engineering & Inspections

Omnis will be available to respond to unknown conditions that require additional engineering, research and/or inspection services. Questions and Issues during the bid period and/or construction will be identified, reviewed, and solutions will be prepared which may include Plans & Specifications. Omnis will be available during construction for technical oversight as required by City staff.

OMNIS INCORPORATED

FEE SCHEDULE

		Project Manager	Project Engineer	CAD Technician	Admin	Surveying	Geotechnical	George Dunn Engineering	
	Task/Description	$140	$135	$85	$50				Subtotals
1.0	Project Management								
1.1	Meetings	24			6				$3,660
1.2	Utility Coordination	2		24	2				$2,420
2.0	Preliminary Investigation								
2.1	Mult-Way Stop Analysis	2						$1,500	$1,780
2.2	Topographic Survey	4				$18,000			$18,560
2.3	Pavement Investigation	4					$7,000		$7,560
2.4	Site Investigations and Base Plans	4	16	80	8				$9,920
3.0	Improvement Plans								
3.1	Street Improvement Plans	8	80	280	8				$36,120
3.2	Signing and Striping Plans	4	40	60					$11,060
3.3	Specifications and Estimate	4	32	16	4				$6,440
4.0	Bid and Construction Services	4	12		4				$2,380
5.0	Contingency Engineering	40	160	160	40				$42,800
	Totals =	$14,000	$45,900	$52,700	$3,600	$18,000	$7,000	$1,500	**$142,700**