



September 27, 2021

City of St. Helens
265 Strand Street
St. Helens, Oregon 97051

c/o McKenzie Civil Engineering
Attn: Ralph Henderson
Phone: 971.346.3685
Email: RHenderson@mcknze.com

**RE: SURVEYING SERVICES PROPOSAL FOR THE CITY OF SAINT HELENS PUBLIC SAFETY
BUILDING PROJECT, CITY OF SAINT HELENS, COLUMBIA COUNTY, OREGON**

Dear Mr. Henderson,

Attached is our proposal to provide surveying services for the above project. This proposal is based on design quality surveying and information provided by McKenzie Civil Engineering and the City of St. Helens. We will do our best to perform our services in a timely manner to help ensure a successful project for all parties involved.

We look forward to working with you on this project. If you have any questions, please contact me using the information in my signature.

Sincerely,

AKS Engineering & Forestry, LLC

A handwritten signature in blue ink that reads 'Nick White'. The signature is fluid and cursive, with the first name 'Nick' and last name 'White' clearly distinguishable.

Nick White, PLS | Associate
12965 SW Herman Road, Suite 100 | Tualatin, OR 97062
(503) 563-6151 | nick@aks-eng.com

LETTER OF AGREEMENT FOR PROFESSIONAL SERVICES

This agreement is made between **The City of St. Helens (Client)** and **AKS Engineering & Forestry, LLC (AKS)** to provide surveying services for the St. Helens Public Safety Building project located at the intersection of Old Portland Road and Kaster Road (Columbia County Tax Map 040109AB, Tax Lot 1400), St. Helens, Columbia County, Oregon. See attached "Exhibit A" for the approximate limits of work. The approximate area of the site is 7.00± acres.

The Client authorizes AKS to provide surveying services, acting as an independent consultant for this project as individually named. The scope of work and fees are as follows.

SCOPE OF WORK

The following list of items are services AKS will be responsible for completing. All work outlined below will be performed by or under the direct supervision of a Professional Land Surveyor.

Topographic Surveying Services

The following items will be completed by AKS within the area shown in "Exhibit A" and will meet the scope requirements as listed in "Exhibit B":

- Survey, title, road, and as-built research
- Locating existing property corner monuments of record
- Establishing property lines, right-of-way lines, and easements
- Elevating site to NAVD 88 vertical datum
- Establishing NAD 83 2011 State Plane Coordinates
- Coordinating public utility locates
- Providing notice to adjoining property owners
- Establishing FEMA Base Flood Elevations
- Field tying:
 - Above ground located utilities (e.g., sanitary, storm, water, gas, power, communications)
 - Hard surfaces (e.g., curb, sidewalk, concrete, asphalt, driveway drops, ramps)
 - Traffic signal poles, light poles, and signs
 - Trees 6-inch diameter at breast height and greater
 - Fences, buildings, eaves, walls, and significant landscaping
 - Natural ground and break lines for 1-foot contours
- Preparing an Existing Conditions Map showing the above items that can be used for design purposes



ESTIMATED FEES

Topographic Surveying Services..... \$17,500

Basis of Fees and Billing

In consideration for performing said services, the Client agrees to compensate AKS monthly for services based on standard hourly rates.

Assumptions

- The Client will provide an updated title report
- Excludes private utility locate services
- Excludes professional traffic control services
- Assumes access will be coordinated by the Client
- Excludes property boundary dispute resolution
- Excludes legal description preparation

Exclusions

Services that do not fall within the scope of work are excluded from this agreement. See attached "General Provisions."



**AKS Engineering & Forestry,
LLC**

Date September 27, 2021

AKS Engineering & Forestry, LLC
12965 SW Herman Road
Tualatin, OR 97062

Client

Date _____

City of Saint Helens
265 Strand Street
St. Helens, Oregon 97051





AKS Engineering & Forestry, LLC

Standard Fee Schedule 7/1/2021

Labor Rate Levels:

Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources I	\$55/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources II	\$60/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources III	\$65/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources IV	\$70/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources V	\$75/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources VI	\$80/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources VII	\$85/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources VIII	\$90/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources IX	\$95/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources X	\$100/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XI	\$105/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XII	\$110/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XIII	\$115/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XIV	\$120/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XV	\$125/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XVI	\$130/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XVII	\$135/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XVIII	\$140/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XIX	\$145/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XX	\$150/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXI	\$155/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXII	\$160/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXIII	\$165/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXIV	\$170/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXV	\$175/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXVI	\$180/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXVII	\$185/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXVIII	\$190/hr
Engineer/Surveyor/Planner/Landscape Architect/Arborist/Natural Resources XXIX	\$195/hr
GPS/Robotic Instrument One Person Field Crew	\$130/hr
GIS Specialist	\$95/hr
Drone One-Person Field Crew	\$150/hr
Drone Specialist - Office	\$110/hr
Survey Crew (Two Person)	\$195/hr
Laser Scanning One Person Crew	\$170/hr
LiDAR One-Person Field Crew	\$175/hr
LiDAR Specialist – Office	\$110/hr
Technical Editor	\$70/hr
Clerical	\$65/hr

Reimbursables:

Subcontractors and Subconsultants	cost + 10%
Application/Permit Fees	cost + 10%
Mileage (current federally allowed rate)	\$0.56/mile
Technical Supplies	cost + 10%
Postage/Shipping	cost + 10%
Commercial Copies	cost + 10%
Commercial Delivery	cost + 10%
Miscellaneous (includes):	
Parking	cost + 10%
Aerial Photos	cost + 10%
Commercial Travel, Meals, Lodging	cost + 10%

AKS does not have an additional charge or multiplier for overtime. Field equipment, computer hardware, and computer software (AutoCAD licenses, etc.) are included in the labor rates.

GENERAL PROVISIONS

1. **Expenses:** AKS Engineering & Forestry, LLC's ("AKS") reimbursable expenses shall be those expenses incurred directly for a project, including but not limited to services provided by outside consultants or contractors, transportation costs, meals, lodging, computer services, printing, permit fees, in-house deliveries, clerical, and binding charges. Client shall pay for such expenses on the basis of actual costs (if incurred through an outside vendor) plus 10%, or at AKS's regular rates at the time the cost is incurred.
2. **AKS's Fees / Fee Estimates:** Unless otherwise agreed in writing: (a) charges for AKS's services will be billed per AKS's rate schedule in effect at the time services are performed; (b) services include, without limitation, all office time, field time, meetings, phone calls, travel time, and all other time incurred for a project; (c) AKS bills in 15-minute increments; (d) AKS bills for travel time door-to-door at its regular rates; (e) AKS's rates may be adjusted from time to time, without notice; and (f) AKS does not warrant that actual fees and expenses will not vary from estimates.
3. **Payment:** AKS will issue invoices approximately monthly. Invoices are due and payable on receipt. All amounts more than 30 days past due will be subject to finance charges. Finance charges are computed at a rate of 1.5% per month, unless such rate exceeds the maximum amount allowed by law, in which case the finance charge will equal the maximum rate allowed by law. If Client disputes any portion of an invoice, Client must notify AKS of the dispute in writing within 30 days of the invoice date. The notice must state the disputed amount and basis for dispute. Client hereby waives the right to dispute an invoice more than 30 days after an invoice's date, and/or if Client fails to provide the required notice.
4. **Failure to Pay:** Failure to timely pay any amount due to AKS is a material breach of this Agreement and, in the case of late payment, AKS may, in its sole discretion, suspend or terminate service and all other obligations under this contract and/or under any other contract between AKS and Client (and/or between AKS and any other client subject to control by Client or any of Client's principals). If any payment is not timely made, AKS may withhold plans, documents, and information (whether such documents and/or information was prepared under this contract, another contract between AKS and Client, or a contract between AKS and another client subject to control by Client or one of Client's principals). If AKS suspends or terminates work due to Client's non-payment, AKS may require an additional "start-up fee" to re-start work, even if Client cures all past defaults. These remedies are in addition to any others available to AKS at law or in equity.
5. **Additional Charges:** If AKS performs any work pursuant to a lump sum agreement, AKS reserves the right to charge additional amounts (and client shall timely pay such extra amounts) when: (a) AKS provides any services not specified in the agreement; (b) unforeseen or differing conditions modify the scope of work anticipated by AKS; (c) any law, ordinance, regulation or similar item changes after the date of the agreement and such change requires AKS to re-perform any work; and (d) delay or other conduct by others impact AKS's services; and/or (e) any other circumstance justifies an equitable adjustment to the contract price. Unless otherwise agreed, additional charges shall be at AKS's standard rates.
6. **Cost Estimates:** Any construction or development cost estimates provided by AKS are only estimates. AKS has no control over market conditions or bidding procedures. AKS cannot warrant that bids or actual costs will not vary from estimates. AKS will not be liable to Client for any inaccurate cost estimates, and Client assumes all risks associated with construction and development cost estimates that AKS provides to Client.
7. **Standard of Care:** AKS shall only be responsible to the level of competency and the standards of care and skill maintained by similarly licensed professionals providing similar services on projects of similar type, size and scope as a subject project, in the locale where the subject project is located, at the time that AKS provides services. *AKS shall not be liable to Client for any standard of care higher than such standard.*
8. **Termination:** Without any liability to the other party, either Client or AKS may terminate this Agreement for any reason by giving 30 days written notice to the other party. In such event, Client shall immediately pay AKS in full for all work performed prior to the effective date of termination. AKS need not give 30-days' notice if the reason for termination is client's non-payment.
9. **Limitation of Liability:** In recognition of the fees charged by AKS, and the relative risks, rewards, and benefits of the project to AKS and Client, Client agrees that AKS's liability to Client relating to this Agreement and the services that AKS performs hereunder, for any cause or combination of causes, under any theory of law, including tort (including negligence), contract or otherwise, shall be limited, in the aggregate, to the **lesser** of: (a) the amount of the fee received by AKS in connection with the project; and (b) the remaining insurance coverage available to AKS (after deduction of any costs, claim payments or other amounts that may have reduced policy limits). Client hereby expressly waives all claims of every nature against AKS that exceed these liability limitations. Client had the opportunity to negotiate a higher limitation for a higher fee.
10. **Release of Individuals:** No member, employee or other representative of AKS shall have any personal liability to Client for any act or omission, whether based on a claim of negligence or any other tort, or otherwise, arising out of or relating to this Agreement or the services that AKS performs hereunder, and Client hereby releases all such individuals from all claims of every nature.
11. **Consequential Damage Waiver:** AKS and Client hereby waive all claims against each other for indirect and consequential damages that arise in any manner out of this Agreement or the services performed hereunder. This mutual waiver includes a release of all claims for consequential damages, whether based in tort, contract or otherwise, and includes, without limitation, a release of claims for economic losses such as rental expenses, losses of use, income, profit, financing, business and reputation, and for loss of management or productivity.
12. **Enforceability:** If any provision contained in this Agreement (or any portion thereof) is held to be unenforceable by a court of competent jurisdiction, the remaining provisions contained herein (and all parts thereof) shall remain unimpaired, in full force and effect. Each clause shall be enforced to the greatest extent not prohibited by law and shall be modified to enforce the expressed intent to the greatest extent allowed.
13. **Assignment:** This Agreement is not assignable by Client without the written consent of AKS.
14. **Access; Client Cooperation:** Client represents and warrants that it has unrestricted access to the site, and that AKS has access to the site, to the same degree as Client. Client shall cooperate with AKS and timely provide AKS information that AKS requests.
15. **Work Product:** Calculations, drawings, and specifications prepared pursuant to this Agreement ("Work Product"), in any form, are instruments of professional service intended for one-time use by Client only, for this project only. Work Product is and shall remain the property of AKS and its consultants. Client may not use any Work Product on other projects without AKS's express written permission. Client shall not obtain the right to use the Work Product, even for one-time use on this project, unless all amounts due to AKS are paid in full. If Client is in possession of any Work Product and has not paid any amount due to AKS, AKS may demand return of the Work Product, and may specifically enforce Client's obligation to return the Work Product. Client agrees that AKS shall not have waived its rights in any Work Product by virtue of submission to a public body, by dissemination of Work Product without copyright designations or via any other conduct other than a written waiver signed by AKS.
- 15.1: If Client uses any Work Product without retaining AKS for any portion of the project (including construction phase) or any other project, then Client releases AKS and AKS's consultant(s) from all claims and causes of action that relate in any manner to the project and the Work Product. Client recognizes, acknowledges and agrees that the design for a project can be a work in progress and that changes occur and information becomes available, even during construction, and that, unless AKS can stay involved in the project through completion, AKS should be relieved of liability associated with the services it provided for the project. Client agrees to indemnify and hold AKS harmless from and against any claims, demands, damages and amounts of every nature, to the extent caused by Client's use of the Work Product (or Client's allowing someone else to use the Work Product) without the involvement

of AKS. If this Agreement is terminated prior to completion of the project, for any reason other than AKS's termination as a result of Client's breach, then Client may continue to use the Work Product prepared by AKS prior to the date of termination, pursuant to the license granted herein, but only if: (a) Client pays AKS all amounts due to AKS; (b) Client removes all indicia of AKS's involvement in the Project from such documents, including title blocks and stamps; (c) Client retains another licensed design professional to review, approve and assume all responsibility for all design documents (the new design professional shall stamp the Work Product and, if anything has been submitted to a jurisdiction prior to termination, then the new design professional shall notify the jurisdiction that the new design professional is the new design professional of record).

15.2: If Client makes, authorizes or consents to changes to any Work Product, and such changes are not approved in writing by AKS, then such changes and the results thereof are not the responsibility of AKS. In that case, Client releases AKS from any liability arising from construction, use or result of such changes, and Client shall indemnify, defend and hold AKS harmless from and against any liabilities, costs, damages, demands, claims or other amounts to the extent caused by such changes.

15.3: AKS's deliverables only include printed paper copies or PDF's of Work Product. If AKS chooses, in its sole discretion, to produce any native editable design documents (such as CADD, REVIT or Word files), then Client agrees not to distribute such editable documents to any other person without AKS's express written consent, which consent AKS may withhold in its discretion.

16. Indemnity: Client hereby agrees to defend, indemnify and hold AKS (and each of AKS's owners, employees and agents) harmless from any claim, demand, loss, damages and/or liability, including reasonable attorneys' fees, to the extent such arises out of any acts by the Client, its agents, staff, and/or other consultants or contractors that act at Client's direction.

17. Work of Others: Client agrees that AKS shall not be responsible or liable for any work performed or services provided by anyone other than AKS and/or AKS's direct employees. If AKS assists Client with the coordination of other contractors and/or design professional and/or consultants, and/or AKS arranges for the provision of services by others, such coordination and/or other efforts is done as a convenience to Client and does not make AKS liable for the services provided by others. Client understands and expressly acknowledges that AKS does not provide geotechnical engineering, safety, traffic engineering, structural engineering, or electrical engineering services. Client acknowledges that AKS does not assume responsibility and agrees that AKS shall have no liability for determining, supervising, implementing or controlling the means, methods, technique, sequencing or procedures of construction, or monitoring, evaluating or reporting job conditions that relate to health, safety or welfare.

18. All Terms Material; Negotiation; Construction: All provisions herein are material to AKS's agreement to provide services and were expressly negotiated by the parties. Client had the opportunity to negotiate each term hereof and waives any argument that this Agreement should be construed against the drafter.

19. Authorization to Proceed: Any request by Client for AKS to proceed with work shall constitute an express acceptance of all terms to this Agreement, including these General Provisions.

20. Law/Venue: All claims that relate to this Agreement or the services provided hereunder shall be subject to Oregon law, and any litigation shall be filed in Multnomah County, Oregon, except: (a) if any case involves a lien claim that must be litigated elsewhere as a matter of law, all issues may be litigated in the same forum as the lien foreclosure; and (b) if all work performed hereunder occurred in Washington, disputes shall be subject to Washington law and litigation shall be filed in Clark County, Washington.

21. Mediation: Client agrees to mediate any dispute between AKS and Client, at AKS's request. The parties shall equally share the costs of mediation.

22. Notice of Claims: Client shall provide AKS immediate written notice of any facts that could potentially result in any potential claim against AKS. *As a condition precedent to any recovery from AKS, Client shall give AKS written notice of any claim or facts that could result in a claim not later than ten (10) days after the date of the occurrence of the event causing the potential claim. Client's failure to provide such notice shall constitute waiver of such claim.*

23. No Third-Party Beneficiaries: Client and AKS are the only beneficiaries of this Agreement; no term herein is intended to benefit any third party.

24. Time Limitation/Accrual: Any claim or cause of action by Client against AKS arising out of or relating to this Agreement or the services performed hereunder (under any theory of law) must be initiated within two (2) years of *the earlier of* the date: (a) of AKS's last invoice; (b) of substantial completion; (c) of abandonment; (d) that Client knew or should have known of the damages claimed; and (e) that Client knew or should have known the facts giving rise to the claim. For purposes of this provision, AKS statements shall not constitute invoices; the "last invoice" shall be the last invoice that reflects new charges not previously charged for base contract work. A signed certificate of substantial completion shall be conclusive evidence of the date of substantial completion. If no certificate of substantial completion is executed, substantial completion shall be the earliest of the date that (a) the project is fit for its intended purpose; (b) the project is utilized for its intended purpose; and (c) a certificate of occupancy (permanent or temporary) is issued for any portion of the Project.

25. Integration; Amendments: This Agreement represents the entire and integrated agreement between Client and AKS, and supersedes all prior and contemporaneous negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by the party against which such amendment is asserted.

26. Binding Nature; Survival: This Agreement shall be binding on the parties and their respective successors, heirs and permitted assigns. Each of Client's principals agrees to be bound by the terms hereof, to the same extent as Client. Any clauses intended to survive termination or expiration of this Agreement (including without limitation indemnity, waivers, limitations, and dispute resolution clauses) shall survive termination or expiration.

27. Waiver: No failure on the part of either party to exercise its rights under this Agreement shall be considered a waiver, release or relinquishment of any rights or powers conferred under this Agreement.

28. Unmanned Aerial Systems (UAS): AKS may utilize UAS to compile aerial photography of the project site before, during, and after construction. Client hereby grants AKS permission to operate the UAS over the project site. Client represents that all persons, vessels, vehicles, and structures related to the project are considered participants consenting to be involved with any UAS operations by AKS, and that Client has authority to grant these rights and to make these representations. Client shall defend, indemnify and hold AKS harmless from any breach of these representations, and from any claims or demands against AKS arising from any allegation of trespass, non-consent, or any other issues arising out of AKS's UAS operations (except to the extent that AKS causes property damage or personal injury that arises out of AKS's negligence).

29. Electronic Media: Client may only rely on printed Work Product, with AKS's wet stamp. Any files provided to Client in electronic format are for convenience only and should not be relied upon as final documents. Any use of electronic files shall be at the user's sole risk. AKS makes no representation as to the accuracy or completeness of electronic documents, or as to the compatibility, usability or readability of such files.

30. Court Materials: If AKS receives a subpoena or is otherwise required to produce documents, provide testimony, or otherwise get involved in a court case that relates to your project (and to which AKS is not a party), the Client will pay all time and costs incurred for such matters at AKS' current staff billing rates.

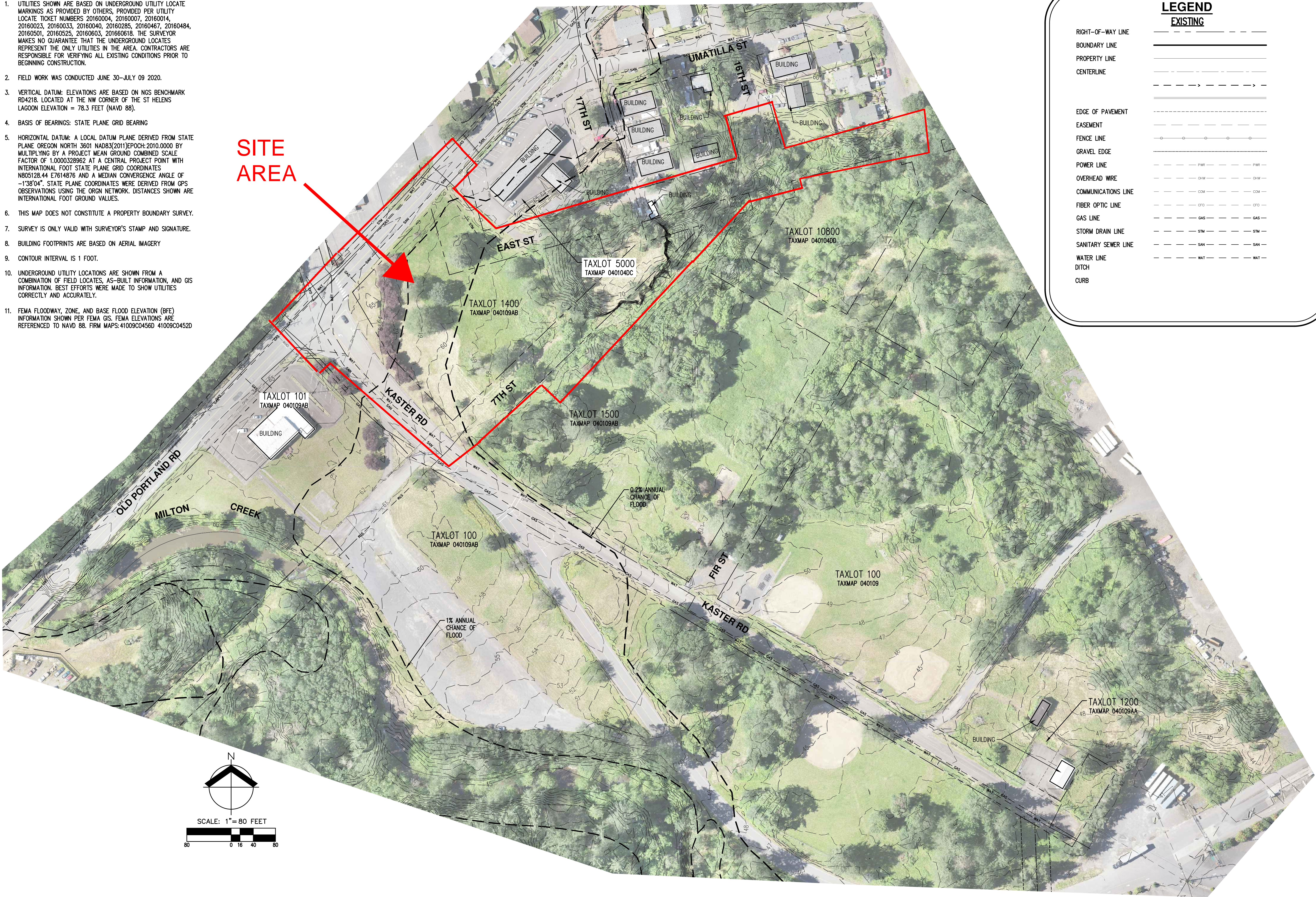


EXHIBIT A:

Limits of Work

- NOTES:**
- UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBERS 20160004, 20160007, 20160014, 20160023, 20160033, 20160040, 20160285, 20160467, 20160484, 20160501, 20160525, 20160603, 20160618. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
 - FIELD WORK WAS CONDUCTED JUNE 30-JULY 09 2020.
 - VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS BENCHMARK RD4218, LOCATED AT THE NW CORNER OF THE ST HELENS LAKE ELEVATION = 78.3 FEET (NAVD 88).
 - BASIS OF BEARINGS: STATE PLANE GRID BEARING
 - HORIZONTAL DATUM: A LOCAL DATUM PLANE DERIVED FROM STATE PLANE OREGON NORTH 3601 NAD83(2011)EPOCH:2010.0000 BY MULTIPLYING BY A PROJECT MEAN GROUND COMBINED SCALE FACTOR OF 1.0000328962 AT A CENTRAL PROJECT POINT WITH INTERNATIONAL FOOT STATE PLANE GRID COORDINATES N805128.44 E7614876 AND A MEDIAN CONVERGENCE ANGLE OF -1'38"04". STATE PLANE COORDINATES WERE DERIVED FROM GPS OBSERVATIONS USING THE ORGN NETWORK. DISTANCES SHOWN ARE INTERNATIONAL FOOT GROUND VALUES.
 - THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
 - SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE.
 - BUILDING FOOTPRINTS ARE BASED ON AERIAL IMAGERY
 - CONTOUR INTERVAL IS 1 FOOT.
 - UNDERGROUND UTILITY LOCATIONS ARE SHOWN FROM A COMBINATION OF FIELD LOCATES, AS-BUILT INFORMATION, AND GIS INFORMATION. BEST EFFORTS WERE MADE TO SHOW UTILITIES CORRECTLY AND ACCURATELY.
 - FEMA FLOODWAY, ZONE, AND BASE FLOOD ELEVATION (BFE) INFORMATION SHOWN PER FEMA GIS. FEMA ELEVATIONS ARE REFERENCED TO NAVD 88. FIRM MAPS: 41009C0456D 41009C0452D

SITE
AREA



LEGEND
EXISTING

RIGHT-OF-WAY LINE	---
BOUNDARY LINE	---
PROPERTY LINE	---
CENTERLINE	---
EDGE OF PAVEMENT	---
EASEMENT	---
FENCE LINE	---
GRAVEL EDGE	---
POWER LINE	---
OVERHEAD WIRE	---
COMMUNICATIONS LINE	---
FIBER OPTIC LINE	---
GAS LINE	---
STORM DRAIN LINE	---
SANITARY SEWER LINE	---
WATER LINE	---
DITCH	---
CURB	---

AKS
AKS ENGINEERING & FORESTRY, LLC
12365 SW HERMAN RD, STE 100
TUALUMIN, OR 97062
503.633.1111
WWW.AKS-ENG.COM

KASTER RD
ST HELENS
OREGON
040109 040109AB 040109AA 040104DC 040104DD
COLUMBIA COUNTY

EXISTING CONDITIONS

DESIGNED BY:	
DRAWN BY:	RB
MANAGED BY:	NW
CHECKED BY:	NW
DATE:	
REGISTERED PROFESSIONAL LAND SURVEYOR	
<i>Nick White</i>	
OREGON	
JANUARY 9, 2007	
NICK WHITE	
70652LS	
RENEWS: 6/30/22	
REVISIONS	

JOB NUMBER
8041-02

SHEET

1



EXHIBIT B:

Scope of Work

SURVEY CONSULTANT SCOPE REQUIREMENTS

The content within this document is meant as a general guideline of expectations only. An equivalent level of content shall be described in detail in the survey proposal, at a minimum. This document and its format can be used as the basis for developing the site-specific survey proposal scope. This scope is intended to supplement the existing topo survey provided to the City.

Any deviations to the requirements within must be discussed with the Mackenzie Civil Engineer and explicitly noted within the survey proposal. Lack of clearly excluding any of the criteria within will constitute an inclusion in the survey scope and fee.

The detailed survey should include the subject site as out-lined in the attached exhibit, the adjacent right-of-way frontages, and detailed survey for a designed road connection to 15th Avenue to the east.

Land (Boundary) Survey Guidelines

1. State elevation datum on drawing. Use Local Agency accepted datum.
2. Tie survey to the state plane coordinate system.
3. Indicate boundary lines, giving length and bearing on each straight line; interior angles; radius; point of tangency, and length of curved lines.
4. Provide legal description, including measurements in recorded deeds for comparison with observed.
5. Indicate area in acres (to 0.001 acre).
6. Identify jurisdictions and adjoining street and highways (right-of-way and pavement width and how paved). Identify landmarks.
7. Plot location of structures on the property and on any abutting property within 50'. Dimension perimeters in feet and decimals to .05'. State character and number of stories. Dimension to property line and other buildings. Note vacant parcels as VACANT.
8. Indicate encroachments, including cornices, belt courses, etc. either way across property lines. If none, include a statement saying so.
9. Describe fences and walls. Identify party walls and locate with respect to property lines, including wall height.
10. Identify recorded or otherwise known easements and rights-of-way widths; state owner of right. Use keynote symbols in plan view and provide a separate table for the easement information.

Topographical Survey Requirements

General Guidelines for Soils Consultant

1. Provide contours at 1' intervals; error shall not exceed one-half contour interval.
2. Include spot elevations at each intersection of a 25' square grid covering the property. Contact Mackenzie Civil Engineer to confirm scope area prior to finalizing scope and fee to owner.
3. Include spot elevations along street frontages at 25' intervals on property line/right-of-way, curblin, sidewalk, and edge of paving where no curb exists. Projects requiring frontage improvements will necessitate survey to opposite right-of-way. Surveyor shall fully spot out existing ramps and ramp landings so that ADA compliance can be determined. Contact Mackenzie Civil Engineer to confirm scope area prior to finalizing scope and fee to owner.
4. Indicate location of buildings, floor elevations, and elevations at each entrance of buildings on property.
5. Indicate location of all structures, railroad tracks, or other man-made or natural features located within the limits of the survey.
6. Indicate location, size and meter size of water mains on or near the property.
7. Indicate location of fire hydrants within 100' of project, including across the street.
8. Indicate location of electrical, telephone, gas and any other present franchise utility services.
9. Indicate location, size, depth, and direction of flow of sanitary sewers (SS), combination sewers, storm drains (SD), ditches, and culverts serving the property within 100' of the project boundary. Indicate location of catch basins and manhole invert, sump, trap, and rim elevations. Invert information is only required on the nearest upstream and downstream manholes from the proposed development, and any within the frontage limits of the development.
10. Indicate mean elevation of water in any excavation, well, or nearby body. Indicate flood level of streams.
11. Indicate trees of 4" DBH and over. Locate within 1' tolerance and give species. Locate and show on survey the location of the drip line of all trees. Show extents of any massings of shrubby vegetation.
12. Indicate location of existing parking area, private access, and roadway striping and signing, including crosswalks, arrows, bike lane markings, lane lines, and all traffic control signs.
13. Indicate location of traffic signal equipment, including poles, signal heads and overhead signs, detector loops by size and center locations, street and junction boxes, signal controllers, and approximate location of underground conduits.
14. Surveyor shall call for full utility locates and map markings on the property and all frontage streets for 100' in each direction. It is expected that some utilities will be impractical or infeasible to identify. Should this occur, surveyor shall contact Mackenzie Civil Engineer to discuss the importance of these utilities and collectively decide if further investigation is required. State the utility locate ticket number on the deliverable survey.
15. Surveyor shall coordinate with wetlands consultant and survey wetlands flags within 1 week of flag placement. Wetlands are expected along the southern edge of the survey area.
16. Indicate location of existing 100-year floodplain boundary and 500-year floodplain boundary.

General Guidelines for Soils Consultant

CAD drawing requirements:

- CAD files shall be AutoCAD Civil3D 2017 or 2018 compliant.
- A TIN surface shall be included with applicable fault lines (SRF-FLT) to create intended triangulation and model vertical breaks (i.e. curbs). If fault lines are found to be missing, surveyor shall provide the additional information at no cost to the Owner.
- All layers shall be named as to be descriptive and unique, with unique line type on each layer.
- All utility lines are to be on their own layer with line work, text, and symbols on a unique, descriptive layer (i.e., X-STORM-PIPE, X-STORM-MH). Underground and at or above grade elements shall be on their own layer (i.e., manholes and pipes on separate layers).
- Objects on the site shall be placed on their own layer with a unique text layer.
- Contour lines shall be on their own layer, with the 5' interval contour on a separate layer.
- Spot elevations shall be on a unique layer.
- Road center lines and right-of-way lines to be on a unique layer.
- Site boundary lines to be on a unique layer.
- Adjacent lot line to be on a unique layer.
- Object symbols and points shall be different entities.
- Contact Mackenzie Civil engineer prior to scaling survey symbols or annotating to coordinate drawing scale.

Send a draft of the survey in AutoCAD format to Mackenzie 2 weeks prior to final survey readiness.

A stamped and signed copy of the survey shall be provided to be included in the plan submittal. Any changes made to the survey will require that a new stamped survey drawing be provided.

Mackenzie Civil Engineer Information

Attention: Ralph Henderson
Phone: 971.346.3685
rhenderson@mcknze.com