Attachment A

Statement of Work: Boones Ferry Road Refinement Plan Phase II

A. Project Startup

HNTB shall develop a work plan detailing roles and responsibilities, important decision points, project milestones and opportunities for community input.

Deliverables: Work plan; Attendance at kickoff meeting.

B. Public Involvement

The prior work on the Lake Grove Village Center Plan (LGVCP) included extensive public involvement to develop the plan goals and provide community input. The development of a preferred alignment in Phase II will identify property and business impacts, right-of-way needs and access issues. Difficult decisions will need to be made to balance the plan goals, engineering design requirements and community impacts. HNTB will support a City-led public involvement effort including coordination with a City appointed Project Advisory Committee (PAC) and will attend three public meetings where the public can provide input. HNTB shall develop presentations for PAC and public meetings.

HNTB will participate in a series (maximum of ten) of meetings with property owners to resolve key refinement and alignment issues.

Deliverables: Attendance at PAC meetings; Attendance at three Public Open Houses; Meetings with property owners; Presentation materials (boards, PowerPoint, estimated average of six display boards per meeting).

C. Data Collection

For the purpose of achieving the Phase II goal of defining the right-of-way footprint, HNTB proposes a limited data collection effort that primarily relies on research of existing City and utility records, and other published data including soils maps and prior studies.

HNTB shall provide survey crews to perform topographic surveys to obtain more accurate locations of curbs, buildings, and other features, and to determine storm drain inverts for development of the green street component of Phase II.

HNTB shall obtain current commercially available existing LiDAR data and topographic mapping for the Boones Ferry corridor for use as base mapping.

Deliverables: Summary of collected research, LiDAR base mapping, survey data.

D. Design Alternatives

1. Green Streets/Stormwater Management – In order to efficiently progress toward meeting the goals of the LGVCP Green Street Policy, HNTB shall develop a preliminary stormwater management and engineering feasibility study to assess issues and costs associated with incorporating green street elements into the design and engineering of Boones Ferry Road. The development of the study will be integrated into the street design refinement and right-of-way determination effort. HNTB and Greenworks shall review the available site data and identify possible green street strategies. HNTB shall perform a conceptual level hydrology study to determine possible drainage basins and stormwater quantities for both a center median-based treatment concept and a concept utilizing facilities integrated into the sidewalk area. Based on the available opportunities, the HNTB team shall develop green street concepts for Boones Ferry Road utilizing previous successful similar projects and new treatment strategies. After collaboration with City staff on preferred alignment and street design concepts, HNTB shall present potential green street elements and low impact development stormwater alternatives at a public meeting to obtain community input.

Deliverables: Exhibits showing possible green street elements; Participation at a public meeting; Preliminary stormwater management and engineering feasibility study.

2. Street Design – In order to meet the key goal of Phase II, determination of the project footprint and related right-of-way requirements and property impacts, HNTB will perform the following street design refinement and right-of-way determination tasks.

HNTB shall develop exhibits showing the 22 refinements from Phase I for review by the team and City staff, and for use at PAC and public meetings. HNTB will provide input to a City-developed evaluation matrix for the refinements with criteria including impacts to the Phase II deliverables, required plan amendments and the project critical path.

HNTB will develop the three baseline alignments for use at a workshop with the PAC. The workshop's outcome will be a "best fit" centerline alignment balancing engineering design and safety needs with reduction of impacts to adjacent properties, where technically feasible. Based on input from this workshop and using City staff-developed Evaluation Criteria (for LGVCP compliance, business/property impacts, costs and overall feasibility), HNTB will develop a composite alignment incorporating the selected refinements from the above task, including alternatives where indicated, e.g. at Boones Ferry/Bryant Road, Boones Ferry/Lanewood Way and U-turn locations for presentation to the community at a public meeting. Based on input from the PAC and public, HNTB will refine the composite alignment into a preferred alignment. The resulting preferred alignment will incorporate the preferred refinements from Phase I, the preferred green street concepts, and the transportation and design elements outlined in the concept plan for Boones Ferry Road as described in the LGVCP. HNTB will provide baseline, composite and preferred alignment exhibits, and a preliminary construction cost estimate for inclusion in a City-prepared summary analysis.

Deliverables: Three baseline alignments for discussion purposes; Participation at an alignment workshop with the PAC; Composite alignment exhibit with Phase I refinements and alternatives; Participation at a public meeting; Baseline, composite and preferred alignment exhibits for City use; Engineer's estimate of probable construction cost for composite alignment and alternatives.

E. Evaluation of the Street Design Alternatives

1. Evaluation Criteria – HNTB understands that the evaluation criteria task will be performed by City staff.

2. Economic Analysis – HNTB and FCS GROUP will perform an economic analysis to document existing and future year (20-year) conditions under no build and build conditions for the Boones Ferry Road Improvement project. The approach includes:

a. Economic Analysis. For the preliminary preferred alignment (including the no build and build alternatives), HNTB will document the following changes in base line conditions: potential private property acquisition; potential driveway consolidation; potential off-street parking impacts; potential public parking impacts; potential private or public business relocations; and potential private household relocations.

FCS GROUP will work with city staff to utilize the Oregon Employment Department's ES202 database and Lake Oswego Chamber of Commerce data to document existing levels of business activity and related direct economic output within the Boones Ferry Road improvement project corridor (defined as within 1,500 feet of planned roadway improvements). Existing business activity will be aggregated into estimates of direct covered employment and payroll for the defined corridor. Existing numbers of households will be estimated by City staff using available Census data and/or building permit data. Existing levels of traffic and pedestrian/bicycle volumes (vehicle trips) will be made based on ITE Greenbook assumptions for the specific types of businesses and households that are estimated to exist within the corridor. Existing levels of assessed valuation of property within the corridor will be provided by City staff based upon available county assessor data.

Future conditions will take into account current vacant and redevelopment potential within the corridor using assumptions provided by City staff, including redevelopment land area and land use zoning assumptions that are consistent with the full implementation of the Lake Grove Village Center Plan. The potential gain in households and employment within the corridor will be quantified by FCS GROUP in terms of households, new commercial/office floor area, jobs and assessed valuation. The potential economic impact attributed to net loss or gain of businesses and households within the corridor will be measured in terms of expected changes in development activity (dwellings and floor area), taxable assessed valuation levels, employment and payroll achieved by year 2035.

b. Construction Impact Analysis. For the preliminary preferred alternative, FCS GROUP will document potential "short term" construction impacts and will take into account the estimated timing and duration of construction phasing estimated by HNTB. HNTB and FCS GROUP will identify potential methods to mitigate business impacts during construction.

c. Economic Impact Report. HNTB and FCS GROUP will summarize the findings from the economic analysis and construction impact analysis in a draft technical memorandum with supporting background data and assumptions, findings and recommendations. The results of this report will be discussed with City staff and the TAC. The draft report will be modified as appropriate into a final economic impact report.

3. Planning Analysis – City staff will prepare a planning analysis and a summary of impacts.

Deliverables: Draft Economic Impact Report, Revised Economic Impact Report.

City Staff Deliverables: Evaluation criteria; Planning analysis to determine consistency with the LGVCP and to determine if plan amendments are required; Summary analysis.

F. Preferred Boones Ferry Road Refinement Plan

Develop a preferred Boones Ferry Road refinement plan – As described in Section D above, HNTB will develop a plan identifying center line alignment, locations for turn lanes and center medians, intersection configurations, necessary right-of-way acquisitions, and pedestrian and bicycle improvements. HNTB will identify required amendments to the special street setback for Boones Ferry Road. HNTB will develop a framework for developing engineering plans identifying phasing options, a stormwater management/green street system, coordination of underground utilities, ADA compliance, and resolution of other issues as required prior to initiating design development of detailed engineering plans. This framework will be delivered in the form of a brief narrative describing the design process, assumptions made, opportunities and next steps for future phases of the project. HNTB will develop a preliminary engineer's estimate of probable costs for the project using current construction average bid prices with escalation for inflation (as required) to the anticipated construction period.

G. Funding Strategy – HNTB understands that the City has been awarded a Metro grant for developing "Lake Oswego Funding Strategy to Implement the LGVC Plan". The funding strategy will not be completed under this contract.

H. Final Recommendation – HNTB's project manager, Terry Song, is available for one meeting with the City Council to present the final recommended plan.

Approach and Schedule

September

- Consultant and staff finalize work scope; Council approves contract and approach.
- Council approves a PAC charge statement and the appointment of members.
- PAC meets and receives a background report on the LGVC and the Boones Ferry Road project. (This informational report may occur prior to PAC being officially appointed)
- Consultant assembles background information and base map (progress prints by October 13, 2010 PAC meeting).

- Staff and consultant evaluate 22 refinements and categorize as: 1) impacting ROW width; 2) not impacting ROW width; 3) consistent with LGVC plan; and 4) potentially inconsistent with the LGVC plan. (by October 13, 2010 PAC meeting)

October

- Staff and consultant conduct a public workshop to inform citizens about the project and collect comments regarding refinements outlined in Phase I (former members of the LGVC advisory committee are invited). Meeting tentatively scheduled for late October, 2010.
- Consultant produces a base line map showing existing ROW, parking, and buildings. The map shows a composite "best-fit" alignment to highlight hot spots and issues. (by October 13, 2010 PAC meeting)
- Consultant defines a range of green street options. (by October 13, 2010 PAC meeting)
- Staff meets with former LGVC members to discuss evaluation criteria.
- October 13, 2010 PAC meeting – PAC discusses evaluation criteria; reviews 22 refinements from Phase I; the consultant presents a range of green street options; an open discussion is held with former LGVC advisory committee members to focus on key issues.

November

- Consultant team generates graphics and design alternatives related to green streets, refinements, street and intersection design, and alignments. Specific alternatives will be produced to address the Bryant, Lanewood, and Madrona intersections. (by November 10, 2010 PAC meeting)
- *Key Decision: PAC approves Evaluation Criteria.*
- *Key Decision: PAC provides direction to consultant regarding a green street approach.*
- *Key Decision: PAC provides direction on the majority of the 22 refinements from Phase I; controversial issues are carried over to December.*

December

- Staff and the consultant conduct a public workshop (tentative date, December 13, 2010) to inform citizens and collect comments on the alternatives (former members of the LGVC advisory committee are specifically invited).
- Consultant and staff conduct an evaluation of the alternatives. Consideration is given to conformance with evaluation criteria, conformance with the LGVC Plan, economic impacts, relative costs and public comments. (by December 8, 2010 PAC meeting)
- Consultant works with property and business owners to minimize impacts of alternatives and develop mitigation strategies.
- PAC reviews the draft evaluation and provides comments and direction. Consultant team identifies new issues based on alternative development and the evaluation process.
- *Key Decision: PAC provides direction on the remaining 22 refinements from Phase I.*
- *Key Decision: PAC provides direction on new issues.*

January

- Consultant continues to work with property and business owners to resolve issues.
- Consultant provides follow-up to recommendations on new issues and final refinements. (by January 12, 2011 PAC meeting)
- *Key Decision: PAC provides final direction on any of the remaining 22 refinements and new issues.*

February

- Consultant provides additional analysis and refinement. (update at February 9, 2011 PAC meeting)
- *Key Decision: PAC provides direction on a preferred alignment.*

March

- Consultant provides a draft narrative and plan graphics for review.
- Staff and the consultant conduct a public open house on the draft and collect comments. (Meeting tentatively scheduled for March 16, 2011)
- *Key Decision: PAC makes a final recommendation.*

April

- Consultant prepares a final refinement plan for City Council review prior to April 5, 2011 Council meeting.
- Staff evaluates the plan and determines is LGVC Plan amendments are needed.
- City Council accepts the plan and provides direction for implementation and adoption at April 19, 2011 Council meeting.

Proposed Cost of Services

A budget summary for the above proposed project approach is attached.

ATTACHMENT A - BUDGET

Engineering and Consultant Services for Boones Ferry Road Refinement Study PHASE II

Estimate of Fee Breakdown and Work Scope Distribution

Hours By Classification & Task

TASKS	**A. Project Startup**	Project Kickoff Meeting	Data Collection/ Research	Criteria Development	**B.Public Involvement**	PI Program Development	Advisory Committee Meetings	Public Meetings	PI Coordination & Delivery	**C. Data Collection**	Site Visits (Geotechnical, Stormwater, I	Survey	**D. Design Alternatives**	Green Streets	Street Design	**E. Evaluation of Street Design Alterr**	Evaluation Criteria	Economic Impacts Analysis	LGVC Planning Assessment	Summary Analysis	Public Workshop	**F. Preferred Refinement Plan**	Boones Ferry Road Refinement Plan	Code Amendment Evaluation	Design Phasing & Approach	Cost Estimate	**G. Funding Strategy**	Urban Renewal District Investigation	Develop Funding Strategy	**H. Final Recommendation**	City Council Study Session Presentatio	Final Revisions	Additional Public Hearings (As Necessa	**FEE ESTIMATE**	Loaded Hourly Rate	Total Hours	**Labor Costs**	Direct Cost Rate	Direct Cost Units	**Direct Costs**
HNTB Project Team																																								
Department Manager (QA/QC)														2	4								8												$ 198.47	14	**$2,779**			
Office Leader III															2																				$ 225.00	2	**$450**			
Senior Project Manager (PM)	4	4			4	8	8			4			8	16				6	8	4		8	12	2					8	8				$ 185.36	112	**$20,760**			
Project Manager I (Roadway Lead)	4	12			1		4			4	6			48						4		28	20	8						8				$ 153.70	147	**$22,594**			
Engineering III	4	16								4				72								32	8	16										$ 116.71	152	**$17,740**			
UDLA IV													0																					$ 93.48	0	**$0**			
Sr. Administrative Assistant	4	2						1					4	10								6			1					1	1			$ 64.07	30	**$1,922**			
Sr. Project Analyst	4													4								4												$ 115.82	12	**$1,390**			
Technician II													8	48								16			16									$ 71.65	88	**$6,305**			
Sr. Technician													2	12																				$ 124.26	14	**$1,740**			
Printing and LiDAR purchase																																							$1,500.00	1	$1,500
Travel																																							$0.50	750	$375
FCS (Economic Studies)																																									
Sr. Economist							4		5									64																$ 180.00	73	**$13,140**			
Admin. Support																		8																$ 70.00	8	**$560**			
Direct Cost Item																																								$300.00	1	$300
DKS (Traffic)																																										
Traffic Lead	3	1					4	4		4				16						4		8		2						4	2			$ 140.00	52	**$7,280**			
Project Engineer	3	2								4				32								16		8							4			$ 95.00	69	**$6,555**			
Assistant Engineer		2												24								4												$ 70.00	30	**$2,100**			
CAD Tech														24								8									4			$ 65.00	36	**$2,340**			
GreenWorks (Green Streets)																																										
Principal in Charge - Mike Faha	1		2					4		2			6	2						4		2	1	2						1				$160.00	27	**$4,320**			
Project Manager - Robin Craig	1	4	4				8	4		4			36	18						4		16	4	12						8				$110.00	123	**$13,530**			
Landscape Designer		8						4		4			60	28								24	8	20						8				$70.00	164	**$11,480**			
Direct Cost Item																																							$0.05	1000	$50
Jeanne Lawson & Associates (PI)																																									
Sr. Associate 2																																				$ 169	0	**$0**			
Sr Project Manager																																				$ 123	0	**$0**			
Coordinator																																				$ 83	0	**$0**			
Admin Manager																																				$ 100	0	**$0**			
Mileage																																							$0.00	400	**$0**
Printing																																							$0.00	2000	**$0**
Shannon & Wilson (Geotechnical)																																									
Sr. Associate										2																								$ 165.00	2	**$330**			
Principal Engineer										14																								$ 125.00	14	**$1,750**			
Senior Engineer/Geotech										2																								$ 115.00	2	**$230**			
Project Engineer										8																								$ 80.00	8	**$640**			
Drafter										4																								$ 85.00	4	**$340**			

ATTACHMENT A - BUDGET

Engineering and Consultant Services for Boones Ferry Road Refinement Study PHASE II

Estimate of Fee Breakdown and Work Scope Distribution

TASKS	**A. Project Startup**	Project Kickoff Meeting	Data Collection/ Research	Criteria Development	**B.Public Involvement**	PI Program Development	Advisory Committee Meetings	Public Meetings	PI Coordination & Delivery	**C. Data Collection**	Site Visits (Geotechnical, Stormwater, I	Survey	**D. Design Alternatives**	Green Streets	Street Design	**E. Evaluation of Street Design Alterr**	Evaluation Criteria	Economic Impacts Analysis	LGVC Planning Assessment	Summary Analysis	Public Workshop	**F. Preferred Refinement Plan**	Boones Ferry Road Refinement Plan	Code Amendment Evaluation	Design Phasing & Approach	Cost Estimate	**G. Funding Strategy**	Urban Renewal District Investigation	Develop Funding Strategy	**H. Final Recommendation**	City Council Study Session Presentatio	Final Revisions	Additional Public Hearings (As Necessa	**FEE ESTIMATE**	Loaded Hourly Rate	Total Hours	**Labor Costs**	Direct Cost Rate	Direct Cost Units	**Direct Costs**
Clerical											2																								$ 65.00	2	**$130**			
Travel																																						$14.00	1	$14
Reproductions																																						$6.00	1	$6
Infiltration Testing																																						$4,888.00	0	$0
BlueDot Group (Survey)																																								
Principal Surveyor												4																								$ 140.00	4	**$560**			
Professional Land Surveyor												16																								$ 106.13	16	**$1,698**			
Project Manager																																				$ 84.90	0	**$0**			
Survey Tech IV												16																								$ 67.92	16	**$1,087**			
Survey Tech III																																				$ 59.43	0	**$0**			
Project Admin Assistant												4																								$ 38.20	4	**$153**			
GPS Receiver																																							$0.00	16	$0
Total Station Instrument																																							$0.00	16	$0
Digital Level																																							$0.00	16	$0
TOTAL LABOR & DIRECT COSTS																																						**$143,902**			**$2,245**
TOTAL COST																																						**$146,147**			