October 13, 2022



Whipple Consulting Engineers, Inc. c/o Todd Whipple 21 S Pines Rd Spokane Valley, WA 99224

RE: Review of File # Z21-344PPLT– Qualchan View Estates Preliminary Long Plat

Dear Mr. Whipple,

This letter is to inform you that the application materials for the above mentioned preliminary plat were found to be technically incomplete, based on a review required under Spokane Municipal Code (SMC) 17G.060.090, Determination of a Complete Application. The following comments were received from various departments and agencies that <u>require addressing</u> <u>before this application can be considered technically complete</u> and proceed to Notice of Application:

Engineering:

- 1. Per SMC 17G.080.040(B)(2), the contents of the preliminary plat map shall include the location of easements (both public and private). There appear to be easements in the title report not reflected on the preliminary plat map."
- 2. Existing topographic lines are not labeled. We are unable to determine if they are representing the maximum two-foot interval as required by SMC 17G.080.040(B)(2)(o). Please clarify.
- 3. Our maps indicate slopes exceeding 15%, slopes exceeding 30%, DNR streams, and erodible soils in the project area. Please complete and submit a geohazard evaluation/mitigation plan for review.
- 4. Please provide the correct parcel numbers for the properties adjacent to the proposed plat.
- 5. Proposed access easements for stormwater facility maintenance shall be shown on the preliminary plat.
- 6. The Tract at the north boundary of the plat should be given a letter designation to be consistant with the other proposed tracts within the plat.
- 7. The following items are required on the preliminary plat per SMC 17G.080.040(B)(2):
 - a. Legal description;
 - b. The numbers proposed to be assigned to each lot and block;
 - c. Conditions of adjacent property, platted or unplatted, and if platted, giving the name of the subdivision;
 - d. The names and address of the record owners and taxpayers of each parcel adjoining the subdivision;
 - e. Indicate any street grades in excess of eight percent;
 - f. Critical areas as defined in SMC 17E;
- 8. The following items are required per SMC 17G.080.070:
 - a. Where alleys are not provided, easements for public utilities shall be provided adjacent to any right-of-way.
- 9. Per SMC 17H.010.030 " Street Design":

- a. A grid pattern featuring more street intersections and shorter block lengths should be implemented whenever possible.
- b. Block lengths should not exceed 650 feet.
- 10. Public right-of-way widths shall be in accordance with the city's comprehensive plan, the city's engineering design standards, or as directed by the director of engineering services. Minimum right-of-way widths are shown in Table 17H.010-2, Local Access Right-of-way and Street Widths. The right-of-way width varies based on the required street elements including number of lanes, on-street parking, bike lanes, medians, turn lanes, roadside swales, pedestrian buffer strips and street trees. Any deviations from the minimum set forth requires approval of a Design Variance.
 - a. Patrick Ct is shown with a proposed forty foot wide right of way. Please clarify.
 - b. Narrower right-of-way widths may be allowed at the discretion of the director of engineering services. <u>Variance requests</u> will be evaluated based on topography, traffic circulation, emergency vehicle access, zoning, existing development and onstreet parking requirements.
- 11. New, permanent dead-end or cul-de-sac streets <u>require the approval of the director of engineering services</u>. Dead-end and cul-de-sac streets are only allowed when street connectivity is unachievable, such as property that is isolated by topography or the configuration of existing lots and streets.
 - a. Turn-arounds designed to meet the city's standards are required at all street deadends to allow emergency and service vehicles to turn around.
 - i. Please show the radius of the right of way for all proposed cul-de-sacs and dimension proposed hammer-head turn-arounds.
 - b. Dead-end or cul-de-sac streets shall be not less than one hundred forty feet nor more than six hundred feet long along the centerline as measured from the curb line of the cross street at the street entrance to the point of curvature into the culde-sac bulb. Proposed exceptions to this rule will be considered by the director of engineering services based on pertinent traffic planning factors.
 - c. A hard surfaced public pathway shall be provided at the end of every dead-end or cul-de-sac street connecting the sidewalk to an existing or future street or public pathway.
- 12. Approved roadway names will be required <u>prior</u> to submitting civil engineering drawings.
 - a. Summerwood St is accepted as a continuation of the existing Summerwood St.
 - b. The dead-end of Summerwood St shall be identified as a Court. Summerwood Ct is acceptable.
 - c. Talon Dr is a continuation of the existing W Talon Dr, but runs in a north/south course. We have reached out to SREC to discuss alternate solutions such as possible changing the name of the roadway north of Patrick Ct in order to maintain the continuity of the directional indicator "W" for Talon Dr.
- 13. Please provide clarification for the intents of all Tracts (e.g. open space, stormwater treatment, stormwater disposal, etc.) as well as the party responsible for maintaining said tracts.
 - a. Tract D will be required to be called out as access-only to the home addressed as 5802 S Meadow Lane Rd and will not developable as a lot.

General Comments on the Plat:

SEPA Comments:

- The Washington State Department of Transportation (WSDOT) has reviewed the revised traffic information submitted by WCE Engineers. In reviewing this information, WSDOT recommends that the following mitigations be contained in a SEPA mitigated determination of non-significance. These mitigations are needed to address the increase in traffic volumes associated with this project.
 - Vehicular traffic from this project is expected to deteriorate the level-of-service and negatively impact safety at the intersection of US 195/Meadowlane and US 195/Hatch Road. Qualchan View may not final plat any lots until a financial commitment is in place (secured by a letter of credit or bond), which has been approved by the City, providing for the construction of the "improvement" at US195/Meadowlane and US 195/Hatch Road. This commitment may be defined as an agreement between several developers to fund and construct the improvement within a specified time frame, not to exceed six years, as agreed upon by city staff and WSDOT. The improvement project will consist of developing a new at grade intersection for Meadowlane on the west side of US 195 further to the south, installing a US 195 j-turn north of the intersection, and eliminating the westbound to southbound left turn at the intersection (please see concept below). The improvement will also eliminate the US 195/Hatch intersection westbound to southbound left turn movement by providing intersection channelization. This movement will be accommodated by the Meadowlane j-turn. The applicant's contributions to funding the design and construction of the improvement project will qualify for a credit against transportation impact fees per SMC 17D.075.070.
 - Vehicular traffic from this project is expected to add 42 AM trips and 14 PM trips to the NB US 195 to EB I-90 ramp. WSDOT has commented that no additional peak hour trips may be added to the ramp due to safety concerns. Qualchan View is required to complete an improvement to the US 195 corridor that will reduce the impact of its traffic on NB US 195 to EB I-90 ramp ("Mitigation Project"). Qualchan View may not final plat any lots until a financial commitment is in place (secured by a letter of credit or bond), which has been approved by the City, providing for the design and construction for the Mitigation Project, which shall be under contract for construction within one year from recording of the final plat. The details of the mitigation project will be agreed upon by the developers, City and WSDOT. The applicant's contributions to funding the design and construction of the mitigation project will qualify for a credit against transportation impact fees per SMC 17D.075.070.



Planning:

 Street trees are required with all new construction. A street tree plan will be required to be submitted with the Engineering public improvement documents to ensure sufficient plantings are achieved. Especially in subdivisions with narrower lots, utility/driveway/tree conflicts should be considered from the beginning with some utilities being placed under the driveways to allow room for the required trees. Each lot that is unable to accommodate a street tree will be required to pay a fee-in-lieu of planting. That fee is \$650 per tree. The approved plan will get adopted as the planting plan for the subdivision and each single-family building permit will be required to adhere to the plan.

Engineering:

Water Requirements:

- 1. The Eagle Ridge area is served by a single 24-inch water transmission main which during peak irrigation use is approaching peak flow velocity. The water reservoir capacity within the Eagle Ridge area is also approaching capacity for the maximum number of lots.
- 2. The proposed plat lies within the Low Water Pressure Zone, the Eagle Ridge 1 Pressure Zone and the Cedar Hills Pressure Zone. The nearest available public water main, within the Low Pressure Zone, which could provide service to this proposed plat is an 8-inch ductile iron main located in S. Meadowlane Road (approximately 107 psi at the nearest hydrant). There is also a 24-inch ductile iron transmission main within the SR 195 right-of-way.
 - a. Other potential connections, if approved by the Water Department, are:

- i. An 8-inch ductile iron distribution main located in S. Summerwood Street (existing water pressure of approximately 56 psi at the hydrant located south of 5905 S. Summerwood Street), and an 8-inch ductile iron distribution main located in W. Talon Drive (approximate pressure of nearest hydrant is 94 psi); both mains are located within the Eagle Ridge 1 Water Pressure Zone. At this time, this pressure zone is at capacity and will require improvements listed under water requirements below.
- ii. A 12-inch ductile iron main located in Bolan Avenue (approximate pressure of nearest hydrant is 93 psi) which is in the Cedar Hills Water Pressure Zone. At this time, this pressure zone is at capacity and will require improvements listed under water requirements below.
- b. The developer will be responsible for all costs associated with design and construction of water improvements necessary to serve the proposed plat.
- c. The water system shall be designed and constructed in accordance with City standards and State standards. A pressure of 45 psi minimum at the property line is required for service connections supplying domestic flows. Pressures shall not drop below 20 psi at any point in the system during a fire situation. Pressures over 80 psi will require that pressure relief valves be installed at developer expense.
- d. An electronic version (pdf) of an overall water plan and hydraulic analysis must be submitted to the Development Services Center for review and concurrence. The hydraulic analysis must include supporting calculations for domestic and fire flows per City of Spokane Design Standards and State standards.
- e. In addition to the hydraulic analysis, construction plans shall be submitted to the Development Services Center for review and acceptance. The water system, including individual service connections to each lot, shall be constructed and accepted for service prior to the City Engineer signing the final plat.
- f. To develop the proposed preliminary plat, the developer will be required to design and construct regional (area larger than preliminary plat) off-site water infrastructure. The developer will be responsible for infrastructure and costs necessary to serve the proposed development and the City will be responsible for any oversize costs, which can be addressed in a Developer Agreement that must be approved by the City Council. Per the hydraulic analysis, off-site water infrastructure shall be constructed as follows:
 - Provide and construct a Water booster station located at the Qualchan reservoir site. This booster station shall pump the flow required to serve the proposed development to the Eagle Ridge 1 reservoir elevation. This water booster station shall be in service upon completion of the Marshall Road water transmission main.
 - Provide and construct a new reservoir at the Eagle Ridge 1 reservoir elevation, large enough to eliminate the need for a twin reservoir at the Qualchan site, exact location to be determined at final design. The new water reservoir shall be in service upon completion of the Marshall Road water transmission main.Provide and install a water transmission main from the proposed water booster station at the Qualchan reservoir site to the proposed new water reservoir to be located at the Eagle Ridge 1 reservoir elevation. The

transmission main shall be constructed in the Cedar Road alignment and shall be sized per the hydraulic analysis. This water transmission main shall be in service upon completion of the Marshall Road water transmission main.

- Based on a full hydraulic analysis provided by the developer, alternative facilities that meet or exceed the capacity provided by the above conditioned facilities can be submitted for review and approval by the City during the Development Services Center review and acceptance process.
- 3. Phasing Restrictions (Water):

Due to high velocities in the existing 24-inch water transmission main serving the Eagle Ridge area, the City is requiring a phased approach for all future developments until a second water transmission main (Marshall Road Water Transmission Main) is in service. This second water transmission main is anticipated to be constructed in 2024. The projected time frame is contingent upon acquisition of property and/or easements over private property, acquisition of piping and appurtenances, and other agency and railroad approvals/access. Until such time as the second water transmission main is operational and in service, development is limited as shown below with a maximum number of additional lots online at 191. Qualchan View Estates can final plat 20 lots. The final remaining lots can be final platted after the Marshall Road water transmission main is in service along with the listed items in "Water Requirements 2. f" above, see phasing plan below.

Proposed SFR Construction Phasing Plan - Eagle Ridge/Qualchan Area																	
					Marshall Road Transmission	Main Construction 2023/2024											
	Project Name	Status	Notes	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Cedar H	ills Pressure Zone																
	Final Platted Lots	Final	Hubers Bluff, Hubers Bluff 2nd, Lincoln Way SP, Overlook at Qualchan 3rd, Hubers Bluff PP	22													22
Eagle Ri	dge I Pressure Zone																
	Final Platted Lots	Final	Talon Ridge	3													3
	Greens at Meadowlane	Preliminary Plat Approval	Hearing 2022, Construction 2023, Occupancy 2023 - 2025		15	10	11										36
	Meadow Point Landing	In Review	Requested Comp Plan Amendment - being handled through "another process"; Convert SFR to MF & CC-2						50	50	50	50	50	50	50	20	370
	Meadowlane Greens 2	In Review	Assumed Hearing 2022, construction needs infrastructure from phase 1			10	17										27
Eagle Ri	dge II Pressure Zone																
	Final Platted Lots	Final	Eagle Ridge 11th, Eagle Ridge 12th	6													6
	The Summit	Preliminary Plat Approval	Approved / 20 Lot first phase construction 2021		20	20	20	20	20								120
	Tangle Ridge	Preliminary Plat Approval	Hearing 2021, construction 2023, occupancy 2023 - 2025		20	20	5										45
Connect	ting to Low Pressure Zo	ne															
	Qualchan View Estates	In Review	Submitted / Waiting for reviews, assumed Hearing 2022, Construction 2024 through 2030			20	25	25	25	25	20	20					160
	Marshall Creek	In Review	Submitted / Waiting for reviews, assumed Hearing 2022, Construction 2024 through 2034			25	25	65	40	40	40	40	40	40	35	35	425
			Annual Total	31	55	105	103	110	135	115	110	110	90	90	85	55	1194
			Running Total		86	191	294	404	539	654	764	874	964	1054	1139	1194	

Proposed SFR Construction Phasing Plan - Eagle Ridge/Qualchan Area

General Engineering Comments

- Construction plans for water and sewer main extensions and system improvements must be designed by a Professional Engineer (licensed in Washington) and must follow City drafting and design standards. A water and sewer capacity study per City of Spokane standards shall show City system improvements that will be required depending upon the timing of the development and anticipated demands.
- 2. The nearest existing public sanitary sewers which could provide service to this proposed plat are:
 - a. Locations
 - i. A ten-inch PVC main in S Summerwood St
 - ii. An eight-inch PVC main in W Talon Dr
 - iii. A twelve-inch PVC main in S Meadowlane Rd
 - iv. A ten-inch PVC main in W Bolan
 - b. The developer will be responsible for all costs associated with design and construction of sanitary sewer improvements necessary to serve the proposed plat.
 - c. The sanitary sewer system shall be designed and constructed in accordance with City standards.
 - d. Construction plans shall be submitted to Development Services for review and acceptance. The sanitary sewer system, including individual service connections to each lot, shall be constructed and accepted for service prior to the City Engineer signing the final plat.
- 3. All stormwater and surface drainage generated on-site shall be disposed of on-site in accordance with SMC 17D.060 "Stormwater Facilities", the Regional Stormwater Manual, Special Drainage Districts, City Design Standards, and, per the Project Engineer's recommendations, based on the drainage plan accepted for the final plat. Pre-development flow of any off-site runoff passing through the plat shall not be increased (rate or volume) or concentrated due to development of the plat, based on a 50-year design storm. An escape route for a 100-year design storm must be provided.
 - a. The proposed plat is located within a High Critical Aquifer Recharge Area and is considered to have high susceptibility for groundwater contamination.
 - b. No building permit shall be issued for any lot in the plat until evidence satisfactory to the City Engineer has been provided showing that the recommendations of SMC 17D.060 "Stormwater Facilities", the Regional Stormwater Manual, Special Drainage Districts, City Design Standards, and the Project Engineer's recommendations, based on the drainage plan accepted for the final plat, have been complied with. A surface drainage plan shall be prepared for each lot and shall be submitted to Engineering Services Developer Services for review and acceptance prior to issuance of a building permit.
- 4. All stormwater facilities necessary to serve the proposed plat shall be designed and constructed in accordance with City standards. The access to Tract A looks quite steep. Grades exceeding 8% will require a Design Deviation Request with supporting justification that must be signed by the Director of Engineering Services prior to construction.
 - a. Prior to construction, a grading and drainage plan shall be submitted to Developer Services for review and acceptance.
 - b. An erosion / sediment control plan, detailing how dust and runoff will be handled during and after construction, shall be submitted to Developer Services for review and acceptance prior to construction.
 - c. If drywells are utilized, they will be tested to insure design infiltration rates are met.

A minimum factor of safety of 2 (two) will be required. In accordance with State Law, existing and proposed Underground Injection Control structures need to be registered with the Washington State Department of Ecology. Proof of registration must be provided prior to plan acceptance.

- d. The developer will be responsible for all costs associated with constructing storm water improvements necessary to serve the proposed plat.
- 5. See item 3 under **<u>SEPA COMMENTS</u>** for WSDOT comments regarding traffic mitigation.
- 6. Public streets, including paving, curb, sidewalk, signs, storm drainage structures/facilities, and swales/planting strips necessary to serve the proposed plat, shall be designed and constructed in accordance with City standards. Sidewalks shall serve each lot.
- 7. Signing and striping plans, where appropriate, shall be included as part of the design submittal.
 - a. Street design for the plat shall include supporting geotechnical information on the adequacy of the soils underneath to support vehicular design loads.
 - b. Any grades exceeding 8% must be shown on the preliminary plat.
 - c. Garages shall be a minimum of 20 feet from the back of sidewalk to fully accommodate a parked vehicle without obstructing the sidewalk.
 - d. All street identification and traffic control signs required due to this project must be installed by the developer at the time street improvements are being constructed. They shall be installed and inspected to the satisfaction of the City's Construction Management Office in accordance with City standards prior to the occupancy of any structures within the plat.
 - e. The developer will be responsible for all costs associated with constructing street improvements necessary to serve the proposed plat.
 - f. Construction plans for public street, sewer, water and storm water systems must be designed by a Professional Engineer, licensed in the State of Washington, and submitted to Developer Services for review and acceptance prior to construction.
 - h. Per Section 17H.010.110 Hillside Development, in steep, hillside areas, a reduced street cross-section may be allowed if the cross-slope is at least fifteen percent and lots will be developed on only one side of the street. In such cases, waiver of one sidewalk and pedestrian buffer strip may be granted at the discretion of the director of engineering services; provided that no lots access the omitted side. Additionally, on-street parking may be omitted on one side to allow for a narrower street width
- 8. Generally, all new local access streets shall provide on-street parking on both sides of the street. Parking may be omitted from one side of a residential street in the following situations:
 - a. Hillside developments as described in SMC 17H.010.110 where lots are developed on only one side of the street.
 - b. Neighborhoods where garage access is provided from alleys and driveway access to the street is restricted.
 - c. The side of a street adjacent to side yards, rear yards or common areas such as stormwater facilities. Parking may not be omitted adjacent to parks or other recreational facilities.
- 9. Per Section 17H.010.180 Sidewalks:
 - a. Sidewalks shall be located on both sides of the street for all public and private streets.
 - b. Sidewalk shall be constructed around the bulb of cul-de-sacs so that every lot is served by a sidewalk.

- c. In steep, hillside areas, where development occurs only on one side of the street, sidewalk may be omitted from one side in accordance with SMC 17H.010.110. However, it must be demonstrated that the segment to be omitted is not a critical link in the sidewalk system.
- d. All sidewalks shall be designed and constructed in accordance with the city's design standards, standard plans and specifications.
- 10. Per Section 17H.010.190 Pedestrian Buffer Strips:
 - a. Pedestrian buffer strips are required on both sides of all streets between the sidewalk and the curb. The width and type of pedestrian buffer strip for each street shall comply with the requirements of the comprehensive plan and the city's design standards.
 - b. Planted strips are required on residential local access streets. A minimum three-foot wide concrete pedestrian buffer strip may be allowed in place of the planted strip for certain land uses such as churches and schools that require passenger loading and unloading. These will be evaluated on a case-by-case basis and allowed at the discretion of the director of engineering services.
 - c. In situations where a separation between the sidewalk and the street is constrained by topography, narrow right-of-way or existing development, a variance from this standard may be granted by the director of engineering services.
 - d. In cases where sidewalk has been omitted on one side of the street, the pedestrian buffer strip may also be omitted on that side.
 - e. Pedestrian buffer strips may be omitted around the bulb of cul-de-sacs.
- 11. Plan review fees for sanitary sewer, water, street, and storm water improvements will be determined at the time of plan submittal and must be paid prior to the start of review.
- 12. Lot plans, following the criteria outlined in the Spokane Regional Stormwater Manual Appendix 3C, must be submitted for review prior to the City Engineer signing the final plat.
- 13. All Tracts within the boundaries of this proposed plat will be maintained by a Homeowners' Association established for this development. Said stormwater facilities will be operated and maintaind in accordance with an operation and maintenance manual written by a licensed engineer in the State of Washington.
- 14. A \$250.00 deposit will be required for each monument to be installed as part of the final plat.
- 15. Civil engineered plans and profiles shall use NAVD88 datum (City of Spokane datum minus 13.13 feet).
- 16. In accordance with the City's Financial Guarantee Policy, a financial guarantee will be required for all street, drainage, and erosion / sediment control improvements not constructed prior to approval of the final plat.
- 17. Preapproved road names shall be identified on plat documents at the time of Final Plat submittal.
 - a. Per Section 17D.050A.060 Roadway Naming Standards:
 - i. Duplicate roadway names will not be allowed. Any roadway name shall not duplicate any county roadway names unless the new roadway is in alignment with the existing county roadway.
 - ii. Roadways with the same root name but different suffix (that are not in reasonable alignment with the existing roadway) will be considered as a duplicate roadway name, e.g., Chesterfield Drive or Chesterfield Lane and thus disallowed.

Due to the need for additional information this application is thus deemed <u>technically incomplete</u> and will be halted until such is resubmitted. You have 60 days from the receipt of this letter to provide

the required data in accordance with SMC 17G.060.090 C.2. If additional time is warranted, a request in writing for an extension may be granted by the Planning and Development Director. If requested data or an extension request are not received within 60 days, all application materials and a portion of fees paid will be returned your client.

If you have any questions regarding these requirements, please let me know by calling 625-6638. Please make an appointment with me to resubmit these materials with me. Thank you for your cooperation.

Sincerely,

alison Brast

Ali Brast Assistant Planner City of Spokane