ASHLEY ENGINEERING DESIGN

MEMORANDUM

Land Use Application – Hillyer Stayton Ford Dealership

City of Stayton – Land Use File No. 19-09/18

TO: Dan Fleishman/*City Planner*

FROM: John Ashley, P.E./*City Engineer*

COPIES: Lance Ludwick, P.E./*Public Works Director*

PROJECT: **Land Use Application for a new automobile dealership along Golf Lane SE.**

DATE: October 19, 2018

Background

I received a copy of the land use application, preliminary site plans, and preliminary stormwater report for a new automobile dealership provided by Ron James Ped Architect, PC., and Branch Engineering, Inc., for owner Leo Hillyer, with a request by the City of Stayton to review and respond. The application is for annexation and comprehensive plan amendment of approximately 8 acres of land and for site plan review for an automobile dealership along Golf Lane SE. The existing parcel is currently vacant land.

The following land use application review concentrates on the public works aspects and implications of the application, including anticipated impacts to existing public utilities and recommended public improvements. The review findings and public works recommendations are based on a review of the applicable public works portions of the City of Stayton Municipal Code (SMC) and Public Works Design Standards (PWDS), and does not include a review of any other agencies requirements, or any building or other specialty code requirements covered under such building, plumbing, mechanical, electrical, fire, or any other applicable codes and regulations that may be required for the project.

The applicant/owner is required to obtain any and all required reviews, approvals, and permits required by the Planning Conditions of Approval, SMC, PWDS, Marion County, ODOT, DEQ, OHA-DWP, Fire Code Official, Building Official, and/or any other agencies having jurisdiction over the work. The applicant/owner shall coordinate with Public Works, Fire Code Official, Building Official, and other appropriate agencies as necessary. The City of Stayton Municipal Code and Public Works Standards are available online at http://www.staytonoregon.gov, under the document center and the public works department menus.

It is recommended that City Staff review this memorandum in conjunction with their application review.

Project Overview

Project Site and Access

GIS mapping and the application shows the location of the development to be within Township 9 South, Range 1 West, Section 03B, Tax Lot 1400. The existing parcel is shown to be approximately 7.96 acres, with development for the automobile dealership of approximately 5.90 acres. Proposed vehicular access is shown to be from a new driveway approach along Golf Lane SE.

Existing Site Topography and Utilities

Existing site topography was provided with the application. The application site plans show slopes ranging from 4%-8% to the northwest corner of the site. The GIS mapping and the application site plans indicate that there are no existing utilities readily available along the frontage to serve this development. As such, additional offsite improvements will be necessary to serve the development.

Construction Phasing

In accordance with PWDS 103.01.B, if a development that has been approved by the City to be constructed in multiple phases, the construction plans for each phase shall be capable of standing alone, and City approval of one phase shall be independent of the approval for all other phases. It appears that the proposed development will be constructed in a single construction phase.

Horizontal and Vertical Datum

The application site plans do not indicate which vertical and horizontal datum is currently being used for the project. In accordance with PWDS 102.03, all elevations on design plans and record drawings shall be based on the NAVD88 Datum, and the horizontal datum shall be based on the Stayton local datum or Oregon State Plain Coordinate System (NAD83). As such, the correct datums will need to be provided on the engineered plans.

Findings

Transportation

- **TIA/TAL** – A Transportation Impact Analysis (TIA) was submitted with the application for Marion County Public Work's and the City Traffic Engineer's (Kittelson & Associates) review. Approval of the TIA by Marion County Public Works and the City's Traffic Engineer will be required.

- **Right of Way (R/W)** – Right-of-ways shall comply with PWDS 312, Geometric Design Requirements by Street Functional Classification.
  - ***Golf Lane SE*** – Figure 5-1d of the Marion County TSP shows Golf Lane SE as a Local Street under Marion County jurisdiction. Figure 1-2 of the City's TSP shows Golf Lane SE as being a future collector street from the Cascade Highway/Whitney Street intersection and extending west where it connects to Golf Club Road. The City Public Works Standards indicate that an 80' R/W is needed for future collector streets designated yellow in the City's TSP. Based on tax assessor's mapping, it appears that additional R/W dedication will be necessary to provide the 80' to meet the City standard. However, the frontage is controlled by Marion County and any additional R/W dedication requirements will be as determined by them. The standard 10' wide public utility easement is recommended to be provided along the frontage in accordance with the PWDS.
- **Streets** – Typical street design sections shall comply with PWDS 312, Geometric Design Requirements by Street Functional Classification and Public Works Standards. It shall be the responsibility of the Developer to preserve and protect the current pavement condition index rating and the structural integrity of the existing roadways from construction traffic to the satisfaction of the Public Works Director throughout all phases of development. Failure to preserve and protect the roadways may result in the Developer being responsible for replacing and reconstructing the damaged roadways at the Developer's expense.
  - ***Street Frontage Improvements*** –
    - ***Golf Lane SE*** – Golf Lane SE is currently an unimproved turnpike style street. The City Public Works Standards indicate that a 50' street section is required for a future collector street. However, the frontage is controlled by Marion County and the street improvement requirements will be as determined and approved by them. Coordination with both the City and Marion County Public Works will be required and required street improvements shall be designed in accordance with City and Marion County Public Works Standards including necessary curb and gutters, storm drainage, sidewalks, street lights, and pavement tapers.
  - ***Street Lighting*** – Existing street lighting shall be reviewed by the Design Engineer and any additional street lighting shall be provided to meet PWDS 308 and Marion County Public Works standards as necessary.
  - ***Streetscape Appurtenances*** – All public and private utilities that currently exist or will be placed in the right-of-way that will impact the sidewalk and/or the landscape strip shall be coordinated and shown on the plans as necessary. Franchise utility poles and other utility structures shall be coordinated with rightful utility owners and located in accordance with the PWDS. Street trees shall be provided in accordance with PWDS 309.05.
  - ***Driveway Spacing*** – Adequate driveway spacing shall be provided in accordance with PWDS 303.11.

- ***Site Distance and Clearance Areas*** – Adequate sight distance and clearance areas shall be provided in accordance with PWDS 303.06. Signage and landscaping shall be located and designed to prevent obstruction of the clear vision areas. Prior to occupancy, it is recommended that final sight distances be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

- **Parking Lot** –
  - Parking lot design shall minimize congestion and take into account both vehicle and pedestrian traffic and shall comply with standard engineering practice, the SMC, Public Works Standards, and meet the requirements of the Building and Fire Code Official.
  - All traffic circulation patterns shall be designed to accommodate emergency vehicles as necessary. Inside curb radius shall be designed to meet the needs of truck turning movements.
  - The proper number and type of ADA parking stalls shall be provided.
  - Parking lot lighting shall be in accordance with SMC 17.20.170.4.c. The type, spacing, and location of parking lot lighting shall be as approved by the City.
  - Parking lot finish grades shall be such that stormwater runoff will be directed towards an appropriate stormwater system. Verify overland sheet flow maximum distances and that adequate design provisions are being implemented to direct runoff into the stormwater facility.
  - Parking lot catch basins shall be designed to support H-20 loading and at minimum shall be equipped with sediment and stormwater pollution control traps.
- **Transportation System Plan** – As previously indicated, Figure 1-2 of the City's TSP shows Golf Lane SE as being a future collector street from the Cascade Highway/Whitney Street intersection and extending west where it connects to Golf Club Road. It is understood that the City's 2019 TSP Update may reclassify Golf Lane SE to a smaller street functional classification standard. However, Golf Lane SE will still need to comply with the current TSP standard until such time the adopted TSP update changes the current street functional classification.
- **Engineered Plans** – The Developer shall submit to the City for review and approval engineered site and street improvement plans conforming to City and Marion County Public Works Standards.

Water

- **Water System** – A public water system is not readily available to serve the development and water system improvements were not shown or requested as part of this application. The application states that domestic and fire protection for the development is proposed to be supplied by means of a private well and on-site storage in compliance with NFPA 1142. As such, the Developer shall provide written documentation of approval from all appropriate jurisdictional agencies in order to utilize

a private well and on-site storage fire protection system at this location. A development agreement is recommended to be in place prior to Site Development Permit issuance that will require the property owner to connect to the City public water system when such time a public water system becomes available.

- **Fire Protection** – Generally, fire hydrant(s) are required to be installed within 250' of any new structure, unless approved otherwise by the Fire Code Official. The development proposes to use a private well to serve its water system needs, as such, additional fire protection measures will need implemented in accordance with applicable Building and Fire Codes for the development. At minimum, the Design Engineer will need to coordinate with the OWRD and OHA-DWS for the private well supply system, and the Building Code Official and Fire Code Official for the fire protection measures needed to ensure compliance with applicable building and fire codes and regulations. All necessary water system improvements shall be shown on the engineered plans.
- **Agency Approvals** – Prior to Site Development Permit issuance, the Developer shall provide written documentation that OWRD, OHA-DWS, Building Official, and Fire Code Official has reviewed and approved the water system improvement plans.
- **Water Master Plan** – There are no improvements shown as being applicable to this development.
- **Engineered Plans** – The Developer shall submit to the City for review and approval engineered water system plans conforming to OWRD, OHA-DWS, and meeting the requirements of the Building and Fire Code Official. Prior to Site Development Permit issuance, the Developer shall provide written documentation that OWRD, OHA-DWS, Building Official, and Fire Code Official have reviewed and approved the water system improvement plans.

Sanitary Sewer

- **Sanitary Sewer System** – A public sanitary sewer system is not readily available to serve this development. As such, offsite sanitary sewer improvements will be required to be designed and constructed per DEQ and PWDS requirements. Sanitary sewer system improvements are shown on the application site plans along Golf Lane SE to the northwest, and it is stated in the narrative that the existing 12" public sanitary sewer system is approximately 1300' away. A sanitary sewer study and supporting documentation will be required in accordance with PWDS 503.01. The City standard minimum pipe size for a public sanitary sewer main is 8" and upsizing may be required to serve future development along Golf Lane SE. If upsizing is required, then the additional costs for the upsizing of the public sanitary sewer system will be eligible for reimbursement in accordance with SMC 13.12. This development will be connected to the Mill Creek Sanitary Sewer Interceptor, and as such, the interceptor fee associated with the connection to this system will be required at the time of building permit issuance. It should be noted that construction around the Mill Creek Sanitary Sewer

Interceptor will need to be carefully coordinated with Public Works. All sanitary sewer system improvements shall comply with DEQ and PWDS requirements.

- **Sanitary Sewer Master Plan** – There are no improvements shown as being applicable to this development.
- **Engineered Plans** – The Developer shall submit to the City for review and approval engineered sanitary sewer plans conforming to DEQ, Public Works Standards, and meeting the requirements of the Building Official. A utility easement in accordance with PWDS 102.08 shall be provided if a sanitary sewer main is extended outside the public right-of-way. Prior to Site Development Permit issuance, the Developer shall provide written documentation that DEQ has reviewed and approved the public sanitary sewer improvement plans.

Stormwater

- **Storm Drainage System** – City storm drainage facilities are not readily available to serve this development. Storm drainage improvements will be required to be designed and constructed per the PWDS and Marion County Public Works standards for the development and for any required street improvements, and conveyed to an acceptable point of discharge.
- **Stormwater Analysis and Report** – A final stormwater analysis, drainage report and supporting documentation will be required in accordance with PWDS 603.01. Existing site topography, off-site contributing areas, and anticipated high seasonal groundwater issues will need to be considered and included in the stormwater design. All developed open water surface areas will also need to be included in the stormwater calculations and the required stormwater facility setback distances shall be shown on the plans.
- **Stormwater Quality and Quantity** – Stormwater quality and quantity provisions will be required in accordance with PWDS 607 and 608, and a downstream capacity analysis may be required per PWDS 603.01.B.
    - Stormwater quality facilities meeting the requirements of the PWDS will be required. Best management practices shall be used to minimize any degradation of stormwater quality caused by the development. See PWDS 607 for stormwater quality requirements.
    - Stormwater quantity facilities meeting the requirements of the PWDS will be required. See PWDS 608 for stormwater quantity requirements.
        - For detention facilities, the stormwater detention facility will be required to detain post-developed peak runoff rates from the 2-year, 5-year, 10-year, and 50-year 24-hour storm events to the respective pre-developed peak runoff rates, and the post-developed peak runoff rate for the 25-year storm event will be required to be detained to the 10-year pre-developed peak runoff rate per PWDS 602.05.C.
        - For retention facilities, then the stormwater retention facility shall be designed to retain a 50-year storm event per PWDS 602.05.C. The City is

known to have high seasonal groundwater issues, as such, the site's high seasonal groundwater elevation will need to be determined to verify that it will not have an influence on the proposed stormwater infiltration systems. Given the size of the development and type of stormwater facilities being proposed, piezometers should be set to determine the site's high seasonal groundwater elevation. Generally, a 5' min vertical separation distance from the area's high seasonal groundwater elevation to the bottom of the stormwater facility will need to be provided, unless otherwise approved.

  - Provisions for an adequate and approved emergency overflow system are required to convey the un-detained, post-developed 100-year storm event flows to an acceptable point of discharge. Additional provisions shall be provided at all locations where the overflow system will create ponding to hazardous depths. Emergency access shall be provided at all times.
  - Appropriate setbacks from the edge of the stormwater facility's maximum water surface to the property lines shall be provided, unless an easement with adjacent property owners is provided in accordance with the SWMM requirements.
  - Appropriate stormwater facility freeboard and vegetation/landscaping shall be provided in accordance with the SWMM requirements.

- **Acceptable Point of Discharge** – It shall be the responsibility of the Developer to provide a suitable discharge location for stormwater from the development which will not harm or inconvenience any adjacent or downstream properties. An acceptable point of discharge is to be designed by the Design Engineer and approved by the City and Marion County Public Works.
- **Stormwater Master Plan** – There are no improvements shown as being applicable to this development.
- **Stormwater Operation and Maintenance Plan and Agreement** – Stormwater operation and maintenance of the private stormwater facilities will be the obligation of the property owner. As such, a stormwater operation and maintenance plan and agreement will be required to ensure future operation and maintenance of the private stormwater facilities.
- **Engineered Plans** – The Developer shall submit to the City for review and approval engineered stormwater conveyance, quality, and quantity plans, stormwater analysis and report, and an O&M plan and agreement conforming to the PWDS, Marion County Public Works Standards, and meeting the requirements of the Building Official. A utility easement in accordance with PWDS 102.08 shall be provided if a public stormwater system is extended outside the public right-of-way. The Developer shall provide written documentation that the Marion County Public Works has reviewed and approved the proposed discharge to the existing County road system.

Erosion and Sediment Control Measures

- **Erosion and Sediment Control Plan** – In accordance with PWDS 610.01, an erosion and sediment control plan shall be submitted for review prior to any site grading or earth disturbing activities. A 1200-C permit will need to be obtained by the applicant from DEQ for any site disturbance of one or more acres through clearing, grading, excavating, or stockpiling of fill material.

Franchise Utilities

- **Franchise Utility Improvements** – All franchise utility improvements, including but not limited to, telephone, electrical power, gas and cable TV shall meet the current standards of the appropriate agency as well as Public Works Standards.

Recommended Public Works Conditions of Approval

1. The City of Stayton Standard Conditions of Approval shall apply. All required easements, agreements, and other documentation required by the Planning Conditions of Approval, SMC, PWDS and other agencies having jurisdiction over the work shall be provided to the City for review and approval prior to issuance of a Site Development Permit.
2. The following engineered plans and supporting documentation shall be submitted to the City for review and approval prior to issuance of a Site Development Permit.
    a. Site and street improvement plans conforming to Marion County and Public Works Standards. The Developer shall provide written documentation that Marion County Public Works has reviewed and approved the Golf Lane SE street improvement plans. It is recommended that final sight distances be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon, prior to occupancy.
    b. Water system plans conforming to OWRD, OHA-DWS, and meeting the requirements of the Fire Code Official and Building Official. The Developer shall provide written documentation that OWRD, OHA-DWS, the Building Official, and the Fire Code Official has reviewed and approved the water system improvement plans.
    c. Sanitary sewer system plans conforming to DEQ, Public Works Standards, and meeting the requirements of the Building Official. The City standard minimum pipe size for a public sanitary sewer main is 8” and upsizing may be required to serve future development along Golf Lane SE. If upsizing is required, then the additional costs for the upsizing of the public sanitary sewer system will be eligible for reimbursement in accordance with SMC 13.12. This development will be connected to the Mill Creek Sanitary Sewer Interceptor, and as such, the interceptor fee associated with the connection to this system will be required at the time of building permit issuance. A utility easement in accordance with PWDS 102.08 shall be provided if a sanitary sewer main is extended outside the

public right-of-way. The Developer shall provide written documentation that DEQ has reviewed and approved the public sanitary sewer improvement plans.

d. A final stormwater analysis and report conforming to Public Works Standards. The site's high seasonal groundwater elevation will need to be determined to verify that it will not have an influence on the proposed stormwater infiltration systems. Revisions to the proposed stormwater facility design will be necessary in order to comply with PWDS that will affect the overall stormwater facility size, location, and other stormwater facility design parameters.
e. Stormwater conveyance, quality, and quantity facility plans conforming to Public Works Standards. It shall be the responsibility of the Developer to provide an acceptable point of discharge for stormwater from the development that conforms to Public Works Standards and will not harm or inconvenience any adjacent or downstream properties. An acceptable point of discharge is to be designed by the Design Engineer and approved by the City and Marion County Public Works.
f. A stormwater operation and maintenance plan/agreement (as approved by the City) to ensure future operation and maintenance of the private stormwater quality and quantity facilities.
g. An erosion and sediment control plan for the site grading and earth disturbing activities conforming to DEQ and Public Works Standards. A 1200-C permit will need to be obtained by the Developer from DEQ for any site disturbance of one or more acres through clearing, grading, excavating, or stockpiling of fill material. The Developer shall provide written documentation that a 1200-C permit has been issued by DEQ for the project.