



## AGREEMENT FOR PROFESSIONAL SERVICES

**PROJECT NAME:** JOHNSON ROAD RECONSTRUCTION (HALLELUJAH TO RHONDA)

**TNP PROJECT NUMBER:** KEL 18388

**CLIENT:** City of Keller

**ADDRESS:** 1100 Bear Creek Parkway  
Keller, Texas 76244

City of Keller (Client) hereby requests and authorizes Teague Nall and Perkins, Inc., (Consultant) to perform the following services:

### Article I

#### SCOPE OF BASIC SERVICES:

Consultant shall provide survey, design, bidding, construction management and construction inspection services for the improvements associated with the reconstruction of Johnson Road from Hallelujah Trail to Rhonda Road. The Project involves the reconstruction of approximately 3,450 LF of Johnson Road along with storm drain improvements, hike/bike trail improvements, sidewalk improvements and street light improvements. It is anticipated that the existing 2-lane roadway will be reconstructed as a 3-lane curb and gutter concrete roadway. The improvements will connect to the proposed roundabout at the intersection of Johnson Road and Keller-Smithfield Road that is currently being designed as a separate project. The improvements will also be integrated with the proposed 12" Johnson Road water line project that is currently being designed as a separate project. A graphical depiction of the approximate location and limits of the Project is shown depicted on Exhibit A. The following is a summary of the various elements associated with this scope of services:

- Approximately 1,800 LF of roadway reconstruction between Hallelujah Trail and the Keller-Smithfield roundabout;
- Approximately 1,650 LF of roadway reconstruction between the Keller-Smithfield roundabout and Rhonda Road;
- Approximately 1,800 LF of storm system improvements west of the Keller-Smithfield roundabout;
- Approximately 1,600 LF of storm system improvements east of the Keller-Smithfield roundabout;
- Approximately 1,800 LF of hike/bike trail between the roundabout and Rufe Snow Drive;
- Approximately 300 LF of hike/bike trail along Keller-Smithfield north of the roundabout;
- Modification to the Keller-Smithfield roundabout design to accommodate the Johnson Road reconstruction;
- Modification to the Johnson Road 12" water line design to accommodate the Johnson Road reconstruction;
- Approximately 5,000 LF of sidewalk improvements along Johnson Road between Hallelujah Trail and Rhonda Dr.

A detailed scope of services is included as Attachment A and is made a part hereto.

### Article II

#### COMPENSATION:

Compensation to be on a basis of the following:

1. **BASIC SERVICES:** The Client agrees to pay the Consultant as follows:
  - a. Services associated with preparing construction documents for the reconstruction of Johnson Road shall be performed for the lump sum fee amount of **\$403,000 (Four Hundred Three Thousand**

**Dollars).** The services to be provided are further outlined on Attachment A.

- b. Services associated with assisting the City with public involvement for the Project shall be performed on a time and expense basis with a not-to-exceed budget of **\$12,000 (Twelve Thousand Dollars)**. This budget is an estimate for the services anticipated but the actual cost for these services may be a lesser or higher amount. However, it is understood that the stated budget amount shall not be exceeded without written authorization from the Client. Reimbursement shall be per the Consultant's standard rate schedule (Attachment B). The services to be provided are further outlined on Attachment A.
- c. Services associated with assisting the City with bidding and awarding the Project shall be performed on a time and expense basis with a not-to-exceed budget of **\$15,000 (Fifteen Thousand Dollars)**. This budget is an estimate for the services anticipated but the actual cost for these services may be a lesser or higher amount. However, it is understood that the stated budget amount shall not be exceeded without written authorization from the Client. Reimbursement shall be per the Consultant's standard rate schedule (Attachment B). The services to be provided are further outlined on Attachment A.
- d. Services associated with providing construction phase services for the Project shall be performed on a time and expense basis with a not-to-exceed budget of **\$30,000 (Thirty Thousand Dollars)**. This budget is an estimate for the services anticipated but the actual cost for these services may be a lesser or higher amount. However, it is understood that the stated budget amount shall not be exceeded without written authorization from the Client. Reimbursement shall be per the Consultant's standard rate schedule (Attachment B). The services to be provided are further outlined on Attachment A.
- e. Direct expenses associated with this project include printing, plotting, reproduction, postage, courier service, photos and binding charges. The project budget for direct expenses shall be **\$5,000 (Five Thousand Dollars)**. Reimbursement shall be per the Consultant's standard rate schedule (Attachment B).

2. **SPECIAL SERVICES:** The Client agrees to pay the Consultant as follows:

- a. Services associated with performing supplemental survey for the Project shall be performed for the lump sum fee amount of **\$9,000 (Nine Thousand Dollars)**. The services to be provided are further outlined on Attachment A.
- b. Services associated with researching and preparing right-of-way (ROW) and/or easement documents for the Project shall be performed for a rate of **\$2,800 (Two Thousand Eight Hundred Dollars)** per parcel. It is anticipated that ROW will need to be acquired from twelve (12) parcels, therefore the total fee anticipated for this task is **\$33,600**. The services to be provided are further outlined on Attachment A.
- c. Services associated with the negotiations and closing services associated with acquisition of right-of-way for the Project shall be performed for a rate of **\$3,000 (Three Thousand Dollars)** per parcel. It is anticipated that right-of-way will be required from twelve (12) parcels to accommodate the proposed paving improvements associated with the Project. Therefore, the total fee anticipated for this task is **\$36,000**. The services to be provided are further outlined on Attachment A.
- d. Services associated with performing geotechnical investigations for the Project shall be performed for the lump sum fee amount of **\$5,500 (Five Thousand Five Hundred Dollars)**. The services to be provided are further outlined on Attachment A.
- e. Services associated with providing Construction Inspection for the Project shall be performed on a time and expense basis with a not-to-exceed budget of **\$150,000 (One Hundred Fifty Thousand**

**Dollars).** The budget is based on providing daily construction inspection for the anticipated construction duration of 1 year. This budget is an estimate for the services anticipated but the actual cost for these services may be a lesser or higher amount. However, it is understood that the stated budget amount shall not be exceeded without written authorization from the Client. Reimbursement shall be per the Consultant's standard rate schedule (Attachment B). The services to be provided are further outlined on Attachment A

- f. Services associated with providing supplemental materials testing shall be performed on a time and expense basis with a not-to-exceed budget of **\$15,000 (Fifteen Thousand Dollars)**. This budget is an estimate for the services anticipated but the actual cost for these services may be a lesser or higher amount. However, it is understood that the stated budget amount shall not be exceeded without written authorization from the Client. Reimbursement shall be per the Consultant's standard rate schedule (Attachment B). The services to be provided are further outlined on Attachment A.

3. **ADDITIONAL SERVICES:** The Client agrees to pay the Consultant as follows:

- a. Services incidental to the project but not within the scope of the Basic Services or the Special Services may be added by the City to the Consultant's responsibilities. These services shall be performed on a time and expense basis. The established budget for these services shall be **\$25,000 (Twenty-Five Thousand Dollars)**. No Additional Services shall be performed without the City's written authorization. Reimbursement shall be per the Consultant's standard rate schedule (Attachment B).

**PAYMENT TERMS:** Client shall be billed monthly for services rendered and pay upon receipt of invoice. Delays of transmitting payments to Consultant more than 30 days from invoice date may result in cessation of services until payment is received.

### **Article III**

**SCHEDULE:** The proposed services shall begin within 5 working days of authorization to proceed. A conceptual project scheduled is included as Attachment C.

It is understood and mutually agreed that the objective of all involved in this project is to produce and provide quality and complete information and deliverables, which requires a considerable amount of coordination and cooperation, as well as adequate time for research, analysis and development. It is also understood that Consultant's ability to perform the scope of service is dependent upon timely receipt of information and data from the Client, as well as other requested materials as may be needed to complete the work. Adjustments in schedule may be required should information or data from the Client become delayed or not provided in a timely manner. It is anticipated that the life of this service agreement will be no more than **Twenty-Four (24) months** after receiving the authorization to proceed. If necessary and mutually agreed in writing by both parties, the duration of the contract can be extended.

### **Article IV**

**Key Project Personnel:** The Consultant has committed key project personnel to the project as identified in Attachment D. Consultant agrees to make these personnel available for the project as needed to accomplish the scope set forth herein. If a key project member becomes physically unable to perform on Client's project as a result of illness, injury, death, leave, departure from the firm, or any other reason, a qualified substitute shall be communicated to the Client for review and approval.

## Article V

**SUPPLEMENTAL PROVISIONS:** The attached supplemental provisions are incorporated and made a part of this agreement.

Please execute and return a signed copy for our files. Receipt of an executed copy of this contract will serve as notice to proceed. No work shall commence on the project until an executed copy of this contract is received by Consultant. By signing below, the signer warrants that he or she is authorized to execute binding contracts for the Client for the services indicated.

Approved by Client:

**City of Keller**

By:

Mark Hafner

Title: City Manager

Date:

Accepted by Consultant:

**Teague Nall and Perkins, Inc.**

By:



Scott Wilhelm, PE

Title: Principal

Date: November 14, 2018

### **FEE SUMMARY:**

#### **Basic Services**

a. Roadway Design:	\$403,000	(Lump Sum)
b. Public Involvement:	\$12,000	(Time and Expense)
c. Bidding and Award:	\$15,000	(Time and Expense)
d. Construction Phase Services:	\$30,000	(Time and Expense)
e. Direct Costs:	\$5,000	(Reimbursable)

#### **Special Services**

a. Supplemental Survey:	\$9,000	(Lump Sum)
b. ROW Documents:	\$33,600	(\$2,800 per parcel)
c. ROW Negotiation Services:	\$36,000	(\$3,000 per parcel)
d. Geotechnical Investigations:	\$5,500	(Lump Sum)
e. Construction Inspection:	\$150,000	(Time and Expense)
f. Supplemental Materials Testing	\$15,000	(Time and Expense)

**Total \$714,100**

## Supplemental Provisions

**1. AUTHORIZATION TO PROCEED**

Signing this agreement shall be construed as authorization by CLIENT for TNP, Inc. to proceed with the work, unless otherwise provided for in this agreement.

**2. LABOR COSTS**

TNP, Inc.'s Labor Costs shall be the amount of salaries paid TNP, Inc.'s employees for work performed on CLIENTS Project plus a stipulated percentage of such salaries to cover all payroll-related taxes, payments, premiums, and benefits.

**3. DIRECT EXPENSES**

TNP, Inc.'s Direct Expenses shall be those costs incurred on or directly for the CLIENT's Project, including but not limited to necessary transportation costs including mileage at TNP, Inc.'s current rate when its, or its employee's, automobiles are used, meals and lodging, laboratory tests and analyses, computer services, word processing services, telephone, printing and binding charges. Reimbursement for these expenses shall be on the basis of actual charges when furnished by commercial sources and on the basis of usual commercial charges when furnished by TNP, Inc.

**4. OUTSIDE SERVICES**

When technical or professional services are furnished by an outside source, when approved by CLIENT, an additional amount shall be added to the cost of these services for TNP, Inc.'s administrative costs, as provided herein.

**5. OPINION OF PROBABLE COST**

In providing opinions of probable cost, the CLIENT understands that TNP, Inc. has no control over costs or the price of labor, equipment, or materials, or over the Contractor's method of pricing, and that the opinions of probable cost provided to CLIENT are to be made on the basis of the design professional's qualifications and experience. TNP, Inc. makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.

**6. PROFESSIONAL STANDARDS**

TNP, Inc. shall be responsible, to the level of competency presently maintained by other practicing professional engineers in the same type of work in the State of Texas, for the professional and technical soundness, accuracy, and adequacy of all design, drawings, specifications, and other work and materials furnished under this Authorization. TNP, Inc. makes no other warranty, expressed or implied.

**7. TERMINATION**

Either CLIENT or TNP, Inc. may terminate this authorization by giving 10 days written notice to the other party. In such event CLIENT shall forthwith pay TNP, Inc. in full for all work previously authorized and performed prior to effective date of termination. If no notice of termination is given, relationships and obligations created by this Authorization shall be terminated upon completion of all applicable requirements of this Authorization.

**8. MEDIATION**

In an effort to resolve any conflicts that arise during the design or construction of the project or following the completion of the project, the CLIENT and the ENGINEER agree that all disputes between them arising out of or relating to this Agreement shall be submitted to nonbonding mediation unless the parties mutually agree otherwise.

The CLIENT and the ENGINEER further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the project and to require all independent contractors and consultants retained also to include a similar mediation provision in all agreements with subcontractors, subconsultants, suppliers or fabricators so retained, thereby providing for mediation as the primary method for dispute resolution between the parties to those agreements.

**9. LEGAL EXPENSES**

In the event legal action is brought by CLIENT or TNP, Inc. against the other to enforce any of the obligations hereunder or arising out of any dispute concerning the terms and conditions hereby created, the losing party shall pay the prevailing party such reasonable amounts for fees, costs and expenses as may be set by the court.

**10. PAYMENT TO TNP, INC.**

Monthly invoices will be issued by TNP, Inc. for all work performed under the terms of this agreement. Invoices are due and payable on receipt. If payment is not received within 30 days of invoice date, all work on CLIENT's project shall cease and all work products and documents shall be withheld until payment is received by TNP. Time shall be added to the project schedule for any work stoppages resulting from CLIENT's failure to render payment within 30 days of invoice date. Interest at the rate of 1½% per month will be charged on all past-due amounts, unless not permitted by law, in which case, interest will be charged at the highest amount permitted by law.

**11. LIMITATION OF LIABILITY**

TNP, Inc.'s liability to the CLIENT for any cause or combination of causes is in the aggregate, limited to an amount no greater than the fee earned under this agreement.

**12. ADDITIONAL SERVICES**

Services not specified as Basic Services in Scope and Attachment A will be provided by TNP, Inc. as Additional Services when required. The CLIENT agrees upon execution of this contract that no additional authorization is required. Additional services will be paid for by CLIENT as indicated in Article II, Compensation.

**13. SALES TAX**

In accordance with the State Sales Tax Codes, certain surveying services are taxable. Applicable sales tax is not included in the fee set forth and will be added on and collected when required by state law. Sales tax at the applicable rate will be indicated on invoice statements.

**14. SURVEYING SERVICES**

In accordance with the Professional Land Surveying Practices Act of 1989, the CLIENT is informed that any complaints about surveying services may be forwarded to the Texas Board of Professional Land Surveying, 12100 Park 35 Circle, Building A, Suite 156, MC-230, Austin, Texas 78753, (512) 239-5263.

**15. LANDSCAPE ARCHITECT SERVICES**

The Texas Board of Architectural Examiners has jurisdiction over complaints regarding the professional practices of persons registered as landscape architects in Texas.

The CLIENT is informed that any complaints about landscape architecture services be forwarded to the Texas Board of Architectural Examiners, Hobby Building: 333 Guadalupe, Suite 2-350, Austin, Texas 78701, Telephone (512) 305-9000, Fax (512) 305-8900.

**16. INVALIDITY CLAUSE**

In case any one or more of the provisions contained in this Agreement shall be held illegal, the enforceability of the remaining provisions contained herein shall not be impaired thereby.

**17. PROJECT SITE SAFETY**

TNP, Inc. has no duty or responsibility for project site safety.

**18. CONSTRUCTION MEANS AND METHODS AND JOBSITE SAFETY**

Means and methods of construction and jobsite safety are the sole responsibility of the contractor.

## **ATTACHMENT A**

### **Johnson Road Reconstruction (Hallelujah Trail to Rhonda Road)**

#### **ITEMIZED SCOPE OF SERVICES**

##### **PROJECT DESCRIPTION**

The Project generally consists of preparing construction plans for the reconstruction of Johnson Road from Hallelujah Trail to Rhonda Road in Keller, Texas. The Project begins at the existing 4-lane concrete pavement on the west side of Hallelujah Trail and extends to a point that is slightly west of the existing cross-drainage culvert under Johnson Road near the Rhonda Road intersection. The Project is essentially divided into two equal parts by the proposed roundabout at the intersection of Johnson Road and Keller-Smithfield Road. The roundabout is currently being designed for the City by another consulting firm. The Project will connect to either side of the proposed roundabout. In addition to paving improvements, the Project includes the design of storm drain improvements, hike/bike trail improvements, sidewalk improvements and street light improvements.

The scope of Basic Services generally consists of the preparation of detailed plans and specifications for:

- Reconstructing approximately 3,450 linear feet of Johnson Road from its current 2-lane HMA section to a 3-lane 41' curb and gutter concrete section.
- Construction of approximately 3,400 LF of storm drain improvements.
- Construction of approximately 2,100 LF of hike/bike trail.
- Construction of approximately 5,000 LF of sidewalk within the Johnson Road parkways.

The Basic Services also include:

- Assisting the City with public involvement and meetings during the design process.
- Assisting the City with project bidding and award.
- Providing construction phase services.

Special Services include:

- Supplemental survey to cover areas not included in the design survey for the roundabout project and the Johnson Road water line project.
- Research and preparation of ROW documents for the additional ROW necessary for the Project.
- Negotiation and closing services for acquisition of the parcels associated with the additional ROW.
- Geotechnical investigations.
- Providing construction inspection services.
- Supplemental materials testing during the construction phase.

All tasks within the Basic Services and Special Services will be performed by either TNP or its subconsultant (Dunaway Associates) except for the geotechnical investigations and supplemental materials testing which will be performed by CMJ Engineering as a sub-consultant to TNP.

## **GENERAL**

### **A. Basis for Scope of Services**

The following assumptions were used by the Engineer for the preparation of the scope of Basic Services for this Project and the determination of fees. In the event that there are changes to the scope of work, a contract fee amendment may be necessary.

1. The Project will be based on reconstructing Johnson Road from its current 2-lane bar ditch section to a 3-lane 41'-wide curbed section.
2. Sidewalks will be provided along both sides of the road except where the hike/bike trail is being proposed along the south side of Johnson Road between Keller-Smithfield Road and Rufe Snow Road.
3. It is anticipated that for a majority of the Project the existing right-of-way (ROW) will be sufficient for the proposed paving and drainage improvements. However, it appears that additional ROW will be needed at several locations within the Project limits. Based on our initial evaluation, this could involve up to twelve (12) parcels.
4. No water or wastewater facilities are included in the scope of this Project. However, the work will be coordinated with the water line that TNP is currently designing within the Project limits.
5. A noise survey/evaluation is not included in this scope of services.
6. Design of the proposed drainage improvements will be coordinated with Newton Ranch drainage study that TNP is currently performing for the City. The work will also be coordinated with the drainage analysis that Dunaway Associates performed as part of the roundabout design process as well as any other drainage work that is taking place along the Project corridor.
7. No floodplain permitting is anticipated to be associated with the Project.
8. The plans will be based on City of Keller's standards that are in place at the time this agreement is executed.
9. It is the Engineer's understanding that none of the roads associated with the Project are TxDOT facilities and as such no coordination or review by TxDOT will be associated with the Project.
10. No signal improvements, traffic study or signal warrant studies are included in the scope of this Project.
11. No construction staking is included in the scope of this Project.
12. The Engineer shall research existing utilities and coordinate with the franchise utility companies to reflect the approximate location of existing utilities in the plans. In addition, the Engineer shall incorporate the utility information obtained as part of the water line project and roundabout project.



B. Design Meetings

1. The Engineer will conduct a kickoff meeting with City staff to clarify responsibilities and to review the proposed schedule. In addition, a site visit will be conducted, either as part of the kickoff meeting or at a later time, to be designated at the kickoff meeting.
2. The Engineer will attend design coordination meetings with City to discuss, exchange and gather information to be used in the development of the plans and specifications. It is anticipated that in addition to the design coordination meetings mentioned below, no more than two (2) coordination meetings will be required during the design process.
3. The Engineer will attend a meeting with the City to present and discuss the schematic plans (30%).
4. The Engineer will attend a meeting with the City to receive comments to the 60% plans.
5. The Engineer will attend a meeting with the City to receive comments to the 90% plans.

C. Project Management, Administration and Coordination

1. Lead, manage and direct design team activities.
2. Ensure quality control is practiced in performance of the work.
3. Communicate internally among team members.
4. Communicate externally with consultants for project services.
5. Prepare and provide meeting minutes with action items.
6. Provide monthly invoices and progress reports.
7. Provide schedule updates when needed.

D. Data Collection

1. The Engineer will collect, compile, and evaluate available data from the City of Keller and other entities that provide existing information related to the design of the Project.
2. A location map and or preliminary plans will be provided to the franchise utility companies. These plans will be used by the utility companies to show approximate locations of their facilities that are, or may be, affected by the Project. The Engineer shall continue to coordinate with the franchise utility companies during the design process to help refine the location and limits of utilities and determine where relocations may be needed.
3. If requested by the City, the Engineer shall attend a franchise utility coordination meeting to present the Project and discuss potential conflicts.
4. The Engineer will establish a utility coordination spreadsheet to document points of contact, track the status of coordination efforts with the various franchise utility companies and document the status of any utilities that need relocation as part of the Project.

5. The Engineer will make an effort to obtain as-built, record, and/or future plans for the following facilities in the Project area including:
  - a. Culvert
  - b. Roadway
  - c. Water Lines
  - d. Sanitary Sewer Lines
  - e. Storm Drain Lines
  - f. Telephone and Cable TV Underground and/or Overhead Lines
  - g. Gas Lines
  - h. City Fiber Optic Lines
  - i. Other Utilities Known to Serve the Project Area
6. The Engineer will attempt to identify potential utility conflicts from available information and provide this information to utility companies.

## **PREPARATION OF JOHNSON ROAD RECONSTRUCTION DOCUMENTS (Basic Service Item a)**

### **DESIGN APPROACH**

1. The design will attempt to identify constructability, efficiency, practicality and cost issues associated with the proposed improvements and provide options and alternatives where practical.
2. The design will incorporate the utility information collected from the field survey and site visits, coordination efforts and any applicable utility information from the existing water line project or the existing roundabout project.
3. The Engineer will coordinate with the City to develop construction sequencing plans that minimize traffic disruptions and impacts to the adjacent property owners.
4. The Engineer will coordinate with City staff to acquire existing information on the existing drainage facilities within the Project limits as well as a list of any known drainage issues. The Engineer will incorporate information from the existing Newton Ranch drainage study and any other drainage studies that have been performed for the Project area.
5. The Engineer shall evaluate the existing street light configuration and coordinate with the City to determine what additional street light improvements are needed for the Project.

### **PLAN DEVELOPMENT**

#### **A. Roadway and Storm Drainage Design**

1. The Engineer will develop plans for the proposed roadway and drainage improvements. These plan sheets will be at a 1"=20' scale and contain topographic information, existing and proposed right-of-way lines, existing underground utilities at identified locations of conflict, locations of driveways, pavement edges, culvert layouts and sections, contours where necessary, limits of structures, limits of retaining walls, if any, drainage structures including pipes, limits of barriers and any other information necessary for pavement construction. Profiles at 1"=20' horizontal scale and 1"= 4' vertical scale will contain existing ground lines at the proposed profile grade line, centerline, ROW lines, limits of structures and profile elevations at 100-foot intervals.

2. The Engineer will prepare cross-sections along the roadway at 50-foot intervals and at each existing driveway and street crossing. At a minimum, the cross-sections will extend to the proposed right-of-way limits. At driveways and cross-streets, the cross-sections shall extend as necessary for the proposed tie-in points. These cross-sections will form the basis for the determination of earthwork quantities. Cut and fill quantities will be computed and tabulated, referencing cross-sections. Cross-sections will be included in the preliminary and final plans.

B. Other Roadway Design Elements

1. A Project title sheet will be prepared as required and included in the plans.
2. Project Layout sheets will be prepared at a uniform scale which clearly indicate the limits of the entire project and the main construction elements of the project.
3. Roadway typical sections will be prepared for paving sections along the various portions of the project.
4. Roadway horizontal and vertical control and horizontal curve data will be shown on the plans.
5. Supplementary layout information will be prepared to properly show the relationship between the profiles of intersecting streets and driveways, where deemed necessary by the Engineer or requested by the City.
6. Details will be developed as necessary, including paving, drainage, culvert, utility, and miscellaneous details to describe the various types of construction for which the City has no standard details available.
7. An Erosion Control Plan will be prepared for the project, but the Stormwater Pollution Prevention Plan (SWPPP) will be prepared by the contractor. Standard City of Keller and NCTCOG details for erosion control will be used as appropriate.
8. A street light plan will be prepared and included in the construction documents. The plan shall be submitted to City's electrical provider for comment and input prior to preparation of the final plans. The street light piers, conduit and pull string shall be designed and installed in accordance with the City's standard criteria and details. The City's electrical provider will be responsible for pulling cable, installing the light poles and energizing the system.
9. A demolition plan will be prepared for pavement and structures to be removed.
10. A right-of-way strip map will be prepared showing the right-of-way limits and associated easements. The strip map will also identify current property ownership and parcel numbers. This strip map will be provided to the City as part of the schematic plan submittal.

C. Drainage Plans and Details

1. The drainage areas will be delineated and calculations will be prepared for the drainage design the City's standards.
2. Drainage area maps will be prepared at a scale of 1"=200'. Off-site drainage areas will be depicted at a scale of 1"=200' minimum scale. Cross-culverts and storm drain systems

will be located and sub-drainage areas determined. The runoff to each culvert and storm drain system will be calculated in accordance with the City's drainage design criteria.

3. Plan/profile sheets will be provided for the culvert and storm drain construction. The plans will show culverts, storm drain, inlets, and necessary grading at outfalls. The plans will also show hydraulic grade line and flow data for each pipe segment and culvert.
4. Miscellaneous drainage details will be prepared for any drainage related items, which are not covered by the City's standard details.

E. Signing and Pavement Markings

1. The Engineer will develop signing and pavement marking layout sheets for the project at an appropriate scale. These layouts will include baselines, pavement edges, right-of-way lines, pictorially depicted signs with their locations, pavement markings and buttons with dimensioning, culverts and other structures which may present a hazard to traffic, and proposed delineators and object markers.

F. Project Sequencing Plans

1. The Engineer shall prepare construction sequencing plans to adequately represent the proposed sequencing for the Project. The sequencing plan will be predicated and minimizing traffic disruptions and inconveniences to the property owners along and adjacent to the Project limits. The Project's contractor(s) will be responsible for preparing traffic control plans showing the actual locations of construction signs and other traffic control devices.

G. TDLR Permitting

1. Engage a Registered Accessibility Specialist (RAS) to review the pedestrian elements of the plans.
2. Address RAS comments prior to preparing the bid documents.

H. Project Quantities and Opinion of Probable Cost

1. Project quantities and an Opinion of Probable Construction Cost will be a part of the 30%, 60%, 90% and 100% submittals.
2. The Engineer's opinion of probable construction costs will be prepared for the entire project using current unit cost data. These opinions of cost will be provided on the basis of Engineer's experience and professional judgment, but will not imply any warranty that final bids might not vary from the cost opinions provided, since neither the Engineer nor the City have any control over market conditions or bidding procedures.

I. Submittals

1. Schematic Plans (30%)
  - a. Using a combination of the field survey, existing aerial photography, general property research, utility research, site visits and experience, the Engineer will develop schematic road reconstruction plans for the Project.
  - b. Develop alternative analysis for the roadway presenting horizontal geometric layouts using sections (3-lane urban vs. 2-lane rural).

- c. Perform Traffic Operational Analysis comparing (2) collector roadway sections (3-lane urban vs. 2-lane rural)
- d. Develop conceptual storm drainage layouts based on recommendations from hydrologic and hydraulic drainage analysis (roadside ditch vs. underground conduit system)
- e. Prepare a Conceptual Design Summary Report describing comparison results for the roadway and drainage alternatives and identifying site impacts, both positive and negative.

2. Preliminary Plans (60%) – The plans will include:

- a. Project control and alignment sheet, showing all Control Points, used or set while gathering data, generally on a scale of not less than 1:400. The following information shall be indicated for each Control Point: Identified (existing City Monument Number, PK Nail, 5/8" Iron Rod); X, Y and Z Coordinates, in an identified coordinate system, and a referred bearing base. Z coordinate on City Datum only; descriptive location (i.e. set in the centerline of the inlet in the South curb line of North Side Drive at the East end of radius at the Southeast corner of North Side Drive and North Main Street);
- b. Overall project right-of-way and easement layout sheet(s);
- c. General construction notes and specifications sheet(s);
- d. Existing and proposed typical section sheets utilizing the City standard roadway sections;
- e. Storm drain design including drainage area map and hydrologic/hydraulic calculations for existing drainage infrastructure and proposed improvements for project limits;
- f. Drainage plan and profile sheets displaying station and coordinate data for all horizontal alignment, junction locations, and station and elevation data of vertical profiles;
- g. Roadway plan and profile sheets displaying station and coordinate data for all horizontal alignment P.C.'s, P.T.'s, P.I.'s; station and elevation data of all vertical profile P.C.'s, P.T.'s, P.I.'s, low points, and high points; lengths of vertical curves, grades, K values, e, and vertical clearances where required;
- h. Intersection design and plans for existing cross street and driveway connections along the proposed roadway;
- i. Roadway cross section sheets displaying sections at 50-ft increments for the length of the project;
- j. Preliminary Signing and Pavement Marking layouts;
- k. Preliminary Street illumination plan;
- l. Preliminary construction phasing plan showing suggested construction sequence;
- m. Preliminary Hike/Bike trail plan and profile sheets displaying all horizontal and vertical information for length of proposed trail;
- n. Preliminary sidewalk layout plans;
- o. Preliminary Erosion control plan;
- p. Provide City construction details and additional details for roadway and drainage elements as applicable.

3. Final Plans (90%)

- a. Final plans will include the complete plan set, along with bid documents and specifications and a final updated Opinion of Probable Construction Cost.
- b. Revise the design/plans as applicable per City review comments.
- c. Progress the Preliminary Plans and elements into Final Plans.

d. Prepare Project Manual including construction specifications.

4. Bid Documents (100%)

Bid documents will be based on City review comments of the final plan submittal. Deliverables will include a full-size signed and sealed plan set ready for reproduction and distribution, along with a final Opinion of Probable Construction Cost, and complete bid documents and specifications. The Engineer will also provide the City with CD's containing PDF's of all documents.

Coordinate with the CITY to develop a best-value based competitive sealed proposal selection criteria and format for bidding the Project in accordance with Texas Local Government Code Chapter 2269. Criteria to be used in the selection process can include, but is not limited to:

- Price
- Contractor's experience
- Contractor's performance on similar work
- Contractor's safety record
- Contractor's personnel
- Contractor's financial capacity

**PUBLIC INVOLVEMENT (Basic Service Item b)**

The purpose of public outreach is to educate and communicate to City officials and community stakeholders the project goals. During this exercise, Engineer will share specific engineering knowledge about the project, and Engineer will showcase the design alternatives completed as a part of this project. The goal of this phase is to educate the City officials and community members on the alternatives to better obtain stakeholder endorsement of the concept.

1. Engineer will attend a Concept Phase Public Meeting to present the proposed concept plan to citizens, stakeholders, and community organizations. Engineer will assist the City during the meeting by discussing the project variables and obtaining feedback from meeting attendees. At the close of the meeting, citizen feedback may be gathered for City staff's use. Engineer will prepare and provide exhibits for the meeting. Note: City staff will be responsible for advertising and arranging a host facility for the meeting.
2. Engineer will attend a Final Phase Public Meeting to present the Final plan (90%) exhibit to citizens, stakeholders, and community organizations. Engineer will assist the City during the meeting by discussing the project variables and obtaining feedback from meeting attendees. At the close of the meeting, citizen feedback may be gathered for City staff's use. Engineer will prepare and provide exhibits for the meeting. Note: City staff will be responsible for advertising and arranging a host facility for the meeting.

**BIDDING & CONTRACT AWARD PHASE (Basic Service Item c)**

1. Assist the City in preparing an advertisement for the Project.
2. Upload the bidding documents to a web-based distribution system such as Civcast.
3. Assist the City in preparing an agenda and conducting a pre-bid conference.

4. Assist the City in addressing bidder questions and preparing and distributing any addenda.
5. Assist in the bid openings and tabulation of bids.
6. Assist the City in evaluating the best value criteria and determining the qualifications of prospective contractors and their teams. Provide a letter of recommendation to the City for award of each construction project associated with Phase.
7. Assist the City in coordinating with the selected Contractor(s) to compile the necessary bonds and insurance to prepare the contract documents for execution by the City and the Contractor(s).
8. Incorporate all addenda into the contract documents and issue conformed sets of plans and specifications for use as the issued for construction documents.

#### **CONSTRUCTION ADMINISTRATION (Basic Service Item d)**

Engineer will provide construction management services for the project as follows.

1. Prepare pre-construction meeting agenda and help conduct the meeting.
2. Provide digital base files and survey control data to contractor for use in construction staking for the Project.
3. Review contractor submittals and shop drawings.
4. Consult and advise the City; respond to RFI's, and prepare change orders and field changes as required.
5. When requested, make site visits to help address design issues as well as contractor and City questions. It is anticipated that no more than three (3) site visits of this nature will be required.
6. Participate in the project's final walk-through.
7. Participate in the project's TDLR walk-through with the Registered Accessibility Specialist.
8. Prepare and submit record drawings based on information and written documentation provided by the Contractor and the inspector.

#### **SPECIAL SERVICES TO BE PROVIDED BY ENGINEER**

Special Services that will be provided by the Engineer for this Project are as follows:

#### **SUPPLEMENTAL SURVEY AND BOUNDARY ANALYSIS (Special Service Item a)**

1. Establish horizontal and vertical control points throughout the Project. Control shall be on the City's datum.
2. Combine the design survey associated with roundabout project with the design survey from the Johnson Road water line project.

3. Perform supplemental field survey to fill in any “gaps” between the roundabout survey and the water line survey.
4. Prepare a topographic drawing (i.e. base file) in digital format (Autocad) showing 1-foot contours to serve as the basis for design of the Project.
5. Coordinate with, and assist the City in acquiring any necessary right-of-entry permissions for the survey services.

**ROW/EASEMENT DOCUMENTS (Special Service Item b)**

1. Supplement the boundary analysis and property corner ties from the existing roundabout survey and water line survey with additional boundary work (field and office) to confirm property limits of the parcels in question.
2. Prepare exhibits and legal descriptions for the proposed right-of-way and/or easement areas. The City shall prepare the document cover sheet.
3. Upon negotiation and acquisition of the right-of-way or easement, the Engineer shall set the necessary property corner irons.

**NEGOTIATIONS AND CLOSING SERVICES FOR ROW/EASEMENT DOCUMENTS (Special Service Item c)**

Project Administration

1. Attend status meetings with appropriate City Staff. Date, time and location are determined by City Staff.
2. Maintain copies of all correspondence and contacts with property owners.

Title and Closing Services

1. Secure preliminary title commitment or preliminary title search, and 5-year sales data from Title Company that will be providing title insurance. The charges from the Title Company for the preliminary title commitments will be paid for by the City.
2. Secure title commitment updates in accordance with insurance rules and requirements for parcel payment submissions.
3. Secure title insurance for all parcels acquired, insuring acceptable title to the City. Written approval by the City required for any exception.
4. The curative services necessary to provide clear title to the City is the responsibility of the Provider (Teague Nall and Perkins).
5. Cost of curative services must be included in the negotiated fee schedule for this service.
6. Curative services do not include costs/expenses that qualify as payment of incidental expenses to transfer real property to the City.



7. The Provider has the responsibility of direct contact with the Title Company to obtain an updated title commitment along with other forms and certified copy of the instrument of conveyance necessary when requesting the Parcel Payment from City Staff.
8. The Provider provides closing services in conjunction with the Title Company and will be required to attend closings.
9. Any fee related to obtaining certified court documents and fees for recording same which are not collected at the closing of the parcel shall be direct pass through fees at the exact cost supported by the county court house receipts.
10. Provider shall cause the recordation all original instruments immediately after closing at the respective County Clerk's Office. The cost of the recording fees and filing fees are paid by City and must not be included in the Provider's negotiated fee schedule.

#### Negotiation Services

1. Analyze preliminary title report to determine potential title problems, propose and inform City Office of methods to cure title deficiencies. This includes analysis of access easements.
2. Analyze Tarrant County Appraisal District information and confirm the City's approved value prior to making offer for each parcel. Provider shall attempt to obtain the easements through donation prior to discussing approved monetary offer with landowners.
3. Prepare and send the letter transmitting the Landowners' Bill of Rights by Certified Mail Return Receipt Requested (CMRRR).
4. Prepare the initial offer letter, memorandum of agreement, instruments of conveyance, and any other documents required or requested by the City.
5. Any prepared forms will be submitted to the City for approval.
6. The written offer and required brochures must be sent to each property owner or the property owner's designated representative through Certified Mail Return Receipt Requested (CMRRR). Maintain follow-up contacts and secure the necessary instruments upon acceptance of the offer for the closing. Retain copies of the unsigned CMRRR as support for billing purposes.
7. Make at least four (4) diligent attempts to negotiate with each property owner after which negotiations will be considered exhausted.
8. Prepare a separate negotiator report for each parcel.
9. Copies of working and final file documents may be kept by the Provider (TNP). Parcel files of original documentation related to the purchase of the real property or property interests will be maintained.
10. Receive any counteroffers from the property owner. Evaluate all counters and submit and discuss them with the City's Project Manager.
11. After concurrence of City Project Manager, prepare final offer letter, and mail the documents of conveyance by Certified Mail Return Receipt Requested (CMRRR).
12. Appear and provide Expert Witness testimony as a Provider when requested.

13. Issue Property Owner's Survey to the property owner.
14. Securing a Right of Entry or Possession and Use Agreement is part of general Negotiation Services.

Services by the City

1. Provide available criteria and full information as to the City's requirements for the project.
2. Assist the Provider by placing at its disposal all available data pertinent to the project.
3. Examine documents submitted by the Provider and render a decision pertaining thereto promptly, to avoid unreasonable delay in the progress of the Provider's services.
4. The Project Manager for the City shall appoint, in writing, a representative that the Provider shall be entitled to rely upon regarding decisions made by the City.
5. City shall pay all title company invoices directly which will include fees for title commitments, title policies and all other fees related to the closing with the title company.

**GEOTECHNICAL INVESTIGATIONS (Special Services Item d)**

1. Engineer will work with its geotechnical consultant to conduct subsurface investigations at certain locations along the proposed route to determine soil conditions, ground water conditions and the proximity of rock.
2. The geotechnical consultant will perform two (2) soil bores with the limits of the Project. The bores shall extend to a minimum of 10' below existing grade.
3. The bore locations will be incorporated into the design base map and reflected on the plans.
4. Field and laboratory analysis will be made for the purpose of determining soil conditions and for making recommendations for paving, excavation, earthwork recommendations and stabilization. The following tests will be performed:
  - a. Moisture content and soil identification
  - b. Percent passing the #200 sieve
  - c. Liquid and plastic limit determinations
  - d. Unconfined compression tests on soil
  - e. Unit weight determinations
  - f. Absorption pressure and/or one-point pressure swell tests
  - g. Eades and Grim lime series tests
  - h. Soluble sulfate tests
5. Bore logs and a summary report shall be prepared. The report will address the following:
  - a. General soil and ground-water conditions
  - b. Recommendations for pavement subgrade stabilization type, depth and concentration
  - c. Guidelines for pavement design
  - d. Earthwork recommendations

**CONSTRUCTION INSPECTION (Special Services Item e)**

Engineer will provide construction inspection services for the project as follows.

1. Assign qualified staff to provide inspection of the work.
2. Document work progress in daily work reports.
  - a. Measure and record pay items placed each day
  - b. Document all project activity inclusive of weather conditions, work items in progress and their locations, and any significant project issues.
3. Review Contractor's traffic control set-up for each work site.
4. Meet with/attend meetings to facilitate coordination of contract work with existing property owners and franchise utility representatives.
5. Facilitate the resolution of any issues arising with the abutting property owners.
6. Coordinate Material Testing with the Project's material testing firm.
  - a. Receive and review test reports
  - b. Coordinate additional testing where deemed necessary
7. Inspect roadway and storm drain construction
  - a. Ensure construction plans are followed
  - b. Ensure specified materials are provided
8. Provide response to requests for information from Contractor.
9. Review and verify the Contractor's progress report each month prior to processing the Contractor's pay request.
10. Assist in the coordination and negotiation for any needs for Field Changes or Change Orders.
11. Help the City resolve any Contractor disputes relative to the work.
12. Serve as a liaison between the public and City and/or Contractor.
13. Participate in the substantial completion walk-thru and prepare a final punch list prior to acceptance of the Project.
14. Advise the City of the status of Contractor's progress on punch list.

**SUPPLEMENTAL MATERIALS TESTING (Special Services Item f)**

Engineer will provide material testing services for the project as follows.

1. A representative of the Engineer's material testing sub-consultant will be present at the pre-construction meeting.
2. Review testing results from the Contractor's testing firm.

3. Coordinate with the Project Inspector to make periodic site visits to observe the Contractor's testing firm and verify that testing is being performed in accordance with the Project's plans and specifications.
4. Where requested by the City or Project Inspector, perform sampling and laboratory testing of existing subgrade, trench backfill, and stabilized pavement subgrade materials.
5. Where requested by the City or Project Inspector, perform in-place moisture/density testing of existing subgrade, utility trench backfill, and stabilized pavement subgrade materials.
6. Where requested by the City or Project Inspector, perform laboratory determination of maximum theoretical specific gravity of base and surface courses for HMAC pavement and perform in-place density monitoring by nuclear methods.
7. Where requested by the City or Project Inspector, perform on-site placement observation and testing of cast-in-place concrete to include slump, temperature, entrained air content, and the molding of test cylinders. Perform laboratory curing and testing of cylinders.
8. Provide and distribute test results as directed by the City or the Project Inspector.
9. When requested by the City or Project Inspector, attend and participate in on-site or off-site meetings to help clarify testing procedures or construction issues related to materials testing.

#### **ITEMS TO BE PROVIDED BY CITY TO THE ENGINEER**

The City or the City's designee will provide or make available to, or assist the Engineer in obtaining the following services, information and materials upon request:

1. Available studies, correspondence, materials and mapping relative to the Project.
2. Electronic data (e.g. topography) from the City's GIS.
3. Assistance in obtaining data from third party sources which is available to the City at no cost to the Engineer.
4. Current City of Keller Standard Details, Specifications and/or Contract Document data, such as required prevailing wage rates.

#### **ADDITIONAL SERVICES NOT INCLUDED IN THE SCOPE OF SERVICES**

City and Engineer agree that the following services are beyond the Scope of Services described in the tasks above. However, Engineer can provide these services, if needed, upon the CITY's written request. Any additional amounts paid to the Engineer as a result of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These additional services include the following:

- Geotechnical services beyond those listed in the scope of services.
- Subsurface Utility Engineering (SUE) services.
- Preparation of detailed traffic control plans.
- Services related to development of the City's project financing and/or budget.

- Services related to disputes over pre-qualification, bid protests, bid rejection and re-bidding of the contract for construction.
- Construction management and inspection services beyond those listed in the scope of services.
- Performance of materials testing or specialty testing services beyond those listed in the scope of services.
- Services necessary due to the default of the Contractor.
- Services related to damages caused by fire, flood, earthquake or other acts of God.
- Services related to warranty claims, enforcement and inspection after final completion.
- Services related to Survey Construction Staking beyond those listed in the scope of services.
- Services to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the City.
- Public outreach support and public meeting attendance beyond those listed in the scope of services.
- Performance of miscellaneous and supplemental services related to the project as requested by the City.

**ATTACHMENT B**  
**TEAGUE NALL AND PERKINS, INC.**  
Standard Rate Schedule for Time and Expense Contracts  
Effective January 1, 2017 to December 31, 2018\*

<b>Engineering /Landscape Architecture/ROW</b>	<b>From</b>	<b>-</b>	<b>To</b>	
Principal	\$200	-	\$240	Per Hour
Team Leader	\$170	-	\$220	Per Hour
Senior Project Manager	\$160	-	\$220	Per Hour
Project Manager	\$120	-	\$175	Per Hour
Senior Engineer	\$180	-	\$225	Per Hour
Project Engineer	\$95	-	\$160	Per Hour
Engineer III/IV	\$105	-	\$140	Per Hour
Engineer I/II	\$ 90	-	\$110	Per Hour
Landscape Architect / Planner	\$110	-	\$200	Per Hour
Landscape Designer	\$80	-	\$110	Per Hour
Senior Designer	\$105	-	\$150	Per Hour
Designer	\$100	-	\$130	Per Hour
Senior CAD Technician	\$90	-	\$120	Per Hour
CAD Technician	\$70	-	\$110	Per Hour
IT Consultant	\$100	-	\$170	Per Hour
Clerical	\$50	-	\$90	Per Hour
Construction Inspector II	\$75	-	\$100	Per Hour
Construction Inspector III	\$90	-	\$110	Per Hour
Senior Construction Inspector	\$100	-	\$125	Per Hour
ROW Manager	\$100	-	\$140	Per Hour
Senior ROW Agent	\$90	-	\$130	Per Hour
ROW Agent	\$80	-	\$115	Per Hour
Relocation Agent	\$100	-	\$130	Per Hour
Senior Utility Coordinator	\$90	-	\$135	Per Hour
Utility Coordinator	\$80	-	\$125	Per Hour
Intern	\$40	-	\$60	Per Hour
<b>Surveying</b>				
Survey Manager	\$150	-	\$220	Per Hour
Registered Professional Land Surveyor (RPLS)	\$130	-	\$180	Per Hour
Field Coordinator	\$90	-	\$110	Per Hour
S.I.T. or Senior Survey Technician	\$70	-	\$110	Per Hour
Survey Technician	\$65	-	\$100	Per Hour
1-Person Field Crew w/Equipment**	\$125			Per Hour
2-Person Field Crew w/Equipment**	\$150			Per Hour
3-Person Field Crew w/Equipment**	\$170			Per Hour
4-Person Field Crew w/Equipment**	\$190			Per Hour
Flagger	\$40			Per Hour
Abstractor (Property Deed Research)	\$85			Per Hour

**ATTACHMENT B  
TEAGUE NALL AND PERKINS, INC.**

Standard Rate Schedule for Time and Expense Contracts  
Effective January 1, 2017 to December 31, 2018\*

**Subsurface Utility Engineering (SUE)**

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SUE Project Manager	\$185 Per Hour
SUE Engineer	\$160 Per Hour
Sr. Utility Location Specialist	\$100 Per Hour
Utility Location Specialist	\$ 85 Per Hour
1-Person Designator Crew w/Equipment***	\$120 Per Hour
2-Person Designator Crew w/Equipment***	\$145 Per Hour
2-Person Vac Excavator Crew w/Equip for Exposing Utility Only	\$250 Per Hour (4 hr. min.)
2-Person Vac Excavator Crew w/Equip for complete QL-A w-S/S Sheet ****	\$450 Per Hour (4 hr. min.)
Core Drill (equipment only)	\$750 Per Day

*All subcontracted and outsourced services shall be billed at rates comparable to TNP's billing rates above or cost times a multiplier of 1.10.*

*\* Rates shown are for calendar year 2017 and are subject to change in subsequent years.*

*\*\* Survey equipment may include truck, ATV, Robotic Total Station, GPS Units and Digital Level.*

*\*\*\* Includes crew labor, vehicle costs, and field supplies.*

*\*\*\*\* Rate applies to Quality Level A (QL-A) test holes on utilities that were designated by TNP as QL-B.*

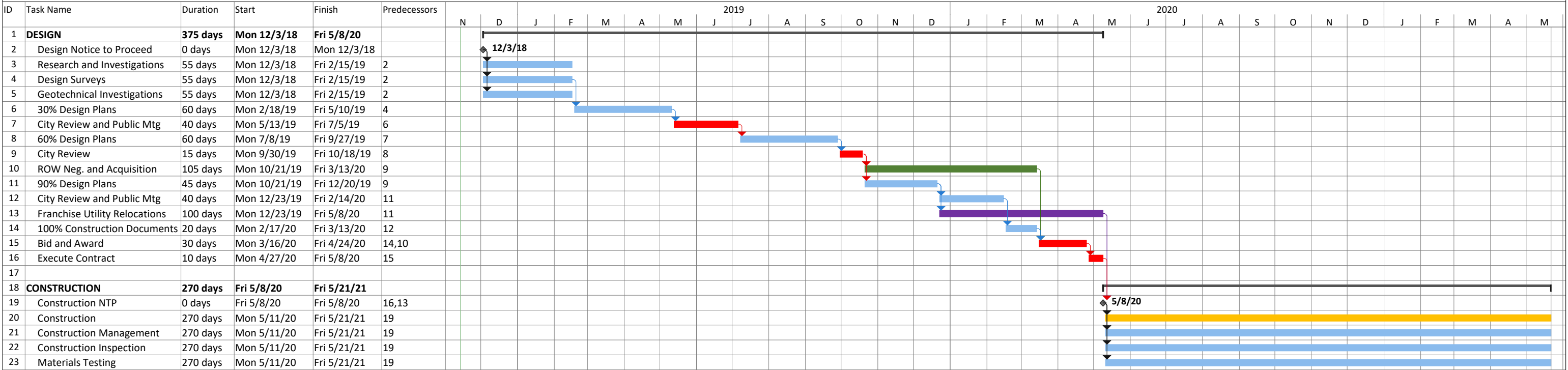
**Direct Expenses**

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Photocopies:	\$0.154/sf	letter, legal and 11" x 17" size bond paper, B&W
	\$0.7701/sf	letter, legal and 11" x 17" bond paper, color
Prints:	\$0.154/sf	letter, legal and 11" x 17" bond paper, B&W
	\$0.7701/sf	letter, legal and 11" x 17" bond paper, color
Plots:	\$0.154/sf	letter, legal and 11" x 17" bond paper, B&W
	\$0.7701/sf	letter, legal and 11" x 17" bond paper, color
	\$0.50/sf	22" x 34" and larger bond paper or vellum, B&W
	\$1.00/sf	22" x 34" and larger mylar or acetate, B&W
Mileage	\$0.535/mile	
Plans on CD	\$20/each	



ATTACHMENT 'C'  
CONCEPTUAL PROJECT SCHEDULE  
for  
**JOHNSON ROAD RECONSTRUCTION**





## Attachment 'D' Key Project Personnel

