

ANACORTES PLANNING COMMISSION

Site Visit : 3:00 PM Site Visit, 1600 20th Street (in front of gym by bell), Anacortes High School Replacement & Renovation, CUP-2015-0006. At the conclusion of the site visit, the Planning Commission will resume the continued public hearing on this matter at the regularly scheduled January 13, 2016 evening meeting.



JANUARY 13, 2016

Municipal Building Council Chambers

6th Street and "Q" Avenue

AGENDA

6 P.M.

1. **Roll Call**
2. **Minutes of January 6, 2016 will be provided at a later date**
3. **Correspondence**
4. **Old Business**
No Old Business
5. **New Business**
 - a. **Public Hearing**: Anacortes High School Replacement & Renovation, CUP-2015-0006 – Discussion
 - b. **Public Hearing**: 2016 Comprehensive Plan Update – Environment & Conservation, Land Use and Housing – Discussion

If reasonable accommodation of a disability is needed please contact Cherri Kahns at 299-1950 at least 48 hours prior to this meeting.

**ANACORTES PLANNING COMMISSION
SITE VISIT**

**Anacortes High School Replacement & Renovation,
CUP-2015-0006**



JANUARY 13, 2016

3 p.m.

**THE PLANNING COMMISSION WILL CONDUCT A SITE
VISIT AT THE ANACORTES HIGH SCHOOL, 1600 20th
STREET (in front of gym by bell) AT 3 P.M.**



Planning Commission Agenda Bill

Meeting Date: 1/13/2016

Agenda Item: CUP-2015-0006

Subject: Anacortes High School Replacement & Modernization CUP & Variance request

Staff Contact: Kevin Cricchio, AICP, Associate Planner

Approved for Submittal to Commission by	
X	Don Measamer, Director

Action Type	
X	Public Hearing
X	Discussion
X	Action

Summary Statement: The replacement and modernization to Anacortes High School

Background: 1/13/16 Open Record Public Hearing Continued to 1/20/16 at 6:00 PM.
Site visit 1/13/16 at 3:00 PM.

RETAIN THIS PACKET OF MATERIALS FOR THE JANUARY 20 MEETING.

Previous Council/Committee Action: None

Competing Viewpoints Considered: See Exhibits

Recommended Motion: Discussion & Approval of the subject CUP & Variance

Alternative Actions: [Click here to enter text.](#)

Attachments (listed in order presented): [Click here to enter text.](#)

[Planning Commission's Draft Findings of Fact, Conclusions of Law, & Recommendation](#)

[Exhibit #01: Master Permit Application, Narrative & CUP Criteria, Height Variance Letter, and SEPA Checklist](#)

[Exhibit #02: Assessor's Info and GIS Map](#)

[Exhibit #03: NOA & NOH using Optional SEPA DNS](#)

[Exhibit #04: Public Comments Received](#)

Exhibit #05: Agency & Department Comments Received

Exhibit #06: Issued SEPA MDNS

Exhibit #07: Traffic Impact & Parking Analysis

Exhibit #08: Critical Area Report (CAR) & Compensatory Wetland Buffer Mitigation Plan

Exhibit #09: Subsurface Exploration & Geotechnical Engineering Report

Exhibit #10: Cultural Resource Survey

Exhibit #11: Site Photos

Exhibit #12: Site Plan & Elevations



**PLANNING COMMISSION'S
DRAFT FINDINGS OF FACT, CONCLUSIONS OF LAW,
& RECOMMENDATION:**

OPEN-RECORD PUBLIC

HEARING DATE:

Wednesday, January 13, 2016, @ 6:00 PM

Wednesday, January 20, 2016, @ 6:00 PM (**Continued to**)

SITE VISIT:

Wednesday, January 13, 2016, @ 3:00 PM

FILE NUMBER:

CUP-2015-0006

PROJECT TITLE:

Anacortes High School (AHS) Replacement & Modernization

PROJECT LOCATION:

The project site is located at 1600 20th Street, Anacortes, WA. The subject property is located in a portion of Section 24, Township 35 North, Range 01 East, Willamette Meridian.

**LANDOWNER &
APPLICANT:**

Anacortes School District, #103
2200 "M" Avenue
Anacortes, WA 98221

AGENT:

Marc Estvold, AIA, Project Manager
3302 Oakes Avenue
Anacortes, WA 98221

PROJECT ARCHITECT:

Hutteball & Oremus Architecture, Inc.
4010 Lake Washington Boulevard NE, Suite 320
Kirkland, WA 98033

PROJECT SURVEYOR:

Bush, Roed, & Hitchings (BRH), Inc.
2009 Minor Avenue East
Seattle, WA 98102

**PROJECT LANDSCAPE
ARCHITECT:**

Weisman Design Group
2329 East Madison Street
Seattle, WA 98112

PROJECT BIOLOGIST:	Aqua-Terr Systems, Inc. (ATSI) 21993 Grip Road Sedro-Woolley, WA 98284
PROJECT GEOTECHNICAL ENGINEER:	Associated Earth Sciences, Inc. 911 5 th Avenue Kirkland, WA 98033
PROJECT PLANNER:	Kevin Cricchio, AICP Associate Planner City of Anacortes 904 6 th Street Anacortes, WA 98221
SUBJECT PROPOSAL:	The applicant has applied for a Conditional Use Permit (CUP) & SEPA environmental review to permit a two (2) phase replacement and modernization of Anacortes High School and associated wetland buffer impacts. Additionally, the applicant has requested a Variance to exceed the maximum height requirement permitted in the underlying zone. The project consists of the replacement of approximately 65% of the existing 154,956 square foot Anacortes High School and modernization of the remaining 35%. The existing gym/PE facility and Brodniak Theater will be modernized (approximately 55,000 square feet) and Rice Field will be upgraded to include new turf, a 1,500 seat partially covered stadium, and associated support facilities such as lighting, crew buildings, and parking /driveway areas. The rest of the high school (approximately 100,000 square feet) will be demolished and replaced with a new two-story building for a grand total of approximately 170,000 square feet. Associated site improvements include expanded vehicular parking, onsite bus loading /unloading areas, stormwater facilities, and utility relocation.
SUBJECT PARCELS:	P31905, P31912, P31920, P31922, P31923, P31926, P55808, P55809, P55810, P55813, P55950, P55951, P55952, P55953, P55954, P55955, P55956, P55957, P55958, P55959, P55960, P55961, P55963, P58053, & P58054
CUT & FILL PROPOSED:	70,100 ± cubic yards of topsoil will be excavated 43,000 ± cubic yards of fill material

EXISTING LAND USE: The project site currently is being used as the Anacortes High School (AHS).

CURRENT ZONING & COMP.

PLAN DESIGNATION: Public Use (P) & Residential Medium Density (R3) Zoning Districts

SURROUNDING ZONING & LAND USES:

Direction:	Zoning:	Present Land-Use:
North:	Residential Medium Density (R3)	Single-family residences
South:	Residential Medium Density (R3)	Single-family residences
East:	Residential Medium Density (R3)	Single-family residences
West:	Public Use (P)	Wetland /Vacant

SITE ACREAGE: Cumulatively, the site is 87.6 ± acres.

DRAFT FINDINGS OF FACT:

I. GENERAL BACKGROUND:

1. The project site is located in the City of Anacortes' Public Use (P) & Residential Medium Density (R3) Zoning Districts.
2. On November 10, 2015, the Anacortes School District held two (2) community open houses (at 3:30 PM & 7:30 PM) concerning the proposed replacement and modernization to Anacortes High School. The applicant provided a summary of concerns identified and responses in the submittal (**See Exhibit #1**).
3. Within the Public Use (P) Zoning District, "public schools" are permitted via an approved Conditional Use Permit per AMC § 17.26.040(A).
4. Additionally, within the Residential Medium Density (R3) Zoning District, "schools" are permitted via an approved Conditional Use Permit per AMC § 17.34.040.
5. Furthermore, a Conditional Use Permit is required for wetland buffer impacts per AMC 17.70.400 as is proposed. Please see the Compensatory Wetland Buffer Mitigation Plan in **Exhibit 8**.
6. Accordingly, the applicant has applied for a Conditional Use Permit (CUP) to permit the replacement and modernization to existing Anacortes High School.
7. In addition to a CUP, the applicant has applied for a Variance request to permit a building height in excess of what is permitted in the underlying Zoning Districts, "P" and "R3". According to AMC § 17.34.090, the maximum permitted building height in the "R3" Zoning District is a "maximum of three (3) stories but no more than thirty-five (35) feet. The maximum permitted building height in the "P" Zoning District according to AMC § 17.26.090, is thirty-five (35) feet. The applicant has requested a Variance to permit 43' above original grade at the west building and 45 feet above original grade at the east building (**See Exhibit 01**).

8. Both project permits (CUP & Variance) were consolidated and processed concurrently.
9. Anacortes School District reported that on October 1, 2015, enrollment for both the Anacortes High School and Cap Sante High School totaled 836 students. This is a decrease of 4 students from 2014. The maximum functional capacity of the existing school is 929 students. The proposed new high school will be approximately 17,000 square feet larger than the existing. It has a calculated functional capacity of 1,017 students, an increased capacity of 88 students. This increase in capacity however does not infer that the school district anticipates significant growth in the near future. According to Washington State's Office of Superintendent of Public Instruction (OSPI) enrollment projections for AHS that by the year 2020 the high school will have an enrollment of 852 students (16 more than they have today). The added capacity to the new high school will permit the school district to offer more specialized elective classes to its student body.
10. On November 16, 2015, the City of Anacortes' Department of Planning, Community, & Economic Development received the subject applications from the applicant / agent.
11. The subject application was reviewed and deemed complete on December 11, 2015, which also requested additional items/revisions therein.
12. Additional items/revisions were submitted by the applicant /agent on December 18, 2015, in response to requested information.
13. The fourteen (14) day comment period ended at 5:00 PM on December 30, 2015, but comments were accepted up until the date of the open-record public hearing.
14. The site plan & elevations associated with the subject proposal is marked as **Exhibit 12.**

II. NOTICE OF APPLICATION (NOA) & NOTICE OF HEARING (NOH):

1. Notice of Application and Hearing Using Optional SEPA DNS process was published in the Anacortes American Newspaper on December 16, 2015.
2. The subject property was posted by staff in four (4) different locations on December 8, 2015.
3. Neighboring landowners were mailed notice of the subject proposal and hearing on December 10, 2015.
4. Agencies and departments of jurisdiction were solicited for comment on December 10, 2015.
5. Notice was posted at city hall, the library, and the local USPS office on December 8, 2015.

III. STATE ENVIRONMENTAL POLICY ACT:

1. The subject proposal is not exempt from SEPA environmental review pursuant to WAC § 197.11.800 & AMC § 18.040.120 as more than 12,000 square footage of office space , 40 parking spaces, and > 500 cubic yards of landfill and/or excavation are proposed.
2. Accordingly, the Notice of Application (NOA) and Notice of Hearing (NOH) with Optional SEPA DNS was published in the Anacortes American Newspaper on December 16, 2015. This notice was mailed to neighboring property owners on December 10, 2015. Notice was also posted at city hall, the library, and the USPS office also on December 8, 2015. Agencies and departments of jurisdiction were solicited for comment also on December 10, 2015. The subject property was posted in four (4) locations with this notice on December 8, 2015.
3. Additionally, the Notice of Application and Notice of Hearing with Optional SEPA DNS was emailed to the Department of Ecology (DOE) for posting on to the SEPA Register on December 12, 2015.
4. The fourteen (14) day comment period ended at 5:00 PM on December 30, 2015, but comments were accepted up until the date of the open-record public hearing
5. On January 7, 2016, a SEPA Mitigated Determination of Non-Significance (MDNS) was issued (**See Exhibit 06**).
6. On January 7, 2016, the issued MDNS was emailed to the Department of Ecology for posting on to the SEPA register.

IV. CRITICAL AREA REVIEW:

WETLAND:

Construction of the high school's Rice Field occurred in 1992/1993 following obtaining and approved Conditional Use Permit with the City of Anacortes' Planning Department. The wetland analysis and mitigation plan drafted in 1991 associated with this project consisted of a twenty-five (25) foot regulated buffer from the western edge of Rice Field.

The applicant has now applied for a Conditional Use Permit and Variance to permit the aforementioned replacement and modernization to Anacortes High School. During June of 2015, Aqua-Terr Systems, Incorporated (ATSI) of Sedro Woolley, Washington prepared a Critical Area Report associated with this project. This Critical Area Report was revised on December 10, 2015 (**See Exhibit 08**).

According to the revised critical areas report, a regulated wetland was identified on and adjacent to the subject property that is approximately 35 acres in size. The wetland was categorized as a Category III (3) wetland which per AMC 17.70.340(2) has a 110-foot buffer from its delineated edge.

Additionally, on December 11, 2015, ATSI also prepared a Compensatory Wetland Buffer Mitigation Plan since impacts to the onsite wetland's buffer are proposed. Specifically, a portion of Rice Field and associated improvements that either are existing or proposed (i.e., score board, bleachers, lighting) are within the wetland's buffer. Since work within the wetland's buffer is unavoidable in this case, proposed mitigation listed therein and conditioned below will compensate for temporary, indirect, and direct impacts to the wetland's buffer.

According to AMC § 17.70.350(F) the required acreage replacement ratio for a Category III wetland is 2:1 which applies to the creation or restoration of in kind, onsite, and in the same category. According to AMC § 17.70.350(G)(1), "Impacts to wetland functions may be mitigated by enhancement of existing degraded wetlands and/or buffers. Applicants proposing to enhance wetlands must produce a critical area report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing wetland functions will be reduced by the enhancement actions."

According to the applicant's compensatory mitigation plan, wetland buffer impacts that will result from improvements to Rice Field include approximately 250 square feet of direct, permanent impacts. Additionally, 4,232 square feet of temporary impacts are proposed. Cumulatively, wetland buffer impacts are 4,482 square feet. Proposed compensatory mitigation however includes enhancing 30,000 square feet of wetland and wetland buffer with native trees and shrubs. The required replacement ratio of 2:1 stated above therefore has been exceeded and conformance with AMC § 17.70.350(F) has been met. The project has been conditioned within SEPA MDNS mitigation measures # 8 to 11 accordingly.

GEOTECHNICAL REPORT:

On June 22, 2015, Associated Earth Sciences of Kirkland, Washington, prepared a Subsurface Exploration and Geotechnical Engineering Report concerning the proposed replacement and modernization to Anacortes High School. According to the report, the project site contains several steep slopes that meet the definition of geologically hazardous areas per AMC § 17.70.190. Accordingly, this SEPA MDNS has been conditioned to address geotechnical requirements.

CULTURAL RESOURCE REPORT:

On September 7, 2015, Drayton Archaeology of Bellingham, Washington, prepared a Cultural Resource Survey concerning the proposed replacement and modernization to Anacortes High School. Accordingly, no evidence of cultural resources was discovered however a condition was added to the SEPA MDNS in case of inadvertent discovery.

V. TRANSPORTATION:

During November of 2015, Transportation Solutions Incorporated (TSI) of Redmond, Washington, prepared a Traffic Impact and Parking Analysis concerning the proposed replacement and modernization to Anacortes High School. According to this report, TSI recommends several improvements to adjacent intersections and pedestrian connectivity by the addition of sidewalk, walk path, and ADA ramps. The SEPA MDNS has been conditioned accordingly.

VI. PUBLIC COMMENT:

Public comment received can be found in **Exhibit 4.**

VII. AGENCY & DEPARTMENT COMMENT:

Comments received from both agencies and departments of jurisdiction can be found in **Exhibit 5.**

VIII. CITY OF ANACORTES COMPREHENSIVE PLAN:

1. The following goals from the City of Anacortes' Comprehensive Plan appear to be applicable to the subject proposal:

General City Goal 1: Create and maintain a high quality of life and environment that maximizes the opportunity for all citizens to share the social, psychological, physical, and economic benefits of Anacortes /Fidalgo Island; aesthetics and health are key components of quality of life.

General City Goal 3: Promote compatible land uses and improve visual appearance in each and every zoning district.

Transportation Goal 3: Improve traffic circulation.

Transportation Goal 5: Develop the city as a pedestrian friendly community and improve non-motorized circulation patterns.

Transportation Goal 6: Encourage a physically active community by allowing people of all ages to incorporate physical activity into their daily lives by walking, bicycling, exercising, and using public transit as part of everyday living.

Transportation Goal 7: Require adequate off-street parking in all zones.

Tourism Goal 1: Encourage an attractive community in order to increase the City's appeal to visitors and residents alike.

Conservation Goal 1: Identify areas of aesthetic, educational, historical, cultural and/ or biological significance, encourage their preservation, and regulate development which could cause significant deterioration of these qualities.

2. The subject proposal is, is not consistent with the goals of the City's Comprehensive Plan that are listed above.

IX. ZONING ORDINANCE/CODE:

1. The City's Zoning Map establishes zoning district boundaries and the City Zoning Ordinance establishes (1) the permitted use of land in the various zones, and (2) development standards.
2. The subject property is located in both the Public Use (P) and Residential Medium Density (R3) Zoning District.
3. Within the Public Use (P) Zoning District, "public schools" are permitted via an approved Conditional Use Permit per AMC § 17.26.040(A).
4. Additionally, within the Residential Medium Density (R3) Zoning District, "Schools" are permitted via an approved Conditional Use Permit per AMC § 17.34.040.
5. Furthermore, a Conditional Use Permit is required for wetland buffer impacts per AMC 17.70.400 as is proposed. Please see the Compensatory Wetland Buffer Mitigation Plan in **Exhibit 8**.
6. Accordingly, the applicant has applied for a Conditional Use Permit (CUP) to permit the replacement and modernization to existing Anacortes High School.
7. In addition to a CUP, the applicant has applied for a Variance to permit a height in excess of what is permitted in the underlying Zoning Districts, "P" and "R3". According to AMC § 17.34.090, the maximum permitted building height in the "R3" Zoning District is a "maximum of three (3) stories but no more than thirty-five (35) feet. The maximum permitted building height in the "P" Zoning District according to AMC § 17.26.090, is thirty-five (35) feet. The applicant has requested a Variance to permit 43 feet above original grade at the west building and 45 feet above original grade at the east building (**See Exhibit 01**).
8. Chapter 17.46 of the Anacortes Municipal Code regulates off-street parking. According to the Traffic Impact and Parking Analysis submitted, there are 318 parking stalls onsite. At the completion of the project, 367 onsite parking stalls are proposed for school day use with an additional 34 onsite stalls available for after school events for a total onsite capacity of 401 parking stalls. Off-street parking requirements for "schools" are not listed in AMC Chapter 17.46. Therefore the applicant /agent utilized Skagit County Code (SCC) and ITE Parking Generation data to determine the minimum number of off-street parking required during the school day. Accordingly, SCC and ITE requires a parking

demand of 213 off-street parking stalls and 367 are provided with the new development.

The subject proposal was also typed as an “Auditorium, assembly room, exhibit hall, theater, and commercial recreation” per AMC § 17.46.020. Accordingly, 1 off-street parking space is required for every 4 fixed seats (1:4). Using this formula from the AMC, 400 off-street parking spaces are required while 401 cumulatively are provided as part of the proposed replacement and modernization to AHS.

Since the applicant proposes phased development, the application has been conditioned hereafter to reflect the need for a phased parking plan.

9. A Conditional Use Permit is required for a “school” use within both the Public Use (P) and Residential Medium Density (R3) Zoning Districts. According to AMC § 17.10.100(B)(2), Conditional Use Permits shall be granted by the city only if the applicant can demonstrate the following:

A) The conditional use is designed in a manner which is compatible with the character and appearance of the existing, or proposed, development in the vicinity of the subject property and is consistent with the purpose of the zone in which the subject property is located.

STAFF ANALYSIS:

The southern 1/3 of the existing high school will be demolished thereby creating more open and pedestrian scaled friendly to pedestrians along 20th Street. The proposed development fronting 20th Street and “K” Avenue will permit new structures with improved architectural massing, fenestration, materials, detailing, and landscaping. Lastly, the new high school will be more residential in scale and echo the massing of the surrounding neighborhood along 20th Street.

According to AMC § 17.26.010, the purpose of the Public Use (P) Zoning District is defined as “It is the intent of this section to allow for common public uses where the need arises and uses will not create a nuisance or interfere with existing uses.” The proposed project as conditioned below is consistent with the purpose of the Public Use Zoning District.

B) The location, size and height of buildings, structures, walls and fences, and screening vegetation for the conditional use shall not hinder neighborhood circulation or discourage the permitted development or use of neighboring properties.

STAFF ANALYSIS:

According to the submitted traffic report, the proposed project will have minimal increase in the amount of vehicular traffic frequenting the high school(s).

According to the report, the proposed development will add 3 more future trips. Furthermore, both vehicular and pedestrian improvements have been made as conditions of the subject permit thereby decreasing impacts to the neighborhood. The design of the high school replacement and modernization also includes a large pedestrian friendly plaza running north to south between the east and west buildings that will essentially link 20th Street to 17th Street along "J" Avenue. When school is not in operation, this plaza could be used by the public for active and non-active recreational use thereby improving the neighborhood. Lastly site improvements also include landscape to the site and parking lot along with compensatory mitigation to the wetland buffer. Additionally, project conditions listed hereafter include abutting site sidewalk and crosswalk improvements thereby increased student /pedestrian circulation and safety.

C) The conditional use is designed in a manner that is compatible with the physical characteristics of the subject property.

STAFF ANALYSIS:

The proposed project entails replacement and modernization to an existing high school and campus. Additional off-street parking will be added onsite. Existing and proposed access points to and from the high school will be relocated and aligned with the existing street system. The project also entails improvements to street and pedestrian connectivity.

The proposed layout of the site and structures has also been planned to reduce impacts to the adjacent wetland and associated buffer. The additional impervious surface created as a result of proposed development will be captured, cleaned, detained, and released per city stormwater requirements.

D) Requested modifications to standards are limited to those which will mitigate impacts in a manner equal to or greater than the standards of this title or will not be detrimental to the surrounding neighborhood.

STAFF ANALYSIS:

The applicant has also applied for a Variance request to exceed the maximum permitted height for buildings within both the Public Use and Residential Medium Density Zoning Districts. The height of the existing building is actually higher than is currently proposed. So despite the request for a Variance to exceed the maximum permitted height, the proposed development would result in a building height that is less than existing thereby decreasing its impact and massing to the surrounding neighborhood.

E) The conditional use is not in conflict with the health and safety of the Community.

STAFF ANALYSIS:

The health and safety of the community and neighborhood will be improved as a result of this project. Additional impervious surfaces created as a result of this project will be captured, cleaned, detained, and released in conformance with city stormwater requirements.

Sanitary sewage and fire suppression will continue to be obtained via the City of Anacortes. Lastly, the project involves several improvements that improve pedestrian and vehicular safety as conditioned below. Additionally the project would include the construction of a north to south running plaza with a drivable surface that is accessible to emergency vehicles. When the school is not in session, the plaza could be used by neighbors for active and non-active recreational opportunities.

- F) The conditional use is such that pedestrian and vehicular traffic associated with the use will not be hazardous or conflict with existing and anticipated traffic in the neighborhood, and adequate pedestrian and vehicular connections to the arterials and adjacent areas as well as appropriate circulation within the project are provided consistent with city policies and standards for circulation patterns in the area.**

STAFF ANALYSIS:

*As previously discussed and conditioned below, both pedestrian and vehicular traffic will be improved as a result of this project's approval. Some additional improvements include additional off-street parking, ADA compliant parking stalls, a curbside passenger drop off area, and the addition of curb, gutter, and sidewalk along 20th Street. Improvements will be provided concurrent to development. Additionally, mitigation measure # 12 of the issued SEPA MDNS also listed below lists a number of required improvements to both pedestrian and vehicular connectivity (**See Exhibit #6**).*

- G) The conditional use will be supported by adequate public facilities or services and will not adversely affect public services to the surrounding area or conditions can be established to mitigate adverse impacts on such facilities.**

STAFF ANALYSIS:

The existing high school once replaced and modernized will continued to be served by city public services. No adverse impacts to public facilities are anticipated.

- H) The conditional use is in compliance with the comprehensive plan.**

STAFF ANALYSIS:

The subject conditional use permit will be in compliance with both the city's comprehensive plan and municipal code. Schools are permitted in the underlying zoning districts via an approved Conditional Use Permit.

- I) The conditional use is designed in a manner which is compatible with the character and appearance of the existing, or proposed, development in the vicinity of the subject property and is consistent with the purpose of the zones in which the subject property is located.**

STAFF ANALYSIS:

The subject proposal has been designed to be compatible with the character and appearance of the existing neighborhood while lessening any foreseen impacts. Additionally, the subject proposal as conditioned is consistent with the underlying zoning districts.

10. The applicant also has submitted a Variance request to permit a building height in excess of what is permitted in the underlying Zoning Districts, "P" and "R3". According to AMC § 17.34.090, the maximum permitted building height in the "R3" Zoning District is a "maximum of three (3) stories but no more than thirty-five (35) feet. The maximum permitted building height in the "P" Zoning District according to AMC § 17.26.090, is thirty-five (35) feet. The applicant has requested a Variance to permit 43 feet above original grade at the west building and 45 feet above original grade at the east building. Variances shall be granted by the city only if the applicant can demonstrate the following:

- A) That special conditions and circumstances exist which are peculiar to the land, structures, or buildings involved and which are not applicable to other lands, structure, or buildings in the same district.**

STAFF ANALYSIS:

Anacortes High School is the only public high school in city limits. The specific requirements of a public institution result in a structure of a minimum height as requested.

- B) That literal interpretation of the provisions of this title would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this title.**

STAFF ANALYSIS:

The literal interpretation of the code will prevent the school district from providing the usual and accustomed services. Additionally, the existing portion of the building scheduled for demolition has been estimated to be 51 feet above grade. This is 8 feet taller than the requested height of the west building and 6 feet taller than the requested height of the east building.

- C) That the special conditions and circumstances do not result from the actions of the applicant.

STAFF ANALYSIS:

Special conditions and circumstances are not a result of the applicant but moreover are due to site constraints onsite such as topography and the location of an onsite wetland in addition to the special requirements of a public educational institution.

- D) That granting the variance requested will not confer on the applicant any special privilege that is denied by this title to other lands, structures, or buildings in the same district.

STAFF ANALYSIS:

Due to site constraints and special requirements of a public educational institution discussed above, the granting of the subject variance will not confer any special privilege. Additionally, per AMC § 17.10.040(B), landowners may apply for a variance request per AMC § 17.10.040.

10. The subject proposal **is, is not** consistent with the above development regulations and the proposed land use is permitted in the underlying zoning districts.

X. CONCLUSIONS OF LAW:

1. The public notice requirements of the Conditional-Use Permit, Variance request, and SEPA environmental review have been complied with.
2. The project **is, is not** consistent with the general purposes of the City's Comprehensive Plan, the city's planning standards and specifications of the zoning ordinance, and other ordinances applicable to the proposal.
3. The Planning Commission bases its Findings of Fact, Conclusions of Law & Recommendation on the entire record, including all testimony and exhibits. Any finding which would be deemed a Conclusion of Law, and any Conclusion of Law which should be deemed a finding is hereby adopted as such.

XI. STAFF RECOMMENDATION:

The Department of Planning, Community, and Economic Development recommends that the Planning Commission make a recommendation of approval to City Council regarding the subject Conditional Use Permit, Variance request, and SEPA environmental review subject to the staff suggested conditions of approval listed below.

XII. DECISION:

Based on the foregoing information and analysis, the environmental documents submitted by the applicant, and the City regulatory authority to implement the policies, standards, and the

regulations of the Anacortes Municipal Code (AMC), the Planning Commission **recommends approval, approval with conditions, or denial** to City Council concerning the subject Conditional Use Permit (CUP), Variance request, and SEPA environmental review subject to the conditions of approval that are listed below.

XIII. CONDITIONS OF APPROVAL:

1. Before building permit submittal or approval is given, the applicant shall submit for review and approval a boundary line adjustment (BLA) application to consolidate underlying platted lots.
2. Before building permit application submittal or approval is given, vacated ROW utility and/or access easements will need to be relinquished and recorded with the Skagit County Auditor's Office.
3. The applicant shall be responsible for reimbursement to the City for the cost of posting, mailing and publication of the public hearing for this proposal. Payment shall be made prior to building permit submittal or issuance.
4. Before building permit application submittal or approval is given, a landscape plan shall be submitted and accompany the parking plan which shows how conformance with AMC Chapter 17.41 is being met. Landscape areas shall consist of a mix of native coniferous and deciduous trees and shrubs indigenous to the Pacific Northwest.
5. Before building permit application submittal or approval is given, a phased parking plan shall be submitted identifying how conformance with AMC Chapter 17.46 and the submitted Traffic Impact and Parking Analysis is being met.
6. A demolition permit is required prior to proposed demolition activities.
7. Any proposed signage will require an approved sign permit that complies with AMC Chapter 17.40.
8. A building permit(s) with the City of Anacortes' shall be secured prior to work.
9. Certificate of occupancy (CO) shall not be issued until it is deemed by both the Planning & Public Works Departments that all required improvements (landscaping, parking lot, compensatory wetland buffer mitigation, installation of bicycle racks, installation dumpsters /recycling, etc.) are in place and meet minimum standards.
10. Pursuant to AMC § 17.10.100(D), "Construction or substantial progress toward construction of a project for which a permit has been granted pursuant to this section must be undertaken within two years after the approval of the permit. Substantial progress towards construction shall include, but not be limited to the letting of bids, making of contracts, purchase of materials involved in development, but shall not include development or uses which are inconsistent with this title. In determining the running of the two-year period hereof, there shall not be included the time during which a development was not actually pursued by construction and the pendency of litigation reasonably related thereto made it reasonable not to so pursue; provided, that the planning commission may, at its discretion extend the two-year time period for a

reasonable time based on factors, including the inability to expeditiously obtain other governmental permits which are required prior to the commencement of construction.”

11. A clearing and grading plan consistent with City requirements shall be submitted by the applicant for review and approval by the City of Anacortes Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site.
12. A Large Parcel Storm Water Plan and Water Quality Control Plan consistent with City requirements shall be submitted by the applicant for review and approval by the Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site.
13. Prior to any clearing\fill\grade work beginning, construction civil plans consistent with the City of Anacortes Engineering Development Standards, including but not limited to, Clearing and Grading Plan, Erosion Control Plan, Site utility\Infrastructure improvements Plan, Roadway Improvements Plan, Signage Plan, Street Lighting Plan and other plans and\or information required by the City Planning\Building and Public Works Departments shall be submitted for review and approval.
14. Engineering and Inspection fees in the amount of \$500.00, plus 2% of the total estimated construction cost shall be due upon civil plan approval. No construction activity is allowed until the construction plans are approved, all fees have been paid and a preconstruction conference held.
15. The City of Anacortes would like to continue discussions on partnering on improvements to access 12th Street from the High School Campus via K Avenue or M Avenue.
16. The City of Anacortes would like to continue discussions on a future Campus access road to D Avenue; this road would also access the Smiley’s Bottom soccer fields.
17. Storm water conveyance both on-site and off-site shall comply with City Storm drainage requirements.
18. Development shall comply with the SEPA Mitigated Determination of Non-Significance (MDNS) that was issued on **January 7, 2016**, as follows:
 - A) Security or construction fencing shall be installed at the project boundary’s demarcating construction /clearing limits as required by the Planning and Public Works Departments (MDNS Condition #1).
 - B) All applicable permits shall be secured before any construction /grading activities begin onsite (MDNS Condition #2).
 - C) Best management practices (BMPs) shall be implemented during both demolition and construction activities (MDNS Condition #3).
 - D) The landowner /applicant shall obtain a National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharge as required by the State of Washington’s Department of Ecology (MDNS Condition #4).
 - E) If any artifacts or human remains are found upon excavation, the Samish Indian Nation; the City of Anacortes’ Department of Planning, Community, & Economic

- Development; the City of Anacortes' Police Department; and the State of Washington's Department of Archaeology and Historic Preservation (DAHP) shall be immediately notified and the work in the immediate area cease. Pursuant to RCW § 27.53.060 it is unlawful to destroy any historic or prehistoric archaeological resources. RCW 27.44 and § 27.53.060 require that a person obtain a permit from the Washington State Department of Archaeology and Historic Preservations before excavating, removing, or altering Native American human remains or archaeological resources in Washington (MDNS Condition #5).
- F) Wetland hydrology shall not be adversely impacted via stormwater discharge. The project wetland Biologist shall review proposed stormwater drainage plans and reports to confirm no adverse impacts to onsite wetlands (MDNS Condition #6).
 - G) Grading and construction drawings shall be reviewed by the project geotechnical engineer for consistency with the project geotechnical reports and engineering standards prior to any construction activity taking place onsite (MDNS Condition #7).
 - H) Buffer mitigation as described in the ATSI Compensatory Wetland Buffer Mitigation Plan dated December 11, 2015, shall be completed within the first planting season upon completion of the Rice Field Improvements and as recommended by the project biologist. Where mitigation is not completed within one (1) year of the Rice Field improvements, bonding shall be required in the amount of 150% of the cost /value required mitigation with completion of the mitigation plantings within two (2) of the completion of the Rice Field improvements (MDNS Condition #8).
 - I) To assure the success of the mitigation site, monitoring shall occur by the project biologist and/or a qualified biologist approved by the Planning Department, during and after plant installation periodically (spring and fall) and continue for a period of five (5) years. Monitoring reports shall be provided to the city Planning Department (MDNS Condition #9).
 - J) Vegetation performance standards shall be a minimum 50% cover by a minimum of nine (9) species total after three (3) years and 75% cover by a minimum of nine (9) species total after five (5) years. The percent cover will be determined by the project biologist and/or a qualified biologist approved by the Planning Department. Plant survival for installed vegetation is 100% after the first year. Plants that have not survived the first year are to be replaced in kind. For the years following, plants that have died shall be replaced in kind except when natural regeneration of native plants has filled the area. A qualified wetland biologist as approved by the Planning Department will need to confirm native plant regeneration (MDNS Condition #10).
 - K) The buffer mitigation "as built" per ATSI report dated December 11, 2015, Section 4.7, shall be completed and provided to the Planning Department for review for consistency with the Compensatory Wetland Buffer Mitigation Plan dated December 11, 2015, planting(s). Any modifications to the Compensatory Wetland Buffer Mitigation Plan prepared by ATSI on December 11, 2015, shall be approved by the Planning Department (MDNS Condition #11).
 - L) Development shall comply with the requirements of the Public Works Department including but not limited to (MDNS Condition #12):

- L1) Prior to the final approval, all off-site infrastructure improvements shall be completed as required by the City of Anacortes Public Works Director and a 2-year Maintenance Bond in place. The 2-year Maintenance Bond is 10% of the actual construction cost.
- L2) Internal Improvements shall include:
- Driving path of travel shall be a minimum of 20-feet in width to meet Fire and Sanitation Department needs.
 - Parking stall widths and lengths shall be per the Engineering Standards.
 - Provide for covered bike parking for at least 50% of the bike parking stalls.
- L3) External to the proposed Campus area, the applicant shall provide for intersection improvements to provide for pedestrian safety as follows:
- To include, but not limited to, traffic calming measures to reduce the crosswalk distance between curbs, ADA compliant sidewalk ramps at each corner, crosswalk markings, 4-way stop with signs, possible at-grade intersections at certain locations.
 - 17th Street and K Avenue;
 - 18th Street and K Avenue;
 - 19th Street and K Avenue;
 - 20th Street and K Avenue;
 - 20th Street and J Avenue, possible at grade intersection;
 - 20th Street and I Avenue; and,
 - 17th Street and J Avenue;
 - 6-foot wide minimum cement concrete sidewalk at the following locations:
 - West side of K Avenue, between 16th and 20th Streets;
 - North side of 17th Street, between K and J Avenues; and,
 - South side of 20th Street, between K and I Avenues;
 - Pedestrian scale lighting along the sidewalks adjacent to the school property.
- L4) For improved access to 12th Street, the Applicant will work with the Public Works Department to develop a plan for channelizing traffic on 17th Street to M Avenue. Especially during periods of busy traffic. The plan may include, but not limited to, signage, 4-way stops, & traffic circles at the intersections of L Avenue.
- L5) Improve the existing fire access road to the north parking lot off of 16th Street and J Avenue with 2-inch minimum asphalt overlay.
- L6) Street lighting shall be energy efficient and shall limit glare and/or emission of light downward to the street and front yard areas. Street lighting will be installed per PSE Schedule 52, Option "B". Lighting fixture's design and location shall be

approved by the Public Works Director. Shields may be necessary to reduce impacts to adjacent properties. Two street lights per intersection at the following locations are recommended:

- 17th Street and K Avenue;
- 18th Street and K Avenue;
- 19th Street and K Avenue;
- 20th Street and K Avenue;
- 20th Street and J Avenue;
- 20th Street and I Avenue; and,
- 17th Street and J Avenue;

L7) The on-site sewer conveyance and pump stations shall be considered private and be maintained by the Applicant.

L8) The Applicant shall provide a downstream sewer analysis of the conveyance system to determine; 1) Sufficient capacity, and; 2) Potential deficiencies.

These Findings of Fact, Conclusions of Law, and Recommendation were adopted by the City of Anacortes' Planning Commission on **January 20, 2016.**

**CITY OF ANACORTES, WASHINGTON
PLANNING COMMISSION**

By _____
Marty Laumbattus, Planning Commission Chair

APPEALS:

Appeals shall be filed in accordance with AMC § 18.16.100 and/or § 18.16.110, as applicable.

EXHIBITS:

EXHIBIT NUMBER:	NAME OF EXHIBIT:
Exhibit #01	Master Permit Application, Narrative & CUP Criteria, Height Variance Letter, and SEPA checklist
Exhibit #02	Assessor's Info & City GIS Map
Exhibit #03	NOA & NOH using Optional SEPA DNS
Exhibit #04	Public Comments Received
Exhibit #05	Agency & Department Comments Received
Exhibit #06	Issued SEPA MDNS
Exhibit #07	Traffic Impact and Parking Analysis
Exhibit #08	Critical Area Report (CAR) & Compensatory Wetland Buffer Mitigation Plan
Exhibit #09	Subsurface Exploration & Geotechnical Engineering Report
Exhibit #10	Cultural Resource Survey
Exhibit #11	Site Photos
Exhibit #12	Site Plan & Elevations

EXHIBIT #1:

**MASTER PERMIT APPLICATION, NARRATIVE & CUP
CRITERIA, HEIGHT VARIANCE LETTER,
& SEPA CHECKLIST**

MASTER PERMIT APPLICATION

- cast.net
- DEC 18 2015

10. Source of water supply and sewer supply: City of Anacortes

11. Permits requested from City:

- | | |
|--|---|
| ☐ Annexation | ☐ Rezone |
| ☐ Boundary Line Adjustment | ☐ Shoreline Exemption |
| ☐ Binding Site Plan | ☐ Shoreline Management Conditional Use Permit |
| ☒ Conditional Use Permit | ☐ Shoreline Management Substantial Development |
| ☐ Comprehensive Plan Amendment | ☐ Shoreline Variance |
| ☐ Planned Unit Development | ☐ Short Plat |
| ☐ Plat Modification | ☐ Special Use |
| ☐ Preliminary Plat | ☒ Variance |

☐ Other: _____

12. Explain your request and ALL proposed uses included in this proposal:

Request for Conditional Use Permit to replace and modernize existing Anacortes High School while continuing the use of existing site and ensuring that the proposed school improvements meet the criteria for development within the Public Use (P) and adjacent Residential (R3) Zoning Districts and within a regulated critical area (wetland buffer). The proposal also includes the request for a variance to exceed maximum allowable building height per AMC 17.26.909. See attached project narrative and variance letter for more information.

PLEASE FILL IN ALL APPLICABLE SECTIONS

FOR REZONES:

13. Requested zoning: _____

14. Comprehensive Plan designation: _____

15. Has anyone applied for a rezone of this property within the last five years? _____
If yes, who? _____ Year? _____

FOR SUBDIVISIONS (PLATS):

16. Plat Name: _____ 17. Number of Lots: _____

FOR SHORT SUBDIVISIONS (SHORT PLATS):

18. Number of Lots: _____ 19. Duplex Lots Proposed: _____

FOR SHORELINE MANAGEMENT SUBSTANTIAL DEVELOPMENT OR CONDITIONAL USE:

20. Total cost or fair market value (whichever is higher) of project (please state total value of all construction finishing work for which the permit will be issued, including all permanent equipment to be installed on the premises): \$ _____
21. Construction dates for which permit is requested (month & year): Begin: _____ / _____
End: _____ / _____
22. Does the project require a Shoreline/Floodplain location? If yes, please explain why: _____

23. Water Body: _____ 24. Shoreline Environment Designation: _____

FOR VARIANCE (ZONING AND SHORELINE):

25. Code sections involved: AMC 17.10 100, AMC 17.26.090
26. Description of variance requested: Request to exceed maximum allowable building height of 35 feet above average natural grade per AMC 17.26.090. See attached variance request letter for more information.

A notarized affidavit is required to be completed by all persons having an ownership interest in the subject property and the applicant, if different from the property owner(s). If the signatory is not listed as the owner in the title report, or if the signatory is signing on behalf of an entity, documentation authorizing the signatory to sign the affidavit on behalf of the individual or entity shall provided.

STATE OF WASHINGTON)

) ss

I (we) MARC L ESTVOLD, being duly sworn, depose and say that I am (we are) the **OWNER(s)** of the property involved in this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed: _____

Property Owner

Subscribed and sworn to before me this 11 day of DECEMBER 2015



Linda C Jackson
Notary Public in and for the State of Washington
residing at Kirkland, WA 98033

STATE OF WASHINGTON

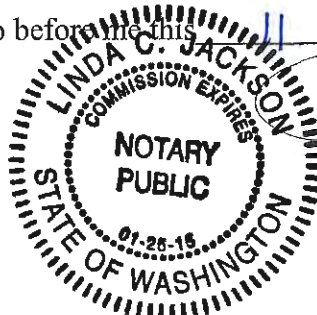
) ss

I (we) MARC L ESTVOLD, being duly sworn, depose and say that I am (we are) the **APPLICANT(s)** for this application, and that I (we) have familiarized myself (ourselves) with the rules and regulations with respect to preparing and filing this application and that the statements and information submitted herewith are in all respects true and correct to the best of my (out) knowledge and belief.

Signed: _____

Applicant

Subscribed and sworn to before me this 11 day of DECEMBER 2015



Linda C Jackson
Notary Public in and for the State of Washington
residing at Kirkland, WA 98033

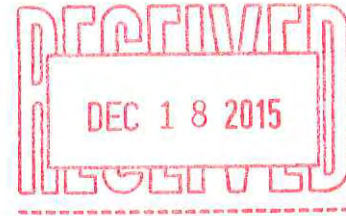


**Marc L. Estvold, Inc. AIA, LEED AP
Project Management**

3302 Oakes Avenue • Anacortes, Washington 98221 • 360-770-3994 • mestvold@comcast.net

December 18, 2015

Kevin Cricchio, AICP
Associate Planner
City of Anacortes
P O Box 547
Anacortes WA 98221



Re: Anacortes School Replacement & Modernization Conditional Use Permit, Variance Request, & SEPA Environmental Review (CUP-2015-0006)

Dear Kevin:

This correspondence is in response to your letter dated December 11, 2015 asking for additional information and clarification on seventeen items. Our response is as follows:

1. The critical area report /wetland report needs to include a discussion in it regarding proposed Rice Field and associated improvements being located within the Category III 110' Wetland's buffer and previous Conditional-Use Permit. The report shall address applicable items found in AMC 17.70.330 to 350. Also, please respond to the criteria for a special /conditional use permit as listed in AMC 17.70.390 to 460.
 - a. *ATSI to respond and provide an updated report if necessary.*
2. In your SEPA checklist, there is a reference to a Cultural Resource Review prepared by Drayton Archaeology. Please provide us with a copy of this report.
 - a. *Cultural Resource Report was received from Jacob's and four copies are included for your use.*
3. The edges of the wetland shown in the critical area report /wetland report do not appear to precisely match those show on Sheet CUP.01. Please correct accordingly.
 - a. *Edges of the wetland have been modified on the survey and adjusted on our drawing CUP.01. ATSI to correct the delineation in their report.*
4. Although, the traffic plan does have some discussion regarding off-street parking, please provide a concise account as to how you comply with Chapter 17.46 of the Anacortes Municipal Code regulating off-street parking. How many off-street parking spaces exist? How many spaces are proposed? How many off-street parking spaces are required per AMC 17.46.020? Additionally, what are the stall dimensions?
 - a. *Per TSINW "The existing on-site parking supply is 318 stalls. At completion of the project, 367 on-site stalls are proposed for school day use and an additional 34 on-site stalls are available for after school events for a total on-site capacity of 401 stalls. Justification for the parking supply and its relationship to the Municipal Code is included in pages 31-35 of the*

traffic report. AMC does not have high school specific requirements; thus, school day parking was reviewed under Skagit county Code and ITE Parking Generation data with a maximum parking demand of 213 stalls (370 provided). Event parking was reviewed under the AMC Code based on "auditorium, assembly room, exhibit hall, theater, and commercial recreation" land uses (parking at 1 stall per 4 fixed seats), with a maximum parking requirement of 400 stalls (401 provided).

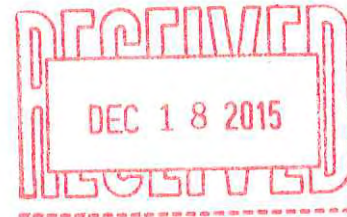
- b. All parking stall dimensions are 9-feet wide by 18-feet long (with a 1-foot overhang) with the exception of approximately 30 existing parking stalls located on the north side of the gym which will remain 8-feet wide. The number of proposed accessible vehicular parking stalls (auto & van) exceed code requirements.*
5. The Plaza will need to be drive-able by fire apparatus.
 - a. A 20-foot wide (minimum) drivable access will be provided through the plaza for emergency vehicles. This is delineated on drawing Sheet CUP.01.*
6. What is the ultimate capacity of the renovated and expanded high school in terms of students and staff?
 - a. The Anacortes School District's reported October 1, 2015 enrollment for both the Anacortes High School and Cap Sante totaled 836 students. This is a decrease of 4 students from the reported 2014 enrollment. The maximum functional capacity of the existing high school is calculated to be 929 students. The proposed new high school is approximately 17,000 square feet larger than the existing. It has a calculated functional capacity of 1,017 students. This is an increased capacity of 88 students. This increase in capacity does not mean the District expects the enrollment to significantly grow in the near future. In fact, OSPI enrollment projections for Anacortes High School projects that by year 2020 the high school will have an enrollment of 852 students (16 more students than they have today). The added capacity being designed into the proposed new high school allows the District to offer more specialized elective classes for their current student body.*
 - b. Staffing will vary depending upon enrolment and course offerings but total projected educational and non-educational staff on site is expected to range between 75 and 80.*
7. All drawings need to be sealed and signed by the engineer/architect.
 - a. Drawings included with this letter are sealed and signed.*
8. Confirm the location of dumpsters, compactors, and recycling enclosures.
 - a. Trash and recycling enclosures are identified on drawing Sheet CUP.01.*
9. On the survey, it shows the location of vacated right-of-ways (ROW) and existing easements. Is the Anacortes School District proposing /requesting that the city relinquish any utility /access easement that were established by ROW vacation or otherwise?
 - a. The Anacortes School District will work with the City of Anacortes to do Boundary Line Adjustments over the vacated streets and request that the City relinquish utility and access easements over those vacated parcels.*
10. Based on RCW 39.350.040, it appears that any school receiving funding in a state capital budget must be constructed to LEED Silver. Will the high school meet LEED design standards?

- a. *School Districts are allowed to use the Washington Sustainable Schools Protocol (WSSP) in lieu of LEED per Chapter 39.35 of the RCW to incorporate high-performance features into school design and construction. The Anacortes High School will be designed and built to a high-performance (green) building standard based on State WSSP requirements.*
11. Please show the zoning lines for the Public Use and R3 Zoning Districts on the plans for the subject property and label accordingly.
- a. *Included on the revised drawing Sheet CUP.01.*
12. Edits are needed to the narrative, master permit application, and SEPA checklist to reflect that a conditional use permit is needed not just for the high school renovation /expansion that lie in both the Public Use and R3 Zoning Districts but due wetland buffer impacts (See AMC 17.70.390 -460).
- a. *Requested edits have been incorporated into the above referenced documents and are included with this letter.*
13. Please show the location of sidewalk and parking lot pedestrian lighting.
- a. *Included on the revised drawing Sheet CUP.01.*
14. Please include a discussion of night sky lighting in your narrative.
- a. *Added to the narrative.*
15. Is any solar proposed? Please discuss accordingly.
- a. *Added to the narrative.*
16. Please show the location of bike parking per AMC 17.46.020. Will showers be provided for students and/or employees?
- a. *Included on the revised drawing Sheet CUP.01.*
- b. *Showers are provided for staff and students within the proposed facility.*
17. Please confirm that back in parking of school busses is proposed as is shown on Sheet CUP.O1.
- a. *Busses will not be required to backup to access the site, load/unload, or depart. They will pull forward into angled parking, crank the wheels to the left and pull out in a forward direction.*

Sincerely,



Marc L. Estvold, AIA LEED AP
Project Manager, Anacortes School District



November 15, 2011 (Revised December 10, 2015)

Department of Planning, Community & Economic Development
City of Anacortes
904 6th Street
Anacortes, WA 98221

ATTN: Don Measamer, Director of Planning

**RE: Anacortes High School Replacement & Modernization
Project Narrative and Conditional Use Permit Criteria Responses**

This letter is presented as part of the submittal requirements for obtaining a Conditional Use Permit (CUP) for the Anacortes High School Replacement & Modernization project. It includes a project narrative and it addresses the Anacortes Municipal Code (AMC) criteria for a conditional use permit.

Project Narrative

History

In 1892 the Colombian School was built at 17th Street and J Avenue and accommodated elementary through high school students. This was the first school to be constructed on the current Anacortes High School site. The three-story Romanesque Revival structure with parapet and bell tower exhibited a monumental presence reflecting the grand vision for the city's future at that time. The school bell that once rang in the belfry now sits outside the existing high school as a symbol of school spirit for Anacortes High School.

In 1932 a new high school was constructed on this site and opened with 271 students. The existing Columbian School (adjacent to the north) became a junior high; however in 1965, after years of decline the building was demolished. In 1955 the high school was renovated and expanded. Major renovations and additions occurred over the next 50 years (1958, 1975, 1991 and 1999) to become the current Anacortes High School.

The high school has had a long tradition on this site, providing excellent education and services to the residents of Fidalgo Island. Throughout the years, notable dedications have been established on this site honoring distinguished local citizens such as Walter Brodniak, Jim Rice, and Charles Williams as well as memorials paying tribute to fallen soldiers and individual students whose lives ended prematurely.

In February of 2015 - with the overwhelming support of the community - the Anacortes School District passed an \$86.9M general obligation bond to partially replace and fully modernize the existing high school facility in continued support of primary education for the community's kids. The new Anacortes High School will carry forward the long

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traditions of its past while providing a new 21st century facility focused on quality learning environments for future generations of Fidalgo Island students.

Purpose

The Anacortes High School Replacement & Modernization project is being undertaken in order to upgrade the entire existing school facility to meet current code requirements and to provide a 21st century learning environment for the students, staff, and community of Fidalgo Island. Portions of the school are over 60 years old and many areas are beyond reasonable repair. Current research identifies significant changes in education, much of which cannot be supported within the current configuration of the existing school. Advances in technology has changed the way teachers teach and students learn. Through a yearlong feasibility study, a community outreach process, and numerous planning and oversight committees, it was determined that a combination of new and modernized facilities could best serve the needs of the students and the community.

General Scope & Phasing

The project proposes replacement of approximately 60% of the existing Anacortes High School and modernization of the remaining 35%. It is anticipated that the existing Gym/PE facility (39,543 sf) and Brodniak Theater (15,465 sf) will be modernized. The rest of the high school will be demolished and replaced with new. The existing High School is approximately 169,680 square feet. It is anticipated that the completed project will increase the size of the existing High School by approximately 14,905 square feet for a total of approximately 169,583 square feet. The increase in size will be for educational program enhancements, not capacity.

The project will be divided into two main phases. Phase 1 will be upgrades to the Rice Field athletic complex, anticipated to be constructed during the summer of 2016. This work generally consists of replacement of the lower grass football/soccer field with synthetic turf, adding field lighting, resurfacing of the existing track and relocation of the track & field events, construction of a 1,500 seat covered grandstand, press boxes, restrooms, concession stand, and ticket booths. Other supporting improvements include vehicular and pedestrian access to the field area and improved parking.

Completion of the Rice Field upgrades will then allow Phase 2 to begin - construction of the main high school replacement and modernization. It will commence in early 2017 with the construction of the new, two-story, approximately 87,848 square foot East Building located on the current upper football field (War Memorial Field). Once completed, work on the one-story, 81,832 square foot West Building (portion of the existing building proposed to remain) will start which includes modernization of the remaining portions of the existing high school (Gym/PE facility and Brodniak Theater) as well as an approximately 27,844 square foot addition. Phase 2 will also include associated site improvements such as expanded vehicular parking, on-site bus loading/unloading areas, and pedestrian circulation/ gathering areas. The approximately 3,000 square foot Cap Sante High School replacement building – to be located in the southwest corner of the site - will also be constructed during this phase. The new Cap Sante High School building will replace the existing portables which currently house this program on-site. The entire project will be sequenced so that the school can remain operational during the construction.

Building Organization

Following a thorough analysis of the site constraints, program requirements, and phasing complexities inherent to the project, a series of conceptual schemes were generated. Issues such as topography, view corridors, site access, site security, construction sequencing, parking, vehicular & pedestrian flow, utilities, soil conditions, community use, emergency access, educational needs, and neighborhood context influenced these design explorations. Out of this process a preferred scheme developed, one that elegantly satisfied competing forces without compromising function, safety, budget, or beauty.

The conceptual approach chosen by the District consists of two separate buildings connected by a dynamic pedestrian plaza. Some of the main strengths of this concept include: 1) simplified phasing and sequencing of project; 2) enhanced safety of students, staff, and public during construction; 3) linkage of campus buildings and parking in a simple but attractive way; 4) improved public access to Brodniak Theater and Williams Gymnasium; 5) easy zoning of venues for off-hour use by the community; 6) outdoor spaces supporting planned and impromptu educational and social activities; and 7) a pleasant extension of the neighborhood pedestrian network.

The proposed new East Building will purposefully stretch along a north-south axis to take advantage of the existing site topography and soil conditions. This linear configuration will also provide staff and students in the commons, library, visual art spaces, science rooms, and general classrooms with marvelous views of Fidalgo Bay, Guemes Island, and March Point, as well as the Cascade foothills and Mount Baker beyond. The administration and counseling areas - located at the southwest corner of the building - will have strong visual control of the site's most active areas including main school entry, pedestrian plaza, parent drop-off, bus drop-off, visitor parking lot, and Cap Sante High School.

The proposed West Building will consist of fully modernized portions on the north end (Brodniak Theater and the physical education wing) and new additions on the south end (CTE and music program spaces). Public access to both the theater and the main gymnasium will be from the pedestrian plaza, as will access to the CTE spaces.

Sustainability

The Anacortes High School Replacement & Modernization project will follow a sustainable (green) approach in the design, construction, and operation of the facility. The process will follow the Washington Sustainable Schools Protocol (WSSP) focusing on the integration and evaluation of major categories such as daylighting, energy efficiency, indoor air quality, acoustics, and sustainable materials. High-performance goals will be established for the project and carried forward as far as the budget will allow. The target will be to maximize the integration of sustainable strategies into the facility, ultimately enhancing the educational environment for the students, reducing the carbon footprint of the buildings, lowering long-term operational costs for the District, and wherever possible presenting the green systems in such a way that they are teaching tools and sources of inspiration.

Some green strategies currently considered for the project include: incorporating a raingarden in the main parking lot for cleaning stormwater runoff; controlling/ harvesting daylight for occupied spaces; using high-efficiency boilers and heat recovery units; using recycled materials both from the site and in products specified; preparing the Cap Sante HS building to be retrofitted later with a photovoltaic system; and installing low-use water fixtures.

Building Materials

The East Building's structure will be steel framing with a concrete slab on grade at the lower level. The West Building's structure will consist of a combination of wood framing and structural concrete masonry. The structures that make up the Rice Field Athletic Complex will consist of a combination of steel framing, wood framing, and structural concrete masonry.

The massing, materials, and architectural detailing of the facility's exterior will seek to communicate both a civic presence and an academic atmosphere, capture the special character and ambiance of Anacortes/ Fidalgo Island, and harmonize appropriately with the surrounding residential neighborhood.

Exterior wall finishes will be a composition of masonry, metal wall panels, and wood accents. Exposed structural steel framing will highlight entrances, sun shades, and the bridge connecting the upper level of the East Building with the pedestrian plaza. Window fenestration will utilize commercial-grade aluminum window systems. The steep sloped portions of new construction will be finished with a standing seam metal roof while the low sloped portions will be a single-ply membrane roof. The existing asphalt composition shingle roof at the physical education wing will remain.

Interior finishes will consist of a variety of painted gypsum wallboard, wood wainscoting & accents, exposed masonry, exposed metal wall panels, and exposed structural steel & decking. The majority of public spaces will be polished concrete, while the majority of teaching spaces will be either carpet or resilient flooring. Restrooms will incorporate ceramic tile for ease of maintenance and durability. Many public spaces wood have special articulated wood ceilings to provide warmth, interest, and scale.

Windows, clerestories, and relites will be strategically located on both the exterior and interior for best use of natural daylighting, supervision purposes, transparency between and into functions, and visual connections to the wonderful views of the surrounding environment.

Building material and finishes will be selected based on the need for durability and low-maintenance as well as for flexibility and adaptability as programmatic needs change.

Site

The existing Anacortes High School site is approximately 92 acres in area. Volunteer Park - located in the northwest portion - uses about a sixth of the property. The existing high school facility (buildings, parking, and fields) uses about a third of the site - mainly the southeast portion. The remaining half of the site is designated as wetlands (southwest portion and north central portion).

About two-thirds of the property (containing Volunteer Park and Smiley's Bottom) is relatively flat or gently sloped, with some steeper portions to the south. The other third of the property (where the high school sits) is relatively steep, with an elevation change of almost 50 feet from the existing gym down to Rice Field. From Rice Field to the practice fields is another elevation drop of 20 feet. The existing high school building sits along a ridge that generally runs north to south. The land slopes away from the building on both the east and west sides providing dramatic views of Fidalgo Bay, the Cascade foothills, and Mount Baker to the east and a peaceful forested wetland to the west.

The vegetation on the developed portions of the existing site is composed mainly of maintained lawn areas. There are some areas landscaped with ornamental shrubs & small trees. A variety of mature, native conifer and deciduous trees are interspersed

around the site, mainly along the perimeter. The vegetation on the undeveloped portions of the existing site is mainly composed of second growth native conifer and deciduous trees, as well as native wetland shrub and grass species.

Geotechnical explorations were conducted in the immediate vicinity of the proposed high school replacement and upgrades. Soils conditions were found to be good in almost all the anticipated areas of development. The one exception is the east half of War Memorial Field which was built on unconsolidated fill material. For the most part the footprint of the proposed replacement building avoids impacting this area in an effort to reduce associated remedial design measures. The site clearing and grading will be done in accordance with all local building codes and in line with recommendations from the geotechnical engineer.

Site Access, Organization, and Landscaping

The main entry to the high school will remain on the south side of the facility along 20th Street. The entry point to an enlarged south visitor parking lot will be aligned with J Avenue, and the exit point will be aligned with I Avenue. A long, generous student drop-off loop will encircle the parking lot in such a way to keep the two functions safely separated.

Staff parking will be provided adjacent to the new academic wing on the east side of the site. This lot will be accessed from K Avenue at an entry/ exit point aligned with 19th Street. Food service, delivery, district maintenance, and emergency vehicles will also use this entry/ exit point.

The existing site entry/ exit point at 17th Street and J Avenue will continue to be maintained for student and emergency vehicle access. The existing student and event parking lots (located northeast of Rice Field) will be improved with the addition of a circulation loop. This will remove the dead end condition, improve safety & emergency vehicle access, and reduce congestion in this area of the site.

Bus drop-off and parking will be moved on site away from its current location in the 20th Street right-of-way. The entry/ exit point for the new bus loop will be from 20th Street about a half block west of I Avenue. The loop will accommodate 12 full-size buses.

Site improvements will include fully accessible pedestrian routes linking multiple dispersed ADA parking stalls to all buildings and venues within the facility including both the East and West Buildings, Brodriak Theater, Williams Gymnasium, Seahawk Stadium, Rice Field, and the Veterans Memorial.

Emergency vehicle access roads will be upgraded throughout the site to meet all Fire Department requirements for width, clearance, steepness, turning radii, fire hydrant locations, paving capacity, etc. The pedestrian plaza between the two buildings will be designed to accommodate emergency vehicles if ever necessary, but will remain secure from other vehicles through the use of removable bollards.

The pedestrian plaza between the East and the West Buildings will be a focal point of the revitalized school facility. Layout, materials, and detailing will be orchestrated to subtly reference the beautiful natural setting and marine environment of Fidalgo Island. In many ways this vibrant outdoor transition space will become a significant connecting element. It will help link the various buildings and parking lots that make up the campus. Through its topography and landscape plantings as well as its accommodations for outdoor teaching, studying, performances, and socializing, the plaza will connect the school to the natural environment. Because the plaza will create a pleasant alternate pathway from 20th to

17th, it will become a natural component of the pedestrian network during non-school hours, thus further connecting the neighborhood. Finally, the plaza will help connect the community by providing easy access to the school facility and its various venues during off hours.

The vast majority of plants proposed will be native, especially those used in the raingardens the required buffer plantings. The remainder of the plantings – mainly located in the pedestrian plaza and along the perimeter of buildings – will be low-maintenance native and ornamental species chosen to respond to the exposure, topography, and function of each landscaped area. Efforts will be made to reduce water usage for irrigation through use of drought-tolerant plant species, temporary irrigation for plant establishment, and drip irrigation where possible.

Storm Drainage

The project will include improvements to the site's existing stormwater system. The improvements will be designed in accordance with the City of Anacortes adopted drainage manual. The stormwater improvements will include work in 3 sub basins. The campus runoff will be collected by area drains and a conventional pipe and catch basin conveyance system. The Phase 1 work on the west side of the school will be in the site's western basin that drains to a wetland to the west in the Smiley's Bottom area. Storm water will be collected and conveyed to a flow control facility constructed under the new athletic field and a water quality facility will be provided for new vehicular surfaces. Since this basin outlets to a wetland the proposed storm system will be designed to release stormwater so that the developed conditions match the pre-developed (existing) flow durations in order to maintain the wetland hydrology and not impact the wetland adversely. This is in conformance with the City's adopted storm manual and the recommendations of the project's wetland biologist. The Phase 2 improvements will include two flow control facilities serving the two sub basins on the eastern half of the site. A treatment and detention facility will be constructed under the new southern parking lot and another treatment and detention facility under the new eastern parking lot. The detained runoff will be released to the City's storm system in 20th Street at the southeast corner of the site.

Water Service

The proposed project will provide new water services for the new structures. A waterline extension will provide fire hydrants and water service to the Phase 1 stadium improvements. The City is also replacing an aged asbestos cement waterline that bisects the site.

Sanitary Sewer

New sanitary sewer side sewers will be installed to service the new buildings. A grinder pump station will provide sanitary sewer service to the Rice Field improvements based on the elevations. The High School buildings will connect to the existing gravity sewer main in 20th Street.

Frontage Improvements

Right-of-way improvements will include new curb, gutter, and sidewalk for 20th Street, and new curb and gutter along K Avenue as necessary for the new site access point. New catch basins will be provided along new curb lines to collect and convey stormwater flows to the existing storm system located in 20th Street.

Critical Areas

Critical areas located on and adjacent to the site have been identified and described in a Critical Area Report performed by ATSI and included as part of this CUP submittal

package. A Category III forested wetland complex was observed on the school property just west and north of Rice Field. The proposed project will not directly impact the wetland, but it will impact the wetland buffer (both temporarily and permanently) at five separate areas all associated with the Rice Field upgrades. These proposed disturbances include the installation of foundation and utilities stubs for future visitor bleachers, two poles for the field lights, installation of a new scoreboard, and relocation of an existing scoreboard. Mitigation measures for these impacted areas will be per the requirements outlined in the City of Anacortes Municipal Code Chapter 17.70 and will be submitted as part of the building permit process for Phase 1.

AMC Criteria Responses

We have provided the following responses to the conditional use permit criteria listed under AMC 17.10.100 B.2.

- a) **The conditional use is designed in a manner which is compatible with the character and appearance of the existing, or proposed, development in the vicinity of the subject property and is consistent with the purpose of the zone in which the subject property is located.**
- The property is located in a Public Use District (P) zone with an existing public high school facility on it which is consistent with the purpose of the zone. The proposed high school replacement and modernization is also consistent with the purpose of the zone. The surrounding properties are mainly zoned (R3) with some zoned (P). Development of these surrounding properties has been strictly for residential purposes (mainly single-family residences), having occurred over a long period of time up to the present. The proposed development will be compatible with the character of the existing development in the immediate vicinity for several reasons:
 - The southern third of the existing high school facility will be demolished. This will help create a more open, friendly, and residential-scaled pedestrian way along 20th Street.
 - The proposed development fronting 20th Street and K Avenue will be all new structures with improved architectural massing, fenestration, materials, detailing and landscaping.
 - The new Cap Sante High School building - which sits at the intersection of 20th Street and I Avenue - will be residential in scale, echoing the massing of the surrounding neighborhood and reinforcing the residential quality of 20th Street.
- b) **The location, size, and height of buildings, structures, walls and fences, and screening vegetation for the conditional use shall not hinder neighborhood circulation or discourage the permitted development or use of adjoining properties.**
- The proposed project will not increase the amount of vehicular traffic coming to and leaving the site, and thus will not increase the amount of traffic on the surrounding road system. A SEPA checklist as well as a Traffic Impact and Parking Analysis report has been included as part of this submittal package. The report contains some mitigation proposals intended to improve the level of service (LOS) at the intersections of K & 12th and M & 12th.
 - The proposed design includes a large, open pedestrian plaza running north-south between the East and West Buildings that will essentially

link 20th Street to 17th Street along J Avenue. During non-school hours, this pleasant landscaped amenity could be utilized by local residents as an extension of the City's pedestrian network for strolling, jogging, biking, etc.

- General site landscaping, parking lot landscaping, screening requirements, and existing site vegetation will meet the requirements of AMC 17.41 (Refer to Landscape drawings included in this submittal).

c) The conditional use is designed in a manner that is compatible with the physical characteristics of the subject property.

- The proposed Anacortes High School Replacement and Modernization will take place within the existing campus. Additional on-site parking capacity will be added to the facility. Existing and new access points to and from the site will be relocated and aligned with the existing street system. The project will upgrade adjacent street frontages along 20th Street, J Avenue, and K Avenue to meet current City of Anacortes standards including landscaping requirements.
- The proposed site layout and the location of new structures have been planned to minimize disturbances to the adjacent wetland and its associated buffers. Before reaching the wetlands, the additional impervious surface area created by the proposed development will be captured, cleaned, detained, and released per the City of Anacortes storm drainage manual.

d) Requested modifications to standards are limited to those which will mitigate impacts in a manner equal to or greater than the standards of this title or will not be detrimental to the surrounding neighborhood.

- The requested variance to increase to the maximum allowable building height is allowed under AMC section 17.10.040 B. As explained in the letter requesting a building height variance (included in this submittal package), the height of the existing school structure (above average natural grade) is actually higher than the proposed height of both the East and West Buildings. This reduction in building height will be an improvement to the surrounding neighborhood – not detrimental.

e) The conditional use is not in conflict with the health and safety of the community.

- The proposed development is not in conflict with the health and safety of the community:
 - The additional impervious surface area created by the proposed development will be captured, cleaned, detained, and released per the City of Anacortes adopted drainage manual. This means that the health of the adjacent wetland – including both plants and wildlife – will not be impacted by the proposal and, the safety of both the surrounding community and areas located downstream from the project will not be impacted in terms of any increased urban flooding.
 - The sanitary sewage generated by the proposed project will continue to connect into the City's existing gravity sewer mains located in adjacent right-of-ways. The acid waste system serving the science classrooms will join with the

sanitary waste system down stream of major toilet rooms to ensure good dilution and mixing. The waste water from the food service kitchen will first pass through a grease interceptor before entering the sanitary waste system.

- The proposed project will continue to obtain domestic and fire suppression water through the City's water system (located in adjacent right-of-ways) via existing and new connections/ extensions. Backflow preventers will be provided on both domestic and fire suppression lines as required per the plumbing & health codes.
- Existing and proposed fire apparatus access roads entering and accessing the site will be upgraded/ installed per all requirements of the International Fire Code as modified by the Anacortes Fire Department. This will include required width, grade, turning radius, distance from structures, vertical clearance, gates, turnarounds, fire hydrant locations, load capacity, etc. This same network of on-site roadways will also provide emergency vehicle access for police, ambulances, etc.

f) The conditional use is such that pedestrian and vehicular traffic associated with the use will not be hazardous or conflict with existing and anticipated traffic in the neighborhood, and adequate pedestrian and vehicular connections to the arterials and adjacent areas as well as appropriate circulation within the project are provided consistent with city policies and standards for circulation patterns in the area.

- The proposed project will provide the following upgrades and improvements to the current vehicular and pedestrian circulation both on-site and off-site:
 - Refer to first bullet point of AMC Criteria b) response.
 - Refer to first bullet point of AMC Criteria c) response.
 - Bus parking will be moved out of the 20th Street right-of-way and on to the site. The bus loop will be separate from the on-site automobile circulation.
 - A long, curbside passenger drop-off area will be provided on-site at the front of the school. These drop-off stalls will be designed to flow with the on-site circulation system to prevent congestion and back-ups.
 - The project will increase the quantity of on-site parking stalls to accommodate major school events, reducing off-site street parking in the adjacent neighborhood.
 - Code required quantity of accessible (ADA) parking stalls will be located/ dispersed appropriately across the site to conveniently serve the various venues. Necessary accessible routes, ramps, crosswalks, signage, etc. serving these stalls will also be provided.
 - On-site pedestrian paths will be separated from vehicular traffic by a combination of curbs and landscape plantings, and all crosswalks will be appropriately marked and/or signed.
 - Refer to second bullet point of AMC Criteria b) response.
 - New curb, gutter, and sidewalk will be provided along the 20th Street frontage including appropriate curb cuts, crosswalks, and street signage per City standards.

- o Additional curb cuts, crosswalks, and street signage will be provided as necessary in the immediate vicinity of the school facility to assure safe student and pedestrian access to and from the site.
- g) **The conditional use will be supported by adequate public facilities or services and will not adversely affect public services to the surrounding area or conditions can be established to mitigate adverse impacts on such facilities.**
 - The proposed project will not affect public services to the surrounding area. (Refer to Section 15 - Public Services of the SEPA Checklist submitted as part of this CUP review package.)
- h) **The conditional use is in compliance with the comprehensive plan.**
 - The requested conditional use permit will be in compliance with the Skagit County Comprehensive Plan (SCCP). The existing/ proposed high school facility is on a parcel of property located within the incorporated City of Anacortes (designated by the SCCP as Urban) and is not directly regulated by county land use policies. However, the school does serve the Anacortes Municipal UGA, and is therefore considered an urban public facility subject to certain concurrency requirements such as water, fire, sewer, and drainage. These requirements are currently met and they will remain so under this proposal. Further, the replacement/ modernization of the existing school facility will fulfill the following GMA planning goals:
 - o *Encourage urban development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.*
 - o *Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.*

The proposed Anacortes High School Replacement & Modernization project is consistent with the governing land use controls, and so the Anacortes School District respectfully asks the planning commission to recommend to the city council that a conditional use permit be granted for this important project.

If you have questions or comments on the contents of this letter, please contact me directly.

Sincerely,



Kevin Oremus
Principal

**MCINTYRE HALL
INCOME STATEMENT
FISCAL YEAR 2016
(July 1, 2015 - June 30, 2016)**

	Budget	ACTUAL			
		July - Sept	October	November	Total
REVENUES					
Earned Revenue					
Facility Rental Revenue	175,000	11,481	11,088	15,608	38,177
Box Office Fees	41,000	1,229	4,412	5,771	11,412
PFD Admissions Fee	17,000	131	1,198	2,459	3,788
Programming Revenues	60,000		14,764	15,024	29,788
Concessions Revenue	40,000	915	1,928	1,991	4,834
Catering Revenue	95,000	10,747	2,240	6,226	19,213
Contributed Revenue					-
SVC Operating Support	27,908	6,977	-		6,977
PFD Operating Support	150,000				-
Hotel Motel Tax Grants	32,500				-
Additional Fundraising	25,000		256	5,000	5,256
Other	-	-	-	-	-
Total Revenue	663,408	31,480	35,886	52,079	119,445
EXPENDITURES					
Salaries & Wages	288,221	49,009	25,990	22,973	97,972
Benefits	94,687	17,615	7,190	6,883	31,688
Supplies & Materials	70,000	1,473	6,373	7,887	15,733
Communications	4,000	285	25	279	589
Utilities	67,000	12,598	637	8,656	21,891
Travel, Training & Membership Fees	4,500	935	9	-	944
Purchased Services	90,000	15,973	16,147	10,368	42,488
Marketing & promotion	33,000	6,379	3,225	-	9,604
Noncapital Equipment	10,000	330	-	-	330
Other	2,000	1,700	-	-	1,700
Total Expenditures	663,408	106,297	59,596	57,046	222,939
FUND EQUITY					
15/16 Accumulated Earnings (Loss)	-	(74,817)	(23,710)	(4,967)	(103,494)

Operating Reserve/Carryforward

188,009

Final Balance

84,515



November 15, 2011

Department of Planning, Community & Economic Development
City of Anacortes
904 6th Street
Anacortes, WA 98221

ATTN: Don Measamer, Director of Planning

**RE: *Anacortes High School Replacement & Modernization
Request for Building Height Variance***

The proposed design for the Anacortes High School Replacement & Modernization is comprised of two separate buildings identified as the East Building and the West Building. The East Building would be a completely new, two-story structure containing the high school's administration area, counseling center, commons, food service area, library, art studios, special education classrooms, some CTE programs, science classrooms, and general classrooms. The West Building would be a combination of modernized spaces (including the existing Brodniak Theater and the existing PE wing) and a new addition (including theater support spaces, music program spaces, and some CTE programs).

The maximum allowable height for a school located in a Public Use District (P) is 35 feet per AMC 17.26.090. Analysis of the proposed design indicates the need for a height variance for both of these buildings.

It should be noted that the Anacortes High School Replacement & Modernization project would also include a new building for the Cap Sante High School (CSHS) program as well as upgrades to the Rice Field Athletic Complex (including new covered grandstands with press boxes, restroom building, concession stand, and future team room building). None of these proposed structures exceed the maximum allowable building height criteria and therefore are not part of this variance request.

Sheet CUP.02 contains the average natural grade calculations for both the East and West buildings as well as the CSHS building. Sheet CUP.03 provides sections through all three buildings indicating average natural grades, maximum allowable building height, and proposed building heights. Sheets CUP.04 thru CUP.06 provide exterior elevations of all three buildings with similar height information as described immediately above.

As proposed, the West Building would have a maximum building height of 41'-2" above average natural grade. This occurs at an existing condition - the main ridgeline of the existing Brodniak Theater roof structure. The submitted design proposes to extend this ridgeline horizontally an additional 24' to the west in order to provide an enclosed mechanical platform housing the new mechanical air-handling units serving the theater, PE wing, and music program spaces. The proposed height (after modernization and addition) will be less than that of the existing high school building (before demolition).

4010 Lake Washington Blvd. NE
Suite 320 Kirkland, WA 98033

hoarch.com

p 425 828 8948

f 425 828 9067

As proposed, the East Building would have a maximum building height of 43'-3" above average natural grade. This would occur along the parapet of the roof enclosing the mechanical equipment platform serving the general classroom spaces at the north end of the building. The allowable building height would be exceeded by lesser amounts at two other locations: 40'-8" above natural grade along the parapet of the roof enclosing the mechanical equipment platform serving all the spaces on the south end of the building, and 36'-3" above natural grade along the ridgeline to either side of the north mechanical equipment platform mentioned above.

We request your review and approval for building height variances as follows:

- 43'-0" at the West Building
- 45'-0" at the East Building

Both of these requested heights slightly exceed the measured height in the building sections in order to assure that there is some flexibility to fine-tune the design as things develop. Although the proposed height of the East Building is approximately 2'-0" taller than the West Building, it would be approximately 9'-7" lower in elevation than the West Building which is located at the topographical crown of the site.

We have provided the following responses to the variance criteria listed under AMC 17.10.040 B.1.

- a. That special conditions and circumstances exist which are peculiar to the land, structures, or buildings involved and which are not applicable to other lands, structure, or buildings in the same district.**
 - The Public Use District land occupied by the high school is the only public high school within the City limits. The specific requirements of a public institution for this purpose results in a structure of the minimum height requested.
- b. That literal interpretation of the provisions of this title would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this title.**
 - The literal interpretation of the code will prevent the school district from providing usual and accustomed services. The East Building is a replacement for the proposed demolition of the old administration area, counseling center, commons, food service area, library, art studios, special education classrooms, CTE programs, science classrooms, and general classrooms.
 - It is worth noting that the existing portion scheduled for demolition has a conservatively estimated building height of 51'-0". This is 8' taller than the requested height of the West Building and 6' taller than the requested height of the East Building.
- c. That the special conditions and circumstances do not result from the actions of the applicant.**
 - The special conditions and circumstances are not a result of actions by the applicant, but are the result of the unique and special requirements of a public education institution as described below:
 - o Area available for development on the site is limited by a number of factors including existing buildings to remain, existing wetlands, existing topography, and existing soil

conditions. The decision to make the East Building a two-story structure and the decision to house mechanical equipment in the attics of both buildings was done in an effort to minimize the footprints of the two buildings in order to provide adequate space for code-driven items:

- On-site parking to accommodate school assemblies & sporting events
 - On-site bus parking (currently occurs in 20th Street ROW)
 - Low Impact Development water quality features (rain gardens)
- o The replacement and modernization project will be permitted under the new energy code expected to be adopted in the summer of 2016. The air-quality requirements for a high school facility under this code substantially increases the size of air-handling units (to meet the required air exchanges per hour) and/or heat recovery units (to meet the more stringent energy efficiency requirements). Taken together, the space needed to house this mechanical equipment is significant both in terms of footprint and volume, thereby impacting the overall height of the two proposed buildings.

d. That granting the variance requested will not confer on the applicant any special privilege that is denied by this title to other lands, structures, or buildings in the same district.

- Granting of the requested variance would not confer to the applicant any special privilege that is denied by the AMC to other lands, structures, or buildings in the same district. AMC 17.10.040 B. provides all land owners located in a Public Use district the option of pursuing a height variance for a project.

If you have questions or comments on the contents of this letter, please contact me directly.

Sincerely,



Kevin Oremus
Principal

SEPA ENVIRONMENTAL CHECKLIST

A. Background [\[help\]](#)

1. Name of proposed project, if applicable: [\[help\]](#)

Anacortes High School Replacement & Modernization Project

2. Name of applicant: [\[help\]](#)

Anacortes School District

3. Address and phone number of applicant and contact person: [\[help\]](#)

Marc Estvold, AIA, LEED AP

Anacortes School District Project Manager

3302 Oakes Avenue

Anacortes, WA 98221

(360) 770-3994

mestvold@comcast.net

4. Date checklist prepared: [\[help\]](#)

October 2015, Revised December 2015

5. Agency requesting checklist: [\[help\]](#)

City of Anacortes

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)

New construction will take place over the existing football/soccer field (War Memorial Field). Therefore, prior to the new construction starting, renovations/upgrades to the backup field (Rice Field) needs to occur. As such, the proposed project will be constructed in two major phases. Phase 1, construction of Rice Field improvements, is scheduled to begin in May 2016 with completion in September 2016. Phase 2, replacement and modernization of the remaining high school, is scheduled to begin when Phase I is completed in October 2016, with completion in December 2018. All work will be completed on and adjacent to the existing high school campus which will remain in full operation.

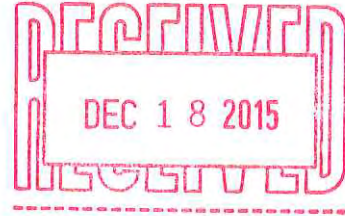
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [\[help\]](#)

There are no current plans for future additions or expansion.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)

The following information has been prepared for the proposed project:

- *Cultural Resources Review of the Anacortes School District #103 High School Renovation and Reconstruction*, Anacortes, Washington; Drayton Archaeology; September 7, 2015



- *Subsurface Exploration and Preliminary Geotechnical Engineering Report, Proposed Anacortes High School Additions*; Associated Earth Sciences, Inc.; June 22, 2015
- *Phase I Environmental Site Assessment, Anacortes High School and Renovation*; Associated Earth Sciences, Inc.; September 17, 2015
- *Critical Area Report (Wetland Protection Areas): Anacortes School District #103-Anacortes High School*; Aqua-Terr Systems, Inc.; June 2015, Buffer Updated September 2015
- *Traffic Impact and Parking Analysis, Anacortes School District High School Replacement and Modernization*; Transportation Solutions, Inc.; November 2015

The following information will be prepared for the proposed project:

- *Hazardous Materials Survey Report*, PBS Engineering + Environment
- *Wetland Impact Report and Wetland Mitigation Plan*, Aqua-Terr Systems, Inc.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [\[help\]](#)

There are no other proposals or applications pending directly affecting the Anacortes High School property.

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)

The following approvals and permits will be required for the proposed project:

- SEPA Compliance, City of Anacortes
- Conditional Use Permit and Variance, City of Anacortes (Anacortes Municipal Code 17.26.040 and 17.70.390-460)
- Clearing and Grading Permit, City of Anacortes
- National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit, Washington State Department of Ecology

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [\[help\]](#)

The project consists of the replacement of approximately 65 percent of the existing 154,965-square-foot Anacortes High School and modernization of the remaining 35 percent. The existing gym/PE facility and Brodniak Theater will be modernized (approximately 55,000 square feet) and Rice Field will be upgraded to include new turf, a 1,500-seat partially covered stadium, and associated support facilities such as lighting, crew buildings, and parking/driveway areas. The rest of the high school (approximately 100,000 square feet) will be demolished and replaced with a new two-story building for a grand total of approximately 170,000 square feet. Associated site improvements include expanded vehicular parking, on-site bus loading/unloading areas, stormwater facilities, and utility relocation.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or

boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [\[help\]](#)

Anacortes High School comprises approximately 87.6 acres and is located at 1600 20th Street in the City of Anacortes, Skagit County, in SW ¼ of NE ¼ of T35N, R1E, Section 24, Willamette Meridian. A vicinity map and current site plan are attached. A complete legal description of the site is provided in Appendix A of the *Phase I Environmental Site Assessment*.

B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

1. Earth [\[help\]](#)

a. General description of the site: [\[help\]](#)

(circle one) Flat, rolling, hilly, steep slopes, mountainous, other _____

The site is tiered with some relatively flat areas and some steeper slopes. The site is situated near a localized high point and slopes downward toward the east, south, and west.

b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

The steepest slope on-site is approximately 114 percent (48.74 degrees), located along the hillside near the south end of the Rice Field grandstand.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)

There are five soils units documented by the US Department of Agriculture on the project site: Clallam-Urban land complex 0-8% slopes, Coveland-Bow complex 5-10% slopes, Mukilteo mulch, Norma silt loam, and Terric Medisaprists 0-2% slopes. According to the *Subsurface Exploration and Preliminary Geotechnical Engineering Report*, the site is underlain by a combination of fill soils and Vashon Lacustrine sediments. No agricultural land of long-term commercial significance is located on-site.

d. Are there ~~surface~~ indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)

According to the *Subsurface Exploration and Preliminary Geotechnical Engineering Report*, the site does contain steep slopes as well as some areas that meet the definition of a landslide hazard area as defined by the Anacortes Municipal Code.

The geotechnical report also indicates that a portion of the existing 1970 school building has settled several inches. Based on subsurface exploration boring data, native soils on-site are dense and not prone to excessive settlement under structural loads such as those imposed by the existing buildings. The settlement that has occurred to-date is assumed to be associated with poorly compacted man-placed fill rather than weak natural soils. An existing retaining wall at the north end of the existing west track and field failed after it was constructed. A fill slope north of the wall was constructed to support the wall and arrest the

ongoing displacement. Exploration borings conducted in this area indicate that the wall foundation may be supported on weak soils, contributing to the failure of the wall.

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)

Earthwork includes excavation, backfill and grading to prepare subgrades for an improved area of approximately 23 acres. This area will accommodate new buildings, athletic fields, utilities, paving, and landscaped areas. Some of the excavated soils on-site will be usable as structural fill and general site fill. Existing fill soils were discovered to have large amounts of silts, meaning they are not likely suitable for structural fill. Existing fill beneath the Rice Field area was found to be mixed with organic material and asphalt; soils within this area will generally remain unless excavated for new utility improvements. The access road on the north (the extension of 17th Street) and the access road/fire lane south and east from War Memorial Plaza will require slopes up to 12 percent to meet existing grade. Approximately 70,100 cubic yards of soil material will be excavated on-site, including activities required to develop subgrades, new foundations, and utility installation. Some surplus soils will not be used for developing subgrades; this material will either be disposed of on the project site (southeast of Rice Field) or exported from the project site. Approximately 43,000 cubic yards of fill material is estimated to accommodate the proposed improvements. The source of imported fill soil is unknown at this time and will be determined by the contractor.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)

Yes. The erosion potential of the site soils is high and erosion could occur as a result of clearing and grading activities.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)

The project area, which is defined as the existing high school and Rice Field, is 990,300 square feet (22.7 acres) in size. Approximately 422,704 square feet (9.7 acres) of the site is currently covered with impervious surfaces. This constitutes 43 percent of the project site. After construction, approximately 566,642 square feet (13 acres) of the site will be covered with impervious surfaces, including asphalt parking lots and campus buildings. This constitutes 57 percent of the project site.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)

An NPDES Construction Stormwater General Permit will be obtained from the Washington State Department of Ecology because the project site is more than one-acre in size and will discharge stormwater to surface waters of the state. In compliance with the NPDES permit, weekly Temporary Erosion and Sedimentation Control (TESC) inspections and turbidity and pH monitoring will be conducted during construction to minimize erosion hazards. The *Subsurface Exploration and Preliminary Geotechnical Engineering Report* indicates that exposed soil should not remain uncovered for more than two-days during the local wet season (October 1st through March 31st), unless it is actively being worked. Other ground-cover measures to reduce the potential generation of turbid runoff and sediment transport include erosion control matting, plastic sheeting, straw mulch, crushed rock or recycled concrete, or

mature hydroseed. The following best management practices (BMPs) are also recommended to minimize erosion hazards during construction:

- Provide storm drain inlet protection
- Route surface water away from work areas
- Keep staging areas and travel areas clean and free of track-out
- Cover work areas and stockpiled soils when not in use
- Complete earthwork during dry weather and site conditions, if possible

The *Subsurface Exploration and Preliminary Geotechnical Engineering Report* recommends the project not rely on the existing gravity wall at the north end of the track and field. The report also recommends a geotechnical review of the site topographic survey and site plans prior to completion of final design to confirm earthwork and foundation recommendations and ensure that work proposed near landslide hazard areas meets the requirements of the Anacortes Municipal Code.

2. Air [\[help\]](#)

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)

Project construction would result in temporary air quality impacts from fugitive dust and emissions from construction equipment and vehicles, such as dump trucks, excavators, graders, etc. However, these impacts would be intermittent and temporary and are not expected to degrade local air quality in the long term. When completed, the new high school will increase vehicular traffic by an estimated 8 trips in the a.m. peak hour, 5 new trips in the afternoon peak hour, and 3 new trips in the p.m. peak hour.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)

There are no off-site sources of emissions or odor that may affect the proposed project.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)

As summarized in response to question 14d, several on and off-site roadway improvements are recommended to improve traffic operations in the project area. According to the *Traffic Impact and Parking Analysis*, if implemented the voluntary off-site improvements are expected to substantially improve level of service and vehicle delay at two study area intersections. The reduction in vehicle delay would result in a corresponding reduction in vehicle emissions.

3. Water [\[help\]](#)

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [\[help\]](#)

A 35-acre forested wetland complex is located on and adjacent to the project site, known as "Smiley's Bottom." The wetland complex is a Category III Palustrine Forested/Emergent Seasonally Flooded/Saturated Permanently Flooded partially drained/ditched excavated

depressional outflow wetland with upland hummocks. Hydrology to the wetland flows northwest and is provided by stormwater outfalls, pipes, and ditches in addition to precipitation and up-gradient runoff. The wetland complex flows northwest to an 18-inch concrete culvert into the City's stormwater system, eventually discharging into the Guemes Channel portion of the Salish Sea. Additional details regarding the existing wetland complex can be found in the *Critical Area Report (Wetland Protection Areas)* prepared for the project by Aqua-Terr Systems, Inc.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [\[help\]](#)

Yes. As shown in the attached plans, several activities associated with the proposed upgrades to Rice Field (grading, concrete mounted scoreboard/flag pole, lighting, and fencing) will occur within 200-feet of the forested wetland complex. All impacts are limited to the wetland buffer. No direct or temporary impacts to the wetland will occur.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [\[help\]](#)

The upgrades to Rice Field will result in approximately 218 square feet of permanent wetland buffer impacts and 2,032 square feet of temporary wetland buffer impacts. The track and field upgrades are within the impacted footprint of the existing natural turf field. The upgrade to synthetic turf will slightly reduce the habitat function by removing the soils organics as a food source for bird species. The switch to synthetic turf will also increase the water quality function because fertilizers, herbicides, and pesticides will not be required for maintenance purposes. The installation of a the concrete mounted flag pole and scoreboard within the vegetated slope will result in 170 square feet of permanent buffer impact and 400 square feet of temporary impact. Concrete mounted field lighting and electric utility trench will result in 48 square feet of permanent buffer impact and 1,500 square feet of temporary buffer impact. Removal of the existing chain link fence and installation of a new chain link fence will result in 132 square feet of temporary buffer impact. Installation of visitor bleachers, including structural supports, on the west side of Rice Field will result in approximately 32 square feet of permanent buffer impact and 2,200 square feet of temporary buffer impact.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No, the project will not require surface water withdrawals or diversions.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [\[help\]](#)

No, the site does not lie within a 100-year floodplain.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [\[help\]](#)

No. The new high school will be connected to the City of Anacortes sanitary sewer system.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No. Groundwater will not be withdrawn from a well for drinking water or other purposes. The new high school will continue to receive water from the City of Anacortes. No water will be discharged to groundwater.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [\[help\]](#)

No waste material will be discharged into the ground from construction or operation of the proposed project.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [\[help\]](#)

On-site hydrology is supplied by stormwater outfalls, pipes, and ditches in addition to precipitation and upgradient runoff. Water within this watershed flows into the Guemes Channel portion of the Salish Sea.

The majority of the site drains toward the east and west. The west half of the existing high school and portions of the existing northerly parking lot drain to the west and northwest into Smiley's Bottom. A small percentage of area drains to the north to J Avenue and then 17th Street, combining with the downstream storm system for the east basin within ¼ mile of the project site.

Permanent stormwater flow control facilities and water quality treatment will be provided on-site in accordance with the Anacortes Municipal Code. Flow control will be provided via underground large-diameter pipes, chamber systems, or concrete vaults. Standard BMPs will be used to provide basic water quality treatment for vehicular surfaces and areas tributary to vehicular surfaces. Some open areas may utilize biofiltration, bioretention or other surface methods. Some areas will require underground BMPs such as wet vaults or storm filters.

- 2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)
No waste materials are expected to enter ground or surface waters.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [\[help\]](#)

Drainage patterns on-site will be modified as a result of the proposed earthwork and site improvements. As indicated in Section 3.c.1 above, new stormwater flow control facilities will be

provided on-site in accordance with the Anacortes Municipal Code. The new flow control system will utilize a system of pipes, chambers, and vaults to direct stormwater flow.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: [\[help\]](#)

Permanent wetland buffer impacts will be mitigated at a 1:1 ratio. Proposed buffer enhancement includes removal of invasive Himalayan blackberry and knotweed species and supplemental planting of native tree and/or shrub species within portions of the wetland buffer. Temporary wetland buffer impacts will also be mitigated at a ratio of 1:1. Proposed revegetation includes planting of native tree and/or shrub species and/or grass species to be mowed and maintained within the areas after the disturbance has occurred.

Construction BMPs such as the use of silt fencing, application of seeding or mulching for soil stabilization, or other techniques will be implemented as necessary in accordance with the requirements of the NPDES permit for construction to reduce or control water quality impacts.

4. Plants [\[help\]](#)

a. Check the types of vegetation found on the site: [\[help\]](#)

- ☒ deciduous tree: red alder, bigleaf maple, aspen, other: willow, black cottonwood, paper birch
- ☒ evergreen tree: Douglas fir, western red cedar, pine, other: western hemlock
- ☒ shrubs: salmonberry, Nootka rose, rhododendron, osoberry, holly, red elderberry, blackberry, Scotch broom, snowberry
- ☐ grass
- ☐ pasture
- ☐ crop or grain
- ☐ Orchards, vineyards or other permanent crops.
- ☒ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other: lady fern, sword fern, reed canarygrass
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered? [\[help\]](#)

Approximately 6 acres of existing ornamental landscaping and turf grass will be altered and/or replaced as part of the proposed improvements. Of that, approximately 4.7 acres is turf grass; 0.9 acres is naturalized shrubs including both native and invasive species such as Sword Fern, Himalayan blackberry, and English Ivy; and 0.3 acres is ornamental shrubs and trees.

c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

There are no threatened or endangered species known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

Proposed landscaping includes approximately 6.7 acres of new ornamental landscape and turf areas, consistent with Anacortes Municipal Code Section 17.41. Of that, approximately 4.5 acres is turf grass and the remaining amount is composed of ornamental landscape beds with shrubs and trees. Use of native and drought tolerant shrubs in new landscape areas will be maximized. Proposed native species include Sword Fern, Salal, Oregon Grape, Ocean Spray, Snowberry, Evergreen Huckleberry, Vine Maple, Serviceberry, Douglas Fir, and Shore Pine. Existing trees and ornamental landscaping will be retained where possible.

e. List all noxious weeds and invasive species known to be on or near the site. [\[help\]](#)

A variety of nonnative and invasive plant species were observed on the site, including Himalayan blackberry and ivy.

5. Animals [\[help\]](#)

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. [\[help\]](#)

Examples include:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other: coyote

fish: bass, salmon, trout, herring, shellfish, other _____

Animals that may utilize habitat on and adjacent to the project site include aquatic and/or terrestrial insects, amphibians, reptiles, birds, and/or small and large mammals that are typical for urban dwelling such as deer and coyote. The ponded portion of the wetland complex also provides waterfowl and beaver habitat.

b. List any threatened and endangered species known to be on or near the site. [\[help\]](#)

No documented occurrences of threatened or endangered species are located on the project site, nor were any threatened or endangered species observed during site visits conducted by qualified biologists.

c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Yes. The entire Puget Sound is part of the Pacific Flyway for migratory birds.

d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)

None proposed.

e. List any invasive animal species known to be on or near the site. [\[help\]](#)

None known.

6. Energy and Natural Resources [\[help\]](#)

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [\[help\]](#)

Energy on the high school campus site is primarily needed for heating and lighting (interior and exterior). The energy source for the existing and new high school is electricity and gas.

b. Would your project affect the potential use of solar energy by adjacent properties?

If so, generally describe. [\[help\]](#)

The proposed project would not affect the use of solar energy by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any: [\[help\]](#)

The current design maximizes opportunities for natural daylight, an energy-saving design feature.

New light fixtures within the parking lots and athletic field will be high-efficiency light-emitting diode (LED) lighting. All new lighting will also be automated by the school district and will occur on an as-needed basis to reduce energy demands.

7. Environmental Health [\[help\]](#)

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?

If so, describe. [\[help\]](#)

1) Describe any known or possible contamination at the site from present or past uses.

[\[help\]](#)

Based upon the results of the *Phase I Environmental Site Assessment*, diesel and heating oil underground storage tanks (USTs) were previously located in the school's boiler room and were removed in 1995. Testing for soil contamination was conducted at the time of removal and the results were reportedly negative. No indications of staining, dumping, or environmentally significant releases of chemicals were observed on-site. No visual evidence of hazardous materials contamination was observed in surficial areas during site reconnaissance. Off-site properties were determined unlikely to present a material threat of a release of hazardous substances or petroleum products to the project site.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [\[help\]](#)

A number of underground utility lines are present on the project site, as shown in the attached site plans. The presence of these lines are being considered throughout the design and construction process and are not expected to pose an environmental hazard.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [\[help\]](#)

Due to the age of the structures on-site, the potential for asbestos-containing building materials and lead-based paint is present. Welding chemicals and gases are stored in the existing metals shop. Paint and resin are stored in the existing wood shop. These substances will continue to be stored on-site upon completion of the proposed renovation, but do not pose an environmental health hazard if properly managed.

4) Describe special emergency services that might be required. [\[help\]](#)

The renovation and modernization does not warrant additional emergency services. However, as an essential public facility, it is critical to maintain access to the school for emergency services at all times, during both construction and operation. The design team is developing an emergency access plan that will be included in the final site plan submittal to the City of Anacortes.

5) Proposed measures to reduce or control environmental health hazards, if any: [\[help\]](#)

A survey for asbestos and lead-based paint was conducted to assess on-site structures for these materials. A *Hazardous Materials Survey Report* is forthcoming and will identify general requirements and recommendations to manage the demolition and disposal process in accordance with local and state standards. More detailed specifications and drawings will be subsequently prepared for inclusion with the construction documents.

The construction contractor will phase work appropriately in order to maintain emergency responder access to the entire school building at all times be maintained during construction. The *Traffic Impact and Parking Analysis* recommends that the District utilize a traffic and parking management coordinator to coordinate with the City, local police, emergency services, campus security, and the neighborhood during special events. The coordinator will ensure that future parking areas can support emergency vehicle access during a special event.

b. Noise [\[help\]](#)

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)

Ambient noise in the project area primarily includes traffic associated with existing school activities and surrounding residential land uses. Existing noise in the project area would not affect the proposed renovation and modernization.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [\[help\]](#)

During construction, there would be temporary increases in noise levels near construction areas. Typical construction equipment include graders, pavers, haul trucks, cranes, and other similar heavy machinery. Construction activities will generally occur on-site during daytime hours only, between 7 a.m. and 7 p.m. The construction contractor will coordinate with school district officials to ensure that noise and vibration are kept to acceptable minimums during school operating hours. The completed project will generate additional traffic trips (see Section 14f), resulting in additional traffic noise. Noise associated with the new traffic trips would generally occur before and after school, between 7-9 a.m. and 2-4 p.m.

3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

Construction activities will comply with applicable state (Washington Administrative Code 173-60-040 and 173-60-050) and City (Anacortes Municipal Code Section 17.54.015) noise standards, which limit nighttime noise levels from construction between 10:00 p.m. and 7:00 a.m. The school

will remain fully operational during construction. Therefore, coordination and careful planning with the Administration will occur to minimize disruption to education during construction. The contractor and District will proactively communicate with each other and the surrounding neighbors so that all parties can understand and plan around specific work activities that may result in increased noise levels.

8. Land and Shoreline Use [\[help\]](#)

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)

The site is comprised of the existing Anacortes High School campus, including infrastructure, play fields, and wetland complex. The site is bound by residential housing to the north, east, and south and Volunteer Park/Smiley's Bottom to the west. The area surrounding the site is primarily recreational park and residential.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#)

No. According to Sanborn fire insurance maps, the site has been developed as a school since approximately 1892.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [\[help\]](#)

No working farm or forest land exist in the immediate project area. Therefore no impacts are anticipated.

- c. Describe any structures on the site. [\[help\]](#)

The main high school campus contains a 154,965-square-foot building comprised of classrooms, a cafeteria, woodworking and metal shops, an auxiliary gym, an auditorium, and other general school amenities. Existing Rice and War Memorial Fields also contain bleachers and other associated support structures.

- d. Will any structures be demolished? If so, what? [\[help\]](#)

The existing gymnasium and Brokniak Theater will be modernized. The remainder of the high school will be demolished (approximately 100,000 square feet) and replaced with new construction.

- e. What is the current zoning classification of the site? [\[help\]](#)

According to the City of Anacortes Zoning Map available on the City website (updated February 2013), the school site is currently zoned for Public Use (P) and the surrounding area is zoned Residential Medium Density (R3).

- f. What is the current comprehensive plan designation of the site? [\[help\]](#)

According to the City of Anacortes 2012 Comprehensive Plan, the comprehensive plan designation of the site is Public Use (P).

g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

Not applicable.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

As indicated in Sections 3a and 1d, a Category III wetland complex is located on the northwestern portion of the project site and several areas on-site meet the definition of a landslide hazard area. There no other documented critical areas located on the project site.

i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

There are currently 101 staff members at Anacortes High School. The proposed renovation and modernization is not expected to increase student enrollment or staff in the foreseeable future. No people would reside in the completed project.

j. Approximately how many people would the completed project displace? [\[help\]](#)

The proposed project would not displace any residents or businesses.

k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)

Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)

The proposed renovation and modernization will continue the existing use of the site as a high school campus, as it has been used since the late 1800s. This use is consistent with the City of Anacortes 2012 Comprehensive Plan. In accordance with the Anacortes Municipal Code (Sections 17.26.040 and 17.70.390-460), a Conditional Use Permit will be obtained to ensure that the proposed school improvements meet the criteria for development within the Public Use (P) and Residential (R3) Zoning Districts and within a regulated critical area (wetland buffer).

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: [\[help\]](#)

No agricultural or forest lands exist in the immediate vicinity of the project site.

9. Housing [\[help\]](#)

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)

No residential development is included as part of the proposed renovation and modernization.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)

The proposed project would not eliminate any residential units.

c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)

Because the proposed project would not impact housing, no measures are necessary to reduce or control housing impacts.

10. Aesthetics [\[help\]](#)

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [\[help\]](#)

The highest portion of the new high school building is approximately 44 feet above average calculated grade. In general, the lower portion of the building exterior would be faced with masonry veneer having smooth finish and natural color. The upper portions of the exterior walls would be clad with prefinished metal siding with limited accent areas using high-pressure composite resin panels. The panels would mimic warm wood tones while prefinished metal panels provide bright colors. Roof surfaces will be both steep and shallow slopes and be covered with either single ply roofing membrane or metal panels. Existing masonry and stucco walls on renovated structures would be sealed/painted to protect and extend their life. The modernized (new) structures would have the materials and finishes to help tie the existing building with the new.

b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)

The layout of the new school capitalizes on views of the water and mountains to the east, providing aesthetic benefit to students, staff, and visitors. The design layout does require substantial modification to site topography, including constructing new facilities on top of existing War Memorial Field. Due to the tiered nature of the site in proximity to the surrounding residences, these site improvements are not expected to obstruct existing views to the east.

c. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)

The design schematic includes a prominent main entry to the new school, creating a strong civic presence for the community. The proposed design layout was selected to minimize fussy or awkward juxtapositions, allow for appropriate distances between new and existing features, and create a unique school identity through the plaza. Exterior materials and finishes were selected to provide a long life for the facility and low maintenance for the District. They were also chosen to help accentuate each building volume and break down the scale of the building to fit within the site and surrounding area.

11. Light and Glare [\[help\]](#)

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)

Existing lighting in the high school parking lots will be replaced with LED light fixtures. Lighting at the new Memorial Plaza will consist of pedestrian pole fixtures and soffit fixtures near the buildings and some low-level LED lighting near the seating areas. The memorial at the plaza will be lighted with an LED fixture. New field lighting consists of four LED poles with 12 cutoff fixtures each to light the track and field. Existing lighting on-site currently occurs approximately ten hours per day, primarily during nighttime hours. All new lighting will be automated and controlled by the District and will occur on an as-needed basis.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)

New parking and plaza lighting will result in no light spill to surrounding areas. New field lighting may result in minimal light spill to off-site areas, which may be visible from residences to the south located on I and H Avenues. However, due to the lower elevation of the new field in proximity to these residences which sit at a higher elevation, the potential impact to views of the surrounding area is expected to be minimal. No safety hazards are anticipated as a result of the proposed lighting.

c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)

No off-site sources of light or glare are expected to affect the proposed renovation and modernization.

d. Proposed measures to reduce or control light and glare impacts, if any: [\[help\]](#)

New parking lots light fixtures will be high-efficiency LED lighting compliant with dark sky guidelines, resulting in no light spill off the project site. New lighting at War Memorial Plaza will comply with dark sky guidelines and will have no light spill to surrounding areas. New field lighting will be high-efficiency LED lighting.

12. Recreation [\[help\]](#)

a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)

Volunteer Park is located immediately west and northwest of the project site. The park includes 3 baseball fields, a soccer field (Kiwanis Meadows), and playground with play equipment, covered picnic shelter and full-sized basketball court. The park also includes 45 acres of open space.

b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)

The proposed project would renovate the athletic fields, gym, and theater at Anacortes High School. No recreational uses would be displaced. Construction activities will be sequenced to ensure that one of the two athletic fields on-site are operational at any given time.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#)

Since the proposed project would not result in any impacts on recreation, no measures are proposed to reduce or control impacts. The proposed renovation and modernization would enhance the existing recreational uses offered on-site.

13. Historic and cultural preservation [\[help\]](#)

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [\[help\]](#)

A *Cultural Resources Review* was conducted for the proposed project and determined that there are no buildings, structures, or sites located on or near that site that are listed in or eligible for listing in preservation registers. A general study of historic structures within the City of Anacortes in 2007 and 2010 included the project area. Nothing of note was recorded on or near the project site. The nearest documented archaeological sites are located near the Guemes Channel shoreline.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)

Background review determined that the project area is located in an area of low probability for cultural resources. No evidence of pre-contact or historic archaeological deposits were identified on the project site during background review or field investigations.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

[\[help\]](#)

As part of the *Cultural Resources Review*, a qualified archaeologist conducted a review and analysis of the environmental and cultural context of the project area, as well as previous cultural resource studies recorded within close proximity of the site. This included a review of local geologic data, historic and ethnographic records on file at the Washington Information System for Architectural and Archaeological Records Data (WISAARD) database, and selected published local historic records. The field investigation consisted of a pedestrian survey of the project site and subsurface investigation of 21 shovel probes throughout the project area.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [\[help\]](#)

The *Cultural Resources Review* determined that the proposed project does not have the potential to affect any historic properties. No further archaeological oversight is recommended. In the event that archaeological materials are encountered during project construction, an archaeologist should be immediately notified and work halted in the vicinity of the find until the materials can be inspected and assessed. In the event of inadvertently discovered human remains or indeterminate bones, pursuant to RCW 68.60.645, all work must stop immediately and law enforcement should be contacted. Any remains should be covered and secured against further disturbance, and communication should be immediately established with the Skagit County Sheriff's Office and the State Physical Anthropologist at DAHP for coordination with the Samish Nation, Swinomish Indian Tribal Community, and any other interested Native Tribe(s).

14. Transportation [\[help\]](#)

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)

Anacortes High School is bound by 20th Street to the south, K Avenue to the east, and 17th Street to the north. Access to the school is currently available from both 20th Street and J Avenue. One new access is proposed off of K Avenue. The new intersection will be stop sign controlled eastbound (from the campus) and westbound (from 19th Street) and free flowing northbound and southbound (on K Avenue). Existing and proposed access to the surrounding street system is shown on the attached site plans. Buses will access the site from 20th Street, west of I Avenue, continuing north along the west side of the school where they will drop off and turn around to exit on 20th Street. Rice Field and associated improvements will be access from 17th Street.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)

Yes. Skagit Transit serves the site via Route 49. The bus stop is located near the intersection of K Avenue and 20th Street, on the east side of Anacortes High School. Route 49 is a flex route that provides primary on-call service to areas around Island Hospital between 7:25 a.m. and 4:45 p.m. on weekdays and between 8:25 a.m. and 4:25 p.m. on Saturdays.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

The existing high school campus provides 318 parking spaces. As shown on the attached site plan, an additional 52 parking spaces would be provided on the future campus, for a total of 370 on-site spaces for daily use. After hours and during special events, the student drop-off and bus parking spaces would be utilized to provide an additional 33 on-site parking spaces, for a grand total of 403 parking spaces. The new parking accessed from 20th Street aligns new driveways with J Avenue and I Avenue. New staff parking will be located along the east side of the new school building parallel to K Avenue. Additional parking for Rice Field will be extended to the east from the existing student parking lot with a new parking lot entrance off of 17th Street. The new parking and associated drive aisle will create a looped drive aisle through the existing parking lot, increasing the safety and efficiency of the existing parking lot.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)

On-campus, the student drop-off and pick-up area will be revised from clockwise to counterclockwise traffic flow so that passengers can be more safely loaded and unloaded on the curbside. An additional unload and load area is also being provided. The *Traffic Impact and Parking Analysis* recommends the following public intersection improvements associated with the revised student drop-off and pick-up area:

- Modify the intersection of 20th Street and I Avenue to an all-way-stop controlled intersection to facilitate new campus egress only vehicle maneuvers.
- Remove the existing 20th Street egress.
- Modify the 20th Street and J Avenue intersection to support new campus ingress.

New high school trips are not projected to significantly impact off-campus locations within the study area. The *Traffic Impact and Parking Analysis* recommends that the high school work with the City of Anacortes to address deficiencies at 12th Street and K Avenue and at 12th Street and M Avenue that are not exacerbated with the addition of new high school trips. Two improvements were reviewed in the traffic analysis and are considered voluntary mitigation for the proposed project:

- Restrict K Avenue to right-turns only to 12th Street. Install curbing and signage to remove the left and through movements on K Avenue and continue to allow left turns from 12th Street into K Avenue. These improvements would help alleviate after-school traffic congestion, although only one new high school trip impacts this intersection in the p.m. peak hour.
- Restripe M Avenue at 12th Street from through-left and right to left and through-right lanes to improve traffic progression on the M Avenue approaches. The restriping provides additional left

turn capacity and would also support the traffic shift anticipated with the proposed K Avenue and 12th Street turn restrictions. However, only one new high school trip impacts this intersection in the p.m. peak hour.

Analysis of a future east-west road extension (20th Street from I Avenue west to D Avenue) was also addressed in the *Traffic Impact and Parking Analysis*. The analysis indicates that there are only 2 new a.m. peak hour, 1 new afterschool peak hour, and 1 new p.m. peak hour high school trips projected to utilize the new roadway connection. It is recognized that the local area and high school would benefit from a new east-west connector within the City. However, new high school trips associated with the proposed project do not result in new impacts under existing conditions and do not require the extension of 20th Street.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#)

No water, rail, or air transportation facilities are located immediately adjacent to the project site. The Anacortes Ferry Terminal is located at the western terminus of Highway 20, approximately 4 miles west of the project site. The Guemes Ferry Landing is located approximately one mile north of the site. Anacortes Airport is located approximately 3 miles west of the site. The proposed renovation and modernization would not affect or interfere with any of these transportation facilities.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

At full student capacity, the new high school would generate the following vehicular trips:

- 495 total a.m. (7-9 a.m.) peak hour trips, including 8 new trips.
- 321 total afterschool (2-4 p.m.) peak hour trips, including 5 new trips.
- 183 total p.m. (4-6 p.m.) peak hour trips, including 3 new trips.

Trip generation rates for the a.m., afterschool, and p.m. peak hours were derived from existing vehicle volumes collected at the campus driveways and the current and projected student enrollment. The peak hour trip rates were applied to the projected student enrollment to forecast the number of future trips generated by the expanded campus. Trip assignment was based generally on the Anacortes Traffic Model and adjusted based in existing turning movement volumes and observed patterns. The Synchro computer program was used to compute peak hour traffic operations. Level of service and delay were reported using the 2010 Highway Capacity Methodology.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [\[help\]](#)

Not applicable.

h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

All construction activities will be physically separated from ongoing pedestrian and student activities to maintain safe public, student, and staff pedestrian and vehicular access to the high school. This separation will be through appropriate use of temporary fencing, right-of-way signage, barricades, and delineators so construction activities and staging areas are isolated and secured from public access. Full operation of the

school and neighborhood access will be maintained at all times. Selected diversion or re-routing of access points may be required on an interim basis to allow all planned development areas to be constructed. During operation, the improvements identified in response to question d above are proposed in the *Traffic Impact and Parking Analysis* to reduce traffic impacts on the surrounding street system.

15. Public Services [\[help\]](#)

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)
Anacortes High School currently provides educational services for the Anacortes community. The proposed renovation and modernization will maintain and improve that service. The project is not expected to increase the need for any other public services.

b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)
None proposed.

16. Utilities [\[help\]](#)

a. Circle utilities currently available at the site: [\[help\]](#)
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

There are stormwater drainage, natural gas, sanitary sewer, water, and electrical utility lines currently available on the site. A site plan illustrating the existing on-site utilities is attached.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [\[help\]](#)

The renovated school will tie in to the existing utilities on-site, including stormwater drainage, natural gas (Cascade Natural Gas), sanitary sewer (City of Anacortes), water (City of Anacortes), telecommunication (Comcast) and electrical (Puget Sound Energy) utility lines. A site plan illustrating the location of proposed utility features is attached. General construction activities include demolition, renovation, and new construction throughout the existing campus. The contractor anticipates close coordination with utility providers for tie-ins, disruptions, and early demolition packages.

Sewer service for the new high school building will include a new connection to the existing 8-inch sewer main on 20th Street. A grease interceptor will be provided for the waste line from the kitchen. Sewer service for the new Rice Field will require the use of a pumped sewer system to connect the sewer from the improvements to the existing sewer. A new gravity sanitary sewer service line will connect the restrooms, concession building, and team room building to a duplex grinder pump lift station. The lift station is located on the north end of Rice Field that will pump to the existing gravity sewer manhole in 20th Street near I Avenue.

The existing 16-inch water main that runs north-south along the east side of the existing high school building will be left in place to continue serving the existing and improved school. Domestic water and fire sprinkler services for the new building will be obtained from the existing 16-inch main or 8-inch

mains within 20th Street or K Avenue. Fire hydrant coverage for the campus and domestic service to Rice Field will be provided by a completed water loop around the west side of the school extending southerly along the new Rice Field fire lane, then easterly along 20th Street to the existing 16-inch water main.

C. Signature [\[help\]](#)

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee: Marc L. Estvold, Architect AIA, LEED AP

Position and Agency/Organization: Project Manager, Anacortes School District

Date Submitted: November 16, 2015

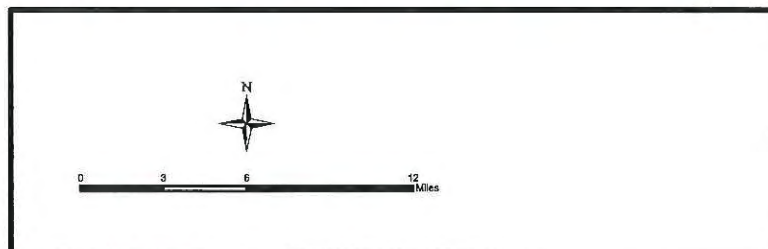
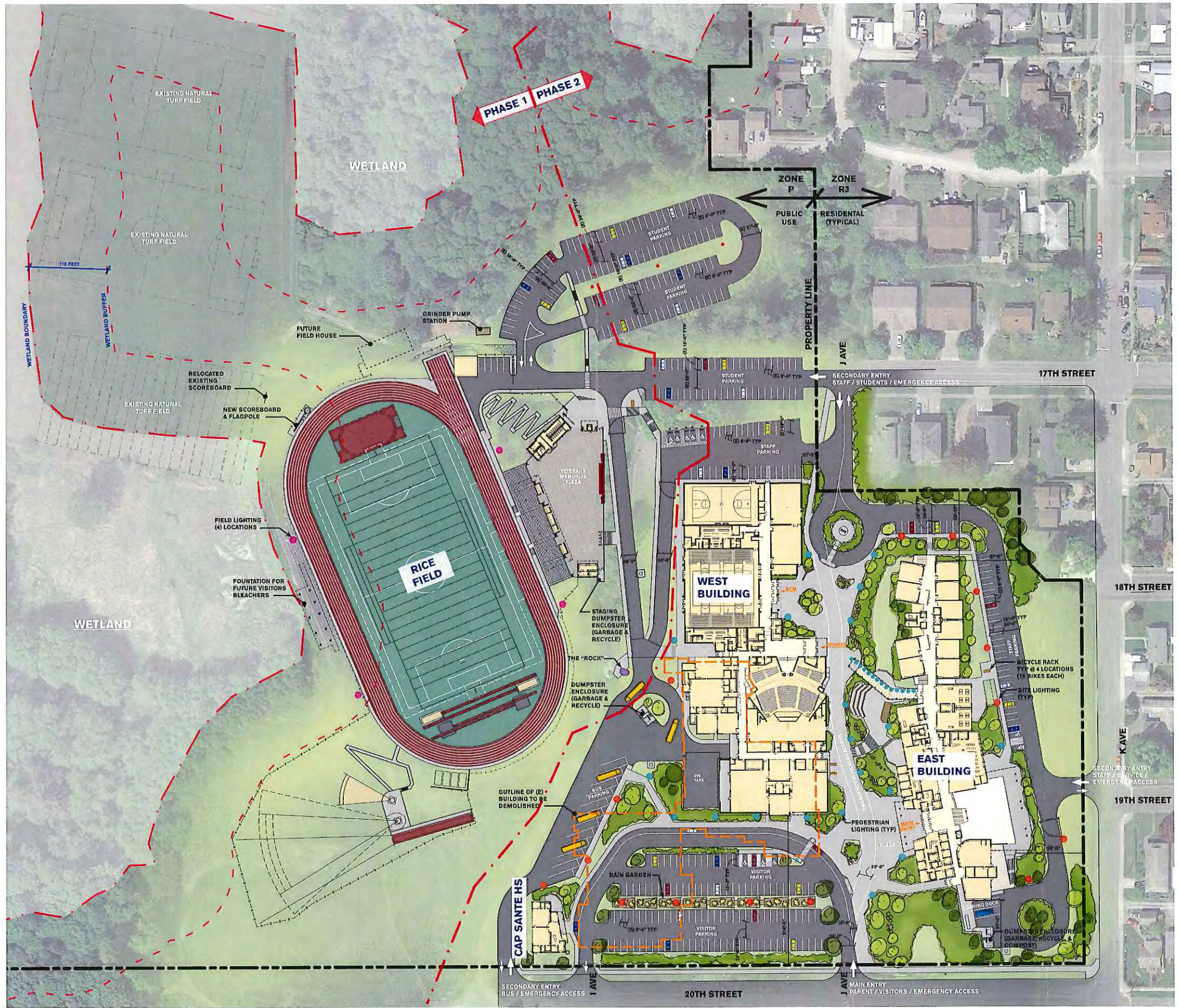
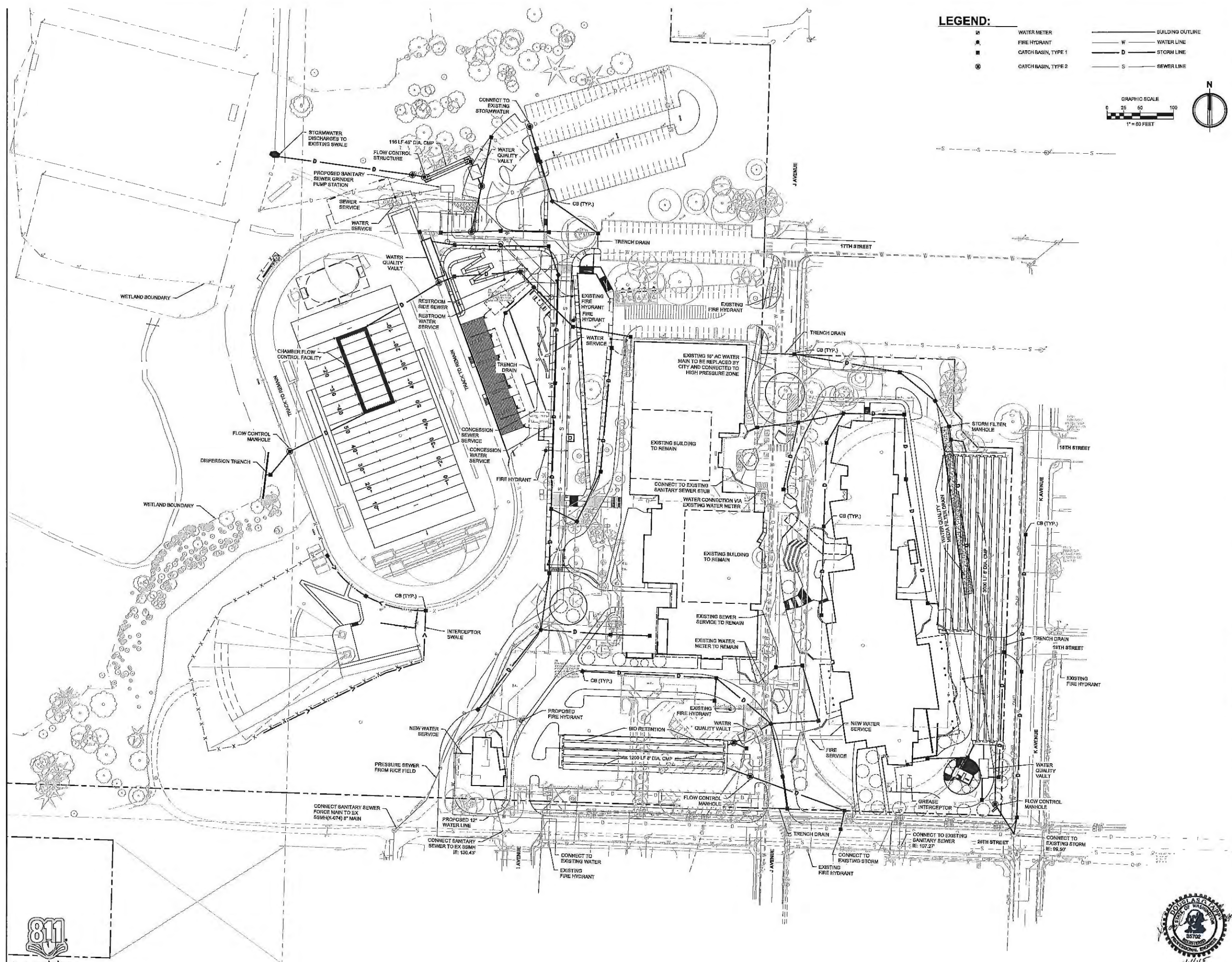


Figure 1: Vicinity Map Anacortes School District Anacortes High School Renovation & Modernization Project	
November 2015	JACOBS





LEGEND:

⊙	WATER METER	—	BUILDING OUTLINE
⊙	FIRE HYDRANT	— W —	WATER LINE
⊙	CATCH BASIN, TYPE 1	— D —	STORM LINE
⊙	CATCH BASIN, TYPE 2	— S —	SEWER LINE

GRAPHIC SCALE
0 25 50 100
1" = 60 FEET

N

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ANACORTES HIGH SCHOOL
1600 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: 11/10/15
Project No. 1506
Drawn:

CONDITIONAL USE
PERMIT SUBMITTAL

UTILITY
EXHIBIT

Sheet No.
EX.1



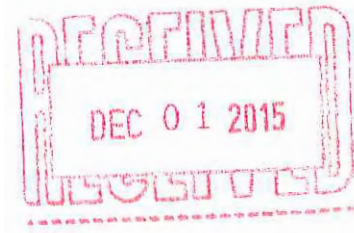


**Marc L. Estvold, Inc. AIA, LEED AP
Project Management**

3302 Oakes Avenue • Anacortes, Washington 98221 • 360-770-3994 • mestvold@comcast.net

November 30, 2015

Don Measamer
Director, Planning, Community & Economic Development
City of Anacortes
904 6th Street
Anacortes, WA 98221



RE: Anacortes High School Reconstruction and Modernization

Mr. Measamer,

On November 10th, 2015 the Anacortes School District held two community open houses to update folks on the status of the Anacortes High School Reconstruction and Modernization project. Post card announcements of the meeting were mailed to all residences within the 98221 zip code and also to all property owners within 300 feet of the High School property. The first meeting was held at 3:30 and attended by approximately 55 people and the second meeting held at 5:30 was attended by approximately 25 people.

A presentation on the status of the project was given by the design team. At the end of each of the presentations a feedback form was handed out to all in attendance. Fifty-six of the forms were filled out and turned in. In addition to the feedback forms there were various stations set up around the room for individuals to get a closer look at the project and ask individual questions after the presentation. Attached please find a typed up version of all comments received.

In general the majority of the comments were very positive. Below we have taken those comments received from the community meetings that were negative or request some revision or action on the District's part. We have tried to provide the action proposed by the district in response to each concern in red font.

Community Meeting

November 10, 2015

3:30 to 5:00 pm and 5:30 to 7:00 pm

1. Overall, what do you see as positive design elements for the new high school based on today's presentation?
 - Cape Sante is not in an appropriate place. They will get all the fumes from the buses. What about traffic concerns? There isn't any place for more streets.
 - The educational specification developed by the district calls for Cap Sante High School (CSHS) to be located on the High School campus but not connected to the main building. The proposed location makes it have its own identity with close proximity to shared support services provided in the main building. Cap Sante staff have reviewed the location and support it. Bus fumes and on-site circulation will be addressed in the final design.

- Additional parking is really needed.

We agree and significantly more parking will be provided in the new design in the area of the main entry where it is mostly needed. Currently a significant number of onsite parking stalls are not used because they are not convenient to the main entry.

2. What concerns or considerations would you like to share regarding the design?

- Concern about traffic flow, particularly K Ave restriction on turns to west. Please keep safe pedestrian, bicycle crossing of 12th Street – possibly light at K Ave so that pedestrians don't get discouraged. I'm interested in how flow of construction will go for 2nd segment when old school is demolished.

Bicycle / pedestrian crossing at 12th and K will be taken into consideration with any modifications to the intersection. We are not at a detailed enough level of the project to yet to determine construction traffic circulation. We would anticipate traffic to approach the project on major streets.

- Part of the school will be built on fill with a 16" water main uphill. This could have a leak and wash out the fill. The water main must be moved.

We are working with the City to abandon this line.

- Unify old building with new building. Handicap parking: Majority of handicap people utilizing this new campus will be attending theater and sporting events.

We will provide disabled parking as required by the City of Anacortes zoning code.

- The road to 19th Street and K – not necessary – could be 18th.

The design team has looked at a number of configurations to provide staff and service vehicle access to the east side of the new building. The access is currently located to align with 19th street. In that configuration it allows staff traffic to enter the site and head north to parking and for service vehicles to enter the site and turn south to the service entrance, providing a separation between these two uses. We looked at locating this entry off of 20th but that configuration caused safety concerns as it would add congestion to an already busy 20th street and required staff traffic to circulate through the service vehicle area. Our traffic engineer has indicated that alignment of streets is the safest approach, if the access is moved from alignment with 19th to be aligned with 18th, it will cause the service vehicles to circulate through the staff parking lot causing safety concerns.

- Security!!! This design has the same multi entrances as old AHS. Parking at several sites making securing the campus impossible. This is a huge issue! We have an opportunity and responsibility to make this campus secure. Seahawk Stadium is very secure.

The design team has worked very closely with the district administration in the design and configuration of the building entrances and exits. District administration is comfortable with the campus layout, that said they understand that proper training of students and staff is critical to the safety of any design. The team plans to work with the police and fire departments, as well as security experts, in finalizing design decisions to support student safety.

3. Do you have any other feedback?

- At present, there is significant traffic on 20th and 17th Streets from the school to Commercial Avenue. Would this continue, or would some shift to 19th Street which is not as wide as either 17th or 20th?

Our traffic engineer has indicated that with the alignment of the parking lot on the east side of the new building across from either 18th or 19th and with no left turn at 12 & K Ave, there may be an increase of as many of 15 vehicle trips on either street.

- K and 12th right only? How do you get to the west end with right turn?
Traffic headed to the west end would be encouraged to go to 12th & M for a left turn at the signal.
- All the neighbors are against access from school and K. Emergency can enter at 20th where it is now on field. I will protest across from 19th St. road and cross K. I own three properties on 19th Street.
Please note the above comment was submitted by one person and see responses above with regard to reasoning for the access to K aligning with 19th.

In addition to the questions posed at the community meetings, we have been approached by neighbors on the northeast corner of the site. One neighbor was concerned about construction noise. We assured this neighbor that all City requirements would be met with regard to noise, construction hours, street cleaning etc.

Another neighbor expressed concern that a sidewalk along the west side of K Avenue would disturb their landscaping, and was not in favor of a sidewalk along the west side of K Avenue. As a result of this neighbor's concerns, we are not proposing a sidewalk along the west side of K Avenue. The existing sidewalk on the east side of K Avenue currently provides a safe walking path for pedestrians.

Concern has also been expressed via email that if the intersection at 12th & K Ave is restricted to right turn only, there will be many times of the day that traffic levels would easily allow a left turn at K, but physical barriers would not allow the turn. In response to this concern our traffic engineer has suggested that instead of providing a physical barrier not allowing left turn, or continuing straight through the intersection at 12th & K, that signage be provided to indicate right turn only during peak hours on school days, allowing normal intersection use during non-peak hours.

Hopefully this information is helpful in your consideration of our SEPA and Conditional Use Permit application.

Respectfully,



Marc Estvold, AIA.
Project Manager
Anacortes School District

Attachment: Complete list of comments from feedback forms



Anacortes School District 103

2200 M Avenue Anacortes, Washington 98221

Phone: 360-293-1200 / Fax: 360-293-1222

<http://www.asd103.org>

Community Meeting

November 10, 2015

3:30 to 5:00 pm and 5:30 to 7:00 pm

Feedback Summary

(56 feedback forms received)

1. Overall, what do you see as positive design elements for the new high school based on today's presentation?
 - Good community outreach and response.
 - I really like the design of the campus, views, etc. You've put in a lot of hard work. Security good, parking improved.
 - Very impressive! Particularly like the openness (plaza) and yet the 'simple linear' concept for security. Also, kids get the great views, instead of administration.
 - Way beyond my expectations. I like the openness for the kids' security. I don't have children that will be attending but I would be very proud to bring friends and family to this new high school – I like all of the windows!
 - Security and safety looked good. Liked flex space. 3D was great.
 - The presentation with its explanation and studies make sense per the design. The 3D animation is helpful – love that kids get the view in library and cafeteria.
 - Liked the design – many great features. Good to have the alternative HS on the campus. Great security features. Loved the plaza concept. Good extra parking and accessibility.
 - Cape Sante is not in an appropriate place. They will get all the fumes from the buses. What about traffic concerns? There isn't any place for more streets.
 - The schematic looks beautiful – lots of glass-visibility, the views of our beautiful island are taken into account.
 - Overall, well done.
 - The central plaza between west and east buildings – great! Views protected, thanks for the use of memorial field's lower elevation. The comprehensiveness accommodates all conceivable interests, community activities, etc.
 - I liked the multiple buildings and all the common areas. The ease of accessing the campus from all sides! A lovely open campus! So inviting for all!
 - Lots of thought has gone into possible problems that might come up (i.e., wetlands, soil testing, safety, etc.)
 - Excellent use of the existing elevations of the site for outdoor opportunities. Good security control at main entry. Good ability to share common and other spaces for multi-use. Two building campus makes good use of the site and provides interest to the complex.
 - All students get the wonderful view – not just football fans.
 - Keeping it compact, yet open is a great plus. Additional parking is really needed.
 - Good use of light and natural setting.
 - Very positive design. Overcame elevations with some very innovative concepts.



Anacortes School District 103

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- Interconnecting open design with multiuse rooms. Remodel of Brodniak Hall and gymnasium. Inventor/metal section. Alternative high school included.
- Use of existing structure and site.
- New structure for learning with better layout from present buildings. Demolition of old buildings that are absolute.
- Very student-friendly facilities, with student security/safety a premium. The design reflects the progressive/future elements so necessary for our kids' future... a facility that will foster pride in our students.
- Lots of glass, light, outdoor spaces. Easy to navigate around campus.
- Good use of challenging topography. Use of views/grouping subjects. Flex spaces. Expanded parking.
- Eastern facing windows with natural lighting and warm/heating. Big tech area.
- I like the classroom wing and building.
- I have to leave early. I think the design/development process has been great.
- Beautiful architectural design including many well designed areas for learning. Hopefully the interim design of the classrooms will be state of the art regarding electronics and computer.
- Like the design from an aesthetic view as well as flow for safety and community.
- I especially like the provisions for small group learning as well as regular classroom learning. The whole design provides an airy look to it. Students will be proud to attend this.
- Open areas. Buses having a community friendly parking area. Parking of 120 spaces. Yeah for additional parking. Round about.
- Taking good advantage of the topography! Some interesting (and practical) features, i.e., the bridge, patio/classrooms.
- I really like how accessible outdoors is.
- Very impressed, well thought out. Great use of space, flow and elevations. Love all the outdoor usage spots. Love that you took advantage of lots of windows and natural light.
- I love the access. I know some folks are a bit concerned about safety or lock-down ability, but I don't think it is a very realistic fear. I love the improved parking areas.
- Literally everything! Especially the clever use of topography and elevation changes to construct the new building, the improved parking and bus routes and the update to the existing gym and theater spaces.
- Great
- The multi level main building is great. Open spaces and Rice Field all super.
- The design is beautiful and functional. I commend you for incorporating student input and soliciting community involvement.
- I like the smart use of space and that the main building incorporates lots of natural light, outdoor/experiential learning spaces and mixed use interior spaces like the commons around the classrooms and conference spaces.
- I'm really impressed with the use of levels and different elevations. It's created a very attractive and functional-looking building.
- The siting of the buildings towards the view – commons area with plaza walkway. The overall design is modern. Better layout. Better parking.
- Buses off public roads and onto school grounds. Traffic flow with roundabouts. Open area – common areas outside.



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2. What concerns or considerations would you like to share regarding the design?

- Ecologic – solar, rain gardens? Handicap access to lower level.
- Very expensive design, every corner and roofline cost more money. No provision for passive or active solar power. No solution to existing traffic problems.
- Concern about traffic flow, particularly K Ave restriction on turns to west. Please keep safe pedestrian, bicycle crossing of 12th Street – possibly light at K Ave so that pedestrians don't get discouraged. I'm interested in how flow of construction will go for 2nd segment when old school is demolished.
- I don't have any concerns regarding the school. I'm a grandmother who runs on the current track frequently – I hope I still have access. And I hope the track isn't made with the black rubber pieces that get in my shoes from running the track.
- Are elevators located in strategic locations? Will sidelights and glass doors for classrooms be able to be covered during any serious physical threats? Will Astroturf/artificial turf have recycled tires? Possible health issues.
- Please don't use crumb rubber artificial turf at Rice Field.
- What about solar energy? Other eco considerations, e.g. rain gardens. Handicapped accessibility to lower level?
- Have the number of entrance and exit doors been reduced from the current high school?
- Not sure if I heard about cafeteria.
- Great job so far!
- Still would like a little more info on school campus security from all entrances!
- Any thoughts about safety on the bridge between the two buildings? Safe biking access?
- Would like a "home" and "visitors" section at the stadium.
- Wish we could safe and re-use old CTE wing for community use and teen center.
- Solar panels? Rain garden(s)? Native plants? Pervious surfaces – roadways, parking, plaza areas
- Understand design based on 1,000 students. Should time come when younger parents replace all the retirees where could expansion take place?
- Overhead protected cover from building to building – will it be covered all the way? Need more details on alternative high school (Cap Sante). Concerned about the amount of glass and effect on heating/cooling/sound transmission. How is the high school and the new football field connected?
- During schematic design it's customary to have design work for low voltage systems and technology infrastructure. Who is handling FFE for ESD? Who is doing A/V design for Brodnyak? When will these bids go out?
- Part of the school will be built on fill with a 16" water main uphill. This could have a leak and wash out the fill. The water main must be moved.
- Enough room designated for STEM?
- Will citizen access to the track at Rice Field still be allowed?
- Nothing was said about accessibility given all of the steps and stairs.
- Wondering about how students will travel from CTE/choir/band/PE to/from main building staying dry/warm during inclement weather and on time for start of next class.
- Is there a workshop? Drama set info and classes (woodworking?)



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- Where the Cape Sante is terrible! I hope you have asked some students at Cap Sante what they think of location with cars and buses –air quality for the students there!
- Based on the perspective drawings the “look” seems too commercial/industrial. The look/feel does not give me a sense of being representative of Anacortes.
- Security – other than the front door option to close that after peak times. What about metal detectors? Artificial turf –is it safe and non toxic. There’s been a lot in the news lately regarding recycled tires used that are toxic. Concerned about traffic at 12th and K directed to 12th and M.
- I have a concern about the parking, but I’m sure those doing the planning are on top of it. Anacortes in general is not known for its parking.
- What will the accommodations be for students and staff of Fidalgo Island’s population increase for the life of the school building?
- Will the updating of Brodriak include correcting the now unsafe middle aisle – the ramp up and then step down?
- Unify old building with new building. Handicap parking: Majority of handicap people utilizing this new campus will be attending theater and sporting events. I feel you could realistically start both projects at the same time. Transition time between classes – will students have enough time to go from Art to PE back to science over to band, etc.
- Is this design able to accommodate a higher student enrollment in the future? Is it built for current enrollment? Seems like a minimal amount of classrooms.
- I think the design is excellent, it would be excellent to see more details about the outdoor spaces including greenhouse and aquaponics.
- The road to 19th Street and K – not necessary – could be 18th.
- Security!!! This design has the same multi entrances as old AHS. Parking at several sites making securing the campus impossible. This is a huge issue! We have an opportunity and responsibility to make this campus secure. Seahawk Stadium is very secure.
- Be sure to incorporate sustainability into every aspect of the project as you are able.
- Any student with accessibility issues would have a time challenge moving from classrooms on one level down the long hall to the elevator and then transversing back down the long hallway on the new level to reach his/her next class.
- I’d love to see space set aside for a school garden, preferably with southwest exposure. It would complement well the environmental science AP class use of a greenhouse/aquaponics, food science class and also the life skills kitchen and class. I’d be happy to help in this endeavor, and connect the garden with community partners/sponsors to support and keep the garden going during the summer months. Lots of potential.
- Safety for all buildings?
- Safety of sky bridge – security. Are outdoor areas covered in areas?

3. Do you have any other feedback?

- Good luck!
- Really like the ‘campus concept’
- Excellent presentation. Thank you
- Very informative presentation. Can you do it all and keep it within the budget? Hope so! ☺



Anacortes School District 103

2200 M Avenue Anacortes, Washington 98221

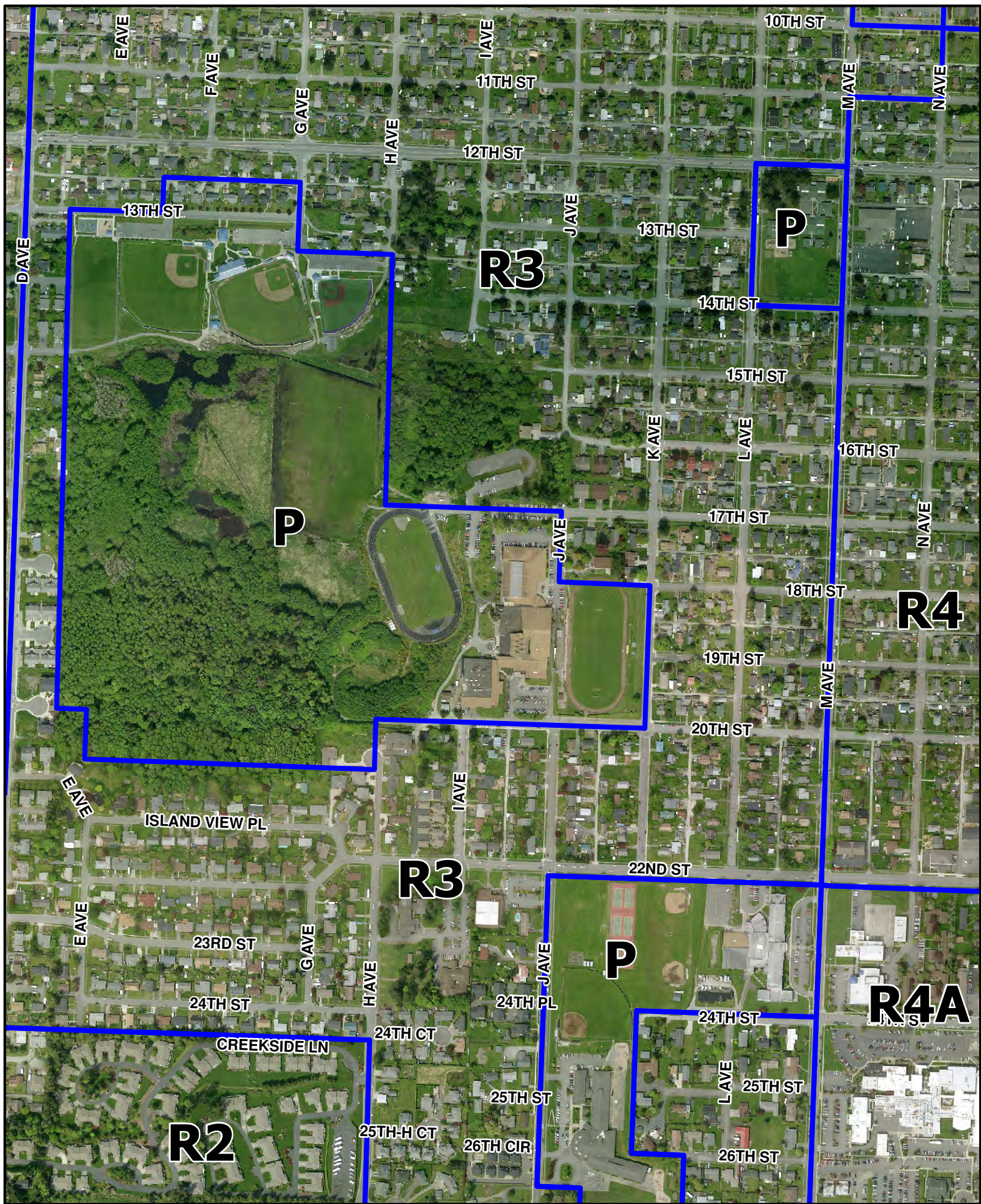
Phone: 360-293-1200 / Fax: 360-293-1222

<http://www.asd103.org>

- The Veterans memorial is a wonderful tribute to all the veterans.
- Question: What happens to the current high school?
- Could you substitute the auxiliary basketball court into a pool? I think a pool, even a small one, would enhance overall athletics.
- Great job!
- Computer graphics really help. Can these be published in the Anacortes American?
- Impressive. Great process. Good people involved. Good priorities.
- Hardly wait to see completed project even though I am 84 years old!
- At present, there is significant traffic on 20th and 17th Streets from the school to Commercial Avenue. Would this continue, or would some shift to 19th Street which is not as wide as either 17th or 20th?
- Great and thoughtful conceptual process.
- You should be very proud of the process followed.
- Where do they eat?
- K and 12th right only? How do you get to the west end with right turn?
- I feel the project has been beautifully managed. Thank you
- I'm very impressed by the amount of planning that has gone on to get to this point!
- Does the cultural assessment team include studies on items like fossils, old burial grounds, etc.? Wasn't clear of what cultural assessments purpose was. Thank you
- Impressed with the 3D imaging.
- What a wonderful way to honor and respect our high school students. Surroundings are so important and we are so happy to finally vastly improve this aspect of the learning environment! Thank you for all of your hard work on this!
- I think it wise to plan for increased enrollment and make the best use of the existing topography while positioning classrooms and offices for natural light and views of Fidalgo Island and beyond.
- All the neighbors are against access from school and K. Emergency can enter at 20th where it is now on field. I will protest across from 19th St. road and cross K. I own three properties on 19th Street.
- Keep up the good work!
- Love the technology used to share designs with us; make it very easy to picture everything. Thank you

EXHIBIT #2:

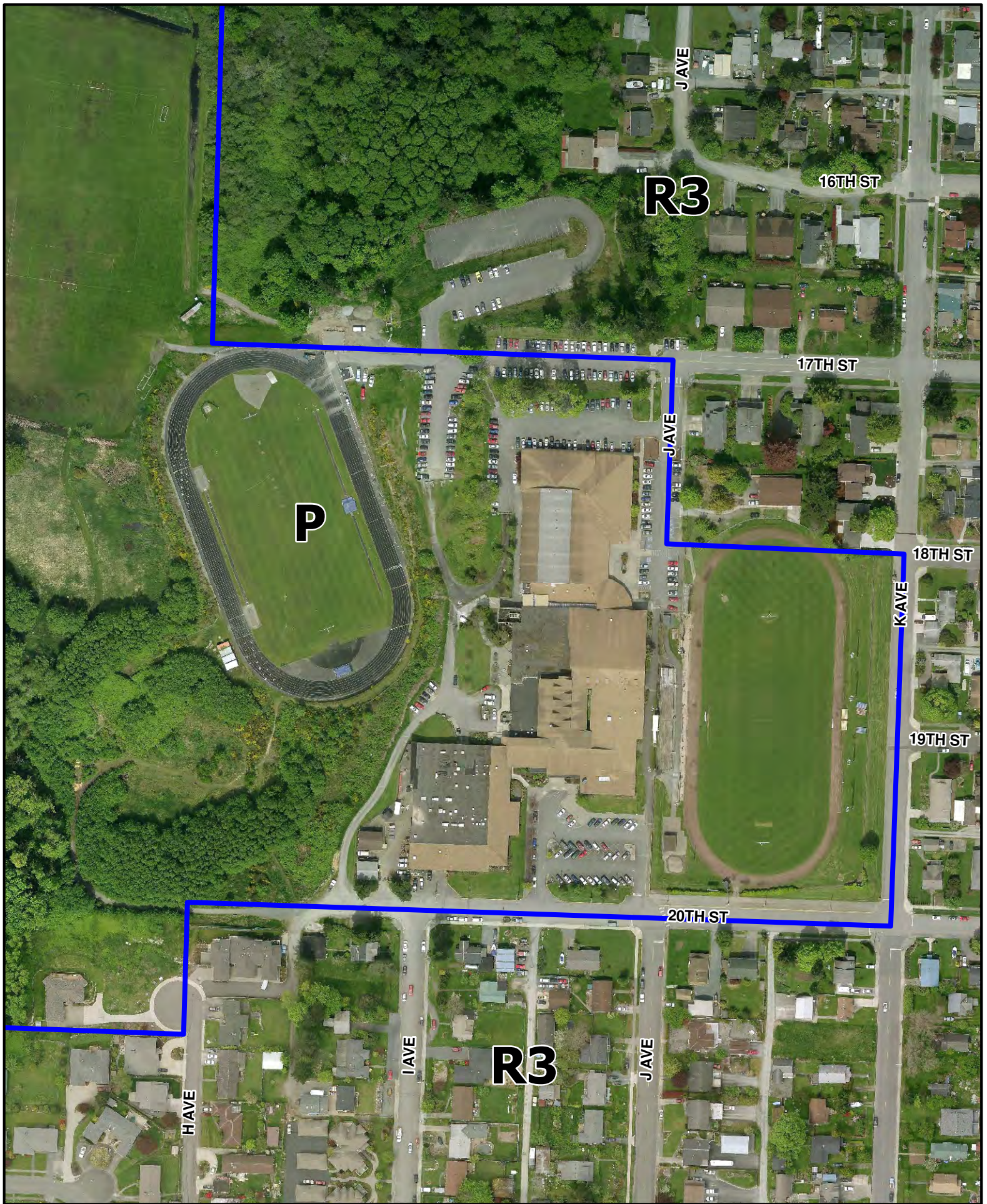
ASSESSOR'S INFO AND CITY GIS MAP



0 300 600 Feet

High School Zoning





0 100 200 Feet

High School Zoning



Details for Parcel: P31905



Jurisdiction: ANACORTES
Please contact the city of **ANACORTES** for ANACORTES zoning information.

Zoning Designation:

Parcel Number	XrefID	Quarter	Section	Township	Range
P31905	350124-0-127-0008	00	24	35	01

Owner Information
ANACORTES SCHOOLS #103
2200 MAVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in IMap](#)

[Assessor's Parcel Map:](#)

[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value	\$.00
Land Market Value	+\$207,000.00
Total Market Value	\$207,000.00
Assessed Value	\$207,000.00
Taxable Value	\$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

(6.5700 ac) TAX 45A PTN NE1/4 & SE1/4 NW1/4 BAT INT OF W LI SD NE1/4 SW1/4 & C/L 22 ND ST TH N ALG SD W LI 1028FT M/L TO S LI OF ALLEY THRU BLK 188 TH E ALG S LI SD ALLEY EXT E 635FT TH S PLW W LI SD SUB TO C/L 22ND ST EXT E TH W 635FT TPB LESS TAX

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900		Fire District		
School District	SD103		Exemptions	School Owned	
Utilities			Acres	6.57	
Improvement 1 Attributes Summary					
Building Style	COMMERCIAL REAL PROPERTY				
Year Built			Foundation		
Above Grade Living Area			Exterior Walls		
Finished Basement			Roof Covering		
*Total Living Area			Heat/Air Conditioning		
Unfinished Basement			Fireplace		
*Total Garage Area			Bedrooms		
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P31912



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number	XrefID	Quarter	Section	Township	Range
P31912	350124-0-135-0008	00	24	35	01

Owner Information
ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)

Assessor's Parcel Map:

[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value	\$.00
Land Market Value	+\$31,800.00
Total Market Value	\$31,800.00
Assessed Value	\$31,800.00
Taxable Value	\$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

(1.0100 ac) TAX 52A PTN NE1/4 SW1/4 BAT INT OF S LI OF ALLEY BLK 188 ANA & E LI SD SUB THE TPB TH E 635FT N 452FT TO C/L 17TH ST T HW 635FT S 452FT TPB LESS TAX 52B

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities		Acres	1.01		
Improvement 1 Attributes Summary					
Building Style	COMMERCIAL REAL PROPERTY				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P31920



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

[Excise Affidavits](#)

Document scans of excise affidavits

Parcel Number
P31920

XrefID
350124-0-143-0008

Quarter	Section	Township	Range
00	24	35	01

Owner Information
ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)

Assessor's Parcel Map:

[PDF](#) | [DWF](#)
2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value	\$.00
Land Market Value	+\$97,700.00
Total Market Value	\$97,700.00
Assessed Value	\$97,700.00
Taxable Value	\$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

(3.1000 ac) TAX 302 PTN SE1/4 NW1/4 BAT INT OF E LI SD SUB & S LI 18TH ST IN ANA EXT W TH WALG SD S LI EXT 225FT TH N PLT W LI AVE H EXT S 592FT TH E 225FT TO E LI SD SUB TH S ALG SD E LI 592FT TPB

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL		
Levy Code	0900	Fire District	
School District	SD103	Exemptions	School Owned
Utilities		Acres	3.10
Improvement 1 Attributes Summary			
Building Style	COMMERCIAL REAL PROPERTY		
Year Built		Foundation	
Above Grade Living Area		Exterior Walls	
Finished Basement		Roof Covering	
*Total Living Area		Heat/Air Conditioning	
Unfinished Basement		Fireplace	
*Total Garage Area		Bedrooms	
Bathrooms			
For additional information on individual segments see Improvements tab			

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P31922



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number P31922 **XrefID** 350124-0-145-0006 **Quarter** 00 **Section** 24 **Township** 35 **Range** 01

Owner Information
ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)

[Assessor's Parcel Map:](#)

[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value \$.00
Land Market Value +\$310,600.00
Total Market Value \$310,600.00
Assessed Value \$310,600.00
Taxable Value \$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016

Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

(9.8600 ac) TAX 304 UNDER AUD#669046

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities		Acres	9.86		
Improvement 1 Attributes Summary					
Building Style	COMMERCIAL REAL PROPERTY				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P31923



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number	XrefID	Quarter	Section	Township	Range
P31923	350124-0-146-0005	02	24	35	01
Owner Information		Site Address(es)		Map Links	
ANACORTES SCHOOLS #103				Open in iMap	
2200 M AVE				Assessor's Parcel Map:	
ANACORTES, WA 98221				PDF DWF	
2015 Values for 2016 Taxes* Exemption		Sale Information		2016 Property Tax Summary	
Building Market Value	\$389,700.00	Deed Type		2016 Taxes will be available after 2/15/2016	
Land Market Value	+\$941,200.00	Sale Date		Use the Taxes link above for 2015 taxes	
Total Market Value	\$1,330,900.00	Sale Price \$.00			
Assessed Value	\$1,330,900.00				
Taxable Value	\$.00				

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

TAX 305 PTN E1/2 NW1/4 AS IN AF#701948 DAF TH PTN OF E1/2 OF NW1/4 OF SEC 24 DAF BAAP ON THE W LINE OF SD SUB 592FT S OF NW COR THOF TH E 742.1FT M/L TO SE COR OF A TRACT CONVEYED TO O M DURHAM AF#372171 TH N 148FT M/L TO C/L OF THE ALLEY IN BLK 194 MAP OF ANACORTESPRODUCED E TH E TAP 393.32FT W OF A PT WHICH IS S O DEG 28' E 444.1FT FR THE NE COR OF NE1/4 SD PT BEING ON THE C/L OF G AVE IF PRODUCED TH S ALG SD C/L 288FT TO THE N LINE OF THE ALLEY IN BLK 8 MUNKS 1ST QUEEN ADD PRODUCED W TH E ALG SD N LINE OF THE ALLEY TO THE NORTH & SOUTH C/L OF SD SEC 24 TH S ALG SD C/L TAP 592FT N OF S LINE OF 18TH ST IN CITY OF ANANCORTES PRODUCED TH W 225FT TH S PLW THE W LINE OF H AVE PRODUCED IN SD CITY OF ANANCORTES TO THE N OF 18TH ST IN SD PLAT PRODUCED TH W ALG SD N LINE TO ITS INT WITH THE W LINE OF E1/2 OF SD NW1/4 TH N ALG SD W LINE TO THE POB EXC STREETS ALSO EXC TH PTN OF NE1/4 NW1/4 OF SEC 24 DAF BAAP ON THE W LINE OF SD SUB 592FT S OF NW COR THOF TH E 742.1FT M/L TO SE COR OF A TRACT CONVEYED TO O M DURHAM AF#372171 TH N 148FT M/L TO THE C/L OF THE ALLEY IN BLK 194 MAP OF CITY OF ANANCORTES PRODUCED E TH E TAP 393.32FT W OF A PT WHICH IS S O DEG 28' E 444.1FT FR THE NE COR OF NW1/4 SD PT BEING ON THE C/L OF G AVE IF PRODUCED TH S ALG SD C/L 188FT M/L TO THE S LINE OF 13TH STREET PRODUCED TH W ALG SD S LINE TO W LINE OF NE1/4 NW1/4 TH N 40FT M/L TO POB

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities		Acres	32.26	
Improvement 1 Attributes Summary				
Building Style	COMMERCIAL REAL PROPERTY			
Year Built		Foundation		
Above Grade Living Area	6,684 Square Feet	Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area	6,684 Square Feet	Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P31926



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

[Recorded Documents](#)

Documents scanned and recorded by the Auditor's office

Parcel Number

P31926

XrefID

350124-3-001-0003

Quarter Section Township Range

03 24 35 01

Owner Information

ANACORTES SCHOOLS #103

2200 M AVE

ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in IMap](#)

[Assessor's Parcel Map:](#)

[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value \$.00

Land Market Value +\$78,800.00

Total Market Value \$78,800.00

Assessed Value \$78,800.00

Taxable Value \$.00

Sale Information

Deed Type DIVORCE

Sale Date 1982-03-01

Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016

Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

(2.5000 ac) NE1/4 SW1/4 N OF C/L OF 22ND ST LESS S 104.37FT OF E 258.23FT

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities		Acres	2.50		
Improvement 1 Attributes Summary					
Building Style	COMMERCIAL REAL PROPERTY				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55808



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55808

XrefID

3772-124-020-0004

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

1600 20TH STREET
Anacortes, WA (Jurisdiction, State)
[Zip Code Lookup](#) | [Site Address Information](#)

Map Links

[Open in iMap](#)
[Assessor's Parcel Map: PDF | DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$178,000.00
Land Market Value +\$119,100.00
Total Market Value \$297,100.00
Assessed Value \$297,100.00
Taxable Value \$0.00

Sale Information

Deed Type
Sale Date
Sale Price \$0.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES VAC ST & ALLEY & LTS 1 TO 20 BLK 124 HIGH SCHOOL GRAND STAND

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities	SEW,WTR-P	Acres	1.89	
Improvement 1 Attributes Summary				
Building Style	COMMERCIAL REAL PROPERTY			
Year Built		Foundation		
Above Grade Living Area		Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area		Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55809



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number P55809 **XrefID** 3772-125-020-0001 **Quarter Section Township Range** 13 35 01

Owner Information
ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in IMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$.00
Land Market Value +\$10,100.00
Total Market Value \$10,100.00
Assessed Value \$10,100.00
Taxable Value \$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES VAC ST & ALLEY & LTS 1 TO 20 BLK 125 VAC ALLEY 1 TO 20

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities	SEW,WTR-P	Acres	0.16	
Improvement 1 Attributes Summary				
Building Style	COMMERCIAL REAL PROPERTY			
Year Built		Foundation		
Above Grade Living Area		Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area		Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55810



Jurisdiction: ANACORTES
Please contact the city of **ANACORTES** for ANACORTES zoning information.

Zoning Designation:

Parcel Number P55810 **XrefID** 3772-125-020-0100 **Quarter** 13 **Section** 35 **Township** 01 **Range**

Owner Information
ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links
[Open in iMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$.00
Land Market Value +\$98,300.00
Total Market Value \$98,300.00
Assessed Value \$98,300.00
Taxable Value \$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES BLK 125 VAC 19TH ST BTW AVE I & J & VAC J AVE BTW 18TH & 20TH ST

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities	SEW,WTR-P	Acres	1.56	
Improvement Attributes Summary				
Building Style	COMMERCIAL REAL PROPERTY			
Year Built		Foundation		
Above Grade Living Area		Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area		Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55813



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

[Recorded Documents](#)

[Excise Affidavits](#)

Documents scanned and recorded by the Auditor's office
Document scans of excise affidavits

Parcel Number

P55813

XrefID

3772-126-017-0103

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)**Map Links**

[Open in IMap](#)

Assessor's Parcel Map:

[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value \$0.00
Land Market Value +\$25,800.00
Total Market Value \$25,800.00
Assessed Value \$25,800.00
Taxable Value \$0.00

Sale Information

Deed Type QUIT CLAIM DEED
Sale Date 2000-06-06
Sale Price \$0.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

ANACORTES THE SOUTH 90 FEET OF LOTS 11-17 BLOCK 126 TOGETHER WITH THAT PORTION OF VACATED 18TH STREET WHICH BY OPERATION OF LAW REVERTED TO THE FOLLOWING DESCRIBED PORTION OF SAID BLOCK 126 BEGINNING AT A POINT 76.7 FEET WEST OF THE SOUTHEAST CORNER OF LOT 20 ALONG THE SOUTH PROPERTY LINE OF LOTS 20 19 AND 18 THENCE NORTHWESTERLY FOR 18.8 FEET TO A POINT 13.3 FEET NORTH FROM THE SOUTHWEST CORNER OF LOT 18 ON THE WEST PROEPRTY LINE OF SAID LOT 18 THENCE SOUTH 13.3 FEET TO THE SOUTHWEST CORNER OF LOT 18 THENCE EAST 13.3 FEET ALONG SOUTH PROPERTY LINE TO THE POINT OF BEGINNING ALSO TOGETHER WITH THAT PORTION OF VACATED 18TH STREET DESCRIBED AS FOLLOWS COMMENCING AT A POINT ON THE SOUTH LINE OF SAID LOT 18 BLOCK 126 AT A POINT 76.7 FEET WEST OF THE SOUTHEAST CORNER OF BLOCK 126 THENCE SOUTH PARALLEL TO THE SOUTHERLY EXTENSION OF THE WEST LINE OF LOT 18 FOR 16 FEET TO A POINT 24 FEET NORTH OF THE CENTERLINE OF VACATED 18TH STREET THE TRUE POINT OF BEGINNING THENCE CONTINUING SOUTH ON A LINE PARALLEL WITH THE SOUTHERLY EXTENSION OF THE WEST LINE OF SAID LOT 18 FOR 24 FEET TO AN INTERSECTION WITH THE CENTELINE OF VACATED 18TH STREET THENCE EASTERLY ALONG SAID CENTERLINE FOR 24 FEET THENCE NORTHWESTERLY TO THE POINT OF BEGINNING

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL		
Levy Code	0900	Fire District	
School District	SD103	Exemptions	School Owned
Utilities	SEW,WTR-P	Acres	0.41
Improvement 1 Attributes Summary			
Building Style	COMMERCIAL REAL PROPERTY		
Year Built		Foundation	
Above Grade Living Area		Exterior Walls	
Finished Basement		Roof Covering	
*Total Living Area		Heat/Air Conditioning	
Unfinished Basement		Fireplace	
*Total Garage Area		Bedrooms	
Bathrooms			
For additional information on individual segments see Improvements tab			

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55950



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55950

XrefID

3772-145-010-0001

Quarter Section Township Range

01 24 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)**Map Links**

[Open in iMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value \$.00
Land Market Value +\$19,500.00
Total Market Value \$19,500.00
Assessed Value \$19,500.00
Taxable Value \$.00

Sale Information

Deed Type WARRANTY DEED
Sale Date 1997-05-21
Sale Price \$336,000.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

ANACORTES LOT 10 BLK 145 6 TO 10

*Land Use	(111) HOUSEHOLD, SFR, INSIDE CITY			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities		Acres	0.62		
Improvement 1 Attributes Summary					
Building Style	SINGLE FAMILY RESIDENCE				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55951



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55951

XrefID

3772-146-020-0007

Quarter Section Township Range

01 24 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)**Map Links**

[Open in iMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWE](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$17,200.00
Land Market Value +\$123,500.00
Total Market Value \$140,700.00
Assessed Value \$140,700.00
Taxable Value \$0.00

Sale Information

Deed Type WARRANTY DEED
Sale Date 1997-05-21
Sale Price \$336,000.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LTS 1 THRU 20 BLK 146 TGW VAC 16TH ST ADJ AND VAC I AVE ADJ

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities		Acres	1.96		
Improvement 1 Attributes Summary					
Building Style	SINGLE FAMILY RESIDENCE				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55952



Jurisdiction: ANACORTES
Please contact the city of **ANACORTES** for ANACORTES zoning information.

Zoning Designation:

Parcel Number P55952 **XrefID** 3772-147-020-0005 **Quarter Section Township Range** 13 35 01

Owner Information
ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in IMap](#)

[Assessor's Parcel Map:](#)

[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$.00
Land Market Value +\$72,500.00
Total Market Value \$72,500.00
Assessed Value \$72,500.00
Taxable Value \$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LOT 20 BLK 147 VAC ALLEY & 1 TO 20

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities	SEW,WTR-P	Acres	1.15	
Improvement 1 Attributes Summary				
Building Style	COMMERCIAL REAL PROPERTY			
Year Built		Foundation		
Above Grade Living Area		Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area		Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55953



Jurisdiction: ANACORTES
Please contact the city of **ANACORTES** for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55953

XrefID

3772-148-020-0003

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

1600 20TH ST
Anacortes, WA (Jurisdiction, State)

Map Links

[Open in iMap](#)
Assessor's Parcel Map:
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$11,007,100.00
Land Market Value +\$148,100.00
Total Market Value \$11,155,200.00
Assessed Value \$11,155,200.00
Taxable Value \$0.00

Sale Information

Deed Type
Sale Date
Sale Price \$0.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LOT 20 BLK 148 1 TO 20 TGW VAC 18TH ST

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL		
Levy Code	0900	Fire District	
School District	SD103	Exemptions	School Owned
Utilities	SEW,WTR-P	Acres	2.35
Improvement 1 Attributes Summary			
Building Style	COMMERCIAL REAL PROPERTY		
Year Built	1900	Foundation	
Above Grade Living Area	146,762 Square Feet	Exterior Walls	
Finished Basement		Roof Covering	
*Total Living Area	146,762 Square Feet	Heat/Air Conditioning	
Unfinished Basement		Fireplace	
*Total Garage Area		Bedrooms	
Bathrooms			
For additional information on individual segments see Improvements tab			

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55954



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55954

XrefID

3772-149-020-0001

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103

2200 M AVE

ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)

Assessor's Parcel Map:

[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$.00

Land Market Value +\$108,400.00

Total Market Value \$108,400.00

Assessed Value \$108,400.00

Taxable Value \$.00

Sale Information

Deed Type

Sale Date

Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016

Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES VAC ST & ALLEY & LTS 1 TO 20 BLK 149

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities	SEW,WTR-P	Acres	1.72		
Improvement 1 Attributes Summary					
Building Style	COMMERCIAL REAL PROPERTY				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55955



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number P55955 **XrefID** 3772-150-017-0004 **Quarter** 13 **Section** 35 **Township** 01 **Range**

Owner Information
ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)
[Assessor's Parcel Map:](#)
[PDF | DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$.00
Land Market Value +\$54,300.00
Total Market Value \$54,300.00
Assessed Value \$54,300.00
Taxable Value \$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LOT 17 BLK 150 1 TO 17

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities	SEW,WTR-P	Acres	1.15		
Improvement 1 Attributes Summary					
Building Style	COMMERCIAL REAL PROPERTY				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55956



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55956

XrefID

3772-150-020-0009

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value \$.00
Land Market Value +\$9,500.00
Total Market Value \$9,500.00
Assessed Value \$9,500.00
Taxable Value \$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

ANACORTES LTS 18 TO 20 BLK 150

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities	SEW,WTR-P	Acres	0.20	
Improvement 1 Attributes Summary				
Building Style	COMMERCIAL REAL PROPERTY			
Year Built		Foundation		
Above Grade Living Area		Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area		Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55957



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55957

XrefID

3772-151-004-0007

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$.00
Land Market Value +\$9,000.00
Total Market Value \$9,000.00
Assessed Value \$9,000.00
Taxable Value \$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LOT 4 BLK 151 N 70' OF 1 TO 4

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL		
Levy Code	0900	Fire District	
School District	SD103	Exemptions	School Owned
Utilities	SEP,WTR-P	Acres	0.19

Improvement 1 Attributes Summary

Building Style	COMMERCIAL REAL PROPERTY		
Year Built		Foundation	
Above Grade Living Area		Exterior Walls	
Finished Basement		Roof Covering	
*Total Living Area		Heat/Air Conditioning	
Unfinished Basement		Fireplace	
*Total Garage Area		Bedrooms	
Bathrooms			

For additional information on individual segments see Improvements tab

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55958



Jurisdiction: ANACORTES
Please contact the city of **ANACORTES** for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55958

XrefID

3772-151-004-0106

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)**Map Links**

[Open in IMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value \$.00
Land Market Value +\$3,900.00
Total Market Value \$3,900.00
Assessed Value \$3,900.00
Taxable Value \$.00

Sale Information

Deed Type
Sale Date
Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

ANACORTES LOT 4 BLK 151 S 30' OF 1 TO 4

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities	SEP	Acres	0.08		
Improvement 1 Attributes Summary					
Building Style	COMMERCIAL REAL PROPERTY				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55959



Jurisdiction: ANACORTES
Please contact the city of **ANACORTES** for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55959

XrefID

3772-151-006-0005

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103

2200 M AVE

ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)

Assessor's Parcel Map:

[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$.00

Land Market Value +\$6,600.00

Total Market Value \$6,600.00

Assessed Value \$6,600.00

Taxable Value \$.00

Sale Information

Deed Type

Sale Date

Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016

Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LOT 6 BLK 151 5 & 6

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities	SEP,WTR-P	Acres	0.14		
Improvement 1 Attributes Summary					
Building Style	COMMERCIAL REAL PROPERTY				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55960



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55960

XrefID

3772-151-020-0007

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103

2200 M AVE

ANACORTES, WA 98221

Site Address(es)**Map Links**[Open in IMap](#)

Assessor's Parcel Map:

[PDF](#) | [DWF](#)**2015 Values for 2016 Taxes* Exemption**

Building Market Value \$.00

Land Market Value +\$12,800.00

Total Market Value \$12,800.00

Assessed Value \$12,800.00

Taxable Value \$.00

Sale Information

Deed Type

Sale Date

Sale Price \$.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016

Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LOT 20 BLK 151 7 TO 20

*Land Use	(680) EDUCATION SERVICES (SCHOOLS)		WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities	WTR-P	Acres	0.27	
Improvement 1 Attributes Summary				
Building Style	COMMERCIAL REAL PROPERTY			
Year Built		Foundation		
Above Grade Living Area		Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area		Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55961



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55961

XrefID

3772-152-020-0005

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 MAVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in IMap](#)
Assessor's Parcel Map:
[PDF](#) | [DWE](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$661,400.00
Land Market Value +\$70,900.00
Total Market Value \$732,300.00
Assessed Value \$732,300.00
Taxable Value \$0.00

Sale Information

Deed Type
Sale Date
Sale Price \$0.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LOT 20 BLK 152 1 TO 20 BUS BARN

Land Use	(680) EDUCATION SERVICES (SCHOOLS)	WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL		
Levy Code	0900	Fire District	
School District	SD103	Exemptions	School Owned
Utilities	WTR-P	Acres	1.50

Improvement 1 Attributes Summary

Building Style	COMMERCIAL REAL PROPERTY		
Year Built		Foundation	
Above Grade Living Area		Exterior Walls	
Finished Basement		Roof Covering	
*Total Living Area		Heat/Air Conditioning	
Unfinished Basement		Fireplace	
*Total Garage Area		Bedrooms	
Bathrooms			

For additional information on individual segments see Improvements tab

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P55963



Jurisdiction: ANACORTES
Please contact the city of **ANACORTES** for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P55963

XrefID

3772-154-010-0003

Quarter Section Township Range

13 35 01

Owner Information

ANACORTES SCHOOLS #103

2200 M AVE

ANACORTES, WA 98221

Site Address(es)**Map Links**[Open in iMap](#)

Assessor's Parcel Map:

[PDF](#) | [DWF](#)**2015 Values for 2016 Taxes* Exemption**

Building Market Value \$.00

Land Market Value +\$32,900.00

Total Market Value \$32,900.00

Assessed Value \$32,900.00

Taxable Value \$.00

Sale Information

Deed Type WARRANTY DEED

Sale Date 1997-05-21

Sale Price \$336,000.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016

Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

ANACORTES LOT 10 BLK 154 1 TO 10 TGW VAC ALLEY ADJ & VAC 16TH ADJ & VAC I AVE ADJ

*Land Use	(111) HOUSEHOLD, SFR, INSIDE CITY		WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities		Acres	1.16	
Improvement 1 Attributes Summary				
Building Style	SINGLE FAMILY RESIDENCE			
Year Built		Foundation		
Above Grade Living Area		Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area		Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P58053



Jurisdiction: ANACORTES
Please contact the city of ANACORTES for ANACORTES zoning information.

Zoning Designation:

Parcel Number

P58053

XrefID

3806-011-009-0008

Quarter Section Township Range

01 24 35 01

Owner Information

ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)**Map Links**

[Open in iMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* Exemption

Building Market Value \$.00
Land Market Value +\$15,600.00
Total Market Value \$15,600.00
Assessed Value \$15,600.00
Taxable Value \$.00

Sale Information

Deed Type WARRANTY DEED
Sale Date 1997-05-21
Sale Price \$336,000.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description Definitions

MUNK'S QUEEN ANN TO ANA LTS 3 TO 9 BLK 11 TGW VAC I AVE ADJ AND VAC ALLEY ADJ

*Land Use	(111) HOUSEHOLD, SFR, INSIDE CITY			WAC 458-53-030
Neighborhood	(6EL3PLND) ALL COUNTY EXEMPT PUBLIC LAND			
Levy Code	0900	Fire District		
School District	SD103	Exemptions	School Owned	
Utilities		Acres	0.62	
Improvement 1 Attributes Summary				
Building Style	SINGLE FAMILY RESIDENCE			
Year Built		Foundation		
Above Grade Living Area		Exterior Walls		
Finished Basement		Roof Covering		
*Total Living Area		Heat/Air Conditioning		
Unfinished Basement		Fireplace		
*Total Garage Area		Bedrooms		
Bathrooms				
For additional information on individual segments see Improvements tab				

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

Details for Parcel: P58054



Jurisdiction: ANACORTES
Please contact the city of **ANACORTES** for ANACORTES zoning information.

Zoning Designation:

[Excise Affidavits](#)

Document scans of excise affidavits

Parcel Number	XrefID	Quarter	Section	Township	Range
P58054	3806-012-010-0003	01	24	35	01

Owner Information
ANACORTES SCHOOLS #103
2200 M AVE
ANACORTES, WA 98221

Site Address(es)

Map Links

[Open in iMap](#)
[Assessor's Parcel Map:](#)
[PDF](#) | [DWF](#)

2015 Values for 2016 Taxes* [Exemption](#)

Building Market Value \$.00
Land Market Value +\$26,800.00
Total Market Value \$26,800.00
Assessed Value \$26,800.00
Taxable Value \$.00

Sale Information

Deed Type WARRANTY DEED
Sale Date 1997-05-21
Sale Price \$336,000.00

2016 Property Tax Summary

2016 Taxes will be available after 2/15/2016
Use the Taxes link above for 2015 taxes

* Effective date of value is January 1 of the assessment year (2015)

Legal Description [Definitions](#)

MUNK'S QUEEN ANN TO ANA LTS 1 TO 10 BLK 12 TGW VAC I AVE ADJ & VAC ALLEY ADJ

*Land Use	(111) HOUSEHOLD, SFR, INSIDE CITY			WAC 458-53-030	
Neighborhood	(6E2SCHL) ALL COUNTY EXEMPT SCHOOL				
Levy Code	0900	Fire District			
School District	SD103	Exemptions	School Owned		
Utilities		Acres	0.85		
Improvement 1 Attributes Summary					
Building Style	SINGLE FAMILY RESIDENCE				
Year Built		Foundation			
Above Grade Living Area		Exterior Walls			
Finished Basement		Roof Covering			
*Total Living Area		Heat/Air Conditioning			
Unfinished Basement		Fireplace			
*Total Garage Area		Bedrooms			
Bathrooms					
For additional information on individual segments see Improvements tab					

* Land Use codes are for assessment administration purposes and do not represent jurisdictional zoning. Please contact the appropriate planning department in your jurisdiction for land use questions.

* Total living area includes above grade living area and finished basement area.

* Garage square footage includes all garage areas; basement garages, attached garages, detached garages, etc.

Assessment data for improvements is based on exterior inspections. Please contact the Assessor's office if the information does not accurately reflect the interior characteristics.

EXHIBIT #3:

NOA & NOH USING OPTIONAL SEPA DNS



NOTICE OF APPLICATION & HEARING WITH OPTIONAL SEPA DNS:

Notice Is Hereby Given That An Application Was Made For The Following Proposal:

Request: The applicant has applied for a Conditional Use Permit & SEPA environmental review to permit the replacement and modernization of Anacortes High School and associated wetland buffer impacts. Additionally, the applicant has requested a Variance to exceed the maximum height requirement permitted in the underlying zone.

Applicant: Anacortes School District

File Number: CUP-2015-0006

Project Location: 1600 20th Street, Anacortes, WA

Date of Application: November 16, 2015

Date of Completeness: December 11, 2015

Public Comment Period: Any person may comment on this application by writing to the address below and/or by testifying at the public hearing. Staff will issue a recommendation on the project after the comment period ends on **December 30, 2015, at 5:00 pm.** Written comments on the proposal should be submitted before the end of the comment period but will be accepted until the close of the Open-Record Public Hearing.

Required Project Permits/Approvals: The following may be required in addition to the above: Civil Construction Plan approval, Building Permit Application Approval, & Department of Ecology Construction Permit

Preliminary Determination of Consistency: At this time, no determination of consistency with City of Anacortes plans, regulations, or standards has been made. At a minimum, this project will be subject to the following plans and regulations: the Comprehensive Plan; Anacortes Municipal Code (Zoning, etc.), Engineering Design and Building Standards.

SEPA Review: Based on the submitted application and available information, the City anticipates issuing an MDNS for this proposal and the optional DNS process as specified in WAC § 197.11.355 is being utilized. Consequently, this may be the only opportunity to comment on the environmental impacts of this proposal. This proposal may include mitigation measures under applicable codes, and the project review process may incorporate or require mitigation measures regardless of whether an EIS is prepared. A copy of the subsequent SEPA threshold determination for the proposal may be obtained upon request.

Existing Environmental Documents: SEPA Environmental Checklist, Critical Area Report, Cultural Resource Report, Traffic Report, & Geotechnical Report

Open-Record Public Hearing: An open-record public hearing will be held by the **Planning Commission at 6:00 PM on Wednesday, January 13, 2016, which is continued to 6:00 PM on Wednesday, January 20, 2016.** Planning Commission members will also conduct a **site visit at 3:00 PM on Wednesday January 13, 2016.**

Closed-Record Public Hearing: A closed-record public hearing to hear any appeals of the Planning Commission's recommendation and to make a decision on the application will be held by the **City Council at 6:00 PM on Tuesday, February 16, 2016.** City Council members will also conduct a **site visit at 3:00 PM on February 16, 2016.** Both hearings will be in City Council chambers located at 904 6th Street, Anacortes, WA.

How to become a party of record: You may become a party of record by submitting written comments, including a (USPS) mailing address, to the City of Anacortes PCED at the address listed below. E-mailed comments must include a return (USPS) mailing address in order for the sender to be considered a party of record. Questions about this proposal, requests to receive future notices of hearings and/or the decision, once made, and/or appeal procedures should be directed to the contact person listed below. The application and complete case file are available for review at the City of Anacortes PCED located at 904 6th Street, Anacortes, WA 98221. A decision on this application will be made within 120 days from the date of completeness.

For Project Information: Kevin Cricchio, AICP, Associate Planner; Phone: (360) 299-1969; Email: kevinc@cityofanacortes.org; City of Anacortes, P.O. Box 547, Anacortes, WA 98221

Date Issued: December 16, 2015

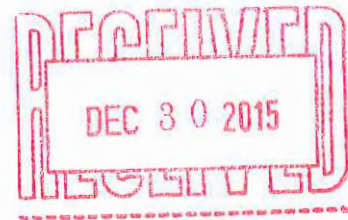
Publish: December 16, 2015

EXHIBIT #4:

PUBLIC COMMENTS RECEIVED

Dec. 30, 2015

City of Anacortes PCED
904 - 6th St.
P.O. Box 547
Anacortes, Wa. 98221
Attn: Kevin Cricchio, AICP, Associate Planner



re: Written Comments regarding the following proposal.

Applicant:

Anacortes School District

Project Location:

1600 - 20th St.

Anacortes, Wa. 98221

File Number: CUP-2015-0006

Applicant has Applied for:

-Conditional Use Permit (CUP)

-SEPA environmental review

Applicant has Requested a:

-Variance.

Written Comments submitted by:

Citizens for Responsible School Facilities

1201 4th St. - OFC.

Anacortes, Wa. 98221

matulus@gmail.com

Alan Johnson

1201 4th St. #8

Anacortes, Wa. 98221

360 293 5338

matulus@yahoo.com

Enclosed are written comments concerning the Anacortes High School (New AHS) project.

Respondents:

Citizens for Responsible School Facilities (CRSF), a non organized group of more than 15 Anacortes residents, some of whom live within the area of the proposed New Anacortes High School and Alan Johnson, as an individual person.

We strongly support the need for new Anacortes high School classroom buildings and athletic facilities. We all voted YES, for the ASD School Bond supporting these facilities.

We believe more planning and research needs to be done to improve the New Anacortes High School proposal.

We believe the proposed New Anacortes High School project does not meet student interests, community demands, City of Anacortes requirements for a Conditional Use Permit (CUP), City of Anacortes and/or State of Washington requirements for a SEPA Determination of Non-Significance (DNS) or for a Variance to the City of Anacortes Zoning ordinance.

Request:

We feel ASD has put the cart in front of the horse. This is the largest construction project in the history of the City of Anacortes.

ASD, in their hurry to start 'pouring concrete' has failed to properly plan for the future and integrate this project with the City of Anacortes Comprehensive Plan. This is especially ironic, since the city is currently in the middle of their major eight year Comprehensive Plan update.

ASD has failed, for the past quarter century, to embrace the Growth Management Act and participate in community planning in a transparent and responsible manner. ASD should not be rewarded with special favors, i.e. conditional uses and variances, for failing to fulfill their duty to comply with the law and spirit of the GMA.

The failure of ASD to participate in community planning has shown shown arrogance, a lack of understading of their role in the community, a lack of cooperation with other local governmental entities, a lack of respect for community planning volunteers, such as Planning Commission and Board of Adjustment members, city planning department employees and worst of all, a poor example to the students they are educating.

We feel the best path forward for ASD is to participate in the 2016 Comprehensive Plan Update and propose in a transparent and public forum, ASD plans for the next decade. This is the proper path and venue for ASD to work cooperatively with the City and Public to update the Comprehensive Plan, not only for the requirements of a new high school, but to plan for the future of other ASD properties. For example, Whitney school may be a parcel, ASD wishes to sell in the future. It is a school on a major State Highway, not a good location. However, it may be a great location for an assisted care facility, which would fetch ASD a healthy price, should it decide to sell this property (perhaps to purchase more property to expand the main ASD campus). This is the time and opportunity to provide input to the Comprehensive Plan, to propose changes.

We request the Anacortes Planning Commission to reject outright approval of the ASD plan and either deny the entire plan or approve the New AHS with conditions.

We encourage ASD to withdraw their proposal and resubmit a new, improved proposal, which will meet community standards and expectations.

We have proposed to the Planning Commission, two options:

I. Denial and Rejection.

+denial of the requested Conditional Use permit,

+rejection of the SEPA determination of non-significance and recommend a full SEPA

Environmental review,
+denial of the requested Variance

II. Approval with conditions.

The City may impose conditions on the Applicant, in return for granting a Conditional Use Permit and Variance. If the Planning Commission chooses to recommend approval of the ASD proposal, we believe conditions must be included in the recommendation. Said conditions may include, but are not limited to:

***Student Safety.**

Pedestrian improvements:

Sidewalks, not less than 5' wide, built and/or improved to city standards, shall be constructed, or maintained/improved, where they exist, on both sides of the following streets:

- 'T' Ave. from 20th St. to 22nd St.
- 'J' Ave. from 20th St. to 22nd St.
- 'K' Ave. from 16th St. to 22nd St.
- 17th St. from 'J' Ave to 'K' Ave.
- 20th St. from 'T' Ave to 'K' Ave.
- 22nd St. from 'T' Ave to 'K' Ave.

Street pedestrian crossing markings. All street pedestrian crossings within a two block radius of the New AHS shall be a visibly marked crossing, to city standards.

Lighted pedestrian crossings. Intersections with sight impediments, due to elevation differences, notably at 17th & 'K' and 19th & 'K', shall have manually operated pedestrian crosslights (similar to those on 'R' Ave.).

***Traffic improvements.**

Traffic improvements to city streets and private ASD roads.:

- 17th St. & 'K' Ave. intersection, to be reconstructed similar to the recently constructed intersection at 22nd & 'M' Ave.
- 19th St. & 'K' Ave. intersection, to be reconstructed similar to the recently constructed intersection at 22nd & 'M' Ave.
- 22nd St. & 'J' Ave. intersection, to be reconstructed similar to the recently constructed intersection at 22nd & 'M' Ave.
- 17th St. & 'J' Ave. intersection, to be reconstructed similar to the recently constructed intersection at 22nd & 'M' Ave. This intersection sits on the crest of a hill, creating sightline issues, travelling East-West.. This intersection shall be reconstructed to meet city sightline standards, to eliminate East-West sightline issues.
- The ASD private road, from the 17th & 'J' intersection, to the Rice Field stadium gate, shall eliminate all parking (except emergency vehicle parking), and shall be re-constructed to city street standards.
- ASD egress road, from Rice Field, South to 20th St., shall be built to city standards and permit two way access to the largest fire trucks the city currently uses. There shall be no parking along this access road. This access road sits on a steep slope. Said slope shall be engineered to meet city and DOE requirements.

- Rice Field intersection where parking, South access road and 17th St., ASD extension intersect, shall be built to accommodate a turning circle for the largest emergency vehicles, the city currently uses.
- Intersections with sight impediments, due to elevation differences, notably at 17th & 'K' and 19th & 'K', shall have flashing warning traffic lights, operable during school hours.
- Provide a bus stop for public transit (SKAT and Island Transit).

***Parking improvements.**

Additional off street parking. Require ASD to submit a detailed parking plan, including actual demand for parking.

Additional off-street parking is needed. ASD should be required to provide a minimum of 300 additional parking stalls than those proposed.

Remove 1 hour parking restrictions from neighboring streets, once adequate on site parking is provided.

***Environmental conditions.**

Smiley's Bottom filtration system. ASD should be required to construct a filtration system on the outflow pipe which carries stormwater from Smiley's Bottom, to the Guemes Channel.

Building Construction standards. ASD shall be prohibited from using any oil based products in any roofing applications installed on the new ASD.

Buildings must be Solar Energy engineererd. Buildings should be constructed to take advantage of passive solar principles. These include, but are not limited to: building positioning, window positioning, roof overhang shading and provision for future installation of solar panels.

Electric Space heating shall be limited to Solar or Heat Pump systems.

***Disabilities improvements.**

Transport system from Rice Field to the main ASD campus. A transport system, either an elevator or escalator, shall be constructed from the Rice Field level, to the main campus level. The simplest would probably involve a two elevator system. One from field level, to the stadium plaza and the other from the stadium plaza to the Williams Gym parking area. This would eliminate the need for the unsightly and unusable proposed switchbacks in that area.

***Bonding requirements that on-site parking and access roads, schednled to be completed during Phase 2, will actually be constructed.** The parking and access routes proposed for Rice Field will not be constructed until Phase 2. These are critical elements to the Phase 1 project. It is commonplace for bonding requirements to be imposed for future promises during construction projects. These items are at the end of the ASD timeline. When cost overruns occur, the items at the end of the timeline are those that are eliminated. These represent safety items for Phase 1, of which ASD is asking permission to use, before these requirements are constructed.

These bonding requirements will protect the city for additional costs the city will incur to insure safety at Rice Field Stadium project, if they are not completed.

***Require ASD to develop a Comprehensive Plan.** ASD should be required to show a plan for future student population increases through 2035. The ASD Comprehensive Plan should mirror the City of Anacortes Comprehensive Plan.

***Require an analysis of other sites for the New AHS.** Require an analysis of other sites considered by ASD and the community, for the New AHS. These sites and an analysis of why they were not chosen is critical in deciding whether a SEPA Determination of Non-Significance should be granted.

Issues supporting our Requests:

- Student Safety
- Traffic
- Parking
- Environmental conditions.
 - Critical Area Issues
 - Storm Water Disposal
- American Disabilities Act
- Financial Bonding requirements
- Failure to address Future growth and Land Use issues through the Comprehensive Plan update process
- Failure to consider site and siting alternatives

Discussion.

Project Size, Importance and Urgency.

This is the largest construction project in the history of the City of Anacortes. The impacts of this project will be felt for the next 60 – 80 years. It is critical that we, as a community, get this project right.

The City of Anacortes has written the Anacortes Municipal Code, so that major decisions such as these, are not decided solely by administrators and paid outside professionals but, by the citizens of our community through their Planning Commission and City Council. Vetting this project may be the most important role any of our Commissioners or Councilors will perform for our community. It is our hope that you put your best efforts forward to critically analyze this proposal and not just 'rubber stamp' approve it.

ASD will advocate for their project and the need to have it approved immediately. Anacortes High School needs replacing. It is not a good facility, but, this is not an emergency. The High School has not burned down.

This is such a large and important project, it is imperative, we get it right. More input and extra time to find solutions to student, neighbor and residents concerns, will only improve the quality of the project.

New AHS is larger.

ASD is 'selling' this project to the permitting agency as simply a replacement and modernization of the existing school, something akin to us remodeling our home. This proposal proposes to spend over 87 million dollars, add 14,000 square feet of classroom space, replace 100,000 square feet of old classroom space, with new 100,000 sq. ft. of space, which will presumably be more efficient and support more students, add a 3,000 square foot alternative school, build an artificial turf, year round

athletic field with 1,500 covered seats, yet ASD characterises these expansions as 'educational program enhancements' and not a substantial expansion.

Make no mistake, the New AHS proposal is an expansion of the existing AHS campus improvements. If they were not expanding, they would not need a Conditional Use Permit and a Variance.

AHS enrollment.

ASD will not dictate future enrollment. It will be dictated by population pressures in our district. It is clear, that ASD enrollment will increase substantially in future years. School enrollment and NGO youth organization enrollment in the younger grades (1 – 4), has increased by double digits. NAS Whidbey has begun a dramatic expansion of military and civilian personnel. Many of these families will choose to live in Anacortes. A new High School will bring students to our district. The great Puget Sound area is experiencing rapid growth in jobs and people. Anacortes will not evade this boom. The trend is clear, we will have a steadily increasing AHS student body over the next few decades.

If ASD has research to indicate future enrollment will be stagnant or decrease, that research should be a part of this application.

Issues:

Student Safety.

Student Safety is not mentioned in the CUP application, yet a CUP must "not conflict with the health and safety of the community".

Rice Field Stadium Complex:

The Rice Field proposal looks good on paper, but, once out at the site, the limitations and issues are obvious. It is a true square peg trying to fit into a round hole.

The location of Rice Field creates difficult and unsafe parking, traffic and evacuation conditions.

This proposed stadium is on a dead end, built on a steep hillside,

Limited parking and small traffic lanes will create vehicle congestion which will limit the ability of emergency vehicles to access the site.

The primary access to Rice Field will be from 17th St. This street ends, two blocks East of Rice Field, at 'J' Ave. When Brodriak Hall (450 seats proposed) or Williams Gym (1,600 seats proposed) are in use, this intersection will be impassable.

Once past 17th & 'J' Ave, the steeply sloping parking lot begins, two blocks and 40 feet, in elevation, higher than Rice field. Cars and emergency vehicles will have to drive through this parking lot to reach the field.

Once first responders reach Rice Field, their access will be extremely limited. There is no access to three sides (the two ends and the westerly 'visitors' side of the field), due to wetlands and steep elevation issues. The accessible side (easterly side, closest to the school) will have a narrow limited access, on the Northeast corner, due to the location of the stadium seating.

In the event of an evacuation, there will simply be no place to go, the only option would be up a steeply sloping grade towards the school buildings, through parked cars, traffic and minimal exits.

Make no mistake, over the projected 60 year period of use of this facility, we will have fatalities due to the lack of access for emergency vehicles and/or evacuation routes.

If this statement seems extreme, go back to the night of Dec. 5, 2013. AHS Boys basketball

hosted a game against the Bellingham High School team at Williams Gym. Two minutes into the game, a BHS player incurred a gruesome fractured leg. 9-1-1 was dialed and a Medic unit arrived at AHS within minutes. However, due to parking and traffic issues they could not get the guernsey in the gym for over 20 minutes. The game was stopped and the 400 fans watched in horror as the young man writhed in pain. This happened with only 400 spectators in attendance. What will happen at Rice Field, when we have 1,500 spectators, another 200 players, coaches, workers, volunteers and media – then add a n event or two at Brodniak and/or Williams gym? It is a recipe for disaster.

ASD will say, “don't worry, we have hired professionals to make it all work”.

Go to the site, visualize an injured player or two, visualize a fight in the stands, visualize a traffic accident in the parking lot, visualize any accident, they will happen. Visualize a big crowd or multiple events. This site is simply not safe. ASD has not addressed this safety issue in their proposal.

Pedestrian Access:

ASD and the City of Anacortes have a history failing to provide safe pedestrian access to ASD schools. Essentially, this means sidewalks for students. We have attached a survey of sidewalks leading to AHS. There are surprisingly few. Of those that do exist, most are too narrow, one has hidden stairs, some are gravel and weed walking paths, others randomly end mid block.

ASD has a policy of requiring Anacortes Middle School students to walk to the High School to take courses that are not offered at AMS, due to building constrictions. These classes will increase with the New AHS, thus creating more pedestrian activity between the two schools.

Nighttime community events create even more dangerous conditions, as pedestrians are forced to walk in the streets, in the dark, to access the school. This is exacerbated by the lack of on-site parking, requiring attendees to park off campus, in the surrounding neighborhoods.

The New AHS proposal does not address this problem. It is a common condition placed upon developers to construct roads and sidewalks to their developments. The City needs to either construct adequate sidewalks to all schools or require ASD to do so. Where ASD is proposing a major new project, such as this, it is clear, the city must require ASD to create a safe sidewalk system leading to the New AHS project.

Traffic.

Neighborhood Streets:

ASD traffic studies do not reflect:

- +the growth of traffic this project will help create
- +the growth of traffic due to increased enrollment
- +peak hour traffic
- +night time event traffic
- +projected increase in traffic resulting from the Anacortes Comprehensive Plan proposals to increase residential density in the adjoining neighborhoods.

The adjoining neighborhoods have long suffered due to a lack of planning for neighborhood traffic impacts.

One neighborhood, the 'Block 6 district', comprised of 17 housing units, has regressed into a slum where nobody wants to live, due to the traffic impact of the current AHS. The New AHS, with increased traffic impacts will only increase the undesirability of living in this transitional neighborhood.

Special Event Management:

ASD has not developed a Special Events Management plan for traffic spilling into the adjoining neighborhoods. This needs to be developed and/or conditioned as part of the building permit process.

Parking.

ASD has not researched actual parking demand for the AHS campus. This will not be a completed application until this study is done.

ASD has not provided research indicating how much impact the existing AHS campus has on adjoining neighborhood parking. Many of the adjoining streets have restricted parking, due to AHS use of those streets for parking for AHS employees and users. This will not be a completed application until this study is done.

ASD has not estimated how much parking will be needed I varous time and activity scenarios for the New AHS. Once, this study is complete, ASD would need to submit a mangement plan on how to accommodate the parking deamnd during peak times.

AMC Requirements:

AMC requires 1 parking space for every four fixed seats for Broadniak Hall (450 seats), Williams Gym (1,600 seats) and Rice Field (1,500 seats). The sum of these three facilities equals 3,550 seats. The AMC formula would require 888 parking stalls.

Broadniak Hall and Williams Gym are both being renovated to the extent that the AMC requires them to meet current parking requirements.

This is another issue that is better decided in the 2016 Copenhensive Plan Update.

Environmental conditions.

-Critical Area Issues

Smiley's Bottom Impacts:

+Wetland. ASD has failed to identify the impact of a year round multi purpose stadium on the Smiley's Bottom Wetland. This stadium is within spitting distance of the largest wetland in the City of Anacortes, yet, ASD says the stadium willhave 'no impact'. Common sense tells us otherwise.

+Wildlife. . ASD has failed to identify the impact of a year round multi purpose stadium, with stadium lights, on the Smiley's Bottom neighborhood.Wildlife. This stadium is within spitting distance of the largest Wildlife sanctuary in the City of Anacortes, yet, ASD does not address the issue

+Noise. ASD has failed to identify the Noise impact of a year round multi purpose stadium on the adjoining neighborhoods. This stadium will be the largest outdoor venue on Fidalgo Island, yet ASD does not address the issue of noise in the adjoining neighborhoods.

+Light. ASD has failed to identify the Lighing impact of a year round multi purpose stadium, with stadium lights, on the adjoining neighborhoods. This stadium will be the largest outdoor venue on Fidalgo Island, yet ASD does not address the issue of stadium lights in the adjoining neighborhoods.

Steep Slopes:

The steep slope that the Rice Field Stadium project will be built on area a critical area. This area needs special consideration and, if approved, special engineering, including seismic studies and engineering, to ensure the safety of the site.

-Storm Water Disposal

Roofing. No roofing materials should be constructed of any petroleum based products. ASD has shown their concern for polluted storm water run off by their decision to reroof Fidalgo Elementary and Mt. Erie elementary schools, as a part of this Bond package, with composition oil-based, non-recyclable products rather than environmentally friendly and recyclable metal roofing.

Storm Water Discharge. No discharge should be made into the Smiley's Bottom Wetland or onto any adjoining neighborhoods. The ASD plan permits discharges into the wetland and does not protect stormwater leaching into neighborhoods by providing a non-permeable barrier to protect adjoining neighborhoods.

Storm Water Plan. ASD has not sufficiently completed their Storm Water plan to allow the Planning Commission to make an informed decision on this issue.

American Disabilities Act.

ASD has tried to meet the legal requirements of the ADA, vis-a-vis the Rice Field Stadium complex portion of their proposal. ASD has failed to meet that standard. Worse, ASD has failed to meet the spirit of the ADA. This stadium will not be accessible, with this proposal.

The best and most cost effective way of meeting the standards and intent of the ADA would be to install a mechanized transportation system between the main AHS campus and the Rice Field Stadium Complex.

The simplest would probably involve a two elevator system. One from field level, to the stadium plaza and the other from the stadium plaza to the Williams Gym parking area. This would eliminate the need for the unsightly and unusable proposed switchbacks in that area.

Financial Bonding requirements.

The history of ASD building projects is (and indeed most folks, home construction projects) is the money runs out and items left at the end of the timeline, are eliminated. In houses, folks eliminate their beautiful hardwood floors and install carpet and vinyl. During the last AHS construction project, the money ran out and ASD eliminated the Athletic Field Stadium and the Vocational Buildings. This time the last items on the list are the Vocational Buildings, Cap Sante High School and the parking and road system. The city has no legal interest in the Vocational buildings or Cap Sante High School, however, they do have an interest in the road and parking system that is promised, as part of the Phase 2 project. It is not unreasonable for the city to require ASD to post a bond, to insure the road and parking system is completed.

Failure to address Future growth and Land Use issues through the Comprehensive Plan update process.

The reason you are reading this discussion, is ASD has failed to responsibly participate in the Anacortes Comprehensive Plan process, over the past quarter century. This is an inexcusable,

irresponsible and arrogant lack of participation on the part of one of the most important segments of our society.

The good news is, coincidentally, this is the perfect time for ASD to address this problem. The city is currently going through the most thorough Comprehensive Plan update, ever. ASD should be required to participate in this planning effort, for the benefit of ASD, the city and the community.

Ultimately, rejecting this Conditional Use Permit and Variance would force ASD to participate in the Comprehensive Plan Update. ASD would be forced to participate in long range planning of not only AHS, but, also the other ASD properties. That result would be the best result for the long term future of our schools.

Failure to consider site and siting alternatives

SEPA guidelines require ASD to consider alternate sites this project. ASD has not submitted their research on alternate sites, with less impact on the environment, to satisfy SEPA standards. This application is not complete until ASD has submitted research of alternate sites, for the New AHS complex.

Rebuttal to ASD Proposal (Nov. 15, 2011) Conditional use Permit

Project Narrative:

- New AHS will result in a capacity increase (see: "Discussion – New AHS is larger" - above).

AMC Criteria Responses:

a). 20th St. will not become a residential scaled pedestrian way. New AHS will be higher than the legal limit, 20th St., will incur more traffic due to 80 additional parking spaces. This area will also see more pedestrian traffic from AMS, due to additional AMS students walking to AHS for classes.

b) ASD states vehicular traffic will not increase. The New AHS will serve more students. The New AHS will provide more parking, which will encourage more cars. The New AHS will reconfigure Bus drop off zones, 150 feet further away from the main building entrance, which will encourage students to drive/ride in cars to school.

A new multi purpose all weather stadium will be used more than 300 days per year, as opposed to the existing Was Memeorial field, which ASD stated in pre-election statements is used only 20 days per year. This will dramatically increase traffic.

ASD provides no data to support their position that vehicular traffic would not increase.

There is a current pedestrian path that connects 17th St. to 20th St. The New AHS pedestrian path is not an addition, it is simply a prettier improvement on an existing path.

c.) The New AHS would have a dramatic and negative effect on the City of Anacortes largest urban wetland (aka 'Smiley's bottom). The environmental effect (see "Discussion – Environmental conditions" - above) from the Rice Field project will create a huge change and is non-compatible to this area.

d.) The height variance is not calculated accurately. It must be calculated using the elevation at the point of the stormwater discharge pipe, northwest of Rice field. This conditional use cannot be acted upon until ASD has provided the city with the proper average height of the building site.

e.) Health and Safety of the area is severely impacted by this proposal. Student safety, Traffic and Parking are discussed above.

Stormwater issues are discussed above.

Rice Field fire prevention, evacuation and medic services are not adequate to serve Rice Field, Williams Gym and Broadniak Hall. ASD has the burden of proving that road access and an ASD management plan will be sufficient to serve the maximum number of users, including all related personel, of these facilities. ASD has not provided a management plan.

f.) Traffic, vehicle and pedestrian, will severely impact the adjoining neighborhood. See above discussion.

New AHS details no new or improved sidewalks or roads to AHS. These are a must for student safety.

Rebuttal to ASD Proposal (Nov. 15, 2011) Building height Variance

Calculation of Average Natural Grade.

ASD does not specify how their average natural grade calculations were calculated.

Were these calculations made for Phase 1 and Phase 2, independently or together, and why?

What were the property parameters for these calculations and why?

Are the methods for calculating the natural grade calculations approved by the City of Anacortes?

Have these methods been used in other multi phase projects in the City of Anacortes?

A recommendation for a height variance cannot be made, without a firm understanding and agreement on what the average natural grade is, for each structure and/or for the entire project.

Calculation of Building Height

The proposal should have the building height for each structure, noted on the application.

The Applicant should describe how the height of each structure is calculated.

Rebuttal to response to AMC 17.10.040 B.1.

a.) Special conditions do not exist. This variance is for a conditional use in the P zone. These height limits were determined over a twenty year period of comprehensive plan discussion, including numerous public hearings.

The applicant has shown no special conditions, that were not in existence at the time of writing and/or reviewing the ordinance.

If the applicant wishes to change the requirements of this ordinance the proper time would be during the City of Anacortes Comprehensive Plan Update periods.

b.) The existing provision do not deprive the applicants of rights commonly associated by other properties in this title. This ordinance was written after those properties were constructed. This ordinance was written with the support of the adjoining neighborhood.

Applicant has many alternatives to this plan, both on-site and off-site. Applicant has not presented any evidence of considering other alternatives.

If the applicant wishes to change the requirements of this ordinance the proper time would be during the City of Anacortes Comprehensive Plan Update periods.

c.) Applicant states, it is not their fault, the site is so bad, we can only build higher. The applicant has many alternatives both off site and on site to build a structure within the existing rules. If the applicant wished to change the rules/requirements of this ordinance, they have had plenty of time.

The Applicant blames the energy code for building height. The energy code does not require higher buildings, it requires smarter buildings.

Request to reject the SEPA Determination of Non-Significance and request a full SEPA Environmental Review.

A full SEPA environmental review is required for this site, due to the danger of damage from a large year around, lighted Stadium project being built on a steep slope less than 100 feet above and adjacent the largest urban wetland in the City of Anacortes.

The applicant would have us believe this is just an improvement of amenities on an existin athletic field. This is an entirely new project. The use and impact of the Rice Field Stadium, with artificail turf, allowing year around activities, expanded Track and field areas, a 1,500 seat covered stadium and other amenities hardly compares to an old grass practice field.

SEPA guidelines require ASD to consider alternate sites this project. ASD has not submitted their research on alternate sites, with less impact on the environment, to satisfy SEPA standards. This application is not complete until ASD has submitted research of alternate sites, for the New AHS complex.

This will be the largest outdoor venue in Anacortes. It is on the boundary of the largest urban critical area in the city.

This project clearly requires a full SEPA environmental review.

Among the issues that need reviewing are:

Smiley's Bottom Impacts:

+Wetland. ASD has failed to identify the impact of a year round multi purpose stadium on the Smiley's Bottom Wetland. This stadium is within spitting distance of the largest wetland in the City of Anacortes, yet, ASD says the stadium willhave 'no impact'. Common sense tells us otherwise.

+Wildlife. . ASD has failed to identify the impact of a year round multi purpose stadium, with stadium lights, on the Smiley's Bottom neighborhood.Wildlife. This stadium is within spitting distance of the largest Wildlife santuary in the City of Anacortes, yet, ASD does not address the issue

+Noise. ASD has failed to identify the Noise impact of a year round multi purpose stadium on the adjoining neighborhoods. This stadium will be the largest outdoor venue on Fidalgo Island, yet ASD does not address the issue of noise in the adjoining neighborhoods.

+Light. ASD has failed to identify the Lighting impact of a year round multi purpose stadium, with stadium lights, on the adjoining neighborhoods. This stadium will be the largest outdoor venue on Fidalgo Island, yet ASD does not address the issue of stadium lights in the adjoining neighborhoods.

+Site and siting alternatives.

Cricchio, Kevin

From: michaelrudd11@frontier.com
Sent: Wednesday, December 23, 2015 10:05 PM
To: Cricchio, Kevin
Subject: Anacortes High School Replacement and Modernization

Attn: Kevin Cricchio, City of Anacortes Associate Planner
Re: High School Modernization plan

As the owners of the duplex located at 1705-1707, we have the following comments to make regarding the High School Modernization plan

Street parking on "J" Ave

The School district installed a planter on J Ave in front of our duplex located at 1705-1707 J Ave. The planter was installed without the City of Anacortes or the School district notifying us or working with us, the property owners, beforehand. As far as we know, the planter was installed without the proper City of Anacortes permits. The planter resulted in the loss of one parking space in front of our rental.

The City of Anacortes then painted the curb yellow between the planter and our duplex driveway. This painted yellow curb resulted in a loss of a second parking space in front of our duplex. Again, the City of Anacortes did not notify us, the property owners, beforehand of this action.

Third, the renters in our J Ave duplex, instead of parking in front of our duplex, used to park their car at the end of J Ave, on the north side of 17th street. It was a small parking area capable of handling only 4 cars with large concrete blocks at one end. But someone moved the large concrete blocks back toward 17th street, eliminating the extra parking. Once again, the City of Anacortes did not notify us, the property owners, beforehand of this action.

So now there is only one parking space on J Ave in front of our duplex. And the plans submitted to the City of Anacortes by the Anacortes School District seem to indicate that this parking space will be eliminated. We are opposed to the elimination of the last parking spot on "J" Ave in front of our duplex.

School officials have their heads in the sand

The Plans for the Anacortes High School replacement and modernization includes many more automotive parking spaces and easy and convent automotive access. It's like the Anacortes School officials are refusing to acknowledge the truth that the earth is suffering from climate change. The solution to climate change begins at home and the citizens of Anacortes would naturally expect our schools to lead the way by reducing the use of automobiles.

First, walking should be encouraged. The roundabout in front of Broadniak hall, for example, inhibits student and visitor access to the east side "J" Ave sidewalk. They have to cut right through the middle of the roundabout to access the sidewalk. Island View Elementary student cutting across the high school to the north side of town would have to face the roundabout twice a day. Instead, turn the roundabout into an open, walking area complete with trees, pavers and grass. Christmas LED lights in the trees along the paths leading to Broadniak hall would make the area magical at night. Pick up and drop off parking could be created on the north side of the gym.

Further, I believe a paved walkway should be established (with steps, if necessary) following J Ave between 17th Street and 16th Street as a condition of the School Modernization to help encourage walking.

Second, biking should be encouraged. The School District should be working with the City of Anacortes to designate certain streets around the school as “shared” and lowering the speed limits on those streets so that the young cyclists feel safe. A covered bike lock area should be established near the entrance of the school and not in some far off corner. The school should start out with modest goals with our enlightened teachers leading the way. Having 5 percent of the teachers and administrators ride a bike to school at least some of the time would be an admirable starting goal in reducing climate change.

Third, car pooling and public transit along with walking and biking would eliminate the need for most of the new parking lot that partly surrounds the new east building. The parking design submitted to the city was poorly thought out anyway. Students leaving the parking lot on 17th Street and too impatience to deal the traffic on 17th Street would now be able to make a quick right turn on J Ave, go through the roundabout, race through the parking lot and out the K Ave exit. Students who love to cruise will now be able to enter the parking lot at K Ave, drive around the parking lot and roundabout and exit J Ave and then go around the block and do it again. Get rid of it!! With the distraction of a busy parking lot gone, students, looking out the windows of their new campus, would see open, green spaces.

David and Michael Rudd
5607 Rosario Way
Anacortes, WA 98221

Up Lizards

AHS

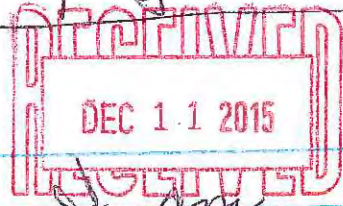
CRICHTO ALP

Attention - KEN

Property owner - 1413 19 St

1415 19 St

1815 K AVE



I am concerned about the K Avenue street from AHS. Our neighborhood is pretty quiet 1 school bus at 7:30 AM & approximately 6 cars per day.

The proposed street is unnecessary & costly to taxpayers.

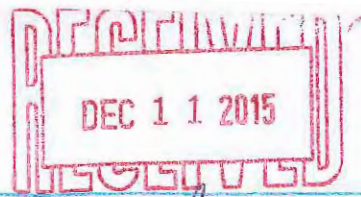
In the 60's AHS had a parking lot - road on the East side of the High School from 20-17th that worked well.

The 80's new AHS Construction brought a 20-17 road with only emergency access.

Now 2016 the East moving AHS road could be 20-17. Again - the curb is already out on 20th in center of football field.

Our neighborhood will change in many ways because of the new AHS: less sunlight - may change the dome draft of fire places,

(2)



I hopefully will not allow
parking on 19 between K & L
more noise.

We have been used
to 12 times a year use
of football field now there
will be 5 days a week
for 9 1/2 months - BIG
DIFFERENCE we are all
fine with the new
buildings & progress.

The road onto K One
from AHS is not
necessary. Our property will go
it will bring on new down
problem for us.

I have lived on 19 & K
for 44 years - 19 is
was a grand road when
we purchased our home
(moved to here from urban-
renewal) We did not
buy on 20 & 19 because of
school traffic etc.

Thank you for listening

293-5835-

Elaine J. Allen
over →

20

19 ST
18



EXHIBIT #5:

AGENCY & DEPARTMENT COMMENTS RECEIVED



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

*Bellingham Field Office • 1440 10th Street, Suite 102 • Bellingham, Washington 98225
(360) 715-5200 • FAX (360) 715-5225*

December 24, 2015

Kevin Cricchio
Anacortes Planning, Community & Economic Development Dept.
PO Box 547
Anacortes, WA 98221

RE: **LA File#** CUP-2015-0006
 DOE file# 201506291
 Applicant **Anacortes School District Marc Estvold**

Dear Mr. Cricchio:

Thank you for the opportunity to provide comments on the above referenced Determination. Based on review of the State Environmental Policy Act (SEPA) checklist associated with this Determination we offer the following comments:

Stormwater runoff can have a significant impact on water quality, introducing sediment and other pollutants into waters of the state. Such pollutants can impair or eliminate aquatic habitat and prevent such waters from having multiple beneficial uses (e.g., fishing, swimming, drinking, etc).

From the SEPA register, it appears that this project may be subject to one of Ecology's National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges.

NPDES Construction Stormwater General Permit

Information regarding the NPDES Construction Stormwater General Permit can be found at:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/>

NPDES Industrial Stormwater General Permit

Permit Coverage is necessary if the industrial activity at the proposed facility meets the following criteria:

- Industrial activities that:
 1. Are listed in 40 CFR Subpart 122.26(b) (14)

2. Discharge stormwater from the site into state surface waters or into storm drainage systems which discharge to state surface waters. (Surface waters may include wetlands, ditches, rivers, unnamed creeks, lakes, estuaries, marine waters).

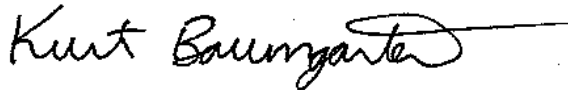
Information regarding the NPDES Industrial Stormwater General Permit can be found at:

<http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>

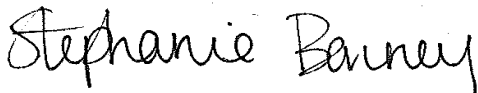
If you have questions about determining the need for NPDES coverage or you need information regarding applying for and implementing an NPDES please contact us.

Thank you for considering these comments from the Department of Ecology. If you have questions please call Kurt Baumgarten at 715-5210 or Stephanie Barney at 715-5233.

Sincerely,



Kurt Baumgarten, Water Quality Specialist



Stephanie Barney, Stormwater Inspector

kb:mr

cc: Anacortes School District, Marc Estvold
BFO SEPA File

Cricchio, Kevin

From: Lange, Steve
Sent: Wednesday, January 06, 2016 10:17 AM
To: Cricchio, Kevin; Measamer, Don
Cc: Shjarback, Eric; Buckenmeyer, Fred; Grage, Libby
Subject: PW Conditions for AHS
Attachments: PW Conditions to Plan 01-06-2016.doc

Kevin and Don.

Hard copy provided to Kevin

Steven Lange, Project Manager

O: 360.293.1920 | C: 360.661.3468

stevel@cityofanacortes.org

City of Anacortes Public Works Engineering Department

904 6th Street | P.O. Box 547

Anacortes, WA 98221

www.cityofanacortes.org

Standard Conditions for Public Works:

Paperwork:

1. A clearing and grading plan consistent with City requirements shall be submitted by the applicant for review and approval by the City of Anacortes Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site.
2. A Large Parcel Storm Water Plan and Water Quality Control Plan consistent with City requirements shall be submitted by the applicant for review and approval by the Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site.
3. Construction activities may require an NPDES Construction Storm Water Discharge Permit issued by the Department of Ecology prior to any construction activities taking place on or off-site.
4. Prior to any clearing\fill\grade work beginning, construction civil plans consistent with the City of Anacortes Engineering Development Standards, including but not limited to, Clearing and Grading Plan, Erosion Control Plan, Site utility\Infrastructure improvements Plan, Roadway Improvements Plan, Signage Plan, Street Lighting Plan and other plans and/or information required by the City Planning\Building and Public Works Departments shall be submitted for review and approval.
5. Engineering and Inspection fees in the amount of \$500.00, plus 2% of the total estimated construction cost shall be due upon civil plan approval. No construction activity is allowed until the construction plans are approved, all fees have been paid and a preconstruction conference held.
6. Prior to the final approval, all off-site infrastructure improvements shall be completed as required by the City of Anacortes Public Works Director and a 2-year Maintenance Bond in place. The 2-year Maintenance Bond is 10% of the actual construction cost.

Water:

7. Fire Hydrants are to be located as approved by the City of Anacortes Fire Chief. Fire flows shall be addressed in a manner acceptable to the Fire Chief and the City of Anacortes Public Works Department.
8. Water Main condition, per Matt and Don.

Site-Frontage:

9. Internal Improvements:
 - Driving path of travel shall be a minimum of 20-feet in width to meet Fire and Sanitation Department needs.
 - Parking stall widths and lengths shall be per the Engineering Standards.
 - Provide for covered bike parking for at least 50% of the bike parking stalls.

10. External to the proposed Campus area, shall provide for intersection improvements to provide for pedestrian safety:
 - To include, but not limited to, traffic calming measures to reduce the crosswalk distance between curbs, ADA compliant sidewalk ramps at each corner, crosswalk markings, 4-way stop with signs, possible at-grade intersections at certain locations.
 - 17th Street and K Avenue;
 - 18th Street and K Avenue;
 - 19th Street and K Avenue;
 - 20th Street and K Avenue;
 - 20th Street and J Avenue, possible at grade intersection;
 - 20th Street and I Avenue, and;
 - 17th Street and J Avenue
 - 6-foot wide minimum cement concrete sidewalk at the following locations:
 - West side of K Avenue, between 16th and 20th Streets;
 - North side of 17th Street, between K and J Avenues, and;
 - South side of 20th Street, between K and I Avenues.
 - Pedestrian scale lighting along the sidewalks adjacent to the school property.
11. For improved access to 12th Street, the Applicant will work with the Public Works Department to develop a plan for channelizing traffic on 17th Street to M Avenue. Especially during periods of busy traffic. The plan may include, but not limited to, signage, 4-way stops, Traffic circles at the intersections of L Avenue.
12. Improve the existing fire access road to the north parking lot off of 16th Street and J Avenue with 2-inch minimum asphalt overlay.
13. Street lighting shall be energy efficient and shall limit glare and/or emission of light downward to the street and front yard areas. Street lighting will be installed per PSE Schedule 52, Option "B". Lighting fixtures and design shall be approved by the Public Works Director. Shields may be necessary to reduce impacts to adjacent properties. Two street lights per intersection at the following locations:
 - 17th Street and K Avenue;
 - 18th Street and K Avenue;
 - 19th Street and K Avenue;
 - 20th Street and K Avenue;
 - 20th Street and J Avenue;
 - 20th Street and I Avenue, and;
 - 17th Street and J Avenue.

14. The City of Anacortes would like to continue discussions on partnering on improvements to access 12th Street from the High School Campus via K Avenue or M Avenue.
15. The City of Anacortes would like to continue discussions on a future Campus access road to D Avenue; this road would also access the Smiley's Bottom soccer fields.

Storm Drainage:

16. Storm water conveyance both on-site and off-site shall comply with City Storm drainage requirements.

Sanitary Sewer:

17. The on-site sewer conveyance and pump stations shall be considered private and be maintained by the Applicant.
18. The Applicant shall provide a downstream sewer analysis of the conveyance system to determine; 1) Sufficient capacity, and; 2) Potential deficiencies.

Cricchio, Kevin

From: Jackie Ferry <jferry@samishtribe.nsn.us>
Sent: Tuesday, December 15, 2015 7:17 AM
To: Cricchio, Kevin
Subject: RE: Anacortes High School Replacement & Modernization, Conditional Use Permit, Variance, & SEPA review; CUP-2015-0006

Hi Kevin,

At this time, we have no cultural resources concerns with this project.

Thanks,

Jackie

Jackie Ferry | Cultural Director and Tribal Historic Preservation Officer - Samish Indian Nation
2918 Commercial Ave | Anacortes, WA 98221-2738 | Monday - Thursday
Office: 360.293.6404 ext. 126 | Fax: 360.299.0790 | E-mail: jferry@samishtribe.nsn.us

From: Cricchio, Kevin [<mailto:kevinc@cityofanacortes.org>]
Sent: Monday, December 14, 2015 4:54 PM
To: Jackie Ferry; Kaehler, Gretchen (DAHP)
Cc: Measamer, Don
Subject: FW: Anacortes High School Replacement & Modernization, Conditional Use Permit, Variance, & SEPA review; CUP-2015-0006

12/14/15

Jackie,

Attached is the cultural resource review per your request. Thanks.

Kevin Cricchio, AICP
Associate Planner
Department of Planning, Community, & Economic Development
City of Anacortes
(360) 299-1969

From: Marc Estvold [<mailto:mestvold@comcast.net>]
Sent: Monday, December 14, 2015 4:52 PM
To: Cricchio, Kevin <kevinc@cityofanacortes.org>
Cc: 'Jackie Ferry' <jferry@samishtribe.nsn.us>; Measamer, Don <don@cityofanacortes.org>
Subject: RE: Anacortes High School Replacement & Modernization, Conditional Use Permit, Variance, & SEPA review; CUP-2015-0006

Kevin, please see attached.

I am shooting to have the resubmittal to you Wednesday, have just a few items to finish up.

Thank you

Marc

From: Cricchio, Kevin [<mailto:kevinc@cityofanacortes.org>]
Sent: Monday, December 14, 2015 4:10 PM
To: 'Marc Estvold' <mestvold@comcast.net>
Cc: 'Jackie Ferry' <jferry@samishtribe.nsn.us>; Measamer, Don <don@cityofanacortes.org>
Subject: RE: Anacortes High School Replacement & Modernization, Conditional Use Permit, Variance, & SEPA review; CUP-2015-0006

12/14/15

Marc,

Can you please forward to me the cultural resource review? This has been requested by Jackie below. Additionally, this is one of the items requested in my letter. Thanks.

Kevin Cricchio, AICP
Associate Planner
Department of Planning, Community, & Economic Development
City of Anacortes
(360) 299-1969

From: Jackie Ferry [<mailto:jferry@samishtribe.nsn.us>]
Sent: Monday, December 14, 2015 3:49 PM
To: Cricchio, Kevin <kevinc@cityofanacortes.org>
Subject: RE: Anacortes High School Replacement & Modernization, Conditional Use Permit, Variance, & SEPA review; CUP-2015-0006

Hi Kevin,

Can you send the cultural resources review?

Thanks,

Jackie

Jackie Ferry | Cultural Director and Tribal Historic Preservation Officer - Samish Indian Nation
2918 Commercial Ave | Anacortes, WA 98221-2738 | Monday - Thursday
Office: 360.293.6404 ext. 126 | Fax: 360.299.0790 | E-mail: jferry@samishtribe.nsn.us

From: Cricchio, Kevin [<mailto:kevinc@cityofanacortes.org>]
Sent: Thursday, December 10, 2015 3:35 PM

To: Storme, Roland; 'Glasow, Robert F.'; 'Clark, Dennis (DNR)'; 'Doug.Thompson@dfw.wa.gov';
'Bob.Fritzen@ecy.wa.gov'; Kaehler, Gretchen (DAHP); 'dalep@co.skagit.wa.us'; 'brandonb@co.skagit.wa.us';
'ddigges@skagittransit.org'; 'Colleen_Stinson@fws.gov'; 'Miller, Mark'; 'lcampbell@swinomish.nsn.us';
'thyatt@skagitcoop.org'; Christine Woodward; Jackie Ferry; 'sschuyler@UPPERSKAGIT.com';
'masmundson@nwcleanair.org'; 'jane.major@pse.com'; 'McCamant, Ted'; 'joanne.e.coughlin@ftr.com'; Development
Review Group

Subject: Anacortes High School Replacement & Modernization, Conditional Use Permit, Variance, & SEPA review; CUP-
2015-0006

12/10/15

**RE: Anacortes High School Replacement & Modernization, Conditional Use Permit, Variance, & SEPA review; CUP-
2015-0006**

Good afternoon everyone. Anacortes School District recently submitted for a Conditional Use Permit, Variance request, & SEPA environmental review for the replacement and modernization of Anacortes High School located at 1600 20th Street, Anacortes, WA.

Attached hereto is the application, narrative, SEPA checklist, site plan, and comment form. Due to file size limitations I have not attached everything to this email (i.e., critical area report, geotechnical report, traffic report, cultural resource review, etc.). Please let me know if you would like additional information not included in this email to you.

Please provide any comments /requirements to me concerning the subject application(s) by 5:00 PM December 30, 2015. Also attached is the notice of application and hearing with the upcoming scheduled public hearings. Thank you.

Kevin Cricchio, AICP
Associate Planner
Department of Planning, Community, & Economic Development
City of Anacortes
(360) 299-1969

EXHIBIT #6:

ISSUED SEPA MDNS



Anacortes Planning, Community & Economic Development Dept.

Permit Center

P.O. Box 547, Anacortes, WA 98221-0547

PH (360) 293-1907

Don Measamer, *Director of Planning, Community and Economic Development* FAX (360) 293-1938

STATE ENVIRONMENTAL POLICY ACT (SEPA)
Mitigated Determination of Non-Significance (MDNS)

PROJECT NAME:

Anacortes High School Replacement & Modernization

FILE NUMBER:

CUP-2015-0006

LANDOWNER & APPLICANT:

Anacortes School District, #103
2200 "M" Avenue
Anacortes, WA 98221

AGENT:

Marc Estvold, AIA, Project Manager
3302 Oakes Avenue
Anacortes, WA 98221

PROJECT ARCHITECT:

Hutteball & Oremus Architecture, Inc.
4010 Lake Washington Boulevard NE, Suite 320
Kirkland, WA 98033

PROJECT SURVEYOR:

Bush, Roed, & Hitchings (BRH), Inc.
2009 Minor Avenue East
Seattle, WA 98102

PROJECT LANDSCAPE ARCHITECT:

Weisman Design Group
2329 East Madison Street
Seattle, WA 98112

PROJECT BIOLOGIST:

Aqua-Terr Systems, Inc. (ATSI)
21993 Grip Road
Sedro-Woolley, WA 98284

PROJECT GEOTECHNICAL ENGINEER:

Associated Earth Sciences, Inc.
911 5th Avenue
Kirkland, WA 98033

PROJECT PLANNER:

Kevin Cricchio, AICP, Associate Planner
City of Anacortes
904 6th Street
Anacortes, WA 98221

SUBJECT PROPOSAL:

The applicant has applied for a Conditional Use Permit (CUP) & SEPA environmental review to permit a two (2) phase replacement and modernization of Anacortes High School and associated wetland buffer impacts. Additionally, the applicant has requested a Variance to exceed the maximum height requirement permitted in the underlying zone.

The project consists of the replacement of approximately 65% of the existing 154,956 square foot Anacortes High School and modernization of the remaining 35%. The existing gym/PE facility and Brodniak Theater will be modernized (approximately 55,000 square feet) and Rice Field will be upgraded to include new turf, a 1,500 seat partially covered stadium, and associated support facilities such as lighting, crew buildings, and parking /driveway areas. The rest of the high school (approximately 100,000 square feet) will be demolished and replaced with a new two-story building for a grand total of approximately 170,000 square feet. Associated site improvements include expanded vehicular parking, onsite bus loading /unloading areas, stormwater facilities, and utility relocation.

PERMITS REQUIRED:

The following permits /approval may be required in addition to the above: Building Permit Application Approval, Department of Ecology Construction Permit, & other applicable state and federal permits/authorizations.

EXISTING ENVIRONMENTAL DOCUMENTS:

SEPA Environmental Checklist, Critical Area Report, Compensatory Wetland Buffer Mitigation Plan, Cultural Resource Survey, Subsurface Exploration and Geotechnical Engineering Report, & Traffic Impact and Parking Analysis

PROJECT LOCATION:

The project site is located at 1600 20th Street, Anacortes, WA. The subject property is located in a portion of Section 24, Township 35 North, Range 01 East, Willamette Meridian.

SUBJECT PARCELS:

P31905, P31912, P31920, P31922, P31923, P31926, P55808, P55809, P55810, P55813, P55950, P55951, P55952, P55953, P55954, P55955, P55956, P55957, P55958, P55959, P55960, P55961, P55963, P58053, & P58054

SITE ACREAGE:

Cumulatively, the site is 87.6 ± acres.

ZONING DISTRICT:

Underlying Zoning District is Public Use (P) and Residential Medium Density (R3)

COMPREHENSIVE PLAN DESIGNATION:

Public Use and Residential Medium Density

CUT & FILL PROPOSED:

- 70,100 ± cubic yards of topsoil will be excavated
- 43,000 ± cubic yards of fill material

CRITICAL AREAS:

Wetland:

During June of 2015, Aqua-Terr Systems, Incorporated (ATSI) of Sedro Woolley, Washington prepared a Critical Area Report concerning the proposed replacement and modernization to Anacortes High School. This Critical Area Report was revised on December 10, 2015.

According to the revised critical areas report, a regulated wetland was identified on and adjacent to the subject property that is approximately 35 acres in size. The wetland was categorized as a Category III (3) wetland which per AMC § 17.70.340(2) has a 110-foot buffer from its delineated edge.

Additionally, on December 11, 2015, ATSI also prepared a Compensatory Wetland Buffer Mitigation Plan since impacts to the onsite wetland's buffer are proposed. Specifically, a portion of Rice Field and associated improvements that either are existing or proposed (i.e., score board, bleachers, lighting) are within the wetland's buffer. Since work within the wetland's buffer is unavoidable in this case, proposed mitigation listed therein and conditioned below will compensate for temporary, indirect, and direct impacts to the wetland's buffer.

According to AMC § 17.70.350(F) the required acreage replacement ratio for a Category III wetland is 2:1 which applies to the creation or restoration of in kind, onsite, and in the same category. According to AMC § 17.70.350(G)(1), "Impacts to wetland functions may be mitigated by enhancement of existing degraded wetlands and/or buffers. Applicants proposing to enhance wetlands must produce a critical area report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing wetland functions will be reduced by the enhancement actions."

According to the applicant's compensatory mitigation plan, wetland buffer impacts that will result from improvements to Rice Field include approximately 250 square feet of direct, permanent impacts. Additionally, 4,232 square feet of temporary impacts are proposed. Cumulatively, wetland buffer impacts are 4,482 square feet. Proposed compensatory mitigation however includes enhancing 30,000 square feet of wetland and wetland buffer with native trees and shrubs. The required replacement ratio of 2:1 stated above therefore has been exceeded and conformance with AMC § 17.70.350(F) has been met. The project has been conditioned within SEPA MDNS mitigation measures # 8 to 11 accordingly.

Geotechnical Report:

On June 22, 2015, Associated Earth Sciences of Kirkland, Washington, prepared a Subsurface Exploration and Geotechnical Engineering Report concerning the proposed replacement and modernization to Anacortes High School. According to the report, the project site contains several steep slopes that meet the definition of geologically hazardous areas per AMC § 17.70.190. Accordingly, the SEPA MDNS has been conditioned to address geotechnical requirements.

Cultural Resource Report:

On September 7, 2015, Drayton Archaeology of Bellingham, Washington, prepared a Cultural Resource Survey concerning the proposed replacement and modernization to Anacortes High School. Accordingly, no evidence of cultural resources was discovered however a condition was added to the SEPA MDNS in case of inadvertent discovery.

TRANSPORTATION:

During November of 2015, Transportation Solutions Incorporated (TSI) of Redmond, Washington, prepared a Traffic Impact and Parking Analysis concerning the proposed replacement and modernization to Anacortes High School. According to this report, TSI recommends several improvements to adjacent intersections and pedestrian connectivity by the addition of sidewalk, walk path, and ADA ramps. The SEPA MDNS has been conditioned accordingly.

LEAD AGENCY:

City of Anacortes' Department of Planning, Community & Economic Development. The lead agency for this proposal has determined that this project does not have a probable adverse impact on the environment provided that the conditions set out below are satisfied. An environmental impact statement (EIS) is not required under RCW § 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

MITIGATION MEASURES:

1. Security or construction fencing shall be installed at the project boundary's demarcating construction /clearing limits as required by the Planning and Public Works Departments.
2. All applicable permits shall be secured before any construction /grading activities begin onsite.
3. Best management practices (BMPs) shall be implemented during both demolition and construction activities.
4. The landowner /applicant shall obtain a National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharge as required by the State of Washington's Department of Ecology.
5. If any artifacts or human remains are found upon excavation, the Samish Indian Nation; the City of Anacortes' Department of Planning, Community, & Economic Development; the City of Anacortes' Police Department; and the State of Washington's Department of Archaeology and Historic Preservation (DAHP) shall be immediately notified and the work in the immediate area cease. Pursuant to RCW § 27.53.060 it is unlawful to destroy any historic or prehistoric archaeological resources. RCW 27.44 and § 27.53.060 require that a person obtain a permit from the Washington State Department of Archaeology and

Historic Preservations before excavating, removing, or altering Native American human remains or archaeological resources in Washington.

6. Wetland hydrology shall not be adversely impacted via stormwater discharge. The project wetland Biologist shall review proposed stormwater drainage plans and reports to confirm no adverse impacts to onsite wetlands.
7. Grading and construction drawings shall be reviewed by the project geotechnical engineer for consistency with the project geotechnical reports and engineering standards prior to any construction activity taking place onsite.
8. Buffer mitigation as described in the ATSI Compensatory Wetland Buffer Mitigation Plan dated December 11, 2015, shall be completed within the first planting season upon completion of the Rice Field Improvements and as recommended by the project biologist. Where mitigation is not completed within one (1) year of the Rice Field improvements, bonding shall be required in the amount of 150% of the cost /value required mitigation with completion of the mitigation plantings within two (2) of the completion of the Rice Field improvements.
9. To assure the success of the mitigation site, monitoring shall occur by the project biologist and/or a qualified biologist approved by the Planning Department, during and after plant installation periodically (spring and fall) and continue for a period of five (5) years. Monitoring reports shall be provided to the city Planning Department.
10. Vegetation performance standards shall be a minimum 50% cover by a minimum of nine (9) species total after three (3) years and 75% cover by a minimum of nine (9) species total after five (5) years. The percent cover will be determined by the project biologist and/or a qualified biologist approved by the Planning Department. Plant survival for installed vegetation is 100% after the first year. Plants that have not survived the first year are to be replaced in kind. For the years following, plants that have died shall be replaced in kind except when natural regeneration of native plants has filled the area. A qualified wetland biologist as approved by the Planning Department will need to confirm native plant regeneration.
11. The buffer mitigation "as built" per ATSI report dated December 11, 2015, Section 4.7, shall be completed and provided to the Planning Department for review for consistency with the Compensatory Wetland Buffer Mitigation Plan dated December 11, 2015, planting(s). Any modifications to the Compensatory Wetland Buffer Mitigation Plan prepared by ATSI on December 11, 2015, shall be approved by the Planning Department.
12. Development shall comply with the requirements of the Public Works Department including but not limited to:
 - A) Prior to the final approval, all off-site infrastructure improvements shall be completed as required by the City of Anacortes Public Works Director and a 2-year Maintenance Bond in place. The 2-year Maintenance Bond is 10% of the actual construction cost.
 - B) Internal Improvements shall include:

- Driving path of travel shall be a minimum of 20-feet in width to meet Fire and Sanitation Department needs.
 - Parking stall widths and lengths shall be per the Engineering Standards.
 - Provide for covered bike parking for at least 50% of the bike parking stalls.
- C) External to the proposed Campus area, the applicant shall provide for intersection improvements to provide for pedestrian safety as follows:
- To include, but not limited to, traffic calming measures to reduce the crosswalk distance between curbs, ADA compliant sidewalk ramps at each corner, crosswalk markings, 4-way stop with signs, possible at-grade intersections at certain locations.
 - 17th Street and K Avenue;
 - 18th Street and K Avenue;
 - 19th Street and K Avenue;
 - 20th Street and K Avenue;
 - 20th Street and J Avenue, possible at grade intersection;
 - 20th Street and I Avenue; and,
 - 17th Street and J Avenue;
 - 6-foot wide minimum cement concrete sidewalk at the following locations:
 - West side of K Avenue, between 16th and 20th Streets;
 - North side of 17th Street, between K and J Avenues; and,
 - South side of 20th Street, between K and I Avenues;
 - Pedestrian scale lighting along the sidewalks adjacent to the school property.
- D) For improved access to 12th Street, the Applicant will work with the Public Works Department to develop a plan for channelizing traffic on 17th Street to M Avenue. Especially during periods of busy traffic. The plan may include, but not limited to, signage, 4-way stops, & traffic circles at the intersections of L Avenue.
- E) Improve the existing fire access road to the north parking lot off of 16th Street and J Avenue with 2-inch minimum asphalt overlay.
- F) Street lighting shall be energy efficient and shall limit glare and/or emission of light downward to the street and front yard areas. Street lighting will be installed per PSE Schedule 52, Option "B". Lighting fixture's design and location shall be approved by the Public Works Director. Shields may be necessary to reduce impacts to adjacent properties. Two street lights per intersection at the following locations are recommended:
- 17th Street and K Avenue;

- 18th Street and K Avenue;
- 19th Street and K Avenue;
- 20th Street and K Avenue;
- 20th Street and J Avenue;
- 20th Street and I Avenue; and,
- 17th Street and J Avenue;

G) The on-site sewer conveyance and pump stations shall be considered private and be maintained by the Applicant.

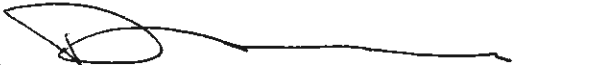
H) The Applicant shall provide a downstream sewer analysis of the conveyance system to determine; 1) Sufficient capacity, and; 2) Potential deficiencies.

The conditions listed above along with the City of Anacortes' code governing noise, land use, traffic, drainage, fire protection, and building will provide substantial mitigation of the aforementioned environmental impacts. The City of Anacortes' derives the authority to require mitigation from Chapter 18.04 of the Anacortes Municipal Code and the State Environmental Policy Act.

This MDNS is issued after using the optional MDNS process in WAC § 197.11.355. There is no further comment period on this MDNS.

RESPONSIBLE OFFICIAL: Don Measamer
POSITION/TITLE: Director of Planning, Community & Economic Development

ADDRESS: 904 6th Street, P.O. Box 547
 Anacortes, Washington 98221

DATE: January 7, 2016 **Signature:** 

For further information, contact the Anacortes Planning, Community, & Economic Development Department at (360) 299-1901. The issuance of this Mitigated Determination of Non-significance should not be interpreted as acceptance or approval of the proposal as presented. The City of Anacortes reserves the right to deny or approve said proposal subject to conditions if it is determined to be in the best interests of the city and/or necessary for the general health, safety and welfare of the public to do so.

ISSUED: January 7, 2016

SEPA APPEAL PROCEDURE:

Pursuant to the procedures adopted under AMC § 18.04.250, no administrative appeal of the SEPA threshold determination is provided. The SEPA threshold determination may be appealed to the Skagit County Superior Court under RCW § 43.21C.075 after the City's final action on the underlying action(s). *Requests to receive notices of decisions for this project proposal should be submitted to the contact person listed above.*

EXHIBIT #7:

TRAFFIC IMPACT & PARKING ANALYSIS



Anacortes School District High School Replacement and Modernization

Traffic Impact and Parking Analysis

November 2015

Prepared for:
City of Anacortes,
Anacortes School District
and
Hutteball & Oremus Architecture

Prepared by:
Transportation Solutions, Inc.
8250 - 165th Avenue NE, Suite 100
Redmond, Washington 98052

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SUMMARY AND CONCLUSIONS

The Anacortes School District is proposing a two phase renovation of the existing high school property to improve and add field event (Rice Field) and classroom space.

Construction of the Rice Field upgrades (Phase 1) is anticipated to begin toward to end of the 2015-2016 school year. Construction of the new high school facilities will begin after, but not necessarily following, the completed upgrades to Rice Field. The full renovation is anticipated to be complete by 2017.

With the renovation complete the student body is anticipated to increase from 838 students, 2014-2015 school year enrollment, to 852 new students. Future student enrollment equates to 8 new AM peak hour trips, 5 new afterschool peak hour trips and 3 new PM peak hour trips.

Local intersections are projected to operate within acceptable levels of service with the exception of 12th Street and K Ave, which operates at LOS F now during the afterschool and PM peak hour periods. In addition, the existing northbound shared left-through lane at 12th Street and M Ave operates with a volume-to-capacity ratio that exceeds 1.00.

New high school trips are not projected to significantly impact these two intersections and do not warrant high school-specific mitigation.

Recognizing that there are traffic deficiencies at both intersections, without the additional student enrollment, the following intersection improvement options were evaluated:

- Restricting the northbound and southbound approaches to K Ave to right-turns only while maintaining left turn movements off of 12th Street. This may be achieved by adding “c-curbing” on 12th Street to restrict northbound and southbound left and through movements from K Ave.
- Restriping M Ave to include dedicated left turn lanes. This would revise the existing northbound and southbound channelization from a shared left-through lane and a dedicated right turn lane to a dedicated left turn lane and a shared through-right lane. This improvement also supports traffic displaced at K Ave with the proposed turn restriction improvement.

It is recommended that the School District work with City of Anacortes on a plan to improve these intersections. Assistance by the School District for intersection improvements is voluntary.

The City of Anacortes is considering an extension of 20th Street from I Ave to D Ave to provide a new east-west connector and alternative to 12th Street. The improvement would shift existing and future traffic, including some high school-related traffic, to 20th Street. Review of new peak hour high school traffic impacts show that up to two new high school-related trips would impact an extension of 20th Street. The 20th Street extension is not needed to support new high school-generated traffic.

In addition to sidewalk, walk path and ADA curb ramp improvements near the high school, crosswalk striping is recommended to be explored at the stop-sign controlled legs at the following intersections:

- 17th Street and K Ave – currently an all-way stop controlled intersection, consider marked crosswalks on all approaches
- 19th Street and K Ave – the new school access, consider a marked crosswalk or other pedestrian feature across the new school access (the west leg of the intersection)
- 20th Street and I Ave – new school egress and proposed an all-way stop controlled intersection, consider crosswalks on the four stop controlled intersection legs

- 20th Street and J Ave – currently an all-way stop controlled intersection, consider adding marked crosswalks to the three unmarked intersection legs (the west, south and north legs of the intersection)
- 20th Street and K Ave – currently an all-way stop controlled intersection, consider marked crosswalks on all approaches

A traffic and parking management coordinator is recommended to support daily campus parking and circulation needs; oversee student loading and unloading operations, particularly off of 20th Street; and support and coordinate with the City, local police, emergency services, campus security and the neighborhood to coordinate special events.

The future parking supply is projected to increase from 318 on-campus parking stalls to 370 stalls for daily use on school days and to 403 stalls for use during major events. The campus parking will support typical day-to-day school-related activities.

The on-campus parking will support demand during special events. The parking supply, satisfies the City of Anacortes's parking requirements for "auditorium, assembly room, exhibition hall, theater, and commercial recreation" uses. Overlap between major events should be minimized and also off-campus and off-street School District parking areas may be used to support event demands. A traffic and parking management coordinator is also recommended to support event parking management and a special event transportation and parking plan.

INTRODUCTION

The purpose of this analysis is to address existing and project future traffic and parking impacts and recommendations for the proposed High School Replacement and Modernization. The analysis is organized to generally follow the City of Anacortes' Traffic Impact Analysis format.

High School Location

Anacortes High School is located at 1600 20th Street. **Figure 1** shows a vicinity map highlighting the current high school campus and surrounding school district properties. The campus includes both Anacortes High School and Cap Sante High School, the latter is an alternative school.

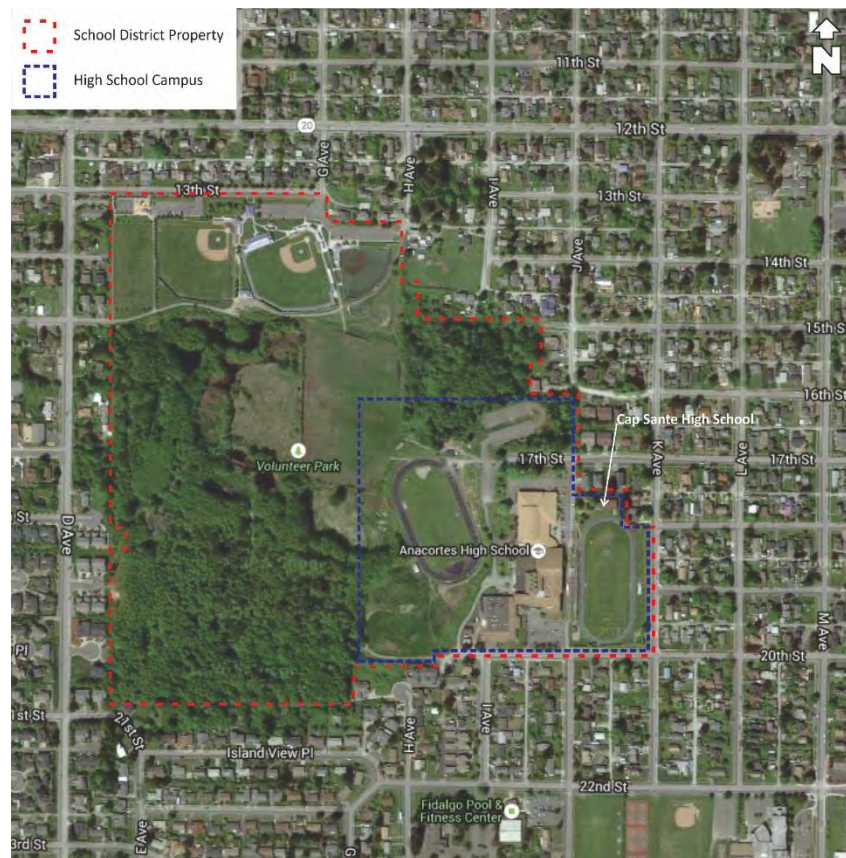


Figure 1: Vicinity Map

Project Description

Anacortes School District is proposing the High School Replacement and Modernization. The proposal is a two phase renovation of approximately 55,000 sq. ft. of existing building area (gymnasium and auditorium space) and construction of approximately 120,000 sq. ft. of new space for classrooms, common areas and associated site and athletic field improvements.

Phase 1: Rice Field Upgrade

Phase 1 includes upgrades to Rice Field, construction of Seahawks Stadium and Memorial Plaza, new stadium seating; concessions; additional parking; and improvements to school bus and event bus loading and unloading.

Construction on the Phase 1: Rice Field Upgrades is anticipated to begin toward to end of the 2015-2016 school year.

Phase 2: High School Renovation and Classroom Addition

Phase 2 includes renovations to existing campus buildings, facilities, parking and accesses. Phase 2 would scrape and regrade War Memorial Field to make way for construction of a new campus building and additional classroom space off of K Ave.

Construction of Phase 2: High School Renovation and Classroom Addition will begin after, but not necessarily following, the completed upgrades to Rice Field.

A conceptual site plan of the proposed campus renovation is provided as **Figure 2**.



Figure 2: Conceptual Site Plan

EXISTING CONDITIONS

The year 2014-2015 high school enrollment was 838 students attending both Anacortes High School and Cap Sante High School. High school student enrollment records are from the State of Washington Office of Superintendent of Public Instruction (OSPI).

Special events which are responsible for the highest impacts to parking and trip generation include:

- Varsity football games at War Memorial Field, which this year have averaged 1,265 attendees.
- Productions at Brodniak Theater, which has a seating capacity of 806 seats.
- Varsity basketball games and graduation at the gymnasium, which has capacity for about 1,600 seats.

The following provides an overview of existing conditions including access and circulation; school bus; parking; street network; and current local traffic operations.

Street Network

Arterial Road Network

12th Street (the SR 20 Spur) is an Urban-Principal Arterial with a Highway of Statewide Significance classification by WSDOT. Within Anacortes it is classified as a Principal Arterial. The SR 20 Spur connects SR 20, at the Anacortes City limits, to the Anacortes Ferry Terminal. 12th Street has one primary lane of travel in each direction and has a posted speed limit of 30 mph. 12th Street includes left turn pockets and left turn acceleration lanes at select intersections and sections with two-way left turn lanes. Along 12th Street signalized intersections located at D Ave, M Ave and Commercial Ave, with the remaining intersections having stop sign control at their minor approaches and free flow on 12th Street.

Street segments classified as Collector Arterials within the City, and near the campus, are: D Ave, south of 12th Street; J Ave, south of 22nd Street; K Ave, from 6th Street to 22nd Street; M Ave, south of 8th Street; 17th Street, east of D Ave and from J Ave to Commercial Ave; 20th Street, from J Ave to K Ave; and 22nd Street from J Ave to R Ave.

School Zones

School zones are roadway segments where vehicle speed are required to be reduced to 20 mph. Fixed and flashing school zones locations are summarized below.

Fixed School Zones (7 AM and 4 PM):

- 17th Street from K Ave to J Ave
- 22nd Street from K Ave to M Ave
- I Ave from 20th Street to 22nd Street
- J Ave from 17th Street to High School Limits
- J Ave from 20th Street to 22nd Street
- K Ave 150 feet north of 17th Street to 22nd Street

Flashing School Zones:

- 14th Street from M Ave to L Ave
- 22nd Street from M Ave to J Ave
- 41st Street from K Ave to N Ave
- J Ave from 22nd Street to 28th Street
- L Ave from 12th Street to 14th Street
- M Ave from 12th Street to 14th Street
- M Ave from 22nd Street to 24th Street

Study Area

The following intersections were included as part of the study area for this traffic analysis:

- | | |
|--------------------|-------------------------------------|
| 1. 12th St / D Ave | 10. 20th St / Campus Inbound |
| 2. 12th St / K Ave | 11. 20th St / J Ave/Campus Outbound |
| 3. 12th St / M Ave | 12. 20th St / K Ave |
| 4. 13th St / D Ave | 13. 20th St / M Ave |
| 5. 17th St / J Ave | 14. 22nd St / Island View Place |
| 6. 17th St / K Ave | 15. 22nd St / H Ave |
| 7. 18th St / K Ave | 16. 22nd St / J Ave |
| 8. 19th St / K Ave | 17. 22nd St / M Ave |
| 9. 20th St / I Ave | |

Figure 3 shows location of the study intersections. **Figure 4** shows the existing intersection controls.

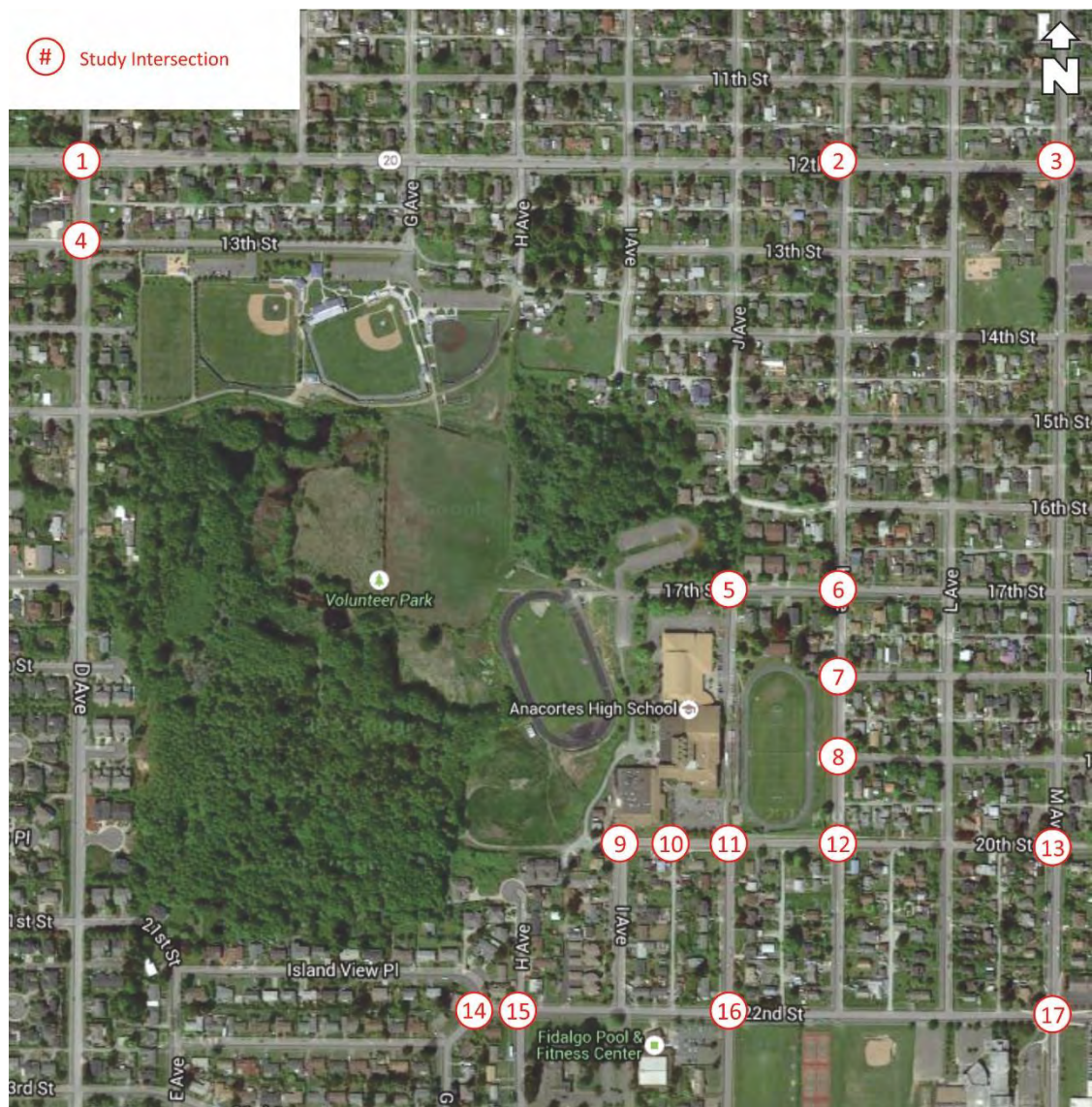


Figure 3: Study Intersection Locations

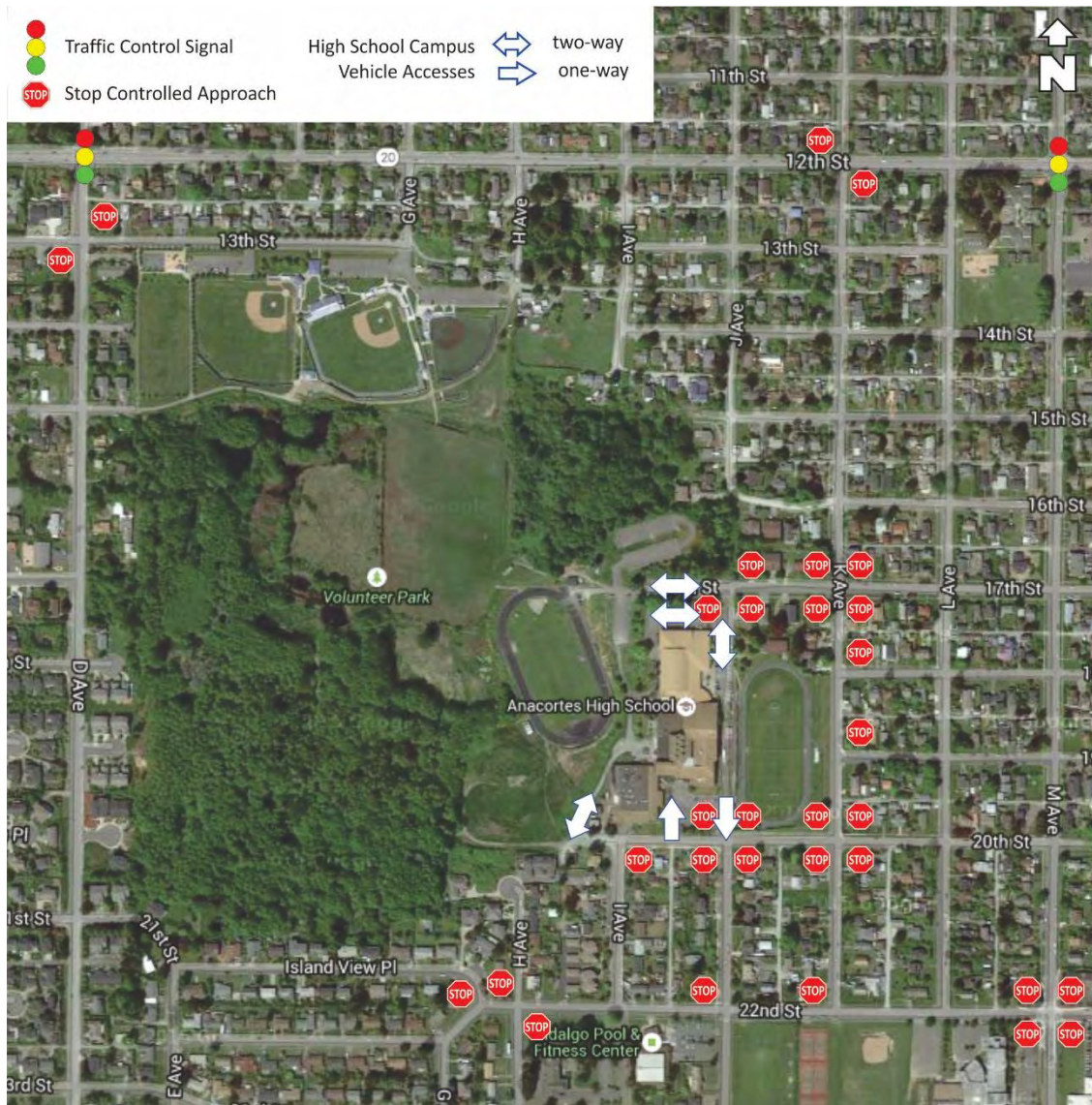


Figure 4: Existing Study Intersections Traffic Controls

Traffic Volumes

Vehicle, pedestrian, and bicycle volumes were collected at the study intersections listed above on June 2, 2015, when the 2014-2015 school year was still in session.

The volume data was collected between 7 AM and 9 AM and between 2 PM and 6 PM. This analysis reports “peak hour” volumes, or the peak one hour volume period between:

- 7 AM and 9 AM, “AM Peak Hour”, to capture vehicle traffic at the start of school;
- 2 PM and 4 PM, “Afterschool Peak Hour”, to capture vehicle traffic when school get out; and
- 4 PM and 6 PM, “PM Peak Hour”, to capture vehicle traffic during then traditional peak hour period when traffic volumes on the adjacent roadway are typically at their highest.

Figures 5, 6 and 7 show the AM, Afterschool and PM peak hour intersection vehicle turning movement volumes. Copies of the volume data are provided in the **Appendix**.

1		D AVE		
AM		12TH ST		
	2	4	1	
	←	↓	↘	
0	↗		↖	1
487	→	B	←	276
137	↘		↖	40
	←	↑	↗	
	63	2	122	
2		K AVE		
AM		12TH ST		
	6	8	2	
	←	↓	↘	
6	↗		↖	1
593	→	C	←	331
17	↘		↖	14
	←	↑	↗	
	4	9	14	
3		M AVE		
AM		12TH ST		
	15	29	9	
	←	↓	↘	
10	↗		↖	3
522	→	B	←	288
57	↘		↖	11
	←	↑	↗	
	36	21	40	
4		D AVE		
AM		13TH ST		
	1	182	0	
	←	↓	↘	
3	↗		↖	1
0	→	B	←	0
12	↘		↖	6
	←	↑	↗	
	5	185	3	
5		J AVE		
AM		17TH ST		
	0	0	0	
	←	↓	↘	
0	↗		↖	0
2	→	B	←	92
1	↘		↖	98
	←	↑	↗	
	3	0	25	
6		K AVE		
AM		17TH ST		
	68	45	5	
	←	↓	↘	
5	↗		↖	0
17	→	A	←	39
7	↘		↖	1
	←	↑	↗	
	86	18	3	
7		K AVE		
AM		18TH ST		
	0	55	2	
	←	↓	↘	
0	↗		↖	7
0	→	A	←	0
0	↘		↖	2
	←	↑	↗	
	0	102	0	
8		K AVE		
AM		19TH ST		
	0	55	2	
	←	↓	↘	
0	↗		↖	2
0	→	A	←	0
0	↘		↖	1
	←	↑	↗	
	0	98	1	
9		I AVE		
AM		20TH ST		
	0	0	0	
	←	↓	↘	
0	↗		↖	0
1	→	A	←	3
1	↘		↖	31
	←	↑	↗	
	4	0	80	
10		HS Inbound		
AM		20TH ST		
	0	0	0	
	←	↓	↘	
42	↗		↖	97
39	→	A	←	34
0	↘		↖	0
	←	↑	↗	
	0	0	0	
11		J AVE/ HS Outbound		
AM		20TH ST		
	10	58	54	
	←	↓	↘	
0	↗		↖	0
18	→	A	←	53
21	↘		↖	20
	←	↑	↗	
	68	0	14	
12		K AVE		
AM		20TH ST		
	28	28	1	
	←	↓	↘	
22	↗		↖	1
62	→	A	←	36
1	↘		↖	1
	←	↑	↗	
	5	76	6	
13		M AVE		
AM		20TH ST		
	11	121	0	
	←	↓	↘	
10	↗		↖	0
44	→	B	←	22
14	↘		↖	0
	←	↑	↗	
	15	95	0	
14		Island View PL		
AM		22ND ST		
	0	0	96	
	←	↓	↘	
0	↗		↖	46
107	→	B	←	42
0	↘		↖	0
	←	↑	↗	
	0	0	0	
15		H AVE		
AM		22ND ST		
	0	1	4	
	←	↓	↘	
1	↗		↖	1
202	→	B	←	86
1	↘		↖	4
	←	↑	↗	
	1	1	26	
16		J AVE		
AM		22ND ST		
	29	34	32	
	←	↓	↘	
5	↗		↖	37
145	→	B	←	69
16	↘		↖	34
	←	↑	↗	
	5	43	63	
17		M AVE		
AM		22ND ST		
	10	112	11	
	←	↓	↘	
15	↗		↖	6
89	→	B	←	84
76	↘		↖	32
	←	↑	↗	
	58	81	34	
ID		N-S Street Name		
AM		E-W Street Name		
	SB R	SB T	SB L	
	←	↓	↘	
EB L	↗		↖	WB R
EB T	→	LOS	←	WB T
EB R	↘		↖	WB L
	←	↑	↗	
	NB L	NB T	NB R	

Figure 5: 2015 Existing AM Peak Hour (7-9 AM) Volumes

1		D AVE		
After-		12TH ST		
School	5	2	4	
	←	↓	↖	
3	↗		↖	4
470	→	B	←	566
109	↘		↗	119
	←	↑	↗	
	105	9	113	
2		K AVE		
After-		12TH ST		
School	12	5	3	
	←	↓	↖	
9	↗		↖	5
566	→	F	←	673
15	↘		↗	28
	←	↑	↗	
	23	9	16	
3		M AVE		
After-		12TH ST		
School	28	43	11	
	←	↓	↖	
16	↗		↖	8
525	→	D	←	598
33	↘		↗	34
	←	↑	↗	
	85	58	73	
4		D AVE		
After-		13TH ST		
School	7	222	2	
	←	↓	↖	
4	↗		↖	5
1	→	B	←	0
6	↘		↗	7
	←	↑	↗	
	4	214	12	
5		J AVE		
After-		17TH ST		
School	0	0	0	
	←	↓	↖	
0	↗		↖	0
79	→	A	←	2
5	↘		↗	33
	←	↑	↗	
	1	0	81	
6		K AVE		
After-		17TH ST		
School	12	41	4	
	←	↓	↖	
46	↗		↖	5
57	→	B	←	14
65	↘		↗	7
	←	↑	↗	
	13	26	4	
7		K AVE		
After-		18TH ST		
School	0	104	4	
	←	↓	↖	
0	↗		↖	1
0	→	A	←	0
0	↘		↗	2
	←	↑	↗	
	0	42	0	
8		K AVE		
After-		19TH ST		
School	0	108	2	
	←	↓	↖	
0	↗		↖	1
0	→	A	←	0
0	↘		↗	1
	←	↑	↗	
	0	39	2	
9		I AVE		
After-		20TH ST		
School	0	0	0	
	←	↓	↖	
0	↗		↖	1
4	→	A	←	2
2	↘		↗	34
	←	↑	↗	
	5	0	34	
10		HS Inbound		
After-		20TH ST		
School	0	0	0	
	←	↓	↖	
11	↗		↖	38
27	→	A	←	36
0	↘		↗	0
	←	↑	↗	
	0	0	0	
11		J AVE/ HS Outbound		
After-		20TH ST		
School	15	20	23	
	←	↓	↖	
0	↗		↖	0
15	→	A	←	33
12	↘		↗	17
	←	↑	↗	
	26	0	18	
12		K AVE		
After-		20TH ST		
School	29	76	3	
	←	↓	↖	
20	↗		↖	2
35	→	A	←	18
6	↘		↗	7
	←	↑	↗	
	2	18	4	
13		M AVE		
After-		20TH ST		
School	1	139	3	
	←	↓	↖	
8	↗		↖	6
19	→	B	←	10
5	↘		↗	6
	←	↑	↗	
	2	173	5	
14		Island View PL		
After-		22ND ST		
School	0	0	46	
	←	↓	↖	
1	↗		↖	78
39	→	B	←	80
0	↘		↗	0
	←	↑	↗	
	0	0	0	
15		H AVE		
After-		22ND ST		
School	2	2	3	
	←	↓	↖	
2	↗		↖	5
77	→	B	←	147
6	↘		↗	28
	←	↑	↗	
	9	0	27	
16		J AVE		
After-		22ND ST		
School	5	16	15	
	←	↓	↖	
2	↗		↖	12
98	→	A	←	123
31	↘		↗	59
	←	↑	↗	
	39	13	76	
17		M AVE		
After-		22ND ST		
School	23	113	12	
	←	↓	↖	
24	↗		↖	15
120	→	B	←	111
44	↘		↗	47
	←	↑	↗	
	44	148	69	
ID		N-S Street Name		
After-		E-W Street Name		
School	SB R	SB T	SB L	
	←	↓	↖	
EB L	↗		↖	WB R
EB T	→	LOS	←	WB T
EB R	↘		↗	WB L
	←	↑	↗	
	NB L	NB T	NB R	

Figure 6: 2015 Existing Afterschool Peak Hour (2-4 PM) Volumes

1		DAVE		
		12TH ST		
	6	11	4	
	←	↓	↘	
1	↗		↖	1
354	→	B	←	639
93	↘		↗	132
	←	↑	↗	
	109	6	116	
2		K AVE		
PM		12TH ST		
	9	5	0	
	←	↓	↘	
6	↗		↖	4
477	→	F	←	804
28	↘		↗	27
	←	↑	↗	
	15	6	5	
3		M AVE		
PM		12TH ST		
	13	34	8	
	←	↓	↘	
5	↗		↖	8
413	→	C	←	722
30	↘		↗	35
	←	↑	↗	
	94	32	61	
4		DAVE		
PM		13TH ST		
	6	230	5	
	←	↓	↘	
7	↗		↖	4
0	→	B	←	0
7	↘		↗	10
	←	↑	↗	
	11	221	9	
5		J AVE		
PM		17TH ST		
	0	0	0	
	←	↓	↘	
0	↗		↖	0
8	→	A	←	6
1	↘		↗	47
	←	↑	↗	
	0	0	36	
6		K AVE		
PM		17TH ST		
	17	56	3	
	←	↓	↘	
21	↗		↖	9
14	→	B	←	18
15	↘		↗	3
	←	↑	↗	
	23	26	0	
7		K AVE		
PM		18TH ST		
	0	72	2	
	←	↓	↘	
0	↗		↖	3
0	→	A	←	0
0	↘		↗	5
	←	↑	↗	
	0	49	1	
8		K AVE		
PM		19TH ST		
	0	73	2	
	←	↓	↘	
0	↗		↖	2
0	→	A	←	0
0	↘		↗	0
	←	↑	↗	
	0	48	2	
9		I AVE		
PM		20TH ST		
	0	0	1	
	←	↓	↘	
0	↗		↖	0
1	→	A	←	8
0	↘		↗	14
	←	↑	↗	
	1	0	21	
10		HS Inbound		
PM		20TH ST		
	0	0	0	
	←	↓	↘	
11	↗		↖	38
11	→	A	←	22
0	↘		↗	0
	←	↑	↗	
	0	0	0	
11		J AVE/ HS Outbound		
PM		20TH ST		
	6	7	10	
	←	↓	↘	
0	↗		↖	0
9	→	A	←	28
2	↘		↗	13
	←	↑	↗	
	26	0	13	
12		K AVE		
PM		20TH ST		
	22	49	1	
	←	↓	↘	
13	↗		↖	3
11	→	A	←	12
2	↘		↗	1
	←	↑	↗	
	3	33	1	
13		M AVE		
PM		20TH ST		
	2	117	1	
	←	↓	↘	
4	↗		↖	3
7	→	B	←	4
3	↘		↗	3
	←	↑	↗	
	6	163	5	
14		Island View PL		
PM		22ND ST		
	0	0	54	
	←	↓	↘	
2	↗		↖	68
50	→	B	←	74
0	↘		↗	0
	←	↑	↗	
	0	0	0	
15		H AVE		
PM		22ND ST		
	2	2	7	
	←	↓	↘	
2	↗		↖	7
104	→	B	←	137
1	↘		↗	23
	←	↑	↗	
	3	2	22	
16		J AVE		
PM		22ND ST		
	6	7	8	
	←	↓	↘	
7	↗		↖	14
99	→	A	←	152
21	↘		↗	53
	←	↑	↗	
	15	23	62	
17		M AVE		
PM		22ND ST		
	31	96	4	
	←	↓	↘	
21	↗		↖	18
87	→	B	←	157
49	↘		↗	42
	←	↑	↗	
	60	126	67	
ID		N-S Street Name		
PM		E-W Street Name		
	SB R	SB T	SB L	
	←	↓	↘	
EB L	↗		↖	WB R
EB T	→	LOS	←	WB T
EB R	↘		↗	WB L
	←	↑	↗	
	NB L	NB T	NB R	

Figure 7: 2015 Existing PM Peak Hour (4-6 PM) Volumes

Traffic Operations

Intersections generally limit the capacity of a roadway by creating fixed locations where approaching vehicles either have to stop or yield. Level of service (LOS) is a measure of the stopped delay at an intersection. Levels of service are categorized from LOS A, representing little to no delay, to LOS F, representing excessive delay and gridlock.

The City of Anacortes's LOS threshold is D at stop controlled approaches to 12th Street (SR 20 Spur) and LOS C for Collector Arterial and Local Access Streets. The WSDOT LOS threshold for 12th Street is LOS D.

For signalized and all-way stop sign controlled intersections LOS is measured in terms of the average control delay for the intersection as a whole. For minor approach stop sign controlled intersections LOS is measured in terms of the delay for the worst controlled movement.

Table 1 summarizes the existing intersection LOS analysis. The LOS analysis is based on the 2010 Highway Capacity Manual methodology. A discussion of the analysis results follows.

Table 1: Existing Intersection Operations

Intersection	Control	Avg./ Mvmt.	7-9 AM Peak		2-4 PM Peak		4-6 PM Peak	
			LOS	Delay	LOS	Delay	LOS	Delay
1. 12th St / D Ave	Signal	Avg.	B	11	B	14	B	10
2. 12th St / K Ave	N/S Stop	NB	C	20	F	71	F	63
		SB	C	20	D	29	C	24
3. 12th St / M Ave	Signal	Avg.	B	13	D	38	C	29
4. 13th St / D Ave	E/W Stop	EB	B	11	B	12	B	13
		WB	B	14	B	13	B	15
5. 17th St / J Ave	All Stop	Avg.	B	11	A	8	A	8
6. 17th St / K Ave	All Stop	Avg.	A	9	B	9	B	8
7. 18th St / K Ave	WB Stop	WB	A	10	A	10	A	9
8. 19th St / K Ave	WB Stop	WB	A	10	A	10	A	9
9. 20th St / I Ave	NB Stop	NB	A	9	A	9	A	9
10. 20th / Campus In	Free	EBL	A	8	A	8	A	7
11. 20th St / J Ave	All Stop	Avg.	A	10	A	8	A	7
12. 20th St / K Ave	All Stop	Avg.	A	9	A	8	A	7
13. 20th St / M Ave	E/W Stop	EB	B	13	B	12	B	11
		WB	B	12	B	12	B	11
14. 22nd St / Island View	SB Stop	SB	B	13	B	10	B	10
15. 22nd St / H Ave	N/S Stop	NB	B	11	A	10	A	10
		SB	B	15	B	11	B	12
16. 22nd St / J Ave	All Stop	Avg.	B	11	A	10	A	9
17. 22nd St / M Ave	All Stop	Avg.	B	11	B	12	B	12

No LOS deficiencies were found during the AM peak hour period.

During the afterschool and PM peak hour periods, the northbound approach at the intersection of 12th Street at K Ave operates at LOS F with over a minute of delay. This is a result of northbound vehicles having to wait an extended period of time for a gap in the traffic volume on 12th Street to enter or cross the road. Critical vehicle movements are northbound left turns from K Ave to 12th Street and northbound through movements crossing 12th Street.

The westbound and eastbound left turn movements off of 12th Street to K Ave are not a major concern of this technical analysis. Left turn delay from the 12th Street to K Ave is less than 10 seconds during the peak hour analysis periods.

In the afterschool peak hour the eastbound and westbound through volumes on 12th Street exceed 1,200 vehicles and are directionally split 63% westbound and 37% eastbound. During this period, the northbound approach volume on K Ave is 23 lefts, 9 through, and 16 rights. In total the northbound approach volume makes up less than 4% of the intersection's total peak hour volume.

In the PM peak the eastbound and westbound through volumes on 12th Street also exceed 1,200 vehicles and are directionally split 54% westbound and 46% eastbound. During this period, the northbound approach volume on K Ave is 15 lefts, 6 through, and 5 rights. In total the northbound approach volume makes up less than 2% of the intersection's total peak hour volume.

Some of the traffic on K Ave can be attributed to the high school. The current vehicle volumes do not suggest a traffic control signal is warranted.

During the afterschool and PM peak hours the 12th Street and M Ave intersection operates sufficiently at LOS D. However, the intersection's northbound shared left-through movement has a volume-to-capacity (V/C) ratio greater than 1.00 during the afterschool and PM peak hours, suggesting that this movement is overcapacity.

There are no LOS impacts near the school campus. However, short surges in the morning and afterschool traffic do result in short periods of congestion on the local roadway.

Campus Access and Circulation

Student and staff parking lots to the north of the campus, parking for Cap Sante High School, and access to one single-family residential home are accessible via J Ave and 17th Street.

The main school entrance and primary student drop-off, staff and visitor area is located off of 20th Street, at the south end of the campus. An inbound-only campus access is located about midblock between H Ave and J Ave and an outbound-only campus access is located at J Ave and is about 150 feet to the east of the inbound access.

A "fire lane" is located to the west of the school building between Rice Field and the school. School vehicles were observed parked on the sides of fire lane.

Existing campus accesses and school bus loading and unloading are illustrated in **Figure 8**.

School Buses

School bus loading and unloading occurs on the north side of NE 20th Street. In total, there are 12 buses arriving and departing in the mornings and afternoons (10 regular route buses and 2 special needs buses).

Parking on the north side of 20th Street between J Ave and K Ave is restricted from 7 AM to 4 PM Mondays through Fridays for school buses.



Figure 8: Existing Campus Accesses and School Bus Load/Unload Locations

Public Transit

Skagit Transit Routes 49 and 410 serve Anacortes. Route 49 is a flex route that provides primary on-call service to areas around Island Hospital between 7:25 AM and 4:45 PM on weekdays and between 8:25 AM and 4:25 PM on Saturdays.

Route 410 provides general service along SR 20 Spur between March Point Park and Ride and the Anacortes Ferry Terminal. The nearest transit stop is on 12th Street at H Ave. Route 410 provides weekday service between 6:40 AM and 7:40 PM and Saturday service between 8:06 AM and 5:35 PM.

Walk Routes

Figure 9 highlights the existing walking routes. Marked crosswalks are on the east leg of 20th Street and J Ave and on the west and south legs of 17th Street and J Ave.

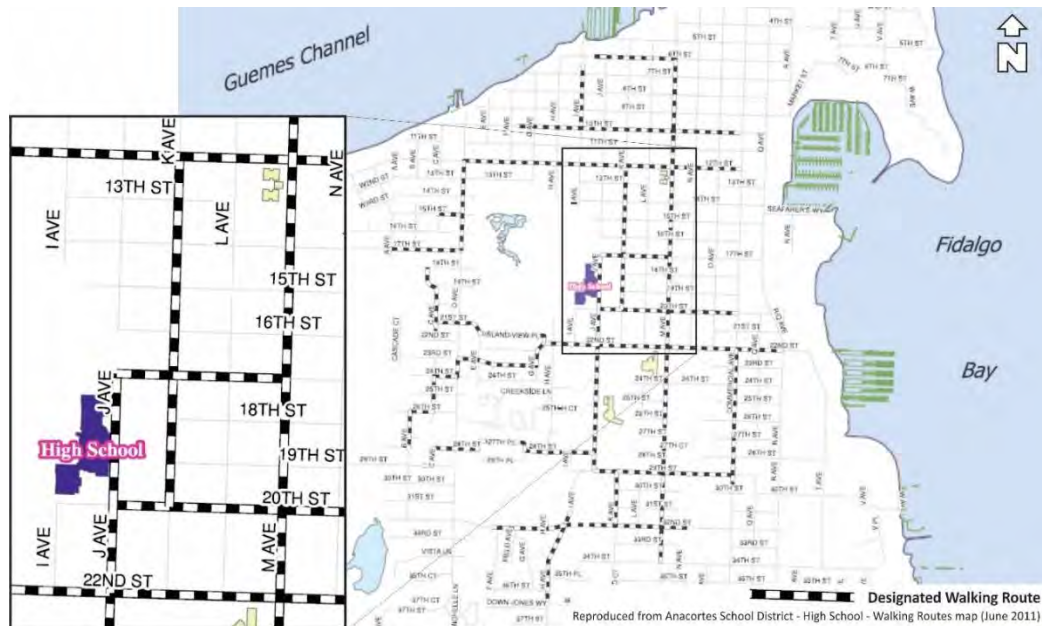


Figure 9: High School Walking Routes

Parking

On-Campus

Figure 10 includes an aerial highlighting the existing on-campus parking areas. There are 318 existing on-campus parking stalls. The total on-campus parking supply also includes 11 accessible stalls. During the 2014-2015 school year there were 215 student parking passes issued.

Eight on-campus parking stalls are reserved for Cap Sante High School and are located in the northeast parking area off of J Ave and adjacent to Cap Sante High School, near Memorial Field. Also, there are three marked stalls fronting the Career and Technical Education (CTE) classroom off of 20th Street. The off-street area fronting this classroom often includes more than three parked vehicles.

A few student and staff vehicles were also observed parked in unmarked within the student lots at the north end of the campus and along the “fire lane” behind the school building. Unmarked parking was not documented within the existing parking supply.

Off-Campus

School District property extends to the parking lots north of the ball fields off of 13th Street; however, no high school-related vehicles were observed parking here on a regular basis.

Student-vehicles were also observed parked in the off-street lots at Fidalgo Pool and Fitness Center, United Methodist Church, and Anacortes Senior Center properties located south of 22nd Street between H Ave and J Ave. High school administration and campus security periodically receives complaints of a few students encroaching on these properties.

The City of Anacortes established a residential parking zone (RPZ) to limit high school parking encroaching on the local streets surrounding the campus. The RPZ limits on-street parking to one hour between 7 AM and 3 PM on days when Anacortes High School is in session, with exceptions for residential and guest permits. Permits are issued through the Anacortes Police Department.



Figure 10: Existing On-Campus Parking

The RPZ is applies to the following street segments:

- 17th Street from J Ave to K Ave;
- I Ave and J Ave between 20th Street and 22nd Street;
- 20th Street between H Ave and K Ave;
- K Ave between 17th Street and 22nd Street; and
- J Ave between 18th Street and 17th Street.

Special Events

On-campus and off-campus parking was reviewed during the September 9, 2015 varsity football game. In general, all of the on-campus parking lots, with the exception of the northern-most parking lot, which was 90% empty, were full for the 7:00 PM game. Also, student vehicles were observed parked in the center aisle in the parking lot directly north of the gymnasium. Home varsity football game attendance averaged 1,265 persons for the current school year.

Groups of events goers were observed walking from the residential homes surrounding the campus, while others were observed parking on streets within proximity of the campus. In general, the majority of persons attended the game as a group and carloads were generally occupied by 3-5+ individuals.

Safety

Crash records were obtained from WSDOT from 2010 through 2014 for the study area. A summary of the reported crashes is provided in **Table 2**.

In total, there were 65 crashes reported within the study area over the past five year period for an average of 13 per year. No fatalities were reported and 60% of the reported crashes resulted in property damage only.

Table 2: Crash History (2010-2014)

Location	Crashes					Crashes per Year	Property Damage Only	Resulted in a Reported Injury
	2010	2011	2012	2013	2014			
12th St / D Ave	1	1	2	2	3	1.8	4	5
12th St from D Ave to J Ave ¹	2	2	3	2	2	2.2	8	3
12th St from J Ave to K Ave	4	1	0	1	1	1.4	5	2
12th St / K Ave	1	1	2	0	1	1.0	2	3
12th St from K Ave to M Ave	1	1	1	3	2	1.6	4	4
12th St / M Ave	1	4	1	3	1	2.0	5	5
17th St / K Ave	1	1	0	1	2	1.0	4	1
17th St east of K Ave	0	0	1	0	0	0.2	1	0
18th St east of K Ave	0	0	0	1	0	0.2	1	0
20th St / I Ave	1	0	0	0	0	0.2	1	0
22nd St / I Ave	0	0	0	0	1	0.2	1	0
22nd St from I Ave to J Ave	1	0	0	0	0	0.2	1	0
22nd St / K Ave	0	0	0	0	1	0.2	0	1
K Ave north of 16th St	0	0	0	0	1	0.2	0	1
K Ave from 19th St to 20th St	0	0	1	0	0	0.2	0	1
K Ave from 20th St to 22nd St	0	0	1	0	1	0.4	2	0
Total	13	11	12	13	16	13.0	39	26

1. Includes J Ave

The majority (74%) of the crashes involved light trucks, which include panel trucks, pickups and large vans. Rear-end (49%), entering at angle (15%) and parked vehicle (11%) crash-types made up the majority of the total crashes recorded.

Of the 65 total crashes reported 18 occurred on days when school was in session and within one of the peak analysis periods: 7-9 AM, 2-4 PM, or 4-6 PM. Seven occurred in the 7-9 AM period, seven in the 2-4 PM period and four in the 4-6 PM period.

At 12th Street and K Ave only one of the five reported crashes involved a vehicle entering 12th Street from K Ave. This crash occurred within the 4-6 PM period in January of 2010.

At 17th Street and K Ave five total crashes were reported and only one resulting in a reported injury. Four of the five crashes involved vehicles entering the intersection, the other related to a crash with a parked vehicle. One crash was reported within the 2-4 PM period (January 2013) and the other within the 4-6 PM period (May 2014).

One crash was reported at 20th Street and J Ave in 2010 during the 7-9 AM period. The crash was a sideswipe between and light truck and car.

FUTURE CONDITIONS

The high school renovation is anticipated to be complete by 2017.

Construction Phasing

Phase 1: Rice Field Upgrades

Rice Field upgrades are anticipated to start next year. Rice Field will include 1,500 fixed seats and improved field access, construction of Seahawks Stadium and Memorial Plaza, concessions and some field parking.

Typically, there are between four and five varsity home games per year. For the current school year, home varsity football games averaged 1,265 attendees. High school enrollment is not projected to significantly increase in the near future; and as such, varsity football attendance is also not anticipated to significantly increase from current attendance levels.

As part of Phase 1, the “fire lane”, located to the west of the existing campus building, is proposed to be modified to allow for on-campus school bus loading and unloading and parking. School bus access will be off of 20th Street.

Phase 2: High School Renovation and Classroom Addition

Following Phase 1, existing facility and classroom upgrades are proposed. Also, a new high school building will be constructed on War Memorial Field, and as such all existing field events will shift to the upgraded Rice Field.

Brodniak Theater and the high school gymnasium are being upgraded; however, their seating capacities are not proposed to increase. Graduation, which is currently held in the gymnasium, will move to Rice Field with all of the renovations complete.

The future on-campus parking supply with Phase 2 complete will increase to 403 total stalls. New high school accesses are proposed off of K Ave at 19th Street and off of 20th Street at I Ave. The existing campus ingress will be vacated along with improvements to circulation and additional parking off of 20th Street.

Trip Generation

High school student enrollment projections from the OSPI project a high school student enrollment of 852 students at Anacortes High School and Cap Sante High School by year 2020. This is a 14 student increase from the current (2014-2015) high school student enrollment (838 students) for the School District.

Existing year 2014 vehicle volumes collected at the campus accesses at 17th Street and J Ave and on 20th Street concludes that the existing campus generates:

- 487 AM peak hour trips, 329 in and 149 out
- 303 afterschool peak hour trips, 85 in and 218 out
- 170 PM peak hour trips, 102 in and 68 out

The representative peak hour trip rates are summarized below and were computed by dividing the peak hour trips by 838 existing peak hour students:

- 0.58 AM peak hour trips per student, 69% in and 31% out
- 0.38 afterschool peak hour trips per student, 28% in and 72% out
- 0.21 PM peak hour trips per student, 60% in and 40% out

The corresponding future trip generation is summarized below and was computed by multiplying the peak hour trips rates by 852 future students:

- 495 total AM peak hour trips, 342 in and 153 out, with 8 new AM peak hour trips
- 321 total afterschool peak hour trips, 94 in and 227 out, with 5 new afterschool peak hour trips
- 183 total PM peak hour trips, 113 in and 70 out, with 3 new PM peak hour trips

Figures 11-13 illustrate the new trip distribution and assignment of high school generated trips.

Street Network

The 2016-2021 City of Anacortes Transportation Improvement Plan, Anacortes Comprehensive Plan, and WSDOT do not identify any planned improvements in the vicinity of the high school campus between now and full renovation of the campus. Anacortes staff has indicated that in the far term they are contemplating an extension of 20th Street between J Ave and D Ave. New high school trip impacts to the 20th Street extension are addressed later in this study.

With the proposed renovation a new campus access is proposed as the west leg of 19th Street and K Ave. This new four-legged intersection is proposed to be stop sign controlled eastbound, from the campus, and westbound, as current and from the 19th Street approach.

Additionally, the renovation will reconfigure the existing student pick-up and drop-off and visitor and staff parking area off of 20th Street will be reconfigured with inbound access at the J Ave intersection and outbound egress at I Ave. It is assumed that the I Ave intersection will be all way stop sign controlled. The existing inbound driveway will be removed.

Figure 14 illustrates the future study intersection traffic controls.

Traffic Operations

Future Baseline Conditions; Future without New High School Traffic

Future baseline conditions represent traffic conditions with no new high school-generated trips. Future baseline condition include non-high school-related traffic growth projected between now and completion of the full campus renovation by 2017.

The future study area traffic conditions were forecast utilizing information from the Anacortes Comprehensive Plan. Traffic growth, not related to the high school, on local roadways is not project to be significant in the near term; and thus, the existing 2015 volumes were factors up by a 0.50% annual growth rate. The growth rate was applied to the existing study area traffic volumes to project future baseline conditions.

The future baseline conditions includes the proposed modifications to the existing and new campus accesses. Existing high school trips were redistributed to the new inbound and outbound campus accesses off of 20th Street and to the new campus access off of K Ave.



Figure 11: AM Peak Hour New Trip Distribution and Assignment



Figure 12: Afterschool Peak Hour New Trip Distribution and Assignment



Figure 13: PM Peak Hour New Trip Distribution and Assignment

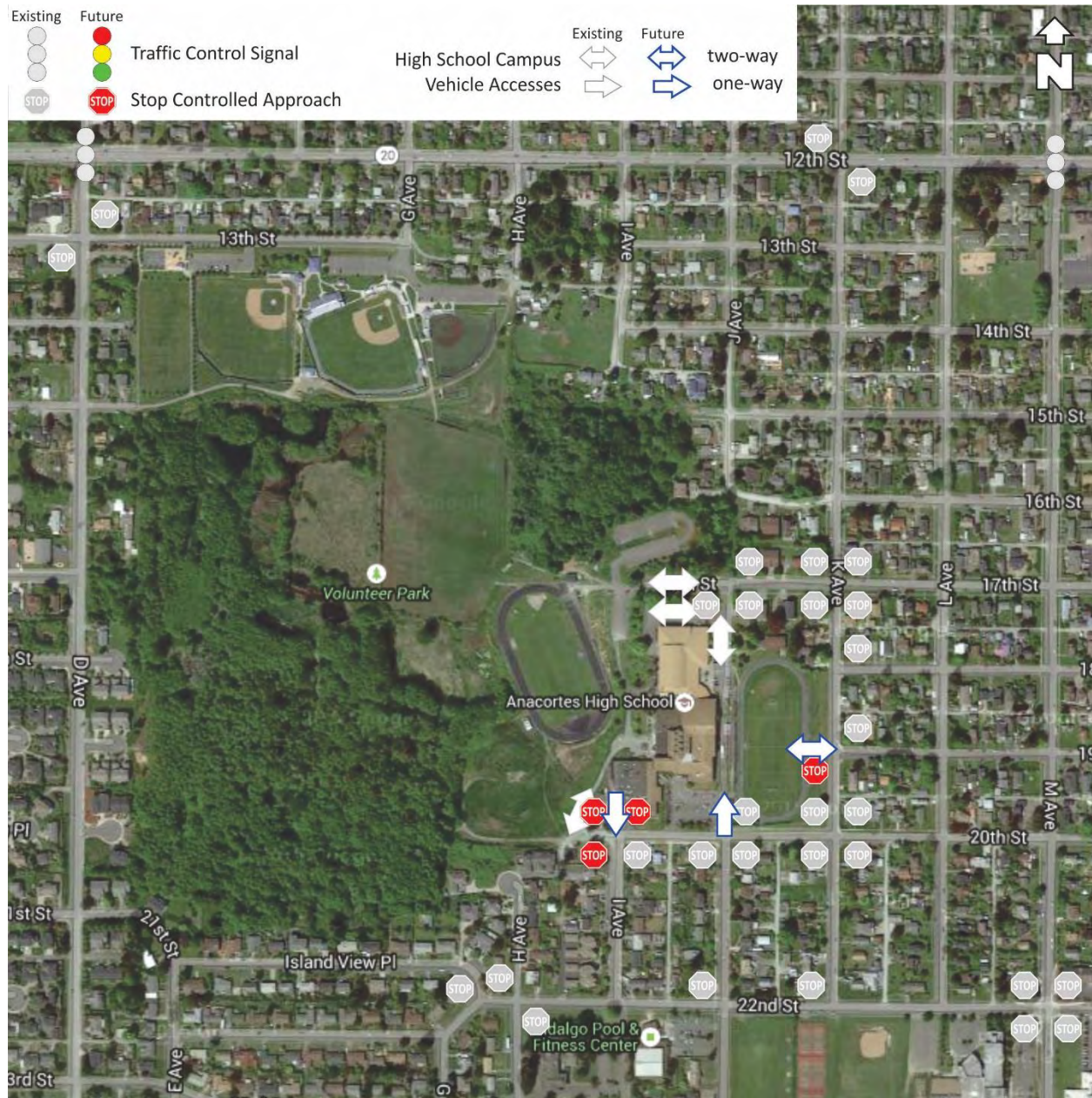


Figure 14: Future Study Intersections Traffic Controls

The future baseline AM, afterschool and PM peak hour traffic volumes without the new high school-related trips are illustrated in **Figures 15-17**.

1		DAVE		
AM		12TH ST		
	2	4	1	
	←	↓	↖	
0	↗		↖	1
511	→	B	←	290
144	↘		↗	42
	↖	↑	↗	
	66	2	128	
2		K AVE		
		12TH ST		
	6	8	2	
	←	↓	↖	
6	↗		↖	1
623	→	C	←	348
18	↘		↗	15
	↖	↑	↗	
	4	9	15	
3		M AVE		
		12TH ST		
	16	30	9	
	←	↓	↖	
11	↗		↖	3
548	→	B	←	302
60	↘		↗	12
	↖	↑	↗	
	38	22	42	
4		DAVE		
		13TH ST		
	1	191	0	
	←	↓	↖	
3	↗		↖	1
0	→	B	←	0
13	↘		↗	6
	↖	↑	↗	
	5	194	3	
5		J AVE		
		17TH ST		
	0	0	0	
	←	↓	↖	
0	↗		↖	0
15	→	A	←	111
1	↘		↗	19
	↖	↑	↗	
	3	0	0	
6		K AVE		
		17TH ST		
	47	72	5	
	←	↓	↖	
2	↗		↖	0
8	→	A	←	36
7	↘		↗	1
	↖	↑	↗	
	60	22	8	

7		K AVE		
		18TH ST		
	0	82	2	
	←	↓	↖	
0	↗		↖	7
0	→	A	←	0
0	↘		↗	2
	↖	↑	↗	
	0	76	0	
8		K AVE		
		19TH ST		
	24	58	2	
	←	↓	↖	
8	↗		↖	2
5	→	B	←	5
13	↘		↗	1
	↖	↑	↗	
	31	72	1	
9		I AVE / HS Outbound		
AM		20TH ST		
	0	11	101	
	←	↓	↖	
0	↗		↖	0
1	→	A	←	3
1	↘		↗	33
	↖	↑	↗	
	4	0	88	
10				
AM		20TH ST		
	0	0	0	
	←	↓	↖	
0	↗		↖	0
187	→	NA	←	33
0	↘		↗	0
	↖	↑	↗	
	0	0	0	
11		J AVE / HS Inbound		
AM		20TH ST		
	0	0	0	
	←	↓	↖	
46	↗		↖	44
61	→	C	←	56
80	↘		↗	21
	↖	↑	↗	
	71	56	15	
12		K AVE		
AM		20TH ST		
	29	29	14	
	←	↓	↖	
23	↗		↖	1
53	→	A	←	38
1	↘		↗	1
	↖	↑	↗	
	5	80	6	

13		M AVE		
AM		20TH ST		
	12	127	0	
	←	↓	↖	
11	↗		↖	0
46	→	B	←	23
15	↘		↗	0
	↖	↑	↗	
	16	100	0	
14		Island View PL		
AM		22ND ST		
	0	0	101	
	←	↓	↖	
0	↗		↖	48
112	→	B	←	44
0	↘		↗	0
	↖	↑	↗	
	0	0	0	
15		H AVE		
AM		22ND ST		
	0	1	4	
	←	↓	↖	
1	↗		↖	1
212	→	C	←	90
1	↘		↗	4
	↖	↑	↗	
	1	1	27	
16		J AVE		
AM		22ND ST		
	30	36	34	
	←	↓	↖	
5	↗		↖	39
152	→	B	←	72
17	↘		↗	36
	↖	↑	↗	
	5	45	66	
17		M AVE		
AM		22ND ST		
	11	118	12	
	←	↓	↖	
16	↗		↖	6
93	→	B	←	88
80	↘		↗	34
	↖	↑	↗	
	61	85	36	
ID		N-S Street Name		
AM		E-W Street Name		
	SB R	SB T	SB L	
	←	↓	↖	
EB L	↗		↖	WB R
EB T	→	LOS	←	WB T
EB R	↘		↗	WB L
	↖	↑	↗	
	NB L	NB T	NB R	

Figure 15: Future Baseline without New High School Trips AM Peak Hour Volumes

1		D AVE		
After-		12TH ST		
School	5	2	4	
	←	↓	↖	
3	↗		↖	4
494	→	B	←	594
114	↘		↗	125
	↖	↑	↗	
	110	9	119	
2		K AVE		
After-		12TH ST		
School	13	5	3	
	←	↓	↖	
9	↗		↖	5
594	→	F	←	707
16	↘		↗	29
	↖	↑	↗	
	24	9	17	
3		M AVE		
After-		12TH ST		
School	29	45	12	
	←	↓	↖	
17	↗		↖	8
551	→	D	←	628
35	↘		↗	36
	↖	↑	↗	
	89	61	77	
4		D AVE		
After-		13TH ST		
School	7	233	2	
	←	↓	↖	
4	↗		↖	5
1	→	B	←	0
6	↘		↗	7
	↖	↑	↗	
	4	225	13	
5		J AVE		
After-		17TH ST		
School	0	0	0	
	←	↓	↖	
0	↗		↖	0
120	→	A	←	11
5	↘		↗	9
	↖	↑	↗	
	1	0	21	
6		K AVE		
After-		17TH ST		
School	8	48	4	
	←	↓	↖	
39	↗		↖	5
49	→	A	←	10
68	↘		↗	7
	↖	↑	↗	
	8	36	10	
7		K AVE		
After-		18TH ST		
School	0	114	4	
	←	↓	↖	
0	↗		↖	1
0	→	A	←	0
0	↘		↗	2
	↖	↑	↗	
	0	39	0	
8		K AVE		
After-		19TH ST		
School	5	113	2	
	←	↓	↖	
15	↗		↖	1
5	→	B	←	5
20	↘		↗	1
	↖	↑	↗	
	5	36	2	
9		I AVE / HS Outbound		
After-		20TH ST		
School	0	17	27	
	←	↓	↖	
0	↗		↖	0
4	→	A	←	2
2	↘		↗	36
	↖	↑	↗	
	5	0	41	
10				
After-		20TH ST		
School	0	0	0	
	←	↓	↖	
0	↗		↖	0
71	→	NA	←	35
0	↘		↗	0
	↖	↑	↗	
	0	0	0	
11		J AVE / HS Inbound		
After-		20TH ST		
School	0	0	0	
	←	↓	↖	
16	↗		↖	23
23	→	A	←	35
33	↘		↗	18
	↖	↑	↗	
	27	18	19	
12		K AVE		
After-		20TH ST		
School	30	80	23	
	←	↓	↖	
21	↗		↖	2
17	→	A	←	19
6	↘		↗	7
	↖	↑	↗	
	2	19	4	
13		M AVE		
After-		20TH ST		
School	1	146	3	
	←	↓	↖	
8	↗		↖	6
20	→	B	←	11
5	↘		↗	6
	↖	↑	↗	
	2	182	5	
14		Island View PL		
After-		22ND ST		
School	0	0	48	
	←	↓	↖	
1	↗		↖	82
41	→	B	←	84
0	↘		↗	0
	↖	↑	↗	
	0	0	0	
15		H AVE		
After-		22ND ST		
School	2	2	3	
	←	↓	↖	
2	↗		↖	5
81	→	B	←	154
6	↘		↗	29
	↖	↑	↗	
	9	0	28	
16		J AVE		
After-		22ND ST		
School	5	17	16	
	←	↓	↖	
2	↗		↖	13
103	→	B	←	129
33	↘		↗	62
	↖	↑	↗	
	41	14	80	
17		M AVE		
After-		22ND ST		
School	24	119	13	
	←	↓	↖	
25	↗		↖	16
126	→	B	←	117
46	↘		↗	49
	↖	↑	↗	
	46	155	72	
ID		N-S Street Name		
After-		E-W Street Name		
School	SB R	SB T	SB L	
	←	↓	↖	
EB L	↗		↖	WB R
EB T	→	LOS	←	WB T
EB R	↘		↗	WB L
	↖	↑	↗	
	NB L	NB T	NB R	

Figure 16: Future Baseline without New High School Trips Afterschool Peak Hour Volumes

1	DAVE			
PM	12TH ST			
	6	12	4	
	←	↓	↘	
1	↑		↖	1
372	→	B	←	671
98	↘		↖	139
	←	↑	↗	
	114	6	122	
2	K AVE			
PM	12TH ST			
	9	5	0	
	←	↓	↘	
6	↑		↖	4
501	→	F	←	844
29	↘		↖	28
	←	↑	↗	
	16	6	5	
3	M AVE			
PM	12TH ST			
	14	36	8	
	←	↓	↘	
5	↑		↖	8
434	→	C	←	758
32	↘		↖	37
	←	↑	↗	
	99	34	64	
4	DAVE			
PM	13TH ST			
	6	242	5	
	←	↓	↘	
7	↑		↖	4
0	→	C	←	0
7	↘		↖	11
	←	↑	↗	
	12	232	9	
5	J AVE			
PM	17TH ST			
	0	0	0	
	←	↓	↘	
0	↑		↖	0
26	→	A	←	20
1	↘		↖	14
	←	↑	↗	
	0	0	13	
6	K AVE			
PM	17TH ST			
	11	65	3	
	←	↓	↘	
19	↑		↖	9
13	→	A	←	14
16	↘		↖	3
	←	↑	↗	
	16	30	2	

7	K AVE			
PM	18TH ST			
	0	82	2	
	←	↓	↘	
0	↑		↖	3
0	→	A	←	0
0	↘		↖	5
	←	↑	↗	
	0	43	1	
8	K AVE			
PM	19TH ST			
	6	77	2	
	←	↓	↘	
5	↑		↖	2
0	→	A	←	5
5	↘		↖	0
	←	↑	↗	
	9	42	2	
9	I AVE / HS Outbound			
PM	20TH ST			
	0	6	15	
	←	↓	↘	
0	↑		↖	0
2	→	A	←	8
0	↘		↖	15
	←	↑	↗	
	1	0	23	
10				
PM	20TH ST			
	0	0	0	
	←	↓	↘	
0	↑		↖	0
38	→	NA	←	15
0	↘		↖	0
	←	↑	↗	
	0	0	0	
11	J AVE / HS Inbound			
PM	20TH ST			
	0	0	0	
	←	↓	↘	
12	↑		↖	24
15	→	A	←	29
9	↘		↖	14
	←	↑	↗	
	27	22	14	
12	K AVE			
PM	20TH ST			
	23	51	6	
	←	↓	↘	
14	↑		↖	3
7	→	A	←	13
2	↘		↖	1
	←	↑	↗	
	3	35	1	

13	M AVE			
PM	20TH ST			
	2	123	1	
	←	↓	↘	
4	↑		↖	3
7	→	B	←	4
3	↘		↖	3
	←	↑	↗	
	6	171	5	
14	Island View PL			
PM	22ND ST			
	0	0	57	
	←	↓	↘	
2	↑		↖	71
53	→	B	←	78
0	↘		↖	0
	←	↑	↗	
	0	0	0	
15	H AVE			
PM	22ND ST			
	2	2	7	
	←	↓	↘	
2	↑		↖	7
109	→	B	←	144
1	↘		↖	24
	←	↑	↗	
	3	2	23	
16	J AVE			
PM	22ND ST			
	6	7	8	
	←	↓	↘	
7	↑		↖	15
104	→	A	←	160
22	↘		↖	56
	←	↑	↗	
	16	24	65	
17	M AVE			
PM	22ND ST			
	33	101	4	
	←	↓	↘	
22	↑		↖	19
91	→	B	←	165
51	↘		↖	44
	←	↑	↗	
	63	132	70	
ID	N-S Street Name			
PM	E-W Street Name			
	SB R	SB T	SB L	
	←	↓	↘	
EB L	↑		↖	WB R
EB T	→	LOS	←	WB T
EB R	↘		↖	WB L
	←	↑	↗	
	NB L	NB T	NB R	

Figure 17: Future Baseline without New High School Trips PM Peak Hour Volumes

Table 3 summarizes the future traffic operations without the new high school trips.

Table 3: Future Baseline without New High School Trips Intersection Operations								
Intersection	Control	Avg./ Mvmt.	7-9 AM Peak		2-4 PM Peak		4-6 PM Peak	
			LOS	Delay	LOS	Delay	LOS	Delay
1. 12th St / D Ave	Signal	Avg.	B	12	B	15	B	11
2. 12th St / K Ave	N/S Stop	NB	C	23	F	92	F	92
		SB	C	23	D	32	D	27
3. 12th St / M Ave	Signal	Avg.	B	16	D	41	C	33
4. 13th St / D Ave	E/W Stop	EB	B	11	B	12	B	13
		WB	B	14	B	13	C	15
5. 17th St / J Ave	All Stop	Avg.	A	9	A	8	A	7
6. 17th St / K Ave	All Stop	Avg.	A	9	A	9	A	8
7. 18th St / K Ave	WB Stop	WB	A	10	A	10	A	9
8. 19th St / K Ave	E/W Stop	EB	B	11	B	10	A	9
		WB	B	12	B	11	A	10
9. 20th St / I Ave	All Stop	Avg.	A	8	A	7	A	7
11. 20th St / J Ave	All Stop	Avg.	C	16	A	8	A	8
12. 20th St / K Ave	All Stop	Avg.	A	9	A	8	A	8
13. 20th St / M Ave	E/W Stop	EB	B	14	B	12	B	11
		WB	B	12	B	12	B	11
14. 22nd St / Island View	SB Stop	SB	B	13	B	10	B	11
15. 22nd St / H Ave	N/S Stop	NB	B	11	A	10	B	10
		SB	C	15	B	11	B	12
16. 22nd St / J Ave	All Stop	Avg.	B	12	B	10	A	9
17. 22nd St / M Ave	All Stop	Avg.	B	12	B	12	B	12

Future baseline traffic growth generally increases vehicle delays at the study intersections.

During the AM peak hour, like existing conditions, there continue to be no significant LOS concerns.

During the afterschool and PM peak hours all of the study intersections operate at LOS D or better, with the exception of 12th Street and K Ave, which continues to operate at LOS F, similar to current conditions. Future baseline traffic growth is forecast to increase the northbound stop delay at this intersection by between 20 and 30 seconds. Future vehicle volumes continue to suggest a traffic control signal is not warranted.

During the afterschool and PM peak hours the 12th Street and M Ave intersection continues to operate at LOS D and the shared northbound left-through movement, like existing conditions, continues to operate overcapacity with a V/C ratio greater than 1.00.

There are no LOS impacts near the school campus. However, short surges in the morning and afterschool traffic will result in short periods of congestion on the local roadway.

Future with New High School Traffic Conditions

Figures 18-20 illustrate year 2017 AM, afterschool and PM peak hour traffic volumes with the new high school-related trips and proposed access improvements.

1	D AVE			
AM	12TH ST			
	2	4	1	
	←	↓	↖	
0	↗		↖	1
512	→	B	←	290
144	↘		↗	42
	↖	↑	↗	
	66	2	128	
2	K AVE			
AM	12TH ST			
	6	8	2	
	←	↓	↖	
6	↗		↖	1
623	→	C	←	348
18	↘		↗	15
	↖	↑	↗	
	4	9	15	
3	M AVE			
AM	12TH ST			
	16	31	9	
	←	↓	↖	
11	↗		↖	3
548	→	B	←	302
60	↘		↗	12
	↖	↑	↗	
	38	22	42	
4	D AVE			
AM	13TH ST			
	1	192	0	
	←	↓	↖	
3	↗		↖	1
0	→	B	←	0
13	↘		↗	6
	↖	↑	↗	
	5	194	3	
5	J AVE			
AM	17TH ST			
	0	0	0	
	←	↓	↖	
0	↗		↖	0
15	→	A	←	113
1	↘		↗	19
	↖	↑	↗	
	3	0	0	
6	K AVE			
AM	17TH ST			
	48	72	5	
	←	↓	↖	
3	↗		↖	0
9	→	A	←	37
7	↘		↗	1
	↖	↑	↗	
	60	22	8	
7	K AVE			
AM	18TH ST			
	0	82	2	
	←	↓	↖	
0	↗		↖	7
0	→	A	←	0
0	↘		↗	2
	↖	↑	↗	
	0	76	0	
8	K AVE			
AM	19TH ST			
	24	58	2	
	←	↓	↖	
8	↗		↖	2
5	→	B	←	5
13	↘		↗	1
	↖	↑	↗	
	31	72	1	
9	I AVE / HS Outbound			
AM	20TH ST			
	0	12	101	
	←	↓	↖	
0	↗		↖	0
1	→	A	←	3
1	↘		↗	33
	↖	↑	↗	
	4	0	88	
10	20TH ST			
AM	20TH ST			
	0	0	0	
	←	↓	↖	
0	↗		↖	0
188	→	NA	←	33
0	↘		↗	0
	↖	↑	↗	
	0	0	0	
11	J AVE / HS Inbound			
AM	20TH ST			
	0	0	0	
	←	↓	↖	
46	↗		↖	44
62	→	C	←	56
80	↘		↗	21
	↖	↑	↗	
	71	60	15	
12	K AVE			
AM	20TH ST			
	29	29	14	
	←	↓	↖	
23	↗		↖	1
53	→	A	←	38
1	↘		↗	1
	↖	↑	↗	
	5	80	6	
13	M AVE			
AM	20TH ST			
	12	127	0	
	←	↓	↖	
11	↗		↖	0
46	→	B	←	23
15	↘		↗	0
	↖	↑	↗	
	16	100	0	
14	Island View PL			
AM	22ND ST			
	0	0	101	
	←	↓	↖	
0	↗		↖	48
114	→	B	←	45
0	↘		↗	0
	↖	↑	↗	
	0	0	0	
15	H AVE			
AM	22ND ST			
	0	1	4	
	←	↓	↖	
1	↗		↖	1
213	→	C	←	91
1	↘		↗	4
	↖	↑	↗	
	1	1	28	
16	J AVE			
AM	22ND ST			
	30	36	34	
	←	↓	↖	
7	↗		↖	39
152	→	B	←	72
17	↘		↗	36
	↖	↑	↗	
	5	46	66	
17	M AVE			
AM	22ND ST			
	11	118	12	
	←	↓	↖	
16	↗		↖	6
94	→	B	←	89
80	↘		↗	34
	↖	↑	↗	
	61	85	36	
ID	N-S Street Name			
AM	E-W Street Name			
	SB R	SB T	SB L	
	←	↓	↖	
EB L	↗		↖	WB R
EB T	→	LOS	←	WB T
EB R	↘		↗	WB L
	↖	↑	↗	
	NB L	NB T	NB R	

Figure 18: Future with New High School Trips AM Peak Hour Volumes

1		D AVE		
After-		12TH ST		
school	5	2	4	
	←	↓	↘	
3	↗		↖	4
494	→	B	←	595
115	↘		↗	125
	←	↑	↗	
	111	9	119	
2		K AVE		
After-		12TH ST		
school	13	5	3	
	←	↓	↘	
9	↗		↖	5
594	→	F	←	707
16	↘		↗	29
	←	↑	↗	
	24	9	17	
3		M AVE		
After-		12TH ST		
school	29	45	12	
	←	↓	↘	
17	↗		↖	8
551	→	D	←	628
35	↘		↗	36
	←	↑	↗	
	89	61	77	
4		D AVE		
After-		13TH ST		
school	7	233	2	
	←	↓	↘	
4	↗		↖	5
1	→	B	←	0
6	↘		↗	7
	←	↑	↗	
	4	225	13	
5		J AVE		
After-		17TH ST		
school	0	0	0	
	←	↓	↘	
0	↗		↖	0
120	→	A	←	12
5	↘		↗	9
	←	↑	↗	
	1	0	21	
6		K AVE		
After-		17TH ST		
school	8	48	4	
	←	↓	↘	
40	↗		↖	5
50	→	A	←	10
68	↘		↗	7
	←	↑	↗	
	8	36	10	
7		K AVE		
After-		18TH ST		
school	0	114	4	
	←	↓	↘	
0	↗		↖	1
0	→	A	←	0
0	↘		↗	2
	←	↑	↗	
	0	39	0	
8		K AVE		
After-		19TH ST		
school	5	113	2	
	←	↓	↘	
15	↗		↖	1
5	→	B	←	5
20	↘		↗	1
	←	↑	↗	
	5	36	2	
9		I AVE / HS Outbound		
After-		20TH ST		
school	0	19	27	
	←	↓	↘	
0	↗		↖	0
4	→	A	←	2
2	↘		↗	36
	←	↑	↗	
	5	0	41	
10				
After-		20TH ST		
school	0	0	0	
	←	↓	↘	
0	↗		↖	0
72	→	NA	←	35
0	↘		↗	0
	←	↑	↗	
	0	0	0	
11		J AVE / HS Inbound		
After-		20TH ST		
school	0	0	0	
	←	↓	↘	
16	↗		↖	23
23	→	A	←	35
33	↘		↗	18
	←	↑	↗	
	27	19	19	
12		K AVE		
After-		20TH ST		
school	30	80	23	
	←	↓	↘	
21	↗		↖	2
17	→	A	←	19
6	↘		↗	7
	←	↑	↗	
	2	19	4	
13		M AVE		
After-		20TH ST		
school	1	146	3	
	←	↓	↘	
8	↗		↖	6
20	→	B	←	11
5	↘		↗	6
	←	↑	↗	
	2	182	5	
14		Island View PL		
After-		22ND ST		
school	0	0	48	
	←	↓	↘	
1	↗		↖	82
41	→	B	←	85
0	↘		↗	0
	←	↑	↗	
	0	0	0	
15		H AVE		
After-		22ND ST		
school	2	2	3	
	←	↓	↘	
2	↗		↖	5
81	→	B	←	155
6	↘		↗	30
	←	↑	↗	
	9	0	29	
16		J AVE		
After-		22ND ST		
school	5	17	16	
	←	↓	↘	
3	↗		↖	13
103	→	A	←	129
33	↘		↗	62
	←	↑	↗	
	41	14	80	
17		M AVE		
After-		22ND ST		
school	24	119	13	
	←	↓	↘	
25	↗		↖	16
126	→	B	←	117
46	↘		↗	49
	←	↑	↗	
	46	155	72	
ID		N-S Street Name		
After-		E-W Street Name		
School	SB R	SB T	SB L	
	←	↓	↘	
EB L	↗		↖	WB R
EB T	→	LOS	←	WB T
EB R	↘		↗	WB L
	←	↑	↗	
	NB L	NB T	NB R	

Figure 19: Future with New High School Trips Afterschool Peak Hour Volumes

1	DAVE		
PM	12TH ST		
6	12	4	
←	↓	↘	
1	↗	↖	1
372	→	B	←
98	↘	↗	139
←	↑	↗	
115	6	122	
2	K AVE		
PM	12TH ST		
9	5	0	
←	↓	↘	
6	↗	↖	4
501	→	F	←
30	↘	↗	28
←	↑	↗	
16	6	5	
3	M AVE		
PM	12TH ST		
14	36	8	
←	↓	↘	
5	↗	↖	8
434	→	C	←
32	↘	↗	37
←	↑	↗	
99	34	64	
4	DAVE		
PM	13TH ST		
6	242	5	
←	↓	↘	
7	↗	↖	4
0	→	C	←
7	↘	↗	11
←	↑	↗	
12	232	9	
5	J AVE		
PM	17TH ST		
0	0	0	
←	↓	↘	
0	↗	↖	0
26	→	A	←
1	↘	↗	14
←	↑	↗	
0	0	13	
6	K AVE		
PM	17TH ST		
12	65	3	
←	↓	↘	
19	↗	↖	9
13	→	A	←
16	↘	↗	3
←	↑	↗	
16	30	2	
7	K AVE		
PM	18TH ST		
0	82	2	
←	↓	↘	
0	↗	↖	3
0	→	A	←
0	↘	↗	5
←	↑	↗	
0	43	1	
8	K AVE		
PM	19TH ST		
6	77	2	
←	↓	↘	
5	↗	↖	2
0	→	A	←
5	↘	↗	0
←	↑	↗	
9	42	2	
9	I AVE / HS Outbound		
PM	20TH ST		
0	7	15	
←	↓	↘	
0	↗	↖	0
2	→	A	←
0	↘	↗	15
←	↑	↗	
1	0	23	
10			
PM	20TH ST		
0	0	0	
←	↓	↘	
0	↗	↖	0
38	→	NA	←
0	↘	↗	0
←	↑	↗	
0	0	0	
11	J AVE / HS Inbound		
PM	20TH ST		
0	0	0	
←	↓	↘	
12	↗	↖	24
16	→	A	←
9	↘	↗	14
←	↑	↗	
27	23	14	
12	K AVE		
PM	20TH ST		
23	51	6	
←	↓	↘	
14	↗	↖	3
7	→	A	←
2	↘	↗	1
←	↑	↗	
3	35	1	
13	M AVE		
PM	20TH ST		
2	123	1	
←	↓	↘	
4	↗	↖	3
7	→	B	←
3	↘	↗	3
←	↑	↗	
6	171	5	
14	Island View PL		
PM	22ND ST		
0	0	57	
←	↓	↘	
2	↗	↖	71
53	→	B	←
0	↘	↗	0
←	↑	↗	
0	0	0	
15	H AVE		
PM	22ND ST		
2	2	7	
←	↓	↘	
2	↗	↖	7
110	→	B	←
1	↘	↗	24
←	↑	↗	
3	2	23	
16	J AVE		
PM	22ND ST		
6	7	8	
←	↓	↘	
8	↗	↖	15
104	→	A	←
22	↘	↗	56
←	↑	↗	
16	25	65	
17	M AVE		
PM	22ND ST		
33	101	4	
←	↓	↘	
22	↗	↖	19
91	→	A	←
52	↘	↗	44
←	↑	↗	
63	132	70	
ID	N-S Street Name		
PM	E-W Street Name		
	SB R	SB T	SB L
	←	↓	↘
EB L	↗		↖
EB T	→	LOS	←
EB R	↘		↗
	←	↑	↗
	NB L	NB T	NB R

Figure 20: Future with New High School Trips PM Peak Hour Volumes

Table 4 summarizes the future traffic operations with the new high school trips.

Table 4: Future With New High School Trips Intersection Operations

Intersection	Control	Avg./ Mvmt.	7-9 AM Peak		2-4 PM Peak		4-6 PM Peak	
			LOS	Delay	LOS	Delay	LOS	Delay
1. 12th St / D Ave	Signal	Avg.	B	12	B	15	B	11
2. 12th St / K Ave	N/S Stop	NB	C	23	F	92	F	92
		SB	C	23	D	32	D	27
3. 12th St / M Ave	Signal	Avg.	B	16	D	41	C	33
4. 13th St / D Ave	E/W Stop	EB	B	11	B	12	B	13
		WB	B	14	B	13	C	15
5. 17th St / J Ave	All Stop	Avg.	A	9	A	8	A	7
6. 17th St / K Ave	All Stop	Avg.	A	9	A	9	A	8
7. 18th St / K Ave	WB Stop	WB	A	10	A	10	A	9
8. 19th St / K Ave	E/W Stop	EB	B	11	B	10	A	9
		WB	B	12	B	11	A	10
9. 20th St / I Ave	All Stop	Avg.	A	8	A	7	A	7
11. 20th St / J Ave	All Stop	Avg.	C	17	A	8	A	8
12. 20th St / K Ave	All Stop	Avg.	A	9	A	8	A	8
13. 20th St / M Ave	E/W Stop	EB	B	14	B	12	B	11
		WB	B	12	B	12	B	11
14. 22nd St / Island View	SB Stop	SB	B	14	B	10	B	11
15. 22nd St / H Ave	N/S Stop	NB	B	11	A	10	B	10
		SB	C	16	B	11	B	12
16. 22nd St / J Ave	All Stop	Avg.	B	12	B	10	A	9
17. 22nd St / M Ave	All Stop	Avg.	B	12	B	12	B	12

With the high school renovation complete there continue to be no significant LOS concerns projected during the AM peak hour.

During the afterschool and PM peak hours all of the study intersections operate at LOS D or better, with the exception of 12th Street and K Ave, which continues to operate at LOS F, similar to existing conditions and future baseline conditions. New high school trips do not significantly impact this intersection and are not projected to increase intersection delay. A signal is not warranted at 12th Street and K Ave.

During the afterschool and PM peak hours the 12th Street and M Ave intersection continues to operate at LOS D and the northbound left-through movement, like existing and future baseline conditions, continues to operate with a V/C ratio greater than 1.00. New high school trips do not significantly impact this intersection and are not projected to increase this movement's V/C ratio.

The new high school trips to the study area are not projected to increase delay or V/C ratios at K Ave and 12th Street and M Ave and 12th Street. Intersection impacts without and with the new high school trips are the same. With no new impact created by new high school traffic, the School District should not be responsible to mitigate either existing deficiencies.

There are no LOS impacts near the school campus.

Access and Circulation

The schematic site plan (refer to Figure 2) shows a new campus access and additional parking are proposed off of K Ave at 19th Street.

In addition to the new campus access, the student drop-off and pick-up and staff and visitor parking area will be modified to provide counter-clockwise traffic flow between J Ave (inbound) and I Ave (outbound), along with additional parking. The existing drop-off and pick-up area is not well defined, but currently provides space for up to 17 vehicles to drop-off and pick-up students. The future drop-off and pick-up area will be separated from the parking area and will provide space for 21 vehicles to stack for student drop-offs and pick-ups.

The future drop-off and pick-up area allows for passengers to be dropped off and picked up along curbside which is safer than the current configuration. The additional stacking area also provides more off-street storage space is provided for loading and unloading students, and during major school events, such as football and basketball games, this area can be used for event parking.

In addition to improving the drop-off and pick-up area, the parking area off of 20th Street will also be better separated from the drop-off and pick-up area to improve circulation and reduce driver-parking-student conflicts and most likely stacking on the local streets.

School bus loading and unloading and field access is also proposed to be modified. Currently buses load and unload off of 20th Street. With the renovation, school buses will load and unload and park off-street and on-campus. School bus loading and unloading will be to the west of and behind the main campus building and bus access will be off of 20th Street. During major events the buses are proposed to be parked off-street and also off of the campus to allow this area to be used for additional event parking (about 12 stalls).

Walk Routes

The future high school walking route plan is anticipated to remain the same as existing. With the renovation continuous sections of sidewalk will be provided on: J Ave from 17th Street to 20th Street (at areas outside of the campus); K Ave from 17th Street to 20th Street; 17th Street from J Ave to K Ave; and 20th Street from I Ave to K Ave.

School Buses

With the renovation, school bus loading and unloading will shift to the west of the existing school building. School buses will load and unload on-campus and bus access will be off of 20th Street. The proposed bus load, unload and parking area are highlighted on **Figure 21**.

Parking General

Figure 22 summarizes the future parking supply with the high school renovation complete and compares it against the existing on-campus parking supply.



Figure 21: Future School Bus Routing, Parking and Load and Unload Plan



Figure 22: Future Campus Parking

The future on-campus parking supply with Phase 2 complete will increase to 403 total stalls, including:

- Eight reserved stalls for Cap Sante High School. These will replace the existing eight stalls that were removed from the northeast end of campus with Cap Sante High School relocated near the proposed campus egress off of 20th Street at I Ave.
- Twenty-one stalls are available during campus events, such as football and basketball games. During the school day these stalls are used as curbside student pick-up and drop-off.
- Additionally, parking for at least twelve vehicles will be available to the west of the existing campus building. During the school day these stalls are used for school bus loading and unloading and parking. During events bus parking will be relocated offsite.
- During the school day there will be 370 vehicle parking stalls on-campus available for day use. During an event the campus parking supply may be increased to 403 total vehicle parking stalls.

The proposed campus plan provides new parking lots off of K Ave accessible via a new campus access.

The discussion that follows address campus parking on a typical school day. As indicated above, on a typical school day there will be 370 vehicle stalls available on-campus.

The Anacortes Municipal Code does not specify a minimum parking requirement for high schools; thus, high school parking was reviewed under the Skagit County Code. The County Code identifies minimum parking requirements for high schools at 1 stall per classroom plus 1 stall for every 10 students.

As stated earlier there are 43 classroom-equivalent rooms proposed with the renovation and the future student enrollment is 852 students. Per the Skagit County Code the school is required to provide a minimum 128 parking stalls (43 classroom-equivalent rooms X 1 stall per classroom + 852 students X 1 stall per 10 students). The 370 vehicle stalls available on a typical school day is sufficient to meet the Skagit County Code.

In addition to satisfying the County's minimum parking requirements high school-related parking needs were reviewed using the *Parking Generation, 4th Edition* (2010), published by the Institute of Transportation Engineers (ITE) and also by comparing current and future student parking needs.

ITE Parking Generation; Peak Parking Demand

The ITE publication includes peak parking demand data collected at eight suburban high schools. On a typical day, exclusive of a special event, the 85th-percentile peak parking demand is 0.25 vehicles per student. This parking demand ratio is inclusive of parked student, staff and visitor vehicles on-campus.

With a future enrollment of 852 students, the equivalent 85th-percentile peak parking demand is 213 vehicles (0.25 rate X 852 students). The 370 vehicle stalls available on a typical school day will support the projected peak parking demand.

Student Parking Passes

Student parking passes are projected to increase to about 220 parking passes (215 existing student parking passes ÷ 838 existing student enrollment X 852 future enrollment, rounded up the nearest multiple of 5). The 370 vehicle stalls available on a typical school day can accommodate student parking needs plus 150 additional stalls for visitors, faculty and staff.

Special Events (Parking)

Special events that generate the highest demand for on-campus and on-street parking include varsity football and basketball games, graduation, and Brodniak Theater productions. The total on-campus parking supply is 403 stalls, which includes 21 stalls available at the student load and unload curbside area fronting the main campus buildings off of 20th Street and at least 12 stalls available where the school bus load and unload and parking area is behind the main campus building.

Varsity sporting events, performing arts productions and major assemblies (such as graduation) will generate the demand for parking on and around the campus. Large events occur outside of the normal school hours and are also outside of the RPZ parking period restrictions so use the public on-street parking is allowed and is current used by event goers.

Rice Field parking demand is highest during home varsity football games (fall sports season). Generally, there are four to five home varsity football games per year. The majority of those games occur on Friday evenings at 7 PM. School officials indicated that for the current football season the average attendance is 1,265 persons.

Gymnasium parking demand is highest during the basketball (winter sports) season. Varsity (boys) basketball games typically see the highest event attendance and there are between nine and eleven home games per season between boys and girls. There will be some nights when the boys and girls are playing at the same time. For the 2015-2016 season the boys and girls varsity teams play at home on the same evening twice (Friday December 18, 2015 and Thursday January 21, 2016). Major events at the gymnasium do not coincide with varsity football games.

Brodniak Theater events may be scheduled throughout the school year. Theater productions do not coincide with varsity football games. However, use of the theater may occur on the same day as an event in the gymnasium. Future scheduling arrangements between athletics, the School District and the theater may avoid significant overlaps in parking demand.

The Anacortes Municipal Code (AMC) Chapter 17.46.20 states that “auditorium, assembly room, exhibition hall, theater, and commercial recreation” land uses are required to provide 1 parking stall for every 4 fixed seats. **Table 5** summarizes the parking requirements for “auditorium, assembly room, exhibition hall, theater, and commercial recreation” uses, as applied to Rice Field, the gymnasium and Brodniak Theater based on the number of fixed seats.

Table 5: City of Anacortes Parking Requirements

Land Use	Fixed Seats	City Pk. Ratio	Stalls Required
New Rice Field	1,500	1 stall per 4 fixed seats	375
Gymnasium	1,600	1 stall per 4 fixed seats	400
Brodniak Theater	806	1 stall per 4 fixed seats	202

The proposed 403 stall total on-campus parking supply would support functions at Rice Field, the gymnasium and Brodniak Theater per the City of Anacortes Code.

Safety

Improvements to school walk routes and campus accesses, both mentioned above, will support improved traffic operations within the vicinity of the high school campus.

IMPACTS AND MITIGATION

This section summarizes traffic impacts related to the proposed renovation and recommended improvements to support off-campus intersections, campus circulation and parking.

Traffic Operations Improvements

12th Street at K Ave operates at LOS F currently during the afterschool and PM peak hour hours. The technical analysis shows that new high school trips do not increase vehicle delay at this intersection. With no new impact created, the School District is not responsible to resolve the existing LOS deficiency.

12th Street at M Ave operates at LOS D or better currently during the afterschool and PM peak hour hours. The intersection satisfies LOS requirements; however, the northbound shared left-through movement on M Ave is projected with V/C ratio that exceeds 1.00, suggesting an existing capacity problem without the new high school traffic. Like at 12th Street and K Ave, the technical analysis shows that new high school trips do not increase vehicle delay or impact V/C at this intersection. With no new impact created, the School District is not responsible to resolve the V/C deficiency.

Recognizing that there are operational concerns at both intersections the following improvement options were evaluated for both intersections:

- Restrict K Ave at 12th Street to right-in/right-out movements only through signage. The turn restrictions would mitigate the left turn and through movement delay and improve intersection operations. "C-curbing" may be installed to assist in restriction the left and through movements from the minor approaches and maintain lefts into K Ave from 12th Street.
- Restripe M Ave at 12th Street from left-through and right lanes to left and through-right lanes on the northbound and southbound approaches. The reconfigured intersection would better support left turns and through movements displaced at K Ave and also reduce delay on the M Ave approaches and also improve the V/C ratio concerns on the northbound approach.

Figure 23 summarizes the future peak hour volumes with the improvement options. **Table 6** compares the with-renovation without and with the above improvements.

Table 6: Future With New High School Trips Intersection Operations; Mitigation Option								
(No Improvements)								
Intersection	Control	Avg./ Mvmt.	7-9 AM Peak		2-4 PM Peak		4-6 PM Peak	
			LOS	Delay	LOS	Delay	LOS	Delay
12th St / K Ave	N/S Stop	NB	(C)	(23)	(F)	(92)	(F)	(92)
		SB	(C)	(23)	(D)	(32)	(D)	(27)
12th St / M Ave	Signal	Avg.	(B)	(16)	(D)	(41)	(C)	(33)
Proposed Improvements								
Intersection	Control	Avg./ Mvmt.	7-9 AM Peak		2-4 PM Peak		4-6 PM Peak	
			LOS	Delay	LOS	Delay	LOS	Delay
12th St / K Ave	N/S Stop	NB-R	B	14	B	14	B	12
		SB-R	B	11	B	15	C	17
12th St / M Ave	Signal	Avg.	A	10	B	17	B	14

Future with New High School Trips without Improvement Options

2		K AVE			2		K AVE			2		K AVE		
AM		12TH ST			After-		12TH ST			PM		12TH ST		
	6	8	2		School	13	5	3			9	5	0	
	←	↓	↘			←	↓	↘			←	↓	↘	
6	↑		↖	1	9	↑		↖	5	6	↑		↖	4
623	→	F	←	348	594	→	F	←	707	501	→	F	←	844
18	↘		↖	15	16	↘		↖	29	30	↘		↖	28
	↖	↑	↗			↖	↑	↗			↖	↑	↗	
	4	9	15			24	9	17			16	6	5	
NEW HIGH SCHOOL TRIPS:				1	NEW HIGH SCHOOL TRIPS:				1	NEW HIGH SCHOOL TRIPS:				0
PROPORTIONATE SHARE IMPACT:				0.00%	PROPORTIONATE SHARE IMPACT:				0.00%	PROPORTIONATE SHARE IMPACT:				0.00%
3		M AVE			3		M AVE			3		M AVE		
AM		12TH ST			After-		12TH ST			PM		12TH ST		
	16	31	9		School	29	45	12			14	36	8	
	←	↓	↘			←	↓	↘			←	↓	↘	
11	↑		↖	3	17	↑		↖	8	5	↑		↖	8
548	→	C	←	302	551	→	D	←	628	434	→	C	←	758
60	↘		↖	12	35	↘		↖	36	32	↘		↖	37
	↖	↑	↗			↖	↑	↗			↖	↑	↗	
	38	22	42			89	61	77			99	34	64	
NEW HIGH SCHOOL TRIPS:				1	NEW HIGH SCHOOL TRIPS:				1	NEW HIGH SCHOOL TRIPS:				0
PROPORTIONATE SHARE IMPACT:				0.00%	PROPORTIONATE SHARE IMPACT:				0.00%	PROPORTIONATE SHARE IMPACT:				0.00%

Future with New High School Trips with Improvement Options

2		K AVE			2		K AVE			2		K AVE		
AM		12TH ST			After-		12TH ST			PM		12TH ST		
	6	0	0		School	13	0	0			9	0	0	
	←	↓	↘			←	↓	↘			←	↓	↘	
6	↑		↖	1	9	↑		↖	5	6	↑		↖	4
623	→	B	←	352	594	→	B	←	731	501	→	C	←	860
18	↘		↖	15	16	↘		↖	29	30	↘		↖	28
	↖	↑	↗			↖	↑	↗			↖	↑	↗	
	0	0	15			0	0	17			0	0	5	
3		M AVE			3		M AVE			3		M AVE		
AM		12TH ST			After-		12TH ST			PM		12TH ST		
	16	39	11		school	29	50	15			14	41	8	
	←	↓	↘			←	↓	↘			←	↓	↘	
11	↑		↖	3	17	↑		↖	8	5	↑		↖	8
546	→	A	←	302	548	→	B	←	628	434	→	B	←	758
60	↘		↖	12	35	↘		↖	36	32	↘		↖	37
	↖	↑	↗			↖	↑	↗			↖	↑	↗	
	42	31	42			113	70	77			115	40	64	
Highlighted cells represents a change in the peak hour volume from without to with improvement conditions.					Highlighted cells represents a change in the peak hour volume from without to with improvement conditions.					Highlighted cells represents a change in the peak hour volume from without to with improvement conditions.				

Figure 23: 12th Street at K Ave and at M Ave Volumes with Improvement Options

With the improvement options the 12th Street and K Ave operates at LOS C or better with the new high school trips. Also, with the improvement options 12th Street and M Ave operates at LOS B and the northbound approach V/C ratios are less than 0.50, suggesting available reserve capacity.

While not responsible for intersection improvements, it is recommended that the School District coordinate with the City of Anacortes on improvements at these two intersections.

Access and Circulation Improvements

General

A traffic and parking management coordinator is recommended to support daily campus parking and circulation needs. The coordinator would be responsible to oversee student loading and unloading operations, particularly off of 20th Street and support campus security to monitor parking.

Walk Routes

In addition to sidewalk, walk path and ADA curb ramp improvements near the high school, crosswalk striping is recommended to be explored at the stop-sign controlled legs at the following intersections:

- 17th Street and K Ave – currently an all-way stop controlled intersection, consider marked crosswalks on all approaches
- 19th Street and K Ave – the new school access, consider a marked crosswalk or other pedestrian feature across the new school access (the west leg of the intersection)
- 20th Street and I Ave – new school egress and proposed an all-way stop controlled intersection, consider crosswalks on the four stop controlled intersection legs
- 20th Street and J Ave – currently an all-way stop controlled intersection, consider adding marked crosswalks to the three unmarked intersection legs (the west, south and north legs of the intersection)
- 20th Street and K Ave – currently an all-way stop controlled intersection, consider marked crosswalks on all approaches

City of Anacortes Future (Far Term) 20th Street Extension

Anacortes is considering an east-west connector roadway south of 12th Street in the vicinity of the high school property. 20th Street between I Ave and D Ave is reviewed in this analysis as the new connector route. A 20th Street extension would extend 20th Street from its terminus near I Ave at the southwest boundary of the high school campus west to D Ave. The road extension would shift existing and future traffic, including some high school-related traffic, to 20th Street.

Based on the projected new trips generated with the campus renovation, new high school trip impacts to 20th Street are marginal. The 20th Street extension could serve high school traffic west of D Ave.

Figure 24 shows the 20th Street extensions impact on traffic distribution to the high school campus. The high school's responsibility toward assisting with funding of the 20th Street extension is based on the number of new trips projected to impact the road extension. New peak hour high school trips impacts to a 20th Street extension are summarized in **Table 7**.

Table 7: Proposed 20th Street Extension Trip Impacts

Time Period	New Trips Generated	20th Street Extension	
		Distribution	New Trips
AM Peak Hour	8	25%	2
Afterschool Peak Hour	5	25%	1
PM Peak Hour	3	25%	1

While there are benefits added to the local roadway network with an extension of 20th Street, new high school traffic impacts to the roadway are minimal. The 20th Street extension is not needed to support new high school-generated traffic.

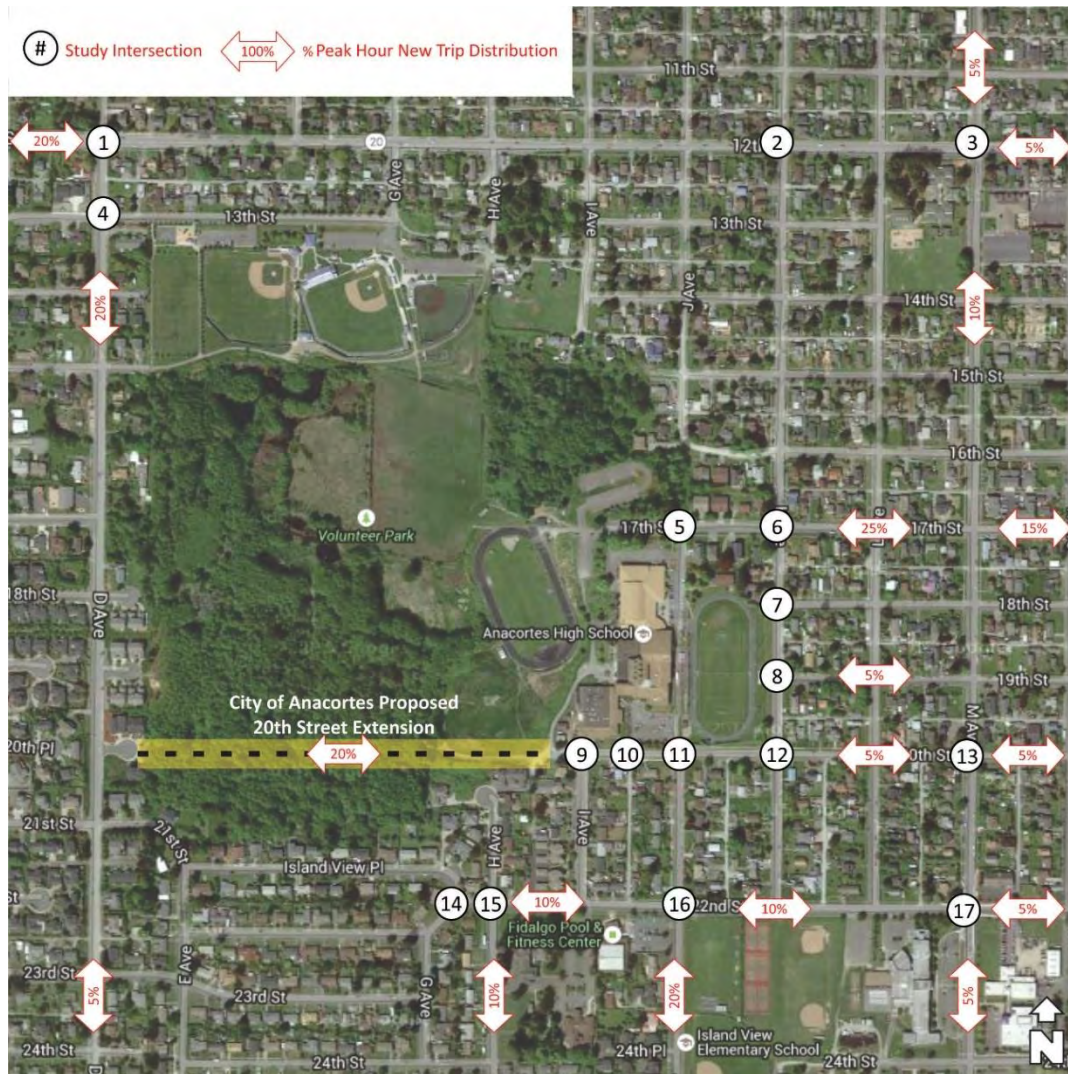


Figure 24: Peak Hour New Trip Distribution and Assignment; with 20th Street Extension

Parking Review and Local Code Comparisons (Special Events)

Table 8 compares assembly and event parking requirements from other local municipal codes to the parking requirements from the Anacortes Municipal Code to show similarities and compare local off-street parking regulations.

For special events, such as varsity football and basketball games, graduation and Brodnyak Theater productions, the available on-campus parking supply is 403 parking spaces.

As stated earlier in this document, the proposed 403 stall on-campus parking supply satisfies the parking requirements under the Anacortes Municipal Code. The proposed 403 on-campus parking stalls satisfies the parking requirements of both the Cities' of Burlington and Mount Vernon.

The Sedro-Woolley Municipal Code requires up to 454 stalls (+51 more than the proposed parking supply) for the gymnasium. The Oak Harbor Municipal Code requires are up to 409 stalls (+6 more than the proposed parking supply) for Rice Field and the gymnasium.

Table 8: Local Parking Requirements Stadiums, Sports Facilities and Public Assembly Places

City (Municipal Code Chapter)	Parking Requirement	Land Use	Fixed Seats	Parking Required
Anacortes (17.46.020)	1 per 4 fixed seats OR 10 per 1,000 net square feet if no fixed seats	New Rice Field	1,500	375
		Gymnasium	1,600	400
		Brodniak Theater	806	213
Burlington (17.54.020)	1 per 8 fixed seats OR 1 per 100 sf of spectator assembly area not containing fixed seats	New Rice Field	1,500	188
		Gymnasium	1,600	200
		Brodniak Theater	806	107
Mount Vernon (17.84.030)	1 per 4 fixed seats	New Rice Field	1,500	375
		Gymnasium	1,600	400
		Brodniak Theater	806	213
Sedro-Woolley (17.36.030)	1 per 3 occupants	New Rice Field	1,500	425 ¹
		Gymnasium	1,600	454 ¹
		Brodniak Theater	806	241 ¹
Oak Harbor (19.44.100)	1 per 4 seats AND 1 per 30 sf of assembly space without fixed seats	New Rice Field	1,500	409 ²
		Gymnasium	1,600	409 ³
		Brodniak Theater	806	222 ³

1. Assumes 85% occupancy. Example: 1,600 seat gym at 85% occupancy is 1,360 persons X 1 stall per 3 occupants = 454 stalls
2. Assumes 1,000 sf of Rice Field assembly space
3. Assumes 250 sf of gymnasium and Brodniak Theater assembly space

Overlapping event schedules could potentially increase parking demand. Thus, event scheduling for Anacortes High School will need to be coordinated to not create demands in excess of supply.

Compared to the other local municipal codes, the Anacortes parking requirement of 4 stalls per fixed seat is similar and reasonable. It is noted that event goers will continue to utilize available on-street and off-campus off-street parking, regardless of the total on-campus supply.

Parking Recommendations

Typical (non-Special Event)

Non-special event parking recommendations are as follows:

- Clearly mark student and reserved staff parking areas
- Consider preferential parking assignments for Running Start and senior students
- Student parking could be made available for by-day purchase and parking.
- Provide up to eight stalls near Cap Sante High School, similar to existing conditions.

Special Event

It is recommended that the school appoint an event coordinator to work with the City, local police, campus security and the neighborhood to develop a special event transportation and parking plan. The plan should encourage walking, identify off-street parking areas both on- and off-campus, identify parking restrictions, recommend arrival times, and note the respective fees and shuttle service information, if these services are desired. For large events we recommend working with the School District to utilize nearby district properties, churches, community centers and other properties to supplement and support event parking, as needed.

The coordinator should also work with emergency services and assist in making sure future parking areas support emergency vehicle access. Double stacking parking in certain lots could also be explored; however, consideration for emergency vehicles shall take precedence over stacking parked vehicles.

Off-campus parking lots within ½-mile from the campus are highlighted in **Figure 25**. These off-campus parking areas, which include approximately 540 off-street parking stalls could be used to support parking for large high school events and minimize spillover concerns onto neighborhood streets and other private parking areas. A formal agreement would be needed between the School District and private properties. It is noted that the ballfields, Whitney Primary School, Island View Elementary, and Anacortes Middle School are School District properties.



Figure 25: Campus Event On-Campus and Possible Off-Campus Parking Areas

The appendix that follows includes intersection turning movement volumes and the intersection capacity (or LOS) reports.

EXHIBIT #8:

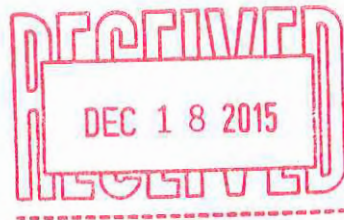
CRITICAL AREA REPORT & COMPENSATORY WETLAND BUFFER MITIGATION PLAN

Critical Area Report (Wetland Protection Areas):
Anacortes School District #103-Anacortes High School
City of Anacortes, Washington

Revised 10 December 2015

Prepared for:

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Aqua-Terr Systems, Inc.

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LIST OF ABBREVIATIONS AND ACRONYMS

Anacortes Municipal Code (AMC)
Aqua-Terr Systems, Inc. (ATSI)
Bush, Roed & Hitchings, Inc. (BRHI)
National Wetlands Inventory (NWI)
Natural Resource Conservation Service (NRCS)
Priority Habitats and Species (PHS)
Professional Wetland Scientist (PWS)
United States Army Corps of Engineers (Corps)
United States Fish and Wildlife Service (USFWS)
Watershed Resource Inventory Area (WRIA)
Washington State Department of Ecology (Ecology)
Washington State Department of Fish and Wildlife (WDFW)
Washington State Department of Natural Resources (WDNR)
Water Quality Certification (WQC)
Willamette Meridian (WM)

1.0 EXECUTIVE SUMMARY

ATSI has been retained by Anacortes School District #103 to review the property associated with Anacortes High School and within 300 feet for biologically critical areas, including wetlands, for a renovation and reconstruction project. A portion of a wetland complex adjacent to the built environment of the Anacortes High School was field flagged and surveyed. The results of the review are provided within this report.

The Anacortes High School property is located on the northeast portion of the City of Anacortes, Washington and is comprised of numerous parcels (an extensive list of the project site parcel numbers is provided in the text of this document). The property is located within a portion of Section 24, Township 35 north, Range 1 east, WM.

The property is bounded by residential housing to the north, east, and south and City Park (Volunteer Park/Smiley's Bottom) to the west. The area surrounding the project site is primarily City Park and residential. The property is comprised of the Anacortes High School and infrastructure and associated fields and a wetland complex. The property slopes moderately to gently northwest and flattens on the central and western portions.

Portions of the wetland complex were delineated on the property while the adjacent portions were estimated. The wetland complex is an approximate 35 acre Category III Palustrine Forested/Emergent Seasonally Flooded/Saturated Permanently Flooded partially drained/ditched excavated (PFO/EMEHdx) depressional outflow wetland with upland hummocks. Hydrology to the wetland flows northwest and is provided by storm water outfalls, pipes, and ditches in addition to precipitation and upgradient runoff. The wetland complex flows northwest to an 18 inch concrete culvert into the City of Anacortes's storm water system and then into the Guemes Channel portion of the Salish Sea.

A regulated critical area was identified on and adjacent to the property and includes a wetland complex. The wetland complex is regulated and has a 110 foot buffer as per Ecology and AMC. Impacts to the wetland and/or its buffer require notification to the City of Anacortes while wetland impacts will require notifying the Corps and Ecology with the appropriate permitting process to follow.

2.0 INTRODUCTION

ATSI prepared this Critical Area Report for reconnaissance, data collection, and delineation of Wetland Protection Areas located on and adjacent to the Anacortes High School property (Figures 1 and 2). The portion of the wetland complex located adjacent to the Anacortes High School built environment and proposed project site have been field flagged and surveyed (Figure 2). The proposed project includes renovation and reconstruction of the Anacortes High School. This Critical Area Report describes the existing conditions of the property and surrounding area in the context of biologically critical wetlands (Figure 2).

3.0 METHODS

3.1 GENERAL

For this Critical Area Report, ATSI focused on biologically critical wetlands located on and adjacent to the property.

The City of Anacortes regulates biologically critical wetlands through AMC Chapter 17.70 Critical Area Regulations Article V. Wetland Protection Areas (City of Anacortes 1982). Biologically critical areas are important natural resources with significant development constraints (City of Anacortes 1982).

This Critical Area Report has been prepared to document the results of ATSI's preliminary review, reconnaissance, data collection, and critical area identification for the property and within 300 feet.

3.1.0 Preliminary Review

Preliminary data review of public resource documents was performed to provide initial information on the potential vegetation, soils, hydrology, and critical areas located on and adjacent to the property. These resources included, but were not limited to:

- Skagit County iMap (Skagit County 2012)
- United States Geological Survey topographic maps (National Geographic 2008)
- Google Earth aerial photographs (Google Earth 2008)
- USFWS NWI wetlands maps (USFWS 29 March 2011)
- United States Department of Agriculture NRCS soil survey maps (Web Soil Survey)

3.1.1 Reconnaissance

To perform qualitative and quantitative analyses, reconnaissance of the property was conducted on 12 and 13 May and 18 June 2015. Reconnaissance aided in determining the location, assessing the functions, and delineating and estimating the boundaries of biologically critical wetlands located on and adjacent to the property. Aerial photographs were used for orientation and to assist in locating wetlands. Data on topography, vegetation, soils, hydrology, wildlife, and habitat were observed and recorded and have been synthesized into this Critical Area Report.

3.1.2 Data Collection

Data were collected utilizing the methods set forth in the Corps, *Wetland Delineation Manual* (Environmental Laboratory 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* as accepted by Ecology (Corps 2010). Data on vegetation, soil, and hydrology were recorded on data forms (Appendix A).

3.1.2.0 Vegetation

In general, hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during the growing season. In most cases, hydrophytic vegetation decisions are based on the wetland

indicator status which include Facultative (FAC), Facultative Wetland (FACW), Obligate (OBL), Facultative Upland (FACU), Upland (UPL), No Indicator (NI), No Occurrence (NO), and Not Listed (NL) as defined in the National Wetland Plant List (Corps 2012).

The percent cover of the dominant plant species is estimated and the indicator status of each species is determined for each stratum (e.g. tree, woody vine, sapling/shrub, and herb strata) within a 30 foot radius plot for the tree and woody vine strata and a 5 foot radius plot for the sapling/shrub and herb strata. Plot size and shape are modified to reflect site conditions. Vegetation characteristics are recorded on data forms (Appendix A).

The hydrophytic vegetation indicators include the Rapid Test, Dominance Test, Prevalence Index, Morphological Adaptations, and Problematic Hydrophytic Vegetation.

3.1.2.1 Soil

Hydric soils are soils formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper portion (upper 12 inches). On-site soils are described from a 20 inch (+/-), hand-dug soil pit. Soil characteristics, including hydric soil characteristics and indicators such as redoxymorphic features if present and color determined using Munsell Soil Color Charts (Munsell 2009), are examined within the soil profile. Soil characteristics are recorded on data forms (Appendix A).

The hydric soil indicators pertinent to this area include Histosol (A1), Histic Epipedon (A2), Black Histic (A3), Hydrogen Sulfide (A4), Depleted Below Dark Surface (A11), Thick Dark Surface (A12), Sandy Mucky Mineral (S1), Sandy Gleyed Matrix (S4), Sandy Redox (S5), Stripped Matrix (S6), Loamy Mucky Mineral (F1), Loamy Gleyed Matrix (F2), Depleted Matrix (F3), Redox Dark Surface (F6), Depleted Dark Surface (F7), Redox Depressions (F8), Muck (A10), and Red Parent Material (TF2).

3.1.2.2 Hydrology

Wetland hydrology is present when direct or indirect indicators of seasonal or permanent soil saturation or inundation are observed. Hydrology characteristics are recorded on data forms (Appendix A).

Primary indicators of wetland hydrology include Surface Water (A1), High Water Table (A2), Saturation (A3), Water Marks (B1), Sediment Deposits (B2), Drift Deposits (B3), Algal Mat or Crust (B4), Iron Deposits (B5), Surface Soil Cracks (B6), Inundation Visible on Aerial Imagery (B7), Sparsely Vegetated Concave Surface (B8), Water Stained Leaves (B9), Salt Crust (B11), Aquatic Invertebrates (B13), Hydrogen Sulfide Odor (C1), Oxidized Rhizospheres along Living Roots (C3), Presence of Reduced Iron (C4), Recent Iron Reduction in Tilled Soils (C6), Stunted or Stressed Plants (D1). Secondary Indicators of wetland hydrology include Water Stained Leaves (B9), Drainage Patterns (B10), Dry-Season Water Table (C2), Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2), Shallow Aquitard (D3), FAC-Neutral Test (D5), Raised Ant Mounds (D6), and Frost-Heave Hummocks.

3.1.2.3 Classification

Wetlands are classified using the methodology provided in Cowardin's, *Classification of Wetlands and Deepwater Habitats of the United States* and Brinson's, *A Hydrogeomorphic Classification for Wetlands* (Cowardin 1979 and Brinson 1993).

3.1.2.4 Categorization

Wetlands were categorized using the local jurisdiction system and the Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014). These systems take into account the hydrogeomorphic class of the wetland (Brinson 1993), sensitivity to disturbance, significance of the wetland, its degree of rarity, replacement potential, and functions the wetland provides. When wetlands extend off of or are located adjacent to the project site, maps and best professional judgment are used. Categorizing information is recorded on wetland rating forms (Appendix B).

3.1.2.5 Functions and Attributes

Wetland functions were evaluated using the Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014).

3.1.3 Qualifications

All reconnaissance conducted and information provided within this document, unless otherwise specified, were completed by ATSI staff, including senior biologist/principal Jim Wiggins, MS, PWS; senior biologist/project manager Karla Van Leaven, BS, PWS; and associate biologist Sigrid Williams, BS. Mr. Wiggins has a Master of Science degree in ecology and has been practicing as a biologist with ATSI since 1988 when he started the business. Ms. Van Leaven has a Bachelor of Science degree in natural resources/environmental science and has been practicing as a biologist with ATSI since 2008. Ms. Williams has a Bachelor of Science degree in environmental science and has been practicing as a biologist with ATSI since May 2015. Mr. Wiggins and Ms. Van Leaven are PWS's certified through the Society of Wetland Scientists, Professional Certification Program. Ms. Van Leaven is qualified to rate wetlands per the Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014).

4.0 RESULTS

4.1 GENERAL

The Anacortes High School property is located on the northeast portion of the City of Anacortes, Washington and is comprised of numerous parcels (Figures 1 and 2). While the property includes only a portion of the project site parcels, the project site parcel numbers include P31905, P31912, P31920, P31922, P31923, P31926, P55808, P55809, P55810, P55813, P55950, P55951, P55952, P55953, P55954, P55955, P55956, P55957, P55958, P55959, P55960, P55961, P55962, P55963, P58053, and P58054 (BRHI 18 June 2015). The property is located within a portion of Section 24, Township 35 north, Range 1 east, WM (Skagit 2012; Figure 1).

The property is bounded by residential housing to the north, east, and south and City Park (Volunteer Park/Smiley's Bottom) to the west (Figure 2). The area surrounding the project site is primarily City Park and residential (Figure 2). The property is comprised of

the Anacortes High School and infrastructure and associated fields and a wetland complex (Figure 2). Wetland complex details are provided in detail in the sections following. The property slopes moderately to gently northwest and flattens on the central and western portions (Figure 1).

4.1.0 Vegetation

4.1.1.0 Observations

The property is comprised of a forested wetland complex, forested upland, upland playfields (Figure 2). Representative vegetation was sampled (Appendix A).

Forested Wetland Complex

Representative forested wetland complex vegetation was sampled with canopy, sub-canopy, scrub/shrub, and herbaceous components. Wetland complex data plot numbers include 1, 3, 6, and 7 (all hydrophytic).

The dominant species present in the tree stratum include willow (*Salix* sp.) and red alder (*Alnus rubra*; FAC). The subdominant species in the tree stratum include bigleaf maple (*Acer macrophyllum*; FACU) and western redcedar (*Thuja plicata*; FAC).

The dominant species present in the sapling/shrub stratum include salmonberry (*Rubus spectabilis*; FAC) and Nootka rose (*Rosa nutkana*; FAC). The subdominant species in the sapling/shrub stratum include rhododendron (*Rhododendron* sp.).

The dominant species present in the herb stratum include lady fern (*Athyrium filix-femina*; FAC), skunk cabbage (*Lysichiton americanus*; OBL), grass sp., common rush (*Juncus effusus*; FACW), and silverweed (*Potentilla anserina*; OBL). The subdominant species in the herb stratum include giant horsetail (*Equisetum telmateia*; FACW), water foxtail (*Alopecurus geniculatus*; OBL), common spike-rush (*Eleocharis palustris*; OBL), trailing blackberry (*Rubus ursinus*; FACU), common plantain (*Plantago major*; FAC), clover (*Trifolium* sp.), reed canarygrass (*Phalaris arundinacea*; FACW), slough sedge (*Carex obnupta*; OBL), common dandelion (*Taraxacum officinale*; FACU), and English daisy (*Bellis perennis*; NL).

Dominant nor subdominant species were not sampled in the woody vine stratum.

Forested Upland

Representative forested upland vegetation was sampled with canopy, sub-canopy, scrub/shrub, and herbaceous components. Forested upland data plot numbers include 4 (hydrophytic) and 5 (not hydrophytic).

The dominant species present in the tree stratum include bigleaf maple and red alder. The subdominant species in the tree stratum include Douglas fir (*Pseudotsuga menziesii*; FACU).

The dominant species present in the sapling/shrub stratum include osoberry (*Oemleria cerasiformis*; FACU) and salmonberry. The subdominant species in the sapling/shrub

stratum include holly (*Ilex* sp.), rhododendron, and red elderberry (*Sambucus racemosa*; FACU).

The dominant species present in the herb stratum include trailing blackberry, lady fern, enchanter's nightshade (*Circaea alpina*; FAC), sword fern (*Polystichum munitum*; FACU), Dewey's sedge (*Carex deweyana*; FAC), and fringe cup (*Tellima grandiflora*; FACU).

Dominant nor subdominant species were sampled in the woody vine stratum.

Upland Field

Representative upland field vegetation was sampled with herbaceous components. Upland field data plot numbers include 2 and 8 (both not hydrophytic).

Subdominant species were not sampled in the tree stratum.

Dominant nor subdominant species were sampled in the sapling/shrub stratum.

The dominant species present in the herb stratum include grass sp. and common dandelion. The subdominant species in the herb stratum include dead grass sp., creeping buttercup (*Ranunculus repens*; FAC), common plantain, clover, and English plantain (*Plantago lanceolata*; FACU).

Dominant nor subdominant species were sampled in the woody vine stratum.

Additional

Additional species documented throughout the property include in the tree stratum black cottonwood (*Populus balsamifera*; FAC), paper birch (*Betula papyrifera*; FAC), Pacific willow (*Salix lasiandra*; FACW), Scouler's willow (*Salix scouleriana*; FAC), and western hemlock (*Tsuga heterophylla*; FACU); in the sapling/shrub stratum include Scotch broom (*Cytisus scoparius*; NI/UPL), snowberry (*Symphoricarpos albus*; FACU), thimbleberry (*Rubus parviflorus*; FACU), red huckleberry (*Vaccinium parvifolium*; FACU), red-flowering currant (*Ribes sanguineum*; FACU), black hawthorn (*Crataegus douglasii*; FAC), hardhack (*Spiraea douglasii*; FACW), and Sitka mountain ash (*Sorbus sitchensis*; FAC); in the herb stratum stinging nettle (*Urtica dioica*; FAC), giant hogweed (*Heracleum mantegazzianum*; FAC), small-fruited bulrush (*Scirpus microcarpus*; OBL), cattail (*Typha latifolia*; OBL), common mare's-tail (*Hippuris vulgaris*; OBL), Canadian thistle (*Cirsium arvense*; FAC), common velvet-grass (*Holcus lanatus*; FAC), red-top (*Agrostis gigantea/alba*; FAC), hairy cat's ear (*Hypochaeris radicata*; FACU), orchard grass (*Dactylis glomerata*; FACU), common tansy (*Tanacetum vulgare*; FACU), Japanese knotweed (*Polygonum cuspidatum*; FACU), false lily of the valley (*Maianthemum dilatatum*; FAC), and cleavers (*Galium aparine*; FACU); and in the woody vine stratum Himalayan blackberry (*Rubus armeniacus*; FACU) and ivy (*Hedera* sp.).

Although not identified to species, moss and additional non-native species were also observed on the property.

4.1.1 Soil

4.1.1.0 NRCS Soil Descriptions

The NRCS maps five soil units on the property: **31** Clallam-Urban land complex 0-8% slopes (Not Hydric), **38** Coveland-Bow complex 5-10% slopes (Hydric), **97** Mukilteo muck (Hydric), **102** Norma silt loam (Hydric), and **143** Terric Medisapristis 0-2% slopes (Hydric) (Web Soil Survey; Figure 3). The NRCS descriptions for the soil units are listed below (Web Soil Survey):

31 Clallam-Urban land complex 0 to 8 percent slopes
Component: Clallam (45 percent)

The Clallam component makes up 45 percent of the map unit. Slopes are 0 to 8 percent. This component is on hillslopes, hills. The parent material consists of glacial drift. Depth to a root restrictive layer, densic material, is 20 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during January, February, March, April. Organic matter content in the surface horizon is about 4 percent.

Component: Urban land (40 percent) and Bow (5 percent)
These soils are miscellaneous and minor components and therefore a description was not generated.

38 Coveland-Bow complex 5 to 10 percent slopes
Component: Coveland (50 percent)

The Coveland component makes up 50 percent of the map unit. Slopes are 5 to 8 percent. This component is on hillslopes, hills. The parent material consists of glaciolacustrine deposits. Depth to a root restrictive layer, abrupt textural change, is 10 to 20 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 9 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 4 percent.

Component: Bow (40 percent)
The Bow component makes up 40 percent of the map unit. Slopes are 5 to 10 percent. This component is on hillslopes, hills on drift plains. The parent material consists of volcanic ash, glaciolacustrine deposits, and glacial drift. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February,

March, April, May, November, December. Organic matter content in the surface horizon is about 1 percent.

97 Mukilteo muck

Component: Mukilteo (100 percent)

The Mukilteo component makes up 100 percent of the map unit. Slopes are 0 to 1 percent. This component is on glacial drift plains, depressions. The parent material consists of woody, mossy, and grassy organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, October, November, December. Organic matter content in the surface horizon is about 30 percent.

102 Norma silt loam

Component: Norma (90 percent)

The Norma component makes up 90 percent of the map unit. Slopes are 0 to 3 percent. This component is on depressions, drainageways, glacial drift plains. The parent material consists of glacial drift and alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 6 percent.

Component: Mukilteo (5 percent) and Bellingham (5 percent)

These soils are minor components and therefore a description was not generated.

143 Terric Medisaprists, 0 to 2 percent slopes

Component: Terric Medisaprists (100 percent)

The Terric Medisaprists component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on glacial drift plains, backswamps on river valleys. The parent material consists of mixed organic material over glacial drift. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 45 percent.

4.1.1.1 Observations

Soils were sampled in eight test pits throughout the property (Appendix A Data Plot Numbers 1 through 8; Figure 5). The soils present within data plot numbers 2, 4, 5, and 8 did not satisfy hydric soil indicators and therefore are upland while the soils present in data plot numbers 1, 3, 6, and 7 satisfied hydric soil indicators and therefore are hydric soils.

Upland

The upland soils sampled had between one and two layers. From 0 to between 9 and 20 inches, the matrix color of the first layer ranged from black (10YR 2/1 and 7.5YR 2.5/1) to very dark gray (7.5YR 3/1) while the second layer ranged from black (7.5YR 2.5/1) to dark brown (7.5YR 3/3). The second layer of data plot number 2 had dark brown (7.5YR 3/3) redoxymorphic distinct, soft mass concentrations at 11 inches. This plot did not qualify as a hydric soil as it did not have a wetland hydrology indicator associated and therefore was considered to be drained/on the edge of the wetland/upland. Soil texture included loam, mucky loam, and sandy loam. Fibric and greasy characteristics were associated with the texture of data plot number 8 and the second layer of data plot number 2.

Wetland

The wetland soils sampled had up to three layers. From 0 to between 3.5 and 20 inches, the matrix color of the first layer ranged from black (10YR 2/1 and 7.5YR 2.5/1) to gray (2.5Y 5/1). The second layer ranged from black (7.5 YR 2.5/1) to gray (2.5Y 5/1). The third layer was dark brown (7.5YR 3/3). Some plots had dark brown (7.5YR 3/3) to yellowish brown (10YR 5/6) redoxymorphic distinct or prominent, soft mass concentrations. Soil texture included loam, sandy fill, fine sandy loam, mucky peaty loam, coarse sandy fill, mucky loam, peat, and fine sand. Fibric and greasy characteristics were associated with the texture of some of the data plots.

4.1.2 Hydrology

4.1.2.0 Water Regime

The property is located within Watershed Resource Inventory Area 3 (Ecology 2008). Hydrology is supplied to the property by storm water outfalls, pipes, and ditches in addition to precipitation and upgradient runoff. The property is part of a watershed which flows into the Guemes Channel portion of the Salish Sea. The wetland flows northwest through the wetland complex and via ditches into an 18 inch concrete culvert associated with the City of Anacortes storm water system and eventually into the Salish Sea.

4.1.2.1 Observations

Indicators of wetland hydrology were observed on the property within the wetland complex while the upland portions of the property did not have hydrology that satisfied indicators of wetland hydrology (Appendix A).

Upland

The upland portions of the property did not have hydrology that satisfied indicators of wetland (data plot numbers 2, 4, 5, and 8).

Wetland

Wetland data plot numbers 1, 3, 6, and 7 satisfied indicators of wetland hydrology. While surface water was observed adjacent to some of the data plots, the water table and saturation were observed in those that satisfied indicators of wetland hydrology.

4.1.3 Wildlife and Habitat

4.1.3.0 WDNR

Natural Heritage Program

As per the WDNR Natural Heritage Program, the Section associated with the property (Section 24, Township 35 north, Range 1 east, WM) does not contain natural heritage features associated with wetlands (WDNR 4 February 2014).

4.1.3.1 WDFW

SalmonScape

Per the WDFW SalmonScape map, there are no fish-bearing streams on or adjacent to the property (WDFW 2003). ATSI observed a non-fish bearing stream on the western portion of the wetland complex which may have been historically created as a ditch.

Priority Habitats and Species

Per the WDFW Priority Habitats and Species program map, there is a priority species with a listed occurrence within and surrounding the property, the pinto abalone (*Haliotis kamtschatkana*) (WDFW 2012). However, the pinto abalone is a marine organism and is therefore not located on or adjacent to the property.

Additionally, palustrine wetland aquatic habitat is mapped on and adjacent to the property (WDFW 2012). Although similarly mapped to Wetlands A and B, there are differences in what WDFW maps and what ATSI delineated (WDFW 2012; Figure 4). Said differences include the wetland being more extensive in some areas and reduced in others.

4.1.3.2 Species

ATSI did not observe species of local importance, priority species, or Endangered Species Act listed, proposed, candidate, delisted, or species of concern that have a primary association with habitat on or adjacent to the property.

4.1.3.3 Observations

The majority of the habitat located on the property includes forested wetland complex, upland field, and forested upland (Figure 2). The wildlife that may utilize the habitat located on and adjacent to the project site include aquatic and/or terrestrial insects, amphibians, reptiles, birds, and/or small and large mammals, i.e., fauna that are typical for urban dwelling such as deer and coyote. The ponded (historically excavated) portions of the wetland complex also provide waterfowl habitat and possibly beaver (*Castor Canadensis*).

4.2 CRITICAL AREAS

The critical areas observed on and adjacent to the property include a wetland complex (Figure 2).

4.2.0 Wetland

A forested wetland complex was observed on and adjacent to the property (Figure 2).

4.2.1.0 NWI Map

The USFWS NWI maps one wetland unit on and adjacent to the property (Figure 4). The wetland unit is comprised of a Palustrine Emergent Temporary Flooded Partially Drained/Ditched (PEMAd) freshwater emergent wetland, a Palustrine Forested Seasonally Flooded (PFOC) freshwater forested/shrub wetland, and a Palustrine Forested Temporary Flooded (PFOA) freshwater forested/shrub wetland (Figure 4).

Although similarly mapped to the wetland complex, there are differences in what the NWI maps and what ATSI delineated/estimated (Figures 2 and 4). Said differences include the wetland being more extensive in some areas and reduced in others.

4.2.1.1 City of Anacortes Map

ATSI mapped the approximate location of the wetland complex for the City of Anacortes in 2012 (ATSI March 2012). The mapping has changed since 2012, but is similar and the changes are not significant.

4.2.1.2 Field Observations

A forested wetland complex was observed on and adjacent to the property. The portion of the wetland complex adjacent to the Anacortes High School built (parking lots and sports fields) environment were delineated while the portions off the property were estimated (Figures 2 and Figure 6 of the Wetland Rating Forms depicts the approximate wetland complex unit).

The forested wetland complex is an approximate 35 acre Category III Palustrine Forested/Emergent Seasonally Flooded/Saturated Permanently Flooded partially drained/ditched excavated (PFO/EMEHDx) depressional outflow wetland with upland hummocks (Figures 3 and 6).

Hydrology to the wetland flows northwest and is provided by storm water outfalls, pipes, and ditches in addition to precipitation and upgradient runoff. The wetland flows north into an 18 inch concrete culvert into the City of Anacortes's storm water system and into the Guemes Channel portion of the Salish Sea.

4.2.1.3 Rating and Categorizing

The wetland was rated as a Category III (Appendix B).

4.2.1.4 Functions and Attributes

Wetland functions were evaluated using the Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014).

Overall, the wetland complex had a moderate rating for function. In particular, for water quality a moderate/high rating was given, for hydrologic a moderate rating was given, and for habitat a moderate/low rating was given (Table 1).

Table 1. Wetland Functions			
FUNCTION	Water Quality	Hydrologic	Habitat
Site Potential	Moderate	Moderate	Moderate
Landscape Potential	High	High	Low
Value	Moderate	Low	Moderate

Generally, the wetland has a moderate/high rating for water quality as it filters potentially contaminated water from untreated storm water, fertilized lawns and playfields, animal waste nutrients, septic systems, etc. prior to being released in to the Salish Sea via the City of Anacortes's storm water system. The wetland complex only has a moderate rating for hydrologic as the water stored in the wetland does not flow into a downstream water that has flooding issues, it flows directly into the Guemes Channel portion of the Salish Sea via the storm water system. Finally, the wetland has a moderate/low rating for habitat as it is surrounded by urbanization and there are no corridors for accessing the habitat.

Refer to Appendix B for additional information regarding wetland functions.

4.3 REGULATIONS

4.3.0 City of Anacortes

A wetland is located on and adjacent to the property (Figures 2 and 6).

4.3.0.0 Wetland

The wetland complex located on and adjacent to the property is regulated by the City of Anacortes (Figure 2). The Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014) was used to rate the wetland which has a habitat score of 5 (Appendix B). As per Ecology and AMC, the buffer is 110 feet (Appendix B; Ecology 26 August 2015; City of Anacortes 1982).

If a project is proposed to impact the wetland or its buffers, the City of Anacortes shall be notified and the necessary wetland critical areas permitting process shall be completed, including showing avoidance and minimization of wetland impacts and mitigating for unavoidable impacts as applicable.

4.3.1 Ecology

Ecology reviews all wetland disturbance permits received by the Corps for WQC. Ecology requires an "individual" review of all wetland disturbances greater than 0.5 acre. WQC is required for all Individual Permit applications. Ecology has authority over discharge into all wetlands (including isolated wetlands) and streams and can impose buffers and compensatory mitigation for impacts.

4.3.2 Corps

Corps requires notification for all disturbances to wetlands, streams, and potentially other drainages. Corps regulates Waters of the United States, which includes wetlands, streams, and other surface waters. The Corps does not regulate isolated wetlands. Although the wetlands on the property may have been historically isolated, the Corps makes the determination of the regulatory status of these wetlands.

5.0 SUMMARY

A regulated wetland complex was identified on and adjacent to the property and within the study area (Figure 2). As per Ecology and AMC, the wetland has a 110 foot buffer (Ecology 26 August 2015; City of Anacortes 1982). Impacts to the wetland and/or its buffer require notification to the City of Anacortes. Direct wetland impacts such as fill, require notifying the Corps and Ecology with the appropriate permitting process to follow.

6.0 LIMITATIONS

We have used the most current, established methods to make determinations as to the location, size, and types of critical areas located on and adjacent to the property. All of the above statements are based on our best professional judgment. Although we follow the local, state, and federal criteria, we cannot guarantee their determination will correspond with ours. Please note that regulations pertaining to critical areas are subject to change over time.

7.0 WORKS REFERENCED

Aqua-Terr Systems, Inc. March 2012. City of Anacortes Parks Department: Volunteer Park Management Plan.

Brinson, M.M. 1993. A Hydrogeomorphic Classification For Wetlands. Prepared For United States Army Corps Of Engineers, Waterways Experiment Station.

Bush, Roed & Hitchings, Inc. 18 June 2015. Personal email communication re: project parcel numbers.

City of Anacortes. 1982. Anacortes, Washington Municipal Code. Online content updated on December 31, 2014.
<http://library.municode.com/index.aspx?clientID=16193&stateID=47&statename=Washington>
[Accessed May 2015]

Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page. (Version 04DEC98).

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. United States Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.

Google Earth. 2008. <http://www.google.com/earth/index.html>

Hruby, T. 2014. Washington State Wetland Rating System for Western Washington: 2014 Update. (Publication #14-06-029). Olympia, WA: Washington Department of Ecology.

Munsell. 2009. Munsell Soil-Color Charts with genuine Munsell color chips. Munsell Color X-rite.

National Geographic. 2008. TOPO! Version 4.5.0.

Natural Resources Conservation Service. Web Soil Survey. Soil Survey Staff, United States Department of Agriculture. [Online WWW] Available URL: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> [Accessed 21 May 2015]

Skagit County. 2012. Skagit County, Washington iMap. <http://www.skagitcounty.net/GIS/Applications/iMap/asp/iMap.asp> [Accessed May 2015]

United States Army Corps of Engineers. 2012. National Wetland Plant List. http://rsgisias.crrel.usace.army.mil/nwpl_static/viewer.html

United States Army Corps of Engineers. May 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

United States Fish and Wildlife Service. 29 March 2011. National Wetlands Inventory Wetlands Mapper. <http://www.fws.gov/wetlands/Data/Mapper.html> [Accessed 17 June 2015]

Washington State Department of Ecology. 26 August 2015. Personal email communication with Donna Bunten regarding the updated wetland rating system for western Washington's buffer guidance.

Washington State Department of Ecology. 8 November 2008. Water Resource Inventory Area (WRIA) Maps. <http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm> [Accessed 19 June 2015]

Washington State Department of Fish and Wildlife. 2012. Priority Habitats and Species on the Web.

<http://wdfw.wa.gov/mapping/phs/>

[Accessed 25 May 2015]

Washington State Department of Fish and Wildlife. 2003. SalmonScape.

<http://wdfw.wa.gov/mapping/salmonscape/>

[Accessed 25 May 2015]

Washington State Department of Natural Resources. 24 September 2014. Sections that Contain Natural Heritage Features Associated with Wetlands.

<http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf>

[Accessed 27 May 2015]

8.0 FIGURES

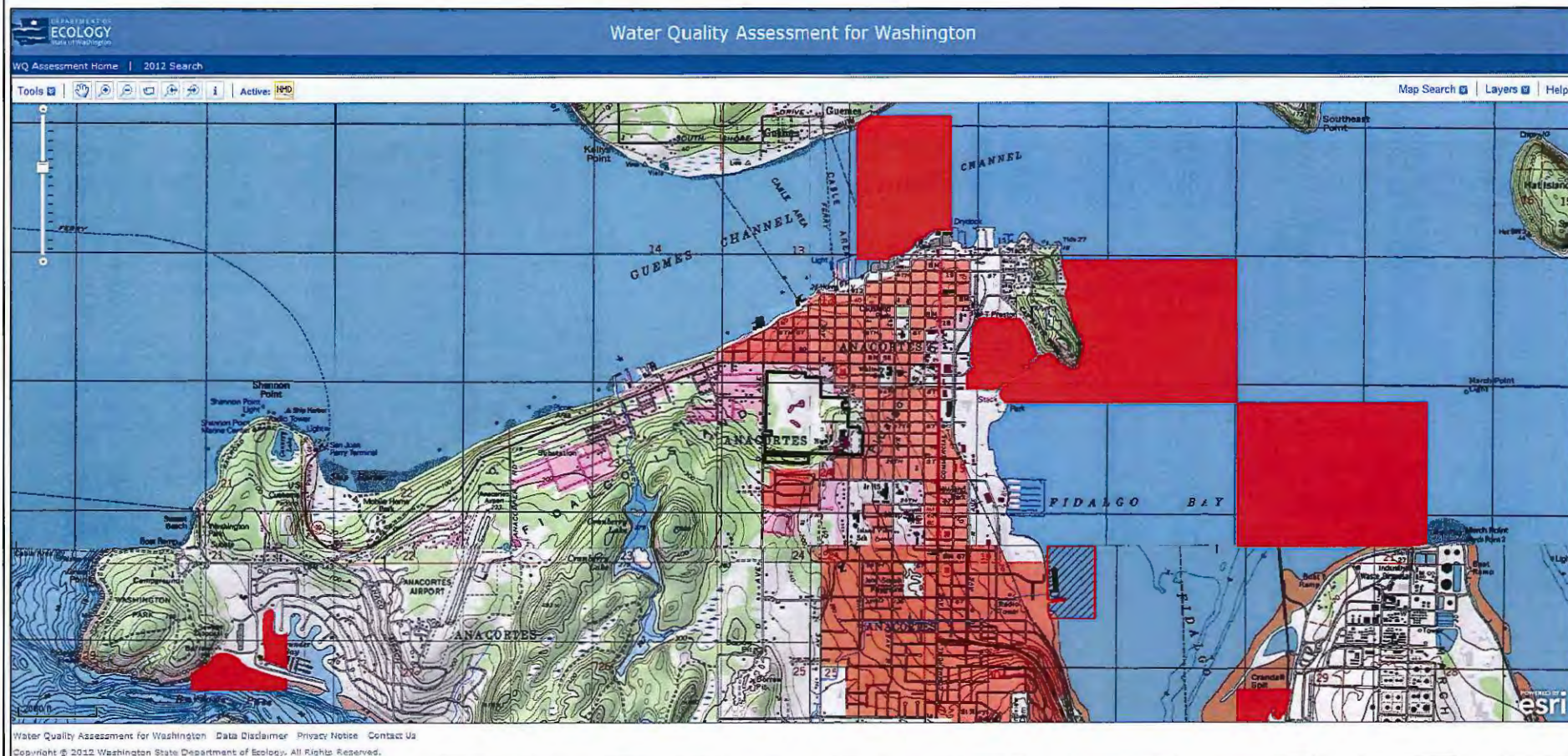
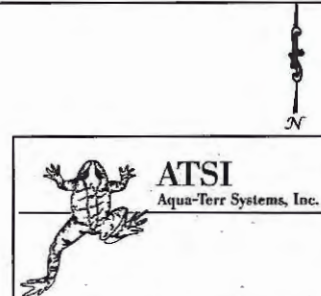


Figure 1 Vicinity Map

Anacortes School District #103-Anacortes High School
 City of Anacortes, Washington
 Section 24, Township 35 N, Range 1 E, WM
 Revised 10 December 2015

Directions I-5->St Rte 20->W on St Rte 20->Round About N to St Rte 20/Commercial Ave->W on 17th->Anacortes High School

Note Basemaps obtained from Ecology and BRHI with alterations made by ATSI. Red areas=Ecology 303d waters, refer to the Wetland Rating Forms and Figure 7 for additional information regarding these waters.



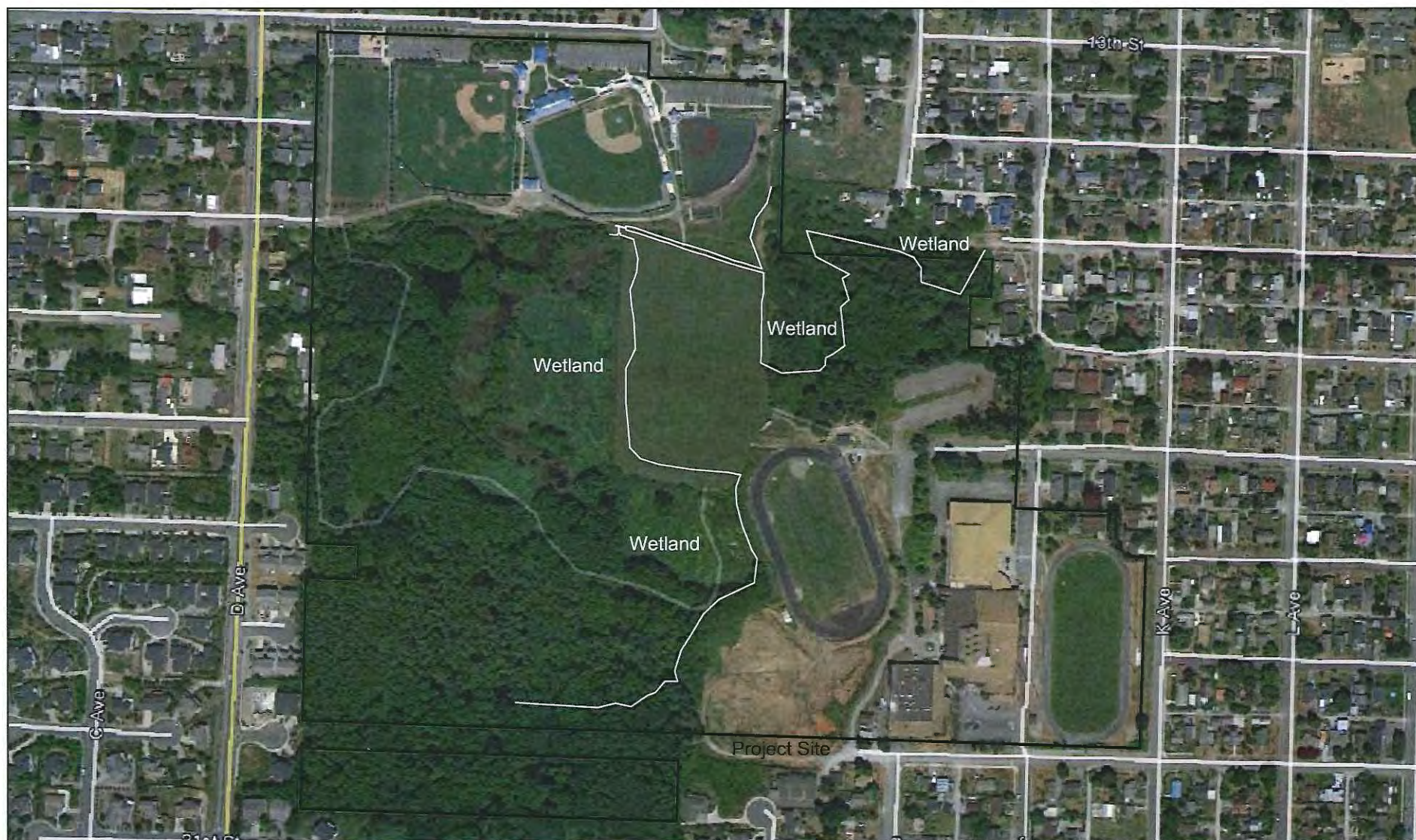


Figure 2 Existing Conditions Aerial Photograph & Map

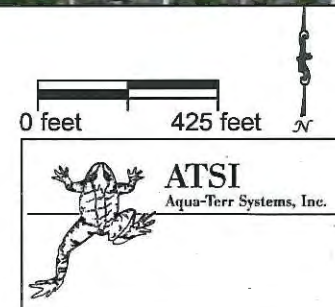
Anacortes School District #103-Anacortes High School

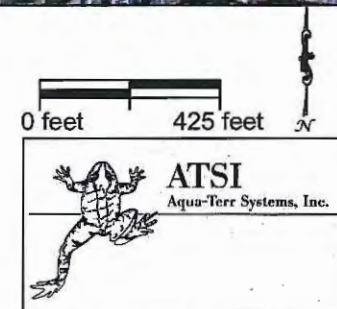
City of Anacortes, Washington

Section 24, Township 35 N, Range 1 E, WM

Revised 10 December 2015

Note Basemap/aerial (Google Earth 10 July 2014 Imagery Date) obtained from BRHI with alterations made by ATSI. The portion of the wetland edge depicted is indicated by the white line and is located adjacent to the built environment of the Anacortes High School. The black line indicates the Review Area of which the Project Site is a subset of in the southeast corner.





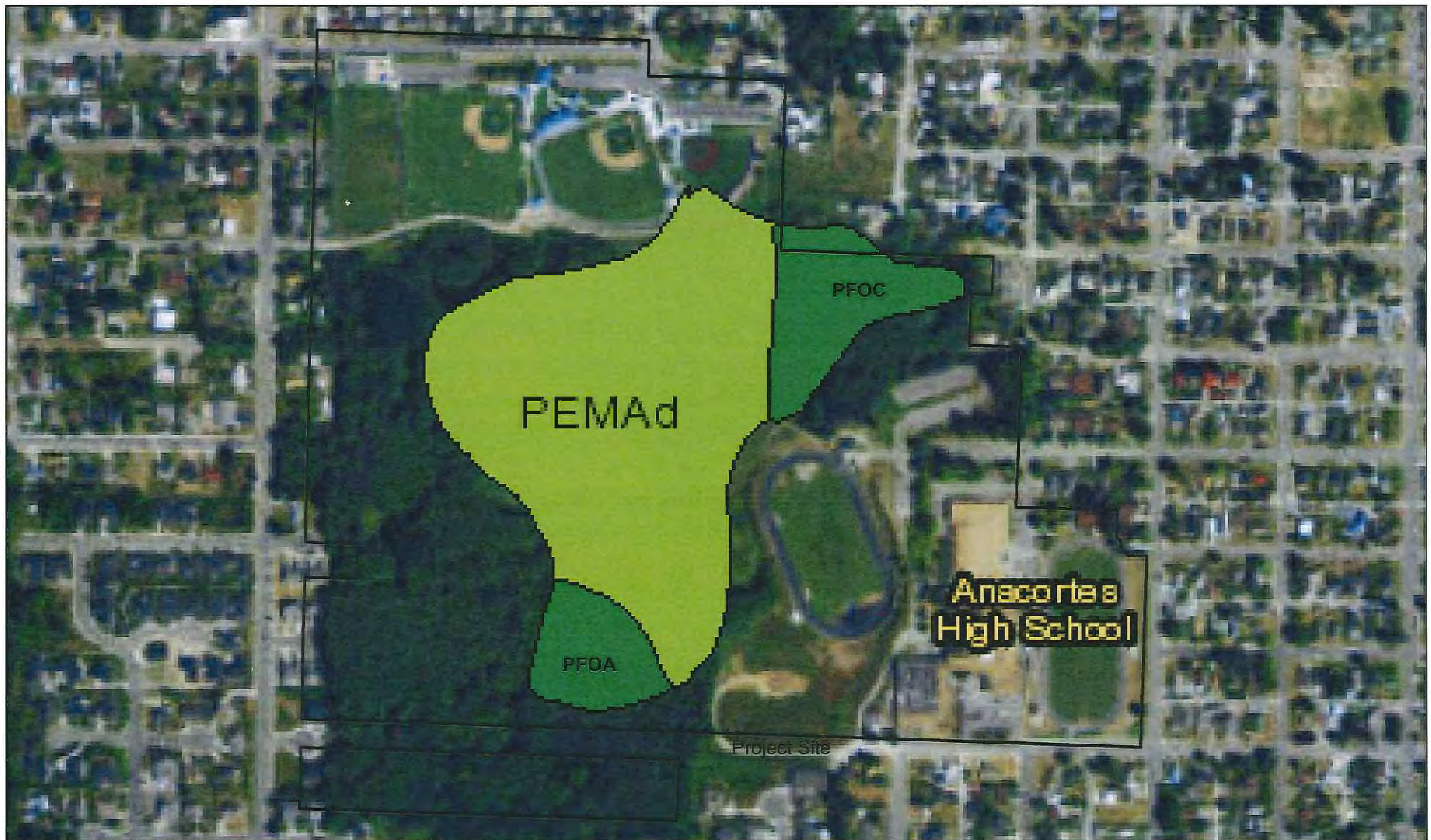


Figure 4 Wetlands Aerial Photograph & Map

Anacortes School District #103-Anacortes High School

City of Anacortes, Washington

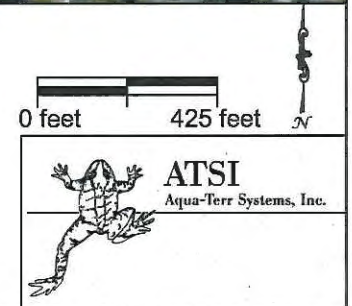
Section 24, Township 35 N, Range 1 E, WM

Revised 10 December 2015

PEMAd Palustrine Emergent Temporarily Flooded Partially Drained/Ditched **PFOC** Palustrine Forested Seasonally Flooded

PFOA Palustrine Forested Temporarily Flooded

Note Baseaerial obtained from USFWS NWI and basemap obtained from BRHI with alterations made by ATSI.



9.0 APPENDICES

9.1 APPENDIX A. DATA FORMS

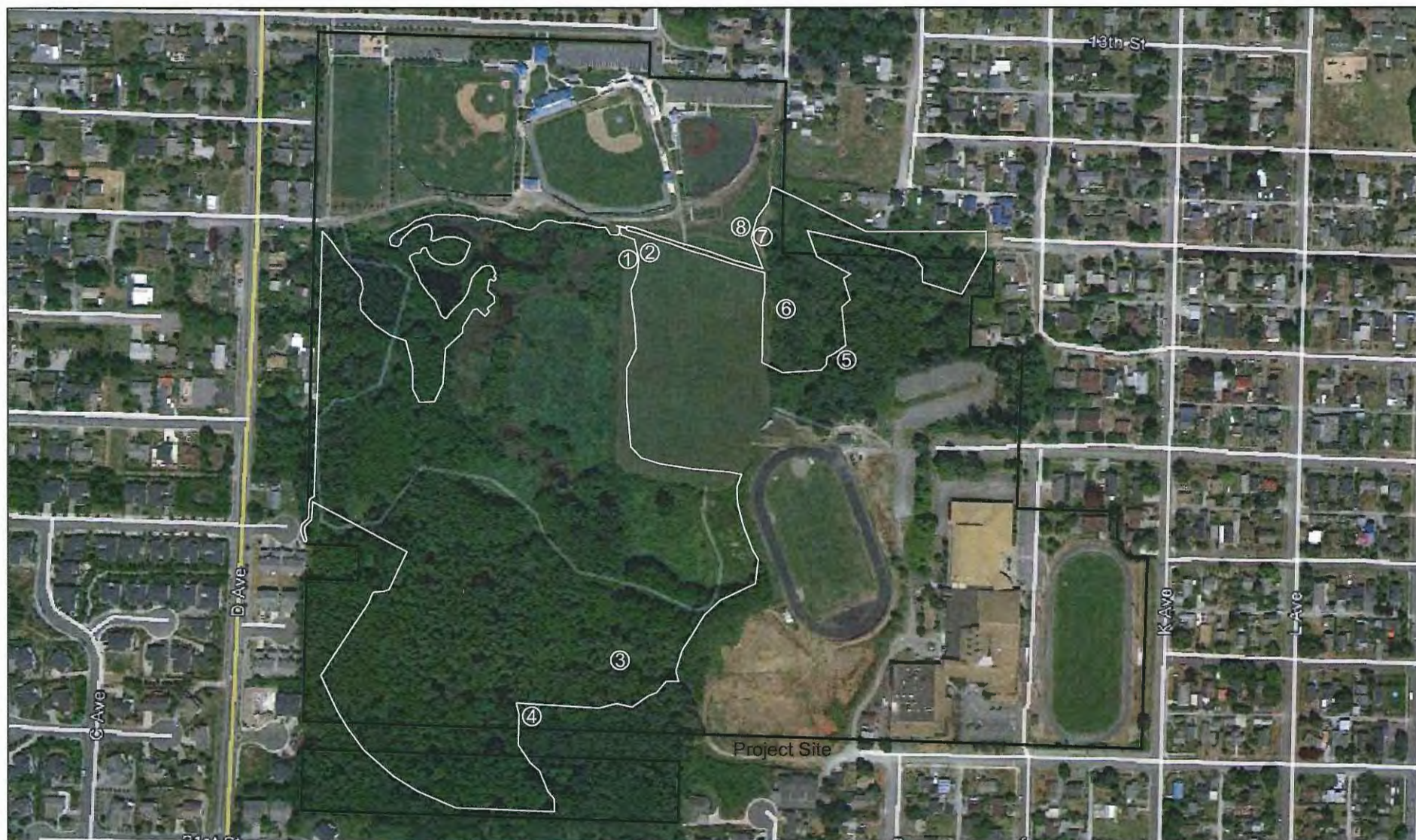
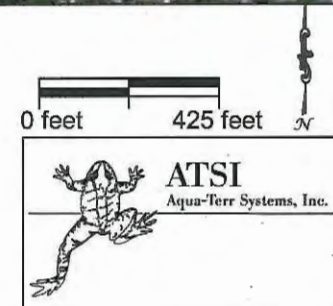


Figure 5 Data Plots 1-8 Aerial Photograph & Map
 Anacortes School District #103-Anacortes High School
 City of Anacortes, Washington
 Section 24, Township 35 N, Range 1 E, WM
 Revised 10 December 2015

Data Plot

Note Basemap/aerial (Google Earth 10 July 2014 Imagery Date) obtained from BRHI with alterations made by ATSI. The portion of the wetland edge depicted is indicated by the white line and is located adjacent to the built environment of the Anacortes High School. The black line indicates the Review Area of which the Project Site is a subset of in the southeast corner.



WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site:	Anacortes High School	Sampling Date:	12 & 13 May 2015
Applicant/Owner:	Anacortes School District	Sampling Point:	1
Investigator:	Karla Van Leaven & Sigrid Williams	City/County:	Anacortes
Section, Township, Range:	24, 25 N, 1 E WM	State:	WA
Landform (hillslope, terrace, etc):	Flat	Slope (%):	~1
Subregion (LRR):	A	Lat:	48°30'29.69"N
		Long:	122°37'24.98"W
		Datum:	WGS84
Soil Map Unit Name:	97 Mukilteo muck (listed as hydric)	NWI classification:	PEMAd
Are climatic/hydrologic conditions on the site typical for this time of year?	☒ Yes ☐ No	(If no, explain in remarks.)	
Are "Normal Circumstances" present on the site?	☒ Yes ☐ No		
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ significantly disturbed?:	No		
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ naturally problematic?:	No	(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☒ Yes ☐ No	Is this Sampling Point within a Wetland?	☒ Yes ☐ No
Hydric Soils Present?	☒ Yes ☐ No		
Wetland Hydrology Present?	☒ Yes ☐ No		
Remarks:	Wetland playfield data plot located on the northwest portion of the project site. Indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were present; therefore, since all three parameters were met, data plot number 1 was located within a wetland.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size 30 foot radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	
1.				Number of Dominant Species that are OBL, FACW, or FAC:	3 (A)
2.				Total Number of Dominant Species Across All Strata:	3 (B)
3.				Percent of Dominant Species that are OBL, FACW, or FAC:	100 (A/B)
4.					
50 percent threshold equals N/A; 20 percent threshold equals N/A	0		= Total Cover		
Sapling/Shrub Stratum (Plot size 5 foot radius)				Prevalence Index Worksheet	
1.				Total % Cover of	Multiply by
2.				OBL species	x 1 =
3.				FACW species	x 2 =
4.				FAC species	x 3 =
5.				FACU species	x 4 =
50 percent threshold equals N/A; 20 percent threshold equals N/A	0		= Total Cover	UPL species	x 5 =
Herb Stratum (Plot size 5 foot radius)				Column totals	(A) (B)
1. Grass sp.	34.5**	-	-	Prevalence Index = B/A = N/A	
2. Juncus effusus	10	Yes	FACW		
3. Plantago major	10	Yes	FAC		
4. Potentilla anserina	10	Yes	OBL		
5. Trifolium sp.	10**	-	-		
6. Taraxacum officinale	2.5	No	FACU		
7. Bellis perennis	1***	No	NL/UPL		
8.					
9.					
10.					
11.					
50 percent threshold equals 16.75; 20 percent threshold equals 6.70	33.5		= Total Cover	1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
Woody Vine Stratum (Plot size 30 foot radius)				Hydrophytic Vegetation Present?	
1.				Yes	☒ No ☐
2.					
50 percent threshold equals N/A; 20 percent threshold equals N/A	0		= Total Cover		
% Bare Ground in Herb Stratum	2				
Remarks: Please note: moss in herb stratum plot at 20% cover. The Corps 2014 NWPL v3.2 was used to determine indicator statuses. Indicators of hydrophytic vegetation were present. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present satisfied the Dominance Test because greater than 50 percent (100 percent) of the dominant species present were FAC, FACW, or OBL.					
**Plant not identified to species level, not included in the total percent cover.					
***Plant with Not Listed (NL) indicator status, assumed to be Upland (UPL).					
****Total cover less than 5 percent and therefore included with another stratum's total cover.					
*****NI indicators with no regional or national indicators are not included.					

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3.5	N/A	100	N/A	N/A	N/A	N/A	Sandy fill	
3.5-20	7.5YR 2.5/1 black	80	7.5YR 3/3 dark brown	20	C	M	Mucky loam	Distinct, soft mass concentrations; Fibric, greasy

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains²Loc: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☒ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³

☐ 2cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: Not present

Hydric soil present?

Yes ☒No ☐

Depth (inches): N/A

Remarks: Indicators of hydric soil were present. The soil present satisfied the F6 Redox Dark Surface hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply):

☐ Surface water (A1)	☐ Sparsely Vegetated Concave Surface (B8)
☒ High Water Table (A2)	☐ Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9)
☐ Saturation (A3)	☐ Salt Crust (B11)
☐ Water Marks (B1)	☐ Aquatic Invertebrates (B13)
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Surface Soil Cracks (B6)	☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (explain in remarks)

Secondary Indicators (2 or more required):

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks

Field Observations

Surface Water Present?	☐ Yes	☒ No	Depth (in):	N/A
Water Table Present?	☒ Yes	☐ No	Depth (in):	8
Saturation Present? (includes capillary fringe)	☐ Yes	☒ No	Depth (in):	N/A

Wetland Hydrology Present?

Yes ☒No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were present. The hydrology present satisfied the A2 High Water Table wetland hydrology indicator.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site:	Anacortes High School	Sampling Date:	12 & 13 May 2015
Applicant/Owner:	Anacortes School District	Sampling Point:	2
Investigator:	Karla Van Leaven & Sigrid Williams	City/County:	Anacortes
Section, Township, Range:	24, 25 N, 1 E WM	State:	WA
Landform (hillslope, terrace, etc):	Depression, Hummock	Slope (%):	~1
Local relief (concave, convex, none):	Concave		
Subregion (LRR):	A	Lat:	48°30'29.69"N
Long:	122°37'24.98"W	Datum:	WGS84
Soil Map Unit Name:	97 Mukilteo muck (listed as hydric)	NWI classification:	PEMAd
Are climatic/hydrologic conditions on the site typical for this time of year?	☒ Yes ☐ No	(If no, explain in remarks.)	
Are "Normal Circumstances" present on the site?	☒ Yes ☐ No		
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ significantly disturbed?:	No		
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ naturally problematic?:	No	(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes ☒ No	Is this Sampling Point within a Wetland?	☐ Yes ☒ No
Hydric Soils Present?	☐ Yes ☒ No		
Wetland Hydrology Present?	☐ Yes ☒ No		
Remarks:	Upland/drained wetland plot located on the northwest portion of the project site, southeast of data plot number 1. Indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were absent; therefore, since all three parameters were not met, data plot number 2 was not located within a wetland.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size 30 foot radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	
1.				Number of Dominant Species that are OBL, FACW, or FAC:	2 (A)
2.				Total Number of Dominant Species Across All Strata:	3 (B)
3.				Percent of Dominant Species that are OBL, FACW, or FAC:	67 (A/B)
4.					
50 percent threshold equals N/A;	0	= Total Cover			
20 percent threshold equals N/A					
Sapling/Shrub Stratum (Plot size 5 foot radius)				Prevalence Index Worksheet	
1.				Total % Cover of OBL species	0 x 1 = 0
2.				FACW species	0 x 2 = 0
3.				FAC species	18 x 3 = 54
4.				FACU species	21 x 4 = 84
5.				UPL species	0 x 5 = 0
50 percent threshold equals N/A;	0	= Total Cover		Column totals	39 (A) 138 (B)
20 percent threshold equals N/A					
Herb Stratum (Plot size 5 foot radius)				Prevalence Index = B/A = 3.5	
1. Grass sp.	55**	-	-	Hydrophytic Vegetation Indicators	
2. <i>Taraxacum officinale</i>	20	Yes	FACU	No	1. Rapid Test- Hydrophytic Vegetation OBL/FACW
3. <i>Plantago major</i>	10	Yes	FAC	Yes	2. Dominance test is > 50%
4. <i>Ranunculus repens</i>	8	Yes	FAC	No	3. Prevalence test is ≤ 3.0 ¹
5. <i>Trifolium</i> sp.	5**	-	-	N/A	4. Morphological Adaptations ¹ (provide supp. info.)
6. <i>Plantago lanceolata</i>	1	No	FACU	N/A	5. Wetland Non-Vascular Plants ¹
7.				N/A	6. Problematic Hydrophytic Vegetation ¹ (explain)
8.				1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
9.					
10.					
11.					
50 percent threshold equals 19.5;	39	= Total Cover		Hydrophytic Vegetation Present? Yes ☐ No ☒	
20 percent threshold equals 7.8					
Woody Vine Stratum (Plot size 30 foot radius)					
1.					
2.					
50 percent threshold equals N/A;	0	= Total Cover			
20 percent threshold equals N/A					
% Bare Ground in Herb Stratum	1				
Remarks: The Corps 2014 NWPL v3.2 was used to determine indicator statuses. Indicators of hydrophytic vegetation were absent. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present satisfied the Dominance Test because greater than 50 percent (67 percent) of the dominant species present were FAC, FACW, or OBL. The vegetation present did not satisfy the Prevalence Test because the result was greater than 3.0 (3.5).					
**Plant not identified to species level, not included in the total percent cover.					
***Plant with Not Listed (NL) indicator status, assumed to be Upland (UPL).					
****Total cover less than 5 percent and therefore included with another stratum's total cover.					
*****NI indicators with no regional or national indicators are not included.					

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR 2/1 black	100	N/A	N/A	N/A	N/A	Loam	
11-20	7.5YR 2.5/1 black	80	7.5YR 3/3 dark brown	20	C	M	Mucky loam	Distinct, soft mass concentrations; Fibric, greasy

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains²Loc: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³

☐ 2cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: No present

Depth (inches): N/A

Hydric soil present?

Yes ☐No ☒

Remarks: Indicators of hydric soil were absent. Although redoxymorphic features were present, the contrast with the matrix was not sufficient to create a depleted matrix and the redoxymorphic features weren't located close enough to the surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply):

☐ Surface water (A1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9)
☐ Saturation (A3)	☐ Salt Crust (B11)
☐ Water Marks (B1)	☐ Aquatic Invertebrates (B13)
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Surface Soil Cracks (B6)	☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (explain in remarks)

Secondary Indicators (2 or more required):

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks

Field Observations

Surface Water Present?	☐ Yes ☒ No	Depth (in):	N/A
Water Table Present?	☒ Yes ☐ No	Depth (in):	14
Saturation Present? (includes capillary fringe)	☐ Yes ☒ No	Depth (in):	N/A

Wetland Hydrology Present?

Yes ☐No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were absent. Direct or indirect indicators of seasonal or permanent soil saturation or inundation were not observed and the water table was located greater than 12 inches deep.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site:	Anacortes High School	Sampling Date:	12 & 13 May 2015
Applicant/Owner:	Anacortes School District	Sampling Point:	3
Investigator:	Karla Van Leaven & Sigrid Williams	City/County:	Anacortes
Section, Township, Range:	24, 25 N, 1 E WM	State:	WA
Landform (hillslope, terrace, etc):	Depression	Slope (%):	~1
Subregion (LRR):	A	Lat:	48°30'29.69"N
		Long:	122°37'24.98"W
		Datum:	WGS84
Soil Map Unit Name:	97 Mukilteo muck (listed as hydric)	NWI classification:	PFOA
Are climatic/hydrologic conditions on the site typical for this time of year?	☒ Yes ☐ No	(If no, explain in remarks.)	
Are "Normal Circumstances" present on the site?	☒ Yes ☐ No		
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ significantly disturbed?: No			
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ naturally problematic?: No		(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☒ Yes ☐ No	Is this Sampling Point within a Wetland?	☒ Yes ☐ No
Hydric Soils Present?	☒ Yes ☐ No		
Wetland Hydrology Present?	☒ Yes ☐ No		
Remarks:	Forested wetland plot located southwest of the project site, southwest of data plot number 2. Indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were present; therefore, since all three parameters were met, data plot number 3 was located within a wetland.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size 30 foot radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	
1. <i>Alnus rubra</i>	40	Yes	FAC	Number of Dominant Species that are OBL, FACW, or FAC:	5
2. <i>Acer macrophyllum</i>	10	No	FACU		(A)
3. <i>Thuja plicata</i>	1	No	FAC	Total Number of Dominant Species Across All Strata:	5
4.					(B)
50 percent threshold equals 25.5;	51	= Total Cover		Percent of Dominant Species that are OBL, FACW, or FAC:	100
20 percent threshold equals 10.2					(A/B)
Sapling/Shrub Stratum (Plot size 5 foot radius)				Prevalence Index Worksheet	
1. <i>Rubus spectabilis</i>	7	Yes	FAC	Total % Cover of	Multiply by
2.				OBL species	x 1 =
3.				FACW species	x 2 =
4.				FAC species	x 3 =
5.				FACU species	x 4 =
50 percent threshold equals 3.5;	7	= Total Cover		UPL species	x 5 =
20 percent threshold equals 1.4				Column totals	(A) (B)
Herb Stratum (Plot size 5 foot radius)				Prevalence Index = B/A = N/A	
1. <i>Athyrium filix-femina</i>	35	Yes	FAC	Hydrophytic Vegetation Indicators	
2. <i>Lysichiton americanus</i>	35	Yes	OBL	No	1. Rapid Test- Hydrophytic Vegetation OBL/FACW
3. <i>Equisetum telmateia</i>	20	Yes	FACW	Yes	2. Dominance test is > 50%
4. <i>Carex obnupta</i>	5	No	OBL	N/A	3. Prevalence test is ≤ 3.0 ¹
5. <i>Phalaris arundinacea</i>	5	No	FACW	N/A	4. Morphological Adaptations ¹ (provide supp. info.)
6.				N/A	5. Wetland Non-Vascular Plants ¹
7.				N/A	6. Problematic Hydrophytic Vegetation ¹ (explain)
8.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
9.					
10.					
11.					
50 percent threshold equals 50;	100	= Total Cover			
20 percent threshold equals 20					
Woody Vine Stratum (Plot size 30 foot radius)				Hydrophytic Vegetation Present? Yes ☒ No ☐	
1.					
2.					
50 percent threshold equals N/A;	0	= Total Cover			
20 percent threshold equals N/A					
% Bare Ground in Herb Stratum	0				
Remarks:	Please note: Huckleberry sp. located on log adjacent the wetland. The Corps 2014 NWPL v3.2 was used to determine indicator statuses. Indicators of hydrophytic vegetation were present. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present satisfied the Dominance Test because greater than 50 percent (100 percent) of the dominant species present were FAC, FACW, or OBL.				
**Plant not identified to species level, not included in the total percent cover.					
***Plant with Not Listed (NL) Indicator status, assumed to be Upland (UPL).					
****Total cover less than 5 percent and therefore included with another stratum's total cover.					
*****NI indicators with no regional or national indicators are not included.					

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-13	10YR 2/1 black	100	N/A	N/A	N/A	N/A	Fine sandy loam	
13-20	2.5Y 5/1 gray	90	10YR 5/6 yellowish brown	10	C	M	Fine sand	Prominent, soft mass concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Loc: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| ☐ Histosol (A1) | ☐ Sandy Redox (S5) |
| ☐ Histic Epipedon (A2) | ☐ Stripped Matrix (S6) |
| ☐ Black Histic (A3) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☒ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³

- | |
|---|
| ☐ 2cm Muck (A10) |
| ☐ Red Parent Material (TF2) |
| ☐ Very Shallow Dark Surface (TF12) |
| ☐ Other (explain in remarks) |

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: Not presentDepth (inches): N/A

Hydric soil present?

Yes ☒No ☐

Remarks: Indicators of hydric soil were present. The soil present satisfied the A12 Thick Dark Surface hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply):

- | | |
|--|--|
| ☐ Surface water (A1) | ☐ Sparsely Vegetated Concave Surface (B8) |
| ☐ High Water Table (A2) | ☐ Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9) |
| ☒ Saturation (A3) | ☐ Salt Crust (B11) |
| ☐ Water Marks (B1) | ☐ Aquatic Invertebrates (B13) |
| ☐ Sediment Deposits (B2) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Drift Deposits (B3) | ☐ Oxidized Rhizospheres along Living Roots (C3) |
| ☐ Algal Mat or Crust (B4) | ☐ Presence of Reduced Iron (C4) |
| ☐ Iron Deposits (B5) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Surface Soil Cracks (B6) | ☐ Stunted or Stressed Plants (D1) (LRR A) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Other (explain in remarks) |

Secondary Indicators (2 or more required):

- | |
|---|
| ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) |
| ☐ Drainage Patterns (B10) |
| ☐ Dry-Season Water Table (C2) |
| ☐ Saturation Visible on Aerial Imagery (C9) |
| ☐ Geomorphic Position (D2) |
| ☐ Shallow Aquitard (D3) |
| ☐ FAC-Neutral Test (D5) |
| ☐ Raised Ant Mounds (D6) (LRR A) |
| ☐ Frost-Heave Hummocks |

Field Observations

Surface Water Present?	☐ Yes	☒ No	Depth (in):	N/A
Water Table Present?	☒ Yes	☐ No	Depth (in):	13
Saturation Present? (includes capillary fringe)	☒ Yes	☐ No	Depth (in):	0-13

Wetland Hydrology Present?

Yes ☒No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Please note: 1/4 inches of surface water adjacent the soil pit. Indicators of wetland hydrology were present. The hydrology present satisfied the A3 Saturation wetland hydrology indicator.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site:	Anacortes High School	Sampling Date:	12 & 13 May 2015
Applicant/Owner:	Anacortes School District	Sampling Point:	4
Investigator:	Karla Van Leaven & Sigrid Williams	City/County:	Anacortes
Section, Township, Range:	24, 25 N, 1 E WM	State:	WA
Landform (hillslope, terrace, etc):	Hillslope	Slope (%):	~1
Subregion (LRR):	A	Lat:	48°30'29.69"N
		Long:	122°37'24.98"W
		Datum:	WGS84
Soil Map Unit Name:	38 Coveland-Bow complex 5-10% slopes (listed as hydric)	NWI classification:	None
Are climatic/hydrologic conditions on the site typical for this time of year?	☒ Yes ☐ No	(If no, explain in remarks.)	
Are "Normal Circumstances" present on the site?	☒ Yes ☐ No		
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed?:	No		
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic?:	No	(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☒ Yes ☐ No	Is this Sampling Point within a Wetland?	☐ Yes ☒ No
Hydric Soils Present?	☐ Yes ☒ No		
Wetland Hydrology Present?	☐ Yes ☒ No		
Remarks:	Upland forest plot located southwest of the project site, southwest of data plot number 3. Indicators of hydrophytic vegetation were present while indicators of hydric soil and wetland hydrology were absent; therefore, since all three parameters were not met, data plot number 4 was not located within a wetland.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size 30 foot radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	
1. <i>Acer macrophyllum</i>	70	Yes	FACU	Number of Dominant Species that are OBL, FACW, or FAC:	4
2. <i>Thuja plicata</i>	25	Yes	FAC		(A)
3. <i>Alnus rubra</i>	10	No	FAC	Total Number of Dominant Species Across All Strata:	7
4. <i>Pseudotsuga menziesii</i>	5	No	FACU		(B)
50 percent threshold equals 55;	110	= Total Cover		Percent of Dominant Species that are OBL, FACW, or FAC:	57
20 percent threshold equals 22					(A/B)
Sapling/Shrub Stratum (Plot size 5 foot radius)				Prevalence Index Worksheet	
1. <i>Rubus spectabilis</i>	15	Yes	FAC	Total % Cover of	Multiply by
2. <i>Oemleria cerasiformis</i>	10	Yes	FACU	OBL species	x 1 =
3. <i>Crataegus douglasii</i>	1	No	FAC	FACW species	x 2 =
4. <i>Ilex</i> sp.	1**	-	-	FAC species	x 3 =
5. <i>Sambucus racemosa</i>	1	No	FACU	FACU species	x 4 =
50 percent threshold equals 13.5;	27	= Total Cover		UPL species	x 5 =
20 percent threshold equals 5.4				Column totals	(A) (B)
Herb Stratum (Plot size 5 foot radius)				Prevalence Index = B/A = N/A	
1. <i>Athyrium filix-femina</i>	20	Yes	FAC	Hydrophytic Vegetation Indicators	
2. <i>Circaea alpina</i>	20	Yes	FAC	No	1. Rapid Test- Hydrophytic Vegetation OBL/FACW
3. <i>Polystichum munitum</i>	20	Yes	FACU	Yes	2. Dominance test is > 50%
4. <i>Rubus ursinus</i>	10	No	FACU	No	3. Prevalence test is ≤ 3.0 ¹
5. <i>Carex deweyana</i>	5	No	FAC	N/A	4. Morphological Adaptations ¹ (provide supp. Info.)
6. <i>Tellima grandiflora</i>	5	No	FACU	N/A	5. Wetland Non-Vascular Plants ¹
7.				N/A	6. Problematic Hydrophytic Vegetation ¹ (explain)
8.					
9.					
10.					
11.					
50 percent threshold equals 40;	80	= Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
20 percent threshold equals 16					
Woody Vine Stratum (Plot size 30 foot radius)				Hydrophytic Vegetation Present?	
1.				Yes	☒ No ☐
2.					
50 percent threshold equals N/A;	0	= Total Cover			
20 percent threshold equals N/A					
% Bare Ground in Herb Stratum	20				
Remarks:	The Corps 2014 NWPL v3.2 was used to determine indicator statuses. Indicators of hydrophytic vegetation were present. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present satisfied the Dominance Test because greater than 50 percent (57 percent) of the dominant species present were FAC, FACW, or OBL.				
	**Plant not identified to species level, not included in the total percent cover.				
	***Plant with Not Listed (NL) indicator status, assumed to be Upland (UPL).				
	****Total cover less than 5 percent and therefore included with another stratum's total cover.				
	*****NI indicators with no regional or national indicators are not included.				

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	7.5YR 3/1 very dark gray	100	N/A	N/A	N/A	N/A	Loam	
9-20	7.5YR 3/3 dark brown	100	N/A	N/A	N/A	N/A	Sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains²Loc: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| ☐ Histosol (A1) | ☐ Sandy Redox (S5) |
| ☐ Histic Epipedon (A2) | ☐ Stripped Matrix (S6) |
| ☐ Black Histic (A3) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³

- | |
|---|
| ☐ 2cm Muck (A10) |
| ☐ Red Parent Material (TF2) |
| ☐ Very Shallow Dark Surface (TF12) |
| ☐ Other (explain in remarks) |

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: Not present

Depth (inches): N/A

Hydric soil present?

Yes ☐No ☒

Remarks: Indicators of hydric soil were absent. There were no redoxymorphic features present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply):

- | | |
|--|--|
| ☐ Surface water (A1) | ☐ Sparsely Vegetated Concave Surface (B8) |
| ☐ High Water Table (A2) | ☐ Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9) |
| ☐ Saturation (A3) | ☐ Salt Crust (B11) |
| ☐ Water Marks (B1) | ☐ Aquatic Invertebrates (B13) |
| ☐ Sediment Deposits (B2) | ☐ Hydrogen Sulfide Odor (C1) |
| ☐ Drift Deposits (B3) | ☐ Oxidized Rhizospheres along Living Roots (C3) |
| ☐ Algal Mat or Crust (B4) | ☐ Presence of Reduced Iron (C4) |
| ☐ Iron Deposits (B5) | ☐ Recent Iron Reduction in Tilled Soils (C6) |
| ☐ Surface Soil Cracks (B6) | ☐ Stunted or Stressed Plants (D1) (LRR A) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Other (explain in remarks) |

Secondary Indicators (2 or more required):

- | |
|---|
| ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) |
| ☐ Drainage Patterns (B10) |
| ☐ Dry-Season Water Table (C2) |
| ☐ Saturation Visible on Aerial Imagery (C9) |
| ☐ Geomorphic Position (D2) |
| ☐ Shallow Aquitard (D3) |
| ☐ FAC-Neutral Test (D5) |
| ☐ Raised Ant Mounds (D6) (LRR A) |
| ☐ Frost-Heave Hummocks |

Field Observations

Surface Water Present?	☐ Yes	☒ No	Depth (in):	N/A
Water Table Present?	☐ Yes	☒ No	Depth (in):	N/A
Saturation Present?	☐ Yes	☒ No	Depth (in):	N/A

(includes capillary fringe)

Wetland Hydrology Present?

Yes ☐No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were absent. Direct or indirect indicators of seasonal or permanent soil saturation or inundation were not observed.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site:	Anacortes High School	Sampling Date:	12 & 13 May 2015
Applicant/Owner:	Anacortes School District	Sampling Point:	5
Investigator:	Karla Van Leaven & Sigrid Williams	City/County:	Anacortes
Section, Township, Range:	24, 25 N, 1 E WM	State:	WA
Landform (hillslope, terrace, etc):	Hillslope	Slope (%):	~1
Subregion (LRR):	A	Lat:	48°30'29.69"N
		Long:	122°37'24.98"W
		Datum:	WGS84
Soil Map Unit Name:	97 Mukilteo muck (listed as hydric)	NWI classification:	None
Are climatic/hydrologic conditions on the site typical for this time of year?	☒ Yes ☐ No	(If no, explain in remarks.)	
Are "Normal Circumstances" present on the site?	☒ Yes ☐ No		
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed?:	No		
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic?:	No	(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes ☒ No	Is this Sampling Point within a Wetland?	☐ Yes ☒ No
Hydric Soils Present?	☐ Yes ☒ No		
Wetland Hydrology Present?	☐ Yes ☒ No		
Remarks:	Upland forest plot located on the northeast portion of the project site, northeast of data plot number 4. Indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were absent; therefore, since all three parameters were not met, data plot number 5 was not located within a wetland.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size 30 foot radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	
1. <i>Alnus rubra</i>	75	Yes	FAC	Number of Dominant Species that are OBL, FACW, or FAC:	2
2. <i>Acer macrophyllum</i>	25	Yes	FACU		(A)
3.				Total Number of Dominant Species Across All Strata:	5
4.					(B)
50 percent threshold equals 50;	100	= Total Cover		Percent of Dominant Species that are OBL, FACW, or FAC:	40
20 percent threshold equals 20					(A/B)
Sapling/Shrub Stratum (Plot size 5 foot radius)				Prevalence Index Worksheet	
1. <i>Oemleria cerasiformis</i>	40	Yes	FACU	Total % Cover of	Multiply by
2. <i>Rubus spectabilis</i>	30	Yes	FAC	OBL species	0 x 1 = 0
3. <i>Ilex</i> sp.	5**	-	-	FACW species	0 x 2 = 0
4. <i>Rhododendron</i> sp.	2.5**	-	-	FAC species	105 x 3 = 315
5. <i>Sambucus racemosa</i>	1	No	FACU	FACU species	91 x 4 = 364
50 percent threshold equals 35.5;	71	= Total Cover		UPL species	0 x 5 = 0
20 percent threshold equals 14.2				Column totals	196 (A) 679 (B)
Herb Stratum (Plot size 5 foot radius)				Prevalence Index = B/A = 3.5	
1. <i>Rubus ursinus</i>	25	Yes	FACU	Hydrophytic Vegetation Indicators	
2.				No	1. Rapid Test- Hydrophytic Vegetation OBL/FACW
3.				No	2. Dominance test is > 50%
4.				No	3. Prevalence test is ≤ 3.0 ¹
5.				N/A	4. Morphological Adaptations ¹ (provide supp. info.)
6.				N/A	5. Wetland Non-Vascular Plants ¹
7.				N/A	6. Problematic Hydrophytic Vegetation ¹ (explain)
8.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
9.				Hydrophytic Vegetation Present? Yes ☐ No ☒	
10.					
11.					
50 percent threshold equals 12.5;	25	= Total Cover			
20 percent threshold equals 5.0					
Woody Vine Stratum (Plot size 30 foot radius)					
1.					
2.					
50 percent threshold equals N/A;	0	= Total Cover			
20 percent threshold equals N/A					
% Bare Ground in Herb Stratum	75				
Remarks:	The Corps 2014 NWPL v3.2 was used to determine indicator statuses. Indicators of hydrophytic vegetation were absent. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present did not satisfy the Dominance Test because less than 50 percent (40 percent) of the dominant species present were FAC, FACW, or OBL. The vegetation present did not satisfy the Prevalence Test because the result was greater than 3.0 (3.5).				
**Plant not identified to species level, not included in the total percent cover.					
***Plant with Not Listed (NL) indicator status, assumed to be Upland (UPL).					
****Total cover less than 5 percent and therefore included with another stratum's total cover.					
*****NI indicators with no regional or national indicators are not included.					

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20+	7.5YR 2.5/1 black	100	N/A	N/A	N/A	N/A	Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains²Loc: PL=Pore Lining, M=Matrix**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³

☐ 2cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: Not presentDepth (inches): N/A

Hydric soil present?

Yes ☐No ☒

Remarks: Indicators of hydric soil were absent. There were no redoxymorphic features present.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply):

☐ Surface water (A1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9)
☐ Saturation (A3)	☐ Salt Crust (B11)
☐ Water Marks (B1)	☐ Aquatic Invertebrates (B13)
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Surface Soil Cracks (B6)	☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (explain in remarks)

Secondary Indicators (2 or more required):

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks

Field Observations

Surface Water Present?	☐ Yes	☒ No	Depth (in):	N/A
Water Table Present?	☐ Yes	☒ No	Depth (in):	N/A
Saturation Present? (includes capillary fringe)	☐ Yes	☒ No	Depth (in):	N/A

Wetland Hydrology Present?

Yes ☐No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were absent. Direct or indirect indicators of seasonal or permanent soil saturation or inundation were not observed.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site:	Anacortes High School	Sampling Date:	12 & 13 May 2015
Applicant/Owner:	Anacortes School District	Sampling Point:	6
Investigator:	Karla Van Leaven & Sigrid Williams	City/County:	Anacortes
Section, Township, Range:	24, 25 N, 1 E WM	State:	WA
Landform (hillslope, terrace, etc):	Depression	Slope (%):	~1
Local relief (concave, convex, none):	Concave		
Subregion (LRR):	A	Lat:	48°30'29.69"N
		Long:	122°37'24.98"W
		Datum:	WGS84
Soil Map Unit Name:	97 Mukilteo muck (listed as hydric)	NWI classification:	PFOC
Are climatic/hydrologic conditions on the site typical for this time of year?	☒ Yes ☐ No	(If no, explain in remarks.)	
Are "Normal Circumstances" present on the site?	☒ Yes ☐ No		
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ significantly disturbed?: No			
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ naturally problematic?: No		(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☒ Yes ☐ No	Is this Sampling Point within a Wetland?	☒ Yes ☐ No
Hydric Soils Present?	☒ Yes ☐ No		
Wetland Hydrology Present?	☒ Yes ☐ No		
Remarks:	Forested wetland plot located on the northeast portion of the project site, northwest of data plot number 5. Indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were present; therefore, since all three parameters were met, data plot number 6 was located within a wetland.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size 30 foot radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet
1. <i>Salix</i> sp.	85	Yes	FAC/FACW	Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
2.				Total Number of Dominant Species Across All Strata: 4 (B)
3.				Percent of Dominant Species that are OBL, FACW, or FAC: 75 (A/B)
4.				
50 percent threshold equals 42.5; 20 percent threshold equals 17.0	85	= Total Cover		
Sapling/Shrub Stratum (Plot size 5 foot radius)				
1. <i>Rubus spectabilis</i>	25	Yes	FAC	Prevalence Index Worksheet Total % Cover of Multiply by OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column totals (A) (B)
2. <i>Rosa nutkana</i>	15	Yes	FAC	
3. <i>Rhododendron</i> sp.	1**	-	-	
4.				
5.				
50 percent threshold equals 20; 20 percent threshold equals 8	40	= Total Cover		
Herb Stratum (Plot size 5 foot radius)				
1. <i>Rubus ursinus</i>	15	Yes	FACU	Prevalence Index = B/A = N/A
2. <i>Athyrium filix-femina</i>	1	No	FAC	
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
50 percent threshold equals 8.0; 20 percent threshold equals 3.2	16	= Total Cover		
Woody Vine Stratum (Plot size 30 foot radius)				
1.				Hydrophytic Vegetation Indicators No 1. Rapid Test- Hydrophytic Vegetation OBL/FACW Yes 2. Dominance test is > 50% N/A 3. Prevalence test is ≤ 3.0 ¹ N/A 4. Morphological Adaptations ¹ (provide supp. info.) N/A 5. Wetland Non-Vascular Plants ¹ N/A 6. Problematic Hydrophytic Vegetation ¹ (explain)
2.				
50 percent threshold equals N/A; 20 percent threshold equals N/A	0	= Total Cover		
% Bare Ground in Herb Stratum	84			
Hydrophytic Vegetation Present? Yes ☒ No ☐				
Remarks: The Corps 2014 NWPL v3.2 was used to determine indicator statuses. Indicators of hydrophytic vegetation were present. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present satisfied the Dominance Test because greater than 50 percent (75 percent) of the dominant species present were FAC, FACW, or OBL. **Plant not identified to species level, not included in the total percent cover. ***Plant with Not Listed (NL) indicator status, assumed to be Upland (UPL). ****Total cover less than 5 percent and therefore included with another stratum's total cover. *****NI indicators with no regional or national indicators are not included.				

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	7.5YR 2.5/1 black	80	7.5YR 3/3 dark brown	20	M	C	Mucky peaty loam	Distinct, soft mass concentrations; Fibric, greasy

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Loc: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☒ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³

☐ 2cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):
Type: Not present

Depth (inches): N/A

Hydric soil present? Yes ☒ No ☐

Remarks: Indicators of hydric soil were present. The soil present satisfied the F6 Redox Dark Surface hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply):

☐ Surface water (A1)	☐ Sparsely Vegetated Concave Surface (B8)
☒ High Water Table (A2)	☐ Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9)
☒ Saturation (A3)	☐ Salt Crust (B11)
☐ Water Marks (B1)	☐ Aquatic Invertebrates (B13)
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Surface Soil Cracks (B6)	☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (explain in remarks)

Secondary Indicators (2 or more required):

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks

Field Observations

Surface Water Present?	☐ Yes	☒ No	Depth (in):	N/A
Water Table Present?	☒ Yes	☐ No	Depth (in):	12
Saturation Present? (includes capillary fringe)	☒ Yes	☐ No	Depth (in):	6-12

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were present. The hydrology present satisfied the A2 High Water Table and A3 Saturation wetland hydrology indicators.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site: <u>Anacortes High School</u>	Sampling Date: <u>12 & 13 May 2015</u>
Applicant/Owner: <u>Anacortes School District</u>	Sampling Point: <u>7</u>
Investigator: <u>Karla Van Leaven & Sigrid Williams</u>	City/County: <u>Anacortes</u>
Section, Township, Range: <u>24, 25 N, 1 E WM</u>	State: <u>WA</u>
Landform (hillslope, terrace, etc): <u>Depression</u>	Slope (%): <u>~1</u>
Local relief (concave, convex, none): <u>Concave</u>	
Subregion (LRR): <u>A</u>	Lat: <u>48°30'29.69"N</u>
Long: <u>122°37'24.98"W</u>	Datum: <u>WGS84</u>
Soil Map Unit Name: <u>97 Mukilteo muck (listed as hydric)</u>	NWI classification: <u>PEMAd</u>
Are climatic/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No	(If no, explain in remarks.)
Are "Normal Circumstances" present on the site? ☒ Yes ☐ No	
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed?: No	
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic?: No	(If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No	
Wetland Hydrology Present? ☒ Yes ☐ No	
Remarks: Emergent wetland disturbed field plot located on the northeast portion of the project site, northwest of data plot number 6. Indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were present; therefore, since all three parameters were met, data plot number 7 was located within a wetland.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size 30 foot radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet
1.				Number of Dominant Species that are OBL, FACW, or FAC: _____ (A)
2.				
3.				Total Number of Dominant Species Across All Strata: _____ (B)
4.				
50 percent threshold equals N/A; 20 percent threshold equals N/A	0		= Total Cover	Percent of Dominant Species that are OBL, FACW, or FAC: _____ N/A (A/B)
Sapling/Shrub Stratum (Plot size 5 foot radius)				
1.				Prevalence Index Worksheet
2.				Total % Cover of _____ Multiply by
3.				OBL species _____ x 1 =
4.				FACW species _____ x 2 =
5.				FAC species _____ x 3 =
50 percent threshold equals N/A; 20 percent threshold equals N/A	0		= Total Cover	FACU species _____ x 4 =
Herb Stratum (Plot size 5 foot radius)				UPL species _____ x 5 =
1. <i>Alopecurus geniculatus</i>	20	Yes	OBL	Column totals (A) _____ (B) _____
2. <i>Eleocharis palustris</i>	20	Yes	OBL	Prevalence Index = B/A = _____ N/A
3. <i>Juncus effusus</i>	20	Yes	FACW	
4. <i>Potentilla anserina</i>	20	Yes	OBL	Hydrophytic Vegetation Indicators
5. <i>Phalaris arundinacea</i>	5	No	FACW	Yes 1. Rapid Test- Hydrophytic Vegetation OBL/FACW
6. <i>Taraxacum officinale</i>	1	No	FACU	N/A 2. Dominance test is > 50%
7.				N/A 3. Prevalence test is ≤ 3.0 ¹
8.				N/A 4. Morphological Adaptations ¹ (provide supp. info.)
9.				N/A 5. Wetland Non-Vascular Plants ¹
10.				N/A 6. Problematic Hydrophytic Vegetation ¹ (explain)
11.				
50 percent threshold equals 43.0; 20 percent threshold equals 17.2	86		= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
Woody Vine Stratum (Plot size 30 foot radius)				
1.				Hydrophytic Vegetation Present? Yes ☒ No ☐
2.				
50 percent threshold equals N/A; 20 percent threshold equals N/A	0		= Total Cover	
% Bare Ground in Herb Stratum	14			
Remarks: The Corps 2014 NWPL v3.2 was used to determine indicator statuses. Indicators of hydrophytic vegetation were present. The vegetation present satisfied the Rapid Test for Hydrophytic Vegetation because all the dominant species across all strata were rated OBL. **Plant not identified to species level, not included in the total percent cover. ***Plant with Not Listed (NL) indicator status, assumed to be Upland (UPL). ****Total cover less than 5 percent and therefore included with another stratum's total cover. *****NI indicators with no regional or national indicators are not included.				

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	2.5Y 5/1 gray	100	N/A	N/A	N/A	N/A	Coarse sand fill	Fibric
5-18	7.5YR 2.5/1 black	100	N/A	N/A	N/A	N/A	Mucky loam	Fibric
18-20	7.5YR 3/3 dark brown	100	N/A	N/A	N/A	N/A	Peat	Fibric

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains²Loc: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

☒ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³

☐ 2cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: Not present

Hydric soil present?

Yes ☒No ☐

Depth (inches): N/A

Remarks: Indicators of hydric soil were present. The soil present best satisfies the A1 Histosol hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply):

☐ Surface water (A1)	☐ Sparsely Vegetated Concave Surface (B8)
☒ High Water Table (A2)	☐ Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9)
☒ Saturation (A3)	☐ Salt Crust (B11)
☐ Water Marks (B1)	☐ Aquatic Invertebrates (B13)
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Surface Soil Cracks (B6)	☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (explain in remarks)

Secondary Indicators (2 or more required):

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks

Field Observations

Surface Water Present?	☐ Yes ☒ No	Depth (in):	N/A
Water Table Present?	☒ Yes ☐ No	Depth (in):	10.5
Saturation Present? (includes capillary fringe)	☒ Yes ☐ No	Depth (in):	0-10.5

Wetland Hydrology Present?

Yes ☒No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were present. The hydrology present satisfied the A2 High Water Table and A3 Saturation wetland hydrology indicators.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project Site: <u>Anacortes High School</u>	Sampling Date: <u>12 & 13 May 2015</u>
Applicant/Owner: <u>Anacortes School District</u>	Sampling Point: <u>8</u>
Investigator: <u>Karla Van Leaven & Sigrid Williams</u>	City/County: <u>Anacortes</u>
Section, Township, Range: <u>24, 25 N, 1 E WM</u>	State: <u>WA</u>
Landform (hillslope, terrace, etc): <u>Hummock</u>	Slope (%): <u>~1</u>
Local relief (concave, convex, none): <u>Concave</u>	
Subregion (LRR): <u>A</u>	Lat: <u>48°30'29.69"N</u>
Long: <u>122°37'24.98"W</u>	Datum: <u>WGS84</u>
Soil Map Unit Name: <u>97 Mukilteo muck (listed as hydric)</u>	NWI classification: <u>PEMAd</u>
Are climatic/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No	(If no, explain in remarks.)
Are "Normal Circumstances" present on the site? ☒ Yes ☐ No	
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ significantly disturbed?: No	
Are Vegetation ☐ , Soil, ☐ , or Hydrology ☐ naturally problematic?: No	(If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☐ Yes ☒ No	Is this Sampling Point within a Wetland? ☐ Yes ☒ No
Hydric Soils Present? ☐ Yes ☒ No	
Wetland Hydrology Present? ☐ Yes ☒ No	
Remarks: Upland/draind wetland disturbed field plot located on the northern portion of the project site, northwest of data plot number 7. Indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were absent/; therefore, since all three parameters were not met, data plot number 8 was not located within a wetland.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size 30 foot radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	
1.				Number of Dominant Species that are OBL, FACW, or FAC:	1 (A)
2.				Total Number of Dominant Species Across All Strata:	2 (B)
3.				Percent of Dominant Species that are OBL, FACW, or FAC:	50 (A/B)
4.					
50 percent threshold equals N/A;	0	= Total Cover			
20 percent threshold equals N/A					
Sapling/Shrub Stratum (Plot size 5 foot radius)				Prevalence Index Worksheet	
1.				Total % Cover of	
2.				OBL species	0 x 1 = 0
3.				FACW species	0 x 2 = 0
4.				FAC species	10 x 3 = 30
5.				FACU species	25 x 4 = 100
50 percent threshold equals N/A;	0	= Total Cover		UPL species	0 x 5 = 0
20 percent threshold equals N/A				Column totals	35 (A) 130 (B)
Herb Stratum (Plot size 5 foot radius)				Prevalence Index = B/A = 3.7	
1. Dead Grass sp.	31.5**	-	-	Hydrophytic Vegetation Indicators	
2. Grass sp.	31.5**	-	-	No	1. Rapid Test- Hydrophytic Vegetation OBL/FACW
3. <i>Taraxacum officinale</i>	20	Yes	FACU	No	2. Dominance test is > 50%
4. <i>Ranunculus repens</i>	10	Yes	FAC	No	3. Prevalence test is ≤ 3.0 ¹
5. <i>Cirsium vulgare</i>	5	No	FACU	N/A	4. Morphological Adaptations ¹ (provide supp. info.)
6.				N/A	5. Wetland Non-Vascular Plants ¹
7.				N/A	6. Problematic Hydrophytic Vegetation ¹ (explain)
8.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
9.					
10.					
11.					
50 percent threshold equals 17.5;	35	= Total Cover		Hydrophytic Vegetation Present? Yes ☐ No ☒	
20 percent threshold equals 7.0					
Woody Vine Stratum (Plot size 30 foot radius)					
1.					
2.					
50 percent threshold equals N/A;	0	= Total Cover			
20 percent threshold equals N/A					
% Bare Ground In Herb Stratum	2				
Remarks: The Corps 2014 NWPL v3.2 was used to determine indicator statuses. Indicators of hydrophytic vegetation were absent. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present did not satisfy the Dominance Test because 50 percent of the dominant species present were FAC, FACW, or OBL. The vegetation present did not satisfy the Prevalence Test because the result was greater than 3.0 (3.7).					
**Plant not identified to species level, not included in the total percent cover.					
***Plant with Not Listed (NL) indicator status, assumed to be Upland (UPL).					
****Total cover less than 5 percent and therefore included with another stratum's total cover.					
*****NI indicators with no regional or national indicators are not included.					

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20+	7.5YR 2.5/1 black	100	N/A	N/A	N/A	N/A	Mucky loam	Fibric, greasy

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Loc: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

☐ Histosol (A1)	☐ Sandy Redox (S5)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³

☐ 2cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (explain in remarks)

³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):
Type: Not present

Depth (inches): N/A

Hydric soil present? Yes ☐ No ☒

Remarks: Indicators of hydric soil were absent. As the soil is similar to that of a Histosol, but hydrophytic vegetation and wetland hydrology were absent, hydric soil is not present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply):

☐ Surface water (A1)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9)
☐ Saturation (A3)	☐ Salt Crust (B11)
☐ Water Marks (B1)	☐ Aquatic Invertebrates (B13)
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Surface Soil Cracks (B6)	☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (explain in remarks)

Secondary Indicators (2 or more required):

☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks

Field Observations

Surface Water Present?	☐ Yes	☒ No	Depth (in):	N/A
Water Table Present?	☒ Yes	☐ No	Depth (in):	20
Saturation Present? (includes capillary fringe)	☐ Yes	☒ No	Depth (in):	N/A

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were absent. Direct or indirect indicators of seasonal or permanent soil saturation or inundation were not observed.

9.2 APPENDIX B. WETLAND RATING FORMS

RATING SUMMARY – Western Washington

18 June

Name of wetland (or ID #): Wetland Unit Date of site visit: 12-13 May 2015

Rated by Karla Van Leaven, BS, PWS Trained by Ecology? ☒ Yes ☐ No Date of training 6/08 - 6/14

HGM Class used for rating Depressional Wetland has multiple HGM classes? ☐ Y ☒ N

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map BRH1 (Google Earth)

OVERALL WETLAND CATEGORY III (based on functions ☒ or special characteristics N/A)

1. Category of wetland based on FUNCTIONS

☐ Category I – Total score = 23 - 27

☐ Category II – Total score = 20 - 22

☒ Category III – Total score = 16 - 19

☐ Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	H (M) L	H (M) L	H (M) L	
Landscape Potential	(H) M L	(H) M L	H M (L)	
Value	H (M) L	H M (L)	H (M) L	TOTAL
Score Based on Ratings	7	6	5	18

Score for each
function based
on three
ratings
(order of ratings
is not
important)

9 = H,H,H

8 = H,H,M

7 = H,H,L

7 = H,M,M

6 = H,M,L

6 = M,M,M

5 = H,L,L

5 = M,M,L

4 = M,L,L

3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland Unit

Maps and figures required to answer questions correctly for Western Washington

* Depressional Wetlands * Figures 6-10

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	6
Hydroperiods	D 1.4, H 1.2	6
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 1.1	6
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 2.2	6
Map of the contributing basin	D 1.3, D 2.3	9
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	10
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 1.1, D 2.2	7
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 2.3	9

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (can be added to figure above)	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

☐ NO - go to 2

☐ YES - the wetland class is **Tidal Fringe** - go to 1.1

- 1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

☐ NO - **Saltwater Tidal Fringe (Estuarine)**

☐ YES - **Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

☐ NO - go to 3

☐ YES - The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
☐ At least 30% of the open water area is deeper than 6.6 ft (2 m).

☐ NO - go to 4

☐ YES - The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The wetland is on a slope (*slope can be very gradual*),
☐ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
☐ The water leaves the wetland **without being impounded**.

☐ NO - go to 5

☐ YES - The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
☐ The overbank flooding occurs at least once every 2 years.

Wetland Unit

NO – go to 6

YES – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7

YES – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. **GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT** (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland Unit

DEPRESSIONAL AND FLATS WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0. Does the site have the potential to improve water quality?		
D 1.1. Characteristics of surface water outflows from the wetland:		2
Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3		
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 18" Concrete Culvert points = 2		
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1		
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1		
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0		0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):		5
Wetland has persistent, ungrazed, plants > 95% of area Not persistent 4% points = 5		
Wetland has persistent, ungrazed, plants > 1/2 of area Open water (60) : Mowed Field (MF) points = 3		
Wetland has persistent, ungrazed plants > 1/10 of area points = 1		
Wetland has persistent, ungrazed plants < 1/10 of area points = 0		
D 1.4. Characteristics of seasonal ponding or inundation:		4
This is the area that is ponded for at least 2 months. See description in manual.		
Area seasonally ponded is > 1/2 total area of wetland points = 4		
Area seasonally ponded is > 1/4 total area of wetland points = 2		
Area seasonally ponded is < 1/4 total area of wetland points = 0		
Total for D 1	Add the points in the boxes above	11

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland?	Confirmed w/ City of Anacortes Yes = 1 No = 0	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3?		
Source <u>Waterfowl</u>	Yes = 1 No = 0	1
Total for D 2	Add the points in the boxes above	4

Rating of Landscape Potential If score is: X 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)?	Yes = 2 No = 0	0
Total for D 3	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland Unit

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation

D 4.0. Does the site have the potential to reduce flooding and erosion?

D 4.1. Characteristics of surface water outflows from the wetland:

- Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4
- Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet points = 2
- Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1
- Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0

2

Fig 6

D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.

- Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7
- Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5
- Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3
- The wetland is a "headwater" wetland points = 3
- Wetland is flat but has small depressions on the surface that trap water points = 1
- Marks of ponding less than 0.5 ft (6 in) points = 0

3

D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.

- The area of the basin is less than 10 times the area of the unit points = 5
- The area of the basin is 10 to 100 times the area of the unit points = 3
- The area of the basin is more than 100 times the area of the unit points = 0
- Entire wetland is in the Flats class points = 5

3

Fig 9

Total for D 4

Add the points in the boxes above

8

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = L

Record the rating on the first page

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?

D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0

1

D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No = 0

1

Fig 6

D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No = 0

1

Fig 9

Total for D 5

Add the points in the boxes above

3

Rating of Landscape Potential If score is: X 3 = H 1 or 2 = M 0 = L

Record the rating on the first page

D 6.0. Are the hydrologic functions provided by the site valuable to society?

D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.

- The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):
- Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2
 - Surface flooding problems are in a sub-basin farther down-gradient. points = 1
- Flooding from groundwater is an issue in the sub-basin. points = 1
- The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why _____ points = 0
- There are no problems with flooding downstream of the wetland. points = 0

0

D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0

0

Total for D 6

Add the points in the boxes above

0

Rating of Value If score is: 2-4 = H 1 = M X 0 = L

Record the rating on the first page

Wetland Unit

These questions apply to wetlands of all HGM classes.	
HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	
H 1.0. Does the site have the potential to provide habitat?	
H 1.1. Structure of plant community: <i>Indicators are Cowardin classes and strata within the Forested class.</i> Check the Cowardin plant classes in the wetland. <i>Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.</i> ☒ Aquatic bed 4 structures or more: points = 4 ☒ Emergent 3 structures: points = 2 ☒ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 ☒ Forested (areas where trees have > 30% cover) 1 structure: points = 0 <i>If the unit has a Forested class, check if:</i> ☒ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	4
H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (<i>see text for descriptions of hydroperiods</i>). ☒ Permanently flooded or inundated <i>ponded</i> 4 or more types present: points = 3 ☒ Seasonally flooded or inundated 3 types present: points = 2 ☐ Occasionally flooded or inundated 2 types present: points = 1 ☐ Saturated only 1 type present: points = 0 ☐ Permanently flowing stream or river in, or adjacent to, the wetland ☒ Seasonally flowing stream in, or adjacent to, the wetland ☐ Lake Fringe wetland 2 points ☐ Freshwater tidal wetland 2 points	2
H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². <i>Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle</i> If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0	2
H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. <i>If you have four or more plant classes or three classes and open water, the rating is always high.</i>  None = 0 points  Low = 1 point  Moderate = 2 points    All three diagrams in this row are HIGH = 3 points	3

Fig 6

Fig 6

Fig 6

Total 11

Wetland Unit

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i> ☒ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). ☒ Standing snags (dbh > 4 in) within the wetland ☐ Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>) ☒ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>) ☐ Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)		+ 11 3
Total for H 1		Add the points in the boxes above 14

Rating of Site Potential If score is: 15-18 = H ☒ 7-14 = M 0-6 = L Record the rating on the first page

H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: % undisturbed habitat ___ + [(% moderate and low intensity land uses)/2] ___ = ___ % If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = <u>0</u>		0 Fig 10
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat ___ + [(% moderate and low intensity land uses)/2] ___ = ___ % Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = <u>2</u> Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0		2 Fig 16
H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = <u>(-2)</u> ≤ 50% of 1 km Polygon is high intensity points = 0		-2 Fig 10
Total for H 2		Add the points in the boxes above 0

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M ☒ < 1 = L Record the rating on the first page

H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated. Site meets ANY of the following criteria: points = 2 — It has 3 or more priority habitats within 100 m (see next page) — It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) — It is mapped as a location for an individual WDFW priority species — It is a Wetland of High Conservation Value as determined by the Department of Natural Resources — It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m points = <u>1</u> Site does not meet any of the criteria above points = 0	

Rating of Value If score is: 2 = H ☒ 1 = M 0 = L Record the rating on the first page

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here: <http://wdfw.wa.gov/conservation/phs/list/>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** *This question is independent of the land use between the wetland unit and the priority habitat.*

- No **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- No **Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- No **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- No **Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- No **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).
- No **Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- No **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).
- No **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- No **Nearshore:** Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page*).
- No **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- No **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- No **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Yes **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt Yes – Go to SC 1.1 (No) Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category I No - Go to SC 1.2	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = Category I No = Category II	Cat. I Cat. II
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? Yes – Go to SC 2.2 (No) Go to SC 2.3 SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes = Category I No = Not a WHCV SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf S24.T35D.R1E.WM Yes – Contact WNHP/WDNR and go to SC 2.4 (No) = Not a WHCV SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? Yes = Category I No = Not a WHCV	Cat. I
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i> SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? Yes – Go to SC 3.3 (No) Go to SC 3.2 SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? Yes – Go to SC 3.3 (No) = Is not a bog SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? Yes = Is a Category I bog No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? Yes = Is a Category I bog No = Is not a bog	Cat. I

Wetland Unit

SC 4.0. Forested Wetlands Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> — Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). Yes = Category I (No) = Not a forested wetland for this section	Cat. I
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) Yes – Go to SC 5.1 (No) = Not a wetland in a coastal lagoon SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¼ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) Yes = Category I No = Category II	Cat. I Cat. II
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i> In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 (No) = not an interdunal wetland for rating SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = Category I No – Go to SC 6.2 SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = Category II No – Go to SC 6.3 SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = Category III No = Category IV	Cat. I Cat. II Cat. III Cat. IV
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	N/A

Wetland Unit

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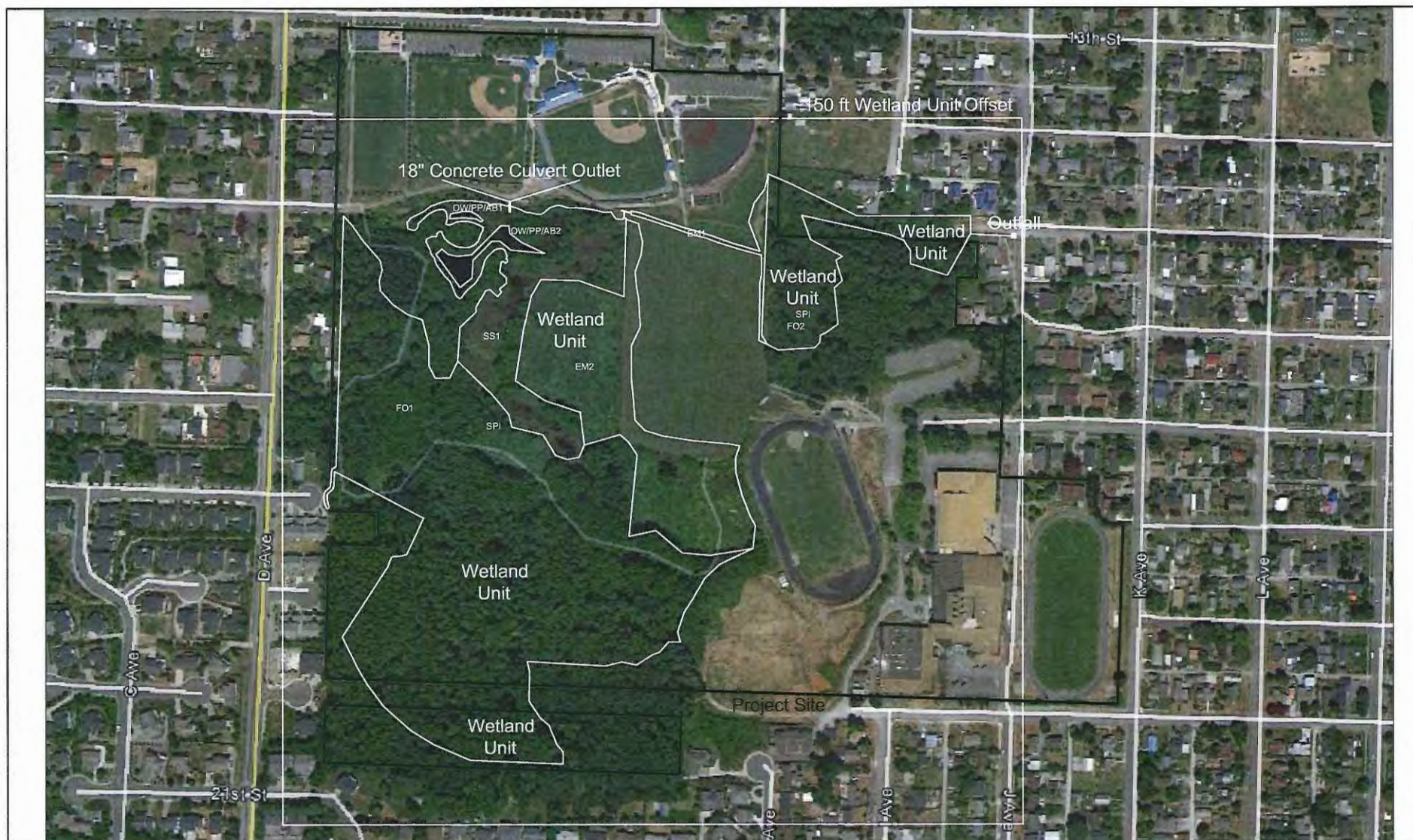


Figure 6 Wetland Rating Forms (D1.1 D1.3 D1.4 D2.2 D4.1 D5.2 H1.1 H1.2 H1.4)

Anacortes School District #103-Anacortes High School

City of Anacortes, Washington

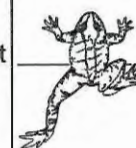
Section 24, Township 35 N, Range 1 E, WM

Revised 10 December 2015

OW/PP/AB Open Water/Permanently Ponged/Aquatic Bed **SPI** Seasonally Ponged Inundated **FO** Forested **SS** Scrub Shrub **EM** Emergent

Note Basemap/aerial (Google Earth 10 July 2014 Imagery Date) obtained from BRHI with alterations made by ATSI. The majority of the wetland unit boundaries and locations are approximate and do not constitute a legal land survey.

0 feet 450 feet N



ATSI
Aqua-Terr Systems, Inc.

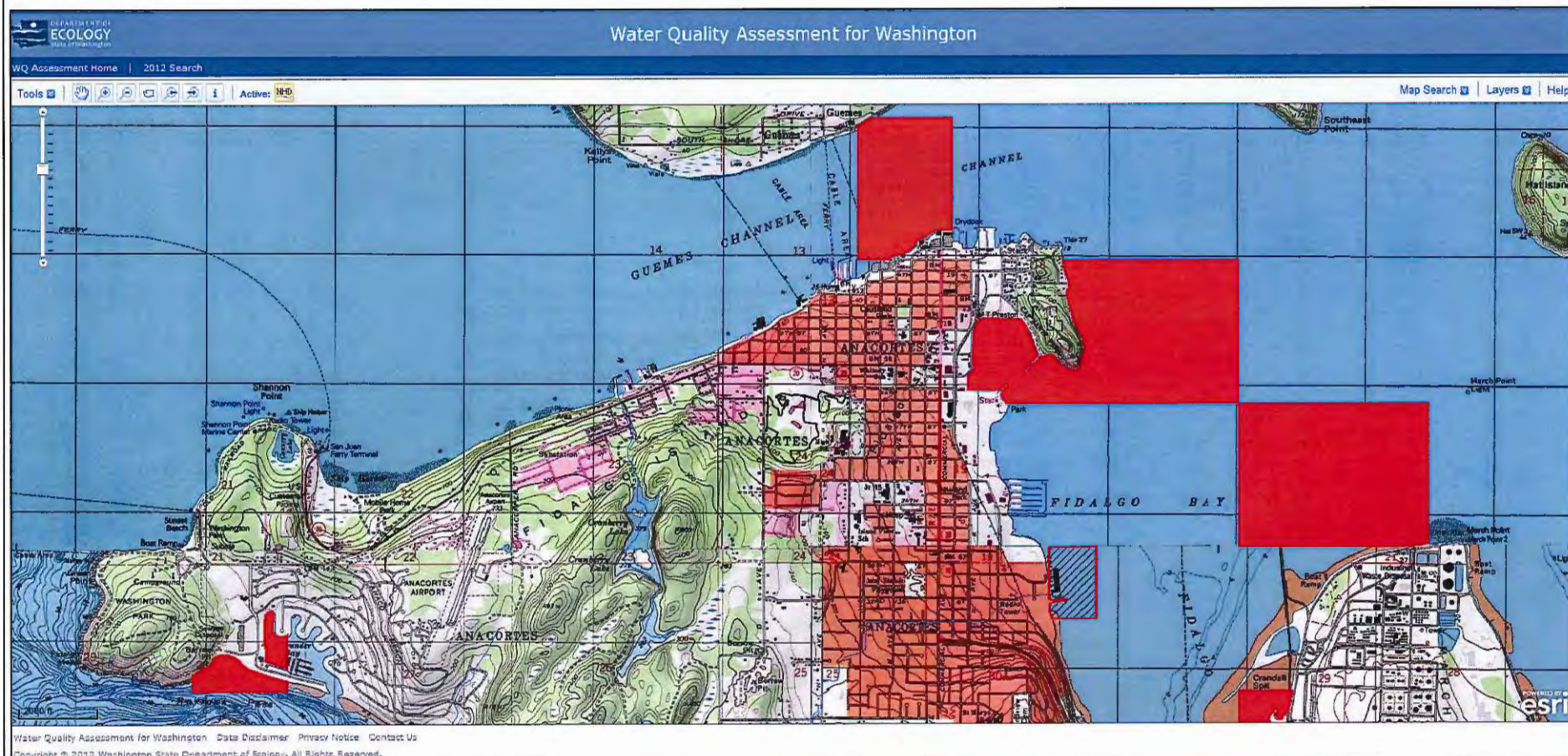


Figure 7 Wetland Rating Forms (D3.1 D3.2)

Anacortes School District #103-Anacortes High School

City of Anacortes, Washington

Section 24, Township 35 N, Range 1 E, WM

Revised 10 June 2015

Red areas=Ecology 303d waters

Note Basemaps obtained from Ecology and BRHI with alterations made by ATSI.



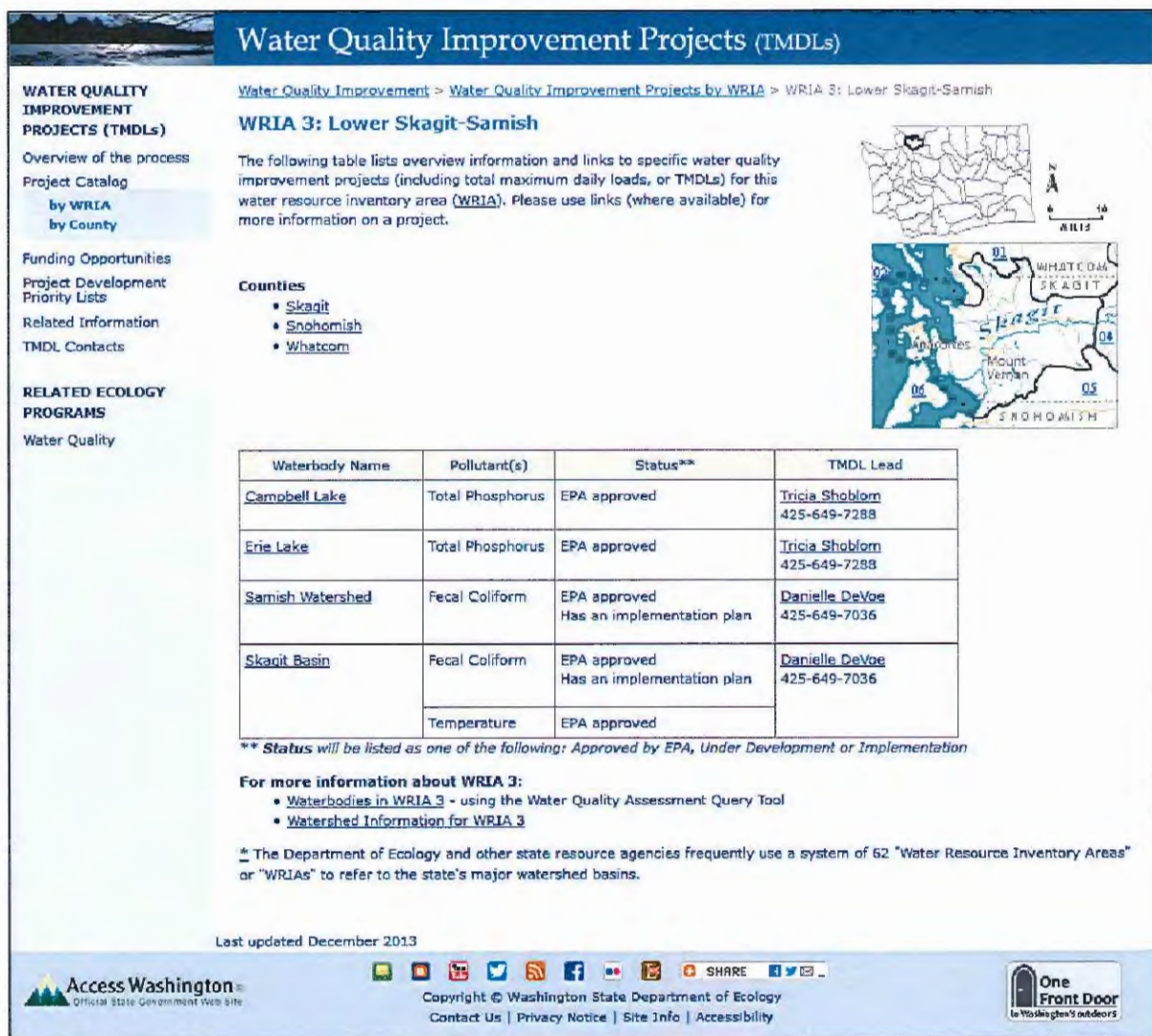


Figure 8 Wetland Rating Forms (3.3)

Anacortes School District #103-Anacortes High School

City of Anacortes, Washington

Section 24, Township 35 N, Range 1 E, WM

Revised 10 December 2015

Note Basemaps obtained from Ecology and BRHI with alterations made by ATSI.



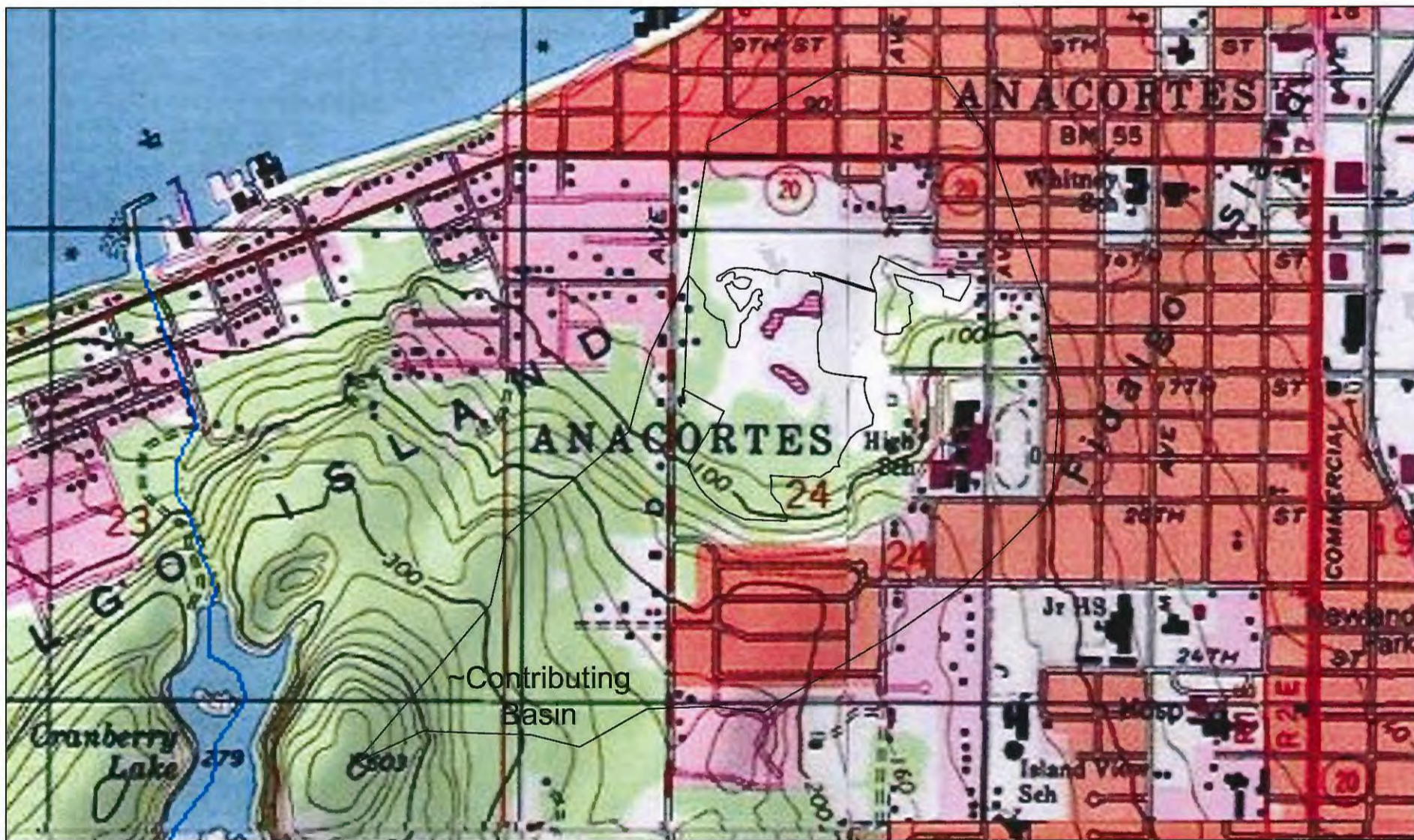


Figure 9 Wetland Rating Forms (D4.3 D5.3)

Anacortes School District #103-Anacortes High School

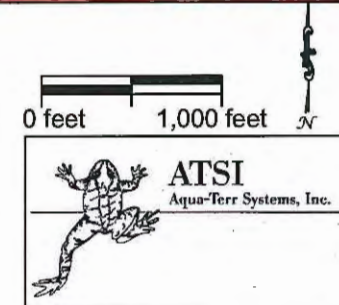
City of Anacortes, Washington

Section 24, Township 35 N, Range 1 E, WM

Revised 10 December 2015

WU Wetland Unit

Note Basemaps obtained from Ecology and BRHI with alterations made by ATSI.



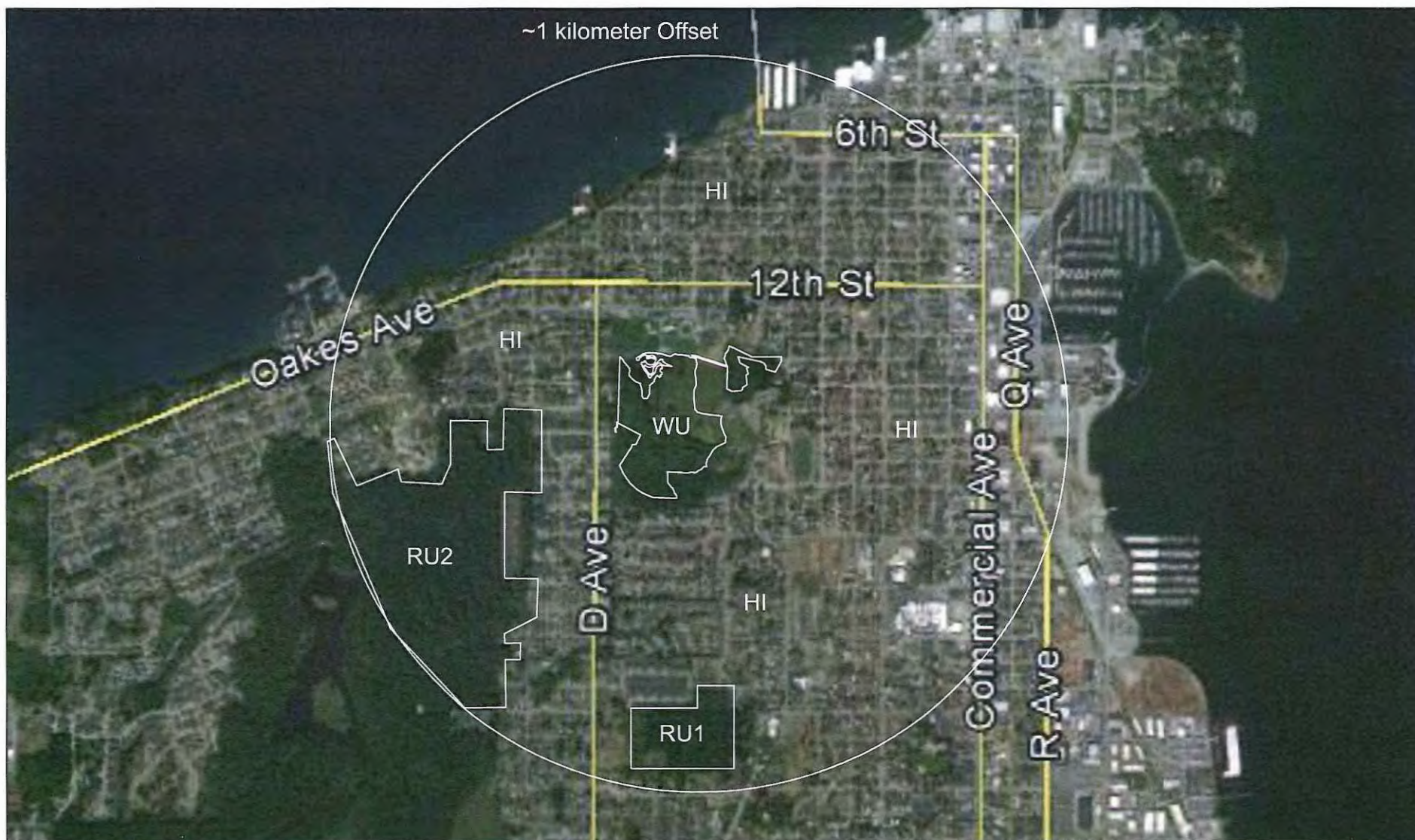
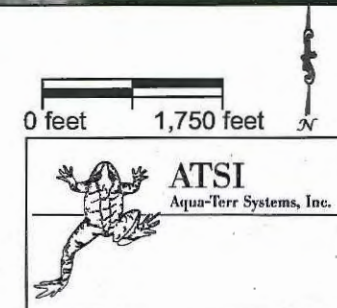


Figure 10 Wetland Rating Forms (H2.1 H2.2 H2.3)
 Anacortes School District #103-Anacortes High School
 City of Anacortes, Washington
 Section 24, Township 35 N, Range 1 E, WM
 Revised 10 December 2015

HI High Intensity **ML** Moderate/Low Intensity **RU** Relatively Undisturbed **WU** Wetland Unit

Note Baseaerial obtained from Google Earth (10 July 2014 Imagery Date). The majority of the wetland unit boundaries and locations are approximate and do not constitute a legal land survey.



Compensatory Wetland Buffer Mitigation Plan:
Anacortes School District #103-Rice Field Improvements
City of Anacortes, Washington

11 December 2015

Prepared for:

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Compensatory Wetland Buffer Mitigation Plan:
Anacortes School District #103-Rice Field Improvements
City of Anacortes, Washington

11 December 2015

Prepared for:

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Signature of ATSI representatives



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Table 3. Recommended planting detail to be confirmed in-situ with a qualified wetland biologist and native plant installer.

LIST OF ABBREVIATIONS AND ACRONYMS

Anacortes Municipal Code (AMC)
Aqua-Terr Systems, Inc. (ATSI)
Best Management Practices (BMPs)
Bush, Roed & Hitchings, Inc. (BRHI)
Conditional Use Permit (CUP)
Critical Areas Ordinance (CAO)
Light-Emitting Diode (LED)
National Pollutant Discharge Elimination System (NPDES)
Palustrine Forested/Emergent Seasonally Flooded/Saturated Permanently Flooded partially drained/ditched excavated (PFO/EMEHdx)
Professional Wetland Scientist (PWS)
United States Army Corps of Engineers (Corps)
Washington State Department of Ecology (Ecology)
Water Quality Certification (WQC)
Willamette Meridian (WM)

RESPONSIBLE PARTIES

- **Project Applicant:**

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- **Project Consultants:**

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- **Reports Prepared By:**

- Wetland Delineation**

Aqua-Terr Systems, Inc.
Jim Wiggins and Karla Gallina

- Compensatory Wetland Mitigation Plan**

Aqua-Terr Systems, Inc.
Jim Wiggins and Karla Gallina

- **Drawings Prepared By:**

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and

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Kirkland, WA

1.0 EXECUTIVE SUMMARY

ATSI has been retained by the Anacortes School District #103 to prepare a compensatory wetland buffer mitigation plan for impacts to a City of Anacortes wetland buffer. Said wetland buffer impacts will occur during the improvements to portions of Rice Field, an Anacortes High School football, track, and sports field. Rice Field occurs directly east of, and abuts, a wetland complex, i.e. Smiley's Bottom.

The construction of Rice Field was originally permitted by the City of Anacortes with a CUP and the Corps and Ecology in 1992 and 1993 respectively. The original wetland analysis was completed in 1991 and a mitigation plan accepted by the City, Corps, and Ecology with mitigation occurring in Smiley's Bottom and enhancement of a 25 foot regulated buffer along the western edge of Rice Field.

For this current project, the City of Anacortes, under portions of Article V, Wetland Protection Areas requires an applicant to demonstrate the mitigation and monitoring plans proposed by the applicant are sufficient to protect the public health, safety, and welfare, and the functions and value of the affected wetland, consistent with the goals, purposes, objectives, and requirements of the chapter. And, non-water dependent activities must also demonstrate the basic project purpose cannot reasonably be accomplished and successfully avoid impacting the functions and values of a wetland. If said wetland or wetland buffer impacts are unavoidable, full compensation is made for loss of hydrological and ecological function and value. This mitigation plan demonstrates project compliance with said portion of the CAO.

Also, AMC 17.70.390 states: "Regulated activities other than those specified in Section 17.70.380 of this chapter may not be conducted except upon application to the planning department and issuance of a special permit entitled a conditional use permit." A CUP has been applied for by the project applicant and the relevant sections within the City CAO, as they pertain to this project, are addressed within the text of this wetland buffer mitigation plan.

Because Rice Field exists directly adjacent to a wetland complex and the improvements will provide reasonable and prudent upgrades to the field, work within the wetland buffer is unavoidable. Proposed mitigation will compensate for direct, temporary, and indirect impacts to the wetland buffer. This will occur by enhancing the existing functions and values of the adjacent wetland by installing native trees and shrubs to increase habitat functions. Therefore, there will be a net gain in wetland functions and values by converting a reed canarygrass dominated portion of the Smiley's Bottom wetland complex and its buffer into a native shrub forest.

The area now surrounding Rice Field is City Park (Volunteer Park/Smiley's Bottom [a wetland complex]), the existing Anacortes High School, and residential. Rice Field, an existing and actively used football and sports field with an oval track, is proposed for upgrades, portions occurring within the buffer of the wetland complex. The upgrades within a portion of the wetland buffer include replacing the turf grass with artificial turf, installing light poles, installing a score board, and installing supporting posts for a future

set of aluminum bleachers. Additionally, a chain link fence, buried storm water outfall, and utilities will be installed.

The wetland complex is an approximate 35 acre Category III Palustrine Forested/Emergent Seasonally Flooded/Saturated Permanently Flooded partially drained/ditched excavated (PFO/EMEHdx) depressional outflow wetland with upland hummocks. Wetland hydrology flows northwest and is provided by stormwater outfalls, pipes, and ditches in addition to precipitation and upgradient runoff. The hydrology of the wetland complex outlets into an 18 inch concrete culvert which flows into the City of Anacortes's stormwater system and is ultimately conveyed into the Guemes Channel portion of the Salish Sea. The wetland complex is regulated by the City and has a 110 foot buffer as per Ecology and the AMC.

The wetland buffer impacts that will result from the improvements to Rice Field include approximately 250 square feet of direct, permanent impacts, 4,232 square feet of temporary impacts, and 26,601 square feet of indirect impacts. The area of Rice Field that is within the buffer and where the existing natural turf will be replaced with artificial turf is approximately 26,601 square feet. While there will be additional, non-quantifiable, indirect impacts from lighting and increased public use within the wetland buffer, the current use of Rice Field will not change.

Proposed mitigation for direct, permanent, and indirect impacts includes compensation at a greater than 1:1 ratio of planting to impact square footages by enhancing approximately 30,000 square feet of wetland and wetland buffer with native trees and shrubs to increase vertical habitat by converting a reed canarygrass dominated portion of the Smiley's Bottom wetland complex and its buffer into a native shrub forest. Proposed mitigation for temporary impacts will be to revegetate.

The Rice Field improvements are within the impacted footprint of the existing natural turf field. The "upgrade" to synthetic turf will slightly reduce the habitat function of the wetland buffer by removing the soil organics and turf where prey species (insects) that are a food source for bird species occur. The switch to synthetic turf will; however, increase the water quality function of the wetland buffer because fertilizers, herbicides, and pesticides will not be required to maintain the field.

Permanent stormwater flow control facilities and water quality treatment will be provided onsite in accordance with the AMC. Flow control will be provided via underground large-diameter pipes, chamber systems, or concrete vaults. Standard BMPs will be used to provide basic water quality treatment for vehicular surfaces and areas tributary to vehicular surfaces. Some open areas may utilize biofiltration, bioretention, or other surface methods. Some areas will require underground BMPs such as wet vaults or storm filters.

Construction BMPs such as the use of silt fencing, application of seeding or mulching for soil stabilization, or other techniques will be implemented as necessary in

accordance with the requirements of the NPDES permit for construction to reduce or control water quality impacts.

New field lighting will be high-efficiency LED directional.

2.0 PROPOSED PROJECT

2.1 Project Site

2.1.0 Location

The Anacortes High School property is located on the central northeast portion of the City of Anacortes, Washington and is comprised of numerous parcels (Figures 1 and 2). While the property includes only a portion of the project site parcels, the project site parcel numbers include P31905, P31912, P31920, P31922, P31923, P31926, P55808, P55809, P55810, P55813, P55950, P55951, P55952, P55953, P55954, P55955, P55956, P55957, P55958, P55959, P55960, P55961, P55962, P55963, P58053, and P58054 (BRHI 18 June 2015). The property is located within a portion of Section 24, Township 35 north, Range 1 east, WM (Figure 1).

The property is bounded by residential housing to the north, east, and south and City Park (Volunteer Park/Smiley's Bottom [a wetland complex]) to the west (Figure 2). The area surrounding the project site is primarily City Park, the Anacortes High School, and residential (Figure 2). Rice Field, the project for the purpose of this wetland buffer mitigation plan and is discussed in detail below in section 4.0, is situated on a "lower" bench on the western portion of the school facility (Figure 2).

2.1.1 Existing Conditions

Rice Field is a mowed and maintained turf sports field. The surrounding oval track is comprised of an artificial surface. Rice Field and the adjacent sloped wetland buffer are generally comprised of compacted soil which was imported during construction. The wetland buffer, i.e. the sloped area west of Rice Field, is vegetated with non-native, invasive species such as Scot's broom, Himalayan blackberry, and reed canarygrass with a small patch of red alder on the southern portion. The vegetation in the wetland where it abuts the wetland buffer slope is primarily reed canarygrass with a small patch of cattail.

Smiley's Bottom wetland, the Palustrine Forested/Emergent Seasonally Flooded/Saturated Permanently Flooded partially drained/ditched excavated (PFO/EMEHdx) depressional outflow wetland with upland hummocks that is adjacent to Rice Field, is comprised of a forested wetland complex, forested upland, and playfields. The forested wetland complex is an approximate 35 acre Category III (ATSI Revised 10 December 2015). Wetland hydrology flows northwest and is provided by storm water outfalls, pipes, and ditches in addition to precipitation and upgradient runoff. The wetland outlets northwest into an 18 inch concrete culvert which flows into the City of Anacortes's stormwater system and is ultimately conveyed into the Guemes Channel portion of the Salish Sea.

Wetland functions were evaluated using the Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014). Overall, the wetland complex had a moderate rating for function. In particular, for water quality, a moderate/high rating was given, for hydrologic, a moderate rating was given, and for habitat, a moderate/low rating was given (Table 1).

Table 1. Wetland functions.			
FUNCTION	Water Quality	Hydrologic	Habitat
Site Potential	Moderate	Moderate	Moderate
Landscape Potential	High	High	Low
Value	Moderate	Low	Moderate

Generally, the wetland has a moderate/high rating for water quality as it filters potentially contaminated water from untreated stormwater, fertilized lawns and playfields, animal waste nutrients, septic systems, etc. prior to being released in to the Salish Sea via the City of Anacortes's stormwater system. The wetland complex only has a moderate rating for hydrologic as the water stored in the wetland does not flow into a downstream water that has flooding issues, it flows directly into the Guemes Channel portion of the Salish Sea via the stormwater system. Finally, the wetland has a moderate/low rating for habitat as it is surrounded by urbanization and there are no corridors for accessing the habitat.

ATSI did not observe species of local importance, priority species, or Endangered Species Act listed, proposed, candidate, delisted, or species of concern that have a primary association with habitat on or adjacent to the property. Because the portion of the wetland directly adjacent to Rice Field is primarily a thick mat of reed canarygrass, the habitat functions are lower than the remaining area of the wetland complex.

3.0 REGULATIONS

3.1 City of Anacortes

The wetland complex located on and adjacent to the property is regulated by the City of Anacortes (Figures 2, 3a, and 3b). The Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014) was used to rate the wetland which has a habitat score of 5 (ATSI Revised 10 December 2015). As per Ecology and the AMC, the buffer is 110 feet.

The City of Anacortes requires by AMC that all applicable sections of *17.70.330 through 17.17.350* and *17.17.390 through 17.17.460* be addressed. These sections are satisfied in either our previous Critical Area Report for Wetland Protection Areas (ATSI Revised 10 December 2015) or in this mitigation plan.

Specifically:

17.70.340 (F) (7) (c). Stormwater Management Facilities. Stormwater management outfall facilities are allowed in accordance with an approved critical areas report with no net loss of function to the wetland and wetland buffer. However, stormwater facilities

beyond those necessary to ensure continued predevelopment stormwater flows to wetlands may only be permitted through the conditional use process.

17.70.390. Regulated activities other than those specified in Section 17.70.380 of this chapter may not be conducted except upon application to the planning department and issuance of a special permit entitled a conditional use permit.

17.70.500. Nonconforming activities. A regulated activity that was lawful before the passage of this chapter, but which is not in conformity with the provisions of this chapter, may be continued subject to the following: A. No such structure or use shall be expanded, changed, enlarged, or altered in any way that increases its nonconforming character relative to the provisions of this chapter without securing a conditional use permit, except as specifically authorized in subsections (B) and (C) of this section.

A CUP for this proposed project has been applied for the entire project, including project components within the wetland buffer as described within this plan and the stormwater spreader within the buffer of the wetland. Other portions of this mitigation plan discuss no net loss of function and mitigation per the above referenced section requirements.

3.2 Historic Project Site Permits

Rice Field was originally permitted by the City of Anacortes with a CUP and the Corps and Ecology in 1992 and 1993 respectively. The original wetland analysis was completed in 1991 and a mitigation plan was accepted by the City, Corps, and Ecology with mitigation occurring in Smiley's Bottom and enhancement of a 25 foot regulated buffer along the western edge of Rice Field.

3.3 Ecology

Ecology reviews all wetland disturbance permits received by the Corps for WQC. Ecology requires an "individual" review of all wetland disturbances greater than 0.5 acre. WQC is required for all Individual Permit applications. Ecology has authority over discharge into all wetlands (including isolated wetlands) and streams and can impose buffers and compensatory mitigation for impacts. No wetlands or other Waters of the State will be directly impacted by this project.

3.4 Corps

Corps requires notification for all disturbances to wetlands, streams, and potentially other drainages. Corps regulates Waters of the United States, which includes wetlands, streams, and other surface waters. The Corps does not regulate isolated wetlands. Although the wetlands on the property may have been historically isolated, the Corps makes the determination of the regulatory status of these wetlands. No wetlands or other Waters of the United States will be directly impacted by this project.

4.0 PROPOSED IMPACTS AND MITIGATION

The proposed project impacts direct, permanent, temporary, and indirect and associated mitigation are outlined in Table 2. Wetland and wetland buffer enhancement are proposed to compensate for the direct, permanent and indirect impacts as a result

of the Rice Field improvements. Revegetation is proposed mitigation for temporary impacts.

Table 2. The proposed project, direct and temporary impacts, and mitigation.					
Wetland Buffer Impacts				Mitigation for Permanent/Indirect Impacts	Mitigation for Temporary Impacts
Area	Type (ft ²)			Type (ft ²)	Type (ft ²)
	Existing/Indirect	Permanent	Temporary	Wetland/Wetland Buffer Enhancement (>1:1 Ratio)	Revegetation
1) Field	26,601	N/A	N/A	26,601	N/A
2) Asphalt	380	N/A	N/A	380	N/A
3) Future Visitors Bleachers/Structural Supports/Utilities-Conduit/Flow Spreader	N/A	32 (Future)	2,200 (Future)	32	2,200
4) Scoreboard/Flag Pole	N/A	170	400	170	400
5) Lighting (north)	N/A	25	N/A	25	N/A
6) Lighting (south)	N/A	23	N/A	23	N/A
7) Lighting & Electric Utilities Installation	N/A	N/A	1,500	N/A	1,500
8) Fencing (Removal/Installation)	N/A	N/A	132	N/A	132
Total	26,981	250	4,232	30,000	4,232

1) Rice Field

Existing Conditions: mowed/maintained natural turf sports field and artificial oval track.

Proposed Conditions: synthetic turf sports field and track resurfaced and restriped with artificial materials.

Wetland Buffer Impact Type: existing, indirect (26,601 square feet). The track and field upgrades will be within the existing impacted footprint with the same use. Moving from natural turf to synthetic turf will slightly reduce the habitat function of the wetland buffer by removing the soil organics and associated insects, thus the occasional bird species utilizing the existing field as a food source. Switching from natural to synthetic turf will increase the water quality function of the wetland buffer as the fertilizers, herbicides, and pesticides used to maintain the natural turf field will be discontinued as they are not necessary to maintain the synthetic turf field.

Proposed Mitigation: included within the 30,000 square feet of native plantings.

2) Asphalt

Existing Conditions: asphalt.

Proposed Conditions: asphalt.

Wetland Buffer Impact Type: existing (380 square feet).

Proposed Mitigation: included within the 30,000 square feet of native plantings.

3) Future Visitors Bleachers, Structural Supports, Utilities-Conduit, Flow Spreader

Existing Conditions: steep slope vegetated with invasive Himalayan blackberry.

Proposed Conditions: future visitor's bleachers, structural supports, utilities-conduit, and flow spreader.

Wetland Buffer Impact Type: future permanent (32 square feet) and future temporary during construction (2,200 square feet).

Proposed Mitigation: included within the 30,000 square feet of native plantings and revegetation.

4) Scoreboard/Flagpole

Existing Conditions: vegetated steep slope.

Proposed Conditions: concrete mounted flag pole and scoreboard.

Wetland Buffer Impact Type: permanent (170 square feet) and temporary during construction (400 square feet).

Proposed Mitigation: included within the 30,000 square feet of native plantings and revegetation.

5) Lighting (north)

Existing Conditions: vegetated steep slope.

Proposed Conditions: concrete mounted field lighting.

Wetland Buffer Impact Type: permanent (25 square feet).

Proposed Mitigation: included within the 30,000 square feet of native plantings.

6) Lighting (south)

Existing Conditions: vegetated flat.

Proposed Conditions: concrete mounted field lighting.

Wetland Buffer Impact Type: permanent (23 square feet).

Proposed Mitigation: included within the 30,000 square feet of native plantings.

7) Lighting & Electric Utilities Installation

Existing Conditions: the lighting utilities installation corridor is vegetated and the electric corridor is existing track.

Proposed Conditions: lighting and electric utilities trench.

Wetland Buffer Impact Type: temporary (1,500 square feet).

Proposed Mitigation: revegetation.

8) Fencing (Removal/Installation)

Existing Conditions: the area where the removal of the existing chain link fence and proposed installation is vegetated.

Proposed Conditions: removal is removal of existing chain link fence and installation of a new chain link fence.

Wetland Buffer Impact Type: temporary (132 square feet).

Proposed Mitigation: revegetation.

4.1 Sequencing

4.1.0 Avoid

Rice Field is an existing sports field that is used by the Anacortes High School. It lies directly adjacent to a City regulated wetland (Figures 3a and 3b). A portion of the field is located within the regulated 110 foot wetland buffer (Figures 3a and 3b). Therefore, upgrade work on the western side of Rice Field is located within the wetland buffer and associated impacts are unavoidable (Figures 3a and 3b). The proposed upgrades within the wetland buffer, primarily the replacement of the turf to artificial turf, and the installation of light poles, a score board, fencing, and utilities, will be mitigated for. Because the existing conditions of the wetland and wetland buffer that abut the western edge of Rice Field are dominated by non-native, invasive plants such as Scot's broom, reed canarygrass, and Himalayan blackberry which have an inherent low habitat value, by increasing the vertical structure and providing a suite of diverse trees and shrubs, the proposed mitigation will provide an uplift in the wetland habitat functions and values, i.e. there will be no-net-loss.

4.1.1 Minimize

Lights

New field lighting will be high-efficiency LED directional. A portion of the sports field lights will face toward the wetland while a portion of the lights will face away from the wetland. Additionally, the lights will only be used during specific events during the sports season, they will not be left on continuously.

Noise

The noise associated with the sports field will not change from what it has been before which is only during specific events during the sports season and will not be continuous.

Runoff

Runoff will be conducted into a stormwater system, not directly into the wetland. Additionally, runoff will not have the herbicides and pesticides associated with the natural turf field as the proposed project will switch the field to synthetic turf.

Permanent stormwater flow control facilities and water quality treatment will be provided onsite in accordance with the AMC. Flow control will be provided via underground large-diameter pipes, chamber systems, or concrete vaults. Standard BMPs will be used to provide basic water quality treatment for vehicular surfaces and areas tributary to vehicular surfaces. Some open areas may utilize biofiltration, bioretention, or other surface methods. Some areas will require underground BMPs such as wet vaults or storm filters.

Construction BMPs such as the use of silt fencing, application of seeding or mulching for soil stabilization, or other techniques will be implemented as necessary in accordance with the requirements of the NPDES permit for construction to reduce or control water quality impacts.

Water Regime

Water inputs to the wetland will be engineered to remain the same.

Pets and Human

Dense planting along either side of the trail that bisects the mitigation area will be installed to deter pet and human use.

Dust

BMPs will be used to control dust.

4.2 Strategy

The proposed mitigation follows those regulations set forth in AMC 17.70.330 through 17.70.350. Because the existing position of Rice Field is abutting a regulated wetland, because improvements to Rice Field are reasonable and prudent (minimal, but necessary), and because work to improve the conditions of Rice Field (upgrade) will occur partially in the wetland buffer, impacts to the wetland buffer are unavoidable. The existing conditions of the wetland buffer where the proposed improvements will be constructed are generally on a sloped edge that is historic fill material. The plant community along this slope is dominated by non-native, invasive shrub, herbaceous, and woody vine species (Scot's broom, reed canarygrass, and Himalayan blackberry). The dominant plant within the wetland is reed canarygrass. Although reed canarygrass has good filtering capacity for water quality, the habitat structure is mono-typic (a single species) lacking variety in vertical, horizontal, and overall species composition. By planting a mixed blend of native trees and shrubs, the habitat functions of the wetland will be substantially increased. That is, more habitat variability to provide habitat for a larger suite of faunal species.

4.3 Implementation Schedule

The proposed mitigation will be implemented concurrently with the proposed project. A time schedule with completion dates may be required or specified for permitting conditions. Prior to commencing work, a qualified wetland biologist must be consulted with regarding site preparation, plant installation timing and placement, and species selection.

4.4 Goals

The goals of this mitigation plan are to increase plant species diversity (trees and shrubs) within the wetland and wetland buffer abutting Rice Field.

4.5 Timing

Planting should occur during the dormant season (fall or winter). Planting will occur with species positioned in the appropriate hydrologic regime to increase plant survival.

4.6 Installation

Approximately 300 native trees and shrubs on 10 foot centers will be planted within the mitigation area (Table 3; Figure 4). Trees and shrubs shall be a minimum 1 gallon size, 36 inches tall, or the equivalent (Table 3). Substitutions for the plant species and minimum size may be recommended post project permitting and a qualified wetland biologist walkthrough. Therefore, modifications such as increasing the quantity and size of plantings or species composition to Table 3 can be made upon approval by a qualified wetland biologist and native plant landscaper.

Plant stock will be provided by a local native plant nursery that has plant stock from the same region as the mitigation site and plant installation will be performed by experienced native plant installers. Plant holes will be twice as wide and twice as deep as the plant root size and may be amended with soil microbes. Protective tubes or stem covers are recommended and plants should be staked if necessary.

In order to increase plant survival by excluding growth of competitive species (reed canarygrass), holding in soil moisture, and providing organic matter and microorganisms that enhance soil fertility, the landscape installer shall place a minimum 2 foot collar of decomposed/compost mulch around each of the newly installed plants. Care should be taken not to load around the stems of the plants as this can cause decay. If mulched wood is used, the mulch should be comprised of roots, stems, and branches of mixed tree and shrub species from land clearing sites. The mulch should not have any non-native or invasive plant stock.

Table 3. Recommended planting detail.

To be confirmed in-situ with a qualified wetland biologist and native plant installer.

Scientific Name	Common Name	Spacing	Location	Quantity	Cover	Size
<i>Pseudotsuga menziesii</i>	Douglas fir	10 foot	Upland	5	Tree	1 gallon
<i>Thuja plicata</i>	Western redcedar		Upland-Wetland	25	Tree	
<i>Acer macrophyllum</i>	Bigleaf maple		Upland	5	Tree	
<i>Populus balsamifera</i>	Cottonwood		Wetland	25	Tree	
<i>Rubus spectabilis</i>	Salmonberry		Wetland	50	Shrub	
<i>Populus tremuloides</i>	Aspen		Upland	50	Tree	
<i>Acer circinatum</i>	Vine maple		Upland	10	Shrub	
<i>Cornus stolonifera</i>	Red osier dogwood		Wetland	80	Shrub	
<i>Malus fusca</i>	Crab apple		Wetland	50	Tree	

4.7 As-Built

An as-built report with drawings of the mitigation site will be provided after completion of mitigation installation. The as-built report shall be prepared by a qualified wetland biologist and plant installer to produce the final drawings. The drawings will indicate all approximate plant locations. The species and quantities of the plants installed will be indicated on a table in the as-built report along with panoramic photographs of the mitigation area.

4.8 Performance Standards

4.8.0 Vegetation

The mitigation area will have a minimum of 50 percent cover by a minimum of nine species total after 3 years and 75 percent cover by a minimum of nine species total after 5 years. The percent cover will be determined by visual estimation by a qualified wetland biologist.

Plant survival for installed vegetation is 100 percent after the first year. Plants that have not survived the first year are to be replaced in kind. For the years following, plants that have died should be replaced in kind except when natural regeneration of native plants has filled in the area. This should be determined by a qualified wetland biologist or plant installer.

4.9 Monitoring

To assure the success of the mitigation site, monitoring shall occur during and after plant installation periodically (spring and fall) and continue for a period of 5 years. This monitoring is required to assure the success of the mitigation site.

4.10 Maintenance

The most important task, if not to properly install all plants and surround them with the appropriate mulch, is to maintain the integrity of the mulch ring. Reed canarygrass or other invasive plant species that become established must be controlled until the installed trees and shrubs gain vigor and height so they are not out competed.

Hand pulling is the preferred method for weeding and should be the first approach during maintenance. However, if any one area of reed canarygrass, Himalayan blackberry, ivy, holly, or other undesirable plant becomes established within the mulch ring, it should be sprayed with glyphosate or a suitable herbicide by a licensed applicator in the spring and rechecked during the summer and fall seasons, as necessary, until the invasive plant(s) are controlled.

4.11 Contingency Plan

If the performance standards are not met, a contingency plan may be necessary in order to accomplish the mitigation goal. If during the monitoring period it is determined that failure has occurred, steps will be taken to correct the situation at that point in time.

The failure of plantings may necessitate re-planting. Possible reasons for failure may include poor quality of the original stock, poor soil, insufficient watering, too wet (wrong location for the installed plant), herbivory, improper installation, or competition by invasive plants (reed canarygrass). Once the reason for failure is determined and corrected, re-planting would take place and monitoring would follow the same schedule as after the first planting. The applicant shall be responsible for the costs of re-planting and plant maintenance. These costs will be separate from any financial guarantees, if required.

5.0 LIMITATIONS

We have used the most current, established methods to make determinations as to the location, size, and types of critical areas located on and adjacent to the property and associated impacts and subsequent mitigation. All of the above statements are based on our best professional judgment. Although we follow the local, state, and federal criteria, we cannot guarantee that the local jurisdiction, Ecology, or the Corps determination will correspond to ours. Please note that regulations pertaining to critical areas are subject to change over time.

6.0 WORKS REFERENCED

Aqua-Terr Systems, Inc. Revised 10 December 2015. Critical Area Report (Wetland Protection Areas): Anacortes School District #103-Anacortes High School, City of Anacortes, Washington.

Bush, Roed & Hitchings, Inc. 18 June 2015. Personal email communication re: project parcel numbers.

Hruby, T. 2014. Washington State Wetland Rating System for Western Washington: 2014 Update. (Publication #14-06-029). Olympia, WA: Washington Department of Ecology.

7.0 FIGURES

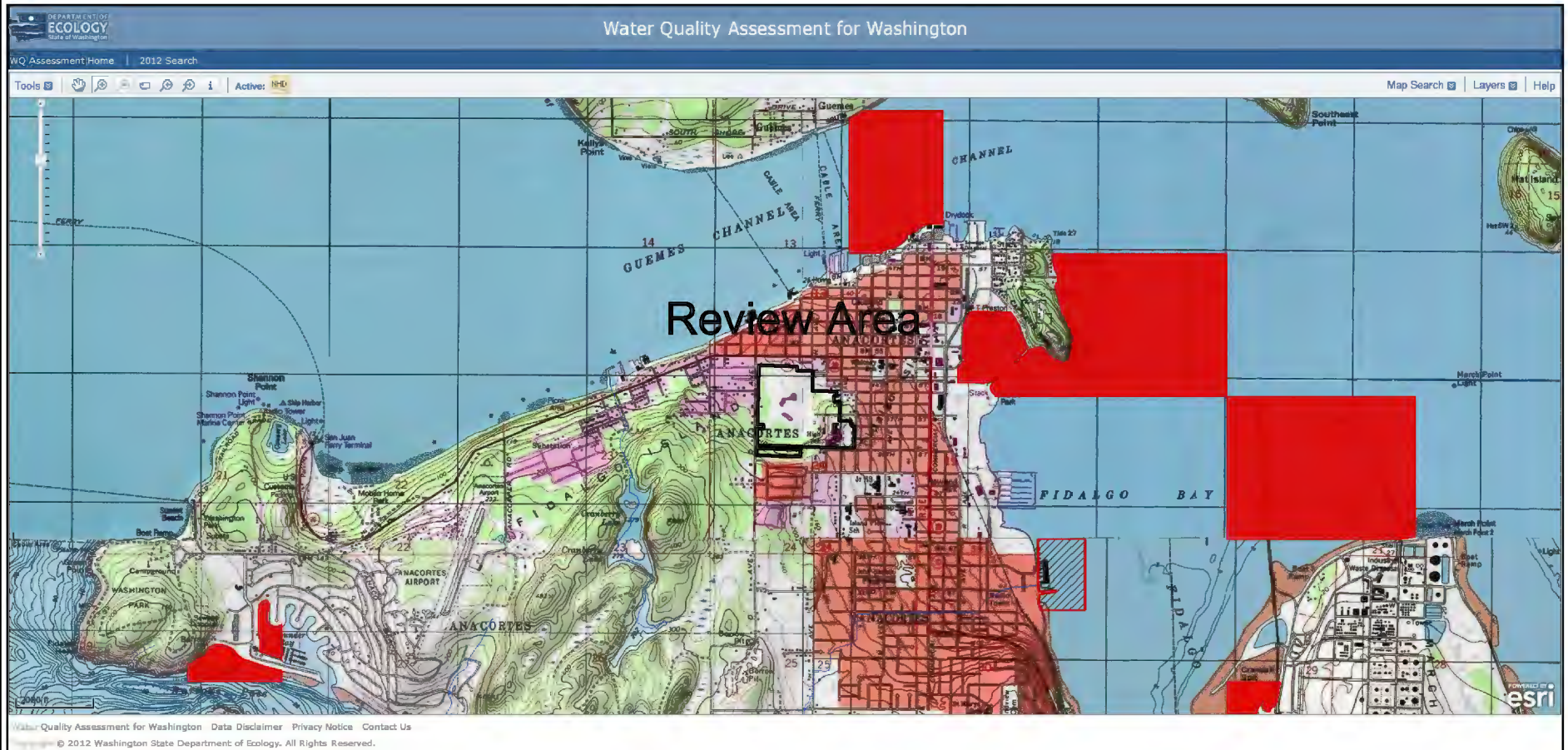
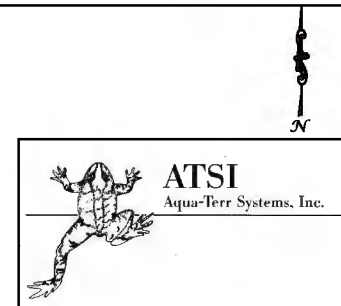


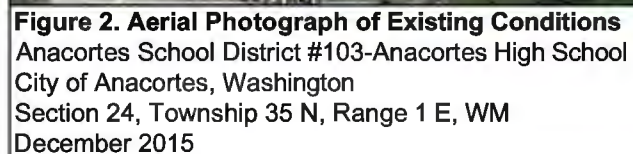
Figure 1. Vicinity Map

Anacortes School District #103-Anacortes High School
City of Anacortes, Washington
Section 24, Township 35 N, Range 1 E, WM
December 2015

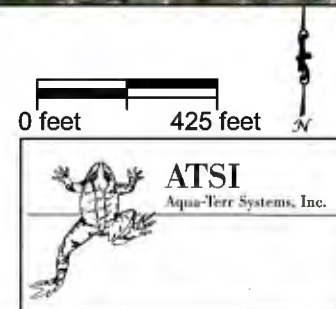
Directions I-5->St Rte 20->W on St Rte 20->Round About N to St Rte 20/Commercial Ave->W on 17th->Anacortes High School

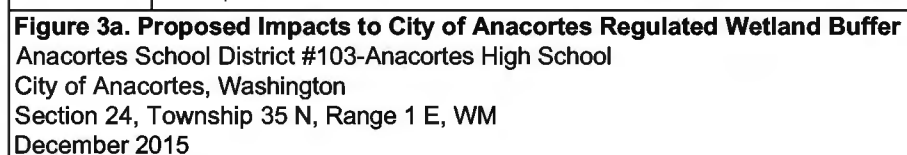
Note Basemaps obtained from Ecology and BRHI with alterations made by ATSI. Red areas=Ecology 303d waters, refer to the Wetland Rating Forms and Figure 7 for additional information regarding these waters.(ATSI June 2015 Updated September 2015)
Project area is a subset of the review area located in the Southwest portion within the existing Rice Field.





Note Basemap/aerial (Google Earth 10 July 2014 Imagery Date) obtained from BRHI with alterations made by ATSI. The portion of the wetland edge depicted is indicated by the white line and is located adjacent to the built environment of the Anacortes High School. Project area is a subset of the review area located in the Southwest portion within the existing Rice Field.





ATSI
Aqua-Terr Systems, Inc.

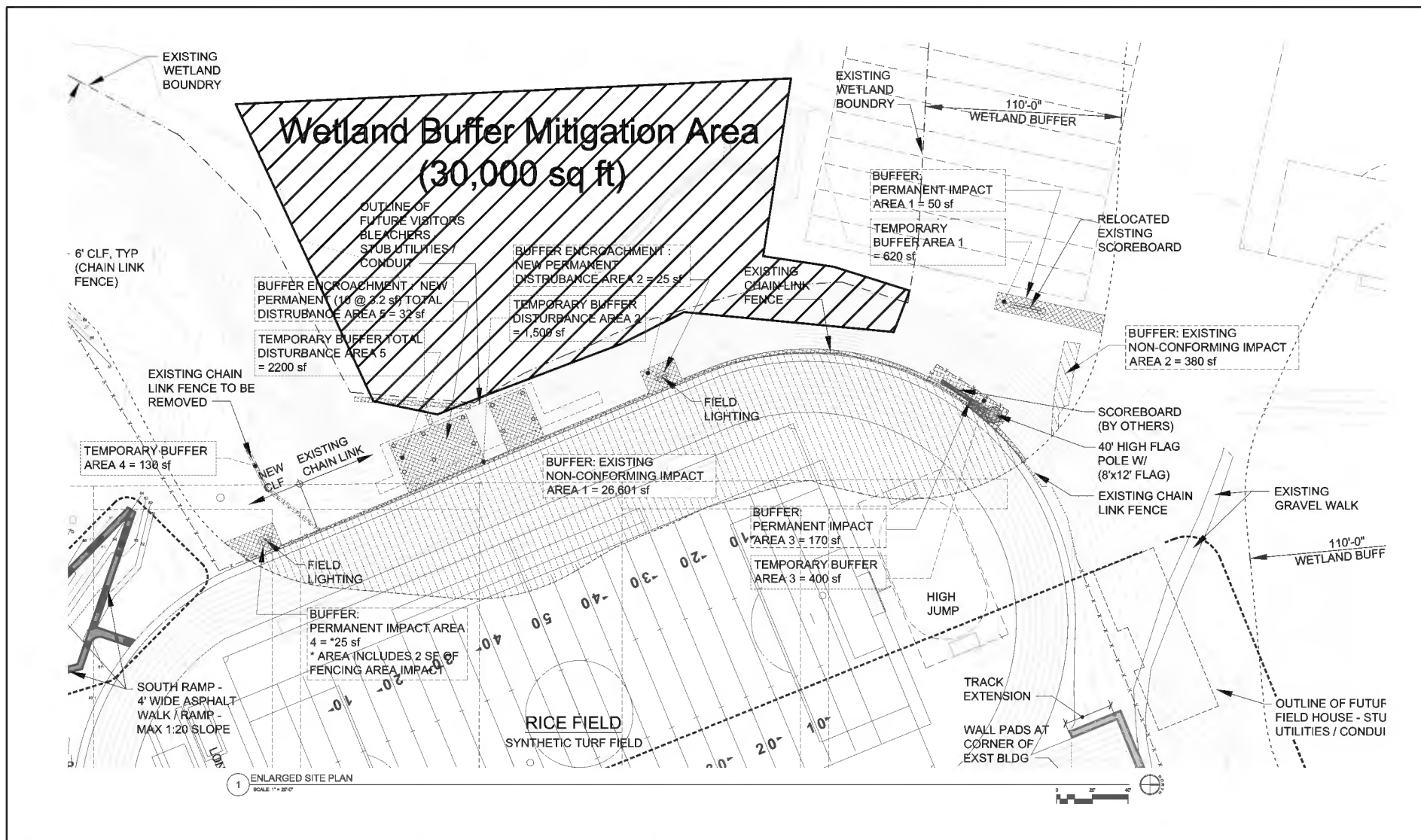


Figure 4. Proposed Mitigation for Impacts to City of Anacortes Regulated Wetland Buffer
 Anacortes School District #103-Anacortes High School
 City of Anacortes, Washington
 Section 24, Township 35 N, Range 1 E, WM
 December 2015

Note Survey and design provided by Hutteball & Oremus Architecture.

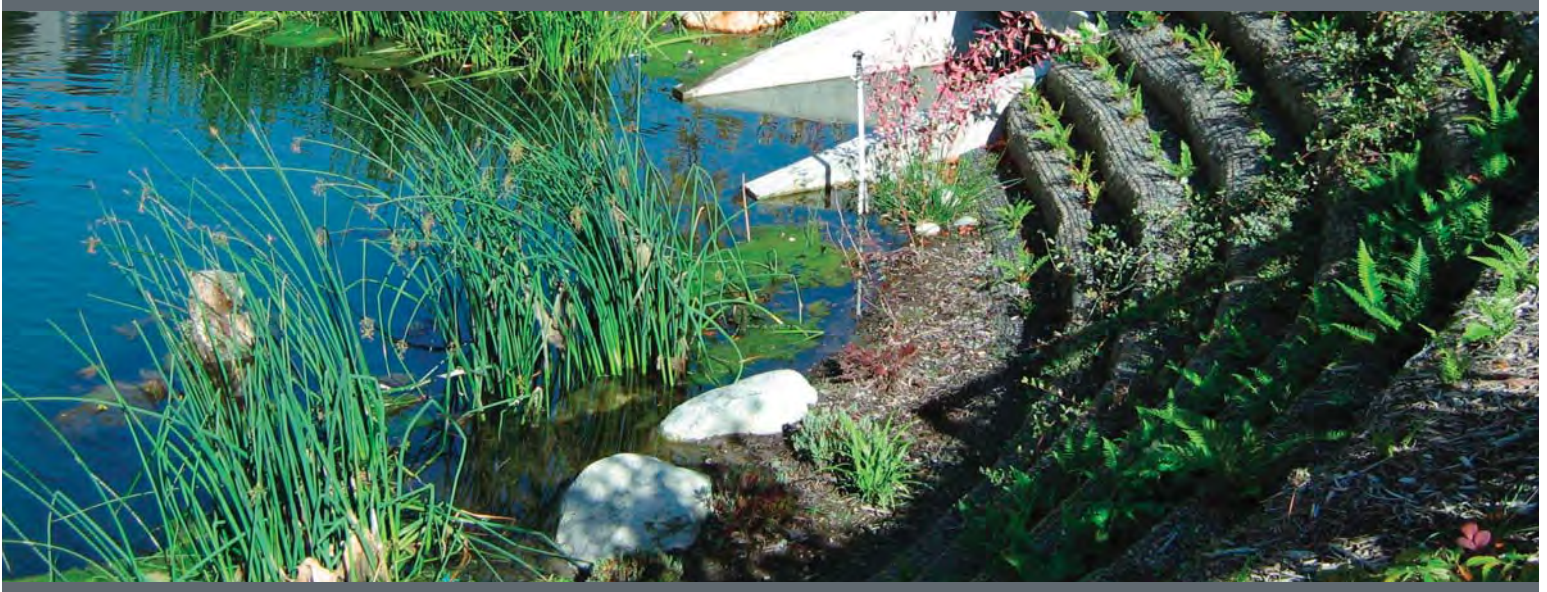


EXHIBIT #9:

SUBSURFACE EXPLORATION & GEOTECHNICAL ENGINEERING REPORT



a s s o c i a t e d
e a r t h s c i e n c e s
i n c o r p o r a t e d



*Subsurface Exploration and
Preliminary Geotechnical Engineering Report*

PROPOSED ANACORTES HIGH SCHOOL ADDITIONS

Anacortes, Washington

Prepared For:

ANACORTES SCHOOL DISTRICT #103

Project No. KE150205A

June 22, 2015



Associated Earth Sciences, Inc.
911 5th Avenue
Kirkland, WA 98033
P (425) 827 7701
F (425) 827 5424



a s s o c i a t e d
e a r t h s c i e n c e s

June 22, 2015
Project No. KE150205A

Anacortes School District #103
2200 M Avenue
Anacortes, Washington 98221

Attention: Mr. Marc Estvold

Subject: Subsurface Exploration and Preliminary Geotechnical Engineering Report
Proposed Anacortes High School Additions
16020 SE 16th Street
Anacortes, Washington

Dear Mr. Estvold:

We are pleased to present these copies of our preliminary geotechnical engineering report for the referenced project. This report summarizes the results of our subsurface exploration, geologic hazards, and preliminary geotechnical engineering studies, and offers recommendations for the design and development of the proposed project. At the time this report was prepared, the site was in the conceptual design phase. We recommend that we be allowed to review the recommendations contained in this report and modify them, if necessary, when project plans are nearing completion.

We have enjoyed working with you on this study and are confident that the recommendations presented in this report will aid in the successful completion of your project. If you should have any questions, or if we can be of additional help to you, please do not hesitate to call.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington

Kurt D. Merriman, P.E.
Senior Principal Engineer

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**SUBSURFACE EXPLORATION AND
PRELIMINARY GEOTECHNICAL ENGINEERING REPORT**

PROPOSED ANACORTES HIGH SCHOOL ADDITIONS

Anacortes, Washington

Prepared for:

Anacortes School District #103

2200 M Avenue

Anacortes, Washington 98221

Prepared by:

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425-827-7701

Fax: 425-827-5424

June 22, 2015

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I. PROJECT AND SITE CONDITIONS

1.0 INTRODUCTION

This report presents the results of our subsurface exploration, geologic hazards, and preliminary geotechnical engineering studies for the proposed Anacortes High School Additions. The site location is shown on the "Vicinity Map," Figure 1. The approximate locations of exploration borings completed for this study are shown on the "Site and Exploration Plan" Figure 2. Figure 3 presents an area topographic study based on published Light Detection and Ranging (LIDAR) data. Logs of the subsurface explorations completed for this study and copies of analytical chemistry and geotechnical laboratory test results completed for this study are included in the Appendix.

1.1 Purpose and Scope

The purpose of this study was to provide geotechnical engineering design recommendations to be utilized in the design of the project. This study included a review of selected available geologic literature, advancing 23 hollow-stem auger soil borings, and performing geologic studies to assess the type, thickness, distribution, and physical properties of the subsurface sediments and shallow ground water. Geotechnical engineering studies were completed to establish recommendations for site preparation, the type of suitable foundations and floors, allowable foundation soil bearing pressure, anticipated foundation and floor settlement, pavement recommendations, drainage considerations, and athletic field design and construction. Based on exploration data contained in this report, storm water infiltration is not recommended. This report summarizes our fieldwork and offers preliminary geotechnical engineering recommendations based on our present understanding of the project. We recommend that we be allowed to review the recommendations presented in this report and revise them, if needed, when project plans are nearing completion.

1.2 Authorization

Authorization to proceed with this study was granted by means of an Anacortes School District consultant agreement. Our work was completed in general accordance with our scope of work and cost proposal, dated May 6, 2015. This report has been prepared for the exclusive use of Anacortes School District #103 (District) and their agents for specific application to this project. Within the limitations of scope, schedule, and budget, our services have been performed in accordance with generally accepted geotechnical engineering practices in effect in this area at the time our report was prepared. No other warranty, express or implied, is made.

2.0 PROJECT AND SITE DESCRIPTION

The site is the existing Anacortes High School in Anacortes, Washington. The school contains existing buildings that were constructed in 1955 and 1970. A portion of the 1970 addition has experienced differential settlement. An upper field with track is located on the east side of the school and a lower football field with track is located on the west side of the school. The site is tiered with some relatively flat areas and some steeper slopes.

We understand that proposed site improvements will involve demolition of a portion of the school, construction of a 100,000-square-foot addition to the school, a new all-season synthetic turf football field, sports field lighting, bleachers, team and officiating crew building, and new parking/driveway areas. We understand that construction of the new all-season football field will occur first, followed by construction of the new building addition on the existing upper sports field.

3.0 SUBSURFACE EXPLORATION

Our subsurface exploration completed for this project included advancing 23 hollow-stem auger soil borings. The conclusions and recommendations presented in this report are based on the explorations completed for this study. The locations and depths of the explorations were completed within site and budget constraints.

3.1 Exploration Borings

The exploration borings were completed by advancing hollow-stem auger tools with a track-mounted drill rig. During the drilling process, samples were obtained at generally 2.5- to 5-foot-depth intervals. The exploration borings were continuously observed and logged by a representative from our firm. The exploration logs presented in the Appendix are based on the field logs, drilling action, and review of the samples obtained.

Disturbed but representative samples were obtained by using the Standard Penetration Test (SPT) procedure in accordance with *American Society for Testing and Materials* (ASTM):D 1586. This test and sampling method consists of driving a standard, 2-inch outside-diameter, split-barrel sampler a distance of 18 inches into the soil with a 140-pound hammer free-falling a distance of 30 inches. The number of blows for each 6-inch interval is recorded, and the number of blows required to drive the sampler the final 12 inches is known as the Standard Penetration Resistance ("N") or blow count. If a total of 50 is recorded within one 6-inch interval, the blow count is recorded as the number of blows for the corresponding number of inches of penetration. The resistance, or N-value, provides a measure of the relative density of granular soils or the relative consistency of cohesive soils; these values are plotted on the attached exploration boring logs.

The samples obtained from the split-barrel sampler were classified in the field and representative portions placed in watertight containers. The samples were then transported to our laboratory for further visual classification and laboratory testing.

4.0 SUBSURFACE CONDITIONS

Subsurface conditions at the project site were inferred from the field explorations accomplished for this study, visual reconnaissance of the site, and review of selected applicable geologic literature. Because of the nature of exploratory work below ground, extrapolation of subsurface conditions between field explorations is necessary. It should be noted that differing subsurface conditions may sometimes be present due to the random nature of deposition and the alteration of topography by past grading and/or filling. The nature and extent of any variations between the field explorations may not become fully evident until construction.

4.1 Stratigraphy

Surficial Topsoil

Exploration borings completed in unpaved areas encountered topsoil and grass, with approximate observed topsoil thickness at the exploration locations shown on the exploration logs in the Appendix. Topsoil is not suitable for structural support, and should be stripped from structural areas. Excavated topsoil may be suitable for reuse in landscape areas if allowed by project documents.

Existing Paving

Existing surficial asphalt paving was encountered at boring locations in paved areas. The approximate observed thickness of existing paving at the exploration locations is presented on the exploration boring logs in the Appendix.

Fill

Existing fill was encountered in 17 of our exploration borings to depths ranging from approximately 2 feet to 21.5 feet. Some exploration borings that encountered existing fill, including the borings that encountered the deepest existing fill, did not fully penetrate the existing fill. The existing fill was observed to be typically silty sand with varying gravel content. Existing fill was observed to be loose to dense, but was occasionally very loose and occasionally very dense. The existing fill beneath the existing west football field was observed to consist of apparently imported soils of mixed composition with organic material and asphalt rubble in some areas. Existing fill elsewhere on-site was typically of a similar texture to the existing undisturbed soils on-site. The existing fill will require removal or other remedial preparation

below planned building areas and remedial preparation below planned paving. Existing fill will likely be left in place below the new west athletic field, with some risk resulting from construction over existing fill as discussed in further detail later in this report. Excavated existing fill is suitable for reuse in structural fill applications if specifically allowed by project specifications, providing that any organic or other deleterious materials are removed and moisture content is adjusted to allow compaction to a firm and unyielding condition at or above the minimum specified compaction level for the final use of the fill in any given area. Excavated existing fill material is expected to be wetter than optimum moisture content for compaction purposes and will require drying during dry site and weather conditions prior to use in compacted fills. Excavated on-site soils are expected to be very silty and highly sensitive to excess moisture associated with wet site and/or weather conditions.

Vashon Lacustrine Deposits

Exploration borings that fully penetrated existing fill encountered laminated silty sand and sandy silt interpreted as Vashon lacustrine (lake) sediments. The Vashon lacustrine sediments were typically dense to very dense/hard, and are suitable for foundation support with proper preparation. The Vashon lacustrine sediments are very silty and highly moisture-sensitive. Moisture-sensitive sediments are easily disturbed when above optimum moisture condition for compaction purposes and require careful management and protection on construction sites to limit the potential for remedial preparation of subgrades for structures, paving, and structural fills. Excavated Vashon lacustrine sediments are expected to be above optimum moisture content for compaction purposes. If allowed by project plans and specifications, reuse of excavated Vashon lacustrine sediments in structural fill applications will require aeration and drying during dry site and weather conditions to allow compaction to a firm and unyielding condition at the specified level of compaction. Drying site soils requires a significant, but unavoidable commitment of effort. A possible alternative to moisture-conditioning is the use of Portland cement admixture to soil that is to be compacted. Refer to the "Structural Fill" section of this report for further discussion of the use of on-site soil in compacted fill applications.

Olympia Non-Glacial Sediments

One exploration boring, EB-10, encountered very stiff to hard, typically massive silt, interpreted as Olympia age non-glacial sediments. Due to the depth below existing grade where these materials were encountered, they are not expected to be encountered during site grading and are not expected to be used for direct foundation support.

Review of Published Geologic Data

We reviewed published geologic maps of the site vicinity on the United States Geological Survey (USGS) National Geologic Map. The site lies at the intersection of three underlying

reference geologic maps and data relevant to the site appears on all three maps. Based on the National Geologic Map, the site is predicted to be underlain at shallow depths by Vashon lodgement till. Our observations and interpretations suggest that the shallow site soils consist instead of Vashon lacustrine sediments, a map unit defined on one of the underlying map resources for the project area, *Geologic Map of the Anacortes South and LaConner 7.5 Minute Quadrangles, Skagit and Island Counties, Washington*, by Joe D. Dragovich, Minda L. Troost, David K. Norman, Garth Anderson, John Cass, Lea A. Gilbertson and Donald T. Mackay Jr., 2000, Washington Division of Geology and Earth Resources Open File Report 2000-6.

4.2 Hydrology

Ground water was observed in seven of the exploration borings at depths ranging from 13 to 28 feet. Because the exploration borings are open for only a short time, equilibrium water levels may be shallower than we observed. The observed ground water appeared to be preferentially concentrated in more permeable strata. Ground water observed in exploration borings EB-15, EB-16, and EB-21 may represent “perched” ground water within existing fill. Perched ground water occurs where vertical infiltration of surface water is impeded by low-permeability strata. Ground water conditions should be expected to vary in response to changes in precipitation, on- and off-site land usage, and other factors.

4.3 Laboratory Testing

As a part of our investigation, we completed one laboratory grain-size analysis. A copy of the grain-size analysis report is included in the Appendix.

4.4 Field Screening and Chemical Analytical Testing

We were requested to complete several field screening tests at boring locations on the existing east and west sports fields. We completed vapor headspace readings of exploration boring samples using a photoionization detector (PID). The photoionization detector can detect chemicals with ionization potentials less than about 10.6 electron volts. The photoionization detector does not report the specific chemical that is detected, or actual concentrations. It also does not detect the presence of compounds that are non-volatile or that have ionization potentials higher than the detector limits. A qualitative number is reported that is useful in comparing headspace screening results of different samples, and also in selecting specific samples for quantitative testing. Headspace readings are reported on exploration logs in the Appendix for borings where headspace screening was completed. With the exception of one exploration boring, EB-7, headspace readings of all tested samples were low, and within the typical “background” range, indicating that no significant contaminants within the method limits were detected. At EB-7, headspace readings were elevated. After conversation with the District, we selected the sample from EB-7 at 20 feet for laboratory testing to quantitatively identify possible contaminants including gasoline-, diesel-, and lubricating oil-range

hydrocarbons, selected volatile chemicals, and selected non-volatile chemicals. The potential contaminants screened for are not all the possible contaminants, but include many of the most commonly encountered contaminants. All of the tests were negative (no detections above test method limits) for the sample selected and the compounds analyzed. Copies of laboratory test results are included in the Appendix. As this report is written, we are working with the District to develop a scope of work for possible further investigation of environmental issues near EB-7.

In addition to PID screening, we operated detectors for methane and hydrogen sulfide when completing exploration borings on both existing sports fields. These two detectors were used to monitor ambient air for these two specific compounds. We did not detect methane or hydrogen sulfide in ambient air at any time during our exploration program

4.5 Infiltration Potential

The site is underlain by existing fill in some locations that is not suitable for use as an infiltration receptor. Native sediments below the surficial fill at this site consist of dense, very fine-grained lacustrine sediments that are not suitable for use as a storm water infiltration receptor. The fine-grained sediments extended to the full depth explored in all explorations, including EB-10 and EB-12, the deepest explorations in our study, which were completed to depths of approximately 100 and 40 feet, respectively. Based on our observations, it does not appear that a suitable infiltration receptor is present for either conventional shallow infiltration strategies such as rain gardens, or deeper strategies such as Underground Injection Control (UIC) wells. Storm water infiltration is not recommended for this project.

4.6 Existing Settlement Issues

We were asked to investigate two areas of settlement that have affected existing structures on-site. We understand that a portion of the existing 1970 school building has settled following its initial construction. Anecdotal information suggests that up to 10 inches of settlement has occurred. During our initial site visit, we observed evidence of settlement in the building such as wall cracking, non-level floors, and skewed door frames. From our observations it appears settlement on the order of several inches has occurred. Because the area of existing settlement is not near the building exterior where the drilling equipment used for this study can work, our exploration data provide some useful context to assist in understanding the existing settlement but no subsurface data at the settlement location. Based on subsurface exploration boring data, native soils on-site are dense and not prone to excessive settlement under structural loads such as those imposed by the existing buildings. Existing fill was observed to be well compacted in many places, but was also observed to be loose in some locations. It seems most likely that any structural settlement in the building area is associated with poorly compacted man-placed fill rather than weak natural soils. We are available to discuss completion of exploration borings inside of the existing building at an accessible location most affected by settlement, if desired.

We were also asked to consider the existing “ecology block” retaining wall at the north end of the existing west track and field. The geometry of the ecology block wall is not known. Key design elements of gravity wall systems such as ecology block walls include wall base width, face batter angle, and toe embedment depth, all of which are concealed from view in this instance. This wall reportedly began to fail after it was constructed, and the fill slope north of the wall was reportedly constructed to support the wall and arrest the ongoing displacement. We observed the exposed tops of ecology blocks in this area, and cracks in asphalt paving south of the existing blocks. Exploration boring EB-15 was completed in this area. Exploration boring EB-15 encountered loose fill to a depth of approximately 15 feet. The conditions at EB-15 suggest that the wall foundation may be supported on weak soils. Weak soils may also be present in the backfill zone, which could contribute to poor wall performance. It is worth noting that often ecology block-type walls are installed without a detailed engineering design. Often non-engineered walls of this type are not provided with sufficient base width and face batter angle to perform as intended. In this case, it appears likely that poor soil conditions are a contributing factor to the failure of the wall, and it is possible that poor wall design is also an important factor though wall design details are not known. We recommend that the project plan not rely on the existing gravity wall in this area. The existing wall should be removed as needed by removing blocks to allow construction of the new project, and if a retaining wall is needed in this area a new wall should be designed.

II. GEOLOGIC HAZARDS AND MITIGATIONS

The following discussion of potential geologic hazards is based on the geologic, slope, and ground and surface water conditions, as observed and discussed herein. The discussion will be limited to slope stability, seismic, and erosion issues.

5.0 SLOPE HAZARDS AND MITIGATIONS

The site contains significant steep slopes in several areas. The tallest and steepest slope exists between the existing school buildings and west athletic field. This slope was constructed to its current geometry by earthwork cuts and retaining walls completed during earlier site development work. Significant slopes also exist at the east side of the east athletic field, between the existing school buildings and the east athletic field, and between the existing parking lot on the north side of the building and the student parking lot farther to the north. All of the slopes except the one north of the north parking lot appear to have been constructed by previous site grading.

Anacortes Municipal Code (AMC) Section 17.70.190 defines geologically hazardous areas, including landslide hazard areas. The site contains some areas that meet the definition for landslide hazard areas as a result of their geometry (steepness and height). At the time this report was written, a site topographic survey was underway. We recommend that we review the survey when it is completed, together with a detailed site development plan when one is available. The AMC requires a project-specific geotechnical analysis of work near landslide hazard areas. The analysis must use site-specific topographic and subsurface data, and detailed project plans including earthwork/grading plans. The AMC stipulates that the geotechnical analysis must recommend siting requirements and setbacks from steep slopes. The AMC does not stipulate minimum setbacks from steep slopes, and therefore in our opinion a project supported by sound engineering consistent with local standards of practice should be acceptable to the City. We are available to complete such an analysis when the inputs required are available.

6.0 SEISMIC HAZARDS AND MITIGATIONS

The site does not appear to contain areas that meet AMC definitions for seismic hazard areas, in our opinion. The following discussion provides input for the District to allow a better understanding of seismic hazards, and to the structural engineer to facilitate design of the project.

Earthquakes occur regularly in the Puget Lowland. The majority of these events are small and are usually not felt by people. However, large earthquakes do occur, as evidenced by the 1949,

7.2-magnitude event; the 2001, 6.8-magnitude event; and the 1965, 6.5-magnitude event. The 1949 earthquake appears to have been the largest in this region during recorded history and was centered in the Olympia area. Evaluation of earthquake return rates indicates that an earthquake of the magnitude between 5.5 and 6.0 is likely within a given 20-year period.

Generally, there are four types of potential geologic hazards associated with large seismic events: 1) surficial ground rupture, 2) seismically induced landslides, 3) liquefaction, and 4) ground motion. The potential for each of these hazards to adversely impact the proposed project is discussed below.

6.1 Surficial Ground Rupture

Generally, the largest earthquakes that have occurred in the Puget Sound area are sub-crustal events with epicenters ranging from 50 to 70 kilometers in depth. Earthquakes that are generated at such depths usually do not result in fault rupture at the ground surface. We reviewed known faults using the USGS Earthquake Hazards Program Interactive Fault Map. The referenced map indicates that the nearest known active fault to the project site is approximately 10 miles to the south. Because the site is distant from known active faults, the potential for seismically induced ground rupture to adversely affect the proposed project is low, in our opinion.

6.2 Seismically Induced Landslides

Final design of the project will need to be accompanied by slope stability modeling that is specific to site geometry, subsurface conditions, and detailed project plans. When slope stability modeling is completed, stability will be considered under both static and seismic conditions.

6.3 Liquefaction

Liquefaction is a process through which unconsolidated soil loses strength as a result of vibrations, such as those which occur during a seismic event. During normal conditions, the weight of the soil is supported by both grain-to-grain contacts and by the fluid pressure within the pore spaces of the soil below the water table. Extreme vibratory shaking can disrupt the grain-to-grain contact, increase the pore pressure, and result in a temporary decrease in soil shear strength. The soil is said to be liquefied when nearly all of the weight of the soil is supported by pore pressure alone. Liquefaction can result in deformation of the sediment and settlement of overlying structures. Areas most susceptible to liquefaction include those areas underlain by non-cohesive silt and sand with low relative densities, accompanied by a shallow water table.

The subsurface conditions encountered at the site pose low risk of liquefaction due to relatively high density and high silt content of the lacustrine sediments. No quantitative liquefaction analysis was completed as part of this study, and none is warranted, in our opinion.

6.4 Ground Motion

Structural design for the project should follow 2012 *International Building Code* (IBC) standards. The 2012 IBC defines Site Classification by reference to Table 20.3-1 of the *American Society of Civil Engineers* Publication ASCE 7, the current version of which is ASCE 7-10. In our opinion the subsurface conditions at the site are consistent with a Site Classification of “C” as defined in the referenced documents.

7.0 EROSION HAZARDS AND MITIGATIONS

The following discussion addresses Washington State Department of Ecology (Ecology) erosion control regulations that will be applicable to the project. We anticipate that if the project complies with Washington State requirements, it will also be acceptable with respect to City of Anacortes requirements.

As of October 1, 2008, Ecology Construction Storm Water General Permit (also known as the National Pollutant Discharge Elimination System [NPDES] permit) requires weekly Temporary Erosion and Sedimentation Control (TESC) inspections and turbidity and pH monitoring for all sites 1 or more acres in size that discharge storm water to surface waters of the state. Because we anticipate that the proposed project will require disturbance of more than 1 acre, we anticipate that these inspection and reporting requirements will be triggered. The following recommendations are related to general erosion potential and mitigation.

The erosion potential of the site soils is high. Maintaining cover measures atop disturbed ground typically provides the greatest reduction to the potential generation of turbid runoff and sediment transport. During the local wet season (October 1st through March 31st), exposed soil should not remain uncovered for more than 2 days unless it is actively being worked. Ground-cover measures can include erosion control matting, plastic sheeting, straw mulch, crushed rock or recycled concrete, or mature hydroseed.

Project planning and construction should follow local standards of practice with respect to TESC. Best management practices (BMPs) should include but not be limited to the following:

- Provide storm drain inlet protection;
- Route surface water away from work areas;
- Keep staging areas and travel areas clean and free of track-out;
- Cover work areas and stockpiled soils when not in use;
- Complete earthwork during dry weather and site conditions, if possible.

III. PRELIMINARY DESIGN RECOMMENDATIONS

8.0 INTRODUCTION

The following report sections address planning and construction of buildings, paving, and related structures contemplated on the school site. Athletic field design and construction is addressed separately in a dedicated section later in this report.

Some portions of the site are underlain by a layer of surficial existing fill that is loose and variable. Existing fill is not suitable for support of new foundations and warrants remedial preparation where it occurs below paving and similar lightly loaded structures. The fill is expected to consist of loose to medium dense soils that resemble native on-site sediments. We recommend that the existing fill below the building pad be removed from below foundations. Different allowable foundation soil bearing pressures are recommended depending on whether foundations will bear directly on suitable dense native sediments or on new structural fill. Foundation design recommendations are presented in the “Foundations” section of this report. Existing fill should be fully or partially replaced below the floor slab. The decision for how to prepare floor slab subgrades is discussed in greater detail in the “Floor Support” section of this report. Below paved areas, existing fill should be exposed and evaluated, and should receive remedial preparation if warranted. Pavement subgrades are discussed in further detail below.

9.0 SITE PREPARATION

Existing structures, paving, buried utilities, vegetation, topsoil, and any other deleterious materials should be removed where they are located below planned construction areas. All disturbed soils resulting from demolition activities should be removed to expose underlying undisturbed native sediments and replaced with structural fill, as needed. All excavations below final grade made for demolition activities should be backfilled, as needed, with structural fill. Erosion and surface water control should be established around the clearing limits to satisfy local requirements.

Once demolition has been completed, existing fill should be addressed. The observed thickness of existing fill varied. For estimated fill thickness at the exploration locations refer to the subsurface exploration logs in the Appendix. We recommend that existing fill be removed from below planned foundation elements using one of the strategies described in further detail below. It is important to include remedial preparation of the existing fill in the bid documents in a way that encourages competitive pricing and reduces the potential for claims of unanticipated conditions. We are available to review project specification sections related to geotechnical issues if requested to do so.

Existing Fill Option 1 - Removal and Replacement

The simplest approach to addressing existing fill below structural areas is removal of the existing fill and replacement with compacted structural fill. This would limit allowable foundation soil bearing pressures to 3,500 pounds per square foot (psf), which may be lower than optimal for multiple-story structures and buildings with areas of wide interior spans such as typically occur in gymnasiums, cafeterias, and theaters.

Existing Fill Option 2 - Removal of Existing Fill with CDF Below Foundations

This approach would excavate existing fill below the building footprint. New fill below foundations would consist of Controlled Density Fill (CDF). Existing fill below floor slabs could be replaced with conventional structural fill. Using this approach, allowable foundation soil bearing pressures of up to 5,000 psf could be used for design.

Existing Fill Option 3 - Removal of Existing Fill Below Foundation Elements, Partial Removal of Existing Fill Below Floors

This approach would treat foundation areas the same as Option 2. Floor slab areas would be excavated 2 feet below floor slab grade, any organic or excessively yielding areas would be repaired, and floor slab grade would be restored with structural fill. Significant upfront cost savings would result as compared to Options 1 and 2, with the tradeoff being that higher risks of future settlement would also result. The magnitude of the potential for future floor slab settlement under this option is difficult to predict since conditions within existing fill that would be left in place are unknown.

Existing Fill Option 4 - Lower Foundation Grades

This approach would select a building footprint and lowest floor elevation that is predicted to position foundation elements directly above native soils, below existing fill. Allowable foundation soil bearing pressures of 5,000 psf or higher could be used for design.

Below planned on-site paving, existing fill should be exposed, proof-rolled, and compacted to 95 percent of the modified Proctor maximum dry density. If a firm and unyielding condition is achieved, no further remedial preparation would be needed. If excessively organic or yielding conditions are encountered, existing fill would be partially removed and replaced with imported structural fill. The depth of replacement of the existing fill below paving should be determined at the time of construction when field conditions are known. Alternatively, soil cement treatment could be used to complete remedial preparation of existing fill below planned new paving.

9.1 Soil Cement Treatment

Treatment of weak and/or wet subgrade soils with Portland cement is often a cost-effective way to provide support for new paving, and also works well below winter construction staging areas. Soil cement treatment could be considered at this site for preparation of paving subgrades underlain by existing loose fill, for winter staging areas, and for building pads that are expected to be exposed to wet weather conditions. It may also be feasible to treat larger mass fills with Portland cement to reduce moisture content and therefore allow reuse of wet on-site soil that would otherwise be unsuitable for reuse in structural fill applications. We are available to discuss appropriate cement treatment strategies with the District and design team as project plans are developed.

Soil cement treatment consists of applying dry Portland cement powder to the surface of a soil area that has excess moisture prior to compaction. The cement powder is thoroughly mixed into the underlying soil to a pre-determined depth. Hydration of the Portland cement consumes the excess moisture, and allows the soil to be compacted to a firm and unyielding condition. The amount of cement powder that is required is a function of field moisture content versus laboratory optimum moisture content for compaction purposes. Typically, the geotechnical engineer and contractor review field conditions, and estimate an appropriate soil cement admixture rate to achieve the desired results. A test pad is then constructed with using the estimated amount of cement powder. Results are evaluated and the cement admixture ratio is fine-tuned based on initial results. Typical admixture percentages range from about 3 to 7 percent by dry weight.

On-site soils should be assumed to have a dry weight of 130 pounds per cubic foot (pcf). For bidding purposes, any place that soil cement treatment is required, a soil cement admixture ratio of 5 percent by dry weight should be used in the base bid. We recommend that the contract cement treatment base bid quantity also includes a cost per cubic yard of treated soil for application to payments in excess of the base bid, or credits for cement treatment volumes less than the base bid.

Soil cement areas are typically not durable to vehicle traffic or other intensive uses, particularly during wet weather, unless very high soil cement admixture rates are used. The soil cement admixture rates recommended in this report are for stabilization of soils with above-optimum moisture content that will be paved or otherwise protected before they are exposed to vehicles or other loads. If the soil cement-treated areas are to be exposed to construction traffic or other heavy use, they should be protected by a surficial layer of structural fill, by a layer of asphalt pavement surfacing or asphalt treated base (ATB), or should be completed with a higher cement admixture percentage. If these situations occur, we should be allowed to offer situation-specific recommendations.

Soil cement treatment must be done in such a way that cement dust is controlled during completion of site work. This is typically accomplished through the use of flexible skirts on equipment used for application and mixing of the cement powder. Because the skirting and mixing equipment are specialized equipment, typically specialty contractors are retained for completion of soil cement work. In addition to dust control, permitting may require monitoring of storm water pH if soil cement treatment is used. In our experience, typically soil cement-treated areas have a relatively short initial period of high storm water pH that rapidly decreases over time. In the short term, it may be necessary to detain runoff from soil cement areas and add dry ice or carbon dioxide diffusers to reduce pH to an acceptable level before discharge off-site. Typically, pH monitoring requirements will be imposed by either construction or storm water permitting. Associated Earth Sciences, Inc. (AESI) can provide pH monitoring services concurrent with our other construction observation activities on-site if requested to do so.

9.2 Site Drainage and Surface Water Control

The site should be graded to prevent water from ponding in construction areas and/or flowing into excavations. Exposed grades should be crowned, sloped, and smooth drum-rolled at the end of each day to facilitate drainage. Accumulated water must be removed from subgrades and work areas immediately prior to performing further work in the area. Equipment access may be limited, and the amount of soil rendered unfit for use as structural fill may be greatly increased, if drainage efforts are not accomplished in a timely sequence. If an effective drainage system is not utilized, project delays and increased costs could be incurred due to the greater quantities of wet and unsuitable fill, or poor access and unstable conditions.

Some of our exploration borings encountered seepage zones at the time of exploration. We anticipate that perched ground water could be encountered in excavations completed during construction. We do not anticipate the need for extensive dewatering in advance of excavations. The contractor should be prepared to intercept any ground water seepage entering the excavations and route it to a suitable discharge location.

Final exterior grades should promote free and positive drainage away from planned buildings at all times. Water must not be allowed to pond or to collect adjacent to foundations or within the immediate building area. We recommend that a gradient of at least 3 percent for a minimum distance of 10 feet from the building perimeters be provided, except in paved locations. In paved locations, a minimum gradient of 1 percent should be provided, unless provisions are included for collection and disposal of surface water adjacent to the structures.

9.3 Subgrade Protection

To the extent that it is possible, existing pavement should be used for construction staging areas. If building construction will proceed during the winter, we recommend the use of a working surface of cement-treated soil, sand and gravel, crushed rock, or quarry spalls to protect exposed soils, particularly in areas supporting concentrated equipment traffic. In winter construction staging areas and areas that will be subjected to repeated heavy loads, such as those that occur during construction of masonry walls, a minimum thickness of 12 inches of quarry spalls or 18 inches of pit run sand and gravel is recommended. If subgrade conditions are soft and silty, a geotextile separation fabric, such as Mirafi 500X or approved equivalent, should be used between the subgrade and the new fill. For building pads where floor slabs and foundation construction will be completed in the winter, a similar working surface should be used, composed of at least 6 inches of pit run sand and gravel or crushed rock. Construction of working surfaces from advancing fill pads could be used to avoid directly exposing the subgrade soils to vehicular traffic. Subgrade protection could also be accomplished using Portland cement treatment as outlined earlier in this report.

Foundation subgrades may require protection from foot and equipment traffic and ponding of runoff during wet weather conditions. Typically, compacted crushed rock or a lean-mix concrete mat placed over a properly prepared subgrade provides adequate subgrade protection. Foundation concrete should be placed and excavations backfilled as soon as possible to protect the bearing surface.

9.4 Proof-Rolling and Subgrade Compaction

Following the recommended demolition, site stripping, existing fill removal, and planned excavation, the stripped subgrade within building and paving areas should be proof-rolled with heavy, rubber-tired construction equipment, such as a fully loaded tandem-axle dump truck. Proof-rolling should be performed prior to structural fill placement or foundation excavation. The proof-roll should be monitored by the geotechnical engineer so that any soft or yielding subgrade soils can be identified. Any soft/loose, yielding soils should be removed to a stable subgrade. The subgrade should then be scarified, adjusted in moisture content, and recompacted to the required density. Proof-rolling should only be attempted if soil moisture contents are at or near optimum moisture content. Proof-rolling of wet subgrades could result in further degradation. Low areas and excavations may then be raised to the planned finished grade with compacted structural fill. As discussed in the "Site Preparation" section of this report, if grade is to be raised below foundations designed with allowable foundation soil bearing pressures greater than 3,500 psf, CDF should be used for backfill below the foundation elements.

9.5 Overexcavation/Stabilization

Construction during extended wet weather periods could create the need to overexcavate exposed soils if they become disturbed and cannot be recompacted due to elevated moisture content and/or weather conditions. Even during dry weather periods, soft/wet soils, which may need to be overexcavated, may be encountered in some portions of the site. If overexcavation is necessary, it should be confirmed through continuous observation and testing by AESI. Soils that have become unstable may require remedial measures in the form of one or more of the following:

1. Drying and recompaction. Selective drying may be accomplished by scarifying or windrowing surficial material during extended periods of dry and warm weather.
2. Removal of affected soils to expose a suitable bearing subgrade and replacement with compacted structural fill.
3. Mechanical stabilization with a coarse crushed aggregate compacted into the subgrade, possibly in conjunction with a geotextile.
4. Soil/cement admixture stabilization.

9.6 Wet Weather Conditions

If construction proceeds during an extended wet weather construction period and the moisture-sensitive site soils become wet, they will become unstable. Therefore, the bids for site grading operations should be based upon the time of year that construction will proceed. It is expected that in wet conditions, additional soils may need to be removed and/or other stabilization methods used, such as a coarse crushed rock working mat, to develop a stable condition if silty subgrade soils are disturbed in the presence of excess moisture. The severity of construction disturbance will be dependent, in part, on the precautions that are taken by the contractor to protect the moisture- and disturbance-sensitive site soils. If overexcavation is necessary, it should be confirmed through continuous observation and testing by a representative of our firm.

9.7 Temporary and Permanent Cut Slopes

In our opinion, stable construction slopes should be the responsibility of the contractor and should be determined during construction. For estimating purposes, however, we anticipate that temporary, unsupported cut slopes in the existing fill can be made at a maximum slope of 1.5H:1V (Horizontal:Vertical) or flatter. Temporary slopes in unsaturated lacustrine sediments may be planned at 1H:1V. As is typical with earthwork operations, some sloughing and raveling may occur, and cut slopes may have to be adjusted in the field. If ground water seepage is

encountered in cut slopes, or if surface water is not routed away from temporary cut slope faces, flatter slopes will be required. In addition, WISHA/OSHA regulations should be followed at all times. Permanent cut and structural fill slopes that are not intended to be exposed to surface water should be designed at inclinations of 2H:1V or flatter. All permanent cut or fill slopes should be compacted to at least 95 percent of the modified Proctor maximum dry density, as determined by ASTM:D 1557, and the slopes should be protected from erosion by sheet plastic until vegetation cover can be established during favorable weather.

9.8 Frozen Subgrades

If earthwork takes place during freezing conditions, all exposed subgrades should be allowed to thaw and then be recompacted prior to placing subsequent lifts of structural fill or foundation components. Alternatively, the frozen material could be stripped from the subgrade to reveal unfrozen soil prior to placing subsequent lifts of fill or foundation components. The frozen soil should not be reused as structural fill until allowed to thaw and adjusted to the proper moisture content, which may not be possible during winter months.

10.0 STRUCTURAL FILL

All references to structural fill in this report refer to subgrade preparation, fill type and placement, and compaction of materials, as discussed in this section. If a percentage of compaction is specified under another section of this report, the value given in that section should be used.

After stripping, planned excavation, and any required overexcavation have been performed to the satisfaction of the geotechnical engineer, the upper 12 inches of exposed ground in areas to receive fill should be recompacted to a firm and unyielding condition. If the subgrade contains silty soils and too much moisture, adequate recompaction may be difficult or impossible to obtain and should probably not be attempted. In lieu of recompaction, the area to receive fill should be blanketed with washed rock or quarry spalls to act as a capillary break between the new fill and the wet subgrade. Where the exposed ground remains soft and further overexcavation is impractical, placement of an engineering stabilization fabric may be necessary to prevent contamination of the free-draining layer by silt migration from below.

After recompaction of the exposed ground is tested and approved, or a free-draining rock course is laid, structural fill may be placed to attain desired grades. Structural fill is defined as non-organic soil, acceptable to the geotechnical engineer, placed in maximum 8-inch loose lifts, with each lift being compacted to 95 percent of the modified Proctor maximum density using ASTM:D 1557 as the standard. Use of soils from the site in structural fill applications is expected to be difficult and require substantial effort due to the fine-grained nature of the site soils and high moisture contents that are anticipated at the time of construction. If explicitly

allowed by project specifications, excavated on-site soils may be reused in structural fill applications if they are free of organic material, demolition waste, and any other deleterious material, and are adjusted to a moisture content that allows compaction to a firm and unyielding condition at the level specified for the application. Cement treatment could be used in lieu of drying wet soils, if allowed by project documents. In the case of roadway and utility trench filling, structural fill should be placed and compacted in accordance with current City of Anacortes codes and standards. The top of the compacted fill should extend horizontally outward a minimum distance of 3 feet beyond the locations of the roadway edges before sloping down at an angle of 2H:1V.

The contractor should note that any proposed fill soils must be evaluated by AESI prior to their use in fills. This would require that we have a sample of the material 72 hours in advance to perform a Proctor test and determine its field compaction standard. Soils in which the amount of fine-grained material (smaller than the No. 200 sieve) is greater than approximately 5 percent (measured on the minus No. 4 sieve size) should be considered moisture-sensitive. Use of moisture-sensitive soil in structural fills should be limited to favorable dry weather conditions, and is only permitted if specifically allowed by project plans and specifications. The native and existing fill soils present on-site are very silty and highly moisture-sensitive. Existing fill also contained trace organic materials and demolition waste in some areas, and soils with significant organic content and demolition waste are not suitable for reuse in structural fill applications. If fill is placed during wet weather or if proper compaction cannot be obtained, a select import material consisting of a clean, free-draining gravel and/or sand should be used. Free-draining fill consists of non-organic soil with the amount of fine-grained material limited to 5 percent by weight when measured on the minus No. 4 sieve fraction with at least 25 percent retained on the No. 4 sieve.

A representative from our firm should observe the stripped subgrade and be present during placement of structural fill to monitor the work and perform a representative number of in-place density tests. In this way, the adequacy of the earthwork may be evaluated as filling progresses, and any problem areas may be corrected at that time. It is important to understand that taking random compaction tests on a part-time basis will not assure uniformity or acceptable performance of a fill. As such, we are available to aid the District in developing a suitable monitoring and testing program.

11.0 FOUNDATIONS

Spread footings may be used for building support when founded directly on undisturbed lacustrine sediments or on structural fill placed above suitable native deposits, as previously discussed. If foundations will be underlain by a combination of very dense native sediments and new structural fill, we recommend that an allowable bearing pressure of 3,500 psf be used for design purposes, including both dead and live loads. If foundations are underlain by very

dense native sediments alone, or very dense native sediments and CDF as described in the “Site Preparation” section of this report, an allowable foundation soil bearing pressure of 5,000 psf should be used for design. An increase of one-third may be used for short-term wind or seismic loading.

Perimeter footings should be buried at least 18 inches into the surrounding soil for frost protection. However, all footings must penetrate to the prescribed bearing stratum, and no footing should be founded in or above organic or loose soils. All footings should have a minimum width of 18 inches.

It should be noted that the area bound by lines extending downward at 1H:1V from any footing must not intersect another footing or intersect a filled area that has not been compacted to at least 95 percent of ASTM:D 1557. In addition, a 1.5H:1V line extending down from any footing must not daylight because sloughing or raveling may eventually undermine the footing. Thus, footings should not be placed near the edge of steps or cuts in the bearing soils.

Anticipated settlement of footings founded as described above should be on the order of $\frac{3}{4}$ inch or less. However, disturbed soil not removed from footing excavations prior to footing placement could result in increased settlements. All footing areas should be observed by AESI prior to placing concrete to verify that the design bearing capacity of the soils has been attained and that construction conforms to the recommendations contained in this report. Such observations may be required by the governing municipality. Perimeter footing drains should be provided, as discussed under the “Drainage Considerations” section of this report.

11.1 Drainage Considerations

Foundations should be provided with foundation drains. Drains should consist of rigid, perforated, polyvinyl chloride (PVC) pipe surrounded by washed pea gravel. The drains should be constructed with sufficient gradient to allow gravity discharge away from the proposed buildings. Roof and surface runoff should not discharge into the footing drain system, but should be handled by a separate, rigid, tightline drain. In planning, exterior grades adjacent to walls should be sloped downward away from the proposed structures to achieve surface drainage.

12.0 FLOOR SUPPORT

Floor slabs can be supported on suitable native sediments, on structural fill placed above suitable native sediments, or above at least 2 feet of new structural fill as outlined in the “Site Preparation” section of this report. Floor slabs should be cast atop a minimum of 4 inches of clean, washed, crushed rock or pea gravel to act as a capillary break. Areas of subgrade that are disturbed (loosened) during construction should be compacted to a non-yielding condition prior

to placement of capillary break material. Floor slabs should also be protected from dampness by an impervious moisture barrier at least 10 mils thick. The moisture barrier should be placed between the capillary break material and the concrete slab.

13.0 FOUNDATION WALLS

All backfill behind foundation walls or around foundation units should be placed as per our recommendations for structural fill and as described in this section of the report. Horizontally backfilled walls, which are free to yield laterally at least 0.1 percent of their height, may be designed to resist active lateral earth pressure represented by an equivalent fluid equal to 35 pcf. Fully restrained, horizontally backfilled, rigid walls that cannot yield should be designed for an at-rest equivalent fluid of 50 pcf. Walls with sloping backfill up to a maximum gradient of 2H:1V should be designed using an equivalent fluid of 55 pcf for yielding conditions or 75 pcf for fully restrained conditions. If parking areas are adjacent to walls, a surcharge equivalent to 2 feet of soil should be added to the wall height in determining lateral design forces.

As required by the 2012 IBC, retaining wall design should include a seismic surcharge pressure in addition to the equivalent fluid pressures presented above. Considering the site soils and the recommended wall backfill materials, we recommend a seismic surcharge pressure of 5H and 10H psf, where H is the wall height in feet, for the “active” and “at-rest” loading conditions, respectively. The seismic surcharge should be modeled as a rectangular distribution with the resultant applied at the midpoint of the walls.

The lateral pressures presented above are based on the conditions of a uniform backfill consisting of excavated on-site soils, or imported structural fill compacted to 90 percent of ASTM:D 1557. A higher degree of compaction is not recommended, as this will increase the pressure acting on the walls. A lower compaction may result in settlement of the slab-on-grade or other structures supported above the walls. Thus, the compaction level is critical and must be tested by our firm during placement. Surcharges from adjacent footings or heavy construction equipment must be added to the above values. Perimeter footing drains should be provided for all retaining walls, as discussed under the “Drainage Considerations” section of this report.

It is imperative that proper drainage be provided so that hydrostatic pressures do not develop against the walls. We recommend installation of a minimum, 1-foot-wide blanket drain to within 1 foot of finish grade for the full wall height using imported, washed gravel against the walls.

13.1 Passive Resistance and Friction Factors

Lateral loads can be resisted by friction between the foundation and the natural soils or supporting structural fill soils, and by passive earth pressure acting on the buried portions of the foundations. The foundations must be backfilled with structural fill and compacted to at least 95 percent of the maximum dry density to achieve the passive resistance provided below. We recommend the following allowable design parameters:

- Passive equivalent fluid = 250 pcf
- Coefficient of friction = 0.30

14.0 PAVEMENT RECOMMENDATIONS

Existing asphalt paving in driveways and parking areas was in typically fair condition, with normal wear and tear and patches from previous buried utility work. If desired, existing paving could likely be overlaid and remain in service, or could be used to provide construction access and laydown areas during completion of the project.

New pavement areas should be prepared in accordance with the “Site Preparation” section of this report. If the stripped native soil or existing fill pavement subgrade can be compacted to a firm and unyielding condition, no additional overexcavation is required. Soft or yielding areas should be overexcavated to provide a suitable subgrade and backfilled with structural fill.

The pavement sections included in this report section are for driveway and parking areas on-site, and are not applicable to right-of-way improvements. At this time, we are not aware of any planned right-of-way improvements; however, if any new paving of public streets is required, we should be allowed to offer situation-specific recommendations.

Pavement subgrades underlain by existing fill should be prepared in accordance with the “Site Preparation” section of this report. The exposed ground should be recompacted to a firm and unyielding condition. If required, structural fill may then be placed to achieve desired subbase grades. Upon completion of the recompaction and structural fill, a pavement section consisting of 2½ inches of asphaltic concrete pavement (ACP) underlain by 4 inches of 1¼-inch crushed surfacing base course is the recommended minimum in areas of planned passenger car driving and parking. In heavy traffic areas, a minimum pavement section consisting of 3 inches of ACP underlain by 2 inches of 5/8-inch crushed surfacing top course and 4 inches of 1¼-inch crushed surfacing base course is recommended. The crushed rock courses must be compacted to 95 percent of the maximum density, as determined by ASTM:D 1557. All paving materials should meet gradation criteria contained in the current Washington State Department of Transportation (WSDOT) Standard Specifications.

Depending on construction staging and desired performance, the crushed base course material may be substituted with ATB beneath the final asphalt surfacing. The substitution of ATB should be as follows: 4 inches of crushed rock can be substituted with 3 inches of ATB, and 6 inches of crushed rock may be substituted with 4 inches of ATB. ATB should be placed over a native subgrade compacted to a firm and unyielding condition or structural fill subgrade compacted to a minimum of 95 percent relative density, and a 1½- to 2-inch thickness of crushed rock to act as a working surface. If ATB is used for construction access and staging areas, some rutting and disturbance of the ATB surface should be expected. The general contractor should remove affected areas and replace them with properly compacted ATB prior to final surfacing.

15.0 ATHLETIC FIELD DESIGN AND CONSTRUCTION

We understand that the existing natural turf athletic field on the west side of the site will be renovated with a synthetic turf surface and perimeter lights. Bleachers and accessory buildings are also being considered. For planning purposes, new buildings associated with the new athletic field may follow recommendations presented earlier in this report for new school buildings. Any construction of new buildings adjacent to the existing athletic field will likely include modification of existing slopes and retaining walls. It is important to include stability analyses of the existing slopes and planning for slope-related issues including possible setbacks, retaining walls, and temporary slopes required for construction. We recommend that we be allowed to participate in development of site plans for constructing new buildings adjacent to the existing west athletic field.

The recommendations below are intended for use in replacement of the existing natural turf with synthetic turf. It should be noted that the existing field was constructed by placing a substantial thickness of new fill. The existing fill was observed in all of our exploration borings in and adjacent to the west athletic field. The existing fill was observed to be reasonably well compacted in most locations. The existing fill was observed to contain small amounts of asphalt rubble and organic material, but was not observed to contain high concentrations of deleterious materials. The existing natural turf field, and the perimeter rubberized track appear to have performed well since they were constructed, with no visually evident settlement as would be expected if they are underlain by poorly compacted fill. The recommendations presented below assume that existing fill will be left in place below the synthetic turf. Due to the depth of existing fill, it would likely not be economically feasible to remove it and replace it with new structural fill. Construction of new facilities above existing fill carries some risks. The conditions within existing fill are unknown. If areas of buried stripping waste, organic material, nested boulders, or other adverse conditions exist within the fill, future settlement could result. The likelihood of such settlement and the possible magnitude are not predictable. The risk of possible future settlement must be accepted before committing to building new facilities underlain by existing fill. The risks are offset by substantial cost savings as compared to

removing and replacing the existing fill. We are available to discuss the existing fill and possible alternate approaches to managing risk and cost of possible different approaches to addressing existing fill below the athletic fields.

AESI has participated in construction of numerous synthetic turf athletic fields in western Washington. In our opinion, synthetic turf projects are very specialized, and should be designed by a specialty field designer with demonstrated experience designing and construction managing synthetic turf athletic fields in western Washington. The recommendations presented below include geotechnical recommendations directed to the field designer. We are available on request to assist the field designer as plans are formulated.

15.1 Athletic Field Site Preparation

We anticipate that much or all of the existing topographic crown will be removed from the existing football field. We visually estimated that ground surface elevations will be lowered up to approximately 2 feet prior to constructing the new field and associated underdrains. Site preparation for the renovated field and track should include removal of existing structures, sod, and topsoil, and regrading to establish design subgrade elevation in preparation for the installation of the new field.

We recommend that the surface of the subgrade soils exposed during grading be compacted with a smooth-drum, vibratory roller to at least 90 percent of the modified Proctor maximum dry density, as determined by the ASTM:D 1557 test procedure, and to a firm and unyielding surface. When initial demolition, stripping, and excavation are completed, we anticipate that exposed soils will consist of existing fill. If areas of existing fill with excessive organic material or demolition waste are exposed after rough grading, it may be appropriate to overexcavate these materials and replace them with suitable fill. We recommend that project bid documents include some overexcavation and replacement of subgrade soils in the base bid, and equitable unit costs for volumes more or less than the base bid. A base bid volume of overexcavation and replacement of 200 cubic yards might be appropriate based on subsurface exploration data. We recommend that volumes of overexcavation and replacement be defined in terms of bank cubic yards, with unit costs volumes based on before and after survey data. The District should be aware that the 200-cubic-yard figure is an estimate, and is used to establish an equitable base bid and unit cost structure that is flexible and able to address field conditions that will not be fully known until the time of construction. We recommend that the District carry a budget contingency for additional overexcavation and replacement beyond what is included in the base bid.

Following demolition, stripping, any organic material removal and replacement, and recompaction, all athletic field and track subgrades should be proof-rolled using a loaded dump truck or other suitable equipment under the observation of the geotechnical engineer. If soft or yielding areas are observed during proof-rolling, additional preparation might be required.

Depending upon field conditions at the time of construction, additional preparation could include overexcavation and replacement of yielding soils with structural fill, use of a geotextile fabric, soil cement admixture stabilization, or some combinations of these methods. The amount of overexcavation will depend on the time of year construction occurs, the amount of precipitation during this time, and the amount of care the contractor takes in protecting the exposed subgrade.

The on-site soils contain a significant amount of fine-grained material, which makes them moderately moisture-sensitive and subject to disturbance when wet. The contractor must use care during site preparation and excavation operations so that the underlying soils are not softened. If disturbance occurs, the softened soils should be removed and the area brought to grade with structural fill. It should be noted that the moisture content of the site soils was visually estimated to typically be above the optimum moisture content for compaction purposes at the time of our study. It will likely be necessary to aerate site soils during favorable dry weather to reach suitable moisture contents prior to compaction.

15.2 Athletic Field Cut and Fill Slopes

In our opinion, stable construction slopes should be the responsibility of the contractor and should be determined during construction. For estimating purposes, however, we anticipate that temporary, unsupported cut slopes in the existing fill can be made at a maximum slope of 1.5H:1V or flatter. Temporary slopes in unsaturated lacustrine sediments may be planned at 1H:1V. As is typical with earthwork operations, some sloughing and raveling may occur, and cut slopes may have to be adjusted in the field. If ground water seepage is encountered in cut slopes, or if surface water is not routed away from temporary cut slope faces, flatter slopes will be required. In addition, WISHA/OSHA regulations should be followed at all times. Permanent cut and structural fill slopes that are not intended to be exposed to surface water should be designed at inclinations of 2H:1V or flatter. All permanent cut or fill slopes should be compacted to at least 95 percent of the modified Proctor maximum dry density, as determined by ASTM:D 1557, and the slopes should be protected from erosion by sheet plastic until vegetation cover can be established during favorable weather.

15.3 Athletic Field Structural Fill

Fill Placement

After athletic field stripping, excavation, and any required overexcavation have been performed to the satisfaction of the geotechnical engineer/engineering geologist, the upper 12 inches of exposed ground should be recompacted to 90 percent of the modified Proctor maximum density using ASTM:D 1557 as the standard. If the subgrade contains too much moisture, adequate recompaction may be difficult or impossible to obtain and should probably not be attempted. In lieu of recompaction, the area to receive fill should be blanketed with washed

rock or quarry spalls to act as a capillary break between the new fill and the wet subgrade. Where the exposed ground remains soft and further overexcavation is impractical, placement of an engineering stabilization fabric may be necessary to prevent contamination of the free-draining layer by silt migration from below.

After recompaction of the exposed ground is tested and approved, or a free-draining rock course is laid, structural fill may be placed to attain desired grades. Structural fill is defined as non-organic soil, acceptable to the geotechnical engineer, placed in maximum 8-inch loose lifts, with each lift being compacted to 90 percent of the modified Proctor maximum density using ASTM:D 1557 as the standard. In the case of utility trench filling, the backfill may also need to be placed and compacted in accordance with current local codes and standards. The top of the compacted fill should extend horizontally outward a minimum distance of 3 feet beyond the locations of athletic field and pavement edges before sloping down at a maximum angle of 2H:1V.

The contractor should note that any proposed fill soils must be evaluated by AESI prior to their use in fills. This would require that we have a sample of the material 72 hours in advance of filling activities to perform a Proctor test and determine its field compaction standard. Soils in which the amount of fine-grained material (smaller than the No. 200 sieve) is greater than approximately 5 percent (measured on the minus No. 4 sieve size) should be considered moisture-sensitive. Use of moisture-sensitive soil in structural fills should be limited to favorable dry weather conditions. The on-site existing fill and native sediments contain significant amounts of silt and are considered highly moisture-sensitive. We anticipate that most of the existing soils will be wetter than optimum moisture content for compaction purposes and will require drying during favorable dry site and weather conditions prior to reuse in structural fill applications. The reuse of on-site soils in structural fill applications is contingent on moisture-conditioning to a moisture content that allows compaction to a firm and unyielding condition at the specified level, and is only permitted if specifically allowed by project plans and specifications.

Construction equipment traversing the site when the soils are wet can cause considerable disturbance. If fill is placed during wet weather or if proper compaction cannot be obtained, a select import material consisting of a clean, free-draining gravel and/or sand should be used. Free-draining fill consists of non-organic soil with the amount of fine-grained material limited to 5 percent by weight when measured on the minus No. 4 sieve fraction with at least 25 percent retained on the No. 4 sieve.

15.4 Subsurface Drains (Underdrains)

We recommend that a subsurface drainage system be provided below the new field. The new underdrain system should consist of perforated pipes placed approximately 15 to 20 feet apart. The pipes should have an invert of at least 12 inches below final grade and be enveloped in

washed pea gravel which freely communicates with the field surfacing. We defer to the field designer for specific underdrain requirements and are available to provide geotechnical recommendations related to underdrain design on request.

Subsurface Drain Trenching

Construction of the subsurface drains will require trenching into the underlying existing fill. As part of this study, borings were advanced to provide preliminary information on subsurface density and ease of trenching. The existing fill soils within the proposed development area are typically loose to dense. Fill was observed to contain asphalt rubble in some areas, and could also contain gravel and larger rock. Therefore, the contractor should be prepared to excavate dense soils and to encounter gravel, cobbles, and occasional boulders during trenching.

15.5 Subfield Drainage Aggregate

We anticipate that two layers of drainage aggregate will be placed and compacted over the prepared field subgrade and below the turf. The drainage aggregate is a very specialized manufactured product that provides a compactable, stable working surface while maintaining a high minimum infiltration rate. Ideally the aggregate should be sourced from a supplier who has demonstrated experience providing synthetic field drainage aggregate on previous projects. The drainage aggregate should be tested for gradation and approved by the field designer prior to delivery on-site. Daily sampling and gradation testing during placement is recommended. The material should be kept moist during transport, placement, and compaction to reduce the potential for fines segregation. Once placed and compacted, the material should be field tested for density and permeability. If field permeability test results are below the minimum project requirements, the material may need to be loosened and recompact or removed and replaced with materials that meet the minimum permeability requirements.

15.6 Athletic Field Light Pole Foundations

We anticipate that light pole foundations for this project will consist of concrete piers cast neat against the sidewalls of drilled holes without the use of forms.

Compressive Capacities

For this project, we anticipate that lateral capacities will be the most critical design factor for the light pole foundations, and will likely exert the most control over the depth of embedment. We recommend that the end-bearing portion of the axial compressive capacity be assumed to be 500 psf for light poles embedded at least 5 feet below the ground surface. Vertical capacity can also be achieved through friction along the shafts of the poles, as described below.

Frictional Resistance

For frictional resistance along the shaft of the drilled piers used for light pole foundations, acting both in compression and in uplift, an allowable skin friction value of 250 psf for the existing fill is recommended. We recommend that frictional resistance be neglected in the uppermost 2 feet below the ground surface. The allowable skin friction value includes a safety factor of at least 2.0.

Lateral Capacities

Passive Pressure Method

Lateral loads on the proposed light pole foundations, caused by seismic or transient loading conditions, may be resisted by passive soil pressure against the side of the foundation. An allowable passive earth pressure of 200 pcf, expressed as an equivalent fluid unit weight, may be used for that portion of the foundation embedded within existing fill. The above values only apply to foundation elements cast "neat" against undisturbed soil. For new structural fill placed around the pier shaft, a passive earth pressure value of 250 pcf is recommended. All fill must be placed as structural fill and compacted to at least 95 percent of ASTM:D 1557. Passive values presented may be represented by a triangular pressure distribution acting over 2 pier diameters beginning at the surface and held at a constant depth greater than 8 feet. The triangular pressure distribution is truncated above 2 feet.

Light Pole Foundation Construction Considerations

In our opinion, the light pole foundation excavations may need to be cased during drilling to facilitate construction and limit caving. The contractor should include temporary casing for the light pole foundation holes in their base bid, in our opinion. Exploration borings suggest that light pole borings may encounter asphalt rubble. The contractor should have the ability to excavate and remove obstacles encountered during light pole foundation drilling, or light pole locations should be shifted to avoid obstacles that are encountered.

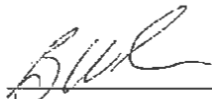
16.0 PROJECT DESIGN AND CONSTRUCTION MONITORING

Our report is based on conceptual plans that were current as it was written. We recommend that AESI perform a geotechnical review of the plans prior to final design completion. In this way, we can confirm that our earthwork and foundation recommendations have been properly interpreted and implemented in the design.

We are also available to provide geotechnical engineering services during construction. The integrity of the foundation system depends on proper site preparation and construction procedures. In addition, engineering decisions may have to be made in the field in the event that variations in subsurface conditions become apparent. Construction monitoring services are not part of this current scope of work. If these services are desired, please let us know, and we will prepare a cost proposal.

We have enjoyed working with you on this study and are confident that these recommendations will aid in the successful completion of your project. If you should have any questions or require further assistance, please do not hesitate to call.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington



Bruce W. Guenzler, L.G., L.E.G.
Senior Project Geologist

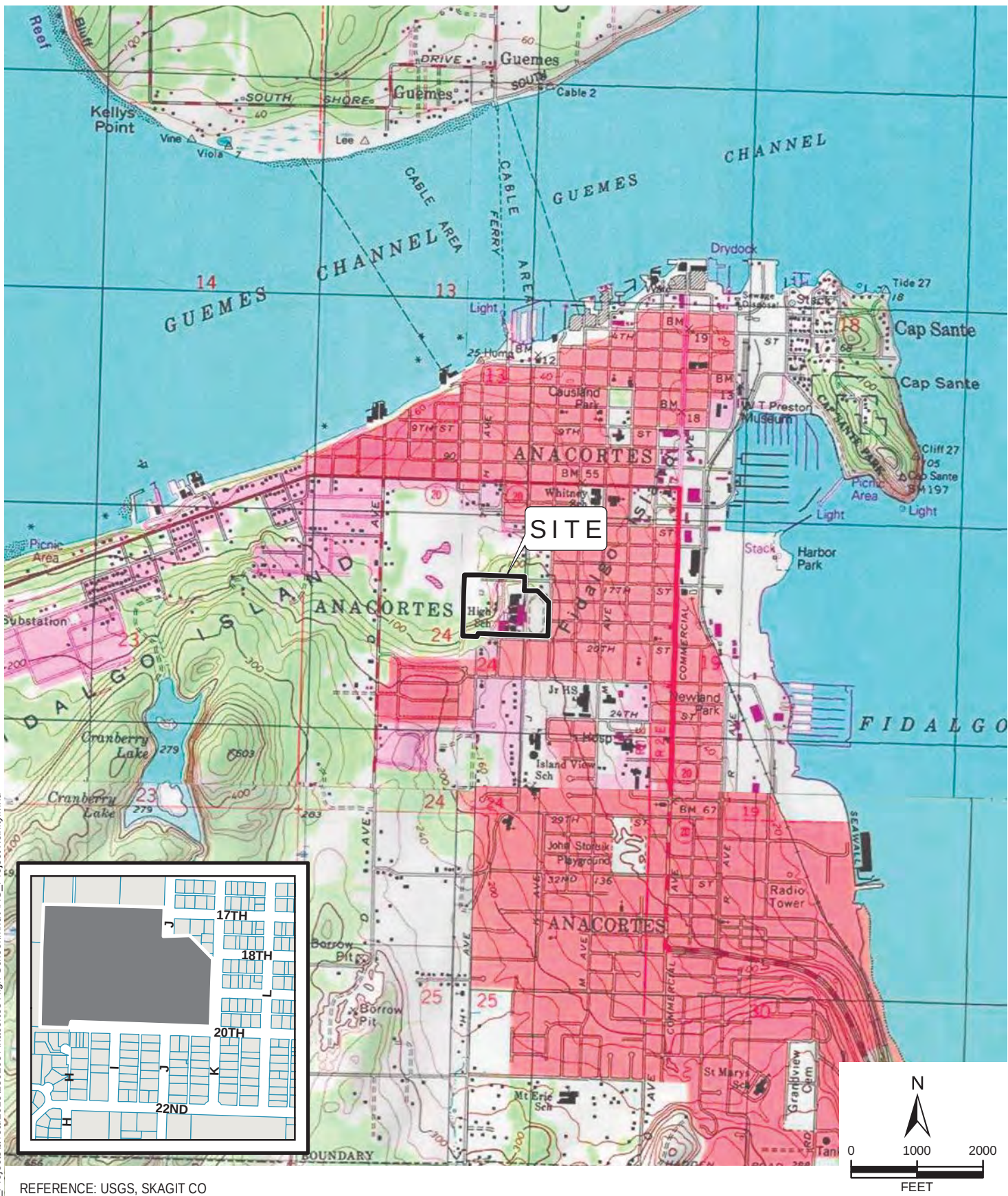


Stephen A. Siebert, P.E.
Associate Geotechnical Engineer



Kurt D. Merriman, P.E.
Senior Principal Engineer

Attachments: Figure 1: Vicinity Map
 Figure 2: Site and Exploration Plan
 Figure 3: Lidar Based Topography
 Appendix: Exploration Logs
 Geotechnical Laboratory Testing Results
 Analytical Laboratory Testing Results



REFERENCE: USGS, SKAGIT CO



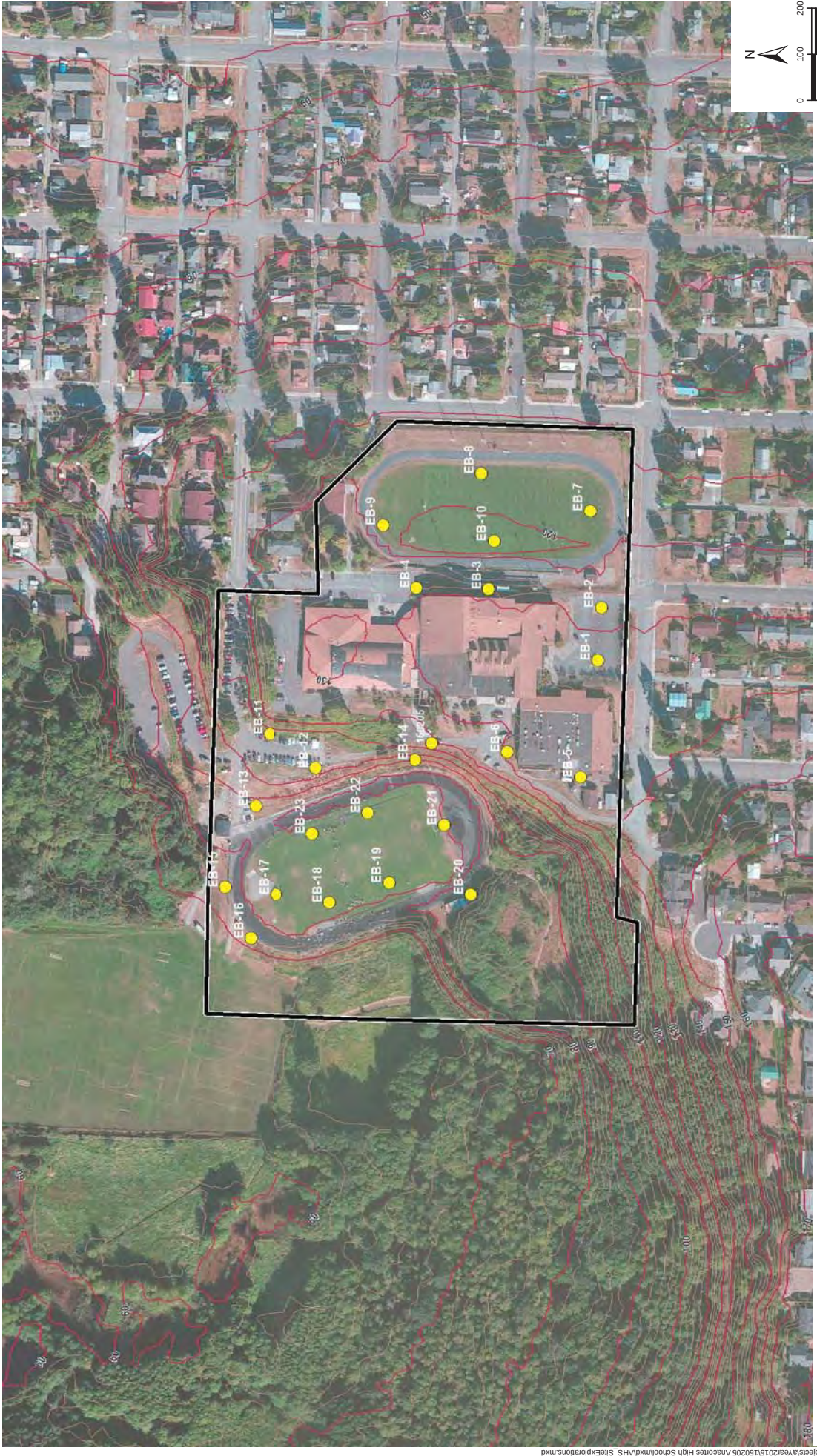
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VICINITY MAP
ANACORTES HIGH SCHOOL
ANACORTES, WASHINGTON

FIGURE 1

DATE 6/15

PROJ. NO. KE150205A



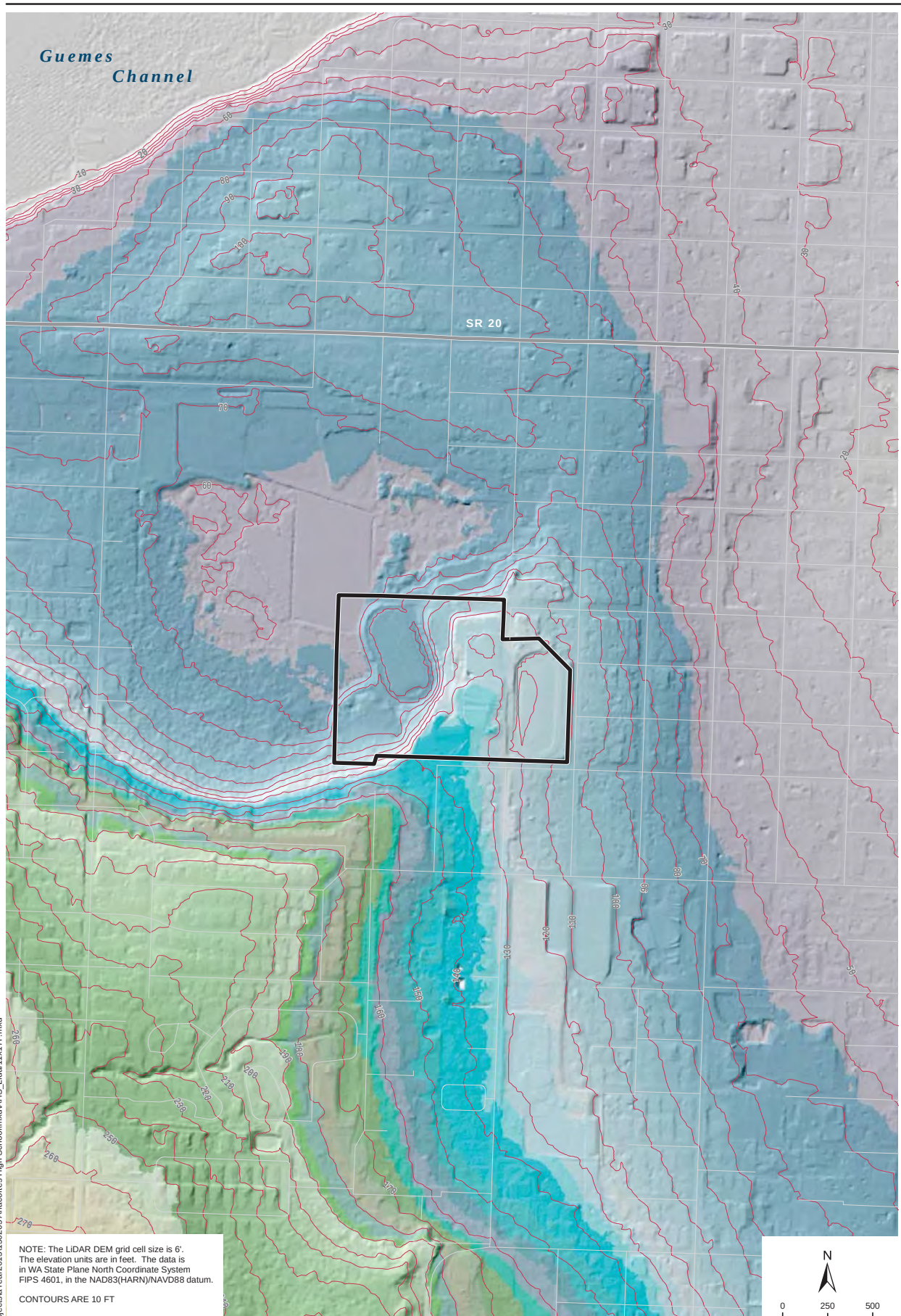
NOTE: BLACK AND WHITE. REPRODUCTION OF THIS COLOR ORIGINAL MAY
REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION.

REFERENCE: PSLC, BING 2010



SITE AND EXPLORATION PLAN
ANACORTES HIGH SCHOOL
ANACORTES, WASHINGTON

FIGURE 2
DATE 5/15
PROJ. NO. KE150205A



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APPENDIX

Coarse-Grained Soils - More than 50% ⁽¹⁾ Retained on No. 200 Sieve					Terms Describing Relative Density and Consistency						
Gravels - More than 50% ⁽¹⁾ of Coarse Fraction Retained on No. 4 Sieve			GW	Well-graded gravel and gravel with sand, little to no fines	Density		SPT ⁽²⁾ blows/foot		Test Symbols G = Grain Size M = Moisture Content A = Atterberg Limits C = Chemical DD = Dry Density K = Permeability		
					Very Loose	0 to 4	Loose	4 to 10			
Sands - 50% ⁽¹⁾ or More of Coarse Fraction Passes No. 4 Sieve			GP	Poorly-graded gravel and gravel with sand, little to no fines	Medium Dense	10 to 30	Dense	30 to 50			
										Very Dense	>50
		GM	Silty gravel and silty gravel with sand	Consistency		SPT ⁽²⁾ blows/foot					
				Very Soft	0 to 2	Soft	2 to 4				
		GC	Clayey gravel and clayey gravel with sand	Medium Stiff	4 to 8	Stiff	8 to 15				
								Very Stiff	15 to 30		
										Hard	>30
					Component Definitions						
					Descriptive Term		Size Range and Sieve Number				
					Boulders		Larger than 12"				
					Cobbles		3" to 12"				
					Gravel		3" to No. 4 (4.75 mm)				
					Coarse Gravel		3" to 3/4"				
					Fine Gravel		3/4" to No. 4 (4.75 mm)				
					Sand		No. 4 (4.75 mm) to No. 200 (0.075 mm)				
					Coarse Sand		No. 4 (4.75 mm) to No. 10 (2.00 mm)				
					Medium Sand		No. 10 (2.00 mm) to No. 40 (0.425 mm)				
					Fine Sand		No. 40 (0.425 mm) to No. 200 (0.075 mm)				
					Silt and Clay		Smaller than No. 200 (0.075 mm)				
					⁽³⁾ Estimated Percentage			Moisture Content Dry - Absence of moisture, dusty, dry to the touch Slightly Moist - Perceptible moisture Moist - Damp but no visible water Very Moist - Water visible but not free draining Wet - Visible free water, usually from below water table			
					Component		Percentage by Weight				
					Trace		<5				
					Some		5 to <12				
					Modifier (silty, sandy, gravelly)		12 to <30				
					Very modifier (silty, sandy, gravelly)		30 to <50				
					Symbols						
					⁽⁴⁾ Depth of ground water ATD = At time of drilling Static water level (date)						
					⁽⁵⁾ Combined USCS symbols used for fines between 5% and 12%						
Fine-Grained Soils - 50% ⁽¹⁾ or More Passes No. 200 Sieve											
Silt and Clays Liquid Limit Less than 50			ML	Silt, sandy silt, gravelly silt, silt with sand or gravel							
		CL	Clay of low to medium plasticity; silty, sandy, or gravelly clay, lean clay								
		OL	Organic clay or silt of low plasticity								
Silt and Clays Liquid Limit 50 or More			MH	Elastic silt, clayey silt, silt with micaceous or diatomaceous fine sand or silt							
		CH	Clay of high plasticity, sandy or gravelly clay, fat clay with sand or gravel								
		OH	Organic clay or silt of medium to high plasticity								
Highly Organic Soils			PT	Peat, muck and other highly organic soils	⁽³⁾ In General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)						

Classifications of soils in this report are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D-2487 and D-2488 were used as an identification guide for the Unified Soil Classification System.



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EXPLORATION LOG KEY

FIGURE A1



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-1

Sheet
1 of 1

Project Name Anacortes High School
Location Anacortes, WA
Driller/Equipment Boretac / Track
Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____
Datum N/A
Date Start/Finish 5/26/15, 5/26/15
Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Asphalt - 2 1/4 inches Fill Loose, moist, dark brown, very gravelly, fine to medium SAND, some silt to silty (SM).								
		S-1		Vashon Lacustrine Sediments Very dense, moist, light brown with mottled zones, fine SAND; gradationally stratified ranging from mostly sand to very gravelly sand to very silty sand; mottling mostly in siltier zones (SM, SW).		13 30 50						▲80
5		S-2		As above, but without mottled, very silty strata (SM).		37 31 50/5"						▲50/5"
10		S-3		Hard, moist, light tan, fine sandy SILT; laminated; very friable, granular behavior (ML).		17 31 40						▲71
15		S-4		Gradation as above. Subtle textural stratification. Horizontal deposition planes provide natural parting. Laminated.		18 27 48						▲75
				Bottom of exploration boring at 16.5 feet No ground water encountered.								
20												
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

Logged by: BWG

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Exploration Log

Project Number
KE150205A

Exploration Number
EB-2

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretec / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/26/15, 5/26/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Asphalt - 2 inches Fill								
		S-1		Dense, moist, dark brown, silty, fine gravelly, fine SAND, trace asphalt rubble (SM).		4 19 17					▲36	
				Vashon Lacustrine Sediments								
5		S-2		Hard, moist, light tan, fine sandy SILT; horizontal oxidation hands, subtle horizontal lamination, very friable, granular behavior (ML).		14 16 23					▲39	
10		S-3		Becomes harder and finer, with more silty behavior, otherwise similar to S-2.		28 50/6"						▲78
15		S-4		Gradation as above.		10 23 28						▲51
20				Bottom of exploration boring at 16.5 feet No ground water encountered.								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample

▽ Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-3

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/26/15, 5/26/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Grass and Topsoil								
				Vashon Lacustrine Sediments								
		S-1		Very dense, moist, brown, very gravelly, fine to coarse SAND, some silt; nonstratified (SM).		25 34 42						▲ 76
5		S-2		As above.		42 50/5"						▲ 50/5"
10		S-3		Hard, moist, tan, fine sandy SILT; horizontal lamination with occasional dark gray laminae; friable, granular behavior (ML).		21 41 45						▲ 86
15		S-4		Dark gray laminae absent, otherwise as S-3.		22 40 48						▲ 88
20		S-5		Hard, moist, tan, fine sandy SILT; horizontal lamination; granular behavior continues (ML).		29 41 40						▲ 81
				Bottom of exploration boring at 21.5 feet No ground water encountered.								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample

▼ Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-4

Sheet
1 of 1

Project Name Anacortes High School

Ground Surface Elevation (ft) _____

Location Anacortes, WA

Datum N/A

Driller/Equipment Boretac / Track

Date Start/Finish 5/26/15, 5/26/15

Hammer Weight/Drop 140# / 30"

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Asphalt - 2 inches								
				Vashon Lacustrine Sediments								
5		S-1		Dense, moist, brown, very gravelly, fine to coarse SAND, some silt; nonstratified (SM).		14 24 25						▲49
		S-2		Hard, moist, tan, fine sandy SILT; friable, granular behavior (ML).		13 16 20				▲38		
10		S-3		Gradation as above; prominent horizontal oxidation bands and lamination.		22 42 39						▲81
15		S-4		Grades without prominent oxidation bands and lamination; very moist to wet 15 to 15 1/2 feet, then returns to moist.		28 21 42						▲63
20		S-5		As above.		29 40 50/6"						▲90
				Bottom of exploration boring at 21.5 feet								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample

▽ Water Level at time of drilling (ATD)

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Exploration Log

Project Number
KE150205A

Exploration Number
EB-5

Sheet
1 of 1

Project Name Anacortes High School

Ground Surface Elevation (ft) _____

Location Anacortes, WA

Datum N/A

Driller/Equipment Borettec / Track

Date Start/Finish 5/26/15, 5/26/15

Hammer Weight/Drop 140# / 30"

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Asphalt - 2 inches Vashon Lacustrine Sediments								
5		S-1		Dense, very moist, brown, interbedded fine SAND, trace silt, trace gravel and fine gravelly fine SAND, some silt (SP and SM).		26 24 21					▲45	
		S-2		Very dense, moist, gray, fine SAND, some silt; thin silt interbeds (+/- 1/2 inch thick) (SP).		19 25 37					▲62	
10		S-3		Hard, moist, tan, fine sandy SILT; friable, granular behavior; horizontal lamination (ML).		12 16 25					▲41	
15		S-4		Dense, moist, gray, fine SAND, some silt, with silt interbeds (SP).		11 17 21					▲38	
20		S-5		As above.		14 15 22					▲37	
25				Bottom of exploration boring at 21.5 feet No ground water encountered.								
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample

▽ Water Level at time of drilling (ATD)

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Exploration Log

Project Number
KE150205A

Exploration Number
EB-6

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/26/15, 5/26/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Grass and Topsoil								
				Fill								
		S-1		Medium dense, moist, dark brown, silty fine SAND, some fine gravel (SM).		7 9 9			▲18			
5		S-2		Becomes loose, trace organics.		7 3 3		▲6				
10		S-3		Becomes medium dense.		6 8 11			▲19			
				Vashon Lacustrine Sediments								
15		S-4		Very dense, moist, brown, fine to medium SAND, some fine gravel, some silt; nonstratified (SM).		28 36 36						▲72
20		S-5		Hard, moist, tan, fine sandy SILT; friable granular behavior; horizontal parting and lamination (ML).		18 27 50/6"						▲77
				Bottom of exploration boring at 21.5 feet No ground water encountered.								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample



Water Level ()



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-7

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Borettec / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/26/15, 5/26/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Grass and Topsoil								
				Fill								
				Loose, moist, dark brown, silty SAND, some gravel, trace organics (SM).								
				Fill / Vashon Lacustrine Sediments ?								
		S-1		Dense, moist, brown, fine to coarse SAND, some fine to coarse gravel, some silt; nonstratified (SM). PID = 170 ppm		17 19 23						▲42
5		S-2		As above. PID = 160 ppm		50/8"						▲50/8"
10		S-3		Trace recovery. Recovery and cuttings resemble S-1 PID = 220 ppm		50/2"						▲50/2"
				Vashon Lacustrine Sediments								
15		S-4		Hard, moist, tan, fine sandy SILT; friable and granular behavior; horizontal partings and lamination (ML). PID = 260 ppm		50/6"						▲50/6"
20		S-5		Hard, moist, gray, SILT; laminated to massive (ML). PID = 310 ppm		17 21 50						▲71
				Bottom of exploration boring at 21.5 feet No ground water encountered.								
25				Photoionization detector readings of sample headspace shown above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

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Exploration Log

Project Number
KE150205A

Exploration Number
EB-8

Sheet
1 of 1

Project Name Anacortes High School
Location Anacortes, WA
Driller/Equipment Boretac / Track
Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____
Datum N/A
Date Start/Finish 5/26/15, 5/26/15
Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level Blows/6"	Blows/Foot				Other Tests
							10	20	30	40	
				Grass and Topsoil							
				Fill							
5		S-1		Very loose, wet (irrigated), dark brown, fine SAND, some silt, some gravel, trace organics (SM). PID = 17 ppm		2 1 2					▲ ₃
		S-2		Dense, very moist, reddish brown, fine to medium SAND, some silt, some fine gravel (SM). PID = 10 ppm		2 8 28					▲ ₃₆
				Vashon Lacustrine Sediments							
10		S-3		Very dense, moist, brownish gray, silty fine SAND, varies from no gravel to gravelly; stratified (SM). PID = 10 ppm		26 53					▲ ₇₉
15		S-4		Hard, very moist, gray, fine sandy SILT; friable; horizontal parting and lamination (ML). PID = 0 ppm		30 70 50/5"					▲ _{50/5"}
20		S-5		Becoming wet. No free water in borehole at time of drilling. PID = 0 ppm		20 33 50/5"					▲ _{50/5"}
				Bottom of exploration boring at 21.5 feet							
25				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.							
30											

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

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Exploration Log

Project Number
KE150205A

Exploration Number
EB-9

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/27/15, 5/27/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" 50/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Grass and Topsoil								
				Fill								
				Loose, moist, dark brown, silty SAND (SM).								
				Vashon Lacustrine Sediments								
		S-1		Hard, moist, light brown, fine sandy SILT; horizontal color banding and partings; laminated, friable, granular behavior (ML). PID = 0 ppm		24 29 45						▲ 74
5		S-2		Very uniform. Unchanged from S-1. PID = 36 ppm		26 44 50/6"						▲ 94
10		S-3		As at S-1. PID = 0 ppm		15 34 50/6"						▲ 84
15		S-4		As at S-1. PID = 41 ppm		21 42 50/6"						▲ 92
20		S-5		As at S-1. PID = 0 ppm		18 36 50/6"						▲ 86
				Bottom of exploration boring at 21.5 feet No ground water encountered.								
25				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-10

Sheet
1 of 3

Project Name Anacortes High School
Location Anacortes, WA
Driller/Equipment Boretac / Track
Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____
Datum N/A
Date Start/Finish 5/27/15, 5/27/15
Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level Blows/6"	Blows/Foot				Other Tests
							10	20	30	40	
				Grass and Topsoil							
				Fill							
		S-1		Very dense, moist, brownish gray, silty, gravelly, fine to coarse SAND; nonstratified (SM). PID = 1 ppm		50/6"					▲ 50/6"
5		S-2		Vashon Lacustrine Sediments Hard, moist, brownish gray, fine sandy SILT; horizontal partings; laminated; horizontal color and oxidation bands; very friable, granular behavior (ML). PID = 6 ppm		34 50/5"					▲ 50/5"
10		S-3		Becoming more gray. PID = 20 ppm		40 50/5"					▲ 50/5"
15		S-4		Oxidized planes more prominent. PID = 2 ppm		24 50/5"					▲ 50/5"
20		S-5		Becoming wet. Oxidized planes less prominent. Dilatant behavior in wet zones. No free ground water in borehole at S-5. Slightly coarser silt. PID = 1 ppm		24 40 50/6"					▲ 90
25		S-6		Becoming more cohesive in appearance and behavior. Horizontal parting and oxidation banding continues. Stratification varies - laminated to massive. PID = 1 ppm		8 21 43					▲ 64
30		S-7		No free water showing on rods, but sample is wet. Variability in cohesive/granular behavior indicates textural variation, but all is fine grained. Horizontal oxidation banding prominent. PID = 1 ppm		9 16 31					▲ 47

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▼ Water Level ()



Grab Sample



Shelby Tube Sample

▼ Water Level at time of drilling (ATD)

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Exploration Log

Project Number
KE150205A

Exploration Number
EB-10

Sheet
2 of 3

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/27/15, 5/27/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
		S-8		Continues wet with no free water in borehole. Oxidation banding and lamination less evident. PID = 3 ppm		12 14 22				▲36		
40		S-9		Hard, wet, brown, fine sandy SILT; micaceous; dilatant; no free water in borehole (ML). PID = 1 ppm		16 21 26					▲47	
45		S-10		Becoming wetter with decreasing density. No free water showing on rods. Mica less prominent. Dilatant. PID = 3 ppm		12 14 21				▲35		
50		S-11		Remains wet, with no free water in boring. Micaceous and dilatant. PID = 1 ppm		10 12 14				▲25		
Olympia Nonglacial Sediments												
55		S-12		Very stiff, wet, gray, SILT; slightly dilatant; no mica; nonstratified (ML). PID = 1 ppm		10 13 15				▲28		
60		S-13		As at S-12. Zones of higher and lower dilatance. Becomes hard. PID = 1 ppm		13 15 17				▲32		
65		S-14		Remains wet and dilatant. No mica. No stratification. PID = 1 ppm		9 21 37					▲58	

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-10

Sheet
3 of 3

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Borettec / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/27/15, 5/27/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
		S-15		As above. PID = 0 ppm Begin using bentonite gel drilling fluid.			18 24 36					▲60
75		S-16		As above. PID = 1 ppm			12 19 42					▲61
80		S-17		As above. PID = 1 ppm			37 50/6"					▲87
85		S-18		As above. PID = 2 ppm			20 50/6"					▲70
90		S-19		As above. PID = 1 ppm			22 50/6"					▲72
95		S-20		As above. PID = 13 ppm			28 50/6"					▲78
100		S-21		As above. Tiny mica flakes. PID = 1 ppm			42 50/5"					▲50/5"
				Bottom of exploration boring at 101 feet								
				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample

▼ Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-11

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/27/15, 5/27/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/ft	Blows/Foot				Other Tests
								10	20	30	40	
				Asphalt - 2 inches Vashon Lacustrine Sediments								
5		S-1		Hard, moist, tan, fine sandy SILT; multidirectional fractures; nonstratified (ML).		10 14 22					▲36	
		S-2		As above. Preferential oxidation zones along fractures. Zones of gradational variation are not tabular or horizontal.		9 19 26					▲45	
10		S-3		Similar to S-1. Less oxidation than S-2.		16 26 36					▲62	
15		S-4		Hard, moist, brown, SILT; multidirectional fractures; zones of textural variation may be sand infills of fractures (ML).		11 25 37					▲62	
20		S-5		As at S-4.		18 35 50/6"					▲85	
				Bottom of exploration boring at 21.5 feet No ground water encountered.								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample

▽ Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-12

Sheet
1 of 2

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretec / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/27/15, 5/27/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Gravel Surfacing Vashon Lacustrine Sediments								
5		S-1		Very stiff, very moist, mottled brown, SILT; multidirectional fractures; oxidation halos along fractures (ML).			7 8 9		▲17			
		S-2		Hard, very moist, brown with oxidized zones, SILT; multidirectional fractures; subtle +/- horizontal bedding (ML).			8 13 19			▲32		
10		S-3		Similar to S-2 but bedding is more subtle and fracturing less pervasive.			10 16 25				▲41	
15		S-4		Similar to S-3; horizontal depositional bedding +/- 1/2 inch.			11 17 29				▲46	
20		S-5		Hard, moist, brown, SILT; multidirectional fractures; horizontal partings may be depositional; distinct zones of oxidation that do not appear to follow fractures or bedding; fracturing intensity more like S-3 than S-2 (ML).			9 14 24			▲38		
25		S-6		As at S-5.			11 25 38				▲63	
30		S-7		Hard, wet (no free water on rods), brown, fine sandy SILT; nonstratified; friable when dry, dilatant wet (ML).			15 24 30				▲54	

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample

▽ Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-12

Sheet
2 of 2

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/27/15, 5/27/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
		S-8		As at S-7. Notable mica.			16 25 34					▲60
40		S-9		As at S-7. Notable mica.			18 23 35					▲58
				Bottom of exploration boring at 41.5 feet								
45												
50												
55												
60												
65												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample



▼ Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-13

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/27/15, 5/27/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/ft	Blows/Foot				Other Tests
								10	20	30	40	
Vashon Lacustrine Sediments												
5		S-1		Hard, moist, tan, SILT; multidirectional fractures; subtle lamination +/- horizontal (ML).		21 16 14				▲30		
		S-2		Becomes very stiff. Otherwise as S-1.		9 9 16				▲25		
10		S-3		Becomes hard. Otherwise as S-2.		10 15 21				▲36		
15		S-4		Becomes wet. No free water on rods.		12 17 21				▲38		
20		S-5		As at S-4.		16 21 23				▲44		
				Bottom of exploration boring at 21.5 feet								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



3" OD Split Spoon Sampler (D & M)



Grab Sample



No Recovery



Ring Sample



Shelby Tube Sample

M - Moisture

Water Level ()

Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-14

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretec / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/27/15, 5/27/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level Blows/6"	Blows/Foot				Other Tests
							10	20	30	40	
				Pea Gravel Fill							
5		S-1		Dense, moist, brown, gravelly, silty, fine to coarse SAND; nonstratified (SM).		15 20 25					▲45
		S-2				13 21 40					▲61
10		S-3		Loose, moist, brown, silty, gravelly, fine to coarse SAND, trace organics (SM).		7 7 1	▲8				
15		S-4		Stiff, wet, brown, fine sandy SILT; dilatant; no free water on rods (ML).		7 6 4	▲10				
20		S-5		Vashon Lacustrine Sediments Hard, wet, brown, SILT; dilatant; no free water (ML).		10 20 26					▲46
				Bottom of exploration boring at 21.5 feet							
25											
30											

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▼ Water Level ()



Grab Sample



Shelby Tube Sample

▼ Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-15

Sheet
1 of 1

Project Name Anacortes High School
Location Anacortes, WA
Driller/Equipment Boretec / Track
Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____
Datum N/A
Date Start/Finish 5/28/15, 5/28/15
Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/ft	Blows/Foot				Other Tests
								10	20	30	40	
				Grass and Topsoil Fill								
		S-1		Loose, moist, dark brown, mixed PEA GRAVEL, TOPSOIL and silty fine SAND (GP and SM).		4	7					
5		S-2		As above.		5	8					
						4						
10		S-3		Stiff, very moist, mottled gray, SILT, some fine gravel, some sand, trace organics (ML).		8	11					
						5						
						6						
				Vashon Lacustrine Sediments								
15		S-4		Very stiff, wet (no free water on rods), mottled gray and brown, SILT; dilatant; nonstratified (ML).		10	28					
						12						
						16						
20		S-5		Becomes hard, gray with little mottling.		10	31					
						14						
						17						
				Bottom of exploration boring at 21.5 feet								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-16

Sheet
1 of 1

Project Name Anacortes High School
Location Anacortes, WA
Driller/Equipment Boretec / Track
Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____
Datum N/A
Date Start/Finish 5/28/15, 5/28/15
Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Grass and Topsoil								
				Fill								
		S-1		Stiff, very moist, gray and mottled gray, SILT (ML).		6 7 8			▲15			
5		S-2		Medium dense, moist, mottled brown, gravelly, silty SAND (SM).		6 10 10			▲20			
10		S-3		Medium dense, moist, gray, silty fine SAND, some fine gravel (SM).		8 8 12			▲20			
15		S-4		Grades with trace organics (mixed with topsoil).		4 9 10			▲19			
20		S-5		Medium stiff, wet, gray, SILT; oxidized zones; no free water in boring (ML to MH).		3 3 3			▲6			
				Bottom of exploration boring at 21.5 feet								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-17

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Borettec / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/28/15, 5/28/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Natural Turf Fill								
		S-1		Hand dug to 2 feet. Very dense, moist, dark brown, silty fine to coarse SAND, trace organics, trace concrete rubble (SM). PID = 3 ppm			14 26 38					▲62
5		S-2		Medium dense, moist, gray, silty, gravelly SAND (SM). PID = 3 ppm			13 10 6		▲16			
				Bottom of exploration boring at 6.5 feet No ground water encountered.								
10				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								
15												
20												
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-18

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Borettec / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/28/15, 5/28/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Natural Turf								
				Fill								
				Hand dug to 2 feet.								
		S-1		Very stiff, moist, gray, SILT; oxidized zones (ML). PID = 4 ppm		7 7 11			▲18			
5		S-2		Medium dense, very moist to wet, brown, silty fine SAND, some gravel (SM). PID = 20 ppm		6 7 4			▲11			
				Bottom of exploration boring at 6.5 feet No ground water encountered.								
10				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								
15												
20												
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ()



Grab Sample



Shelby Tube Sample

Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-19

Sheet
1 of 1

Project Name Anacortes High School
Location Anacortes, WA
Driller/Equipment Boretac / Track
Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____
Datum N/A
Date Start/Finish 5/28/15, 5/28/15
Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Grass and Topsoil Fill								
				Hand dug to 2 feet.								
5		S-1		Dense, very moist, mixed brown, gray and black, silty fine to coarse SAND, some fine gravel, trace organics, trace asphalt rubble (SM). PID = 16 ppm		12 12 24					▲36	
		S-2		Stiff, wet (no free water), gray, SILT (ML). PID = 14 ppm		4 4 5		▲9				
				Bottom of exploration boring at 6.5 feet No ground water encountered.								
10				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								
15												
20												
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-20

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/28/15, 5/28/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Grass and Topsoil Fill								
5		S-1		Very dense, moist, brown, fine gravelly, fine to coarse SAND, some silt to silty (SM).		27 50/6"						▲77
		S-2		Medium dense, very moist, black, silty fine to coarse SAND, some fine gravel, trace organics and brick rubble (SM).		5 7 6		▲13				
10		S-3		Medium dense, moist, dark brown, TOPSOIL, trace wood fragments.		7 13 13			▲26			
15		S-4		Dense, wet, dark gray, mixed washed rock and silty SAND, trace organics (SM).		12 16 15				▲31		
20		S-5		Loose, wet, brown, medium to coarse SAND, some fine gravel, trace silt (SP).		10 5 5		▲10				
				Bottom of exploration boring at 21.5 feet								
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-21

Sheet
1 of 1

Project Name Anacortes High School

Location Anacortes, WA

Driller/Equipment Boretac / Track

Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____

Datum N/A

Date Start/Finish 5/28/15, 5/28/15

Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Natural Turf Fill								
				Hand dug to 2 feet.								
5		S-1		Loose, moist, light brown, fine SAND, trace to some silt (SP-SM). PID = 1 ppm		5 3 4	▲7					
		S-2		As above. PID = 8 ppm		4 4 6	▲10					
10				Bottom of exploration boring at 6.5 feet No ground water encountered.								
15												
20												
25												
30												
				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample



Water Level ()



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-22

Sheet
1 of 1

Project Name Anacortes High School
Location Anacortes, WA
Driller/Equipment Borettec / Track
Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____
Datum N/A
Date Start/Finish 5/28/15, 5/28/15
Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Natural Turf Fill								
				Hand dug to 2 feet.								
5		S-1		Dense, moist, mixed gray and dark gray, gravelly, silty SAND (SM). PID = 13 ppm		11 17 26					▲43	
		S-2		PID = 2 ppm		21 17 21					▲38	
10				Bottom of exploration boring at 6.5 feet No ground water encountered.								
15				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								
20												
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

Logged by: BWG

Approved by: JHS



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Exploration Log

Project Number
KE150205A

Exploration Number
EB-23

Sheet
1 of 1

Project Name Anacortes High School
Location Anacortes, WA
Driller/Equipment Boretec / Track
Hammer Weight/Drop 140# / 30"

Ground Surface Elevation (ft) _____
Datum N/A
Date Start/Finish 5/28/15, 5/28/15
Hole Diameter (in) 7 inches

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				Natural Turf Fill								
		S-1		Hand dug to 2 feet.								
				Dense, moist, brown, silty, gravelly SAND (SM). PID = 4 ppm		13 13 14					▲37	
5		S-2		Becomes medium dense. PID = 1 ppm		5 6 11			▲17			
				Bottom of exploration boring at 6.5 feet. No ground water encountered.								
10				Photoionization detector readings of sample headspace noted above with sample descriptions. Methane and hydrogen sulfide in ambient air monitored periodically. None detected.								
15												
20												
25												
30												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▽ Water Level ()



Grab Sample



Shelby Tube Sample

▽ Water Level at time of drilling (ATD)

Logged by: BWG

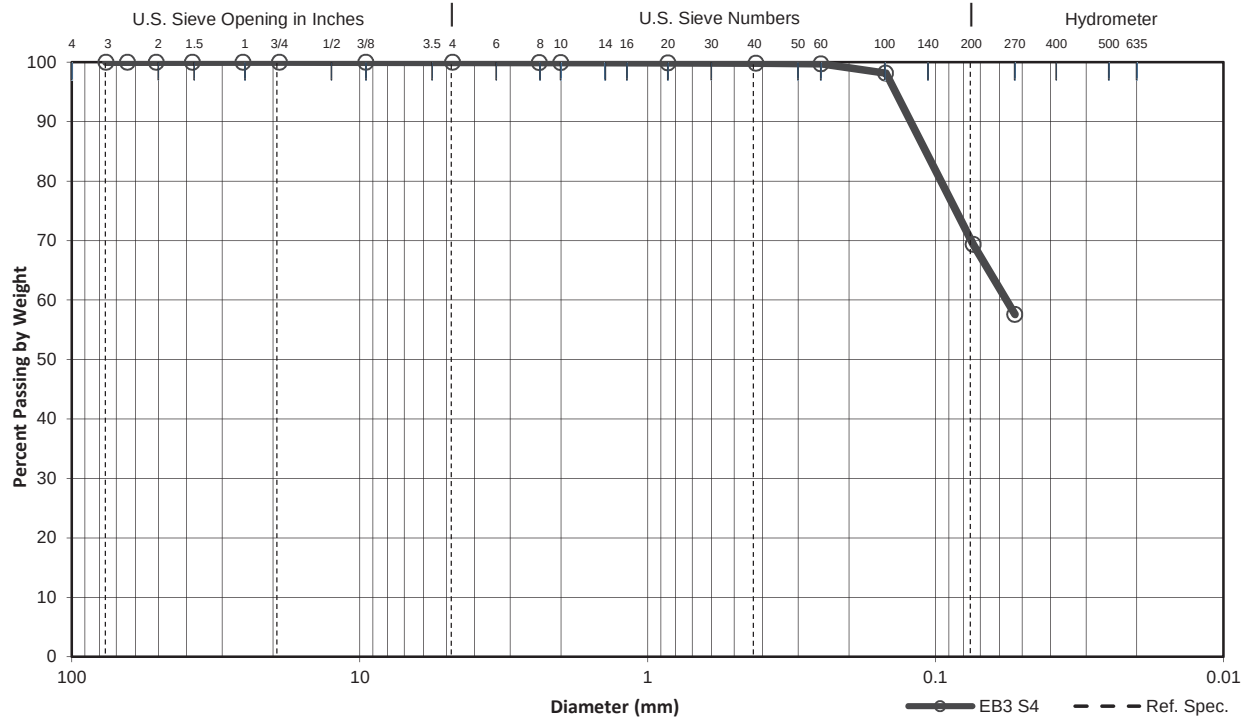
Approved by: JHS



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GRAIN SIZE ANALYSIS - MECHANICAL ASTM D422

Project Name	Project Number	Date Sampled	Date Tested	Tested By
Anacortes High School	KE150205A	5/26/2015	5/29/2015	MM
Sample Source	Sample No.	Depth (ft)	Soil Description	
Onsite	EB3 S4	15'	very sandy SILT (ML/MH)	
Total Sample Dry Wt. (g)	Moisture Content (%)	D ₁₀ (mm)	Reference Specification	
378.2	18	~0.01		



Cobb.	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

Sieve. No.	Diam. (mm)	Cum. Wt. Ret. (g)	% Ret. by Wt.	% Passing by Wt.	% Specs. Pass. by Wt.	
					Min	Max
3	76.1		0.0	100.0		
2.5	64		0.0	100.0		
2	50.8		0.0	100.0		
1.5	38.1		0.0	100.0		
1	25.4		0.0	100.0		
3/4	19		0.0	100.0		
3/8	9.51		0.0	100.0		
#4	4.76		0.0	100.0		
#8	2.38	0.2	0.0	100.0		
#10	2	0.3	0.1	99.9		
#20	0.85	0.5	0.1	99.9		
#40	0.42	0.7	0.2	99.8		
#60	0.25	1.1	0.3	99.7		
#100	0.149	6.9	1.8	98.2		
#200	0.074	115.8	30.6	69.4		
#270	0.053	160.4	42.4	57.6		

Kirkland Office | 911 Fifth Avenue | Kirkland, WA 98033 P | 425.827.7701 F | 425.827.5424

Everett Office | 2911 1/2 Hewitt Avenue, Suite 2 | Everett, WA 98201 P | 425.259.0522 F | 425.252.3408

Tacoma Office | 1552 Commerce Street, Suite 102 | Tacoma, WA 98402 P | 253.722.2992 F | 253.722.2993

www.aesgeo.com

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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June 9, 2015

Bruce Guenzler, Project Manager
Associated Earth Sciences, Inc.
911 5th Avenue, Suite 100
Kirkland, WA 98033

Dear Mr. Guenzler:

Included are the results from the testing of material submitted on June 2, 2015 from the Anacortes High Sch KE150205A, F&BI 506023 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
AE10609R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 2, 2015 by Friedman & Bruya, Inc. from the Associated Earth Sciences Anacortes High Sch KE150205A, F&BI 506023 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID

506023 -01

Associated Earth Sciences

EB-7 S-5

The NWTPH-Gx and 8260C samples were not received in a 5035 sampling kit. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/15

Date Received: 06/02/15

Project: Anacortes High Sch KE150205A, F&BI 506023

Date Extracted: 06/02/15

Date Analyzed: 06/02/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Gasoline Range</u>	Surrogate (% Recovery)
Laboratory ID		(Limit 50-150)
EB-7 S-5 pc 506023-01	<2	84
Method Blank 05-1259 MB	<2	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/15

Date Received: 06/02/15

Project: Anacortes High Sch KE150205A, F&BI 506023

Date Extracted: 06/02/15

Date Analyzed: 06/02/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery)
			(Limit 53-144)
EB-7 S-5	<50	<250	100
506023-01			
Method Blank	<50	<250	104
05-1035 MB			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: EB-7 S-5 pc	Client: Associated Earth Sciences
Date Received: 06/02/15	Project: Anacortes High Sch KE150205A, F&BI 506023
Date Extracted: 06/03/15	Lab ID: 506023-01
Date Analyzed: 06/04/15	Data File: 060339.D
Matrix: Soil	Instrument: GCMS4
Units: mg/kg (ppm) Dry Weight	Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	99	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Associated Earth Sciences
Date Received:	Not Applicable	Project:	Anacortes High Sch KE150205A, F&BI 506023
Date Extracted:	06/03/15	Lab ID:	05-1250 mb
Date Analyzed:	06/03/15	Data File:	060327.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	98	55	145
4-Bromofluorobenzene	98	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	EB-7 S-5	Client:	Associated Earth Sciences
Date Received:	06/02/15	Project:	Anacortes High Sch KE150205A, F&BI 506023
Date Extracted:	06/02/15	Lab ID:	506023-01 1/5
Date Analyzed:	06/02/15	Data File:	060209.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	31	163
Benzo(a)anthracene-d12	99	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	Associated Earth Sciences
Date Received:	Not Applicable	Project:	Anacortes High Sch KE150205A, F&BI 506023
Date Extracted:	06/02/15	Lab ID:	05-1036 mb 1/5
Date Analyzed:	06/02/15	Data File:	060205.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	31	163
Benzo(a)anthracene-d12	101	24	168

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
Acenaphthylene	<0.01
Acenaphthene	<0.01
Fluorene	<0.01
Phenanthrene	<0.01
Anthracene	<0.01
Fluoranthene	<0.01
Pyrene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01
Benzo(g,h,i)perylene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/15

Date Received: 06/02/15

Project: Anacortes High Sch KE150205A, F&BI 506023

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR TPH AS GASOLINE
USING METHOD NWTPH-G_x**

Laboratory Code: 506023-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	100	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/15

Date Received: 06/02/15

Project: Anacortes High Sch KE150205A, F&BI 506023

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL
SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 506013-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	103	119	64-133	14

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	103	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/15

Date Received: 06/02/15

Project: Anacortes High Sch KE150205A, F&BI 506023

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 506023-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	12	10	10-142	18
Chloromethane	mg/kg (ppm)	2.5	<0.5	34	34	10-126	0
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	34	31	10-138	9
Bromomethane	mg/kg (ppm)	2.5	<0.5	44	43	10-163	2
Chloroethane	mg/kg (ppm)	2.5	<0.5	47	45	10-176	4
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	37	36	10-176	3
Acetone	mg/kg (ppm)	12.5	<0.5	68	66	10-163	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	50	46	10-160	8
Hexane	mg/kg (ppm)	2.5	<0.25	33	29	10-137	13
Methylene chloride	mg/kg (ppm)	2.5	<0.5	65	63	10-156	3
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	68	66	21-145	3
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	57	54	14-137	5
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	64	61	19-140	5
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	68	63	10-158	8
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	66	63	25-135	5
Chloroform	mg/kg (ppm)	2.5	<0.05	69	65	21-145	6
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	72	66	19-147	9
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	63	64	12-160	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	65	62	10-156	5
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	63	59	17-140	7
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	65	62	9-164	5
Benzene	mg/kg (ppm)	2.5	<0.03	64	61	29-129	5
Trichloroethene	mg/kg (ppm)	2.5	<0.02	65	63	21-139	3
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	71	69	30-135	3
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	75	72	23-155	4
Dibromomethane	mg/kg (ppm)	2.5	<0.05	71	69	23-145	3
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	75	71	24-155	5
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	74	72	28-144	3
Toluene	mg/kg (ppm)	2.5	<0.05	66	64	35-130	3
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	74	72	26-149	3
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	74	71	10-205	4
2-Hexanone	mg/kg (ppm)	12.5	<0.5	77	72	15-166	7
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	72	68	31-137	6
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	65	63	20-133	3
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	74	70	28-150	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	75	71	28-142	5
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	68	65	32-129	5
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	68	65	32-137	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	77	72	31-143	7
m,p-Xylene	mg/kg (ppm)	5	<0.1	69	65	34-136	6
o-Xylene	mg/kg (ppm)	2.5	<0.05	70	67	33-134	4
Styrene	mg/kg (ppm)	2.5	<0.05	72	68	35-137	6
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	73	69	31-142	6
Bromoform	mg/kg (ppm)	2.5	<0.05	70	66	21-156	6
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	72	68	23-146	6
Bromobenzene	mg/kg (ppm)	2.5	<0.05	72	69	34-130	4
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	69	65	18-149	6
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	77	73	28-140	5
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	72	70	25-144	3
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	70	66	31-134	6
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	71	68	31-136	4
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	70	67	30-137	4
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	70	67	10-182	4
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	73	70	23-145	4
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	72	70	21-149	3
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	72	68	30-131	6
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	71	67	29-129	6
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	70	66	31-132	6
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	75	71	11-161	5
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	69	67	22-142	3
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	72	69	10-142	4
Naphthalene	mg/kg (ppm)	2.5	<0.05	74	70	14-157	6
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	72	69	20-144	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/15

Date Received: 06/02/15

Project: Anacortes High Sch KE150205A, F&BI 506023

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	61	10-146
Chloromethane	mg/kg (ppm)	2.5	77	27-133
Vinyl chloride	mg/kg (ppm)	2.5	77	22-139
Bromomethane	mg/kg (ppm)	2.5	84	38-114
Chloroethane	mg/kg (ppm)	2.5	81	10-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	80	10-196
Acetone	mg/kg (ppm)	12.5	83	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	78	47-128
Hexane	mg/kg (ppm)	2.5	74	43-142
Methylene chloride	mg/kg (ppm)	2.5	78	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	82	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	83	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	83	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	88	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	83	72-113
Chloroform	mg/kg (ppm)	2.5	85	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	87	57-123
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	79	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	85	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	84	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	83	60-139
Benzene	mg/kg (ppm)	2.5	81	68-114
Trichloroethene	mg/kg (ppm)	2.5	83	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	86	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	85	72-130
Dibromomethane	mg/kg (ppm)	2.5	85	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	84	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	86	75-136
Toluene	mg/kg (ppm)	2.5	96	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	99	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	98	75-113
2-Hexanone	mg/kg (ppm)	12.5	98	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	97	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	98	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	95	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	101	74-132
Chlorobenzene	mg/kg (ppm)	2.5	93	76-111
Ethylbenzene	mg/kg (ppm)	2.5	96	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	102	69-135
m,p-Xylene	mg/kg (ppm)	5	96	78-122
o-Xylene	mg/kg (ppm)	2.5	97	77-124
Styrene	mg/kg (ppm)	2.5	98	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	100	76-127
Bromoform	mg/kg (ppm)	2.5	87	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	102	74-124
Bromobenzene	mg/kg (ppm)	2.5	102	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	99	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	103	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	100	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	98	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	100	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	100	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	101	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	103	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	103	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	101	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	100	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	98	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	99	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	98	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	99	50-153
Naphthalene	mg/kg (ppm)	2.5	102	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	101	63-138

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/09/15

Date Received: 06/02/15

Project: Anacortes High Sch KE150205A, F&BI 506023

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: 505342-21 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	<0.01	76	74	44-129	3
Acenaphthylene	mg/kg (ppm)	0.17	<0.01	90	87	52-121	3
Acenaphthene	mg/kg (ppm)	0.17	<0.01	90	93	51-123	3
Fluorene	mg/kg (ppm)	0.17	<0.01	91	91	37-137	0
Phenanthrene	mg/kg (ppm)	0.17	0.016	104	77	34-141	30 hr
Anthracene	mg/kg (ppm)	0.17	<0.01	83	78	32-124	6
Fluoranthene	mg/kg (ppm)	0.17	0.019	110	79	16-160	33 hr
Pyrene	mg/kg (ppm)	0.17	0.021	102	72	10-180	34 hr
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	101	83	23-144	20
Chrysene	mg/kg (ppm)	0.17	0.012	94	72	32-149	27 hr
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.016	109	94	23-176	15
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	108	91	42-139	17
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.013	111	92	21-163	19
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.011	106	77	23-170	32 hr
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	102	80	31-146	24 hr
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	0.012	102	73	37-133	33 hr

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	80	58-121
Acenaphthylene	mg/kg (ppm)	0.17	91	54-121
Acenaphthene	mg/kg (ppm)	0.17	90	54-123
Fluorene	mg/kg (ppm)	0.17	91	56-127
Phenanthrene	mg/kg (ppm)	0.17	82	55-122
Anthracene	mg/kg (ppm)	0.17	77	50-120
Fluoranthene	mg/kg (ppm)	0.17	79	54-129
Pyrene	mg/kg (ppm)	0.17	88	53-127
Benz(a)anthracene	mg/kg (ppm)	0.17	87	51-115
Chrysene	mg/kg (ppm)	0.17	86	55-129
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	114	56-123
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	107	54-131
Benzo(a)pyrene	mg/kg (ppm)	0.17	100	51-118
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	113	49-148
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	116	50-141
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	108	52-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Bo

TURNAROUND TIME

Phone # 425 827 7701 Fax # _____

REMARKS: REPACKAGED FROM
GEOTERM SAMPLE CONTAINERS

ANALOGUES HIGH SH.
KE 150205A

KEISD205A

Rush charges authorized by

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Samples received at 5 °C

FORMS\COC\COC.DOC

Received by:

Nhan Phan

FeBT

6/2/15	1000
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EXHIBIT #10:

CULTURAL RESOURCE SURVEY

CULTURAL RESOURCES SURVEY COVER SHEET

Authors: Garth L. Baldwin and Adam N. Rorabaugh

Title of Report: Cultural Resources Review of the Anacortes School District #103 High School Renovation and Reconstruction, Anacortes, Washington.

Date of Report: September 7, 2015

County (ies): Skagit Section: 24 Township: 35N Range: 1E
Quad: Anacortes North, WA (1977) Acres: ~4.25

Does this replace a draft? ☐ Yes ☒ No

Archaeological Sites Found or Amended? ☐ Yes ☒ No

TCP(s) found? ☐ Yes ☒ No

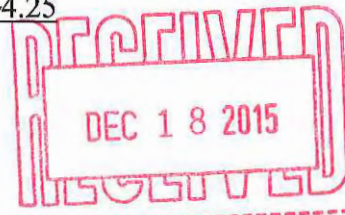
Does this report fulfill a DAHP permit requirement? ☐ Yes ☒ No

DAHP Archaeological Site #:

REPORT CHECK LIST

Report should contain the following items:

- Clear objectives and methods
- A summary of the results of the survey
- A report of where the survey records and data are stored
- A research design that:
 - Details survey objectives
 - Details specific methods
 - Details expected results
 - Details area surveyed including map(s) and legal locational information
 - Details how results will be fed back in the planning process



DRAYTON ARCHAEOLOGY

Cultural Resources Review of the Anacortes School District #103 High School Renovation and Reconstruction, Anacortes, Washington.



By: Garth L. Baldwin, M.A., RPA
and Adam N. Rorabaugh, Ph.D., RPA

Prepared For:

Marc Estvold, AIA, LEED, AP
Project Manager
2200 M Avenue
Anacortes, Washington 98221

Drayton Archaeology Report: 0815E

September 7, 2015

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Cultural Resources Review of the Anacortes School District #103 High School Renovation and Reconstruction, Anacortes, Washington.

Author: Garth L. Baldwin and Adam N. Rorabaugh
Date: September 7, 2015
Location: City of Anacortes, Skagit County, Washington
USGS Quad: Anacortes, WA North 7.5 minute USGS Quadrangle (1977)
Township, Range, Section: T35N, R1E, Section 24

SUMMARY

Drayton Archaeology (Drayton or DA) was retained to conduct a cultural resources survey of the Anacortes School District #103 High School Renovation and Reconstruction Project (the Project). The proposed project consists of renovating approximately 40,000 sf of gym and auditorium area as well as construction of 100,000 sf of new classroom/commons area along with associated site and athletic field improvements. The project will receive approximately \$2,000,000 from the Office of Superintendent of Public Instruction (OSPI), making the funding source a Capital Improvements Project. As such the recipients must comply with Washington State Governor's Executive Order 05-05 (EO 05-05) regarding cultural, historical and archaeological concerns. The following review is our address of the EO 05-05 mandate.

Drayton's cultural resources assessment consisted of background review, field investigation, and the production of this report. Background review determined that the project area is located in an area of low probability for cultural resources. Field investigation included pedestrian survey and subsurface testing. As a result of background and field research no evidence of precontact or historic archaeological deposits were encountered. As proposed the project does not appear to have the potential to effect any historic properties and no further cultural resources oversight is warranted. DA recommends the project be permitted to proceed without further archaeological oversight.

REGULATORY CONTEXT

This project is subject to Executive Order (EO) 05-05. This order requires all state agencies to review capital construction projects with the DAHP and affected Tribes to determine the potential impacts to cultural resources. In accordance with the EO, when state funds are used for a project, the proponent is required to consult with the DAHP and interested tribal organizations to determine whether there are known cultural resources or if there is a potential for such sites within the project area. It is the responsibility of the agency to assure proper consideration for cultural resources and to develop archaeological survey and mitigation strategies.

The State of Washington requires all state agencies comply with the cultural resources management laws and regulations under the Revised Code of Washington (RCW) 27.53 Archaeological Sites and Resources; RCW 27.44 Indian Graves and Records; and RCW 68.50.645

Skeletal Human Remains—Duty to Notify. The latter regulation provides a strict process for notification of law enforcement and other interested parties in the event of the discovery of any human remains, regardless of inferred cultural affiliation.

PROJECT LOCATION AND DESCRIPTION

The project area consists of the existing Anacortes High School, Rice Field, War Memorial Field, and parking lots. It is an approximate land area of 4.25 acres. Anacortes High School is located in the City of Anacortes, Skagit County, in SW1/4 of NE1/4 of T35N, R1E, Section 24, Willamette Meridian (Figure 1). Elevations throughout the project corridor range from approximately 25m above sea level at Rice Field to 40m above sea level at Memorial Field and high school buildings. The project area is bordered by single family residences to the north, south, and east and forested parkland, Volunteer Park, to the west.

The proposed project would replace approximately 60% of the existing Anacortes High School while modernizing the remaining 40%. The Gymnasium and Physical Education facility of ~40,300 square feet (sf) and the Brodniak Theater with an additional ~19,700 sf of space will be modernized. The rest of the structures will be demolished and replaced with new construction that amounts to about 100,000 sf of campus area. The existing War Memorial football/soccer field will be utilized as host to the new construction and Rice Field will be renovated to support those programs in the future. Rice Field will receive new turf, covered seating for 1500 and necessary support facilities.

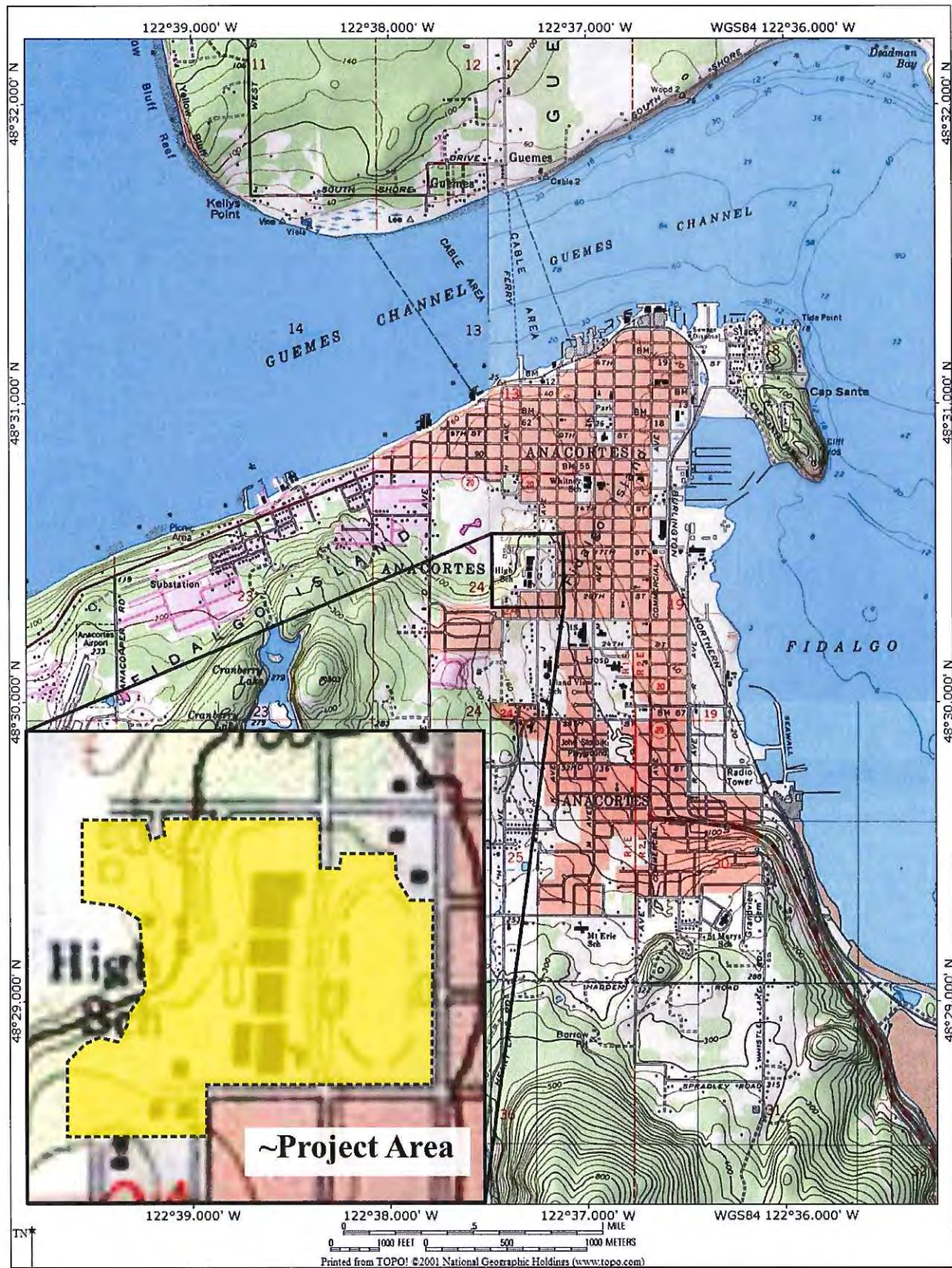


Figure 1. USGS map illustrating the Anacortes High School Project Area, North Anacortes WA (1977) 7.5" minute U.S. Geological Survey quadrangle map.

BACKGROUND REVIEW

Determining the probability for archaeological sites and Historic Properties within the project area was based largely upon review and analysis of past environmental and cultural contexts and previous cultural resources studies and sites recorded within about one-mile of the project area. Consulted sources included reviewing local geologic data to better understand the depositional environment; archaeological, historic and ethnographic records on file on the Washington Information System for Architectural and Archaeological Records Data (WISAARD) database; and selected published local historic records.

Environmental Context

Topography and Geology

Anacortes High School project area is located on Fidalgo Island. Fidalgo Island has a complex geological history. The bedrock consists of an assemblage of Paleozoic through Mesozoic (~540-65 million year ago) sedimentary and volcanic rocks that were accreted to North America as oceanic crust was subducted under the continental crust (Brown and Dragovich 2003).

Fidalgo Island falls within the Puget Lowlands, a geological and physiographic province that was shaped by at least four periods of extensive glaciation during the Pleistocene (Easterbrook 2003; Waitt and Thorson 1983). The bedrock was depressed and deeply scoured by glaciers and sediments were deposited and often reworked as the glaciers advanced and retreated. A thick mantle of glacial till and drift were left on many portions of Fidalgo Island at the end of the last of these glacial periods: the Fraser Glaciation.

The Vashon Stade of the Fraser Glaciation began around 18,000 B.P. with an advance of the Cordilleran ice sheet into the lowlands (Porter and Swanson 1998). As the ice built up one lobe flowed down into the Puget Lowland and another lobe filled the Strait of Juan de Fuca. The ice in the Puget Lobe reached its terminus just south of Olympia between 14,500 and 14,000 BP (Clague and James 2002; Easterbrook 2003; Waitt and Thorson 1983). The Puget Lobe was thicker towards the north and thinned towards its terminus. The depth of the ice over the San Juan Islands is estimated to have been about 1600-1800 meters (Easterbrook 2003).

The Puget Lobe began to retreat shortly after reaching its terminus. Marine waters entered the lowlands that had been carved out by the glacier and filled Puget Sound. The remaining ice was floated and wasted away rapidly. Everson glaciomarine drift deposits dating between 12,500 and 11,500 BP were released from the melting glacial ice and deposited on the sea floor across the northern and central Puget Lowland (Easterbrook 2003). The enormous weight of the ice had depressed the land but as the crust rebounded relative sea levels fell and exposed some of the drift deposits (Clague and James 2002; Easterbrook 2003).

The project area overlies the bedrock of the Fidalgo complex (Brown and Dragovich 2003). The Fidalgo complex consists of peridotite, gabbro, quartz diorite-tonalite, sedimentary breccia, argillite, and volcanic-lithic sandstone. The surficial geology within the project area has been mapped as Vashon Stade glacial till.

Specific soils recorded for the project area are part of the Clallam series of soils (Klungland and McArthur 1989). Those soils are formed of glacial till over very compact glacial till located on glaciated hills and have slopes of 0 to 30 percent. It is a gravelly ashy sandy loam soil commonly found in a forested environment. The soils are further described as consisting of moderately deep to dense materials that are moderately well drained. The soil profile is recorded as follows:

“Oi--0 to 1 inch; slightly decomposed needles, leaves, and twigs.

Oe--1 to 2 inches; moderately decomposed needles, leaves, and twigs.

A--2 to 3 inches; brown (10YR 4/3) gravelly ashy sandy loam, light brownish gray (10YR 6/2) dry; weak fine and very fine granular structure parting to weak very fine subangular blocky; slightly hard, friable, slightly sticky and nonplastic; many fine and very fine roots; many fine and very fine irregular and tubular pores; 15 percent gravel; strongly acid (pH 5.2); abrupt smooth boundary. (1 to 4 inches thick)

Bw1--3 to 12 inches; brown (10YR 5/3) gravelly ashy sandy loam, light gray (2.5Y 7/2) dry; common medium distinct dark yellowish brown (10YR 4/4) redox concentrations, very pale brown (10YR 7/4) dry; weak fine and very fine subangular blocky structure; hard, friable, nonsticky and nonplastic; many fine and very fine and common medium roots; many fine and very fine irregular and tubular pores; 20 percent gravel and 5 percent cobbles; strongly acid (pH 5.4); clear smooth boundary. (3 to 14 inches thick)

Bw2--12 to 30 inches; brown (10YR 5/3) very gravelly ashy sandy loam, light gray (2.5Y 7/2); common medium distinct dark yellowish brown (10YR 4/4) redox concentrations, very pale brown (10YR 7/4) dry; weak fine and very fine subangular blocky structure; hard, firm, nonsticky and nonplastic; common fine and very fine, and few medium roots; many very fine irregular and common very fine tubular pores; 35 percent gravel and 10 percent cobbles; strongly acid (pH 5.4); clear wavy boundary. (7 to 18 inches thick)

Cd1--30 to 39 inches; light brownish gray (2.5Y 6/2) dense glacial till that crushed to very gravelly sandy loam, light gray (2.5Y 7/2) dry; common medium distinct strong brown (7.5YR 5/6) redox concentrations, reddish yellow (7.5YR 6/6) dry; massive; very hard, very firm, slightly sticky and nonplastic; few very fine irregular and common very fine tubular pores; 30 percent gravel and 5 percent cobbles; strongly acid (pH 5.4); clear wavy boundary. (7 to 19 inches thick)

Cd2--39 to 62 inches; grayish brown (2.5Y 5/2) dense glacial till that crushes to very gravelly loam, light gray (2.5Y 7/2) dry; massive; very hard, very firm, slightly sticky and slightly plastic; few very fine irregular pores; 30 percent gravel and 10 percent cobbles; moderately acid (pH 6.0)".

The soils observed on site were disturbed soils and sediment due to the large-scale construction of the school and past development of the area; presumably logging, clearing, etc.

Vegetation and Fauna

The Puget Sound basin, as part of the Puget Trough, is part of the *Tsuga heterophylla* zone. Precontact vegetation would have included an overstory of Western Red cedar (*Thuja plicata*), Western Hemlock (*Tsuga heterophylla*), and Douglas fir (*Pseudotsuga menziesii*) (Franklin and Dyrness 1973). Lowland areas would have had a canopy dominated by, but not limited to, red alder (*Alnus rubra*), Oregon maple (*Acer macrophyllum*), and Willow (*Salix sp.*) and a thick understory of stinging nettles (*Urtica dioica*), bracken fern (*Pteridium aquilinum*), sword fern (*Polystichum munitum*), skunk cabbage (*Lysichiton americanus*) and Nootka rose (*Rosa nutkana*). Currently the project area is in a developed residential area. The ground is covered by lawn, landscape plants, a few mature Douglas fir trees, asphalt and concrete as well as standing structures.

A substantial marine invertebrate population in coastal waters near the project area would have included bivalves such as the steamer clam (*Leukoma staminea*), butter clam (*Saxidomus giganteus*), horse clam (*Tresus capax*), and basket cockle (*Clinocardium nuttali*). Univalves would have included frilled dogwinkle (*Nucella lamellosa*). These shellfish were a significant contribution to the precontact diet.

Abundant pink salmon (*Oncorhynchus gorbuscha*) runs go through Deception Pass on their route to the Skagit River. Other anadromous fish species would also be available in the nearshore and offshore environments. Additional harvested marine species in the surrounding waters would have included dogfish (*Squalus acanthias*), Pacific cod (*Gadus macrocephalus*), lincod (*Ophiodon elongatus*), herring (*Clupea harengus*), and Eulachon (*Thaleichthys pacificus*).

In addition to a broad range of seasonal and permanent birds, the near shore waters contain various marine mammal species that may have contributed to the precontact diet, Harbor Seal (*Phoca vitulina*) being the most prominent. Terrestrial mammals are rarer and tend to be smaller species. Black tail deer (*Odocoileus hemionus*) are still found on Fidalgo and elk (*Cervus canadensis*) were previously found on the island.

Cultural Context

There are number of Coast Salish groups that have traditional claims to the area surrounding the project area. The aboriginal inhabitants of the area were classified by Suttles (1951:6) as Northern Straits Salish, a group of Coast Salish peoples differentiated by dialect and areas of occupation. It is important to note that these names were imposed upon the indigenous population by Europeans who expected them to be static groups and that these labels would logically apply to all descendents. The Samish are recognized as the local Northern Straits Salish group, although the Swinomish and Lummi have made claims to the area because of longtime family connections and traditional cooperative use. Distinguishing the Northern Straits Salish is their language, Lkungen, which differs from its close sister language Klallam (Southern Straits Salish) and is distinct from Lushootseed, spoken by other Coast Salish peoples further to the south and east (Blukis-Onat 1987; Thompson 1978). Straits Salish peoples also differ from other Coast Salish by the subsistence strategies focused primarily on marine resources and reef-netting of sockeye salmon.

Native people of the Northwest coast recognized ancestry, rights to resources, resource locations, settlement areas, songs, dances, rituals and other cultural expressions as dynamic and individually restrictive, not group based as is understood by the European world view of nationalities. Prior to European contact and influence the Coast Salish peoples were less segmented. They were more of a fluid entity then after the divisive influences brought by Euroamericans and other non-Native influences. Traditional land use rights were determined by marriage and/or inheritance; therefore, intermarriage (for one) between groups frequently created dynamic opportunities for resource acquisition. In addition, the artificial political boundary of the US/Canada border is another artifice of European conquest that further divided indigenous life ways.

According to Ruby and Brown (1992) winter villages were preferentially located on Fidalgo, Samish and Gueines Islands during the precontact period. According to Suttles (1951), the north and west shores of Fidalgo Island were used exclusively by the antecedents of today's Samish Nation. Resources were taken from specific areas when it was the best time of year to do so, people would have travelled throughout the area occupying particular areas relative to what resource was available and to which they had rights to exploit. In the spring and summer they utilized the southern and eastern portions of Lopez Island and the surrounding smaller islands as part of their seasonal round to live and gather resources during the year (Suttles 1951). There were not fixed boundaries and that the highly mobile people maintained extensive contact with their neighbors and shared use areas with each other (Blukis -Onat 1987).

Expansion for colonization along with trade brought Europeans into contact with the Native population of the islands. The navigable trade waters surrounding the San Juan Islands were first visited by Spanish explorers Francisco de Eliza, Juan Pantoja y Arriga, and later British explorers such as Lieutenant William Broughton, sailing under George Vancouver. Fidalgo Island was first sighted by the Spanish on July 5, 1790 by Manuel Quimper while exploring the inland waters of Washington (Blumenthal 2004). He named the island for Lieutenant Salvador Fidalgo who he had previously dispatched to explore the Alaskan coast and determine the extent of Russian migration (Blumenthal 2004).

The early European explorers would have been looking for resources to exploit such as timber, farmland, and furs. The first settlers did not arrive on Fidalgo Island until the 1850's. Its relative isolation and resource potential relegated it to a secondary concern for Euroamerican settlement (Lunsford 2009). Shortly after the arrival of permanent residents to the island the majority of the Native population relocated to nearby islands or the Swinomish Reservation once it was established in 1873 (Sampson 1972).

In 1879 the town of Anacortes, originally called Ship Harbor, was founded by railroad surveyor Amos Bowman. Eventually the town was renamed for his wife, Anna Curtis Bowman. In the 1880s Anacortes had a large population boom as a result of the expectation that it would become a railway terminus. Between January and March 1890 the population of the town grew from 40 to 3,000. However in 1893 Anacortes along with other towns hoping to be railroad terminals were suffering from the "Panic of 1893" an economic depression tied to the overbuilding and questionable financing of the railroad industry that resulted in bank failures and was the worst economic depression the United States had faced to that date. Anacortes rebounded from this economic crisis with the establishment of fish canneries, fruit canneries, sawmills, shingle mills, and factories by the turn of the century (Lunsford 2009).

The first of these canneries the Fidalgo Island Packing Company was opened in 1893. This cannery employed about 350 people including Chinese, Norwegian, and Greek Euroamerican immigrants, as well as a large body of Samish workers, employed for their knowledge of traditional salmon fishing and netting sites located nearby (Waterhouse 1986). The Samish lived in separate quarters, like the Chinese, away from the larger body of Euroamerican employees. The remains of their living area are still observable surrounding Cannery Lake and the Ship Harbor wetlands around the Washington State Ferry Terminal (Baldwin et al. 2007; Gill 2008; Koziarski and Baldwin 2010a, 2010b, 2010c; Waterhouse 1986; Wessen and Waterhouse 1987). Cannery operations continued in Ship Harbor into the 1920's when the cannery and rail were closed, abandoned, and subsequently sold to the Port of Anacortes.

Previous Cultural Resource Studies and Archaeological Sites

According to the WISAARD database (accessed August 25, 2015) there have been two cultural resource studies conducted within one mile of the present project area. Those reviews have been

limited to locations near the Guemes Channel shoreline, with the exception of the general study of historic structures in a portion of the city (Kohler 2007, 2010).

The first regional study of indigenous society on the Northwest Coast was conducted by the Jesup North Pacific Expedition in 1897-1902 (Smith 1907). The multidiscipline group was lead by Franz Boas, and sponsored by the American Museum of Natural history. The expedition accounted for early documentation of many groups throughout Washington State and the northwest coast generally, but little else happened in way of research until after World War II.

Archaeological investigations in the general vicinity were conducted by Alan Bryan (1963). The efforts in the area were concentrated more on the readily identifiable shell matrix sites along the shoreline while interior, particularly populated cities were largely excluded. More recently there have been efforts to identify cultural resources as part of development-based efforts and some historic structure reviews sponsored by the City of Anacortes and DAHP (Baldwin 2013a, 2013b; Barsh 2003; Gilpin 2009; Hartmann 2012; Hodges 2003; Jordan et al. 2008; Kohler 2007, 2010; Koziarski and Baldwin 2010a, 2010b, 2010c; Thompson, et.al 2009).

In a review for Kiwanis Waterfront Park Barsh (2003) recorded 45SK294, a shell bearing site disturbed by railroad and sewer construction on the shoreline and potentially early historic wharves and shanties. Barth interpreted this midden as being associated with *qelecilč*, "ironwood," a Samish village located near the Guemes Island ferry landing in Anacortes occupied in the early 1800s which had not been previously identified archaeologically (Suttles 1951: 43). *qelecilč* was affiliated with *sx'a'imel*, a large Samish plank house village located directly across Guemes channel to the north and likely represented archaeologically as 45SK13.

Julie M. Kohler (2007, 2010) conducted a number of efforts to record and assess historic structures within selected portions of the City of Anacortes. Although her most recent work included the present project area, nothing of note was recorded on or near the site. Her latest project built upon four previous surveys undertaken in 1976, 1987 and 2007. The shoreward cultural resources reviews are located near or beyond one mile from the project area, but are presented in brief for context.

Charles Hodges (2003) conducted a review of 2.7 miles of former railroad grade for a federally funded trail project in the city. Although he recorded a section of former railroad, spurs and features of the line as an archaeological resource it was not determined eligible for listing as a Historic Property according to the NHPA. He did not encounter or observe precontact resources with the corridor he surveyed.

Jordan et al. (2008)'s cultural resources survey report for the Anacortes ferry dock embankment rip-rap replacement project, located 50m northwest of 45SK294. Jordan et al. noted nothing of

precontact or historic significance. Also near the one mile boundary of the project area shoreward is a historic shipway recorded by Gilpin (2009). While monitoring backhoe trenching for the installation of a storm water system Gilpin observed this shipway which is affiliated with prominent local shipbuilder C.C. Keesling.

A review for contamination remediation was conducted by Thompson, et.al (2009) at a former mill location along the shoreline more than a mile from the present APE. The site investigation was conducted at the former Scott Paper Mill by the Port of Anacortes. Although the site was along the shoreline the extensive past use and modern fill deposition precluded the use of subsurface test excavations by archaeologists. They recommended monitoring excavations at particular locations of the site if excavation was below predetermined depths. No additional archaeological record was present for any follow-up work at the site. There were no cultural resources recorded as a result of the review.

In 2012 Glenn Hartmann performed a review for the development of a private boatyard storage building. Again, modern fill and contaminated soils precluded subsurface testing to assess the presence of anthropogenic soils or materials in the project area. The review did not record or observe anything of precontact or historic importance.

Another project done an approximate mile or so from the project area was conducted by Garth Baldwin (2013a) and sons for the Guemes Island Trail Project. Baldwin recorded semi exposed and eroded railroad ties and wooden culvert associated with a former railroad grade for the Great Northern Railroad which serviced a historic cannery, the Fidalgo Island Packing Company. Cannery operations continued into the 1920's until the cannery and rail were abandoned and sold to the city of Anacortes.

The most recent work done in the vicinity of the project area was a cell tower construction project in downtown Anacortes (Baldwin 2013b). Observed soils in the shovel probe were consistent with natural soil descriptions. Nothing of precontact or historic significance was observed in Baldwin's review.

CULTURAL RESOURCE EXPECTATIONS

Based on a review of the previous efforts at identifying cultural resources, past historical, environmental and cultural reviews, the project area was considered to be located in an area to have a low probability for either historic-era or precontact cultural deposits, structures, or isolated items. The expectations were based upon:

- Previous inventories of historic or potentially historic structures in the city of Anacortes.
- The topographic and geologic context of the project area are unlikely to contain cultural resources.

Nonetheless, all types of cultural resources were considered during work, however improbable. Remnants of precontact activities related to lithic resource acquisition and testing (cobble tool scatters), fire modified rock (suggestive of processing/camping activities), temporary camps or resource processing locations that could represent a range of ephemeral hunting, gathering and/or ceremonial activities. Historic cultural resources thought possible included trash scatters or artifacts associated with logging, farming or residential settlement. Considering the depositional environment of the project area any potential cultural resource deposits were expected to be highly disturbed.

FIELD INVESTIGATIONS

The physical archaeological assessment of an area is conducted through visual reconnaissance of a project area, examination of existing ground disturbances and subsurface excavation as needed. Surface survey of an area proposed for ground alteration or other impact is employed in an attempt to locate any surficial cultural materials or structures with any historic or archaeological importance or cultural concern. When utilized, shovel probes or mechanical excavation can assist in providing a wider sample of subsurface soil conditions for determining the potential for, or presence/absence of, buried archaeological deposits. The employment of probes or trenches is most often dependent upon considerations of the landform, topography, project proposal and subsurface geologic conditions.

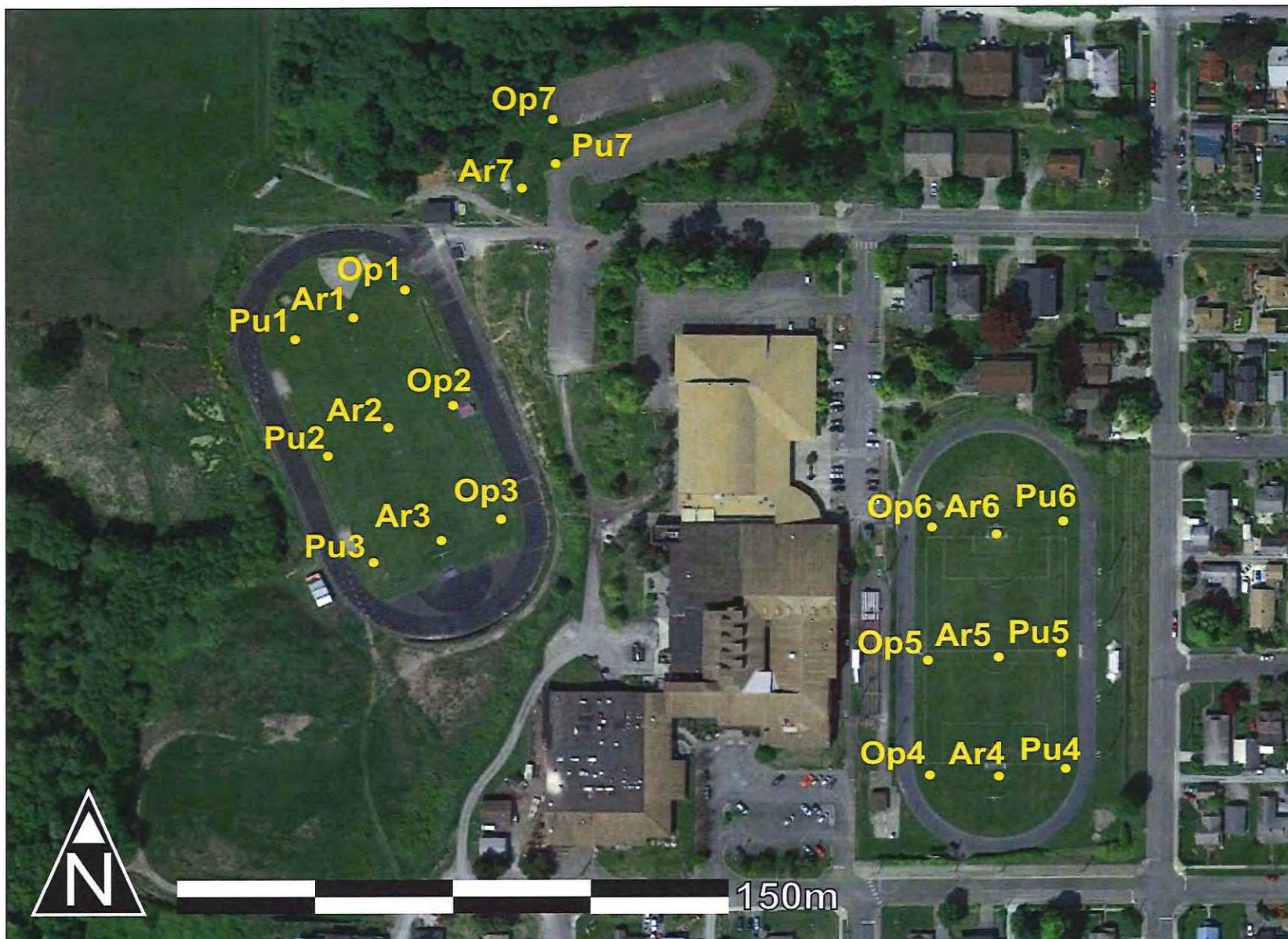


Figure 2. An adapted Google Earth Showing Shovel Probe Test Locations.

Field investigations were conducted by DA lead archaeologist Adam Rorabaugh, archaeologist Oliver Patsch, and field technician Patrick Uskert, on August 21, 2015. Fieldwork conditions were warm and dry. The investigation consisted of pedestrian survey, exposed soil inspection, and the excavation of 21 shovel probes (SPs, Figure 2).

Pedestrian survey was conducted in the entire project area. All exposed ground was examined for surface manifestations of cultural materials and for evidence of previous earthmoving activities. Ditches provided excellent exposures for the sub surface sediments throughout the project area. The project area was also photodocumented to demonstrate the degree of disturbance and lack of intact native soils in the area (Photo 1, Photo 2).



Photo 1. Example of disturbed sediments and steep terrain in western project area.



Photo 2. Example backfilled sediments in north parking lot

Probes were placed in areas with exposed ground that would be subject to excavation during the construction of the new Anacortes High School. As the majority of earthmoving activities are planned to be done in Rice and Memorial fields (Photo 3), shovel tests were placed in each field at 50m intervals. This resulted in nine SPs per field. An additional three SPs were placed in the west margins of the northern parking lot to determine the degree of disturbance of the soils in that area (Photo 4).



Photo 3. Overview of shovel test location (Rice Field).



Photo 4. Shovel Probes being excavated in disturbed sediments near north parking lot.

Probes were excavated as cylindrical pits, approximately 40-50 cm in diameter with a predetermined target depth of 50 cm (Photo 5). However, the individual depth of each SP is ultimately determined by the geological conditions present at each SP location. All sediment excavated from the probe was screened through ¼" mesh hardware screen. Details regarding the location, depth, sediments encountered and material content were recorded for each SP. A detailed description of the sediments observed in the SP is presented in Appendix A. The probes were completely backfilled after the location was marked with GPS.



Photo 5. Typical soil profile observed at the project site (OP-1).

RECOMMENDATIONS

Both surface and subsurface surveys were conducted within the Anacortes High School project area. Pedestrian survey was conducted within the entire project area. All exposed ground was examined for surface manifestations of cultural materials. Exposed surfaces were examined for any evidence of sub-surface cultural deposits or anthropogenic soils. Typical sediments encountered were highly disturbed fill. No cultural materials were found in any of the probes.

The investigation included a background review into the environmental and historic context of the site, field review with subsurface probing and production of this report. Background review determined the project was located in an area of low probability for archaeological resources based upon development and past land use. The soils and sediments observed are consistent with the naturally defined soils for the location, barring modern disturbances. No evidence for precontact or historic archaeological occupation or deposits was encountered during surface and subsurface review at the project area. Further archaeological oversight for the project appears unwarranted based upon the current review and project design.

It should also be recognized that Washington State law provides for the protection of archaeological resources in the state. Washington State Revised Codes of Washington (RCW) Chapter 27.53, Archaeological Sites and Resources, prohibits the unauthorized removal, theft, and/or destruction of archaeological resources and sites. This statute also provides for prosecution and financial penalties covering consultation and the recovery of archaeological resources. Additional legal oversight is provided for Indian burials and grave offerings under RCW Chapter 27.44, Indian Graves and Records. RCW 27.44 states that the willful removal, mutilation, defacing, and/or destruction of Indian burials constitute a Class C felony. A recent addition to Washington legal code, RCW 68.50.645, Notification, provides a strict process for the notification of law enforcement and other interested parties in the event of the discovery of any human remains regardless of perceived patrimony. The assessment of the property has been conducted by a professional archaeologist and meets or exceeds the criteria set forth in RCW: 27.53 for professional archaeological reporting and assessment.

In the event that archaeological materials are encountered during the development of the property, an archaeologist should immediately be notified and work halted in the vicinity of the find until the materials can be inspected and assessed. At that time, the appropriate persons are to be notified of the exact nature and extent of the resource so that measures can be taken to secure them. In the event of inadvertently discovered human remains or indeterminate bones, pursuant to RCW 68.50.645, all work must stop immediately and law enforcement should be contacted. Any remains should be covered and secured against further disturbance, and communication should be immediately established with the Skagit County Sheriff's Office and the State Physical Anthropologist at DAHP for coordination with the Samish Nation, Swinomish Indian Tribal Community and any other interested Native Tribe(s).

REFERENCES

- Baldwin, Garth, Genevieve Brown, and Christopher Kaiser
2007 Archaeological Investigation for the Leeward Condominium Project. Anacortes, Skagit County, Washington. Report prepared for Ronald Hoelscher. On file at the Department of Archaeology and Historic Preservation, Olympia.
- Baldwin, Garth
2013a Cultural Resources Review for the Guemes Channel Trail Project, City of Anacortes, Skagit County, Washington. Report on file with the Department of Archaeology and Historic Preservation, Olympia.
2013b Letter to Adam Escalona RE: Cultural Resources Review of the SN2883 Downtown Anacortes Cell Tower Co-locate and New Construction. On file with the Department of Archaeology and Historic Preservation, Olympia.
- Barsh, Russel
2003 45SK294 Archaeological Site Inventory Form on file with the Department of Archaeology and Historic Preservation, Olympia
- Brown, Edwin H., and Joe D. Dragovich
2003 Tectonic Elements and Evolution of Northwest Washington. Washington Division of Geology and Earth Resources, Geologic Map GM-52. Washington State Department of Natural Resources, Olympia.
- Bryan, Alan
1963 *An Archaeological Survey of Northern Puget Sound*. Occasional Papers of the Idaho State University Museum, Number 11, Pocatello, Idaho.
- Blukis-Onat, Astrida
1987 Resource Protection Planning Process Identification of Prehistoric Archaeological Resources in the Northern Puget Sound Study Unit. Report draft on file with the Department of Archaeology and Historic Preservation, Olympia.
- Blumenthal, Richard W. (ed.)
2004 *The Early Exploration of Inland Washington Waters: Journal and Logs from Six Expeditions, 1786-1792*. McFarland and Company, Inc., Publishers, Jefferson, North Carolina.
- Clague, John J., and Thomas S. James
2002 History and Isostatic Effects of the Last Ice Sheet in Southern British Columbia. *Quaternary Science Reviews* 21:71-87.

Easterbrook, Donald J.

- 1969 Pleistocene Chronology of the Puget Lowland and San Juan Islands, Washington. Geological Society of America Bulletin. 74:1465-1484

Franklin, J.F. and C.T. Dyrness

- 1973 *Natural Vegetation of Oregon and Washington*. USDA Forest Service General Technical Report PNW-8, Portland, Oregon

Gill, Matthew

- 2008 Addendum to DAR Technical Report 1006B – Archaeological Investigations for the Leeward Condominium Project, Anacortes, Skagit County. DAR Technical Memorandum 0308C prepared for Ronald J. Hoelscher. On file at the Department of Archaeology and Historic Preservation, Olympia.

Gilpin, Jennifer

- 2009 45SK410 Archaeological Site Inventory Form on file with the Department of Archaeology and Historic Preservation, Olympia

Hartmann, Glenn

- 2012 Letter to Jimmy Blais RE: Cultural Resources Assessment for the HFA Boatyard Project, Anacortes. Cultural Resource Consultants, Inc., Technical Memo 1204F-1, Bainbridge Island, WA.

Hodges, Charles

- 2003 *Cultural Resources Reconnaissance for the Thompson Trail Project, Phase 1, City of Anacortes*. Northwest Archaeological Associates, Inc. NWAA Report Number WA03-11, Seattle, WA.

Jordan, A. J., Sparks, Shane, and Cowen, Tim

- 2008 Cultural Resource Survey Report Anacortes Ferry Dock Embarkment Rip-Rap Replacement Project, Skagit County, Washington. Report on file with the Department of Archaeology and Historic Preservation, Olympia.

Kohler, Julie

- 2007 Reconnaissance Survey “Old Town” Anacortes, WA. Koler & Associates, Seattle, WA
- 2010 *Reconnaissance Survey “Old Town and South to 24th Street” Anacortes, WA*. Koler & Associates, Seattle, WA

Koziarski, Ralph and Baldwin, Garth

- 2010a Archaeological Assessment for the Ship Harbor Trail Project, Anacortes, Skagit County, Washington. DAR Technical Report 060I prepared for Robert Hoxie, City of Anacortes.

- 2010b Letter to Robert Hoxie RE: Management Summary for Archaeological Monitoring of the Ship Harbor Trail Installation for the City of Anacortes, Skagit County Washington. On file at the Department of Archaeology and Historic Preservation, Olympia.
- 2010c UPDATE: Washington State Site Inventory Form 45SK174. On file with the Department of Archaeology and Historic Preservation, Olympia.
- Klungland, Michael W. and Michael McArthur.
- 1989 *Soil Survey of Skagit County Area, Washington*. United States Department of Agriculture, Soil Conservation Service.
- Lunsford, Bret
- 2009 *Images of America, Anacortes*. Arcadia Publishers, Mount Pleasant, South Carolina.
- Porter, S. C. and T. W. Swanson
- 1998 Advance and Retreat rate of the Cordilleran Ice Sheet in southeastern Puget Sound Region. *Quaternary Research* 50: 205-213.
- Ruby, R.H. and J.A. Brown
- 1992 *A Guide to the Indian Tribes of the Pacific Northwest*. University of Oklahoma Press, Norman.
- Sampson, Chief Martin J.
- 1972 Indians of Skagit County. Skagit County Historical Series 2. Skagit County Historical Society, Mount Vernon, Washington.
- Smith, Harlan Ingersoll
- 1907 Archaeology of Gulf of Georgia and Puget Sound. In: *The Jesup North Pacific Expedition* edited by Franz Boas, pp. 301-441. *Memoirs of the American Museum of Natural History*, Vol. II - Part 5, New York
- Suttles, Wayne P.
- 1951 *Economic Life of the Coast Salish of Haro and Rosario Straits*. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Washington
- Thompson, Gail
- 1978 Prehistoric Settlement changes in the southern Northwest Coast: a functional approach. University of Washington, Department of Anthropology Reports in Archaeology #5, Seattle WA.
- Thompson, Gail, Derek Shaw, and Shari Maria Silverman,
- 2009 *Cultural Resources Assessment of the Former Scott Paper Mill Site, Anacortes*. Historical Research Associates, Inc., Seattle WA.

United States Surveyor General (GLO)

- 1872 General Land Office Map, Township 35 North, Range 1 East, Willamette Meridian. Electronic resource,
<http://www.blm.gov/or/landrecords/survey/ySrvy1.php> Accessed July 2013.

Waitt, Richard B. Jr., and Robert M. Thorson

- 1983 The Cordilleran Ice Sheet in Washington, Idaho, and Montana. In *The Late Pleistocene*, edited by Stephen Porter, pp. 53-70. *Late-Quaternary Environments of the United States*, Vol. 1, H.E. Wright, Jr., general editor, University of Minnesota Press, Minneapolis.

Waterhouse, Joseph Jr.

- 1986 Ship Harbor Archaeological Project Preliminary Report. On file with the Department of Archaeology and Historic Preservation, Olympia.

Wessen, Gary and Waterhouse, Joseph Jr.

- 1987 Archaeological Testing at Ship Harbour, Skagit County, Washington. On file with the Department of Archaeology and Historic Preservation, Olympia.

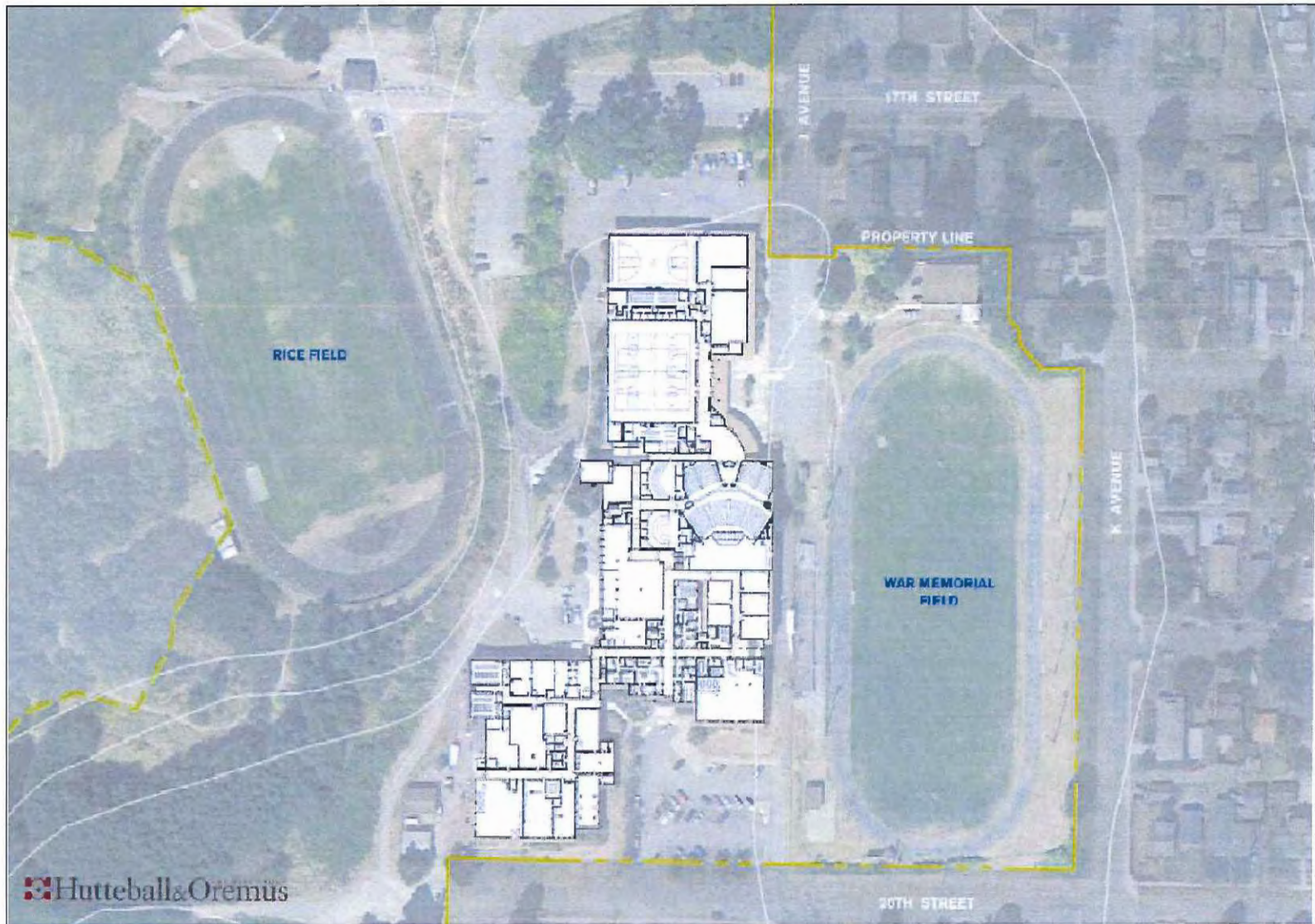
APPENDIX A. SHOVEL TEST PROBE TABLE

DEPTH (BS)	SEDIMENT DESCRIPTION	CONTENTS
Shovel Test Probe AR-1		
0 – 1cm	Turf (Grass)	No Cultural Material
1-20cm	10yr 3/2 Brown (moist) sandy loam. <5% well-sorted subrounded gravels.	No Cultural Material
20-30cm	10yr 4/2 Light brown silty clay. <2% well-sorted subrounded gravels.	No Cultural Material
31-50cm	10yr 5/1 Gray silty clay. ~15% well-sorted subrounded and subangular gravels.	No Cultural Material
Notes: Modern brick at 5cm BS.		
Shovel Test Probe AR-2		
0 – 1cm	Turf (Grass)	No Cultural Material
1-20cm	10yr 3/2 Brown (moist) sandy loam. <5% well-sorted subrounded gravels.	No Cultural Material
20-30cm	10yr 4/2 Light brown silty clay. <2% well-sorted subrounded gravels.	No Cultural Material
31-49cm	10yr 5/1 Gray silty clay. ~15% well-sorted subrounded and subangular gravels.	No Cultural Material
Notes: None		
Shovel Test Probe AR-3		
0 – 1cm	Turf (Grass)	No Cultural Material
1-20cm	10yr 3/2 Brown (moist) sandy loam. <5% well-sorted subrounded gravels.	No Cultural Material
20-30cm	10yr 4/2 Light brown silty clay. <2% well-sorted subrounded gravels.	No Cultural Material
31-53cm	10yr 5/1 Gray silty clay. ~15% well-sorted subrounded and subangular gravels. <2% Subrounded pebbles. 1 Cobble.	No Cultural Material
Notes: Earthenware ceramic fragment (modern flower pot) at 42cm BS.		
Shovel Test Probe AR-4		
0 – 1cm	Turf (Grass)	No Cultural Material
1-20cm	10yr 3/2 Brown silty loam. <5% well-sorted subrounded gravels.	No Cultural Material
21-50cm	10yr 5/3 Light Brown sandy loam ~10% well-sorted subrounded gravels. ~2% subangular pebbles.	No Cultural Material
Notes: None.		
Shovel Test Probe AR-5		
0 – 1cm	Turf (Grass)	No Cultural Material
1-40cm	10yr 3/2 Brown silty loam. <5% well-sorted subrounded gravels.	No Cultural Material
40-51cm	10yr 5/3 Light Brown sandy loam ~10% well-sorted subrounded gravels. ~2% subangular pebbles.	No Cultural Material
Notes: None.		

DEPTH (BS)	SEDIMENT DESCRIPTION	CONTENTS
Shovel Test Probe AR-6		
0 – 1cm	Turf (Grass)	No Cultural Material
1-15cm	10yr 3/2 Brown silty loam. <5% well-sorted subrounded gravels.	No Cultural Material
15-48cm	10yr 3/2 Brown sandy silt. 20% well-sorted subrounded and subangular gravels. 5% subangular pebbles. 2 subangular cobbles.	No Cultural Material
Notes: None		
Shovel Test Probe AR-7		
0-1cm	Densely packed sod	No Cultural Material
1 – 10cm	10yr 5/3 light brown sand. >70% well sorted gravels. Compacted.	No Cultural Material
Notes: Densely compacted and disturbed. Modern plastic at 8cm.		
Shovel Test Probe OP-1		
0 – 5cm	Turf (Grass)	No Cultural Material
5-30cm	10yr 3/2 Brown sandy loam. Fill.	No Cultural Material
30-38cm	10yr 3/2 Brown clay. Fill.	No Cultural Material
Notes: None.		
Shovel Test Probe OP-2		
0 – 5cm	Turf (Grass)	No Cultural Material
5-30cm	10yr 3/2 Brown sandy loam. Fill.	No Cultural Material
30-40cm	10yr 3/2 Brown clay. Fill.	No Cultural Material
Notes: None.		
Shovel Test Probe OP-3		
0 – 5cm	Turf (Grass)	No Cultural Material
5-30cm	10yr 3/2 Brown sandy loam. Fill.	No Cultural Material
30-38cm	10yr 3/2 Brown clay. Fill.	No Cultural Material
Notes: None.		
Shovel Test Probe OP-4		
0 – 4cm	Turf (Grass)	No Cultural Material
4-25cm	10yr 3/2 Brown fine sandy loam. Fill.	No Cultural Material
25-40cm	10yr 5/3 Light Brown slightly compacted sand. Gravel fill.	No Cultural Material
Notes: None.		
Shovel Test Probe OP-5		
0 – 3cm	Turf (Grass)	No Cultural Material
3-29cm	10yr 3/2 Brown fine sandy loam. Fill.	No Cultural Material
30-42cm	10yr 5/3 Light Brown compacted sand. Gravel fill.	No Cultural Material
Notes: None.		
Shovel Test Probe OP-6		
0 – 4cm	Turf (Grass)	No Cultural Material
4-30cm	10yr 4/2 Brown Sandy Loam	No Cultural Material
31-44cm	10yr 5/3 Light Brown sandy fill with moderate (~20%) gravels	No Cultural Material
DEPTH (BS)	SEDIMENT DESCRIPTION	CONTENTS

Shovel Test Probe OP-7		
0-1cm	Densely packed sod	No Cultural Material
1-15cm	10yr 5/3 light brown sand. >70% well sorted gravels. Compacted.	No Cultural Material
Notes: Very compacted modern fill material.		
Shovel Test Probe PU-1		
0-20cm	10yr 3/2 Brown sandy loam. Fill. 20-30% Pebbles	No Cultural Material
40-50cm	10yr 5/1 Gray sandy silt. 10% Pebbles. 1 large cobble.	No Cultural Material
Notes: Modern brick fragments from 40-50cm BS		
Shovel Test Probe PU-2		
0-20cm	10yr 2/2 Dark Brown sandy loam (wet). Fill. 25-30% Pebbles	No Cultural Material
20-30cm	10yr 5/1 Gray sandy silt. 10-15% Pebbles	No Cultural Material
Notes: None.		
Shovel Test Probe PU-3		
0 – 20cm	10yr 3/2 Brown (wet) sandy loam. Fill. 20% Pebbles	No Cultural Material
20-40cm	10yr 5/1 Gray (wet) silty sand. 5-10% Rounded and Subrounded Pebbles	No Cultural Material
Notes: Several small pieces of wood		
Shovel Test Probe PU-4		
0 – 40cm	10yr 5/3 light brown sandy loam. (moist) 5-10% subrounded and subangular pebbles	No Cultural Material
Notes: None.		
Shovel Test Probe PU-5		
0 – 40cm	10yr 3/2 brown sandy loam. (moist) 5-10% pebbles	No Cultural Material
Notes: None.		
Shovel Test Probe PU-6		
0 – 22cm	10yr 3/2 brown sandy loam. (moist) 10% pebbles	No Cultural Material
22-25cm	10yr 5/3 light brown silt	No Cultural Material
25-45cm	10yr 5/1 gray silty sand with well sorted gravels 10-15%. Hit water table at 45cm. Large cobble in east side of shovel probe.	No Cultural Material
Notes: None.		
Shovel Test Probe PU-7		
0 – 20cm	0-20cm Hard packed sandy silt. High angular gravel concentration.	No Cultural Material
Notes: Very compacted modern fill material.		

APPENDIX B. ANACORTES HIGH SCHOOL EXISTING SITE PLAN PROVIDED BY HUTTEBALL & OREMUS



**APPENDIX C. COMPLETED ANACORTES HIGH SCHOOL PRE-BOND CONCEPTUAL PLAN
PROVIDED BY HUTTEBALL & OREMUS**

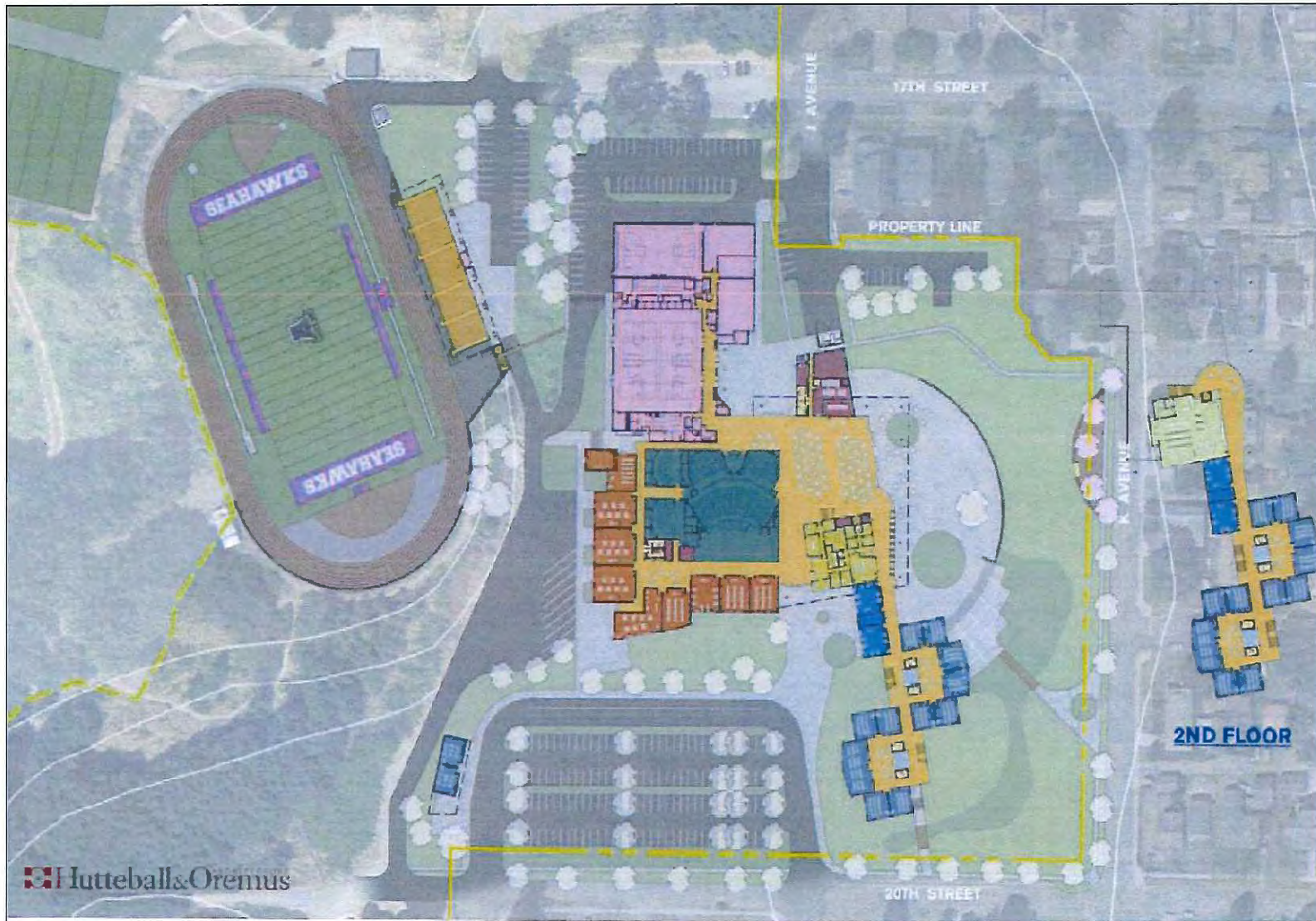


EXHIBIT #11:

SITE PHOTOS

AHS CUP-2015-0006 SITE PHOTOS:



17TH & "J"
Avenue
Entrance
NOA &
NOH
Posting

20th Street
Entrance
NOA & NOH
Posting





Intersection of 20th Street & "K" Avenue
NOA & NOH Posting



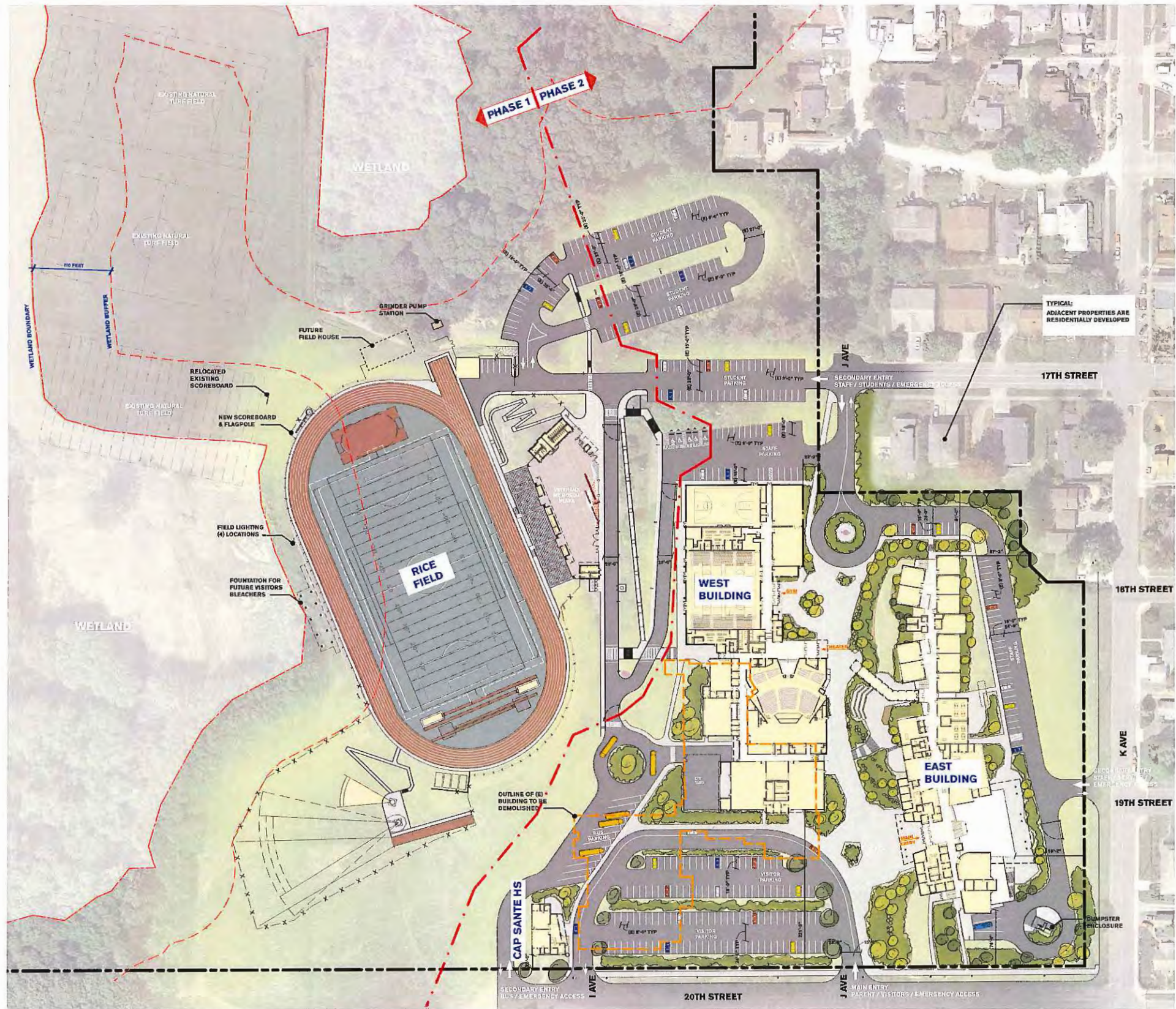
"K"
Avenue
NOA &
NOH
Posting
near 18th
Street

EXHIBIT #12:

SITE PLAN & ELEVATIONS

ANACORTES HIGH SCHOOL Replacement & Modernization

Anacortes School District No. 103



1 SITE PLAN
SCALE: 1" = 50'-0"

PROJECT TEAM

Owner:
Anacortes School District
2200 M Avenue
Anacortes, WA 98221
360.295.1290 phone

Project Management:
Marc L. Estvold
2200 M Ave.
Anacortes, WA 98221
360.270.3994 phone
mestvold@comcast.net

Architect:
Huttenball & Oremus Architecture, Inc.
4010 Lake Washington Blvd. NE Suite 320
Kirkland, WA 98033
425.828.8948 phone
Kevin Oremus koremus@harch.com
Scott Williams swilliams@harch.com

PROJECT INFORMATION

SITE ADDRESS: 1600 20TH STREET
ANACORTES, WA 98221

PARCEL NUMBER(S): P31905, P31912, P31920, P31922, P31923, P31926, P55808, P55809, P55810, P55813, P55850, P55851, P55852, P55853, P55854, P55855, P55856, P55857, P55858, P55859, P55860, P55861, P55863, P55863, P58054

LEGAL DESCRIPTION: SEE ATTACHED SURVEY SHEET #2 OF 9.

SECTION/TOWNSHIP/RANGE: NORTH 1/2, SECTION 24, TOWNSHIP 35 NORTH, RANGE 1 EAST, WM

JURISDICTION: CITY OF ANACORTES

ZONING CLASSIFICATION: P - PUBLIC USE

SITE AREA: 92 ACRES (4,008,349 SQ FT)

ALLOWABLE BLDG HEIGHT: 35'-0" (AMC 17.28.000)

PROPOSED BLDG HEIGHT:
EAST BLDG 43'-3" ABOVE AVERAGE NATURAL GRADE (PER AMC 17.08.390)
WEST BLDG 41'-2" ABOVE AVERAGE NATURAL GRADE (PER AMC 17.08.390)

DRAWING INDEX

- | | |
|---------|---|
| CUP.01 | Cover Sheet, Project Information, Site Plan |
| CUP.02 | Average Grade Calculations |
| CUP.03 | Building Sections |
| CUP.04 | East Building Exterior Elevations |
| CUP.05 | West Building Exterior Elevations |
| CUP.06 | Cap Sante HS Exterior Elevations & Rice Field Elevations & Perspectives |
| 9 Pages | Topographic Survey |
| C1.0 | Preliminary Storm Drainage Plan |
| C2.0 | Preliminary Grading Plan |
| L1.0 | Landscape Plan - Overall |
| L1.1 | Landscape Plan - Enlargement |
| L1.2 | Landscape Plan - Enlargement |
| L1.3 | Landscape Plan - Enlargement |
| L1.4 | Landscape Plan - Enlargement |
| L1.5 | Landscape Schedule |
| L2.0 | Tree Preservation Plan - Overall |
| L2.1 | Tree Preservation Plan - Enlargement |
| L2.2 | Tree Preservation Plan - Enlargement |
| L2.3 | Tree Preservation Plan - Enlargement |
| L2.4 | Tree Preservation Plan - Enlargement |
| L2.5 | Tree Preservation Plan - Enlargement |
| L2.6 | Tree Preservation Plan - Enlargement |

VICINITY MAP



Site Address:
1600 20th Street
Anacortes, WA 98221



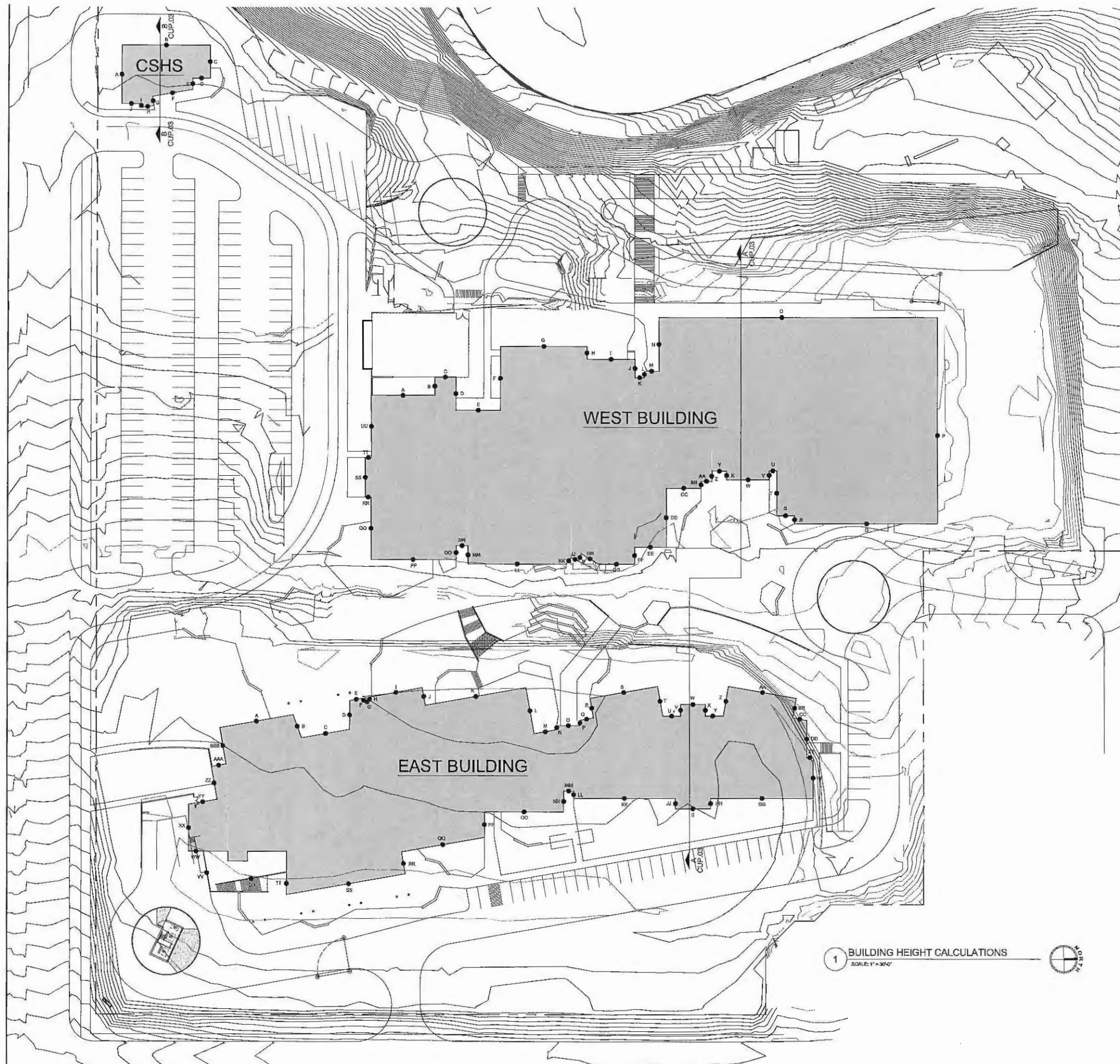
**Anacortes High School
Replacement & Modernization**
1600 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: 11/16/15
Project No.: 1506
Drawn:

CONDITIONAL
USE PERMIT

**Cover Sheet,
Project
Information &
Site Plan**

Sheet No.
CUP.01



CSHS Average Grade Calculation (AGC)

TAG	LENGTH (ft)	ELEV	L x E
A	48	137.81	6614.88
B	72.5	137.46	9965.85
C	27	137.45	3711.15
D	14.33	137.87	1975.6771
E	5.17	137.98	1265.2766
F	35.66	137.97	4644.0702
G	7.5	137.88	1034.1
H	10.5	137.87	1447.635
I	3.17	137.79	436.7943
J	16	137.71	2203.36
Sum L =	241.83	Sum L x E =	33256.7932
AGC =	Sum L x E / Sum L =		137.70

West Building Average Grade Calculation (AGC)

TAG	LENGTH (ft)	ELEV	L x E
A	52.75	135.37	7140.7675
B	15	135.37	2030.55
C	17.17	135.37	2324.3029
D	27.17	135.37	3678.0029
E	135.37	135.37	18411.026
F	52.33	135.37	7083.9121
G	71.5	135.37	9678.955
H	10.5	135.37	1421.383
I	39.75	135.37	5380.9575
J	15	130.32	1954.8
K	7.86	130.34	1034.0404
L	5.25	130.2	683.55
M	12	129.89	1558.68
N	44	120.37	5296.28
O	229.33	128.59	29478.8747
P	169	129.7	21919.3
Q	118	128.5	15161
R	129.67	128.66	16683.6022
S	14.66	129.29	1896.3914
T	36.66	129	4729.14
U	6.09	129.65	789.5685
V	7.25	129.6	939.6
W	35	129.53	4533.55
X	7.25	129.6	939.6
Y	12.17	129.72	1578.6924
Z	8.5	129.69	1102.365
AA	8.66	129.55	1121.903
BB	5.66	129.61	733.5926
CC	28.75	129.73	3729.7375
DD	48.25	129.27	6237.2775
EE	26	128.8	3358.8
FF	14	129.4	1811.6
GG	30	130.12	3903.6
HH	16.42	131.5	2159.23
II	6.58	131.6	865.928
JJ	7	130.4	912.8
KK	6.75	130.6	881.55
LL	80.83	128.85	10414.9455
MM	15	135.37	2030.55
NN	9.66	135.37	1307.6742
OO	11.33	135.37	1533.7421
PP	70.25	128.52	9028.53
QQ	51	135.37	6903.87
RR	4.83	135.37	653.8271
SS	32.5	135.37	4399.5225
TT	4.83	135.37	653.8271
UU	41	135.37	5550.17
Sum L =	1576.45	Sum L x E =	206526.9361
AGC =	Sum L x E / Sum L =		131.01

East Building Average Grade Calculation (AGC)

TAG	LENGTH (ft)	ELEV	L x E
A	61	119.48	7288.28
B	20	119.5	2390
C	40	119.45	4778
D	23.58	119.8	2814.864
E	11.58	119.97	1389.2536
F	9.5	120.01	1140.095
G	5	120	600
H	9.5	120.01	1140.095
I	44.83	120.22	5389.4676
J	14.66	120.35	1764.331
K	83.42	120.47	10049.6079
L	38.33	120.34	4612.5322
M	19.37	120.27	2325.5759
N	3.33	120.25	400.4325
O	19	120.23	2284.37
P	4.33	120.18	520.3794
Q	11.5	120.17	1381.955
R	16.75	120.16	2013.6
S	56.5	119.94	6776.61
T	24.66	119.69	2951.5554
U	14.58	119.5	1742.31
V	9.5	119.49	1135.155
W	20.5	119.47	2449.135
X	9.5	119.38	1134.11
Y	24.58	119.3	2929.39
Z	24.66	119.33	2942.6776
AA	56.5	119.7	6763.05
BB	15.25	123.2	2000
CC	11.5	123	1414.5
DD	30.42	121.5	3696.03
EE	5.25	119	624.75
FF	33.5	119.1	3991.875
GG	84	118.67	9968.28
HH	8.5	119	1011.5
II	29	118.98	3450.42
JJ	8.5	119.14	1012.69
KK	84	119.3	10011.2
LL	6	118.57	711.42
NN	8	119.56	956.48
NN	17.17	119.4	2050.098
OO	85.17	119.32	10160.844
PP	20.92	118.75	2484.25
QQ	69	118.4	8169.6
RR	16.17	118.1	1909.877
SS	99.5	117.92	11733.04
TT	38.17	117.97	4503.5169
UU	64.75	117.95	7627.2625
VV	28.92	117.9	3400.668
WW	11.92	117.96	1406.0832
XX	38.5	118.15	4548.775
YY	23.75	118.4	2812
ZZ	22.25	118.6	2631.86
AAA	12.5	118.75	1484.375
BBB	30.25	119	3599.75
Sum L =	1524.82	Sum L x E =	181903.1778
AGC =	Sum L x E / Sum L =		119.29

1 BUILDING HEIGHT CALCULATIONS
SCALE: 1" = 30'-0"

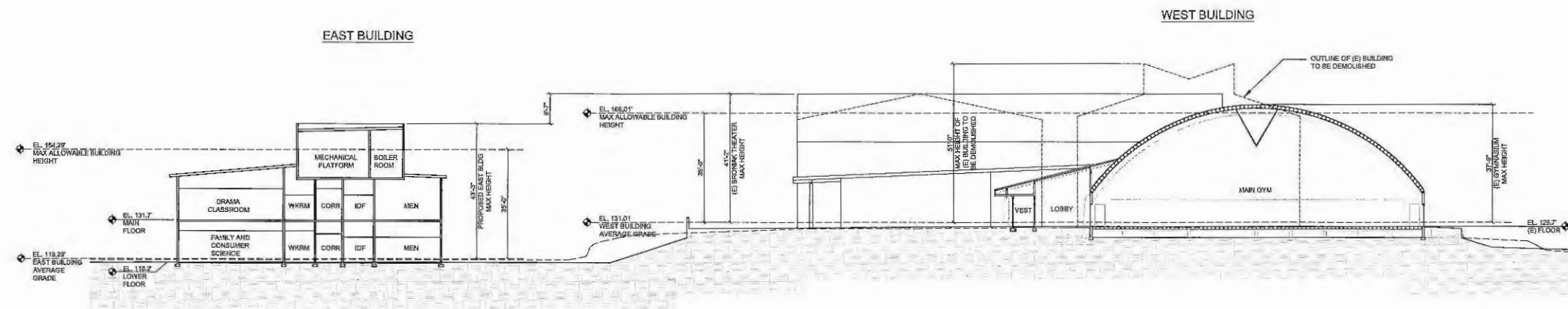
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Anacortes High School Replacement & Modernization
1600 20th Street
Anacortes, WA 98221
Anacortes School District No. 103

Date: 11/16/19
Project No. 1508
Drawn: _____
Checked: _____
Reviewed: _____

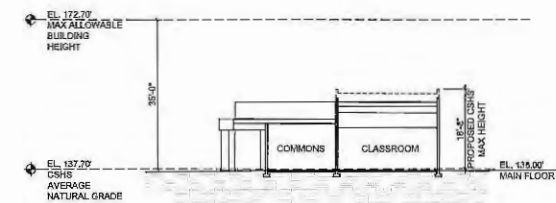
CONDITIONAL
USE PERMIT

Average Grade Calculations
Sheet No. **CUP.02**



1 BUILDING SECTIONS A-A
SCALE: 1/16"=1'-0"

CAP SANTE HIGH SCHOOL



2 BUILDING SECTIONS B-B
SCALE: 1/16"=1'-0"



**Anacortes High School
Replacement &
Modernization**
1800 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: 11/16/15
Project No. 1508

Drawn:

Checked:

Reviewed:

CONDITIONAL
USE PERMIT

Building
Sections

Sheet No.
CUP.03



1 EAST BUILDING EAST ELEVATION
SCALE: 1/16"=1'-0"



2 EAST BUILDING NORTH ELEVATION
SCALE: 1/16"=1'-0"



3 EAST BUILDING SOUTH ELEVATION
SCALE: 1/16"=1'-0"



4 EAST BUILDING WEST ELEVATION
SCALE: 1/16"=1'-0"



Anacortes High School Replacement & Modernization
1600 20th Street
Anacortes, WA 98221
Anacortes School District No. 103

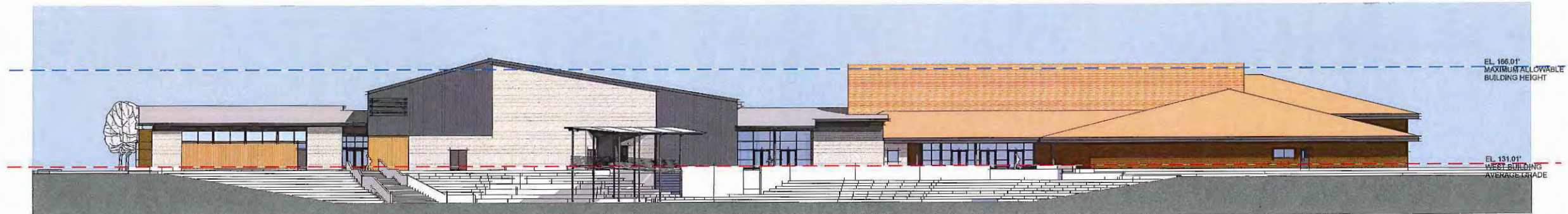
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Project No. 1505
Drawn: _____

CONDITIONAL
USE PERMIT

East
Building
Exterior
Elevations

Sheet No.

CUP.04



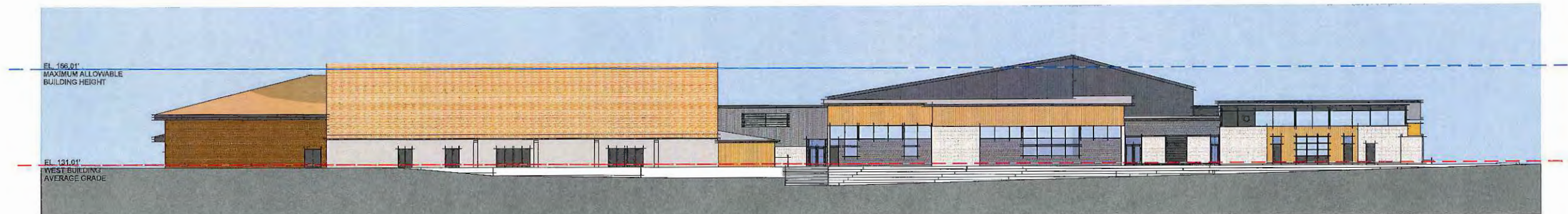
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2 WEST BUILDING NORTH ELEVATION
SCALE: 1/16"=1'-0"



3 WEST BUILDING SOUTH ELEVATION
SCALE: 1/16"=1'-0"



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



**Anacortes High School
Replacement &
Modernization**
1600 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: _____
Project No. 1526
Drawn: _____

CONDITIONAL
USE PERMIT

West
Building
Exterior
Elevations

Sheet No.
CUP.05



1 CAP SANTE HS EAST ELEVATION
SCALE: 1/16"=1'-0"



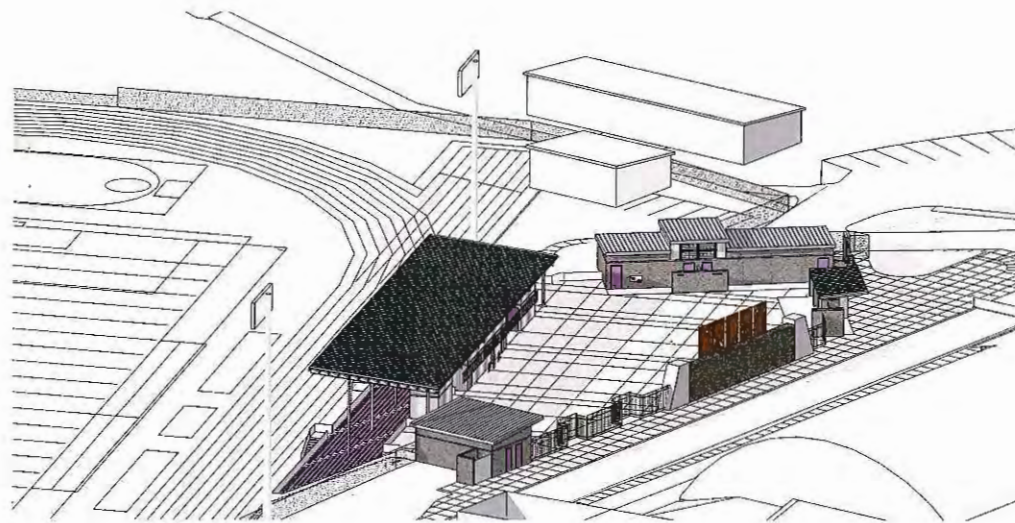
2 CAP SANTE HS NORTH ELEVATION
SCALE: 1/16"=1'-0"



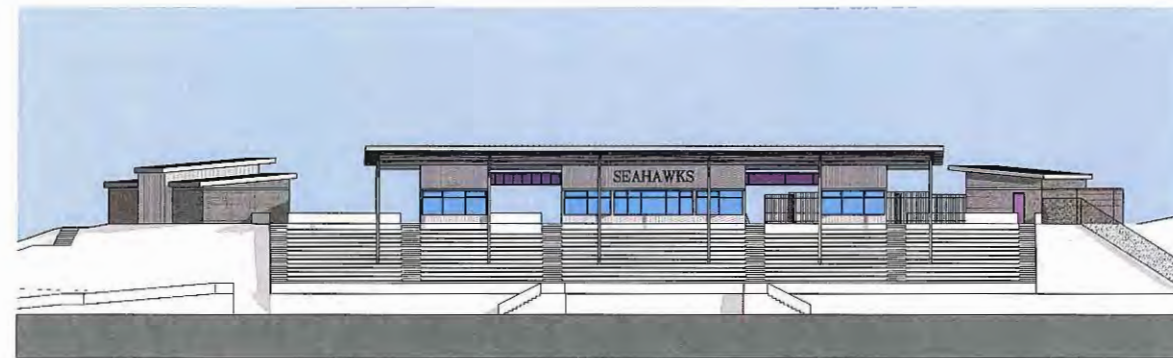
3 CAP SANTE HS NORTH ELEVATION
SCALE: 1/16"=1'-0"



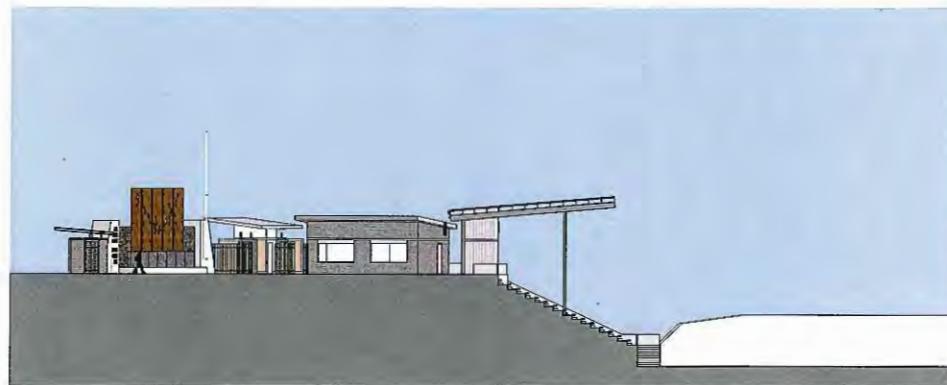
4 CAP SANTE HS SOUTH ELEVATION
SCALE: 1/16"=1'-0"



5 RICE FIELD PERSPECTIVE
SCALE: 1/16"=1'-0"



6 RICE FIELD WEST ELEVATION
SCALE: 1/16"=1'-0"



7 RICE FIELD NORTH ELEVATION/SECTION
SCALE: 1/16"=1'-0"



8 RICE FIELD PERSPECTIVE
SCALE: 1/16"=1'-0"



**Anacortes High School
Replacement & Modernization**
1600 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: _____
Project No: 1526
Drawn: _____

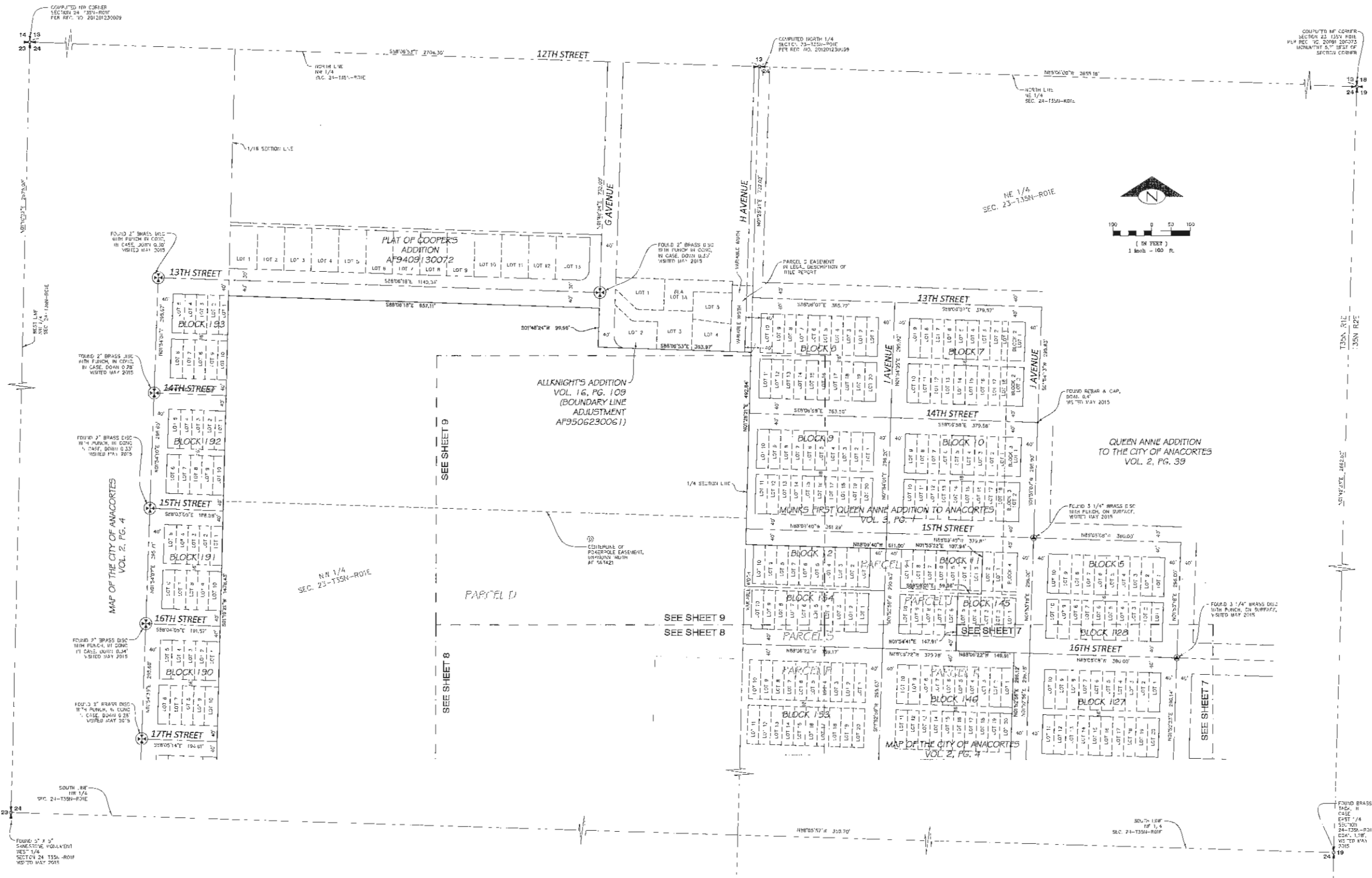
CONDITIONAL
USE PERMIT

Cap Sante
High School
Elevations &
Rice Field
Elevations &
Perspectives

Sheet No.

CUP.06

Figure 2



CONTROL DIAGRAM

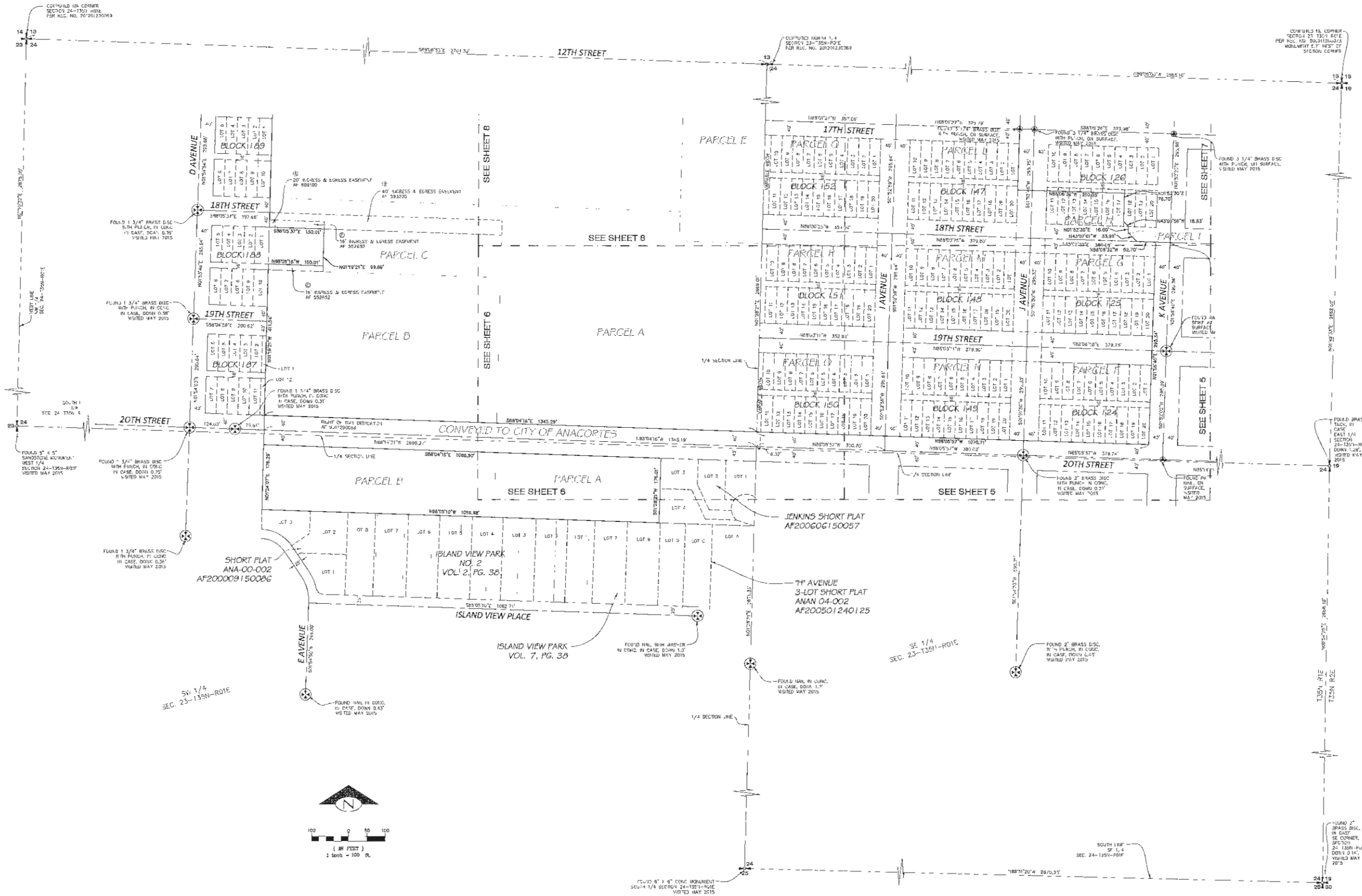
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ANACORTES SCHOOL DISTRICT

CITY OF ANACORTES,
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WASHINGTON

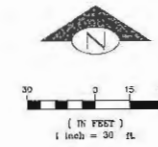
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BY	3
CHECKED BY	9
SCALE	1"=100'
DATE	7/15



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SEAL BUSINESS REGISTERED WASHINGTON 1989		SEAL BUSINESS REGISTERED WASHINGTON 1989	
BOOK BY IGM		CHECKED BY TRS	
DATE 7/15		DATE 7/15	
JOB NO. 2015058.00		SHEET 4 of 9	

CONTROL DIAGRAM

SEE SHEET 7



SEE SHEET 6

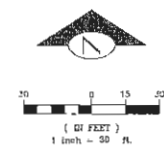


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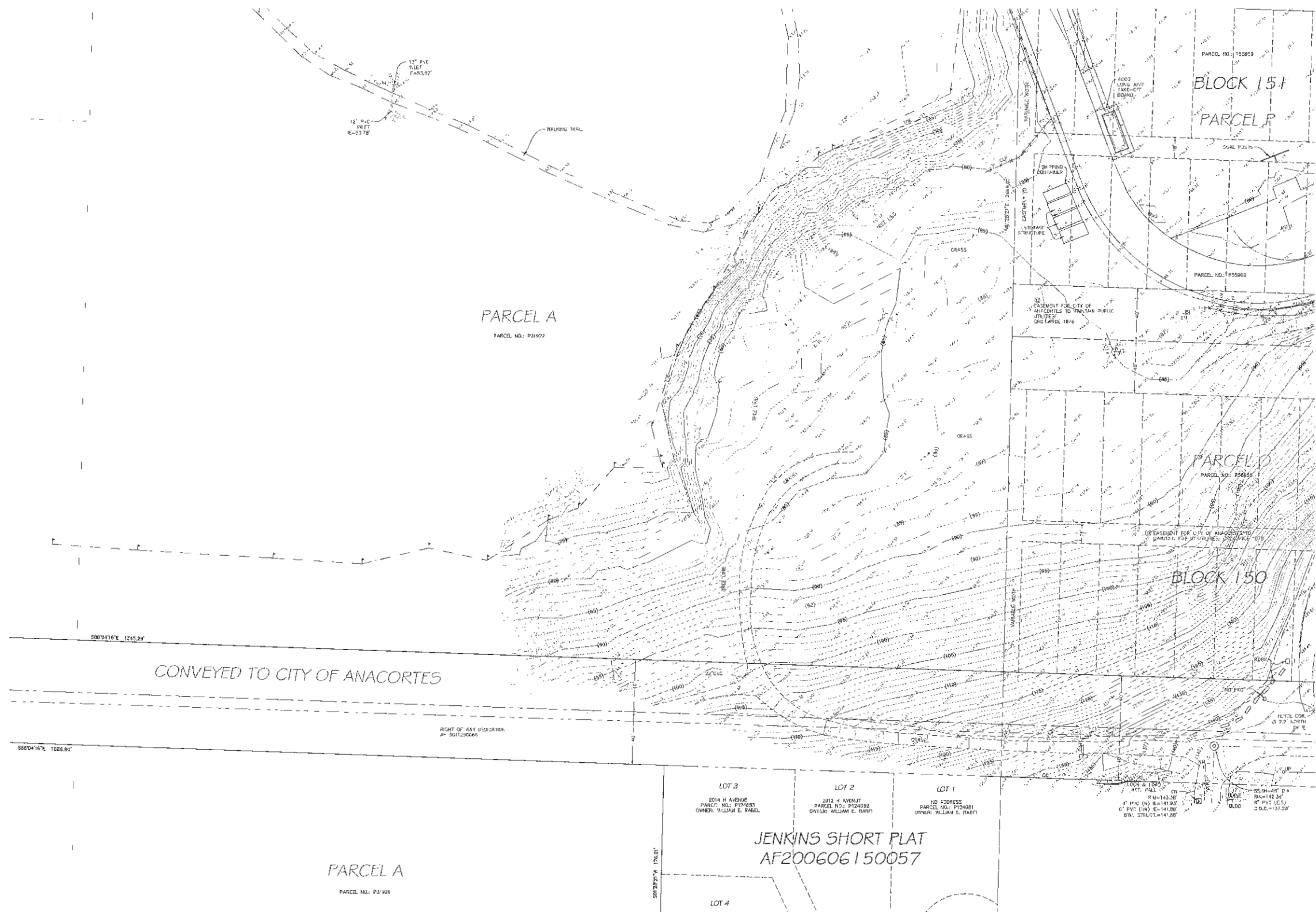


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ANACORTES SCHOOL DISTRICT
CITY OF ANACORTES, SNAAGT COUNTY, WASHINGTON

Drawn by: IGM
Checked by: TRS
Scale: 1"=30'
Date: 6/10/15
Job No.: 2015058.00
Sheet: 5 of 9



SEE SHEET 9



SEE SHEET 5

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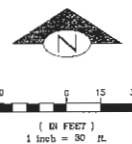


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ANACORTES HIGH SCHOOL
ANACORTES SCHOOL DISTRICT
CITY OF ANACORTES, SKAGIT COUNTY, WASHINGTON

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IGM	TRS
Scale	Date
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Job No.	
2015058.00	
Sheet	6 of 9

SEE SHEET 8

SEE SHEET 5

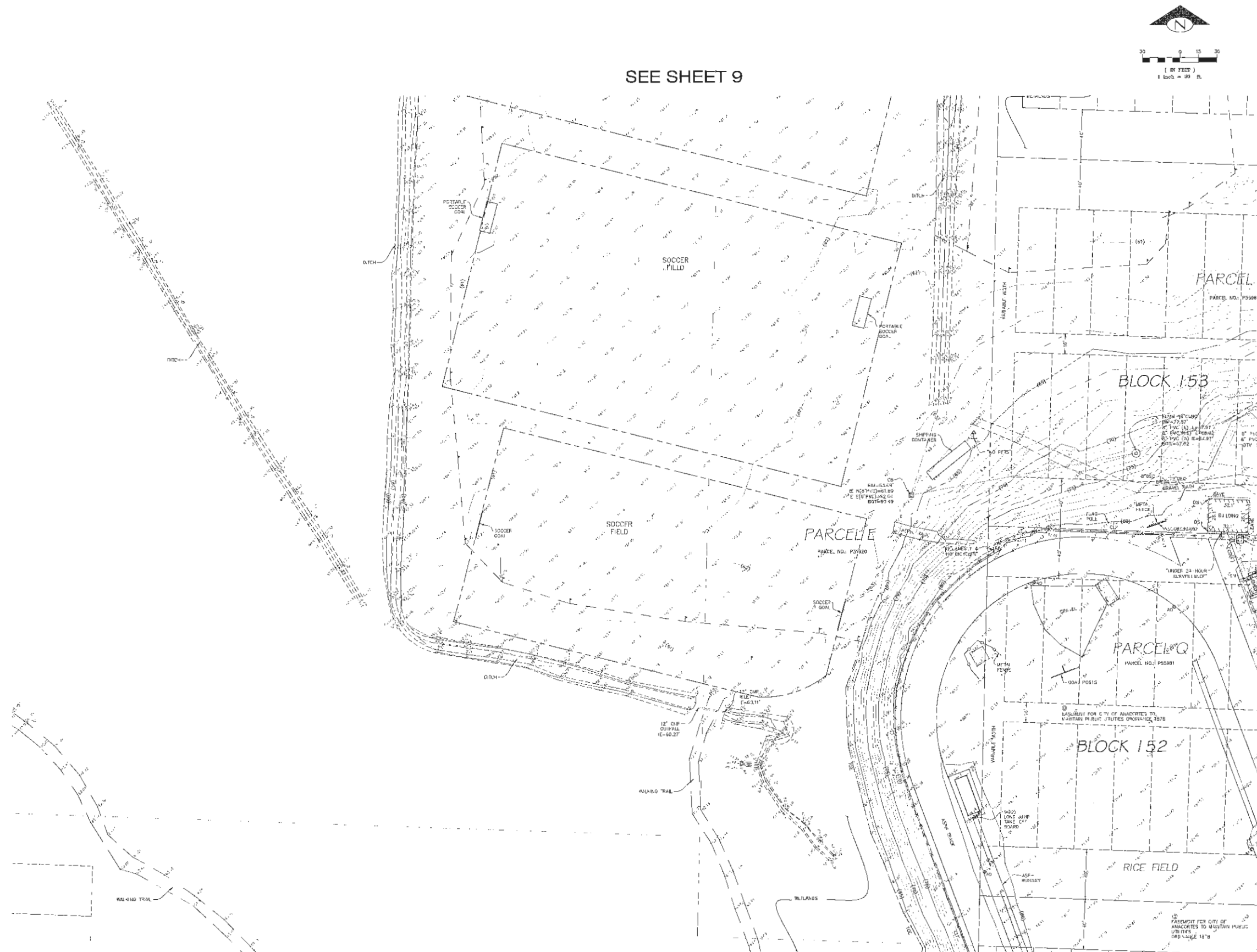


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ANACORTES SCHOOL DISTRICT

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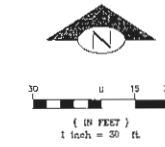


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Date: 6/10/15
Job No: 2015058.00
Sheet: 7 of 9

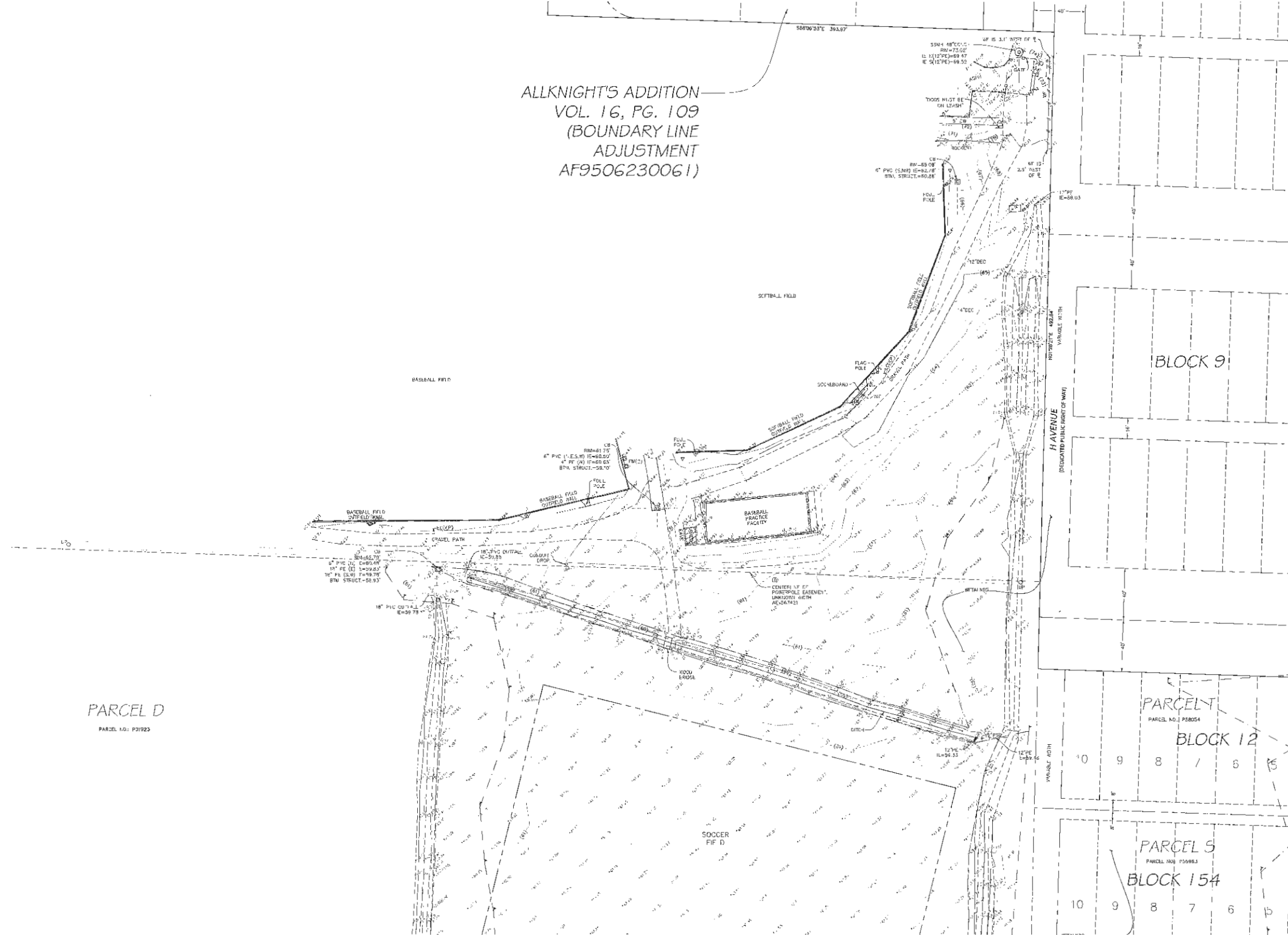


SEE SHEET 6

SEE SHEET 7



ALLKNIGHT'S ADDITION
VOL. 16, PG. 109
(BOUNDARY LINE
ADJUSTMENT
AF9506230061)



PARCEL D
PARCEL NO. P31923

PARCEL
PARCEL NO. P28054
BLOCK 12

PARCEL 5
PARCEL NO. P55983
BLOCK 154

SEE SHEET 8

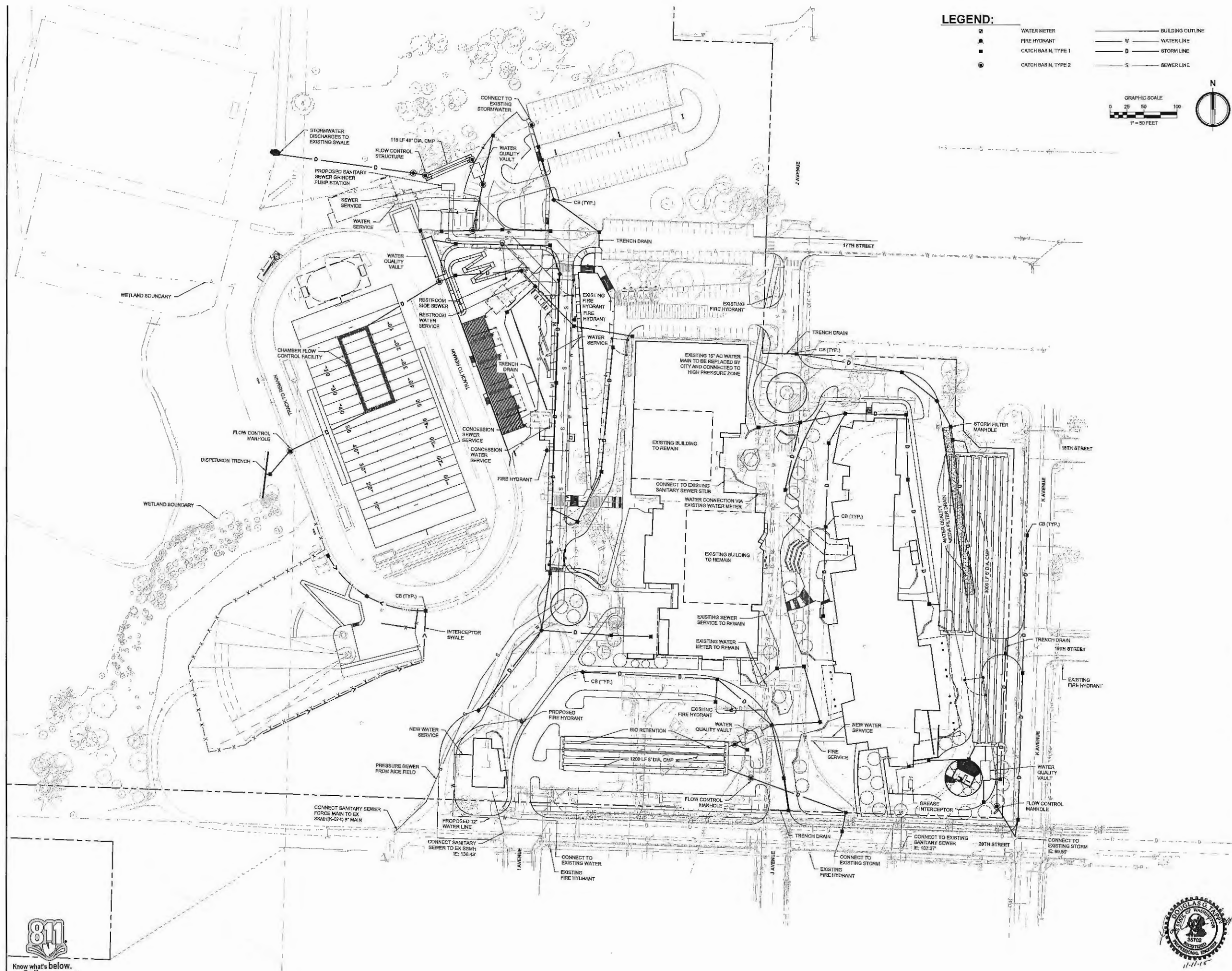
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ANACORTES SCHOOL DISTRICT

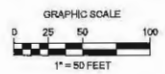
CITY OF ANACORTES,
SKEGOT COUNTY,
WASHINGTON

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Scale	1"=30'	Date	6/10/15
Job No.	2015058.00		
Sheet	9	of	9



LEGEND:

- | | | | |
|---|---------------------|-------|------------------|
| ● | WATER METER | — | BUILDING OUTLINE |
| ■ | FIRE HYDRANT | — W — | WATER LINE |
| ■ | CATCH BASIN, TYPE 1 | — D — | STORM LINE |
| ● | CATCH BASIN, TYPE 2 | — S — | SEWER LINE |



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ANACORTES HIGH SCHOOL
1600 20th Street
Anacortes, WA 98221
Anacortes School District No. 103

Date: 11/16/15
Project No: 1506
Drawn:

CONDITIONAL USE PERMIT SUBMITTAL



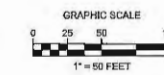
PRELIMINARY STORM DRAINAGE

Sheet No.

C1.0



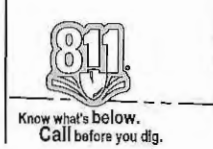
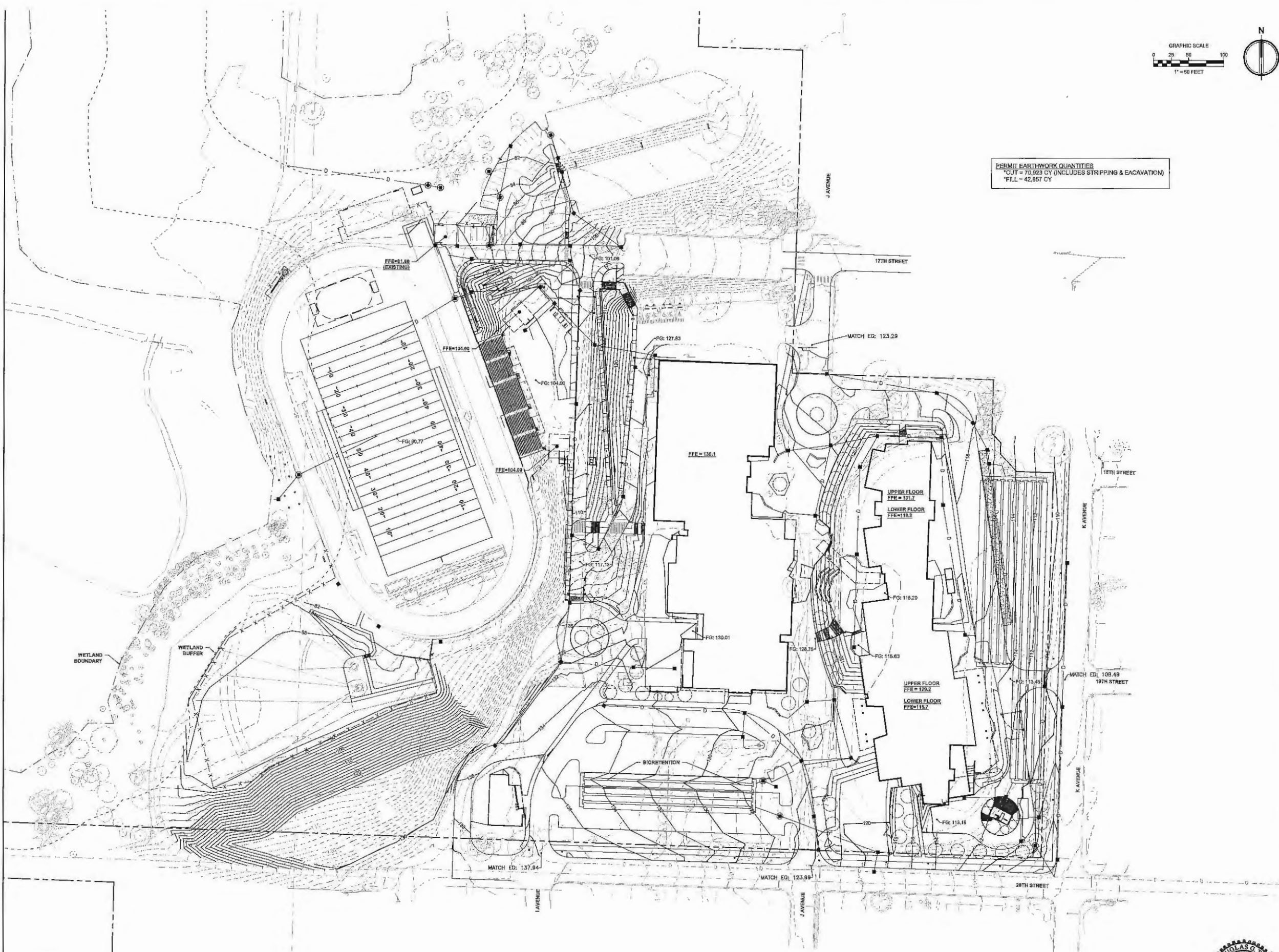
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PERMIT EARTHWORK QUANTITIES
*CUT = 70,923 CY (INCLUDES STRIPPING & ECAVATION)
*FILL = 42,867 CY

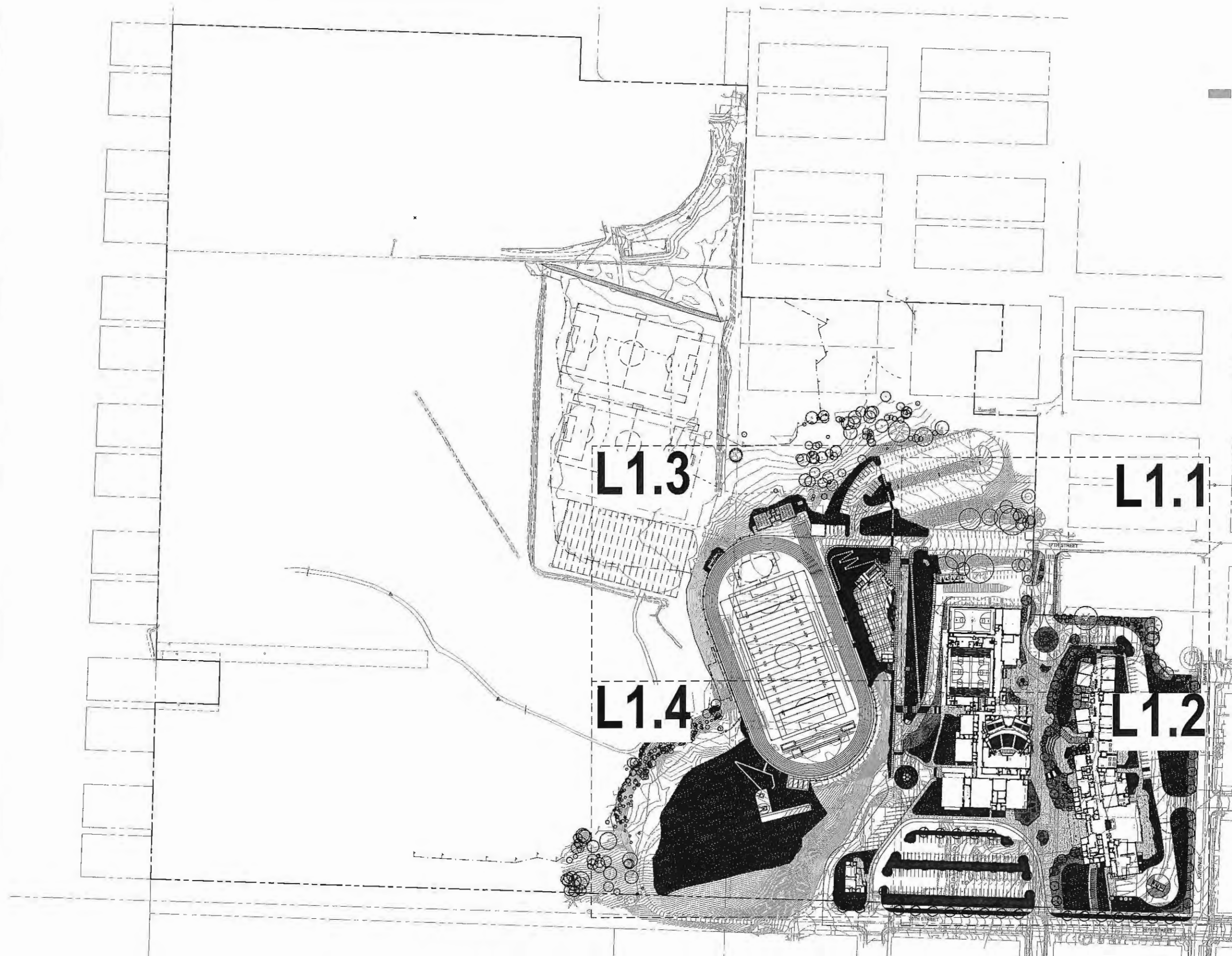



ANACORTES HIGH SCHOOL
1600 29th Street
Anacortes, WA 98221
Anacortes School District No. 102

Date: 11/16/15
Project No.: 1506
Discipline: _____

CONDITIONAL USE
PERMIT SUBMITTAL

PRELIMINARY GRADING PLAN
Sheet No. **C2.0**



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Anacortes High School Replacement & Modernization
1600 20th Street
Anacortes, WA 98221
Anacortes School District No. 193

Date: 10/13/2015
Project No.: 1509
Drawn: TY

CONDITIONAL USE PERMIT

Landscape Plan
Overall
Sheet No. **L1.0**

SCALE: 1"=80'-0"
0' 40' 80' 160'
WEISMANDESIGNGROUP
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2320 11TH AVENUE S.E.
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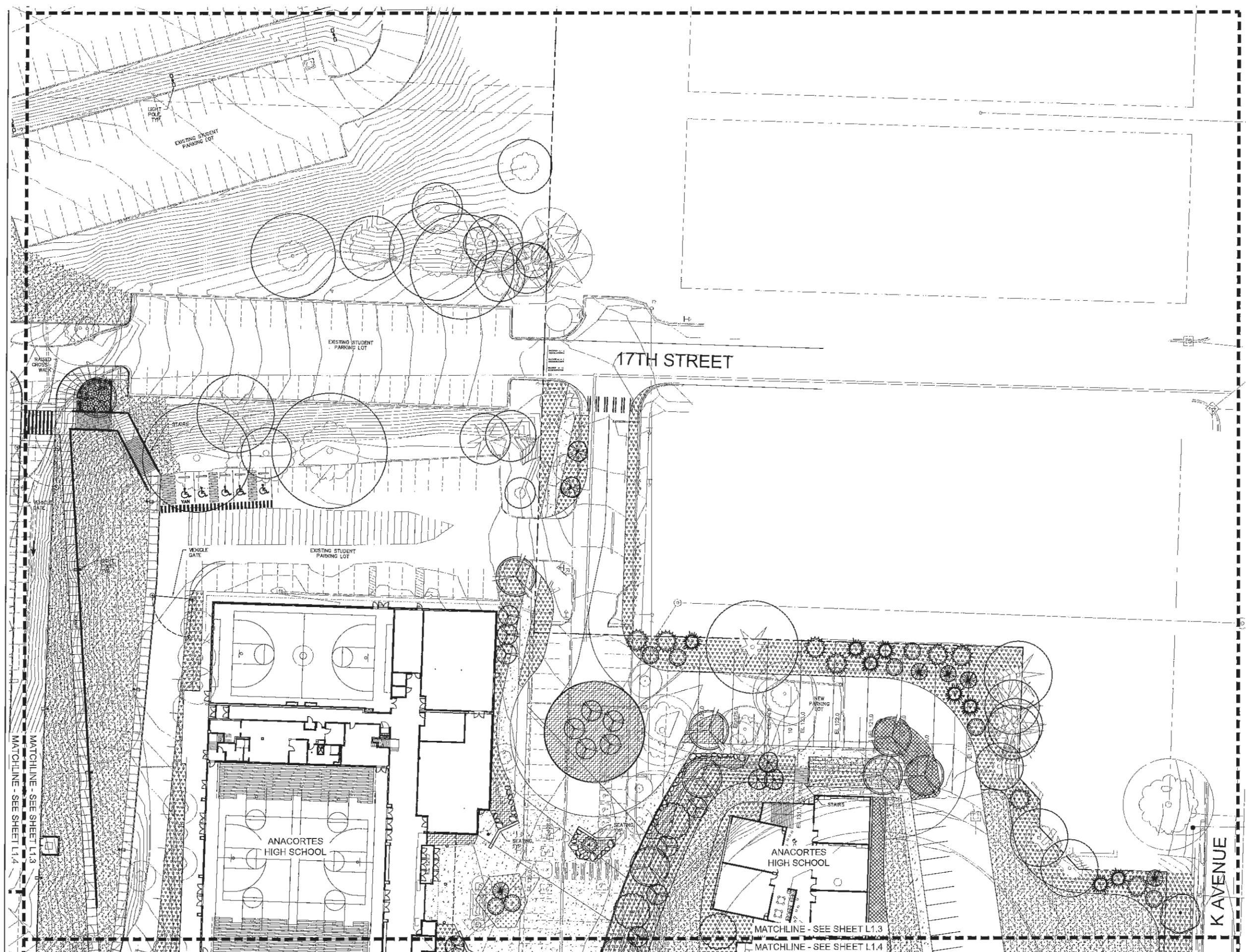
Anacortes High School Replacement & Modernization
1600 20th Street
Anacortes, WA 98221
Anacortes School District No. 163

Date: 10/13/2015
Project No. 1506
Drawn: TY

CONDITIONAL USE PERMIT

Landscape Plan
Enlargement

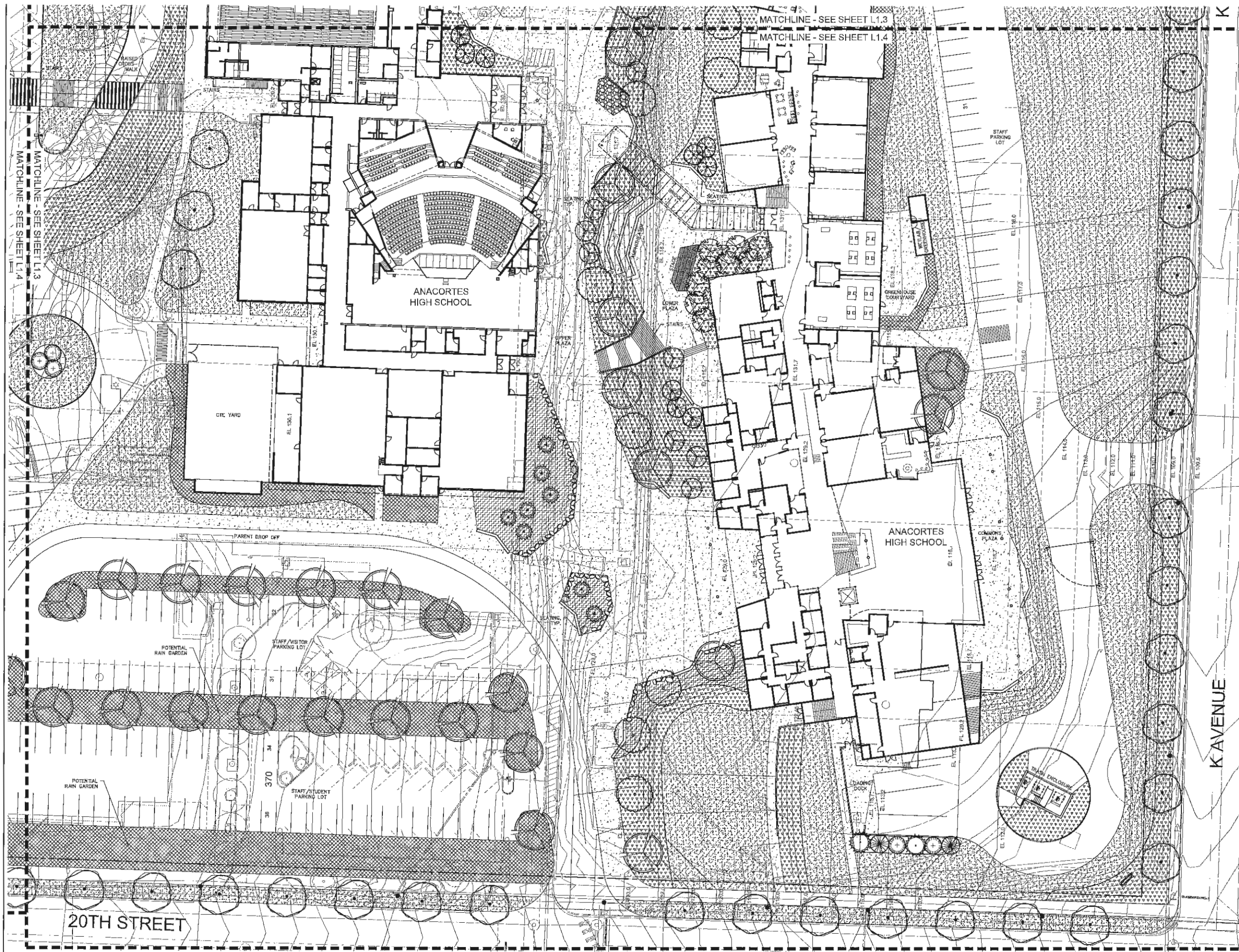
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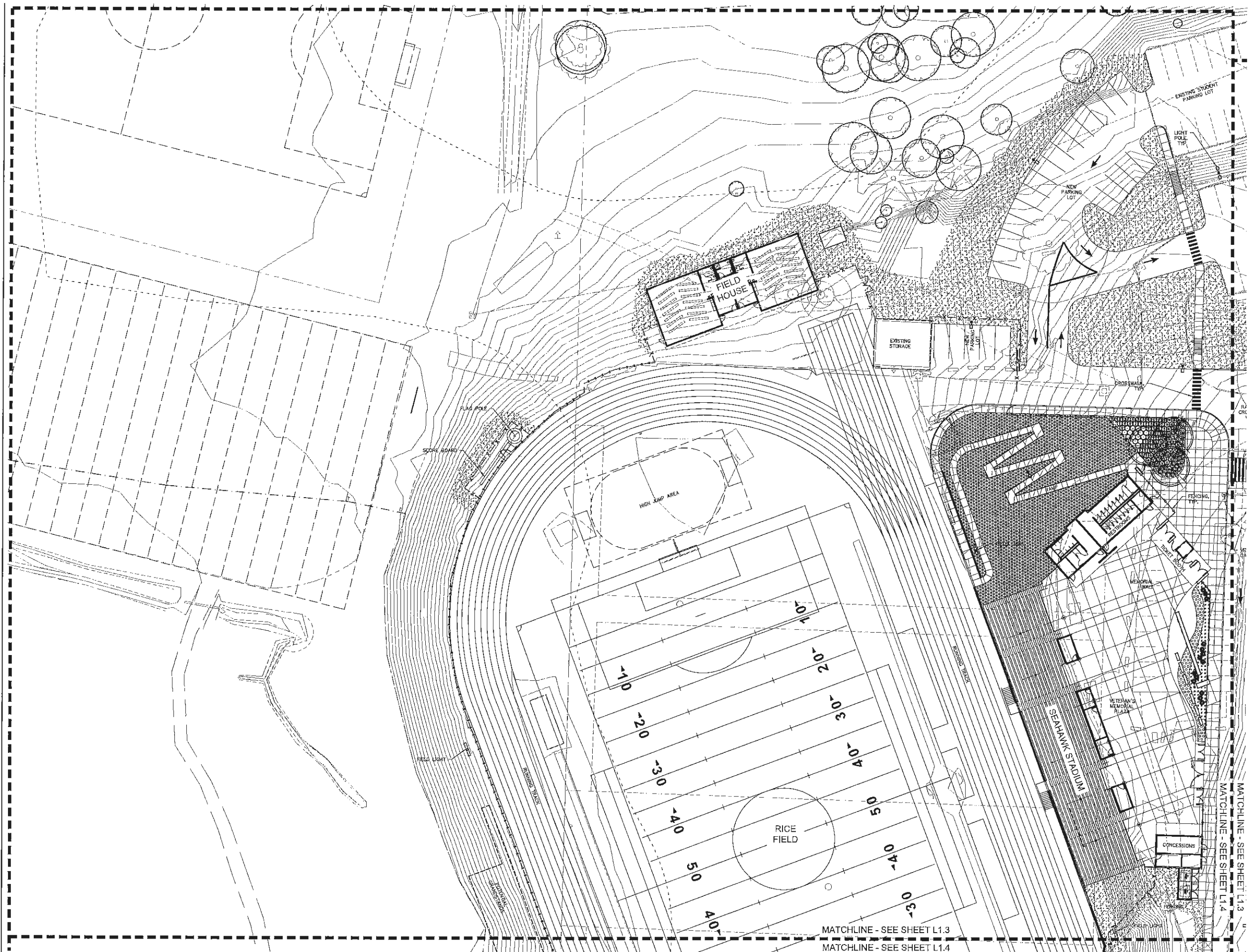


SCALE: 1"=20'-0"
0' 10' 20' 40'



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Anacortes High School Replacement & Modernization
1600 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

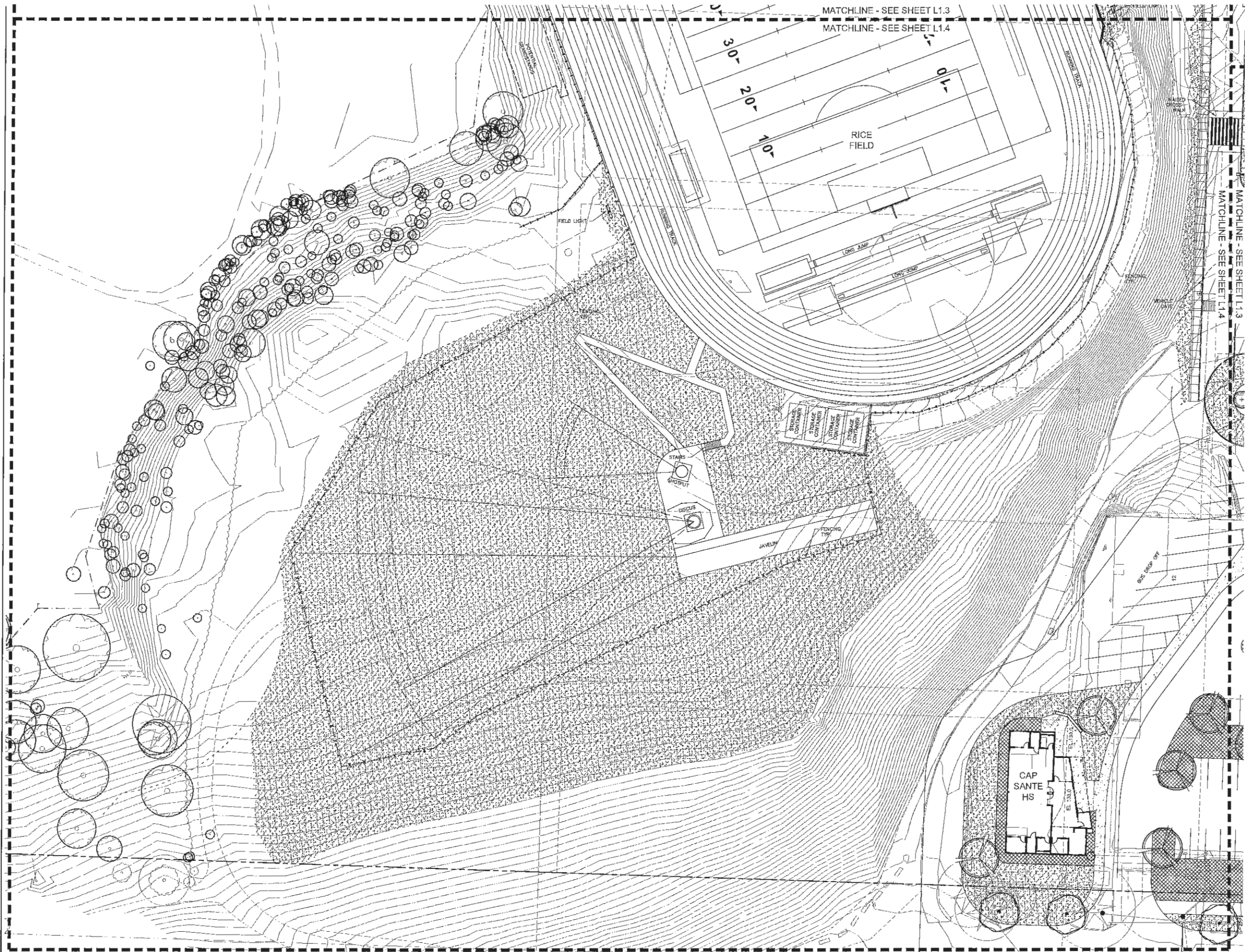
Date: 10/13/2018
Project No: 1506
Drawn: TY

CONDITIONAL USE PERMIT

Landscape
Plan
Enlargement

Sheet No.
L1.3

SCALE: 1"=20'-0"
0' 10' 20' 40'
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Replacement &
Modernization**
1600 20th Street
Anacortes, WA 99221
Anacortes School District
No. 103

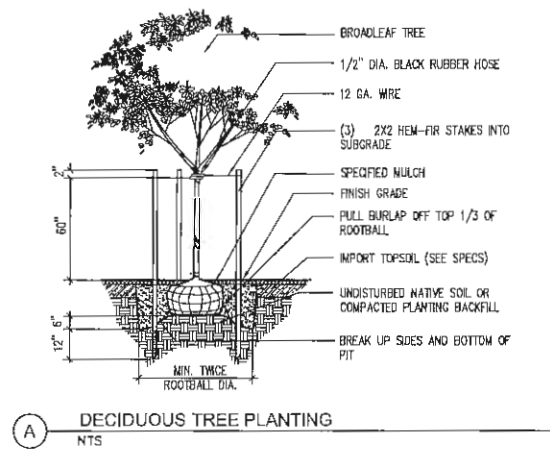
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Project No: 1508
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CONDITIONAL USE PERMIT

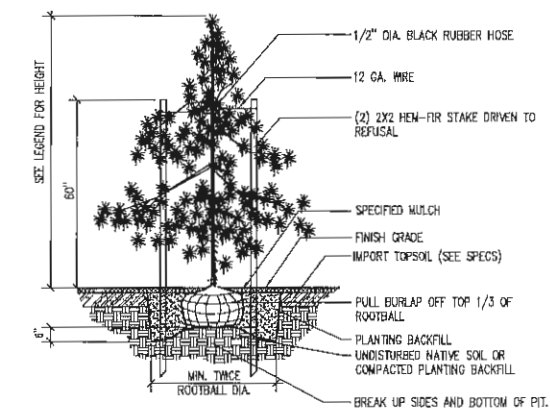
Landscape
Plan
Enlargement

Sheet No.
L1.4

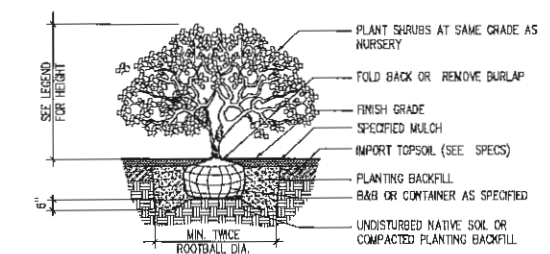
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WEISMANDESIGNGROUP
LANDSCAPE
CONSULTANT
2225 6th Avenue SE
SEATTLE, WA 98132
206.322-1752
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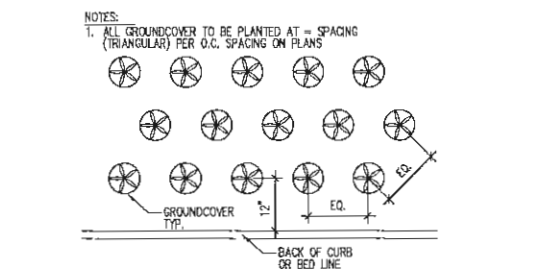
A DECIDUOUS TREE PLANTING
NTS



B CONIFEROUS TREE PLANTING
NTS



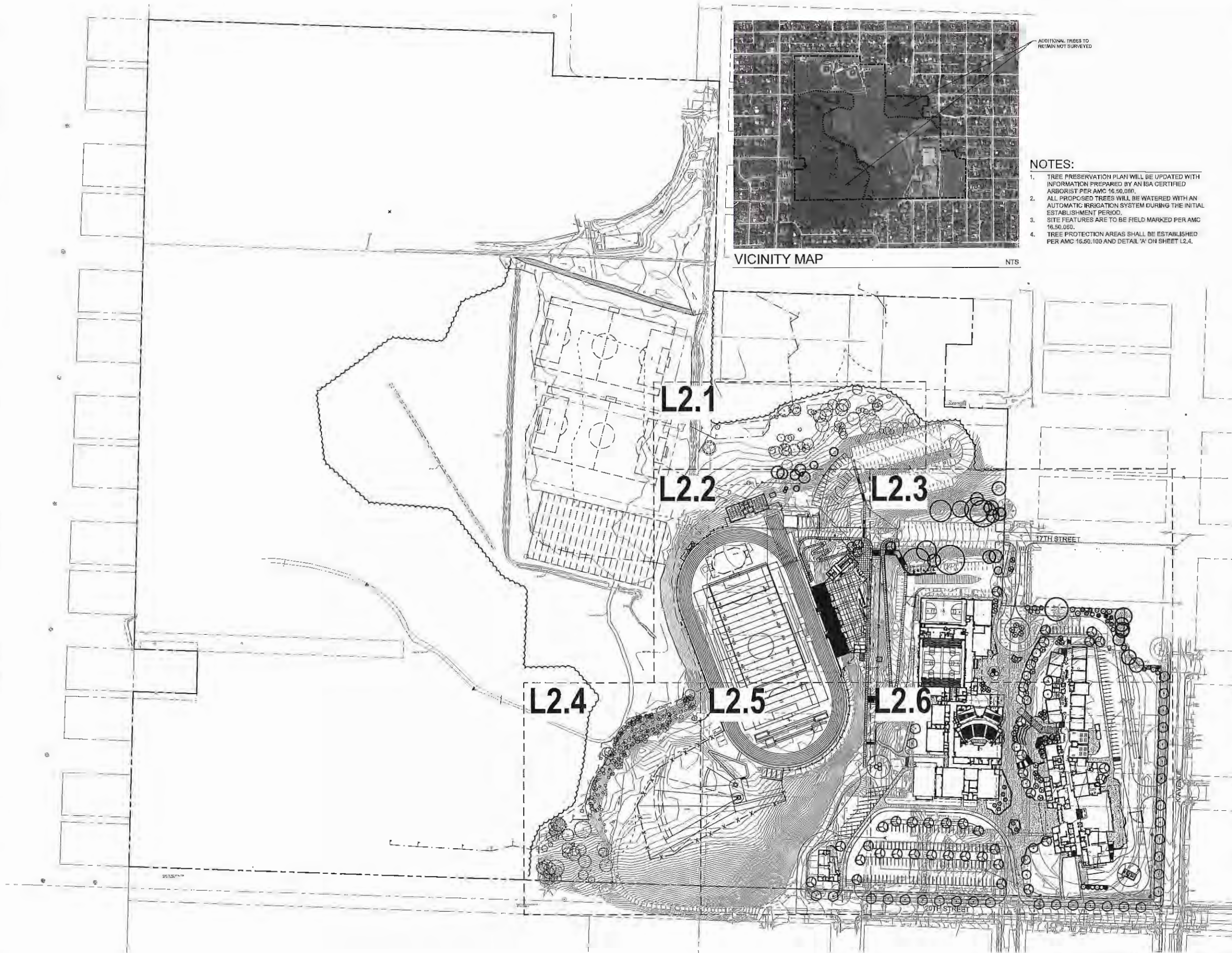
C SHRUB PLANTING
NTS



D GROUND COVER PLANTING
NTS

LANDSCAPE SCHEDULE		
SYMBOL		SIZE/CONDITION/REMARKS
DECIDUOUS SHADE TREES		
	ACER RUBRUM 'OCTOBER GLORY' / OCTOBER GLORY RED MAPLE	2\"/>
	ILIA CORDATA 'GREENSPIRE' / GREENSPIRE LITTLE LEAF LINDEN	2\"/>
	GINKGO BILBOA 'NAGYAR' / MAGYAR GINKGO	2\"/>
	POPULUS TREMULOIDES / QUAKING ASPEN	2\"/>
DECIDUOUS ACCENT TREES		
	CORNUS MAS / CORNELIAN CHERRY	1-1/2\"/>
	ACER GINATUM / VINE MAPLE	MULTI-STEMMED, MIN (3) 1\"/>
	AMELANCHIER X AUTUMN BRILLIANCE / SERVICEBERRY	MULTI-STEMMED, MIN (3) 1\"/>
CONIFEROUS TREES		
	PSEUDOTSUGA MENZIESII / DOUGLAS FIR	MIN. 8\"/>
	TSUGA KERTENSIANA / MOUNTAIN HEMLOCK	MIN. 8\"/>
	THUJA PLICATA 'HOBAN' / HOBAN CEDAR	MIN. 8\"/>
	PICEA OMORICA / SERBIAN SPRUCE	MIN. 8\"/>
	PINUS CONTORTA / SHORE PINE	MIN. 8\"/>
PARKING LOT AND ENTRY PLANTING AREAS		
	YUERNUM DAVIDI / DAVID YUERNUM	18\"/>
	NANDINA DOMESTICA 'GULF STREAM' / COMPACT HEAVENLY BAMBOO	18\"/>
	SPRAEA X BUNALDA 'ANTHONY WATERER' / ANTHONY WATERER SPRAEA	15\"/>
	PINUS MUGO / MUGO PINE	15\"/>
	PRUNUS LAUROGRASUS 'OTTO LUYKEN' / OTTO LUYKEN LAUREL	15\"/>
	CORRUS SERICEA 'KELSEY' / KELSEY DOGWOOD	15\"/>
	HELIOTRICHON SEMPERVIRENS / BLUE OAT GRASS	2 GAL. CONTAINERS, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
WOODLAND SLOPE CONCEPT PLANTING AREAS		
	MAHONIA AQUIFOLIUM / FALL OREGON GRAPE	30\"/>
	HOLDOUSUS DISCOLOR / OCEAN SPRAY	30\"/>
	RIBES SANGUINEUM / RED FLOWERING CURRANT	30\"/>
	ROSA RUGOSA / RUGOSA ROSE	24\"/>
	CEMLERIA CERASIFORMIS / INDIAN PLUM	24\"/>
	SYMPHORICARPUS ALBUS / SNOWBERRY	18\"/>
	VACCINIUM OVATUM / EVERGREEN HUCKLEBERRY	18\"/>
	LONGICERA PILEATA / BOX LEAF HONEYSUCKLE	15\"/>
	MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE	15\"/>
	GAULTHERIA SHALLOH / SALAL	1 GAL. CONTAINERS @ 24\"/>
	MAHONIA REPENS / CREEPING MAHONIA	1 GAL. CONTAINERS @ 24\"/>
FOREST ISLAND CONCEPT PLANTING AREAS		
	POLYSTICHUM MUNITUM / SWORD FERN	2 GAL. CONTAINER, MIN. 12 FRONDS, FULL AND BUSHY SPECIMENS
	MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE	15\"/>
	GAULTHERIA SHALLOH / SALAL	15\"/>
	MAIANthemum DILATATUM / FALSE LILY OF THE VALLEY	1 GAL. CONTAINER, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	IRIS DOUGLASSIANA / DOUGLAS IRIS	1 GAL. CONTAINER, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	NURSE LOG SALVAGED FROM ON-SITE TREE REMOVAL	SIZE AND LOCATION PER LANDSCAPE PLANS, SEE DETAIL
WATER'S EDGE CONCEPT PLANTING AREAS		
	ELYNUS GLIAGUS / BLUE DUNE LYME GRASS	2 GAL. CONTAINERS, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	HELIOTRICHON SEMPERVIRENS / BLUE OAT GRASS	2 GAL. CONTAINERS, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	PENNISETUM ALEPPECURIOIDES 'HAMELI' / HAMELI FOUNTAIN GRASS	2 GAL. CONTAINERS, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	ACHILLEA MILLEFOLIUM / YARROW	1 GAL. CONTAINER, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	FRAGERIA CHLOENIS / BEACH STRAWBERRY	1 GAL. CONTAINERS @ 24\"/>
	ARCTOSTAPHYLOS UVA-URSI / KINTIKINNICK	1 GAL. CONTAINERS @ 24\"/>
	DRIFTWOOD LOG SALVAGED FROM ON-SITE TREE REMOVAL	SIZE AND LOCATION PER LANDSCAPE PLANS, SEE DETAIL
	BEACH PEBBLES	SEE SPECS
	2 MAN BOULDER	SEE SPECS
	3 MAN BOULDER	SEE SPECS
	4 MAN BOULDER	SEE SPECS
ROCKY ISLAND CONCEPT PLANTING AREAS		
	SEDUM RUPESTRIS 'ANGELINA' / ANGELINA STONECROP	1 GAL. POTS, FULL AND BUSHY, SPACING AS SHOWN ON PLANS
	SEDUM SPURUM 'JOHN DREECH' / CAUCASIAN STONECROP	1 GAL. POTS, FULL AND BUSHY, SPACING AS SHOWN ON PLANS
	SEDUM ALBUM 'CORAL CARPET' / CORAL CARPET STONECROP	1 GAL. POTS, FULL AND BUSHY, SPACING AS SHOWN ON PLANS
	SEMPERVIVUM TECTORUM 'GREENIT' / GREEN TENS AND CHICKS	1 GAL. POTS, FULL AND BUSHY, SPACING AS SHOWN ON PLANS
	SEMPERVIVUM ARACHNOIDEUM 'CEBENESE' / CEBENESE COBWEB HOUSELEEK	1 GAL. POTS, FULL AND BUSHY, SPACING AS SHOWN ON PLANS
	1 MAN BOULDER	SEE SPECS
	2 MAN BOULDER	SEE SPECS
	3 MAN BOULDER	SEE SPECS
	4 MAN BOULDER	SEE SPECS

LANDSCAPE SCHEDULE		
SYMBOL		SIZE/CONDITION/REMARKS
SHRUBS		
	YUERNUM DAVIDI / DAVID YUERNUM	18\"/>
	NANDINA DOMESTICA 'GULF STREAM' / COMPACT HEAVENLY BAMBOO	18\"/>
	SPRAEA X BUNALDA 'ANTHONY WATERER' / ANTHONY WATERER SPRAEA	18\"/>
	PINUS MUGO VAR. PUMILO / DWARF MUGO PINE	15\"/>
	PRUNUS LAUROGRASUS 'OTTO LUYKEN' / OTTO LUYKEN LAUREL	15\"/>
	CORRUS SERICEA 'KELSEY' / KELSEY DOGWOOD	15\"/>
	ROSA RUGOSA / RUGOSA ROSE	24\"/>
	LONGICERA PILEATA / BOX LEAF HONEYSUCKLE	15\"/>
	MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE	15\"/>
ORNAMENTAL GRASSES, GROUND COVER AND PERENNIALS		
	MISCANTHUS SINENSIS 'LITTLE KITTEN' / LITTLE KITTEN MAIDEN GRASS	2 GAL. CONTAINERS, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	HELIOTRICHON SEMPERVIRENS / BLUE OAT GRASS	2 GAL. CONTAINERS, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	FRAGERIA CHLOENIS / BEACH STRAWBERRY	1 GAL. CONTAINERS @ 24\"/>
	RIBES SEMPERVIRENS 'AUTUMN SNOW' / PURITY CANDYTUFF	1 GAL. CONTAINERS @ 24\"/>
	CALLUNA VULGARIS 'FIREFLY' / FIREFLY SCOTCH HEATHER	1 GAL. CONTAINER, FULL AND BUSHY, SPACING AS SHOWN ON PLAN
	SEEDED LAWN	SEE SPECS
	EXISTING TREE TO REMAIN	PRESERVE AND PROTECT



VICINITY MAP

NTS

ADDITIONAL TREES TO
REMAIN NOT SURVEYED

NOTES:

1. TREE PRESERVATION PLAN WILL BE UPDATED WITH INFORMATION PREPARED BY AN ISA CERTIFIED ARBORIST PER AMC 16.50.050.
2. ALL PROPOSED TREES WILL BE WATERED WITH AN AUTOMATIC IRRIGATION SYSTEM DURING THE INITIAL ESTABLISHMENT PERIOD.
3. SITE FEATURES ARE TO BE FIELD MARKED PER AMC 16.50.060.
4. TREE PROTECTION AREAS SHALL BE ESTABLISHED PER AMC 16.60.100 AND DETAIL 'A' ON SHEET L2.4.



**Anacortes High School
Replacement &
Modernization**
1600 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: 10/13/2015
Project No. 1509
Drawn: TY

CONDITIONAL USE PERMIT

Tree Preservation
Plan

Overall

Sheet No.
L2.0

SCALE: 1"=80'-0"
0' 40' 80' 160'



WEISMANDESIGNGROUP

LANDSCAPE ARCHITECT
208 S. MARSHALL ST.
SEATTLE, WA 98102
206-322-1772
WWW.WDGR.COM



Anacortes High School Replacement & Modernization
1600 20th Street
Anacortes, WA 98221
Anacortes School District No. 103

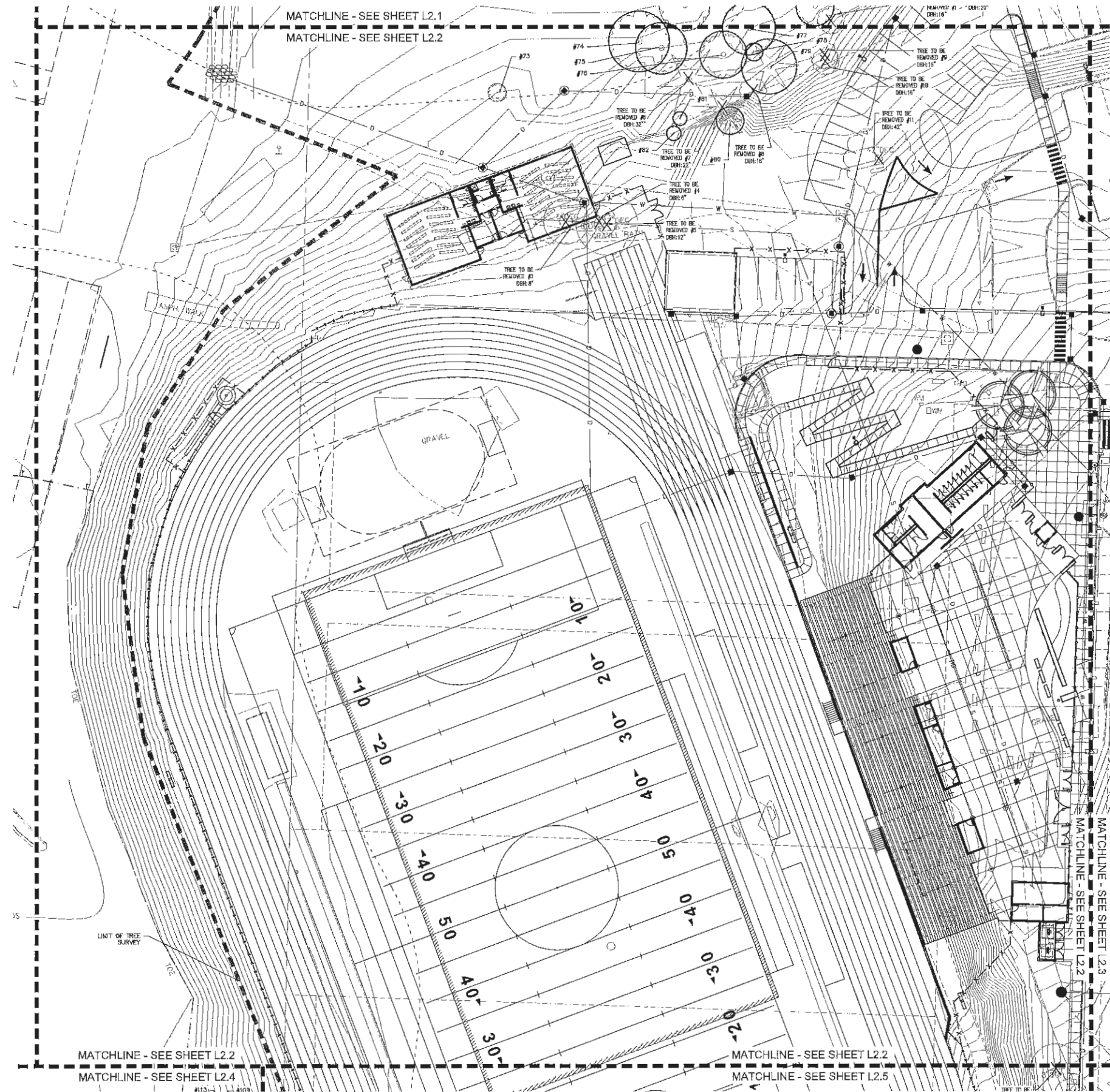
Date: 10/13/2019
Project No. 1506
Drawn: TY

CONDITIONAL USE PERMIT

Tree Preservation Plan

Enlargement

Sheet No. **L2.2**



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WEISMANDESIGNGROUP
LANDSCAPE CONSULTANT
2229 2 WARD BLVD. STE. 100
SEATTLE, WA 98112
206-322-4732
WWW.WEISMANDSGROUP.COM



**Anacortes High School
Replacement &
Modernization**
1609 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: 10/13/2015
Project No. 1505
Drawn: TY

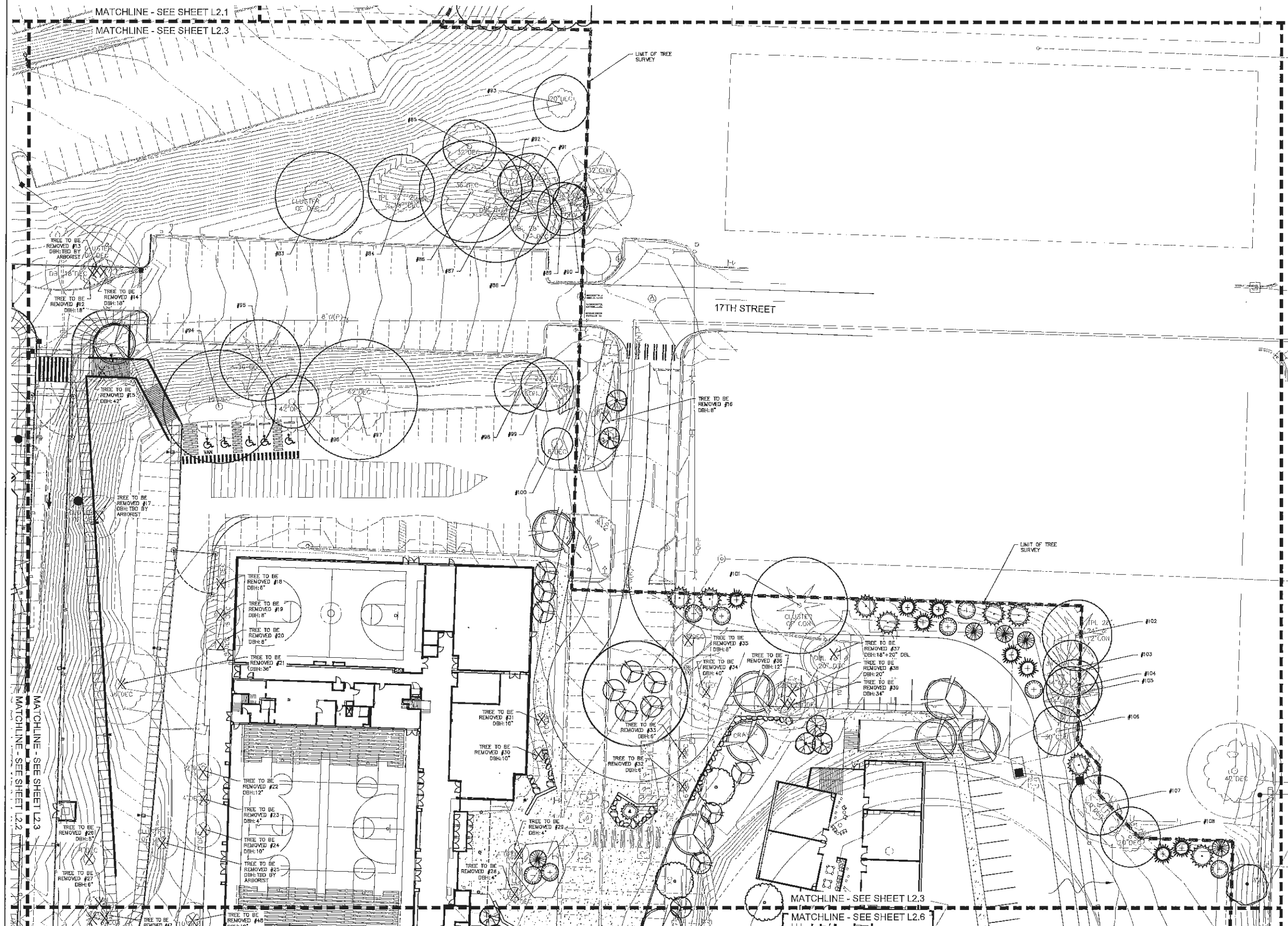
CONDITIONAL USE PERMIT

Tree Preservation
Plan

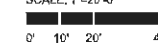
Enlargement

Sheet No.

L2.3

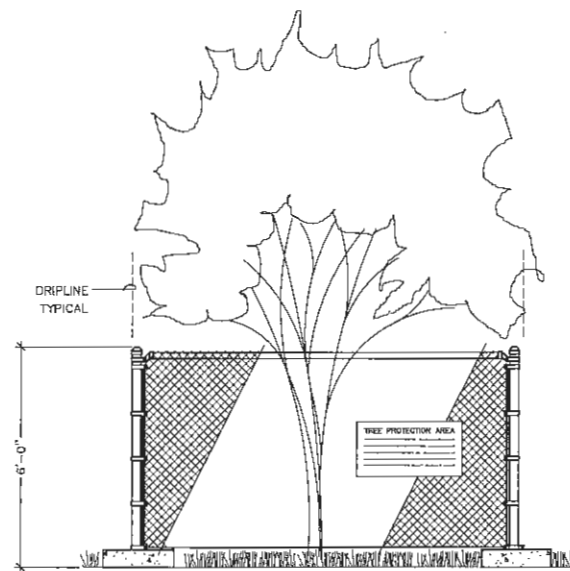


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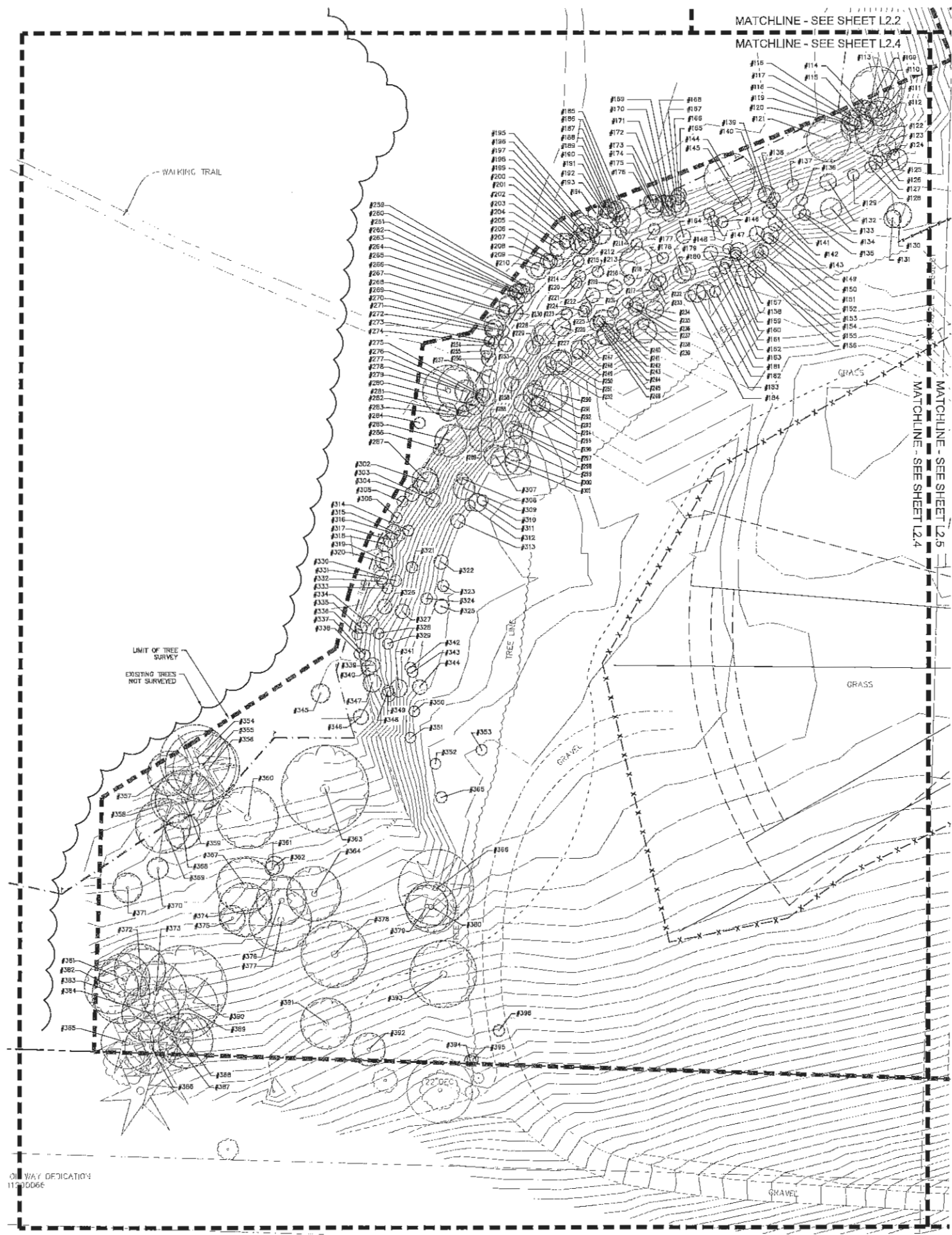
WEISMANDESIGNGROUP

LANDSCAPE
CONSULTANT
2019 E HADSON ST
SEATTLE WA 98112
206-322-1732
WWW.WDGROUP.COM



- NOTES:**
1. A 6-FOOT HIGH TEMPORARY CHAIN LINK FENCE MUST BE PLACED AT THE DRIPLINE OF TREES FOUR BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF DEMO & EARTHWORK. NOTIFY THE CLEARING AND GRADING INSPECTOR TO GET BOTH THE INSPECTION AND WRITTEN APPROVAL OF FLAGGED TREES AND TEMPORARY PROTECTION FENCING AROUND TREES TO BE SAVED PER THE APPROVED CLEARING AND GRADING PLAN.
 2. SIGNAGE NOTING THAT TREES WITHIN THE FENCING ARE TO BE SAVED, AND THAT NO MATERIAL STORAGE IS ALLOWED WITHIN THE FENCING SHALL BE PLACED ON THE FENCE IN A CONSPICUOUS LOCATION.
 3. NO STOCKPILING OF MATERIAL AND NO VEHICULAR TRAFFIC ARE ALLOWED WITHIN THE LIMITS OF THE TEMPORARY FENCING. ONLY LIMITED INTRUSION INTO TREE DRIPZONES WILL BE ALLOWED AS SHOWN ON THE APPROVED PLANS. FILLING, EXCAVATING, AND CLEARING MUST BE ACCOMPLISHED BY HAND METHODS ONLY.
 4. ROOTS OF TREES TO BE SAVED WHICH ARE DAMAGED DURING CONSTRUCTION WILL BE TREATED IN THE FOLLOWING WAY:
FOR DAMAGED ROOTS OVER 1" IN DIAMETER, MAKE A CLEAN, STRAIGHT CUT TO REMOVE THE DAMAGED PORTION OF THE ROOT. ALL EXPOSED ROOTS WILL BE TEMPORARILY COVERED WITH DAMP BURLAP OR WOOD SHAVING TO PREVENT DRYING AND COVERED WITH EARTH AS SOON AS POSSIBLE.
 5. SEE PLAN FOR LOCATION OF EXISTING TREES TO RECEIVE TEMPORARY FENCING.

F TREE PROTECTION FENCING
NTS



SCALE: 1"=20'-0"
0' 10' 20' 40'

WEISMANDESIGNGROUP
LANDSCAPE ARCHITECTS
2328 S WADESBURY
SEATTLE, WA 98112
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ARCHITECTURE
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SEASIDE, WA 98138
P 425.833.9348 F 425.833.9667

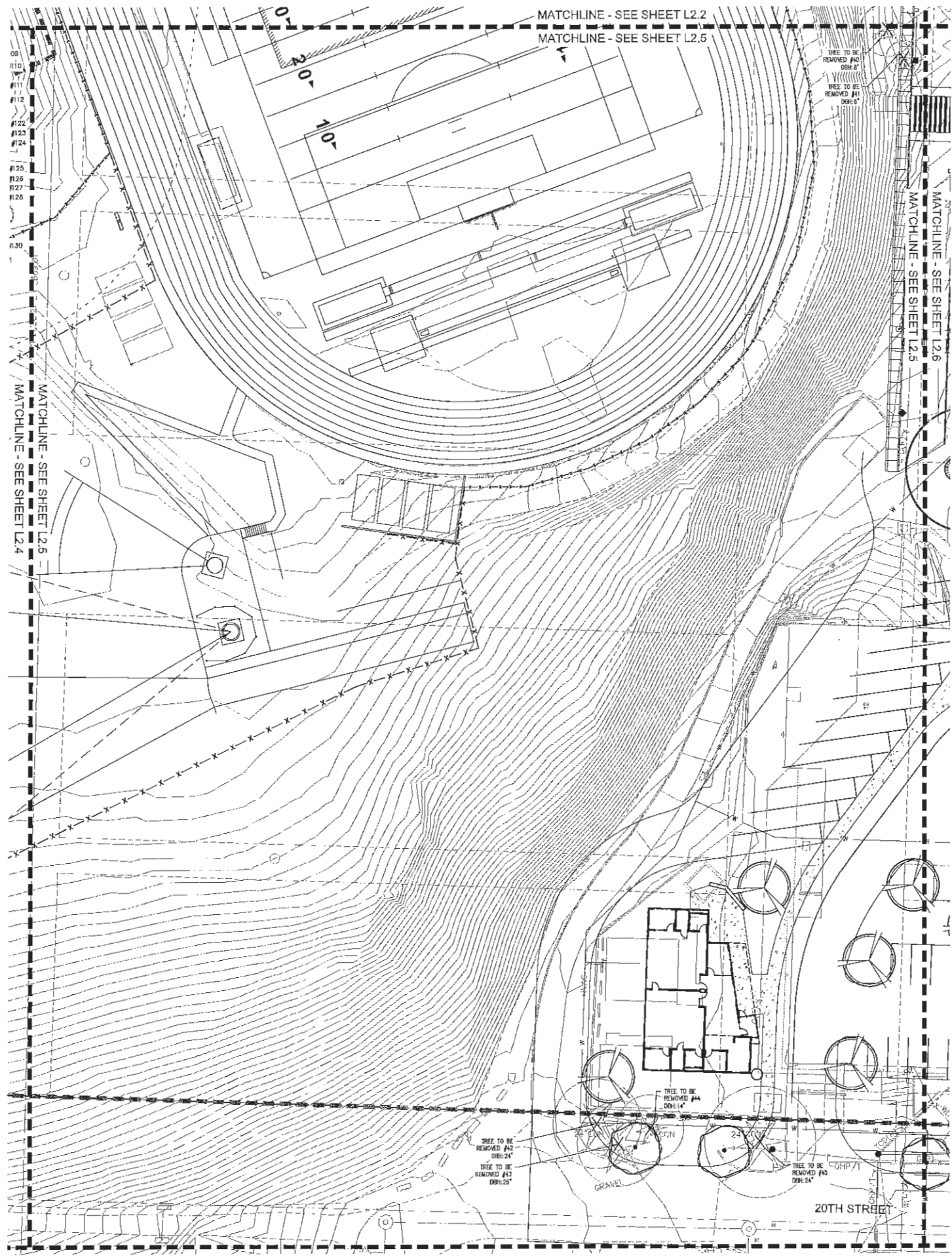


Anacortes High School Replacement & Modernization
1600 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: 10/13/2015
Project No. 1508
Drawn: TY

CONDITIONAL USE PERMIT

Tree Preservation Plan
Enlargement
Sheet No. **L2.4**



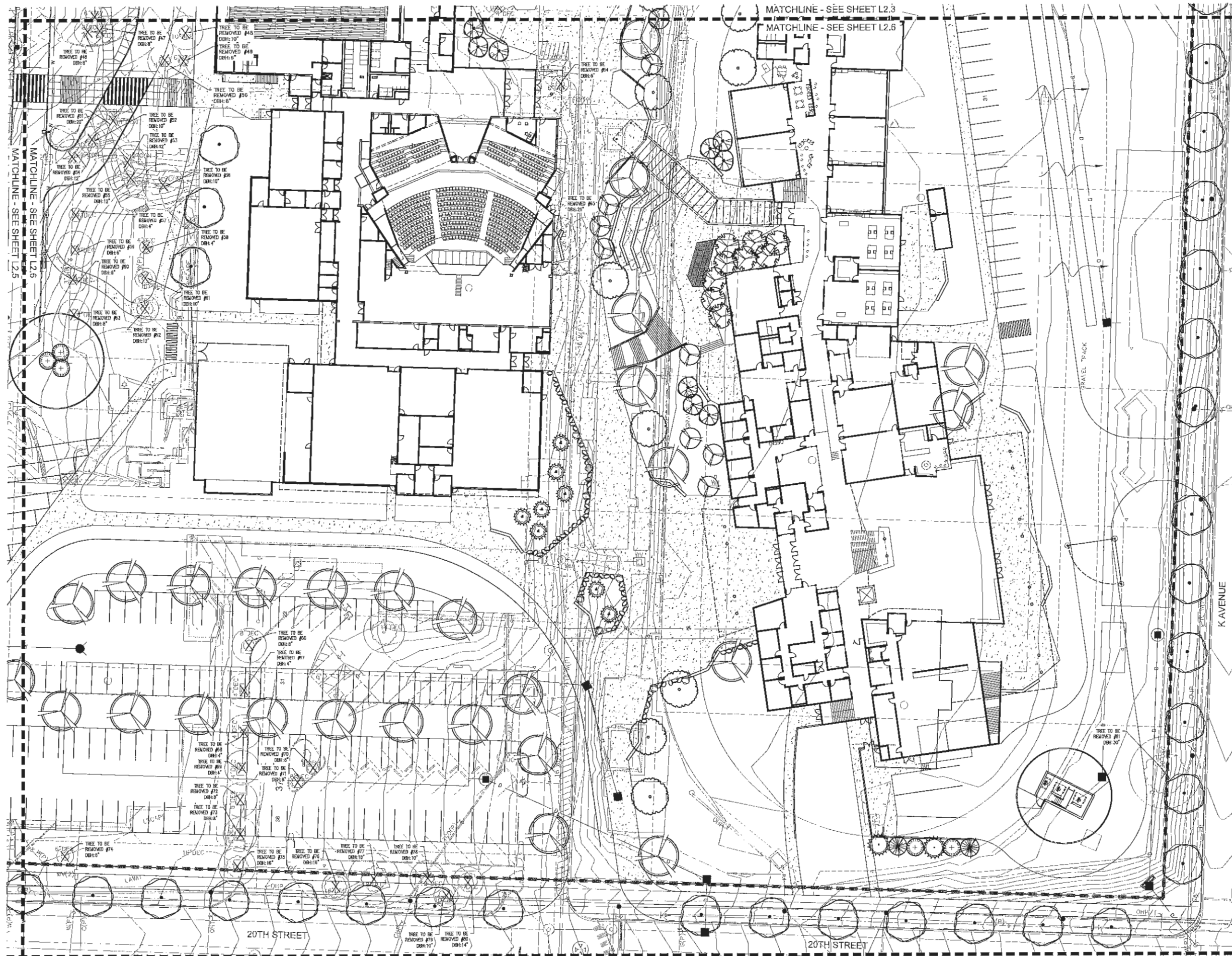
**Anacortes High School
Replacement & Modernization**
1600 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: 10/13/2015
Project No.: 1508
Drawn: TY

CONDITIONAL USE PERMIT

Tree Preservation
Plan
Enlargement

Sheet No.
L2.5



**Hutteball
& Oremus**
ARCHITECTURE
1410 Lake Washington Blvd. NE, Suite 208
Bellevue, WA 98005
P 425.428.8944 F 425.528.9067



Anacortes High School Replacement & Modernization
1900 20th Street
Anacortes, WA 98221
Anacortes School District
No. 103

Date: 10/13/2015
Project No.: 1505
Drawn: TY

CONDITIONAL USE PERMIT

Tree Preservation Plan

Enlargement

Sheet No. **L2.6**

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WEISMANDESIGNGROUP
LANDSCAPE CONSULTANT
1300 6th Avenue, Suite 100
Seattle, WA 98101
206.322.1732
WWW.WDGROUP.COM



Planning Commission Agenda Bill

Meeting Date: 1/13/2016 **Agenda Item:** #5b

Subject: Public Hearing – 2016 Comprehensive Plan Update: Land Use & Housing Elements

Staff Contact: Libby Grage, Planning Manager

Approved for Submittal to PC by	
	Laurie Gere, Mayor
x	Don Measamer, PCED Director

Action Type	
	Ordinance No.
	Code Revision
	Resolution No.
X	Public Hearing
X	Staff Report
X	Discussion

Summary Statement: This evening the Planning Commission will hold a public hearing to take public input regarding the Environment & Conservation (carried over from the 1/6/16 meeting), Land Use and Housing elements of the [Draft 2016 Comprehensive Plan](#). Staff has prepared an overview of each of the referenced elements, including summaries of substantive public comments received regarding the 1st draft, staff responses and recommendations.

Background: Following is the updated remaining schedule for PC public meetings on the 2016 Comp. Plan update.

Date/Time

Wednesday, January 6, 2016 at 6pm:

Wednesday, January 13, 2016 at 6pm:

Wednesday, January 20, 2016 at 6pm:

Wednesday January 27, 2016 at 6pm:

Wednesday, February 3, 2016 at 6pm:

Wednesday, February 10, 2016 at 6pm:

Wednesday, February 17, 2016 at 6pm:

Wednesday, February 24, 2016 at 6pm:

Topic / Element

Public hearing - Parks, Recreation & Open Space and Environment & Conservation (public hearing)

Public hearing - Environment & Conservation (carried over from 1/6/16), Land Use and Housing

Public hearing - Economic Development, Capital Facilities and Utilities

Public hearing - Transportation

Planning Commission recommendation development

Planning Commission recommendation development

Planning Commission recommendation development

TBD

Previous Commission/Committee Action: On January 6, 2016, the Planning Commission held a public hearing regarding the Parks, Recreation and Open Space elements. The Environment and Conservation element public hearing was postponed to January 13.

Competing Viewpoints Considered: N/A

Recommended Motion: N/A - Staff recommends that Planning Commission conduct a public hearing, take public comment, discuss, and provide staff with direction regarding additions, changes, clarifications needed, etc.

Attachments (listed in order presented):

[Staff Report – Environment & Conservation Element](#)

[Staff Report – Land Use](#)

[Staff Report – Housing](#)



DEPARTMENT OF PLANNING, COMMUNITY & ECONOMIC DEVELOPMENT

DATE: December 30, 2015
TO: Anacortes Planning Commission
FROM: Planning, Community & Economic Development
SUBJECT: January 6, 2016 PC Meeting
2016 Comprehensive Plan Update – Public Hearing
Environment & Conservation Element – Staff Report

Element: Environment & Conservation

Element Focus: Emphasizing environmental stewardship, protecting and enhancing shorelines and water quality, protecting wildlife habitat, protecting tree cover, promoting sustainable development practices, and addressing climate change.

Background: Volume 1 of the draft 2016 Comp. Plan contains the goals and policies for each plan element. The Environment & Conservation element carries over many of the existing Conservation goals and policies from the current 2012 GMA Comprehensive Plan, and expands upon policy guidance regarding natural hazards, tree retention, fish and wildlife habitat protection and enhancement, and marine waters and shoreline protection and enhancement. New goals and policies address protection of water quality, guidance for climate change planning, air quality, noise and light pollution, and food security.

Volume 2 of the Environment & Conservation element contains a description of the City's environmental setting and elements of the environment, including vegetation, fish and wildlife habitat, wetlands, lakes, streams and creeks, groundwater, shorelines, surface water, aquatic resources and habitat, air quality, flood hazard areas, geologic hazard areas, wildland fire, hazardous material, tsunami, climate change and energy consumption reduction.

Comments on 1st Draft (received as of 12/30/15):

#	From	Comment summary	Staff comment
1	Public	Goal EC-2 states "Enhance and preserve the City's shoreline and marine resources while accommodating uses reasonable and appropriate to	The Shoreline Management Act's primary purpose is to provide for the "management and protection of the state's shoreline area resources by planning for 'reasonable and appropriate uses'". The City's Shoreline Master Program (SMP) as adopted by the City Council and approved by the Department of Ecology specifically identifies reasonable and

#	From	Comment summary	Staff comment
		shorelines". The phrase "reasonable and appropriate" is open to wide interpretation.	appropriate uses within each shoreline designation, and provides goals, policies and development regulations that govern such uses. <i>Recommendation:</i> No change.
2	Public	Need to address preparation for increasing frequency and strength of storms and long-term power outages associated with climate change; develop plans for water provision during and after emergencies.	Several expanded and new proposed policies address natural hazard preparedness planning and climate change: EC-3 (3.10 and 3.15) includes policies related to natural hazard mitigation planning and promotion of public awareness of hazards and emergency procedures. EC-13 includes new policies related to identifying potential climate change impacts, mitigation and adaptation strategies. LU-8.5 states that plans and regulations should take into account sea-level rise, tsunamis and other natural hazards. The City of Anacortes Natural Hazard Mitigation Plan was last updated in 2014 and is part of the Skagit County 2014 Natural Hazards Mitigation Plan . It identifies potential natural hazards and mitigation strategies and projects. The City has also developed Emergency Response Plan and Water Shortage Response Plan, which address supplying a safe and adequate water supply during adverse events such as drought or an emergency. <i>Recommendation:</i> No change.
3	Public	EC-2.5 – sounds like an open door to industry. Suggest adding "...as long as such uses do not degrade or damage the shorelines".	<i>Recommendation:</i> Revise policy language as follows: <u>"Ensure that new and expanded shoreline development achieves no net loss of shoreline ecological functions consistent with the requirements of the Shoreline Master Program"</u> .
4	Public	Would like to see stronger policies regarding vegetation retention.	Several existing draft policies address vegetation retention: EC-3.3 promotes soil stability through retention of existing vegetation. EC-6.4 discussed placement of appropriate restrictions on land surface modifications and tree removal that would cause unnecessary landscape scarring, hydrology modification, erosion, or undermining support of nearby land, including but not limited to dredging, filling, clearing, paving, and grading. Goal EC-7 and associated policies relate specifically to tree retention. New policy 7.2 encourages

#	From	Comment summary	Staff comment
			development of regulations that preserve trees and provide penalties for unauthorized removal. Existing development regs in the Anacortes Municipal Code (AMC) governing clearing and grading, subdivision, and tree preservation provide standards for vegetation retention. The SMP also contains vegetation conservation development regulations that apply specifically to shoreline areas. <i>Recommendation:</i> No change.
5	Public	Change “encourage” to “require” in EC-4.7 regarding encouraging the proper use and maintenance of septic systems and connection to sewer.	<i>Recommendation:</i> Change policy language (EC-4.7) as follows: “Encourage <u>Require</u> the proper use and maintenance of existing on-site septic systems and encourage <u>require</u> connection to sanitary sewer whenever possible”.
6	Public	Change “promote” to “require” in EC-9.1 regarding compliance with federal and state air pollution control laws and improvements to regional air quality.	The City cannot enforce compliance with federal and state air pollution control laws. <i>Recommendation:</i> No change.
7	Public	EC-12: Promote a resilient local food system. Proposes the addition of the following policies under this goal: • Promote an increased diversity of food sources. • Require utmost care of the eco-systems (e.g. soil, water, pollinators) that sustain our lives. • Use minimal inputs of fossil fuels to grow, process and deliver foods. • Develop infrastructure for processing and storing food. • Allow use of gray water for irrigation.	<i>Recommendation:</i> Consider the following new policies under Goal EC-12: <u>“Support a local food system that includes a diversity of food sources, encourages consumption of local, healthy foods with a low carbon-footprint, minimizes adverse impacts to eco-systems, minimizes food waste, and fosters composting.”</u> <u>“Support development of infrastructure for processing and storing food.”</u>

#	From	Comment summary	Staff comment
8	Public	Anacortes is a laggard in environmental stewardship: • Port allows OGV to idle @ Port, spewing diesel exhaust into the air we breathe (recently, diesel exhaust was named a known carcinogen) • City allows refineries to spew hazardous chemicals unlawfully	Comment noted. <i>Recommendation:</i> No change.
9	Public	Concerned about impacts of sea level rise in area around Portalis & San Juan Passage; should be considered in determining allowed development	Proposed Policy LU-8.5 states that “plans and regulations should take into account sea-level rise, tsunamis and other potential natural hazards”. Policy CF-7.9 states “consider future climate conditions during siting and design, including changes to temperature, precipitation and sea level, to help ensure facilities function as intended over their planned life cycle.” Updates to the Shoreline Master Program, required to be completed by 2020, will include additional discussion, goals and policies about sea level rise planning. <i>Recommendation:</i> No change.
10	Public	Has there been air quality testing in Portalis area – fumes from cars, trucks, in summer months is an issue	Comment noted. Northwest Clean Air Agency has been contacted for more information. <i>Recommendation:</i> No change.
11	Public	Addressing stormwater issues, protecting homes from water damage, should be a priority	The City’s standards require development to meet the current Department of Ecology Surface Water Design Manual and Surface Water Management/Comprehensive Plan adopted by the City. <i>Recommendation:</i> Consider additional policies regarding stormwater management and protection of property in the land use or capital facilities element.
12	Anacortes Historic Preservation Board	EC-1.3.F mentions “City Historic Preservation Board saleback and leaseback and property donation” as methods for conserving property in its	This is an existing policy carried over from the 2012 Comp. Plan. The saleback /leaseback and property donation references are included as examples of methods to preserve/conserv natural areas. Keeping them in the list preserves the option for

#	From	Comment summary	Staff comment
		natural state. The AHPB is not prepared to administer such programs under its current ordinance.	considering and implementing such programs in the future at the option of the City Council. <i>Recommendation:</i> No change.
13	CAC	Discussion regarding refineries should be included (eg. including environmental impacts)	The element contains multiple goals and policies related to protection of the environment without identifying any one industry or business. <i>Recommendation:</i> Consider potential revisions to proposed policies in the land use element (possible LU-4.3) to encourage new and existing businesses to retrofit or modify processes/procedures to improve energy performance and reduce environmental impacts. Example language could be provided if requested by the Planning Commission.
14	City Council	Consider adding policy language in this element about water use (Evergreen Islands amendment request)	The City Council Public Works Committee is working on making some recommendations regarding this item. <i>Recommendation:</i> None at this time. Staff will update Planning Commission once the committee's recommendations are received.
15	City Council	EC-1.3.D – either re-write or remove; avoid circular references	<i>Recommendation:</i> Revise policy language for EC-1.3.D – <u>“Promote public outreach activities aimed at encouraging Wwater conservation and water recycling shall be high priorities in the City’s Water System Plan”.</u>
16	City Council	Consider pulling Shoreline Master Program goals and policies into the Comp. Plan	EC-2.1 states “adhere to the goals and policies outlined in the City of Anacortes Shoreline Master Program (ASMP)”. According to RCW 36.70A.480, the goals and policies of the SMA included as one of the goals of GMA and the goals and policies of the shoreline master program approved under Chapter 90.58 RCW shall be considered an element of the City’s comprehensive plan. <i>Recommendation:</i> Consider various alternatives in subsequent amendment cycle(s).
17	Staff	Minor grammatical corrections and updates to the “Introduction” section	
18	Staff	EC-2.8 re: street ends	This policy is repeated in PR-2.4 and probably is better suited in that location. <i>Recommendation:</i> Delete Policy EC-2.8.

#	From	Comment summary	Staff comment
19	Staff	Suggest addition of Best Available Science (BAS) policy.	<i>Recommendation:</i> Add new policy language (EC-__): <u>“Use the best available science to preserve and/or enhance the function and values of critical areas through regulation, programs and incentives”.</u>
20	Staff	EC-4.1 – Change to include LID language per consultant suggestion.	<i>Recommendation:</i> Revise policy language (EC-4.1): “Work with neighboring jurisdictions and other partners to maintain and restore the natural hydrological functions on a drainage basin level. <u>These restoration plans will incorporate requirements that encourage LID techniques to facilitate mimicking the natural site drainage”.</u>
21	Staff	EC-5.1 – update language to reflect accurate Plan titles	<i>Recommendation:</i> Revise policy language (EC-5.1): Identify, plan for and preserve habitat areas, including wildlife corridors and areas with healthy native ecosystems, through development regulations and as part of the Parks, Open Space and Recreation Plan and AFCL Comp. Plans <u>and the Open Space Connectivity map.</u>
22	Staff	Encourage interjurisdictional coordination in the protection of critical areas; including potential impacts to ACFL (a designation Fish & Wildlife Habitat Protection Area) from development of abutting property that is outside of City limits and UGA	<i>Recommendation:</i> Add new policy language (under EC-1): <u>“Work cooperatively with Skagit County in the development of land use plans and development review to identify and protect habitat networks and critical areas on an inter-jurisdictional basis.”</u> Add new policy language (under EC-5): <u>“Encourage the use of buffers between new development and the Anacortes Community Forestlands that reflect the nature of the existing vegetation, sensitivity of the habitat, and the type and intensity of human activity proposed to be conducted nearby.”</u>
23	Staff	EC-13.1 and EC-13.8 are repetitive.	<i>Recommendation:</i> Eliminate EC-13.8.



DEPARTMENT OF PLANNING, COMMUNITY & ECONOMIC DEVELOPMENT

DATE: January 6, 2016
TO: Anacortes Planning Commission
FROM: Planning, Community & Economic Development
SUBJECT: January 13, 2016 PC Meeting
2016 Comprehensive Plan Update – Public Hearing
Land Use Element – Staff Report

Element: Land Use

Element Focus: Land use capacity to meet projected growth, desired land use patterns, community design, historic preservation, resource protection, community gathering spaces, healthy community provisions, regional coordination, and a focus on special planning areas.

Background: Volume 1 of the draft 2016 Comp. Plan contains the goals and policies for each plan element. In general, the policy language in the draft is consistent with the direction of the 2012 Comprehensive Plan. Changes were made to clarify and refine language, to ensure consistency with other city and regional planning documents and to make updates to the Future Land Use Map. The changes to the [Future Land Use Map](#) (attached) provide increased capacity and flexibility in achieving community growth goals and do not represent significant changes to the City's overall land use pattern.

Comments on 1st Draft (received as of 12/30/15):

#	From	Comment summary	Staff comment
1	Public	Disappointed that proposed land use map appears to suggest a decision to punt on any land use decisions for area between 17 th to 22 nd , east of Q/R Ave. Visitors' #1 request is waterfront lodging and dining, and retail outlet for fresh seafood, etc.	The new Marine Mixed Use designation is intended to promote revitalization of the subject areas by providing for a mix of uses including those listed in the comment, while emphasizing the unique marine setting by maximizing marine access and views and establishing/maintaining a pedestrian-friendly character. Development of implementing development regulations would follow re-designation of property. <i>Recommendation:</i> No change.
2	Anacortes Historic	LU-3.5 – AHPB Board is not prepared to	These are listed as examples of methods to achieve historic preservation, not necessarily programs the

#	From	Comment summary	Staff comment
	Preservation Board (AHPB)	administer saleback/leaseback, or property donation/acquisition	City currently administers. But it could in the future. <i>Recommendation:</i> No change.
3	AHPB	LU-8.2 – can historic/cultural preservation goals be added here?	<i>Recommendation:</i> Revise LU-8.2 as follows: “Encourage public/private partnerships to facilitate coordinated development that balances economic, public amenity, environmental, <u>and historical/cultural preservation goals.</u> ”
4	AHPB	LU-9 (9.4 & 9.5) do these policies relating to protection of industrial lands from encroachment of incompatible uses conflict with Historic/Cultural preservation and Public Access goals?	LU-3.2 supports crafting zoning to maintain a balance between accommodating growth and preserving historic resources/character. <i>Recommendation:</i> To address potential conflict with public access goals, consider adding a sentence to 9.5 or a new policy under LU-9 to reference the need to collaborate with industrial/manufacturing property/business owners along the trail route to accommodate a trail while minimizing impacts to industrial uses.
5	AHPB	Could a legend be added to Table LU-2?	<i>Recommendation:</i> Update table and add legend. (see attached updated housing chart)
6	AHPB	Will 2015 information be available for H-5 through H-7 and ED-26?	Updates to various data can be provided. <i>Recommendation:</i> Staff to review areas where updated information is available.
	AHPB	Request adding an “Overview of Historic Preservation” to Volume 2 (attached to AHPB comment letter)	<i>Recommendation:</i> Incorporate information into volume 2 land use info.
7	Public	LU-7 and LU-7.1- suggest adding: “Consider closing off a portion of downtown to all vehicles except passenger shuttles to increase pedestrian safety, reduce pollution, and create a welcoming public square”.	This suggestion may be more of an implementation detail. LU-7.1.D directs that the downtown should be emphasized as the primary gathering space for Anacortes, and identifies several broad methods for accomplishing this. <i>Recommendation:</i> No change.
8	Public	LU-8 – If goal is to “enhance visual access to the water”, which is stated in other places	The intent of Goal LU-8 is to promote revitalization of the area, while maximizing visual access to the water from public spaces, not all spaces.

#	From	Comment summary	Staff comment
		(such as EC-2.2) since connecting to the water is a high value for people, why are we leaving open the possibility of 6-story buildings on the waterfront?	<i>Recommendation:</i> Consider adding language to LU-8.4 that emphasizes providing for at least one access or open space view corridor between Q Ave/Tommy Thompson Trail to the water every 300 lineal feet on average, which is somewhat consistent with the grid of the surrounding streets / right-of-way.
9	Council	Add explicit policies about encouraging denser development downtown, including reducing parking requirements for businesses, particularly in the CBD, and reducing the fire impact fee	<i>Recommendation:</i> Add language to LU-7.1.B key concepts • Evaluate and potentially adjust off-street parking requirements; implement other parking management techniques • Consider reducing fire impact fee
11	Staff	LU-4.2 – revise to include more detail about LID	<i>Recommendation:</i> Revise policy as follows: “Update development regulations to emphasize sustainable design in new developments, including <u>forms of investigation of using Low Impact Development techniques prior to conventional treatment techniques.</u>
12	Staff	LU-4.3 – revise to include reference to LID	<i>Recommendation:</i> Revise policy as follows: “Encourage retrofits to existing development and infrastructure, <u>including low impact development options,</u> to reduce environmental impacts. Explore incentives to residents and businesses that improve energy performance and/or incorporate onsite renewable energy”.
13	Staff	LU-4.4 – revise to include reference to LID	<i>Recommendation:</i> Revise policy as follows: “.....Key elements: • Update public works standards, as necessary, to emphasize best practice sustainable design/practice <u>and low impact development options;</u> and.....”
14	Staff	Suggest adding a table showing the acreage in each land use designation, in each implementing zone, approximate densities that are assumed, and how this meets the twenty-year population projection.	<i>Recommendation:</i> Staff is currently developing a table with this information.
15	Staff	Update Table LU-1 to address R4a areas in Skyline and near City Shop	<i>Recommendation:</i> Update table.

#	From	Comment summary	Staff comment
16	Staff	Tribal relations	Recommendation: Consider adding a new policy under LU-11 specifically focused on tribal relations

Future Land Use Map comments

Map #1	Public	Apply the concept of expanding list of permitted commercial uses near intersections (in the LM1 zone) to the HM zone at the Reservation Rd/SR20 Intersection	<i>Recommendation:</i> Consider adding locational criteria to the LM1 and HM designations on page I-18. Consider changing HM designation to LM1 for properties fronting SR20 between existing LM1/HM zone boundary and Reservation Rd/SR 20 intersection properties. Potential considerations could be property size, use, visibility along highway, access to rail, etc.
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Attachments:

Proposed Land Use Designations (as directed by City Council)

Housing Types Chart

PERMITTED HOUSING TYPES

Under Proposed Zoning

		PROPOSED ZONING DISTRICTS						
Housing Types		R-1	R-2	R-3	R-4	CBD	C	MMU
Single Family Small Lot		X	X 6,000sf min lot size	● 4,500sf min lot size	●	X	X	X
Accessory Dwelling Unit		●	●	●	●	○	○	○
Cottages		●	●	●	●	X	X	X
Duplex		X	○	●	●	X	X	X
Townhouses		X	X	●	●	○	○	○
SR. Housing		X	X	●	●	○	○	○
Apartments		X	X	●	●	○	○	○
Mixed-Use		X	X	X	○	●	●	●
LEGEND		● Permitted use ○ Permitted in limited cases X Prohibited						



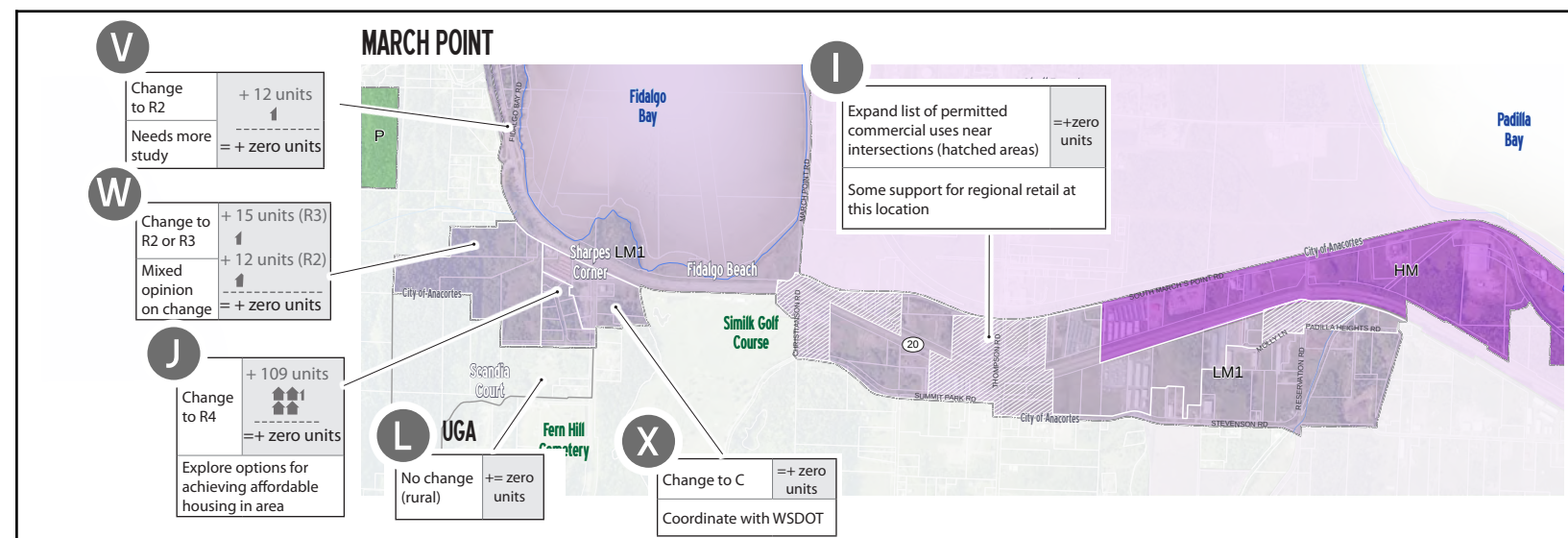
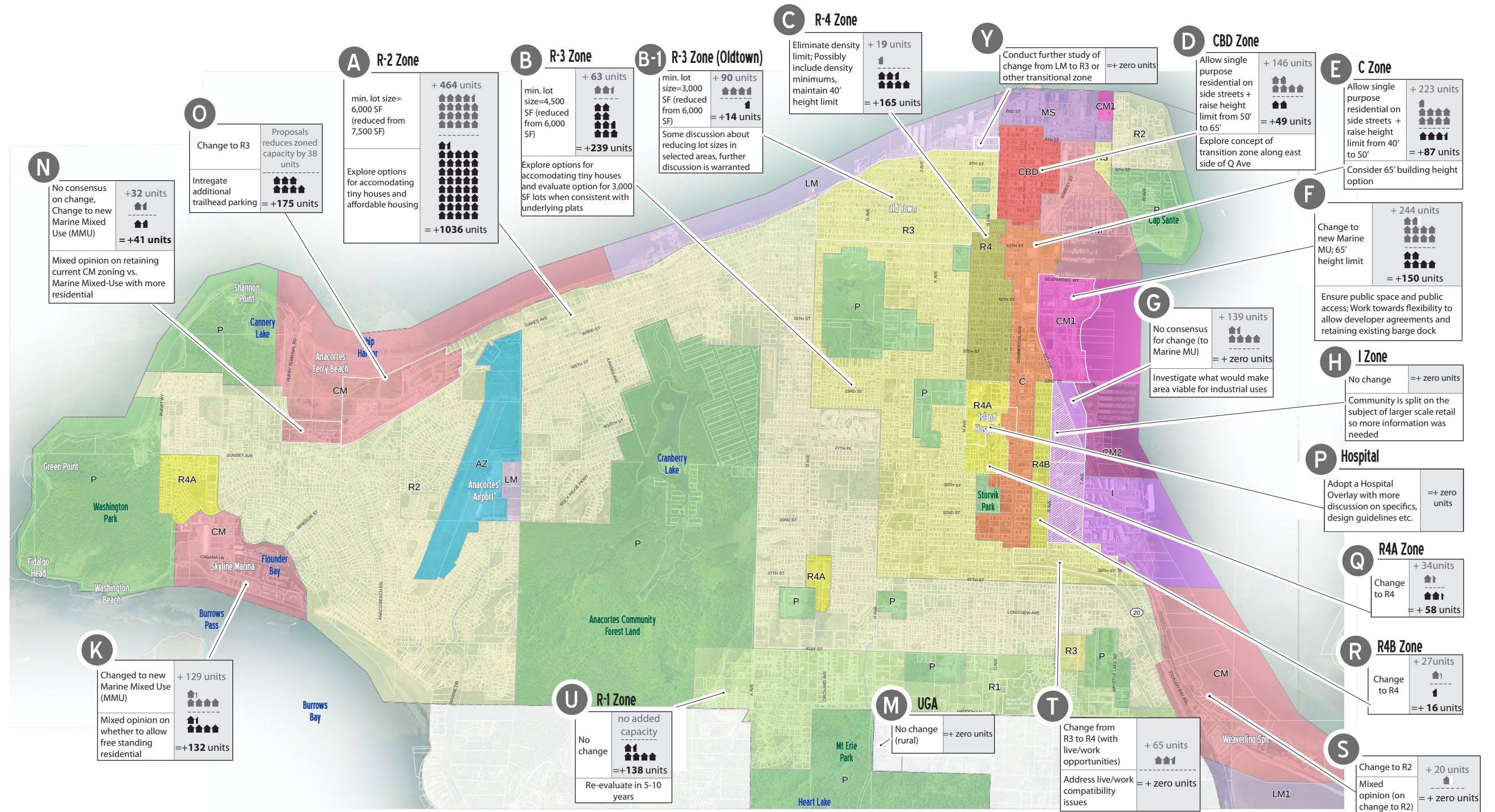
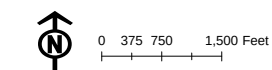
Proposed Land Use Designations (as directed by City Council) August 13, 2015

Existing Zoning

- **CBD** Central Business District
- **C** Commercial
- **CM** Commercial Marine
- **CM1** Commercial Marine (1)
- **CM2** Commercial Marine (2)
- **AZ** Airport Zone
- **HM** Heavy Manufacturing
- **I** Industrial
- **LM** Light Manufacturing
- **LM1** Light Manufacturing (1)
- **MS** Manufacturing/Shipping
- **P** Public Use
- **R4** Residential High Density
- **R4A** Residential High Density Two (A)
- **R4B** Residential High Density Two (B)
- **R3** Residential Medium Density
- **R2** Residential Low Density
- **R1** Residential Low Density

Legend for Proposals

Proposed action	20-year growth estimate
City Council directive for preferred alternative	Additional capacity under proposal Existing zoning capacity
Additional City Council directives	
Proposal applies to the outlined area or applicable zone	





DEPARTMENT OF PLANNING, COMMUNITY & ECONOMIC DEVELOPMENT

DATE: January 6, 2016
TO: Anacortes Planning Commission
FROM: Planning, Community & Economic Development
SUBJECT: January 13, 2016 PC Meeting
2016 Comprehensive Plan Update – Public Hearing
Housing Element – Staff Report

Element: Housing

Element Focus: Housing capacity to meet projected growth, housing preservation, housing design, neighborhood character, regional collaboration, and provision of a range of housing types to serve diverse needs and all economic segments of the community.

Background: Volume 1 of the draft 2016 Comp. Plan contains the goals and policies for each plan element. In general, the policy language in the draft is consistent with the direction of the 2012 Comprehensive Plan. Changes were made to clarify and refine language, to ensure consistency with other city and regional planning documents and to address emerging issues.

Comments on 1st Draft (received as of 1/6/16):

#	From	Comment summary	Staff comment
1	Public	Housing costs will never be low enough for middle low income people to afford living here. We need to proactively try to attract industries which by their nature attract people with higher income.	GMA requires that jurisdictions encourage the availability of affordable housing to all economic segments of the community. H-1.2 promotes a variety of densities and housing types in all price ranges to meet a range of housing needs and respond to changing needs and preferences. <i>Recommendation:</i> No change.
2	Council	We need a definition of affordable housing	GMA defines “affordable housing” as residential housing that is rented or owned by a person or household whose monthly housing costs, including utilities other than telephone, do not exceed thirty percent of the household’s monthly income. (WAC 365-196-210(4))

#	From	Comment summary	Staff comment
			WAC defines “workforce housing” as housing affordable to households earning between eighty to one hundred twenty percent of the median household income. (WAC 365-196-410(d)(A)). Volume 2 of the plan includes data regarding housing affordability in Anacortes.
3	Staff	Incorporate LID language into plan	<i>Recommendation:</i> Revise H-1.8 as follows: “Provide for flexibility in subdivision development in order to promote environmental protection, <u>employ low impact development techniques</u>, encourage infill development, enhance neighborhood character, or other similar goals.
4	Staff	Minor grammatical changes and updates to address consistency throughout document	

From: [Anacortes Diving & Supply](#)
To: [Measamer, Don](#); [Grage, Libby](#); [Cricchio, Kevin](#)
Cc: voliver@islandhospital.org
Subject: Hospital Rezone
Date: Thursday, January 07, 2016 12:36:01 PM

From: Robert Scarzafava- owner Anacortes Diving & Supply, Inc.

To: Don Measamer, Libby Grage, Kevin Cricchio

CC: Vince Oliver

January 7, 2016

Good Morning,

This letter is in response to Mark Estvold's response to my previous letter dated July 2015.

This is in regards to the medical use overlay that the hospital is trying to pass. While Island Hospital has been transparent with the city, they have been anything but transparent with the businesses located within their proposed medical use overlay. The fact that Mr. Tully is quoted in saying "The medical use of Commercial Avenue parcels would be a strong contributor to the Anacortes community". When in effect the master plan is to level thriving businesses and turn it into a parking lot. In their June 24, 2015 proposal, Island Hospital basically stated that if the displaced business would just move, the city would not lose any revenue. The obvious disregard for the businesses in moving, is stated clearly in the Island Hospital statement. They do not take into account the shear cost of moving, nor the effect that moving a business can have with foot traffic through their doors and overall revenues.

The fact that this medical use overlay basically gives the hospital: "The Medical Use Overlay will allow Island Hospital to develop property within the Commercial Zone without the City's conditional use requests, or concern that the City could deny healthcare development along Commercial Ave. Once the city approves the Medical Use Overlay, additional modifications can be made to widen the zone, increase height allowances, and reduce setbacks." (Island Hospital Masterplan 2013) This plan will give the hospital a Carte Blanc along the overlay to what they would like without regard to city or community planning.

The fact that Island Hospital seems to be so transparent with city is a slap in the face to the businesses in the overlay who have been systematically uninformed from the meetings starting early in the planning (2013) to the planning now with Marc Estvold or Mr. Tully not even having the courtesy to CC us in this response to our original letter.

Yes, Island Hospital will need to grow and expand but there must a check and balance system so they cannot just devalue property in their quest for expansion. Once again, the medical use overlay will destroy the property values of the businesses in it making it impossible for the businesses to have a fair opportunity to sell to anyone or be able to expand their business. Instead of trying to be partners in this project they have chosen to be a "Goliath" and to simply steamroll the property owners.

Thank You

Robert and Kelley Scarzafava

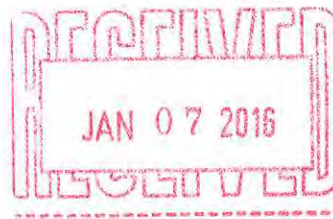
Owner Anacortes Diving and Supply, Inc

2502 Commercial Ave

www.AnacortesDiving.com
Open 9-6 pm everyday
2502 Commercial Ave
Anacortes, WA 98221
360-293-2070

Jan. 6, 2016

City of Anacortes Planning Department



Enclosed are comments in regards to the Land Use element of the 2016 Comprehensive Plan Update.

These comments are split into:

- General Comments on Anacortes Land Use.
- Specific Comments, related to specific Proposed Tables and Policies.

Thank you,
Al Johnson
1201 4th St.
Anacortes

GENERAL COMMENTS:

1. General Residential Density.

Fidalgo island is looking forward to a 'tidal wave' of people desiring to move into our community. This tidal wave will far exceed any current future predictions. Those of us that live here, understand the desirability of our community. That desirability combined with a four lane divided highway, connected to Interstate 5, a booming Puget Sound economy, a large expansion of personnel Whidbey Island Naval facility and the baby boomer retirement bulge, will drive the demand for housing in Anacortes beyond any previous historic levels.

The Washington state 'Growth Management Act' requires us to develop 90% of new residential units in Urban Growth areas. On Fidalgo island, that means within the city limits of Anacortes. It is imperative that we plan for growth now, to get ahead of it, rather than wait, unprepared, for the inevitable crush later.

Few, if any, existing neighborhoods want more growth. However, it is only fair that all neighborhoods share in this future increase. We, as a community should plan for modest increases in density, in all residential neighborhoods, while also rezoning appropriate areas for high density multi-family development.

This approach gives us the best chance to manage residential growth, while also maintaining the wonderful quality of life we currently experience. Every neighborhood, in Anacortes, has to share the 'pain' of growth.

2. Medical Facilities.

Medical facilities should not be a permitted use in any Commercial zone. We have seen and will continue to see, unless unchecked, a rapid expansion of Medical facilities, that are squeezing out retailers, in our limited Commercially zoned areas.

Medical facilities do not pay sales taxes, thus, they do not create any sales tax revenue for the City.

One reason the City's zoning plan permits Commercial uses is to promote those businesses that provide a revenue stream of sales taxes to the city, to allow for a more broad based and fair tax structure to support city services.

Medical facilities on Commercially zoned property remove that property from the sales tax revenue stream.

Medical facilities are 'destination' businesses, thus, they do not need to locate in visible, high-traffic locations, as other businesses.

3. School zoning.

We designate some of our neighborhoods as zones for public uses, such as schools, as a permitted use and others, as a conditional use. The City of Anacortes should encourage the Anacortes School District to develop a comprehensive plan and incorporate that plan with the City of Anacortes comprehensive plan. This would be a similar idea to the interaction between the Port of Anacortes and the City of Anacortes comprehensive plans.

We should add language to the comprehensive plan that will encourage this cooperation and planning concept.

4. CBD.

The CBD is a unique, special district to the City of Anacortes. It represents a traditional small town, downtown, shopping/meeting/gathering place that very few cities have been able

to retain. The CBD reflects the personality of Anacortes in similar ways as our forest lands, marine areas, views and other natural wonders of this island.

We have the good fortune to be able to look to those communities, closer to our major urban centers and study how they developed when they went through the same 'tidal wave' of population, we will be facing over the next decades.

Twenty years from now, would you prefer to see downtown Anacortes look like Gig Harbor or Edmonds, well planned and preserved downtowns or the chaos of strip malls as in Lynnwood or Federal Way?

Developing a proper zoning scheme for this area must take into account the CBD's unique characteristics:

- Ownership. Unlike residential zones, the vast majority of property owners in the CBD are non-local investors. Unlike residential zones with owner occupied investments, whose 'pride in neighborhood' ethos plays a role in the ambiance of a neighborhood, non-local investors typically narrow minded focus on the financial aspect of their properties.
- Financial realities. Real estate investors typically look to develop their properties with as little design and amenities as possible in order to maximize their financial return. This is opposite to the interests of a community to retain as much ambiance, open space, sunlight and user friendliness as possible to retain a small town traditional downtown area. Investors tend to think towards the mall model.
- Residential development. Developers will typically choose Residential Development over Commerical (Retail) Development due to ease of financing and a larger financial return for Residential properties. Where a zoning scheme permits Residential Development, in Commerical districts, Residential Development will inevitably squeeze out Commercial uses, especially small scale, local retailers.
- Current zoning allows 100% residential development to occur. This will eventually turn our CBD from a retail core to a residential community.
- Conditional use requirements are the best way we can have a say as to future developments in our traditional small town downtown.

The only protection we have to maintain this vibrant, pedestrian friendly, well scaled area is through our zoning process.

The trend over the past decade to encourage high density residential development in the CBD, will inevitably result in squeezing out retailers, in our limited Commercially zoned areas.

There is a healthy trend among Land-Use planners to encourage Residential Development, in Retail areas of large Urban areas. This is the idea of going back to the Mixed Use concept many cities were built on, while rejecting the Single Use ideas of early zoning schemes. For large cities, the Mixed Use concept makes sense, it encourages the use of utility and transportation facilities after retail/office hours, it keeps people in the neighborhoods in the evening hours, minimizing crime, it can encourage affordable housing, as per unit land costs would be less.

In small towns, such as Anacortes, this type of Mixed Use is less important due to the smaller, almost tiny, CBD, compared to an urban area, such as downtown Seattle. Anacortes has residential development within a two block area of all of the CBD.

That is not to say, that Mixed Use is inappropriate for Anacortes. It is, but, it must be designed to protect retail/office uses and forbid residential only development.

The current zoning rules for the CBD do not require Retail or Office development, on the First floor, which most citizens assume, is the case. The current scheme only forbids Residential on the First floor. It is only a matter of time, where a residential developer will teardown existing CBD buildings and develop a residential only structure, with only parking on the First floor and no retail/office space.

SPECIFIC COMMENTS:

GOAL LU-1. Land Use Pattern:

Table LU-1.

U. R-1 Zone.

- The minimum lot size in R-1 should be changed to 7,500 square feet.
- The maximum number of units per acre should be changed to Four per gross acre.
- Setbacks should mimic the current R-2 zone (5/10/15 foot scheme).
- It is doubtful the 15,000 sq. ft. minimum lot size, in a city the size of Anacortes would be upheld by the courts.
- All neighborhoods must share in the 'pain' of increased residential density.

A. R-2 Zone.

- The minimum lot size in R-2 should be changed to 6,000 square feet.
- The maximum number of units per acre, in R-2, should be changed to Nine per gross acre.
- Duplexes should be a permitted use. They will be limited in each neighborhood by the gross acre requirement.
- Setbacks should mimic the current R-3 zone.
- All neighborhoods must share in the 'pain' of increased residential density.

B. R-3 Zone.

- The minimum lot size in R-3 should be changed to 4,500 square feet.
- The maximum number of units per acre, in R-3, should be changed to Thirteen per gross acre.
- Tri-plexes and Four-plexes should be changed to a permitted use. They will be limited in each neighborhood by the gross acre requirement.
- Setbacks should be changed to a minimum of Five feet on each side.
- All neighborhoods must share in the 'pain' of increased residential density.

C. R-4 Zone.

- The minimum lot size should be changed to 3,000.

Q. R-4A Zone.

- The maximum density should be changed to 28 units per gross acre.

R. R-4B Zone.

- This zone should be eliminated.
- This area should be changed to the Commercial zone (that is adjacent to the West).
- The Commercial zone Alternative 2 should be adopted for this area.
- Existing residential uses, established as of Jan. 1, 2015, shall be a permitted use.

B1. Old Town overlay.

- Minimum lot size should be reduced to 4,500 square feet.
- The maximum number of units per acre, in R-3, should be changed to Eleven per gross acre.

- Setbacks should be changed to a minimum of Five feet on each side.
 - Existing multi-family uses allowed as a permitted use.
- D. CBD Zone.**

The CBD is a unique and vital area to the livability of Anacortes. The CBD was changed to encourage more residential development during the last Comprehensive Plan Review. The real estate recession limited funding for the type of development that would have taken advantage of that zoning change. Now that the economy is starting to boom again, we will soon see many projects proposed for the CBD that will chip away and eventually destroy the traditional downtown that we are accustomed to and that draws people to Anacortes.

The two projects that did take advantage of the CBD height limit zoning change have resulted in blights on the CBD. One, the 911-919 Commercial Avenue property has resulted in empty buildings converted to a large hole in the ground over the past seven years. The other, the Majestic addition is an unsightly, poorly designed structure, that may be an economically positive addition to the owners, but is an eyesore to those that come to Downtown Anacortes for that feel of a classical small town central business district.

If we continue with the current zoning or with either of the two Alternatives proposed, we will effectively be killing the Downtown area, in favor of investor owned condominium development. We will be effectively killing the CBD as a retail area and converting into a condominium and restaurant area. The future buildings will be maximized economically, resulting in boxes like the Majestic addition and/or properties swapped from one LLC to another, resulting in holes in the ground like the 911 property.

Those that subscribe to the theory that urban areas need a balance of residential units to prevent blight are mistaking URBAN areas, in larger cities, with the small town we live in. There is plenty of housing within walking distance of our CBD.

CBD Proposal:

- Restrict residential development to 35 feet, (50 feet with a CUP).
- Require 60% of ground floor space in the entire structure and 95% of ground floor space, facing Commercial Ave., to be retail (currently, a condo developer could build four floors of condominiums above the ground level and use the entire ground level for parking).
- Require a additional \$10,000. fee for each new residential unit in the CBD, to contribute to a capital fund to provide special CBD infrastructure, such as parking, plazas, etc.
- Require the City Council to appoint an architectural committee, of community members, to review all plans for redevelopment and development of CBD properties. The City Council shall develop goals and guidelines for the committee.

E. Commercial Zone.

- The existing R-4B zone should be changed to Commercial Zone.
- The Commercial zone should adopt Alternative 1.

N. CM Zone on Ferry Terminal Rd.

- This zone should be changed to provide commercial services to accommodate ferry visitors.

O. CM Zone near Ship Harbor.

- This zone should be changed to R-2, to match the neighboring residential development. The CM zone is outdated in this area.

P. Island Hospital Overlay.

- Medical clinics, hospitals, etc. should not be permitted in Commercial zones. They do not pay

sales tax and that loss of tax revenue in the small amount of land zoned Commercial is a major loss of revenue to the City, which may force to City to rezone more areas for Commercial development.

T. Maple Grove R-3 area.

- Change to R-4 designation. R-3 zoning does not provide an economic incentive to owners to renovate or build new house in this area, thus its current 'run-down' condition. The area is too hilly for any industrial/manufacturing use. Existing roads and utilities are appropriate for denser residential development.

X. LM1 Zone fronting SR20.

- Change to Commercial to match the existing uses.

Y. LM Zone 4th St.

- No change.
 - This neighborhood debated this topic in the late 90's. All parties agreed to the changes in place then.
 - The current zoning has worked well since then, among multiple uses.
 - Down-zoning to R-3 would change many properties from a 'conforming' use to a 'non-conforming' use. This goes against the principle of periodically updating our comprehensive plan.
 - Change would eliminate many low-income, affordable housing units.
 - Change would have a significant negative impact on Trident Seafoods, at times, the City's largest private employer.

- Old Town Overlay is not appropriate for this area.

New. - Public School Zone.

A new Zone, designated as **S**, should be developed to be used in those areas of existing schools and potentially expanded schools. This zone should also include, as a permitted use, those existing uses, such as residential. This allows the ASD to work to create a campus and engage in a pattern of land purchases when and where appropriate.

GOAL LU-2. Community Design:

Policy LU-2.2.

E. (New)

Encourage other local governmental units, such as the Port of Anacortes, Anacortes School District, etc., to develop their own Comprehensive Plan and attempt to integrate those Comprehensive Plans with the City of Anacortes Comprehensive Plan. This will encourage interaction and communication within local governments within our community.

This will facilitate those non-city local agencies to participate in planning for locations of future expansion and development of their facilities, such as storage for the Port and Schools for ASD.

GOAL LU-3. Historic Preservation:

Policy LU-3.8 (New).

Work with City of Anacortes Building department to develop policies, permitting and fees, to encourage the preservation of existing buildings.

GOAL LU-5. Community Gathering Space:

Policy LU-5.6 (New).

Encourage other local governmental units, such as the Port of Anacortes, Anacortes School District, etc., to coordinate their Public Gathering Spaces with the City of Anacortes scheme. This will encourage interaction and communication within local governments within our community.

GOAL LU-6. Residential Uses:

Policy LU-6.1.

B. (Change).

This should include the R-1 and R-2 zones. The language should specify minimum density than the existing minimums. Such as: R-1 to 7,500 sq. ft., R-2 to 6,000. sq. ft. and R-3 to 4,500 sq. ft.

D. Duplexes and Triplexes. (Change).

This should be changed to include Duplexes to be encouraged, as a permitted use, in the R-2 zone. All neighborhoods must share in the 'pain' of increased residential density.

GOAL LU-6. Downtown and South Commerical Avenue:

B. (Change).

Single Purpose Residential units should not be allowed on the side streets, of the CBD, between 'O' Ave. and 'Q' Ave.

E. (Change).

Eliminate the word 'downtown' for a new City Hall. If and when, we decide a new City Hall should be constructed, we should not limit the location to the downtown area. The location of a new City Hall is a large conversation, that should not be limited by language in this Comprehensive Plan.

J. (New).

Encourage the construction of a PublicTransit Center, in the Downtown area, not necessarily in the CBD.

GOAL LU-9. Industrial & Manufacturing Areas:

Policy LU-9.8 (New).

Encourage the continued flexibility and development of those uses, in LM zones that explicitly recognize existing non-manufacturing uses.