

**PROFESSIONAL ENGINEERING SERVICES CONTRACT FOR
TROPICANA AVENUE AND BROADBENT BOULEVARD –
BOULDER HIGHWAY TO CITY OF HENDERSON LIMITS**

THIS Contract, made and entered into this 20th day of July, 2021, between CLARK COUNTY, NEVADA, a political subdivision of the State of Nevada, hereinafter referred to as “COUNTY”, and JACOBS ENGINEERING GROUP INC., a corporation authorized to do business under the laws of the State of Nevada, hereinafter referred to as “ENGINEER”.

The initial addresses of the parties, which one party may change by giving notice to the respective other party, are as follows:

COUNTY	ENGINEER
Denis Cederburg, Director Clark County Department of Public Works 500 South Grand Central Parkway, Suite 2066 Las Vegas, Nevada 89106 (702) 455-6020	Ken Gilbreth, P.E., Vice President Jacobs Engineering Group Inc. 1301 North Green Valley Parkway, Suite 200 Henderson, Nevada 89074 (702) 369-6175

W I T N E S S E T H

WHEREAS, the COUNTY desires to obtain quality professional engineering services in connection with the work hereinafter described; and,

WHEREAS, the ENGINEER desires to provide such services in exchange for the fees hereinafter specified.

NOW, THEREFORE, for and in consideration of the premises and mutual covenants herein contained, it is agreed as follows:

ARTICLE I: DEFINITIONS

As used in this Contract, the following terms shall have the meanings as set out below:

“Basic Services” are those services as set forth in Section 2.02.

“County Surveyor” means the County Surveyor, or Deputy County Surveyor, for the County of Clark as designated by the Director to administer the Land Surveying aspects of this Contract.

“Director” means the Director of Public Works of the County of Clark, Nevada, and all persons designated by him, in a notice to the ENGINEER, to administer this Contract.

“Notice to Proceed” – A separate written notice from the Director.

“Direct Salary” is defined as the actual base rate of pay on an hourly basis of the ENGINEER’s employees whose time will be directly chargeable to this Contract. The ranges of base rate of pay to be used by the ENGINEER under this Contract are those specified in Exhibit “A” attached hereto and made a part hereof by this reference.

“Project Area” means the area within Clark County, Nevada.

“Special Services” are those services as set forth in Section 2.03.

“Project” means the roadway improvements on Tropicana Avenue and Broadbent Boulevard from Boulder Highway to City of Henderson, Nevada, Limits. Such improvements are to include, at a minimum, hot mix asphaltic concrete pavement providing four (4) travel lanes, a two-way left-turn lane with raised medians, buffered bike lanes, and intersecting side streets, storm drainage facilities, curbs, gutters, sidewalks, bus stops, streetlighting, traffic signals modifications, ped crossing flasher beacon at trail crossing, ITS facilities, utility modifications and relocations, traffic control devices, pavement markings, intersecting streets, horizontal and vertical transitions, and other necessary appurtenances required to make a good, complete, and serviceable Project.

ARTICLE II: SCOPE OF SERVICES

2.01 In General

The ENGINEER shall perform the Basic Services specified in Section 2.02 hereof, as well as those Special Services specified in Section 2.03 hereof that the Director authorizes the ENGINEER in writing, to perform.

Whenever the ENGINEER, in the course of performing the Basic Services, is required to present recommendations to the Director with respect to the advisability of or the need for any Special Service, such recommendation will be in writing and shall include a recommended scope of work for such Special Services and a recommended range of fees. If the ENGINEER recommends subcontract services, the recommendation shall also include the name(s) of the subcontractor(s) recommended by the ENGINEER and, if requested, a copy of the subcontract proposal(s).

2.01.1 Engineer Assignment

The ENGINEER shall assign Ken Gilbreth, P.E., as the Project Manager, who shall be responsible for all services to be performed under this Contract. No work may commence until ENGINEER has received a separate Notice to Proceed to commence work under the contract. All of the services specified by this Contract shall be performed by the Project Manager, or by the ENGINEER’s associates, employees and subconsultants under the personal supervision of the Project Manager. Should the Project Manager be unable to complete his or her responsibility for any reason, the ENGINEER shall notify the Director in writing, and within four (4) calendar days thereafter, nominate a replacement for the Director approval, in its reasonable discretion, who has an equivalent amount of experience performing the same type of services as required for the Project. An approved replacement

shall be assigned to the Project within ten (10) calendar days. If the Director is not satisfied with the replacement then the Director may terminate the Contract by giving five (5) days' written notice to the ENGINEER.

2.01.2 Subconsultant Services

With respect to any subconsultant services performed in connection with performance of the terms and obligations imposed under these Contract provisions, the ENGINEER agrees as follows:

- A. To pay the subconsultant if and when the ENGINEER is paid for the subconsultant's portion of the work by the COUNTY. The ENGINEER shall provide to the COUNTY lien releases from its subconsultants.
- B. The subconsultant does not have any contractual rights with the COUNTY.
- C. The Director has the right in its discretion to approve every subconsultant prior to such subconsultant's performance of any portion of the Project.
- D. The ENGINEER shall require that each subconsultant performing any portion of the Project:
 - Is duly formed, in good standing, and authorized to do business in the State of Nevada;
 - Is a duly licensed or registered architect, engineer, or other professional, as the case may be, with the State of Nevada, and such license or certificate of registration is in full force and effect;
 - Has obtained any and all licenses, certificates and permits that are required to be obtained by subconsultant by the Nevada Revised Statutes (NRS) and the Nevada Administrative Code (NAC), and by any other law, rule, regulation or ordinance applicable to subconsultant and to the performance of any part of the Project by subconsultant;
 - Is duly licensed and authorized to do business in the COUNTY, and such business license is in full force and effect; and
 - To comply with all laws, rules, regulations, and ordinances, as such may be amended, supplemented or modified from time to time, that are applicable to subconsultant and any portion of the Project performed by subconsultant.

2.02 Basic Engineering Services

Beginning on the date the Director notifies the ENGINEER to begin performance pursuant to a written Notice to Proceed; the ENGINEER shall proceed with furnishing the engineering detailed construction plans and specifications, which enable the COUNTY to advertise, award, and administer a construction contract for the Project. Without limiting the generality of the following, the Basic Services shall include the following specific tasks:

- A. Kickoff Meeting:** Hold a Project kick-off meeting within the timeframe provided in Section 4.01.

At the Project kick-off meeting provide a Project design schedule and preliminary right-of-way map. The format for the preliminary right-of-way map is attached as Exhibit "B".

The Project design schedule shall include all elements identified in Section 4.01 herein, up to the projected date of advertisement for construction bids.

- Deliverable: Meeting minutes, preliminary right-of-way map, one (1) hard-copy design schedule, and an electronic design schedule.

B. Final Survey Control and/or Record of Survey Meeting: Within ninety (90) calendar days of the Notice to Proceed, provide a P.L.S. stamped preliminary Record of Survey or preliminary Survey Control Plan, whichever is determined to be needed by the County Surveyor.

The ENGINEER must receive a written notice of acceptance from the County Surveyor to obtain final approval of the Survey Control Plan and/or prior to recordation of the Record of Survey.

Requirements for approval of the Survey Control Plan and/or Record of Survey shall include but not be limited to the following: 1.) Perform land surveying services to establish horizontal and vertical control for the Project and prepare a Survey Control Plan and/or Record of Survey as described in Exhibit "C" attached hereto and made a part hereof by this reference; 2.) Provide alignment information for the roadway and its intersections and side street alignments as necessary; 3.) The Survey Control Plan shall be prepared in conformance with the Record of Survey, where applicable, and shall be sealed by a P.L.S.; 4.) Field verification of existing monuments, as well as any additional monuments to be set by the P.L.S. to perpetuate the alignment, shall be completed by a P.L.S. and approved by the County Surveyor prior to final acceptance of the Survey Control Plan and/or Record of Survey; 5.) The Survey Control Plan or Record of Survey will be tied to the County's established vertical control network, the United States Public Land Survey System, and where applicable, the County's established horizontal geodetic control network. Existing monuments within the project limits will be tied into this control network; and 6.) The P.L.S. shall further submit to the County Surveyor stamped right-of-way drawings. The right-of-way drawings shall depict all encroachments, as determined by the P.L.S., and additional right-of-way acquisitions necessary to accommodate the proposed limits of construction submittal. The right-of-way status sheet shall be supported by P.L.S. research of legal descriptions, acquisition maps, easement maps, right-of-way maps, and other back up information as requested by the County Surveyor. The County Surveyor will coordinate/provide all title reports, outsourced to third party title companies, as necessary to complete the Project.

The ENGINEER must receive a separate written authorization to proceed beyond the 30% design. Authorization is contingent upon the formal acceptance of the Survey Control Plan and/or, if determined necessary, a Record of Survey. Formal approval

can only be achieved by the County Surveyor's endorsement of the Survey Control Plan and/or Record of Survey final Mylar sheets.

- Deliverable: Survey Control Plan, and Record of Survey electronic copy with file format in an AutoCAD.dwg and a scanned PDF of the final County Surveyor's endorsed acceptance.
- Deliverable: Survey Control Plan shall be inclusive within all stages of detailed construction plans.
- Deliverable: If determined necessary, a recorded copy Record of Survey complete with the County Surveyor's approval by endorsement filed on 24" x 36" Mylar.
- Deliverable: Final Right-of-Way drawings with legal descriptions.

C. Progress/Review and Public Meetings: Participate in all Project right-of-way, field (walk-through) reviews, and progress review meetings at 30%, 60%, 90%, pre-final, and final design levels unless otherwise determined by the Director.

Prepare exhibits and/or PowerPoint presentations for public meetings and attend public meetings with key staff to answer questions and explain design elements; respond to questions and concerns generated at the public meeting; attend meetings of Clark County Board of Commissioners to provide pertinent background information as requested by the Director. Document progress of public meetings.

- Deliverable: Project progress/review meetings, meeting minutes and/or review comments, and public meeting minutes and exhibits, PowerPoint presentations.
- Deliverable: Progressively updated Project schedules.

D. Utility Coordination & Location Identification: Utilities shall be accurately located and shown on the plans to ensure no unanticipated impacts to existing underground and overhead utilities during construction of the Project. The ENGINEER shall provide Subsurface Utility Engineering (SUE) services. The SUE services shall consist of designating and locating subsurface and overhead utilities located within the Project limits. ENGINEER shall provide all equipment, personnel and supplies needed to perform utility location services as described in Exhibit "D". Quality Level B would be authorized through Special Services.

Prepare and submit a Utility Conflict Schedule in the form prescribed by the Director after the roadway footprint and underground facilities have been determined. Update at subsequent design stages as needed and as required by the Director. The Utility Conflict Schedule shall identify all surface and subsurface utility features that may conflict or be affected by the Project's improvements, together with the proposed resolution to and the party responsible for such resolution and shall be updated through the subsequent design stages as needed and as required by the Director. Provide utility companies and governmental agencies with plans, specifications for the Project, and other information concerning the relocation and modification of utility facilities necessary to construct the Project; all correspondence between utilities and ENGINEER shall be copied to the Director. Obtain utility company and government

agency approvals of utility modifications (including undergrounding of overhead utilities) and relocations. Document the resolution of all utility conflicts and coordinate such with the respective utility owner and the Director. Prepare and furnish to the Director notices of utility removal or relocation including but not limited to notices that are required in the COUNTY's franchise agreement with local utility companies.

Review design drawings for concurrent utility improvements within Project limits for conformance with proposed design improvements. Perform coordination with utility company, government agency and their representatives as requested by the Director. Coordination shall continue throughout the design process.

- Deliverable: Utility Conflict Schedule, copies of correspondence, notices of utility removal or relocations required and documentation of detailed resolutions, report of finding for utility potholes. Utility Conflict Schedule must have valid resolutions to all conflicts prior to obtaining COUNTY sign-offs on cover sheet.
- Deliverable: The ENGINEER will incorporate the pothole field survey and CADD line work into the project base mapping.
- Deliverable: Review comments on improvement drawings for utility company and government agency projects. Documentation of correspondence with utility company, government agency and their representatives.
- Deliverable: Provide all designation information for inclusion into preliminary and intermediate plan sheets. 30%, 60%, 90%, pre-final, and final design levels.

E. Permit Coordination: Identify all permits required for the Project, including those, which may be necessary for applications to, or permits from, local, state, and federal authorities. Prepare and furnish to the Director a permit matrix detailing all permits that will be required for the Project, reason for permit, local, state or federal authority requiring permit, contact person at the authority requiring permit, estimate of time required to obtain permit, and a list of information and exhibits required as part of each permit application process.

- Deliverable: A permit matrix shall be prepared and submitted to the Director at the 30% design stage and updated at all subsequent stages. The matrix shall include a full listing of all permits required for this Project and information about each permit, as described above.
- Deliverable: Nevada Department of Transportation permit

F. Preliminary Cost Estimates: Prepare detailed cost estimates including summaries of bid items and quantities all based upon a unit price system of bidding unless the Director prescribes another system of bidding; such estimates to be based on the best available data.

- Deliverable: Electronic copy of preliminary cost estimate.

- G. Quality Control/Quality Assurance (QC/QA):** Perform QC/QA reviews, for all submittals, and make all corrections and/or revisions on all reports, drawings, specifications and any other documents prior to submittal to the Director for review and comment. All submittals made to the Director shall include a letter from the ENGINEER certifying that all QC/QA reviews have been performed by the ENGINEER and corrections made prior to submitting to the Director. Upon request by the Director, ENGINEER shall furnish a copy of the QC/QA review set of plans and specifications.

Additionally, the ENGINEER shall estimate the quantities of materials for the Project using the care and skill employed by professionals engaged in similar tasks. The ENGINEER shall attest to the accuracy of the plan quantities provided by the ENGINEER for the bid schedule and that such quantities have been checked by two independent calculations and any differences reconciled. Plan sets with approximate quantities broken out per plan sheet shall be submitted with the 60% plans and subsequent plan submittals. The ENGINEER shall furnish a copy of the two (2) independent worksheets of the plan quantities checking and shall attend a special quantity review meeting if necessary and as determined by the Director.

- Deliverable: QC/QA certification letters with all plan submittals. Assurance review set of plans and specifications, upon request.
- Deliverable: Quantity calculation plan sets with all submittals.
- Deliverable: Worksheets of independent quantity checking, upon request.

- H. Development Coordination:** Review design drawings for concurrent developments within Project limits for conformance with proposed design improvements. Perform coordination with adjacent property owners, developers and their representatives as requested by the Director. Coordination shall continue throughout the design process.

- Deliverable: Review comments on improvement drawings for adjacent development projects. Documentation of correspondence with adjacent property owners, developers and their representatives.

- I. Research:** Conduct research, obtain and review previous reports, prior studies, off-site improvement plans, and other information pertaining to the Project.

- J. Initial Site Visit:** Conduct a visual survey of the Project site and the immediate Project site vicinity. The site visit will also include an inventory of all potential impacts to design and report on any indications of potential contamination or contamination generators that would require environmental mitigation. Perform digital video recording of the existing conditions of the Project site to use during the design process. The video shall be high resolution (a minimum of 1920 x 1080 pixels) at sixty (60) frames per second and date-stamped on the frame.

- Deliverable: DVD copy of the digital video recording of existing conditions and memorandum of potential impacts to design and potential contaminations.

K. Topographic Base Mapping: Provide base mapping per Exhibit “E”

- Deliverable: An electronic copy of topographic surveying data in the most recent version of AutoCAD civil design software.
- Deliverable: 24” x 36” plots of topographic survey data plotted at a scale of 1” = 40’ horizontal.

L. Special Service Recommendations: Present recommendations to the Director as to the advisability of, or the need for, any of the Special Services as set out in Section 2.03 hereof; and upon approval of such services by the Director, plan and supervise such services in relation to the ENGINEER’s other tasks.

- Deliverable: Written recommendations of Special Services

M. Hydrologic and Hydraulic Analysis: Obtain and review existing drainage studies on file with Clark County. Review the current Clark County Regional Flood Control District Master Plan Update. Prepare a hydrology study that will identify the drainage area tributary to the Project, analytical methodologies, rainfall data and rainfall distribution curves, drainage area and subarea characteristics, existing drainage facilities, peak run-off flows and flow-routing, among other considerations. The study shall be performed in accordance with the Regional Transportation Commission of Southern Nevada’s Policies and Procedures and the Regional Flood Control District’s Hydrologic Criteria and Drainage Design Manual. Such study shall include an analysis, a summary of results, and recommendations concerning the handling of storm water runoff for the Project.

- Deliverable: Three (3) hard copies of the drainage study report and backups, plus an electronic copy in .pdf (300 dpi) format and electronic copies of the backup calculations.

N. Geotechnical Investigation: By subcontractor or otherwise, perform geotechnical evaluations consisting :by:

1. Obtaining encroachment permits for drilling in Clark County ROWs.
2. Obtaining and submit traffic control plans and implementation of traffic control devices during drilling operations within Clark County ROWs. Daily coordination of traffic control operations during the drilling program as needed.
3. Call-before-you-dig prior to drilling operations.
4. Core asphalt at each boring location.
5. Pothole to a depth of up to 5 feet using vacuum extraction at each boring location.
6. Drill and log up to 4 borings within the proposed storm drain locations to a depth of up to 20 feet using hollow-stem auger drilling method.
7. Drill and log 11 borings within the proposed at-grade/existing roadway alignments to a depth of up to 10 feet using hollow-stem auger drilling method.

8. Conversion of up to two 20-foot deep borings to 20-foot deep monitoring wells (and subsequent plugging of these wells) for groundwater analyses as described below:
 - Groundwater monitoring wells will be completed utilizing the following methodology: Installation of up to 15 feet of 2- or 4-inch diameter machine slotted PVC well screen with a threaded bottom cap, Installation of 2- to 4-inch diameter threaded solid flush joint PVC pipe to surface, addition of sand pack in the annular space from the bottom of the boring to at least two (2) feet above the well screen, a bentonite/grout seal above the sand pack to ground surface, and a traffic rated flush mount well box encased in concrete.
 - Well development will be performed to provide more representative samples and more accurate analysis of physical properties of the surrounding aquifer. Well development involves stressing the formation so that a graded filter pack is created around the screen and particulate matter and fluids remaining from well drilling and construction are removed. In general, the wells will be developed at the site using a combination of bailing, surging techniques and pumping/overpumping techniques. Development generally begins with bailing the well in order to remove as much accumulated sediment as possible. Following the bailing, the well will be surged by using a surge block to pull and push water into and out of the wells screened interval. This process can destroy bridging and generally helps condition the filter pack, making it more effective at filtering out fine grain sediment. In addition, the well will be pumped/overpumped using a submersible flow-controlled pump. Development pumping is performed by begin pumping at the top of the screen with low pumping rates and incrementally lowering the pump down the well screen. The process is then repeated in reverse, from the bottom of the well to the top. This process is repeated several times, along with gradually increasing the pumping rate, and is considered complete when the effluent water runs clear and certain stabilization parameters have been met.
9. California or Standard Penetration Tests approximately every five (5) feet in each boring
10. Boring abandonment using bentonite and CLSM, DOT concrete patch and disposal of drill cuttings, as necessary
11. Laboratory tests performed on samples recovered from the borings at approximately the frequency outlined below:
 - In-Place Moisture Content and Dry Density – one (1) test per five (5) feet of each boring
 - Sieve Analysis – up to two (2) tests per boring
 - Plasticity Index – up to two (2) tests per boring
 - Direct Shear – up to one (1) test per two (2) borings
 - Consolidation Testing - up to four (4) tests
 - Corrosivity Suite – up to one (1) test per three (3) borings
 - Swell – up to one (1) test per two (2) borings

- R-Value – Up to five (5) tests on bulk samples obtained from upper five (5) feet of the borings

12. Prepare a Geotechnical Report to include:

- Subsurface materials and conditions summary
 - Geologic conditions and seismicity, and subsurface soil conditions
 - Anticipated excavatability considerations
 - Approximate depth to groundwater
- Geotechnical design and construction criteria
 - a. Bearing capacity and settlements for spread footings for ancillary structures
 - b. Recommended minimum width and depth of spread footing foundations
 - c. Static and seismic lateral earth pressures for subsurface walls
 - d. Subgrade preparation recommendations for roadways and ancillary structures
 - e. Conceptual dewatering induced settlement evaluation
 - f. Trench backfill recommendations, including suitability of native soils
 - g. Pavement sections for new roadways and rehabilitation areas
 - h. Surface drainage considerations
 - i. Soil Corrosivity/sulfate exposure for concrete structures

13. During the drilling process, field personnel will observe samples for the presence of hydrocarbons by odor, texture and color. If the presence of hydrocarbons is suspected, the ENGINEER will notify the COUNTY that further testing may be required. Perform soil resistivity tests of in-situ soils by subcontractor or otherwise, perform additional soils tests regarding soils unit weight, moisture contents, R-values, moisture density curves, gradations, plasticity, soil classifications, ultimate soil strength, chemical composition, settlement potential, and other appropriate tests and analysis of data as needed and as required by the Director. Provide pavement sections and subgrade recommendations and prepare a report of soil conditions applicable to the project.

14. Temporary Groundwater Dewatering Support

- Slug Test
 - A slug test will be performed within each monitoring well installed during geotechnical evaluation. The slug tests could be performed over a period of up to eight (8) hours. The well will be redeveloped as needed several days prior to performing slug testing.
 - During the slug testing, a known volume of water in the monitoring well will be displaced through the introduction of a slug. The resulting increase in groundwater height within the well and the return of the groundwater to its' static elevations will be recorded versus time during the test. After the test, the slug will be removed from the monitoring well and the traffic rated cover replaced. Monitoring wells will be abandoned by the general contractor.
 - Maintain encroachment permits for slug testing in Clark County ROWs

- Obtain and submit traffic control plans and implementation of traffic control devices during slug testing within Clark County ROWs. Daily coordination of traffic control operations during the slug testing as needed

- **Groundwater Quality Sampling/Testing**

Obtain one groundwater sample from each monitoring well installed as part of the geotechnical evaluation task. The samples will be stored in a cooler on ice and transported to an accredited laboratory for analytical testing. The samples will be tested for constituents noted in the Nevada Administrative Code (NAC) Section 445A.1236 "Standards for toxic materials applicable to designated waters". The laboratory analytical results will be compared to the beneficial use limits noted in NAC 445A.1236. The well will be redeveloped as needed several days prior to performing quality sampling and testing.

- Deliverable: Three (3) hard copies of the soils investigation report and addendums as required plus an electronic copy.

O. Right-of-Way Engineering: Perform research and obtain certified copies of deeds, and data depicting property ownerships within the proposed road right-of-way. Using this information, and the title reports provided, prepare a right-of-way map depicting all properties within the Project limits in the form prescribed by the COUNTY and containing the information called for in Exhibit "B" attached hereto and made a part hereof by this reference.

Perform and prepare 8 individual acquisition maps and legal descriptions of proposed right-of-way acquisitions and 8 temporary construction easement maps in the forms prescribed by the COUNTY and containing the information called for in Exhibit "B" attached hereto and made a part hereof by this reference.

- Deliverable: P.L.S.-stamped legal descriptions, acquisition maps, easement maps, right-of-way maps, and backups upon request.

P. 30% Plans and Review Meeting: Develop 30% preliminary roll-plot showing the vertical and horizontal alignments of the proposed typical roadway sections and any details as may be necessary. Include alignment of any major drainage facilities (the alignment of these major drainage facilities shall be aligned in a manner to complement and not conflict with the future Clark County Regional Flood Control District Master Plan facilities). Identify the locations where conflicts may occur between recommended Project features and existing or proposed utilities and other facilities. Establish geometry necessary to determine alignment and right-of-way requirements; layout improvements and facilities in sufficient detail to establish limits of construction for the Project; general construction staging and traffic control constraints; and lighting. Provide proposed grades at centerline of roadways and back of curb.

Provide proposed typical roadway sections with vertical and horizontal alignments and any details as may be necessary for four (4) design alternatives to provide pedestrian

facilities, and street lighting along the east side of Broadbent Boulevard south of the Duck Creek Wash.

For Pavement Recommendation, perform visual pavement inspection to determine the existing pavement conditions. Provide pavement rehabilitation strategy recommendations based on visual inspections, geotechnical investigation, existing pavement thickness and review of existing plans. Prepare an exhibit showing location and limits of the pavement rehabilitation strategies.

For Median Recommendation, perform an evaluation of existing median limits and configuration, recommend modifications including locations for additional medians, and identify where median openings should be provided and where median openings can be eliminated. Provide exhibits showing limits of existing medians and recommended modification.

For Intelligent Transportation System (ITS) Recommendation, perform an evaluation of existing ITS facilities and coordinate with the Traffic Management Department of Clark County Public Works as well as the Regional Transportation System of Southern Nevada (RTC) Freeway & Arterial System of Transportation (FAST) to determine and recommend ITS improvement within the project limits. Provide exhibits showing the recommended ITS improvement.

Provide traffic signal design Modifications for the Tropicana/Jimmy Durante/Steptoe intersection and the Tropicana/Stephanie intersection, Ped Crossing Flasher Beacon at Trail crossing.

The ENGINEER and COUNTY will participate in a 30% Review Meeting which will include a thorough review of the entire Project. The ENGINEER will be responsible for taking notes and documenting comments made during the meeting. The comments from the meeting shall be put into a comment matrix and submitted with resolutions prior to the next plan submittal.

- Deliverable: 30% roll plot scalable to a standard engineering scale, any supporting exhibits including for the Pavement Recommendation and Median Recommendation, 30% Cost Estimate, Utility Conflict Schedule, and Permit Assessment. Electronic copy in .pdf (300 dpi) format of all deliverable items.

Q. Predesign Report: Prepare and submit to the COUNTY predesign reports covering all aspects of the research, analyses performed in Subsections 2.02 A through P above and provide recommendations for final design and preliminary cost estimates for the Project.

- Deliverable: Three (3) copies of the Predesign Report, including preliminary plans and technical appendices containing all hydrologic and hydraulic calculations and supporting data plus electronic copies in .pdf (300 dpi) format or other appropriate format as approved by the Director.

R. Addenda to the Predesign Report: Upon receipt of written comments and direction from the Director, prepare addenda incorporating all clarifications and modifications to the Predesign Report as required by the Director and memorandum summarizing all reviews and comments made on the submittals made, complete with appropriate responses.

- Deliverable: Three (3) copies of all addenda plus electronic copies in .pdf (300 dpi) format.

S. Construction Cost Estimates: Prepare detailed cost estimates by funding source including summaries of bid items and quantities all based upon a unit price system of bidding unless the Director prescribes another system of bidding; such estimates to be based on the best available data. The construction cost estimate shall be submitted beginning at the 30% design stages and shall be updated through subsequent design stages and as required by the Director.

- Deliverable: Three (3) copies of construction cost estimates plus an electronic copy in .pdf (300 dpi) format or other appropriate format as approved by the Director shall be submitted at 30% design and subsequent stages.

T. 60% Plans, Partial Special Provisions and Review Meeting: Upon receipt of comments from the Director and a separate written authorization, prepare the design plans and special provisions Section 104 at the 60% stage.

The design plans to be submitted will include the cover sheet, sheet layout and index of drawings, legend and abbreviations, general notes, estimate of quantities, monumentation and survey control sheet, Record of Survey, typical sections, removals and relocations, roadway construction plan and profiles, grading plans, drainage and flood control plans, utilities, traffic signal modifications, ped crossing flasher beacon at trail crossing, LED street lighting, signing/stripping/signal/ITS, identification of necessary structural components, and any other existing/ proposed facilities required for the Project.

The ENGINEER and COUNTY will participate in a 60% Review Meeting which will include a thorough review of the entire Project. The ENGINEER will be responsible for taking notes and documenting comments made during the meeting. The comments from the meeting shall be put into a comment matrix and submitted with resolutions prior to the next plan submittal.

- Deliverable: Fifteen (15) scalable (to a standard engineering scale) sets of plans at half size (11" x 17") and/or full-size (24" x 36") as determined by the Director and up to fifteen (15) copies of special provision Section 104, updated Utility Conflict Schedule, updated permit assessment, detailed cost estimate, quantity calculations, QC/QA letter, prior review comment, responses, and Right-of-Way map.
- Deliverable: An electronic copy of all deliverable items shall be submitted in .pdf matrix (300 dpi) format or other appropriate format.

- U. 90% Plans, Special Provisions and Review Meeting:** Upon receipt of comments from the Director, prepare the design plans and specifications at the 90% stage unless otherwise determined by the Director.

The 90% Review Meeting will occur at the COUNTY and will last approximately three (3) hours. The meeting will include a thorough review of the entire project plan set and special provisions. The ENGINEER will be responsible for taking notes and documenting all comments made during the meeting. The comments from the meeting shall be put into a comment matrix and submitted with the next plan submittal.

- Deliverable: Fifteen (15) scalable (to a standard engineering scale) sets of plans at half size (11" x 17") and/or full-size (24" x 36") as determined by the Director and fifteen (15) sets of special provisions, updated Utility Conflict Schedule, updated permit assessment, detailed cost estimate, quantity calculations, QC/QA letter, prior review comment matrix, responses, and Right-of-Way map.
- Deliverable: An electronic copy of all deliverable items shall be submitted in .pdf (300 dpi) format or other appropriate format.

- V. Pre-Final Plans and Special Provisions:** Upon receipt of comments from the Director, prepare the design plans and specifications at the Pre-Final design stage, unless otherwise determined by the Director.

Prepare and submit at the Pre-Final design level roadway, channel and/or any other facility grading earthwork cross-sections plotted at 50-foot intervals and/or grade breaks with cut and fill quantities.

Prepare and submit the Bid Estimate / Abstract, Bid Schedule (Form), and the Construction Project Checklist, collectively known as the Advertising Care Package. These documents shall be prepared using templates provided by the Director, to assist the County in the preparation of the General Conditions.

- Deliverable: Five (5) sets of to-scale Pre-Final plans at half size (11" x 17") and/or full-size (24" x 36"), as determined by the Director and five (5) sets of special provisions, completed Utility Conflict Schedule, updated permit assessment, detailed cost estimate, updated comment matrix with responses, and all design updates as needed or as required by the Director.
- Deliverable: An electronic copy of all deliverable items shall be submitted in .pdf (300 dpi) format or other appropriate format.

- W. Final Plans and Special Provisions:** Complete and furnish to the Director final plans and specifications ready for advertisement for construction bids along with a detailed engineers cost estimate; final permit assessment and any permit applications authorized through Special Services, all in a form approved by the Director and suitable for reproduction. A summary of all reviews and comments made on the Pre-Final submittal shall be provided, complete with appropriate responses.

- Deliverable: One (1) set of final plans at half size (11" x 17") and full-size (24" x 36") each to scale, one (1) set of special provisions and final cost estimate,

earthwork cross-sections and all design updates as needed or as required by the Director.

- Deliverable: An electronic copy of final plans (full size), special provisions, and technical appendices in .pdf (300 dpi) format or other appropriate format shall be submitted.

X. Bidding Assistance Phase: The bidding assistance phase will begin once the COUNTY advertises the Project for construction bids. Typical items completed during this phase include:

Participate in the pre-bid conference, answer contractors' questions, prepare addenda, attend the bid opening, tabulate the bids, analyze the bids for mistakes and anomalies, and provide a contractor recommendation.

Assist the COUNTY by attending Project pre-bid meetings, preparing addendums, tabulation, and analysis of bids received for Project, and present written recommendations with respect to such bids to the Director.

- Deliverable: Spreadsheet as furnished by COUNTY that includes bid form, bid tabulation, and low bid by funding source.

Y. Issued for Construction Plans: Within thirty (30) days following opening of construction bids for the Project, furnish to the Director an electronic copy with full and half size plans (one set of each) and special provisions in ".pdf" (300 dpi) format or other appropriate format as requested by the Director. These documents shall constitute the "Issued for Construction" documents. The cover sheet shall be stamped to indicate "Issued for Construction." Each sheet of the plans modified per addendum shall include a revision note in the title block, indicating date and "Revised per Addendum No." The cover sheet of the special provisions shall be stamped to indicate "Issued for Construction." In addition, each page of the special provisions modified per an addendum shall include a footnote, indicating "Revised per Addendum No."

The ENGINEER shall submit an electronic copy with all drawings files in AutoCAD's ".dwg" format or ".dxf" format, incorporating all revisions, clarifications and addenda identified during bidding.

- Deliverable: An electronic copy containing "Issued for Construction" full-size (24" x 36") and half size (11" x 17") plans, each to scale, and special provisions.
- Deliverable: An electronic copy containing all drawings files and technical appendices.

2.03 Special Services

The ENGINEER understands and agrees that execution of this Contract is not authorization to perform any work as specified in Section 2.03 Special Services.

The ENGINEER shall submit a written request to the Director for each Special Service desired to perform. The written request shall include a detailed description for the work to be performed, an amount “not to exceed” for each Special Service to be performed, and the time of performance to complete the Special Service. The ENGINEER shall perform the following Special Services if, as, and when approved in writing by the Director in the amount “not to exceed” and time period approved by the Director. Compensation will only be provided for work completed as authorized in writing by the Director up to the total maximum amount for the Special Services listed below as specified in Section 5.02:

- A. Provide additional design and related services in the event the Director finds it necessary to perform additional work not specified in Section 2.02, but required for and related to the Project.
- B. Perform additional research and obtain certified copies of additional deeds, title reports, and data depicting property ownerships within the proposed additional road right-of-way/easement and prepare a right-of-way map depicting all properties within the added Project limits in the form prescribed by the COUNTY and containing the information called for in Exhibit “B” attached hereto and made a part hereof by this reference. Perform and prepare additional individual acquisition maps and legal descriptions of additional right-of-way acquisitions and temporary construction easement maps in the forms prescribed by the COUNTY and containing the information called for in Exhibit “B” attached hereto and made a part hereof by this reference.
- C. Obtain P.L.S. stamp certified topographic mapping of the additional Project area in sufficient detail and coverage to prepare construction plans and other studies for the Project.
- D. Perform services related to a re-advertisement for bids not caused by the ENGINEER’s failure to perform in the first instance.
- E. Utility Potholing – Excavate and expose utilities, at additional ENGINEER recommended pothole locations per the requirements of Basic Services.
- F. Perform post-design services as requested by the COUNTY in writing after, the COUNTY awards the construction of this Project to a contractor. Items may include:
 - 1. Respond to contractor-initiated requests for additional information.
 - 2. Attend construction meetings and field meetings, as requested by the COUNTY.

3. Review and make recommendations on shop drawings submittals made during construction of the Project.
 4. Cause a registered professional engineer, who has substantial responsibility with respect to the design and preparation of the plans and specifications for the Project, to make periodic visits to the construction site to observe the progress and general quality of the work. Such visits shall be made at a frequency as specified by the Director. After each visit, the ENGINEER shall make a written report to the Director with respect to the progress and general quality of the work and the relationship of the work to the construction contract documents. This task shall not be construed to include the services of a Resident Project Representative.
 5. Present written recommendations with respect to items submitted by the Director to the ENGINEER for evaluation under a “substitution clause” of a construction contract, evaluate the items and revise the plans and specifications accordingly.
 6. Provide written responses to requests from the Director for technical clarifications and information during construction of the Project when such clarifications and need for technical information are not the result of error or omission on the part of the ENGINEER.
- G. Provide Record Drawings following completion of Project construction and within sixty (60) days of receipt of hard copy as-built mark-ups. Update all drawing files and sheet drawings, incorporating all revisions and clarifications identified during construction and as requested by the Director. These documents shall constitute the “Record Drawings”. Each drawing sheet shall be dated and stamped to indicate “Record Drawings”. Furnish to the Director one an electronic copy of the Record Drawing in .pdf (300 dpi) format and all drawing files in AutoCAD’s “.dwg” format or “.dxf” format. The ENGINEER shall also return the hard copy as-built mark ups to the Director. An index of all drawing files, including reference files, shall also be provided.
- H. Concurrent with the completion of 2.03 H above, furnish to the Director an electronic copy containing the imaged as-built “Record Drawings” for the Project, imaged preliminary or final design reports, if applicable, and other imaged documents as requested by the Director. The format for imaged files shall be Class IV, single image, 200 dpi “tagged image file format (tiff)” or other format acceptable to the Director. An index of all files shall also be provided.
- I. Assist the COUNTY as an expert witness in any litigation with third parties or administrative proceedings arising in relation to the Project.

- J. Quality Level B Utility Designation – this level of utility designation involves the use of surface geophysical techniques to determine the existence and horizontal position of underground utilities and obtain two-dimensional mapping information.
- K. Monitoring Well – Convert geotechnical boring and/or install groundwater monitoring well (and subsequent plugging of the well) for groundwater analysis including slug test and groundwater quality sampling/testing.
- L. NPDES Permit Support and Groundwater Modeling – provide support to prepare an Individual Discharge Permit application to submit to NDEP’s Bureau of Water Pollution Control (BWPC) to cover construction dewatering activities for the project alignment. A limited groundwater flow model would be developed to estimate quantity of groundwater discharge for the permit using data from boring logs and slug tests.

2.04 Coordination

In association with the Basic Services and upon request of the Director, the ENGINEER shall set up and attend periodic meetings with City, COUNTY, and State and federal officials designated by the Director as well as interested citizens. Such meetings will include the design conferences, design progress meetings, public meetings and hearings, and general information meetings for interested citizens.

2.05 Approvals Required

For the plans and specifications, the ENGINEER shall obtain the approval, permits and signature of authorized representatives of the public utilities and governmental agencies affected by the Project, in addition to the signatures of COUNTY officials indicated on the COUNTY’s standard title block formats and drawings.

2.06 Engineer’s Responsibility for Accuracy

ENGINEER is responsible for the accuracy on their drawings, plans, calculated quantities, specifications, and proposals furnished by the ENGINEER under this Contract.

All items of improvements and work shown on final drawings and plans must be accurately set forth in the bid schedule prepared by the ENGINEER.

ARTICLE III: DUTIES OF THE COUNTY

3.01 Other Duties

- A. Provide access to the ENGINEER for all data and allow the ENGINEER to make copies of documents in the possession and control of the COUNTY Public Works Department, or available to the COUNTY Public Works Department, which are

requested by the ENGINEER to perform its engineering services under this Contract.

- B. Perform and provide to the ENGINEER, evaluations on the ENGINEER's performance of the work specified herein. Evaluations will be made at the 60% level of completion of the ENGINEER's work and after the COUNTY has awarded a bid for the construction of the Project.

ARTICLE IV: TIME OF PERFORMANCE

4.01 Time of Performance

Subject to Section 4.02 hereof, the ENGINEER shall complete the following specific tasks, and all the work preceding such tasks on or before the date set out below:

<u>TASK</u>	<u>DESCRIPTION</u>	<u>COMPLETION TIME</u>
2.02 A	Kickoff Meeting	Within 14 calendar days following the receipt of the notice from the Director to begin work under this Contract.
2.02O	Right-of-Way Engineering	Within 90 calendar days following the receipt of comments from the Director on the 30% Plan Submission and written authorization, pursuant to Section 2.02.B.
2.02P	30% Plans and Review Meeting	Within 110 calendar days following the receipt of the notice from the Director to begin work under this Contract.
2.02Q	Predesign Report	Within 45 calendar days following the 30% Plans and Review Meeting.
2.02R	Addenda to the Predesign Report	Within 100 calendar days following the receipt of comments from the Director on the Predesign Report.
2.02T	60% Plans, Partial Special Provisions, and Review Meeting	Within 100 calendar days following the receipt of comments from the Director on the 30% Plan Submission and written authorization, pursuant to Section 2.02.B.
2.02U	90% Plans, Special Provisions and Review Meeting	Within 80 calendar days following the receipt of comments from the Director on the 60% Plan Submission.

2.02V	Pre-Final Plans and Special Provisions	Within 30 calendar days following the receipt of comments from the Director on the 90% Plan Submission.
2.02W	Final Plans and Special Provisions	Within 30 calendar days following the receipt of comments from the Director on the Pre final Plan Submission.
2.02X	Bidding Assistance Phase	Beginning when Project is advertised and lasting until Project is awarded to low bidder.
2.03	Special Services	Within time period as specified by the Director.

The ENGINEER shall complete all other Basic Services and authorized Special Services by the end of December 31, 2025, unless the Board of County Commissioners amends such date in writing.

4.02 Time Extensions

Upon written request of the ENGINEER, the Director may grant time extensions to the extent of any delays caused by the COUNTY or other agencies with whom the work must be coordinated and over whom the ENGINEER has no control, but only to the extent that the exercise of due diligence and care, on the part of the ENGINEER, within the scope of its work under this Contract could not have avoided such delays and to the extent of any delays caused by force majeure, as that term is defined in Section 9.12 hereof.

ARTICLE V: PAYMENT FOR SERVICES

5.01 Maximum Amount Payable

The maximum amount payable by the COUNTY to the ENGINEER shall be a sum of money equal to the Basic Services fees plus the Special Service fees, if, as, and when approved by the Director, and provided, however, that under no circumstances may the total amount payable to the ENGINEER under this Contract or in connection with the subject matter of this Contract, exceed the sum of One Million Two-Hundred Thirty-Eight Thousand Three Hundred Fifty-Seven and 00/100 Dollars (\$1,238,357.00) for the Basic Service fees, and One Hundred Twenty Thousand and 00/100 Dollars (\$120,000.00) for Special Services fees, unless such sum is increased by the Clark County Board of Commissioners, but only to the extent such total sum is increased.

The ENGINEER is not authorized to perform any work outside the Scope of Services. Compensation will be only for work completed as authorized by the Scope of Services. Any changes to the Scope of Services must be approved by the Director in writing prior to the commencement of work as a supplement to this Contract. No additional compensation shall be paid to the ENGINEER for any additional work outside scope of services without the prior written authorization of the Director.

5.02 Basic Services and Special Services Fees

Compensation for the engineering services provided herein will be made on the basis of ENGINEER's direct salary, times a multiplier not to exceed of 2.70 plus direct non-salary expenses, plus actual approved subcontractor or subconsultant costs. The ENGINEER shall provide certified payrolls and Federal or State audited overhead rates at the Director's request.

Direct non-salary expenses incurred by the ENGINEER for work done under this Contract eligible for reimbursement by the COUNTY are as specified below:

- A. Identifiable reproduction costs applicable to the work, such as printing, binding, and related expenses.
- B. Identifiable communications expense, such as long-distance telephone, overnight delivery charges (FedEx, UPS) and postage.
- C. Subconsultant or subcontractor services provided the COUNTY has given written prior approval for such service.

The Basic Services and Special Services fees shall not be paid to the ENGINEER unless the Director approves the purpose and the amount of such fees in writing.

In no event may the fees exceed the following Basic Services and the Special Services fees shown below in purposes or amounts:

<u>TASK</u>	<u>MAXIMUM AMOUNTS</u>
Basic Services 2.02	\$1,238,357.00
Special Services 2.03	\$120,000.00
Grand Total Basic and Special Services	\$1,358,357.00

5.03 Method of Payment for Basic Services and Special Services Fees

The ENGINEER will be paid on the basis of monthly invoice, submitted by the ENGINEER and approved by the Director. The ENGINEER shall invoice on a monthly basis regardless of the amount of work performed in the preceding month. The invoice shall include a summary of work completed by the ENGINEER during the preceding month. Additionally, the ENGINEER shall furnish with each invoice a summary of work performed during the invoice period. Within thirty (30) days of receipt of an invoice, the Director shall approve, or reject with cause, the invoice. The approved invoice shall then be reduced by 5%; such 5% representing a retention. The 95% not retained shall be paid to the ENGINEER after receipt of an approved invoice, as set forth below. Failure of the ENGINEER to provide a monthly invoice may result in the invoice payment being rejected by the COUNTY.

Fees shall be invoiced in the months which follow performances of such services and shall be paid by the COUNTY within sixty (60) days after receipt of an invoice submitted by the ENGINEER and approved by the Director unless the Director notifies the ENGINEER within such period of time that a payment or a portion thereof for the services rendered is in dispute. The COUNTY agrees that it will not unreasonably delay or withhold payment or approval of any invoice submitted by the ENGINEER.

At the sole discretion of the Director, in consultation with the ENGINEER, the retention shall be paid to the ENGINEER one hundred twenty (120) days after notice from the Director of satisfactory completion of Basic Services or after completion of 50% of the construction contract value or at such earlier time as the Director deems appropriate. The ENGINEER shall submit an invoice request payment of retention for approval by the Director. No interest will be paid on retention, but not withstanding the release of retention, the ENGINEER shall continue to be responsible for its obligations under this agreement, including, but not limited to, any errors and omissions under the terms of this Contract.

The parties hereby agree that no penalty will be imposed upon the COUNTY for failure to pay the ENGINEER in a timely manner nor will the COUNTY require a discount for timely payment in accordance with the terms set forth in this Contract.

ARTICLE VI: DESIGN CRITERIA; APPROVALS

6.01 Design Criteria

The ENGINEER shall employ design criteria established by the most recent publications of the American Association of State Highway and Transportation Officials (AASHTO) and standards established by the current policies and procedures of the Regional Transportation Commission of Southern Nevada, as well as those adopted by the Clark County Board of Commissioners. These shall include the most recent editions of the following publications:

- A. A Policy of Geometric Design of Highways & Streets and American Association of State Highways & Transportation Officials (AASHTO).
- B. Bridge Design Specifications, American Association of State Highways & Transportation Officials, Load and Resistance Factor Design (AASHTO LRFD).
- C. Uniform Standards Specifications for Public Works' Construction of Off-Site Improvements, Clark County, Nevada, Regional Transportation Commission of Southern Nevada.
- D. Uniform Standard Drawings for Public Works Construction of Off-Site Improvements, Clark County Area, Nevada Volumes I and II.
- E. Manual on Uniform Traffic Control Devices for Streets and Highways, Federal Highway Administration, U.S. Department of Transportation.
- F. Hydrologic Criteria and Drainage Design Manual, Clark County Regional Flood Control District.
- G. Standard Specifications for Road and Bridge Construction, State of Nevada Department of Transportation.
- H. Standard Plans for Road and Bridge Construction, State of Nevada Department of Transportation, English edition.
- I. Standard Highway Signs, Nevada Supplement, State of Nevada Department of Transportation, English edition.

6.02 Approvals

An approval by the Director, or any other instrumentality of the COUNTY, of any part of the ENGINEER's performance shall not be construed to waive compliance with this Contract or to establish a standard of performance other than that established by law unless such approval is in writing and expressly refers to:

- A. Specific items and the characteristics of such items subject to such a waiver; and,
- B. This Article VI, and in such event, such a waiver shall only be effective as to the specific items and the characteristics thereof identified in the writing.

The COUNTY's approval herein shall not relieve the ENGINEER of its responsibility to correct errors on the drawings, plans, specifications and proposals furnished by the ENGINEER under this Contract, and no payment to the ENGINEER will be made by the COUNTY for correction of such errors.

ARTICLE VII: TERM AND TERMINATION

7.01 In General

This Contract shall be in force and effect from and after the day on which the Director gives notice to the ENGINEER to begin work under this Contract under Section 2.02 above. This Contract shall remain in effect until one (1) year from the date listed in the paragraph of Article 4.01. This section shall not be construed to relieve either party of its obligations to perform under this Contract while the Contract is in effect. Termination of this Contract shall not release either party from any of its continuing obligations hereunder. This section shall not be construed to change any disputes arising out of this Contract or in connection with the subject matter hereof, nor shall this section be construed to change the date or the time on which a cause of action arising out of this Contract, or the subject matter hereof, would otherwise accrue under the statutes of limitations or doctrines of law.

7.02 Termination by the COUNTY

The Director may terminate this Contract at any time by giving thirty (30) days notice in writing to the ENGINEER. Upon receipt of such notice, the ENGINEER shall, unless the notice directs otherwise, immediately discontinue all services in connection with this Contract and shall proceed to cancel promptly all existing orders and contracts insofar as such orders or contracts are chargeable to this Contract. As soon as practicable after receipt of notice of termination, the ENGINEER shall submit a statement showing in detail the services performed under this Contract to the date of termination. The COUNTY shall then promptly pay the ENGINEER that portion of the prescribed fee which the services actually performed under this Contract bear to the total services called for under this Contract, less such payment on account of the fee as had been previously made.

ARTICLE VIII: INSURANCE

8.01 In General

The ENGINEER shall obtain and maintain, for the duration of this Contract, insurance against claims for injuries to persons or damages to property or other losses which may arise from or in connection with the ENGINEER's negligence or fault in the performance of the work hereunder by the ENGINEER, the ENGINEER's agents, representatives, employees, or subcontractors of any tier.

8.02 Insurance Coverages

The ENGINEER will provide the COUNTY with certificates of insurance for coverage as listed below and endorsements establishing coverage required by this Contract within ten (10) calendar days after approval of this Contract by the Clark County Board of Commissioners. The certificate of endorsement for each insurance policy is to be signed by a person authorized by that insurer and licensed by the State of Nevada, and shall include the Project name on the certificate.

All deductibles and self-insured retention shall be fully disclosed in the certificate of insurance. No deductible or self-insured retention may exceed Two Hundred Fifty Thousand and 00/100 Dollars (\$250,000.00) without written approval of the COUNTY. If aggregate limits are imposed on bodily injury and property damage and professional liability coverage, the amount of such a limit must not be less than twice the amount of the limits required herein. All aggregates must be fully disclosed, and the amount must be entered on the required certificate of insurance. Any notice given to the ENGINEER with respect to the exhaustion of limits of insurance shall also be sent to the COUNTY. Each insurance company's rating, as shown in the latest "Best's Key Rating Guide" shall be fully disclosed and entered on the required certificate of insurance. The adequacy of the insurance supplied by the ENGINEER, including the rating and financial health of each insurance company providing coverages, is subject to approval by the COUNTY.

The insurance coverages are in the following amounts:

- A. The ENGINEER will maintain general liability coverage at limits of no less than One Million and 00/100 Dollars (\$1,000,000.00) specified combined single limit per occurrence for bodily injury (including death), personal injury and property damages. Coverage shall be on an "occurrence" basis only and not on a "claims made" basis; and the coverage must be provided on ISO commercial liability or on ISO broad form comprehensive general liability forms with no exception to the coverage provided in such forms. The policies must include, but not be limited to, coverage for: bodily injury, personal injury, broad form property damages, premises operations, severability of interest, products and completed operations, contractual and independent contractors. Policies must contain a primary and non-contributory clause and must contain a waiver of subrogation endorsement. The COUNTY, its officers, its employees, and its volunteers must be expressly covered as "additional insureds."
- B. Maintain automobile coverage at limits of no less than One Million and 00/100 Dollars (\$1,000,000.00) combined single limit "per accident" for bodily injury and property damage for all owned automobiles, non-owned automobiles, hired automobiles, or any automobile. The COUNTY, its officers, its employees, and its designated volunteers must be expressly covered as "additional insureds."
- C. Maintain professional liability insurance at limits of no less than One Million and 00/100 Dollars (\$1,000,000.00) per occurrence and to insure against claims or losses arising out of the services provided by the ENGINEER, the ENGINEER's agents, representatives or employees pursuant to the ENGINEER's contract with the COUNTY. "Claims made" insurance coverage will continue for a period of three (3) years beyond the term of this Contract. Any retroactive date must coincide with or predate the date of this Contract and may not be advanced without the COUNTY's consent. The ENGINEER's professional liability insurance must provide coverage for the ENGINEER's subcontractor if the subcontractor does not maintain professional liability insurance in the same amounts and manner as required for the ENGINEER.

8.03 Additional Coverage

The ENGINEER's insurance shall be primary as respects to the COUNTY, its officers, its employees, and its volunteers. Any other coverage available to the COUNTY, its officers, its employees, and its volunteers shall be in excess over the insurance required of the ENGINEER. The insurance requirements specified herein do not relieve the ENGINEER of his responsibility or limit the amount of the ENGINEER's liability to the COUNTY or other persons, and the ENGINEER is encouraged to purchase such additional insurance as the ENGINEER deems necessary.

8.04 Notice of Cancellation

The insurance certificates supplied by the ENGINEER must provide for a thirty (30) day notice to the COUNTY before implementation of a proposal to cancel required insurance coverage. This notice requirement does not waive the insurance requirements contained herein. In addition, the ENGINEER shall notify the COUNTY within thirty (30) days of any reduction in coverage or limits.

8.05 Special Conditions

- A. ENGINEER agrees, as a condition precedent to the performance of any work under this Contract and as a precondition to any obligation of COUNTY to make any payment under this Contract, to provide COUNTY with a certificate issued by the Employer's Insurance Company of Nevada in accordance with NRS Section 616B.627. Prior to the expiration of such coverage, ENGINEER shall provide COUNTY with proof of continued coverage as a condition precedent to the continuation of work and payments under this Contract.
- B. ENGINEER agrees to maintain coverage for industrial insurance pursuant to the terms of NRS Chapter 616 throughout the term of this Contract. If ENGINEER does not maintain such coverage, or fails to provide proof of continued coverage, ENGINEER agrees that COUNTY may withhold payment, order the ENGINEER to stop work, suspend the Contract or terminate the Contract.

8.06 COUNTY's Remedies

If the ENGINEER fails to maintain any of the insurance coverages required under this Contract, the COUNTY will have the option to:

- A. Terminate the Contract;
- B. Declare the ENGINEER in breach of Contract;
- C. Purchase replacement insurance; or

- D. Pay the premiums that are due on existing policies in order that the required coverage may be maintained.

The ENGINEER is responsible for any costs incurred by the COUNTY to maintain such insurance, and the COUNTY may collect the same from the ENGINEER or deduct the amount of costs incurred from any sums due the ENGINEER under this Contract.

ARTICLE IX: MISCELLANEOUS PROVISIONS

9.01 Indemnification

Professional Liability:

ENGINEER agrees to indemnify and hold harmless COUNTY and all the officers, employees and agents of the COUNTY, and each of them, from and against any liabilities, damages, losses, claims, actions or proceedings, including, without limitation, reasonable attorneys' fees and costs, to the extent such liabilities, damages, losses, claims, actions or proceedings are caused by the negligence, errors, omissions, recklessness or intentional misconduct of the ENGINEER, ENGINEER's employees and/or agents, in the performance of this Contract. If the ENGINEER is adjudicated to be liable by a trier of fact, the trier of fact shall award reasonable attorney's fees and costs to be paid to the COUNTY, as reimbursement for the attorney's fees and costs incurred by the COUNTY in defending the action, by the ENGINEER in an amount which is proportionate to the liability of the ENGINEER.

ENGINEER further agrees to defend, indemnify and hold harmless the COUNTY and all the officers, employees and agents of the COUNTY, and each of them, from and against any and all liabilities, damages, losses, claims, actions or proceedings caused by the negligence, errors, omissions, recklessness or intentional misconduct of the ENGINEER, and ENGINEER's employees and/or agents, in the performance of this Contract when said liabilities, negligence, errors, omissions, recklessness or intentional misconduct are not based upon or arising out of the professional services performed under this Contract.

ENGINEER will not be required to defend, indemnify or hold harmless the public body or the employees, officers or agents of the COUNTY from any liability, damage, loss, claim, action or proceeding caused by the negligence, errors, omissions, recklessness or intentional misconduct of the employees, officers or agents of the COUNTY.

General and Automobile Liability:

As to acts or omissions which do not arise directly out of the performance of the professional services, including but not limited to those acts or omissions normally covered by general and automobile liability insurance, ENGINEER agrees to indemnify, defend (at COUNTY's option), and hold harmless COUNTY, its officers, employees from and against any and all losses, damages, fines, liability, claims, demands, causes of action, costs, expenses, judgments, including but not limited to reasonable costs of investigation,

reasonable attorney's fees and expenses, reasonable consultants' fees and expenses, reasonable expert witnesses' fees and expenses and all court or arbitration or other alternative dispute resolution costs arising out of or in connection with the ENGINEER and its principals, employees, agents, consultants, and/or contractors.

Furthermore, this entire Section 9.01 survives any termination or completion of this Contract.

9.02 Non-Discrimination

ENGINEER acknowledges that the COUNTY has an obligation to ensure that public funds are not used to subsidize private discrimination. ENGINEER recognizes that if they or their subcontractors are found guilty by an appropriate authority of refusing to hire or do business with an individual or company due to reasons of race, color, religion, sex, sexual orientation, gender identity or gender expression, age, disability, national origin, or any other protected status, the COUNTY may declare the ENGINEER in breach of the Contract, terminate the Contract, and designate the ENGINEER as non-responsible.

9.03 Engineer's Responsibility for Services and Materials

Until the COUNTY's acceptance of the services performed by the ENGINEER the ENGINEER shall have the charge and care of the services and of the materials to be used herein and shall bear the risk of injury, loss and/or damages to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the nonexecution of the services. The ENGINEER shall rebuild, repair, restore and make good all injuries, losses and/or damages to any portion of the services to be performed or the materials occasioned by any cause before its completion and acceptance and shall bear the expense thereof.

9.04 Independent Contractor

The relationship of the ENGINEER to the COUNTY shall be that of an independent contractor.

9.05 Business Structure and Assignments

The ENGINEER shall not assign this Contract or dispose of all or substantially all of its assets without the written consent of the Clark County Board of Commissioners.

9.06 Subcontractors

The ENGINEER shall not subcontract any part of its performance under this Contract without the written consent of the Director. Subcontractor shall carry insurance coverage equivalent to the ENGINEER.

9.07 Parties and Interests

This Contract shall not bestow any rights upon any third party, but rather shall bind and benefit the COUNTY and the ENGINEER only.

9.08 Non-waiver

Failure of either party hereto to insist on the strict performance of any of the agreements herein or to exercise any rights or remedies accruing hereunder upon the fault or failure of performance, shall not be considered a waiver of the right to insist upon and to enforce by any appropriate remedy, strict compliance with any other obligation hereunder, or to exercise any right or remedy occurring as a result of any future default or failure of performance.

9.09 Applicable Laws

This Contract is subject to all the laws of the State of Nevada, the ordinances of the County of Clark, Nevada, the laws of the federal government of the United States of America, and all of the rules and regulations of any regulatory body or officer having jurisdiction.

9.10 Notices

All notices required or permitted hereunder shall be in writing and shall be deemed delivered three (3) days after deposit in a United States Postal Service Post Office receptacle with proper postage affixed (certified mail, return receipt requested) to the respective other party at the address prescribed in the preamble to this Contract.

9.11 Property: Copyrights

The ENGINEER shall furnish to the COUNTY all field notes, reports, data, and electronic or magnetic media, and original tracings of all drawings and plans, maps, photographs, and other materials (including, if requested by the Director, design computations, design sketches and review drawings) prepared pursuant to this Contract (hereinafter collectively referred to as "Documents"). The originals of such Documents shall be and remain the property of the COUNTY.

All of such Documents shall be deemed to be "works made for hire" prepared for the COUNTY. The ownership of all copyrights and all rights embodied in the copyrights in or to such Documents shall rest in the COUNTY when any such is subject to copyright. The ENGINEER agrees that it, nor any of its employees, shall have any right to copyright any of such Documents. The ENGINEER further agrees that neither it nor any of its employees shall exercise any of the rights embodied in the copyrights in or to such Documents, unless authorized to do so by the Clark County Board of Commissioners. The ENGINEER shall place a conspicuous notation upon each such Document which indicates that the copyright thereto is owned by the COUNTY.

Should it be finally determined, by a court or other tribunal of competent jurisdiction, that any of such Documents is not a “works made for hire,” it is agreed that the provisions of this section shall be termed an assignment, sale, and transfer of the copyright in or to such Document to the COUNTY for the longest term allowed by law. Notwithstanding the foregoing, the ENGINEER may retain copies of such Documents and such copies shall remain the property of the ENGINEER. The ENGINEER shall have the right to use such copies as it may desire, but the ENGINEER may not sell, license, or otherwise market such Documents.

Documents, including drawings and specifications prepared by ENGINEER pursuant to this Contract, are not intended or represented to be suitable for reuse by COUNTY or others on extensions of the services provided for the Project or any other Project. Any use of completed Documents for other projects and/or any use of uncompleted Documents without specific written authorization from ENGINEER will be at the COUNTY’s sole risk and without liability or legal exposure to ENGINEER.

9.12 Force Majeure

In the event either party is rendered unable, wholly or in part by force majeure to carry out any of its obligations under this Contract, it is agreed that on such party’s giving notice of the particulars of such force majeure in writing to the other party as soon as possible after the occurrence of the cause relied upon, then the obligations of the party giving such notice, to the extent it is affected by force majeure and to the extent that due diligence is being used to resume performance at the earliest practicable time, shall be suspended during the continuance of any inabilities so caused as to the extent provided, but for no longer period. Such cause shall, as far as possible, be remedied with all reasonable dispatch. In such an event, the ENGINEER shall provide an updated schedule satisfactory to the COUNTY for the completion of the remaining work called for under this Contract.

The term “force majeure” as used herein, shall include acts of God, acts of the public enemy, war, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, tornadoes, hurricanes, and restraints of government and people, explosions, breakage and not within the control of the party claiming such inability, which by the exercise of due diligence and care such party could not have avoided. The term “force majeure” as used herein, does not include strikes, lockouts, work slowdowns, and other labor disturbances.

9.13 Inspections and Audits

The Director shall have the right to perform, or cause to be performed, audits of the books and records of the ENGINEER and inspections of all places where work is undertaken in connection with this Contract provided that the ENGINEER shall not be required to keep such books and records longer than three (3) years after the termination of this Contract.

9.14 No Gratuities or Gifts

The ENGINEER, or agent/representative of the ENGINEER, shall not offer or give any gratuities (in the form of entertainment, meals, gifts, or otherwise) to any officer or employee of the COUNTY with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or making of any determinations with respect to the performance of this Contract.

9.15 Entire Agreement

This Contract contains all of the agreements of the parties.


This Agreement may be executed in multiple counterparts, each of which shall be deemed an original Agreement and each of which shall constitute one and the same Agreement. The counterparts of this Agreement may be executed and delivered by facsimile or other electronic signature (including portable document format) by either of the parties and the receiving party may rely on the receipt of such document so executed and delivered electronically or by facsimile as if the original had been received.

IN WITNESS WHEREOF, the parties have executed this Contract as of the date herein above set forth.

CLARK COUNTY, NEVADA

JACOBS ENGINEERING GROUP INC.

Randall J. Tarr
Assistant County Manager


Ken Gilbreth, P.E.
Vice President

APPROVED AS TO FORM:

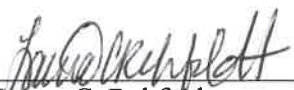

Laura C. Rehfeldt
Deputy District Attorney

EXHIBIT "A"
MAXIMUM DIRECT SALARY OF THE
ENGINEER'S EMPLOYEES STANDARD RATES

<u>CLASSIFICATION</u>	<u>DIRECT SALARY</u> (Not to Exceed Standard Rates)
Principal	\$135.00
Senior Project Manager / Technologist	\$130.00
Project Manager / Engineering Specialist	\$105.00
Project Engineer	\$95.00
Associate Engineer	\$75.00
Staff Engineer 2	\$55.00
Staff Engineer 1	\$40.00
Engineer Tech 5	\$75.00
Engineer Tech 4	\$55.00
Engineer Tech 3	\$50.00
Engineer Tech 2	\$40.00
Engineer Tech 1	\$30.00
Office/Clerical/Accounting	\$53.00
Bridge Engineering	\$90.00
Junior Bridge Engineer	\$78.00
Junior Roadway Engineer	\$70.00
Junior Technician	\$38.00
Project Assistant 1	\$48.00
Project Assistant 2	\$42.00
Senior Bridge Engineer	\$100.00
Senior Q/C	\$98.00
Senior Roadway Engineer	\$105.00
Senior Technician	\$70.00
Planner	\$65.00
Environmental Professional	\$75.00

EXHIBIT “B”

RIGHT-OF-WAY MAPS, LEGAL DESCRIPTIONS, INDIVIDUAL ACQUISITION MAPS, AND TEMPORARY CONSTRUCTION EASEMENT MAPS

RIGHT-OF-WAY MAPS

Right-of-way-maps shall be 24" x 36" sheets to a scale of 1" = 100'. A roll plot of the right-of-way maps shall also be provided, with a width of approximately 9"-11", length of five (5) feet, a scale not to exceed 1" = 100' but clearly legible, and a heading with the roadway name and to/from streets. If necessary to accommodate the entire corridor, more than one sheet of the roll plot can be provided, or the length of the plot allowed to exceed five (5) feet. Coordinate specific requirements of the roll plot with the Project Manager prior to submission.

The right-of-way maps and roll plot shall include the following information as a minimum:

1. Project alignment information for section lines and sectional ties.
2. Subdivision map references; section and section subdivision (aliquot) part reference.
3. Existing encroachment conflict improvements and improvements in acquisition areas and immediately adjacent thereto.
4. Existing and proposed right-of-way lines; with right-of-way widths, (right-of-way acquisition area to be shaded).
5. Property lines, together with the recorded document reference that created the property line, and/or the current vesting document by its recorded reference.
6. Recorded document reference for existing rights-of-way, roadway and utility easements, and patent reservations.
7. Tax parcel numbers and owner's names for all parcels from which right-of-way may be required; tax parcel numbers only for all other parcels shown.
8. Street names, together with street widths.
9. Curve data to include radius, delta, arc length and tangent.
10. Legend.
11. City limits of municipalities.
12. Property schedule; property owner, and on parcels which require additional right-of-way provide acquisition areas in square feet and acres.
13. Basis of bearing.
14. North arrow.
15. Maps shall be signed and sealed by a Nevada licensed professional land surveyor (P.L.S.)
16. Acquisition schedule; detailing acquisition progress at the time of all plan submittals.

LEGAL DESCRIPTIONS

P.L.S. shall prepare legal descriptions in compliance with Nevada Revised Statutes Section 625.790. All legal descriptions and exhibits submitted for the acquisition of right-of-way shall include a signed cover letter or memo, on the ENGINEER's letterhead, stating that "all text, drawings, and calculations have been checked, are accurate and in compliance with the requirements contained in the engineering services contract."

INDIVIDUAL ACQUISITION MAPS

Individual acquisition maps shall be 8 ½ " x 11" maps for all properties from which right-of-way is required. Individual acquisition maps shall include:

1. Tax parcel number and owner's name.
2. Subdivision map references, sectional and/or subdivision (aliquot) part references.
3. Existing and proposed right-of-way lines, with right-of-way widths.
4. Dimensions and bearings of the acquisition area.
5. Acquisition area to be shaded.
6. Existing cultural topo. Show contour lines only if appropriate.
7. Parcel areas in square feet and acres: total area, acquisition areas, remainder area, and area under existing improvements shall be indicated.
8. North arrow and scale.
9. U.S.A. patent reservations and area of right-of-way acquisition within U.S.A. patent reservation.
10. Listing of reference documents used to construct the map.
11. Existing improvements within the acquisition area and immediately adjacent thereto; all improvements shall be identified and dimensioned, as appropriate.
12. All property lines of the subject parcel together with the recorded document reference that created the property lines and/or the current vesting document by its recorded reference.
13. Existing easements of record within the acquisition area, with recording reference.
14. Curve data, including radius, delta, arc length and tangent.
15. Street names, together with street widths.
16. Maps shall be signed and sealed by a Nevada licensed professional land surveyor.

TEMPORARY CONSTRUCTION EASEMENT MAPS

Temporary construction easement maps shall be individual 8 ½" x 11" maps and shall include all data required for Individual Acquisition Maps including section views showing existing and proposed improvements, and indicating horizontal and vertical dimensions and purpose of the required easement.

All legal descriptions and exhibits submitted for the acquisition of right-of-way shall include a signed cover letter or memo, in the ENGINEER's letterhead, stating that "all text, drawings, and calculations have been checked, are accurate and in compliance with the requirements contained in the engineering services contract"

EXHIBIT “C”

RECORD OF SURVEY

The ENGINEER will cause a professional land surveyor to provide the following services for the Project:

Establish horizontal alignment for the Project and file a Record of Survey in the Office of the County Recorder. The Record of Survey will comply with the requirements of Nevada Revised Statutes 625.350 and Nevada Administrative Code 625.650 through 625.720, or as determined by the county surveyor, and will also contain the following information:

1. Bearings of the centerline of legal rights-of-way for all streets to be constructed and extending centerline bearing beyond construction area a minimum of one-half mile or to the next quarter section or full section line.
2. Bearings of the centerline of legal rights-of-way of all intersecting streets at which curb returns exist or will be constructed by the Project.
3. Ground distances along the centerlines of legal rights-of-way between intersections and descriptions of monuments used to control this alignment.
4. Ground distances to and descriptions of monuments controlling the centerlines of legal rights-of-way on intersecting streets.
5. Relationship to government land corners if right-of-way alignment is not coincident with sectional land lines.
6. The statement that: “This field survey was performed to establish and memorialize the legal rights-of-way and/or boundary limits for the construction of the Project that all intersections and other control points for the Projects will be monumented in accordance with applicable State statutes and local ordinances at the completion of roadway construction.”
7. Seal; date and signature of a State of Nevada registered professional land surveyor.
8. Description of all monuments both found and set. Monuments set must be sufficient in number, durability, and placement so as not to be easily disturbed and to ensure, together with monuments already existing, the perpetuation of facile reestablishment of any point or line of the survey.
 - A. Where an “offset” centerline alignment is to be used, the “offset” centerline shall be tied along the alignment to aliquot part corners. The “offset” centerline shall be so labeled on the Record of Survey.
 - B. Verify vertical control, checking existing benchmarks against other COUNTY benchmarks in the area to insure their reliability. Establish sufficient construction benches proximate to the construction to facilitate satisfactory completion of the Project. All vertical control will be based on the North American Vertical Datum of 1988.
 - C. Before causing the Record of Survey to be recorded, the ENGINEER must receive a written notice of acceptance from the County Surveyor.

EXHIBIT "D"

UTILITY COORDINATION & LOCATION IDENTIFICATION

The following description of the designation and locating phases are not intended to be comprehensive or inclusive, but is provided as a general outline of the work that is expected by the ENGINEER.

Phase I – Designating: For the purpose of this section "Designating" shall mean the process of using geophysical methods to determine the presence of a subsurface utility and mark its location using acceptable survey standards. SUE services shall include:

- Conduct records research to identify utility owners that are within the Project limits. The sources of information may include but is not limited to the utility company records and as-built plans, contract plans, One-Call, Public Utilities offices, and COUNTY offices.
- When designation and or location activities are to take place outside of right-of-ways, the ENGINEER shall request an access permit from the property owner prior to any entry on private property.
- Provide all maintenance and control of traffic to perform work. This includes obtaining an encroachment permit from the local permits officer and complying with all requirements imposed by said permit prior to initiating any field surveys. All traffic control plans must conform to the Manual on Uniform traffic Control Devices.
- Designate, field mark and record the approximate horizontal location of existing subsurface utilities using all of the following Quality Levels.

Quality Level D: information comes solely from existing utility as-built records.

Quality Level C: involves surveying visible aboveground utility facilities, such as manholes, valve boxes, posts, etc., and correlating this information with existing utility as-built records.

Quality Level B: involves the use of surface geophysical techniques to determine the existence and horizontal position of underground utilities. This activity is called "Designating". Two-dimensional mapping information is obtained. Quality Level B would be authorized through Special Services.

Quality Level A: involves the use of nondestructive digging equipment at critical points to determine the precise horizontal and vertical position of underground utilities, as well as the type, size, condition, material, and other characteristics. This activity is called "Locating." It is the highest level presently available.

Phase II – Locating: For the purpose of this section, “Locating” shall mean the process of exposing and recording the precise vertical and horizontal location of a utility by excavating a pothole using vacuum extraction or comparable nondestructive equipment. The ENGINEER will determine and identify potential utility conflicts, which, if necessary, will require potholes to determine actual vertical location. The hours developed for this scope of work are based on thirty (30) potholes. The initial thirty (30) potholes shall be included in Basic Services. Additional potholes will be considered as Special Services and will require written authorization, from the Project Manager, prior to performing the work. The ENGINEER shall:

- Provide all maintenance and control of traffic to perform work. This includes obtaining an Encroachment permit from the permits officer and complying with all requirements imposed by said permit prior to initiating any potholes or field surveys. All traffic control plans must conform to the Manual on Uniform Traffic Control Devices.
- Coordinate with utility companies for inspection as required.
- Neatly cut and remove existing paving. Excavate pothole in such a manner as to prevent any damage to wrappings, coatings, or other protective coverings of the utility facility. Where conduits are concrete encased, determine top and bottom of encasements in addition to both sides. Utilities over 48” in diameter (or four (4) feet in width on RCB’s) will require potholes at the centerline of the utility and both sides. Utilities shall also be potholed on each side of the proposed structure location, located transversely to any proposed structure with a width in excess of six (6) feet.
- Where existing pavement exists, provide a restoration patch of pavement or concrete within the limits of the original cut at time of backfill, as required by the permitting agency. Such restoration and backfill procedures shall comply with the standards of the governmental authority that issued the applicable excavation permit. Whenever potholes are excavated outside of roadway pavement, these disturbed areas shall be restored, as nearly as possible, to the condition that existed prior to excavation.
- Furnish, install and color code per utility standards, a permanent above ground marker (i.e. P.K. nail, steel pin or hub) directly above the centerline of the structure (or by using offsets), and record the elevation of the marker. Prepare a sketch of each pothole, showing location of the existing utility in relation to the hub. Survey the ground marker and determine elevation of utility, and include in sketch.
- Provide an AutoCAD sheet file of the potholes horizontal and vertical location as well as the individual detailed information of each hole.
- Provide the following pothole information in an Excel spreadsheet:

Pothole reference number and description of the utility.

Elevation of top of utility.

Horizontal location using the x y coordinates further translated to project stationing and offset.

Identify the freeway, highway, route or city street on which the pothole is located.

Outside diameter of pipe or width of duct banks and configuration of non-encased, multi-conduit systems.

Identification of utility structure material composition, when possible.

Identification of benchmarks used to determine elevations.

Pavement thickness and type.

Elevation data shall be accurate to within 0.05' +/- based on benchmarks shown by consultant and horizontal accuracy shall be within 0.5' +/- based on the projects horizontal control.

EXHIBIT “E”

TOPOGRAPHIC BASE MAPPING

Aerial Mapping Supplemented with Conventional Field Survey: Develop engineering base sheets and digital terrain models (DTM) utilizing aerial mapping. DTM will be produced from aeriels flown at an altitude to produce one (1) inch to 40 feet horizontal scale with one-foot contour intervals per National Mapping Accuracy Standards. Contours will be developed utilizing a digital terrain program and the aerial mapping. Conventional ground topographic surveying techniques will be further utilized to supplement aerial mapping. Specifically, these tasks shall be performed by the P.L.S. and include, but are not limited to, the following: 1.) Set panel locations for control in obtaining aerial topography. Topographic mapping to be relative to a published County benchmark; 2.) Horizontal and vertical mapping shall be consistent with control established by the Survey Control Map or Record of Survey; and 3.) Conduct field survey to identify and locate existing improvements as necessary to supplement the aerial topography. Collect field survey data along the project alignment, including but not limited to existing edge of pavement, drop inlet locations and invert elevations, storm drain and sanitary sewer manhole lids and invert elevations, and gutter flow line, top of curb and back of sidewalk elevations, water valve box lid and water valves top of operating nut elevations, visible surface utilities and potholed sub-surface references. In areas where it is anticipated that storm drain construction will require full street reconstruction, obtain field survey shots at 50-foot intervals along the top of curbs and street centerline, plus shots at edges of driveways, transitions, and curb returns. Aerial and field survey shall extend a minimum of 100 feet for minor street intersections and 150 feet for major street intersections beyond curb returns of adjacent streets. Aerial and field survey shall extend a minimum of 200 feet beyond the beginning and end stations of the project limits. Aerial and field data shall extend a minimum of 100 feet beyond existing and/or anticipated right-of-way limits.

DISCLOSURE OF OWNERSHIP/PRINCIPALS

Business Entity Type (Please select one)						
<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Partnership	<input type="checkbox"/> Limited Liability Company	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Trust	<input type="checkbox"/> Non-Profit Organization	<input type="checkbox"/> Other
Business Designation Group (Please select all that apply)						
<input type="checkbox"/> MBE	<input type="checkbox"/> WBE	<input type="checkbox"/> SBE	<input type="checkbox"/> PBE	<input type="checkbox"/> VET	<input type="checkbox"/> DVET	<input type="checkbox"/> ESB
Minority Business Enterprise	Women-Owned Business Enterprise	Small Business Enterprise	Physically Challenged Business Enterprise	Veteran Owned Business	Disabled Veteran Owned Business	Emerging Small Business
Number of Clark County Nevada Residents Employed:				111		
Corporate/Business Entity Name: Jacobs Engineering Group Inc.						
(Include d.b.a., if applicable)						
Street Address:		1999 Bryan Street Ste. 1200		Website: www.jacobs.com		
City, State and Zip Code:		Dallas, TX 75201		POC Name:		
Telephone No:		(214) 638-0145		Email:		
Nevada Local Street Address:		1301 N. Green Valley Pkwy, Suite 200		Website: www.jacobs.com		
(If different from above)		Henderson, NV 89074		Local Fax No: (702) 369-1107		
Local Telephone No:		(702) 369-6175		Local POC Name: Ken Gilbreth Ken.Gilbreth@jacobs.com		
				Email:		

All entities, with the exception of publicly-traded and non-profit organizations, must list the names of individuals holding more than five percent (5%) ownership or financial interest in the business entity appearing before the Board.

Publicly-traded entities and non-profit organizations shall list all Corporate Officers and Directors in lieu of disclosing the names of individuals with ownership or financial interest. The disclosure requirement, as applied to land-use applications, extends to the applicant and the landowner(s).


Entities include all business associations organized under or governed by Title 7 of the Nevada Revised Statutes, including but not limited to private corporations, close corporations, foreign corporations, limited liability companies, partnerships, limited partnerships, and professional corporations.

Full Name	Title	% Owned (Not required for Publicly Traded Corporations/Non-profit organizations)
SEE ATTACHED		

This section is not required for publicly-traded corporations. Are you a publicly-traded corporation? ☒ Yes ☐ No

- Are any individual members, partners, owners or principals, involved in the business entity, a Clark County, Department of Aviation, Clark County Detention Center or Clark County Water Reclamation District full-time employee(s), or appointed/elected official(s)?
☐ Yes ☐ No (If yes, please note that County employee(s), or appointed/elected official(s) may not perform any work on professional service contracts, or other contracts, which are not subject to competitive bid.)
- Do any individual members, partners, owners or principals have a spouse, registered domestic partner, child, parent, in-law or brother/sister, half-brother/half-sister, grandchild, grandparent, related to a Clark County, Department of Aviation, Clark County Detention Center or Clark County Water Reclamation District full-time employee(s), or appointed/elected official(s)?
☐ Yes ☐ No (If yes, please complete the Disclosure of Relationship form on Page 2. If no, please print N/A on Page 2.)

I certify under penalty of perjury, that all of the information provided herein is current, complete, and accurate. I also understand that the Board will not take action on land-use approvals, contract approvals, land sales, leases or exchanges without the completed disclosure form.

 Signature	Ken Gilbreth Print Name
Vice President	April 28, 2021 Date

DISCLOSURE OF RELATIONSHIP

List any disclosures below:
(Mark N/A, if not applicable.)

NAME OF BUSINESS OWNER/PRINCIPAL	NAME OF COUNTY* EMPLOYEE/OFFICIAL AND JOB TITLE	RELATIONSHIP TO COUNTY* EMPLOYEE/OFFICIAL	COUNTY* EMPLOYEE'S/OFFICIAL'S DEPARTMENT
N/A			

* County employee means Clark County, Department of Aviation, Clark County Detention Center or Clark County Water Reclamation District.

"Consanguinity" is a relationship by blood. "Affinity" is a relationship by marriage.

"To the second degree of consanguinity" applies to the candidate's first and second degree of blood relatives as follows:

- Spouse – Registered Domestic Partners – Children – Parents – In-laws (first degree)
- Brothers/Sisters – Half-Brothers/Half-Sisters – Grandchildren – Grandparents – In-laws (second degree)

For County Use Only:

If any Disclosure of Relationship is noted above, please complete the following:

- ☐ Yes ☐ No Is the County employee(s) noted above involved in the contracting/selection process for this particular agenda item?
- ☐ Yes ☐ No Is the County employee(s) noted above involved in any way with the business in performance of the contract?

Notes/Comments:

Signature

Print Name
Authorized Department Representative

Blueprint Platform 04/26/2021 *Jacobs Engineering Group Inc.*

Appointments

Board Directors

Name	QuickRef	Position	Appointed
<u>Brooks, Vincent K.</u>	<u>BROOKS-VK</u>	Director	08/14/2020
<u>Demetriou, Steven J</u>	<u>DEMETRI-SJ</u>	Chair of the Board	07/28/2016
		Director	08/17/2015
<u>Eberhart, Ralph E.</u>	<u>EBERHAR-RE</u>	Director	09/27/2012
<u>Jr., R. C. Davidson</u>	<u>JR-RCD 00001</u>	Director	02/13/2001
<u>Kiser, Georgette D.</u>	<u>KISER-GD</u>	Director	05/29/2019
<u>Levinson, Linda Fayne</u>	<u>LEVINSO-LF</u>	Director	02/13/1996
<u>Loughran, Barbara</u>	<u>LOUGHRAN-B</u>	Director	05/29/2019
<u>McNamara, Robert</u>	<u>MCNAMARA-R</u>	Director	01/19/2017
<u>Robertson, Peter J.</u>	<u>ROBERTS-PJ</u>	Director	07/30/2009
<u>Thompson, Chris M.T.</u>	<u>THOMPSON-CM 1</u>	Director	11/15/2012

Officers

Name	QuickRef	Position	Appointed
<u>Adkisson, Jason</u>	<u>ADKISSON-J</u>	Assistant Secretary	11/19/2020
<u>Allen, William "Billy" B.</u>	<u>ALLEN-WB 001</u>	Senior Vice President and Chief Accounting Officer	10/13/2016
<u>Andrews, Madhuri</u>	<u>ANDREWS-M</u>	Chief Digital and Information Officer	11/14/2019
		Executive Vice President	01/27/2021
<u>Arnette, Stephen A.</u>	<u>ARNETTE-SA</u>	SVP & GM, CMS Advanced Engineering, Research & Ops (AERO)	01/18/2018
<u>Bello, Marius (Mark) F.</u>	<u>BELLO-MF</u>	Senior Vice President, Designated Project Executive	01/16/2020
<u>Berryman, Kevin Christopher</u>	<u>BERRYMA-KC</u>	President	11/14/2019
		Chief Financial Officer	01/05/2015
<u>Blackwood, Dennis</u>	<u>BLACKWOO-D</u>	Manager, California Engineering Operations	01/18/2018
<u>Bloom, Katie</u>	<u>BLOOM-K</u>	Designated person responsible for practice of Environmental	01/18/2018
<u>Bruning, Michael</u>	<u>BRUNING-M</u>	Manager, California Engineering Operations	01/18/2018
<u>Bunderson, Michael</u>	<u>BUNDERSO-M</u>	Vice President, Tax	05/29/2018
<u>Bussell, Scott</u>	<u>BUSSELL-S</u>	Vice President	01/17/2019

<u>Byers, Timothy</u>	<u>BYERS-T</u>	Sr Vice President & GM, Federal & Environmental Solutions	05/05/2020
<u>Carlin, Michael James</u>	<u>CARLIN-M 001</u>	Vice President	01/17/2019
<u>Caruso, Joanne E.</u>	<u>CARUSO-J</u>	Treasurer	01/16/2020
		Chief Administrative Officer	01/18/2018
		Chief Legal Officer	11/07/2018
<u>Cordtz, Kent</u>	<u>CORDTZ-K</u>	Executive Vice President	11/07/2018
		Manager, California Engineering Operations	01/18/2018
<u>Crawford, Bruce</u>	<u>CRAWFORD-B</u>	Senior Vice President, CMS Strategic Development	11/19/2020
<u>Delisle, Tina</u>	<u>DELISLE-T</u>	Senior Manager Payroll	02/01/2021
<u>Demetriou, Steven J</u>	<u>DEMETRI-SJ</u>	Chief Executive Officer	08/17/2015
<u>Doros, Jonathan</u>	<u>DOROS-J</u>	SVP, Financial Planning & Analysis, Investor Relations & Tre	11/19/2020
<u>Doyna, James</u>	<u>DOYNA-J 0001</u>	Sr Vice President & Chief Financial Officer, CMS	03/18/2021
<u>Earsom, Deryl</u>	<u>EARSOM-D</u>	Assistant Secretary	11/19/2020
<u>Walstrom, Jan</u>	<u>ELLIS-JW</u>	Senior Vice President	05/05/2020
		Global Market Director, Environmental	05/05/2020
<u>Gilmartin, Kenneth</u>	<u>GILMARTI-K</u>	Executive Vice President, People & Places Solutions	11/14/2019
<u>Gustafson, Shelette M.</u>	<u>GUSTAFS-SM</u>	Chief People and Inclusion Officer	01/17/2019
		Senior Vice President	01/17/2019
<u>Hannigan, Marietta C.</u>	<u>HANNIGA-MC</u>	EVP Strategy, Corporate Development & Corporate Communicatio	11/19/2020
<u>Hansen, Taggart</u>	<u>HANSEN-T</u>	Sr Vice President, Deputy General Counsel & Internal Audit	05/05/2020
<u>Hanson, Robert</u>	<u>HANSON-R</u>	Manager, California Engineering Operations	06/01/2018
<u>Hendon, Brian Lee</u>	<u>HENDON-BL</u>	Designated person responsible for practice of Architecture i	01/18/2018
<u>Herlitzka, Scott</u>	<u>HERLITZK-S</u>	Vice President	05/16/2016
<u>Hicks, Rich</u>	<u>HICKS-R</u>	Manager, Ohio Engineering Operations	05/09/2018
<u>Hickton, Dawne Sepanski</u>	<u>HICKTON-DS</u>	COO Critical Mission Solutions	01/16/2020
		Executive Vice President	06/03/2019

<u>Hill, Patrick</u>	<u>HILL-P</u>	Executive Vice President, People & Places Solutions	01/16/2020
<u>Hsu, Mike</u>	<u>HSU-M</u>	Senior Director Tax	09/04/2019
<u>Johnson, Justin</u>	<u>JOHNSON-J</u>	Vice President	11/19/2020
		Secretary	07/09/2020
<u>Jones, Keith B.</u>	<u>JONES-KB</u>	Manager, Ohio Land Surveying Operations	05/09/2018
<u>Krishnan, Kosalram</u>	<u>KRISHNAN-K</u>	Manager, California Engineering Operations	01/18/2018
<u>Laity, Michael</u>	<u>LAITY-M</u>	Senior Director Tax	02/21/2020
<u>Lamb, Matt</u>	<u>LAMB-M</u>	Vice President, Florida Engineering Operations	09/24/2018
<u>Lopez-Dubois, Miguel</u>	<u>LOPEZDUB-M</u>	Manager, California Engineering Operations	01/18/2018
<u>Maloney, Kevin</u>	<u>MALONEY-K</u>	Manager, California Engineering Operations	01/18/2018
<u>Meinhart, Thomas</u>	<u>MEINHART-T</u>	Senior Vice President, PPS, Americas (South)	11/14/2019
<u>Miller, Shannon</u>	<u>MILLER-S</u>	SVP, Enterprise Risk Management & HR Talent Management	11/19/2020
<u>Montellano, Victorino</u>	<u>MONTELLA-V</u>	Manager, California Engineering Operations	01/18/2018
<u>Morris, Gary</u>	<u>MORRIS-G</u>	Senior Vice President, PPS, Americas (North)	11/14/2019
<u>Morrison, Hugh Donald</u>	<u>MORRISO-HD</u>	Senior Vice President & GM, PPS Europe, Middle East & Africa	01/18/2018
<u>Nein, Brett</u>	<u>NEIN-B</u>	Vice President, Florida Landscape Architecture Operations	06/01/2018
<u>O'Connor, Kelly</u>	<u>OCONNOR-K</u>	Senior Vice President, Strategy & Project Delivery	05/02/2019
<u>Owens, John G.</u>	<u>OWENS-JG</u>	Designated Person Responsible Electrical Engineering in AK	02/27/2020
<u>Parent, Mark J.</u>	<u>PARENT-MJ</u>	Designated Person Responsible Structural Engineering in AK	02/27/2020
<u>Pragada, Robert V.</u>	<u>PRAGADA-RV</u>	President	11/14/2019
		Chief Operating Officer	11/07/2018
<u>Refinski, Elizabeth A.</u>	<u>REFINSK-EA</u>	Assistant Secretary	03/26/2009
<u>Richmond, Jennifer</u>	<u>RICHMOND-J</u>	Senior Vice President & General Manager, CMS ANS	05/05/2020

<u>Rosenfeld, Benjamin</u>	<u>ROSENFEL-B</u>	Manager, California Engineering Operations	01/18/2018
<u>Scarlat, Cristian</u>	<u>SCARLAT-C</u>	Manager, California Engineering Operations	01/18/2018
<u>Scher, Brian</u>	<u>SCHER-B</u>	Assistant Secretary	03/26/2009
<u>Sever, Jeffrey David</u>	<u>SEVER-JD</u>	Designated person responsible for practice of Mechanical Eng	06/28/2018
<u>Shelton, Brian R.</u>	<u>SHELTON-BR</u>	Senior Vice President, Critical Mission Solutions Finance	01/17/2019
<u>Strauss, Scott</u>	<u>STRAUSS-S</u>	Vice President - Authorized Signer	04/01/2019
<u>Thom, Chrissy</u>	<u>THOM-C</u>	Senior Vice President, Growth, Strategy & Solutions PPS	01/27/2021
<u>Tyler, Michael R.</u>	<u>TYLER-MR</u>	Chief Compliance Officer	01/17/2019
		General Counsel	07/25/2013
		Senior Vice President	07/25/2013
<u>Uchil, Vinay</u>	<u>UCHIL-V</u>	Vice President, Florida Engineering Operations	09/24/2018
<u>Vadlamudi, Koti</u>	<u>VADLAMUD-K</u>	Senior Vice President & GM, Advanced Facilities, PPS	11/14/2019
<u>Wallace, Ronald</u>	<u>WALLACE-R</u>	Senior Vice President, Operations Support	09/02/2020
<u>Walter, Eric</u>	<u>WALTER-E</u>	Senior Vice President, Finance PPS	11/19/2020
<u>Warnock, William Kirkpatrick</u>	<u>WARNOCK-WK</u>	Manager, California Engineering Operations	01/18/2018
<u>Watson, Katus</u>	<u>WATSON-K</u>	Vice President, Florida Engineering Operations	09/24/2018
<u>White, Clive Thomas</u>	<u>WHITE-CT</u>	Senior Vice President, CMS International	05/05/2020
<u>Wiemelt, Karen</u>	<u>WIEMELT-K</u>	Senior Vice President & GM, CMS North America Nuclear	01/18/2018
<u>Williams, Ronald R.</u>	<u>WILLIAM-RR</u>	Senior Vice President, PPS, Americas (West)	11/14/2019
<u>Willis, Aaron</u>	<u>WILLIS-A</u>	Manager, California Land Surveying Operations	01/18/2018
<u>Wishart-Smith, Heather</u>	<u>WISHARTS-H</u>	SVP, Innovation & Jacobs Connected Enterprise	05/02/2019
<u>Wood, Mark</u>	<u>WOOD-M</u>	Manager, California Engineering Operations	01/18/2018

Yox, Jeff

YOX-J

Manager, California
Engineering Operations

06/01/2018

Glenda Sargent

From: Richard Robinson
Sent: Monday, June 28, 2021 4:01 PM
To: board@boe.state.nv.us
Cc: Glenda Sargent
Subject: NEVADA GOVERNMENT ENTITY FILING OF AWARDED PUBLIC WORKS - TROPICANA AVENUE AND BROADBENT BOULEVARD-BOULDER HIGHWAY TO CITY OF HENDERSON LIMITS
Attachments: CertEligibilityAwardedProject Trop.pdf

Hi awesome people at NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS,

Attached is the form I am suppose to send to you because we have selected an engineering firm to help us with another project.

Have a great day and please let me know this was received and if you need anything else.

Thanks,
Richard

Richard R. Robinson P.E. | Senior Civil Engineer
Clark County Public Works | Design Engineering Division
500 S Grand Central Pkwy. Box 554000 | Las Vegas, NV | 89155-4000
T: 702.455.6921 | F: 702.455.6113



NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

1755 E. PLUMB LANE, RENO, NEVADA 89502-3632 • (775) 688-1231 • FAX (775) 688-2991
board@boe.state.nv.us

NEVADA GOVERNMENT ENTITY FILING OF AWARDED PUBLIC WORKS PROJECTS FOR POSTING ON BOARD WEBSITE

In accordance with Nevada Revised Statutes (NRS) 338, awarded public works projects must be submitted to the Nevada State Board of Professional Engineers and Land Surveyors (Board) for posting on the Board's official website. Nevada state and local government entities are to use this form to comply with NRS 338.

INSTRUCTIONS

1. Forms must be typed or printed legibly in ink.
2. The person completing the form must sign form in ink.
3. Only authorized government staff can submit this form.
4. List all certified professional licensees by discipline that were considered to give firm(s) local preference.
5. Form is to be submitted to the Board via email [board@boe.state.nv.us] from an official email account or faxed [(775) 688-2991] with an official cover sheet.

I - Public Works Project Awarding Agency

Clark County
Agency

Public Works
Department

500 S Grand Central Pkwy. Box 554000
Address 1

Address 2

Las Vegas NV 89155-4000
City State Zip

702-455-6000 RRR@clarkcountynv.gov
Phone Number Email

702-455-6113
Fax Number

II - Firm Awarded Public Works Project

Jacobs Engineering Group, Inc.
Firm Name

1301 North Green Valley Parkway, Suite 200
Address 1

Address 2

Henderson NV 89074
City State Zip

702-369-6175 Ken.Gilbreth@jacobs.com
Phone Number Email

N/A
Fax Number

If selected firm is a Joint Venture, list firms involved on additional sheet(s) and attach.

III - Project Description

TROPICANA AVENUE AND BROADBENT BOULEVARD

Project Name

Project Cost ☐ Actual ☐ Projected

roadway improvements on Tropicana Avenue and Broadbent Boulevard from Boulder Highway to City of Henderson Limits. Such im
Project Description - Provide the services for which the design professional(s) were selected. Attached extra sheet(s) if required.

Project Description

Roadway improvements on Tropicana Avenue and Broadbent Boulevard from Boulder Highway to City of Henderson Limits. Such improvements are to include, at a minimum, hot mix asphaltic concrete pavement providing four (4) travel lanes, a two-way left-turn lane with raised medians, buffered bike lanes, and intersecting side streets, storm drainage facilities, curbs, gutters, sidewalks, bus stops, streetlighting, traffic signals modifications, ped crossing flasher beacon at trail crossing, ITS facilities, utility modifications and relocations, traffic control devices, pavement markings, intersecting streets, horizontal and vertical transitions, and other necessary appurtenances required to make a good, complete, and serviceable Project.

IV - Local Preference: Did selected firm receive local preference per NRS 338? ☐ Yes ☐ No

If yes, then complete Section V, otherwise, skip to Section VI.

V - Certified Professional Licensee(s)

<u>Name</u>	<u>License Type and Discipline</u>	<u>License Number</u>	<u>Certificate Number</u>
<u>Name</u>	<u>License Type and Discipline</u>	<u>License Number</u>	<u>Certificate Number</u>
<u>Name</u>	<u>License Type and Discipline</u>	<u>License Number</u>	<u>Certificate Number</u>
<u>Name</u>	<u>License Type and Discipline</u>	<u>License Number</u>	<u>Certificate Number</u>
<u>Name</u>	<u>License Type and Discipline</u>	<u>License Number</u>	<u>Certificate Number</u>
<u>Name</u>	<u>License Type and Discipline</u>	<u>License Number</u>	<u>Certificate Number</u>
<u>Name</u>	<u>License Type and Discipline</u>	<u>License Number</u>	<u>Certificate Number</u>

Use additional sheet(s) if more certified licensees were considered in this selection.

VI – Person Completing Posting Form

<u>Richard R Robinson</u>	<u>6/28/2021</u>
Signature	Date
<u>Richard R. Robinson</u>	
Name	
<u>Senior Civil Engineer</u>	
Title	
<u>702-455-6921</u>	<u>RRR@clarkcountynv.gov</u>
Phone Number	Email