



PUBLIC WORKS DEPARTMENT

Findings, Conclusions and Decision Public Works Variance EN-22-0014

Site: The Reserve Preliminary Plat
Parcel No. 0222323134

Applicant: Darton Riely-Gibbons, P.E.
Project Manager
CPH Consultants
11321 120th Street, Suite B
Kirkland, WA 98034

Re: **(EN-22-0014)** The Reserve Preliminary Plat Approach Landing - Public Works Variance Request

Dear Mr. Riely-Gibbons:

The City of Gig Harbor Public Works Department has reviewed the submitted materials for the Reserve Preliminary Plat Public Works Variance and has concluded the following:

I. **Findings.**

A. Facts. On May 9th, 2022, Darton Riely-Gibbons, P.E., of CPH Consultants, submitted an application to the City of Gig Harbor requesting a variance from the City of Gig Harbor Public Works Standards (Standards) Section 2B.140(B) for the Reserve Preliminary Plat Development. The Applicant's package included a letter addressing the variance criterion, a preliminary site plan, a preliminary road grading plan, and the typical roadway sections.

The Applicant requests a variance from Public Works Standard Section 2B.140(B). Approach landings should be measured 30 feet from the nearest right-of-way (ROW) line for approaches to any arterial, per Standards. Due to existing conditions, the applicant requests that the approach landing be measured from the nearest traveled lane as opposed to the nearest ROW line.

B. The Applicant's submittal included the variance application, payment in the amount of \$2,000.00, and letter and pertinent documents addressing the variance criterion (copy attached.)

C. Application of Facts to Criteria for Approval. The City Engineer may grant variances from the Standards if the Applicant presents substantial evidence to demonstrate that all of the criteria in Section 1.035(C) of the Standards are satisfied. Following is the City

Engineer's analysis of the facts to the criteria for approval based on information supplied by the applicant:

1. *"Strict compliance with the Public Works Standards is undesirable or impractical because of impracticality or undesirable conditions".*

The Applicant states:

- The PWS section 2B.140.B requires that intersections with sloping approaches shall provide a landing not exceeding 3% for 30 feet approaching any arterial as measured from the nearest right-of-way line. This is undesirable due to the slopes existing on the site. Beginning the 30-foot landing measurement at the right-of-way line, 30 feet from centerline, as opposed to the edge to the traveled way, 17 feet from centerline, causes an elevation increase over the length of the road of approximately 1.6 feet. This elevation increase results in a substantial increase in required fill material of approximately 10,000 cubic yards and increased wall heights throughout the site.

The City Engineer's analysis concurs with the Applicant's analysis and concludes that strict compliance is impractical due to the reasons stated by the applicant.

2. *"The proposed variations are functionally equivalent to and are consistent with the intent of the Public Works Standards, and/or provide compensating benefits to the City and the public".*

The Applicant states the following:

- The proposed variation is consistent with the intent of the PWS section 2B.140.B because it provides a 30-foot safe landing for vehicles prior to entering the traveled way of the minor arterial, Peacock Hill Avenue NW. This will provide a landing of 3% or less for 1.5 times the length of average size vehicles and maintains adequate sight distance for existing vehicles. Adjusting the landing measurement point out to the right-of-way as stated in the PWS section 2B.140.B would create a landing that is 43 feet long prior to entry into the traveled way of Peacock Hill Avenue. While a longer landing provides more room for vehicles exiting the project site, the fact that the project is proposing a low volume, dead-end road with only 14 single-family residential lots suggests that the additional queuing/staging length is not warranted.

The City Engineer's analysis has concluded that the requested variation is functionally equivalent to and is consistent with the intent of Section 2B.140(B).

3. *"The proposed variation(s) are based on sound engineering judgment".*

The Applicant states:

- The intersection of Road A with Peacock Hill Avenue will be stop-controlled and a 30-foot landing outside of the travelled way provides safe refuge for drivers to attain sight distance. Measuring landing distance from the travelled way is

consistent with other Puget Sound jurisdictions as well as with AASHTO's method of measuring intersection sight distance. As such, the proposed variation is based on sound engineering judgement.

The City Engineer's analysis concludes that the Applicant has demonstrated that the proposed landing conforms with the intent of Section 2B.140(B) of the City of Gig Harbor Public Works Standards. The requested variance meets sound engineering practice as indicated.

4. *"The proposed variations have not been made necessary by actions of the Applicant or Property Owner".*

The Applicant states the following:

- The proposed variation has been made necessary by the existing topographical conditions of the site. The variance provides for a significant reduction in import fill material to the site and retaining wall heights, with results in less truck traffic during construction.

The City Engineer's analysis concludes that the fact the site is constrained by the existing conditions and are not the result of actions by the Applicant.

5. *"Safety, function, appearance, and economical maintenance requirements are met with the proposed variation".*

The Applicant states the following:

- The variation proposed will meet the safety and function requirements by providing a clear refuge for vehicles entering Peacock Hill Avenue. The required landing length itself will not be reduced. Rather it is only a change in at what point the landing is measured. This measurement location is actually consistent with the intersection sight distance requirements than measuring from the right-of-way line. Appearance will be improved over the standard because the elevation of the proposed Road A will be reduced thus reducing the number and elevation of any onsite walls. The cost of maintenance will remain unchanged.

The City Engineer's analysis concludes appropriate safety and functional requirements are met by providing the essential elements of Section 2B.140(B). The proposed landing meets the expectations of the site distance requirements, and the proposed variance causes no meaningful increase in maintenance costs.

I. Decision.

For the Reserve Preliminary Plat Approach Landing Variance request, the Gig Harbor City Engineer concludes that the variance satisfies all the Criteria for Approval and therefore approves the variance request. Any modifications to the proposed development may nullify or require re-consideration of this approval, at the sole discretion of the City Engineer.

II. Appeal.

This decision shall be considered the Notice of Decision on the variance and any appeal shall be filed and processed as described in Title 19 GHMC for a Type II application, as provided in Section 1.035E of the City's Public Works Standards. An appeal may be filed with the City of Gig Harbor Engineering Department within fourteen (14) working days of issuance of this decision (GHMC 19.06.004). All other procedures for an appeal of a Type II application shall be followed in the appeal process (GHMC 19.06.005).

Aaro
City Engineer



01/09/2023

Date

January 4, 2023

Mr. Jeff Langhjem, PE
Public Works Director
City of Gig Harbor
Public Works Department
3510 Grandview Street
Gig Harbor, WA 98335

RE: The Reserve — CPH Project No. 0228-21-001
Request for Public Works Standards Variance for Intersection Landing Length
City of Gig Harbor Permit No. EN-22-0014

Mr. Langhjem,

This letter and the attached site plan are provided on behalf of Prospect Development to request the City's review and approval of a *Public Works Standards Variance* for the intersection landing at the proposed intersection of the minor arterial, Peacock Hill Avenue NW, and Road A in the proposed 14-lot subdivision known as The Reserve (**PL-PPLAT-22-0001**). The requested Variance would allow for the 30-foot minimum landing at a grade of 3 percent at the intersection of private roadway Road A and Peacock Hill Avenue to be measured from the nearest traveled lane as opposed to the nearest right-of-way (ROW) line as stated in the standard.

The 2018 City of Gig Harbor Public Works Standards (PWS) section 2B.140.B specifies that a landing of no more than 3 percent grade be provided at intersecting roadway approaches. It specifies that the length of this landing should be 30 feet measured from the nearest right-of-way line for approaches to any arterial road. The variance for this project is proposed to maintain a safe refuge and staging position for vehicles exiting the new low volume local access Road A that also facilitates a significant reduction in the earthwork efforts for the project.

The Reserve site has significant topographic relief that under existing conditions falls at an approximately 15% grade from the existing edge of pavement approximately 17 feet from the centerline of Peacock Hill Avenue NW to approximately 500 feet east in the site where steeper slopes as high as 45% exist. The project roadway design and measurement of the vehicular landing from the existing travelled way instead of the right-of-way limit of Peacock Hill Avenue is proposed to reduce the amount of fill and height of walls that would be required to accommodate these existing topographic conditions. The proposed edge of traveled way will be 17 feet from the existing centerline of Peacock Hill Avenue and this traveled way will consist of a 12-foot driving lane and 5-foot bike lane consistent with the current conditions present on Peacock Hill Avenue. Please see the attached plan and profile exhibits for reference.

The requested Variance to modify the landing measurement point is proposed to provide a safe landing at the intersection of Peacock Hill Avenue and Road A consistent with the intent of PWS section 2B.140.B and complies with the provisions and necessary approval criteria of PWS section 1.035 (C) and as follows:

1. *Strict compliance with the public works standards is undesirable or impractical because of impracticality or undesirable conditions.*

The PWS section 2B.140.B requires that intersections with sloping approaches provide a landing not exceeding 3% for 30 feet approaching any arterial as measured from the nearest right-of-way line. This is undesirable due to the slopes existing on the site. Beginning the 30-foot landing measurement at the right-of-way line, 30 feet from centerline, as opposed to the edge to the traveled way, 17 feet from centerline, causes an elevation increase over the length of the road of approximately 1.6 feet. This elevation increase results in a substantial increase in required fill material of approximately 10,000 cubic yards and increased wall heights throughout the site.

2. *The proposed variation is functionally equivalent to and is consistent with the intent of the Public Works Standards, and/or provides compensating benefit to the city and the public.*

The proposed variation is consistent with the intent of the PWS section 2B.140.B because it provides a 30-foot safe landing for vehicles prior to entering the traveled way of the minor arterial, Peacock Hill Avenue NW. This will provide a landing of 3% or less for 1.5 times the length of average size vehicles and maintains adequate sight distance for existing vehicles. Adjusting the landing measurement point out to the right-of-way as stated in the PWS section 2B.140.B would create a landing that is 43 feet long prior to entry into the traveled way of Peacock Hill Avenue. While a longer landing provides more room for vehicles exiting the project site, the fact that the project is proposing a low volume, dead-end road with only 14 single-family residential lots suggests that the additional queuing/staging length is not warranted.

3. *The proposed variation is based on sound engineering judgment.*

The intersection of Road A with Peacock Hill Avenue will be stop-controlled and a 30-foot landing outside of the travelled way provides safe refuge for drivers to attain sight distance. Measuring landing distance from the travelled way is consistent with other Puget Sound jurisdictions as well as with AASHTO's method of measuring intersection sight distance. As such, the proposed variation is based on sound engineering judgement.

4. *The proposed variation has not been made necessary by the actions of the applicant or property owner.*

The proposed variation has been made necessary by the existing topographical conditions of the site. The variance provides for a significant reduction in import fill material to the site and retaining wall heights, with results in less truck traffic during construction.

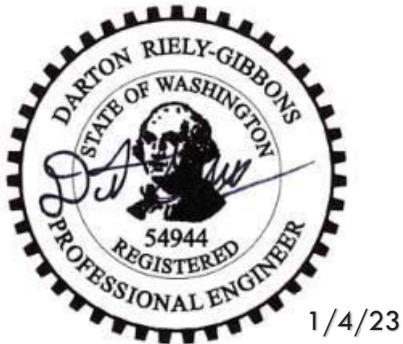
5. *Safety, function, appearance and economical maintenance requirements are met with the proposed variation.*

The variation proposed will meet the safety and function requirements by providing a clear refuge for vehicles entering Peacock Hill Avenue. The required landing length itself will not be reduced. Rather it is only a change in at what point the landing is measured. This measurement location is actually consistent with the intersection sight distance requirements than measuring from the right-of-way line. Appearance will be improved over the standard because the elevation of the proposed Road A will be reduced thus reducing the number and elevation of any onsite walls. The cost of maintenance will remain unchanged.

Please contact me directly at (425) 484-0949 or by e-mail at darton@cphconsultants.com if you have questions or need any additional information to complete your review and approval of the requested Variance. Your prompt response is appreciated. Thank you.

Sincerely,
CPH Consultants

Darton Riely-Gibbons, PE
Project Manager



1/4/23

Enclosures: Figure 1 – Preliminary Site Plan
Figure 2 – Preliminary Road A Grading Profile
Figure 3 - Typical Roadway Sections

Cc: Prospect Development, LLC
copy to file

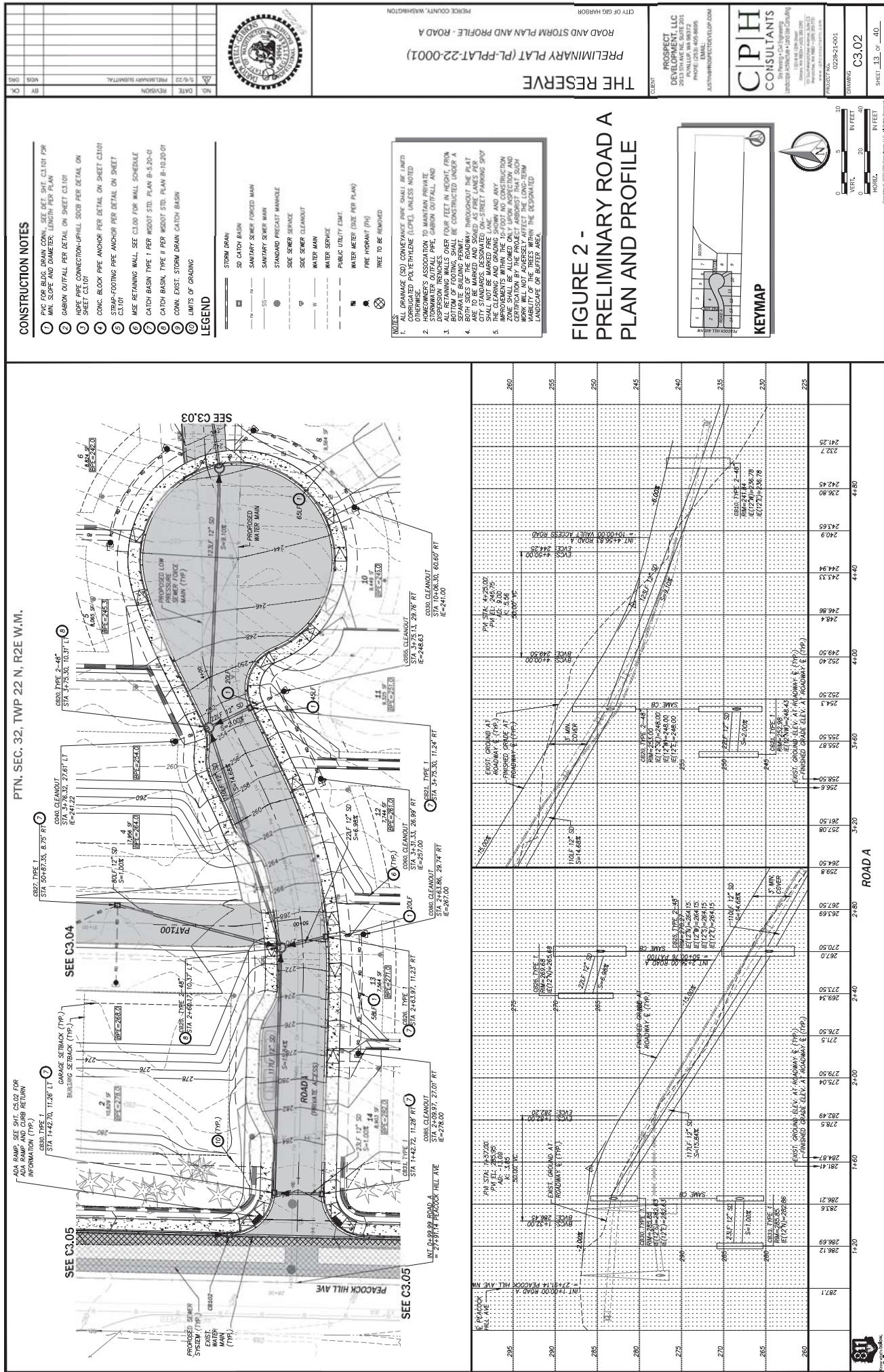
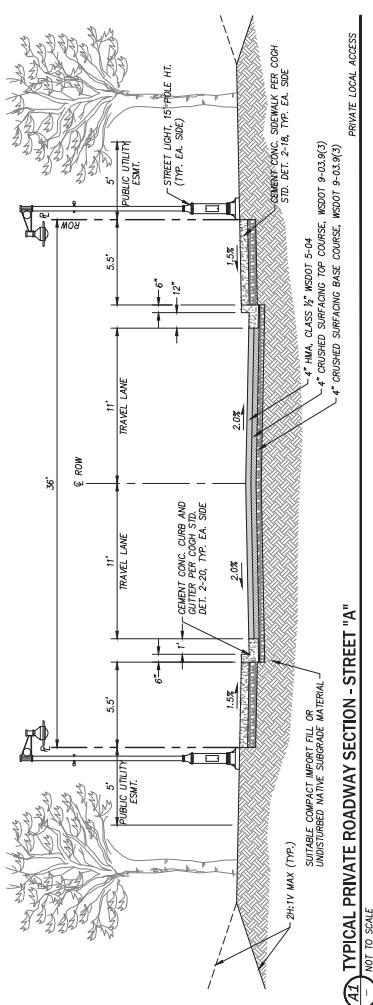


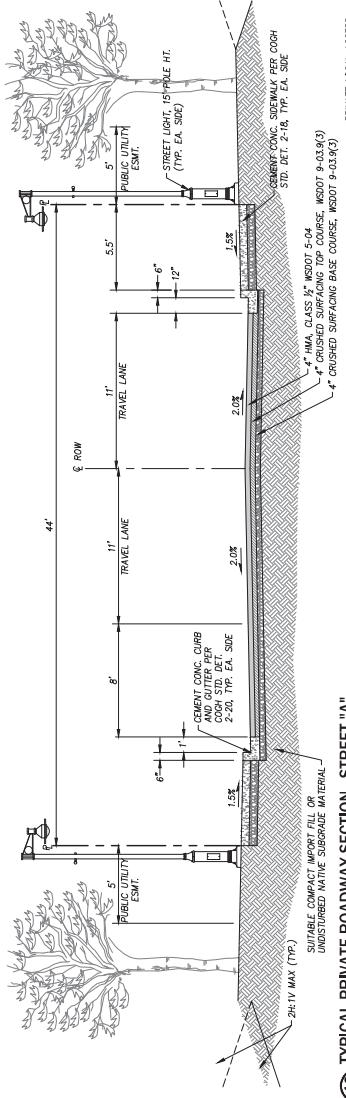
FIGURE 2 -
PRELIMINARY ROAD A
PLAN AND PROFILE

PTN. SEC. 32, TWP 22 N, R2E W.M.

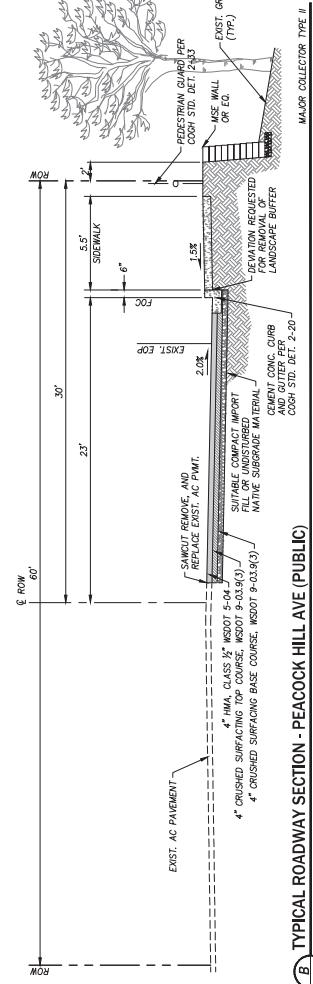
FIGURE 3 - TYPICAL ROAD SECTIONS



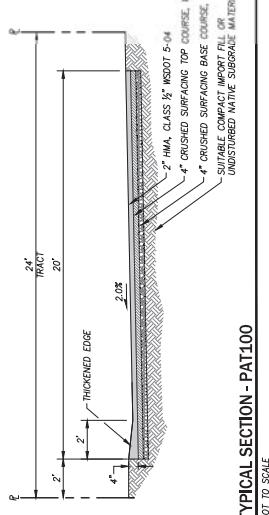
A1 TYPICAL PRIVATE ROADWAY SECTION - STREET "A" NOT TO SCALE



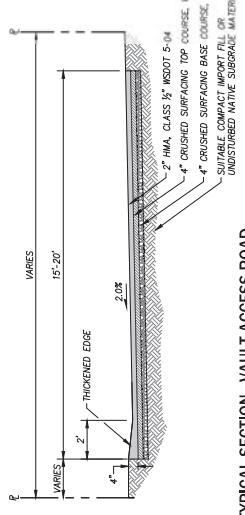
(A2) TYPICAL PRIVATE ROADWAY SECTION - STREET "A"



Typical Roadway Section - Peacock Hill Ave (Public)



C TYPICAL SECTION - PAT100
NOT TO SCALE



D TYPICAL SECTION - VAULT ACCESS ROAD

NO.	DATE	REVISION	PRELIMINARY SUBMITTAL	5/6/22	MISS QHS
				BY CH.	

PRELIMINARY PLAT (PL-PLAT-22-0001) TYPICAL ROAD SECTIONS
PEPPER COUNTY, WASHINGTON

PROSPECT

LLI
CONSULTANTS
Site Planning • Civil Engineering
Landscaping • Surveying • Construction

PROJECT NO. C2228-21-001
C2228-21-001

C1.100

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