

THIS AGREEMENT is entered into between the City of Norman (OWNER) and Garver, LLC (CONSULTANT) for the following reasons:

1. OWNER intends to conduct a study and develop construction plans for roadway modifications, roadway lighting, and traffic signal improvements at the intersection of 24th Avenue and Tee Drive (the Project); and,

AGREEMENT FOR PROFESSIONAL SERVICES

- 2. OWNER requires certain professional survey, design, analysis and engineering services in connection with the Project (the Services); and,
- 3. CONSULTANT is prepared to provide the Services.

In consideration of the promises contained in this Agreement, OWNER and CONSULTANT agree as follows:

ARTICLE 1 - EFFECTIVE DATE

The effective date of this Agreement shall be __th day of _____, 2015.

ARTICLE 2 - GOVERNING LAW

This Agreement shall be governed by the laws of the State of Oklahoma.

ARTICLE 3 - SCOPE OF SERVICES

CONSULTANT shall provide the Services described in Attachment A, Scope of Services.

ARTICLE 4 - SCHEDULE

CONSULTANT shall exercise its reasonable efforts to perform the Services described in Attachment A according to the Schedule set forth in Attachment B.

ARTICLE 5 - COMPENSATION

OWNER shall pay CONSULTANT in accordance with Attachment C, Compensation. Invoices shall be due and payable upon receipt. OWNER shall give prompt written notice of any disputed amount and shall pay the remaining amount.

ARTICLE 6 - OWNER'S RESPONSIBILITIES

OWNER shall be responsible for all matters described in Attachment D, OWNER'S Responsibilities. OWNER hereby represents that it owns the intellectual property rights in any plans, documents or other materials provided by OWNER to CONSULTANT. If OWNER does not own the intellectual property rights in such plans, documents or other materials, prior to providing same to CONSULTANT, OWNER shall obtain a license or right to use, including the right to sublicense to CONSULTANT. OWNER hereby grants CONSULTANT the right to use the intellectual property associated with plans, documents or other materials it owns or has the right to use for the limited purpose of performing the Services. OWNER represents that CONSULTANT'S use of such documents will not infringe upon any third parties' rights.

ARTICLE 7 - STANDARD OF CARE

The same degree of care, skill, and diligence shall be exercised in the performance of the Services as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. No other warranty, express or implied, is included in this Agreement or in any drawing, specification, report, opinion, or other instrument of service, in any form or media, produced in connection with the Services.

ARTICLE 8 - INDEMNIFICATION AND LIABILITY

Indemnification. The CONSULTANT and the OWNER each hereby agree to defend, indemnify, and hold harmless the other party, its officers, servants, and employees, from and against any and all liability, loss, damage, cost, and expense (including attorneys' fees and accountants' fees) caused by an error, omission, or negligent act of the indemnifying party in the performance of services under this Agreement. The CONSULTANT and the OWNER each agree to promptly serve notice on the other party of any claims arising hereunder, and shall cooperate in the defense of any such claims. In any and all claims asserted by any employee of the CONSULTANT against any indemnified party, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONSULTANT or any of the CONSULTANT'S employees under workers' compensation acts, disability benefit acts, or other employee benefit acts. The acceptance by OWNER or its representatives of any certification of insurance providing for coverage other than as required in this Agreement to be furnished by the CONSULTANT shall in no event be deemed a waiver of any of the provisions of this indemnity provision. None of the foregoing provisions shall deprive the OWNER of any action, right, or remedy otherwise available to the OWNER at common law.

<u>Survival.</u> The terms and conditions of this Article shall survive completion of the Services, or any termination of this Agreement.

ARTICLE 9 - INSURANCE

During the performance of the Services under this Agreement, CONSULTANT shall maintain the following insurance:

- (a) General Liability Insurance, with a limit of
- \$1,000,000 per occurrence and \$2,000,000 annual aggregate.
- (b) Automobile Liability Insurance, with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
- (c) Workers' Compensation Insurance in accordance with statutory requirements and Employers' Liability Insurance, with a limit of \$500,000 for each occurrence.
- (d) Professional Liability Insurance, with a limit of
- \$1,000,000 per claim and annual aggregate.

CONSULTANT shall, upon written request, furnish OWNER certificates of insurance which shall include a provision that such insurance shall not be canceled without at least thirty days' written notice to OWNER. OWNER shall require all Project contractors to include OWNER, CONSULTANT, and its parent company, affiliated and subsidiary entities, directors, officers and employees, as additional insureds on their General and Automobile Liability insurance policies, and to indemnify both OWNER and CONSULTANT, each to the same extent

ARTICLE 10 - LIMITATIONS OF RESPONSIBILITY

CONSULTANT shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project; (b) the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to CONSULTANT, to fulfill contractual responsibilities to OWNER or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to CONSULTANT in Attachment A, Scope of Services. In the event the OWNER requests CONSULTANT to execute any certificates or other documents, the proposed language of such certificates or documents shall be submitted to CONSULTANT for review at least 15 days prior to the requested date of execution. CONSULTANT shall not be required to execute any certificates or documents that in any way would, in CONSULTANT's sole judgment, (a) increase CONSULTANT'S legal or contractual obligations or risks; (b) require knowledge, services or responsibilities beyond the scope of this Agreement; or (c) result in CONSULTANT having to certify, guarantee or warrant the existence of conditions whose existence CONSULTANT cannot ascertain.

ARTICLE 11 - OPINIONS OF COST AND SCHEDULE

Because CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, or over the resources provided by others to meet Project schedules, CONSULTANT's opinion of probable costs and of Project schedules shall be made on the basis of experience and qualifications as a practitioner of its profession. CONSULTANT does not guarantee that proposals, bids, or actual Project costs will not vary from CONSULTANT'S cost estimates or that actual schedules will not vary from CONSULTANT'S projected schedules.

ARTICLE 12 - REUSE OF DOCUMENTS

All documents, including, but not limited to, plans, drawings, and specifications prepared by CONSULTANT as deliverables pursuant to the Scope of Services are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by OWNER or others on modifications or extensions of the Project or on any other project. Any reuse without prior written verification or adaptation by CONSULTANT for the specific purpose intended will be at OWNER'S sole risk and without liability or legal exposure to CONSULTANT. OWNER shall indemnify and hold harmless CONSULTANT and its subconsultants against all judgments, losses, damages, injuries, and expenses, including reasonable attorneys' fees, arising out of or resulting from such reuse. Any verification or adaptation of documents will entitle CONSULTANT to additional compensation at rates to be agreed upon by OWNER and CONSULTANT.

ARTICLE 13 - OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

Except as otherwise provided herein, documents, drawings, and specifications prepared by CONSULTANT and furnished to OWNER as part of the Services shall become the property of OWNER; provided, however, that CONSULTANT shall have the unrestricted right to their use. CONSULTANT shall retain its copyright and Ownership rights in its design, drawing details, specifications, data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of CONSULTANT.

ARTICLE 14 - TERMINATION AND SUSPENSION

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement; provided, however, the nonperforming party shall have 14 calendar days from the receipt of the termination notice to cure or to submit a plan for cure acceptable to the other party. OWNER may terminate or suspend performance of this Agreement for OWNER'S convenience upon written notice to CONSULTANT. CONSULTANT shall terminate or suspend performance of the Services on a schedule acceptable to OWNER, and OWNER shall pay CONSULTANT for all the Services performed. Upon restart of suspended Services, an equitable adjustment shall be made to CONSULTANT'S compensation and the Project schedule.

ARTICLE 15 - DELAY IN PERFORMANCE

Neither OWNER nor CONSULTANT shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage; judicial restraint; and delay in or inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either OWNER or CONSULTANT under this Agreement. CONSULTANT shall be granted a reasonable extension of time for any delay in its performance caused by any such circumstances. Should such circumstances occur, the nonperforming party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

ARTICLE 16 - NOTICES

Any notice required by this Agreement shall be made in writing to the address specified below:

OWNER:

Michael D. Rayburn, P.E. Capital Projects Engineer City of Norman P.O. Box 370 Norman, OK 73070 (405) 217-7713

CONSULTANT:

Michael Graves Garver, LLC 1016 24th Avenue NW Norman, Oklahoma 73069 (405) 329-2555 Office (405) 329-3555 FAX

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of OWNER and CONSULTANT.

ARTICLE 17 - DISPUTES

In the event of a dispute between OWNER and CONSULTANT arising out of or related to this Agreement, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises. If the parties cannot thereafter resolve the dispute, each party shall nominate a senior officer of its management to meet to resolve the dispute by direct negotiation or mediation.

Should such negotiation or mediation fail to resolve the dispute, either party may pursue resolution of the dispute by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association; provided, however, in the event the parties are unable to reach agreement to arbitrate under terms reasonably acceptable to both parties, either party may pursue resolution in any court having jurisdiction. During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder.

ARTICLE 18 - EQUAL EMPLOYMENT OPPORTUNITY

CONSULTANT hereby affirms its support of affirmative action and that it abides by the provisions of the "Equal Opportunity Clause" of Section 202 of Executive Order 11246 and other applicable laws and regulations. CONSULTANT affirms its policy to recruit and hire employees without regard to race, age, color, religion, sex, sexual preference/orientation, marital status, citizen status, national origin or ancestry, presence of a disability or status as a Veteran of the Vietnam era or any other legally protected status. It is CONSULTANT'S policy to treat employees equally with respect to compensation, advancement, promotions, transfers and all other terms and conditions of employment. CONSULTANT further affirms completion of applicable governmental employer information reports including the EEO-1 and VETS-1 00 reports, and maintenance of a current Affirmative Action Plan as required by Federal regulations.

ARTICLE 19 - WAIVER

A waiver by either OWNER or CONSULTANT of any breach of this Agreement shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

ARTICLE 20 - SEVERABILITY

The invalidity, illegality, or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if it did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

ARTICLE 21 - INTEGRATION

This Agreement, including Attachments A, B, C, and D incorporated by this reference, represents the entire and integrated agreement between OWNER and CONSULTANT. It supersedes all prior and contemporaneous communications, representations, and agreements, whether oral or written, relating to the subject matter of this Agreement.

ARTICLE 22 - SUCCESSORS AND ASSIGNS

OWNER and CONSULTANT each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners, to the other party to this Agreement and to the successors, executors, administrators, permitted assigns, legal representatives, and partners of such other party in respect to all provisions of this Agreement.

ARTICLE 23 - ASSIGNMENT

Neither OWNER nor CONSULTANT shall assign any rights or duties under this Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld; provided, however, CONSULTANT may assign its rights to payment without OWNER'S consent. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement. Nothing contained in this Article shall prevent CONSULTANT from engaging independent CONSULTANTS, associates, and subcontractors to assist in the performance of the Services.

ARTICLE 24 - NO THIRD PARTY RIGHTS

The Services provided for in this Agreement are for the sole use and benefit of OWNER and CONSULTANT. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than OWNER and CONSULTANT.

IN WITNESS WHEREOF, OWNE.	R and Garver, Ll	LC have executed this Agreement.
DATED thisth day of	, 2015.	
The City of Norman (OWNER)		Garver, LLC (CONSULTANT)
Signature		Signature
Name		Name Michael Graves
Title		Title Vice President
Date		Date 5/18/15
Attest:		Attest:
City Clerk	_	Claudia J. Smith Secretary
Approved as to form and legality thi	s 21 day of 1	May 2015.
City Advantage		
City Attorney		

APPENDIX A – SCOPE OF SERVICES

1. General

The City of Norman requires the professional services of an engineering firm to facilitate intersection improvements and signalization at 24th Avenue NW and Tee Drive and roadway illumination to Robinson Street. The engineering firm will analyze the intersection, prepare design plans, develop project specifications and bid package, and provide technical assistance throughout the construction. Generally, the scope of services consists of coordinating with the city and ODOT; preliminary analysis to develop improvements; construction plans, and construction assistance.

The limits of the project are along 24th Avenue NW from the intersection of Palmer Circle to the intersection of W. Robinson Street. Roadway improvements will be designed and constructed between the intersections of Palmer Circle and Westport Drive. Lighting improvements will be designed and constructed along the limits of the project.

Specific tasks will consist primarily of the following:

2. Preliminary Analysis

For the preliminary analysis, Garver will develop traffic projections for the anticipated shift in volumes once the traffic signal is installed, analyze the intersection movements level of service (LOS), evaluate the turn lane needs on 24th Avenue NW, and evaluate the intersection crash data. In addition, conceptual drawings and cost estimates will be determined, utility impacts assessed, and roadway illumination needs determined.

2.1. Kick-Off Meeting

Immediately after receipt of a formal Notice to Proceed, we will request a kick-off meeting with the City of Norman to clearly define the project goals and reporting procedures, establish expectations and priorities, decide the needed level of involvement from other stakeholders (ODOT, FHWA, and adjacent property owners), and discuss the project schedule and submittal dates. We will also discuss the relevance of previous studies completed within the project area to determine the extent of available data that is valid for use in carrying out the goals of this project.

2.2. Site Visit/Field Observations

Garver will conduct a site visit, which can occur on the same day as the kick-off meeting. This visit will be coordinated with the city so that key issues such as location of the controller and power source can be determined. Some of the items noted during the site visit will include lane configurations, speed limits, signal phasing, and pedestrian facilities. Traffic observations will be made to determine the extent and duration of any congestion within the study area.

2.3. Develop Traffic Projections

Immediately after the kick-off meeting, we will gather available information (existing traffic counts, future developments, and land use information) to analyze existing conditions and project future conditions at the intersection. We anticipate that this information will be available from the city.

2.3.1. Traffic Counts

The latest traffic counts for 24th Avenue NW at Tee Drive intersection and all signal warrant-based volume assumptions will be provided by the City of Norman. Additionally, it is requested that the City furnish counts at the intersection of 24th Avenue NW at Westport Drive so that an estimate of expected diversion traffic can be made. From this traffic data, a 2015 traffic projection for the signalized condition will be created for the intersection which will include AM, Midday, and PM peak hour volumes.

2.3.2. Future Traffic Projections

Garver will utilize the same growth assumptions as assumed in the latest University North Park validation study. These trips — coupled with background growth assumptions for the Tee Drive approach — will be applied to the 2015 volumes to create the design year 2035 projections.

2.4. GIS Information

Garver will collect information from the city's GIS model. This information will include parcel information, utilities, zoning, and existing buildings to get an idea of the potential impact of the proposed improvement alternatives.

2.5. Operational Analysis

Using the base year 2015 and projected 2035 volumes, we will analyze the intersection using Synchro as well as a calibrated micro-simulation model (SimTraffic), which will be extended from our prior work in the study area. We will request the City's Synchro model of 24th Avenue NW to develop intersection timing/phasing at Tee Drive that is compatible with the entirety of the coordinated system Our 2015 Synchro models will maintain the 100/110 second cycle lengths currently in use or possibly half cycle. Iterative turn lane and signal timing testing will be performed in order to produce optimum operating conditions. Vehicle and pedestrian clearance intervals for the proposed configuration will be calculated.

2.6. Geometric Analysis

The length of all proposed turn lanes will be in accordance with ODOT criteria for auxiliary lanes and in conjunction with the results of the capacity analysis. The projected storage needed will be presented to the city for final approval.

2.7. Safety Analysis

Garver will review the crash history at the study intersection over the last three years. Crash records from the Norman Police Department will be reviewed to assess any discernable trends/patterns in the collision data.

2.8. Utilities

Utilities will be identified and located utilizing atlases provided by the utility owners. During the alternative comparison, our efforts will focus on identifying potential utility conflicts and estimated cost of relocations.

2.9. Lighting Analysis

Garver will coordinate with the city to select a light fixture and a lighting design will be completed with the selected light fixture. Design will be conducted to Illuminating Engineering Society (IES) recommended light levels and uniformities, as well as city lighting requirements. Lighting performance will be modeled along the street using an industry accepted lighting modeling and analysis program. In addition, Garver will coordinate with the city to select a light pole to complement the aesthetic appearance desired for the area. An airspace evaluation will also be conducted for the light poles due to their proximity to KOUN Westheimer Airport's Runway 3-21.

2.10. Conceptual Plans

The conceptual plans will consist of schematic line diagrams on aerial photographs. This will include sidewalk improvements with ADA wheelchair ramps for the all approaches and widening to accommodate a northbound and southbound left turn lanes.

2.11. Project Cost

Planning level cost estimates will be developed for the recommended improvements.

2.12. Documentation

Analysis results, preliminary cost, and project impacts will be summarized to the city in report format.

2.13. <u>Preliminary Analysis Meeting</u>

Once we have completed the detailed written analysis of their respective advantages and disadvantages as well as costs, we will present the results to the city for discussion. Once approval of the written analysis is received, we will be design.

3. Topographic Survey

The topographic survey will depict existing above-ground features and marked underground utilities. The survey limits will extend from 15 feet outside of right-of-way on both sides of 24th Avenue NW from approximately 850 feet south of the Tee Drive intersection to approximately 1,000 feet north of the Tee Drive intersection at 24th Avenue NW to incorporate the left-turn lane improvements as well as the new roadway illumination. Along Tee Drive, the limits will extend from 15 feet outside of right-of-way on both sides for approximately 300 feet to accommodate detection zones. The topographical survey will also extend an additional 100 feet minimum along each cross street. The existing rights-of-way will be located on the survey based upon recovered property monuments and record documents on file with the Cleveland County Clerk. During the research of these records, utility easements and landowners adjacent to the right-of-way will be identified and noted on the survey.

4. Geotechnical Exploration, Testing, and Reporting

Geotechnical investigation, testing, and reporting will be in accordance with the "State of Oklahoma Department of Transportation Geotechnical Specifications for Roadway Design" (June 29, 2011) except as specifically indicated otherwise in the attached GEOTECHNICAL SCOPE OF WORK provided by Terracon. The scope of services for geotechnical investigation, testing, and reporting is provided as the attached GEOTECHNICAL SCOPE OF WORK provided by Terracon. The In-Place and Shoulder Soil Survey Survey services are identified as separate schedules for the City of Norman's convenience.

5. Right-of-Way Maps and Easements

Right-of-way plans will be prepared depicting the existing street centerlines and right-of-way lines, existing utility easements, and existing parcel lines of properties within the project limits. Proposed right-of-way lines will be included based upon information provided by the engineer.

Since the number of properties impacted by the project is not known at this time, our scope of services does not include the preparation of land acquisition documents consisting of legal descriptions and graphic exhibits for each of the proposed easement/right-of-way takes. This service can be added at a later date, if needed.

6. Coordination with Utilities

Prior to field surveys, our team will notify the "Call Okie" service to mark their utility lines. Additionally, we will request atlases from all of the known utility companies in the vicinity of the project. The field locates will be checked against the atlases to confirm that all known utilities will be picked up by the survey. These utilities as well as other visible utilities such as overhead power lines will be shown on the plans. As the plans are being developed, we will check for potential conflicts. When possible, we will design the proposed improvements around the utilities.

Garver will furnish plans to all known utility owners potentially affected by the project at each

stage of development. Garver will conduct coordination meetings among all known affected utility owners and facilitate the coordination efforts for any necessary utility relocation. Garver will include the surveyed locations of the observable and marked utilities in the construction plans. Garver will also include proposed and/or relocated utility information in the construction plans as provided by the utility companies.

Garver will provide a review of utility relocation plans prepared by the affected utilities. Garver will provide periodic field observations of the relocation of private or franchise utilities estimated at two visits per anticipated utility relocation.

Since the impact to City owned utilities by the project is not known at this time, our scope of services does not include the preparation utility relocation plans or relocation assistance. This service can be added at a later date, if needed.

7. Construction Plans

The design and preparation of construction plans will include roadway modifications, drainage improvements, signalization, and roadway lighting. The roadway modifications will consist of provisions for northbound and southbound turn lanes, full reconstruction on the south leg with concrete pavement, symmetrical widening on the north leg, demolition plans, permanent striping, a traffic control plan, and sidewalk/ramp improvements to accommodate crosswalks on all approaches. Impacted drainage inlets will be relocated along the new curb lines. Stormwater design will not include improvements to the downstream stormwater network, should this be necessary it can be added at a later date. The traffic signal plan will consist of audible pedestrian signals, phasing diagram, wiring diagram, relocation of fiber optic interconnect, and street name sign details. The roadway lighting plans will extend from south of the Tee Drive intersection to Robinson Street. This will include electric utility coordination, power distribution design, lighting design, and details. A Storm Water Pollution Prevention Plan will be included. Quantities and pay item notes will also be included. The construction plans will be to City of Norman and ODOT standards.

7.1. Preliminary Plans

The preliminary design phase submittal will include 60% construction plans for review by the Owner. In particular, the preliminary plans will include typical sections, horizontal and vertical alignments, geometric layouts, right-of-way impacts, major utility conflicts, signal plans, roadway lighting, and an order of magnitude cost opinion. This submittal will not include technical specifications.

After submittal of the 60% preliminary plans, Garver will attend a plan-in-hand meeting with the City of Norman and the Oklahoma Department of Transportation (ODOT).

7.2. Final Plans

Once Garver receives comments from the Preliminary Plans and Plan-in-Hand meeting, final design will begin. The final design phase submittal will include 90% construction plans and 100% construction plans.

7.2.1. 90% Plans

Comments from the 60% plans and plan-in-hand meeting will be incorporated into the 90% plans. Garver will attend a meeting with the city and ODOT once the 90% plans have been submitted.

7.2.2. 100% Plans

The final plans will include the construction plans and specifications, quantity calculations, and opinion of probable construction cost. The Engineer will also make any needed plan changes as a result of the Owners review. Garver will attend a meeting with the city once the final plans have been submitted.

8. Construction Phase Services

Garver will attend the pre-bid meeting and issue addenda if needed. Minimal effort by the Garver is anticipated during the City of Norman or ODOT bid process.

The construction contract will be administered and inspected by the City of Norman or ODOT with minimal effort required by Garver. During the Construction Phase the Garver will:

- Attend the preconstruction meeting.
- Issue necessary clarifications (respond to RFIs) regarding the construction contract documents.
- Participate in final project inspection.
- Prepare record drawings based upon red-line mark ups provided by the City of Norman.

9. Project Deliverables

The following will be submitted to the Owner, or others as indicated, by Garver:

- 1. PDF submittal of all Meeting Minutes.
- 2. PDF submittal of concept report prior to beginning construction plans.
- 3. PDF version of preliminary construction plans, quantity calculations, and opinion of probable cost.
- 4. PDF version of final construction plans, quantity calculations, opinion of probable cost, and special provisions.

- 5. Electronic copies of final construction plans, quantity calculations, opinion of probable cost, and special provisions.
- 6. Electronic copy of as-built plans.

10. Extra Work

The following items are not included under this agreement but will be considered as extra work:

- 1. Redesign for the Owner's convenience or due to changed conditions after previous alternate direction and/or approval.
- 2. Submittals or deliverables in addition to those listed herein.
- 3. 24-hour tube counts and peak hour turning movement counts
- 4. Design of any utility relocations
- 5. Utility potholing
- 6. Retaining wall or other structural design.
- 7. Coordination with the USACE and preparation/submittal of an Individual or Nationwide 404 permit.
- 8. Construction materials testing.
- 9. Construction administration and inspection.
- 10. Review and comment on construction material submittals.
- 11. Construction observation.
- 12. Front end sections of construction contract documents.
- 13. Plans for construction easements (temporary and/or permanent) or drainage easements.
- 14. Right-of-way acquisition documents.
- 15. Environmental Handling and Documentation including wetlands identification or mitigation plans for other work related to environmentally or historically (culturally) significant items.
- 16. Services after construction, such as warranty follow-up, surety work, etc.

Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and Garver.



GEOTECHNICAL SCOPE OF WORK

24TH AVENUE N.W. AND TEE DRIVE NORMAN, OKLAHOMA CITY OF NORMAN PROJECT NO. K-1415-128

Terracon Proposal No. P03150205 May 18, 2015 (REVISION 2)

Geotechnical work shall be performed in accordance with "State of Oklahoma Department of Transportation Geotechnical Specifications for Roadway Design" (June 29, 2011) except as specifically indicated otherwise by this scope of work. Work shall be performed under the supervision of a Professional Engineer licensed to practice in the State of Oklahoma. Our services are based on task order budgets, with not to exceed amounts that are based on previously negotiated unit rates.

We understand that the existing 24th N.W. between Westport Drive and Palmer Circle will be widened. We also understand that the 24th Avenue N.W. between Tee Drive and Palmer Circle will be reconstructed. The Geotechnical Scope of work will include an In-Place and Shoulder Soil Survey.

In-Place and Shoulder Soil Survey:

A total of four borings will be drilled for this project. Two borings will be drilled through the existing pavement and two borings will be drilled on the shoulder. Cores of the pavement surface will be collected and measured for presentation in the report. As requested, the borings will be advanced to depths of 5 feet below the bottom of the pavement or ground surface. Samples will be collected in the top 6 inches and the bottom 54 inches of each borehole. The extent of similar soils will be reported. Composite bulk samples will be collected of each different soil type that is encountered along the project extent. The borings will be located using the site plan provided by the Client.

The following laboratory tests will be performed on representative samples for each soil type encountered in the borings along the alignments:

Soil Classification, including Atterberg Limits and gradation



GEOTECHNICAL SCOPE OF WORK

In-Place and Shoulder Soil Survey - 24th Avenue N.W Norman, Oklahoma City of Norman Project No. K-1415-128

May 18, 2015 Terracon Proposal No. P03150205 (REVISION 2)



The following laboratory tests will be performed on the bulk sample.

- Soil Classification, including Atterberg Limits and gradation
- Moisture density
- Resilient Modulus

The engineering report will include a boring location diagram, boring logs, extents of the different soils types, laboratory test data, and recommended subgrade preparations for problem soils. We will also provide pavement section recommendations Portland cement concrete pavement. We understand traffic information will be provided by the client.

We understand Garver, LLC will issue a Task Order and the work will be performed in accordance to the Master Agreement between Terracon Consultants, Inc. and Garver, LLC dated March 24, 2014.

ATTACHMENT B - SCHEDULE

The CONSULTANT shall begin work under this Agreement within ten (10) days of a Notice to Proceed (NTP) and shall complete the work in accordance with the schedule below:

Phase Description	Calendar Days
Kick-Off Meeting	10 days from NTP
Submit Written Preliminary Analysis	60 days from NTP
Submit Preliminary (60%) Plans	45 days from approval of written analysis
Submit Final (100%) Plans	21 days from plan-in-hand meeting
Construction Phase Services	As needed

APPENDIX C K-1415-128

THE CITY OF NORMAN 24TH AVENUE NW AND TEE DRIVE

PROJECT DESCRIPTION:

The City of Norman requires the professional services of an engineering firm to provide all engineering services necessary to prepare plans, specifications and bid package, and to provide technical assistance throughout the design and construction of the intersection improvements and signalization at 24th Avenue NW and Tee Drive.

FEE SUMMARY:

Labor	Man-Hours	Total
1. Preliminary Analysis	295 85	\$34,930.00 \$10,467.00
Construction Plans - Signal Construction Plans - Roadway Lighting	205 494	\$19,800.00 \$48,999.00
Construction Plans - Roadway Utility Coordination	38	\$4,290.00 \$2,939.00
Construction Phase Services Project Management	23 4	\$748.00
Total Labor	1,144	\$122,173.00

Expenses	Amount
Preliminary Analysis Construction Plans - Signal Construction Plans - Roadway Lighting Construction Plans - Roadway Utility Coordination Construction Phase Services Project Management	\$1,050.00 \$948.00 \$1,644.00 \$235.00 \$82.00 \$101.00 \$52.00
Total Expenses	\$4,112.00

Subconsultants	Amount
1. Durham Surveying 2. Terracon In-Place and Shoulder Soil Survey Pedological Survey	\$16,000.00 \$7,706.00 \$0.00
Total Subconsultants	\$23,706.00

GRAND TOTAL LUMP SUM FEE:

\$149,991.00



K-1415-128

24th Avenue NW & Tee Drive Garver Hourly Rate Schedule

Classification		Rates
Engineers / Architects		
	\$	94.00
	\$	108.00
		132.00
L-V	\$	153.00
	\$	187.00
E-0		234.00
E-0,		309.00
Planners / Environmental Specialist	Ť	
	\$	113.00
	~	141.00
P-3	4	180.00
	_	100.00
Designers D-1	\$	87.00
	-	102.00
D-2		
D-3	\$	122.00
U-7(\$	141.00
Technicians		
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	\$	68.00
-4	\$	87.00
T-3	\$	105.00
Surveyors		
Q=	\$	42.00
S-2	\$	55.00
S-3	\$	75.00
S-4	\$	107.00
S-5	\$	141.00
S-6	\$	161.00
2-Man Crew (Survey)	\$	172.00
3-Man Crew (Survey)	\$	214.00
2-Man Crew (GPS Survey)	\$	192.00
3-Man Crew (GPS Survey)	\$	234.00
Construction Observation	Ť	
C-1	\$	83.00
C-2	\$	106.00
C-3	\$	130.00
	*	159.00
	*	
Management/Administration	¢	309.00
M-1		54.00
X-1	-	
X-2		73.00
X-3		102.00
X-4	\$	139.00

THE CITY OF NORMAN 24TH AVENUE NW AND TEE DRIVE

PRELIMINARY ANALYSIS

	WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
		\$234.00	\$187.00	\$153.00	\$132.00	\$108.00	\$94.00	\$87.00
		hr	hr	hr	hr	hr	hr	hr
1.	Preliminary Analysis - Traffic		ľ					
	Site Visit/Fleid Observations						12	
	Develop Traffic Projections	_				_		
	Future Traffic Projections			8			4	
	GIS Information						4	
	Operational Analysis			16			8	
	Calcs		1				8	
Г	Geometric Analysis						6	
Г	Safety Analysis						6	
Г	Documentation		2	8			8	
Г								
П	Subtotal - Preliminary Analysis - Traffic	0	3	32	0	0	56	0
2.	Preliminary Analysis - Utilities							
	Obtain Utility Atlases						2	
	Identify Potential Utility Conflicts				4		8	
	Estimated Costs of Relocations				2		2	
	Documentation		1		2		4	
Г								
Г	Subtotal - Preliminary Analysis - Utilities	0	1	0	8	D	16	0
3.	Preliminary Analysis - Roadway							
	Develop Concept				2	24		
_	Planning Level Costs for Roadway Improvements	1				16		
	Documentation				4	24		
	Subtotal - Preliminary Analysis -Roadway	0	0	0	6	64	0	0
4.	Preliminary Analysis - Roadway Lighting							
	Preliminary Analysis and Coordination				3		4	
	Site Visit/Field Observations				10		10	
	Model Lighting Layout				6		28	
	Light Pole Airspacing Coordination with the FAA	1			1		В	
	Planning Level Cost for Roadway Lighting				1		2	
	Documentation				1	-	2	
					-			
	Subtotal - Meetings	1	0	0	22	0	54	D
4.	Meetings							
_	Kick-Off		12		4		_	
	Analysis Results		12		4			
_								
	Subtotal - Meetings	0	24	0	8	0	0	0

Hours	1	28	32	44	64	126	0
Salary Costs	\$234.00	\$5,236.00	\$4,896.00	\$5,808.00	\$6,912.00	\$11,844.00	\$0.00

		+-,
SUBTOTAL - SALARIES:		\$34,930.00
DIRECT NON-LABOR EXPENSES		
Document Printing/Reproduction/Assembly	\$50.00	
Postage/Freight/Courier	\$0.00	
Office Supplies/Equipment	\$0.00	
Communications	\$0.00	
Survey Supplies	\$0.00	
Aerlal Photography	\$0.00	
GPS Equipment	\$0.00	
Computer Modeling/Software Use	\$0.00	
Traffic Counting Equipment	\$0.00	
Locator/Tracer/Thermal Imager Equipment	\$0.00	
Travel Costs	\$1,000.00	

Travel Costs	\$1,000.00
SUBTOTAL - DIRECT NON-LABOR EXI	PENSES: \$1,050.00
SUBTOTAL:	\$35,980.00
SUBCONSULTANTS FEE:	\$0.00
TOTAL FEE:	\$35,980.00

THE CITY OF NORMAN 24TH AVENUE NW AND TEE DRIVE

SIGNALIZATION DESIGN

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$234.00	\$187.00	\$153.00	\$132.00	\$108.00	\$94.00	\$87.00
	hr	hr	hr	hr	hr	hr	hr
. Preliminary Plans						- 15	
Signalization Plans	<u> </u>	1				12	
Wheelchair Ramp Details		1				16	
Quantities & Opinion of Probable Cost		1				8	
Plan Review		3					
Plan Submittal and Corrections						8	
60% Plan-in-Hand		12					
Subtotal - Preliminary Plans	0	18	0	0	0	44	0
2. Final Plans (90% & 100%)			ļ				
Special Provisions		1				1	
Update Signalization Plans	<u> </u>	11				4	<u> </u>
Update Quantities & Opinion of Probable Cost		1				2	
Plan Review		2			<u> </u>	2	
90% Plan Submittal		1				11	
90% Plan Submittal Meeting				2			_
Final Plan Submittal and Corrections		1				2	
Final Plan Submittal Meeting				2			ļ
Subtotal - Final Plans (90% & 100%)	0	7	0	4	0	12	0

Hours	0	25	0	4	0	56	0
Salary Costs	\$0.00	\$4,675.00	\$0.00	\$528.00	\$0.00	\$5,264.00	\$0.00

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SUI	811	UI.	ΑL	SA	LA	M	E3:

TOTAL FEE:

SUBCONSULTANTS FEE:

\$10,467.00

\$0.00

\$11,415.00

	\$11,415.00
): 	\$948.00
\$875.00	
\$0.00	
\$0.00	
\$0.00	
\$0.00	
\$0.00	
\$0.00	
\$0.00	
\$0.00	
\$0.00	
\$73.00	
	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00

THE CITY OF NORMAN 24TH AVENUE NW AND TEE DRIVE

ROADWAY LIGHTING

	2	4	0	39	8	86	66
Subtotal - Final Plans	2	2	0	22	4	36	28
100 W L MID LOSION MOONING							
100% Plans Review Meeting							
Sign Plans / Complle Documents	+			1		2	
Final QA / QC	2			6		4	2
Specifications				2		6	
Address 90% Plans Meeting Comments				2		2	2
90% Plans Review Meeting	 						
Cost Estimate	1			1		1	
Electrical Quantities				1		3	
Electrical Details		2		2	4	4	8
Lighting Installation Plans	+			2		8	8
Lighting Removal Plans	1			1		2	4
Address Plan-In-Hand Meeting Comments				2		2	4
General Coordination	+			2		2	
. Final Plans							
Subtotal - Preliminary Plans	0	2	0	17	4	50	38
Preliminary Plan-In-Hand Meeting	+						
Cost Estimate	+			 -			
Electrical Quantities	 			1		2	
Electrical Details				1		4	
Lighting Installation Plans		2		2	4	8	12
Lighting Removal Plans				4		16	16
Electrical Calculations				2		6	8
Utility Coordination				2		6	
Address Preliminary Analysis Comments				1		2	
General Coordination				2 2		4	
Preliminary Plans				_		2	2
	hr	hr	hr	hr	hr	nr	- 111
	\$234.00	\$187.00	\$153.00	\$132.00	\$108.00	\$94.00 hr	hr hr
WORK TASK DESCRIPTION	E-6	E-5	E-4				\$68.00

SUBT	OTAL	-	SALARIES:	
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\$19,800.00

DIRECT NON-LABOR EXPENSES		
Document Printing/Reproduction/Assembly	\$144.00	
Postage/Freight/Courier	\$0.00	
Office Supplies/Equipment	\$0.00	
Communications	\$0.00	
Survey Supplies	\$0.00	
Aerial Photography	\$0.00	
GPS Equipment	\$0.00	
Computer Modeling/Software Use	\$0.00	
Traffic Counting Equipment	\$0.00	
Locator/Tracer/Thermal Imager Equipment	\$0.00	
Travel Costs	\$1,500.00	_
SUPTOTAL DIRECT NONLI AROR FYPENSES:	•	

Travel Costs	\$1,500.00
SUBTOTAL - DIRECT NON-LABOR EXPENSES	\$1,644.00
SUBTOTAL:	\$21,444.00
SUBCONSULTANTS FEE:	\$0.00
TOTAL FEE:	\$21,444.00

APPENDIX ¢

THE CITY OF NORMAN 24TH AVENUE NW AND TEE DRIVE

ROADWAY PLANS

	\$0.00	\$1,122.00	\$0.00	-	\$10,368.00	-	
Hours	0	6	0	43	96	210	139
Subtotal - Final Plans	0	3	0	19	62	92	65
Plan Submittal and Corrections				2	4	8	12
Plan Review		2		5			
Opinion of Probable Cost				1	8		
Specifications and Special Provisions				2	16		
Cross Sections						12	8
Signing and Striping		1				4	
Sequence of Construction				1		8	6
Special Construction Details				2	6		8
Joint Layout Sheet					4	8	
Removal Sheets						8	4
Intersection Details (2 Intersections)				2	4	8	6
Final Drainage design				1	4	4	1
Plan and Profile Sheets (3 Roadway)					8	10	12
General Notes				1	4		
Summary of Pay Quantities				1	4		1
Summary Sheet				t		2	
Summary of Drainage Structures					i	6	
SWPPP						8	4
Drainage Map					İ	2	1
Typical Sections						4	1
Title Sheet							1
Final Plans						Ì	
Subtotal - Preliminary Plans	D	3	D	24	34	118	74
Plan Submittal and Corrections				4		8	
Plan Review		2		4		4	<u> </u>
Quantities & Opinion of Probable Cost		_		4		16	<u> </u>
Cross Section				2		8	4
Signing and Striping		1				8	6
Sequence of Construction					1	16	8
Drainage design				1	4	12	2
Plan and Profile Sheets (3 Roadway Sheets)				2	8	24	20
Geometric Layout Sheet				<u> </u>		4	4
Note Sheet(s)				2	8		4
Summary of Pay Quantities				1	6		2
Summary Sheet				11		8	4
Drainage Area Map					6		4
Typical Sections and Modeling				2		8	12
Cover Sheet						2	4
Check and Convert Survey				1	2		
Preliminary Plans							
	hr	hr	hr	hr	hr	hr	hr
	\$234.00	\$187.00	\$153.00	\$132.00	\$108.00	\$94.00	\$87.0

SUBTOTAL - SALARIES: \$48,999.00

DIRECT NON-LABOR EXPENSES

Document Printing/Reproduction/Assembly	\$210.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$25.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES:	\$235.00
SUBTOTAL:	\$49,234.00
SUBCONSULTANTS FEE: TERRACON	
In-Place and Shoulder Soil Survey	\$7,706.00
Pedological Survey	\$0.00
SUBCONSULTANTS FEE: DURHAM SURVEYING	\$16,000.00
TOTAL FEE:	\$72,940.00

THE CITY OF NORMAN 24TH AVENUE NW AND TEE DRIVE

UTILITY COORDINATION

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$234.00	\$187.00	\$153.00	\$132.00	\$108.00	\$94.00	\$87.00
	hr	hr	hr	hr	hr	hr	hr
. Utility Coordination							
Forward preliminary plans to all Utilities						2	
Communication -Discuss relocation with Utility				3			
Plans	_			2		4	
Communication - Field review of Relocation						2	
Natural Gas -Discuss relocation with Utility				1		2	
Natural Gas -Review Utility Relocation Plans				2		2	
Natural Gas - Field review of Relocation						2	
Electric -Discuss relocation with Utility				3			
Electric -Review Utility Relocation Plans		, and the second		2		4	
Electric - Field review of Relocation						2	
Water/Sewer -Discuss relocation with Utility				1		2	
Oversight		2					
Subtotal - Utility Coordination	O	2	0	14	0	22	0
Hours	0	2	0	14	0	22	0
Salary Costs	\$0.00	\$374.00	\$0.00	\$1,848.00	\$0.00	\$2,068.00	\$0.00

SUBTOTAL -	SALARIES:
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TOTAL FEE:

\$4,290.00

\$4,372.00

SUBCONSULTANTS FEE:		\$0.00
SUBTOTAL:		\$4,372.00
SUBTOTAL - DIRECT NON-LABOR EXPENSE	S:	\$82.00
Travel Costs	\$25.00	
Locator/Tracer/Thermal Imager Equipment	\$0.00	
Traffic Counting Equipment	\$0.00	
Computer Modeling/Software Use	\$0.00	
GPS Equipment	\$0.00	
Aerial Photography	\$0.00	
Survey Supplies	\$0.00	
Communications	\$0.00	
Office Supplies/Equipment	\$0.00	
Postage/Freight/Courier	\$0.00	
Document Printing/Reproduction/Assembly	\$57.00	
DIRECT NON-LABOR EXPENSES		

THE CITY OF NORMAN 24TH AVENUE NW AND TEE DRIVE

CONSTRUCTION PHASE SERVICES

WORK TASK DESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T-2
	\$234.00	\$187.00	\$153.00	\$132.00	\$108.00	\$94.00	\$87.00
	hr	hr	hr	hr	hr	hr	hr
1. Construction Phase Services							
Pre-Bid Meeting				2			
Preconstruction Meeting	Ī			2		ļ	
Respond to RFI's				4		4	
Submittal Reivew							
Final Project Inspection				2			
Record Drawings		1		8			
Subtotal - Construction Phase Services	0_	1	0	18	0	4	0
Hours	0	1	0	18	0	4	0
Salary Costs	\$0.00	\$187.00	\$0.00	\$2,376.00	\$0.00	\$376.00	\$0.00

SUBTO	TAL -	SALARIE	S:
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\$2,939.00

DIRECT NON-LABOR EXPENSES	
Document Printing/Reproduction/Assembly	\$76.00
Postage/Freight/Courier	\$0.00
Office Supplies/Equipment	\$0.00
Communications	\$0.00
Survey Supplies	\$0.00
Aerial Photography	\$0.00
GPS Equipment	\$0.00
Computer Modeling/Software Use	\$0.00
Traffic Counting Equipment	\$0.00
Locator/Tracer/Thermal Imager Equipment	\$0.00
Travel Costs	\$25.00

SUBTOTAL - DIRECT NON-LABOR EXPENSES:	\$101.00
SUBTOTAL:	\$3,040.00
SUBCONSULTANTS FEE:	\$0.00
TOTAL FEE:	\$3,040.00

THE CITY OF NORMAN 24TH AVENUE NW AND TEE DRIVE

PROJECT MANAGEMENT

WORK TASK DESCRIPTION							
THE BESCRIPTION	E-6	E-5	E-4	E-3	E-2	E-1	T
	\$234.00	\$187.00	\$153.00	\$132.00			T-2
1. Administration	hr	hr	hr	hr	\$108.00	\$94.00	\$87.00
Invoicing & Proj. Management				111	hr	hr	br
		4		 			
Subtotal - Administration		ļ					
	0	4	0	0	0	0	
Hours	0	4	_			0	0
Salaria	•	4	0	0	0	0	0
Salary Costs	\$0.00	\$748.00	£0.00	4		-	U
SUBTOTAL - SALARIES:		Ţ. 15.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
- SALARIES:		\$740 AA					

		\$748.0
DIRECT NON-LABOR EXPENSES Document Printing/Reproduction/Assembly Postage/Freight/Courier Office Supplies/Equipment Communications	\$34.00 \$18.00 \$0.00 \$0.00	V/40.(
Survey Supplies Aerial Photography GPS Equipment Computer Modeling/Software Use Traffic Counting Equipment Locator/Tracer/Thermal Imager Equipment Travel Costs	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
SUBTOTAL - DIRECT NON-LABOR EXPENSES:	\$52.00	
SUBTOTAL: SUBCONSULTANTS FEE:	\$800.00 \$0.00	
TOTAL FEE:		\$800.00

ATTACHMENT D - OWNER'S RESPONSIBILITIES

In connection with the project, the Owner's responsibilities shall include, but not be limited to, the following:

- Owner will give thorough consideration to all documents presented by the Engineer and informing the Engineer of all decisions within a reasonable time so as not to delay the work of the Engineer.
- Owner will make provision for the employees of the Engineer to enter public and private lands as required for the Engineer to perform necessary preliminary surveys and other investigations.
- 3. Owner will furnish the Engineer existing plans, previous studies, existing Synchro files, existing traffic data, available aerial photography, reports, surveys, or copies of the same, related to or bearing on the proposed work as may be in the possession of the Owner. Such documents or data will be returned upon completion of the work or at the request of the Owner.
- 4. Owner will furnish the Engineer a current boundary survey with easements of record plotted for the project property.
- 5. Owner will provide legal, accounting, and insurance counseling services necessary for the project and such auditing services as the Owner may require.
- 6. Owner will give prompt written notice to the Engineer whenever the Owner observes or otherwise becomes aware of any defect in the project or other events which may substantially alter the Engineer's performance under this Agreement.
- 7. Owner will not hire any of the Engineer's employees during performance of this contract and for a period of one year beyond completion of this contract.
- 8. Owner will provide turning movement count data at the intersection of 24th Avenue NW and Tee Drive and at the intersection of 24th Avenue NW and Westport Drive.
- 9. Owner will provide the current Synchro model for 24th Avenue NW.