

**Planning Commission
Regular Meeting Agenda
Wednesday, February 1, 2023 at 7:00 p.m.**

**Lowell Fire Department
389 N Pioneer St
Lowell, OR 97452**

Members of the public are encouraged to provide comment or testimony through the following:

- Joining by phone, tablet, or personal computer. For details, click on the event at www.ci.lowell.or.us.
- In writing, by using the drop box at Lowell City Hall, 107 East Third Street,
- Lowell, OR 97452.
- By email to: admin@ci.lowell.or.us.

Meeting Agenda

Call to Order/Roll Call/Pledge of Allegiance

Commissioners: Dragt ___ Kintzley ___ Hall___ Pickett___ George___

Approval of Agenda

Approval of Minutes

Old Business

1. Consider 45-day extension request from applicant H&H Lowell LLC regarding land use applications 2022-01, 2022-04, and 2022-06. – Discussion possible action
 - a. Staff report – Henry Hearley, City Planner
 - b. Motion to accept (or deny) the extension request and to set a date to resume consideration of the land use applications.

If the Planning Commission grants the extension request, then consideration of items 2, 3, and 4 under old business will be postponed until a later hearing date set by the Planning Commission, and the record and comment period will remain open until then.

2. Resume consideration of land use application #2022-01, “Dollar General zone change application - Assessor’s Map 19-01-11-33, Tax Lot 06502,” continued from November 16, 2022 hearing – Discussion/ Possible action
 - a. The public hearing is now open at ___ (state time)
 - b. Staff report – Henry Hearley, City Planner
 - c. Public comment
 - d. The public hearing is now closed at ___ (state time)
 - e. Planning Commission decision on Land Use file #2022-01

The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or other accommodations for persons with disabilities must be made at least 48 hours before the meeting to City Clerk Sam Dragt at 541-937-2157.

3. Resume consideration of land use application #2022-04, "Partition application for Dollar General/Multiple-Family Development - Assessor's Map 19-01-11-33, Tax Lot 06502," continued from November 16, 2022 hearing. – Discussion/ Possible action
 - a. The public hearing is now open at ____ (state time)
 - b. Staff report – Henry Hearley, City Planner
 - c. Public comment
 - d. The public hearing is now closed at ____ (state time)
 - e. Planning Commission decision on Land Use file #2022-04

4. Resume consideration of land use application #2022-06, "Site plan review for Dollar General retail store and townhome multi-family residential development - Assessor's Map 19-01-11-33, Tax Lot 06502," continued from November 16, 2022 hearing. – Discussion/ Possible action
 - a. The public hearing is now open at ____ (state time)
 - b. Staff report – Henry Hearley, City Planner
 - c. Public comment
 - d. The public hearing is now closed at ____ (state time)
 - e. Planning Commission decision on Land Use file #2022-06

New Business

Other Business

Adjourn

City of Lowell

Waiver/Extension of Statutory Timeline Requirements

Instructions: to waive or extend statutory timeline requirements applicable to your land use application, please complete all applicable fields, sign, date and return this form to the address listed below.

I, MARK M. KECHWIE, as owner or authorized representative of the

Applicant (Print Name)

property known as Assessor's Map and Tax Lot(s): **1901113306502 (known as Land Use Files # LU 2022 01, LU 2022 04, and LU 2022 06)**, and is the subject of this request, do hereby voluntarily **(Check only One Box)**:

Waive the statutory timeline requirements of ORS 215.427, including any rights to a refund as provided for by ORS 215.427(8), and the associated right to seek mandamus as provided for by ORS 215.429(1). Furthermore, I hereby voluntarily request that the City delay processing the application until

_____ **(6 months maximum)**

Extend the statutory timeline requirements of ORS 215.427 for 45 days in

order to submit additional information. Furthermore, I do hereby voluntarily request the City delay processing of the application for the same number of days as above.

I understand:

1. By signing this form, I am making an irrevocable decision to extend/waive the statutory timeline requirements of ORS 215.427. I may not change my mind later except by withdrawing my application, filing a new application and paying the associated fees.
2. This statutory timeline waiver/extension is given freely and without compulsion by the City and is not conditioned on any City action apart from granting the delay requested for processing the application, if any.
3. I may request that the City resume processing my application at any time and understand that any such request has no effect on the statutory timeline extension/waiver granted.
4. The City of Lowell is not obligated to accept this statutory timeline waiver/extension request.

Mark M. Kechwie

Signature (Authorized Representative/Owner)

1-23-23

Date Signed

Return to: City of Lowell

P.O. Box 490, Lowell, OR, 97452

Staff Report
Dollar General Zone Change Application
LU 2022 01
November 9, 2022

Date of Completeness: August 12, 2022

120th Day: February 8, 2023

Notice sent: October 7, 2022

Property Owner: H & H Lowell, LLC.

Applicant: H & H Lowell, LLC.

Applicant Representative: Rajan Mehta, Oregon Architecture

1. **PROPOSAL.** The Planning Commission is being asked to review and render a recommendation on a zone change for Map and Tax Lot 19-01-11-13-06502. The entire property is presently zoned Public Lands (PL). The applicant is requesting a portion of the property be rezoned from PL to General Commercial (C-1) and the other portion be rezoned from PL to Multiple-Family Residential (R-3). The applicant is also seeking concurrent approval of two related applications, in addition to the requested zone change. The applicant is requesting site plan review for a Dollar General retail store and a townhome multiple-family residential development and a partition of the property into two separate parcels. However, this staff report only deals with the zone change request. If the zone change is denied, the remaining two applications cannot be approved, as the applicant's intended uses do not conform to the zoning of the property.

BACKGROUND. The subject property is not located within the confines of the Regulating Plan which governs development within the Downtown District of Lowell. The subject property was formerly an Oregon State Parks and Recreation Department (OPRD) property. Seeing no need or use for the property OPDR sold off the property as excess. The subject property was "Parcel 2" of Land Partition Plat No. 2009-P2377 recorded for a past partition which split off the subject property from the northern portion. The land uses occurring to the north are governmental/public. Land uses occurring to the east and south of the site are residential.

The City has received a couple public comments on the proposal. See **Attachment B** for all public comments.

2. **PLANNING COMMISSION DISCRETION REQUIRED.**

- Amendments criteria requires the Planning Commission to divine the "intent" of the Comprehensive Plan. Approval criteria #1 for an amendment is located in Section 9.253(b)(1). This approval standard requires that the proposed amendment, in this case a zone change, not conflict with the "intent" of the Comprehensive Plan.
 - Staff require Planning Commission's discretion on several policies and provisions of the Comprehensive Plan as to whether the proposed amendment

- does not conflict with the intent of the Comprehensive Plan.
- Staff provide a reasonable interpretation as to how to divine the “intent” of the Comprehensive Plan backed by case law. The proposed interpretation for Planning Commission’s consideration is found under the “staff response” on Page 3 of this report.
- Planning Commission is only making a recommendation for approval or denial City Council will make the final determination.
- Specific policies or areas of the Comprehensive Plan that Planning Commission must address are highlighted in **green throughout this staff report**. Staff require the Planning Commission’s discretion and direction on these areas. Planning Commission’s deliberation should be geared towards addressing each of these areas.
- Staff conclude a recommendation for the proposed zone change can either be denied or approved based on Planning Commission’s discretion. See Page 25-26 for formal conclusion. Again, City Council will make the final decision.
- The applicant’s responses to the zone change (amendment) criteria are contained in **Attachment A**.

3. AGENCY REFERRAL COMMENTS.

Lane County Transportation: Per the County Engineer, Lane County Transportation has waived the requirement for a traffic impact analysis (TIA) for the zone change. This is because Lane County has already required a traffic impact analysis for the proposed development.

4. APPROVAL CRITERIA. Section 9.523 Amendments; Lowell Comprehensive Plan; and Applicable Oregon Statewide Planning Goals.

5. STAFF REVIEW OF APPLICABLE APPROVAL CRITERIA.

Section 9.253 Amendments. It is recognized that this Code or the Lowell Comprehensive Plan may require amendments to adjust changing circumstances. An amendment may require either, a Legislative Decision as defined in Section 9.303(b) or a Quasi-judicial decision as defined in Section 9.303(c) depending upon whether the amendment applies to the Code in general or to a specific property.

Amendments may be either Text Amendments or Map Amendments. The City utilizes a single land use map as a Comprehensive Plan and a Zoning Districts Map, therefore a zone change map amendment is an amendment to the Lowell Comprehensive Plan and the Lowell Development Code.

(a) Amendment Application. An Amendment to this Code may be initiated by the City Council, the Planning Commission or by application of a property owner. A request by a property owner for an amendment shall be accomplished by filing an application with the City using forms prescribed in Section 9.203.

Staff Response: The subject property under consideration for zone change is Map and Tax Lot 19-01-11-33-06502. According to the Regional Land Information Database (RLID), the subject property is owned by BJ Real Properties, LLC. The applicant has indicated to staff this is the incorrect property owner name. The property owner name provided to staff by the applicant is H & H Lowell, LLC. Regardless, the property owner has submitted an application to the City of Lowell requesting a zone change for the subject property. The application was submitted by David Sommer, of Oregon Architecture, on April 16, 2022. A letter of authorization from Bradley V. Hoffman of H & H Northwest Companies, LLC granted Oregon Architecture to act in their interest and serve as the agent on this application. Staff find this criterion met.

(b) Decision Criteria. All requests for an amendment to the text of map of this Code or the Comprehensive Plan may be permitted upon authorization by the City Council in accordance with the following findings:

(1) The proposed amendment does not conflict with the intent of the Comprehensive Plan.

Applicant response: The Comprehensive Plan is meant to be a living document that reflects the goals and aspirations of the citizens of Lowell. One of the City’s goals is to maintain its viability as an attractive residential community with a local employment base. This particular parcel had been owned by the Forest Service and was once intended to be a location for an office for the Service. Times change, the US federal government’s plans changed, and the Forest Service found it no longer needed this parcel to accomplish their mission.

Staff Response: This approval criterion is worded a bit differently than other similar types of approval criteria that call for “consistency” or “compliance” with the comprehensive plan or “consistency” or “compliance” with the policies of the comprehensive plan. This approval criterion requires that the proposed change “not conflict with” the “intent” of the comprehensive plan. The Planning Commission’s interpretation of what that provision means is entitled to deference. *Friends of Hood River Waterfront v. City of Hood River, 68 Or LUBA 459 (2013)*. Below is an interpretation of that provision that the city decision makers could adopt.

This provision does not simply require the council to review the comp plan policies and find that the proposed zone change does not conflict with each applicable policy. Rather, it requires a more comprehensive study of the comprehensive plan to discern what the “intent” of the comprehensive plan is, with regard to the subject proposal. This conclusion is consistent with the cases that hold that, even where a specific comprehensive plan policy may not constitute an independent applicable mandatory approval criterion, policies may provide relevant, necessary consideration that must be reviewed and balanced with other relevant plan provisions to demonstrate “consistency with applicable plan provisions.” *See Bothman v. City of Eugene, 51 Or LUBA 426 (2006); Save our Skyline v. City of Bend, 48 Or LUBA 192 (2004)*.

Staff agree with the applicant response to criterion #1. At its core, the purpose of Lowell’s

Comprehensive Plan is to provide guidelines for conservation and development of community resources and to promote public health, safety and general welfare of community residents. It is intended to ensure that the City's livability will be enhanced rather than weakened in the face of growth and change. Recognizing the Forest Service no longer needed the subject property, it was sold off and eventually purchased by the present property owner in hopes of redeveloping the property with commercial and residential uses. Consistent with the interpretation of approval criterion #1, above, staff turn to a review of relevant policies, goals and sections the Comprehensive Plan.

The applicant has not addressed any specific policy of the Comprehensive Plan in their written findings submitted with the application for zone change. The applicant's written narrative is included as **Attachment A**.

Section 9.932 Economy

(b) Industrial/Commercial Land

The City of Lowell has a designated area for light industrial activities in an Industrial Park. A portion of the land is occupied by manufacturing uses. The Lowell Industrial Park has full City services and there are two vacant tax lots totaling 3.45 acres available for businesses to locate there. The Industrial and Commercial Lands Assessment in Rural Lane County (June 2000) includes inventory information for these two lots.

Commercially zoned land is also available in Lowell, primarily to accommodate small, sole proprietor businesses common in the area. There are several vacant commercial sites available for new occupants or redevelopment.

Industries that meet the following criteria should be given the highest priority in regards to outreach and recruitment because they are considered to be the most likely candidates for a good fit with the Lowell area:

1. Small, clean, quiet companies. These offer a better fit and employment growth potential for Lowell, e.g. ten companies with 5 employees each rather than one company with 50 employees.
2. Employers that require skilled labor and provide family wage jobs.
3. Entrepreneurial in nature.
4. Cottage industries that meet the applicable code requirements.
5. Manufacture a product or provide a service that is exportable outside the Lowell/Dexter/Fall Creek area. These bring in money from outside the community to add to the local economy.
6. A business that will pull customers from outside the city.

Attachment A, Ordinance 244

TC-31

11/15/05

CITY OF LOWELL

COMPREHENSIVE PLAN 2005

7. Target commercial, industrial, and residential employers and developers—it takes all components to create the healthy economy that the area is seeking to build.

Staff Response: Section 9.932(b) says “commercially zoned land is also available in Lowell, primarily to accommodate small, sole proprietor businesses common in the area.” If the City’s intent, with respect to commercial uses, is to primarily accommodate small, sole proprietor businesses common in the area, then city decision makers must consider whether the proposed rezone from Public Lands to General Commercial to facilitate a Dollar General retail store conflicts with this intention. Further, if such a proposed commercial use could be considered an “industry,” Lowell sets forth several criteria for consideration when recruiting good commercial/industrial “fits” to the Lowell area. The highest priority on that list is small, clean and quite companies. According to the criteria, these companies offer a better fit and employment growth potential for Lowell.

****Planning Commission should also discuss and interpret if “commercial” is the same as “industry” in the context of criteria for recruiting industries to Lowell. If Planning Commission considers a “commercial use” to be separate from what is intended by “industrial” or “industries” then the ranking criteria section of the Comprehensive Plan should be not considered relevant to approval criterion #1.**

City decision makers must glean the intention of Section 9.932 to determine whether it conforms to approval criterion #1.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it’s found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it’s found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Section 9.939 Population & Economy Goals & Policies:

Policy 1: The City of Lowell shall strive for continual and substantial progress toward improving the quality of life for area residents including livability and economic prosperity.

Staff Response: City decision makers should consider if this policy does not conflict with the intent of the Comprehensive Plan. Does rezoning a vacant, public lands property to multiple-family residential and commercial use provide for continued and substantial progress towards the quality of life including livability and economic prosperity? A few points to consider:

- The rezone is being requested in order to permit a 12,480 square foot retail store and six multiple-family dwelling units;
- The proposed retail development has the ability to offer several new jobs within the Lowell area in the retail-service industry; and
- The proposed development will back up to existing residential dwellings.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it’s found not to conflict with the intent of the**

Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.

Policy 5: The City shall continue to actively encourage industrial and business developments that can help improve the economy of the Lowell area which are compatible with maintaining the area's environmental assets and the livability of the community.

Staff Response: City decision makers should consider if this policy does not conflict with the intent of the Comprehensive Plan. If the City were to approve the rezone would such an act actively encourage business developments that can help improve the economy of the Lowell area which are compatible with maintaining the area's environmental assets and the livability of the community? A few points to consider:

- The site is vacant and can be developed with commercial or residential uses if the zoning were not Public Lands.
- Does rezoning the property from Public Lands to General Commercial help improve the economy of the Lowell area?
- If rezoned to permit the proposed uses, are such uses compatible with the area's environmental assets and the livability of the community?

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Policy 7: The City recognizes the need to create a centralized downtown business district in Lowell and shall encourage new retail, office and service commercial developments to locate there.

Staff Response: Policy 7 gets at the City's desire to create a centralized downtown business district. This is evident in the city's recent adoption of a Downtown Master Plan and the presently underway amendments to the Lowell Development Code to fully implement the Downtown Master Plan. The subject property is located outside of the boundaries of the Downtown District. The Downtown District is defined as properties within the Regulating Plan as adopted in the Downtown Master Plan. Presently, Lowell does not have lands outside of the Downtown District that is zoned for commercial uses. This does not mean commercial uses cannot locate outside of the Downtown District, but it does mean that lands to accommodate commercial uses would have to be rezoned – hence the present proposal. Staff find it reasonable to conclude the City is striving to encourage new retail, office and service commercial developments to reside in the Downtown District by the fact that the City has adopted a Downtown Master Plan and is amending the Land Development Code to fully implement the Downtown Master Plan. Policy 7 does not state that new retail, office and service commercial developments shall locate in the Downtown District.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Policy 8: The City shall provide and maintain an adequate supply of land for commercial and industrial uses to support the Lowell economy.

Staff Response: The Comprehensive Plan contains some analysis of buildable lands inventory in Lowell; however, the data is likely antiquated as Lowell's Comprehensive Plan was last updated in 2005. According to **Figure 1**, Table 9.950 B of the Comprehensive Plan, there are 6.12 total acres zoned General Commercial and 3.72 acres zoned Downtown Commercial. Between the two zoning designations, the commercially zoned land represents 2.22% of the total land Lowell. The proposal being considered is to rezone a portion of the parcel from Public Lands (PL) to General Commercial (C-1). Furthermore, Figure 1 shows the City has 36.40 acres zoned PL, which represents 8.18% of the total land in Lowell.

**TABLE 9.950 B
2005 LAND USE SUMMARY**

	Land Area	2005 CITY LAND USE DISTRICTS					
		R-1	R-3	C-1	C-2	I-1	PL
TOTAL TAX LOTS	444.77	376.55	14.56	6.12	3.72	7.42	36.40
	100.00%	84.66%	3.27%	1.38%	0.84%	1.67%	8.18%
DEVELOPED LAND	174.30	125.86	2.43	5.74	2.51	2.07	35.69
	39.19%	72.21%	1.39%	3.29%	1.44%	1.19%	20.48%
% DISTRICT DEV		33.42%	16.69%	93.79%	67.47%	27.90%	98.05%
VACANT LAND	270.47	250.69	12.13	0.38	1.21	5.35	0.71
	60.81%	92.69%	4.48%	0.14%	0.45%	1.98%	0.26%
% DISTRICT VAC		66.58%	83.31%	6.21%	32.53%	72.10%	1.95%
STREETS	73.00						
	9.91%						
LAKE	219.00						
	29.72%						
TOTAL AREA	736.77						
	100.00%						
HOUSING 2003		Homes	Percent				
Single-Family		215	53.88%				
Manufactured Homes		134	33.58%				
MH in Parks		6	1.50%				
Multiple-Family		44	11.03%				
		399	100.00%				

Figure 1. Table 9.950 B of the Comprehensive Plan.

The take-away from Figure 1 is Lowell has an abundance of land zoned PL, with a large portion of that land being Lowell School District property and that perhaps some of the surplus PL zoned land should be rezoned and considered for redevelopment. A further discussion of the need of commercially zone land will ensue.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Section 9.953 Land Use Trends

(b) Commercial Land Use Trends

The City has 10 acres of commercially zoned land at this time. Only 1 acre is utilized for commercial use and the remainder of the 10 commercial acres is utilized for other uses. The commercial facilities are located within the two adjoining commercial Districts.

District C-1. The corridor commercial area contains only 0.38 acres of vacant land. Much of this area's 6.12 acres is devoted to other uses. The corridor commercial area should provide space for heavier commercial uses requiring on-site truck and auto access like lumber yards, equipment sales and light fabrication shops.

District C-2. The City's downtown core area has continued to decline due primarily to the realignment of through traffic off Main Street many years ago. The location and redevelopment of the downtown core area will become increasingly important as a pedestrian friendly center for those persons who do not drive automobiles by providing a walking environment for students, the elderly and those living in adjacent multi-family facilities. Convenient parking areas will be needed for residents and visitors that do not interfere with an integrated shopping environment

The City's commercial development has been diluted due to a limited population, fewer jobs that don't require travel to the Eugene/Springfield urban area, and the proximity of that urban area. The limited development that has occurred has been haphazard and allowed without any specific commercial area planning. Emphasis and increased planning for the Downtown Core Area will greatly improve the appearance and commercial vitality of the City over the long run.

Staff Response: The above excerpt is from the Land Use Trends of the Comprehensive Plan for commercial uses. The section related to District C-1 may be relevant because it says, "the corridor commercial area should provide space for heavier commercial uses requiring on-site truck and auto access like lumber yards, equipment sales and light fabrication shops." The "corridor commercial area" is not defined. It may or may not be the same as the Jasper-Lowell Corridor, which is defined. Staff believe there might be an argument that commercial uses that are auto-mobile dependent should locate on commercial lands that are not within the Downtown Core Area, of which the proposed rezone would facilitate.

Additionally, staff also find the last two sentences of the last paragraph particularly relevant. "The limited development that has occurred has been haphazard and allowed without any specific commercial area planning. Emphasis and increased planning for the Downtown

Core Area will greatly improve the appearance and commercial vitality of the City over the long run.” This is relevant because staff find there is an argument to be made that the City is now undertaking those specific planning efforts contemplated in the Comprehensive Plan to avoid haphazard commercial development. And those planning efforts are focused on the Downtown Core Area, not the subject property under consideration for rezone. The City’s adopted Downtown Master Plan contains the vision and goals of the City with respect to creating a Downtown that is vibrant and quaint. The city decision makers may find that rezoning a property from public lands to commercial for a commercial use that is located outside of the Downtown Core Area contrary to the City’s efforts to revive the Downtown Core Area of Lowell. Further, the last sentence seems to suggest if commercial planning efforts are to be undertaken, those efforts should focus on the Downtown Core Area for the long-term vitality of the City. City decision makers will have to interpret this section of the Comprehensive Plan to discern if the proposed rezone conflicts with the intent of the Comprehensive Plan. If city decision makers find this section of the Comprehensive Plan conflicts with the proposed rezone, then it may be cited as grounds for denial.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it’s found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it’s found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

(d) Public & Semi-Public Land Use Trends

Because of the wide differences in public and semi-public uses it is virtually impossible to define a land use district applicable to all. Therefore the Public Lands District applies to governmental or institutionally owned lands. All other public and semi-public uses may be located in any zoning district under specified conditions as a Permitted or Conditional Use.

One of the City’s largest public lands owners, the U.S. Forest Service, has indicated that they will divest themselves of much, if not all of their land within the next 10 years. This land will have to be considered for reutilization. The office complex on Pioneer Street is very close to the downtown commercial district and could be easily converted to commercial use as a business park. The undeveloped property adjoining Moss Street could be developed for multi-family use. The developed property adjoining Moss and 6th Streets should be considered for light industrial reuse with no more impacts than the present use has on neighboring residential properties. If such a use can not be found, redevelopment for residential uses or semi-public uses would be the City’s preference.

Staff Response: The above section related to Public and Semi-Public Land Uses may also be relevant to the proposed rezone. This section seems to envision the U.S. Forest Service divesting from much of its property within Lowell in the future. The second paragraph offers recommendations for how the lands, formerly owned by the U.S. Forest Service should be used and redeveloped upon being relinquished. One particular parcel that is noteworthy is the subject property itself – “the undeveloped property adjoining Moss Street *could* be developed for multi-family use.” The word “could” should be viewed as

nonmandatory language, but the intent is noteworthy. While it is not explicitly identified, staff find it reasonable to conclude that the “undeveloped property adjoining Moss Street,” is indeed the parcel under consideration for rezone. The parcel to the immediate north of the subject property is developed and has been taken over by Oregon Parks and Recreation Department (OPRD). The Comprehensive Plan says that the “undeveloped property adjoining Moss Street *could* be developed for multi-family use.” Further, if such a use cannot be found, the City’s preference would for the property to redevelop for residential uses or semi-public uses. Absent in this paragraph is any mention of the undeveloped property being redeveloped with commercial uses. It is true that the applicant is also proposing to develop a small portion of the property with six multiple-family dwelling units.

If city decision makers find a proposal to rezone the subject property from Public Lands to General Commercial, and a portion Multiple-Family Residential, conflicts with the intent of the Comprehensive Plan, then this section may be pointed to as a reason for denial. If not, then this section can be found to not conflict with the Comprehensive Plan.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it’s found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it’s found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Section 9.954 Projected Land Use Needs

(b) Commercial Land Use Needs

Comparative land use statistics for 33 Oregon cities show an average of 4.2% allocated for commercial use for cities with 2,500 to 10,000 population. Lowell's 2.2% is lower than this average and much of the commercially designated land is used for other purposes.

Commercial activities that provide goods and services to area residents are essential to a viable community. The location and distribution of commercial facilities is also crucial to the organizational structure of a community and can substantially influence the quality of life in a city.

District C-1. Additional corridor commercial uses that rely on the Jasper-Lowell Corridor such as heavier commercial uses requiring on-site truck and auto access that are not appropriate for the Downtown Core Area should be encouraged in this area.

District C-2. The redeveloped Downtown Core Area should be the central commercial focus of the community with the majority of the retail, office and service businesses locating there. A strong downtown area can serve as a focal point for the community, encourage business activity, increase service efficiency, and stimulate residential development in the adjacent areas. Adequate off-street and public parking should be provided and a pedestrian-oriented atmosphere should be encouraged.

Commercial centers can provide the structure for quality community development. Fragmented dispersed development does not contribute to a sense of community. Designating more commercial land than is needed along an arterial road will encourage fragmented random strip development at the expense of the community and should be avoided.

If the needed amount of commercial land is located wisely in commercial centers new commercial businesses will be attracted to the community and will have a higher potential for success because they are supported by the activities generated by adjacent businesses, and are more efficient and convenient for area residents. The City's land use plan and transportation systems are thereby supported and the quality of life in the community is enhanced.

(f) The Jasper-Lowell Corridor

The "Jasper-Lowell Road Corridor" includes the Causeway, Pioneer to North Shore, North Shore from Pioneer to Moss and Moss Street to the City Limits where it becomes Jasper-Lowell Road. It is the primary corridor of Lowell where most of the City's businesses and High School are located with direct access to the City Hall and Fire Station. Future improvements to the "Corridor" will be needed as growth occurs including curb & gutters, storm drainage, sidewalks and bicycle lanes. Further upgrading of the street system could include turn lanes, raised medians, traffic signals and controls, limited access management, parking and street lighting,

Staff Response: The Jasper-Lowell Corridor is defined on page TC-82 of the Comprehensive Plan.

(f) The Jasper-Lowell Corridor

The "Jasper-Lowell Road Corridor" includes the Causeway, Pioneer to North Shore, North Shore from Pioneer to Moss and Moss Street to the City Limits where it becomes Jasper-Lowell Road. It is the primary corridor of Lowell where most of the City's businesses and High School are located with direct access to the City Hall and Fire Station. Future improvements to the "Corridor" will be needed as growth occurs including curb & gutters, storm drainage, sidewalks and bicycle lanes. Further upgrading of the street system could include turn lanes, raised medians, traffic signals and controls, limited access management, parking and street lighting,

The Jasper-Lowell Corridor includes the Causeway, Pioneer to North Shore, North Shore from Pioneer to Moss Street and Moss Street to the City Limits where it becomes Jasper-Lowell Road. The subject property is located north of the Moss – North Shore Drive intersection and south of the city limits. Therefore, staff find it reasonable to conclude it is located within the defined Jasper-Lowell Corridor. Staff provide this section of the Comprehensive Plan because it helps in interpreting the intent of the Comprehensive Plan, which is approval criterion #1 for the proposed zone change. Staff will breakdown Section 9.954 into smaller, more manageable sizes for Planning Commission's consideration.

- The first paragraph (see below) of subsection (b) of Section 9.954 states that comparatively, Lowell is below the average in land allocated for commercial uses (it must be noted that the reference cited above refers to cities with populations between 2,500 and 10,000. Lowell's population is not within this parameter.) City decision makers might interpret this to mean Lowell is lacking in commercially zoned lands and cite this section as a reason to approve the zone change.

Comparative land use statistics for 33 Oregon cities show an average of 4.2% allocated for commercial use for cities with 2,500 to 10,000 population. Lowell's 2.2% is lower than this average and much of the commercially designated land is used for other purposes.

- The first sentence of the second paragraph (see below) of subsection (b) of Section 9.954 states that commercial activities that provide goods and services to area residents are essential to a viable community. However, in the second sentence it's further explained that the location and distribution of commercial facilities is also critical to the organizational structure of a community and can substantially influence the quality of life in a city. The first portion recognizes the vital role commercial activities provide to the residents of Lowell. The second portion sort of places a qualifier on the commercial activities to elaborate that not only is the existence of a commercial facility important to Lowell, *but also is the location and distribution of commercial facilities*. These factors are critical to the organizational structure of a community and can substantially influence the quality of life in a city.

Commercial activities that provide goods and services to area residents are essential to a viable community. The location and distribution of commercial facilities is also crucial to the organizational structure of a community and can substantially influence the quality of life in a city.

- The language provided for in the third paragraph (see below) seems to be cognizant to the fact that not all commercial uses that could potentially locate in Lowell will be well suited for location in the Downtown Core Area. In this instance, it's suggested (for the C-1 District Zone), additional corridor commercial uses that rely on the Jasper-Lowell Corridor such as heavier commercial uses requiring on-site truck and auto access that are not appropriate for the Downtown Core Area should be encouraged in this area. The zone change, if approved, would facilitate the development of a 12,480 square foot Dollar General retail store, of which would rely on the Jasper-Lowell Corridor and rely on truck and auto access; therefore, a location in the Downtown Core Area would not be appropriate. The subject property under consideration for zone change and development would be more appropriate.

District C-1. Additional corridor commercial uses that rely on the Jasper-Lowell Corridor such as heavier commercial uses requiring on-site truck and auto access that are not appropriate for the Downtown Core Area should be encouraged in this area.

- The fifth paragraph (see below) contains language that seems to contradict the previous paragraph. The fourth paragraph states “fragmented dispersed development does not contribute to a sense of community. Designation more commercial land than is needed along an arterial road will encourage fragmented random strip development at the expense of the community and should be avoided.” Whereas in the previous paragraph it was recognized that not all commercial facilities are well suited for the Downtown Core Area, paragraph five states fragmented commercial development should be avoided. There is an argument to be made that the proposal will result in a fragmented commercial development because there would be a 12,480 square foot retail store located outside of the areas presently zoned for commercial uses and placed adjacent to an arterial road and adjacent to current residential development.

Commercial centers can provide the structure for quality community development. Fragmented dispersed development does not contribute to a sense of community. Designating more commercial land than is needed along an arterial road will encourage fragmented random strip development at the expense of the community and should be avoided.

- The sixth and final paragraph states “if the needed amount of commercial land is located wisely in commercial centers, new commercial businesses will be

attracted to the community and will have a higher potential for success because they are supported by the activities generated by adjacent businesses and are more efficient and convenient for area residents.” If the property is rezoned to site a new retail store, it will be the only retail/commercial use in the immediate vicinity, so it’s questionable if the development will attract additional commercial facilities to the city because there would be no adjacent business activity, so one could reasonably conclude that it is not “located wisely.” It’s staff’s opinion that the six paragraph recognizes the importance of a Downtown Core Area, in that commercial facilities that locate there help spur adjacent economic activity in the Downtown Core Area, of which are more convenient and efficient to area residents. Lastly, the paragraph also addresses location and the amount of needed commercial land. Page TC 97 concludes there is, initially, no anticipated need for additional commercial land. What is needed is an emphasis on downtown development. As the City grows, it is anticipated that the need for additional commercial lands will increase to 4% of the City’s land use.

If the needed amount of commercial land is located wisely in commercial centers new commercial businesses will be attracted to the community and will have a higher potential for success because they are supported by the activities generated by adjacent businesses, and are more efficient and convenient for area residents. The City's land use plan and transportation systems are thereby supported and the quality of life in the community is enhanced.

(b) Commercial Acreage Needs

There is no anticipated need for additional designated commercial land initially. What is needed is an emphasis on downtown renewal to attract additional commercial uses to the Downtown Core Area to revitalize the community. As the City grows, it is anticipated that the need for additional commercial lands will increase to 4% of the City’s land use.

Attachment A, Ordinance 244

TC-97

11/15/05

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it’s found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it’s found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Section 9.959 Land Use Goals and Policies

General Land Use Policies:

Policy 1: Sufficient area shall be maintained for the balanced expansion of all major land uses.

Staff Response: As referenced above in Figure 1, the percentage of Lowell's land zoned for commercial uses is 2.2%. By contrast, the percentage zoned Public Lands is 8.18%. A reasonable explanation of the large difference is that in Lowell the Lowell School District occupies several large parcels that are zoned Public Lands for school and governmental uses.

City decision makers will have to decide if removing 1.53 acres of Public Lands and replacing it with 0.33 acres of multiple-family residential zoned lands and 1.18 acres of commercial zoned lands is providing sufficient area for the balanced expansion of all major land uses.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

General Residential Land Use Policies:

Policy 6: Residential districts shall be protected from heavy through traffic, conflicting land uses, or other encroachment that would impair a safe, quiet living environment.

Staff Response: The subject property is adjacent to existing low-and high-density residential uses located to the east and south. There is no through traffic expected because the subject property is adjacent to a Lane County arterial, in which access to the proposed site is proposed.

City decision makers will have to consider if a rezone to commercial and residential lands would impair a safe and quiet living environment in the adjacent residential districts.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Policy 7: The City shall encourage in-fill development on over-sized lots.

Staff Response: While the proposal is not a traditional in-fill development, the applicant is requesting the subject property be partitioned into three separate parcels – two of which are proposed to be rezoned to R-3 Multiple-Family. In a way, the applicant is in-filling the property in that it's a large enough property to accommodate the primary commercial use and accommodate two smaller residential parcels which will result in new multiple-family dwelling units.

City decision makers may see the proposal as a way to encourage in-fill development.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Commercial Land Use Policies:

Policy 11: The City shall encourage commercial facilities that will serve the needs of the community as well as those of the visiting tourists and recreational participants.

Staff Response: The City has a policy to “encourage” commercial facilities that will serve the needs of the community as well as those of the visiting tourist and recreational participants.

In the context of the proposal, the City could “encourage” commercial facilities by making more lands zoned for commercial uses and activities available for use.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Policy 12: The City shall ensure that future commercial development will not have a significant adverse effect on surrounding land uses.

Staff Response: The proposed zone change from Public Lands to General Commercial, and a small portion Multiple-Family, would spur a future commercial development in the form of a proposed 12,480 square foot Dollar General retail store. Policy 12 says “the City shall ensure that future commercial development will not have a significant adverse effect on surrounding land uses.” This does not mean that no adverse effects on surrounding land uses are permitted – it means that the adverse effects should not be “significant.”

City decision will have to make the distinction between what adverse effects on surrounding land uses are reasonable when considering the proposal and what adverse effects are considered significant and if so, what mitigation can be reasonably be implemented to address “significant adverse effects.” Staff note that practically all perceived adverse effects on surrounding land uses have the ability to be mitigated through site plan review, of which the applicant is concurrently going through.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it’s found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it’s found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

Policy 13: Vehicular and pedestrian efficiency and safety shall be required criteria for all commercial developments.

Staff Response: Lane County did not require a Traffic Impact Analysis (TIA) as a result of the proposed zone change. However, Lane County did require a TIA to be completed as part of the site plan review application. Vehicular and pedestrian safety improvements are proposed as part of the site plan review process. Such improvements include:

- 5’ sidewalk along frontage;
- 6’ planter strip;
- 6’ bike lane;
- Pedestrian crosswalk to west side of North Moss Street; and
- Two ADA parking spaces.

As described above, staff find it reasonable to conclude the proposed amendment does not conflict with this policy, however, Planning Commission may form their own conclusion. Staff note there are several minor unresolved issues with the TIA. Those issues will be discussed in the staff report for site plan review.

Section 9.972 Street System

(g) Downtown Core Area. The Downtown Core Area is centered on Main Street and extends from the High School to North Shore Drive, which is part of the Jasper-Lowell Corridor. This area has struggled to maintain itself over the years. Public and commercial businesses have located outside of the area causing fragmentation and dispersal of facilities that usually define a City. Renewal of the “Downtown” should begin immediately and should be continually improved as the community grows. The City should seek participation in a downtown planning program with the Oregon Downtown Development Association that can help provide the impetus needed to initiate this important effort. Pedestrian facilitates, pedestrian scaled street lighting, sidewalks, landscaping and ties to the Park can also provide an attractive identification feature for the Downtown Core Area of the corridor.

Staff Response: Staff present subsection (g) of Section 9.972 because of the reference to public and commercial businesses locating outside of the Downtown have caused fragmentation and dispersal of facilities that usually define a City. This may be relevant because the addition of a new commercial use may contribute to the fragmentation and dispersal of facilities that the City is attempting to avoid. Such a proposal, as the one being sought by the applicant, may be counter to the City's present efforts around revitalizing the Downtown Core Area.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

(2) There is a need for the proposed amendment to comply with changing conditions, new laws or to correct existing deficiencies.

Applicant Response: The Forest Service has greatly reduced its presence in Lowell in recent years, making this particular site surplus and no longer necessary for its ongoing operations. The proposed amendment seeks to modify the Comprehensive Pan to address this change in conditions. As the site is within the town proper, repurposing this site will help address statewide planning goals 3 and 4, which seek to preserve agricultural and forest lands. This site was not needed by any other governmental agency, so it was put up for sale by the Forest Service for redevelopment by private developers.

Staff Response: The applicant's reference to Goal 3 and 4 is not abundantly clear to staff. Notwithstanding, staff do agree that there is a changing of condition that has occurred at the subject property. Evident in the Comprehensive Plan is the Forest Service's plans to divest from its property interests in Lowell. Thus, the end result is vacant or under-development lands formerly owned by the Forest Service. Staff find a reasonable person could find that the changing condition is the fact the former Forest Service lands are no longer owned by the Forest Service in Lowell and are ready for redevelopment.

(3) The amendment will not have a significant adverse impact on adjacent properties.

Applicant Response: The properties on all sides of this parcel are developed, so adding low density development within the town proper will have no negative impact on adjacent properties. The parcel is located on the main north/south roadway through the town, which has a mix of residential and commercial uses. The mix of proposed development on this parcel will mirror surrounding development.

Staff Response: The applicant is correct in asserting that all sides of the property are developed. Located immediately north are OPRD offices. Located to the east and south are

residential uses To the west, across North Moss Street, are more residential uses. The applicant further asserts that adding “low-density development within the town property will have no negative impact on adjacent properties.” Staff do not necessarily agree with that statement. Staff believe there are negative impacts to adjacent properties. What’s important is how those impacts are mitigated. Negative impacts could include, but are not limited to light pollution, noise pollution, traffic, emissions, and heavy-duty trucks. However, these possible negative impacts are more attributable to the operational characteristics of the proposed retail store, and to a lesser extent, the proposed multiple-family development. This proposed zoned change in of itself will not cause the negative impacts to materialize, although the rezone makes the proposed development a possibility.

By virtue of following the site plan review criteria and implementation of conditions of approval, staff find it reasonable any potential adverse impacts on adjacent properties can be appropriately mitigated.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it’s found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it’s found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

(4) The amendment will not have a significant adverse impact on the air, water and land resources of the City

Applicant Response: The amendment will have no significant adverse impact on air, water and land resources of the City. This particular site in not impacted by wetlands or flood plains. It has a gentle slope, so it will not impact any areas with steep slopes. Delivery truck traffic is regulated to a few trips per week, and drivers are instructed to shut down their engines while the trucks are stationary.

Staff Response: The applicant has adequately addressed the stormwater management requirements for stormwater drainage. The Public Works Director indicated during the pre-application conference that the City has adequate water and sewer capacity to serve the property and the proposed development. To address air, the applicant has indicated truck drivers are trained to turn-off their engines when making delivers as a way to reduce emissions and noise pollution. The subject property is not known to contain wetlands.

Matt elaborated on the stormwater issue. Matt explained that the existing homes on the back-side of the subject property (adjacent to the eastern property line) drain to and through the subject property. This is something to keep in mind when addressing stormwater; a three-foot berm would not be permitted. Max commented the City had adequate water and sewer capacity for both proposed developments.

Figure 2. Notes from the Pre-Application Conference meeting from March 4, 2022. Highlighted portion cites evidence of the Public Works Director stating the City has adequate water and sewer capacity for the proposed development.

To address the land resources of the City part of the approval standards, staff again turn to relevant portions of the Comprehensive Plan. Staff are not certain how to quantify adverse impacts on land resources of the City. One method would be to look at the proposed rezone as taking away from one land designation and adding to the other and then comparing that result against the land use needs of Lowell, as set forth in the Comprehensive Plan. City decision makers are welcome to form their own conclusions and methodology for addressing this portion of the approval criterion.

(a) Residential Acreage Needs

Lowell will need approximately 73 additional gross acres of unconstrained buildable residential land to accommodate the additional housing needs of the community based upon the coordinated population projections to the year 2025 for a UGB change.

Section 9.985(a) above is taken from the Comprehensive Plan section dealing with projected growth needs. Specifically, subsection (a) relates to residential acreage needs. As stated in the Comprehensive Plan, by the year 2025, Lowell will need approximately 73 additional gross acres of unconstrained building residential land to accommodate housing needs of the community. It is unknown precisely if Lowell has that amount of land available within its current UGB. The Comprehensive Plan does recommend the City pursue a formal buildable lands analysis and housing needs analysis to answer those critical questions. The proposal to rezone a portion of the subject property R-3 multiple-family would decrease the need from 73 acres to 72.67 acres, based on the square footage of proposed Parcels 2 and 3. In other words, the proposal to rezone a small portion of the subject property to residential would aid the city's residential lands need.

The other question that needs to be addressed with respect to land resources of the City is whether the City needs additional commercially zoned land. The answer to this question is summed in in Section 9.985(b) of the Comprehensive Plan.

(b) Commercial Acreage Needs

There is no anticipated need for additional designated commercial land initially. What is needed is an emphasis on downtown renewal to attract additional commercial uses to the Downtown Core Area to revitalize the community. As the City grows, it is anticipated that the need for additional commercial lands will increase to 4% of the City's land use.

Section 9.985(b) states there is no anticipated need for additional designated commercial land initially. What is needed is an emphasis on downtown renewal to attract additional commercial uses to the Downtown Core Area to revitalize the community. As alluded to earlier in this staff report, the proposal to rezone a vacant parcel commercial and a portion residential, may be counter to the City's efforts revitalize the Downtown Core Area.

City decision makers will have to consider if rezoning of a vacant parcel from Public Lands to commercial and a portion residential, rises to an adverse impact on City resources.

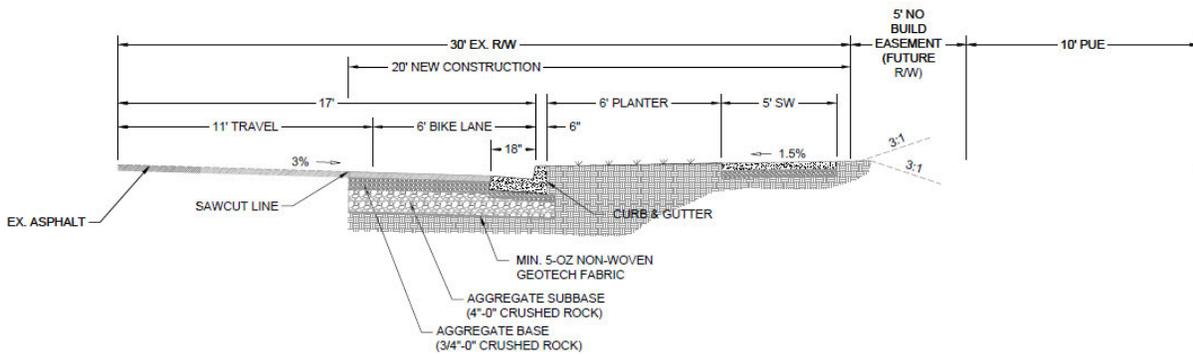
****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

(5) The amendment will not have a significant adverse impact on public facilities, transportation, the economy, and on the housing needs of the City.

Applicant Response: This parcel was declared surplus by the federal government and not needed for its mission to service the public within the town of Lowell and Lane County. The land was also not needed by the Town of Lowell or Lane County, so it was put up for sale and purchased by a private individual. It was subsequently put under contract to the Developers who are seeking a zone change and a lot partition.

This change will not have a significant adverse impact on public facilities or transportation within the town of Lowell or Lane County. It will, however, have a positive impact on both the economy of Lowell, where it will be providing additional employment opportunities, additional retail opportunities, 6 additional housing units in a very tight market, and additional property tax revenues which flow directly to City coffers.

Staff Response: Staff do not believe the proposed amendment will have a significant impact on public facilities. The Public Works Director has indicated the City has adequate water and sewer service to serve the subject property once fully built out. A complete drainage plan has been completed by the applicant's civil engineer that will address and treat stormwater drainage in a manner consistent with City standards and commonly acceptable methods in western Oregon. The applicant has completed a TIA to catalogue and mitigate any traffic impacts. Of particular interest to transportation is public and pedestrian safety. The applicant will be constructing half-street improvements along the frontage of North Moss Street and a pedestrian crossing from the property to the western side of North Moss Street. See Figures 3 and 4 below.



SECTION - N. MOSS STREET

SCALE: NTS CITY OF LOWELL COMMERCIAL STREET WITH 5' NO BUILD EASEMENT

Figure 3. Cross-section of proposed improvements along the frontage of North Moss Street.

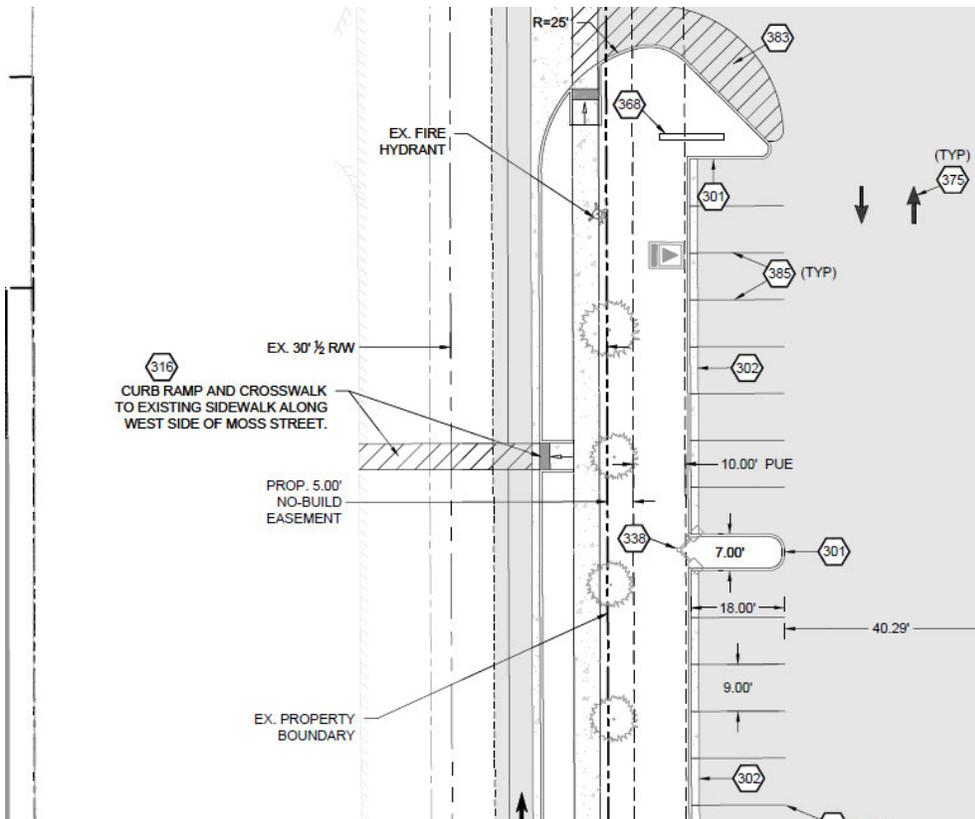


Figure 4. To address pedestrian safety, applicant will be constructing a pedestrian crosswalk across North Moss Street.

Based on the findings of the TIA, the applicant’s proposed public improvements to North Moss Street and the pedestrian improvements, staff find it’s reasonable to conclude that the amendment will not have a significant adverse impact on transportation. Staff now turn to

the issue of housing needs of the City.

As referenced earlier in this staff report, to meet its projected housing needs, Lowell will need more residential land and more dwelling units. The proposal to rezone the property from Public Lands to General Commercial and a small portion to Multiple-Family will aid to address that need that adding six additional dwelling units and 0.33-acres of residentially zone land.

****Planning Commission must tell staff whether the proposed amendment does not conflict with the intent of the Comprehensive Plan. If it's found not to conflict with the intent of the Comprehensive Plan, then this criterion is met. If it's found to conflict, then this criterion is not met, and the proposed amendment shall be denied.**

(6) The amendment does not conflict with the intent of Statewide Planning Goals.

Applicant Response: The amendment does not conflict with the intent of Statewide Planning Goals.

Staff Response: To address subsection 9.253(b)(6), staff introduce and discuss relevant Statewide Planning Goals.

Goal 1 Citizen Involvement: Goal 1 requires governments to ensure the public as adequate involvement in the land use decision making process. Further, Goal 1 requires that governments form a citizen advisory committee to review land use proposals. Most governments in Oregon for a Planning Commission which serves as the city's citizen involvement committee. Goal 1 is met and addressed through the public hearing process where the Planning Commission and City Council will each hold a public hearing to invite the public to review and provide testimony on the proposal. The two public hearing dates of November 16 (for Planning Commission) and December 6 (for City Council) have been duly noticed; DLCD notice of proposed amendment has also been submitted. Goal addressed.

Goal 2 Land Use Planning: Goal 2 requires each local government to have and follow a comprehensive land use plan and implementing regulations. A city must build their comprehensive plans on a factual basis and follow their plan when making decisions on appropriate zoning. Applying Goal 2 to the proposed rezone, this means that in rendering a decision, the decision must be made on a factual basis and be consistent with the Comprehensive Plan. The approval criteria for a rezone (or amendment) reference that the amendment must be consistent with the "intent of the Comprehensive Plan," thus the Comprehensive Plan is invoked as an applicable approval criterion for an amendment. Goal addressed.

Goals 3-8 are not applicable to the proposal.

Goal 9 Economic Development

Staff Response: The purpose of Goal 9 is to make sure cities have enough land to realize economic growth and development opportunities. Each city has a unique local vision for economic development. Goal 9 is implemented through the economic development portions of the Comprehensive Plan. Goal addressed.

Goal 10 Housing

Staff Response: The purpose of Goal 10 is for cities to provide an adequate buildable land supply to meet housing needs. The Comprehensive Plan quite plainly outlines that Lowell needs additional land zoned residential and additional dwelling units to meet its projected demand. The portion of the property to be rezoned R-3 will add six additional dwelling units to the city's housing stock, which furthers Goal 10 efforts to address housing needs. Goal addressed.

Goal 11 Public Facilities

Staff Response: Goal 11 requires cities to plan and develop public facilities in an timely, orderly and efficient manner. The proposal does not conflict with the intent of Goal 11 because the City has the ability to provide efficient and orderly extension of public facilities to the site, upon redevelopment. Goal addressed.

Goal 12 Transportation

Staff Response: The Transportation Planning Rule (TPR), Oregon Administrative Rule 660-012-000 was enacted to support Goal 12. Normally, when a rezone is proposed, TPR is triggered in that a traffic analysis must be completed to enumerate the "worst-case" scenario impacts on transportation facilities due to a rezone. Since North Moss Street is a Lane County facility, Lane County Transportation owns the jurisdiction of North Moss. Lane County has exercised its discretion to waive a formal TPR zone change analysis but has required a traffic study be completed as part of the site review and development process. The applicant's TIA and proposed vehicular and pedestrian improvements are consistent with Goal 12. Goal addressed.

Goals 13-19 are not applicable to the proposal.

6. CONCLUSION.

Staff believe there to be two main issues at play in which the Planning Commission must consider: preserve the Downtown Core Area and focus commercial development there or recognize that the Downtown Core Area is important, but not all commercial uses are suitable for location there but are suitable elsewhere in Lowell.

Both relate to conflicts with the intent of the Comprehensive Plan, which is approval criterion #1 for an amendment.

Staff believe there is a route for approval and a route for denial.

The first route staff present is denial.

If Planning Commissions fails to find the applicant has submitted evidence sufficient to find all applicable approval criteria met, then the application must be denied. All that Planning Commission must find is one approval criteria to not be met in order to recommend denial to the City Council. Since approval criterion #1 is that the proposed amendment does not conflict with the intent of the Comprehensive Plan, the Planning Commission can point to any policy, section or provision of the Comprehensive Plan to base for which conflict is found and thus base denial on failure to meet approval criterion #1. Staff believe there are several policies and sections of the Comprehensive Plan that could reasonably be cited as grounds for denial based on approval criterion #1.

The second route is approval.

If Planning Commission finds the intent of the Comprehensive Plan is to maintain the Downtown Core Area for commercial uses, but also recognizing, there is a need for commercially zoned outside of the Downtown Core Area. Especially those commercial uses that are auto-mobile dependent, and that the addition of six dwelling units furthers the City's residential needs, then the proposed rezone should be approved.

Staff do not recommend any conditions of approval. This is because when dealing with amendments, such as a zone change, there can be no approval criterion that is conditioned upon approval. All the approval criteria are either met and approval is granted or one or more of the approval criteria are not met and denial is warranted.

The prevail of concurrent applications, LU 2022 04 (Partition) and LU 2022 06 (Site Plan Review), depend on whether the proposed rezone is successful. If the proposed rezone is denied, all concurrent applications should also be denied. This is because the proposed site plan review and partition are dependent on the applicant obtaining the appropriate zoning for how the applicant intends to develop the property. Staff note that the proposed partition could still be partitioned to the applicant's request, but the zoning would remain PL and the uses that could locate on the subject property would need to conform to Section 9.441(b).

If Planning Commission provide staff direction on a recommendation for a decision, staff

can revise the staff responses that reflect that recommendation to place in front of the City Council for consideration. The Planning Commission is on only making a recommendation for approval or denial. The City Council will make the final decision for approval or denial.

7. ATTACHMENTS

Attachment A: Applicant's application for zone change

Attachment B: Public comments



(541) 772-4372

132 WEST MAIN STREET, SUITE 101

MEDFORD, OREGON 97501

www.oregonarchitecture.biz

June 16, 2022

NARRATIVE:

The Contract owners of Tax Lot 1901113306502 are seeking to change the town of Lowell's General Use Plan for this site from public lands to commercial and residential use, and a zone change from PL (Public Lands) to C-1 (General Commercial) and R-3 (Multi-Family Residential) through the amendment process of the Comprehensive Plan.

Several years ago the Forest Service decided this parcel was excess property and no longer needed for the mission of the Service, and so sold it through a duly authorized procedure. The Contract Purchasers are seeking to subdivide this parcel into three separate lots, to rezone each lot appropriate to its use and to develop a tri-plex on each residential lot and a 12,480 square foot Dollar General on the commercial lot.

SECTION 9.253 AMENDMENT OF THE COMPREHENSIVE PLAN

DECISION CRITERIA

1. The proposed amendment does not conflict with the intent of the Comprehensive Plan.

RESPONSE: The Comprehensive Plan is meant to be a living document that reflects the goals and aspirations of the citizens of Lowell. One of the City's Goals is to maintain its viability as an attractive residential community with a local employment base. This particular parcel had been owned by the Forest Service and was once intended to be a location for an office for the Service. Times change, the US federal government's plans changed and the Forest Service found it no longer needed this parcel to accomplish their mission.

The Developer that plans to develop the parcel will meet the City's Goal as an attractive residential community with a local employment base. The Developer is proposing to construct 6 new dwelling units and a 12,500 square foot retail store. The store will employ 16 local residents through a combination of shifts.

2. There is a need for the proposed amendment to comply with changing conditions, new laws or to correct deficiencies.

RESPONSE: The Forest Service has greatly reduced its presence in Lowell in recent years, making this particular site surplus and no longer necessary for its ongoing operations. The proposed amendment seeks to modify the Comprehensive Plan to address this change in conditions. As this site is within the town proper, repurposing this site will help address statewide planning goals 3 and 4, which seek to preserve agricultural and forest lands.

This particular site was not needed by any other governmental agency, so it was put up for sale by the Forest Service for redevelopment by private developers.

3. *The amendment will not have a significant adverse impact on adjacent properties.*

RESPONSE: The properties on all sides of this parcel are developed, so adding low density development within the town proper will have no negative impact on adjacent properties. The parcel is located on the main north/south roadway through the town, which has a mix of residential and commercial uses. The mix of proposed development on this parcel will mirror surrounding development.

Further, this development will provide additional retail opportunities in the town for everyday necessities. That will reduce the need to drive to Eugene or Springfield to shop for those necessities.

4. *The amendment will not have a significant adverse impact on the air, water and land resources of the City.*

RESPONSE: The amendment will have no significant adverse impact on the air, water and land resources of the City. This particular site is not impacted by wetlands or flood plains. It has a gentle slope, so it will not impact any areas with steep slopes. Delivery truck traffic is regulated to a few trips per week, and drivers are instructed to shut down their engines while the trucks are stationary.

5. *The amendment will not have a significant adverse impact on public facilities, transportation, the economy, and the housing needs of the City.*

RESPONSE: This parcel was declared surplus by the federal government and not needed for its mission to service the public within the town of Lowell and Lane County. The land was also not needed either by the Town of Lowell or Lane County, so it was put up for sale and purchased by a private individual. It was subsequently put under contract to the Developers who are seeking a zone change and a lot partition.

This change will not have a significant adverse impact on public facilities or transportation within the town of Lowell or Lane County. It will, however, have a positive impact on both the economy of Lowell, where it will be providing additional employment opportunities, additional retail opportunities, 6 additional housing units in a very tight market, and additional property tax revenues which flow directly into the City coffers.

6. The amendment does not conflict with the intent of Statewide Planning Goals.

RESPONSE

Dear City Council,

Over the past several years Lowell has been taking great strides towards creating a community that holds to its small town feel and at the same time polishing itself into the jewel that we all know Lowell is. In 2017, Lowell developed a Strategic Plan that encompasses ideas such as “Positively plan, develop, and coordinate economic and population growth consistent with community values” and a Mission stating “A historical rural city surrounded by nature’s beauty on the north side of Dexter Lake where all people are valued, encouraged, and appreciated for their diversity. We desire to maintain the rural and historical character of the city, while striving to be a city where people want to live, work, and enjoy the outdoors...”. Based on this Strategic Plan, the city, along with community members and stakeholders, developed a Downtown Master Plan with a vision that states “A quaint downtown with a central park, multi-story mixed use buildings, a variety of homes, and wide sidewalks connecting to Dexter Lake’s recreational opportunities.” The Downtown Master Plan reflects what the residents of Lowell desire for their community. Your decision to rezone the lot in question should consider the overall direction Lowell, and its residents wish to go. Below are just a few highlights of corporate Dollar General:

- Their headquarters are in Tennessee
- Their annual sales exceed \$34B
- The CEO earns \$16 million per year
- The next 4 execs each earn over \$3 million per year
- In 2004 they opened a sourcing office in Hong Kong
- In 2021 CNN Business said “Dollar General has become a retail empire by building small stores in rural towns across America to attract mainly low-income shoppers.”

Do these characteristics ring true to our vision as a community?

I know the site Dollar General is currently looking at is outside of the Downtown Master Plan, however, their impact will impair future development in our downtown. Our ability to draw retail to Lowell will be greatly diminished, if not eliminated, and they will have a material impact on our local store, Bridge Town Market.

- In August of 2020 a local Denver station published an article titled “Dollar stores driving out local businesses in many small towns”.

Aside from the concerns above we also need to consider that Oregon is facing a housing crisis. Affordable housing in our state is mostly non-existent and if anyone has tried to buy or rent in Lowell this fact hits home. Our market locally is tough to get into. Dollar General’s placement of a few residences is a nice gesture; however, do we know where we stand with the future

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BY: 

housing needs in Lowell? What does eliminating 1.5 acres of prime residential real estate due to future housing within our existing Urban Growth Boundary? Expanding the Urban Growth Boundary might be an option, however, it is a very expensive option. Do we want to use our limited resources to expand the Urban Growth Boundary simply to allow Dollar General to build or do we want to use those resources for law enforcement or something else that benefits our community as a whole?

It does not seem logical to give up this lot to commercial until we know what our local housing needs are. And it is not logical to give up this lot to commercial only then to spend hard fought resources on expanding the Urban Growth Boundary instead of a service or services that benefits the whole, such as law enforcement.

In addition, the majority of our residents are in the Eugene/Springfield area at least once a week where the majority of our needs can be met. Dollar General does not offer something new to our community.

I can appreciate the decision placed before the planning commission here and whichever direction the City decides to go it will shape the future of Lowell.

Jimmy and Mindy Martini
149 W Main
Lowell, Oregon

Jeremy Caudle

From: AW [REDACTED] >
Sent: Wednesday, February 1, 2023 1:23 PM
To: Jeremy Caudle
Subject: Dollar General in Lowell

Hi Jeremy,

I am unable to be in the zoom or in person meeting tonight, but wanted to put some comments in regarding the rezoning proposal to accommodate a Dollar General to be built in Lowell.

Like many people have already voiced, larger box stores are not in alignment with Lowell's quaint, small town center plan. Just like a year or so ago, when Dollar General wanted to buy the lot near the school, I hope to see this be turned down again. Smaller, locally owned businesses would be amazing in Lowell, but not larger big box stores. In fact, as a health professional I am waiting to be able to open my private practice in Lowell and have had some discussions with people around this, but ultimately Lowell needs spaces for small businesses to help build our town center. Even though I would like to move my clinic to Lowell, there's no where for me to go, yet. My husband and I are starting to look at options of re-zoning part of our property to allow mixed use because we see there's so much potential here to really create a thriving little community center with small businesses. I am fully in support of letting Lowell grow into the best small town it can be, and investing in opportunities and spaces for people to have their businesses out in Lowell. However, the feeling of a quaint, small town will be completely squashed and cheapened by a Dollar General for many reasons:

-Not in alignment with current city plans of creating a small town center composed of small, locally owned businesses. The current plan (without the Dollar General) will make Lowell an even more desirable town to live in and bring resources and employment to our area. I've been really looking forward to seeing this new plan develop into reality, as I know many other community members are, too.

-Rezoning and allowing a Dollar General to come into our town could potentially monopolize the market, making it difficult for any current or potential future small businesses to thrive. In past meetings people have voiced concerns around Bridge Town being put out of business, and that is a possibility. Because a Dollar General is a larger, cheaper store it would make it difficult other small businesses to thrive in our small town. It may end up taking over the entire plan, not just augment the current Lowell town planning, but instead change it all together if we bring this big box store in.

-Concern around if increased traffic into our area will also increase crime given we already have concerns in our community around safety/theft. Especially considering the fact the lot being looked at to be rezoned is right in the middle of residential are. Having a small business among homes is one thing, but having a big box store among homes is another.

-At previous city council meeting people shared stories regarding messy, unkept parking lot and store. There was a truck driver who shared his experience delivering to these unkept Dollar General stores, and this really stands out in my memory. The idea of having a well kept Dollar General isn't appealing, so having an unkept store is certainly not appealing.

-Concern this will change the entire personality of the town. There aren't many businesses currently so to put one big box store, it will overwhelm and take over the feeling of the town.

-Concern that rezoning the property to fit a Dollar General's needs (or any big box store) will lead to decreased property values over time. Also concerned many of us daydreaming on how to invest more into the community will pull out of those plans and ideas if a Dollar General is put in because it will no longer be the town we want to invest in.

-Like with any project there will be other unforeseen consequences we can't predict. It's not looking likely there will be more positive than negative if many of us view this as a negative option to start with.

We must think about the big picture, what is best on a larger scale for development of Lowell into the shared vision of a nice community that we are all proud of and enjoy living in. This is not that path.

Thank you for your time.

Sincerely,

Alisha Wimberly-Menser & Graham Menser

Jeremy Caudle

From: Jasmine Brazill <[REDACTED]>
Sent: Sunday, January 29, 2023 10:27 PM
To: Jeremy Caudle
Subject: Not to Dollar General

Please do not sacrifice our carefully laid city plans for the scourge that is Dollar General. We have a market and we love it. Dollar General devalues property, pays its employees unfairly, and undermines beloved, established businesses.

Thank you,

Jasmine Brazill
156 Wetleau Drive

Jeremy Caudle

From: Joe Brazill <[REDACTED]>
Sent: Sunday, January 29, 2023 10:38 PM
To: Jeremy Caudle
Subject: Dollar General

Dear City Council,

I will not be able to attend the meeting this coming Wednesday February 1, 2023.
I am opposed to Dollar General opening a store here due to the following reasons:

They offer only low paying jobs.
They have a history of not taking care of their employees.
They will offer low prices in hopes of getting our local store to go out of business.
They offer primarily high calorie sugary foods —very limited healthy options.
They do not fit into the city plan that the citizens agreed upon.

Thank you for your time.

Joe Brazill
[REDACTED]
Sent from my iPhone

Jeremy Caudle

From: Alan Evans [REDACTED] >
Sent: Sunday, January 29, 2023 8:51 AM
To: Jeremy Caudle
Subject: Rezone for Dollar General

Lowell Planning Commission:

I am opposed to a rezone of land currently zoned for public use for the following reasons:

1. Lowell has adopted a downtown plan which is meant to encourage commercial development in the downtown. This proposal takes land zoned for public use outside of the downtown and converts most of it to commercial.
2. This proposal is not from Dollar General. It is from a developer for Dollar General. The developers intent is to get approval, build the store, lease it long term to Dollar General on a triple net lease and then sell it to an outside investor. This is their formula. Nothing wrong in principal but the effect is that the developer will build the absolutely cheapest building possible to control costs and wring the highest profit on the sale. All one has to do is to look at other towns to see how this plays out. Do we want a cheap metal 13,000 square foot building outside the downtown on one of our main entryways to the City?
3. Lowell fire is in an older undersized facility. If this site is rezoned, there will be no other viable options to relocate them in the future.
4. I believe that we should support local where possible. Bridgetown Market provides many of the same goods that the Dollar General will sell.
Do we need or want this? I think not.

Alan Evans
40198 Little Fall Creek Road
Fall Creek, OR 97438

January 29 2023

Lowell City Council
Re: Dollar General

I oppose having a Dollar General Store in the City of Lowell. I recommend that the permit request to build is denied

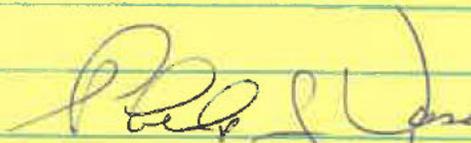
Barbara R Voss
41726 Highway 58
Lowell, Oregon 97452

Barbara R Voss 1-29-23

January 29 2023

Lowell City Council
Re: Dollar General

I oppose having a Dollar General Store in the city of Lowell. I recommend that the permit request to build is denied


Philip J. Voss
41726 Highway 58
Lowell, Oregon 97452

Jeremy Caudle

From: Jessi Osborn [REDACTED] >
Sent: Friday, January 27, 2023 7:09 PM
To: Jeremy Caudle
Subject: NO DOLLAR GENERAL

Dollar General is NOT a fit for the vision of Lowell. We are in support of Locally owned small businesses making their home in Lowell, not mainstream cheap franchises. PLEASE DO NOT APPROVE DOLLAR GENERAL ANYWHERE IN LOWELL!

Tim and Jessi Osborn-Homeowners @ 105 N Alder st. Lowell, OR 97452

Sent from my iPhone

Jeremy Caudle

From: Megan Moerdyk-Schauwecker <[REDACTED]>
Sent: Tuesday, January 17, 2023 9:52 PM
To: Jeremy Caudle
Subject: Comments on proposed zoning change

To whom it may concern:

I am a resident of Lowell and have seen the signs announcing the proposed zoning change for the property next to the State Parks Office and have subsequently looked up the proposed changes for this property. I agree that this property is no longer needed as public land. I further am in full agreement with the rezoning of a portion of this land as R3-Multifamily. This is consistent with current land use, as there are several other multifamily dwellings right across the street. It will also benefit Lowell and the region by providing additional, (hopefully) affordable housing within existing growth boundaries.

I am concerned about the rezoning of the remainder of the property as commercial in general and more specifically, about the proposed building of a Dollar General. While there is other commercial property in the same and adjoining blocks, none of that commercial use is retail. Retail brings a level of disruption (traffic, noise, light etc.) that is generally in excess of other non-industrial commercial uses. In addition, with proposed operating hours of 8am-10pm seven days a week, the disruptions will occur over a greater period of time than is seen from existing commercial sources in the immediate vicinity. That it occurs in an area with a number of multifamily dwellings (with more proposed), only increases my concern as this increases the number of dwelling units impacted. Both for the peace of the residence and the furtherance of the goal of creating a true downtown area (rather than random commercial sprawl), I would prefer to see commercial growth confined to the area around the periphery of Rolling Rock Park. In my opinion, this property falls too far out of that proposed downtown development area.

In regards to Dollar General in particular, I fail to see how bringing in this national chain will have a positive economic or social impact on the community. Its offerings will not be extensive enough to keep me (and I expect most people) from doing the bulk of their shopping in Eugene/Springfield but will be in direct competition with other locally owned businesses already in town. Furthermore, with the stated goal of opening stores in Dexter and Pleasant Hill in addition to Lowell, and with stores already present in Creswell and Oakridge, Dollar General seems to be more interested in a checklist than being invested in specific communities.

Thank you for your consideration.

Regards,

Megan Moerdyk-Schauwecker

HEARLEY Henry O

From: Jeremy Caudle <JCaudle@ci.lowell.or.us>
Sent: November 7, 2022 4:18 PM
To: HEARLEY Henry O; Matt Wadlington
Subject: FW: Follow up re drainage issues

Follow Up Flag: Follow up
Flag Status: Flagged

CAUTION: This email originated from outside the organization. DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

FYI

Comments from one of my city councilors regarding the Dollar General application.

His neighbors questioned him about drainage issues and wanted to pass along to me so that everyone is at least aware.

From: Tim Stratis [REDACTED] >
Sent: Wednesday, November 2, 2022 8:24 AM
To: Jeremy Caudle <JCaudle@ci.lowell.or.us>
Subject: Re: Follow up re drainage issues

Lol on the Tom Status! The houses on the West side of D Street have the back of their property adjacent to the new developments being proposed on the East side of Moss Street. They already have standing water and water issues on their property (development of Carol Street affected this). Their concern is that if the developments on Moss don't send their water to the West to Moss Street that the water issues on their property will worsen.

On Wed, Nov 2, 2022, 7:29 AM Jeremy Caudle <JCaudle@ci.lowell.or.us> wrote:

Hi Tom Status:

Could you email me a brief description of the drainage issues that you identified last night? This is regarding the Dollar General land use application.

I'll forward that to our planning and engineering team.

Thanks

JC

Jeremy B. Caudle

City Administrator

City of Lowell, OR

(541) 937-2157

www.ci.lowell.or.us

Dear Planning Commission,

Over the past several years Lowell has been taking great strides towards creating a community that holds to its small town feel and at the same time polishing itself into the jewel that we all know Lowell is. In 2017, Lowell developed a Strategic Plan that encompasses ideas such as “Positively plan, develop, and coordinate economic and population growth consistent with community values” and a Mission stating “A historical rural city surrounded by nature’s beauty on the north side of Dexter Lake where all people are valued, encouraged, and appreciated for their diversity. We desire to maintain the rural and historical character of the city, while striving to be a city where people want to live, work, and enjoy the outdoors...”. Based on this Strategic Plan, the city, along with community members and stakeholders, developed a Downtown Master Plan with a vision that states “A quaint downtown with a central park, multi-story mixed use buildings, a variety of homes, and wide sidewalks connecting to Dexter Lake’s recreational opportunities.” The Downtown Master Plan reflects what the residents of Lowell desire for their community. Your decision to rezone the lot in question should consider the overall direction Lowell, and its residents wish to go. Below are just a few highlights of corporate Dollar General:

- Their headquarters are in Tennessee
- Their annual sales exceed \$34B
- The CEO earns \$16 million per year
- The next 4 execs each earn over \$3 million per year
- In 2004 they opened a sourcing office in Hong Kong
- In 2021 CNN Business said “Dollar General has become a retail empire by building small stores in rural towns across America to attract mainly low-income shoppers.”

Do these characteristics ring true to our vision as a community?

I know the site Dollar General is currently looking at is outside of the Downtown Master Plan, however, their impact will impair future development in our downtown. Our ability to draw retail to Lowell will be greatly diminished, if not eliminated, and they will have a material impact on our local store, Bridge Town Market.

- In August of 2020 a local Denver station published an article titled “Dollar stores driving out local businesses in many small towns”.

Aside from the concerns above we also need to consider that Oregon is facing a housing crisis. Affordable housing in our state is mostly non-existent and if anyone has tried to buy or rent in Lowell this fact hits home. Our market locally is tough to get into. Dollar General’s placement of a few residences is a nice gesture; however, do we know where we stand with the future

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In addition, the majority of our residents are in the Eugene/Springfield area at least once a week where the majority of our needs can be met. Dollar General does not offer something new to our community.

I can appreciate the decision placed before the planning commission here and whichever direction the City decides to go it will shape the future of Lowell.

Jimmy and Mindy Martini
149 W Main
Lowell, Oregon

The City of Lowell
PO Box 490
Lowell, OR 97452

4/19/2022

RE: RE-ZONING of Forest Service lot
on N. Moss Street, Lowell, OR

To the Lowell City Council:

Yesterday a neighbor told me that you are considering Re-Zoning the lot on N. Moss St. lot owned by the Forest Service to enable someone to build a Dollar General Store on that lot. Said lot is in the center of houses and apartments. The Building that was Forest Service years ago now houses the Park facility for this part of the county. Additionally, there has been a larger number of cars and trucks using N. Moss St. Some is logging and some is from the new homes being built on the north edge of town and the Post Office n other towns being included into the Lowell Post Office. All of that has affected traffic. We have been seeing too many cars and pickups treating this street like a Race Track.

If that lot is going to be used, I would prefer to have more affordable housing built there. I have lived in this same place in Lowell since 1994. We watched the buildings on the east side of the street going up and turning a hillside into homes for a lot of people. Given the low volume of housing available in Lowell, Housing is a much better choice of use of that lot.



Marlys J. Bennett
601 N. Moss St.
[REDACTED]

RECEIVED
APR 19 2022
BY: [Signature]

City of Lowell
PO Box 490
107 E. 3rd St.
Lowell, Or. 97452
Attn: Jeremy Caudle
Re: General Store

April 19, 2022

To Whom it may concern;

We have resided in the City of Lowell since 2003. We own our home at 567 N. Moss Street. Prior to moving to Lowell, we lived in a rural section on the coast (outside of Reedsport, Oregon). Coming from a country area without local city services we especially appreciated living in the city limits with the benefits and atmosphere of country living. We especially appreciate the services of local businesses. It is wonderful to have the Bridgetown Market for grocery and fuel. We also appreciate having a local post office, restaurant and coffee shop. The services of local business make trips to the "city" less necessary. It is not only convenient but often saves us time, money and stress.

Since we are grateful for the services of the community businesses already located in Lowell, you would think we might also be in favor of a proposal for a General Store to be located the lot adjacent to the Forestry Building on Moss Street. However, we are adamantly not.

A General Store would add to the traffic and congestion in Lowell. Moss Street is a direct route to Fall Creek. Traffic on weekends and during the summer is a steady stream of motor cycles, motor homes, trailers, ATVS and recreational consumers/party goers. Many of the travelers would likely divert their stops/ purchases from existing local business to the General Store. This diversion would hurt existing business and possibly result in employment loss and existing store closures.

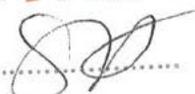
A General Store would require long operational hours. They would likely open early in the morning and close late at night. The high traffic volume could increase the criminal element in the neighborhood. The store would be at risk for shoplifters and/or armed robberies for cash at this location.

A lot of traffic at this location would also mean people coming in and out of the store and tracking in dirt and debris. Traffic would not only include customers but vendor traffic. If the store was not well maintained the increased traffic could cause health concerns.

Thank you for your consideration.

Bill & Vickie Schneider

Bill & Vickie Schneider
567 N. Moss St.
Lowell, Or. 97452 Email: 

RECEIVED
APR 19 2022
BY: 

May 19, 2022

Dear city of Lowell,

It has come to my attention that the city of Lowell is considering the re-zoning of the forest service lot located on Moss St. in order to make way for a dollar general store!? I was a law enforcement officer for 28 years and would advise against placing a general store/ stop and rob, in the middle of a residential area especially in the wake of declining none existing law enforcement coverage. This move defies any common sense and logic. We already have enough eye sores and thug hangouts. Jimmy at the Bridgetown market has done a phenomenal job at turning the store around especially as it relates to the quality and diversity of products provided. It makes no sense to duplicate and take away from an already existing business that sill struggles to stay above water.

Furthermore, Lowell already has plenty of space zoned for commercial/ retail within the downtown master plan. What Lowell needs is more single family homes in order to keep up with market demand. We need more tax payers with a vested interest in their community and are able support the existing infrastructure which has limped along at best over the decades. This is one of the primary solutions if the city ever hopes to secure rural law enforcement funding for a resident deputy position in the future. At this point, we can't even control speeding!

For reasons cited above, I'm opposed to the general store!

Andrea Larsen
657 N. Moss St.



RECEIVED
APR 18 2022
BY: 

**Staff Report
Partition
Assessor's Map 19-01-11-33, Tax Lot 06502
Dollar General/Multiple-Family Development
LU 2022 04
Staff Report Date: November 9, 2022**

1. **Proposal.** Associated with a proposed Dollar General retail store and six-unit multiple-family development and zone change, the applicant is seeking partition of the parent parcel into three parcels. Parcel 1 will be ~51,525 square feet. Parcel 2 will be ~7,280 square feet. Parcel 3 will be ~7,274 square feet. The main Dollar General retail store will be sited on Parcel 1. Parcels 2 and 3 will each have a three-unit townhome and accompanying parking placed on them.
2. **Approval Criteria.** Section 9.223 General Information, Section 9.220 Subdivision or Partition Tentative Plan, Section 9.204 Application Site Plan, Section 9.224 Existing Conditions Information, Section 9.518 and Section 9.228 Decision Criteria. Notice of decision will be sent to the applicant, and parties of record.
3. **Concurrent Application.** The applicant has requested the City process this application concurrently along with application LU 2022 01 (zone change) and LU 2022 06 (site plan review). If the zone change application is denied, the subject property can still be partitioned, but the applicant's plans will change dramatically. A proposed retail store and townhome development can only occur if the zoning is changed, and site plan review is approved.

Planning Commission is only making a recommendation for approval or denial. City Council will make the final decision.

3. **Staff review of applicable criteria for partition.**

LDC 9.204 Application Site Plan

Staff Response: The applicant has submitted the necessary information as required for an application site plan, and application narrative in order for Staff to make findings on the proposal. Criterion met.

LDC 9.223. General Information.

Staff Response: The applicant has submitted the necessary information as required for a partition as seen on the surveyor's tentative partition plan. Compliance with ORS 92 for final recording will be a condition of approval. Criterion met.

LDC 9.224 Existing Conditions Information.

(a) The location, widths and names of both opened and unopened streets within or adjacent to the land division, together with easements, other rights-of-ways and other important locational information such as section line, corners, city boundary lines and monuments.

Staff Response: The applicant's tentative partition plat shows the location, width and names of opened and unopened streets. The tentative partition plat includes the necessary information for staff level review.

(b) The location of all existing sewers, septic tanks and drain fields, water lines, storm drains, culverts, ditches and utilities, together with elevation data, on the site and on adjoining property or streets, if applicable.

Staff Response: The topographic survey map shows two existing water meters located outside of the property boundaries at the far southwestern corner of the map. The topographic survey map shows the necessary information.

The applicant has submitted the necessary information as required in Section 9.224 for a partition as seen on the surveyor's tentative partition map and application narrative. Criterion met.

LCD 9.225 Proposed Plan Information.

...

(c) The location, width, and purpose of existing and proposed easements.

Staff Response: The tentative partition plat shows an existing 20' private access easement that is proposed for accessing Parcels 2 and 3. This easement was recorded as part of the previous partition that created the parent parcel (Partition Plat No. 2009-P2377). To staff's knowledge there are no proposed easements.

(d) The total acreage and the proposed land use for the land division including sites for special purposes or those allocated for public use.

Staff Response: The tentative partition plat includes the total acreage of the proposed parcels. No acreage is proposed for special purpose or allocated for public use.

(e) The location and approximate location dimensions of lots or parcels and the proposed lot or parcel numbers. Where the property division results in any lots or parcels that are larger than 2 and one-half times the minimum lot size, the applicant shall provide a sketch plan showing how the parcels may be re-divided in the future to provide for at least 80% of maximum density within current minimum lot sizes, existing site constraints and requirements of this Code.

Staff Response: The proposed partition will create Parcel 1 which is greater than 2.5X the minimum lot size. However, staff are able to glean the larger proposal of the applicant's to

construct a 12,480 foot square foot Dollar General retail store and two townhomes, both of which are 2,112 square feet.

...

(g) a general layout of all public utilities and facilities to be installed including provisions for connections and extensions beyond the proposed land division.

Staff Response: The associated site plans and civil improvement plans for the other two concurrent applications contain a general layout of public utilities and facilities. If the site is fully built out, as the applicant proposes, the City had adequate capacity to provide services to the site.

(h) The proposed method of connection to all drainage channels located outside of the proposed land division and the proposed method of flood control (retention ponds, swales.) and contamination protection (settling basins, separators, etc.)

Staff Response: A stormwater management drainage plan has been submitted by the applicant's civil engineer as part of the application materials submittal for site plan review. The applicant has feasibly shown the proposed method of connection to drainage channels and how they will deal with stormwater run-off. Stormwater detention for downstream erosion control will be achieved through an ADS-SC 310 Stormtech Chamber System with Isolator Row for treatment. All stormwater from the proposed development will be collected and conveyed to underground detention and then taken to the west into Moss Street. The applicant's civil engineer believes any standing water issues on adjacent properties to the east will not be adversely affected and may aid in any standing water issues due to the proposed curtain drain along the common property line with residential properties to the east.

(i) Identification of all proposed public dedications including streets, pedestrian or bike ways, parks or open spaces.

Staff Response: The proposed partition does not require the dedication of any streets, pedestrian or bike ways, parks or open space areas. However, a 5' no build easement will be kept intact that was a requirement of the previous partition. The 5' no build easement is seen on the tentative partition plat. The applicant will be providing urban street improvements as seen in the figure below. The improvements are subject to review and approval by Lane County Transportation and Engineering. The improvements have been conditioned in LU 2022 06.

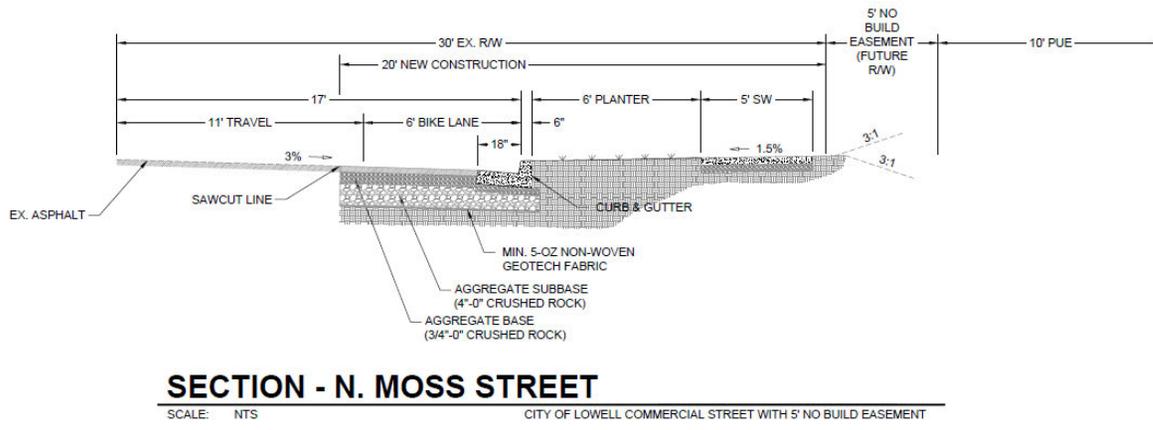


Figure 1. Applicant frontage improvements along North Moss Street.

(j) Identification of any requirements for future streets and easements required for extension of public infrastructure beyond the development together with restrictions on building within those future streets and easements as well as future setback areas required by this Code.

Staff Response: No future streets are proposed or necessary. Urban public improvements are proposed along the frontage of North Moss Street (as seen in Figure 1). The applicant will also be constructing a pedestrian crosswalk across North Moss Street (as seen in Figure 2). The construction of the crosswalk will be required to be permitted by Lane County. The aforementioned improvements are included in as conditions of approval in the site plan review application – LU 2022 06.

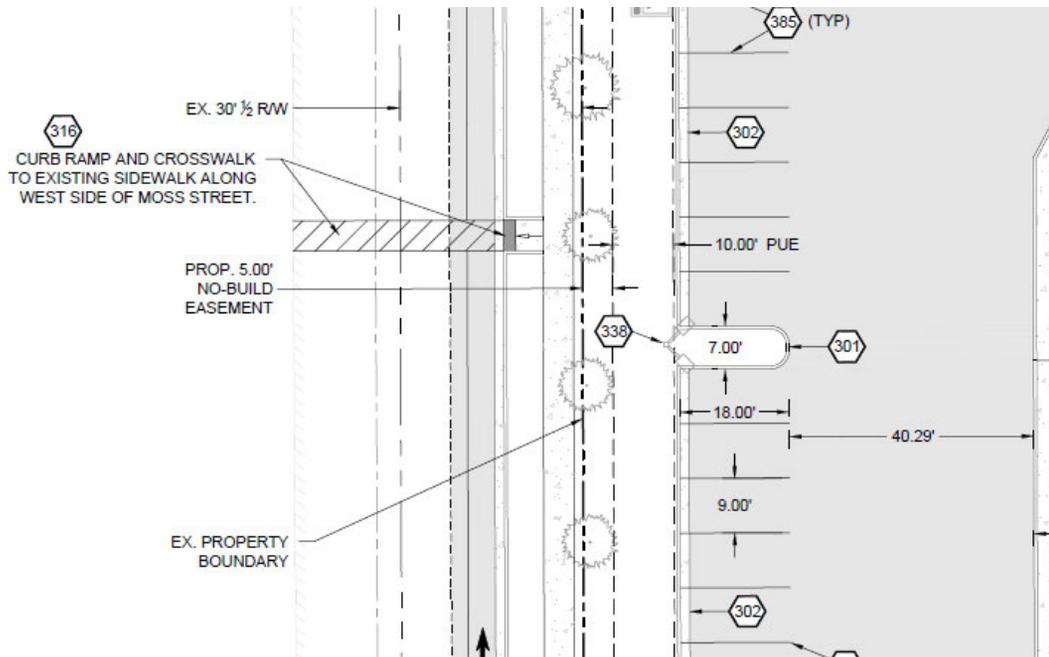


Figure 2. Applicant's proposal to construct a pedestrian crosswalk across North Moss Street.

(k) Identification and layout of all special improvements. Special improvements may include, but are not limited to, signs, lighting, benches, mailboxes, bus stops, greenways, bike or pedestrian paths.

Staff Response: No special improvements are proposed. The site will be improved with exterior lighting, landscaping and other pedestrian and vehicular improvements as part of the site plan review application (LU 2022 06).

LDC 9.226 Accompanying Statements. The Tentative Plan shall be accompanied by written statements from the applicant giving essential information regarding the following matters:

(a) Identify the adequacy and source of water supply including:

- (1) Certification that water will be available to the lot line of each and every lot depicted on The Tentative Plan for a subdivision, or;*
- (2) A bond, contract or other assurance by the applicant that a public water supply system will be installed by or on behalf of the applicant to each and every lot depicted on the Tentative Plan.*

(b) Identify the proposed method of sewage disposal including:

- (1) Certification that a sewage disposal system will be available to the lot line of each and every lot depicted on the Tentative Plan for a subdivision, or;*
- (2) A bond, contract or other assurance by the applicant that a public water supply system will be installed by or on behalf of the applicant to each and every lot depicted*

on the Tentative Plan.

Staff Response: Public water and sewer service is available to the subject property. The Public Works Director has indicated the City has the capacity and ability to provide the site with full City services. Preliminary water and sewer improvement plans are shown on the civil sheets that were created and submitted as part of the site plan review application.

(c) Protective covenants, conditions and deed restrictions (CC&R's) to be recorded, if any.

Staff Response: To staff's knowledge no CC&Rs are proposed. If they should be at time of final plat approval, CC&Rs and any deed restrictions shall be recorded.

(d) Identify all proposed public dedications including streets, pedestrian or bike ways, parks or open space areas.

(e) Identify all public improvements proposed to be installed, the approximate time installation is anticipated and the proposed method of financing. Identify required improvements that are proposed to not be provided and the reason why they are not considered necessary for the proposed land division.

Staff Response: As part of the site plan review process, the applicant will be constructing urban public improvements as shown in Figures 1 and 2 and as seen on the civil plans. The requirement for these improvements have been made conditions of approval in the site plan review staff report (LU 2022 06).

The applicant has submitted the necessary information, as seen on the Tentative Plan, and in the application narrative, for staff to determine the necessary criteria contained in LDC 9.226 are met, or can be met conditionally, where applicable. Criterion met.

(f) A statement that the declarations required by ORS 92.075 on the final plat can be achieved by the fee owner, vendor and/or the mortgage or trust deed holder of the property.

Staff Response: Prior to final plat approval, the property owner shall submit the final plat in accordance with ORS 92.075. Criterion met with the following condition:

Condition of Approval #1: Prior to final plat approval, the property owner shall submit the final plat in accordance with ORS 92.075, and all state and county recording requirements.

LDC 9.227 Supplemental Information. Any of the following may be required by the City, in writing to the applicant, to supplement the Tentative Plan.

(d) If lot areas are to be graded, a plan showing the nature of cuts and fill and information on the character of the soil.

Staff Response: A preliminary grading plan has been submitted as part of the site plan review application. A final grading plan has been conditioned as part of the site plan review application.

(e) Specifications and details of all proposed improvements.

Staff Response: The proposed partition is being concurrently processed with an application for a zone change and site plan review. The applicant is proposing a 12,480 square foot Dollar General retail store and two townhomes that will each contain three dwelling units. Specifications for all proposed improvements have been submitted as part of the site plan review application (LU 2022 06).

(f) Wetland delineation if identified as an existing condition in Section 9.224(f).

Staff Response: Staff have reviewed the Local Wetlands Inventory Map (LWI), and based on the map, there exists no mapped waterways, or wetlands.

The applicant has submitted the necessary information, as seen on the Tentative Plan, and in the application narrative, for staff to determine the necessary criteria contained in LDC 9.227 are met, or can be met conditionally, where applicable. Criterion met.

LDC 9.228 Decision Criteria. A Partition Tentative Plan may be approved by the Planning Commission and a Subdivision Tentative Plan may be approved by the City Council. Approval shall be based upon compliance with the submittal requirements specified above and the following findings.

(a) That the proposed land division complies with applicable provision of City Codes and Ordinances, including zoning district standards.

Staff Response: Presently the subject property is zoned Public Lands (PL). Staff will provide an analysis of the lot development standards of the PL zone. A discussion of the lot development standards, if the applicant is successful in the rezone, is contained in the staff report for site plan review.

In the PL zone there is no established minimum lot area and configuration. There are no yard setbacks but for when adjacent to a residentially zoned property, then the setback shall be 10-feet. If the rezone is not successful, it's unlikely any development will occur on the property or that the applicant will continue with the proposed partition.

(b) Where the property division results in any lots or parcels that are larger than 2 and one-half times the minimum lot size, the applicant shall provide a sketch plan showing how the parcels may be re-divided in the future to provide for at least 80% of maximum density within current minimum lot sizes, existing site constraints and requirements of this Code.

Staff Response: Proposed Parcel 1 will be larger than 2.5X the minimum lot size, but staff are aware of the applicant's larger plans with the property. The partition is being concurrently processed with a zone change and site plan review request.

(c) The applicant has demonstrated that the proposed land division does not preclude

development on properties in the vicinity to at least 80% of maximum density possible within current minimum lot sizes, existing site conditions and the requirements of this Code.

Staff Response: The partition is being concurrently processed with a zone change and site plan review request. The proposed land division requires no further land division and will not preclude development on properties in the vicinity. Criterion met.

(d) *The proposed street plan:*

- (1) Is in conformance with City standards and with the Master Road Plan or other transportation planning document.*
- (2) Provides for adequate and safe traffic and pedestrian circulation both internally and in relation to the existing City street system.*
- (3) Will not preclude the orderly extension of streets and utilities on undeveloped and underdeveloped portions of the subject property or on surrounding properties.*

Staff Response: The subject property abuts a Major Collector Lane County facility. The partition does not require the construction of any new streets – just public improvements along North Moss Street, for the portion that abuts the property. Street improvements have been conditioned in the site plan review application.

(e) *Adequate public facilities and services are available to the site, or if public services and facilities are not presently available, the applicant has demonstrated that the services and facilities will be available prior to need, by providing at least one of the following:*

- (1) Prior written commitment of public funds by the appropriate public agency.*
- (2) Prior acceptance of public funds by the appropriate public agency of a written commitment by the applicant or other party to provide private services and facilities.*
- (3) A written commitment by the applicant or other party to provide for offsetting all added public costs or early commitment of public funds made necessary by development, submitted on a form acceptable to the City.*

Staff Response: The City can service the property with adequate public facilities. The Public Works Director has issued comment that the City can provide services to the property – even when fully built out as proposed by the applicant.

(f) *That proposed public utilities can be extended to accommodate future growth beyond the proposed land division.*

Staff Response: The City can service the property with adequate public facilities. The Public Works Director has issued comment that the City can provide services to the property – even when fully built out as proposed by the applicant.

(g) *Stormwater runoff from the proposed land division will not create significant and unreasonable negative impacts on natural drainage courses either on-site or downstream, including, but not limited to, erosion, scouring, turbidity, or transport of sediment due to increased peak flows and velocity.*

Staff Response: Stormwater runoff can be adequately addressed by the applicant. A detailed

discussion of the applicant's stormwater management proposal can be found in the site plan review staff report. The applicant has submitted a preliminary stormwater drainage plan.

(h) The proposed land division does not pose a significant and unreasonable risk to public health and safety, including but not limited to fire, slope failure, flood hazard, impaired emergency response or other impacts identified in Section 9.204(u).

Staff Response: To staff's knowledge, the property does not contain steep slopes, flood hazards, or will be a threat to health and safety of the public.

4. Recommendation

If the applicant's request for a zone change and site plan review are approved, then staff recommend approval of the proposed partition. If the zone change is denied the partition can still be approved, but any future uses to locate on the property would have to adhere to the permitted uses of the Public Lands district and go back through site plan review. Since the applicant has requested all three land use applications be processed concurrently, staff would recommend the partition be denied or the applicant withdraw the application. It's unlikely that the applicant will continue with the partition should the zone change application be denied as the applicant's entire proposal falls apart.

5. Conditions of Approval

Condition of Approval #1: Prior to final plat approval, the property owner shall submit the final plat in accordance with ORS 92.075, and all state and county recording requirements.

6. Attachments

Attachment A: Tentative partition plat

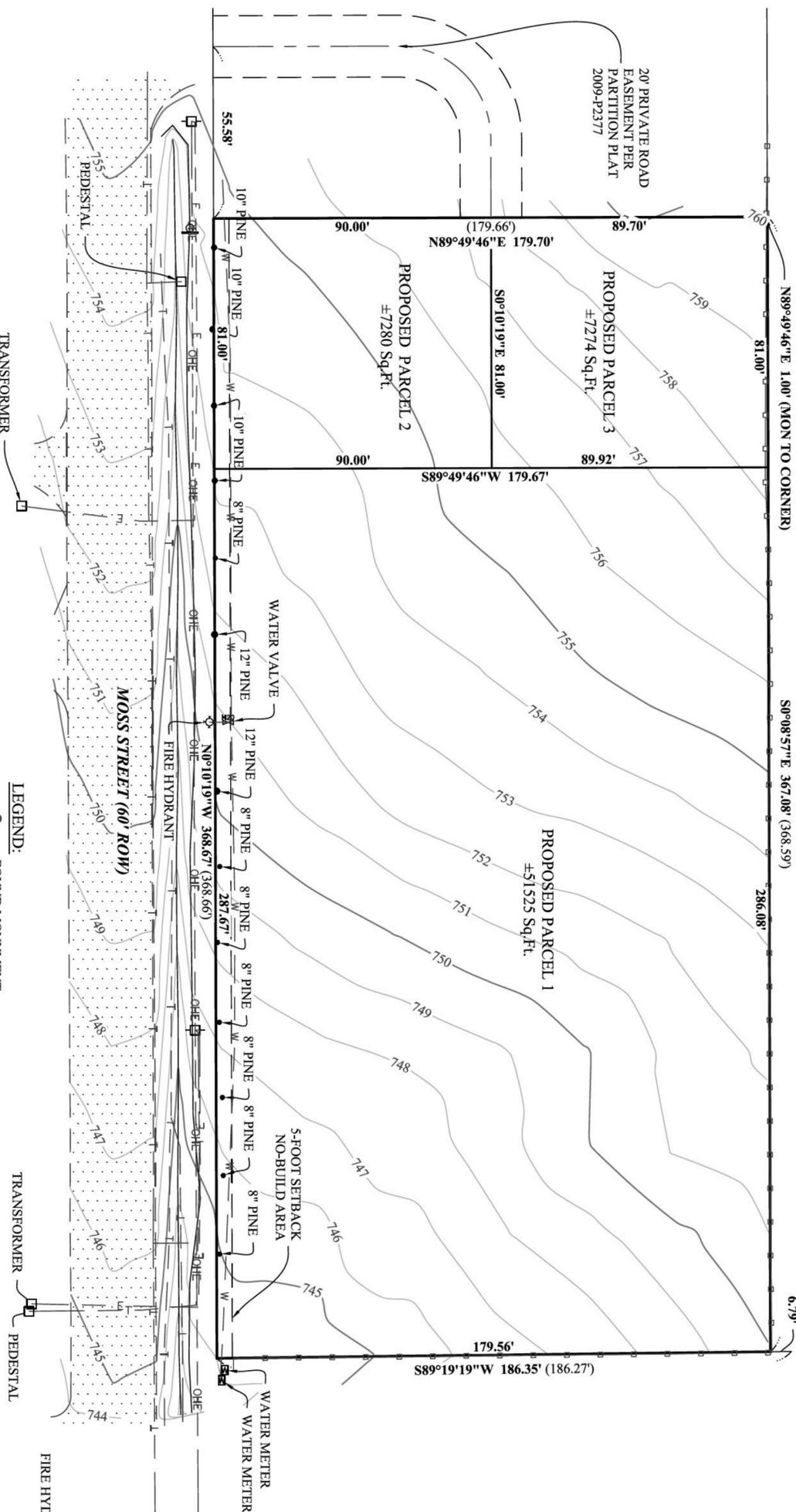
TENTATIVE PARTITION PLAN
FOR
BJ REAL PROPERTIES, LLC
SW 1/4, SECTION 11, TOWNSHIP 19 SOUTH, RANGE 1 WEST
OF THE WILLAMETTE MERIDIAN, LANE COUNTY, OREGON
JULY 6, 2022

APPLICANT:

BJ REAL PROPERTIES, LLC
 38015 WHEELER RD
 DEXTER, OR 97431

SURVEYOR:

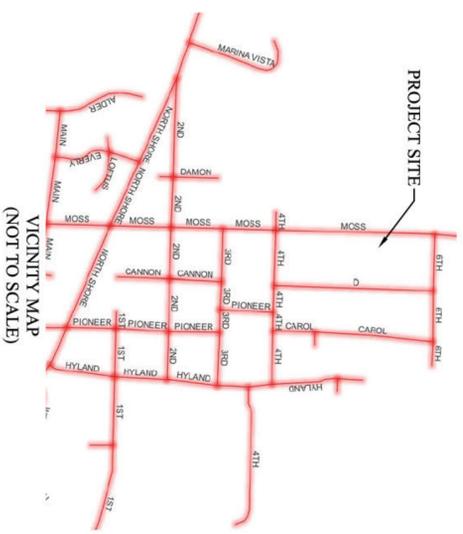
BRENT CORNING, PLS
 EGR & ASSOCIATES INC.



- NOTES:
1. ELEVATIONS ARE NAVD(88) BASED ON THE OREGON COORDINATE REFERENCE SYSTEM (OCRS), EUGENE ZONE.
 2. THE PROPOSED PARTITION COMPRISES ALL OF THE CONTIGUOUS PROPERTY OWNED BY THE APPLICANT.
 3. NO PUBLIC IMPROVEMENTS ARE PROPOSED UNDER THIS LAND USE APPLICATION.
 4. NO NEW STREETS ARE PROPOSED.
 5. NO PUBLIC EASEMENTS ARE PROPOSED.
 6. EXISTING WASTEWATER LATERALS AT THE SOUTHWEST CORNER OF THE PROPERTY WILL BE USED.
 7. WATER SERVICE IS PROVIDED BY CITY OF LOWELL.
 8. THE NEAREST FIRE HYDRANT IS LOCATED ON THE PROJECT SITE, APPROXIMATELY IN THE CENTER OF THE WEST LINE OF THE PROPERTY.
 9. THE PROPERTY IS SERVED BY MOSS STREET. TWO TREES ARE PROPOSED FOR REMOVAL UNDER THIS APPLICATION.
 10. NO PUBLIC OR PRIVATE STREETS ARE PROPOSED WITH THIS APPLICATION. FINAL FACILITIES AND SIZINGS WILL BE ACCOMPLISHED AT TIME OF PERMITTING FOR FUTURE CONSTRUCTION. THE SITE IS GENERALLY FLAT WITH A SLIGHT GRADIENT RUNNING NORTHERLY.
 11. ZONING FOR PROPOSED PARCEL 1 IS COMMERCIAL.
 12. ZONING FOR PROPOSED PARCELS 2 & 3 IS R-3 RESIDENTIAL.
 13. ZONING FOR THE PROPERTY TO THE NORTH CONTAINING THE 20' ACCESS EASEMENT IS PUBLIC LANDS.

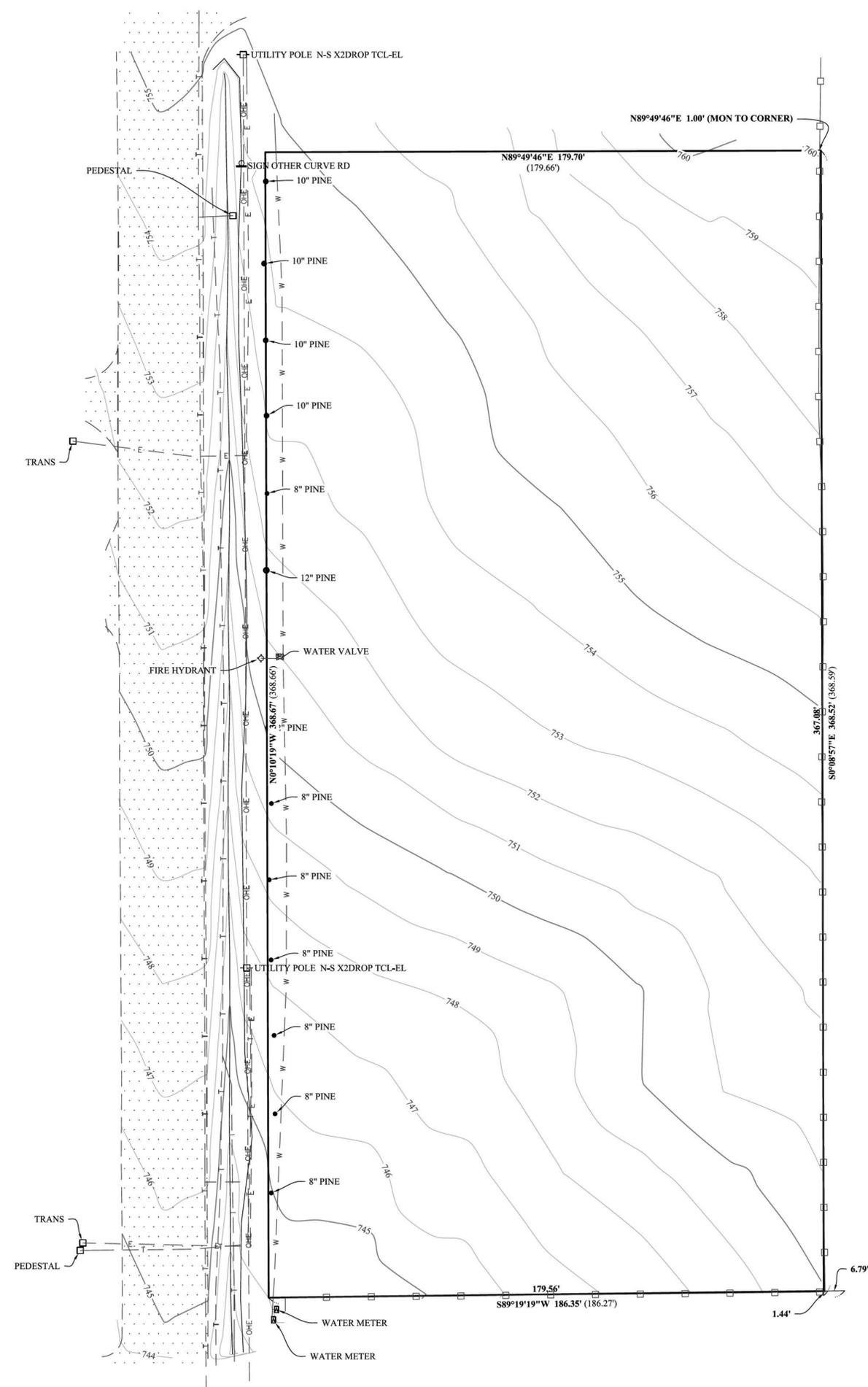
LEGEND:

- FOUND MONUMENT
- ⊕ BRASS CAP
- ⊕ MANHOLE - WASTE WATER
- ⊕ MANHOLE - STORM WATER
- ⊕ CURB INLET
- ⊕ WATER VALVE
- ⊕ WATER METER
- ⊕ ELECTRICAL VAULT
- ⊕ FIRE HYDRANT
- ⊕ UTILITY POLE
- ⊕ SIGN - COMMERCIAL VEHICLE PARKING ONLY
- TREE
- WW - WASTE WATER LINE
- ST - STORM WATER LINE
- W - WATER LINE
- E - ELECTRICAL POWER LINE
- G - OVERHEAD ELECTRICAL POWER LINE
- T - NATURAL GAS LINE
- OHT - TELEPHONE/COMMUNICATIONS LINE
- OHT - OVERHEAD TELEPHONE/COMMUNICATIONS LINE
- FENCELINE - CYCLOPE FENCING (TYP.)
- PAVEMENT



EGR & Associates, Inc.
 Engineers, Geologists, and Surveyors
 2535B Praille Road
 Eugene, Oregon 97402
 (541) 688-8322
 Fax (541) 688-8087

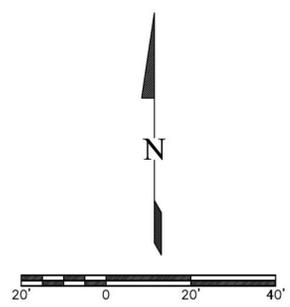
May 31, 2022 - 2:39pm
 S:\Projects\1515 Oregon Arch Inc\22-0060 Dollar General (Lowell)\AutoCAD\1517 DG Lowell OEB8.dwg LAYOUT.d SIZE



- LEGEND:**
- FOUND MONUMENT
 - BRASS CAP
 - ⊙ MANHOLE - WASTE WATER
 - ⊙ MANHOLE - STORM WATER
 - CURB INLET
 - ⊞ WATER VALVE
 - ⊞ WATER METER
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 - OVERHEAD ELECTRICAL POWER LINE
 - NATURAL GAS LINE
 - TELEPHONE/COMMUNICATIONS LINE
 - OVERHEAD TELEPHONE/COMMUNICATIONS LINE
 - FENCELINE - CYCLONE FENCING (TYP.)
 - ▨ CONCRETE WALK/DRIVE

UTILITY STATEMENT:
 THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES

HORIZONTAL & VERTICAL DATUM:
 ALL INFORMATION SHOWN HEREON IS PER THE EUGENE ZONE OF THE OREGON COORDINATE REFERENCE ZONE. ELEVATIONS ARE PER NORTH AMERICAN VERTICAL DATUM 88



**LOWELL DOLLAR GENERAL
 TOPOGRAPHY SURVEY**
 N. MOSS STREET, TAX LOT 6502
 LOWELL, LANE, OREGON

Date	No	Description of Revisions	Name
5-16-2022			
Job Number	7157-22-0060		
Design by	DESIGN BY		
Drawn by	BWC	DRAWN BY	
Checked by	R.E.		

Sheet Number
SHEET #

Staff Report
Site Plan Review Application
Dollar General Retail Store & Townhome Multiple-Family Residential
Development - LU 2022 06
November 9, 2022

Date of Completeness: August 12, 2022

120th Day: February 8, 2023

Notice sent: October 7, 2022

Property Owner: H & H Lowell, LLC.

Applicant: H & H Lowell, LLC.

Applicant's Representative: Rajan Mehta, Oregon Architecture

- 1. PROPOSAL.** The Planning Commission is being asked to review and make a recommendation on a 12,480 square foot Dollar General retail store and a 6-unit multiple-family residential dwelling development on the adjacent parcel. The proposal includes 61 (48 for Dollar General and 13 for residential) off-street parking spaces, including two ADA spaces. The site is located adjacent to North Moss Street and is presently zoned PL – Public Lands. The applicant is seeking a concurrent rezone and partition of the property from PL to C1 – General Commercial and a portion R3 – Multiple Family. The proposed Dollar General retail store will locate on a 1.18-acre parcel of the site, while the residential portions will be sited on two separate 0.16-acre sites. On-site and off-site improvements include landscaping, sidewalk, curb and gutter along the frontage of North Moss Street and a pedestrian crosswalk extending from the edge of the parking lot across Moss Street. Stormwater detention for downstream erosion control will be achieved through an ADS-SC 310 Stormtech Chamber System with Isolator Row for treatment.

Planning Commission is only making a recommendation for approval or denial for site plan review. City Council will make the final decision.

Refer to **Attachment C** for all applicant site plans and **Attachment D** for landscaping plan.

- 2. ISSUES.**

Setbacks –

Staff Response: As seen in Figures 6 and 7, if the applicant is successful in rezoning the property, the site plan does not meet setbacks as stated in Section 9.421(d)(B)(B).

“Service Facilities” –

Staff Response: The applicant is proposing a 16’X16’ concrete pad for delivery. Planning Commission must determine if a concrete pad for deliveries is a “service facility” and thus

required to be screened from public view and landscaped in accordance with Section 9.528(e).

Access – SECTION 9.516 Access.

(a) Every property shall abut a street other than an alley for a minimum width of 16 feet, of which 12 foot must be paved, except where the City has approved an access to multiple lots sharing the same access in which the total width must be at least 16 feet. No more than two properties may utilize the same access unless more are approved with the tentative plan.

(b) The following access alternatives to Panhandle properties may be approved by the City:

(1) Approval of a single access road easement to serve proposed parcels. The City may require a provision for conversion to a dedicated public road right-of-way at some future date, in which case the easement shall have the same width as a required right-of-way.

Staff Response: The subject property does abut a street for a minimum width of 16 feet, but such abutment is not used for access to proposed Parcels 2 and 3. The applicant has been granted an access easement across TL 06501 to access proposed Parcels 2 and 3. The easement was granted by the Forest Service back when the property was first partitioned. Staff and Lane County do not have objections to this proposed access dynamic, but Planning Commission should review and approve this access dynamic pursuant to subsection (b)(1) that allows approval of a single access road easement to serve proposed parcels. The qualifier for such a provision seems to apply as alternative to Panhandles lots, which is not being proposed.

3. AGENCY REFERRAL COMMENTS.

City Engineer: The City Engineer has reviewed the initial and supplemental materials, primarily related to stormwater management and drainage issues. After consultation and review of the plans in coordination with the Lane County engineer and the applicant's engineer, the City Engineer finds the applicant's stormwater management proposal acceptable.

Lane County Transportation: Lane County Transportation Planning and Engineering has been closely involved in the review of the application. This is because the subject property is adjacent to a Lane County roadway facility (North Moss). Lane County has asked the application to complete and submit a Traffic Impact Analysis (TIA) for review and approval, as part of the site review process. The applicant has completed the requested TIA. The TIA underwent two rounds of review by Lane County staff. After an initial round of revisions by the applicant based on Lane County staff's comments. Lane County still has unresolved issues with the applicant's TIA. After review and revision one unresolved comment remains with respect to accepting the findings and conclusions of the TIA.

- Two driveways are justified for the development based on the business needs. However, Lane County believes potential traffic conflicts from the closely spaced driveways could be minimized by restricting conflicting movements at the driveways. Lane County recommends two driveways be designed in a way that allows right turns at the first

driveway only for trips coming from the city center North Moss Street and restrict northbound right turns at the second driveway. Likewise, southbound left movements at the first driveway should be restricted. Such restrictions can be implemented by driveway design modifications along with appropriate signage to help guide traffic in and out of the property.

As of the writing of this staff report, the applicant has not addressed the remaining issue raised by Lane County Transportation Planning and Engineering.

Staff recommend conditions of approval that ensures the applicant address the County's TIA issues before proceeding with the facility permit process to conduct work within Lane County right-of-way. Relatedly, staff recommend a condition of approval that requires the applicant to adhere to conditions of approval as imposed by Lane County Transportation and Engineering.

See **Attachment A** for applicant's final TIA.

- 4. APPROVAL CRITERIA.** Lowell Development Code (LDC) *LDC, Section 9.204* lays out which items are required as part of an application for site plan review request. The applicant has submitted a site plan review application. A site plan review requires a "limited land use review" by the Planning Commission, and *LDC, Section 9.250* contains the decision criteria the Planning Commission shall consider in making their decision for approval or denial. Additionally, this specific proposal may involve criteria related to *LDC, Section 9.520, Storm Drainage, and Section 9.514, Off-Street Parking Requirements, and LDC Section 9.529 Exterior Lighting, Section 9.527 Grading, Section 9.528 Landscaping, Section 9.517 Street, Section 9.518 Sidewalks, Section 9.421 General Commercial District, Section 9.412 Multiple-Family Residential District, and Section 9.706 Multiple-Family Standards.*

5. STAFF REVIEW OF APPLICABLE APPROVAL CRITERIA.

(b) Decision Criteria. After an examination of the Site and prior to approval, the Planning Commission must make the following findings:

(1) That the proposed development complies with the Zoning District standards.

Staff Response: The success of the proposed site plan development application is dependent upon the applicant prevailing in its rezone request (land use file # LU 2022 01). This is because the subject property is zoned PL – Public Lands. In the PL zone the uses proposed by the applicant are not permissible. If the applicant prevails in a successful rezone of the property, this criterion can be found to be met. If not, then the site plan review should be denied.

A review of the proposed zoning designations against the proposed development will ensure later on in this staff report under the appropriate sections addressing specific zoning standards.

(2) That the proposed development complies with applicable provisions of city codes and ordinances.

Staff Response: A discussion of other applicable provisions of city codes and ordinances will occur later on in this staff report under those applicable sections. If all applicable provisions of city codes and ordinances are found to be met or can feasibly be met by the applicant, then the Planning Commission can find this approval standard to be met.

(3) That the proposed development will not cause negative impacts to traffic flow or to pedestrian and vehicular safety and future street rights-of-way are protected.

Staff Response: for a discussion of traffic impacts the proposed development will have on pedestrian and vehicular safety and future street rights-of-way protection, staff will primarily rely on the conclusions and findings as contained in the TIA and the comments of Lane County Transportation Planning and Engineering staff. As seen on Partition Plat No. 2009-P2377, the westerly 30 feet of the subject property is within the County right-of-way. What this means is that development on the subject property, adjacent to North Moss Street require a greater setback that would otherwise be required. General note #1 of the Partition Plat No. 2009-P2377 reads “the minimum setback requirements for development adjoining Moss Street (County Road No. 886) shall be five (5) foot greater than established by the Lowell Development Code in the event the County would need to acquire an additional five (5) foot of right-of-way.” As such the City and County are requiring an additional five-foot setback along the frontage of the subject property. The five-foot setback is seen on Sheet C3.0 as the “5’ no build zone.”

Lane County has issued comment related to the two proposed driveways. Lane County agrees that two driveways are justified for the development based on the business needs. However, Lane County believes potential traffic conflicts from the closely spaced driveways could be minimized by restricting conflicting movements at the driveways. Lane County recommends two driveways be designed in a way that allows right turns at the first driveway only for trips coming from the city center North Moss Street and restrict northbound right turns at the second driveway. Likewise, southbound left movements at the first driveway should be restricted. Such restrictions can be implemented by driveway design modifications along with appropriate signage to help guide traffic in and out of the property.

Staff recommend a condition of approval requiring the applicant address this concern and any other concerns or issues raised by Lane County with respect to traffic and the TIA.

Pedestrian safety improvements include frontage improvements along the North Moss Street to include a 5’ sidewalk and 6’ bike lane and a pedestrian crosswalk extending to the western side of North Moss Street.

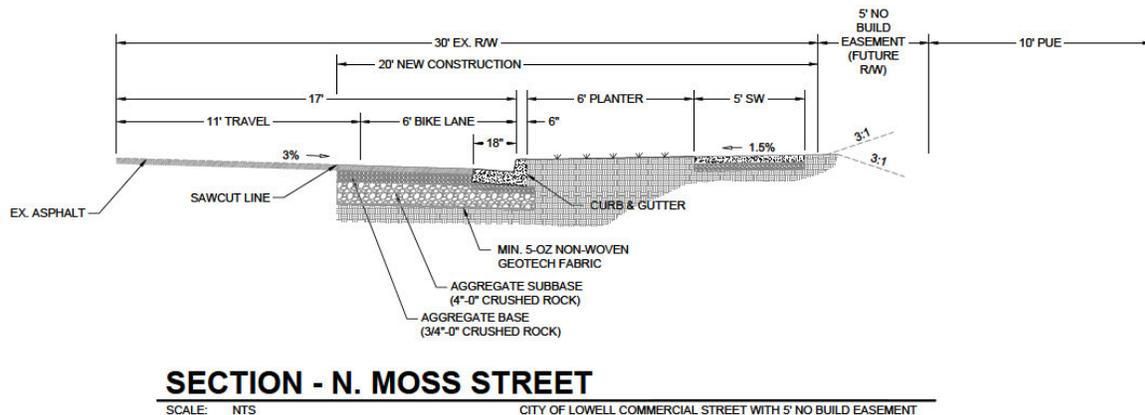


Figure 1. Applicant proposed frontage improvements along North Moss Street.

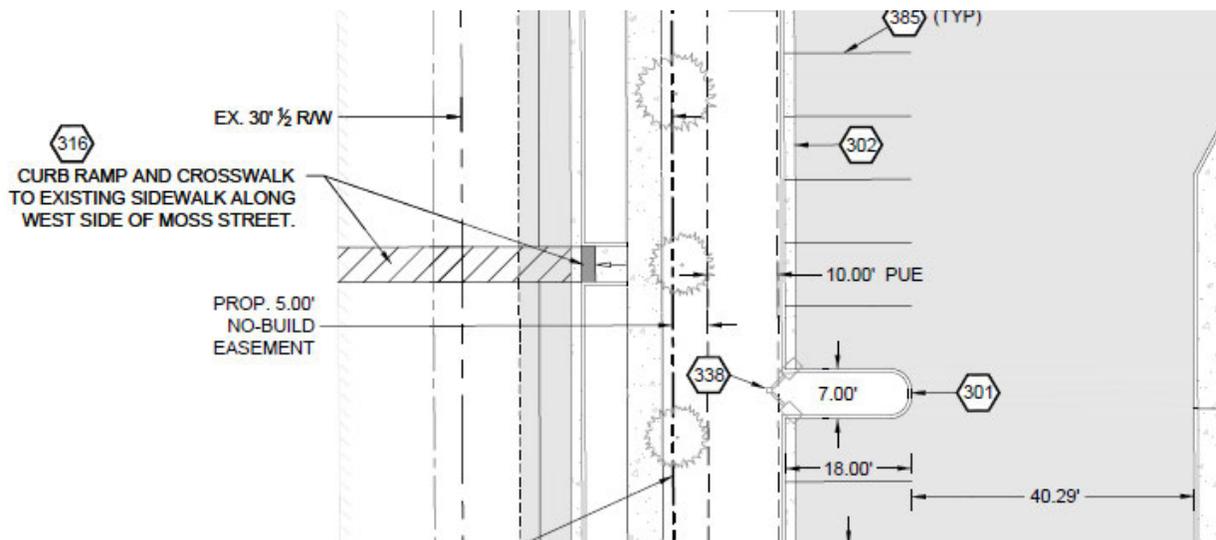


Figure 2. Applicant proposed pedestrian crosswalk across North Moss Street.

As of the writing of this staff report, the applicant has not addressed the remaining issue raised by Lane County Transportation Planning and Engineering. Staff find the applicant can feasibly meet these standards based on the conclusions of the TIA but would recommend a condition of approval that requires the applicant to address any remaining issues raised by Lane County with respect to traffic and the TIA.

Condition of Approval #1: Prior to the issuance of building permits, applicant shall address Lane County’s comment regarding potential traffic conflicts from closely spaced driveways and restrictions implemented by driveway design modifications along with appropriate signage.

Condition of Approval #2: As a general condition, the applicant shall adhere to the conditions of approval imposed by Lane County Transportation Planning and Engineering related to the

findings and conclusions of the TIA and traffic in general. A County facility permit will be required to be obtained by the applicant to perform work and improvements within and adjacent to North Moss Street. Final Facility permit approval by Lane County shall be required prior to issuance of certificates of occupancy for the retail and residential uses.

See **Attachment B** for civil engineering sheets.

(3) That proposed signs or lighting will not, by size, location or color, interfere with traffic, limit visibility or impact on adjacent properties.

Staff Response: Proposed signage is seen on Sheet A2.1 and A2.2. Site signage is limited to the front facing façade of the building itself, but for a lighted pylon sign near the entrance to the northernmost driveway. Site lighting is labeled on Sheet C5.0. 24” pole bases with luminaires are seen at the front and rear of the parking lot associated with the multiple-family development and in the middle of the parking lot, near the front property line and at the southern property line. Also, on Sheet C5.0, the applicant has listed the exterior lighting standards of Section 9.529. This alone is enough to establish feasibility that the applicant can meet the exterior lighting standards. A final exterior lighting plan, in conformance with Section 9.529, will be a condition of approval. Signage and exterior lighting standards will be further addressed in this staff report. Criterion addressed.

(4) That proposed utility connections are available, have the capacity to serve the proposed development and can be extended in the future to accommodate future growth beyond the proposed land division.

Staff Response: The subject property has the ability to connect to existing city services. The City has adequate utility capacity to serve the subject property and proposed development. The applicant will be installing a new utility transformer to the northwest of proposed Townhome A. The applicant will be tying into an existing utility transformer pedestal located on the west side of Moss Street. A new water meter and backflow will be placed near the proposed signage at the northernmost driveway. This water meter line will be extended underneath the parking lot to the Dollar General retail store. See the applicant’s utility plan on Sheet C5.0.

(6) That the proposed development will not cause negative impacts to existing or proposed drainage ways including flow disruptions, flooding, contamination or erosion.

Staff Response: There is an existing upstream basis located northeast of the subject property. See Figure 3 below. The area of redevelopment is moderately sloped with existing slopes to the southwest at approximately 4%-6%. Existing runoff is calculated using the Santa Barbara Urban Hydrograph Method with a Type 1A storm distribution. Precipitation data used in the stormwater management plan is from the City’s Stormwater Master Plan with a 25-year rainfall amount of 5”. All stormwater from the proposed development will be collected and conveyed to

underground detention and then taken to the west into Moss Street. The applicant's civil engineer believes any standing water issues on adjacent properties to the east will not be adversely affected and may aid in any standing water issues due to the proposed curtain drain along the common property line with residential properties to the east.



Figure 3. Image of drainage basins. Image taken from applicant's civil drainage plan.

Based on the calculations of the applicant's civil engineer and the size of the two drainage basins. The existing on-site drainage has a 25-year peak flow of 0.751 cubic feet per second (cfs). The existing upstream off-site drainage basin has a 25-year peak flow of 1.079 cfs. The combined existing basin hydrograph peak flow is 1.831 cfs. Flow control calculations have been completed for the entire onsite redevelopment basin, assuming a pre-developed runoff curve number of 80. The offsite upstream basin is also collected and routed through the detention system as bypass runoff. Therefore, according to the applicant's civil engineer, the matching release rate of the detention system shall be equal to or less than the combined existing basin hydrographs of the EX BSN ONSITE + UPSTREAM BSN which equals 1.831 cfs. Therefore, to match the pre-development 25-year peak flow of 1.831 cfs, the proposed ADS Stormtech Chamber System for downstream erosion control shall be sized as follows:

- Required total storage volume = 3,247 cubic feet (including rock storage)
- Bottom of Rock Elevation = 742.85; Slope = 0%
- 25-year Water Surface Elevation = 744.56
- 8" Pipe Outflow with no orifice.

A final stormwater management plan will be required as a condition of approval. The final plan shall be reviewed by the City Engineer. The applicant has shown through the preliminary stormwater management plan that the proposed development can adequately address stormwater

management issues. See **Attachment E** for preliminary stormwater management plan.

Staff have reviewed the Local Wetlands Inventory Map and there are no known mapped wetlands on the subject property.



Figure 4. Lowell Local Wetlands Inventory Map.

(7) That the proposed development will not cause negative impacts, potential hazards or nuisance characteristics as identified in Section 2.140, Item 21 of the Application Site Plan consistent with the standards of the Zoning District and complies with the applicable standards of all regulatory agencies having jurisdiction.

Staff Response: Potential nuisance characteristics identified are lighting, visual and auditory. Nuisance characteristics will primarily be felt by the residential properties located to the east and south of the subject property. Visual and noise nuisances will be mitigated through the implementation of a required landscaped buffer as indicated in LDC 9.528(b)(2). The applicant will retain the existing 6' wooden fence along the common property line with the residential uses to the east. In addition, to protect residential properties to the south, the applicant will also retain the existing 6' wooden fence along the southern property line. Further, as seen on Sheet L.1, the applicant will be providing landscaping features along the eastern and southern property lines. The implementation of the landscaping features and retaining of the 6' fences, will aid in mitigating any lighting, visual and auditory nuisances. The two proposed townhouse developments will also be shielded from the proposed retail Dollar General store by the implementation of landscaping features.

(8) That development within Lowell’s Downtown, as defined by the Regulating Plan included in the Lowell Downtown Master Plan, are consistent with the policies of the Lowell Downtown Master Plan.

Staff Response: The subject property is not contained within the boundaries of the Regulating Plan. Therefore, this criterion is not applicable.

(h) NPDES Permit Required. A National Pollutant Discharge Elimination System (NPDES) permit must be obtained from the Department of Environmental Quality (DEQ) for construction activities (including clearing, grading, and excavation) that disturb one or more acres of land.

Staff Response: A National Pollutant Discharge Elimination System permit shall be obtained by the applicant prior to the disturbance of one or more acres of land. This will be a condition of approval.

Condition of Approval #3: Prior to construction activities including clearing, grading and excavation that disturb one or more acres of land, the applicant shall obtain an approved NPDES permit from Oregon DEQ.

Section 9.514 Off-Street Parking Requirements

SECTION 9.514 OFF-STREET PARKING REQUIREMENTS

<u>USE</u>	<u>SPACE REQUIREMENT</u>	
(a) Residential		
(1) One and two family dwellings	Studio	Space for one car per unit
	1 Bedroom	Space for one car per unit
	2 Bedroom	Space for two cars per unit
	3+ Bedroom	Space for two cars per unit
(2) Multiple family dwellings	1.5 Spaces per unit.	
(3) Rooming or boarding house, Transient Lodging	Spaces equal to 80% of the number of guest accommodations <u>plus</u> one additional space for each owner, <u>manager</u> or employee.	

(d) Commercial

- | | |
|---|---|
| (1) Retail stores except as otherwise specified below | One space per 300 s/ft. of floor area designated for retail sales |
|---|---|

Staff Response: Based on a ratio of 1.5 spaces per multiple family dwelling, a total of 9 off-street parking spaces is required. The applicant has indicated to staff via email on November 3, 2022, that 13 off-street parking spaces are proposed for the multiple-family residential development. Because the applicant is proposing an amount of off-street parking spaces that exceed the minimum required this criterion is met. Staff now turn to the required off-street parking spaces for the commercial retail store. The LDC requires one space per 300 square feet of floor space designated for retail sales. As seen on multiple site plans, the total area dedicated to sales is 10,387 square feet. This equates to a required minimum of 35 off-street parking spaces. Again, via email on November 3, 2022, the applicant indicated to staff that 48 off-street parking spaces are proposed for the proposed Dollar General retail store. The final site plan that accompanies the building permit applicant shall show no less than 61 off-street parking spaces, as proposed by the applicant. This criterion is met.

SECTION 9.513 PARKING

For each new structure or use, each structure or use increased in area and each change in the use of an existing structure there shall be provided and maintained off-street parking areas in conformance with the provisions of this section.

(a) Design and Improvement Requirements for Parking Lots:

- (1) All parking areas and driveway approaches shall be surfaced with a minimum of two inches asphaltic concrete or four inches Portland Cement Concrete over approved base unless other methods are approved by the City. Under specified conditions the City may defer paving and permit gravel parking areas as a temporary use.**
- (2) For Commercial and Industrial uses, service drives and parking spaces on surfaced parking lots shall be clearly and permanently marked. Handicapped Parking must comply with the Oregon Structural Specialty Code.**

Staff Response: As seen on Sheet C3.0, all parking areas and driveway approaches are proposed to be paved. The applicant is proposing two ADA parking spaces to be located near the southwestern end of the proposed Dollar General retail store. The two ADA spaces shall be clearly marked with appropriate ADA signage and conform to current ADA building standards. Criterion met.

- (5) The outer boundary and all landscaped islands of a parking area shall be contained by a 6" high curb for protection of landscaping, pedestrian walkways**

and to contain rainwater runoff. No motor vehicle shall project over the property line.

Staff Response: As seen on Sheet C3.0 & A0.1, the outer boundary and all landscaping islands of the parking lots will be curbed to provide protection of landscaping, pedestrian walkways and to contain water runoff. Criterion met.

(6) All parking areas, except those in conjunction with a single family or two-family dwelling, shall have adequate drainage to dispose of the run-off generated by the impervious surface area of the parking area. On-site collection of drainage water shall not allow sheet flow of water onto sidewalks, public rights-of-way or abutting property and shall detain out-flow velocities to that of undeveloped land. On-site drainage must be approved by the City.

Staff Response: Adequate drainage to dispose of the run-off generated by impervious surfaces is being proposed by the applicant. The applicant's stormwater drainage management plan has been preliminary reviewed and approved by the City Engineer. Other drainage details may need to be reviewed by Lane County Transportation and Engineering as part of a Facility permit process. Criterion met.

(7) Service driveways to off-street parking areas shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrian and vehicular traffic on the site. The number of service driveways shall be limited to the minimum that will allow the property to accommodate and service the traffic anticipated. Service driveways connected to County roads must be approved and permitted by Lane County Public Works.

Staff Response: There are two service driveways proposed from North Moss Street. The northernmost driveway will have one in-turn lane, and a left and right turn lane, northbound and southbound, respectively. The southernmost driveway will have an in-and-out driveway. The engineering details of the driveways will be reviewed by Lane County Transportation and Engineering as part of the Facility permit process because North Moss is a Lane County roadway facility. Criterion met.

(8) All off-street parking areas within or abutting residential districts or uses shall be provided with a sight-obscuring fence, wall or hedge as approved by the City to minimize disturbances to adjacent residents.

Staff Response: Properties Located to the east and south of the subject property contain existing residential uses. As such, subsection (8) is applicable to the proposal. As seen on Sheet A0.1, there is an existing 6' wooden fence located along the eastern and southern property lines that is proposed to remain. Criterion met.

(h) A plan, drawn to scale, indicating how the off-street parking requirements are to be

fulfilled, shall accompany all requests for City approval or a Building Permit.

Staff Response: The applicant has shown on Sheets C3.0 and A0.1 that the off-street parking requirements can be met. A final plan, drawn to scale, shall accompany the building permit application. The final plan shall be in substantial conformance with the approved parking plan and contain no fewer than 61 off-street parking spaces; 48 for Dollar General and 13 for the townhomes.

Condition of Approval#4: A final parking/site plan, drawn to scale, indicating how the off-street parking requirements are to be fulfilled, shall accompany the applicant's building permit application.

Section 9.517 Streets. (a) Urban public street improvements including curbs, gutters and storm drainage are required for all land divisions and property development in the City of Lowell. Urban street improvements may be deferred by the City if there is not existing sidewalk or storm drain system to which connection can be made, conditional upon the responsible party agreeing to an irrevocable waiver of remonstrance to a future assessment at the time of construction of a sidewalk which is otherwise required to be constructed.

Staff Response: Urban street improvements including curbs, gutters and storm drainage are required for all property development in Lowell. Section 9.517 applies to the present proposal because the property fronts a portion North Moss Street. Because North Moss Street is a Lane County roadway facility, the street improvements must conform to the standards for Lane County roads. North Moss Street is classified as a Major Collector. As such, the applicant is proposing half-street improvements along the frontage of North Moss to include: 6' bike lane, 6' planting strip, 5' sidewalk, and the required 5' no-build easement. These improvements are consistent with Lane County standards. Criterion met.

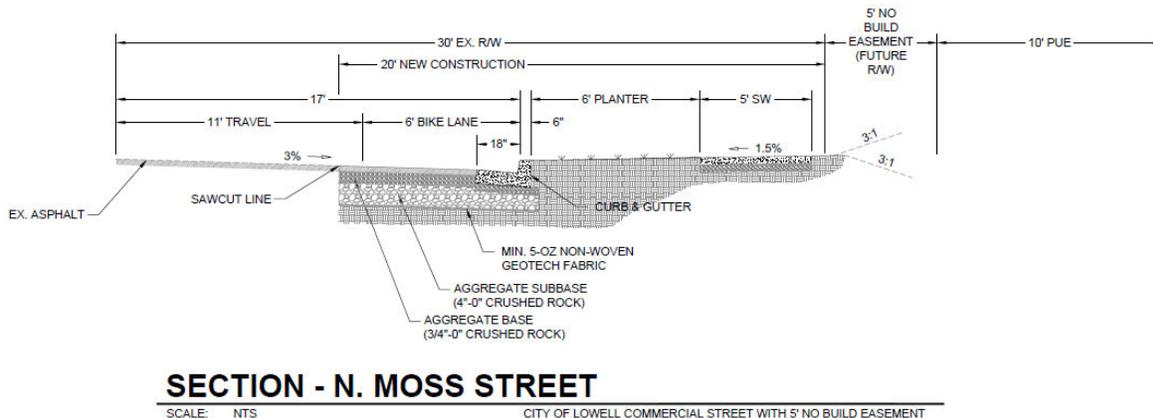


Figure 5. Applicant proposed urban street improvements along frontage of North Moss Street.

Condition of Approval #5: Applicant shall construct urban street improvements consistent with Lane County Major Collector standards and as specifically proposed by the applicant (as seen in

Figure 5) to include 20' of total new construction, 6' bike lane, 6' planter strip, 5' sidewalk, 5' no build easement and 10' public utility easement. Final construction plans and details are subject to review and approval by Lane County as part of the Facility permit process. The City Public Works and Engineering departments reserve the right to review and comment on urban street improvements as part of the facility permit process.

(p) Traffic Signs/Signals: Where a proposed intersection will result in the need for street signals to serve the increased traffic generated by the proposed development, they shall be provided by the developer or land divider and the costs shall be born by the developer or land divider unless an equitable means of cost distribution is approved by the City.

Staff Response: Any applicable street/traffic signage costs shall be borne by the developer. Street /traffic signage should be included with the building permit and Lane County facility permit process. This will be a condition of approval.

Condition of Approval #6: Any applicable signage costs shall be borne by the developer. Street/traffic signage should be included with the building permit process with the City and Lane County.

SECTION 9.518 SIDEWALKS. *Public sidewalk improvements are required for all land divisions and property development in the City of Lowell. Sidewalks may be deferred by the City where future road or utility improvements will occur and on property in the rural fringe of the City where urban construction standards have not yet occurred. The property owner is obligated to provide the sidewalk when requested by the City or is obligated to pay their fair share if sidewalks are installed by the City at a later date. An irrevocable Waiver of Remonstrance shall be recorded with the property to guarantee compliance with this requirement.*

Staff Response: Similar to the response for Section 9.517 Streets, above, the applicant is proposing development adjacent to the City right-of-way and thus, per Section 9.518, public sidewalks are required for all property development in Lowell. The applicant will be constructing 5' sidewalks along the frontage of North Moss Street.

SECTION 9.519 BIKEWAYS

Bikeways are required along Arterial and Major Collector streets. Currently the only Bikeway requirements are those required by the County as a part of the County owned Major Collector streets within the City. Future requirements for Bikeways may be addressed at such time that a Transportation System Plan (TTSP) is completed for the City., but until specific Bikeway requirements are adopted, travel lanes of all streets that do not require Bikeways are approved for joint use with bicycles.

Staff Response: The applicant is proposing to construct a 6' bikeway along the frontage of North Moss Street. Lane County Transportation and Engineering will be reviewing the specific

construction plans because North Moss Street is a Lane County roadway facility. Criterion met.

SECTION 9.520 STORM DRAINAGE

Until completion of a Storm Drainage Master Plan for the City of Lowell, Section IV, of the Standards for Public Improvements and the following shall apply. In the event of a conflict, the following takes precedence.

(a) General Provisions. It is the obligation of the property owner to provide proper drainage and protect all runoff and drainage ways from disruption or contamination. On-site and off-site drainage improvements may be required. Property owners shall provide proper drainage and shall not direct drainage across another property except as a part of an approved drainage plan. Paving, roof drains and catch basin outflows may require detention ponds or cells and discharge permits. Maintaining proper drainage is a continuing obligation of the property owner. The City will approve a development request only where adequate provisions for storm and flood water run-off have been made as determined by the City. The storm water drainage system must be separate and independent of any sanitary sewerage system. Inlets should be provided so surface water is not carried across any intersection or allowed to flood any street. Surface water drainage patterns and proposed storm drainage must be shown on every development plan submitted for approval. All proposed drainage systems must be approved by the City as part of the review and approval process.

(g) Drainage Management Practices. Developments within the City must employ drainage management practices approved by the City. The City may limit the amount and rate of surface water run-off into receiving streams or drainage facilities by requiring the use of one or more of the following practices:

- (1) Temporary ponding or detention of water to control rapid runoff;***
- (2) Permanent storage basins;***
- (3) Minimization of impervious surfaces;***
- (4) Emphasis on natural drainageways;***
- (5) Prevention of water flowing from the development in an uncontrolled fashion;***

Staff Response: It is the obligation of the property owner to provide proper drainage and protect all run and drainage ways from disruption or contamination. All stormwater from the proposed development will be collected and conveyed to underground detention and then taken to the west into Moss Street. The applicant's civil engineer believes any standing water issues on adjacent properties to the east will not be adversely affected and may aid in any standing water issues due to the proposed curtain drain along the common property line with residential properties to the

east. The applicant will utilize a Stormtech SC-310 Chamber System as the primary stormwater management mechanism. The applicant will also be installing an in 6” roof drain lateral along the rear of the property, and an open-graded gravel interceptor trench for upstream residential overland flow. The applicant’s preliminary stormwater drainage management plan has been reviewed and approved by the City Engineer. A final stormwater drainage plan will be a condition of approval and subject to review and approval by the City Engineer.

Condition of Approval #7: Prior to issuance of building permits, applicant shall submit to the City Administrator or their designee a final stormwater drainage plan complete with details. Plan and details are subject to review and revision.

SECTION 9.527 GRADING

General grading shall conform to Lowell Ordinance 227, Section 2, Excavation and Grading Building Code, and the following standards unless engineered and approved by the City.

(a) Cut slopes shall not exceed one and one-half feet horizontally to one foot vertically.

(b) Fill slopes shall not exceed two feet horizontally to one foot vertically.

(c) The type and characteristics of imported fill soils shall be the same or compatible with the existing soils on the site.

(d) Fills for streets and building sites shall be engineered and approved by the City.

(e) All sites shall be graded to direct storm water to City storm sewers or to natural drainage ways.

Staff Response: The applicant’s civil engineer has submitted a preliminary grading plan. Staff find the preliminary plan acceptable to establish feasibility to meet grading standards. A final and detailed grading plan will be required. See Sheets C4.3 and C4.2.

Condition of Approval #8: Prior to the issuance of building permits, the applicant shall submit a final grading plan, in conformance with Section 9.527, to the City Administrator or their designee for review and approval.

SECTION 9.528 LANDSCAPING

All yard setbacks and parking areas shall be landscaped in accordance with the following requirements:

(a) General Provisions.

(1) Landscaping shall primarily consist of ground cover, trees, shrubs or other living plants with sufficient irrigation to properly maintain all

vegetation. Decorative design elements such as fountains, pools, benches, sculptures, planters, fences and similar elements may be placed within the area.

Staff Response: As seen on Sheet L.1, the site will be landscaped. Landscaping elements include trees, shrubs and ground cover. Criterion met.

(2) Provisions for landscaping, screening and maintenance are a continuing obligation of the property owner. All required landscaped areas shall be cleared of unwanted vegetation and weeds at least once a year prior to July. Dead landscape plantings shall be replaced by April of the following year.

Staff Response: Landscaping, screening and maintenance shall be a continuing obligation of the property owner. All required landscaped areas shall be cleared of unwanted vegetation and weeds at least once a year prior to July. Dead landscape plantings shall be replaced by April of the following year.

(3) Landscape plans for proposed new industrial, commercial or residential developments shall be included with the site plans submitted to the City for approval. Trees exceeding 10 inches in diameter, plantings and special site features shall be shown on all submitted plans and shall clearly indicate items proposed to be removed and those intended to be preserved.

Staff Response: As seen on Sheet L.1, the site will be landscaped. Landscaping elements include trees, shrubs and ground cover. As seen on Sheet A0.1, all existing pine trees are proposed to be removed because they interfere with site entrances and improvements. New trees will be planted in landscaping areas per the landscape plan. Criterion met.

Condition of Approval #9: A final landscaping plan, in conformance with Section 9.528, shall accompany the applicant's building permit application. Landscaping plan is subject to review and revision by the City Administrator or their designee.

(b) Yard Setbacks and Open Space.

(1) All required street facing exterior yard setbacks in each land use district and the entire open space of all commercial, and multiple-family dwelling sites exclusive of walks, drives, parking areas and buildings shall be landscaped and permanently maintained.

Staff Response: As seen on Sheet L.1, street facing yard setbacks are proposed to be landscaped. Criterion met.

(2) Commercial and industrial developments abutting residential properties shall have their yard setbacks landscaped and/or fenced to protect the abutting residential properties.

Staff Response: As seen on Sheet L.1, the areas abutting residential uses have a 6' foot fence that is already existing and will be landscaped.

(c) Fences:

(1) Residential fences, hedges and walls may be located within yard setbacks. Height is limited to 6 feet in required side, rear or interior yards, 3 feet in any required front yard or 4 feet if the top 1 foot of the fence is 75% open, and 3 feet in height in a Vision Clearance Area. Commercial or industrial properties may have 8-foot-high fences except in a street facing front yard setback.

(2) Materials. Residential fences and walls shall not be constructed of or contain any material which would do bodily harm such as electric, barbed or razor wire, broken glass, spikes, or any other hazardous or dangerous materials. Commercial or industrial properties may have barbed wire at the top of fences over 6 feet in height.

(3) Sight-obscuring fences, walls or landscaping may be required to screen objectionable activities as part of the City's review and approval process. Sight-obscuring means 75% opaque when viewed from any angle at a point 25 feet away. Vegetative materials must be evergreen species that meet this standard year-round within 3 years of planting.

(4) Maintenance. Fences shall be structurally maintained in a safe condition of repair and shall not lean over an adjoining property or sidewalk, have missing sections or slats, or broken supports.

Staff Response: As seen on Sheet A0.2, two 6' fences will remain to buffer the property from the adjacent residential uses. The site will also include landscaping to further provide a buffer from conflicting land uses. The existing fences shall be maintained in a safe condition of repair. Criterion met.

(d) Parking Areas:

(1) Parking lots shall be screened from abutting residential districts by a combination of fences, walls, and landscaping adequate to screen lights, provide privacy and separation for the abutting residential districts.

Staff Response: As seen on Sheet A0.2, two 6' fences will remain to buffer the property from the adjacent residential uses. The site will also include landscaping to further provide a buffer from conflicting land uses. The existing fences shall be maintained in a safe condition of repair.

(2) Parking lots shall have curbed landscaped islands and trees at the ends of parking rows to facilitate movement of traffic and to break large areas of parking surface. The minimum dimension of the landscaped area excluding

the curbs shall be 3 feet and the landscaping shall be protected from vehicular damage by wheel guards.

Staff Response: As seen on Sheet L.1, the two parking areas lot contain curbed landscaped islands at the ends of parking rows to facilities movement of traffic. The minimum dimensions of the landscaped area excluding the curbs shall be 3 feet and the landscaping shall be protected from vehicular damage by wheel guards. Criterion met.

(3) Parking lots containing more than 20 parking spaces shall have a minimum of 5 percent of the area devoted to vehicular circulation and parking areas in landscaping and trees. Landscaping shall be evenly distributed throughout the parking lot and long rows of parking spaces shall be interrupted by landscaped islands. The 5 percent landscaping shall be within or abutting the parking area and shall be in addition to the required landscaped yard setbacks.

Staff Response: As listed on Sheet A0.1, 27% of the site will be landscaped. This exceeds the minimum 5% required. The landscaping appears to be well distributed throughout the site. Criterion met.

(e) Service Facilities:

Garbage collection areas and service facilities located outside the building shall be screened from public view and landscaped.

Staff Response: As seen on Sheet A0.1 the applicant is proposing a 16'-10" X 19'-3" concrete dumpster pad. The dumpster pad appears to be contained behind doors, but no details as to how the dumpster pad will be screened from public view and landscaped. The applicant is also proposing a 16'X16' concrete delivery pad. The delivery pad does not appear to be screened from public view or landscaped. Planning Commission must decide if the concrete deliver pad is a "service facility" and thus required to be screened from public view and landscaped. Staff request Planning Commission's decision on this issue. At a minimum, staff will require greater detail as to how the garbage collection area will be appropriately screened from public view and landscaped as required. This may be added as a condition of approval, but more information is required. The applicant should be prepared to address this issue at the public hearing.

****Planning Commission's discretion is requested on this approval standard.**

Condition of Approval #10: Prior to the issuance of building permits, the applicant shall submit plans to the City Administrator, for review and approval, detailing how the garage enclosure will be screened from public view and landscaped.

SECTION 9.529 EXTERIOR LIGHTING.

Exterior lighting should be provided in parking lots and may be provided elsewhere. All exterior lighting shall be designed and installed to the following standards:

(a) Uplighting is prohibited. Externally lit signs, displays, building and aesthetic lighting must be lit from the top and shine downward. The only exception to this requirement is for lighting of a flagpole. The lighting must be shielded to prevent direct glare and/or light trespass. The lighting must also be contained to the target area.

(b) All exterior lights shall be designed, located, installed and directed in such a manner as to prevent glare across the property lines.

(c) All exterior building lighting for security or aesthetics will be full cut-off or shielded type, not allowing any upward distribution of light.

(d) For purposes of this subsection:

(1) "Glare" means light that causes annoyance, discomfort, or loss of visual performance and ability.

(2) "Uplighting" means any light source that distributes illumination above a 90-degree horizontal plane.

(e) Pre-existing non-conforming lighting may be required to be brought into compliance upon a determination by the City Administrator that such non-conforming lighting is a nuisance.

Staff Response: As seen on Sheet A0.1 and A0.2, the applicant is proposing 25' high light poles throughout the parking lot and at the front and rear of the townhome development. The light poles will shine down in a manner that is shielded to prevent direct glare and light trespass. The exterior lighting standards have also been denoted on Sheet C5.0. Staff find the applicant can feasibly meet the exterior lighting standards. Therefore, a final and detailed exterior lighting plan can be delegated to the City Administrator for final review and approval. This will be a condition of approval.

Condition of Approval #11: Prior to the issuance of building permits, the applicant shall submit a final exterior lighting plan in full compliance with Section 9.529. Plan is subject to review and revision by the City Administrator or their designee.

SECTION 9.805 IMPROVEMENTS AGREEMENT

Before City final approval of a development, site plan or land division, the developer or land divider shall file with the City an agreement between developer or land divider and the City, specifying the period within which required improvements and repairs shall be completed and providing that, if the work is not completed within the period specified, the City may complete the work and recover the full cost and expense, together with court costs and attorney fees necessary to collect said amounts from the developer or land divider. The agreement shall also provide for reimbursement of the City's cost of inspection in accordance with Section 9.801 (f).

SECTION 9.421 GENERAL COMMERCIAL DISTRICT C-1

Staff Response: The standards of the General Commercial zone are only applicable if the applicant is successful in rezoning the subject property to C-1.

(a) *Permitted Uses. In a C-1 District, the following uses and their accessory uses are permitted subject to the Site Plan Review provisions of Section 9.250 and the standards, provisions and exceptions set forth in this Code, provided all operations except off-street parking and temporary activities shall be conducted entirely within an enclosed building:*

(1) *Retail stores or shops.*

Staff Response: If the applicant is successful in a rezone of the subject property to General Commercial C-1, a retail store is a permitted use in that zoning designation. Criterion met.

(b) *Development Standards. Lots within a General Commercial District are approved by the Planning Commission as part of the Site Plan Review procedures of Sections 9.250. Lots are required to be large enough and developed to accommodate the building, sewage disposal system, required parking, service access and pedestrian circulation including persons with disabilities.*

(2) *Minimum lot area: None established*

Staff Response: In the C-1 zone there is no minimum lot area established. The applicant is proposing to create a 51,525 square foot commercial parcel. Criterion addressed.

(3) *Yards:*

A. *Front yard setbacks - none required. See Section 9.509 to 9.512 for additional street setbacks.*

Staff Response: There is no specified front yard setback, however the applicant is proposing a 15' front setback as seen on Sheet A0.3. Section 9.512 requires at least a 5' setback. This setback includes the required 5' no-build easement as required by Lane County. Criterion met.

B. *Side yard setbacks*

A. *None required between commercially or industrially zoned property*

B. *10 feet when abutting residentially zoned property.*

C. *None required for street side yard.*

Staff Response: For the proposed commercially zoned parcel, the side yard setback area is located along the southern property line. Because the properties located south of the subject property are zoned residential, a 10' setback is required. As seen on Sheet A0.2, a setback of 5' is proposed. This does not meet the minimum side yard setback standard for the C-1 zone, when abutting residentially zoned property. The applicant shall submit a revised site plan showing a

10' side yard setback along the southern property line. This will be a condition of approval. Alternatively, Planning Commission may cite this as a reason to deny the site plan.

Furthermore, the portion of the property to be partitioned and rezone to R-3 will require a 10' side yard setback. As seen on Sheet A0.2, the applicant only shows a 7' setback. This will need to be revised to 10' or Planning Commission may cite this as a reason to deny the site plan.

The side yard setback standards are not met. It is unknown to staff if the applicant can feasibly reconfigure the site plan to accommodate for the required setbacks.

C. Rear yard:

- 1. None required between commercially or industrially zoned property.**
- 2. 10 feet when abutting residentially zoned property.**

Staff Response: As seen on Sheet A0.2 the rear yard contains a 10' setback. Criterion met.

- (4) Maximum building height: There is no building height limitation except when the property abuts a residential zone, in which case the building height is limited to the height allowed in the adjacent residential zone for a distance of 50 feet.**

Staff Response: As seen on Sheet A0.2, the maximum height of the townhomes is 26'. The maximum height of the Dollar General retail store is 19'-6". Because the proposed commercially zoned parcel is adjacent to a residential district, the maximum height allowed is the maximum height allowed in the adjacent residential zone which is 30'. The maximum heights of the retail store and townhomes are acceptable.

- (5) Lot Size: There is no minimum lot size or lot dimension.**

Staff Response: There is no minimum lot size or dimension. Criterion not applicable.

- (6) Lot Coverage and Density: There is no lot coverage or density requirements except as provided in yard setback and on-site parking requirements.**
- (7) Access shall be designed to cause a minimum interference with traffic and may be subject to the review and approval of the County Engineer or State Department of Transportation. The dedication of additional right-of-way and construction of street improvements by the applicant may be required in order to facilitate traffic circulation.**

Staff Response: Access is addressed earlier in this staff report as part of the site plan review process. Access will be reviewed and approved by Lane County Transportation and Engineering because access is taken from a Lane County roadway facility. Access to the proposed townhome development is via an existing access easement.

SECTION 9.412 MULTIPLE-FAMILY RESIDENTIAL DISTRICT R-3

Staff Response: The standards of the Multiple-Family Residential zone are only applicable if the applicant is successful in rezoning the subject property to R-3.

(b) *Permitted Uses. In an R-3 District, the following uses and their accessory uses are permitted subject to the Site Plan Review provisions of Section 9.250, single-family and duplexes excepted, and other standards and provisions set forth in this Code:*

(1) *Duplexes, apartments, and multiple-family dwellings.*

Staff Response: In the R-3 zone multiple-family dwelling are a permitted use, subject to site plan review. This staff report and related application is seeking site review approval for both the townhome development and Dollar General retail store. Criterion met.

(d) *Development Standards.*

(1) *Minimum lot area - 7,000 square feet.*

Staff Response: As seen on the tentative partition plat proposed parcels 2 and 3 are greater than 7,000 square feet. Criterion met.

(2) *Minimum lot width - 60 feet, except for corner lots which must have no less than 65 feet on any property line adjoining a street*

Staff Response: As seen on the tentative partition plat proposed parcels 2 and 3 are greater than 60-feet.

(3) *Minimum Lot Depth – 80 feet*

Staff Response: As seen on the tentative partition plat proposed parcels 2 and 3 are greater than 80-feet in depth.

(4) *Maximum Building coverage including accessory buildings - 40%, provided that any patio structure used solely for open space and swimming pool not structurally covered shall not be counted as a structure for ascertaining coverage.*

Staff Response: Proposed Parcel 2 is 7,280 square feet. The size of the townhome expected on Parcel 2 is 2,112 square feet. This equates to a lot coverage of 29%.

Proposed Parcel 3 is 7,274 square feet. The size of the townhome expected on Parcel 3 is 2,112 square feet. This equates to a lot coverage of 29%.

Criterion met.

(5) *Maximum building height – 3 stories or 45 feet, whichever is lower. Accessory*

building are limited to one story. For R-3 development within 50 foot of an abutting R-1 district side or rear yard, R-1 height standards apply.

Staff Response: As seen on Sheet A0.1, the maximum height of the townhomes are 26-feet. Criterion met.

(6) *Yards:*

A. *Front Yard*

1. *For Streets with constructed or planned curbs and/or sidewalks, 20 feet from the outside edge of the curb or sidewalk but no less than 10 feet from the property line.*
2. *Where no curbs or sidewalks are constructed or planned, 15 feet, except all garages, carports or other parking structures taking access from the front of the property shall be set back 20 feet.*

B. *Side yard setbacks:*

1. *Interior side yard: 5 feet and 7 ½ feet for two story structures.*
2. *Alley side yard: 5 feet*
3. *Street side yard: For Streets with constructed or planned curbs and/or sidewalks, 15 feet from the outside edge of the curb or sidewalk but no less than 5 feet from the property line except for parking structures which shall be set back at least 20 feet from a curb or sidewalk. Where no curbs or sidewalks are constructed or planned, 10 feet, except all parking structures taking access from the side street shall be set back 20 feet.*

C. *Rear yard: 10 feet.*

Staff Response: The front yard setback shall not be less than 10-feet. As seen on Sheet A0.1 the front yard setback is 15-feet. Front yard setback is met.

The side yard setback is 5 feet for single story buildings but 7.5 feet for two story structures. As seen on Sheet A0.1, the setback is 7-feet. However, the property located directly south of the townhomes is proposed to be zoned commercial. When a commercially zoned property is adjacent to a residentially zoned property, the side yard setback is increased 10 feet (see Section 9.421(d)(2)(B)). The side yard setback is not met.

The rear yard setback in the R-3 zone is 10-feet. As seen on Sheet A0.1. the rear yard setback is ~12-feet. Rear setback is met.

- (7) See **Article 9.5** for additional General Development Standards, **Article 9.6** for Special Development Standards and **Article 9.7** for Use Standards that may apply in the R-3 District.

Staff Response: Article 7, Section 9.706 Multiple-Family Standards are applicable.

SECTION 9.706

MULTIPLE-FAMILY STANDARDS

Medium density multiple-family housing is allowed in the R-3 residential district up to 15 units per acre and high density Multiple-family housing may be allowed in accordance with the Conditional Use provisions of Section 9.251.

- (a) *Access shall be from a designated arterial or collector street.*

Staff Response: Access to the multiple-family townhomes is via an existing access easement over Tax Lot 06501. Persons entering Parcels 2 and 3 arrive from North Moss Street, which is a collector, but travel over the rear parking lot the OPRD property to enter into the parking lot of the townhomes.

- (b) *Requirements for front, rear, side and street side yards, for high density shall comply with the R-3 District standards.*

Staff Response: All setbacks are met, except for the side yard setback. The side yard setback is the setback that abut the proposed commercially zoned lot to the south. When a commercially zoned lot is adjacent to a residentially zoned property, the minimum setback required is 10-feet. As seen on Sheet A0.1, the setback is currently 7-feet. See Section 9.421(d)(2)(B). This criterion is not met.

- (c) *On-site bicycle storage facilities, bicycle paths and pedestrian ways shall be provided for developments exceeding six dwelling units.*

Staff Response: The proposal for dwelling units does not exceed six. Therefore, this criterion is not applicable.

- (d) *The City may require conditions of approval when deemed necessary for the mitigation of potential adverse impacts on a neighborhood or adjacent areas.*

Staff Response: The Planning Commission, at its discretion, may impose reasonable conditions of approval when deemed necessary for the mitigation of potential adverse impacts on a neighborhood or adjacent areas.

- (e) *The City may regulate the type of dwelling units for high density multiple family to mitigate potential adverse impacts on a neighborhood or adjacent areas.*

Staff Response: The Planning Commissions, at its discretion, may regulate the type of dwelling units for high density multiple family to mitigate potential adverse impacts on a neighborhood or adjacent areas.

- (f) *Additional landscaping or screening on the property boundary may be required to mitigate potential adverse impacts on adjacent properties.*

Staff Response: landscaping between the proposed residential and commercial development is proposed and appears to be sufficient. Staff don't find additional landscaping or screening necessary but Planning Commission may find otherwise.

SECTION 9.516 Access.

(c) Every property shall abut a street other than an alley for a minimum width of 16 feet, of which 12 foot must be paved, except where the City has approved an access to multiple lots sharing the same access in which the total width must be at least 16 feet. No more than two properties may utilize the same access unless more are approved with the tentative plan.

(d) The following access alternatives to Panhandle properties may be approved by the City:

(1) Approval of a single access road easement to serve proposed parcels. The City may require a provision for conversion to a dedicated public road right-of-way at some future date, in which case the easement shall have the same width as a required right-of-way.

Staff Response: The subject property does abut a street for a minimum width of 16 feet, but such abutment is not used for access to proposed Parcels 2 and 3. The applicant has been granted an access easement across TL 06501 to access proposed Parcels 2 and 3. The easement was granted by the Forest Service back when the property was first partitioned. Staff and Lane County do not have objections to this proposed access dynamic but Planning Commission should review and approve this access dynamic pursuant to subsection (b)(1) that allows approval of a single access road easement to serve proposed parcels. The qualifier for such a provision seems to apply as alternative to Panhandles lots, which is not being proposed.

6. RECOMMENDATION

The success of site plan review is dependent on the applicant's ability to successfully rezone proposed Parcel 1 to C-1 and proposed Parcels 2 and 3 to R-3. If the property is zoned C-1 and R-3, respectively, the applicant fails to meet two setback standards. If the rezone is successful, the Planning Commission can deny the site plan review based on failure to meet Section 9.421(d)(B)(B) or require the applicant to bring back a site plan that displays conformance with the setback standards. If Planning Commission approves the site plan review, staff recommend Planning Commission staff's proposed conditions of approval.

If the applicant's request for rezone is unsuccessful then the proposal for site plan review shall be denied for failure to meet Section 9.250(b)(1).

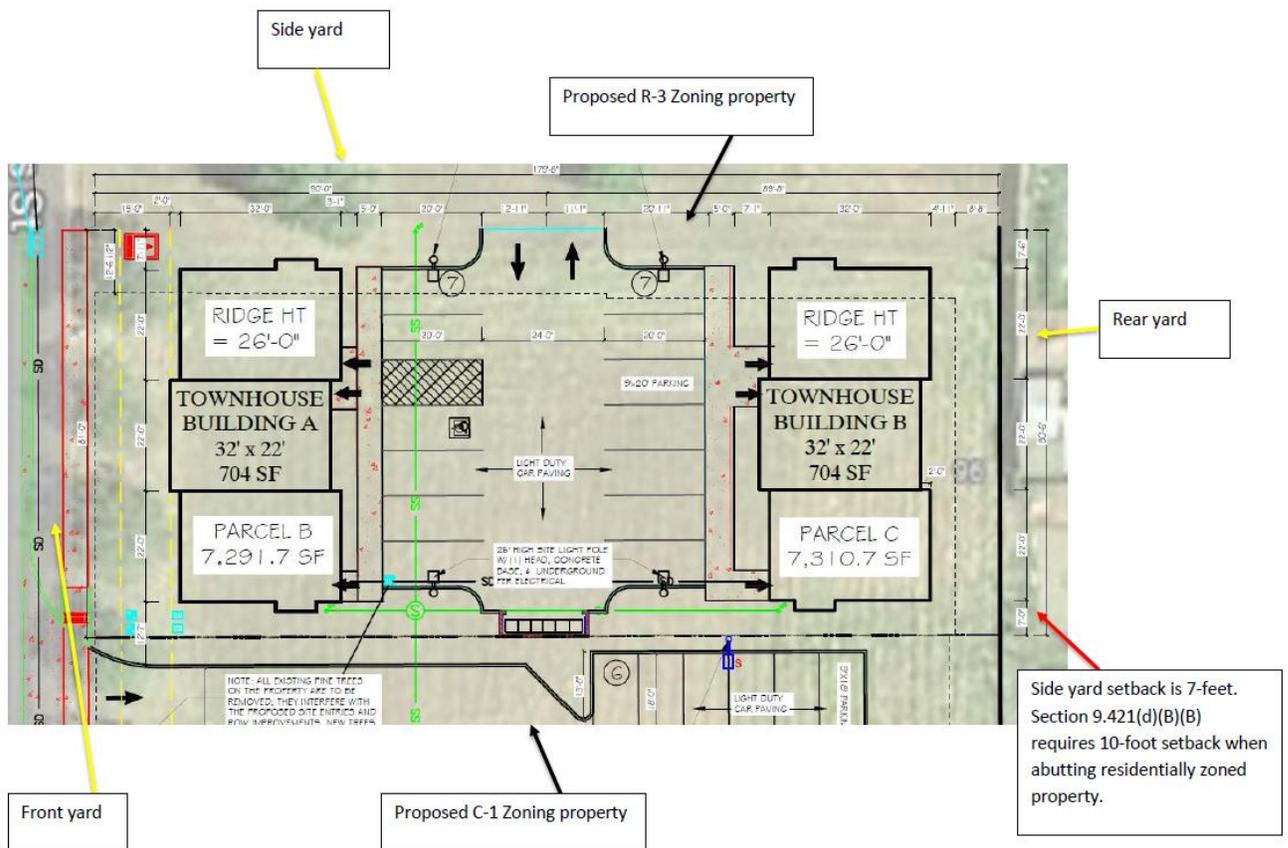


Figure 6. Staff graphic showing setback issues.

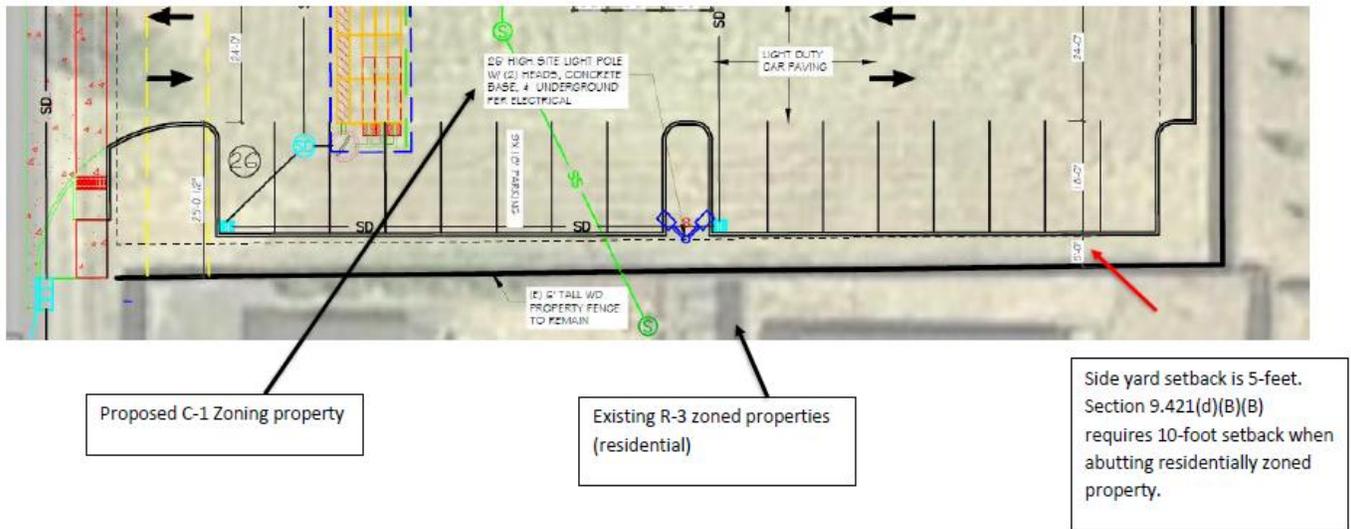


Figure 7. Side yard setback issue between residential and commercial properties.

7. CONDITIONS OF APPROVAL

Condition of Approval #1: Prior to the issuance of building permits, applicant shall address Lane County’s comment regarding potential traffic conflicts from closely spaced driveways and restrictions implemented by driveway design modifications along with appropriate signage.

Condition of Approval #2: As a general condition, the applicant shall adhere to the conditions of approval imposed by Lane County Transportation Planning and Engineering related to the findings and conclusions of the TIA and traffic in general. A County facility permit will be required to be obtained by the applicant to perform work and improvements within and adjacent to North Moss Street. Final Facility permit approval by Lane County shall be required prior to issuance of certificates of occupancy for the retail and residential uses.

Condition of Approval #3: Prior to construction activities including clearing, grading and excavation that disturb one or more acres of land, the applicant shall obtain an approved NPDES permit from Oregon DEQ.

Condition of Approval #4: A final parking/site plan, drawn to scale, indicating how the off-street parking requirements are to be fulfilled, shall accompany the applicant’s building permit application.

Condition of Approval #5: Applicant shall construct urban street improvements consistent with Lane County Major Collector standards and as specifically proposed by the applicant (as seen in Figure 5) to include 20’ of total new construction, 6’ bike lane, 6’ planter strip, 5’ sidewalk, 5’ no build easement and 10’ public utility easement. Final construction plans and details are

subject to review and approval by Lane County as part of the Facility permit process. The City Public Works and Engineering departments reserve the right to review and comment on urban street improvements as part of the facility permit process.

Condition of Approval #6: Any applicable signage costs shall be borne by the developer. Street/traffic signage should be included with the building permit process with the City and Lane County.

Condition of Approval #7: Prior to issuance of building permits, applicant shall submit to the City Administrator or their designee a final stormwater drainage plan complete with details. Plan and details are subject to review and revision.

Condition of Approval #8: Prior to the issuance of building permits, the applicant shall submit a final grading plan, in conformance with Section 9.527, to the City Administrator or their designee for review and approval.

Condition of Approval #9: A final landscaping plan, in conformance with Section 9.528, shall accompany the applicant's building permit application. Landscaping plan is subject to review and revision by the City Administrator or their designee.

Condition of Approval #10: Prior to the issuance of building permits, the applicant shall submit plans to the City Administrator, for review and approval, detailing how the garage enclosure will be screened from public view and landscaped.

Condition of Approval #11: Prior to the issuance of building permits, the applicant shall submit a final exterior lighting plan in full compliance with Section 9.529. Plan is subject to review and revision by the City Administrator or their designee.

Condition of Approval #12: Applicant shall be responsible for costs associated with engineering review of technical plans.

8. ATTACHMENTS

Attachment A: Applicant's final TIA

Attachment B: Civil sheets (C3.0, 4.0, 4.2, 4.3, 5.0)

Attachment C: Applicant site plans (A0.1, A0.2, A0.3, A2.0, A2.1, A2.2)

Attachment D: Landscaping plan

Attachment E: Stormwater management plan

Technical Memorandum

September 22, 2022

Project# 27926.0

To: Shashi Bajracharya, Lane County Traffic Engineer
Lane County
3050 N Delta Highway
Eugene, OR 97408

From: Matt Bell, Matt Bell, Wayne Kittelson, P.E.

CC: David Sommer, Oregon Architecture

RE: Lowell Dollar General - Traffic Impact Analysis

INTRODUCTION

H & H Northwest Companies is proposing to develop the 1.53-acre site located on the east side N Moss Street in Lowell, Oregon. Figure 1 illustrates the site vicinity map. The proposed develop plan includes a 12,480 square foot Dollar General and six multi-family residential homes. Access to the Dollar General will be provided by two new driveways on the east side of N Moss Street and access to the multi-family homes will be provided by an existing driveway to the north. Figure 2 illustrates the conceptual site plan. Construction of the proposed development is expected to occur in two phases. The phase 1 Dollar General is expected to begin in 2022 with full build-out and occupancy in 2023. The build-out year for the phase 2 multi-family homes is not known at this time but for the purposes of the study, will be assumed to occur in 2023 as well.

The results of this study indicate that the proposed development can be constructed while maintaining acceptable traffic operations at the site driveways, assuming provision of the recommended mitigation measures. The recommended mitigation measures include:

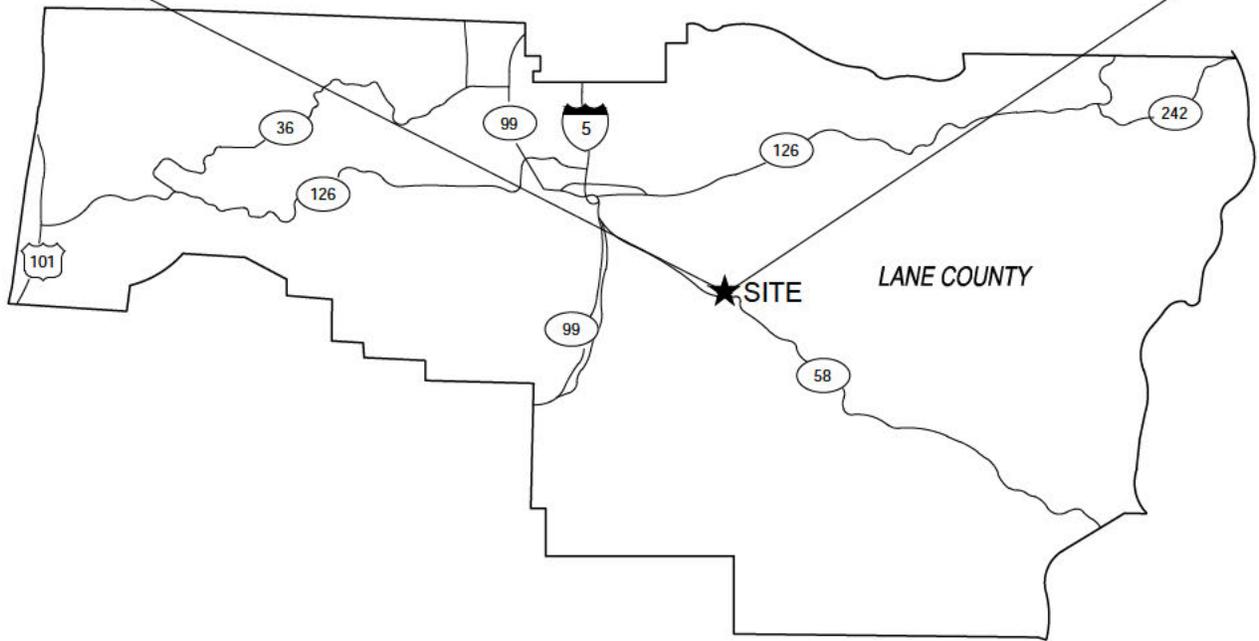
- Landscaping, above ground utilities, and signing should be located and maintained along the site frontage in a manner that preserves adequate intersection sight distance for turning movements onto N Moss Street.
- Provide sufficient right-of-way along the site frontage to accommodate the optimum pavement width per Lane County Road Standards.

Additional details of the study methodology, findings, and recommendations are provided herein.

Scope of the Report

This report documents the transportation-related impacts associated with the proposed development. The scope of this report was developed based on guidance provided by Lane County staff in their letter dated March 29, 2022. Per the letter, operational analyses were performed at the following site driveways:

1. N Moss Street/North Driveway
2. N Moss Street/South Driveway

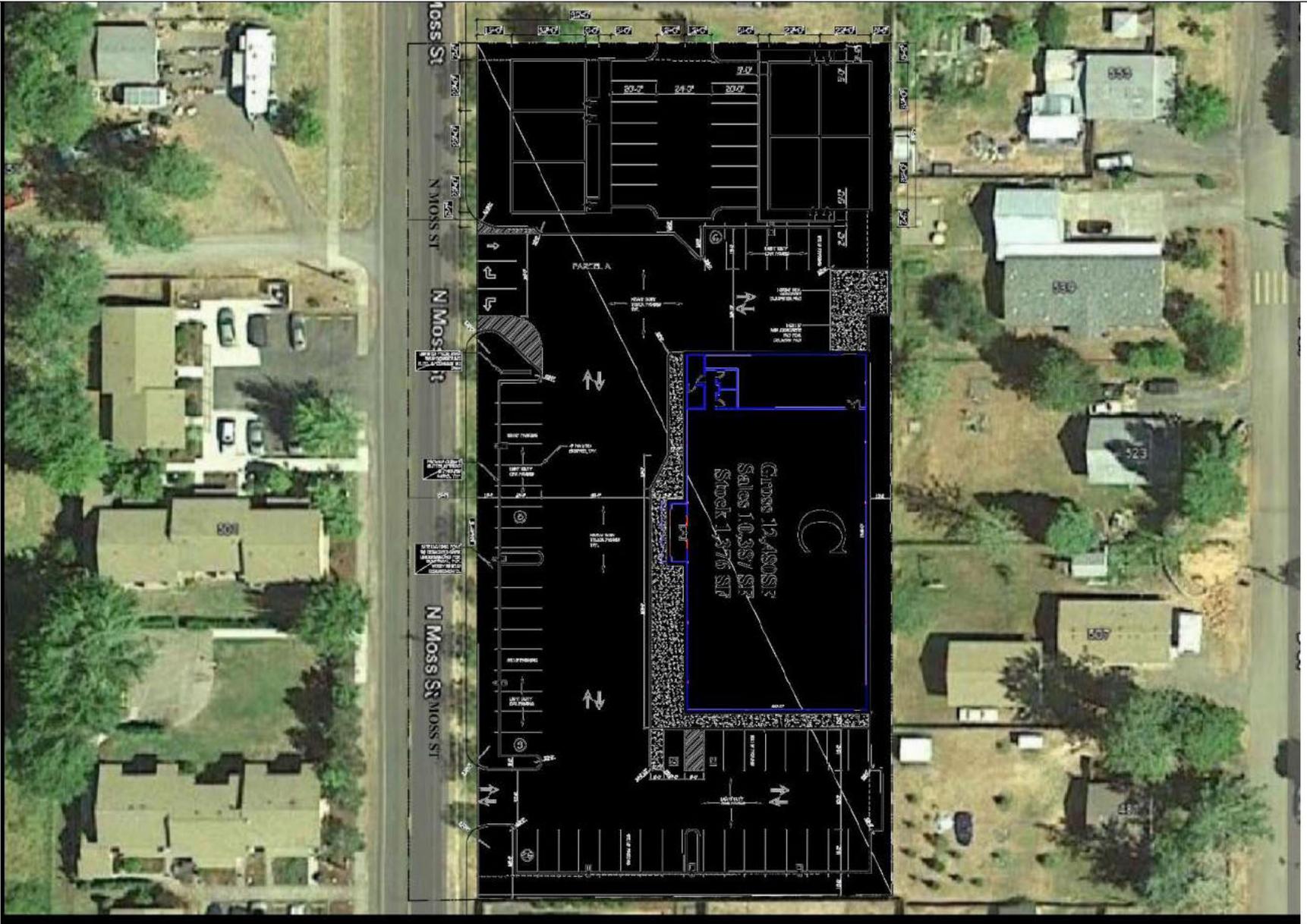


Site Vicinity Map
Lowell, Oregon

Figure
1

C:\Users\ppolka\OneDrive\Documents\temp\publish_3448\127926_Figures_pop.dwg Jun 24, 2022 - 1:12pm - ppolka\khina Layout Tab: Site Vicinity Map

C:\Users\ppolikakhina\p\p\p\data\local\temp\kch\publish_3448\427926_Figures_prop.dwg Jun 24, 2022 - 1:12pm - ppolikakhina Layout Tab: Proposed Site Plan



RECEIVED FROM _____ : (05/18/2022)

Preliminary Site Plan
Lowell, Oregon

Figure
2

This report evaluates these transportation issues:

- Existing land-use and transportation-system conditions within the site vicinity during the weekday AM and PM peak hours;
- Year 2023 background traffic conditions within the site vicinity during the weekday AM and PM peak hours;
- Trip generation and distribution estimates for the proposed development;
- Year 2023 total traffic conditions (with full build-out of the proposed development) at the site driveways during the weekday AM and PM peak hours;
- Horizon year 2028 total traffic conditions (with full build-out of the proposed development) at the site driveways during the weekday AM and PM peak hours, and;
- On-site access and circulation

Operational Standards

Traffic operations at the site driveways were evaluated based on the operational standards identified in the Lane County Transportation System Plan (TSP, Reference 1). Per Table 6-6 of the TSP, two-way stop and yield controlled intersections inside the urban growth boundary (UGB) of an incorporated city must operate at level of service (LOS) E or better with a volume-to-capacity (v/c) ratio of 0.95 or lower during the average weekday peak hour.

Analysis Tools and Methodology

All analyses described in this report were performed in accordance with the procedures stated in the *Highway Capacity Manual, 6th Edition* (HCM, Reference 2). Synchro was used to conduct the analysis. Synchro is a software tool that provides operational analysis in accordance with HCM methodologies.

All analyses used the peak 15-minute flow rates that occurred during the weekday morning and evening peak hours. Using the peak 15-minute flow rates ensures that this analysis is based on a reasonable worst-case scenario.

EXISTING CONDITIONS

The existing conditions analysis identifies the site conditions and current physical and operational characteristics of roadways within the study area. These conditions will be compared with future conditions later in this report.

Site Conditions and Adjacent Land Uses

The proposed development site is located within the Lowell city limits and UGB, it is zoned Public Lands (PL), and it is undeveloped. Adjacent land uses include additional Public Lands (PL) to the north, Single-Family Residential (R1) to the east, and Multi-Family Residential (R3) to the south and west per the *City of Lowell Zoning District Map* (Reference 3).

Development of the proposed Dollar General and multi-family residential homes will require a zone change and comprehensive plan amendment from Public Lands (PL) to Commercial District (C1) and Multi-Family Residential (R-3). Per discussions with County staff, the traffic impact analysis does NOT need to address state or local approval criteria for the zone change or comprehensive plan amendment.

Transportation Facilities

Table 1 summarizes the characteristics of roadways within the site vicinity.

Table 1: Existing Transportation Facilities

Roadway	Functional Classification ¹	Number of Lanes	Posted Speed (mph)	Sidewalks	Bicycle Lanes	On-Street Parking
N Moss Street	Major Collector	2	35	Partial	No	No

¹ Per the Lane County Transportation System Plan (TSP – Reference 1)

Roadway Facilities

N Moss Street is located on the west side of the proposed development site. N Moss Street connects the site to N Shore Drive to the south and Place Road to the north. N Shore Drive connects N Moss Street to Pioneer Street which connects with OR 58 (Willamette Highway) to the south. OR 58 connects the site to several nearby communities including the City of Eugene to the northwest. Figure 3 illustrates the existing lane configurations and traffic control devices at the site driveways.

Pedestrian and Bicycle Facilities

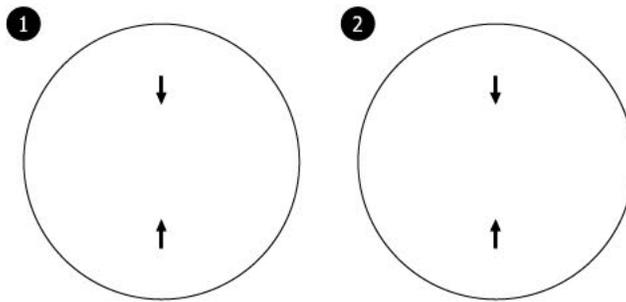
Continuous sidewalks are provided on the west side of N Moss Street and on the north and/or south sides of several side streets. Continuous shoulders are also provided on both sides of N Moss Street.

Transit Facilities

Local transit service is provided in the site vicinity by Lane Transit District (LTD). Route 92 – Lowell/LCC provides service between Eugene Station and Lowell via OR-58. Service is provided Monday through Saturday with one morning and evening trip departing from Eugene Station and two morning and one evening trip departing from Lowell. No service is provided on Sunday. The closest stop is located approximately ½ mile from the site at S Moss Street between Shore Line Drive and Main Street.

Traffic Volumes

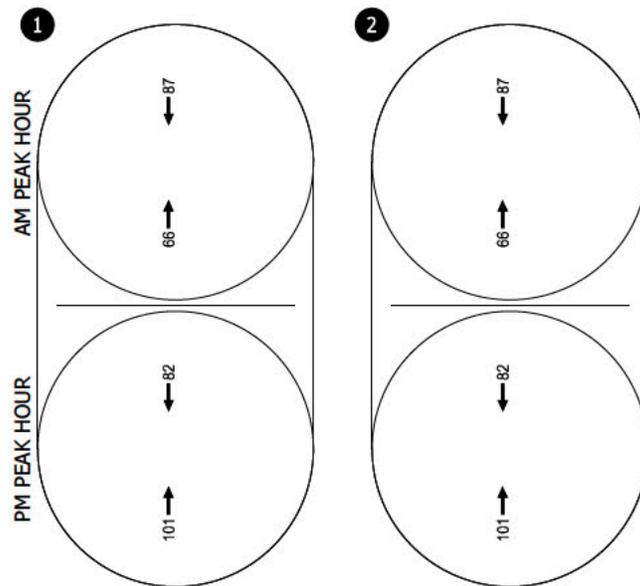
Traffic counts were conducted on N Moss Street over a 24-hour period in June 2022. The counts were conducted on a typical mid-week day while local schools were in session. The morning and evening peak hours were found to occur from 7:15 to 8:15 AM and 3:00 to 4:00 PM, respectively. Figure 4 shows the existing traffic volumes at the site driveways during the weekday AM and PM peak hours. *Appendix “A” contains the traffic count worksheets.*



 - STOP SIGN
  - EXISTING LANE CONFIGURATION

Existing Lane Configurations
& Traffic Control Devices
Lowell, Oregon

Figure
3



Existing Traffic Conditions
Weekday AM & PM Peak Hours
Lowell, Oregon

Figure
4

Traffic Safety

The crash history of N Moss Street was reviewed to identify potential safety issues that could impact access to the proposed development. Based on data obtained from the Oregon Department of Transportation (ODOT) for the five-year period from January 1, 2016 through December 31, 2020, no crashes were reported on N Moss Street between 4th Street and 6th Street over the five-year period.

TRAFFIC IMPACT ANALYSIS

The traffic impact analysis identifies how the site driveways will operate in the year the proposed development is expected to be fully built, 2023. The impact of traffic generated by the proposed development was examined as follows:

- Developments and transportation improvements planned in the site vicinity were identified and reviewed in coordination with County staff.
- Year 2023 background traffic conditions were analyzed at the site driveways during weekday AM and PM peak hours.
- Site-generated trips were estimated for the proposed development.
- A trip distribution pattern was developed for the proposed development, and the site-generated trips were distributed to the study area roadways and assigned to the site driveways.
- Year 2023 total traffic conditions were analyzed at the site driveways during the weekday AM and PM peak hours, assuming full build-out and occupancy of the proposed development.
- Horizon year 2028 total traffic conditions were analyzed at the site driveways during the weekday AM and PM peak hours, assuming full build-out and occupancy of the proposed development.
- On-site circulation issues and site-access operations were evaluated.

Year 2023 Background Traffic Conditions

The year 2023 background traffic conditions analysis identifies how the site driveways will operate in the year the proposed development is expected to be complete. This analysis includes traffic attributed to planned developments and general growth in the region but does not include traffic from the proposed development.

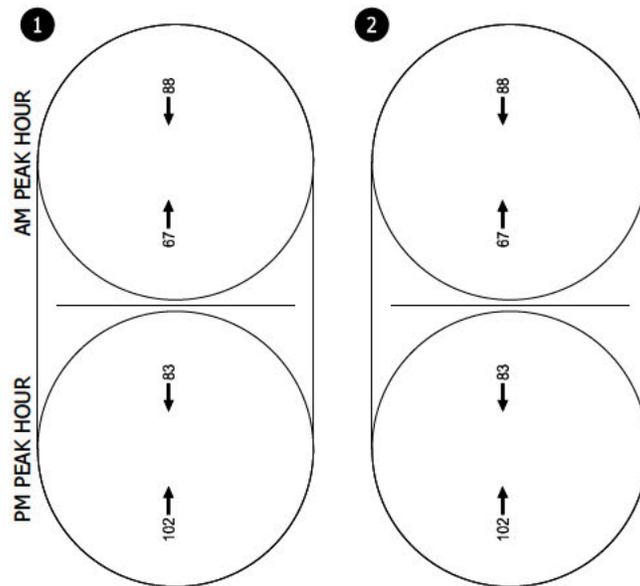
Planned Developments and Transportation Improvements

No planned developments or transportation improvements are expected to be complete within the site vicinity prior to full build-out and occupancy of the proposed development. However, sufficient right-of-way should be provided along the site frontage to accommodate the optimum pavement width per Lane County Road Standards.

Traffic Volumes

The growth rate used in this analysis was determined based on information provide in the Lane County TSP. Per the TSP, traffic volumes in Lowell are expected to increase by less than 1% per year throughout the planning horizon. Therefore, a 1% annual growth rate was used to provide a conservative analysis.

Ultimately, the year 2023 background traffic volumes were developed for N Moss Street by applying a 1% growth rate (1% per year for 1 year) to the existing traffic volumes shown in Figure 4. Figure 5 illustrates the year 2023 background traffic volumes during the weekday AM and PM peak hours.



Year 2023 Background Traffic Conditions
Weekday AM & PM Peak Hours
Lowell, Oregon

Figure
5

Proposed Development Plan

The proposed development plan includes a 12,480 square-foot Dollar General and six multi-family residential homes. Access to the Dollar General will be provided by two new driveways on the east side of N Moss Street and access to the multi-family homes will be provided by an existing driveway to the north. Figure 6 illustrates the proposed lane configurations and traffic control devices at the site driveways. Construction of the proposed development is expected to occur in two phases. The phase 1 Dollar General is expected to begin in 2022 with full build-out and occupancy in 2023. The build-out year for the phase 2 multi-family homes is not known at this time but for the purposes of the study, will be assumed to occur in 2023 as well.

Trip Generation

A trip generation estimate was prepared for the proposed development based on information provided in the standard reference, *Trip General Manual, 11th Edition*, published by the Institute of Transportation Engineers (ITE, Reference 4). ITE land use code 814 (Variety Store) was used to represent the Dollar General and ITE land use code 215 (single-family attached housing) was used to represent the multi-family homes. Table 2 summarizes the estimates for the daily, weekday AM and weekday PM peak hours.

Table 2: Trip Generation Estimate

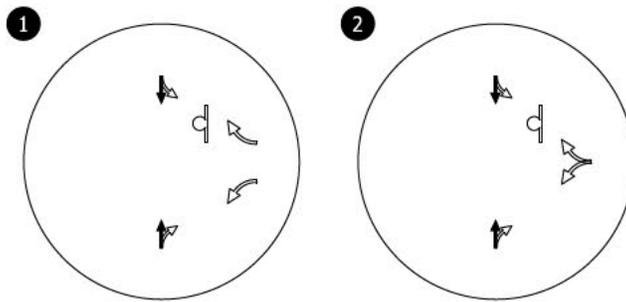
Land Use	ITE Code	Size	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Dollar General	814	12,480 sq ft	794	38	21	17	84	43	41
Multi-Family Homes	215	6 units	43	3	1	2	3	2	1
Total			837	41	22	19	87	45	42

Site Trip Distribution/Trip Assignment

The site-generated trips shown in Table 2 were distributed onto the study area roadways based on a review of existing traffic patterns and the location of major trip origins and destinations in the Lowell area. Figure 7 illustrates the estimated trip distribution pattern within the site vicinity and the assignment of site-generated trips at the site driveways.

Year 2023 Total Traffic Conditions

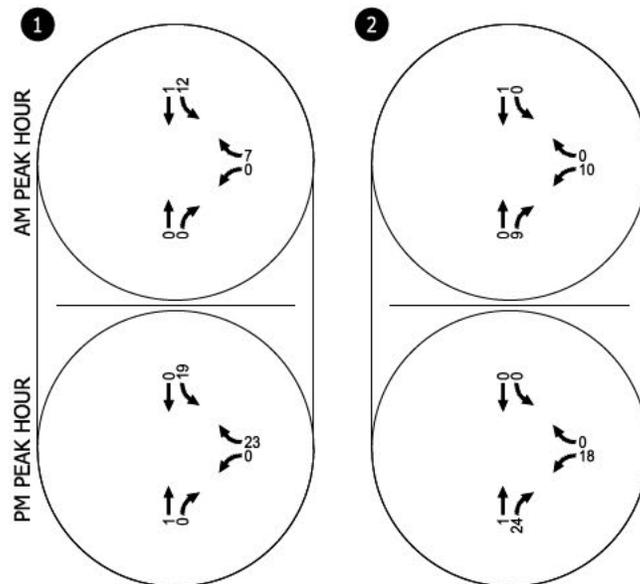
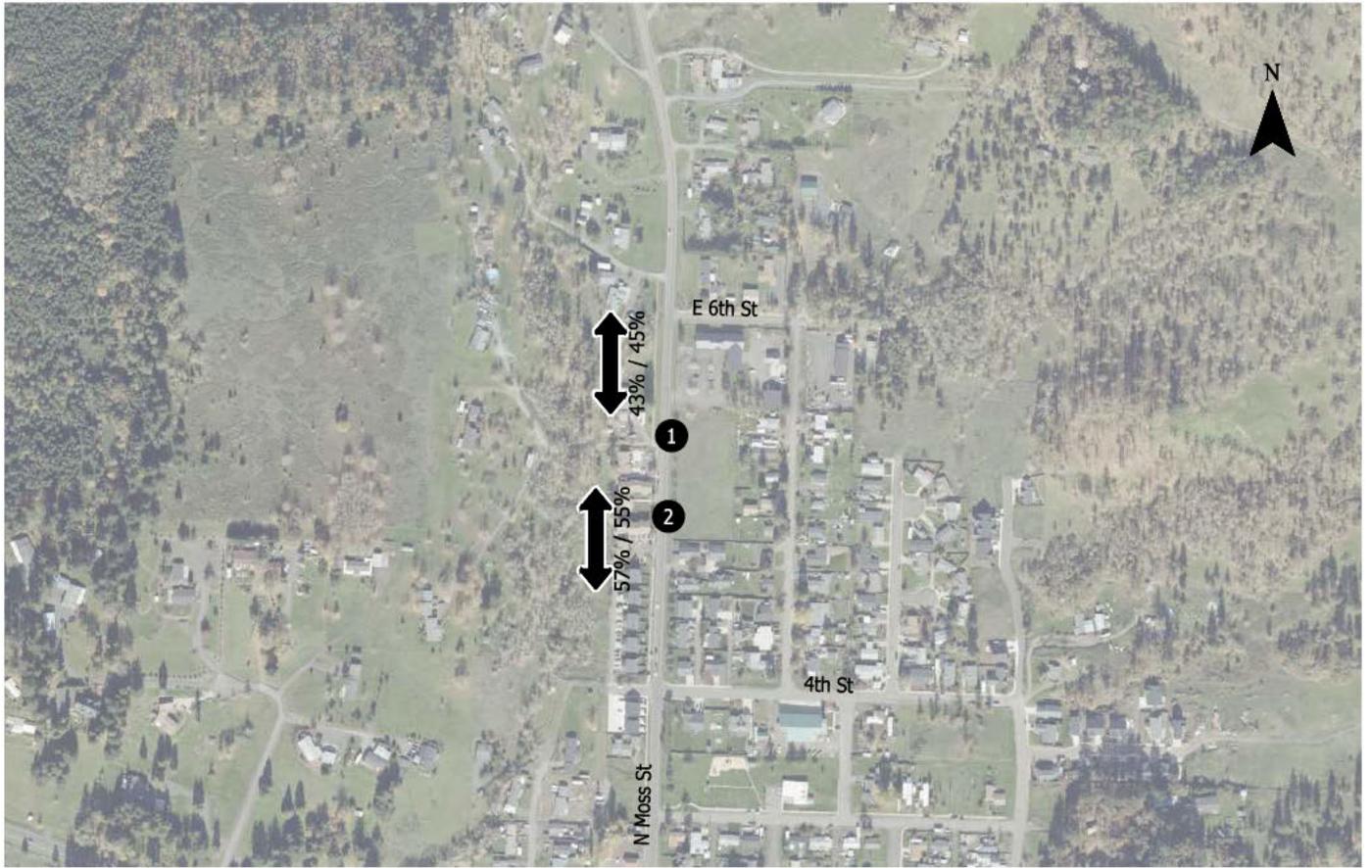
The year 2023 total traffic conditions analysis forecasts how the site driveways will operate with traffic generated by full build-out and occupancy of the proposed development. The year 2023 background traffic volumes shown in Figure 5 were added to the site-generated traffic shown in Figure 7 to arrive at the year 2023 total traffic volumes that are shown in Figure 8.



- ↩ - EXISTING LANE CONFIGURATION
- ↪ - PROPOSED LANE CONFIGURATION
- ⊥ - PROPOSED STOP SIGN

Proposed Lane Configurations
& Traffic Control Devices
Lowell, Oregon

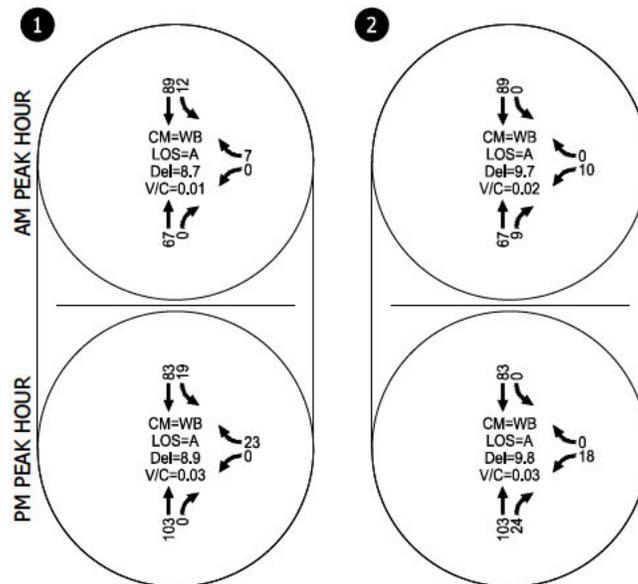
Figure
6



↔ - TRIP DISTRIBUTION (AM/PM)
XX%

Estimated Trip Distribution Pattern and Site-Generated Trips
Weekday AM & PM Peak Hours
Lowell, Oregon

Figure
7



CM = CRITICAL MOVEMENT
 LOS = CRITICAL MOVEMENT LEVEL OF SERVICE
 Del = CRITICAL MOVEMENT CONTROL DELAY
 V/C = CRITICAL MOVEMENT VOLUME-TO-CAPACITY RATIO

Year 2023 Total Traffic Conditions
 Weekday AM & PM Peak Hours
 Lowell, Oregon

Figure 8

Traffic Operations

The weekday AM and PM peak hour turning movement volumes shown in Figure 8 were used to conduct an operational analysis at the site driveways. Figure 8 summarizes the results of the year 2023 total traffic conditions analysis for the weekday AM and PM peak hours, respectively. As shown, the site driveways are expected to operate acceptably during the weekday AM and PM peak hours. *Appendix "B" contains the year 2023 total traffic conditions worksheets.*

Horizon Year 2028 Total Traffic Conditions

The horizon year 2028 total traffic conditions analysis forecasts how the study area's transportation system will operation five years beyond full build-out and occupancy of the proposed development. The horizon year 2028 total traffic volumes were developed by applying a 5% growth rate (1% per year for 5 years) to the existing traffic volumes shown in Figure 4 and by adding the site-generated traffic shown in Figure 7 to arrive at the horizon year 2028 total traffic volumes that are shown in Figure 9.

Traffic Operations

The weekday AM and PM peak hour turning movement volumes shown in Figure 9 were used to conduct an operational analysis at the site driveways. Figure 9 summarizes the results of the horizon year 2028 total traffic conditions analysis. As shown, the site driveways are forecast to operate acceptably during the weekday AM and PM peak hours. *Appendix "C" contains the horizon year 2028 total traffic conditions worksheets.*

SITE-ACCESS OPERATIONS

As indicated above, access to the proposed Dollar General will be provided by two new driveways on the east side of N Moss Street and access to the proposed multi-family homes will be provided by an existing driveway to the north. Also indicated above, the two new driveways are expected to operate acceptably under year 2023 and horizon year 2028 total traffic conditions. The following summarizes additional information on site-access operations at the two new driveways.

Motor Vehicle Access

Motor vehicles are expected to use the two new driveways to access the site. The northernmost driveway is expected to be the primary point of access for vehicles traveling to/from the north, as well as for heavy vehicles (i.e., delivery trucks)¹. The southernmost driveway is expected to be the primary point of access for vehicles traveling to/from the south. The southernmost driveway will also serve to separate vehicle traffic from heavy vehicle traffic during deliveries, as well as improve access and circulation throughout the site. Based on the proposed configuration of the two new driveways, turning movement conflicts are expected to be minimal.

¹ Additional information on heavy vehicle traffic (i.e., delivery trucks), including the frequency of deliveries, the types of delivery trucks, truck turning templates at the northernmost driveway, and potential strategies to ensure safe delivery operations is provided under separate cover.

Queuing Analysis

A queuing analysis was conducted at the site driveways under year 2023 and horizon year 2028 total traffic conditions. Table 3 summarizes the results of the analysis and identifies 95th percentile queues for each movement. The 95th percentile queues are rounded to the nearest 25-feet, or one vehicle length. As shown below, motor vehicle queues are not expected to occur on N Moss Street.

Table 3: Queuing Analysis

Driveway	Approach	Movement	Year 2023 Total Traffic Conditions		Year 2028 Total Traffic Conditions	
			AM	PM	AM	PM
N Moss Street/ North Driveway	Northbound	Thru/Right	0	0	0	0
	Southbound	Thru/Left	0	0	0	0
	Westbound	Right	<25 ft	<25 ft	<25 ft	<25 ft
		Left	<25 ft	<25 ft	<25 ft	<25 ft
N Moss Street/ South Driveway	Northbound	Thru/Right	0	0	0	0
	Southbound	Thru/Left	0	0	0	0
	Westbound	Left/Right	<25 ft	<25 ft	<25 ft	<25 ft

Turn Lane Analysis

The need for southbound left-turn and northbound right-turn lanes was evaluated at the site driveways based on the turn lane criteria provided in the ODOT analysis procedures manual (APM, Reference 5). Based on the criteria, year 2023 and horizon year 2028 total traffic volumes are not expected to meet the minimum thresholds to require separate left- or right-turn lanes at the site driveways. *Appendix "D" contains the left- and right-turn lane warrant worksheets.*

Sight-Distance Evaluation

Sight distance requirements were determined for the site driveways based on 85th percentile speeds along N Moss Street and information in the American Association of State Highway and Transportation Officials (AASHTO) publication, *A Policy on the Geometric Design of Highways and Streets (a.k.a. "The Greenbook")*. The traffic counts indicate that the 85th percentile speed along N Moss Street is approximately 44 miles per hour (mph). According to AASHTO, the minimum intersection site distance at the site driveways is approximately 485 feet and the minimum stopping site distance along N Moss Street is 347 feet.

N Moss Street is relatively flat and straight with the site vicinity and there are no vertical or horizontal curves, vegetation, or other impediments that limit sight distance. Therefore, sight distance at the proposed driveways is expected to be sufficient. Landscaping, above ground utilities, and signing should be located and maintained along the site frontage in a manner that preserves adequate sight distance for turning movements onto N Moss Street.

Access Spacing

Per the Lane County TSP, the minimum private access spacing standards on N Moss Street (a major collector with a posted speed limit of 35 mph) is 220 feet. As indicated by the preliminary site plan shown in Figure 2, the proposed site driveways are spaced at approximately 225 feet (measured centerline to centerline). Therefore, the site driveways meet Lane County access spacing standards.

Based on the site-access operations information provided above, the two new driveways are expected to operate safely and efficiently. Therefore, no further mitigation measures are recommended in conjunction with the proposed Dollar general.

PEDESTRIAN ACCESS

National Cooperative Highway Research Program (NCHRP) Report 562 *Improving Pedestrian Safety at Unsignalized Crossings* (Reference 6) provides a methodology for determining the need for enhanced pedestrian crossings² based on a variety of factors, including traffic volumes, travel speeds, and pedestrian crossing activity. According to the methodology, a minimum of 14 pedestrian crossings are needed during the peak hour to support an enhanced pedestrian crossing along a facility with either a posted speed or an 85th percentile speed equal to or above 35 mph, such as N Moss Street.

Pedestrian crossing counts were conducted along N Moss Street adjacent to the proposed development site to assess the need for an enhanced pedestrian crossing. The counts were conducted on a typical midweek day in September 2022 during the morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak time periods. No pedestrians were observed to cross N Moss Street during any of the four hours when data was collected. Therefore, an enhanced pedestrian crossing is not supported by the NCHRP methodology under existing conditions.

Pedestrian crossings may increase within the site vicinity over time as development occurs and as additional pedestrian infrastructure is constructed (for example, sidewalks on the east side of Moss Street, crosswalks at the intersections with 2nd and 4th, etc.). Today, however, there are relatively few existing land uses on the west side of N Moss Street within the site vicinity as compared to the east side, and the few that do exist are not expected to generate enough pedestrian crossings during the peak hour to support an enhanced pedestrian crossing in the immediate vicinity of the proposed Dollar General store; this is because approximately half of the homes on the west side of N Moss Street would need to generate a pedestrian trip during the same peak hour on a day-after-day basis to establish the need for such a crossing).

Based on the pedestrian counts and an assessment of existing land uses within the site vicinity, an enhanced pedestrian crossing is not recommended on conjunction with the proposed Dollar General store. However, the County should continue to monitor pedestrian crossing activity and consider installing an enhanced pedestrian crossing when additional connecting pedestrian infrastructure has been installed nearby and when pedestrian activity in the immediate vicinity increases to a level necessary to support one.

² An example of an enhanced pedestrian crossing is a crossing with high visibility crosswalk pavement markings and signs with flashing beacons.

FINDINGS AND RECOMMENDATIONS

The results of this study indicate that the proposed development can be constructed while maintaining acceptable traffic operations at the site driveways. Key findings of this analysis and our recommendations are discussed below.

Findings

- The site driveways are expected to operate acceptably with the proposed development.
- A review of historical crash data did not reveal any trends or patterns in the site vicinity.
- Vehicle queues are expected to be less than one vehicle entering and exiting the site.
- Separate left and right turn lanes are not warranted at the site driveways.
- Site distance is expected to be sufficient at the site driveways.
- The site driveways meet Lane County's access spacing standards.
- The provision of two driveways will separate vehicle traffic from heavy vehicle traffic and improve access and circulation throughout the site.
- Based on the proposed configuration of the two driveways, turning movement conflicts are expected to be minimal.

Recommendations

- Landscaping, above ground utilities, and signing should be located and maintained along the site frontage in a manner that preserves adequate intersection sight distance for turning movements onto N Moss Street.
- Provide sufficient right-of-way along the site frontage to accommodate the optimum pavement width per Lane County Road Standards.

REFERENCES

1. Lane County. *Lane County Transportation System Plan*.
2. Transportation Research Board. *Highway Capacity Manual*, 6th Edition. 2016.
3. City of Lowell. *City of Lowell Zoning District Map*. 2012.
4. Institute of Transportation Engineers. *Trip Generation Manual*, 11th Edition. September 2017.
5. Oregon Department of Transportation (ODOT). *Analysis Procedures Manual*, Version 2. June 2022.
6. The National Cooperative Highway Research Program (NCHRP). *Report 562 Improving Pedestrian Safety at Unsignalized Crossings*. 2006.

APPENDIX

- A. Traffic Counts
- B. Year 2023 Total Traffic Conditions Worksheets
- C. Horizon Year 2028 Total Traffic Conditions Worksheets
- D. Turn Lane Warrants

Appendix A Traffic Counts

Type of report: Tube Count - Volume Data

LOCATION: N Moss Street south of E 6th St							QC JOB #: 15840001			
SPECIFIC LOCATION:							DIRECTION: NB, SB			
CITY/STATE: Lowe, OR							DATE: Jun 9 2022 - Jun 9 2022			
Start Time	Mon	Tue	Wed	Thu 9 Jun 22	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM				7		7			7	
01:00 AM				2		2			2	
02:00 AM				2		2			2	
03:00 AM				8		8			8	
04:00 AM				13		13			13	
05:00 AM				29		29			29	
06:00 AM				58		58			58	
07:00 AM				123		123			123	
08:00 AM				92		92			92	
09:00 AM				75		75			75	
10:00 AM				71		71			71	
11:00 AM				103		103			103	
12:00 PM				153		153			153	
01:00 PM				98		98			98	
02:00 PM				116		116			116	
03:00 PM				183		183			183	
04:00 PM				148		148			148	
05:00 PM				114		114			114	
06:00 PM				108		108			108	
07:00 PM				65		65			65	
08:00 PM				87		87			87	
09:00 PM				34		34			34	
10:00 PM				15		15			15	
11:00 PM				12		12			12	
Day Total				1716		1716			1716	
% Weekday Average				100%						
% Week Average				100%		100%				
AM Peak Volume				7:00 AM 123		7:00 AM 123			7:00 AM 123	
PM Peak Volume				3:00 PM 183		3:00 PM 183			3:00 PM 183	

Comments:

ype of report: ube Count Speed Data

LOCATION: N Moss Street south of E 6th St
 SPECIFIC LOCATION:
 CITY/STATE: Lowe , OR

QC JOB #: 15840001
 DIRECTION: NB, SB
 DATE: Jun 9 2022

Start Time	15	16	20	21	25	26	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	76	999	Tota	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	31 40	6	
01:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	31 40	2	
02:00 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	26 35	1	
03:00 AM	0	1	2	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	16 25	3	
04:00 AM	0	0	0	1	3	1	0	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	46 55	7	
05:00 AM	0	0	1	4	7	8	6	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	31 40	15	
06:00 AM	2	2	4	6	12	14	9	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	31 40	26	
07:00 AM	1	1	5	8	24	47	26	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	36 45	73	
08:00 AM	3	1	1	2	24	33	18	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	31 40	57	
09:00 AM	2	1	5	8	20	22	12	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	31 40	42	
10:00 AM	1	2	2	6	24	14	15	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	31 40	38	
11:00 AM	5	1	3	9	25	34	19	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103	31 40	59	
12:00 PM	4	3	3	12	46	42	25	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153	31 40	88	
01:00 PM	2	2	3	13	26	34	12	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	31 40	60	
02:00 PM	4	5	2	6	30	37	22	6	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	31 40	67	
03:00 PM	11	7	15	23	40	47	31	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183	31 40	87	
04:00 PM	5	0	0	5	28	50	34	18	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	148	36 45	84	
05:00 PM	2	1	3	7	25	38	15	15	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114	31 40	63	
06:00 PM	3	1	3	8	24	33	22	7	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	31 40	57	
07:00 PM	2	0	1	3	14	25	10	4	1	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	65	31 40	39	
08:00 PM	4	0	6	6	24	25	15	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	31 40	49	
09:00 PM	1	1	0	5	11	3	2	3	4	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	34	26 35	16	
10:00 PM	0	0	1	1	3	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	41 50	7	
11:00 PM	1	0	0	2	2	1	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	26 35	4	
Day tota	53	29	60	135	418	516	301	135	40	20	7	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1716	31 40	934	
Percent	3 1%	1 7%	3 5%	7 9%	24 4%	30 1%	17 5%	7 9%	2 3%	1 2%	0 4%	0%	0 1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
AM Peak	00 AM	6 00 AM	7 00 AM	00 AM	00 AM	7 00 AM	7 00 AM	7 00 AM	4 00 AM	4 00 AM	2 00 AM	7 00 AM																		
Volume	5	2	5	9	25	47	26	7	4	4	0	0	0	0	0	23														
PM Peak	3 00 PM	3 00 PM	3 00 PM	3 00 PM	2 00 PM	4 00 PM	4 00 PM	2 00 PM	5 00 PM	6 00 PM	9 00 PM	2 00 PM	7 00 PM	2 00 PM	3 00 PM															
Volume	7	5	23	46	50	34	8	6	5	3	0	0	0	0	83															

Comments:

Type of report: Tube Count - Speed Data

SUMMARY - Tube Count - Speed Data

LOCATION: N Moss Street south of E 6th St SPECIFIC LOCATION: CITY/STATE: Lowe , OR														QC JOB #: 15840001 DIRECTION: NB, SB DATE: Jun 9 2022			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	ota	Pace Speed	Number n Pace
Grand ota Percent	53 3 1%	29 1 7%	60 3 5%	135 7 9%	418 24 4%	516 30 1%	301 17 5%	135 7 9%	40 2 3%	20 1 2%	7 0 4%	0 0%	2 0 1%	0 0%	1716	31 40	934
Cumu at ve Percent	3 1%	4 8%	8 3%	16 1%	40 5%	70 6%	88 1%	96%	98 3%	99 5%	99 9%	99 9%	100%	100%			
AD 1716															85th Percent e: 44 MPH Mean Speed(Average): 36 MPH Median: 36 MPH Mode: 38 MPH		
<i>Comments:</i>																	

Report generated on 6/13/2022 4:23 PM

SOURCE: Qua ity Counts, LLC (<http://www.qua itycounts.net>)



LOCATION: N Moss Street south of E 6th St

QC JOB #: 15840001

SPECIFIC LOCATION:

DIRECTION: NB, SB

CITY/STATE: Lowe, OR

DATE: Jun 9 2022

Start Time	Motorcycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	4	1	0	2	0	0	0	0	0	0	0	0	0	7
01:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
02:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
03:00 AM	0	3	3	1	1	0	0	0	0	0	0	0	0	0	8
04:00 AM	0	5	2	0	6	0	0	0	0	0	0	0	0	0	13
05:00 AM	0	16	8	0	4	0	0	1	0	0	0	0	0	0	29
06:00 AM	0	23	16	1	12	0	1	3	0	0	0	0	0	2	58
07:00 AM	0	70	30	3	13	1	0	5	0	1	0	0	0	0	123
08:00 AM	0	48	24	0	7	4	0	6	0	0	0	0	0	3	92
09:00 AM	0	37	24	0	5	0	1	7	0	0	0	0	0	1	75
10:00 AM	0	34	20	0	15	0	0	2	0	0	0	0	0	0	71
11:00 AM	0	51	23	0	19	2	0	5	0	0	0	0	0	3	103
12:00 PM	2	78	41	0	20	1	0	7	1	0	0	0	0	3	153
01:00 PM	0	48	31	1	7	2	0	8	0	0	0	0	0	1	98
02:00 PM	0	59	33	1	13	0	0	6	0	1	0	0	0	3	116
03:00 PM	2	89	47	5	22	3	0	6	1	0	0	0	1	7	183
04:00 PM	2	93	36	0	8	0	0	4	0	0	0	0	0	5	148
05:00 PM	1	74	26	0	10	0	0	1	0	0	0	0	0	2	114
06:00 PM	2	72	21	0	7	0	0	3	0	0	0	0	0	3	108
07:00 PM	1	40	21	0	1	0	0	0	0	0	0	0	0	2	65
08:00 PM	0	60	16	0	6	0	0	1	0	0	0	0	0	4	87
09:00 PM	0	23	9	0	1	0	0	0	0	0	0	0	0	1	34
10:00 PM	0	11	2	0	2	0	0	0	0	0	0	0	0	0	15
11:00 PM	0	8	2	0	1	0	0	0	0	0	0	0	0	1	12
Day Total	10	948	436	12	184	13	2	65	2	2	0	0	1	41	1716
Percent	0.6%	55.2%	25.4%	0.7%	10.7%	0.8%	0.1%	3.8%	0.1%	0.1%	0%	0%	0.1%	2.4%	
ADT 1716															
AM Peak Volume	12:00 AM	7:00 AM	7:00 AM	7:00 AM	11:00 AM	8:00 AM	6:00 AM	9:00 AM	12:00 AM	7:00 AM	12:00 AM	12:00 AM	12:00 AM	8:00 AM	7:00 AM
AM Peak	0	70	30	3	19	4	1	7	0	1	0	0	0	3	123
PM Peak Volume	12:00 PM	4:00 PM	3:00 PM	3:00 PM	3:00 PM	3:00 PM	12:00 PM	1:00 PM	12:00 PM	2:00 PM	12:00 PM	12:00 PM	3:00 PM	3:00 PM	3:00 PM
PM Peak	2	93	47	5	22	3	0	8	1	1	0	0	1	7	183

Comments:

LOCATION: N Moss Street south of E 6th St **QC JOB #:** 15840001
SPECIFIC LOCATION: **DIRECTION:** NB, SB
CITY/STATE: Lowe , OR **DATE:** Jun 9 2022

	Motorcyc es	Cars & Tra er	2 Ax e Long	Buses	2 Ax e 6 Tre	3 Ax e S nge	4 Ax e S nge	<5 Ax e Doub e	5 Ax e Doub e	>6 Ax e Doub e	<6 Ax e Mu t	6 Ax e Mu t	>6 Ax e Mu t	Not Cass f ed	Tota
Grand Total	10	948	436	12	184	13	2	65	2	2	0	0	1	41	1716
Percent	0.6%	55.2%	25.4%	0.7%	10.7%	0.8%	0.1%	3.8%	0.1%	0.1%	0%	0%	0.1%	2.4%	
ADT 1716															

Comments:



Appendix B
Year 2023 Total Traffic Conditions
Worksheets

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	67	0	12	89
Future Vol, veh/h	0	7	67	0	12	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	50	0	0	39
Mvmt Flow	0	9	91	0	16	120

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	243	91	0	0	91
Stage 1	91	-	-	-	-
Stage 2	152	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	750	972	-	-	1517
Stage 1	938	-	-	-	-
Stage 2	881	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	742	972	-	-	1517
Mov Cap-2 Maneuver	742	-	-	-	-
Stage 1	938	-	-	-	-
Stage 2	871	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	0.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	972	1517
HCM Lane V/C Ratio	-	-	-	0.01	0.011
HCM Control Delay (s)	-	-	0	8.7	7.4
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	-	0	0

HCM 6th TWSC
2: N Moss Street & Driveway 2

06/16/2022

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	0	67	9	0	89
Future Vol, veh/h	10	0	67	9	0	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	50	0	0	39
Mvmt Flow	14	0	91	12	0	120

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	217	97	0	0	103
Stage 1	97	-	-	-	-
Stage 2	120	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	776	965	-	-	1502
Stage 1	932	-	-	-	-
Stage 2	910	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	776	965	-	-	1502
Mov Cap-2 Maneuver	776	-	-	-	-
Stage 1	932	-	-	-	-
Stage 2	910	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	776	1502
HCM Lane V/C Ratio	-	-	0.017	-
HCM Control Delay (s)	-	-	9.7	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th TWSC
1: N Moss Street & Driveway 1

06/16/2022

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	23	103	0	19	83
Future Vol, veh/h	0	23	103	0	19	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	36	0	0	60
Mvmt Flow	0	26	117	0	22	94

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	255	117	0	0	117	0
Stage 1	117	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	738	941	-	-	1484	-
Stage 1	913	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	726	941	-	-	1484	-
Mov Cap-2 Maneuver	726	-	-	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	941	1484
HCM Lane V/C Ratio	-	-	-	0.028	0.015
HCM Control Delay (s)	-	-	0	8.9	7.5
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1	0

HCM 6th TWSC
2: N Moss Street & Driveway 2

06/16/2022

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	18	0	103	24	0	83
Future Vol, veh/h	18	0	103	24	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	36	0	0	60
Mvmt Flow	20	0	117	27	0	94

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	225	131	0	0	144
Stage 1	131	-	-	-	-
Stage 2	94	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	768	924	-	-	1451
Stage 1	900	-	-	-	-
Stage 2	935	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	768	924	-	-	1451
Mov Cap-2 Maneuver	768	-	-	-	-
Stage 1	900	-	-	-	-
Stage 2	935	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	768	1451
HCM Lane V/C Ratio	-	-	0.027	-
HCM Control Delay (s)	-	-	9.8	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Appendix C
Horizon Year 2028 Total Traffic Conditions
Worksheets

HCM 6th TWSC
1: N Moss Street & Driveway 1

06/16/2022

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	70	0	12	93
Future Vol, veh/h	0	7	70	0	12	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	50	0	0	39
Mvmt Flow	0	9	95	0	16	126

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	253	95	0	0	95	0
Stage 1	95	-	-	-	-	-
Stage 2	158	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	740	967	-	-	1512	-
Stage 1	934	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	732	967	-	-	1512	-
Mov Cap-2 Maneuver	732	-	-	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	865	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	967	1512
HCM Lane V/C Ratio	-	-	-	0.01	0.011
HCM Control Delay (s)	-	-	0	8.8	7.4
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	-	0	0

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	0	70	9	0	93
Future Vol, veh/h	10	0	70	9	0	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	0	0	50	0	0	39
Mvmt Flow	14	0	95	12	0	126

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	227	101	0	0	107
Stage 1	101	-	-	-	-
Stage 2	126	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	766	960	-	-	1497
Stage 1	928	-	-	-	-
Stage 2	905	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	766	960	-	-	1497
Mov Cap-2 Maneuver	766	-	-	-	-
Stage 1	928	-	-	-	-
Stage 2	905	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	766	1497
HCM Lane V/C Ratio	-	-	0.018	-
HCM Control Delay (s)	-	-	9.8	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th TWSC
1: N Moss Street & Driveway 2

06/16/2022

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	23	108	0	19	87
Future Vol, veh/h	0	23	108	0	19	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	36	0	0	60
Mvmt Flow	0	26	123	0	22	99

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	266	123	0	0	123	0
Stage 1	123	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	727	933	-	-	1477	-
Stage 1	907	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	715	933	-	-	1477	-
Mov Cap-2 Maneuver	715	-	-	-	-	-
Stage 1	907	-	-	-	-	-
Stage 2	875	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	1.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	933	1477
HCM Lane V/C Ratio	-	-	0.028	0.015
HCM Control Delay (s)	-	-	0	9
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th TWSC
2: N Moss Street & Driveway 3

06/16/2022

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	18	0	108	24	0	87
Future Vol, veh/h	18	0	108	24	0	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	36	0	0	60
Mvmt Flow	20	0	123	27	0	99

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	236	137	0	0	150
Stage 1	137	-	-	-	-
Stage 2	99	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	757	917	-	-	1444
Stage 1	895	-	-	-	-
Stage 2	930	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	757	917	-	-	1444
Mov Cap-2 Maneuver	757	-	-	-	-
Stage 1	895	-	-	-	-
Stage 2	930	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	757	1444
HCM Lane V/C Ratio	-	-	0.027	-
HCM Control Delay (s)	-	-	9.9	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Appendix D
Turn Lane Warrants

Left Turn Lane Evaluation Process

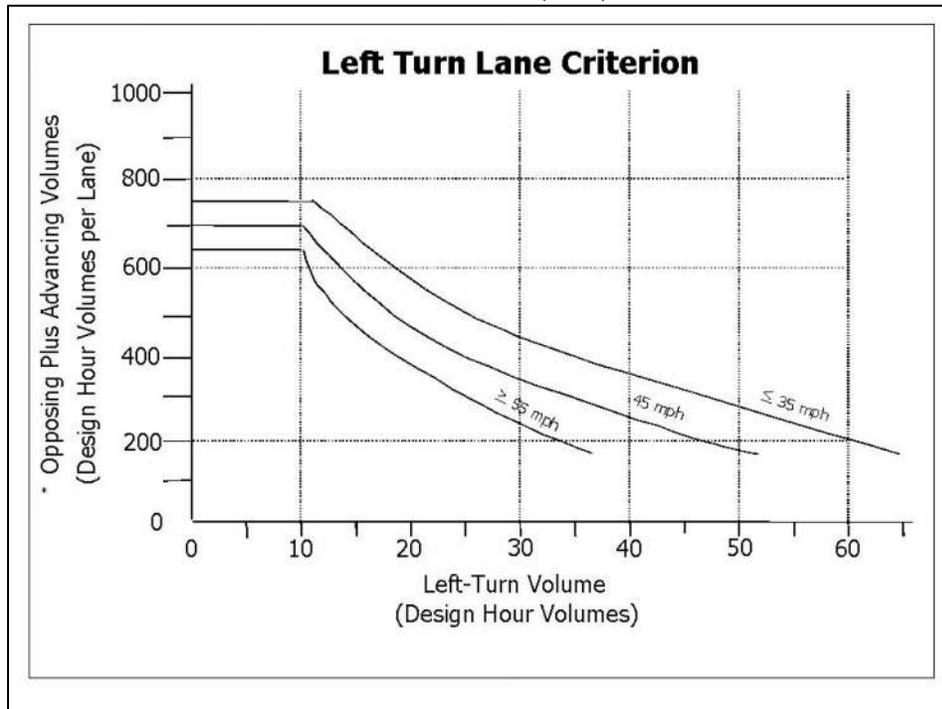
- A left turn lane should be installed, if criterion 1 (Volume) or 2 (Crash) or 3 (Special Cases) are met, unless a subsequent evaluation eliminate it as an option; and
- The Region Traffic Engineer must approve all proposed left turn lanes on state highways, regardless of funding source; and
- Left turn lane complies with Access Management Spacing Standards; and
- Left turn lane conforms to applicable local, regional and state plans.

Criterion 1: Vehicular Volume

The vehicular volume criterion is intended for application where the volume of intersecting traffic is the principal reason for considering installation of a left turn lane. The volume criterion is determined by the Texas Transportation Institute (TTI) curves in Exhibit 12-1.

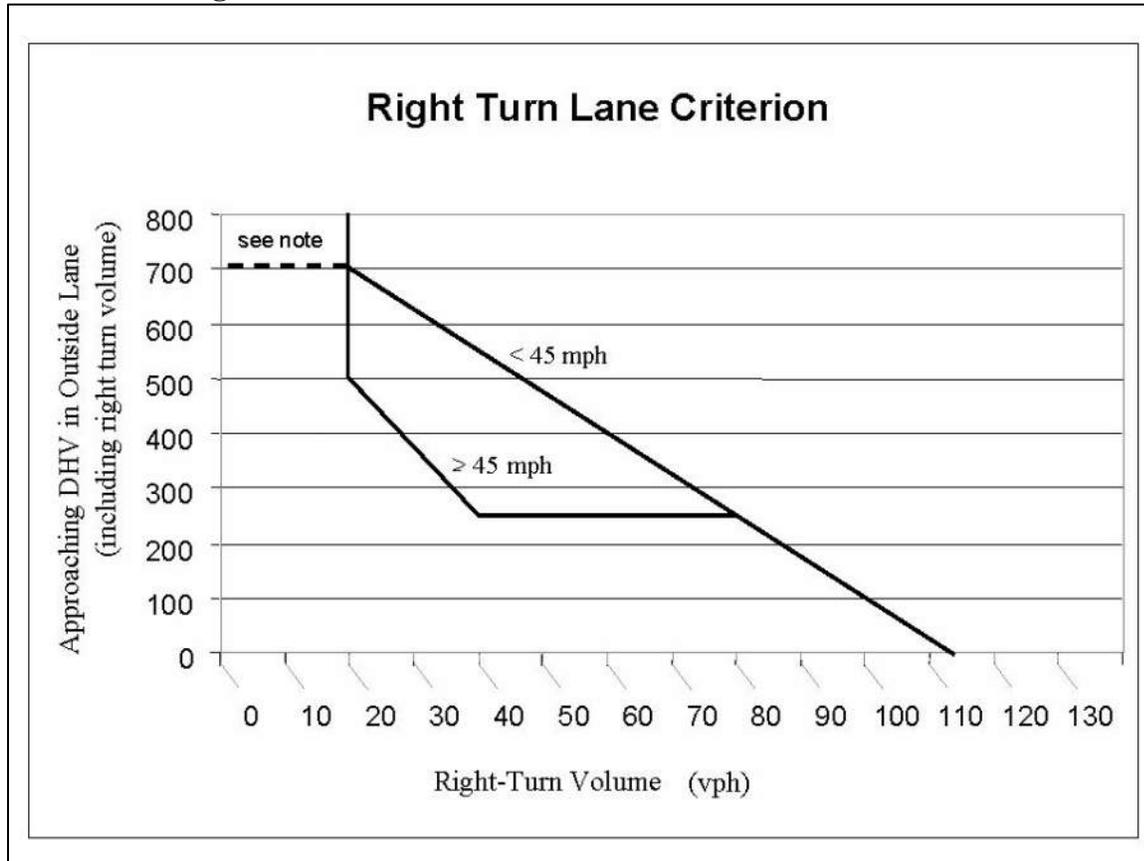
The criterion is not met from zero to ten left turn vehicles per hour, but indicates that careful consideration be given to installing a left turn lane due to the increased potential for rear-end collisions in the through lanes. While the turn volumes are low, the adverse safety and operations impacts may require installation of a left turn. The final determination will be based on a field study.

Exhibit 12-1 Left Turn Lane Criterion (TTI)



*(Advancing Volume/Number of Advancing Through Lanes) + (Opposing Volume/Number of Opposing Through Lanes)
Opposing left turns are not counted as opposing volumes

Exhibit 12-2 Right Turn Lane Criterion



Note: If there is no right turn lane, a shoulder needs to be provided. If this intersection is in a rural area and is a connection to a public street, a right turn lane is needed.

Criterion 2: Crash Experience

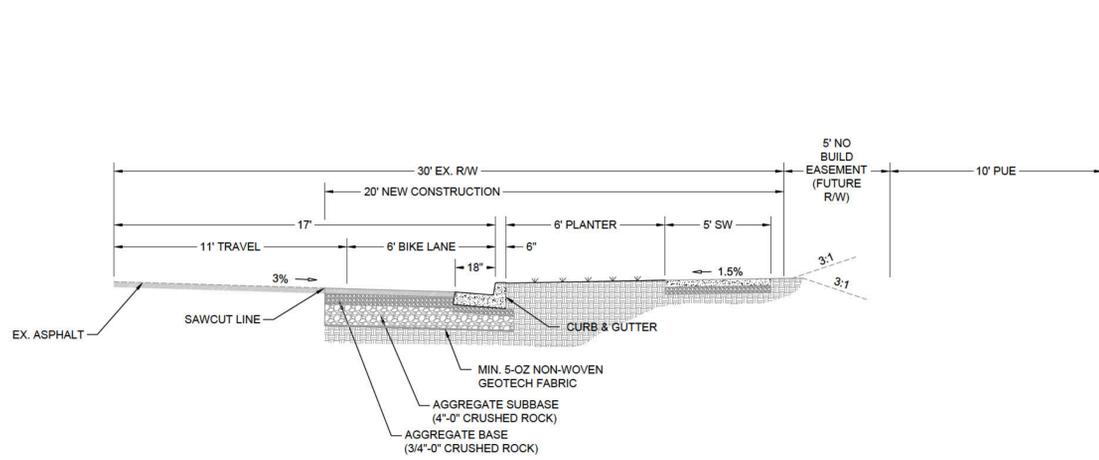
The crash experience criterion is satisfied when:

1. Adequate trial of other remedies with satisfactory observance and enforcement has failed to reduce the accident frequency; **and**
2. A history of crashes of the type susceptible to correction by a right turn lane; **and**
3. The safety benefits outweigh the associated improvements costs; **and**
4. The installation of the right turn lane minimizes impacts to the safety of vehicles, bicycles or pedestrians along the roadway.

Criterion 3: Special Cases

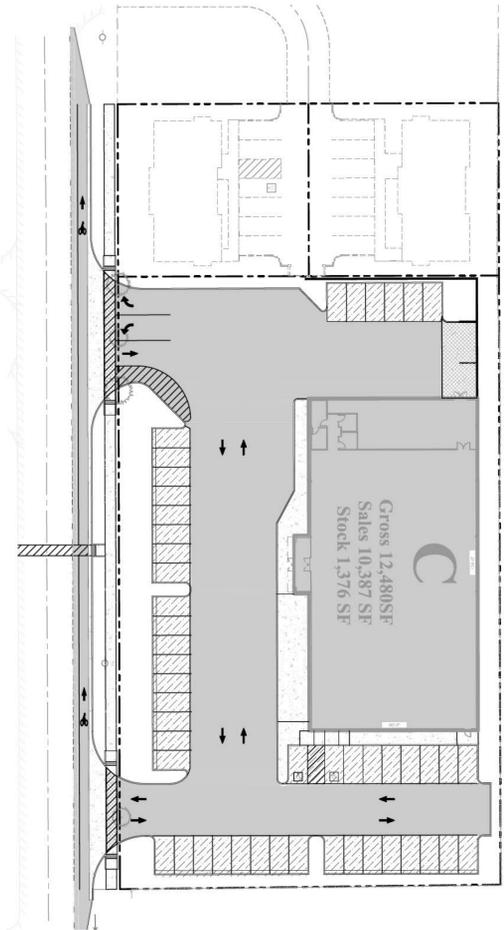
1. **Railroad Crossings:** If a railroad is parallel to the roadway and adversely affects right turns, a worst case scenario should be used in determining the storage requirements for the right turn lane design. The right turn lane storage length depends on the amount of time the roadway is closed, the expected number of vehicle arrivals and the location of the crossing or other obstruction. The analysis should consider all of the variables influencing the design of the right turn lane and may allow a design for conditions other than the worst case storage requirements, providing safety is not

Drawing Name: C:\Users\TPO\OneDrive\Documents\Projects\Lowell\Drawings\CADD\04_Lowell_C1-C5.dwg Last Save: October 10, 2022 5:07 PM Plot Date: October 11, 2022 8:48 AM By: TPOWELL



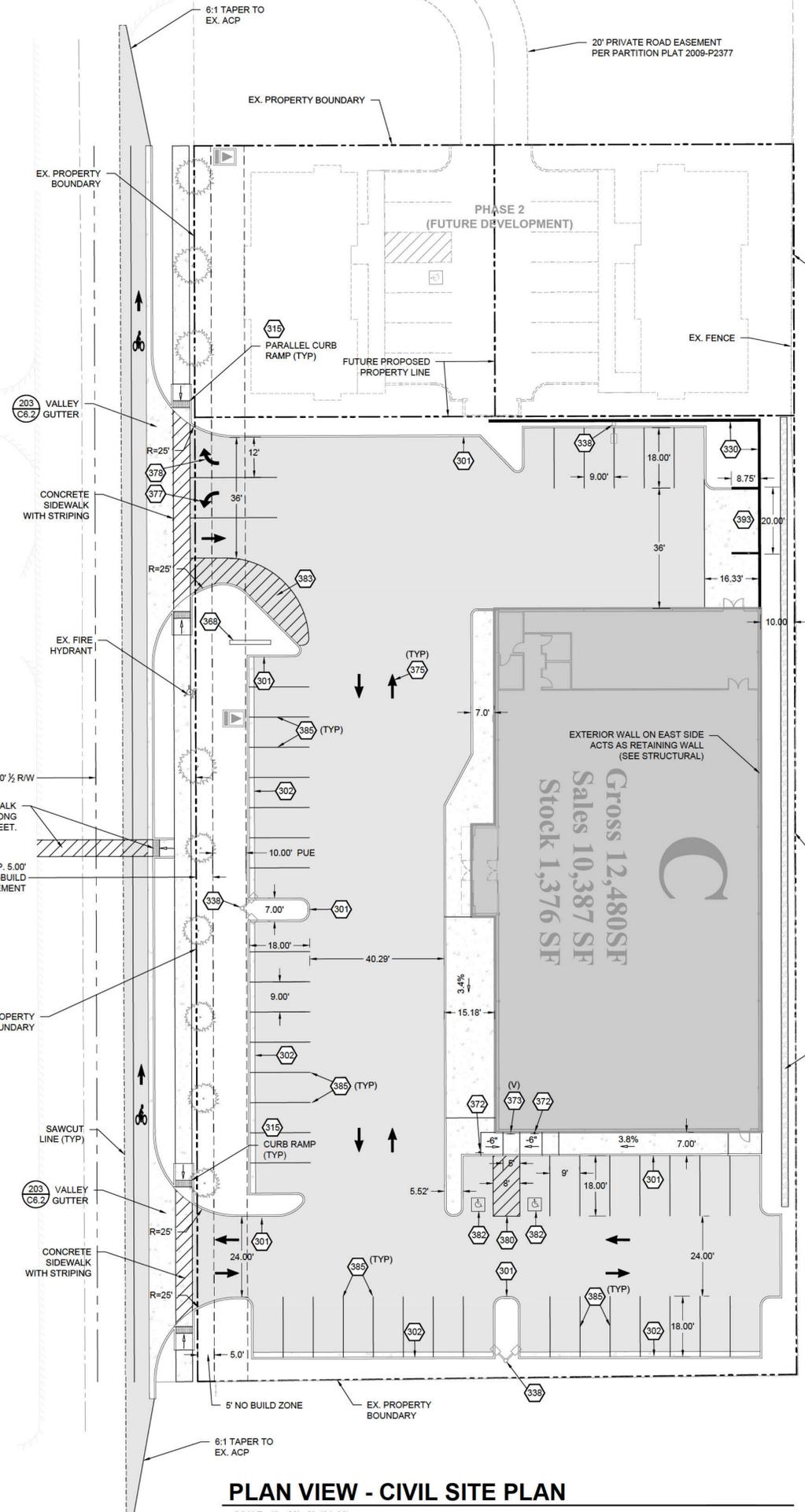
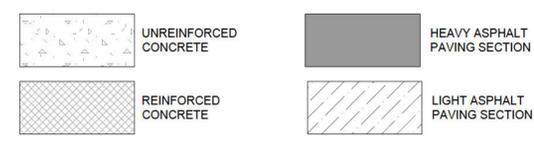
SECTION - N. MOSS STREET

SCALE: NTS CITY OF LOWELL COMMERCIAL STREET WITH 5' NO BUILD EASEMENT



PAVING PLAN

SCALE: 1" = 40' - 0" (24x36)



PLAN VIEW - CIVIL SITE PLAN

SCALE: 1" = 20' - 0" (24x36)

GENERAL NOTES

- ALL SIGN POSTS SHALL BE TELESAR (2", 12 GAUGE).
- ALL SIGNS WITHIN THE PUBLIC RIGHT OF WAY TO BE INSTALLED BY CITY FORCES. CONTRACTOR TO COORDINATE.
- CONTRACTOR TO INSTALL ALL SIGNS ON PRIVATE PROPERTY.

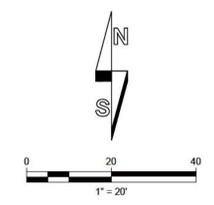
KEYNOTES

- 301 STANDARD VERTICAL CURB. (301 C6.0)
- 302 CURB & GUTTER (302 C6.0)
- 315 PARALLEL CURB RAMP WITH TRUNCATED DOMES. SEE GRADING.
- 316 CURB RAMP THROUGH BUFFER WITH TRUNCATED DOMES PER RD 910 (316 C6.2)
- 330 CONCRETE RETAINING WALL (330 C6.0)
- 338 LIGHT POLE WITH CONCRETE BASE, UNDERGROUND ELECTRICAL, VERIFY SHIELD REQUIREMENTS (SEE ELEC)
- 368 MONUMENT SIGN (SEE ARCH & ELEC)
- 372 ADA PARKING SIGN (372 C6.0)
- 373 ADA ACCESS AISLE SIGN (373 C6.0) WC=WHEEL CHAIR, V=VAN
- 375 WHITE PAINTED ONE WAY ARROW
- 377 WHITE PAINTED LEFT TURN ARROW
- 378 WHITE PAINTED RIGHT TURN ARROW
- 380 ADA VAN ACCESS AISLE STRIPING (380 C6.0)
- 382 ADA PARKING SYMBOL (382 C6.0)
- 383 4" STRIPING FOR CLEAR TRUCK ACCESS
- 385 4" YELLOW PARKING STRIPING
- 392 BIKE RACKS (SEE ARCH).
- 393 TRASH ENCLOSURE (SEE ARCH)

GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING POSTAL DELIVERY METHOD WITH THE LOCAL JURISDICTION IF A PHYSICAL MAILBOX IS REQUIRED. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PURCHASE, LOCATION PLACEMENT AND INSTALLATION.

PARKING CALCULATIONS

TOTAL PROPOSED PARKING STALLS = 58 REGULAR STALLS
3 ADA STALLS (2 VAN)
TOTAL: 61 PARKING STALLS



H&H NW Companies, LLC.
RETAIL / REAL ESTATE / INVESTMENTS
13215 SE MILL PLAIN BLVD., STE C# 829 VANCOUVER WA 98689
OFFICE: 509-884-1889

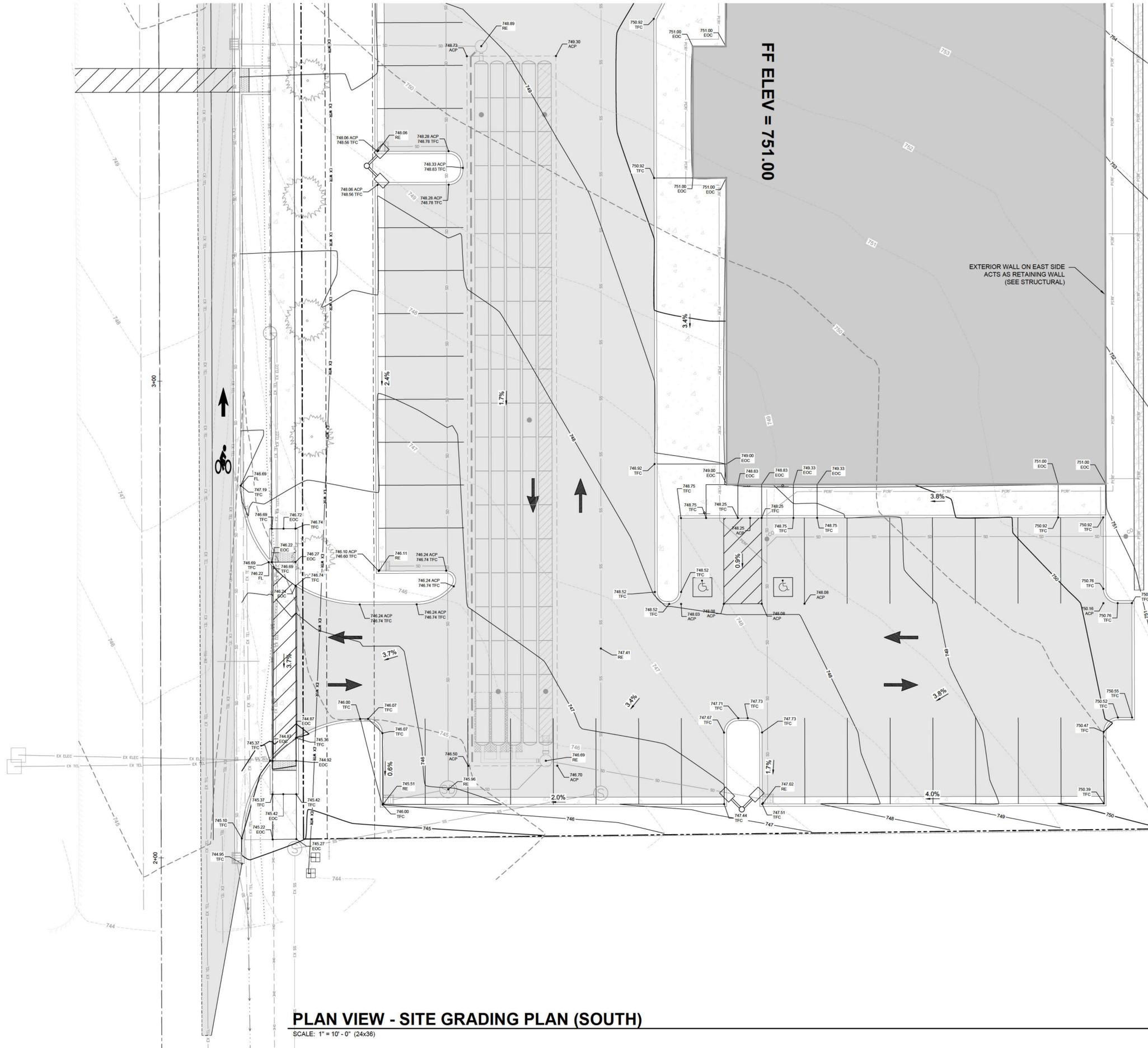
POWELL +
engineering +
consulting
STRONG RELATIONSHIPS • INFINITE POSSIBILITIES

DOLLAR GENERAL
RETAIL STORE
FOR: H & H NORTHWEST
PROJECT LOCATION: 344 N. Moss St., Lowell, Or 97452
PARCEL: 1119S1W-6502

Approved for the Owner By:	Date:
REVISIONS	BY
ISSUE:	PERMIT SET
ISSUE DATE:	10/07/22
DRAWN BY:	TDP
JOB NO.:	22-018
SHEET	

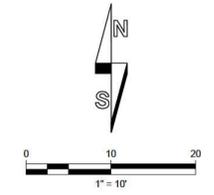
C3.0
CIVIL SITE PLAN

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PLAN VIEW - SITE GRADING PLAN (SOUTH)
SCALE: 1" = 10' - 0" (24x36)

TO VERIFY SCALES 0" 1" BAR SHOULD MEASURE ONE INCH BY ONE SIXTEENTH INCH



H&H NW Companies, LLC.
RETAIL / REAL ESTATE / INVESTMENTS
13215 SE MILL PLAIN BLVD., STE C# 8239 VANCOUVER WA 98689
OFFICE: 503-984-1889

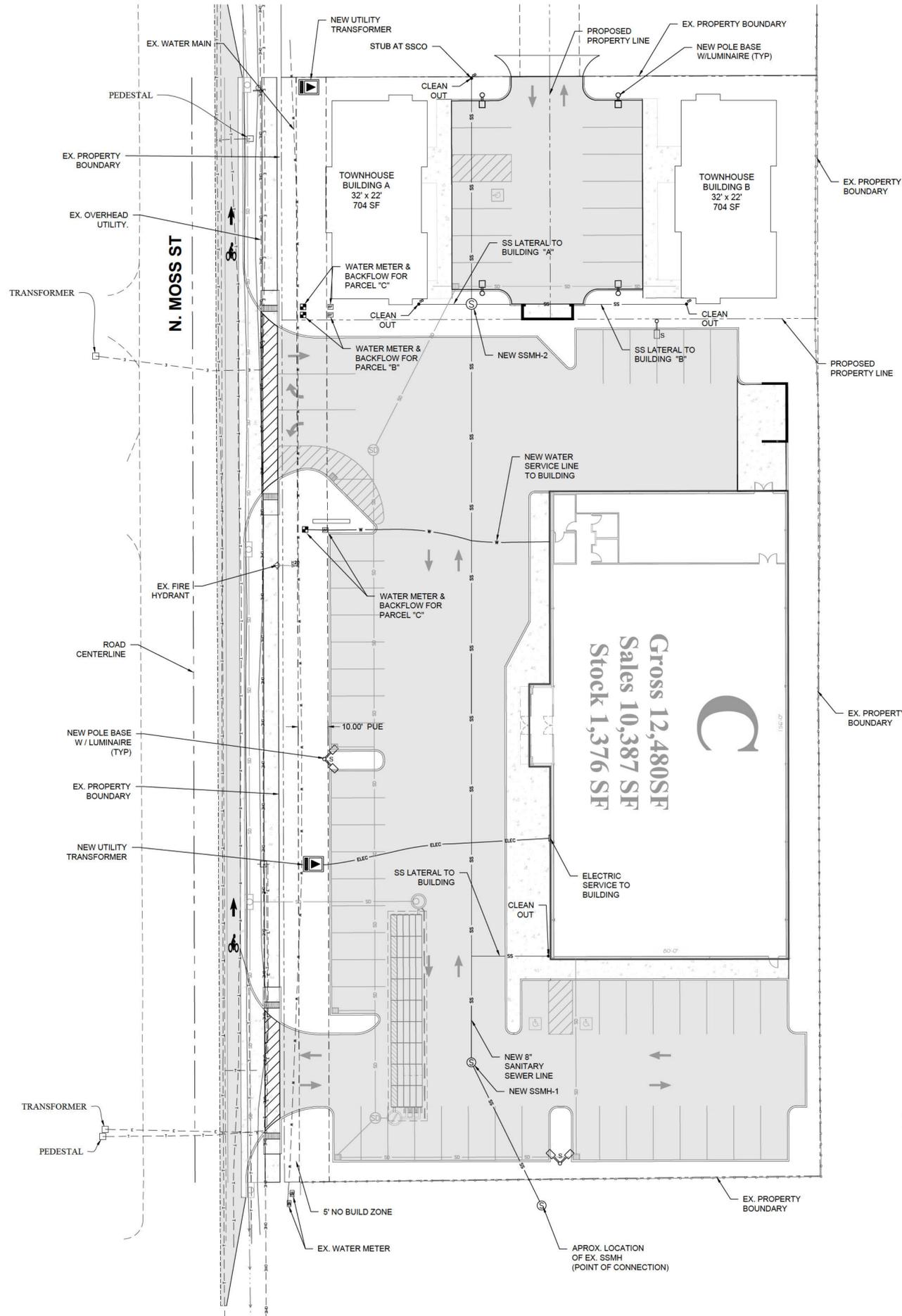
POWELL
engineering +
consulting
STRONG RELATIONSHIPS • INFINITE POSSIBILITIES

DOLLAR GENERAL
RETAIL STORE
FOR: H & H NORTHWEST
PROJECT LOCATION:
444 N. Moss St., Lowell, Or 97452
PARCEL: 1119S1W-6502

Approved for the Owner By:	Date:
REVISIONS	BY
ISSUE:	PERMIT SET
ISSUE DATE:	10/07/22
DRAWN BY:	TDP
JOB NO.:	22-018
SHEET	

C4.3
SITE GRADING
PLAN (SOUTH)

Drawing Name: C:\Users\TDP\OneDrive\Documents\Projects\Current\Projects\Lowell\Drawings\CADD\04.Lowell C1-C5.dwg Last Save: August 10, 2022 2:15 PM Plot Date: August 11, 2022 8:19 AM By: TPOWELL



PLAN VIEW - UTILITY PLAN

SCALE: 1" = 20' - 0" (24x36)

TO VERIFY SCALES 0" 1" BAR SHOULD MEASURE ONE INCH BY ONE SIXTEENTH INCH

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H&H NW Companies, LLC.
 RETAIL / REAL ESTATE / INVESTMENTS
 13215 SE MILL PLAIN BLVD. STE C-B #229 VANCOUVER WA, 98689
 OFFICE: 509-984-1898

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 engineering +
 consulting



STRONG RELATIONSHIPS • INFINITE POSSIBILITIES

DOLLAR GENERAL
 RETAIL STORE
 FOR: H & H NORTHWEST
 PROJECT LOCATION:
 444 N. Moss St., Lowell, Or 97452
 PARCEL: 1119S1W-6502

Approved for the Owner By: _____ Date: _____

REVISIONS	BY

ISSUE: LAND USE SET
 ISSUE DATE: 08/10/22
 DRAWN BY: TDP
 JOB NO.: 22-018

SHEET
C5.0
 UTILITY
 PLAN

PRELIMINARY SITE PLAN REVIEW

CITY, STATE - STREET:
484/570 N MOSS ST, LOWELL, OR-97452

PROTOTYPE: 'C'
 BLDG/SALES SF: 12,480SF/ 10,387SF
 ACREAGE: 1.14 A (49,456.2 SF)
 PARKING SPACES: 50 (INCLUDING 2 ACC.)

DEVELOPER
 COMPANY: H & H NORTHWEST COMPANIES
 NAME: KEVIN HEPNER
 PHONE #: (503) 810-6108

DESIGNER
 COMPANY: OREGON ARCHITECTURE INC.
 NAME: M. MORGAN
 PHONE #: (541) 772-4372

DATE:
 08/05/22

**SITE PLAN
 A0.1**

PROJECT DATA

SITE AREA:
 PARCEL A: 49,456.2 SF (1.14 AC)
 (111951W-6502)
 APN: 6502

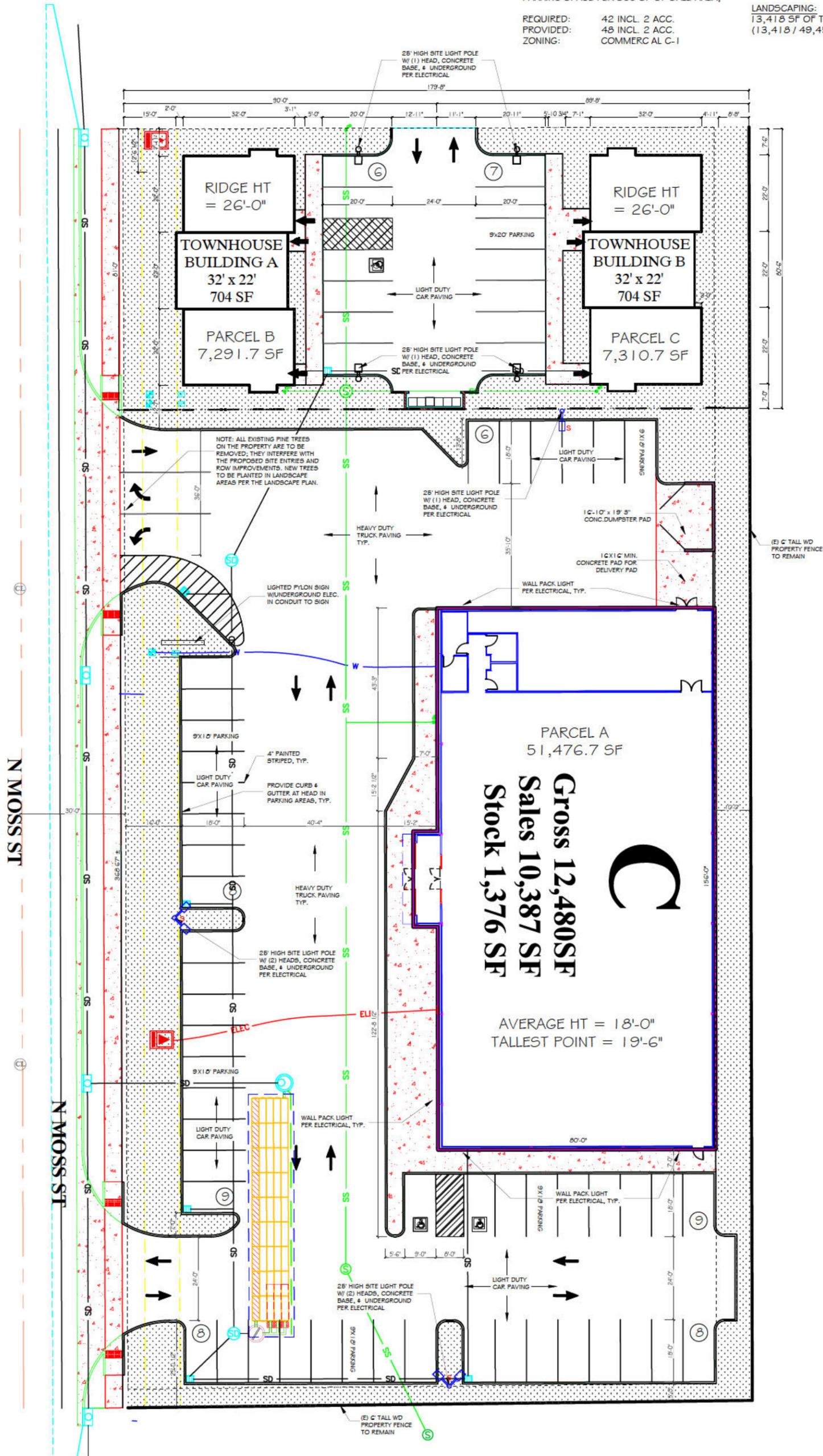
PARKING:
 PER GENERAL RETAIL USES - ONE (1) OFF-STREET
 PARKING SPACE PER 300 SF OF SALE AREA,

REQUIRED: 42 INCL. 2 ACC.
PROVIDED: 48 INCL. 2 ACC.
ZONING: COMMERCIAL C-1

SETBACK:
 PER CITY OF LOWELL ORDINANCE LAND
 DEVELOPMENT CODE SECTION 9.4.12 - d - (G) -
 A-C

FRONT: 10 FEET FROM PROPERTY LINE
SIDE: 10 FEET ABUTTING RESIDENTIAL
REAR: 10 FEET ABUTTING RESIDENTIAL

LANDSCAPING:
 13,418 SF OF THE SITE
 (13,418 / 49,456.2) x 100% = 27 % OF SITE



SCALE: 1" = 30'-0"

PRELIMINARY SITE PLAN REVIEW

CITY, STATE - STREET:
484/570 N MOSS ST, LOWELL, OR-97452

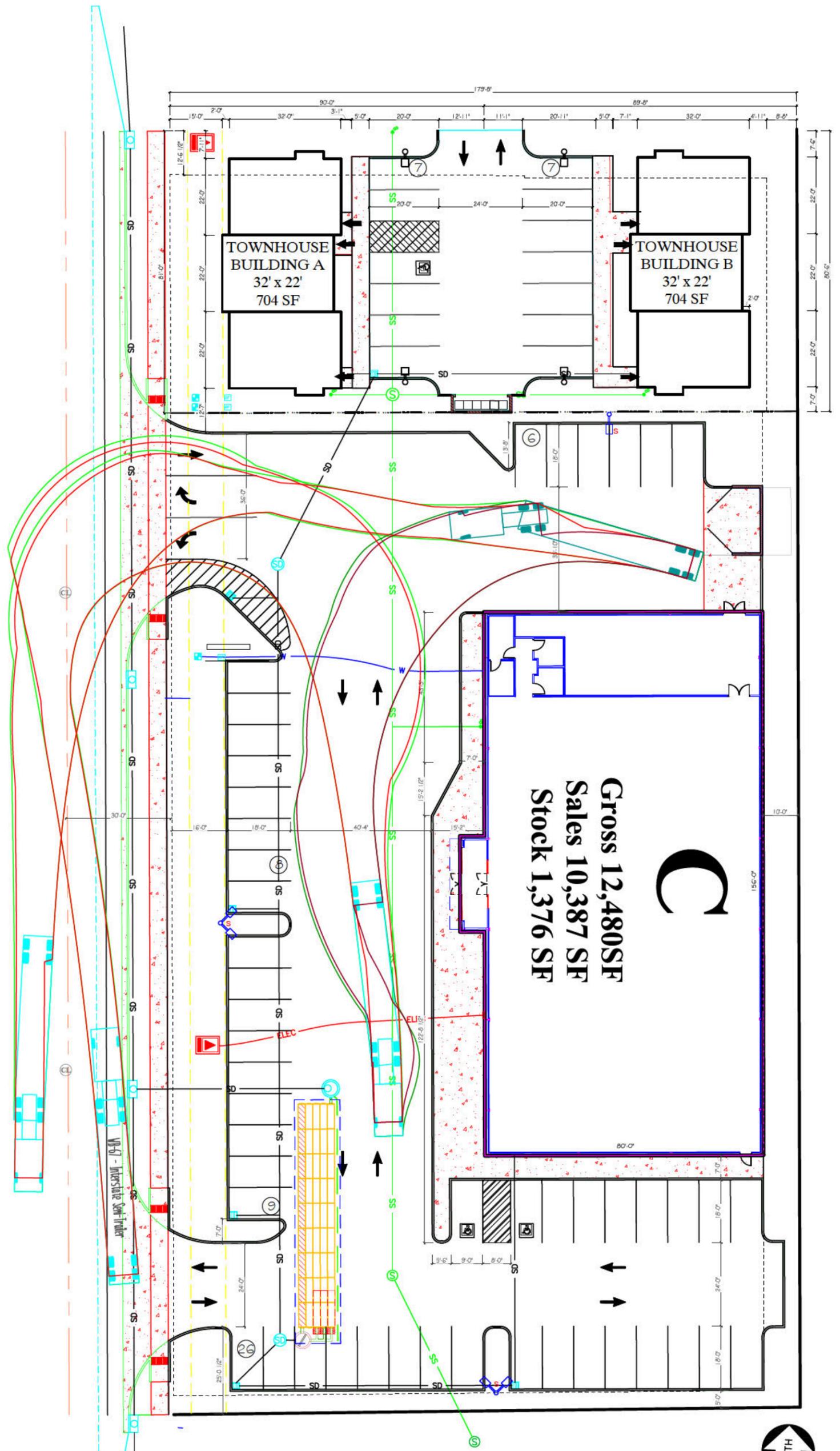
PROTOTYPE: 'C'
BLDG/SALES SF: **12,480SF/ 10,387SF**
ACREAGE: 1.14 A (49,456.2 SF)
PARKING SPACES: 50 (INCLUDING 2 ACC.)

DEVELOPER
COMPANY: H & H NORTHWEST COMPANIES
NAME: KEVIN HEPNER
PHONE #: (503) 810-6108

DESIGNER
COMPANY: OREGON ARCHITECTURE INC.
NAME: M. MORGAN
PHONE #: (541) 772-4372

DATE:
08/05/22

TRUCK PATH
A0.3



DC



SCALE: 1"=30'-0"

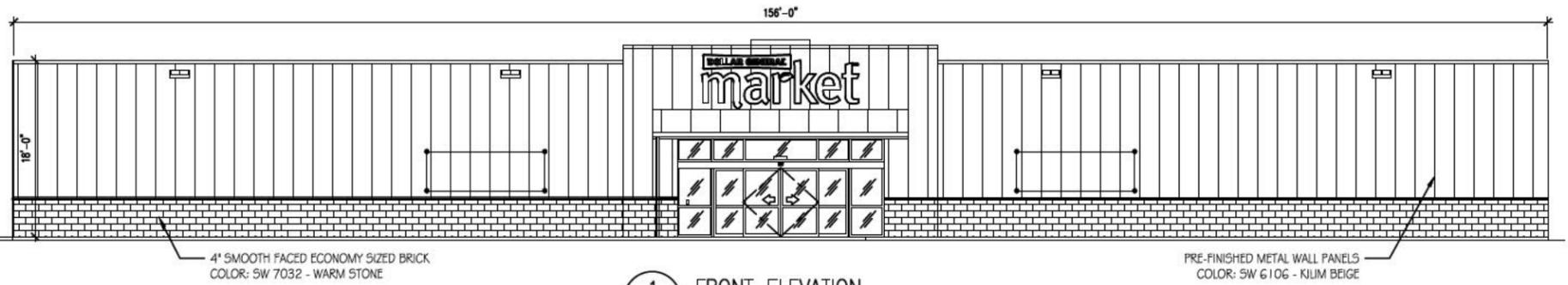
PRELIMINARY SITE PLAN REVIEW

CITY, STATE - STREET:
484/570 N MOSS ST, LOWELL, OR-97452

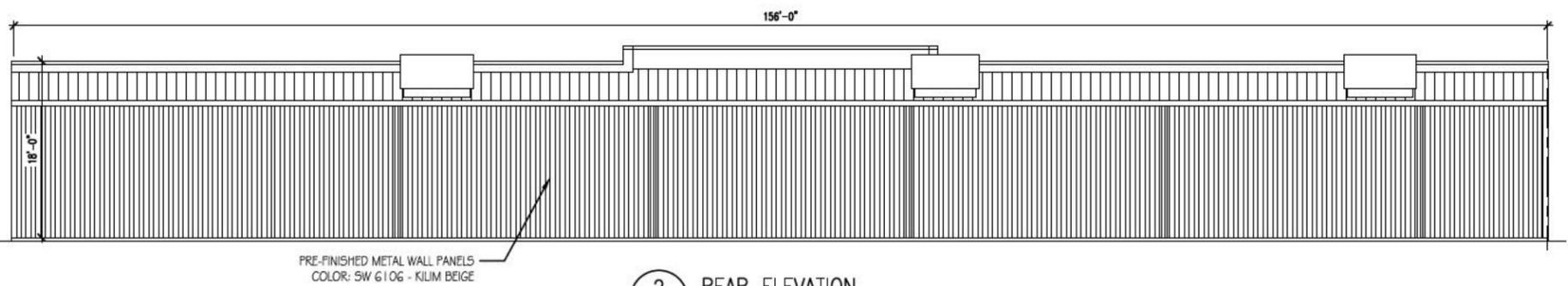
ELEVATIONS

PROTOTYPE: 'C'	DEVELOPER	DESIGNER	DATE: 08/05/22
BLDG/SALES SF: 12,480SF/ 10,387SF	COMPANY: H & H NORTHWEST COMPANIES	COMPANY: OREGON ARCHITECTURE INC.	
ACREAGE: 1.14 A (49,456.2 SF)	NAME: KEVIN HEPNER	NAME: M. MORGAN	
PARKING SPACES: 50 (INCLUDING 2 ACC.)	PHONE #: (503) 810-6108	PHONE #: (541) 772-4372	

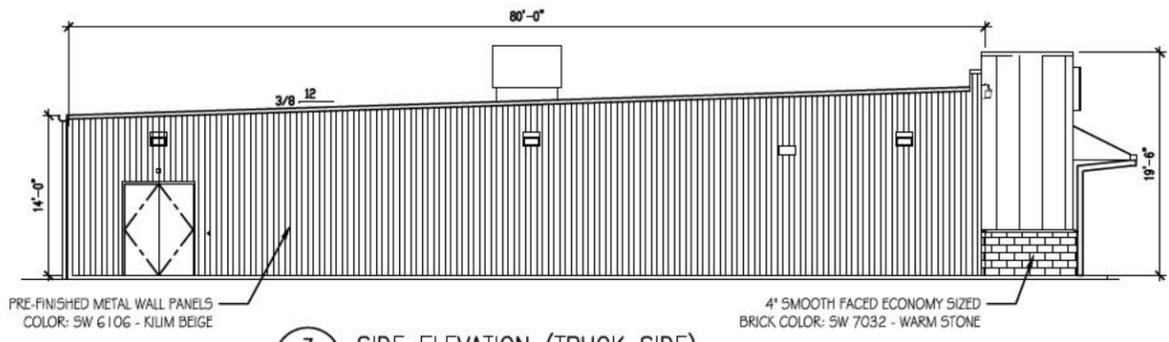
A2.0



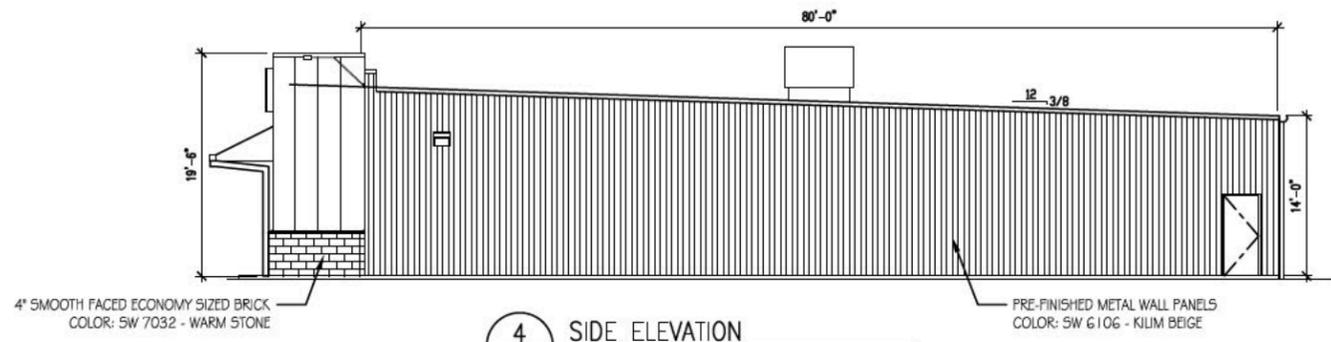
1 FRONT ELEVATION
 SCALE: 1/16" = 1'-0"



2 REAR ELEVATION
 SCALE: 1/16" = 1'-0"



3 SIDE ELEVATION (TRUCK SIDE)
 SCALE: 1/16" = 1'-0"



4 SIDE ELEVATION
 SCALE: 1/16" = 1'-0"

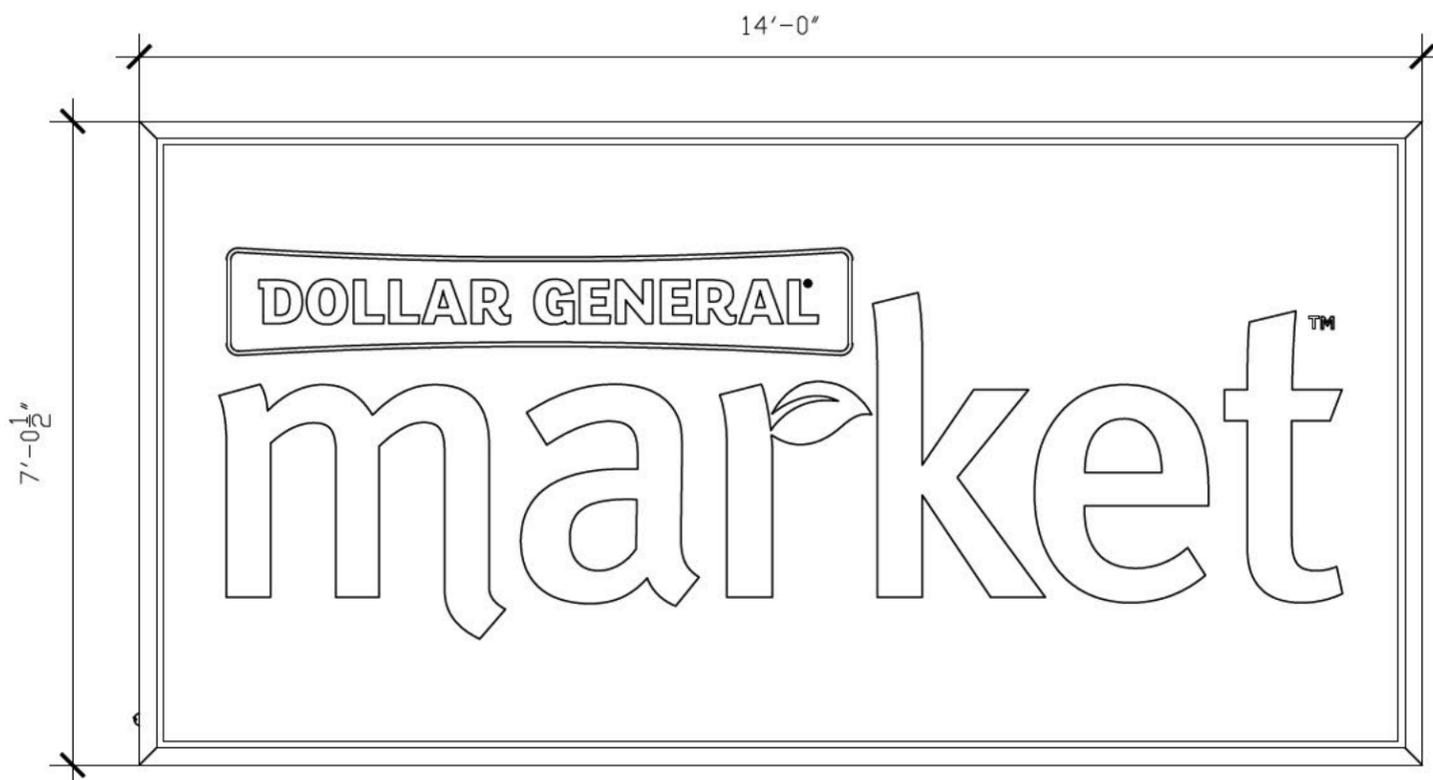
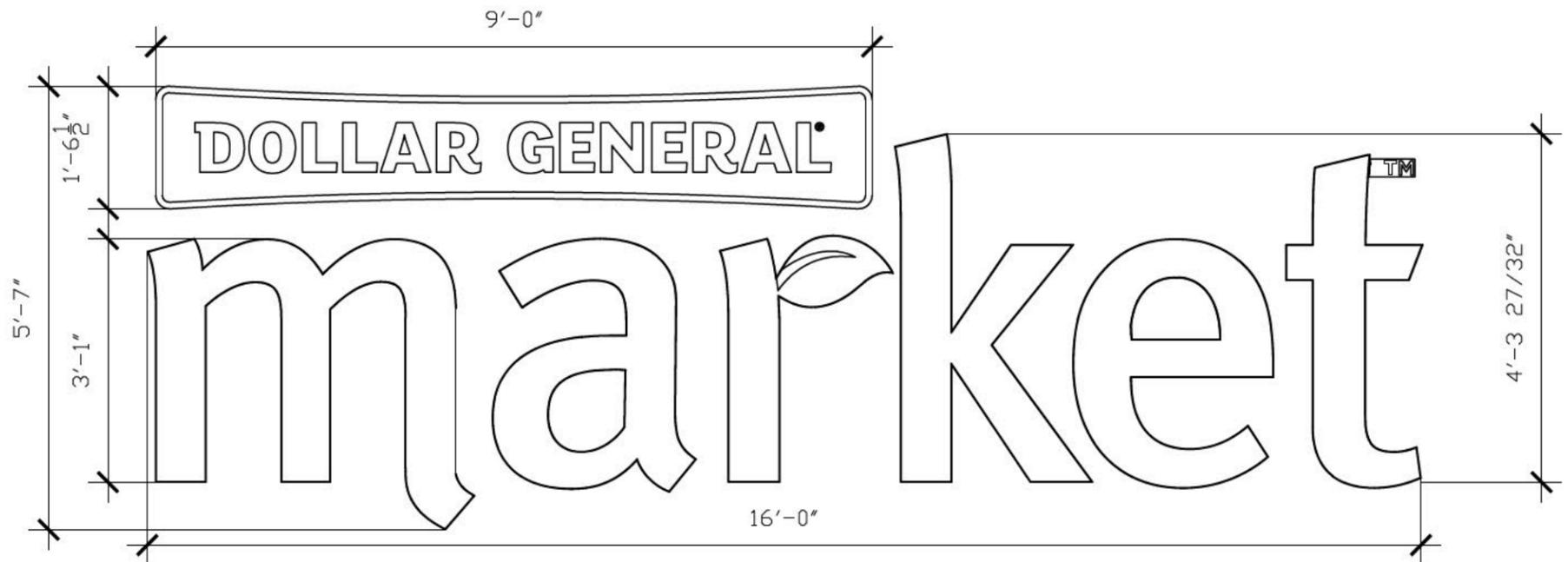
PRELIMINARY SITE PLAN REVIEW

CITY, STATE - STREET:
484/570 N MOSS ST, LOWELL, OR-97452

PROTOTYPE: 'C'	DEVELOPER	DESIGNER
BLDG/SALES SF: 12,480SF/ 10,387SF	COMPANY: H & H NORTHWEST COMPANIES	COMPANY: OREGON ARCHITECTURE INC.
ACREAGE: 1.14 A (49,456.2 SF)	NAME: KEVIN HEPNER	NAME: M. MORGAN
PARKING SPACES: 50 (INCLUDING 2 ACC.)	PHONE #: (503) 810-6108	PHONE #: (541) 772-4372

DATE:
 08/05/22

SIGNAGE
A2.1



THIS IS THE PRIMARY PYLON SIGN FOR ALL LOCATIONS.

SIGN SPECIFICATIONS

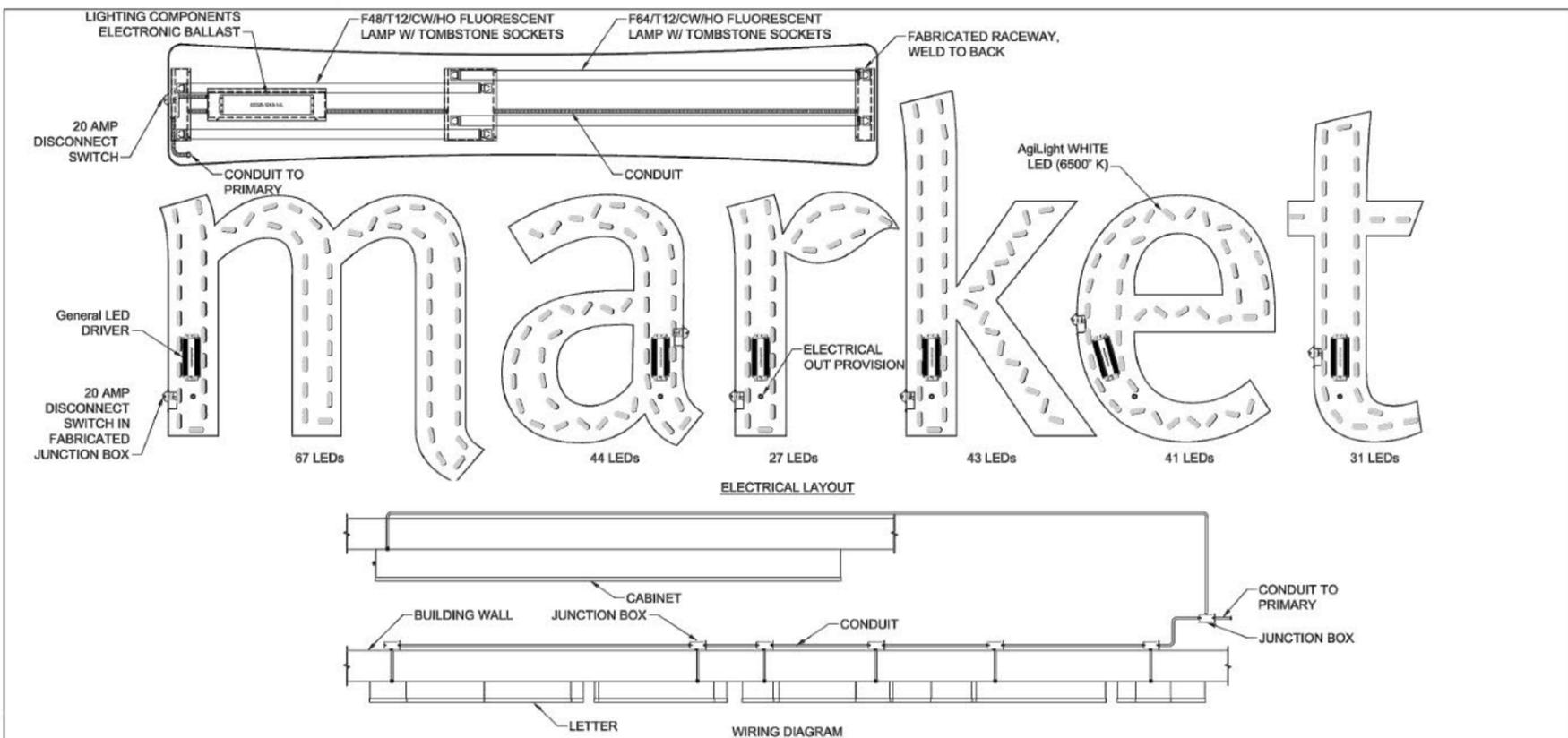
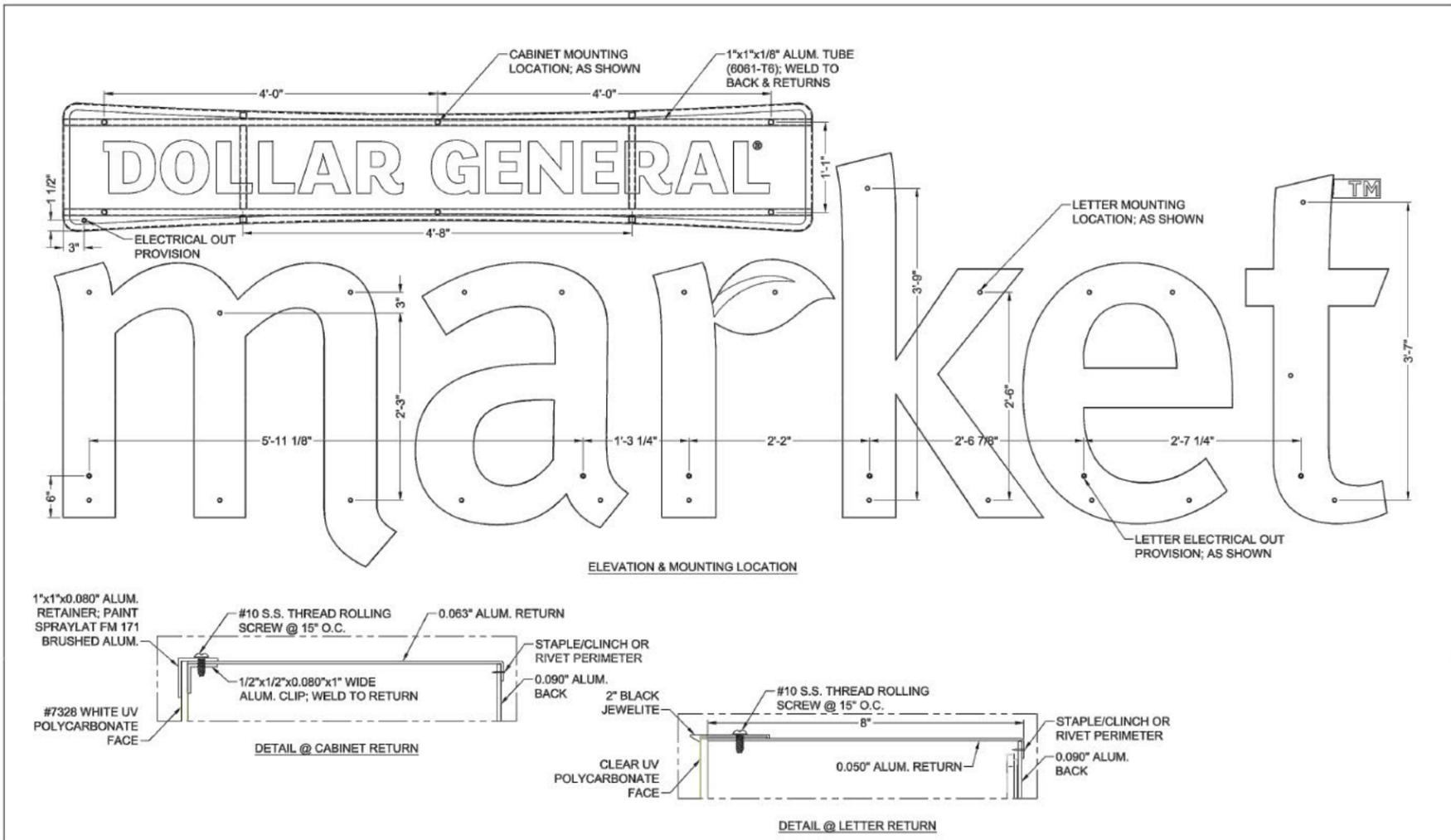
1. BUILDING SIGNS: PROVIDE CONDUIT AND WIRE FROM ELECTRICAL PANEL TO THE SIGN CANOPY. THE CONDUIT IS TO BE 1" AND HAVE ONE SET OF 10/2 WIRE WITH GROUND. BUILDING CANOPY MUST BE SUFFICIENTLY BUILT TO SUPPORT THE DOLLAR GENERAL SIGN OF UP TO 1400 LBS.
2. PYLON SIGNS: PROVIDE CONDUIT FROM ELECTRICAL PANEL TO LOCATION OF THE PYLON SIGN BASE. BURY CONDUIT UNDER PARKING AREA. THE CONDUIT IS TO BE 1" AND HAVE ONE SET OF 10/2 WIRE WITH GROUND.
3. FINAL ELECTRICAL CONNECTIONS FOR SIGN SHALL BE THE SIGN VENDORS RESPONSIBILITY SINCE THE 'J' BOX AND WIRES ARE IN PLACE.
4. CONFIRM SIGN SPECIFICATIONS WITH DOLLAR GENERAL.
5. SEE SHEET A8 FOR SIGN CONNECTION DETAILS.
6. PYLON SIGN CABINETS TO CLEAR 15' FROM GRADE AND EDGE SHALL BE LOCATED NO CLOSER THAN 10' TO ANY OVERHEAD UTILITY LINES.

PRELIMINARY SITE PLAN REVIEW

CITY, STATE - STREET:
484/570 N MOSS ST, LOWELL, OR-97452

**SIGNAGE
 DETAILS
 A2.2**

PROTOTYPE: 'C'	DEVELOPER	DESIGNER	DATE: 08/05/22
BLDG/SALES SF: 12,480SF/ 10,387SF	COMPANY: H & H NORTHWEST COMPANIES	COMPANY: OREGON ARCHITECTURE INC.	
ACREAGE: 1.14 A (49,456.2 SF)	NAME: KEVIN HEPNER	NAME: M. MORGAN	
PARKING SPACES: 50 (INCLUDING 2 ACC.)	PHONE #: (503) 810-6108	PHONE #: (541) 772-4372	



ELECTRICAL REQUIREMENTS:

LAMPS: (2) F64/T12/CW/HO FLUORESCENT LAMP
 (2) F48/T12/CW/HO FLUORESCENT LAMP
 BALLAST: (1) LIGHTING COMPONENTS EESB-1040-14L @ 2.4 AMPS
 LED: (253) AgiLight LS-CORE-45K-G1 WHITE (6500° K)
 DRIVER: (6) General LED PS12-60W-100-277V @ 0.8 AMPS
 TOTAL LOAD: 7.2A @ 120VAC
 CIRCUITS: (1) 20 AMP REQUIRED

120 LEDs MAX.
 PER DRIVER



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STRONG RELATIONSHIPS • INFINITE POSSIBILITIES

PRELIMINARY STORMWATER MANAGEMENT REPORT

Lowell Dollar General

**484 and 570 N. Moss Street
Lowell, OR 97452
Map 19-1W-11-BC, Tax Lot 6502**

August 31, 2022

Prepared For:
Oregon Architecture
132 W. Main Street
Medford, OR 97501

Prepared By:
Todd D. Powell, P.E.



EXPIRES: 12/31/22

TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
Introduction	1
Existing Conditions	1
Developed Conditions	2
Appendix	
Drainage Basin Map	
Drainage Calculations	
25-year Storm	
ADS Stormtech Details	

INTRODUCTION

The subject property is currently undeveloped and is located between 484 and 570 N. Moss Street in the City of Lowell, Oregon.

The proposed development is to build a 12,480 square foot Dollar General store (Phase 1) and two new multi-family residential buildings (Phase 2) with associated parking and landscaping on the 1.5-acre site.

Civil related site improvements include design and installation of new utility laterals to serve the proposed buildings, grading plan, stormwater management plan and connection to downstream facilities, erosion control plan, vehicular circulation and parking plan, and accessible routes.

Per City of Lowell, a stormwater management report is required to show that detention will be provided for any re-developed areas. In this case, detention will be shown for the proposed new asphalt and rooftop impervious areas. Further discussion and design methodology is included as a part of this report.

Additionally, as a part of the City permit requirements, an Operations and Maintenance Manual will be required for all the new and existing stormwater facilities. This O&M Manual will be submitted to the City in a separate document following Land Use Approval and is not a part of this report.

EXISTING CONDITIONS

The 1.50-acre property is currently undeveloped. There are also 1.18 acres of developed single family residential homes adjacent and upstream from the subject property along the adjacent northeast property line. Runoff from this upstream basin is included in the calculations in this report.

The area of redevelopment is moderately sloped with existing slopes to the southwest at approximately 4%-6%. Existing runoff is calculated using the Santa Barbara Urban Hydrograph Method with a Type 1A storm distribution. Precipitation data is from the City of Lowell Stormwater Master Plan with a 25-year rainfall amount of 5".

An analysis of the existing drainage basins are as follows:

Existing Onsite Drainage Basin (EX BSN ONSITE):

- Area of redevelopment = 1.20 acres (tributary to detention)
- Runoff Curve Number = 80; Time of Concentration = 14.30 min.
- 25-year Peak Flow = 0.751 cfs

Existing Upstream Offsite Drainage Basin (UPSTREAM BSN):

- Area = 1.18 acres
- Runoff Curve Number = 91; Time of Concentration = 15 min.
- 25-year Peak Flow = 1.079 cfs

Combined Existing Basin Hydrographs (EX BSN ONSITE + UPSTREAM BSN):

- 25-year Peak Flow = 1.831 cfs

DEVELOPED CONDITIONS

The proposed development is to build a 12,480 square foot Dollar General store (Phase 1) and two new multi-family residential buildings (Phase 2) with associated parking and landscaping on the 1.5-acre site.

Stormwater Detention for downstream erosion control will be achieved through an ADS SC-310 Stormtech Chamber System with Isolator Row for treatment. This system is specified in detail in the appendix to this report.

Flow control calculations have been completed for the entire onsite redevelopment basin, assuming a pre-developed runoff curve number of 80. The offsite upstream basin is also collected and routed through the detention system as bypass runoff. Therefore, the matching release rate of the detention system shall be equal to or less than the combined existing basin hydrographs of the EX BSN ONSITE + UPSTREAM BSN which equals 1.831 cfs.

Developed runoff is calculated using the Santa Barbara Urban Hydrograph Method with a Type 1A storm distribution. Precipitation data is also from the City of Lowell Stormwater Master Plan with a 25-year rainfall amount of 5-inches in a 24-hour period. There is one drainage basin associated with the underground detention system. This basin is identified as “DEV BSN ONSITE” and includes the new asphalt, concrete, and rooftop impervious areas. This basin is further described below:

Onsite Redeveloped Basin (DEV BSN ONSITE):

- Area = 1.20 acres (tributary to detention)
- Runoff Curve Number = 98
- Time of Concentration = 5 min.
- 25-year Undetained Peak Flow = 1.417 cfs
- 25-year Allowable Release Rate = 1.831 cfs (EX BSN ONSITE + UPSTREAM BSN)
- 25-year Combined Flow to ADS System = 2.463 cfs (DEV BSN ONSITE + UPSTREAM BSN)
- 25-year Detained Release from ADS System = 1.723 cfs < 1.831 cfs =>> **OK**

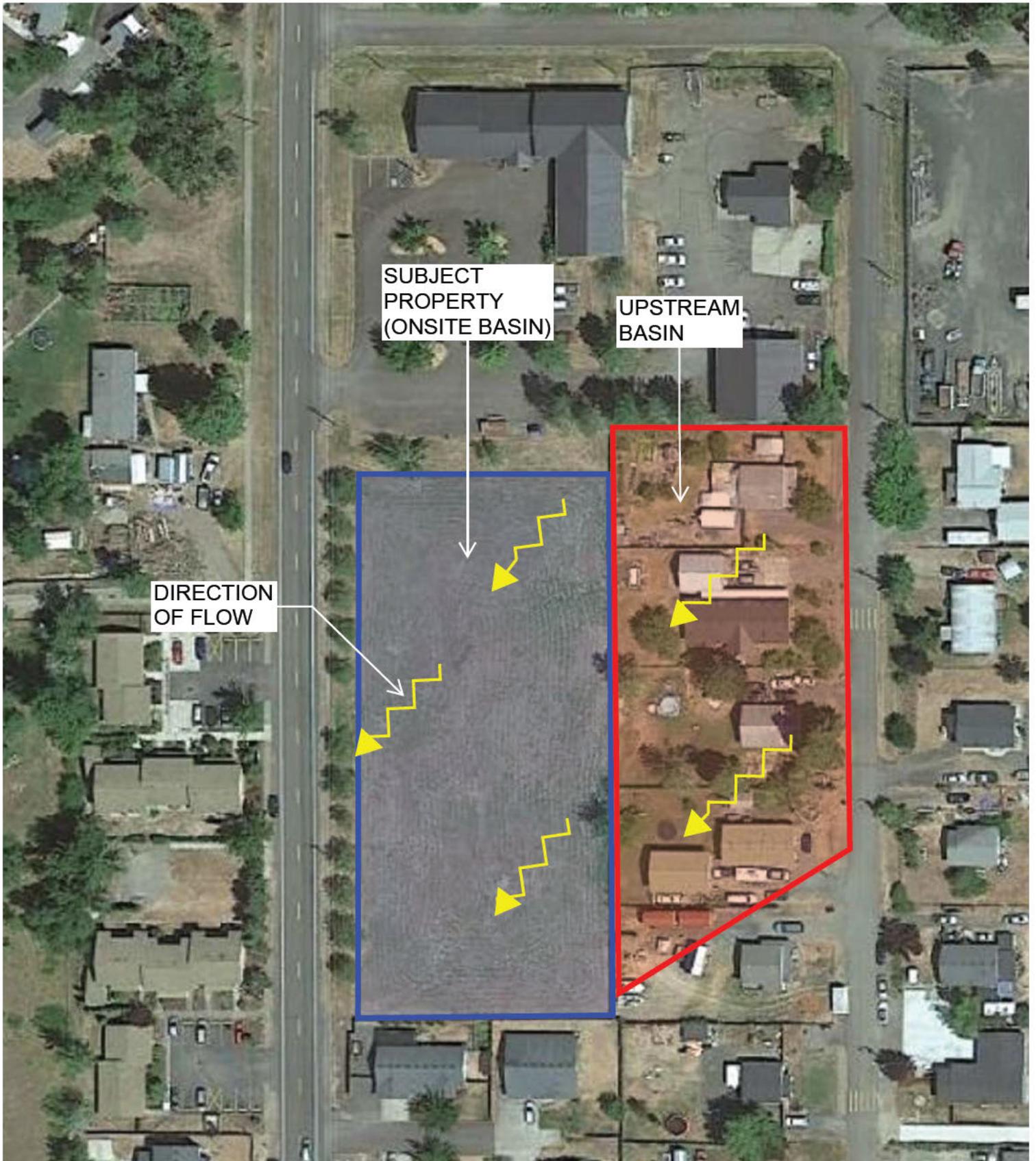
Therefore, to match the pre-development 25-year peak flow of 1.831 cfs, the proposed ADS Stormtech Chamber System for downstream erosion control shall be sized as follows:

- Required total storage volume = 3,247 cubic feet (incl. rock storage)
- Bottom of Rock Elevation = 742.85. Slope = 0%
- 25-year Water Surface Elevation = 744.56
- 8" Pipe Outflow with no orifice.

Further design calculations are provided below in the Appendix to this report.

DRAINAGE BASIN MAP

DRAINAGE BASIN MAP

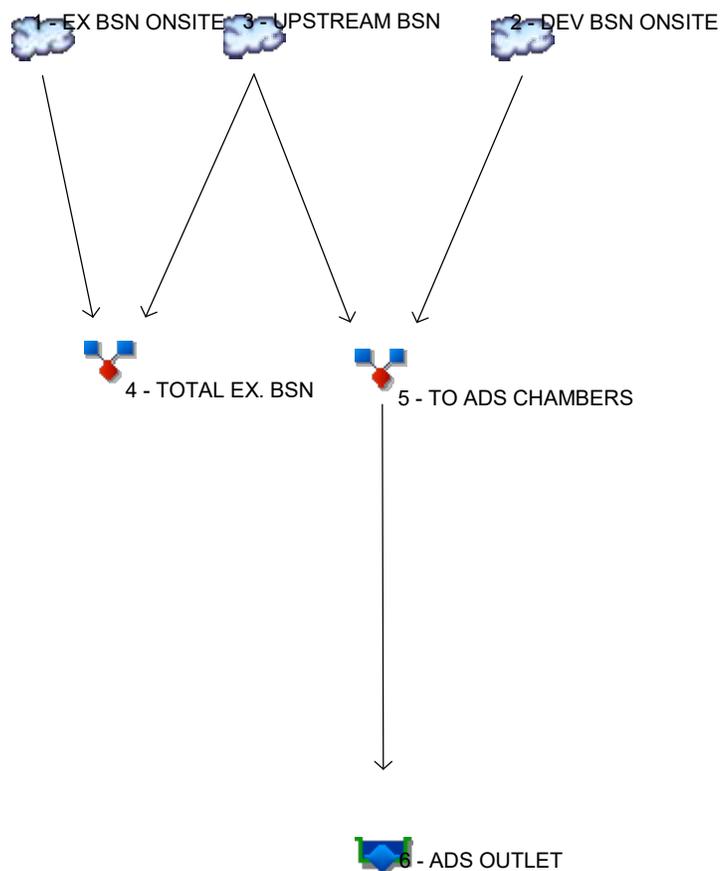


DRAINAGE CALCULATIONS

Watershed Model Schematic.....	1
Hydrograph Return Period Recap.....	2
25 - Year	
Summary Report.....	3
Hydrograph Reports.....	4
Hydrograph No. 1, SBUH Runoff, EX BSN ONSITE.....	4
TR-55 Tc Worksheet.....	5
Hydrograph No. 2, SBUH Runoff, DEV BSN ONSITE.....	6
Hydrograph No. 3, SBUH Runoff, UPSTREAM BSN.....	7
Hydrograph No. 4, Combine, TOTAL EX. BSN.....	8
Hydrograph No. 5, Combine, TO ADS CHAMBERS.....	9
Hydrograph No. 6, Reservoir, ADS OUTLET.....	10
Pond Report - ADS CHAMBERS.....	11

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022



Legend

Hyd. Origin	Description
1	SBUH Runoff EX BSN ONSITE
2	SBUH Runoff DEV BSN ONSITE
3	SBUH Runoff UPSTREAM BSN
4	Combine TOTAL EX. BSN
5	Combine TO ADS CHAMBERS
6	Reservoir ADS OUTLET

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description	
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr		
1	SBUH Runoff	-----	-----	-----	-----	-----	-----	-----	0.751	-----	-----	EX BSN ONSITE
2	SBUH Runoff	-----	-----	-----	-----	-----	-----	-----	1.417	-----	-----	DEV BSN ONSITE
3	SBUH Runoff	-----	-----	-----	-----	-----	-----	-----	1.079	-----	-----	UPSTREAM BSN
4	Combine	1, 3	-----	-----	-----	-----	-----	-----	1.831	-----	-----	TOTAL EX. BSN
5	Combine	2, 3,	-----	-----	-----	-----	-----	-----	2.463	-----	-----	TO ADS CHAMBERS
6	Reservoir	5	-----	-----	-----	-----	-----	-----	1.723	-----	-----	ADS OUTLET

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SBUH Runoff	0.751	2	480	12,601	-----	-----	-----	EX BSN ONSITE	
2	SBUH Runoff	1.417	2	474	20,748	-----	-----	-----	DEV BSN ONSITE	
3	SBUH Runoff	1.079	2	480	17,057	-----	-----	-----	UPSTREAM BSN	
4	Combine	1.831	2	480	29,658	1, 3	-----	-----	TOTAL EX. BSN	
5	Combine	2.463	2	478	37,805	2, 3,	-----	-----	TO ADS CHAMBERS	
6	Reservoir	1.723	2	492	37,796	5	744.56	2,683	ADS OUTLET	
220829 Lowell DG DRN CALCS.gpw					Return Period: 25 Year			Wednesday, 08 / 31 / 2022		

Hydrograph Report

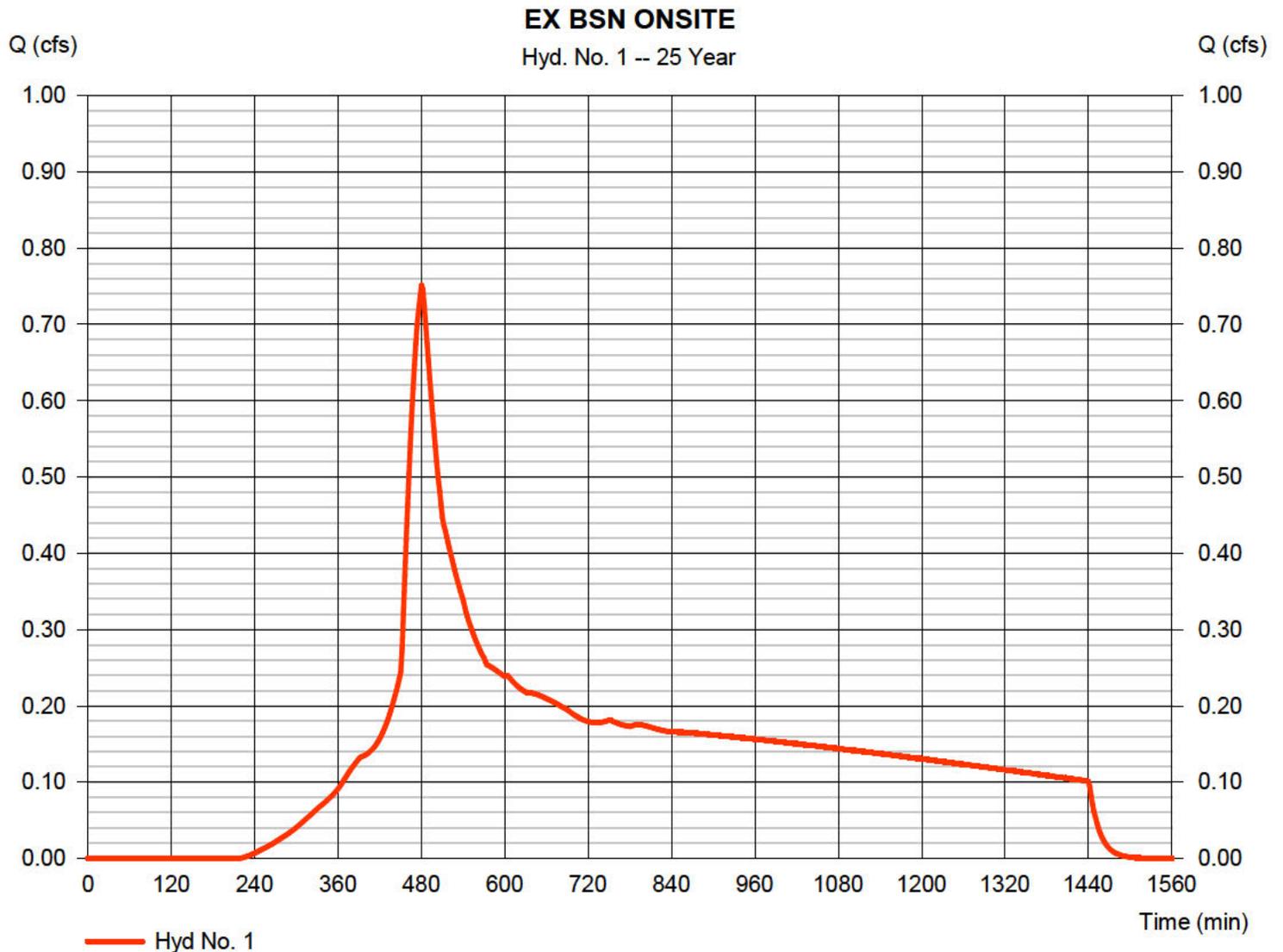
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Wednesday, 08 / 31 / 2022

Hyd. No. 1

EX BSN ONSITE

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.751 cfs
Storm frequency	= 25 yrs	Time to peak	= 480 min
Time interval	= 2 min	Hyd. volume	= 12,601 cuft
Drainage area	= 1.200 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 14.30 min
Total precip.	= 5.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No. 1

EX BSN ONSITE

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.150	0.011	0.011	
Flow length (ft)	= 150.0	0.0	0.0	
Two-year 24-hr precip. (in)	= 2.00	0.00	0.00	
Land slope (%)	= 4.00	0.00	0.00	
Travel Time (min)	= 12.99	+ 0.00	+ 0.00	= 12.99
Shallow Concentrated Flow				
Flow length (ft)	= 250.00	0.00	0.00	
Watercourse slope (%)	= 4.00	0.00	0.00	
Surface description	= Unpaved	Paved	Paved	
Average velocity (ft/s)	=3.23	0.00	0.00	
Travel Time (min)	= 1.29	+ 0.00	+ 0.00	= 1.29
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00	0.00	0.00	
Flow length (ft)	0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				14.30 min

Hydrograph Report

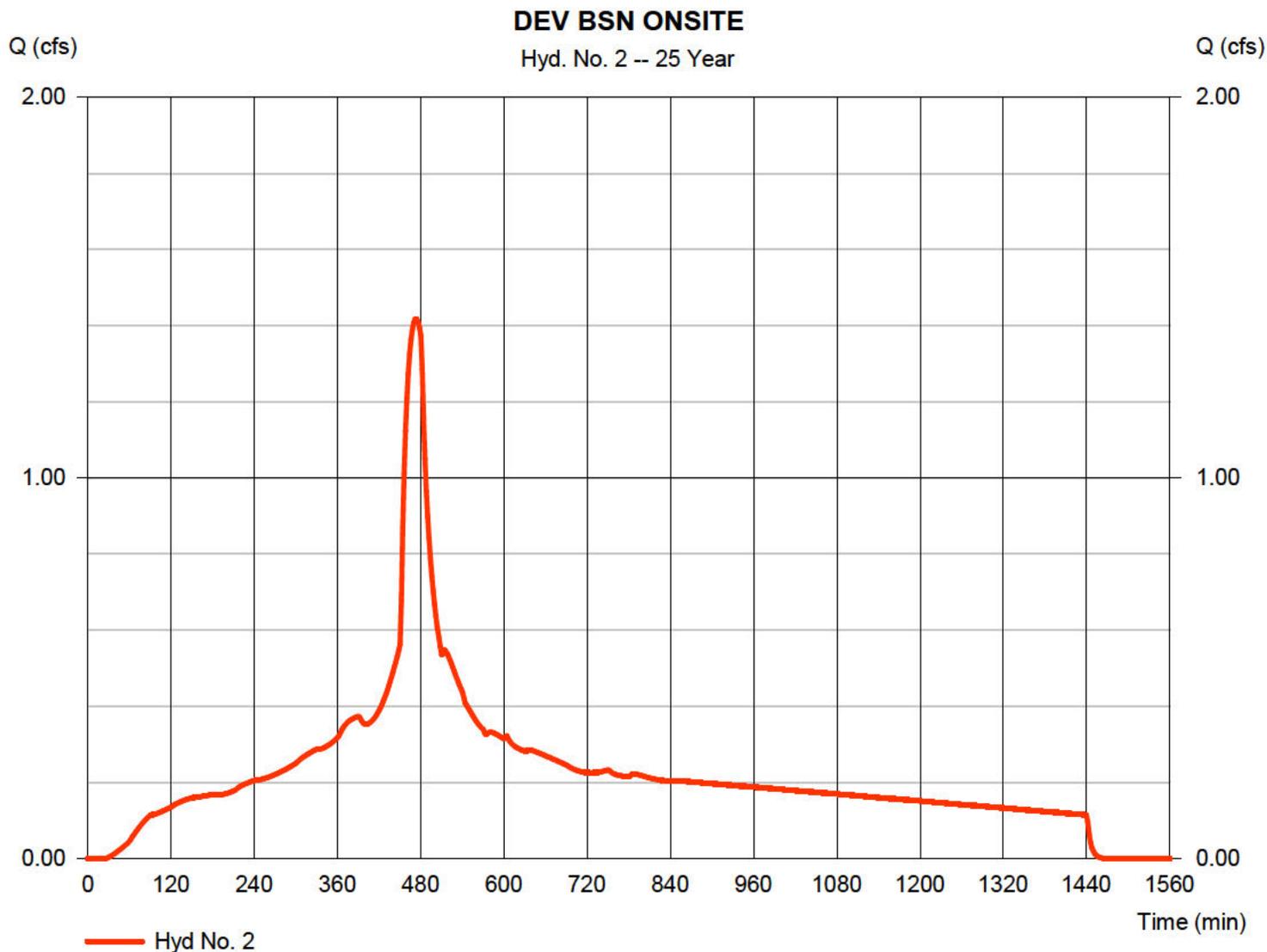
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Wednesday, 08 / 31 / 2022

Hyd. No. 2

DEV BSN ONSITE

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.417 cfs
Storm frequency	= 25 yrs	Time to peak	= 474 min
Time interval	= 2 min	Hyd. volume	= 20,748 cuft
Drainage area	= 1.200 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a



Hydrograph Report

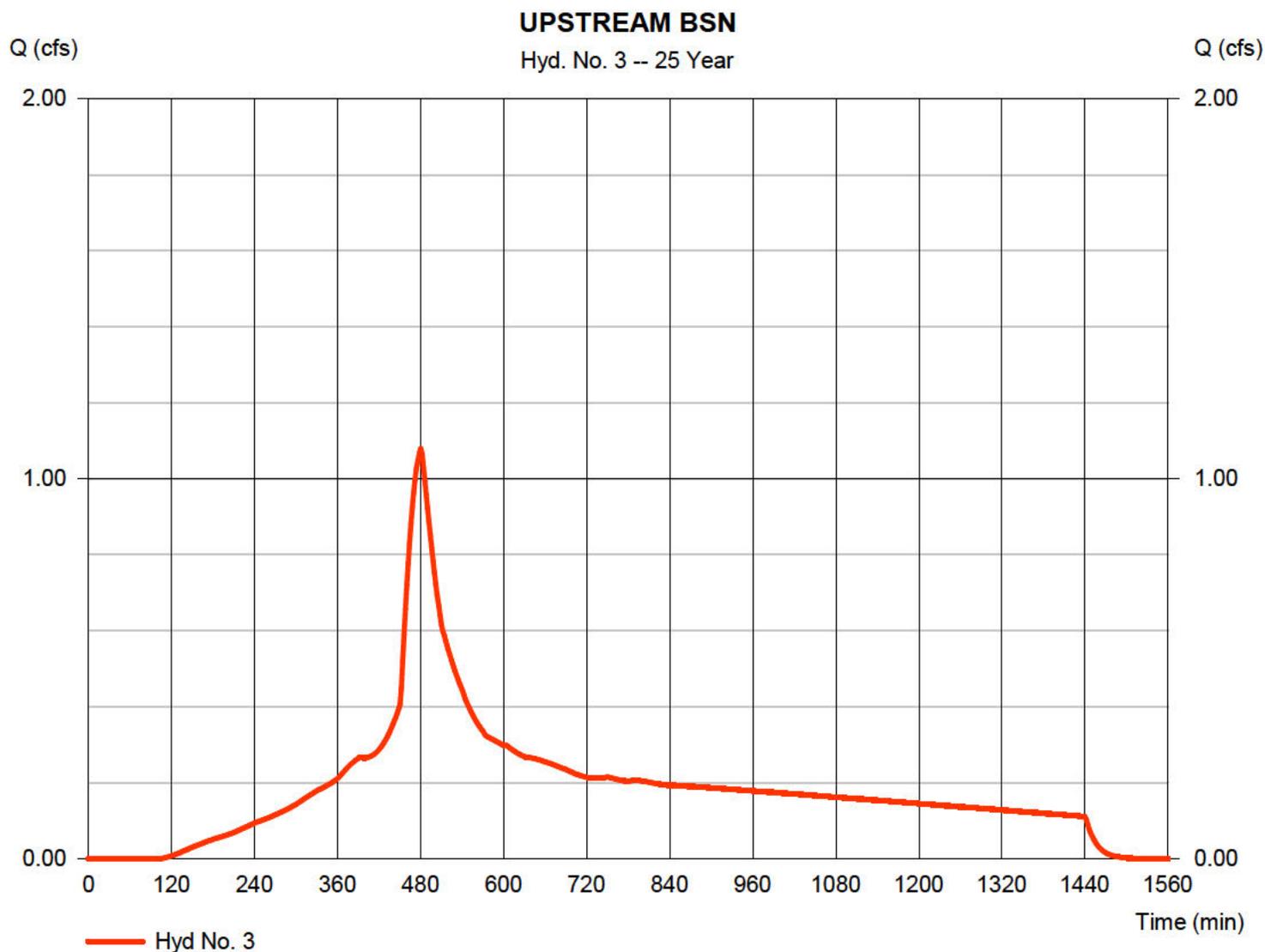
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Wednesday, 08 / 31 / 2022

Hyd. No. 3

UPSTREAM BSN

Hydrograph type	= SBUH Runoff	Peak discharge	= 1.079 cfs
Storm frequency	= 25 yrs	Time to peak	= 480 min
Time interval	= 2 min	Hyd. volume	= 17,057 cuft
Drainage area	= 1.180 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 5.00 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a



Hydrograph Report

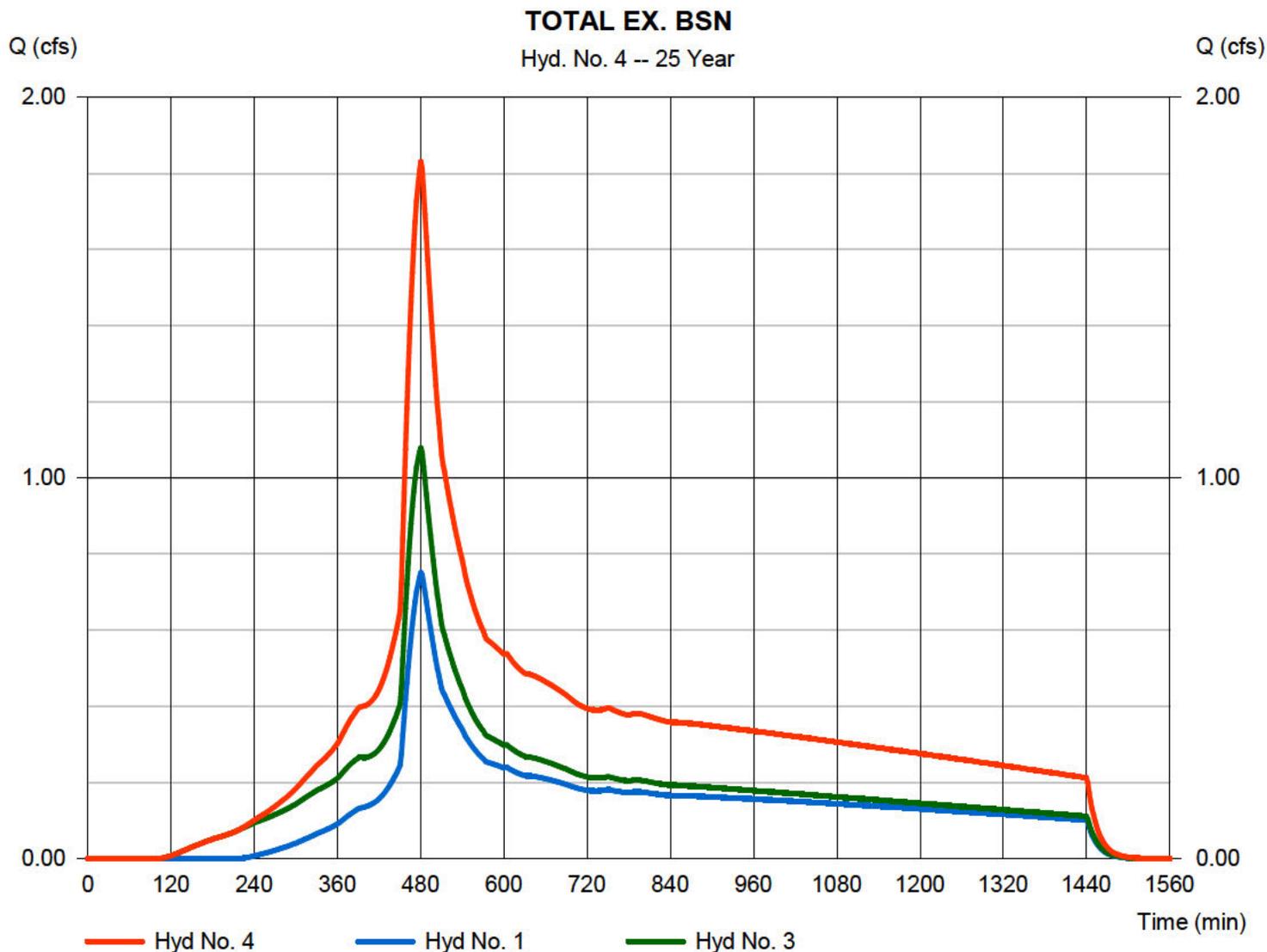
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Wednesday, 08 / 31 / 2022

Hyd. No. 4

TOTAL EX. BSN

Hydrograph type	= Combine	Peak discharge	= 1.831 cfs
Storm frequency	= 25 yrs	Time to peak	= 480 min
Time interval	= 2 min	Hyd. volume	= 29,658 cuft
Inflow hyds.	= 1, 3	Contrib. drain. area	= 2.380 ac



Hydrograph Report

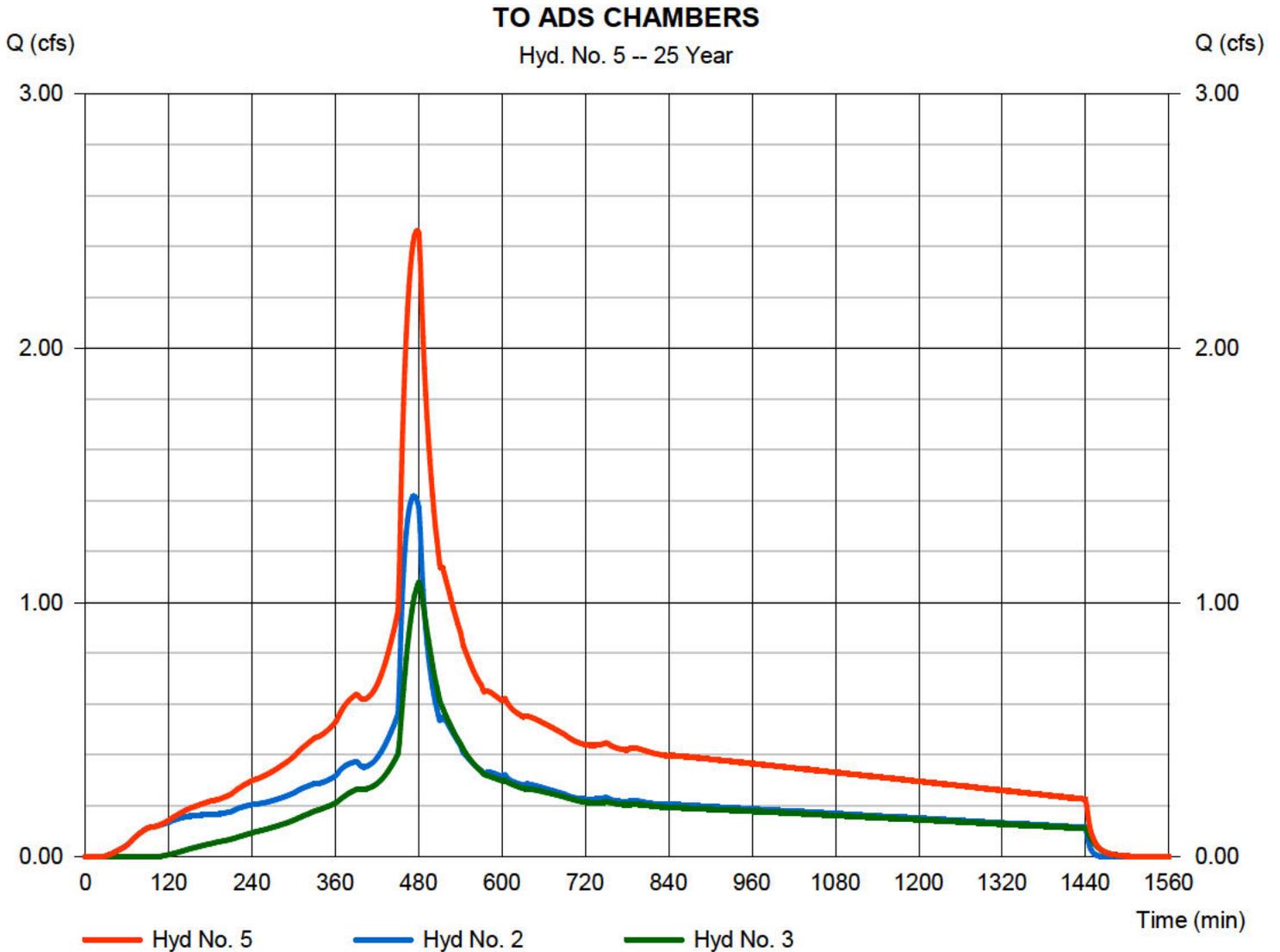
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Wednesday, 08 / 31 / 2022

Hyd. No. 5

TO ADS CHAMBERS

Hydrograph type	= Combine	Peak discharge	= 2.463 cfs
Storm frequency	= 25 yrs	Time to peak	= 478 min
Time interval	= 2 min	Hyd. volume	= 37,805 cuft
Inflow hyds.	= 2, 3	Contrib. drain. area	= 2.380 ac



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

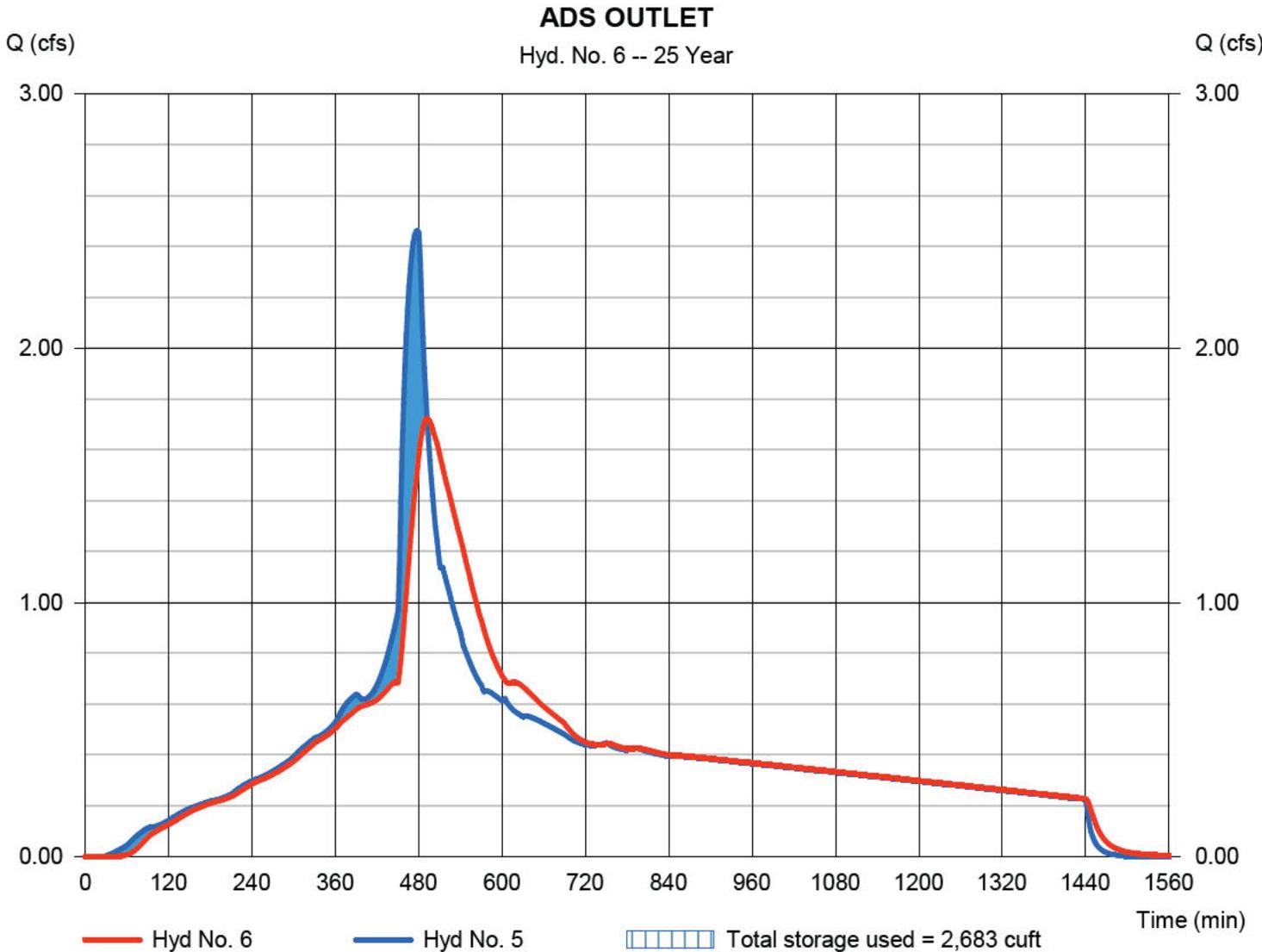
Wednesday, 08 / 31 / 2022

Hyd. No. 6

ADS OUTLET

Hydrograph type	= Reservoir	Peak discharge	= 1.723 cfs
Storm frequency	= 25 yrs	Time to peak	= 492 min
Time interval	= 2 min	Hyd. volume	= 37,796 cuft
Inflow hyd. No.	= 5 - TO ADS CHAMBERS	Max. Elevation	= 744.56 ft
Reservoir name	= ADS CHAMBERS	Max. Storage	= 2,683 cuft

Storage Indication method used.



**ADS STORMTECH UNDERGROUND
DETENTION SYSTEM**

User Inputs

Chamber Model:	SC-310
Outlet Control Structure:	Yes
Project Name:	Lowell Dollar General
Engineer:	Todd Powell
Project Location:	Oregon
Measurement Type:	Imperial
Required Storage Volume:	3200 cubic ft.
Stone Porosity:	35%
Stone Foundation Depth:	6 in.
Stone Above Chambers:	6 in.
Average Cover Over Chambers:	18 in.
Design Constraint Dimensions:	(20 ft. x 150 ft.)

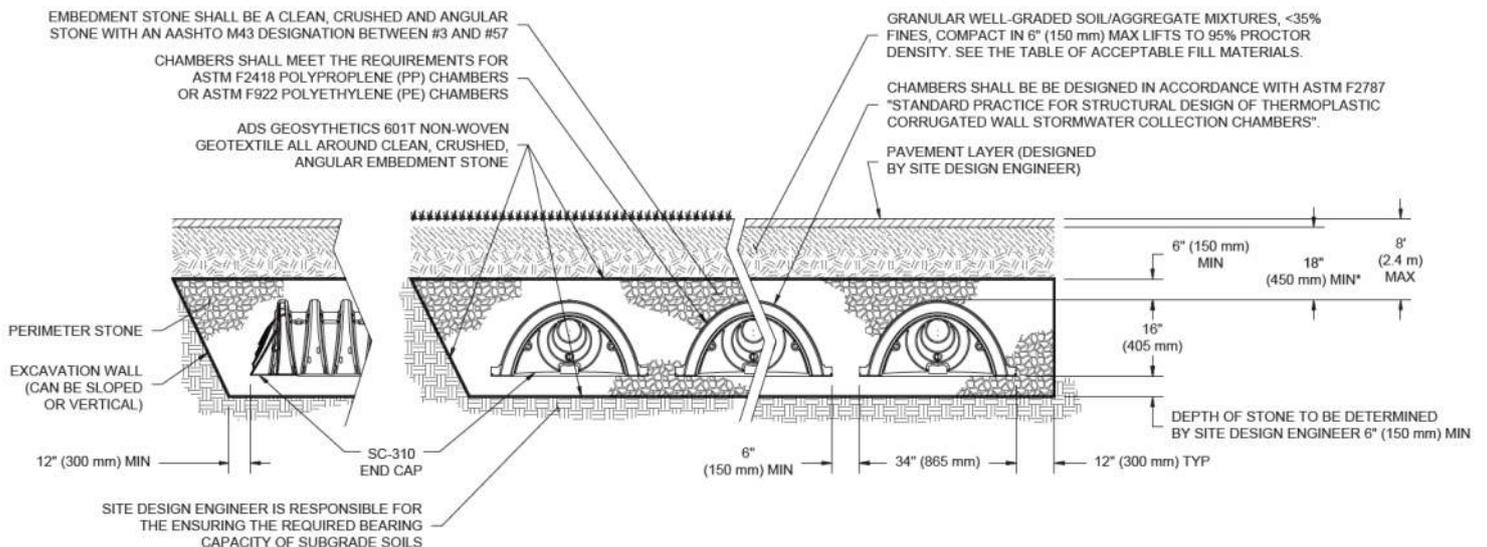
Results

System Volume and Bed Size

Installed Storage Volume:	3236.77 cubic ft.
Storage Volume Per Chamber:	14.70 cubic ft.
Number Of Chambers Required:	100
Number Of End Caps Required:	10
Chamber Rows:	5
Maximum Length:	148.85 ft.
Maximum Width:	18.77 ft.
Approx. Bed Size Required:	2793.39 square ft.

System Components

Amount Of Stone Required:	187 cubic yards
Volume Of Excavation (Not Including Fill):	242 cubic yards
Total Non-woven Geotextile Required:	850 square yards
Woven Geotextile Required (excluding Isolator Row):	17 square yards
Woven Geotextile Required (Isolator Row):	77 square yards
Total Woven Geotextile Required:	94 square yards



PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	



LOWELL DOLLAR GENERAL

LOWELL, OR

SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLYETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

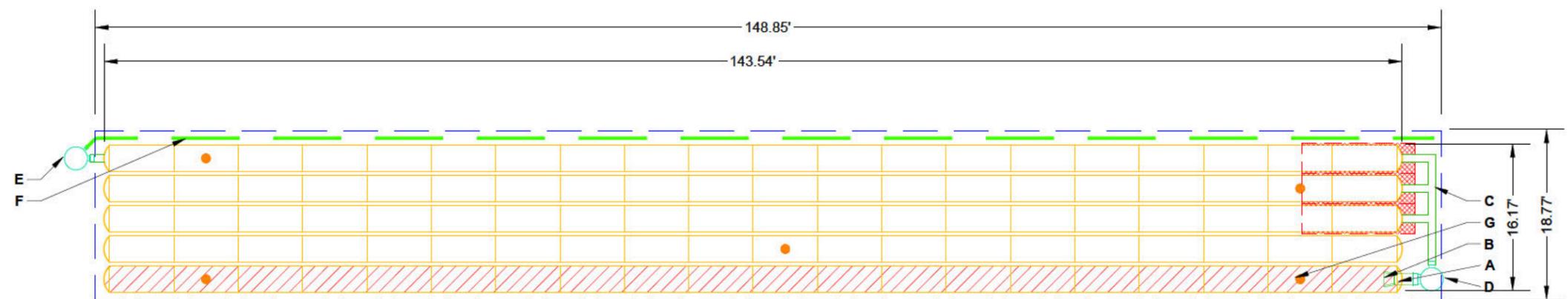
NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT		PROPOSED ELEVATIONS		*INVERT ABOVE BASE OF CHAMBER				
				PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT	MAX FLOW
100	STORMTECH SC-310 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	752.68					
10	STORMTECH SC-310 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	746.68					
6	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	746.18	PREFABRICATED EZ END CAP	A	12" BOTTOM PREFABRICATED EZ END CAP, PART#: SC310ECEZ / TYP OF ALL 12" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	0.90"	
6	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	746.18	FLAMP	B	INSTALL FLAMP ON 12" ACCESS PIPE / PART#: SC31012RAMP		
35	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	746.18	MANIFOLD	C	8" x 8" TOP MANIFOLD, MOLDED FITTINGS	3.50"	
3241	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	745.18	NYLOPLAST (INLET W/ ISO PLUS ROW)	D	30" DIAMETER (24.00" SUMP MIN)		2.3 CFS IN
		TOP OF SC-310 CHAMBER:	744.68	NYLOPLAST (OUTLET)	E	30" DIAMETER (DESIGN BY ENGINEER)		0.7 CFS OUT
		8" x 8" TOP MANIFOLD INVERT:	743.64	UNDERDRAIN	F	4" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		
		12" ISOLATOR ROW PLUS INVERT:	743.43	INSPECTION PORT	G	4" SEE DETAIL (TYP 5 PLACES)		
2793	SYSTEM AREA (SF)	8" BOTTOM CONNECTION INVERT:	743.40					
335.2	SYSTEM PERIMETER (ft)	BOTTOM OF SC-310 CHAMBER:	743.35					
		UNDERDRAIN INVERT:	742.85					
		BOTTOM OF STONE:	742.85					



- ISOLATOR ROW PLUS (SEE DETAIL)
- PLACE MINIMUM 12.50' OF ADSP125 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS
- BED LIMITS

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

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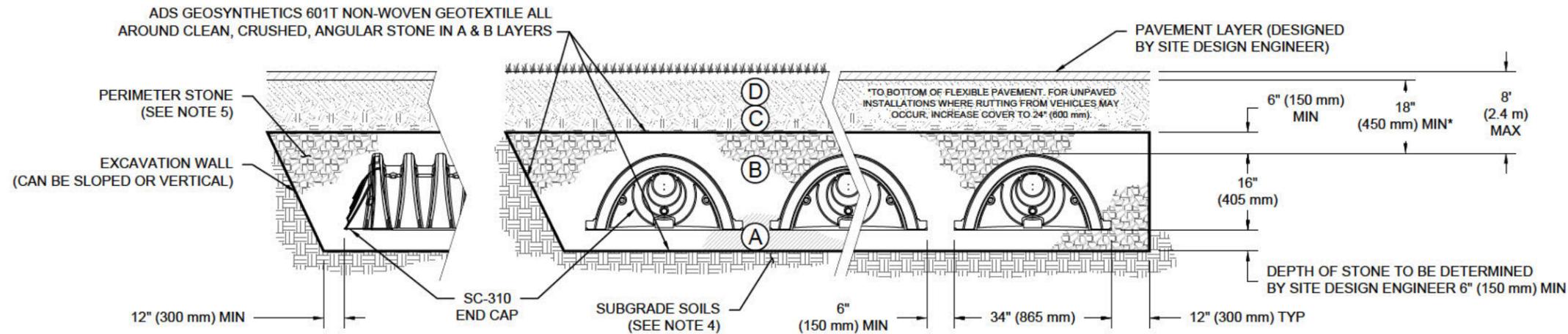
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ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 bs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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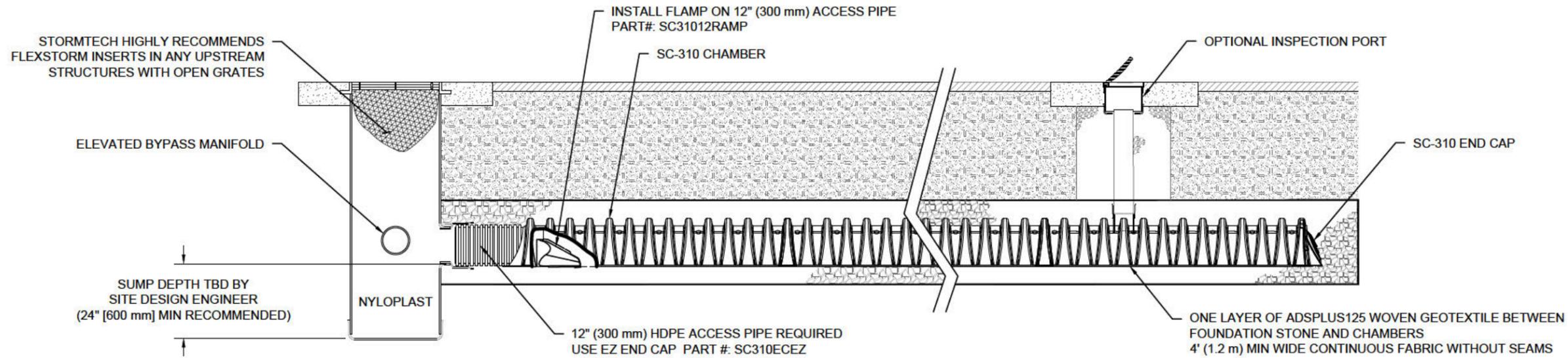
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3 OF 6

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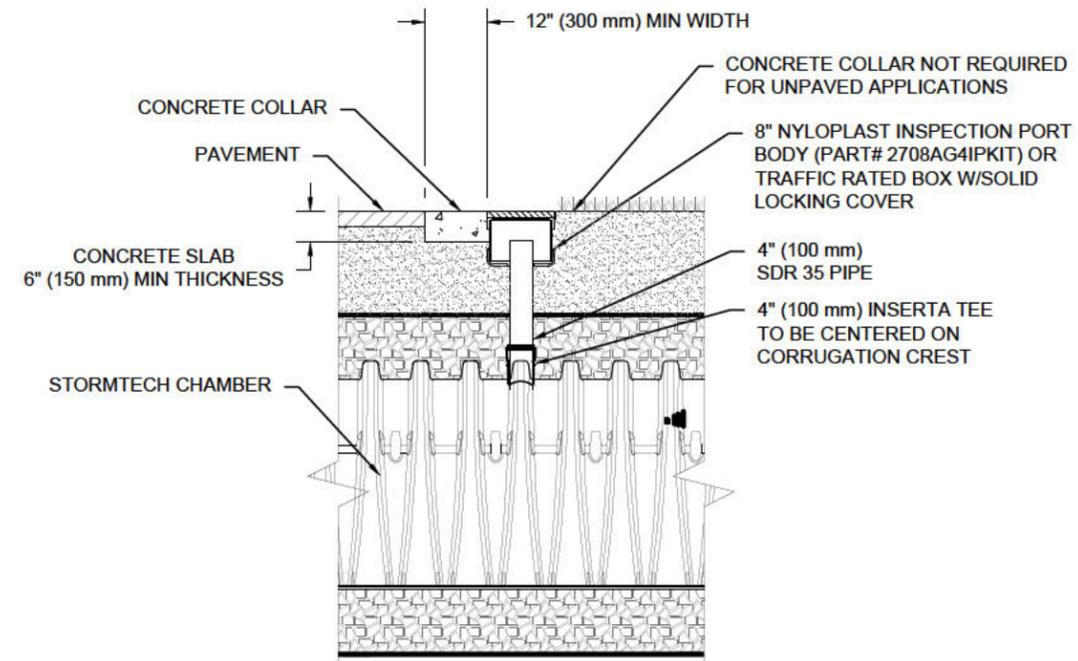
SC-310 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - B. ALL ISOLATOR PLUS ROWS
 - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



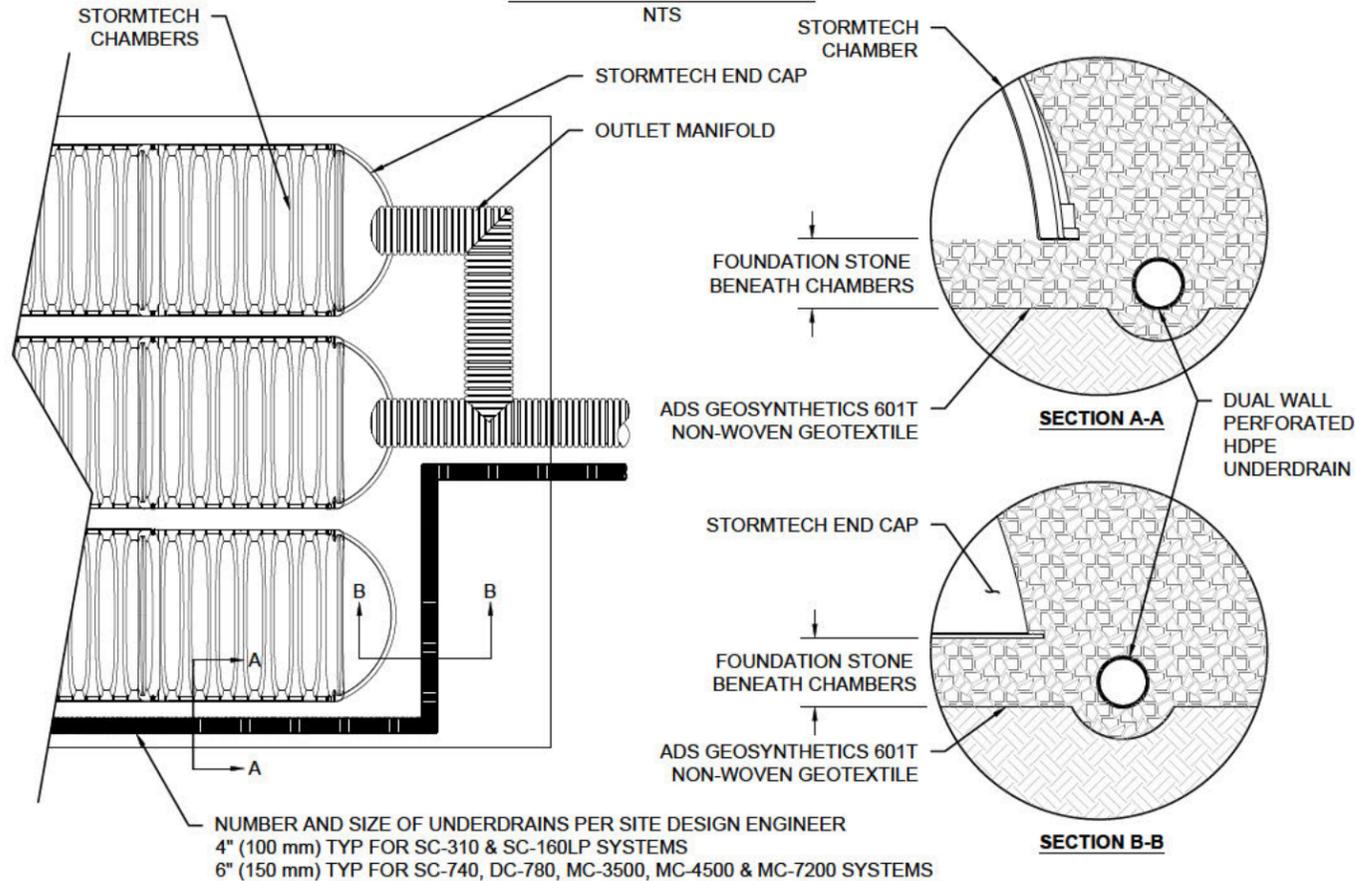
NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4" PVC INSPECTION PORT DETAIL
(SC SERIES CHAMBER)
NTS

<p>StormTech® Chamber System</p> <p>888-882-2694 WWW.STORMTECH.COM</p>	<p>LOWELL DOLLAR GENERAL LOWELL, OR</p> <p>DATE: _____ DRAWN: TP</p> <p>PROJECT #: _____ CHECKED: N/A</p>
<p>4640 TRUJEMAN BLVD HILLIARD, OH 43026 1-800-733-7473</p> <p>ADS</p>	<p>THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.</p>
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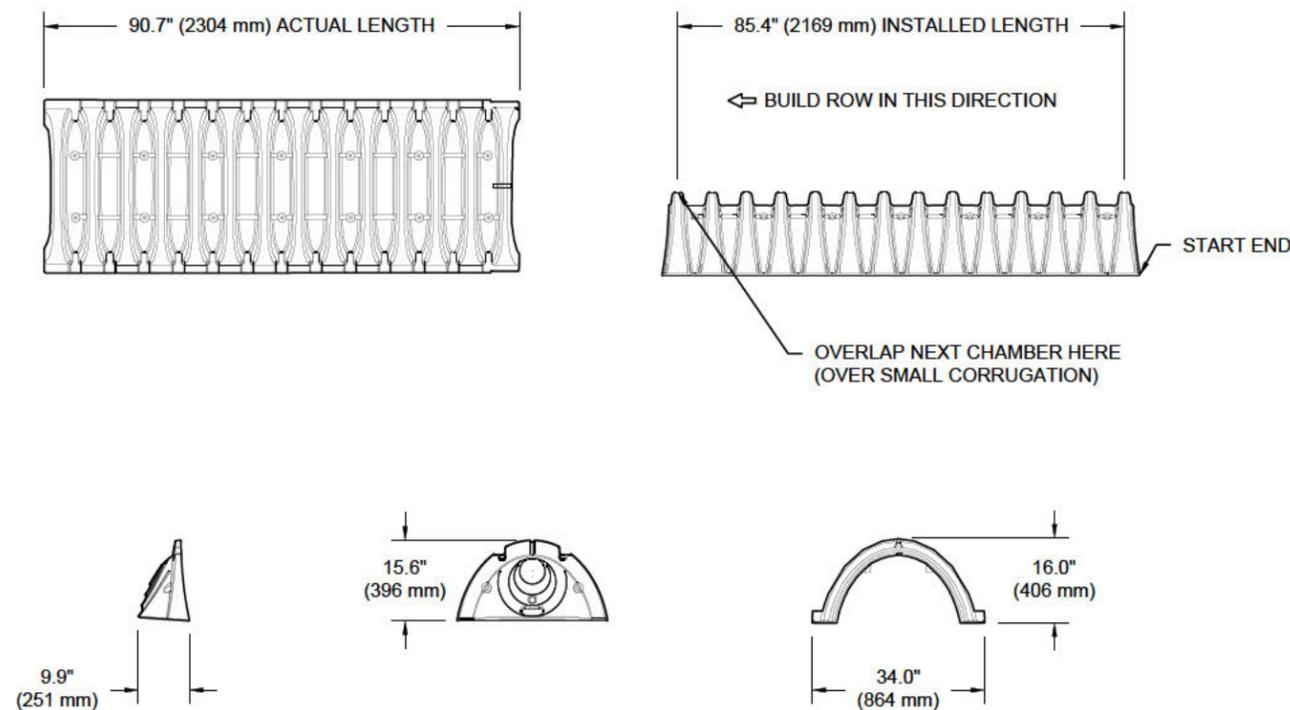
UNDERDRAIN DETAIL

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SC-310 TECHNICAL SPECIFICATION

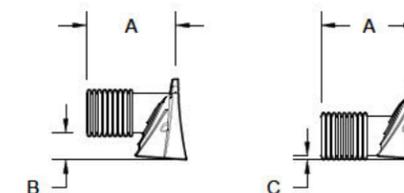
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NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m ³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m ³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310ECEZ*	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310ECEZ THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

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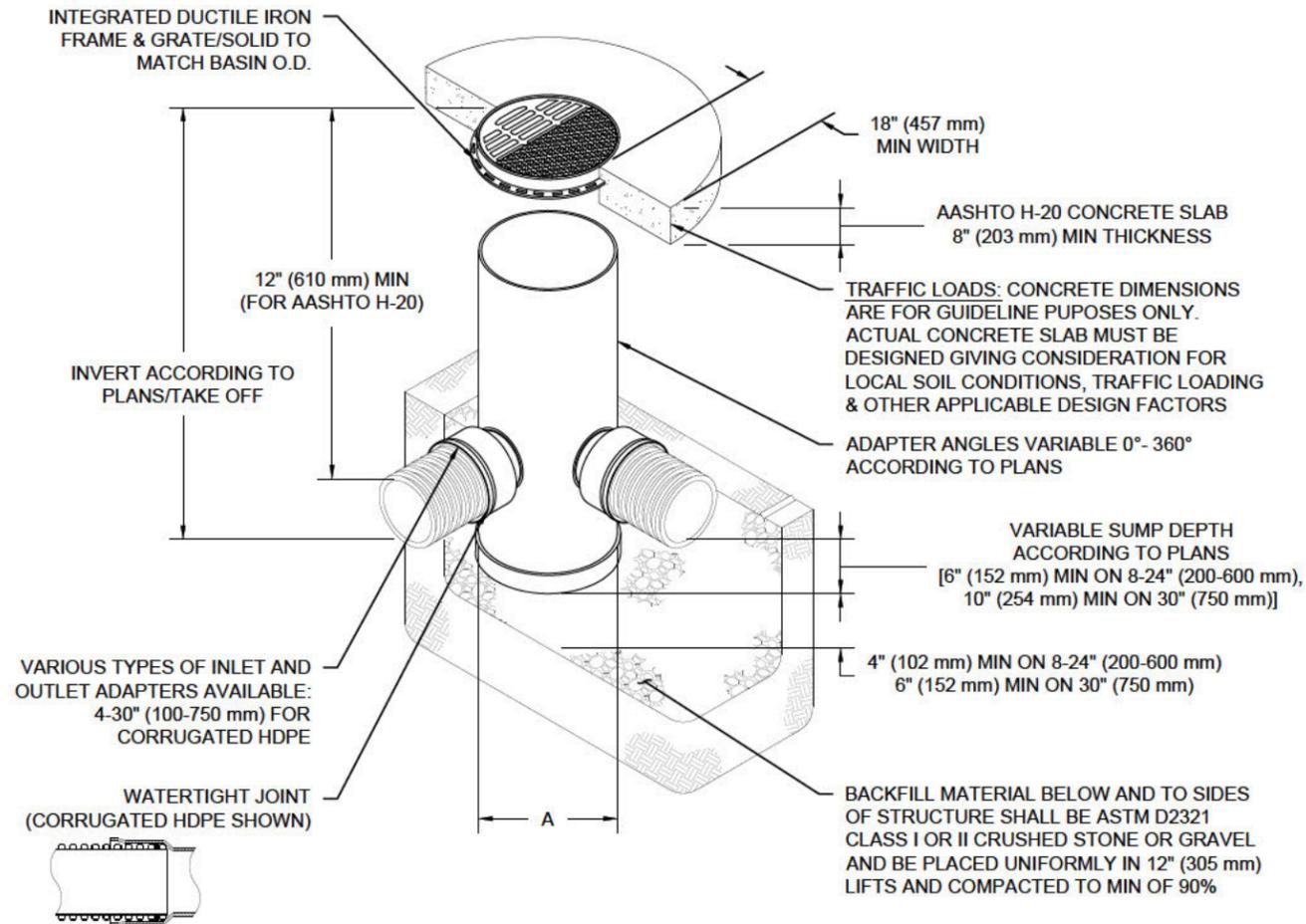
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5 OF 6

NYLOPLAST DRAIN BASIN

NTS



NOTES

- 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
- FOR COMPLETE DESIGN AND PRODUCT INFORMATION: WWW.NYLOPLAST-US.COM
- TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

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