



December 12, 2019

City of Sparks  
Attn: Bob Schricker, Infrastructure Coordinator  
431 Prater Way  
Sparks, NV 89431

**RE: Proposal for Professional Services  
Avenue of the Oaks Realignment - Construction Drawings**

Dear Mr. Schricker

Christy Corporation, LTD (CC) is pleased to have this opportunity to present our proposal for professional services for design of the Avenue of the Oaks realignment in Victorian Square. The following Scope of Services was developed based on our meeting of October 2 and understanding of the project.

**Scope of Services - Professional Services**

<b>Task 1 – Meetings and Coordination</b>	<b>\$4,500 T&amp;M</b>
CC will be available for meetings and general coordination with the City of Sparks, utility agencies, adjacent property owners, and the design team as necessary throughout the design of the project.	
<b>Task 2 – Topographic Survey</b>	<b>\$3,220</b>
Conduct a topographic survey of the area of work and provide right-of-way boundaries sufficient for preparation of construction documents. CFA will perform these services under subcontract with Christy Corporation. We will perform a topographic survey to map the planimetric and topographic features in the area. Sufficient data will be collected to enable preparation of a 1-foot contour map at a suitable scale. Existing structures, features, and surface apparent utilities will be located. Invert elevations will be measured for any applicable utilities lying within the subject area. CFA will utilize previously completed boundary survey work for adjacent parcels for right-of-way limits.	
<b>Task 3 – Existing Utility Research</b>	<b>\$4,140 T&amp;M</b>
CC will research existing utility locations for inclusion in the plans. Research will include obtaining and reviewing record drawings for previous City of Sparks redevelopment projects in Victorian Square. Utility providers will be contacted to provide documentation of existing utilities including AT&T, Charter Communications, NV Energy (gas and electric) and TMWA. This task includes a \$200 fee charged by AT&T to provide existing utility information. CC will conduct	

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field visits for visual verification of existing facilities. No utility excavation or potholing is proposed with this work.

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**Task 4 – Geotechnical Investigation**

**\$6,380**

Conduct a geotechnical investigation and associated lab testing to provide design recommendations for the project. Black Eagle Consulting, Inc. (BEC) will provide these services under subcontract with the Christy Corporation.

The scope of work will include research, field exploration, field and laboratory testing, and engineering analyses to allow formulation of geotechnical recommendations for design and construction of this project. All of the above items will be summarized in a report suitable for use by project design team members, the City of Sparks, and bidding contractors.

BEC will obtain utility clearance from Underground Service Alert (USA) prior to exploration. There are significant utilities in the project area, we will also hire a private utility locator to identify potential utility conflicts with the exploration and will select appropriate locations for exploration. Exploration will be performed via advancing 2 test borings east and west of the circular surface water foundation feature within the existing pavers. Since the borings will be outside the current street alignment, we assume an encroachment permit will not be necessary from the City of Sparks; however, the exploration will require coordination with the City of Sparks to remove a traffic block post that exists for drill rig access. It is our understanding that the existing pavers are underlain by a PCC slab section. We will hire a concrete cutting subcontractor to core the pavers and underlying PCC prior to advancement of the borings. After the exploration, the borings will be backfilled with drill spoils and/or bentonite chips and patched at the surface with non-shrink grout.

The borings will be advanced using hollow-stem auger drilling techniques and through a depth of about 5 feet below existing grade. The existing section (pavers and underlying PCC and aggregate base) will be measured at the boring locations. Soils will be sampled with a 2-inch-outside-diameter, split-spoon sampler driven by a standard 140-pound drive hammer with a 30-inch stroke. The number of blows to drive the sampler 1 foot into undisturbed soil (standard penetration test) is an indication of the density and subgrade strength characteristics. Bulk samples will be collected from drill spoils. The subgrade soils will be logged by geotechnical personnel in the field. The groundwater surface will be measured if encountered.

Representative samples of significant soil types on each roadway segment will be tested in the laboratory to characterize the index properties of foundation soils, such as moisture content, grain size distribution, and plasticity. These index properties are indicative of the mechanical behavior of the soils. A resistance value (R-value) test will be performed on representative subgrade material for use in the PCC pavement design.

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The results of the research, site exploration, laboratory testing, and engineering analysis will allow formulation of geotechnical recommendation for the design and construction of this project. We will perform rigid pavement structural section design using the boring data as well as laboratory test (R-value) results on the subgrade soils. Unless other traffic data is available from the City of Sparks, the annual average daily traffic (AADT) counts available from the Nevada Department of Transportation (NDOT) traffic data at a location on C Street east of N Rock Boulevard will be used in the pavement design. The available NDOT data shows an AADT of 970 for year 2018. The geotechnical design and construction recommendations will be summarized in a geotechnical report that will cover:

- Description of subject roadway segment and other site conditions
- Summary of site exploration and field test results
- Summary of laboratory testing
- Subgrade soil and groundwater information
- Excavation characteristics
- Structural/utility backfill
- Site preparation/stabilization
- Subgrade soil preparation
- Pavement structural section analysis results and PCC pavement structural section recommendations
- Identification of recognizable construction problems.

The exploration can begin within 5 days of authorization, subject to drill rig availability and necessary coordination with the City of Sparks. A final report will be available 3 to 4 weeks following exploration.

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<b>Task 5 – Construction Documents – Civil Engineering Services</b>	<b>\$35,800</b>
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Civil Improvement Plans and Specifications will be developed to realign Avenue of the Oaks in Victorian Square between 13<sup>th</sup> Street and the former 12<sup>th</sup> Street alignment. The realignment will result in elimination of the existing fountain to straighten the street. The new street alignment will be paved with Portland cement concrete (PCC) and stamped concrete similar to the existing Avenue of the Oaks improvements. Adjacent pedestrian facilities will be designed as pavers to match existing facilities and transition zones will be provided in the design to transition to the existing plaza facilities as required. Two intersections will be designed transitioning to the existing north-south one-way connectors to Victorian Avenue in the plaza area.

Civil improvement Plans will consist of the following:

- Title Sheet with project information and vicinity map.
  - Notes sheet identifying general specifications and project requirements, legend, and abbreviations.
  - Demolition Plan – identifying limits of demolition required for the project and specific items of demolition.
  - Horizontal Control/Site Plan – identifying project horizontal construction information, and surface improvements. This plan will identify required signage and striping improvements as well.
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- Plan and Profile Sheets – identifying existing and proposed finished surface profiles, horizontal and vertical locations of existing utilities in the area of work to the extent information is provided by utilities or field surveying. Design assumption for this task assumes that existing water, sewer, primary electric, gas and storm drain main alignments will remain unchanged by the realignment with the exception of replacing or resetting surface structures. New storm drain inlets and laterals are anticipated to be required with the realignment. New lighting, private (City of Sparks) electrical and conduit facilities as well as new irrigation facilities are anticipated to be required and are listed in the electrical and landscaping scopes within this task.
- Hardscape Pattern Plan – identifying proposed final surface treatments for Portland cement concrete, stamped concrete, concrete paver areas, and temporary interface or transition areas between the new street alignment pedestrian routes and adjacent, existing plaza areas.
- Erosion Control Plan – identifying temporary erosion control measures for construction.
- Construction Details – identifying structural sections for streets, pedestrian routes, and plaza area transitions, construction details for paver areas, Portland cement concrete paving areas and joints, necessary special details for facilities specific to the project, and standard details for public facilities.

Construction Specifications – CC will provide book specifications for necessary items in the scope of construction to include a Bid Schedule, Special Conditions, Technical Specifications and Bid Item Clarifications. Standard Specifications for Public Works Construction (SSPWC – Orange Book) will be utilized where sufficient. Electrical and Landscaping specifications will be provided as plan specifications. The City of Sparks will prepare all construction contracts and front-end bid documents.

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**Task 6 – Construction Documents – Electrical Engineering Services** **\$12,240**

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Electrical engineering services will be provided by Dinter Engineering Company (DEC) under subcontract with Christy Corporation. Electrical engineering services will involve coordination with utility companies to protect or relocate utilities, coordination with utilities for power to new area lighting and illumination calculations for area lighting. Electrical engineering services include one field investigation visit and two design meetings.

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**Task 7 – Construction Documents – Landscape Architecture Services** **\$9,020**

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Landscape Architectural Design Services will be provided by L.A. Studio Nevada (LASN) under subcontract with Christy Corporation. Landscape construction documents will be prepared as follows:

- Planting Plan & Specifications. The planting plan will indicate the type, location, size, and condition of all trees, shrubs, and groundcover, and plan specifications for proper installation.
  - Irrigation Plan & Specifications. The irrigation plan will depict irrigation for all landscaping listed above. The plan will schematically indicate the
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type and location of all irrigation appurtenances including piping, valve, controller, and emission devices.

- Construction Details. The detail plans will depict proper installation of all planting and irrigation.
- Landscape Water Demand. LASN will prepare an estimated landscape water demand for submittal to the water authority.

It is assumed that construction documents will be provided to the City of Sparks at 50% design, 90% design, and 100% design documents will be provided for bidding and construction.

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<b>Task 8 – Utility Relocation Design – Additive Work</b>	<b>\$9,000 T&amp;M</b>
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Assumptions for the design of utilities are stated in Task 5. Should utility relocations be required for any mainlines, the design will be completed under this task and incorporated into the plans outlined in Task 5. The cost and scope of any additive work under this task will be agreed to between City of Sparks staff and Christy Corporation prior to performing the work and will be limited to the total cost amount of this task. Additive work may consist of realignments of sewer or storm drain main infrastructure, new or realigned water mains, fire hydrants, or water services. Additive work may also include extensive coordination for new or relocated dry utilities including facilities for NV Energy, AT&T, and Charter Communications as approved by the City of Sparks. Prior to providing any services under this task or payment for services under this task, a written Authorization for Additive Work will be executed by Christy Corporation and City of Sparks.

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<b>Task 9 – Bidding Support</b>	<b>\$4,600 T&amp;M</b>
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CC will provide support to the City of Spark during bidding as outlined below.

During bidding, CC will issue bid documents to requesting bidders, maintain a bidder list, provide responses to RFIs, attend a pre-bid meeting, and issue required addenda. CC will assist the City of Sparks in evaluating bids. CC will prepare a conformed set of plans and specifications for construction following bidding for use during construction.

Construction support may be provided by separate purchase order following award of contract.

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<b>Task 10 – Reimbursable Expenses</b>	<b>\$2,000 T&amp;M</b>
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CC will bill reimbursables at cost to the client. Reimbursables include printing, copies, mileage and other job-related expenses. This task will be billed on a time and materials basis, as needed, not to exceed.

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<b>TOTAL SERVICES</b>	<b>\$90,900</b>
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**Assumptions**

1. The services above shall be provided on a lump sum basis except for Tasks 1, 3, 8, 9, and 10 which will be billed on a time and materials basis, not to exceed.

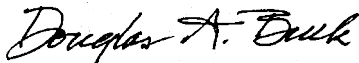
2. Client is responsible for direct payment of all application and permit and application fees and expenses unless specifically stated as part of the scope.
3. Traffic control plans will be provided by the contractor.
4. Bid set plan and specification printing costs to be paid by the bidding contractor.
5. Construction services including responses to RFI's, review of submittals, site visits, construction surveying and staking, construction contract administration, materials testing, and construction inspection will be performed by the City of Sparks or provided by separate proposal upon selection of the contractor and preparation of a construction schedule.

### **Schedule**

Christy Corporation anticipates a notice to proceed and beginning work in early January. The design schedule is approximately 10-12 weeks including deliverables at 50%, 90%, and Construction Documents (100% design). This schedule assumes and includes a week of agency review time at 50% and 90% completion.

We are confident that Christy Corporation and our design team will provide the City of Sparks with a successful project and look forward to working with you.

### **Christy Corporation, LTD**



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Douglas G. Buck, P.E.  
Engineering Manager

**FEE SCHEDULE**  
**EFFECTIVE JANUARY 1, 2019**

<b>CLASSIFICATION</b>	<b>STANDARD RATE</b>
PRINCIPAL ENGINEER	\$205
SENIOR ENGINEER	\$180
SENIOR PLANNER	\$170
PROFESSIONAL LAND SURVEYOR	\$125 - \$155
PROJECT ENGINEER / SENIOR DESIGNER	\$125 - \$155
STAFF DESIGNER / STAFF PLANNER / CAD TECHNICIAN	\$105 - \$130
ADMINISTRATIVE ASSISTANT / PROJECT COORDINATOR	\$90
MATERIALS & DIRECT CHARGES	COST PLUS 10%
OVERTIME WORK	RATE PLUS 50%
PRINTS 24x36 – BLACK & WHITE	\$2.50 PER SHEET
PRINTS 30x42 – BLACK & WHITE	\$3.50 PER SHEET
PRINTS 24x36 – COLOR	\$3.50 PER SHEET
PRINTS 30x42 – COLOR	\$4.50 PER SHEET
AUTO MILEAGE WILL BE CHARGED AT THE IRS STANDARD RATE	.58 CENTS PER MILE

**FEE SCHEDULE SUBJECT TO CHANGE JANUARY 1, 2020**



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