



COMMUNITY DEVELOPMENT

333 Broadalbin Street SW, PO Box 490, Albany, Oregon 97321-0144 | BUILDING 541-917-7553 | PLANNING 541-917-7550

Staff Report

Site Plan Review

SP-25-19 & LA-06-19

February 27, 2020

Application Information

Proposal:	Converting an existing structure into a site manager office, updating parking, and establishment of a self-service, outdoor vehicle storage facility
Review Body:	Staff (Type I-L review)
Property Owner/Applicant:	Shedd Investment LLC; PO Box 4, Shedd, OR 97377
Representative	Udell Engineering & Land Surveying LLC 63 E Ash Street, Lebanon, OR 97355
Address/Location	730 34th Ave SW, Albany, OR 97322
Map/Tax Lot:	Linn County Assessor's Map No. 11S-04W-13DD; Tax Lots 100, 101, & 102
Zoning:	Heavy Industrial (HI)
Overlay Districts:	N/A
Total Land Area:	3.25 acres
Existing Land Use:	Warehousing and storage
Neighborhood:	West Albany
Surrounding Zoning	North: HI- Heavy Industrial East: HI- Heavy Industrial South: HI- Heavy Industrial West: LI - Light Industrial
Surrounding Uses:	North: Public Right of Way 34th Avenue SW East: Railroad Right of Way South: Warehouse West: Storage and Residential
Prior History:	Tax lot 101: Site Plan Review (SP-32-91) was approved for Northwest Natural to construct a 1,440 square foot storage building.

Tax Lot 100 &102:

Site Plan Review (SP-10-89) was approved to convert a metals recovery plant to a manufacturing plant.

Site Plan Review (SP-39-89) was approved to construct a 10,000 square foot warehouse for fiber storage.

Site Plan Review (SP-45-92) was approved to construct a 12,000 square foot warehouse addition.

Summary

The application for Site Plan Review is to establish an outdoor storage facility for RVs, boats, and tractors. The applicant is proposing a three phased project including converting an existing structure into a site manager office, updating parking, and creating roughly 220 spaces for vehicle storage over two separate lots. Therefore, a Site Plan Review is required.

Site Plan Review criteria found in section 2.450 of the Albany Development Code (ADC or Development Code). These criteria must be satisfied to grant approval for this application.

Staff Decision

The application for a Site Plan Review referenced above is **approved with conditions** as described in this staff report.

Notice Information

A Notice of Filing was mailed to property owners located within 300 feet of the subject property on December 10, 2019. Property owners were given 14 days to respond to the notice. No written comments were received during the 14-day window.

Analysis of Development Code Criteria

Section 2.450 of the ADC includes the following review criteria, which must be met for this application to be approved. Code criteria are written in **bold** followed by findings, conclusions, and conditions of approval where conditions are necessary to meet the review criteria.

Criterion 1

Public utilities can accommodate the proposed development.

Findings of Fact

Sanitary Sewer

- 1.1 City utility maps show an eight-inch public sanitary sewer main in 34th Avenue. The existing building on the property is connected to the public sewer system.
- 1.2 No modifications are proposed to the site that would affect public sanitary sewer service to the property.

Water

- 1.3 City utility maps show a 16-inch public water main in 34th Avenue. The existing building on the property is connected to the public water system.

- 1.4 No modifications are proposed to the site that would affect public domestic water service to the property.

Storm Drainage

- 1.5 City utility maps show a 30-inch storm drainage main in 34th Avenue SW.
- 1.6 A private concrete ditch exists along the south boundary of 730 34th Avenue SW. This ditch flows to the west and discharges to another private drainage system that runs under the adjacent property to the west. The capacity of these private facilities is unknown. The applicant is proposing to provide on-site stormwater detention to limit runoff into the ditch to no more than existing volumes.
- 1.7 On-site stormwater detention must be provided for each phase of the development at the time that phase is constructed, such that runoff from the site into the existing private drainage system will not exceed existing runoff volumes.
- 1.8 It is the property owner's responsibility to ensure that any proposed grading, fill, excavation, or other site work does not negatively impact drainage patterns to, or from, adjacent properties. In some situations, the applicant may propose private drainage systems to address potential negative impacts to surrounding properties. Private drainage systems that include piping will require the applicant to obtain a plumbing permit from the building division prior to construction. In addition, any proposed drainage systems must be shown on the construction drawings. The type of private drainage system, as well as the location and method of connection to the public system must be reviewed and approved by the City Engineer and Building Official.

Conclusions

- 1.1 City utilities (sanitary sewer, water, and storm drainage) are available to the subject property. The existing building on the site (730 34th Avenue SW) is connected to the public sewer and water systems. No modifications to the site are proposed that would impact these services.

Criterion 2

The proposed post-construction stormwater quality facilities (private and/or public) can accommodate the proposed development, consistent with Title 12 of the Albany Municipal Code (AMC).

Findings of Fact

- 2.1 ADC 12.530 states that a development will be approved only where adequate provisions for storm and flood water run-off have been made, as determined by the City Engineer.
- 2.2 ADC 12.560 states that where it is anticipated by the City Engineer that the additional run-off resulting from the development will overload an existing drainage facility, the review body will not approve the development until provisions have been made for improvement of the potential problem.
- 2.3 The applicant is required to submit a drainage plan, including support calculations, as defined in the City's Engineering Standards. The applicant is responsible for making provisions to control and/or convey storm drainage runoff originating from, and/or draining to, any proposed development in accordance with all City standards and policies as described in the City's Engineering Standards. In most circumstances, detention will be required unless it can be satisfactorily demonstrated by the applicant that there is no adverse impact.
- 2.4 Stormwater quality facilities must be provided for the proposed development. Each phase of the project must provide stormwater quality facilities that will treat the impervious areas at the time of development of each successive phase.

- 2.5 The applicant submitted a storm drainage/detention/water quality report for the project. The City has reviewed the report and has found it to be generally acceptable. The applicant must obtain a stormwater quality permit from the City's Public Works Department before beginning work on the stormwater quality facilities. Final design details for the stormwater plan must be reviewed and approved as part of this required permit.
- 2.6 The applicant's proposal is to discharge on-site stormwater runoff to an existing private ditch on the property. Because the capacity of this ditch is unknown, and the ditch discharges to another private system on the adjacent property, on-site stormwater detention will be required.

Conclusions

- 2.1 Detention must be designed to limit runoff to the ditch to no more than existing flow volumes.
- 2.2 Any liability for adverse impacts to the adjacent downstream property as a result of stormwater runoff from this development is the responsibility of the property owner/developer and not the City of Albany.
- 2.3 The applicant submitted a storm drainage report detailing the proposed stormwater detention and stormwater quality facilities for the development. While the report appears to be generally acceptable, the final design details will be reviewed by the City's Public Works Department as part of the Stormwater Quality Permit.

Conditions of Approval

- Condition 1** Before beginning work on the stormwater quality and detention facilities, the applicant must obtain a Stormwater Quality Permit through the City's Public Works Department. Before a final occupancy permit will be granted for the project and for each successive phase, the applicant must complete the stormwater detention and quality facilities and obtain final approval of the facilities by the Public Works Department. Final approval shall include entering into an Operation and Maintenance Agreement for said stormwater quality/detention facilities.

Criterion 3

The transportation system can safely and adequately accommodate the proposed development.

Findings of Fact

- 3.1 The project is located on the south side of 34th Avenue SW about 650 feet east of Highway 99E. The project will expand an existing RV and boat storage facility. The project will occupy two separate parcels and be developed in three phases. The site was previously occupied by Northwest Natural Gas Company.
- 3.2 34th Avenue is classified as a minor arterial street and is constructed to City standards. Improvements include curb, gutter, and sidewalk; two vehicle travel lanes in each direction; a central median island with left turn pockets; and on street bike lanes.
- 3.3 The applicant did not submit a Traffic Impact Analysis (TIA) with the application. Albany guidelines call for submittal of a trip generation analysis for projects that generate more than 50 new peak hour trips, and a full TIA for projects that generated more than 100 peak hour trips.
- 3.4 Based on the Institute of Transportation Engineers (ITE) trip generation rates for a small office building, the previous use on the site as an office for Northwest Natural Gas Company generated about 12 vehicle trips during the peak p.m. traffic hour.

- 3.5 Based on ITE trip generation rates for mini warehouse storage facilities, when fully developed the proposed use is estimated to generate four vehicle trips during the peak p.m. traffic hour.
- 3.6 Albany's Transportation System Plan (TSP) was developed with the assumption of this site developing in accordance with its underlying zone designation and does not show any capacity or safety issues occurring along the frontage of the site.

Conclusions

- 3.1 The site's frontage on 34th Avenue SW is improved to City standards.
- 3.2 The proposed development will result in fewer vehicle trips than were generated by the previous use on the site. The development will not generate enough vehicle trips to meet the City's threshold for submittal of a TIA.
- 3.3 Albany's TSP does not identify any capacity or safety issues occurring along the frontage of the site.

Criterion 4

Parking areas and entrance-exit points are designed to facilitate traffic and pedestrian safety and avoid congestion.

Findings of Fact

- 4.1 The proposal is to convert an existing structure into a site manager office, update the parking area, and establish a self-service, outdoor vehicle storage facility.
- 4.2 Access to the site from 34th Avenue SW will be provided via two existing driveway approaches. The west approach will allow for ingress and egress movements, and the east approach will allow for exiting movements only.
- 4.3 Per ADC 9.020, Table 9-1, regarding parking spaces, the warehousing and wholesale use requires 1 per 2 employees plus 1 per 300 square feet of patron serving area plus 1 per company vehicle. The existing building has a floor area of 1,200 square feet. Less than 300 square feet of the existing office is intended as a patron service area. This is a self-service storage area with no more than one employee on site. The applicant proposes two standard parking spaces with an additional handicap space. Therefore, this standard is met.
- 4.4 ADC 9.120(1)-(16) specifies standards for parking area improvements. Those standards that are applicable to the proposed improvements are noted below along with staff findings.
- 4.5 ADC 9.120(3) requires parking areas to have a durable, dust-free surface. All parking areas and travel aisles are paved. Therefore, this standard is met.
- 4.6 ADC 9.120(4) pertains to drainage and stormwater runoff. Findings and conclusions related to drainage and stormwater can be found in Criterion 1 above and are incorporated here by reference.
- 4.7 ADC 9.120(5) requires perimeter curbing for protection of landscape areas and pedestrian walkways. As proposed, pedestrian walkways are identified without an indication that there will be sidewalk or protective curbing. The proposed landscaping areas are proposed to have protective curbing. A condition of approval will require perimeter protective curbing or sidewalk for all pedestrian walkways adjacent to the proposed parking area.
- 4.8 ADC 9.120(6) requires the installation of wheel bumpers when parking stalls front a sidewalk, alleyway, street, or property line. Wheel bumpers have been provided for all proposed parking stalls. This standard is met.

- 4.9 ADC 9.120(8) requires all parking spaces to be permanently and clearly striped. The applicant's site plan (Attachment B) indicates that all parking spaces will be striped. This standard is met.
- 4.10 ADC 9.120(9) states that "where an existing or proposed parking area is adjacent to a developed or undeveloped site within the same zoning district, any modifications to the parking areas must be designed to connect to the existing or future adjacent parking area. The property in which the parking area is proposed (Tax Lot 102) abuts right of way to the north and east. The property to the west of the subject property is zoned Light Industrial and the property to the south (Tax Lot 100) is zoned Heavy Industrial. Phase two of the proposed site plan includes extending access from the parking area on Tax Lot 102 to Tax Lot 100. This standard is met.
- 4.11 ADC 9.120(12) requires accessible parking be provided in conformance with the Oregon Specialty Code. As indicated in the proposed site plan, the applicant has provided accessible parking and an accessible route to the building. It's conformance with the Oregon Specialty Code will be assessed at the time of building permit.
- 4.12 ADC 9.120(13)(c) requires industrial developments to provide at least one bicycle parking space for every ten required automobile parking spaces. At least one-half of those spaces must be sheltered. As specified above, the proposal is for two standard parking spaces with an additional handicap space. Therefore, a minimum of one bicycle parking space is required. The applicant proposes two covered bicycle parking spaces along the western portion of the northern exterior wall of the site manager's office. This standard is met.
- 4.13 ADC 9.130, Table 9-2, lists required parking stall and aisle widths. The parking lot utilizes a one-lane travel aisle that is 26 feet wide with 90-degree stalls that measure 18.5 feet by 9 feet. Per Table 9-2, when parking stalls with these dimensions are used the travel aisle must be at least 26 feet wide. This standard is met.
- 4.14 ADC 9.120(15) requires that pedestrian access be provided from all new parking lots to the public sidewalk. This connection is provided via a five-foot dedicated walkway extending from the entrance of the existing office building, along the proposed parking lot to the public sidewalk. This standard is met.
- 4.15 ADC 9.150(1) states that parking areas shall be divided into bays of not more than 12 parking spaces. As proposed, there are no more than three contiguous parking spaces. This standard is met.
- 4.16 ADC 9.150(1) also requires curbed planters at least five feet wide at the end of each parking bay. A curbed planter is provided at each end of the parking bay on the east side of the travel aisle. This standard is met.
- 4.17 ADC 9.150(2) requires that both sides of a parking lot entrance shall be bordered by a minimum five-foot-wide landscape planter strip. The entrance to the parking area is a driveway with 15 feet of landscaping extending from the front property line to the interior of the lot on either side. This condition is met.
- 4.18 ADC 9.150(3) requires that parking areas shall be separated from the exterior wall of a structure by pedestrian walkways or loading areas by a five-foot strip of landscaping. On the west side of the building the applicant is proposing a pedestrian walkway located beneath the building canopy. This standard is met.
- 4.19 ADC 12.100(2) specifies driveway widths for the portion of the driveway located in the public right-of-way. Because no changes are proposed to the driveway entrances, this standard is not applicable.
- 4.20 ADC 12.100(3) pertains to the location of driveway entrances in relation to street intersections. Again, changes to the driveway entrances are not proposed as part of this application. Therefore, this standard is not applicable.

- 4.21 Access to Phase 2 and 3 of the development will be to 34th Avenue SW via an easement across Phase 1 (Tax Lot 101). The existing access easement across Tax Lot 101 is located along the west boundary of the parcel and does not follow the travel path shown on the proposed site plan. Dedication of an access easement that reflects the proposed access route will be necessary.
- 4.22 The internal travel aisle connecting Phase 1 to Phase 2 will cross a concrete drainage swale with vertical sides. The site plan identifies that travel aisle as having the same gravel surface as the adjoining RV storage areas. Using a gravel surface at the crossing would make it difficult for drivers to determine the location of the travel aisle and could result in drivers veering into the concrete swale. Use of a paved travel aisle together with edge delineation (such as concrete curb or a series of edge markers) would help drivers to choose the correct travel path for the crossing.

Conclusions

- 4.1 The proposal meets the minimum number of required vehicle parking standards.
- 4.2 The proposal meets the travel aisle and parking stall dimensional standards of ADC 9.120.
- 4.3 No changes are proposed to the access driveways at the point of the public right of way.
- 4.4 A loading area is not required because the proposed building is less than 5,000 square feet.
- 4.5 The applicant is proposing two covered bicycle parking spaces in accordance with ADC 9.120.
- 4.6 A sidewalk or protective curbing between the parking area and pedestrian path are required per ADC 9.120(5).
- 4.7 The development will not create any new driveway connections to the street system.
- 4.8 The site's west driveway to 34th Avenue SW will allow for both entering and exiting movements. The site's east driveway will allow for exit movement only. In order to avoid driver confusion, the east exit will need to be posted with a "Do Not Enter – Exit Only" sign
- 4.9 The proposed access aisle connecting Phases 1 and 2 is shown as being gravel and will have to cross an existing concrete drainage swale with vertical sides. In order to channelize traffic and avoid the risk of having vehicles drop into the channel, the travel aisle approaches to the channel crossing should be paved and have some form of edge delineation.
- 4.10 Creation of an access easement over Phase 1 will be needed in order to provide Phase 2 and 3 with access to 34th Avenue SW in accordance with the proposed site plan.
- 4.11 As proposed, this criterion can be met with the following conditions.

Conditions of Approval

- Condition 2** Prior to issuance of a parking lot permit, the applicant shall provide an updated site plan that demonstrates sidewalk or protective curbing along the portion of the pedestrian path directly abutting the parking area in accordance with ADC 9.120(5).
- Condition 3** The site's east driveway to 34th Avenue SW shall be posted "Do Not Enter – Exit Only."
- Condition 4** Prior to issuance of any construction permit or site development within Phases 2 or 3 the applicant shall provide evidence of a recorded easement providing Phase 2 and 3 with access over Phase 1 to 34th Avenue SW at a location that conforms to the approved site plan.
- Condition 5** The travel aisle connecting Phase 1 and 2 shall be paved where it crosses the concrete drainage swale. Pavement shall have a minimum width of 24 feet, extend a minimum distance of 50

feet on both sides of the crossing, and provide edge delineation through use of concrete curbs or other measures approved by the City Engineer.

Criterion 5

The design and operating characteristics of the proposed development are reasonably compatible with surrounding development and land uses, and any negative impacts have been sufficiently minimized.

Findings of Fact

- 5.1 Site Plan Review is intended to promote functional, safe, and attractive developments that maximize compatibility with surrounding developments and uses and with the natural environment. Site Plan Review is not intended to evaluate the proposed use or structural design of the proposal. Rather, the review focuses on the layout of a proposed development, including building placement, setbacks, parking areas, external storage areas, open areas, and landscaping. Where conflicts are identified, mitigation can be required through conditions of approval.
- 5.2 The proposal is to convert an existing structure into a site manager's office with an associated parking area and establish approximately 220 spaces for an outdoor vehicle storage facility. No changes are proposed to the existing building.
- 5.3 Design and Operating Characteristics. The subject property is a developed industrial lot and is in the Heavy Industrial (HI) zoning district. Per ADC 22.140(b), the long-term storage of vehicles or equipment is classified as Warehousing and Distribution. This use is permitted through Site Plan Review in the HI zoning district.
- 5.4 Surrounding Development and Land Use. As shown on the location map (Attachment A), the subject property abuts HI-zoned property to the south, adjoins 34th Avenue SW to the north, abuts Light Industrial property to the west and abuts railroad right of way to the east. The majority of surrounding properties, including those on the north side of 34th Avenue SW and to the east of the existing railroad right-of-way, are utilized for commercial or industrial purposes. Four properties abutting Tax Lot 100 to the west are within the Light Industrial zone but occupied by residential uses including a manufactured home park, a multifamily apartment complex, and two single family residences.
- 5.5 Lot Size, Dimensional Requirements and Lot Coverage. Per ADC 4.090, Table 4-2, there is no maximum lot coverage in the HI zone. A fifteen-foot setback will apply to the property abutting 34th Avenue SW. The applicant's proposal meets the applicable lot coverage and dimensional standards.
- 5.6 Building Height & Building Setbacks. No changes are proposed to the building. These standards are not applicable.
- 5.7 Landscape & Open Space. Per ADC 4.090, Table 4-2, the HI zoning district requires that all yards adjacent to streets must be 100 percent landscaped. The applicant's site plan demonstrates that all yards adjacent to 34th are landscaped. This standard is met.
- 5.8 Landscaping & Irrigation. ADC 9.140(2) and ADC 9.160 pertain to required landscaping and irrigation. The applicant's site plan meets the required landscaping standards of this section. The plans do not indicate a method for irrigating the proposed landscaping and no written verification that the proposed plants do not need irrigation has been provided. A condition of approval will require the submission of an irrigation plan.
- 5.9 Buffering & Screening. ADC 9.210-9.270, Table 9-4 pertains to buffering and screening requirements from adjacent uses or zoning districts. Table 9-4 indicates that properties zoned HI should maintain a 10-foot buffer from any arterial street. 34th Avenue SW is identified as a minor arterial. The site plan includes a 15-foot vegetative buffer from 34th Avenue SW. The applicant is also proposing an

additional 40-foot buffer and screening area along the northern portion of the western property line of Tax Lot 100. This standard is met.

- 5.10 Environmental Standards. ADC 9.440 - 9.500 include environmental standards related to noise, visible emissions, vibrations, odors, glare, heat, insects, rodents, and hazardous waste. The design and operating characteristics of the proposed outdoor storage area are similar to, or less intense than, the current commercial vehicle storage use, and comparable to other commercial and industrial operations in the immediate vicinity. Therefore, no adverse environmental impacts are anticipated.
- 5.11 Lighting. ADC 9.120(14) requires that any lights provided to illuminate any public or private parking area or vehicle sales area must be arranged to reflect light away from any abutting or adjacent properties. No new lighting is proposed. Therefore, this standard is not applicable.

Conclusions

- 5.1 The subject property is zoned HI. The Wholesale and Distribution use is allowed through Site Plan Review approval in the HI district.
- 5.2 The proposal is to construct an outdoor vehicle storage facility including upgraded parking and required landscaping associated with an existing office building.
- 5.3 Per ADC 9.160 an irrigation plan or written testimony for landscaping is required.
- 5.4 No adverse environmental impacts are anticipated.
- 5.5 This criterion is met with the following conditions.

Conditions of Approval

- Condition 6** The applicant shall submit a final landscape and irrigation plan to the Community Development Department for review and approval prior to issuance of a building permit. The landscape and irrigation plans shall be consistent with the standards under ADC 9.140(2), 9.150, 9.160 and 9.240. The landscape plan shall include a planting schedule that indicates the plant species, size, and quantity of each plant. In lieu of an irrigation plan, applicants may provide written testimony from a certified professional that the proposed plants do not require irrigation in accordance with ADC 9.160

Criterion 6

Activities and developments within special purpose districts must comply with the regulations described in Articles 4 (Airport Approach), 6 (Natural Resources), and 7 (Historic), as applicable.

Findings of Fact

- 6.1 *Article 4 Airport Approach district*: According to Figure 4-1 of the ADC, the subject property is not located within the Airport Approach District. This standard is not applicable.
- 6.2 *Article 6 Steep Slopes, Comprehensive Plan Plate 7*: According to Plate 7 of the Comprehensive Plan, the subject property is not located in the Hillside Development district.
- 6.3 *Article 6 Floodplains, Comprehensive Plan Plate 5*: FEMA/FIRM Community Panel No. 41043C0526G, dated September 29, 2010, shows that the entirety of the subject property is located outside the 100-year floodplain.
- 6.4 *Article 6 Wetlands, Comprehensive Plan Plate 6*: does not show any wetlands on the subject site. The National Wetland Inventory Map does identify a freshwater forested wetland along a canal situated at the southern property line of Tax Lot 101. This wetland is not identified as locally significant.

- 6.5 Due to the potential impacts to a mapped wetland, a Wetland Land Use Notification was submitted to the Oregon State Department of State Lands (DSL). In response, DSL has stated that this proposal may require a permit from the State and recommend that the applicant complete a wetlands delineation.
- 6.6 *Article 6:* The subject property is not located in the Willamette River Greenway, Open Space Zoning, Riparian, or Habitat overlay district.
- 6.7 *Article 7 Historic Districts, Comprehensive Plan Plate 9:* shows the subject property is not in a historic district. There are no known archaeological sites on the property.

Conclusions

- 6.1 The subject property is not located in a special purpose district.
- 6.2 This criterion is met without conditions.

Criterion 7

The site is in compliance with prior land use approvals.

Findings of Fact and Conclusions

- 7.1 A list of prior land use approvals can be found at the beginning of this report.
- 7.2 A previous Site Plan Review (SP-45-92) approved the construction of a 12,000 square foot warehouse. This decision included a requirement for, and approval of a 40-foot buffer area with screening along the entire western property line of Tax Lot 100. As proposed, site improvements will not disturb the existing buffer and screening area.
- 7.3 The subject property is in compliance with prior land use approvals.

Criterion 8

Sites that have lost their nonconforming status must be brought into compliance and may be brought into compliance incrementally in accordance with Section 2.370.

Findings of Fact and Conclusions

- 8.1 The site is not considered nonconforming.
- 8.2 This criterion is not applicable.

Property Line Adjustment Review Criteria

Section 11.180 of the ADC includes the following review criteria, which must be met for this application to be approved. Code criteria are followed by findings, conclusions, and conditions of approval where conditions are necessary to meet the review criteria.

Summary

The applicant is proposing to adjust the property line between two lots under the common ownership of SDI LLC. The involved properties include a lot identified as 3615 Pacific Boulevard (Tax Lot 102) and the unaddressed property that abuts Tax Lot 102 directly to the north (Tax Lot 100). Currently, Tax Lot 100 herein referred to as "Property A", is 455,616.31 square feet in size and Tax Lot 102, herein referred to as "Property B", is 255,631.85 square feet in size. The proposal is to give 168,253.49 square feet of Property A to Property B.

Criterion 1

The property line adjustment does not create a new lot or a land-locked parcel.

Findings of Fact

- 1.1 The proposed action is to move an existing interior property line between two parcels within the Heavy Industrial zoning district. No new lot will be created
- 1.2 Property A currently gains access to Pacific Boulevard via a private access easement through Property B. A second (undeveloped) access easement exists on the northwest corner of Property A that could provide access to 34th Avenue SW to the north through Tax Lot 101. This action will not result in a land-locked parcel.

Conclusions

- 1.1 This Criterion is met without conditions.

Criterion 2

The adjusted properties are not reduced below the minimum dimensions of the zoning district and do not otherwise violate standards of this Code, or the adopted building codes.

Findings of Fact

- 2.1 All properties involved are situated within the Heavy Industrial zoning district. The HI zoning district has no minimum lot size or dimensional standards.
- 2.2 The proposal is to give 168,253.49 square feet (3.86 acres) of Property A (Tax Lot 100) to Property B (Tax Lot 102). This would result in Property A becoming 287,362.82 square feet (6.6 acres) in size and Property B becoming 423,885.34 square feet (9.73 acres) in size.
- 2.3 The reconfiguration of these properties will not result in a violation of the standards in the ADC or adopted building codes, consistent with ADC 11.120(2).

Conclusions

- 2.1 Development of any remainder of property under the same ownership can be accomplished in accordance with the ADC.
- 2.2 This criterion is met without conditions.

Criterion 3

The adjusted properties are in compliance with any adopted transportation, public facilities, or neighborhood plan.

Findings of Fact

- 3.1 Stormwater Drainage: City utility maps indicate that this site utilizes a network of private drainage ditches. The proposed lot line adjustment will not impact public storm drainage.
- 3.2 Water: City utility maps show water in the area. The proposal will not impact public water facilities.
- 3.3 Sewer: City utility maps show a private sanitary sewer lateral entering Property A from the west near the southwest corner of parcel. This lateral serves the existing development that will lie within Property B after the property line adjustment. Property A will not have access to the public sanitary sewer system after the adjustment. A private utility easement must be provided from 34th Avenue SW to Area A to allow for a future connection to the public sewer main in 34th Avenue. Only one parcel may discharge to a single sewer service lateral.
- 3.4 The proposed property line adjustment is between two properties with no frontage along the public right of way. Therefore, no right of way will be altered by this action.

Conclusions

- 3.1 The proposed property line adjustment will limit access to City sewer on Property A.
- 3.2 Criterion is met with the following conditions.

Conditions of Approval

Condition 7 Prior to recording of the final deed, the applicant must provide a private utility easement from 34th Avenue SW to the north boundary of Property A to allow for future connection to the public sewer main in 34th Avenue SW.

Criterion 4

The adjusted properties comply with any previous requirements or conditions imposed by a review body.

Findings of Fact

- 4.1 There are no known previous conditions or requirements imposed by a review body that remain to be met.

Conclusions

- 4.1 This criterion is met without conditions.

Overall Conclusion

As proposed and conditioned, the applications for a Property Line Adjustment and Site Plan Review to develop an outdoor vehicle storage facility and associated site improvements satisfies all applicable review criteria as outlined in this report.

Conditions of Approval

- Condition 1** Before beginning work on the stormwater quality and detention facilities, the applicant must obtain a Stormwater Quality Permit through the City's Public Works Department. Before a final occupancy permit will be granted for the project and for each successive phase, the applicant must complete the stormwater detention and quality facilities and obtain final approval of the facilities by the Public Works Department. Final approval shall include entering into an Operation and Maintenance Agreement for said stormwater quality/detention facilities.
- Condition 2** Prior to issuance of a parking lot permit, the applicant shall provide an updated site plan that demonstrates sidewalk or protective curbing along the portion of the pedestrian path directly abutting the parking area in accordance with ADC 9.120(5).
- Condition 3** The site's east driveway to 34th Avenue SW shall be posted "Do Not Enter – Exit Only."
- Condition 4** Prior to issuance of any construction permit or site development within Phases 2 or 3, the applicant shall provide evidence of a recorded easement providing Phase 2 and 3 with access over Phase 1 to 34th Avenue SW at a location that conforms to the approved site plan.
- Condition 5** The travel aisle connecting Phase 1 and 2 shall be paved where it crosses the concrete drainage swale. Pavement shall have a minimum width of 24 feet, extend a minimum distance of 50 feet on both sides of the crossing, and provide edge delineation through use of concrete curbs or other measures approved by the City Engineer.
- Condition 6** The applicant shall submit a final landscape and irrigation plan to the Community Development Department for review and approval prior to issuance of a building permit. The

landscape and irrigation plans shall be consistent with the standards under ADC 9.140(2), 9.150, 9.160 and 9.240. The landscape plan shall include a planting schedule that indicates the plant species, size, and quantity of each plant. In lieu of an irrigation plan, applicants may provide written testimony from a certified professional that the proposed plants do not require irrigation in accordance with ADC 9.160

Condition 7 Prior to recording of the final deed, the applicant must provide a private utility easement from 34th Avenue SW to the north boundary of Property A to allow for future connection to the public sewer main in 34th Avenue SW.

Attachments

- A Location Map
- B Site Plan Set
- C Property Line Adjustment
- D Wetland Notification Response
- E Applicant's Submittals
 - 1. Application Narrative/Written Findings
 - 2. Storm Drainage Report

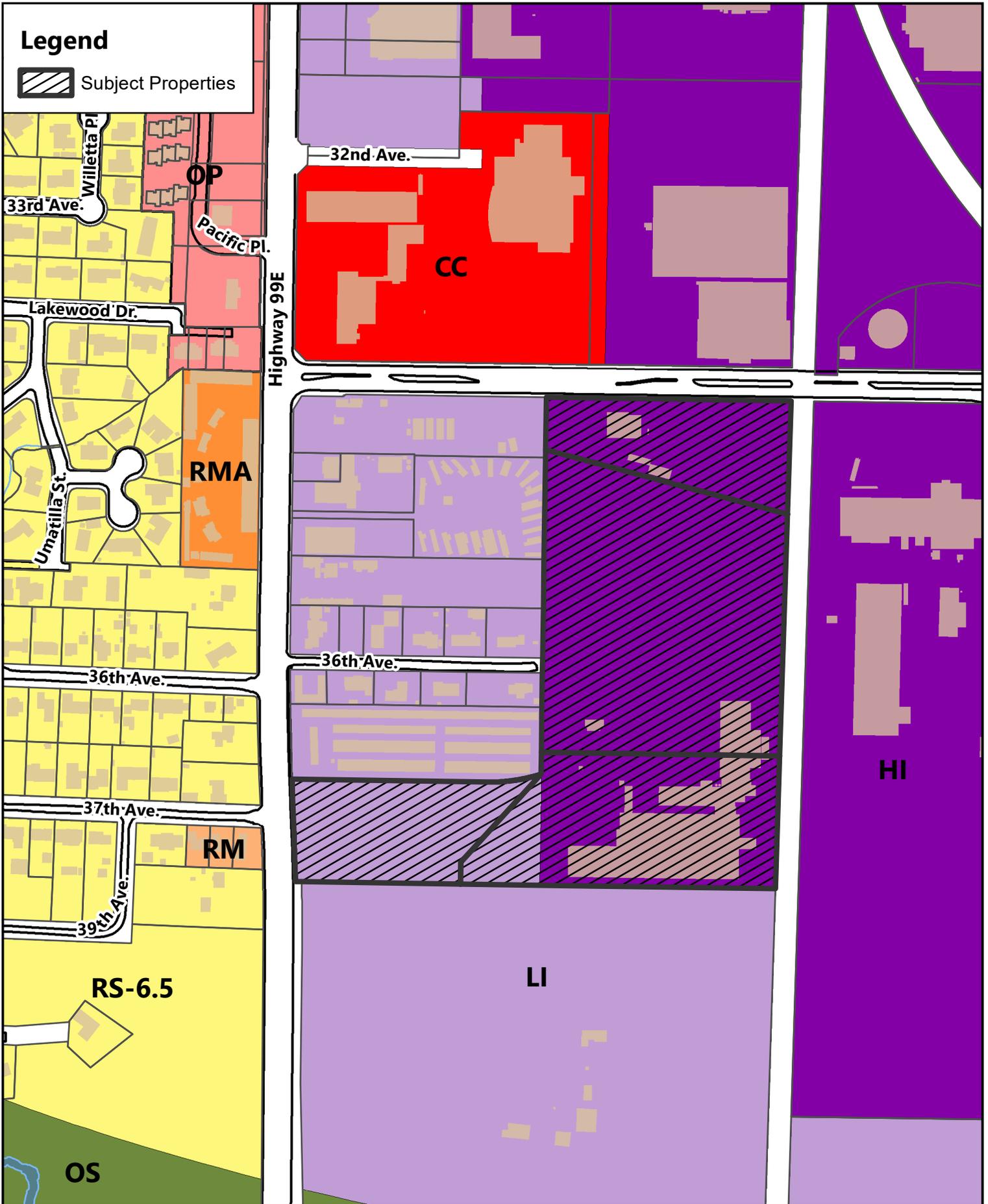
Acronyms

ADA	American Disabilities Act (Accessible Parking standards)
ADC	Albany Development Code
AMC	Albany Municipal Code
HI	Heavy Industrial (Zoning District)
LI	Light Industrial (Zoning District)
DEQ	Oregon Department of Environmental Quality
DSL	Oregon Department of State Lands
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
ITE	Institute of Transportation Engineers (Trip Generation)
LA	Property Line Adjustment
SP	Site Plan Review
TSP	Transportation System Plan

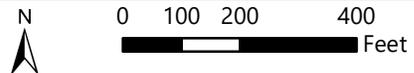
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Legend

 Subject Properties



G:\Community Development\Planning\Land Use Cases\preapprove\2019\p6_68_19 (Sheild Investments)\P6_68_19_location.mxd



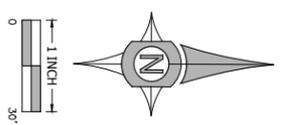
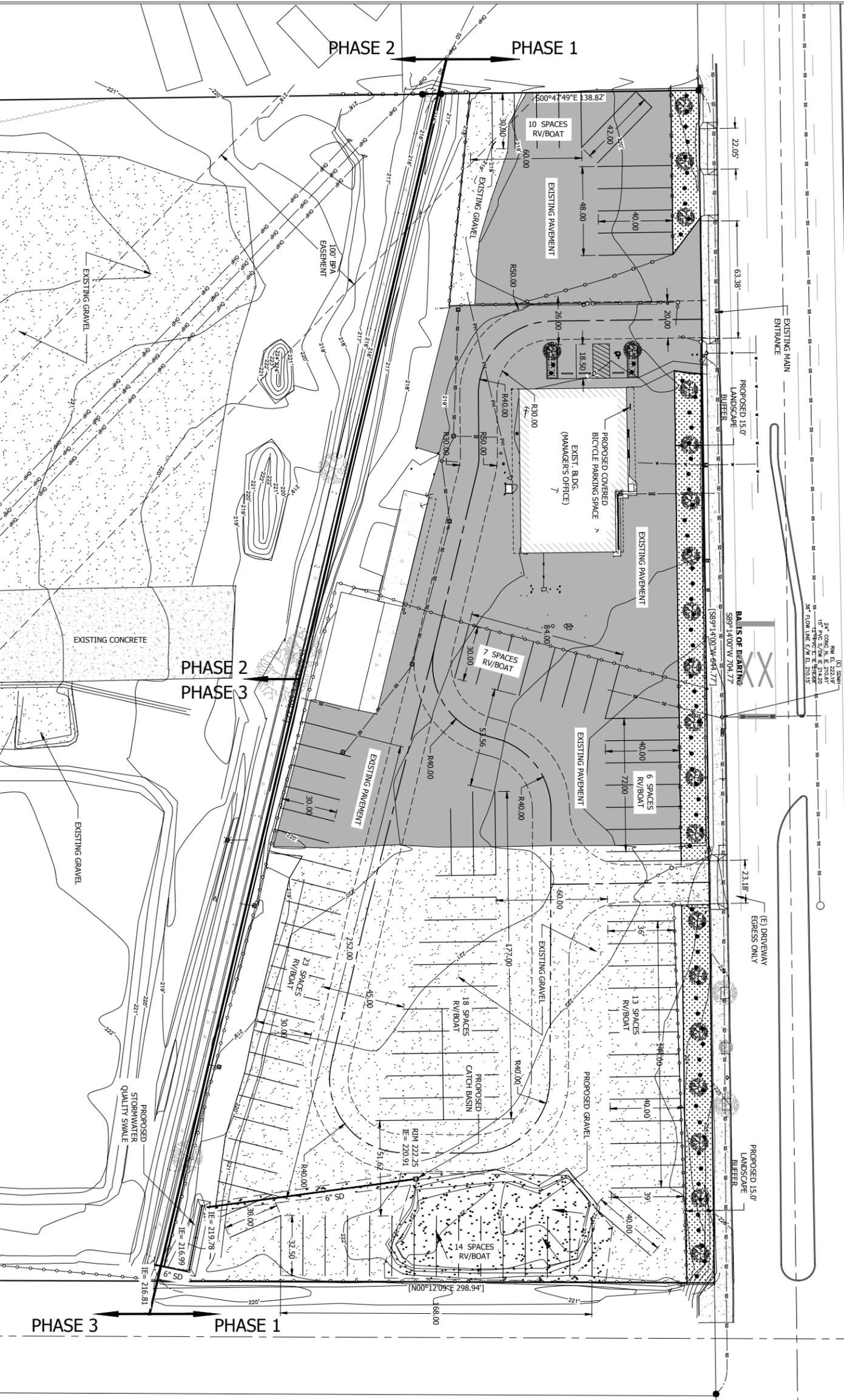
730 34th Ave SW

Date: 7/26/2019 Map Source: City of Albany

Location / Zoning Map

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TL 101
 140,754.27 SF
 3.23 AC
 PROPOSED IMPERVIOUS AREA = 119,269.47 SF
 84.74% IMPERVIOUS AREA



LEGEND
 → PROPOSED DRAIN DIRECTION
 ↘ EXISTING SLOPE DIRECTION

PLAN REVISIONS	DATE

Sheet **C102**
 SCALE: SEE BARS/SCALE

THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY

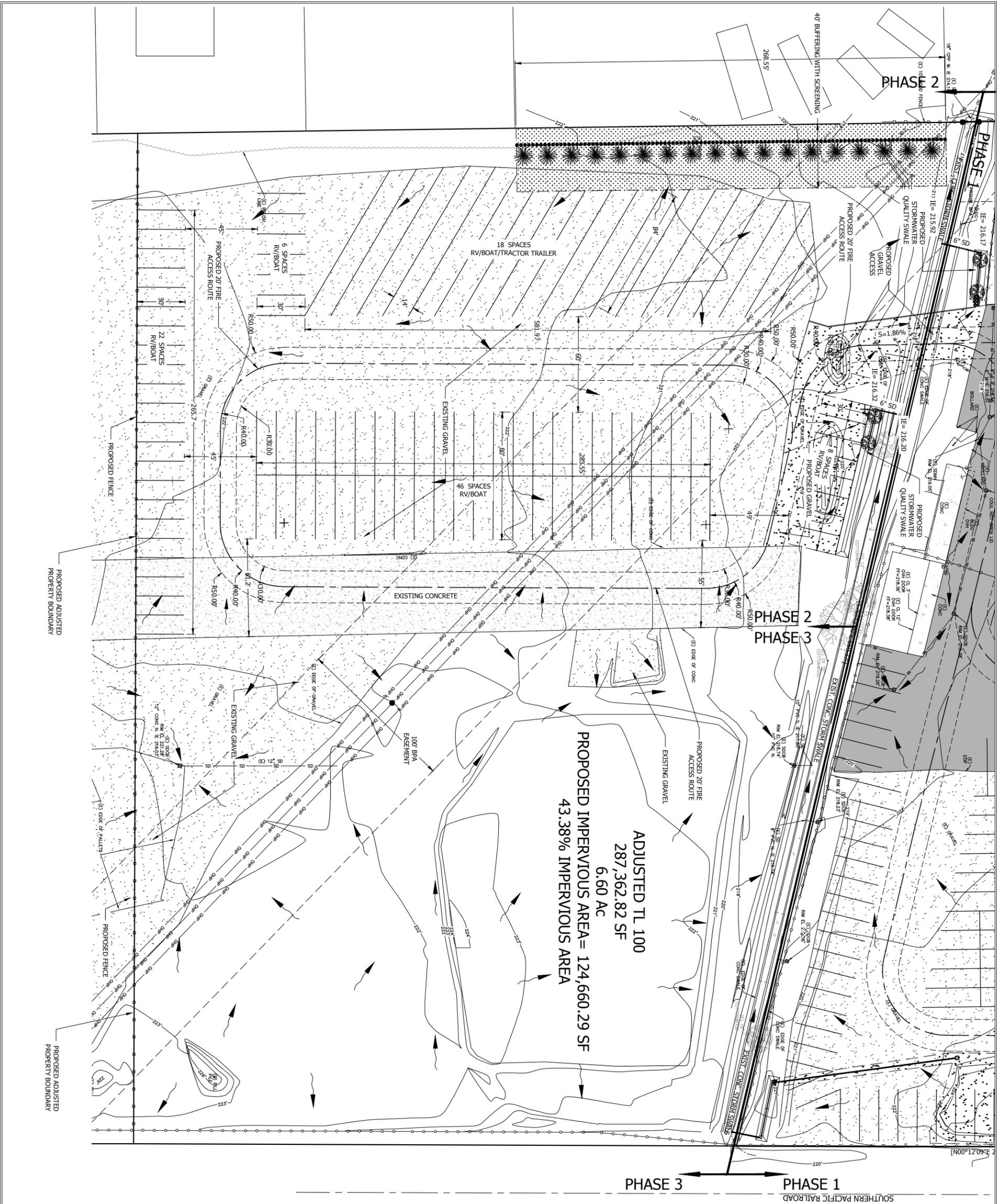
DATE: OCTOBER 9, 2019
 PROJECT: 19-097 SHEDD INVESTMENTS
 DRAWN BY: BSV, MM, EJP
 CHECKED BY: EJP, BSV

SITE LAYOUT PHASE 1
34TH AVE. RV & BOAT STORAGE
ALBANY, OREGON

UDELL ENGINEERING AND LAND SURVEYING, LLC
 63 EAST ASH ST.
 LEBANON, OREGON 97355
 (541) 451-5125 PH.
 (541) 451-1366 FAX

CLIENT:
 SHEDD INVESTMENTS, LLC
 PO BOX 04
 SHEDD, OREGON 97377





ADJUSTED TL 100
 287,362.82 SF
 6.60 AC
 PROPOSED IMPERVIOUS AREA = 124,660.29 SF
 43.38% IMPERVIOUS AREA

PHASE 3 PHASE 1
 SOUTHERN PACIFIC RAILROAD



LEGEND
 —> PROPOSED DRAIN DIRECTION
 - - -> EXISTING SLOPE DIRECTION

PLAN REVISIONS	DATE

Sheet **C103**
 SCALE: SEE BARS/SCALE

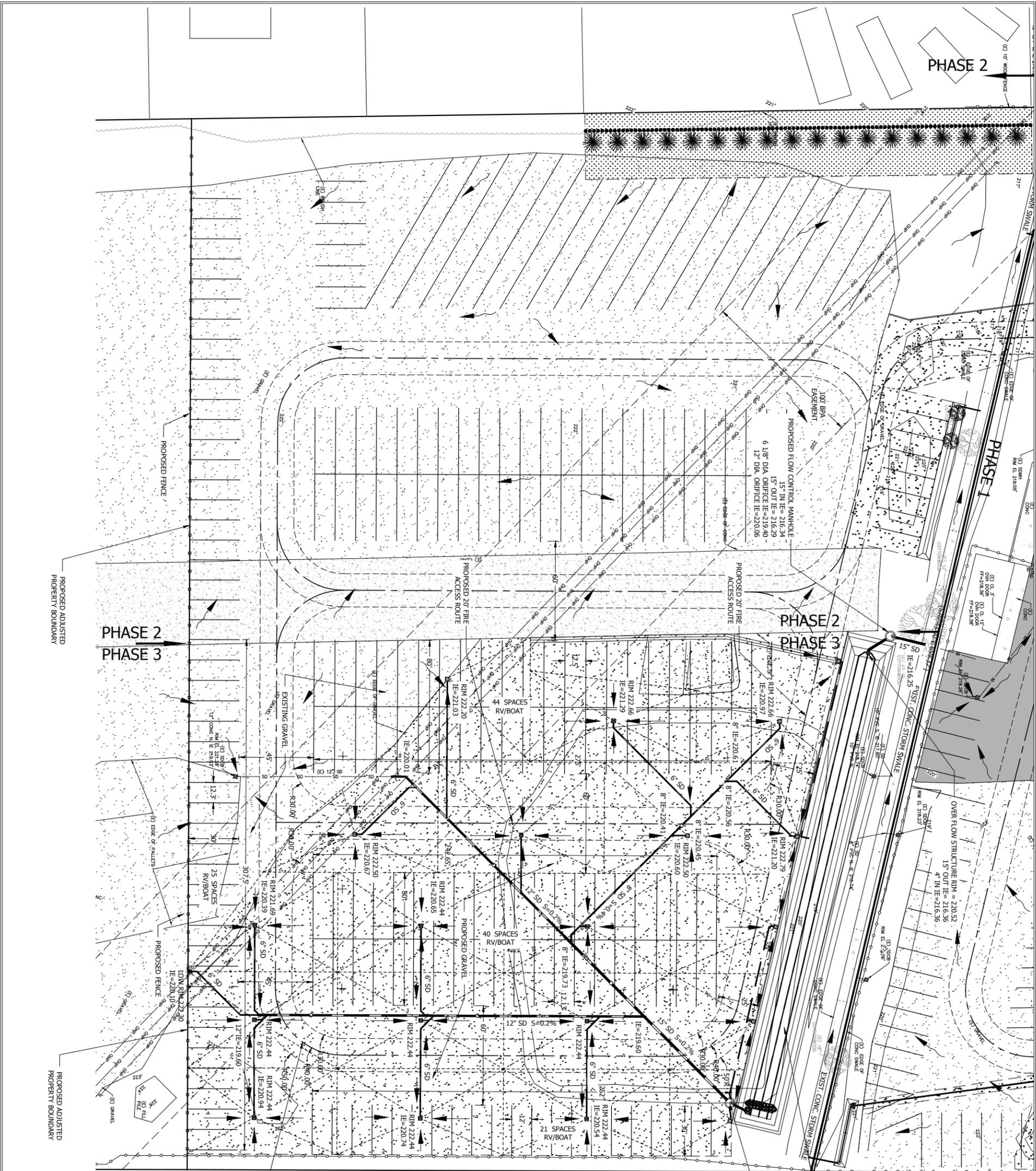
THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY

DATE: OCTOBER 9, 2019
 PROJECT: 19-097 SHEDD INVESTMENTS
 DRAWN BY: BSV, MM, EJP
 CHECKED BY: EJP, BSV

SITE LAYOUT PHASE 2
 34TH AVE. RV & BOAT STORAGE
 ALBANY, OREGON

UDELL ENGINEERING AND LAND SURVEYING, LLC
 63 EAST ASH ST.
 LEBANON, OREGON 97355
 (541) 451-5125 PH.
 (541) 451-1366 FAX

CLIENT:
 SHEDD INVESTMENTS, LLC
 PO BOX 04
 SHEDD, OREGON 97377



PHASE 2

PHASE 2
PHASE 3

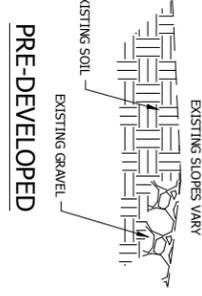
PHASE 2
PHASE 3

PHASE 3

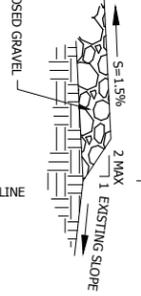
PHASE 1

LEGEND

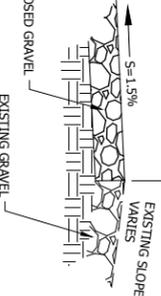
- PROPOSED DRAIN DIRECTION
- EXISTING SLOPE DIRECTION
- EXISTING SLOPES VARY
- EXISTING SOIL
- PROPOSED STORMWATER QUALITY PRETREATMENT MANHOLE
15" IE (N)=219.41
15" IE (SW)=219.46
- EXISTING SLOPES VARY
- EXISTING SOIL
- PROPOSED STORMWATER QUALITY DRY BASIN
VOLUME=5922CF
BOTTOM ELEV.=218.90
- EXISTING SLOPES VARY
- EXISTING SOIL
- PROPOSED STORMWATER QUALITY PRETREATMENT MANHOLE
15" IE (N)=219.41
15" IE (SW)=219.46
- EXISTING SLOPES VARY
- EXISTING SOIL
- PROPOSED STORMWATER QUALITY DRY BASIN
VOLUME=5922CF
BOTTOM ELEV.=218.90
- EXISTING SLOPES VARY
- EXISTING SOIL
- PROPOSED STORMWATER QUALITY PRETREATMENT MANHOLE
15" IE (N)=219.41
15" IE (SW)=219.46
- EXISTING SLOPES VARY
- EXISTING SOIL
- PROPOSED STORMWATER QUALITY DRY BASIN
VOLUME=5922CF
BOTTOM ELEV.=218.90



PRE-DEVELOPED



POST-DEVELOPED



POST-DEVELOPED

ADJUSTED TL 100
287,362.82 SF
6.60 AC
PROPOSED IMPERVIOUS AREA= 111,920.04 SF
82.33% IMPERVIOUS AREA (PHASES 2 & 3)

THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY

SITE LAYOUT PHASE 3
34TH AVE. RV & BOAT STORAGE
ALBANY, OREGON

UDELL ENGINEERING AND LAND SURVEYING, LLC
63 EAST ASH ST.
LEBANON, OREGON 97355
(541) 451-5125 PH.
(541) 451-1366 FAX

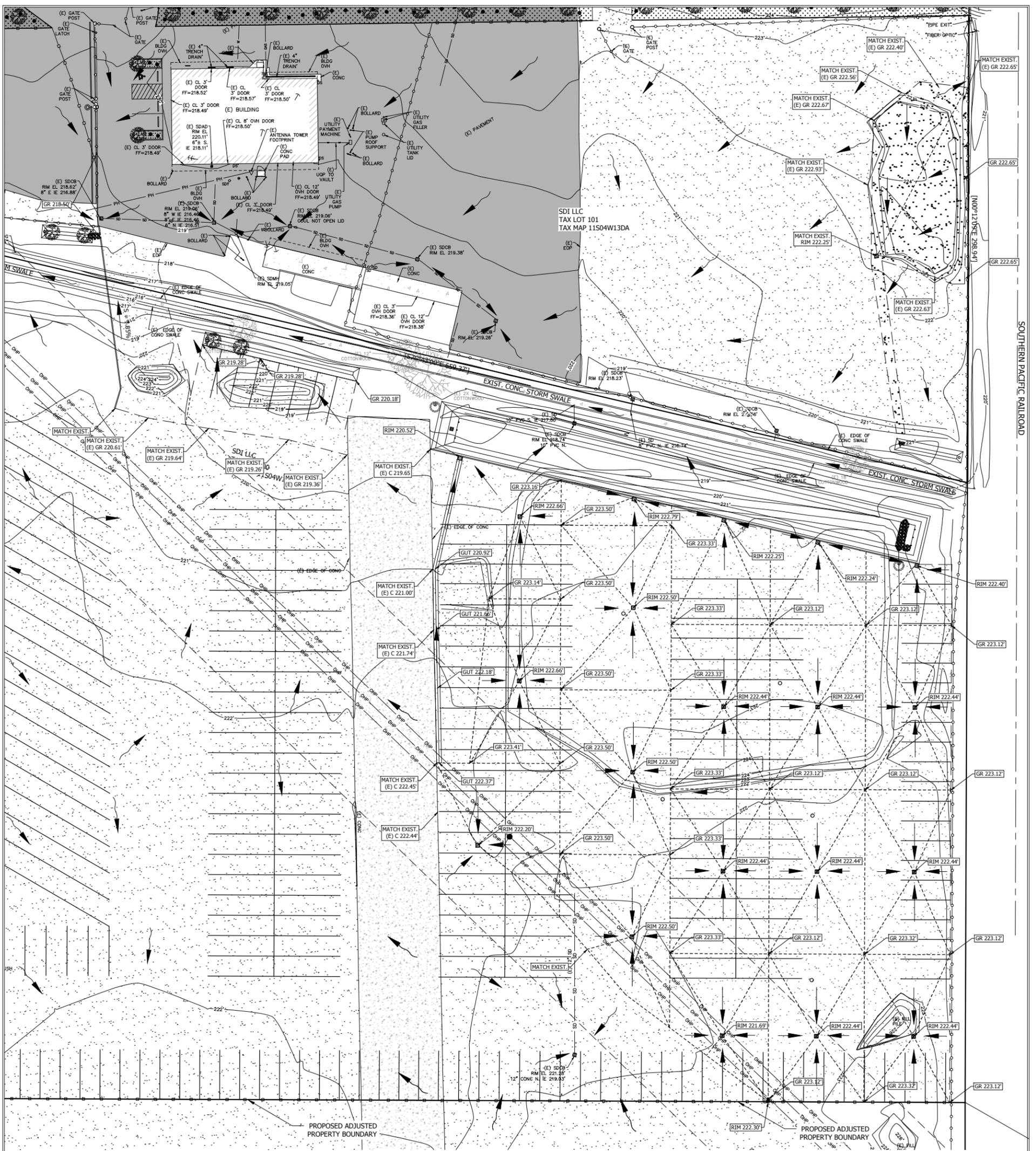
CLIENT:
SHEDD INVESTMENTS, LLC
PO BOX 04
SHEDD, OREGON 97377



DATE:
OCTOBER 9, 2019
PROJECT:
19-097 SHEDD INVESTMENTS
DRAWN BY:
BSV, MM, EJP
CHECKED BY:
EJP, BSV

PLAN REVISIONS	DATE

Sheet **C104**
SCALE: SEE BARS/SCALE



PLAN REVISIONS	DATE

Sheet **C200**
SCALE: SEE BARS/SCALE

THIS MAP WAS PREPARED FOR PLANNING PURPOSES ONLY

DATE: OCTOBER 9, 2019
PROJECT: 19-097 SHEDD INVESTMENTS
DRAWN BY: BSV, MM, EJP
CHECKED BY: EJP, BSV

GRADING PLAN

34TH AVE. RV & BOAT STORAGE

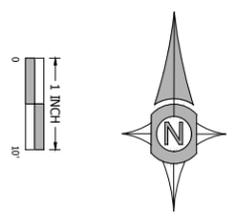
ALBANY, OREGON

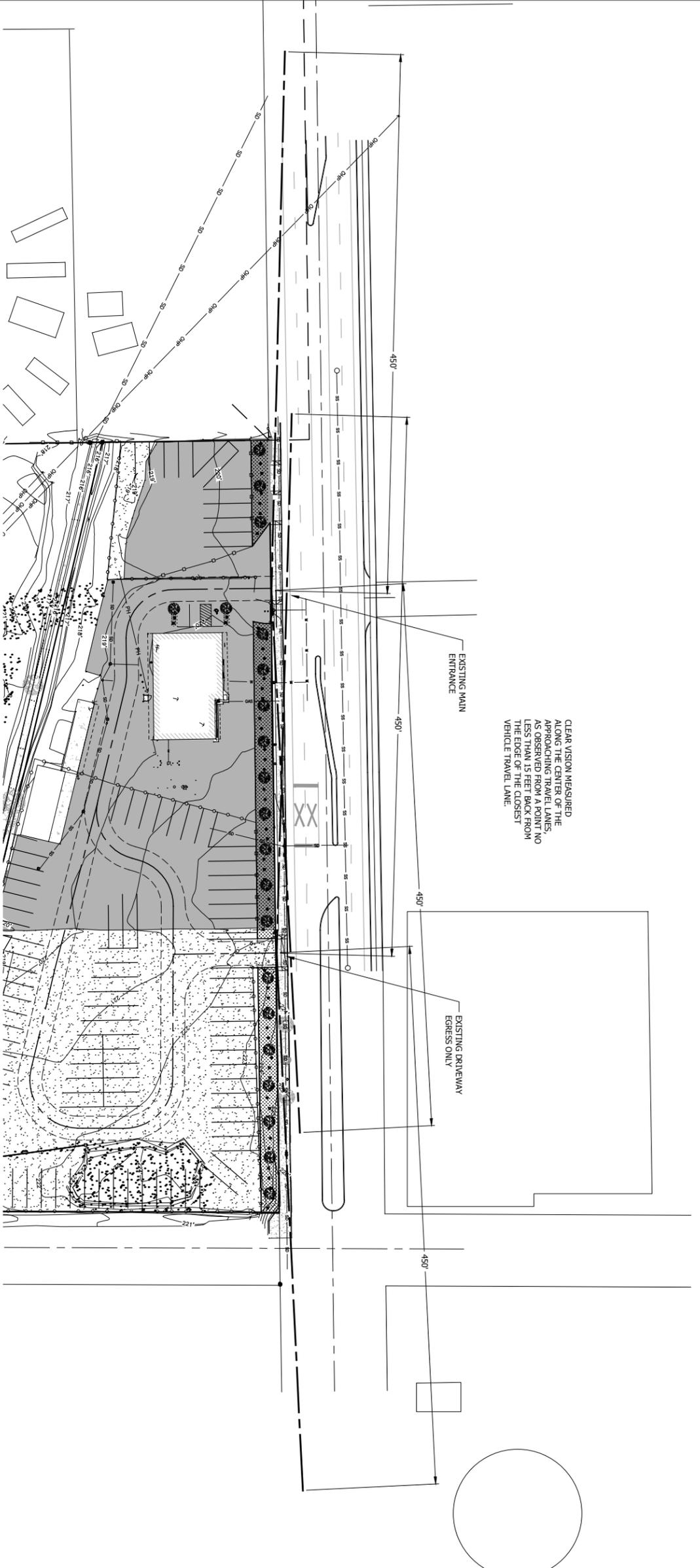
UDELL ENGINEERING AND LAND SURVEYING, LLC
63 EAST ASH ST.
LEBANON, OREGON 97355
(541) 451-5125 PH.
(541) 451-1366 FAX

CLIENT:
SHEDD INVESTMENTS, LLC
PO BOX 04
SHEDD, OREGON 97377

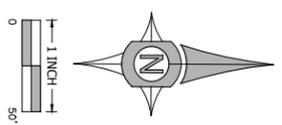
GRADING LEGEND

- 5 = 0.00% - SURFACE DRAIN DIRECTION
- (E) 0.00/0.00 - EXISTING TOP OF PAVERMENT ELEVATION
- (E) 0.00/0.00 - EXISTING TOP OF CURB ELEVATION
- (E) 0.00/0.00 - EXISTING GROUND ELEVATION
- (E) 0.00/0.00 - DESIGN TOP OF ASPHALT PAVEMENT ELEVATION
- (E) 0.00/0.00 - DESIGN TOP OF CONCRETE PAVEMENT ELEVATION
- (E) 0.00/0.00 - DESIGN TOP OF SIDEWALK ELEVATION
- (E) 0.00/0.00 - DESIGN TOP OF GRAVEL ELEVATION
- (E) 0.00/0.00 - DESIGN TOP OF GROUND ELEVATION
- (E) 0.00/0.00 - DESIGN TOP OF WALL ELEVATION





CLEAR VISION MEASURED
ALONG THE CENTER OF THE
APPROACHING TRAVEL LANES
AS OBSERVED FROM A POINT NO
LESS THAN 15 FEET BACK FROM
THE EDGE OF THE CLOSEST
VEHICLE TRAVEL LANE.



THIS MAP WAS
PREPARED FOR
PLANNING
PURPOSES ONLY

DATE:
OCTOBER 9, 2019
PROJECT:
19-097 SHEDD INVESTMENTS
DRAWN BY:
BSV, MM, EJP
CHECKED BY:
EJP, BSV

VISION CLEARANCE PER ADC 12.180
**34TH AVE. RV & BOAT STORAGE
ALBANY, OREGON**

**UDELL ENGINEERING
AND
LAND SURVEYING, LLC**
63 EAST ASH ST.
LEBANON, OREGON 97355
(541) 451-5125 PH.
(541) 451-1366 FAX

CLIENT:
SHEDD INVESTMENTS, LLC
PO BOX 04
SHEDD, OREGON 97377



PLAN REVISIONS	DATE

Sheet **C400**
SCALE: SEE BARSCALE

34TH AVENUE SW

BASIS OF BEARING
S89°14'00"W 704.77'

[S89°14'00"W 644.77']

SMTC LLC
(BURCHAM'S METALS)
TAX LOT 200
MAP 11S-04W-13DD
ZONING: LI

SDI LLC
TAX LOT 101
MAP 11S-04W-13DD
ZONING: HI
730 34TH AVE. SW

[N 00°12'09" E 298.94']

S 01°15'51" E 10.22'

VALLEY MHP LLC
(MANUFACTURED HOME PARK)
TAX LOT 700
MAP 11S-04W-13DD
ZONING: LI

[S 76°43'00" E 659.37']

SDI LLC
TAX LOT 100
MAP 11S-04W-13DD
ZONING: HI

AREA A

455,616.31 SQ FT
-168,253.49 SQ FT
287,362.82 SQ FT

[S 00°12'09" W 376.70']

BISON HEART INVESTMENTS LLC
(RESIDENCES)
TAX LOT 700
MAP 11S-04W-13DD
ZONING: LI

[S 00°46'41" E 515.45']

S 00°46'41" E 668.21'

100' BPA EASEMENT
(VOL. 289 PG 670)

SOUTHERN PACIFIC RAILROAD

[N 00°12'09" E 298.94']

VINSON STEVEN D & LEETTA
(SINGLE FAMILY RESIDENCE)
TAX LOT 1001
MAP 11S-04W-13DD
ZONING: LI

BROWN TYSON & BRENNIA
(SINGLE FAMILY RESIDENCE)
TAX LOT 1100
MAP 11S-04W-13DD
ZONING: LI

[S 89°46'00" E 633.18']

36TH AVENUE SW

PROPOSED ADJUSTED
PROPERTY BOUNDARY

KAUFFMAN CRAIG A & DIANE
(SINGLE FAMILY RESIDENCE)
TAX LOT 1200
MAP 11S-04W-13DD
ZONING: LI

[S 00°46'41" E 152.76']

[S 00°06'36" W 260.72']

ALBANY SECURE STORAGE LLC
(STORAGE UNITS)
TAX LOT 1501
MAP 11S-04W-13DD
ZONING: LI

S 00°46'28" E 176.97'

[S 89°16'00" E 633.18']

EXISTING PROPERTY BOUNDARY

AREA B

255,631.85 SQ FT
+168,253.49 SQ FT
423,885.34 SQ FT

[S 00°14'00" E 350.29']

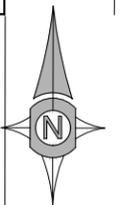
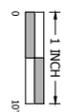
SDI LLC
(VACANT)
TAX LOT 1500
MAP 11S-04W-13DD
ZONING: LI

[S 40°42'21" E 313.44']

SDI LLC
(INDUSTRIAL USES)
TAX LOT 102
MAP 11S-04W-13DD
ZONING: HI
3615 PACIFIC BLVD.

[S 89°11'22" E 830.10']

EPPING FOUNDATION HOLDINGS LLC
(VACANT)
TAX LOT 414
MAP 11S-03W-19
ZONING: LI



PLAN REVISIONS	DATE

Sheet **C300**
SCALE: SEE BARSCALE

THIS MAP WAS
PREPARED FOR
PLANNING
PURPOSES ONLY

DATE:
OCTOBER 9, 2019
PROJECT:
19-097 SHEDD INVESTMENTS
DRAWN BY:
BSV, MM, EJP
CHECKED BY:
EJP, BSV

PROPERTY LINE ADJUSTMENT
34TH AVE. RV & BOAT STORAGE
ALBANY, OREGON

**UDELL ENGINEERING
AND
LAND SURVEYING, LLC**
63 EAST ASH ST.
LEBANON, OREGON 97355
(541) 451-5125 PH.
(541) 451-1366 FAX

CLIENT:
SHEDD INVESTMENTS, LLC
PO BOX 04
SHEDD, OREGON 97377



Wetland Land Use Notice Response

Response Page

Department of State Lands (DSL) WN#*

WN2020-0125

Responsible Jurisdiction

Staff Contact Tony Mills	Jurisdiction Type City	Municipality Albany
Local case file # SP-25-19	County Linn	

Activity Location

Township 11S	Range 04W	Section 13	QQ section DD	Tax Lot(s) 101,100
------------------------	---------------------	----------------------	-------------------------	------------------------------

Street Address

730 34th Ave SW

Address Line 2

City

Albany

Postal / Zip Code

97321

State / Province / Region

OR

Country

Linn

Latitude

44.609611

Longitude

-123.109449

Wetland/Waterway/Other Water Features



- There are/may be wetlands, waterways or other water features on the property that are subject to the State Removal-Fill Law based upon a review of wetland maps, the county soil survey and other available information.
- The National Wetlands Inventory shows wetland, waterway or other water features on the property
- The county soil survey shows hydric (wet) soils on the property. Hydric soils indicate that there may be wetlands.

Your Activity



- It appears that the proposed project **may** impact wetlands and **may** require a State permit.

- An onsite inspection by a qualified wetland consultant is recommended prior to site development to determine if the site has wetlands or other waters that may be regulated. The determination or delineation report should be submitted to DSL for review and approval. Approved maps will have a DSL stamp with approval date and expiration date.

Applicable Oregon Removal-Fill Permit Requirement(s)

- A state permit is required for 50 cubic yards or more of fill removal or other ground alteration in wetlands, below ordinary high water of waterways, within other waters of the state, or below highest measured tide.

Closing Information

Additional Comments

Based on review of mapping submitted, the proposed project ("Establishment and expansion of an RV boat and tractor self-storage facility") appears that it may impact jurisdictional wetlands in excess of the 50 cubic yard threshold and may require a permit from the Department of State Lands. It is recommended that the site be delineated by a certified wetland consultant prior to site development.

This is a preliminary jurisdictional determination and is advisory only.

This report is for the State Removal-Fill law only. City or County permits may be required for the proposed activity.

- A Federal permit may be required by The Army Corps of Engineers: (503)808-4373

Contact Information

- For information on permitting, use of a state-owned water, wetland determination or delineation report requirements please contact the respective DSL Aquatic Resource, Proprietary or Jurisdiction Coordinator for the site county. The current list is found at: <http://www.oregon.gov/dsl/ww/pages/wwstaff.aspx>
- The current Removal-Fill permit and/or Wetland Delineation report fee schedule is found at: <https://www.oregon.gov/dsl/WW/Documents/Removal-FillFees.pdf>

Response Date

2/19/2020

Response by:

Grey Wolf

Response Phone:

503-986-5321

34th Storage LLC

c/o Elwood Martin

SITE PLAN REVIEW & PLA NARRATIVE

APPLICANT: 34th Storage LLC (Elwood Martin)
P.O. Box 4
Shedd, Oregon 97377

OWNER: 34th Storage LLC (Elwood Martin)
P.O. Box 4
Shedd, Oregon 97377

Engineer/Surveyor: Udell Engineering & Land Surveying LLC
63 E. Ash Street
Lebanon, OR 97355
541-451-5125

PROPERTY LOCATION: 730 34th Ave. SW
Albany, Oregon 97321

**ASSESSOR'S MAP:
AND TAX LOTS:** 11S04W13DD
100, 101, and 102

ZONE DESIGNATION: **Heavy Industrial (HI)**

BACKGROUND AND SUMMARY OF REQUEST

General Background

The subject properties are located south of 34th Avenue SW along the west side of the Southern Pacific Railroad. The subject properties include three tax lots; Tax Lots 100, 101, and 102. Tax Lot 101 is presently a RV, trailer, boat, and vehicle storage facility. Tax Lot 100 is presently used as a storage facility which includes tractor trailer truck storage.

Summary of Request:

The applicant is requesting approval of a 3 phased expansion of the existing RV and boat storage facility presently located on Tax Lot 101 to include a north portion of Tax Lot 100 for RV, Boat, and tractor trailer truck storage. To facilitate the expansion, a property line adjustment is proposed to reduce Tax Lot 100 and increase Tax Lot 102 moving the common boundary between the two tax lots north. No development is presently proposed on Tax Lot 102.

Phase 1 includes Tax Lot 101 including an on-site manager's office in the existing building and associated parking improvements. Phase 2 includes the west portion of the adjusted north area of Tax Lot 100 followed by Phase 3 which includes the east portion of the adjusted north area of Tax Lot 100.

This application is for Site Plan Review per Development Code 2.400 and a Property Line Adjustment per Development Code 11.100.

SITE PLAN REVIEW CRITERIA

- 1. Public utilities can accommodate the proposed development.*

Fact: All public utilities including sanitary sewer, storm drains, and water run along 34th Avenue SW serving the existing building located at the north side of the site. No other buildings are proposed.

Conclusion: Public utilities can accommodate the development; this condition is satisfied.

- 2. The proposed post-construction stormwater quality facilities (private and/or public) can accommodate the proposed development, consistent with Title 12 of the Albany Municipal Code.*

Fact: The proposed post-construction stormwater quality facilities for this project can be provided in compliance with City codes and design standards. The preliminary stormwater report and preliminary plans provide further detail and are included with this application.

Conclusion: This condition is satisfied.

3. *The transportation system can safely and adequately accommodate the proposed development.*

Fact: 34th Avenue along the subject property is classified as a minor arterial by the City Transportation System Plan. No capacity deficiencies or short-term improvements were identified from our review of the Albany Transportation System Plan for this portion of 34th Avenue SW.

Conclusion: The transportation system is adequate.

4. *Parking areas and entrance-exit points are designed to facilitate traffic and pedestrian safety and avoid congestion.*

Fact: The existing RV, trailer, boat, and vehicle storage facility has vehicular access directly off of 34th Avenue SW. All driveways necessary for the existing and proposed operations are presently in place for customers and fire emergency vehicles. The driveway closest to the west side of the existing building will provide ingress and egress access to and from all other proposed phases of development through an easement over the existing paved access serving the two tax lots per Code 12.090 and 12.100. The eastern access onto 34th Avenue SW will become an exit only controlled access to facilitate safe maneuvering with trailers. The existing driveway closest to the west side of the existing building is over 63' wide which is necessary for WB-67 semi-trucks to enter the property without encroaching into the left east bound lane.

The site frontage is fully improved including sidewalk. New parking stalls will be provided with Phase 1 and will comply with ADA standards. An ADA accessible way to the public walk along 34th Avenue SW will also be provided from the Phase 1 office. The proposed design provides adequate space for vehicular parking and circulation.

Conclusion: Parking areas are easily accessible, and pedestrian access is direct, this condition is satisfied.

5. *The design and operating characteristics of the proposed development are reasonably compatible with surrounding development and land uses, and any negative impacts have been sufficiently minimized.*

Fact: The zone is Heavy Industrial. The proposed development is an expansion of the existing RV, trailer, boat, and vehicle storage facility. The vast majority of the proposed expansion is presently gravel or paved. The proposed use is permissible in the Heavy Industrial zone.

The surrounding properties to the south and east are also zoned Heavy Industrial and used for manufacturing and service buildings (Walsh Trucking, Western Packaging, Summit Structures of Oregon, and ATI). The surrounding properties to the west are zoned Light Industrial and uses

varying from single family residential to office space, tavern/restaurant, and a scrap yard which includes residents on 36th Avenue SW, Elwood Staffing, Cascade Earth Sciences, Industrial Welding Supply, Ma's Dairy Farm Tavern, Burcham's Metals, and a small mobile home park. The surrounding properties to the north are zoned Heavy Industrial (National Frozen Foods) and Community Commercial (Mid-Willamette Family YMCA).

Parking spaces are sufficient to support the proposed development (see parking on site plan). No additional buildings are proposed.

Conclusion: The proposed building is compatible with surrounding development. This condition is satisfied.

6. Activities and developments within special purpose districts must comply with the regulations described in Articles 4 (Airport Approach), 6 (Natural Resources), and 7 (Historic), as applicable

Fact: This project is not within special purpose districts

Conclusion: The condition is satisfied

7. The site is in compliance with prior land use approvals.

Fact: The prior land use approval SP-19-16 will be formally withdrawn. The prior use was a Northwest Natural Gas office including outside material and equipment storage.

Conclusion: The condition is satisfied following withdrawal of prior land use approval SP-19-16.

8. Sites that have lost their nonconforming status must be brought into compliance, and may be brought into compliance incrementally in accordance with Section 2.370.

Fact: The effort with the proposed development is to comply with current code.

Conclusion: The condition is satisfied

PROPERTY LINE ADJUSTMENT REVIEW CRITERIA

1. The property line adjustment does not create a new lot or land-locked parcel.

Fact: The proposed property line adjustment will not create any new or land-locked lot or parcel.

Conclusion: This condition is satisfied.

- 2. The proposed post-construction stormwater quality facilities (private and/or public) can accommodate the proposed development, consistent with Title 12 of the Albany Municipal Code.*

Fact: The proposed post-construction stormwater quality facilities for this project can be provided in compliance with City codes and design standards. The preliminary stormwater report and preliminary plans provide further detail and are included with this application.

Conclusion: This condition is satisfied.

- 3. The transportation system can safely and adequately accommodate the proposed development.*

Fact: 34th Avenue along the subject property is classified as a minor arterial by the City Transportation System Plan. No capacity deficiencies or short-term improvements were identified from our review of the Albany Transportation System Plan for this portion of 34th Avenue SW.

Conclusion: The transportation system is adequate.

- 4. Parking areas and entrance-exit points are designed to facilitate traffic and pedestrian safety and avoid congestion.*

Fact: The existing RV, trailer, boat, and vehicle storage facility has vehicular access directly off of 34th Avenue SW. All driveways necessary for the existing and proposed operations are presently in place for customers and fire emergency vehicles. The driveway closest to the west side of the existing building will provide ingress and egress access to and from all other proposed phases of development through an easement over the existing paved access serving the two tax lots per Code 12.090 and 12.100. The eastern access onto 34th Avenue SW will become an exit only controlled access to facilitate safe maneuvering with trailers. The existing driveway closest to the west side of the existing building is over 63' wide which is necessary for WB-67 semi-trucks to enter the property without encroaching into the left east bound lane.

The site frontage is fully improved including sidewalk. New parking stalls will be provided with Phase 1 and will comply with ADA standards. An ADA accessible way to the public walk along 34th Avenue SW will also be provided from the Phase 1 office. The proposed design provides adequate space for vehicular parking and circulation.

Conclusion: This condition is satisfied.

DEVELOPMENT CODE STANDARDS ADDRESSED

4.090 Purpose. Development standards are intended to promote site planning and design that consider the natural environment, site intensity, building mass, and open space. The standards also promote energy conservation, needed privacy, safe and efficient parking areas for new development, and improve the general living environment and economic life of a development. Table 4-2, on the following page, summarizes the basic development standards. It should be used in conjunction with the sections immediately succeeding the table, which address special circumstances and exceptions. See Article 8 for design standards for single-family and multiple-family developments.

The proposed development is in compliance with land uses of 4.050 Table 4-1 and the development standards identified in 4.090 Table 4-2:

<u>Standard</u>	<u>Required Standard</u>	<u>Proposed</u>
Lot Size	None	(varies)
Lot width	None	633.18 to 644.77 ft (varies)
Lot depth	None	138.82 to 515.45 ft (varies)
Landscape Area	All yards adjacent to street	All yards adjacent to street
Minimum front setback	15'	40.83'
Interior setback non residential	None	None
Interior setback residential	50'	N/A
Maximum Height	None	Existing building height
Maximum Lot Coverage	None	Varies
Maximum Building size	None	4,930 sq ft
Open Space	N/A	N/A

4.100 Minimum Standards. All setbacks must meet the minimum standards in Table 4-2, Development Standards. In addition to the setbacks in this Article, all development must comply with Section 12.180, Clear Vision Area. For residential accessory structures, see also Article 3, Table 2, Accessory Structure Standards.

The proposed development is in compliance with setback requirements of the development standards identified in 4.090 Table 4-2 and Clear Vision Area requirements of Section 12.180 as shown in the plans. No residential districts adjoin the project site as defined by Section 3.020.

4.250 Parking Standards moved to Article 9 per Ord. 5832, 4/9/14.

9.020 Space Requirements. Off-street parking and loading must be provided for all development in the amounts indicated in the table below subject to any applicable reductions permitted in this Article. All required parking must be developed in accordance with the standards in this Article.

The proposed development is in compliance with parking requirements of the development standards identified in 9.020 Table 9-1 and design standards of Section 9.130. For warehousing in the Heavy Industrial zone, 3 parking spaces are proposed for 1 employee plus 1 per 300 sq ft of patron serving area plus 1 per

company vehicle. 1 covered bicycle parking space is provided in compliance with Section 9.120(13).

4.270 General. Developments must comply with the site landscaping standards in Article 9 before occupancy or in accordance with Section 9.140.

9.150 Parking Lot Landscaping. The purpose of landscaping in parking lots is to provide shade, reduce stormwater runoff, and direct traffic. Incorporation of approved vegetated post-construction stormwater quality facilities in landscaped areas is encouraged. Parking lots must be landscaped in accordance with the following minimum standards:

(1) Planter Bays. Parking areas shall be divided into bays of not more than 12 parking spaces. At both ends of each parking bay, there shall be curbed planters at least five feet wide, excluding the curb. Gaps in the curb may be allowed for connections to approved post-construction stormwater quality facilities. Each planter shall contain one canopy tree at least ten feet high and decorative ground cover containing at least two shrubs for every 100 square feet of landscape area. Neither Albany Development Code, Article 9 9 - 12 October 14, 2017 planter bays nor their contents may impede access on required public sidewalks or paths, or handicapped-accessible parking spaces.

Curbed 85s.f. 5-foot wide planter bays containing code compliant 1 tree, 2 shrubs and ground cover in each bay are provided at each end of the small parking area proposed. These proposed bays do not impede access as required.

(2) Entryway Landscaping. Both sides of a parking lot entrance shall be bordered by a minimum five-foot-wide landscape planter strip meeting the same landscaping provisions as planter bays, except that no sight-obscuring trees or shrubs are permitted.

Entryway landscaping is proposed at both sides of each driveway as part of a 15-foot wide landscape area as required. Proposed vegetation will not be sight obscuring as required. The clear vision requirements of Section 12.180 are met and are shown in the proposed plan.

(3) Parking Space Buffers. Parking areas shall be separated from the exterior wall of a structure by pedestrian walkways or loading areas or by a five-foot strip of landscaping materials.

Proposed parking areas are separated from the exterior wall of the existing structure by a pedestrian walkway.

(4) Alternate Plan. An alternate plan may be submitted that provides landscaping of at least five percent of the total parking area exclusive of required landscaped yard areas and that separates parking areas of more than 100 spaces into clusters divided by landscape strips. Each planter area shall contain one tree at least ten feet tall and decorative ground cover containing at least two shrubs for every 100 square feet of landscape area. Landscaping may not impede access on required public sidewalks or paths, or handicapped-accessible parking spaces.

Acknowledged.

(5) Landscape Protection. Required landscaped areas adjacent to graveled areas must be protected, either by railroad ties secured by rebar driven 18 inches into the ground, by large boulders, or by another acceptable means of protection.

All required landscaping is protected by curbs adjacent to pavement. Only a buffer area is adjacent to gravel.

*4.280 General. Buffering and screening may be required in addition to the minimum landscaping to offset the impact of development. See Sections 9.210 through 9.320.
9.210 General Requirements/Matrix. In order to reduce the impacts on adjacent uses of a different type, buffering and screening are required in accordance with the matrix that follows Section 9.300. The property owner of each proposed development is responsible for the installation and maintenance of such buffers and screens. The Director may waive the buffering/screening requirements of this section where such has been provided on the adjoining property in conformance with this Code. Where a use would be abutting another use except for separation by right-of-way, buffering (but not screening) shall be required as specified in the matrix. Where a proposed use abuts undeveloped property, only one-half of the buffer width shall be required.*

Proposed buffering complies with Table 9-4. Abutting land use zones only include Light Industrial and Heavy Industrial zones. No buffering is required for the Heavy Industrial zones along these adjacent zones nor for the parking lot area. However, a 40-foot screened buffer is required and provided along the existing Manufactured Home Park.

9.220 Delineation of Area. A buffer consists of an area within a required setback adjacent to a property line. It has a depth equal to the amount specified in the buffer matrix and contains a length equal to the length of the property line of the abutting use or uses.

The proposed buffer area is 40-feet wide adjoining the length of the property boundary of the existing Manufactured Home Park.

9.230 Occupancy. A buffer area may only be occupied by utilities, screening, sidewalks, bikeways, landscaping, and approved vegetated post-construction stormwater quality facilities. No buildings, access ways or parking areas are allowed in a buffer area except where an access way has been approved by the City.

The proposed buffer only includes screening vegetation, trees, and ground cover as required.

9.240 Buffering. The minimum improvements within a buffer area consist of the following: (1) At least one row of trees. These trees will be not less than ten feet high at the time of planting for deciduous trees and spaced not more than 30 feet apart and five feet high at the time of planting for evergreen trees and spaced not more than 15 feet apart. This requirement may be waived by the Director when it can be demonstrated that such trees would conflict with other purposes of this Code (e.g. solar access). (2) At least five five-gallon shrubs or ten one-gallon shrubs for each 1,000 square feet of required buffer area. (3)

The remaining area treated with attractive ground cover (e.g., lawn, bark, rock, ivy, evergreen shrubs).

The proposed buffer area provides 1 row of trees and shrubs as required.

9.250 Screening. Where screening is required or provided, the following standards apply in addition to conditions (1) and (3) above: (1) One row of evergreen shrubs that will grow to form a continuous hedge at least four feet tall within two years of planting, or (2) A fence or masonry wall at least five feet tall constructed to provide a uniform sight-obscuring screen, or (3) An earth berm combined with evergreen plantings or a fence that forms a sight and noise buffer at least six feet tall within two years of installation.

Acknowledged. The proposed shrubs will comply with these screening requirements.

9.260 Clear Vision. Buffering and screening provisions are superseded by the clear vision requirements of Section 12.180 and by the fence and wall height restrictions of the zone when applicable.

Acknowledged.

9.270 Landscape Plan. In lieu of these standards a detailed landscape plan, which provides the same degree of desired buffering utilizing alternative designs, may be submitted for approval.

Acknowledged.

4.290 (4) In the LI and HI zones, outside storage is permitted in interior yards outside of the required setback. Outside storage is allowed in front yards outside the front setback provided that it is enclosed with a sight-obscuring fence, wall, hedge, or berm, which must be constructed of noncombustible material. This enclosure must be located on the property at the required setback line as if the berm, fence, wall, or hedge was a building.

Acknowledged. Code definitions of Article 22 do not specifically describe outside storage. Section 4.290 seems to define outside storage as the display of materials, junk, parts, or merchandise; or exterior display of goods. Therefore, a sight-obscuring improvement is proposed at this time.

4.300 Screening of Refuse Containers. The following standards apply to all development, except for one- and two-family dwellings. Any refuse container or disposal area that would otherwise be visible from a Albany Development Code, Article 4 4 - 15 February 8, 2019 public street, customer or resident parking area, any public facility, or any residential area, must be screened from view by placement of a sight-obscuring fence, wall, or hedge at least 6 feet tall. All refuse materials must be contained within the screened area. Refuse disposal areas may not be located in required setbacks or buffer yards and must be placed at least 15 feet from any dwelling window.

Acknowledged. No refuse container is proposed at this time.

4.400 Purpose. The Airport Approach district is intended to protect the public from excessive noise and air traffic from possible hazards on landing or takeoff.

4.410 Applicability. The regulations below apply to those areas indicated on Figures 4-1 and 4-2.

Acknowledged. We believe the proposed development is outside Airport district regulations that would impact the proposed development.



Udell Engineering & Land Surveying, LLC



63 East Ash Street, Lebanon, OR 97355
Ph: 541-451-5125 • Fax: 541-451-1366

34th Avenue RV & Boat Storage Preliminary Stormwater Quality & Quantity Calculations 10/16/19

The stormwater calculations following the City of Albany Stormwater Management Engineering Standards Division E include basin analysis for historic run-off, post development run-off, and storm quality and detention storage. A dry basin is incorporated into the site design to provide stormwater quality and detention.

City of Albany Stormwater Management Engineering Standards Division E requires site discharge be limited to the 2-yr, 5-yr, 10-yr, and 25-yr historic rates and requires detention storage for post-developed run-off of each of these storm events using the SCS TR-20 method.

Site stormwater quality design is based on a sizing factor of 0.025 per Table 3.03-A of the City design standard. While Phase 1 proposes to remove paved areas for construction of required landscaping, Phase 1 includes an additional gravelled area at the east boundary of the site. Due to the flat slope of the area and the location of the existing stormwater drainage channel, stormwater detention is proposed south of the channel for Phase 3. Phase 3 discharge is restricted to 2-yr predeveloped flow through a 6.125" diameter orifice. An additional 12" orifice is proposed to restrict Phase 3 discharge to 5-yr predeveloped discharge. As stormwater flow is increased to 10-yr and 25-yr post-developed run off the proposed 12" orifice restricts discharge to a rate less than predeveloped flow rates. Three additional stormwater quality facilities are proposed at the two areas where small expansions of existing gravel surfaces are proposed (east side of Phase 1, and the gravel access from Phase 1 to Phase 2 including a small storage area). Though the site is flat the proposed stormwater conveyance pipe slopes are able to provide velocities over 2.64fps. Historic stormwater discharge is to the existing 6-foot wide concrete stormwater channel with a 2-foot wide flat bottom. The slope of the existing channel through the site is 0.0015 which is calculated to provide a velocity of 3.22fps and a capacity of 12.88cfs. City GIS information seems to indicate a storm pipe carries this flow to 34th Avenue. City as-builts have not indicated where this pipe connects to the public stormwater drainage system. Very limited information is available on down stream facilities. We request the City provide a TV inspection to identify the location from which we can approximate slope and capacity.

All on-site pipe capacities were calculated based on capacity to serve an area of post-developed run-off. A spread sheet is provided indicating the capacity of each pipe size shown in the plan, and a map indicating the Phase 3 sub-basin area and historic flow patterns are provided in this report.



FLOW IN FLAT BOTTOM CHANNEL

SIDE 1 SLOPE (run/1'rise)	SIDE 2 SLOPE (run/1'rise)	DEPTH(ft)	BOTTOM WIDTH	REQ'D SURFACE WIDTH	WETTED PERIMETER(ft)	AREA(sq.ft.)	HYD.RAD.	SLOPE	MANNING'S n	VEL.(ft/sec)	FLOW(cfs)	FLOW(gpm)
2	2	1.000	2.000	6.00	6.472	4.000	0.618	0.001500	0.013	3.2208	12.8832	5781.98

FLOW IN PIPE AT 10-YR STORM

DIA.(in)	DEPTH(in)	ANG	PERIMETER(ft)	AREA(sq.ft.)	HYD.RAD.	SLOPE	MANNING'S n	VEL.(ft/sec)	FLOW(cfs)	FLOW(gpm)	i 10yr	C	Max. Area s.f.
4	4	360.0000	1.0472	0.0873	0.0833	0.020000	0.01	4.02	0.35	157.45	2.1	0.85	8561.39
6	6	360.0000	1.5708	0.1963	0.1250	0.010000	0.01	3.73	0.73	328.25	2.1	0.85	17848.67
8	8	360.0000	2.0944	0.3491	0.1667	0.004000	0.01	2.85	1.00	447.10	2.1	0.85	24311.17
10	10	360.0000	2.6180	0.5454	0.2083	0.003000	0.01	2.87	1.56	702.05	2.1	0.85	38173.60
12	12	360.0000	3.1416	0.7854	0.2500	0.002000	0.01	2.64	2.08	932.12	2.1	0.85	50683.60
15	15	360.0000	3.9270	1.2272	0.3125	0.002000	0.01	3.07	3.77	1690.04	2.1	0.85	91895.48

19-097 Pre-Construction Model 10-2-19

Type IA 24-hr 2 Year Rainfall=2.50"

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Summary for Subcatchment 3S: 19-097 Phase 3

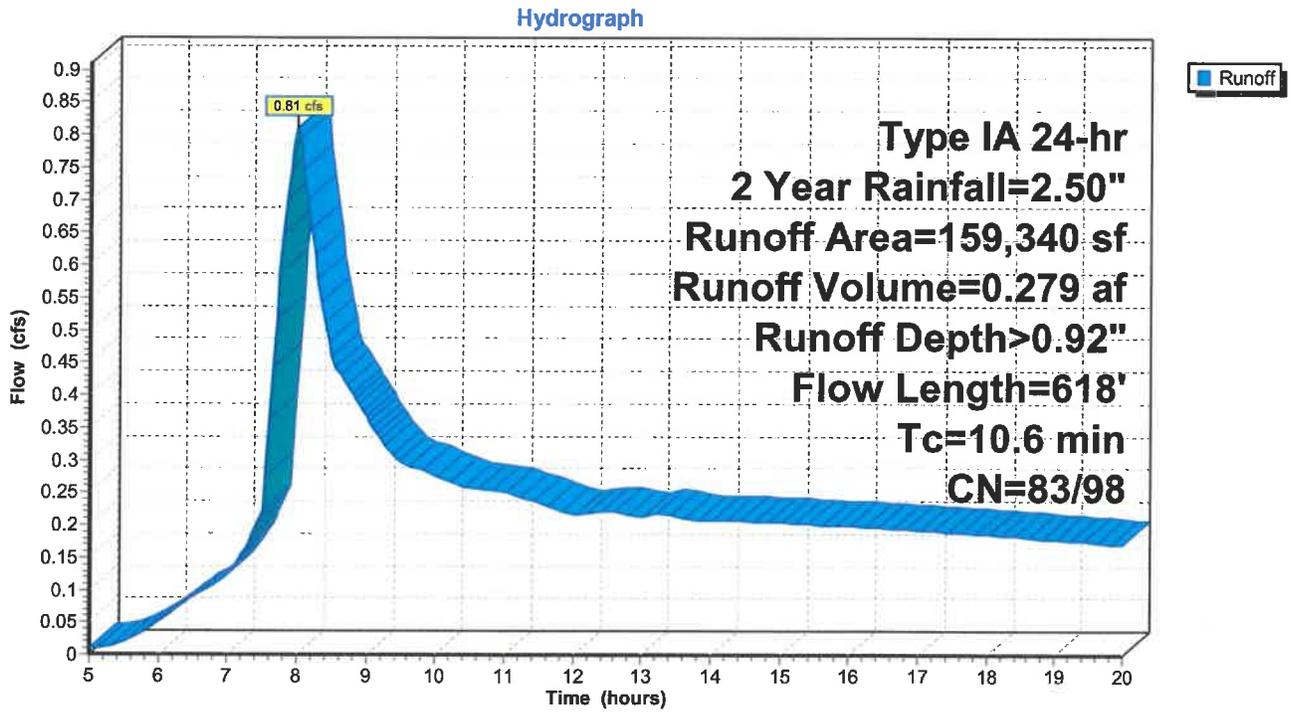
Runoff = 0.81 cfs @ 8.01 hrs, Volume= 0.279 af, Depth> 0.92"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type IA 24-hr 2 Year Rainfall=2.50"

Area (sf)	CN	Description
31,908	96	Gravel surface, HSG C
120,389	79	50-75% Grass cover, Fair, HSG C
5,044	98	Paved parking, HSG C
1,999	96	Gravel surface, HSG C
159,340	83	Weighted Average
154,296	83	96.83% Pervious Area
5,044	98	3.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	60	0.0098	0.77		Sheet Flow, south concrete Smooth surfaces n= 0.011 P2= 2.20"
1.9	122	0.0163	1.09		Sheet Flow, South Gravel Smooth surfaces n= 0.011 P2= 2.20"
1.0	98	0.0012	1.57	1.23	Pipe Channel, South Gravel Pipe 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
2.1	74	0.0073	0.60		Shallow Concentrated Flow, overland out of south gravel pipe Short Grass Pasture Kv= 7.0 fps
4.3	264	0.0104	1.02		Shallow Concentrated Flow, Around Bottom Bank of old fill to c Nearly Bare & Untilled Kv= 10.0 fps
10.6	618	Total			

Subcatchment 3S: 19-097 Phase 3



19-097 Pre-Construction Model 10-2-19

Type IA 24-hr 2 Year Rainfall=2.50"

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Events for Subcatchment 3S: 19-097 Phase 3

Event	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
2 Year	0.81	0.279	0.92

19-097 Pre-Construction Model 10-2-19

Type IA 24-hr 5 Year Rainfall=2.86"

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Summary for Subcatchment 3S: 19-097 Phase 3

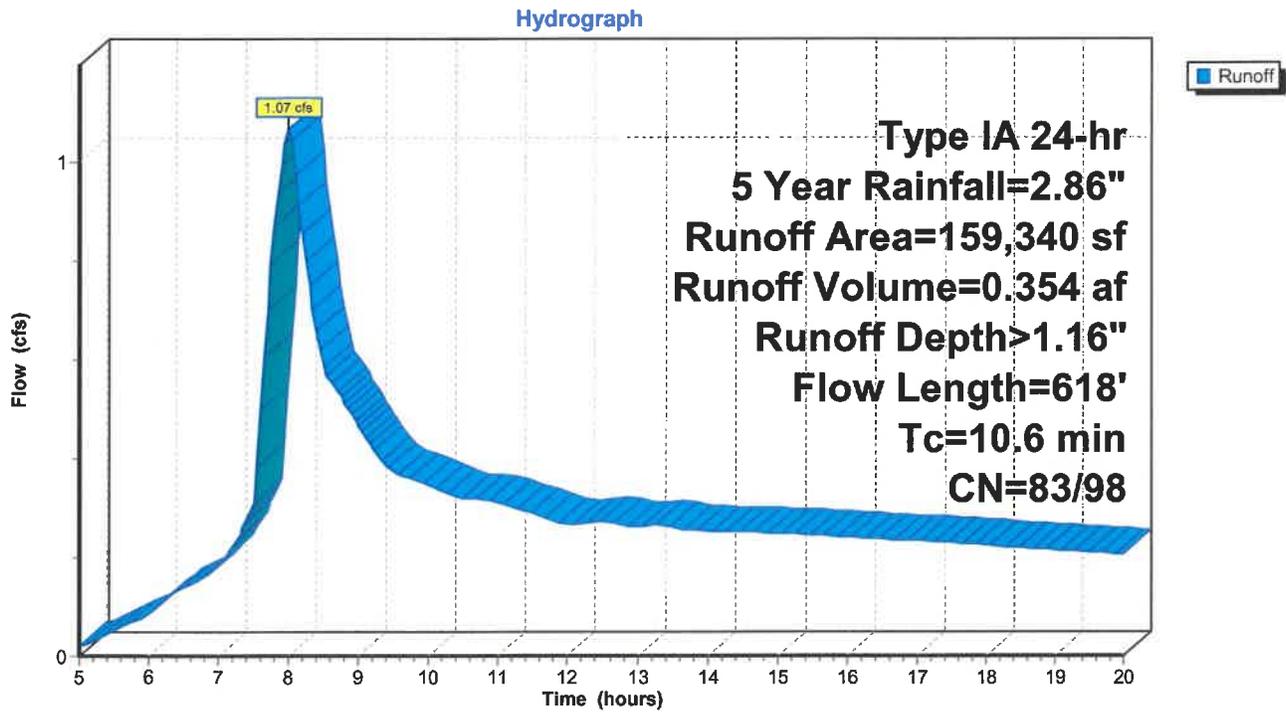
Runoff = 1.07 cfs @ 8.00 hrs, Volume= 0.354 af, Depth> 1.16"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 5 Year Rainfall=2.86"

Area (sf)	CN	Description
31,908	96	Gravel surface, HSG C
120,389	79	50-75% Grass cover, Fair, HSG C
5,044	98	Paved parking, HSG C
1,999	96	Gravel surface, HSG C
159,340	83	Weighted Average
154,296	83	96.83% Pervious Area
5,044	98	3.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	60	0.0098	0.77		Sheet Flow, south concrete Smooth surfaces n= 0.011 P2= 2.20"
1.9	122	0.0163	1.09		Sheet Flow, South Gravel Smooth surfaces n= 0.011 P2= 2.20"
1.0	98	0.0012	1.57	1.23	Pipe Channel, South Gravel Pipe 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
2.1	74	0.0073	0.60		Shallow Concentrated Flow, overland out of south gravel pipe Short Grass Pasture Kv= 7.0 fps
4.3	264	0.0104	1.02		Shallow Concentrated Flow, Around Bottom Bank of old fill to c Nearly Bare & Untilled Kv= 10.0 fps
10.6	618	Total			

Subcatchment 3S: 19-097 Phase 3



19-097 Pre-Construction Model 10-2-19

Type IA 24-hr 5 Year Rainfall=2.86"

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Events for Subcatchment 3S: 19-097 Phase 3

Event	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
5 Year	1.07	0.354	1.16

Summary for Subcatchment 3S: 19-097 Phase 3

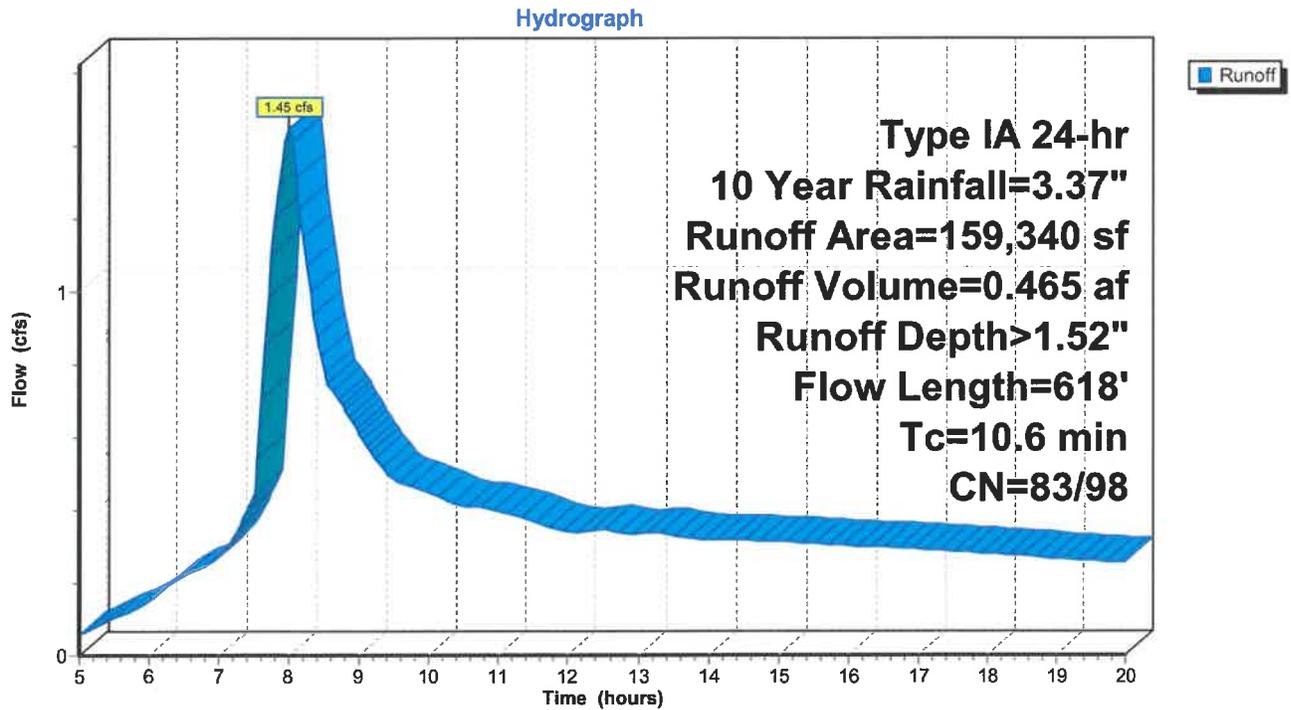
Runoff = 1.45 cfs @ 8.00 hrs, Volume= 0.465 af, Depth> 1.52"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type IA 24-hr 10 Year Rainfall=3.37"

Area (sf)	CN	Description
31,908	96	Gravel surface, HSG C
120,389	79	50-75% Grass cover, Fair, HSG C
5,044	98	Paved parking, HSG C
1,999	96	Gravel surface, HSG C
159,340	83	Weighted Average
154,296	83	96.83% Pervious Area
5,044	98	3.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	60	0.0098	0.77		Sheet Flow, south concrete Smooth surfaces n= 0.011 P2= 2.20"
1.9	122	0.0163	1.09		Sheet Flow, South Gravel Smooth surfaces n= 0.011 P2= 2.20"
1.0	98	0.0012	1.57	1.23	Pipe Channel, South Gravel Pipe 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
2.1	74	0.0073	0.60		Shallow Concentrated Flow, overland out of south gravel pipe Short Grass Pasture Kv= 7.0 fps
4.3	264	0.0104	1.02		Shallow Concentrated Flow, Around Bottom Bank of old fill to c Nearly Bare & Untilled Kv= 10.0 fps
10.6	618	Total			

Subcatchment 3S: 19-097 Phase 3



19-097 Pre-Construction Model 10-2-19

Type IA 24-hr 10 Year Rainfall=3.37"

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Events for Subcatchment 3S: 19-097 Phase 3

Event	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
10 Year	1.45	0.465	1.52

19-097 Pre-Construction Model 10-2-19

Type IA 24-hr 10 Year Rainfall=3.37"

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Events for Subcatchment 3S: 19-097 Phase 3

Event	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
10 Year	1.45	0.465	1.52

19-097 Pre-Construction Model 10-2-19

Type IA 24-hr 25 Year Rainfall=3.94"

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Summary for Subcatchment 3S: 19-097 Phase 3

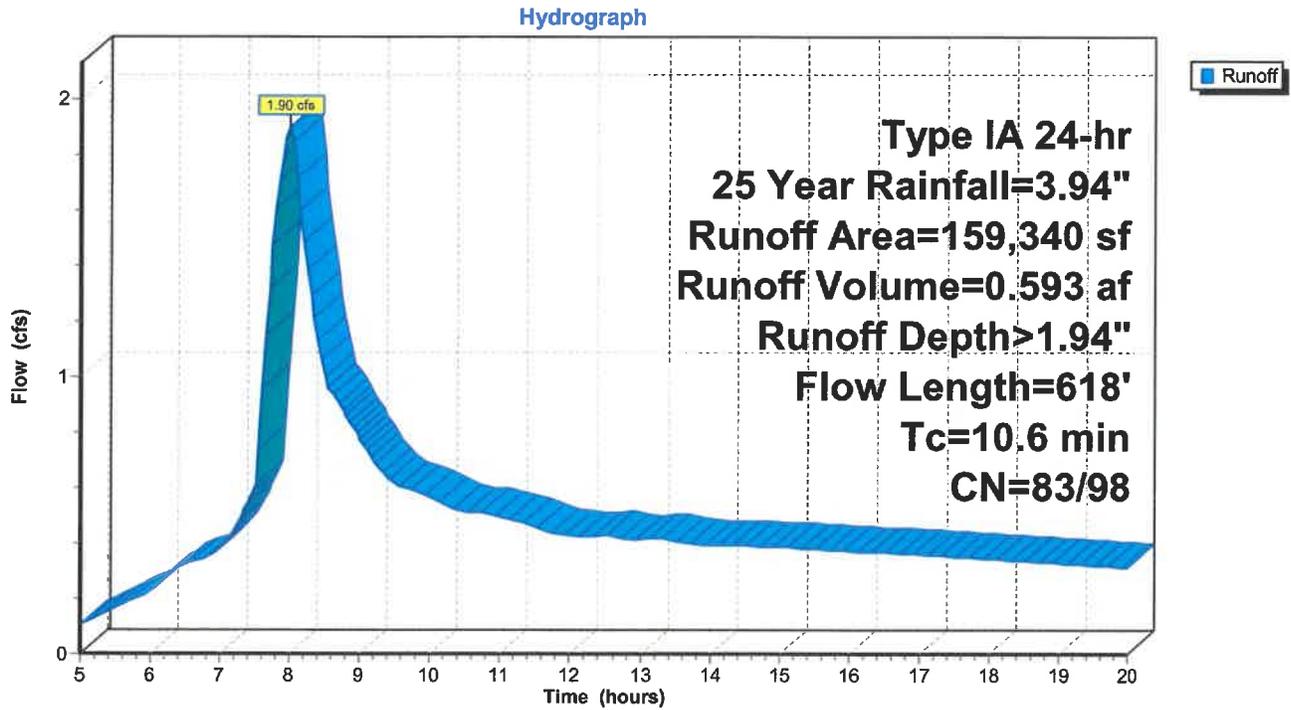
Runoff = 1.90 cfs @ 8.00 hrs, Volume= 0.593 af, Depth> 1.94"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25 Year Rainfall=3.94"

Area (sf)	CN	Description
31,908	96	Gravel surface, HSG C
120,389	79	50-75% Grass cover, Fair, HSG C
5,044	98	Paved parking, HSG C
1,999	96	Gravel surface, HSG C
159,340	83	Weighted Average
154,296	83	96.83% Pervious Area
5,044	98	3.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	60	0.0098	0.77		Sheet Flow, south concrete Smooth surfaces n= 0.011 P2= 2.20"
1.9	122	0.0163	1.09		Sheet Flow, South Gravel Smooth surfaces n= 0.011 P2= 2.20"
1.0	98	0.0012	1.57	1.23	Pipe Channel, South Gravel Pipe 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013
2.1	74	0.0073	0.60		Shallow Concentrated Flow, overland out of south gravel pipe Short Grass Pasture Kv= 7.0 fps
4.3	264	0.0104	1.02		Shallow Concentrated Flow, Around Bottom Bank of old fill to c Nearly Bare & Untilled Kv= 10.0 fps
10.6	618	Total			

Subcatchment 3S: 19-097 Phase 3



19-097 Pre-Construction Model 10-2-19

Type IA 24-hr 25 Year Rainfall=3.94"

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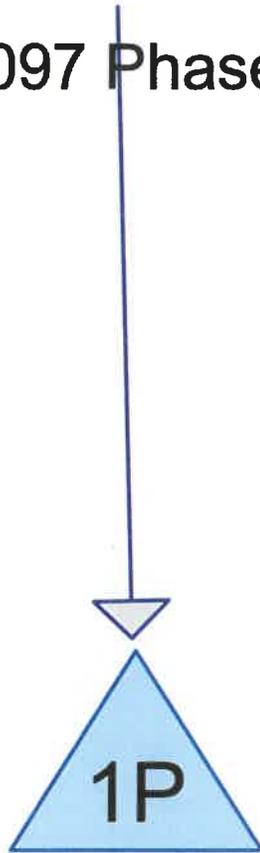
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Events for Subcatchment 3S: 19-097 Phase 3

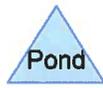
Event	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
25 Year	1.90	0.593	1.94



19-097 Phase 3



Detention Pond



19-097 Post-Construction Model 10-2-19

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Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
17,277	74	>75% Grass cover, Good, HSG C (3S)
141,250	96	Gravel surface, HSG C (3S)
5,049	98	Paved parking, HSG C (3S)
163,576	94	TOTAL AREA

19-097 Post-Construction Model 10-2-19

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Page 3

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
163,576	HSG C	3S
0	HSG D	
0	Other	
163,576		TOTAL AREA

19-097 Post-Construction Model 10-2-19

Type IA 24-hr 2 Year Rainfall=2.50"

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Page 4

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 3S: 19-097 Phase 3

Runoff Area=163,576 sf 3.09% Impervious Runoff Depth=1.88"
Flow Length=473' Tc=5.6 min CN=94/98 Runoff=1.813 cfs 25,651 cf

Pond 1P: Detention Pond

Peak Elev=220.06' Storage=3,240 cf Inflow=1.813 cfs 25,651 cf
Outflow=0.803 cfs 25,651 cf

Total Runoff Area = 163,576 sf Runoff Volume = 25,651 cf Average Runoff Depth = 1.88"
96.91% Pervious = 158,527 sf 3.09% Impervious = 5,049 sf

Summary for Subcatchment 3S: 19-097 Phase 3

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.813 cfs @ 7.94 hrs, Volume= 25,651 cf, Depth= 1.88"

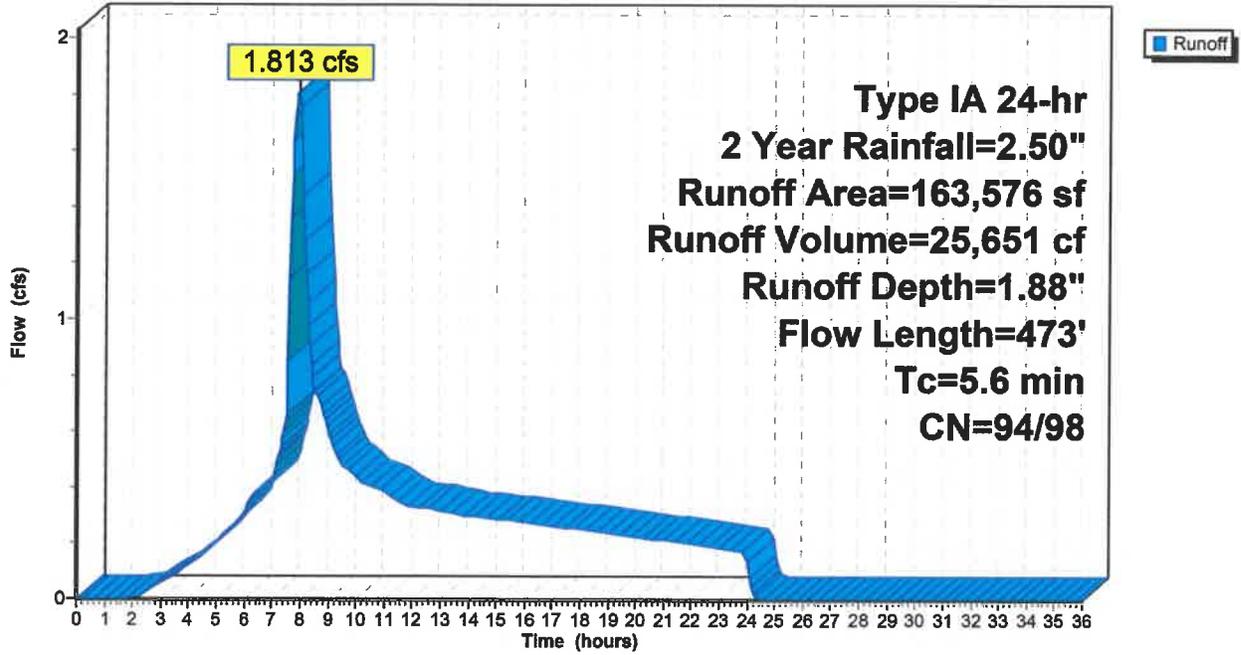
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 2 Year Rainfall=2.50"

Area (sf)	CN	Description
132,550	96	Gravel surface, HSG C
4,232	96	Gravel surface, HSG C
4,468	96	Gravel surface, HSG C
17,277	74	>75% Grass cover, Good, HSG C
5,049	98	Paved parking, HSG C
163,576	94	Weighted Average
158,527	94	96.91% Pervious Area
5,049	98	3.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	182	0.0050	0.79		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.50"
1.7	291	0.0040	2.85	0.99	Pipe Channel, East Pipe 8.000" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010
5.6	473	Total			

Subcatchment 3S: 19-097 Phase 3

Hydrograph



Summary for Pond 1P: Detention Pond

Inflow Area = 163,576 sf, 3.09% Impervious, Inflow Depth = 1.88" for 2 Year event
 Inflow = 1.813 cfs @ 7.94 hrs, Volume= 25,651 cf
 Outflow = 0.803 cfs @ 8.44 hrs, Volume= 25,651 cf, Atten= 56%, Lag= 30.0 min
 Primary = 0.803 cfs @ 8.44 hrs, Volume= 25,651 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 220.06' @ 8.44 hrs Surf.Area= 5,505 sf Storage= 3,240 cf

Plug-Flow detention time= 45.0 min calculated for 25,615 cf (100% of inflow)
 Center-of-Mass det. time= 45.3 min (771.2 - 725.8)

Volume	Invert	Avail.Storage	Storage Description
#1	219.40'	12,317 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

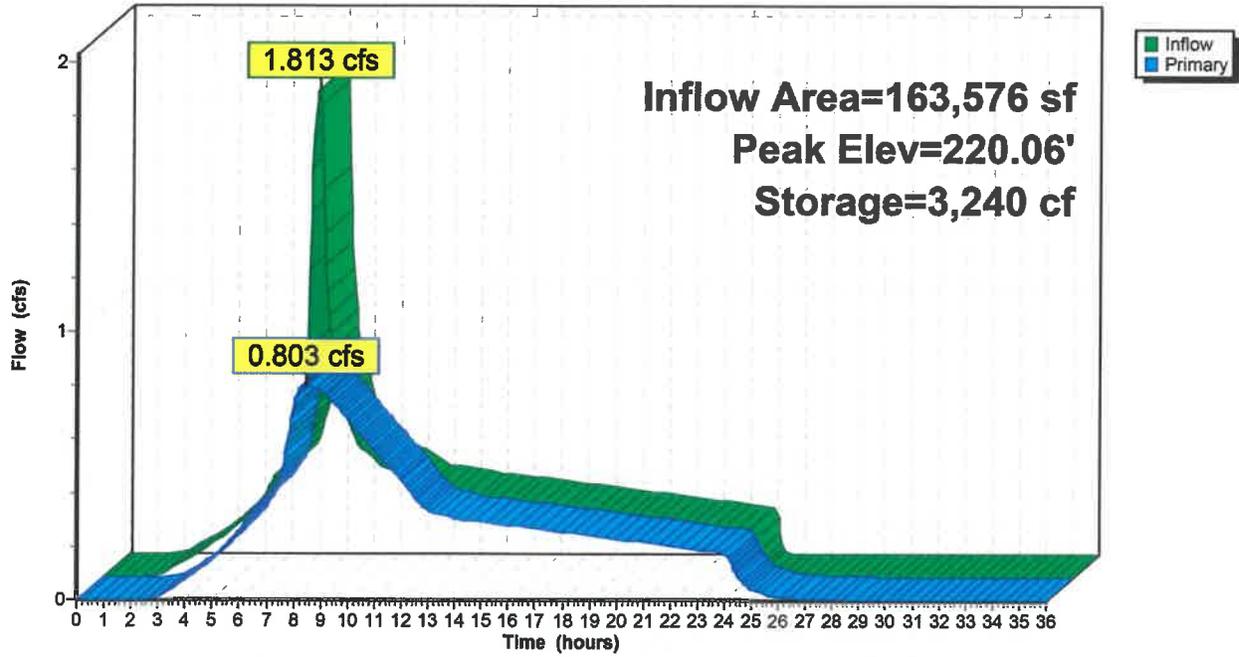
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
219.40	4,256	0	0
220.40	6,138	5,197	5,197
221.40	8,101	7,120	12,317

Device	Routing	Invert	Outlet Devices
#1	Primary	219.40'	6.125" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#2	Primary	220.06'	12.000" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.803 cfs @ 8.44 hrs HW=220.06' (Free Discharge)
 1=Orifice/Grate (Orifice Controls 0.803 cfs @ 3.92 fps)
 2=Orifice/Grate (Orifice Controls 0.000 cfs @ 0.21 fps)

Pond 1P: Detention Pond

Hydrograph



19-097 Post-Construction Model 10-2-19

Type IA 24-hr 5 Year Rainfall=2.86"

Prepared by Microsoft

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Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 3S: 19-097 Phase 3

Runoff Area=163,576 sf 3.09% Impervious Runoff Depth=2.23"
Flow Length=473' Tc=5.6 min CN=94/98 Runoff=2.151 cfs 30,366 cf

Pond 1P: Detention Pond

Peak Elev=220.20' Storage=4,015 cf Inflow=2.151 cfs 30,366 cf
Outflow=0.969 cfs 30,366 cf

Total Runoff Area = 163,576 sf Runoff Volume = 30,366 cf Average Runoff Depth = 2.23"
96.91% Pervious = 158,527 sf 3.09% Impervious = 5,049 sf

Summary for Subcatchment 3S: 19-097 Phase 3

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.151 cfs @ 7.93 hrs, Volume= 30,366 cf, Depth= 2.23"

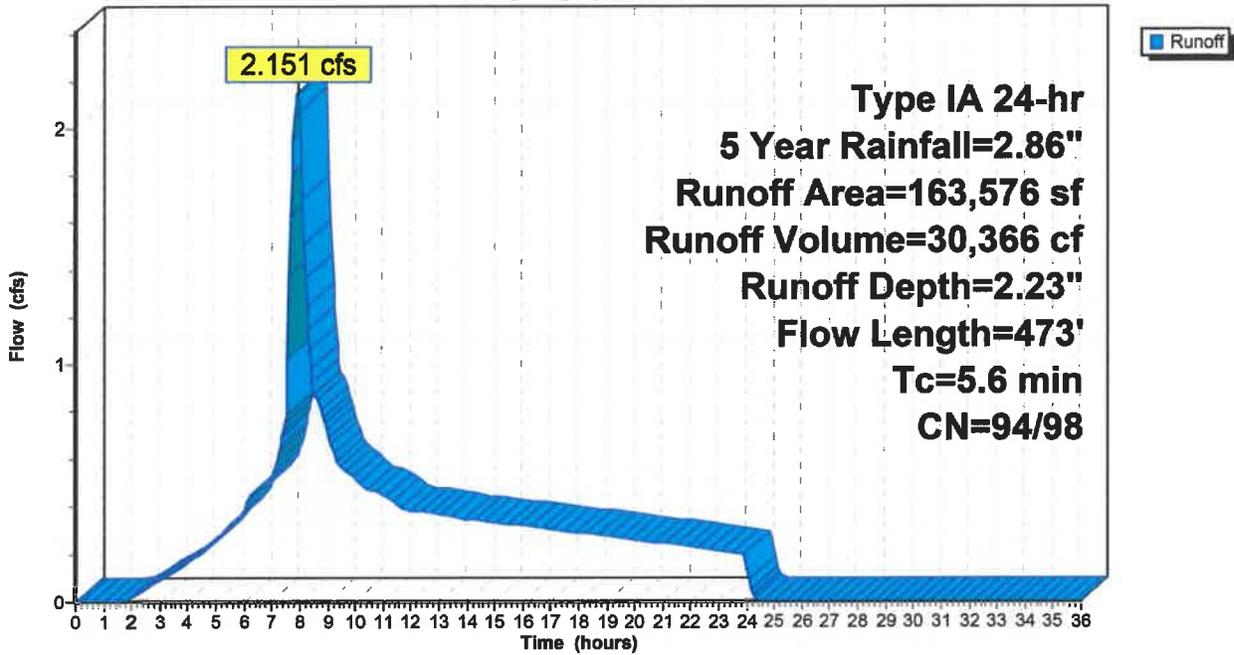
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 5 Year Rainfall=2.86"

Area (sf)	CN	Description
132,550	96	Gravel surface, HSG C
4,232	96	Gravel surface, HSG C
4,468	96	Gravel surface, HSG C
17,277	74	>75% Grass cover, Good, HSG C
5,049	98	Paved parking, HSG C
163,576	94	Weighted Average
158,527	94	96.91% Pervious Area
5,049	98	3.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	182	0.0050	0.79		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.50"
1.7	291	0.0040	2.85	0.99	Pipe Channel, East Pipe 8.000" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010
5.6	473	Total			

Subcatchment 3S: 19-097 Phase 3

Hydrograph



Summary for Pond 1P: Detention Pond

Inflow Area = 163,576 sf, 3.09% Impervious, Inflow Depth = 2.23" for 5 Year event
 Inflow = 2.151 cfs @ 7.93 hrs, Volume= 30,366 cf
 Outflow = 0.969 cfs @ 8.42 hrs, Volume= 30,366 cf, Atten= 55%, Lag= 29.1 min
 Primary = 0.969 cfs @ 8.42 hrs, Volume= 30,366 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 220.20' @ 8.42 hrs Surf.Area= 5,764 sf Storage= 4,015 cf

Plug-Flow detention time= 47.5 min calculated for 30,366 cf (100% of inflow)
 Center-of-Mass det. time= 47.3 min (765.1 - 717.8)

Volume	Invert	Avail.Storage	Storage Description
#1	219.40'	12,317 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
219.40	4,256	0	0
220.40	6,138	5,197	5,197
221.40	8,101	7,120	12,317

Device	Routing	Invert	Outlet Devices
#1	Primary	219.40'	6.125" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#2	Primary	220.06'	12.000" Vert. Orifice/Grate C= 0.600

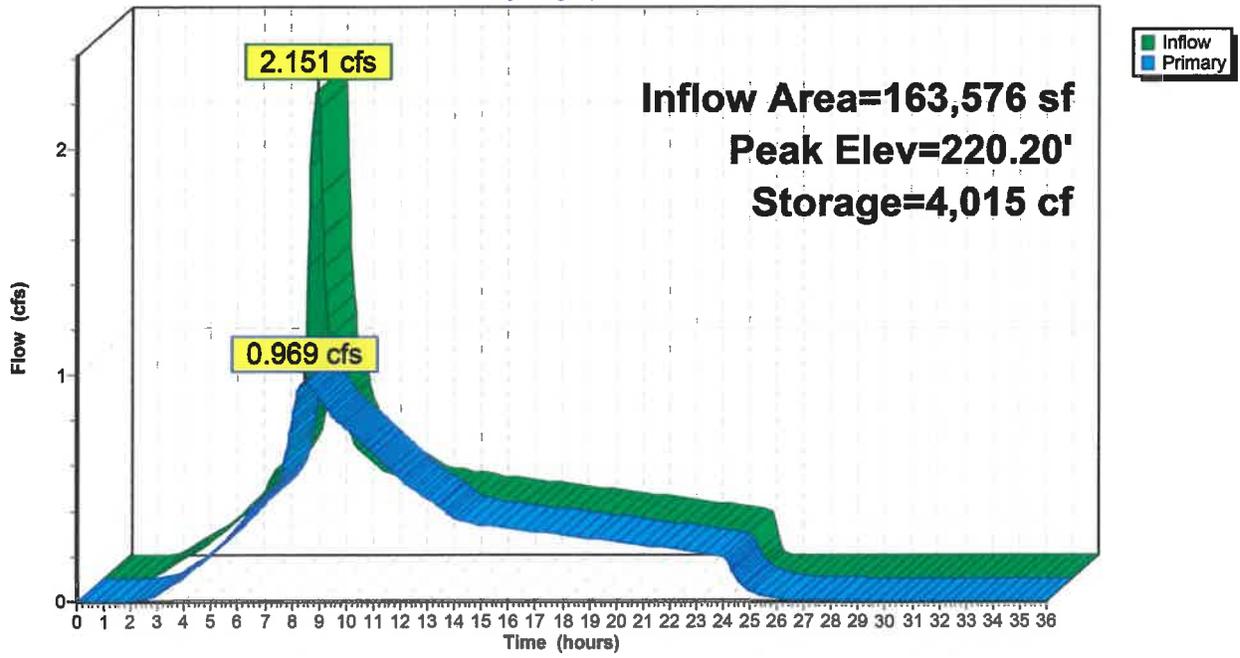
Primary OutFlow Max=0.968 cfs @ 8.42 hrs HW=220.20' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.882 cfs @ 4.31 fps)

2=Orifice/Grate (Orifice Controls 0.086 cfs @ 1.28 fps)

Pond 1P: Detention Pond

Hydrograph



19-097 Post-Construction Model 10-2-19

Type IA 24-hr 10 Year Rainfall=3.37"

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Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 3S: 19-097 Phase 3

Runoff Area=163,576 sf 3.09% Impervious Runoff Depth=2.72"
Flow Length=473' Tc=5.6 min CN=94/98 Runoff=2.630 cfs 37,108 cf

Pond 1P: Detention Pond

Peak Elev=220.36' Storage=4,970 cf Inflow=2.630 cfs 37,108 cf
Outflow=1.343 cfs 37,108 cf

Total Runoff Area = 163,576 sf Runoff Volume = 37,108 cf Average Runoff Depth = 2.72"
96.91% Pervious = 158,527 sf 3.09% Impervious = 5,049 sf

19-097 Post-Construction Model 10-2-19

Type IA 24-hr 10 Year Rainfall=3.37"

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Summary for Subcatchment 3S: 19-097 Phase 3

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.630 cfs @ 7.93 hrs, Volume= 37,108 cf, Depth= 2.72"

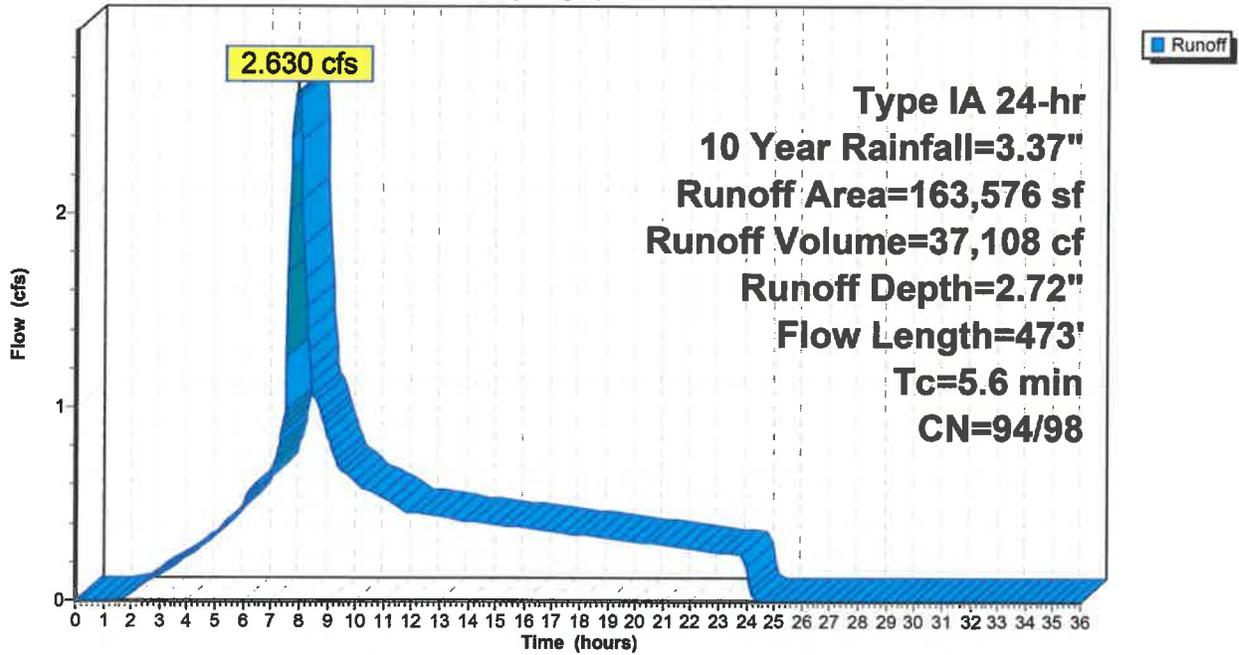
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 10 Year Rainfall=3.37"

Area (sf)	CN	Description
132,550	96	Gravel surface, HSG C
4,232	96	Gravel surface, HSG C
4,468	96	Gravel surface, HSG C
17,277	74	>75% Grass cover, Good, HSG C
5,049	98	Paved parking, HSG C
163,576	94	Weighted Average
158,527	94	96.91% Pervious Area
5,049	98	3.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	182	0.0050	0.79		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.50"
1.7	291	0.0040	2.85	0.99	Pipe Channel, East Pipe 8.000" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010
5.6	473	Total			

Subcatchment 3S: 19-097 Phase 3

Hydrograph



Summary for Pond 1P: Detention Pond

Inflow Area = 163,576 sf, 3.09% Impervious, Inflow Depth = 2.72" for 10 Year event
 Inflow = 2.630 cfs @ 7.93 hrs, Volume= 37,108 cf
 Outflow = 1.343 cfs @ 8.33 hrs, Volume= 37,108 cf, Atten= 49%, Lag= 23.9 min
 Primary = 1.343 cfs @ 8.33 hrs, Volume= 37,108 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 220.36' @ 8.33 hrs Surf.Area= 6,068 sf Storage= 4,970 cf

Plug-Flow detention time= 48.8 min calculated for 37,108 cf (100% of inflow)
 Center-of-Mass det. time= 48.6 min (757.3 - 708.7)

Volume	Invert	Avail.Storage	Storage Description
#1	219.40'	12,317 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
219.40	4,256	0	0
220.40	6,138	5,197	5,197
221.40	8,101	7,120	12,317

Device	Routing	Invert	Outlet Devices
#1	Primary	219.40'	6.125" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#2	Primary	220.06'	12.000" Vert. Orifice/Grate C= 0.600

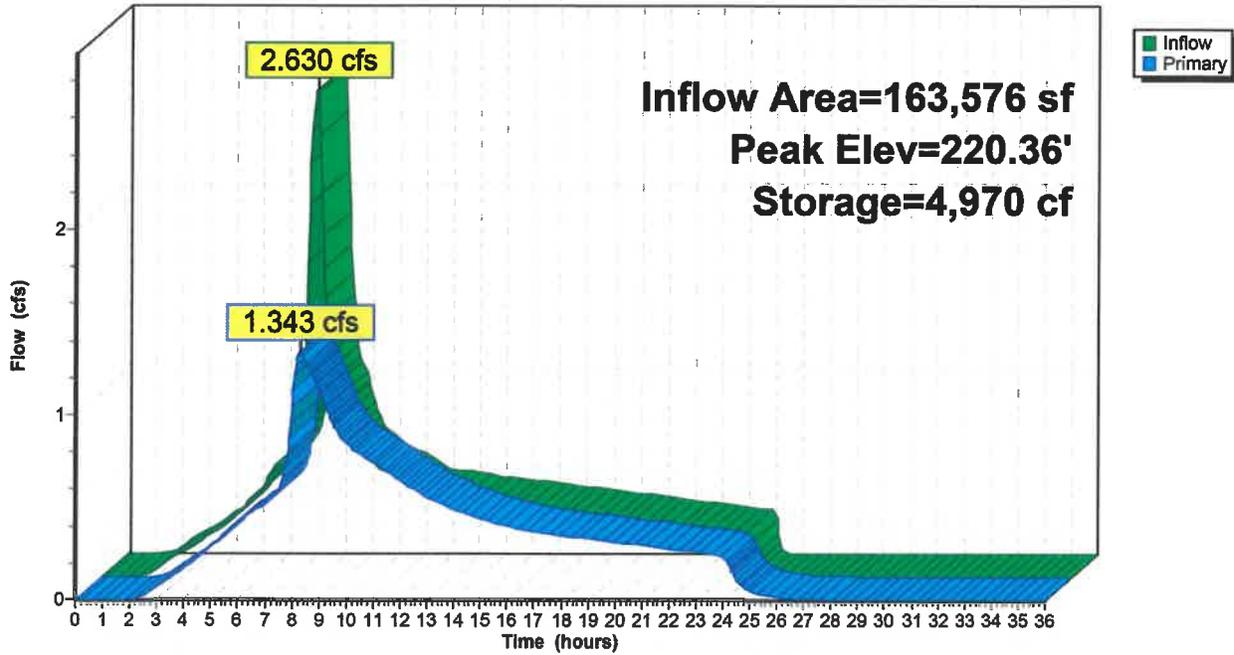
Primary OutFlow Max=1.342 cfs @ 8.33 hrs HW=220.36' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.967 cfs @ 4.72 fps)

2=Orifice/Grate (Orifice Controls 0.375 cfs @ 1.87 fps)

Pond 1P: Detention Pond

Hydrograph



19-097 Post-Construction Model 10-2-19

Type IA 24-hr 25 Year Rainfall=3.94"

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Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 3S: 19-097 Phase 3

Runoff Area=163,576 sf 3.09% Impervious Runoff Depth=3.28"
Flow Length=473' Tc=5.6 min CN=94/98 Runoff=3.164 cfs 44,699 cf

Pond 1P: Detention Pond

Peak Elev=220.52' Storage=5,922 cf Inflow=3.164 cfs 44,699 cf
Outflow=1.842 cfs 44,699 cf

Total Runoff Area = 163,576 sf Runoff Volume = 44,699 cf Average Runoff Depth = 3.28"
96.91% Pervious = 158,527 sf 3.09% Impervious = 5,049 sf

Summary for Subcatchment 3S: 19-097 Phase 3

[49] Hint: Tc<2dt may require smaller dt

Runoff = 3.164 cfs @ 7.92 hrs, Volume= 44,699 cf, Depth= 3.28"

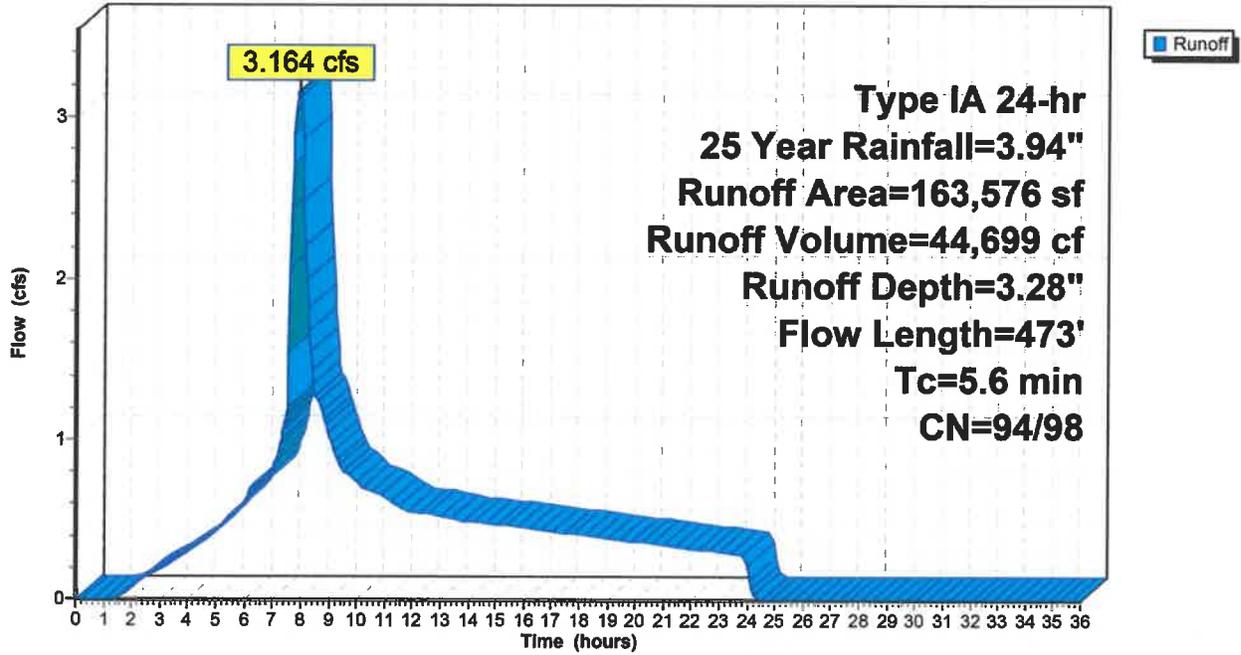
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25 Year Rainfall=3.94"

Area (sf)	CN	Description
132,550	96	Gravel surface, HSG C
4,232	96	Gravel surface, HSG C
4,468	96	Gravel surface, HSG C
17,277	74	>75% Grass cover, Good, HSG C
5,049	98	Paved parking, HSG C
163,576	94	Weighted Average
158,527	94	96.91% Pervious Area
5,049	98	3.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	182	0.0050	0.79		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.50"
1.7	291	0.0040	2.85	0.99	Pipe Channel, East Pipe 8.000" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010
5.6	473	Total			

Subcatchment 3S: 19-097 Phase 3

Hydrograph



19-097 Post-Construction Model 10-2-19

Type IA 24-hr 25 Year Rainfall=3.94"

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Summary for Pond 1P: Detention Pond

Inflow Area = 163,576 sf, 3.09% Impervious, Inflow Depth = 3.28" for 25 Year event
 Inflow = 3.164 cfs @ 7.92 hrs, Volume= 44,699 cf
 Outflow = 1.842 cfs @ 8.25 hrs, Volume= 44,699 cf, Atten= 42%, Lag= 19.3 min
 Primary = 1.842 cfs @ 8.25 hrs, Volume= 44,699 cf

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 220.52' @ 8.25 hrs Surf.Area= 6,366 sf Storage= 5,922 cf

Plug-Flow detention time= 49.5 min calculated for 44,637 cf (100% of inflow)
 Center-of-Mass det. time= 49.8 min (750.6 - 700.8)

Volume	Invert	Avail.Storage	Storage Description
#1	219.40'	12,317 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
219.40	4,256	0	0
220.40	6,138	5,197	5,197
221.40	8,101	7,120	12,317

Device	Routing	Invert	Outlet Devices
#1	Primary	219.40'	6.125" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#2	Primary	220.06'	12.000" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.842 cfs @ 8.25 hrs HW=220.52' (Free Discharge)

1=Orifice/Grate (Orifice Controls 1.041 cfs @ 5.09 fps)

2=Orifice/Grate (Orifice Controls 0.801 cfs @ 2.30 fps)

Pond 1P: Detention Pond

Hydrograph

