



HUNSAKER & ASSOCIATES

IRVINE, INC.

PLANNING
ENGINEERING
SURVEYING
GOVERNMENT RELATIONS

IRVINE
LOS ANGELES
PALM DESERT
RIVERSIDE
SAN DIEGO

May 12, 2022

Mr. Remon Habib, PE
City Engineer
CITY OF LAKE ELSINORE
130 South Main Street
Lake Elsinore, CA 92530

Reference: **Terra Cotta Road Widening Improvements**

Subject: **Proposal for Professional Civil Engineering Services to Provide Preliminary and Final Engineering for Terra Cotta Road Widening**

Dear Mr. Habib:

Per your request and directives, Hunsaker & Associates Irvine, Inc. (H&A) is pleased to present this proposal for professional civil engineering services to prepare preliminary and final engineering, plans and profile for Terra Cotta Road Widening.

As one of the premier multi-disciplined civil engineering companies within Southern California, H&A is celebrating over 46 years of providing distinguished professional services to our clients and is distinctly suited to provide technically accurate and comprehensive civil engineering to develop the desired roadway for Terra Cotta Road Widening plan.

H&A has assembled a highly experienced and professional team, including specialized subconsultants to provide services for the Terra Cotta Road widening plans. A complete listing of our specialized subconsultants for Professional Engineering services is as follows:

- R.J. Lung & Associates, Inc. (Aerial Mapping)
- TJW Engineering, Inc. (Traffic Engineering)
- LGC Geotechnical, Inc. (Geotechnical Engineer)
- RGI Consulting (Dry Utility Engineer)

H&A strictly adheres to our policy of non-discrimination against any employee or employment application because of race, color, religion, sex or national origin. We possess policies of insurance, which meet or exceed Agency Agreement requirements.

Hunsaker & Associates Irvine, Inc. is grateful for the opportunity to submit this Proposal. We look forward to working with the City of Lake Elsinore to ensure this project is engineered in an economical and cost effective manner, in compliance with applicable state law, Agency standards/procedures and policies. Should you have any questions, please do not hesitate to contact me directly at (949) 768-2572.

Sincerely,

HUNSAKER & ASSOCIATES IRVINE, INC.

Sean Swanson
Project Manager

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FOUNDING PARTNERS:

RICHARD HUNSAKER
TOM R. McGANNON
JOHN A. MICHLER
DOUGLAS G. SNYDER

Three Hughes
Irvine, California
92618-2021

(949) 583-1010 PH

(949) 583-0759 FX

www.hunsaker.com



Exhibit A

Professional Civil Engineering Services to Provide Final Engineering for Terra Cotta Road Widening

SCOPE OF SERVICES

H&A has developed a comprehensive scope of services that is anticipated to evolve Terra Cotta Road Widening plan and profile that will be acceptable to the City of Lake Elsinore. The scope of services, subject to your approval and based on the general understandings and assumptions herein, will be as follows:

PHASE I – PRELIMINARY ENGINEERING

Office Engineering

Phase I Roadway Widening Concept Plans Development

1. Conduct **Research** of public files for existing and planned infrastructure, survey/Right-of-Way. Identify voids in reference data, etc.
2. Prepare Preliminary **Design Schedule**.
3. Perform visual **Site Inspections**, obtain site photos and identify field constraints at join conditions.
4. Prepare Exhibit showing Existing Right-of-Way within project limits showing APN's and owner's names of adjacent parcels (**Record Calcs**).
5. **Conceptual Grading Exhibit** prepare horizontal and vertical alignment for Terra Cotta Road and Nichols Road to identify daylight conditions including Traffic Signal and geometric design for turn-pockets at intersections on both Terra Cotta Road and Nichols Road including any transitions to intersections as needed for City buyoff on geometric alignment design. Terra Cotta Road to include Ultimate Pavement Intersection per City Std. 104 (see attachment A). Will include all returns to each existing intersection. Identify and propose drainage easements and temporary construction easements.
6. **Hydrology Report and Research** - Review existing reports/analysis for: Hydrology, Hydraulics, and Storm Water Quality. Prepare a hydrology study to determine 100-, 25- and 10-year discharges for flood protection, inlet, pipe and culvert sizing.
7. Prepare Preliminary **Composite Utility Exhibit** showing all wet utilities combined with dry utility Exhibit.
8. Project **Coordination Meetings** with City (assume 3 meetings attended by two team members, including Kick-Off meeting).
9. Project **Coordination Meetings** with EVMWD (assume 3 meetings attended by two team members, including Kick-Off meeting).
10. Project **Coordination Meetings** with KWC Engineering (assume 3 meetings attended by two team members, including Kick-Off meeting).



Exhibit A Scope of Services, cont.

Deliverables:

- Preliminary design Schedule (Item #2)
- Right-of-Way Exhibit (Item #4)
- Concept Grading/Construction Exhibit (Item #5)
- Preliminary Composite Utility Plan (Item #7)

Aerial Topography (Lung)

11. **Aerial Topography** - Provide 1"=20' minimum scale **one-half foot contour interval accuracy** aerial topographic mapping having 500-foot minimum wide strip coverage including existing roadway and adjacent fringe areas of entire Roadway project reach (L = 2,500± LF). Aerial mapping includes detailed site culture photogrammetric plotting for roadway project features.

Deliverables:

- 1"=20' scale aerial topography mapping. (Item #11)

Traffic Engineering (TJW)

12. Prepare **Concept Striping and Signal Plans** for Terra Cotta Road and the proposed signalized intersection at Nichols Road. The plans will be prepared at 40 scale (1"=40') using AutoCAD. The plans will include proposed and existing striping, new lane configurations, and potential locations and phasing for the signal equipment. Existing striping will be referenced at the project limits.

Deliverables:

- Preliminary Exhibit for Geometric Design of Intersection and Signal. (Item #12)

Soils/Geotechnical Engineering (LGC)

13. **Conceptual Design Recommendations** - Coordinate with the project team and provide geotechnical guidance during the conceptual design phase (prior to ultimate design evaluation). Services include attending design meetings, providing preliminary recommendations, and project management.

Deliverables:

- Geotechnical Memo (Item #13)

Dry Utility Consultant Engineering (RGI)

14. **General Services:**

- a. Prepare for, attend, and respond to action items resulting from the attendance at Project Team meetings during the course of the project.
- b. Address general dry utility items at the request of the Client but not specific to the current Scope.



Exhibit A
Scope of Services, cont.

- c. Prepare "Notice to Relocate" letter.

15. Dry Utility Planning:

- a. Assist Owner and Project Team with overall planning for Dry Utility facilities within the Project.
- b. Coordinate documents related to initial research and submittals for the Dry Utility Companies
- c. Generate initial conceptual dry utility layout and related dry utility Budget Cost Estimate

Deliverables:

- Utility Notices, Memos and Estimate (Item #14 & 15)

Field Engineering

(For project concept design only)

- 13. Set Aerial Targets** control survey for topography mapping herein including field notes reduction.
- 14. Provide Miscellaneous "Pick-Up" Topography** field locations data only for critical site culture necessary for concept plans development including miscellaneous gravity (storm drain) facilities manholes/inlet/outlet structures, etc. (budget estimate only).



Exhibit A

Scope of Services, cont.

H&A has developed an anticipated comprehensive scope of services for final engineering that is to evolve during Phase 1 Conceptual of Terra Cotta Road Widening plan and profile that will be acceptable to the City of Lake Elsinore. The scope of services, subject to your approval and based on the general understandings and assumptions herein, will be as follows:

PHASE II – FINAL ENGINEERING

Office Engineering

Phase II Anticipated Final Roadway Widening Plans

1. Prepare 1"=40' **Demo Plans and Grading Plans** for Nichols Road and Terra Cotta Road based on City approved Conceptual Grading Plans.
 - a. Includes all utility adjustments outside of curb to curb roadway and any utilities to be adjusted to grade.
 - b. Includes Erosion Control Plans.
 - c. Includes staged traffic control plans as required.
 - d. Includes Earthwork.
 - e. Does not include Retaining Walls at this time.
2. Prepare 1"=40' minimum scale **Street Improvement Plan** and Profile for Terra Cotta Road and Nichols Road based on City approved Conceptual Grading Plans.
3. Prepare 1"=40' minimum scale **Storm Drain Improvements** facilities plan to accommodate roadway construction to include conduit, manholes, junction structures, laterals, inlets, drainage details and associated grading improvements, including hydraulic calculations and pipeline sizing for new storm drain culvert facilities. Includes WQ sheets as required.
4. Prepare **Transportation Guidance Document**.
5. **Technical Specs** - Prepare project specifications per City of Lake Elsinore "sample" roadway Technical Provisions. Including City street light specifications. Revision work also includes pre-bid draft and coordination with Construction Manager to structure general provisions.
6. Project **Coordination Meetings** with City (assume 6 meetings attended by two team members, including Kick-Off meeting).
7. Prepare **Engineer's Estimate**.
8. **Field Support** - Attend construction coordination meetings as directed CITY to assist CM with review of Contractor's construction progress reports and "look-ahead" schedules delineating upcoming construction tasks, provide construction/ engineering consultation during meetings and attend periodic site visits to address Contractor's/CM construction activities related questions.



Exhibit A Scope of Services, cont.

9. Coordinate submittals to RCFC and WCD as required for final permitting.
10. Conduct field **Survey**; this survey will be of the existing parcels and centerline of Terra Cotta Road.
11. Prepare **Boundary Analysis** and file a record of survey of Terra Cotta Road.
12. Prepare **Legal Descriptions** for ultimate right-of-way of Terra Cotta Road. Includes drainage, wet and dry utility easements as well as any (if needed temporary construction easements). The amount is for budget purposes and could increase or decrease based on final constraint maps.

Deliverables:

- Demo and Grading Plan (Item #1)
- Street and Storm Drain Plan (Item #2 & 3)
- Technical Specs (Item #5)
- Engineers Estimates (Item #7)
- Boundary Analysis (Item #11)
- Legal Descriptions (Item #12)

Traffic Engineering (TJW)

13. Prepare **Signing and Striping Plans** for the work associated with the project for the approximately 2,600-foot segment of Terra Cotta Road between Nichols Road and Grey Avenue. The plans would include the signing and striping affected by the construction of the roadway extension and the proposed traffic signal at the intersection of Terra Cotta Road and Nichols Road. The plans would be designed per the standards set forth by the City of Lake Elsinore. The plans will be prepared at 40 scale (1"=40') using AutoCAD. The plans will include all new signs and striping, pavement markings, pavement legends, and removal of any conflicting sign or stripe elements. Existing striping will be referenced at the project limits.
14. Prepare **Traffic Signal** design plan for a new signal at the intersection of Terra Cotta Road at Nichols Road. Plans will be prepared at 20 scale (1"=20') using AutoCAD and be designed per the standards set forth by the City of Lake Elsinore. The plans will include but not be limited to, signal pole and mast arm equipment type and locations, signal controller cabinet and service cabinet locations, conduit and their schedule, phase diagrams and other appurtenances associated with the operation of a traffic signal system. TJW will also coordinate with the City of Lake Elsinore for service cabinet and service point connection and work to complete service. Potholing exhibits will be provided as part of the design plans. Additional coordination efforts for potholing to determine final locations of traffic signal equipment may be coordinated with HUNSAKER and/or the City. These plans would be designed to match the street improvements as per the proposed project.



Exhibit A Scope of Services, cont.

15. Prepare **Street Lighting Plans** for the work associated with the project along Terra Cotta Road and the intersection with Nichols Road. The design plans will include but not be limited to, using City LS2B light poles and locations, pull box type and locations, conduit, circuit diagrams and SCE service point locations. In addition, the task will include photometric diagrams for the proposed street lighting and voltage drop calculations. The design plans will be 40 scale (1" = 40').
16. Prepare **Traffic Control Concept Plans & Reviews** for roadway widening, curb & gutter, sidewalk, and storm drain utilities on the Terra Cotta Road extension and the Nichols Road intersection. Traffic will be utilizing the existing, interim roadways. TJW would design the construction in phases in order to maintain traffic on both Terra Cotta Road and Nichols Road. The concept plans will be 40 scale (1" = 40').

Deliverables:

- Signing & Striping Plans (Item #12)
- Traffic Signal Plans (Item #13)
- Street Lighting Plans (Item #14)
- Traffic Control Concept Plans (Item #15)

Soils/Geotechnical Engineering (LGC)

17. Mark boring locations and notify **Dig Alert**. Client shall provide any information regarding any known subsurface utilities. We cannot be responsible for unmarked utilities.
18. Perform a **Subsurface Field** evaluation consisting of excavation of hollow-stem auger borings including the following:
 - a. Approximately 4 to 6 hollow-stem auger borings.
 - b. A geologist or engineer will be onsite to direct the field operations, collect samples, and log the geotechnical borings. We have assumed excess soil cuttings can be left on-site and spread out next to each hole. Should the excess soil cuttings require disposal, additional costs (not included) here will apply.
19. Obtaining bulk and driven samples for classification and laboratory testing from the borings. The **Laboratory Testing** will likely include in-situ moisture and density, grain size analysis, Atterberg Limits (liquid limit and plastic limits), expansion index, R-Value, laboratory compaction and testing for corrosivity characteristics (sulfate and chloride content).
20. Perform **Geotechnical Interpretation** and analysis of field and laboratory data. Prepare one geotechnical report for the planned street improvements summarizing our findings, conclusions, and geotechnical recommendations based on the 2019 California Building Code (CBC).



Exhibit A
Scope of Services, cont.

21. **Optional Infiltration:** Perform optional infiltration testing within two of the borings (one day) to depths of approximately 5 to 10 feet below ground surface (actual depth of infiltration and location to be coordinated with the civil engineer). Install infiltration testing standpipes for onsite infiltration testing within the shallow borings. A geologist or engineer will pre-soak the test location and return the following day to perform the infiltration testing. The infiltration locations will be backfilled with crushed rock or sand at completion of testing.

Incorporate results of infiltration testing into the proposed geotechnical design report.

Deliverables:

- Geotechnical Report (Item #17-21)

Dry Utility Consultant Engineering (RGI)

22. General **Services/Dry Utility Planning**
23. Coordination with Dry Utilities and City related to **“Notice to Relocate” Process:**
- Prepare exhibits, obtain updated documents and information requested by dry utility companies and prepare “Notice of Intent” Packages to Dry Utilities for this portion of the project. Review packages with Project Team members to ensure that all packages have the latest electronic and development information.
 - Make submittals to dry utility companies on behalf of City and establish “Rights Checks” from each dry utility company.
 - Coordinate processing of “Notice of Intent” packages from City/Civil to each of the dry utility companies involved in the project. Confirm receipt of same by each respective dry utility design representative. Once plans have progressed to an 80% completion, coordinate with City/Civil/Dry Utility companies on the “Notice to Prepare to Relocate” process. Once the plans have been signed, Coordinate with the “Notice to Relocate” process with each of the dry utility companies and establish schedules for same.
 - Coordinate processing of Agreements Funding Requests, and easement quitclaim documents, if any, to ensure consistency in Project Schedule.
 - Prepare for, attend, and address follow-up action items resulting from attendance at one (1) Pre-Con meeting between City Contractor and Dry Utility crews.



Exhibit A
Scope of Services, cont.

24. SCE Transmission and **SCE Corporate Real Estate** for Roadway Improvements:
- a. Prepare exhibits, obtain updated documents and information requested by SCE CRE and prepare Submittal Packages to same for their impacted portion of the project. Review packages with Project Team members to ensure that all packages have the latest information.
 - b. Make submittals to SCE TPM and establish their process with Chronological commitment dates. Meet with SCE TPM and Transmission to identify with City what roles SCE will play in the project. Review SCE schedule with Project Team and establish approvals.
 - c. Assist City and SCE Transmission with preparation of plans for review by City.
 - d. Coordinate processing of final SCE plans for the Roadway Improvements portion of the project. Obtain final plans from SCE and review same with Project Team. Address Plan Check comments and process changes and updates to establish final plan approvals.
 - e. Coordinate processing of Agreements, Funding Requests, and easement documents, if any, to ensure consistency in Project Schedule.
25. New **Business Tasks** Service Work Orders for **Terra Cotta Road** Improvements:
- a. Prepare exhibits obtain updated documents and information requested by dry utility companies and prepare Submittal Packages to Dry Utilities for this New Business portion of the project. Review packages with Project Team members to ensure that all packages have the latest electronic and development information.
 - b. Make submittals to dry utility companies and establish design schedules with Chronological commitment dates from each dry utility company. Meet with Power Company Distribution Service Planner to obtain his/her “red-line” conduit layout for their facilities. Review red-line layout with Project Team and establish approvals.
 - c. Generate Dry Utility Base maps and establish layouts for dry utilities for their facilities. Review layouts with Project Team and Dry Utility company representatives to obtain tentative approvals. Update Dry Utility Composite Plans based upon current Project Team's electronic files and establish agreements with all parties.



Exhibit A
Scope of Services, cont.

- d. Coordinate processing of final Dry Utility plans for the Roadway New Business portion of the project. Obtain final plans from each dry utility company and review same with Project Team. Address Plan Check comments and process changes and updates to establish final plan approvals.
 - e. Coordinate processing of Agreements, Funding Requests, and easement documents, if any, to ensure consistency in Project Schedule.
- 26. Phasing segments and New **Business Tasks** for **Nichols Road** Improvements:
 - a. Prepare exhibits, obtain updated documents and information requested by dry utility companies and prepare Submittal Packages to Dry Utilities for this New Business portion of the project. Review packages with Project Team members to ensure that all packages have the latest electronic and development information.
 - b. Make submittals to dry utility companies and establish design schedules with Chronological commitment dates from each dry utility company. Meet with Power Company Distribution Service Planner to obtain his/her "red-line" conduit layout for their facilities. Review red-line layout with Project Team and establish approvals.
 - c. Generate Dry Utility Base Maps and establish layouts for dry utilities for their facilities. Review layouts with Project Team and Dry Utility company representatives to obtain tentative approvals. Update Dry Utility Composite Plans based upon current Project Team's electronic files and establish agreements with all parties.
 - d. Coordinate processing of final Dry Utility plans for the Roadway New Business portion of the project. Obtain final plans from each dry utility company and review same with Project Team. Address Plan Check comments and process changes and updates to establish final plan approvals.
 - e. Coordinate processing of Agreements, Funding Requests, and easement documents, if any, to ensure consistency in Project Schedule.
- 27. CAD Updates – Base Maps/Composite Plans/Exhibits:
 - a. Address Project Team CAD Base File updates and convert same to "SCE Format" and Low- Voltage CAD format files.
 - b. Generate DUCP Base Files and address changes to DUCP based on new CAD files from Project Team members.



Exhibit A
Scope of Services, cont.

- c. Distribute updated CAD Base Files and DUCP updates to dry utility personnel as a result of updates provided by Project Team members.

Deliverables:

- Notice to Relocate Memos (Item #23)
- Service Work Order Letters (Item #25)
- Base Maps/Composite Plans/Exhibits (Item #27)



Exhibit B

Professional Civil Engineering Services to Provide Final Engineering for Terra Cotta Road Widening

GENERAL UNDERSTANDINGS AND ASSUMPTIONS

1. These fees do not include title documents or insurance we assume City will obtain for such services.
2. Design for landscape items and appurtenances is **not** a part of this proposal.
3. Governmental Agency fees or charges are to be the responsibility of the Client.
4. The Engineer's work **does NOT** include any ecological or environmental CEQA studies work for the Roadway project, City to provide. We have assumed the City will have one for such services
5. This proposal **does NOT** include acoustical studies or separate noise wall mitigation plans.
6. We have assumed Client or City shall be responsible for any Right-of-Way land acquisition/land quitclaim/acquiring new easements etc. work associated with this project. We have assumed such fees for parcels.
7. WQMP is not required for this project, only the Transportation Guidance Document.
8. SWPPP will be prepared by Contractor.
9. Water and Sewer plans are assumed to be installed with no relocation required per latest improvement plans.
10. **No** retaining wall structural designs are not anticipated at this time and is not included in this proposal.
11. **No** hazardous materials, archeology, paleontology are assumed to be encountered within the project limits.
12. **No** QSP Water Quality testing services are included in this proposal.
13. The following is a summary of the insurance coverages that Hunsaker & Associates Irvine, Inc. provides and is included in our offer of this proposal:

General Liability	\$ 2,000,000
Personal Injury	\$ 1,000,000
Auto Liability.....	\$ 1,000,000
Professional Liability	\$ 2,000,000
Valuable Papers.....	\$ 1,850,000

Upon request, we will provide a Certificate of Insurance for the insurance coverages listed above. Should you require additional coverage, the costs that we incur from our insurance carriers will be invoiced at their direct costs and are not included in our fee quoted within this proposal.



Exhibit B
General Understandings and Assumptions, cont.

14. **Special design issues will be handled on a time and materials basis.** Engineering fees for any substantial scope of work changes, discoveries made upon design planning evolution, additions and/or revisions etc., shall be negotiated and agreed upon by the Client and H&A in conjunction with any special issues work.
15. At the time of construction completion, the Contractor will provide Hunsaker & Associates with **field marked-up “red-line” project improvement plans prints (approved by City inspector) of all “As-built” changes to the approved construction plans** for incorporation of said “As-built” conditions onto “Record” Mylars for City files. **This proposal provides a budget estimate only for As-built Record drawings plans preparation.**
16. We have assumed centerline monuments will be included with the previous road project, which should include centerline tie-notes. We have therefore excluded tie notes from this proposal.



Exhibit C

Professional Civil Engineering Services to Provide
Final Engineering for Terra Cotta Road Widening

ENGINEERING FEES

Phase I – Preliminary Engineering

Office Engineering

1. Research	\$ 6,800
2. Design Schedule	\$ 3,240
3. Site Inspection	\$ 1,300
4. Record Calcs	\$ 7,000
5. Conceptual Grading Exhibit.....	\$ 25,920
6. Hydrology Report and Research	\$ 14,260
7. Composite Utility Exhibit.....	\$ 6,480
8. Coordinate Submittals to RCFC and WCD as required for permitting.	\$ 3,240
9. Consultation/coordination/meetings attendance (budget estimate).	\$ 4,860

Aerial Topography (Lung)

10. Aerial Topography	\$ 8,400
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Traffic Engineering (TJW)

11. Conceptual Striping and Signal Plans	\$ 5,800
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Geotechnical Engineering (LGC)

12. Conceptual Design Recommendations	\$ 1,800
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Dry Utility (RGI)

13. General Services	\$ 3,500
14. Dry Utility Planning Tasks	\$ 4,300

Subtotal Office \$ 96,900

Field Engineering

15. Set aerial targets control survey.	\$ 5,600
16. Miscellaneous pick-up topography (budget estimate).	\$ 5,000

Subtotal Field \$ 10,600

Total Phase 1 – Preliminary Engineering \$ 107,500



Exhibit C
Engineering Fees, cont.

Phase II – Final Engineering

Office Engineering

1.	Demo and Grading Plans	\$ 67,000
2.	Street Improvement Plans	\$ 82,000
3.	Storm Drain Improvement Plans	\$ 19,440
4.	Prepare Transportation Guidance Document.	\$ 1,300
5.	Technical Specs	\$ 18,000
6.	Consultation/Coordination/Meetings Attendance	\$ 4,860
7.	Engineers Estimate	\$ 3,888
8.	Field Support	\$ 9,720
9.	Boundary Survey	\$ 27,000
10.	Boundary Analysis	\$ 15,000
11.	Legal Descriptions (budgeted cost).....	\$ 50,000

Traffic Engineering (TJW)

12.	Signing and Striping Plans	\$ 4,600
13.	Traffic Signal Plans	\$ 13,800
14.	Street Lighting Plans	\$ 13,800
15.	Traffic Control Concept Plans & Review	\$ 3,500

Soils/Geotechnical Engineering (LGC)

16.	DigAlert/Background Review	\$ 580
17.	Subsurface Field Work	\$ 5,200
18.	Laboratory Testing	\$ 2,300
19.	Geotechnical Report	\$ 3,500
20.	Subsurface Infiltration (Optional)	\$ 2,900

Dry Utility Consultant Engineering (RGI)

21.	General Service/Planning	\$ 11,100
22.	“Notice” Processing	\$ 10,300
23.	SCE CRE/TPM Tasks	\$ 14,400



Exhibit C
Engineering Fees, cont.

24. DU New Business Tasks (Terra Cotta Road)	\$ 5,400
25. DU New Business Tasks (Nichols Road)	\$ 5,200
26. CAD Updates – Base Maps/Composite Plans/Exhibits	<u>\$ 4,800</u>
Total Phase 2 – Final Engineering	\$ 399,588
GRAND TOTAL PHASE 1 AND 2	<u>\$ 507,088</u>

All billing will be invoiced monthly at the following rates:

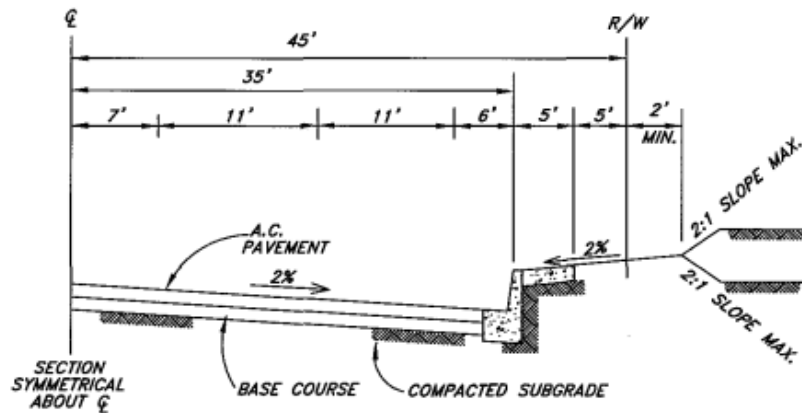
Principal	\$200/hour
Project Manager	\$162/hour
Project Engineer/Land Surveyor	\$162/hour
General Office Staff.....	\$162/hour
2-Person Survey Crew.....	\$278/hour (<i>used at Engineer's discretion</i>)
3-Person Survey Crew.....	\$340/hour (<i>used at Engineer's discretion</i>)

These rates will remain in effect until December 31, 2022, at which time they may be changed.

Any incidental expenses such as deliveries, reproductions, etc., are included in this proposal and will be billed at H&A costs plus 15%.



ATTACHMENT A



TYPICAL 1/2 WIDTH SECTION

NOTES:

- 1.) ADDITIONAL RIGHT OF WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY
- 2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R-VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR. SEE STD DWG 100
- 3.) MIN. T.I.=8
- 4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 19'.
- 5.) REFER TO GENERAL PLAN FOR BIKE LANE REQUIREMENTS
- 5.) STRUCTURAL SECTION COMPACTION PER APPROVED PLANS OR MIN. CALTRANS STANDARDS.

REVISION		ENGINEERING	DATE 01/09	CITY OF LAKE ELSINORE	
DATE	APPROVED	APPROVED BY		PREPARED BY PUBLIC WORKS	
		[Signature]		SECONDARY ARTERIAL	
		CITY ENGINEER		(4 LANE)	
		DATE 01/01/2009		NO. 104	