



780 N. 4th Street
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(760) 370-3000
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77-948 Wildcat Drive
Palm Desert, CA 92211
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April 3, 2024

Ms. Andrea Varela
Mission Springs Water District
66575 Second Street
Desert Hot Springs, CA 92240

Subject: Construction Testing Services
Watermain Emergency Repair @ 3 Sites
Desert Hot Springs, California
LCI Proposal No.: LP24060T

Dear Ms. Varela:

LandMark Consultants, Inc. is pleased to provide this proposal for construction testing at the proposed watermain emergency repair project located at 13th Avenue, Mission Lakes Blvd. and Thomas Avenue crossing the Mission Creek in the city of Desert Hot Springs, California.

The following scope of work is anticipated for this project:

- Compaction Testing of trench backfill.
- Laboratory Testing for Soil

Our services as described above will be provided for a **"budget fee"** of:

13 th Avenue crossing @ Mission Creek	\$ 6,000.00
Mission Lakes Blvd. crossing @ Mission Creek	\$ 9,500.00
Thomas Avenue crossing @ Mission Creek	\$ 7,800.00

Our services will be provided on a **time and materials** basis in accordance with the rates set forth in the attached Prevailing Wage 2023/2024 fee schedule.

We have attempted to be realistic in developing our estimate for this project; please keep in mind that our services are directly dependent upon the contractor's schedule and events which occur during the duration of the project which cannot always be predicted in advance. Any change in the contractor's schedule will impact on our budget. We will attempt to coordinate our services with the contractor's site superintendent to efficiently service the project. In the event that construction activities result in projected additional fees beyond those described herein, we will contact you for an additional written budget increase, if necessary.

The fees presented are based on prompt payment for services presented in our standard invoicing format. Please sign this agreement and return it to our office. We appreciate the opportunity to provide these services for the subject project. Please feel free to call me if you have any questions.

Sincerely Yours,
LandMark Consultants, Inc.

A handwritten signature in blue ink, appearing to read 'greg', followed by a long horizontal line extending to the right.

Greg M. Chandra, P.E., M.ASCE
Area Manager- Palm Desert Office



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ESTIMATE WORKSHEET - Civil

CLIENT: MSWD
PROJECT: 13th Avenue Emergency Watermain Repair
LOCATION: 13th Avenue Crossing @ Mission Creek
PROPOSAL NO.: LP24060T

FIELD	Trips	Hrs.		Rate	Total
Soil Technician-Onsite Compaction	6	36	@	\$ 130.00	\$ 4,680.00
Project Engineer (Meeting)	1	2	@	\$ 200.00	\$ 400.00
Subtotal:					\$ 5,080.00

LABORATORY

Maximum Density/Optimum Moisture	2	@	\$ 210.00	\$ 420.00
Subtotal:				\$ 420.00

PROJECT MANAGEMENT - REPORTS	10%	\$ 5,500.00	\$ 550.00
Subtotal:			\$ 550.00
TOTAL:			\$ 6,050.00



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ESTIMATE WORKSHEET - Civil

CLIENT: MSWD
PROJECT: Mission Lakes Blvd. Emergency Watermain Repair
LOCATION: Mission Lakes Blvd. Crossing @ Mission Creek
PROPOSAL NO.: LP24060T

FIELD	Trips	Hrs.		Rate	Total
Soil Technician-Onsite Compaction	10	60	@	\$ 130.00	\$ 7,800.00
Project Engineer (Meeting)	1	2	@	\$ 200.00	\$ 400.00
Subtotal:					\$ 8,200.00

LABORATORY

Maximum Density/Optimum Moisture	2	@	\$ 210.00	\$ 420.00
Subtotal:				\$ 420.00

PROJECT MANAGEMENT - REPORTS	10%	\$ 8,620.00	\$ 862.00
Subtotal:			\$ 862.00
TOTAL:			\$ 9,482.00



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ESTIMATE WORKSHEET - Civil

CLIENT: MSWD
PROJECT: Thomas Avenue Emergency Watermain Repair
LOCATION: Thomas Avenue Crossing @ Mission Creek
PROPOSAL NO.: LP24060T

FIELD	Trips	Hrs.		Rate	Total
Soil Technician-Onsite Compaction	8	48	@	\$ 130.00	\$ 6,240.00
Project Engineer (Meeting)	1	2	@	\$ 200.00	\$ 400.00
Subtotal:					\$ 6,640.00

LABORATORY

Maximum Density/Optimum Moisture	2	@	\$ 210.00	\$ 420.00
Subtotal:				\$ 420.00

PROJECT MANAGEMENT - REPORTS

10%	\$ 7,060.00	\$ 706.00
Subtotal:		\$ 706.00
TOTAL:		\$ 7,766.00

Landmark Consultants, Inc.
2023/2024 Standard Fee Schedule

**PROFESSIONAL RATES
(HOURLY)**

Principal Engineer	\$250
Senior Engineer	\$195
Project Engineer	\$200
Staff Engineer	\$145
Assistant Engineer	\$135
Operations Manager	\$170
Senior Geologist	\$195
Project Geologist	\$170
Staff Geologist	\$145

* \$25/hr added for all investigative work with legal (court) cases
* \$100/hr added for all depositions/court appearances w/ 4-hr min

TECHNICAL RATES (*)

Testing Technician-(Concrete/Masonry/Soils/Asphalt)	\$95.00
Special Inspector-(Masonry, Steel, Concrete, Welding & Bolt)	\$99.00
Laboratory Technician	\$86.50
Admin. Support Staff	\$90
Drafting	\$95
Copies of Reports (Min)	\$75

* \$35/hr added for all Testing/Laboratory Technician for PW rate
* \$41/hr added for all Special Inspector for PW rate

EQUIPMENT/MATERIAL CHARGES

2 & 4 WD Vehicle (per mile)	\$0.90
Tow-Behind Auger (per day)	\$150
Truck Mounted Drilling (Flight Auger per hr.)	\$275
Truck Mounted Drilling-(Prevailing Wage and Env. per hr.)	\$425
Per Diem Technicians/Inspectors (per day)	\$175
Per Diem Drillers (per day)	\$350
Trip Charge (per day)	\$285
Cone Penetrometer Mob	\$2,000
Piezocone and Stratigraphic Plots (per ft.)	\$15
Resistivity, Piezocone Testing (per ft.)	\$15
Seismic Piezocone Testing (per ft.)	\$30
Per Diem (CPT)	\$325
Grouting (per ft.)	\$8
Dozers, Backhoe, Portable Auger, etc.	\$Cost+10%
2" diameter slotted PVC Piezometer (w/filter sock & gravel pack per ft.)	\$12
8" diameter cast-iron Piezometer cover	\$50

**MATERIALS TESTING EQUIPMENT-FIELD
(DAILY RATES)**

Swiss Hammer (Concrete)	\$75
Masonry Mortar Penetrometer	\$75
Vibrating Probe (Concrete)	\$90
Generator	\$150
Coring Machine	\$150
2" Diamond Bit/Core	\$40
3" Diamond Bit/Core	\$50
4" Diamond Bit/Core	\$60
6" Diamond Bit/Core	\$80
8" Diamond Bit/Core	\$100
Rebar Locator (R-Meter)	\$85

COMPACTION CURVES

Relative Compaction (CAL 216)	\$250
Standard 4" Mold, D698 Method A	\$200
Standard 6" Mold, D698 Method B,C,D	\$225
Modified 4" Mold, D1557 Method A	\$210
Modified 6" Mold, D1557 Method B,C,D	\$240
Relative Density	\$450
Relative Compaction	\$250

SOIL & AGGREGATE STABILITY

R-Value (CAL 301)	\$315
CBR 100% Compaction	\$650
Soil Cement, CTB, Mix Design	\$5,000
CTB Compression Test	\$100
Soil-Lime Compression Test (Includes Prep)	\$750

BASIC SOIL & AGGREGATE PROPERTIES

Sieve Analysis, Coarse & Fine Including Wash	\$135
Sieve Analysis, Coarse (CAL 202)	\$125
Sieve Analysis, Fine Including Wash	\$125
#200 Wash (CAL 202)	\$90
Sand Equivalent-Average of 3 (CAL 217)	\$105
Plasticity Index (CAL 204)	\$185
Expansion Index (UBC 29-2)	\$150
Moisture Determination and Unit Weight	\$50
Moisture Determination Only	\$25
Permeability Test (Undisturbed Samples) (D5084)	\$400
Permeability Test (Remolded Samples) (D5084)	\$480
Hydrometer (Without Specific Gravity)	\$300
Corrosivity Series (Resistivity, Ph, Sulfates, Chlorides)	\$245

Construction Administration/Project Management: 10% of Field & Laboratory Subtotal

2 hrs minimum will be charged for all field work and thereafter in actual hours. An overtime premium of 1.5 times the standard rate will be charged for all personnel services periods in excess of 8 hrs per day or Saturday, and 2 times the standard rate for work in excess of 12 hrs per week day, in excess of 8 hrs on Saturday, and all day on Sunday or holidays. ICC inspection will be charged 4 hrs minimum

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2023/2024 Standard Fee Schedule

SHEAR STRENGTH & CONSOLIDATION TEST

Unconfined Compression	\$140
* Direct Shear (3pt. Staged Test)	\$370
Consolidation, Per load Increment w/ Time Rate	\$125
Consolidation Test w/ Time Rate	\$450

AGGREGATE QUALITY

Organic Impurities (CAL 213)	\$110
Specific Gravity and Absorption, Coarse Aggregate (CAL 206)	\$85
Specific Gravity and Absorption, Fine Aggregate (CAL 207/208)	\$110
Unit Weight (Average of 3) (CAL 212)	\$75
Los Angeles Rattler Test-500 Revs (CAL 211)	\$190
Los Angeles Rattler Test-1000 Revs (CAL 211)	\$210
Sulfate Soundness 5 cycle test per primary size (C88)	\$145
Mortar Making Properties of Sand (CAL 515)	\$510
Potential Reactivity Test (ASTM C289)	\$990
Cleanness Value Test (CAL 227)	\$160
% Crushed Particles (CAL 205)	\$125
Flat & Elongated Particles per screen size (D4791)	\$80
Clay Lumps and Friable Particles (C142)	\$160
Lightweight Pieces in Aggregate (C123)	\$330
Durability Index-Coarse or Fine (CAL 229)	\$180

MASONRY

Compression Test, Grout Prisms	\$33
Compression Test, Mortar Cube/Cylinder	\$33
Compression Test, Masonry Unit	\$60
Compression Test, Masonry Prism (Grouted)	\$150
Absorption and Received Moisture, Masonry Unit (Unit weight, 3 required)	\$85
Grout or Mortar Specimen, Handled & Cured But Not Tested	\$33
Bond Test (Shear) for grout/masonry interface (DSA)	\$110

CONCRETE

Concrete Mix Design or Review (Not Including Lab Test)	\$500
Laboratory Trial Batch, Incl. Compression Testing of 6 Specimens	quote
Compression Test, Concrete Cylinder (CAL 521)	\$31
Unit Weight of Concrete Cylinders (CAL 518)	\$50
Flexural Strength, Concrete Beam (CAL 523)	\$105
Compression Test, Gunite	\$70
Compression Test on Cored Specimens	\$70
Cylinder Molds (if not tested by Landmark)	\$10
Drying Shrinkage Test, Set of 3 (CAL 537)	\$500
Modulus of Elasticity of 6"x12" Concrete Cylinder	\$300
Splitting Tensile Strength	\$95
Chloride Ion Determination (Water Soluble)	\$350

ASPHALT

Agg. Corr. Factor Ignition (Lab Mix)	\$480
Extraction % Bitumen (Reflux Method)-Inc. Shipping	quote
%Bitumen (Ignition Oven /Gradation of Extracted Sample)	\$265
Stabilometer Test on Premixed Sample (CAL 366)	\$420
Inc. Hveem Max. Density	
%Bitumen (Ignition Oven) (CAL 382)	\$150
Complete Design of Wearing Surface for a Given Asphalt/Aggregate, Hveem (CAL 367)	quote
Stability & Flow on Premixed Sample (Set of 3)	
Inc. Marshall Max. Density	\$420
Marshall Stability & Flow (Set of 4) Lab Mix	
Inc. Marshall Max. Density	\$490
Unit Weight of Asphalt Core (CAL 308)	\$55
Max Density of Mix by Marshall/Hveem Method (Without Mixing)	\$200
Maximum Theoretical Specific Gravity (CAL 309)	\$210
Maximum Theoretical Specific Gravity (ASTM D2041)	\$150
Index of Retained Strength	\$950
Tensile Strength Ratio (CAL 371)	\$1,250
Tensile Stress Ratio	\$800
Stripping (CAL 302)	\$200

METALS

Tensile, Up to ¾" (Not Including Machining Cost)	\$90
Greater than ¾"	\$150
Bend	\$90

WELDING QUALIFICATIONS - STRUCTURAL STEEL (PHYSICAL TEST METHOD - ASTM, AWS, API, AISC)

* Visual Inspection	\$97
* Magnetic Particle/Ultrasonic Testing	\$230
Operator Performance & Procedure Tests	\$110
Machining & Material Costs	\$85
Qualification Tests on Machined Coupons	\$200