DEPARTMENT OF COMMUNITY DEVELOPMENT
Joan Davenport, AICP, Director

Planning Division
Joseph Calhoun, Manager
129 North Second Street, 2nd Floor, Yakima, WA 98901
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NOTICE OF APPLICATION, ENVIRONMENTAL REVIEW, & PUBLIC HEARING

DATE:	December 30, 2019
TO:	SEPA Reviewing Agencies, Applicant, and Adjoining Property Owners
FROM:	Joan Davenport, AICP, Community Development Director
APPLICANT:	West Valley School District (8902 Zier Rd., Yakima, WA 98908)
FILE NUMBER:	CL3#010-19, ADJ#027-19, VAR#004-19, SEPA#038-19, CAO#027-19
LOCATION:	7 N. 88th Ave.
TAX PARCEL NUMBER(S):	181319-42006, -42020, & -42021
DATE OF APPLICATION:	October 23, 2019
DATE OF COMPLETENESS:	December 20, 2019

PROJECT DESCRIPTION Proposal to construct a new 60,000 sq. ft. elementary school building in the R-1 zoning district with 147 parking spaces and other associated site amenities and improvements. This request includes a variance to exceed the building height limitation of 35 ft. in this zoning district to allow a height of 44 ft., a critical areas review due to the site being in a wellhead protection area, and an administrative adjustment for the following: request to waive the sitescreening requirement that would impose a 6-ft. view-obscuring fence, installation of a digital sign and wall signs which are not otherwise allowed in residential zoning districts, and adjust the maximum height of 10 ft. for signs set back more than 15 ft. from the right-of-way to allow a height of 11 ft. 6 in.

DETERMINATION OF CONSISTENCY Pursuant to YMC § 16.06.020(A), the project considerations are determined to be consistent with applicable development regulations, as follows:

1. The type of land use: Elementary School is a Class (3) use in the R-1 zoning district.
2. Level of Development: 60,000 sq. ft. school with 147 parking spaces.
3. Infrastructure and public facilities: The subject property is able to be served by public streets, water, sewer, garbage collection, etc.
4. Characteristics of development: Two-story elementary school with 147 proposed parking spaces. The proposal shall adhere to all Title 12 and Title 15 development standards.

Pursuant to YMC § 16.06.020(B), the development regulations and comprehensive plan considerations are found to be consistent, as follows:

1. The type of land use: Elementary School is a Class (3) use in the R-1 zoning district.
2. Density of Development: N/A
3. Availability and adequacy of infrastructure and public utilities: The subject property is able to be served by public facilities.

NOTICE OF ENVIRONMENTAL REVIEW This is to notify agencies with jurisdiction and environmental expertise and the public that the City of Yakima, Planning Division, has been established as the lead agency, under WAC § 197-11-928 for this project. The City of Yakima has reviewed the proposed project for probable adverse environmental impacts and expects to issue a Determination of Nonsignificance (DNS) per WAC § 197-11-355. The 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 will be mailed to parties of record and entities who were provided this notice and may be appealed pursuant to YMC § 6.88.170.

Required Permits: The following local, state, and federal permits/approvals may or will be needed for this project: Building Permit, Grading Permit, Stormwater Permit, Street Break Permit
Required Studies: N/A
Existing Environmental Documents: None

Development Regulations for Project Mitigation and Consistency Include: the State Environmental Policy Act, the Yakima Urban Area Zoning Ordinance, YMC Title 12—Development Standards, and the Yakima Urban Area Comprehensive Plan.

REQUEST FOR WRITTEN COMMENT AND NOTICE OF PUBLIC HEARING Agencies, tribes, and the public are encouraged to review and comment on the proposed project and its probable environmental impacts. There is a 20-day comment period for this review. This may be your only opportunity to comment. All written comments received by 5:00 p.m. on **January 21, 2020,** will be considered prior to issuing the final SEPA determination. This request requires that the Hearing Examiner hold an open record public hearing, which is scheduled for **February 13, 2020 at 9:00 a.m.**, in the City of Yakima Council Chambers, City Hall, 129 N. 2nd St., Yakima, WA. Any person desiring to express their views on the matter is invited to attend the hearing to provide testimony. Please reference file numbers (CL3#010-19, ADJ#027-19, VAR#004-19, SEPA#038-19, CAO#027-19) and applicant's name (West Valley School District – Apple Valley) in any correspondence you submit. You can mail your comments to:

Joan Davenport, AICP, Community Development Director
City of Yakima, Department of Community Development
129 N. 2nd St.; Yakima, WA 98901

NOTICE OF DECISION Following the public hearing, the Hearing Examiner will issue his decision within ten (10) business days. When available, a copy of the decision will be mailed to parties of record and entities who were provided this notice once it is rendered.

The file containing the complete application is available for public review at the City of Yakima Planning Division, City Hall – 2nd Floor, 129 North 2nd Street, Yakima, Washington. If you have questions regarding this proposal, please call Eric Crowell, Associate Planner, at (509) 576-6736, or email to: eric.crowell@yakimawa.gov.

Enclosed: Narratives, Project Descriptions, SEPA Checklist, Site Plan, and Vicinity Map

DEPARTMENTO DE DESARROLLO COMUNITARIO
Joan Davenport, AICP, Directora

Division de Planificación
Joseph Calhoun, Gerente
129 Norte Calle 2ª, 2º Piso, Yakima, WA 98901
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AVISO DE APLICACIÓN, REVISION AMBIENTAL, Y AUDIENCIA PÚBLICA

El Departamento de Desarrollo Comunitario de la Ciudad de Yakima ha recibido una aplicación por parte de un propietario/solicitante y este es un aviso sobre esa solicitud. Información sobre la ubicación de la propiedad en cuestión y la solicitud es la siguiente:

FECHA OTORGADA:	30 de diciembre, 2019
PARA:	Agencias de Revisión Ambiental, Solicitante y Propietarios Adyacentes
DE:	Joan Davenport, AICP, Directora de Desarrollo Comunitario
SOLICITANTE:	West Valley School District (8902 Zier Rd., Yakima, WA 98908)
No. DE ARCHIVO:	CL3#010-19, ADJ#027-19, VAR#004-19, SEPA#038-19, CAO#027-19
UBICACIÓN:	7 N. 88th Ave.
No. DE PARCELA(S):	181319-42006, -42020, & -42021
FECHA DE APLICACIÓN:	23 de octubre, 2019
FECHA DE APLICACIÓN COMPLETA:	20 de diciembre, 2019

DESCRIPCIÓN DEL PROYECTO: Propuesta para construir un nuevo edificio de 60,000 pies cuadrados para un escuela primaria en la zona residencial R-1 con 147 espacios de estacionamiento y mejoramientos asociados. Esta solicitud incluye un proceso de Variación para exceder la limitación de altura del edificio de 35 pies a 44 pies, una revisión de aéreas critica debido a que el sitio se encuentra en un área de protección, y un ajuste administrativo para suspender el requisito de apantallamiento que impondría una cerca obstaculizada de 6 pies, instalación de un letrero digital y letreros de pared que de otra manera no están permitidos en zonas residenciales y un ajuste a la altura máxima de 10 pies para letreros a más de 15 pies de la vía pública para permitir una altura de 11 pies 6 pulgadas.

DETERMINACIÓN DE LA CONSISTENCIA: Conforme al Código Municipal YMC §16.06.020(A), las consideraciones del proyecto se determinan consistentes con las siguientes normas aplicables:

1. El tipo de uso terrenal: Escuela primaria es un uso Clase 3 en la zona residencial R-1.
2. Nivel de desarrollo: Escuela de 60,000 pies cuadrados con 147 espacios de estacionamiento.
3. Infraestructura e instalaciones públicas: La propiedad puede ser servida por calles públicas, agua, drenaje, recolección de basura, etc.
4. Características del desarrollo: Escuela primaria con 147 espacios de estacionamiento. La propuesta se adherirá a todas las normas de desarrollo del Título 12 y Título 15.

Conforme al Código Municipal YMC §16.06.020(B), los reglamentos de desarrollo y las consideraciones del plan comprehensivo son coherentes, de la siguiente manera:

1. El tipo del uso terrenal: Escuela primaria es un uso Clase 3 en la zona residencial R-1.
2. Densidad del desarrollo: N/A
3. Disponibilidad y adecuación de infraestructura y servicios públicos: La propiedad puede ser servida por instalaciones públicas.

AVISO DE REVISIÓN AMBIENTAL: Esto es para notificar a las agencias con jurisdicción y experiencia ambiental y al público que la Ciudad de Yakima, Division de Planificación, se establece como la agencia principal, de acuerdo con la Ley Estatal de Política Ambiental de Washington (SEPA) bajo WAC §197-11-928 para la revisión de este proyecto. La Ciudad de Yakima ha revisado el proyecto propuesto para posibles impactos ambientales adversos y espera emitir una Determinación de No-Significancia (DNS) para este proyecto conforme al proceso DNS opcional en WAC § 197-11-355. La propuesta puede incluir medidas de mitigación bajo los códigos aplicables y el proceso de revisión del proyecto puede incorporar o requerir medidas de mitigación independientemente de si se prepara un EIS (Declaración de Impacto Ambiental). Una copia de la determinación de umbral posterior se enviara a las personas y agencias que comentaron y que recibieron este aviso, y se puede apelar de acuerdo con el Código Municipal de Yakima YMC § 6.88.170.

Permisos Requeridos: Los siguientes permisos/aprobaciones locales, estatales, y federales pueden o serán necesarios para este proyecto: Permiso de Construcción, Permiso de Nivelación Terrenal, Permiso de Aguas Pluviales, Permiso para Excavar en la Vía Publica
Estudios Requeridos: N/A
Documentos Ambientales Existentes: Ninguno
Los Reglamentos de Desarrollo para la Mitigación y Consistencia de Proyectos Incluyen: La Ley Estatal de Política Ambiental de Washington, La Ordenanza de Zonificación del Área Urbana de Yakima, Los Estándares de Desarrollo del Título 12, y el Plan Integral del Área Urbana de Yakima.

SOLICITUD DE COMENTARIOS ESCRITOS Y AVISO DE AUDIENCIA PÚBLICA: Se anima a las agencias, tribus, y el público a revisar y comentar sobre el proyecto y sobre sus probables impactos ambientales. Habrá un periodo de veinte días para hacer sus comentarios. Este podría ser su única oportunidad para comentar. Todos los comentarios recibidos por escrito antes de las 5:00 p.m. el **21 de enero, 2020** serán considerados antes de emitir la decisión final sobre esta solicitud. Esta propuesta requiere una audiencia pública con registro abierto con el Examinador de Audiencias. Por lo tanto, una audiencia pública se llevara a cabo el **13 de febrero, 2020 comenzando a las 9:00 a.m.** en el Ayuntamiento de la Ciudad de Yakima ubicado en el 129 N 2nd Street, Yakima, WA. Se le invita a cualquier persona que desee expresar sus opiniones sobre este caso a asistir a la audiencia pública o a presentar comentarios por escrito. Por favor de hacer referencia al número de archivo (CL3#010-19, ADJ#027-19, VAR#004-19, SEPA#038-19, CAO#027-19) o al nombre del solicitante (West Valley School District – Apple Valley) en cualquier correspondencia que envié. Por favor envié sus comentarios sobre esta propuesta a:

Joan Davenport, AICP, Community Development Director
City of Yakima, Department of Community Development
129 N. 2nd St., Yakima, WA 98901

AVISO DE LA DECISIÓN FINAL: Después de la audiencia pública, el Examinador de Audiencias emitirá su decisión o recomendación dentro de diez (10) días hábiles. Cuando la decisión final sea emitida, una copia será enviada a las personas que mandaron comentarios o que recibieron este aviso.

El archivo que contiene la aplicación completa está disponible para inspección pública en la Oficina de Planificación de la Ciudad de Yakima en el 129 al Norte la Calle 2da, Yakima, WA.
Si tiene cualquier pregunta sobre esta propuesta, puede contactar a la Oficina de Planificación al (509) 575-6183 o por correo electrónico al: ask.planning@yakimawa.gov

Adjuntes: Narrativo, Descripción del Proyecto, Lista de SEPA, Plan de Sitio, Mapa

CITY OF YAKIMA Planning

Supplemental Application For:

TYPE (3) REVIEW

YAKIMA URBAN AREA ZONING ORDINANCE, YMC CHAPTER 15.15

PART II – LAND USE DESIGNATION

1. PROPOSED LAND USE TYPE: (As listed on YMC § 15.04.030 Table 4-1 Permitted Uses)

Schools: Elementary and Middle

PART III - ATTACHMENTS INFORMATION

1. SITE PLAN REQUIRED (Please use the attached City of Yakima Site Plan Checklist)
2. TRAFFIC CONCURRENCY (if required, see YMC Ch. 12.08, Traffic Capacity Test)
3. ENVIRONMENTAL CHECKLIST (if required by the Washington State Environmental Policy Act)

PART IV - WRITTEN NARRATIVE: Please submit a written response to the following questions. Use a separate sheet of paper if necessary.

1. Fully describe the proposed development, including number of dwelling units and parking spaces. If the proposal is for a business, describe hours of operation, days per week and all other relevant information related the business.
   Replacement of existing Elementary School and site amenities with new Elementary School and site improvements. New facility to be 60,000 square feet, nearly 2x larger than the existing. Two separate parking lots are proposed with a bus loading lane and a separate student drop-off lane. A total of 147 parking spaces will be provided not to include bus and student drop-off lanes.

2. How is the proposal compatible to neighboring properties?
   Existing site is already being used for an elementary school so its use will remain unchanged. New building will be positioned in the same location as the existing to maintain the separation between the adjacent residential properties and the school.

3. What mitigation measures are proposed to promote compatibility?
   Additional parking will be provided and drop off lanes included to improve traffic circulation in and out of the site. Building is located on property away from existing residences.

4. How is your proposal consistent with current zoning of your property?
   Current zoning is R-1 and to remain unchanged. Use of site to remain unchanged - Elementary school.

5. How is your proposal consistent with uses and zoning of neighboring properties?
   Neighboring properties are zoned R-1. Elementary schools are commonly located within residential neighborhoods to provide easy access for nearby students.

6. How is your proposal in the best interest of the community?
   The community passed a bond to construct a new elementary school on this site.

Note: if you have any questions about this process, please contact us City of Yakima, Planning Division – 129 N. 2nd St., Yakima, WA or 509-575-6183

Supplemental Application For:

ADMINISTRATIVE ADJUSTMENT

YAKIMA URBAN AREA ZONING ORDINANCE, CHAPTER 15.10

PART II - APPLICATION INFORMATION

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1. TYPES OF ADMINISTRATIVE ADJUSTMENTS (√ at least one)

☐ SETBACKS: Front _____ Side _____ Rear _____

☐ SIGNS: Height _____ Size _____

☐ FENCES ☐ LOT COVERAGE ☑ SITESCREENING

☐ PARKING ☐ OTHER

2. AMOUNT OF ADJUSTMENT

6ft Site Obscuring Fencing	±	No existing fence revisions	=	
Zoning Ordinance Standard		Proposed Standard		Adjustment

PART III – LAND USE DESIGNATION & REQUIRED ATTACHMENTS

1. PROPOSED USE TYPE (As listed on Table 4-1 Permitted Land Uses – See YMC § 15.04.030)

Schools: Elementary and Middle

2. SITE PLAN REQUIRED (Please use the attached City of Yakima Site Plan Checklist)

PART IV - WRITTEN NARRATIVE: (Please submit a written response to the following questions)

1. How would the strict enforcement of the current standard affect your project?

Existing fencing is installed around the entire property at all R-1 parcels. Each fence belongs to the residential homeowner and each fence varies in type from chain link to wood construction. Replacing all fences would be a difficult challenge as each home owner would have to agree to have their fence removed and open for a period of time while new fencing is constructed. Removing existing fencing around the entire site and installing 6-ft site obscuring fencing would have a significant cost impact to the project.

2. How is the proposal compatible with neighboring properties? Have other adjustments been granted nearby?

Neighboring properties are also R-1. Fencing exists around the entire property although it has never been entirely site obscuring. We are proposing the existing fencing remain in place.

3. How is your proposal consistent with current zoning of your property?

The current zoning is R-1 and elementary school use will remain unchanged. Existing fencing is not site obscuring.

4. How is your proposal consistent with uses and zoning of neighboring properties?

The current zoning is R-1. Neighboring properties are R-1. Table 7-1 lists sitescreening as generally not required between adjacent R-1 zones.

5. How is your proposal in the best interest of the community?

Site screening does not exist around the current school and does not appear to be in demand by the community. Using the taxpayer money elsewhere on the project would be more beneficial to the community.

Supplemental Application For:

ADMINISTRATIVE ADJUSTMENT

YAKIMA URBAN AREA ZONING ORDINANCE, CHAPTER 15.10

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PART II - APPLICATION INFORMATION

1. TYPES OF ADMINISTRATIVE ADJUSTMENTS (√ at least one)

☐ SETBACKS: Front _____ Side _____ Rear _____

☑ SIGNS: Height _____ Size _____

☐ FENCES ☐ LOT COVERAGE ☐ SITESCREENING

☐ PARKING ☑ OTHER Wall Signs

2. AMOUNT OF ADJUSTMENT Digital & Wall Signs

Digital & Wall Signs not Allowed in R1		Allow Digital & Wall Signs in R1		
Digital Signs: 10 ft Height	±	11'-6" Height	=	1'-6"
Zoning Ordinance Standard		Proposed Standard		Adjustment

PART III – LAND USE DESIGNATION & REQUIRED ATTACHMENTS

1. PROPOSED USE TYPE (As listed on Table 4-1 Permitted Land Uses – See YMC § 15.04.030)

Schools: Elementary and Middle

2. SITE PLAN REQUIRED (Please use the attached City of Yakima Site Plan Checklist)

PART IV - WRITTEN NARRATIVE: (Please submit a written response to the following questions)

1. How would the strict enforcement of the current standard affect your project?

Digital and Wall signage is not allowed in R-1 zones. An electronic readerboard is wanted to communicate information about school related events to the community. Freestanding signage is limited in height to 10ft. Proposed digital readerboard design shows bottom of sign at 8' above grade and top of sign at 11'-6", which is 1'-6" higher than the current standard allows. Keeping the bottom of the sign at 8' allows visibility from the road without obstructions and also allows clearance to walk under. Wall signage is critical to identifying the building name and entrances for Gym and Library

2. How is the proposal compatible with neighboring properties? Have other adjustments been granted nearby?

Neighboring properties are also R-1 zones. It is unknown if other adjustments have been granted nearby. Neighbors around the property are community members who are using the facility. The proposed signage provides communication to the neighbors. The Gym and Library are zoned for after-hours use. Including wall signage at these entrances makes them more inviting to the public.

3. How is your proposal consistent with current zoning of your property?

The current zoning is R-1 where digital & wall signage is not allowed. Proposed signage visible from the right-of-way for this project includes:
(1) Digital Readerboard with internally illuminated sign above. Digital readerboard area proposed is 14 sf.
(1) Fascia sign on main entry canopy constructed of fixed metal letters reading "APPLE VALLEY ELEMENTARY"
(1) Fascia sign on side entry canopy to gymnasium constructed of metal letters reading "GYM"

4. How is your proposal consistent with uses and zoning of neighboring properties?

Use of property is for an Elementary School. Digital signage is common at Elementary Schools. Wall signage is also common to identify the school.

5. How is your proposal in the best interest of the community?

The new elementary school is financed with a bond voted upon and approved by the community. This is a public facility and communicating information about events occurring at the school to the community is beneficial in keeping the community informed. Providing wall signage helps with identifying entrances used by the community after-hours.

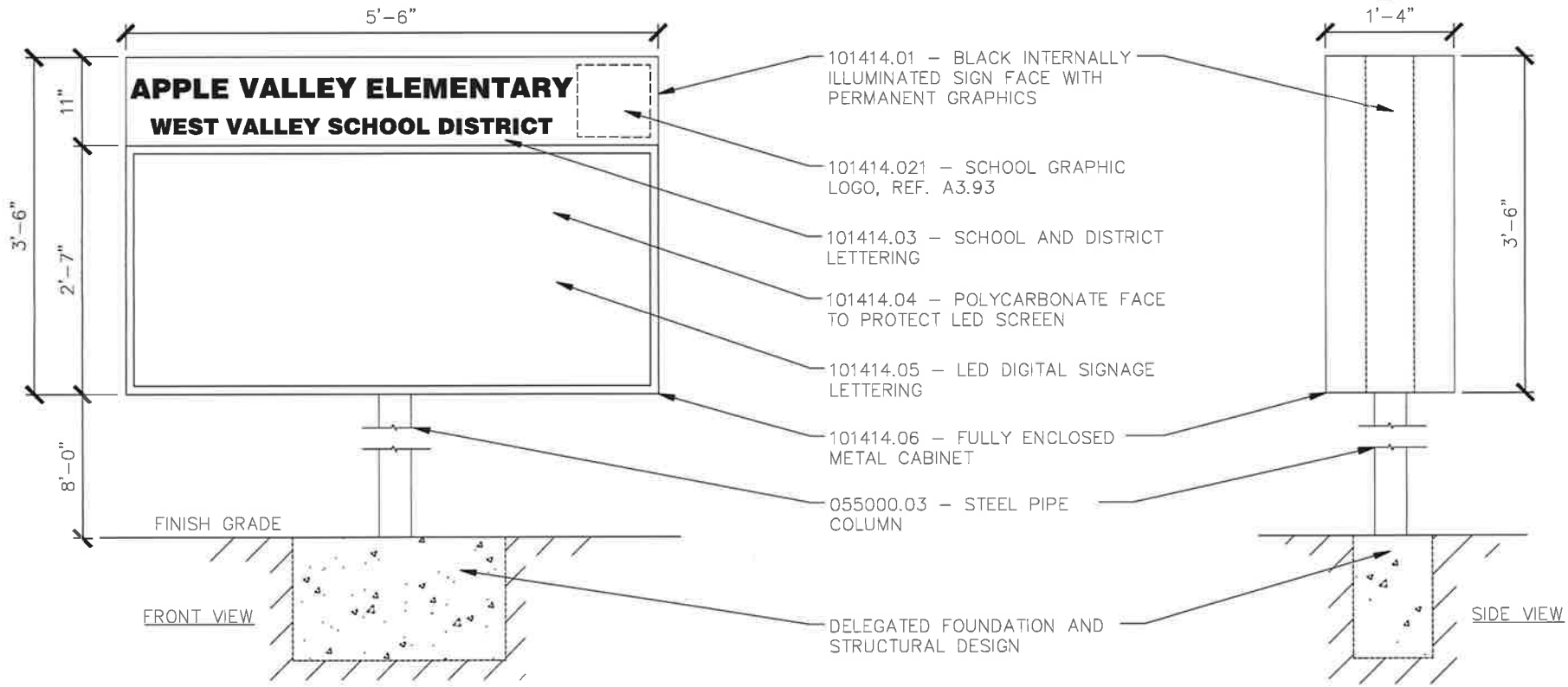
WEST ELEVATION

18" METAL LETTERS
"APPLE VALLEY ELEMENTARY"
MOUNTED TO CANOPY FASCIA

14" METAL LETTERS
"GYM"
MOUNTED TO CANOPY FASCIA

WVSD - APPLE VALLEY ELEMENTARY

PROPOSED BUILDING SIGNAGE



ELECTRONIC READERBOARD

SCALE: 3/4" = 1'-0"

ELECTRONIC READERBOARD

CITY OF YAKIMA Planning

Supplemental Application For:

VARIANCE

YAKIMA URBAN AREA ZONING ORDINANCE, CHAPTER 15.21

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PART II - APPLICATION INFORMATION

1. TYPES OF VARIANCE (√ at least one)

☐ Lot Size | ☑ Building Height | ☐ Sign | ☐ Critical Areas

☐ Other _____ | Variance Is From YMC 1 5 . 0 5 . 0 2 0

2. AMOUNT OF ADJUSTMENT

35 FT	±	44 FT	=	9 FT
Zoning Standard		Proposed Standard		Amount of Variance

3. PROPOSED USE: (Must Be Taken From YMC Ch. 15.05, Table 5-1)

Schools: Elementary and Middle

4. LEGAL DESCRIPTION OF THE SUBJECT PROPERTY: (Attach if lengthy)

PART III - REQUIRED ATTACHMENTS

SITE PLAN REQUIRED: (Please use the City of Yakima Site Plan Checklist, attached)

PART IV - WRITTEN NARRATIVE: (Please submit a written response to the following items)

A variance shall be granted only when the applicant demonstrates that the variance will not be contrary to the public interest, is not self-created, and that practical difficulty and unnecessary hardship will result if it is not granted. The applicant must clearly establish and substantiate that the request for variance conforms to all the requirements:

1. Would granting the variance be consistent with the general purpose and intent and not be injurious to the neighborhood or otherwise detrimental to the public welfare?

A height variance is requested to help hide mechanical equipment on the roof from view with parapet walls and also to provide access to the roof for maintenance via an internal stair and elevator to the roof. In total, only 8% of the entire roof would be above the 35ft height restriction. Granting the variance would not be detrimental to the neighborhood. Flat (low-slope) roofs are designed to keep the overall building height down, but the scale of the building requires some features to exceed the current standards for height.

2. Would granting the variance permit the establishment of a use not permitted in a particular zoning district?

The height increase has no effect on the use of the building. The building is designed to be an elementary school.

3. Does a unique circumstance exist that is not generally applicable to land or structures in the neighborhood?

The scale of an elementary school provides unique conditions not typically experienced in other buildings allowed in the R-1 zone. Most structures in the R-1 zone are residences. The scale of a new elementary school makes the 35-ft height restriction more difficult to achieve. Screening HVAC equipment requires parapets to be elevated to nearly 35ft. As architectural features, the main entry and (3) other small roofs exceed the 35ft threshold by nearly 3ft. For roof access to maintain HVAC equipment, (1) stairwell requires a roof at 40ft height and an elevator up to a height of 44ft.

4. Would the strict application of the provisions deprive the applicant of reasonable use of such land or structure?

Strict application would prevent safe access to the roof via an internal stairwell or elevator. Many HVAC rooftop units will be located on the roof making access to the roof critical for maintenance staff.

PART IV - WRITTEN NARRATIVE (CON'T): (Please submit a written response to the following items)

5. Does an unnecessary hardship exist?

No

6. What is the minimum variance needed?

9 FT Maximum Height increase in R-1 zone for elementary school.

7. Is the property located in the Floodplain or Airport Overlay?

NO

THE BELOW QUESTIONS ARE APPLICABLE ONLY TO VARIANCES LOCATED IN THE FLOODPLAIN AND AIRPORT OVERLAYS

8. Will the proposed variance or development result in an increase of danger to life and property due to flooding or airport conflicts?

N/A

9. Please provide an explanation of the importance of the services provided by the proposed use to the community.

N/A

10. Please provide an explanation of why the proposed development needs a waterfront or airport location.

N/A

11. Are there other locations for the proposed use, which are not subject to flooding or airport hazards?

N/A

12. Please provide an explanation of how the proposed use is compatible with existing and anticipated development in the area.

N/A

13. Please explain the relationship of the proposed use to the airport master plan and floodplain management program.

N/A

Critical Areas Identification Form

CITY OF YAKIMA, DEPARTMENT OF COMMUNITY DEVELOPMENT

129 NORTH SECOND STREET, 2ND FLOOR, YAKIMA, WA 98901

VOICE: (509) 575-6183 EMAIL: ask.planning@yakimawa.gov

This form is intended to provide a sufficient level of information that, when combined with a site inspection, the Administrative Official can make an informed determination as to whether or not critical areas are present on the site, and whether or not the proposed activity will impact those critical areas. A "yes" response to any single question on the identification form does not necessarily indicate that further critical area review is required. **The Administrative Official will evaluate all the information provided on the form, in conjunction with the information provided with the initial permit application, to determine if further investigation is needed and whether completion of a critical area report is warranted**. In some instances, a preliminary report prepared by an environmental professional may be appropriate. If a buffer reduction is necessary for your project, a separate review will be required and a separate fee will be charged.
Some of the questions listed here require locating the project area on reference maps. The City of Yakima has various maps on file, i.e. the FEMA Floodplain Map. Maps from other federal, state, and local agencies may also be used as indicators.

PART II - APPLICATION INFORMATION

A. Project Information

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PLANNING DIV.

1. Name of project.

Apple Valley Elementary School Project

2. Name and address of applicant.

West Valley School District No. 208 (WVSD) 8902 Zier Road, Yakima, WA 98908

3. Name and address of individual completing the identification form and their environmental/technical expertise/special qualifications.

Jeff Ding, Planner
EA Engineering, Science and Technology 2200 6th Avenue, Suite 707, Seattle, WA 98121

4. Date the identification form was prepared.

December 17, 2019

5. Location of the proposed activity (street address and legal description).

7 N 88th Avenue, Yakima, WA 98908 (NW 1/4 of the SE 1/4 of Section 19, Township 13N, Range 18 E WM).

6. Give a brief, complete description of the proposed activity, including extent of proposed activities, and impervious surface areas.

The proposed project would include the demolition of the existing school buildings and relocation of the existing portable buildings to allow for the construction of a new two-story, approximately 60,300 sq. ft. elementary school building. Parking areas would be provided along the northern and western edges of the site. Grass open areas would be retained along the southern and eastern edges of the site. Impervious surfaces with the project would be similar to those currently on the site (buildings, parking areas, paved play areas, walkways) and the amount of impervious surface on the site would increase from approximately 30 percent of the site to approximately 48 percent of the site.

7. Describe the limits of the project area in relation to the site (*for example, "the project area will extend to within 50 feet of the north property line"*), including the limits of proposed clearing and construction activity.

The proposed school building would be located in the central portion of the site (approximately 45 feet from the west property line and 50 feet from the north property line). Parking areas would be located adjacent to the western edge of the site (and approximately 15 feet from the south property line) and near the northern edge of the site (approximately 15 feet from the north property line). Existing grass areas would be retained adjacent to the southern and eastern edges of the site.

B. General Questions That May Be Applicable To All Areas

1. What is the U.S. Department of Agriculture soil classification of the soil found on site?

The USDA Natural Resources Conservation Services classifies the soils as Cowiche loam across the majority of the site, with Harwood loam in the northeast portion of the site (see the Geotechnical Report included with the SEPA Checklist).

2. What types of soils are found on the site (for example, clay, sand, gravel, peat, muck)?

Soils on the site consist of an upper layer of fill atop native silty soil overburden overlying the local sedimentary unit of the Ellensburg Formation (see the Geotechnical Report included with the SEPA Checklist)..

3. What types of vegetation are found on site? Cattail, buttercup, bulrush, skunk cabbage, water lily, eelgrass, milfoil?

Existing grass open areas are located along the eastern and southern portion of the site. Seven existing trees are located surrounding the existing school building, including five trees within the existing courtyard and two trees adjacent to the existing parking lot.

4. Describe any vegetation proposed to be planted as part of the project.

New landscaping and planting areas would be provided on the site as part of development and would be consistent with City of Yakima requirements, including Yakima Municipal Code Section 15.06.090. The existing grass open areas along the eastern and southern portions of the site would also be retained.

5. Give a brief, complete description of existing site conditions, including current and past uses of the property as well as adjoining land uses.

The existing site contains the current Apple Valley Elementary School which is comprised of three buildings and three portable classroom buildings. An existing parking lot is located along the western edge of the site. Paved play areas are located adjacent to the existing building. Grass open space areas are located along the eastern and southern edges of the site.
Existing adjacent land uses include the Cross Church and single family residences.

6. Will the project include installation of an on-site septic system?

No, the project would not install any on-site septic systems.

7. What is the proposed timing and schedule for all multi-phased projects?

Demolition is anticipated to begin in the end of 2019 followed by site preparation and construction. Building occupancy is anticipated to occur in April 2021.

8. Do you have any plans for future additions, expansion, or related activity? If yes, explain.

The are no plans for future additions or further development of the site.

9. Have any critical areas or protection easements been recorded on the title of the property or adjacent properties?

There are no critical areas easements or protection easements on the property. Access, utility and irrigation easements are located adjacent to portions of the south property line.

10. Will your project require review under the State Shoreline Management Act or the State Environmental Policy Act?

The project is not subject to review under the State Shoreline Management Act. A SEPA Environmental Checklist has been submitted for the project.

11. Is the site within the 100-year flood plain on flood insurance maps published by the Federal Emergency Management Agency (FEMA), or on other local flood data maps?

The site is not located within a 100-year flood plain.

12. Describe any surface water and watercourses, including intermittent streams, drainage channels, ditches, and springs, located on site or within one-half mile of the site. If appropriate, provide the names of the water bodies to which the streams flow.

The Congdon Canal is the closest surface water body to the site and is located more than 600 feet to the southeast of the project site.

13. Indicate the topography of the site (shallow areas often retain water and may be wetlands, although wetlands may also occur on slopes).

The majority of the site is generally flat with a slight slope near the north edge of the site. The steepest slope on the site is approximately 15 percent.

14. How will stormwater from the project be managed?

The proposed stormwater management system for the site would include drainage basins and underground stormwater drainage structures generally located along the south portion of the site. Stormwater management would be consistent with applicable provisions of the Yakima County Regional Stormwater Manual.

15. Is development proposed to be clustered to reduce disturbance of critical areas?

The development has not been clustered to reduce disturbance to critical areas. However, development has been designed to retain existing grass areas along the southern and eastern edges of the site.

16. Will this project require other government approvals for environmental impacts?

- ☐ Hydraulic Project Approval (HPA) (Washington Department of Fish and Wildlife)
- ☐ Water quality certification [(Washington State Department of Ecology (Ecology)).
- ☑ National Pollutant Discharge Elimination System (Ecology).
- ☐ Municipal or health district wastewater/septic approval (Ecology).
- ☐ Water Use Permit; Certificate of Water Right (Ecology).
- ☐ U.S. Army Corps Section 404 or Section 10 Permits.
- ☐ Forest Practices Permit (Washington State Department of Natural Resources (DNR)).
- ☐ Aquatic Lands Lease and/or Authorization (DNR).
- ☐ Shoreline development, conditional use, or variance permit (local jurisdiction).
- ☐ Other _____

C. Available Information

1. Has a critical area review, or other environmental review, been conducted for another project located on or adjacent to the site? List any environmental information known to have been prepared, or expected to be prepared, relating to this proposal or project area.

A SEPA Checklist was completed for the demolition and construction of the proposed project, including a Geotechnical Report, a Greenhouse Gas Emissions Worksheet, a Hazardous Building Materials Survey Report, and a Traffic Impact Analysis Report.

D. Wetlands

1. Is there any evidence of ponding on or in the vicinity of the site?

There is no evidence of ponding on or in the vicinity of the site.

2. Does the proposed activity or construction involve any discharge of waste materials or the use of hazardous substances?

The project would not discharge waste materials or hazardous substances.

E. Critical Aquifer Recharge Areas

1. What is the permeability (rate of infiltration) of the soils on the site? (Note: *General information for this question and the following question can be found in the Guidance Document for the Establishment of Critical Aquifer Recharge Area Ordinances, 2000, Ecology Publication #97-30*). Three soil infiltration test pits were completed as part of the Geotechnical Report. Test pits P1 and P2 were located in the south portion of the site and had an infiltration rate of 0.84 inches/hour and 2.4 inches/hour, respectively. Test pit P3 was in the northeast portion of the site and had an infiltration rate of 0.79 inches/hour.

2. What is the annual average precipitation in the area?

The average annual precipitation for the City of Yakima is approximately 9 inches.

3. Is there any evidence of groundwater contamination on or in the vicinity of the site?

There is no evidence of groundwater contamination on or in the vicinity of the site. However, soil sampling for the Geotechnical Report identified levels of lead and arsenic above the MTCA levels. A remediation plan would be completed

4. Is there any groundwater information available from wells that have been dug in the vicinity? If so, describe, including depth of groundwater and groundwater quality.

Groundwater was not encountered in the geotechnical borings which were completed to a depth of 13 feet bgs. The Ecology Well Log database indicates that the depth of groundwater in the site vicinity is approximately 40 feet bgs.

5. Does the proposed activity or construction involve any discharge of waste materials or the use of hazardous substances?

The project would not discharge waste materials or hazardous substances.

F. Frequently Flooded Areas

1. Is the site, or a portion of the site, at a lower elevation than surrounding properties?

No, the site and surrounding areas are generally flat.

G. Geological Hazard

1. Generally describe the site: Flat, rolling, hilly, steep slopes, mountainous, other.

The site and surrounding areas are generally flat.

2. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill material.

Approximately 15,000 cubic yards of grading and excavation would occur during construction. The site is anticipated to be a net balance and no significant amounts of imported or exported soils are anticipated.

3. What is the steepest slope on the property? The steepest slope is approximately 15 percent.

4. Is the area mapped by Ecology (Coastal Zone Atlas) or the Department of Natural Resource (slope stability mapping) as unstable ("U" or class 3), unstable old slides ("UOS" or class 4), or unstable recent slides ("URS" or class 5)?

No, the area is not mapped as unstable.

5. Is the area designated as quaternary slumps, earthflows, mudflows, lahars, seismic hazard, or landslides on maps published by the U.S. Geological Survey or Dept. of Natural Resources?

No, the area is not designated as quaternary slumps, earthflows, mudflows, lahars, seismic hazard or landslide hazards.

6. Is there any indication of past landslides, erosion, or unstable soils in the vicinity?

The is no indication of past landslides, erosion or unstable soils on the site.

7. Is erosion likely to occur as a result of clearing, construction, or use?

Temporary erosion is possible with any construction activity but TESC measures would minimize potential impacts.

8. Are soils proposed to be compacted?

Some level of soil compaction may occur during the construction process but would be in accordance with applicable City of Yakima standards and regulations.

9. Are roads, walkways, and parking areas designed to be parallel to natural contours?

The proposed north parking lot would be parallel to the natural contours of the site. The proposed west parking lot would run perpendicular to the natural contours.

H. Habitat

1. List any birds, mammals, fish, or other animal species found in the vicinity of the site, including those found during seasonal periods.

Birds and small mammals tolerant of developed areas are known to be in the vicinity of the site, including squirrel, mouse, rat, opossum, raccoon, crow, sparrow, robin, and starling.

2. Is the site or areas in the vicinity used for commercial or recreational fishing, including shellfish?

The site is not in the vicinity of commercial or recreational fishing areas.

3. Is the area designated an Area of Special Concern under on-site sewage regulations to protect shellfish or the general aquatic habitat?

The site is not designated as an Area of Special Concern under on-site sewage regulations.

4. Are any natural area preserves or natural resource areas located within 500 feet of the site?

There are no natural area preserves or natural resource areas within 500 feet of the site.

5. Is the site part of a migration route?

The site is not part of a migration route.

6. Are any priority habitat areas, as shown on maps published by the WA Dept. of Fish & Wildlife, within one-half mile of the site? If so, describe type of habitat and distance from project area.

There are no priority habitat areas in the vicinity of the site.

7. Are any of the following located on or adjacent to the site?

☐ Aspen stands	☐ Estuary and estuary like areas	☐ Juniper savannah
☐ Caves	☐ Marine/estuarine shorelines	☐ Prairies and steppe
☐ Cliffs	☐ Vegetative marine/estuarine areas	☐ Riparian areas
☐ Shrub-steppe	☐ Old-growth/mature forests	☐ Instream habitat areas
☐ Snags or logs	☐ Oregon white oak woodlands	☐ Rural natural open spaces
☐ Talus	☐ Freshwater wetlands and fresh deepwater	☐ Urban natural open spaces

8. Does the proposal involve any discharge of waste materials or the use of hazardous substances?

The project would not discharge waste materials or hazardous substances.

9. What levels of noise will be produced from the proposed activity or construction?

Short-term construction-related noise would occur during the development of the proposed project and would be subject to the City's Noise Ordinance. Subsequent to construction, noise from the school would be similar to existing conditions and would include human voices and vehicles travelling to and from the site.

10. Will light or glare result from the proposed activity or construction?

At times, area lighting may be necessary during construction to meet safety requirements. Light and glare from the proposed project would be similar to the existing school and include interior and exterior building lighting, as well as vehicle headlights. Lighting levels may be slightly higher due to increased building space but would not be significant.

III. REQUIRED ATTACHMENTS

1. Are there any existing environmental documents for the subject property?

2. Provide a detailed site plan which includes all the required items on the Site Plan Checklist, along with the extent and nature of on-site and off-site Critical Areas and the relationship of the project to those Critical Areas.

ENVIRONMENTAL CHECKLIST

STATE ENVIRONMENTAL POLICY ACT (SEPA)
(AS TAKEN FROM WAC 197-11-960)
YAKIMA MUNICIPAL CODE CHAPTER 6.88

PURPOSE OF CHECKLIST

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

INSTRUCTIONS FOR APPLICANTS

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help you describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

USE OF CHECKLIST FOR NONPROJECT PROPOSALS

For non-project proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project", "applicant", and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B – Environmental Elements – that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND INFORMATION (To be completed by the applicant.)

RECEIVED
OCT 23 2019
CITY OF YAKIMA
PLANNING DIV.

1. **Name Of Proposed Project (If Applicable):**
   Apple Valley Elementary School Project

2. **Applicant's Name & Phone:**
   West Valley School District No. 208 (WVSD)

3. **Applicant's Address:**
   8902 Zier Road, Yakima, WA 98908

4. **Contact Person & Phone:**
   Rob Gross. Sr. Project Manager CBRE|Heery. 1212 North Washington Street, Suite 210, Spokane, WA 99201. 509-496-1712.

5. **Agency Requesting Checklist:** City of Yakima

6. **Proposed Timing Or Schedule (Including Phasing, If Applicable):**
   Demolition could begin in approximately November 2019, followed by site preparation and construction. Building occupancy is anticipated in approximately April 2021.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain:**
   No future plans for further development of the project site are proposed.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal:**
   Geotechnical Site Investigation Report (GN Northern, Inc., 2019); Greenhouse Gas Emission Worksheet (EA Engineering, 2019); Hazardous Building Materials Inspection Report (Fulcrum Environmental Consulting, 2019); and, Transportation Technical Report (Transpo Group, 2019).

A. BACKGROUND INFORMATION (To be completed by the applicant.)

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:

A demolition permit is currently being reviewed by the City of Yakima for the project. There are no known other applications that are pending approval for the Apple Valley Elementary School Project site.

10. List any government approvals or permits that will be needed for your proposal, if known:

Demolition Permit; Type 3 Review Application; Building Permit; Mechanical Permits; Electrical and Fire Alarm Permits; Drainage and Sewer Permit; Comprehensive Drainage Control Plan Approval; Drainage Control Plan with Construction Best Management Practices, Erosion and Sediment Control Approval; Grading/Shoring Permit; Tree Removal Authorization; Street Use and Construction Use Permit (temporary – construction related); Street Use and Utility Permit

11. Give a brief, but 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.):

The proposed Apple Valley Elementary School Project is intended to address current over-crowded conditions in the existing facility and upgrade the quality of the student learning environment at the school. The proposed project would include the demolition of the existing buildings and relocation of the existing portable buildings to allow for the construction of a new two-story elementary school building. The approximately 60,300 gsf building would contain approximately 24,110 gsf of classroom space (approximately 23 classrooms), 11,770 gsf of common areas, 1,440 gsf of offices, and 22,990 gsf of other space. The proposed addition would increase the student capacity of the school from an existing capacity of 232 students (current enrollment of approximately 367 students) to a new capacity of 550 students. Play areas would located adjacent to the building. Existing grass open areas would continue to remain to the east and south of the building. Visitor parking and parent drop off/pickup would be located along the western edge of the site; staff parking and bus loading/unloading would be located at the north edge.

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:

The proposed Apple Valley Elementary School Project site is located at 7 N 88th Avenue. The project site is generally bounded by open grass area, single family residences, and the Cross Church to the north; single family residences to the east and to the south; and N 88th Avenue and single family residences to the west.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

EARTH

1. **General description of the site (✓ one):**
   ☑ flat ☐ rolling ☐ hilly ☐ steep slopes ☐ mountainous ☐ other: _____

2. **What is the steepest slope on the site (approximate percent slope)?**
   See Attachment 1.

3. **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.**
   See Attachment 1.

4. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**
   See Attachment 1.

5. **Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.**
   See Attachment 1.

6. **Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**
   See Attachment 1.

7. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**
   See Attachment 1.

8. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**
   See Attachment 1.

AIR

1. **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.**
   See Attachment 1.

2. **Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**
   See Attachment 1.

3. **Proposed measures to reduce or control emissions or other impacts to air, if any:**
   See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

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.**
   See Attachment 1.

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.**
   See Attachment 1.

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.**
   See Attachment 1.

4. **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**
   See Attachment 1.

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**
   See Attachment 1.

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.**
   See Attachment 1.

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.**
   See Attachment 1.

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.**
   See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

WATER RUNOFF (INCLUDING STORM WATER)

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.**
   See Attachment 1.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**
   See Attachment 1.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**
   See Attachment 1.

4. **Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:**
   See Attachment 1.

PLANTS

1. **Check (✓) types of vegetation found on the site:**

Deciduous Trees:	Evergreen Trees:	Wet Soil Plants:	Water Plants:	Other:
☐ Alder	☐ Fir	☐ Cattail	☐ Milfoil	☑ Shrubs
☐ Maple	☐ Cedar	☐ Buttercup	☐ Eelgrass	☑ Grass
☐ Aspen	☐ Pine	☐ Bullrush	☐ Water Lily	☐ Pasture
☑ Other	☐ Other	☐ Skunk Cabbage	☐ Other	☐ Crop Or Grain
		☐ Other		☐ Orchards, vineyards, or other permanent crops
				☐ Other types of vegetation

2. **What kind and amount of vegetation will be removed or altered?**
   See Attachment 1.

3. **List threatened or endangered species known to be on or near the site.**
   See Attachment 1.

4. **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**
   See Attachment 1.

5. **List all noxious weeds and invasive species known to be on or near the site.**
   See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

ANIMALS

1. **List any birds or other animals which have been observed on or near the site or are known to be on or near the site.**
   Examples include:
   birds: hawk, heron, eagle, songbirds, other:
   mammals: deer, bear, elk, beaver, other:
   fish: bass, salmon, trout, herring, shellfish, other:
   See Attachment 1.

2. **List any threatened or endangered species known to be on or near the site.**
   See Attachment 1.

3. **Is the site part of a migration route? If so, explain.**
   See Attachment 1.

4. **Proposed measures to preserve or enhance wildlife, if any:**
   See Attachment 1.

5. **List any invasive animal species known to be on or near the site.**
   See Attachment 1.

ENERGY AND NATURAL RESOURCES

1. **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.**
   See Attachment 1.

2. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**
   See Attachment 1.

3. **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:**
   See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

ENVIRONMENTAL HEALTH

1. **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.**
   See Attachment 1.

2. **Describe any known or possible contamination at the site from present or past uses.**
   See Attachment 1.

3. **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.**
   See Attachment 1.

4. **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.**
   See Attachment 1.

5. **Describe special emergency services that might be required.**
   See Attachment 1.

6. **Proposed measures to reduce or control environmental health hazards, if any:**
   See Attachment 1.

NOISE

1. **What types of noise exist in the area, which may affect your project (for example: traffic, equipment, operation, other)?**
   See Attachment 1.

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.**
   See Attachment 1.

3. **Proposed measures to reduce or control noise impacts, if any:**
   See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

LAND AND SHORELINE USE

1. **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.**

   See Attachment 1.

2. **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?**

   See Attachment 1.

3. **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:**

   See Attachment 1.

4. **Describe any structures on the site.**

   See Attachment 1.

5. **Will any structures be demolished? If so, what?**

   See Attachment 1.

6. **What is the current zoning classification of the site?**

   See Attachment 1.

7. **What is the current comprehensive plan designation of the site?**

   See Attachment 1.

8. **If applicable, what is the current shoreline master program designation of the site?**

   See Attachment 1.

9. **Has any part of the site been classified as a critical area by the city or county? If so, specify.**

   See Attachment 1.

10. **Approximately how many people would reside or work in the completed project?**

    See Attachment 1.

11. **Approximately how many people would the completed project displace?**

    See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

LAND AND SHORELINE USE

12. **Proposed measures to avoid or reduce displacement impacts, if any.**
See Attachment 1.

13. **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**
See Attachment 1.

14. **Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:**
See Attachment 1.

HOUSING

1. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**
See Attachment 1.

2. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**
See Attachment 1.

3. **Proposed measures to reduce or control housing impacts, if any:**
See Attachment 1.

AESTHETICS

1. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**
See Attachment 1.

2. **What views in the immediate vicinity would be altered or obstructed?**
See Attachment 1.

3. **Proposed measures to reduce or control aesthetic impacts, if any:**
See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

LIGHT AND GLARE

1. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**
   See Attachment 1.

2. **Could light or glare from the finished project be a safety hazard or interfere with views?**
   See Attachment 1.

3. **What existing off-site sources of light or glare may affect your proposal?**
   See Attachment 1.

4. **Proposed measures to reduce or control light and glare impacts, if any:**
   See Attachment 1.

RECREATION

1. **What designated and informal recreational opportunities are in the immediate vicinity?**
   See Attachment 1.

2. **Would the proposed project displace any existing recreational uses? If so, describe.**
   See Attachment 1.

3. **Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**
   See Attachment 1.

HISTORIC AND CULTURAL PRESERVATION

1. **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.**
   See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

HISTORIC AND CULTURAL PRESERVATION

2. **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.**

   See Attachment 1.

3. **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.**

   See Attachment 1.

TRANSPORTATION

1. **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.**

   See Attachment 1.

2. **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?**

   See Attachment 1.

3. **How many parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?**

   See Attachment 1.

4. **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).**

   See Attachment 1.

5. **Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

   See Attachment 1.

6. **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 non-passenger vehicles). What data or transportation models were used to make these estimates?**

   See Attachment 1.

B. ENVIRONMENTAL ELEMENTS (To be completed by the applicant)

TRANSPORTATION

7. **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:**

See Attachment 1.

8. **Proposed measures to reduce or control transportation impacts, if any:**

See Attachment 1.

PUBLIC SERVICES

1. **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:**

See Attachment 1.

2. **Proposed measures to reduce or control direct impacts on public services, if any.**

See Attachment 1.

UTILITIES

1. **Check (✓) utilities currently available at the site:**

☑ **electricity** ☑ **natural gas** ☑ **water** ☑ **refuse service** ☑ **telephone**

☑ **sanitary sewer** ☐ **septic system** ☐ **other**_____

2. **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.**

See Attachment 1.

C. SIGNATURE (To be completed by the applicant.)

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.

RECEIVED
OCT 23 2019
CITY OF YAKIMA
PLANNING DIV.

October 10, 2019	
Property Owner or Agent Signature	**Date Submitted**
Jeff Ding	Planner, EA Engineering, Science and Technology, Inc., PBC
Name of Signee	**Position and Agency/Organization**

PLEASE COMPLETE SECTION "D" ON THE NEXT PAGES
IF THERE IS NO PROJECT RELATED TO THIS ENVIRONMENTAL REVIEW

D. SUPPLEMENTAL SECTION FOR NONPROJECT ACTIONS ONLY (to be completed by the applicant)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment. When answering these questions, be aware of the extent the proposal, or the types of activities that would likely result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

   Proposed measures to avoid or reduce such increases are:

2. **How would the proposal be likely to affect plants, animals, fish, or marine life?**

   Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. **How would the proposal be likely to deplete energy or natural resources?**

   Proposed measures to protect or conserve energy and natural resources are:

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

   Proposed measures to protect such resources or to avoid or reduce impacts are:

D. SUPPLEMENTAL SECTION FOR NONPROJECT ACTIONS ONLY (to be completed by the applicant)

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

ATTACHMENT 1

ENVIRONMENTAL CHECKLIST

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for the proposed

Apple Valley Elementary School Project

prepared by

WEST VALLEY SCHOOL DISTRICT

October 2019

EA Engineering, Science, and Technology, Inc., PBC
GN Northern, Inc.
Fulcrum Environmental Consulting
The Transpo Group.

PREFACE

The purpose of this Environmental Checklist is to identify and evaluate probable environmental impacts that could result from the ***Apple Valley Elementary School Project*** and to identify measures to mitigate those impacts. The ***Apple Valley Elementary School Project*** would involve demolition of the existing school buildings and development of a new two-story, approximately 60,300 gross square foot (gsf) elementary school building to address current over-crowded conditions in the existing facility and upgrade the quality of the student learning environment at the school.

The State Environmental Policy Act (SEPA)[1] requires that all governmental agencies consider the environmental impacts of a proposal before the proposal is decided upon. This Final Environmental Checklist has been prepared in compliance with the State Environmental Policy Act; the SEPA Rules, effective April 4, 1984, as amended (Chapter 197-11, Washington Administrative Code); and the Yakima Municipal Code (6.88), which implements SEPA.

This document is intended to serve as SEPA review for site preparation work, building construction, and operation of the proposed development comprising the ***Apple Valley Elementary School Project.*** Analysis associated with the proposed project contained in this Environmental Checklist is based on Schematic Design plans for the project, which are on-file with the West Valley School District and the City of Yakima. While not construction-level detail, the schematic plans accurately represent the eventual size, location and configuration of the proposed project and are considered adequate for analysis and disclosure of environmental impacts.

This Environmental Checklist is organized into three major sections. *Section A* of the Checklist (starting on page 1) provides background information concerning the *Proposed Action* (e.g., purpose, proponent/contact person, project description, project location, etc.). *Section B* (beginning on page 5) contains the analysis of environmental impacts that could result from implementation of the proposed project, based on review of major environmental parameters. This section also identifies possible mitigation measures. *Section C* (page 28) contains the signature of the proponent, confirming the completeness of this Environmental Checklist.

Project-relevant analyses that served as a basis for this Environmental Checklist include: the *Geotechnical Site Investigation Report* (GN Northern, Inc., 2019), the *Greenhouse Gas Emissions Worksheet* (EA Engineering, 2019), the *Hazardous Materials Building Inspection Report* (Fulcrum Environmental Consulting, 2019), and the *Traffic Impact Analysis Report* (Transpo Group, 2019). These reports are included as appendices to this SEPA Checklist

[1] Chapter 43.21C. RCW

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PURPOSE

The State Environmental Policy Act (SEPA), Chapter 43.21 RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. The purpose of this checklist is to provide information to help identify impacts from the proposal (and to reduce or avoid impacts, if possible) and to help make a SEPA threshold determination.

A. BACKGROUND

1. Name of Proposed Project:

Apple Valley Elementary School Project

2. Name of Applicant:

West Valley School District No. 208 (WVSD)

3. Address and Phone Number of Applicant and Contact Person:

Rob Gross
Senior Project Manager
CBRE | Heery
1212 North Washington Street, Suite 210
Spokane, WA 99201
509.496.1712

4. Date Checklist Prepared

October 10, 2019

5. Agency Requesting Checklist

City of Yakima
129 North 2nd Street
Yakima, WA 98901

6. Proposed Timing or Schedule (including phasing, if applicable):

The ***Apple Valley Elementary School Project*** that is analyzed in this Environmental Checklist involves demolition, site preparation work, construction, and operation of the project. Demolition is anticipated to begin in November 2019 and would be followed by site preparation and construction of the new building. Building occupancy is anticipated to occur in April 2021.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No future plans for further development of the project site are proposed.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal:

- *Geotechnical Site Investigation Report* (GN Northern, Inc., 2019);
- *Greenhouse Gas Emission Worksheet* (EA Engineering, 2019);
- *Hazardous Building Materials Inspection Report* (Fulcrum Environmental Consulting, 2019);
- *Traffic Impact Analysis Report* (Transpo Group, 2019).

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:

A demolition permit is currently being reviewed by the City of Yakima for the project. There are no known other applications that are pending approval for the ***Apple Valley Elementary School Project*** site.

10. List any government approvals or permits that will be needed for your proposal, if known:

City of Yakima

Permits/approvals associated with the proposed project, including:

- Type 3 Review Application
- Demolition Permit
- Building Permit
- Mechanical Permit
- Plumbing Permit
- Electrical Permit
- Fire Code Permit
- Sewer Permit
- Water Connection Permit
- Stormwater Permit
- Grading/Shoring Permit
- Tree Removal Authorization
- Excavation Permit – Street Break

WA Department of Ecology

- NPDES Construction Stormwater Permit

11. Give a 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.

Existing Site Conditions

The proposed ***Apple Valley Elementary School Project*** site is located in the western portion of the City of Yakima (see **Figures 1** and **2**). The school campus is generally bounded by open grass area, single family residences, and the Cross Church to the north; single family residences to the east and to the south; and N 88th Avenue and single family residences to the west.

The existing single-story Apple Valley Elementary School contains approximately 31,670 gsf of building space, including approximately 16,350 gsf of classroom space, 6,900 gsf of common space, 1,185 gsf of offices, and 7,220 gsf of other space. The school is comprised of three buildings that are centrally located on the site, including a gymnasium building, a library building, and an office building (classroom are located within the library building and the office building). Three portable classroom buildings are also located to the southeast of the existing buildings.

Existing play areas are located to the northwest and northeast of the existing buildings. Open grass areas are located to the south of the buildings and include a backstop for baseball/softball use and soccer goals; additional open grass area is located along the eastern edge of the site

A parking lot is located to the west of the buildings, adjacent to N 88th Avenue, and includes space for approximately 55 vehicles. School bus loading and unloading also occurs in this area adjacent to the buildings.

The existing Apple Valley Elementary School has a capacity for approximately 232 students; however, current enrollment for the existing school is approximately 367 students *(West Valley School District, 2019)*. It should be noted that to accommodate construction activities with the project, Apple Valley Elementary has temporarily moved to the West Valley freshman campus until the proposed project is operational.

Proposed Project

The proposed ***Apple Valley Elementary School Project*** is intended to address current over-crowded conditions in the existing facility and upgrade the quality of the student learning environment at the school. The proposed project would include the demolition of the existing buildings and relocation of the existing portable buildings to allow for the construction of a new two-story elementary school building that would be centrally located on the school campus (see **Figure 3**). The approximately 60,300 gsf building would contain approximately 24,110 gsf of classroom space (approximately 23 classrooms), 11,770 gsf of common areas, 1,440 gsf of offices, and 22,990 gsf of other space. The proposed addition would increase the student capacity of the school

from an existing capacity of 232 students to a new capacity of 550 students. **Table 1** provides a summary of existing and proposed building area for the school.

Table 1
Existing and Proposed Building Area

	Existing	Proposed
Classroom	16,347 gsf	24,110 gsf
Common Areas	6,916 gsf	11,766 gsf
Offices	1,185 gsf	1,437 gsf
Other	7,222 gsf	22,987 gsf
Total	**31,670 gsf**	**60,300 gsf**

Source: Design West Architects, 2019.

Multiple play areas would be provided adjacent to the new building. A kindergarten playground would be located to the east of the building. Two playground areas, a basketball court and other hard surface play areas would also be located to the south and southeast of the building. Existing grass open areas would continue to remain to the east and south of the building; grass areas to the south and southeast of the building would be able to be utilized for baseball/softball and soccer.

Visitor parking and parent drop off/pickup would be located along the western edge of the site, adjacent to N 88th Avenue; approximately 64 parking stalls would be provided within this area. Staff parking and bus loading/unloading would be located to the north of the building with access via N 88th Avenue; approximately 86 parking stalls would be located in this area.

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. If a proposal would occur over a range of area, provide the range or boundaries of the site(s).

The proposed ***Apple Valley Elementary School Project*** site is located at 7 N 88th Avenue. The project site is generally bounded by open grass area, single family residences, and the Cross Church to the north; single family residences to the east and to the south; and N 88th Avenue and single family residences to the west. See **Figure 1** and **Figure 2** for vicinity maps of the project site

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other:_____

The majority of the ***Apple Valley Elementary School Project*** site is generally flat with a slight slope near the north edge of the site.

b. What is the steepest slope on the site (approximate percent slope)?

The overall vertical change of the school campus is approximately 25 feet from north to south. The steepest slope on the site is approximately 15 percent and located to the north of the existing buildings (*GN Northern, 2019*).

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.

Three exploratory borings were completed on the site as part of the Geotechnical Report prepared by GN Northern for the project (see **Appendix A** for further details). Explorations were completed to a depth ranging from 11 to 13 feet below the existing ground surface. Soils on the site generally consisted of an upper layer of fill atop native silty soil overburden overlying the local sedimentary unit of the Ellensburg Formation. Native soils were typically classified as sandy silt that appear medium dense. Silty sand with gravel was encountered beneath a thin gravel unit and the upper fill soils in the southern portion of the site.

The project site does not contain any agricultural land of long-term commercial significance.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

There are no indications or history of unstable soils on the site or in the site vicinity. According to the City of Yakima's GIS Maps, there are no geologic hazards on or immediately adjacent to the site (*City of Yakima, 2019*).

e. Describe the purpose, type, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Approximately 15,000 cubic yards of grading and excavation would occur during project construction. The site is anticipated to be a net balance and no significant amounts of imported or exported soils are anticipated.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Temporary erosion is possible in conjunction with any construction activity. Site work would expose soils on the site, but the implementation of a Temporary Erosion Sedimentation Control (TESC) plan and best management practices (BMPs) during construction that are consistent with City of Yakima standards would mitigate any potential impacts.

Once the project is operational, no erosion is anticipated.

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

Under the current conditions, approximately 30 percent of the school campus is covered with impervious surfaces, including buildings, paved play areas, walkways, parking areas and other impervious surfaces.

With the completion of the project, approximately 48 percent of the campus would be covered with impervious surfaces. New impervious surfaces would primarily consist of the building, paved play areas, walkways, parking areas and other impervious surfaces.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The proposed project would comply with the applicable provisions of Yakima Municipal Code Section 7.82 – Construction Stormwater Runoff, including the provision of a construction stormwater pollution prevention plan which includes elements to minimize erosion, stabilize soils and maintain temporary erosion and sediment control BMPs .

2. Air

a. What type of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

During construction, the ***Apple Valley Elementary School Project*** could result in temporary increases in localized air emissions associated with particulates and construction-related vehicles. It is anticipated that the primary source of temporary, localized increases in air quality emissions would result from particulates associated with demolition, on-site excavation and site preparation. While the potential for increased air quality emissions could occur throughout the construction process, the timeframe of greatest potential impact would be at the outset of the project in conjunction with the site preparation and excavation/grading activities. However, as described above under the Earth discussion, minimal amounts of excavation would be required for the project and air quality emission impacts are not anticipated to be significant.

Temporary, localized emissions associated with carbon monoxide and hydrocarbons would result from diesel and gasoline-powered construction equipment operating on-site, construction traffic accessing the project site, and construction worker traffic. However, emissions from these vehicles and equipment would be small and temporary and are not anticipated to result in a significant impact.

Upon completion of the project, the primary source of emissions would be from vehicles travelling to and from the site. While the number of vehicles travelling to and from the site will increase as a result of the increased capacity of the school, the amount of emissions generated from those vehicles is not anticipated to result in a significant impact.

Another consideration with regard to air quality and climate relates to Greenhouse Gas Emissions (GHG). In order to evaluate climate change impacts of the proposed project, a Greenhouse Gas Emissions Worksheet has been prepared (**Appendix B** of this Environmental Checklist). This Worksheet estimates the emissions from the following sources: embodied emissions; energy-related emissions; and, transportation-related emissions. In total, the estimated lifespan emissions for the proposed project would approximate 63,042 $MTCO_2e$[2]. Based on an assumed building life of 62.5 years,[3] the proposed building would be estimated to generate approximately 1,009 $MTCO_2e$ annually. For reference, the Washington State Department of

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2 $MTCO_2e$ is defined as Metric Ton Carbon Dioxide Equivalent and is a standard measure of amount of CO2 emissions reduced or sequestered.

3 According to the Greenhouse Gas Emissions Worksheet, 62.5 years is the assumed building life for educational buildings.

Ecology threshold for potential significant GHG emissions is 25,000 $MTCO_2e$ annually. Therefore, the proposed project would not be anticipated to generate a significant amount of GHG emissions.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

The primary off-site source of emissions in the site vicinity is vehicle traffic on surrounding roadways, including N 88th Avenue and Summitview Avenue. There are no known offsite sources of air emissions or odors that would affect the proposed project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

No emission-related impacts are anticipated and mitigation measures would not be necessary.

3. Water

a. Surface:

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.

There is no surface water body on or in the immediate vicinity of the ***Apple Valley Elementary School Project*** site. The nearest surface water body is the Congdon Canal, which is located more than 600 feet to the southeast of the proposed project site (see **Figure 1**).

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.

The proposed project will not require any work over, in, or adjacent (within 200 feet) of any water body.

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.

No fill or dredge material would be placed in or removed from any surface water body as a result of the proposed project.

4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

The proposed project would not require any surface water withdrawals or diversions.

5) **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

The proposed project site does not lie within a 100-year floodplain and is not identified as a floodway area on City of Yakima maps (*City of Yakima, 2019)*.

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.**

There would be no discharge of waste materials to surface waters.

b. **Ground:**

1) **Will ground water be withdrawn, or will water be discharged to ground water? 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.**

No groundwater would be withdrawn or water discharged to ground water as part of the proposed project. During geotechnical investigations on the site, groundwater was not encountered within the three exploratory borings which were completed to a depth of 13 feet bgs. Review the Washington Department of Ecology (Ecology) Well Log database indicates that the depth of groundwater in the vicinity of the site is approximately 40 feet bgs or greater. Groundwater levels likely fluctuate throughout the year and are typically highest during irrigation season (*GN Northern, 2019*).

2) **Describe waste material that will be discharged into the ground from septic tanks or other sources; 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.**

Waste material would not be discharged into the ground from septic tanks or other sources as a result of the proposed project.

c. ***Water Runoff (including storm water):***

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.**

Approximately 30 percent of the existing campus is in impervious surfaces, including existing buildings and paved surfaces (parking areas, play areas, walkways, etc.). Existing stormwater sheet flows to grass areas and underground stormwater drainage structures on the school campus.

Stormwater from the proposed ***Apple Valley Elementary School Project*** would generated from similar sources as the existing conditions (buildings, parking areas, hard surface play areas, etc.) but would drain a greater amount of impervious surface when compared to existing conditions (48 percent impervious surface under the proposed project). Proposed stormwater management for the site would include drainage basins and underground stormwater drainage structures generally located along the south portion of the site. Stormwater management for the site would be designed to be consistent with applicable provisions of the Yakima County Regional Stormwater Manual.

2) **Could waste materials enter ground or surface waters? If so, generally describe.**

The proposed stormwater management system for the site would continue to ensure that waste materials would not enter ground or surface waters as a result of the proposed project.

3) **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

The proposed project would not alter or otherwise affect drainage patterns in the site vicinity.

d. **Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:**

The following measures would be implemented to control surface, ground and runoff water impacts:

- The proposed project would comply with the applicable provisions of Yakima Municipal Code Section 7.82 – Construction Stormwater Runoff, including the provision of a construction stormwater pollution prevention plan.

- Stormwater management for the proposed project would comply with applicable provisions of the Yakima County Regional Stormwater Manual.

4. Plants

a. Check or circle types of vegetation found on the site:

X deciduous tree:
__evergreen tree:
X shrubs
X grass
__ pasture
__ crop or grain
__ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
__ water plants: water lily, eelgrass, milfoil, other
_ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Existing grass areas are located on the ***Apple Valley Elementary School Project*** site surrounding the existing building, surface parking areas and play areas. Seven existing trees are located on the site including five trees located within the existing courtyard and walkway to the building, and two trees adjacent to the existing parking lot. A large open grass area is also located immediately to the south and east of the existing building

It is anticipated that portions of the existing grass areas and trees within the project area would be removed as part of construction. Seven trees would be removed as part of the project to accommodate the proposed project. The existing open grass areas to the south and east of the existing building would be largely retained.

c. List threatened or endangered species known to be on or near the site.

No known threatened or endangered species are located on or proximate to the project site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

New landscaping and planting areas would be provided on the site as part of development and would be consistent with City of Yakima requirements, including Yakima Municipal Code Section 15.06.090. The existing large open grass areas in the south and east portions of the school campus would be retained.

e. List all noxious weeds and invasive species known to be on or near the site.

No noxious weeds or invasive species are known to be on the site. Species that could be present in the vicinity of the site include Japanese knotweed, English ivy and Himalayan blackberry.

5. Animals

a. Circle (underlined) any birds and animals that have been observed on or near the site or are known to be on or near the site:

birds: songbirds, hawk, heron, eagle, **other:** crows, pigeons,
mammals: deer, bear, elk, beaver, **other:** squirrels, raccoons, rats, mice
fish: bass, salmon, trout, herring, shellfish, **other:** None.

Birds and small mammals tolerant of urban conditions may use and may be present on and near the ***Apple Valley Elementary School Project*** site. Mammals likely to be present in the site vicinity include: raccoon, eastern gray squirrel, mouse, rat, and opossum.

Birds common to the area include: European starling, house sparrow, rock dove, American crow, American robin, and house finch.

b. List any threatened or endangered species known to be on or near the site.

The following are listed threatened or endangered species that could affected by development on the project site, based on data from the U.S. Fish and Wildlife Service: marbled murrelet, Canada lynx, yellow-billed cuckoo, bull trout, grey wolf, and north american wolverine[4]. However, it should be noted that none of these species have been observed at the project site and it is unlikely that these animals are present on or near the site

c. Is the site part of a migration route? If so, explain.

The project site is not part of a known migration route.

d. Proposed measures to preserve or enhance wildlife, if any:

New landscaping would be provided adjacent to the proposed building and parking areas that could provide areas for urban wildlife.

[4] U.S. Fish and Wildlife Service. IPaC. https://ecos.fws.gov/ipac/location/index. Accessed September 2019.

e. List any invasive animal species known to be on or near the site.

No invasive animal species are known to be located on or near the project site.

6. Energy and Natural Resources

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.

Electricity and natural gas are the primary source of energy that would serve the proposed ***Apple Valley Elementary School Project*** and would generally be utilized for lighting, electronics, and heating.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

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:

The proposed project would be required to meet or exceed the requirements of the Washington State Energy Code, as adopted by the City of Yakima.

7. Environmental Health

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.

As with any construction project, accidental spills of hazardous materials from equipment or vehicles could occur; however, a spill prevention plan would minimize the potential of an accidental release of hazardous materials into the environment.

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

No known sources of potential contamination are present on the 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.

A hazardous materials inspection report was conducted for the ***Apple Valley Elementary School Project*** (*Fulcrum, 2019*). Samples for asbestos-containing materials (ACM) were taken from multiple locations within the existing school buildings. ACM was identified in several samples; however, the presence of ACM in wall materials was inconsistent and may represent an artefactual asbestos ceiling texture overspray. All ACM would require abatement by a licensed asbestos contractor following all pertinent regulations prior to building demolition. If any new suspect materials are identified during demolition, work would be halted until the materials are sampled.

Lead-containing materials (LCM) were sampled and tested from the existing buildings. 12 samples had lead detected at levels above the method of limit of reporting and 8 of the samples contained lead greater than or equal to 600mg/Kg, which is the general guideline for worker exposure risk. These materials are classified as LCM and are regulated under worker safety regulations identified in WAC 296-155-176.

Mercury-containing fluorescent lamps were also identified in the building and should be removed and recycled or disposed of in accordance with applicable local, state and federal requirements prior to demolition.

In addition, refrigerant-containing systems (refrigerators, freezers, chilled drinking fountains and HVAC systems) were identified and should be removed for reuse or decommissioned by a qualified contractor prior to demolition.

Soil sampling was also conducted as part of the geotechnical investigations on the site. Soil samples tested above the Model Toxics Control Act (MTCA) levels for both lead and arsenic. The District's team would develop a remediation plan for proper handling and disposal of contaminated soils during earthwork activities that would comply with Washington State Department of Ecology guidelines and regulations.

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.

During construction, gasoline and other petroleum-based products would be used for the operation of construction vehicles and equipment.

During the operation of the school, chemicals that would be used on the site would be limited to cleaning supplies and would be stored in an appropriate and safe location.

4) **Describe special emergency services that might be required.**

No special emergency services are anticipated to be required as a result of the project. As is typical of urban development, it is possible that normal fire, medical, and other emergency services may, on occasion, be needed from the City of Yakima (i.e. injuries during athletic activities or other school events).

5) **Proposed measures to reduce or control environmental health hazards, if any:**

A spill prevention plan would be developed and implemented during construction to minimize the potential for an accidental release of hazardous materials into the environment.

In areas where hazardous materials (ACM, LCM, mercury-containing lamps, and refrigerant cooling systems) or contaminated soils may be present, the construction contractor would comply with applicable regulations and standards for removal and disposal of such material prior to demolition of the existing building.

b. Noise

1) **What types of noise exist in the area that may affect your project (for example: traffic, equipment operation, other)?**

Traffic noise associated with adjacent roadways (N 88th Avenue and Summitview Avenue) is the primary source of noise in the vicinity of the project site. Existing noise in the site vicinity is not anticipated to adversely affect the proposed ***Apple Valley Elementary School Project***.

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 site.**

Short-Term Noise

Construction-related noise would occur as a result of on-site construction activities associated with the project. Existing residential land uses (particularly those to the immediate south and west of the site) would be the most sensitive noise receptors and could experience occasional noise-related impacts during the construction process. However, pursuant to Yakima Municipal

Code 6.04.180, sounds created by construction equipment are exempt from the City's Noise Ordinance between the hours of 6:00 AM to 10:00 PM on weekdays and 8:00 AM to 10:00 PM on Sundays and legal holidays

Long-Term Noise

The proposed ***Apple Valley Elementary School Project*** and associated increase in student capacity would likely result in a potential minor increase in noise from human voices and vehicles travelling to and from the site, particularly during student drop-off and pickup. The potential increase in noise is anticipated to be minor and would not result in significant noise impacts.

3) Proposed measures to reduce or control noise impacts, if any:

The following measures would be provided to reduce noise impacts:

- As noted, the project would comply with provisions of the City's Noise Ordinance (Yakima Municipal Code 6.04.180); which identifies construction-related noise as exempt between the hours of 6:00 AM to 10:00 PM on weekdays and 8:00 AM to 10:00 PM on Sundays and legal holidays.

8. Land and Shoreline Use

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.

The existing single-story Apple Valley Elementary School is located in the central portion of the school campus site and is comprised of three buildings, including the gymnasium building, the library building and an office building. The buildings contain approximately 31,670 gsf of building space, including classroom space, common areas, offices, and other spaces. Three portable classroom buildings are also located to the southeast of the existing buildings. Existing play areas are located to the northwest and northeast of the existing building. Open grass areas are located to the south of the building and include a backstop for baseball/softball use and soccer goals; additional open grass area is located along the eastern edge of the site. A parking lot is located to the west of the building and includes space for approximately 55 vehicles. School bus loading and unloading also occurs in this area adjacent to the building, as well as parent drop-off and pick up. (see **Figure 2** for an aerial photo of the site and **Figure 3** for the site plan of the project).

The school campus is generally bounded by open grass area, single family residences, and the Cross Church to the north; single family

residences to the east and to the south; and N 88th Avenue and single family residences to the west.

Adjacent land uses surrounding the project site are generally comprised of one-story and two-story single family residences, and the Cross Church.

The site would continue to be utilized as a school and would not be anticipated to affect current land uses on adjacent properties.

b. Has the 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?

The project site has no recent history of use as a working farmland or forest land.

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:**

The project would not affect or be affected by working farm or forest land; no working farm or forest land is located in the immediate vicinity of this site.

c. Describe any structures on the site.

The Apple Valley Elementary School campus contains three permanent single-story structures on the site, including the gymnasium building, the library building, and the office building. In total, these buildings contain approximately 31,670 gsf of building space. Three portable classroom buildings are also located to the southeast of these existing buildings.

d. Will any structures be demolished? If so, what?

As part of the proposed project, the existing single-story buildings would be demolished and the three portable classroom buildings would be relocated from the site.

d. What is the current zoning classification of the site?

The site is currently zoned as R-1 Single-Family. Public schools are categorized as a Class 3 permitted use in the R-1 Single Family zone.

The adjacent surrounding areas to the north, south, east and west, are also currently zoned as R-1 Single-Family. R-2 Two Family zoned areas are located further to the north, beyond Summitview Avenue. R-3 Multi-Family zoned areas are located further to the south and southeast, beyond W Chestnut Avenue (*City of Yakima, 2019)*.

e. What is the current comprehensive plan designation of the site?

The current comprehensive plan designation for the site is Low Density Residential (*City of Yakima, 2019*).

f. If applicable, what is the current shoreline master program designation of the site?

The project site is not located within the City's designated shoreline boundary.

g. Has any part of the site been classified as a critical area by the city or county? If so, specify.

According to the City of Yakima GIS Maps there are no Environmental Critical Areas located on the project site (*City of Yakima, 2019*).

h. Approximately how many people would reside or work in the completed project?

The proposed ***Apple Valley Elementary School Project*** would not provide any residential opportunities.

Development of the project would create new classroom space that would increase the student capacity for the school to approximately 550 students (current capacity is approximately 232 students). It should be noted that the current student enrollment at the school is approximately 367 students.

Currently the school has approximately 42 full-time and part-time employees. Is anticipated that employment levels at the school would remain generally similar with the proposed project.

i. Approximately how many people would the completed project displace?

The proposed project would not permanently displace any people.

j. Proposed measures to avoid or reduce displacement impacts, if any:

No displacement impacts would occur and no mitigation measures are necessary.

k. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project is compatible with existing land uses and plans.

l. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

The project site is not located near agricultural or forest lands and no mitigation measures are necessary.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

No housing units would be provided as part of the ***Apple Valley Elementary School Project***.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No housing presently exists on the site and none would be eliminated.

c. Proposed measures to reduce or control housing impacts, if any:

No housing impacts would occur and no mitigation would be necessary.

10. Aesthetics

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

The existing school buildings are single-story structures. The proposed building would be two stories and approximately 36 feet tall at its highest point.

The exterior building materials for the proposed ***Apple Valley Elementary School Project*** would include metal wall panel, masonry units, storefront curtain wall systems, and a standing seam metal roof.

b. What views in the immediate vicinity would be altered or obstructed?

The proposed building would be situated in a similar location as the existing building (central portion of the site), but would be slightly taller and include a greater amount of building space. Views of the site would reflect the taller, denser building on the school campus; however, views of the site would generally remain similar to the existing conditions and would be reflective of the existing school uses on the site.

The proposed project would not obstruct any existing views in the site vicinity.

c. Proposed measures to reduce or control aesthetic impacts, if any:

No significant impacts are anticipated with regard to aesthetic impacts and no measures are proposed.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Short-Term Light and Glare

At times during the construction process, area lighting of the job site (to meet safety requirements) may be necessary, which would be noticeable proximate to the project site. In general, however, light and glare from construction of the proposed project is not anticipated to adversely affect adjacent land uses.

Long-Term Light and Glare

Under the proposed ***Apple Valley Elementary School Project***, light and glare sources on the site would remain similar to the existing conditions and would primarily consist of interior and exterior building lighting, as well as vehicle lights travelling to and from the site. Lighting levels could be slightly higher than existing conditions due to the increased building space on the site but would not be anticipated to significantly affect adjacent land uses. Exterior building lighting and parking lot lighting would be designed to focus light on the site and minimize light spillage to adjacent properties.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Light and glare associated with the proposed project would not be expected to cause a safety hazard or interfere with views.

c. What existing off-site sources of light or glare may affect your proposal?

No off-site sources of light or glare are anticipated to affect the proposed project.

d. Proposed measures to reduce or control light and glare impacts, if any:

Interior and exterior building lighting would designed to be consistent with applicable City of Yakima requirements, including YMC 15.06.100. The proposed lighting would be designed to focus light on the site and minimize light spillage to adjacent properties.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The Apple Valley Elementary School campus includes open play areas and playground structures to the east and west of the existing buildings. A grass open space area is also located immediately south of the existing buildings and includes areas for baseball/softball and soccer.

There are several additional parks and recreation uses in the vicinity (approximately 1.5 miles) of the project site, including:

- Harman Center at Gailleon Park is located approximately 1.3 miles to the east of the site;
- Westwood West Golf Course is located approximately 1.2 miles to the southeast of the site; and,
- West Valley Community Park is located approximately 1.1 miles to the southeast of the site.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The existing play areas and playground structures would be removed to accommodate the construction of the proposed building.

As part of the project, multiple new play areas would be provided adjacent to the new building. A kindergarten playground would be located to the east of the building. Two playground areas, a basketball

court and other hard surface play areas would also be located to the south and southeast of the building.

A portion of the existing grass areas to the north of the existing buildings would be removed with construction to accommodate the proposed parking lot and bus drop off area. However, the grass open areas to the south and east of the building would remain and these areas would continue to be utilized for baseball/softball, soccer and other activities.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No impacts to recreation would occur and no mitigation is necessary.

13. Historic and Cultural Preservation

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.

Building records indicate that Apple Valley Elementary School was originally constructed in 1950 with two additions subsequently added to the building in 1962 and 1964. However, site drawings for the school were dated 1968 and are consistent with the existing buildings on the site. Three portable classroom buildings were also placed on the site in the late 1990s and early 2000s. The school is not listed on the Washington Heritage Register (WHR) or the National Register of Historic Places (NRHP) and there are no listed buildings immediately adjacent to the project site.

The Charles Russell Barn is located approximately one mile to the southwest of the site and is listed on the Washington Heritage Barn Register (WHBR). Two additional buildings are listed on the WHBR and are located within approximately two miles to the east of the site, including the J.E. Ott Barn and the Johnson Orchards Packing House.

Two structures are also listed on the Washington Heritage Register and the National Register of Historic Places (NRHP) and located within two miles of the site, including the Carbonneau Mansion and portions of the Yakima Valley Electric Interurban Railroad. None of these structures are anticipated to be affected by the proposed project.

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.**

A review of Washington Information System for Architectural and Archaeological Records Data (WISAARD) indicates that the site and surrounding areas are considered a low potential for archaeological resources based on the WISAARD predictive model.

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.**

Potential impacts to historic and cultural resources on or near the site were evaluated by consulting the West Valley School District building history information and the WISAARD mapping and database system.

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.**

Although no impacts to historic or cultural resources are anticipated with the proposed project, the following measure would be implemented to minimize impacts from a potential inadvertent discovery of cultural resources:

- Although archaeological resources are not anticipated on the site, it is possible that undiscovered pre-contact or historic cultural material could be present within the project area. In the event of an inadvertent discovery, the City of Yakima, Yakima County, the Washington State Department of Archaeology and Historic Preservation (DAHP), and affected Tribes would be contacted.

14. Transportation

A Traffic Impact Analysis Report for the ***Apple Valley Elementary School Project*** has been prepared by the Transpo Group and is included as **Appendix D** to this Checklist.

a. Identify public streets and highways serving the site or affected geographic area and describe the proposed access to the existing street system. Show on site plans, if any.

The proposed ***Apple Valley Elementary School Project*** would continue to be served by N 88th Avenue. Access to the site would be provided via three driveways along N 88th Avenue. School buses would access the site via the northern-most driveway, while parent pick-up/drop-off would use the two southern driveways. Parking would be accessed via all proposed driveways.

b. Is site or affected geographic area currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The nearest public transit stop is located at the N 88th Avenue/Summit Avenue intersection, approximately 500 feet from the project site. The stop is served by Yakima Transit Route 1, which provides one-hour headways with service between the City of Yakima Summitview neighborhood and the downtown transit center.

The School District provides school bus transportation to students that qualify, which generally applies to those living outside of the Apple Valley Elementary identified walk/bike route area. The school would be served by up to four school buses in the future.

c. How many additional parking spaces would the completed project have? How many would the project or proposal eliminate?

The existing site currently contains approximately 55 parking stalls. The project would construct an additional 95 parking space for a total of 150 on-site parking spaces located in two parking lots (staff parking and visitor parking)

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).

As part of the project, roadway frontage improvements (including curb, gutter, and sidewalk) would be provided along N 88th Avenue adjacent to the site. New sidewalks would connect with onsite pedestrian walkways.

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

The proposed project would not utilize water, rail or air transportation.

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?

Vehicle trip generation for the proposed project was based on *ITE's Trip Generation Manual, 10th Edition (2017)* for the Elementary School land use. With completion of the proposed project, Apple Valley Elementary is anticipated to generate a total of 1,040 trips per day with 358 trips during the school morning arrival peak hour (8-9 a.m.) and 187 trips during the school dismissal peak hour (3 to 4 p.m.).

The existing elementary school has an enrollment of 367 students and the proposed school would have a capacity of 550 students. The estimated increase in vehicle trips with the proposed project would be 119 net new school trips during the school morning arrival peak hour and 62 net new school trips during the school afternoon dismissal peak hour.

Up to four school buses would serve the school in the morning and afternoon. These buses would be up to five percent of school peak period traffic. There would also be a limited number of trucks on a weekly basis for deliveries such as food and trash pick-up.

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.

The proposed project would not affect the movement of agricultural or forest products.

h. Proposed measures to reduce or control transportation impacts, if any.

The proposal would not have any significant traffic or parking impacts requiring off-site mitigation.

The proposed project includes on-site improvements such as separated bus and parent loading areas and additional on-site parking. These improvements help reduce conflicts between parent vehicles, buses and pedestrians as well as increase storage on-site such that spillover is not anticipated onto the adjacent street. In addition, the provision of additional parking on-site will help reduce potential neighborhood parking impacts.

The project also includes new sidewalks along the N 88th Avenue frontage. Providing these sidewalks will improve walking conditions to and from the school.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

While the ***Apple Valley Elementary School Project*** would increase the student capacity of the school when compared to the existing condition, it is not anticipated to generate a significant increase in the need for public services. To the extent that emergency service providers have planned for gradual increases in service demands, no significant impacts are anticipated.

b. Proposed measures to reduce or control direct impacts on public services, if any.

The increase in the capacity of the school and the number of students on the site may result in an incrementally greater demand for emergency services; however, such an increase in demand is not anticipated to be significant and it is anticipated that adequate service capacity is available to preclude the need for additional public facilities/services.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

All utilities are currently available at the site, including cable/internet services.

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 immediate vicinity that might be needed.

Electrical (Pacific Power), natural gas (Cascade Natural Gas) and telephone/internet would continue to be provided to the new school building. The existing natural gas service line would be retired and a new service line would be installed to serve the proposed building. New electrical service lines would also be provided and would connect at the west side of the project site and be routed to the new school building.

Water service (Nob Hill Water Association) and sewer service (City of Yakima) are also provided to the ***Apple Valley Elementary School Project*** site. An existing water service line with a three-inch meter currently serves the site. The existing water line would be removed and a new line and meter would be installed for the proposed building. Three new fire hydrants would also be located along the west side of the site. A new sanitary sewer service line would also be provided for the school and connected to the existing City sewer collection system.

C. SIGNATURES

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

Signature:

Name of Signee:

Jeff Ding

Position and Agency/Organization:

Planner. EA Engineering, Science and Technology, Inc., PBC

Date:

October 10, 2019

REFERENCES

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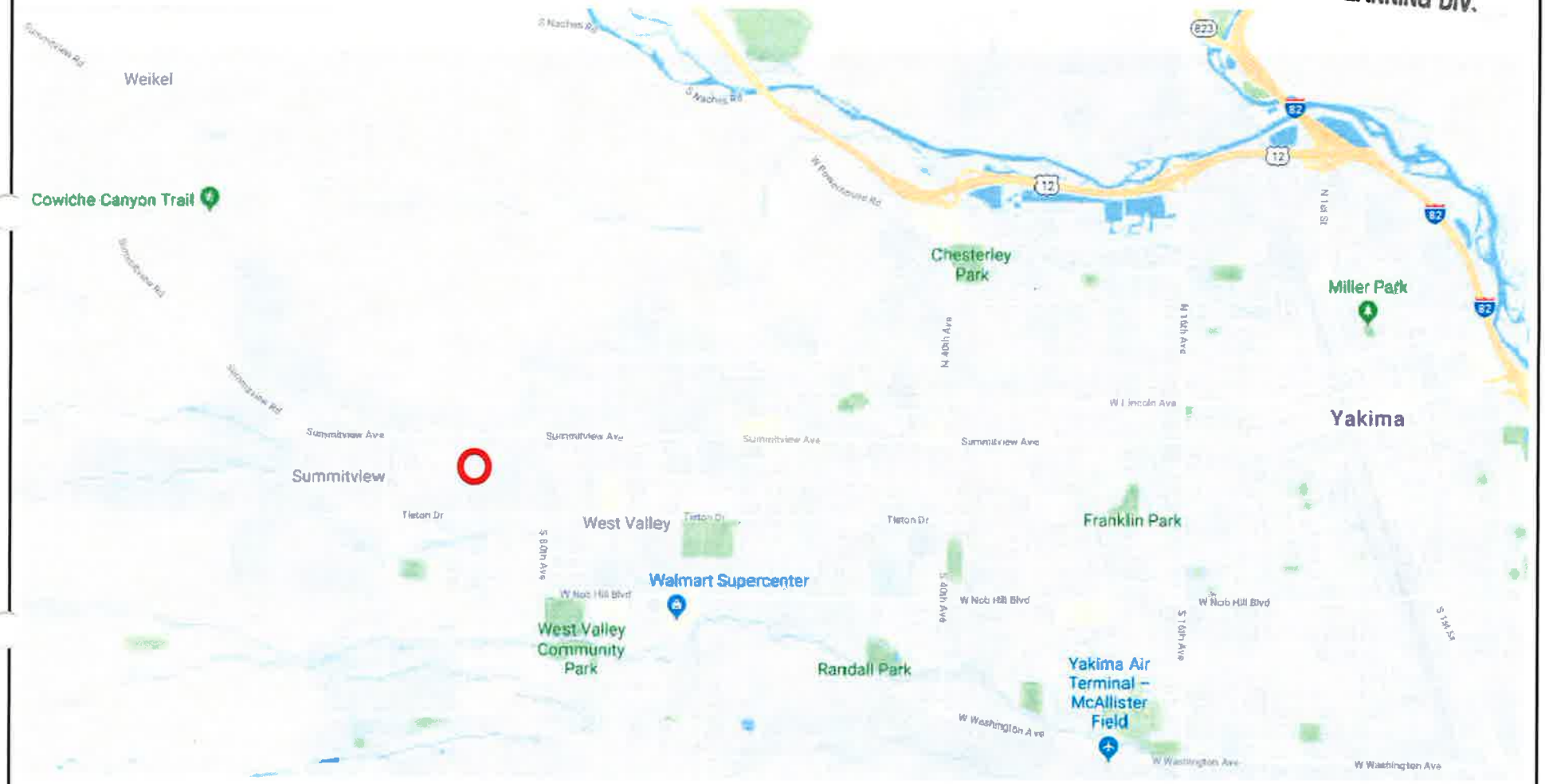
Figures

Apple Valley Elementary School Project
Environmental Checklist



Source: Bing Maps and EA Engineering, 2019

EA Engineering, Science, and Technology, Inc., PBC

Figure 1

Vicinity Map

Apple Valley Elementary School Project
Environmental Checklist

Project Site

Note: This figure is not to scale

North

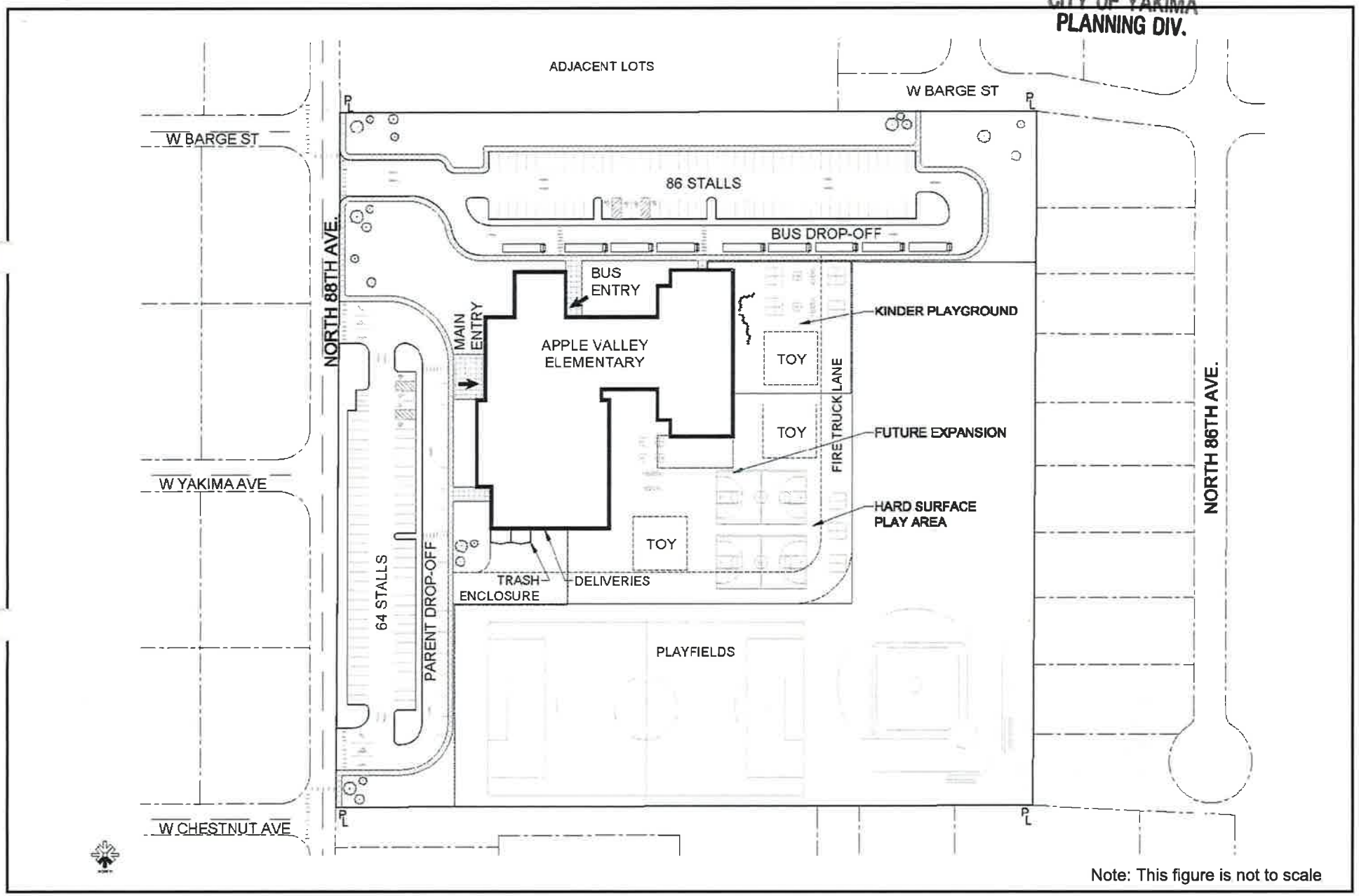
Source: Google Earth and EA Engineering, 2019

EA Engineering, Science, and Technology, Inc., PBC

Figure 2

Aerial Map

Apple Valley Elementary School Project
Environmental Checklist



Note: This figure is not to scale

Source: Design West Architects, 2019

EA Engineering, Science, and Technology, Inc., PBC

Figure 3

Site Plan

Appendix A

GEOTECHNICAL REPORT

Northern, Inc.
Consulting Engineers Environmental Scientists Geologists
Construction Materials Testing Geophysical Services

GEOTECHNICAL SITE INVESTIGATION REPORT

APPLE VALLEY ELEMENTARY SCHOOL REPLACEMENT PROJECT

7 N. 88TH AVENUE, YAKIMA, WA

GNN PROJECT NO. 219-1130

AUGUST 2019

Prepared for

WEST VALLEY SCHOOL DISTRICT NO. 208
8902 ZIER ROAD
YAKIMA, WA 98908

Prepared by

GN NORTHERN, INC.
CONSULTING GEOTECHNICAL ENGINEERS
YAKIMA, WASHINGTON
(509) 248-9798

Northern, Inc.

At GN Northern our mission is to serve our clients in the most efficient, cost effective way using the best resources and tools available while maintaining professionalism on every level. Our philosophy is to satisfy our clients through hard work, dedication and extraordinary efforts from all of our valued employees working as an extension of the design and construction team.

Northern, Inc.

August 9, 2019

West Valley School District No. 208
8902 Zier Road
Yakima, WA 98902

Attn: Angela Von Essen, Asst. Supt. Finance/Oper.

CC: Rob Gross, Sr. Project Manager, CBRE|HEERY

Subject: **Geotechnical Site Investigation Report**
Apple Valley Elementary School Replacement Project
7 N. 88th Avenue, Yakima, Washington

GNN Project No. 219-1130

Ladies & Gentlemen,

As requested, GN Northern (GNN) has completed a geotechnical site investigation for the proposed Apple Valley Elementary School replacement project in Yakima, Washington.

Based on the findings of our subsurface study, we conclude that the site is suitable for the proposed construction provided that our geotechnical recommendations presented in this report are followed during the design and construction phases of the project.

This report describes in detail the results of our investigation, summarizes our findings and presents our recommendations concerning earthwork and the design and construction of foundations and pavements for the proposed project. It is important that GN Northern provide consultation during the design phase as well as field compaction testing and geotechnical monitoring services during the earthwork phase to ensure implementation of the geotechnical recommendations.

If you have any questions regarding this report, please contact us at 509-248-9798.

Respectfully submitted,

GN Northern, Inc.

Karl A. Harmon, LEG, PE
Senior Geologist/Engineer

M. Yousuf Memon, PE
Geotechnical Engineer

Exp: 7-15-2020

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APPENDICES

1.0 PURPOSE AND SCOPE OF SERVICES

This report has been prepared for the proposed Apple Valley Elementary School replacement project in Yakima, Washington; site location is shown on the *Vicinity Map* (Figure 1, Appendix I). Our investigation was conducted to collect information regarding subsurface conditions and present recommendations for suitability of the subsurface materials to support the proposed improvements and allowable bearing capacity for the proposed construction.

GN Northern, Inc. has prepared this report for use by the client and their design consultants in the design of the proposed development. Do not use or rely upon this report for other locations or purposes without the written consent of GN Northern, Inc.

Our study was conducted in general accordance with our *Proposal for Special Consultant Services* dated May 29, 2019. Notice to proceed was provided in the form of an *AGREEMENT BETWEEN West Valley School District No. 208 and GN Northern, Inc. for Geotechnical Engineering Services*, executed by Dr. Mike Brophy, Superintendent on July 1, 2019.

A *Conceptual Site Plan* (dated 7/9/19) prepared by Design West Architects, annotated with infiltration test locations, was provided by Darral Moore of JUB Engineers, Inc. via email on July 24, 2019. Field exploration, consisting of three (3) exploratory test-pits and three (3) infiltration tests, was completed on July 25, 2019. Test-pit and infiltration test locations are shown on the *Site Exploration Map* (Figure 2, Appendix I), and detailed test-pit logs are presented in Appendix II. Soil samples for environmental contaminants (lead & arsenic) and topsoil testing were also collected from the test-holes, and results of the analyses are presented in Appendices III & IV.

This report has been prepared to summarize the data obtained during this study and to present our recommendations based on the proposed construction and the subsurface conditions encountered at the site. Results of the field exploration were analyzed to develop recommendations for site development, earthwork, pavements and foundation bearing capacity. Design parameters and a discussion of the geotechnical engineering considerations related to construction are included in this report.

2.0 PROPOSED CONSTRUCTION

Based on the information provided in the *Request for Proposal/Quotation* document (dated May 16, 2019) prepared by CBRE|HEERY, along with the *Conceptual Site Plan* prepared by Design West Architects, we understand that the existing school building will be demolished for construction of a new 2-story 61,000 SF school building with an attached gymnasium. The project will contain a new parking lot on the north side of the school building, student bus circulation/bus drop-off areas, playgrounds and playfields. We understand that the initial concept is to construct the new building with structural steel with infill of steel framing, while the attached gymnasium will be a CMU structure.

Structural loading information for the school building was not available at the time of this report. Based on our experience with similar projects, we expect maximum wall loads to be on the order of 2,500 to 3,500 plf and maximum column loads to be less than 100 kips. It shall be noted that assumed loading is based on limited preliminary information provided at the time of this report. If loading conditions differ from those described herein, GNN should be given an opportunity to perform re-analysis. Settlement tolerances for structures are assumed to be limited to 1 inch, with differential settlement limited to ½ inch.

3.0 FIELD EXPLORATION & LABORATORY TESTING

Our field exploration was completed on July 25, 2019. A local public utility clearance was obtained prior to the field exploration. Additionally, we contracted Utilities Plus to complete a private underground utility locate at each of exploratory locations. Site access was coordinated with Mr. Tim Critchlow, WVSD's Facilities Director, as well as Gilbert who helped with identifying the onsite sprinkler/irrigation lines.

Three (3) exploratory test-pits were excavated by Ken Leingang Excavating, Inc. using a John Deere 410L backhoe at locations selected by our field engineer to depths ranging from approximately 11 to 13 feet below existing ground surface (BGS). The test-pits were logged by a GNN field engineer. Additionally, infiltration testing was completed at three (3) of the locations provided by JUB Engineers. Upon completion, all excavations were loosely backfilled with excavation spoils. Test-pit and infiltration test locations are shown on *Site Exploration Map* (Figure 2).

The soils observed during our field exploration were classified according to the Unified Soil Classification System (USCS), utilizing the field classification procedures as outlined in ASTM D2488. A copy of the USCS Classification Chart is included in Appendix II. Photographs of the site and exploration are presented in Appendix VI. Depths referred to in this report are relative to the existing ground surface elevation at the time of our investigation. The surface and subsurface conditions described in this report are as observed at the time of our field investigation. Representative samples of the subsurface soils obtained from the field exploration were selected for testing to determine the index properties of the soils in general accordance with ASTM procedures. The following laboratory tests were performed:

Table 1: Laboratory Tests Performed

Test	To determine
Particle Size Distribution (ASTM D6913)	Soil classification based on proportion of sand, silt, and clay-sized particles
Natural Moisture Content (ASTM D2216)	Soil moisture content indicative of in-situ condition at the time samples were taken

Results of the laboratory test are included on the test-pit logs and are also presented in graphic form in Appendix III attached to the end of the report.

4.0 SITE CONDITIONS

The site of the proposed school replacement project, Apple Valley Elementary School, is located at 7 N. 88th Avenue in the City of Yakima, Washington. The approximately 10.37-acre site is currently comprised of three contiguous parcels identified by the Yakima County Assessor as Parcel Nos. 18131942020, 18131942021 & 18131942006. The site is located within the NW ¼ of the SE ¼ of Section 19, Township 13 North and Range 18 East, Willamette Meridian. The site is accessed via N. 88th Avenue located along the east side, and is surrounded by single-family residence along the south, east and northeast sides, and a church and playfield towards the north.

We understand that prior to construction of the existing school campus in 1968, the site was historically used as an orchard. Based on our site observations, it appears that grading for existing school historically resulted cut excavation along the north side and subsequent fill in the southern portions. The portable classroom buildings to the southeast of the school building were removed at the time of our exploration. An apparent equipment storage building exists to the southeast of easternmost playground. The currently developed school site includes playgrounds on the north

and east sides of the building, playfields to the south, and a parking lot on the west side of the school. Based on Google Earth topography, surface elevations across the site range from ±1284' in the northern portion to ±1260' in the southern portion.

4.1 Regional Geology

The City of Yakima lies in the Yakima Valley on the Yakima Fold Belt portion of the Columbia Plateau, a broad plain situated between the Cascade Range to the west and the Rocky Mountains to the east. The Columbia Plateau was formed by a thick sequence of Miocene Age tholeiitic basalt flows, called the Columbia River Basalt Group that erupted from fissures in north central and northeastern Oregon, eastern Washington, and Western Idaho. The mapped geologic unit in the vicinity of the site include Tertiary continental sedimentary rocks over basalt flows from the Wanapum and Saddle Mountain Basalt Formations, inter-bedded with fluvial-lacustrine deposits of the Ellensburg and The Dalles Formations. Surficial deposits generally consist of Plio-Pleistocene loess, silt, sand and gravel. Based on the published *Geologic Map of the Yakima Area* (Campbell, 1976), the northern half of the site is mapped as sedimentary bedrock of the Ellensburg Formation [Teu-s], predominantly fine sand and silt with some clay, while the southern half of the site is mapped as Quaternary alluvium [Qtu], mostly coarse gravel with sand.

4.2 Seismic Design Considerations

As per the 2015 International Building Code (IBC), a Site Class 'D' may be used for seismic design purposes. Site Class 'D' corresponds to 'stiff soil'. According to Mapped Spectral Acceleration obtained from the USGS Seismic Design Maps using the 2015 IBC, the following site-specific design values may be used:

Table 2: IBC Design Response Spectra Parameters

Seismic Design Parameter	Value (unit)
S_s	0.536 (g)
S_1	0.219 (g)
F_a	1.372 (unitless)
F_v	1.962 (unitless)
SM_s	0.735 (g)
SM_1	0.430 (g)
SD_s	0.490 (g)
SD_1	0.287 (g)

S_S = MCE spectral response acceleration at short periods
S_1 = MCE spectral response acceleration at 1-second period
F_a = Site coefficient for short periods
F_v = Site coefficient for 1-second period

SM_S = MCE spectral response acceleration at short periods as adjusted for site effects
SM_1 = MCE spectral response acceleration at 1-second period as adjusted for site effects
SD_S = Design spectral response acceleration at short periods
SD_1 = Design spectral response acceleration at 1-second period

Site Liquefaction Potential: Based on the *Liquefaction Susceptibility Map for Yakima County, Washington*, prepared by the Washington State Department of Natural Resources, the project site is mapped, with a 'low' potential for liquefaction susceptibility. In our professional opinion, due to the presence of relatively shallow sedimentary unit, the potential for soil liquefaction to occur at this site is considered very low. The onsite soils are generally non-susceptible to liquefaction-induced settlement.

5.0 SUBSURFACE CONDITIONS

Based on the findings of our field exploration, soils across the site generally consist of an upper layer of artificial fill soils atop the native silty soil overburden overlying the local sedimentary unit of the Ellensburg Formation. Test-pit logs in Appendix II show detailed descriptions and stratification of the soils encountered.

Thickness of the near-surface fill soils ranges from less than 12 inches to approximately 3.5 feet as noted in test-pits TP-1 & P-2. The geotextile separation fabric was noted at depths of approximately 3 to 16 inches BGS, separating the apparently contaminated underlying soils from the upper 'clean' cap soils. The fill soils were generally classified as silty sand and sandy silt with varying amounts of gravel, and typically appeared medium dense.

The native soils encountered beneath the fills typically included an upper approximately 2.5- to 3-foot thick layer of Sandy Silt (ML) that appeared medium dense, atop an approximately 18-inch thick layer of relatively dense Silty Gravel (GM) with variable degrees of cementation. These upper native layers were only encountered in the southern portion of site (TP-1, P-1 & P-2), and were absent in the northern portion (TP-2, TP-3 & P-3) likely due to historic cut grading in these areas. Silty Sand with Gravel (SM) was encountered beneath the thin gravel unit in the southern portion, and below the upper fill soils in test-pit TP-3. In test-pits where a thicker profile of this layer of exposed (TP-1 & TP-3), some lenses and layers of cementation were also noted.

Siltstone was typically encountered as the prevailing underlying stratum below the native silts, gravels and sands in the northern portion of the site, and is expected to be present at greater depths

towards the south. The siltstone appeared medium dense and was encountered as shallow as approximately 16 inches BGS in test-pit TP-2, to a depth of approximately 5 feet BGS in TP-3.

5.1 NRCS Soil Survey

The soil survey map of the site prepared by the Natural Resources Conservation Service (NRCS) identifies the site soils as *Cowiche loam* across the majority of the site, while *Harwood loam* is identified in the northeastern portion of the site. The typical soil profile for *Cowiche loam* is described as *loam* grading to *loamy fine sand, very fine sandy loam*, while the profile for *Harwood loam* is noted as *loam* atop *gravelly loam* atop *cemented material*. Based on the NRCS map (Appendix VII), these units generally consist of *well drained* materials.

5.2 Groundwater

Groundwater was not encountered within the test-pits at time of our exploration to a maximum depth of approximately 13 feet BGS. We reviewed the Washington Department of Ecology (DOE) Well Log database to estimate groundwater levels in the site vicinity based on nearby wells. Our review of nearby well logs, from wells located typically in the adjacent quarter-quarters, indicate depth of groundwater in the site vicinity to be on the order of 40 feet BGS or greater (see Appendix VIII). Groundwater levels likely fluctuate throughout the year, typically highest during the irrigation season and decreasing thereafter. These levels will fluctuate with irrigation, precipitation, drainage, and regional pumping from wells.

6.0 SOIL INFILTRATION TESTING

Soil infiltration test-pits P-1 & P-2 in the southern portion of the site encountered fine-grained silty sand at the test depths, and were performed using a single ring infiltrometer consisting of a 10-inch diameter steel pipe driven into the ground at the test depth. After an initial pre-soak period, a constant water level was maintained in the ring with the use of a float valve and timed intervals of the water demand volumes were recorded. Continuous readings of the infiltration rates of water volumes required to maintain the constant head were recorded until a relatively constant rate was achieved and the average infiltration rate was determined.

Infiltration test-pit P-3 in the northeastern portion of the site encountered relatively shallow siltstone, and was therefore completed using a small-scale Pilot Infiltration Test (PIT). To the degree possible, care was exercised during excavation to attempt to maintain relatively uniform

side walls, and the resulting size and geometry of the finished test-pit was carefully recorded in the field. The infiltration test-pit was filled with water from a nearby spigot. The excavation was continuously filled at a measured constant inflow rate until the water head within the test-pit was observed to be relatively stable. Water flow into the test-pit at the noted rate was continued for a sufficient period to flood the pit and fully saturate the surrounding soils.

The test results are indicative of the infiltration characteristics of the subsurface soils encountered at the test location/depth using the specific test method. The following table presents the results of the infiltration tests:

Table 3: Infiltration Test Results

Test ID	Test Method	Test Depth	Soil Tested	Field Infiltration Rate
P-1	Single-ring infiltrometer	7 feet BGS	Silty Sand	**0.84 inches/hour**
P-2		8 feet BGS	Silty Sand	**2.4 inches/hour**
P-3	Small-scale PIT	7 feet BGS	Siltstone	**0.79 inches/hour**

The infiltration rates presented herein represents the un-factored field soil infiltration rate. An appropriate factor of safety should be applied to the field infiltration rate to determine long-term design infiltration rate. Determination of safety factors for long-term design infiltration should consider the following: pretreatment, potential for biofouling, system maintainability, horizontal and vertical variability of soils, and type of infiltration testing. Typical factors of safety for these soils generally range from 2.5 to 3.

We believe that the variability of infiltration rates associated with the tested silty sand stratum in P-1 & P-2 is likely a result of presence of cemented lenses/layers noted within this layer. Furthermore, we recommend that onsite infiltration facilities be designed using the lowest field infiltration rates, generally believed to be representative of the limiting layers across the site. The cemented silty gravel unit (noted in test-pits TP-1, P-1 & P-2) is believed to represent an apparent restrictive layer; therefore, the bottom of infiltration facilities shall extend below this unit.

Due to varying degrees of cementation of the underlying onsite soils, we recommend conducting infiltration testing of the as-constructed stormwater infiltration facilities to confirm the design rate(s), by means of full-scale drywell testing and/or infiltrometer testing of shallow infiltration facilities.

7.0 ENVIRONMENTAL SOIL SAMPLING & TESTING

Four (4) samples were collected from the exploratory test-pits at depths of 12- to 18-inches BGS from soils present beneath the buried geotextile separation fabric for analytical testing of Lead and Arsenic contamination. Lead and Arsenic levels in the soil were tested in accordance with EPA Method 6020A. The following table provides a summary of analytical results along with the Model Toxics Control Act (MTCA) cleanup levels:

Table 4: Analytical Laboratory Test Results

Sample ID	Lead Detected (ppm)	Lead MTCA CUL	Arsenic Detected (ppm)	Arsenic MTCA CUL
TP-1 @ 12"	73.9	250	22.5	20
TP-2 @ 12"	466	250	89.8	20
TP-4 @ 14"	23.4	250	66.5	20
P-3 @ 18"	217	250	37.3	20

CUL = clean-up level; ppm = parts per million

Results of analytical testing are presented in Appendix IV. The analytical results indicate that Lead & Arsenic contaminants in the soils tested at the sampling locations are typically above the MTCA cleanup levels. Results of previous environmental testing completed by the Washington State Department of Ecology (DOE) in March and June of 2005 using an X-Ray Fluorescence (XRF) device also suggested relatively high contaminant levels for Lead & Arsenic (see Appendix V). GNN is available to perform additional screening or testing if requested.

The onsite contaminated soils, if reused in landscape area, will require a cap of clean soils placed over a geotextile separation fabric. The District's environmental consultant shall develop a remediation plan for proper handling and disposal of onsite contaminated soils during earthwork to comply with the WA State DOE guidelines and regulations which should include the 40-hour HAZWOPER training of contractor's employees. Dust control measures should be implemented during earthwork to comply with Yakima Regional Clean Air Authority. The design team should consult the District's environmental consultant to determine the need for including the remediation plan in the earthwork specifications for this project.

8.0 FINDINGS & CONCLUSIONS

Conditions imposed by the proposed development have been evaluated on the basis of assumed elevations and engineering characteristics of the subsurface materials encountered in the exploratory test-pits, and their anticipated behavior both during and after construction. The following is a summary of our findings, conclusions and professional opinions based on the data obtained from a review of selected technical literature and the site evaluation.

- Based on the findings of this geotechnical evaluation and our understanding of the proposed development, from a geotechnical perspective, it is our opinion that the site is suitable for the proposed development, provided the soil design parameters and site-specific recommendations in this report are followed in the design and construction of the project.

- Design plans for the proposed development, including grading, drainage and finished elevations, were not provided at the time of this report. Once the plans are finalized, GNN shall be provided an opportunity to review final design plans to provide revised recommendations if/as necessary.

- Site soils generally consist of an upper layer of artificial fill soils range from less than 12 inches to approximately 3.5 feet BGS, atop the native silty, gravelly and sandy soil overburden overlying the local sedimentary siltstone of the Ellensburg Formation

- Groundwater was not encountered within the test-pits at time of our exploration to a maximum depth of approximately 13 feet BGS. Nearby well logs indicate depth of groundwater in the site vicinity to be on the order of 40 feet BGS or greater

- The underlying geologic condition for seismic design is site class 'D'. The *minimum* seismic design should comply with the *2015 International Building Code* (IBC) and ASCE 07-10, *Minimum Design Loads for Buildings and Other Structures*.

- The results of limited sampling and analytical testing completed during our geotechnical investigation confirms Lead and Arsenic concentrations exceed the MTCA CUL and confirms the findings of the 2005 XRF screening completed by the WA State DOE at this site.

- The onsite sandy fill soils and the sandy silts, free of deleterious materials and oversize rocks (>4 inches), are generally suitable for reuse as engineered fill and utility trench backfill. We do not recommend reusing excavated siltstone material due to the expected degree of difficulty required to process and uniformly moisture-condition this material.

- The near-surface clean soils, above the geotextile separation fabric, shall be stockpiled separately for use in landscape areas.

- The proposed school building may be supported on conventional shallow foundations bearing on a layer of imported crushed rock atop the recompacted native subgrade in accordance with the recommendations of this report.

- Site grading shall incorporate the requirements of IBC 2015, Appendix J *Grading*.

- Upon completion, all test-pit excavations were loosely backfilled with excavation spoils. The contractor is responsible to locate the test-pits to re-excavate the loose soils and re-place as compacted engineered fill.

- Site soils can be readily cut by normal grading equipment to the anticipated depths of excavations.

- The near-surface site soils are susceptible to wind and water erosion when exposed during grading operations. Preventative measures and appropriate BMPs to control runoff and reduce erosion should be incorporated into site grading plans.

- Due to varying degrees of cementation of the underlying onsite soils, we recommend conducting infiltration testing of the as-constructed stormwater infiltration facilities to confirm the design rate(s), by means of full-scale drywell testing and/or infiltrometer testing of shallow infiltration facilities.

9.0 GEOTECHNICAL RECOMMENDATIONS

The following preliminary geotechnical recommendations are based on our current understanding of the proposed development as shown on the *Conceptual Site Plan* (dated 7/9/19) prepared by Design West Architects. The report is prepared to comply with the 2015 International Building Code Section 1803, Geotechnical Investigations, and as required by Subsection 1803.2, Investigations Required. Please note that the recommendations presented in this report are predicated upon appropriate geotechnical monitoring and testing of the site preparation and foundation and building pad construction by a representative of GNN's Geotechnical-Engineer-of-Record (GER). Any deviation and nonconformity from this requirement may invalidate, partially or in whole, the following recommendations. GNN shall be engaged to review site grading and foundation plans in order to provide revised, augmented, and/or additional geotechnical recommendations as required.

9.1 Site Development – Grading

Site grading shall incorporate the requirements of IBC 2015 Appendix J. The project GER or a representative of the GER should observe site clearing, grading, and the bottoms of excavations before placing fills. Local variations in soil conditions may warrant increasing the depth of over-excavation and recompaction. Seasonal weather conditions may adversely affect grading operations. To improve compaction efforts and prevent potential pumping and unstable ground conditions, we suggest performing site grading during dryer periods of the year.

Soil conditions shall be evaluated by in-place density testing, visual evaluation, probing, and proof-rolling of the imported fill and re-compacted on-site soil as it is prepared to check for compliance with recommendations of this report. A moisture-density curve shall be established in accordance with the ASTM D1557 method for all onsite soils and imported fill materials used as structural fill.

9.2 Demolition, Clearing & Grubbing

At the start of site grading, existing pavements, exposed/buried foundation elements, surface vegetation, any large roots, non-engineered/artificial fill, and any abandoned underground utilities shall be removed from the proposed building and structural areas. The surface shall be stripped of all topsoil and/or organic growth (vegetation) that may exist within the proposed structural areas. The topsoil and organic rich soils shall either be stockpiled on-site separately for future use or be

removed from the construction area. The near-surface clean soils, above the geotextile separation fabric, shall be stockpiled separately for use in landscape areas. Depth of stripping can be minimized with real-time onsite observation of sufficient removals. Areas disturbed during clearing shall be properly backfilled and compacted as described below.

9.3 Suitability of the Onsite Soils as Engineered Fill

The onsite sandy fill soils and the sandy silts (including contaminated soils), free of deleterious materials and oversize rocks (>4 inches), are generally suitable for reuse as engineered fill and utility trench backfill. We do not recommend reusing excavated siltstone material due to the expected degree of difficulty required to process and uniformly moisture-condition this material. Suitable onsite soils shall be placed in max. 8-inch lifts (loose) and compacted to at least 95% relative compaction (ASTM D1557) near its optimum moisture content. Compaction of these soils shall be performed within a range of ±2% of optimum moisture to achieve the proper degree of compaction.

9.4 Temporary Excavations

It shall be the responsibility of the contractor to maintain safe temporary slope configurations since the contractor is at the job site, able to observe the nature and conditions of the slopes and be able to monitor the subsurface conditions encountered. Unsupported vertical cuts deeper than 4 feet are not recommended if worker access is necessary. The cuts shall be adequately sloped, shored or supported to prevent injury to personnel from caving and sloughing. The contractor and subcontractors shall be aware of and familiar with applicable local, state and federal safety regulation including the current OSHA Excavation and Trench Safety Standards, and OSHA Health and Safety Standards for Excavations, 29 CFR Part 1929, or successor regulations.

According to chapter 296-155 of the Washington Administrative Code (WAC), it is our opinion that the soil encountered at the site is classified as Type B soils. We recommend that temporary, unsupported, open cut slopes to depths of 20 feet or less shall be no steeper than 1.0 feet horizontal to 1.0 feet vertical (1H:1V) in Type B soils. No heavy equipment should be allowed near the top of temporary cut slopes unless the cut slopes are adequately braced. Final (permanent) fill slopes should be graded to an angle of 2H:1V or flatter. Where unstable soils are encountered, flatter slopes may be required.

9.5 Utility Excavation, Pipe Bedding and Trench Backfill

To provide suitable support and bedding for the pipe, we recommend the utilities be founded on suitable bedding material consisting of clean sand and/or sand & gravel mixture. To minimize trench subgrade disturbance during excavation, the excavator should use a smooth-edged bucket rather than a toothed bucket.

Pipe bedding and pipe zone materials shall conform to Section 9-03.12(3) of the *Washington State Department of Transportation (WSDOT) 2018 Standard Specifications*. Pipe bedding should provide a firm uniform cradle for support of the pipes. A minimum 4-inch thickness of bedding material beneath the pipe should be provided. Prior to installation of the pipe, the pipe bedding should be shaped to fit the lower part of the pipe exterior with reasonable closeness to provide uniform support along the pipe. Pipe bedding material should be used as pipe zone backfill and placed in layers and tamped around the pipes to obtain complete contact. To protect the pipe, bedding material should extend at least 6 inches above the top of the pipe.

Placement of bedding material is particularly critical where maintenance of precise grades is essential. Backfill placed within the first 12 inches above utility lines should be compacted to at least 90% of the maximum dry density (ASTM D1557), such that the utility lines are not damaged during backfill placement and compaction. In addition, rock fragments greater than 1 inch in maximum dimension should be excluded from this first lift. The remainder of the utility excavations should be backfilled and compacted to 95% of the maximum dry density as determined by ASTM D1557.

Onsite soils are considered suitable for utility trench backfill provided they are free of oversize material and can be adequately compacted. All excavations should be wide enough to allow for compaction around the haunches of pipes and underground tanks. We recommend that utility trenching, installation, and backfilling conform to all applicable federal, state, and local regulations such as OSHA and WISHA for open excavations.

Compaction of backfill material should be accomplished with soils within ±2% of their optimum moisture content in order to achieve the minimum specified compaction levels recommended in this report. However, initial lift thickness could be increased to levels recommended by the manufacturer to protect utilities from damage by compacting equipment.

9.6 Imported Crushed Rock Structural Fill

Imported structural fill shall consist of well-graded, crushed aggregate material meeting the grading requirements of *WSDOT 2018 Standard Specifications*, Section 9-03.9(3) (1-1/4 inch minus Base Course Material) presented here:

Table 5: WSDOT Standard Spec. 9-03.9(3)

Sieve Size	Percent Passing (by Weight)
1¼ Inch Square	99 - 100
1 Inch Square	80 - 100
5/8 Inch Square	50 – 80
U.S. No. 4	25 - 45
U.S. No. 40	3 – 18
U.S. No. 200	Less than 7.5

A 50-pound sample of each imported fill material shall be collected by GNN personnel prior to placement to ensure proper gradation and establish the moisture-density relationship (proctor curve).

9.7 Compaction Requirements for Engineered Fill

All fill or backfill shall be approved by a representative of the GER, placed in uniform lifts, and compacted to a minimum 95% of the maximum dry density as determined by ASTM D1557. The compaction effort must be verified by a representative of the GER in the field using a nuclear density gauge in accordance with ASTM D6938. The thickness of the loose, non-compacted, lift of structural fill shall not exceed 8 inches for heavy-duty compactors or 4 inches for hand operated compactors.

9.8 Foundation Bearing Support

In our opinion, the proposed new school building may be supported on conventional shallow foundations bearing on a layer of imported crushed rock structural fill atop a recompacted native subgrade in accordance with the recommendations of this report. The minimum footing depth shall be 24 inches below adjacent grades for frost protection and bearing capacity considerations.

Following completion of site clearing and grubbing operations, all proposed foundation areas shall be over-excavated to a minimum depth of 12-inches below the bottom elevations of the footings to expose the native subgrade. The over-ex shall include a minimum lateral offset of 2-foot on all sides. The exposed native soils shall be moisture conditioned and compacted to minimum 95% of the maximum dry density as determined by ASTM D1557 for a minimum depth of 12 inches. Any

soft spots encountered during compaction of the native soils shall be over-excavated an additional 12 inches and replaced as compacted fill. Foundation excavations in the northeastern portion of the building may encounter relatively shallow siltstone; consequently, scarification and recompaction is not recommended. The exposed siltstone subgrade shall be carefully cut to the desired elevation and the excavations shall be cleared of all loose soils.

In order to limit the risk of differential settlement from foundations straddling a silty soil and siltstone subgrade, following re-compaction and preparation of the exposed bottom of the over-excavation, a minimum 12-inch thick layer of imported crushed rock structural fill shall be placed beneath all footings. Imported structural fill shall consist of 1¼-inch minus crushed rock and shall be placed as engineered fill in accordance with the recommendations of this report.

Footings constructed in accordance with the above recommendations may be designed for an allowable bearing capacity of **2,000 pounds per square foot (psf)**. The allowable bearing pressure may be increased by 1/3 for short-term transient loading conditions. The estimated total settlement for footings is approximately 1-inch with differential settlement less than half that magnitude. The weight of the foundation concrete below grade may be neglected in dead load computations.

Lateral forces on foundations from short term wind and seismic loading would be resisted by friction at the base of foundations and passive earth pressure against the buried portions. We recommend an allowable passive earth pressure for the compacted onsite soil of **200 pcf**. This lateral foundation resistance value includes a factor of safety of 1.5. We recommend a coefficient of friction of **0.45** be used between cast-in-place concrete and imported crushed rock fill. An appropriate factor of safety should be used to calculate sliding resistance at the base of footings.

9.9 Slab-on-Grade Floors

Place a minimum 8-inch layer of crushed aggregate fill beneath the slabs. The material shall meet the WSDOT 2018 Standards Specifications, Section 9-03.9(3), "Crushed Surfacing Top Course", with less than 5 percent passing the No. 200 sieve (fines). The crushed rock material shall be compacted to at least 95% of the maximum dry density as determined by the ASTM D1557 method. Prior to placing the crushed rock layer, all fill soils shall be completely removed and the native subgrade shall be moisture-conditioned and compacted to minimum 95% of the maximum dry density as determined by ASTM D1557 to a minimum depth of 12 inches. Any soft spots or

areas displaying pumping/deformation during compaction shall be over-excavated an additional 12 inches, backfilled with imported granular structural fill and re-compacted.

We recommend a modulus of subgrade reaction equal to **120 pounds per cubic inch (pci)** based on a value for gravel presented in the Portland Cement Association publication No. EB075.01D. Slab thickness, reinforcement and joint spacing shall be determined by a licensed engineer based on the intended use and loading.

An appropriate vapor retarder (15-mil polyethylene liner) shall be used (ASTM E1745/E1643) beneath areas receiving moisture sensitive resilient flooring/VCT where prevention of moisture migration through slab is essential. The slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder. If a vapor retarder is used, we recommend placing a sand layer over the vapor retarder and immediately below the slab to promote proper curing and protect the vapor retarder during rebar placement. Relative humidity (RH) and moisture vapor emission rate (MVER) of concrete floor slabs shall be tested and measured in accordance with ASTM F2170-18 and ASTM E1869 when the building has been properly conditioned. Manufacturer's guidelines shall be adhered to in performing the slab moisture test. The architect shall determine the need and use of a vapor retarder and sand layer.

9.10 Flexible Pavement

Pavement subgrade soils are generally expected to consist of the native sandy silts. A California Bearing Ratio (CBR) value of 4 has been estimated for the onsite soils for use in the pavement analysis. Using an empirical relationship, this CBR value corresponds to a resilient modulus value of approximately 6,000 psi. Pavement analyses are based on *1993 AASHTO Guide for Design of Pavement Structures*. Table 6 presents recommended pavement sections for this project:

Table 6: Recommended Asphalt Concrete Paving Sections

Traffic	Asphalt Thickness (inches)	Crushed Aggregate Base Course (inches)	Subgrade
Heavy Duty†	4.0	10*	upper min. 12 inches scarified, moisture conditioned and re-compacted to at least 95% of the maximum dry density as determined by ASTM D1557
Standard Duty††	2.5	8	

†Heavy duty applies to pavements section for bus loop, entrance drives, and trash enclosure drive lanes
††Standard duty applies to general parking areas
*The upper 2" of crushed rock should be top course rock placed over the base course layer

Pavement design recommendations assume proper and positive drainage and construction monitoring and are based on AASHTO Design parameters for a 20-year design period. Asphalt pavements tend to develop thermal and fatigue cracking over time from environmental factors and traffic loads. Asphalt, being a viscoelastic material, weakens from temperature influx. Timely preventative measures for continual flexible maintenance such as crack filling and seal coating at 8-10 year intervals to control the progression of surface cracking and distress to prevent water from infiltrating into the base course and subgrade shall be considered. Performing this intermediate level of maintenance will net at least a 20-year service life/performance life

Soils containing roots or organic materials, and any artificial fill soils, shall be completely removed from the proposed paved areas prior to subgrade construction. The upper 12 inches of subgrade soils beneath the pavement section shall be scarified, moisture conditioned and re-compacted to at least 95% of the maximum dry density as determined by ASTM D1557. All fills used to raise low areas must be compacted onsite soils or structural gravel fill and shall be placed under engineering control conditions. The finished surface shall be smooth, uniform and free of localized weak/soft spots. All subgrade deficiency corrections and drainage provisions shall be made prior to placing the aggregate base course. All underground utilities shall be protected prior to grading.

The HMAC utilized for the project should be designed and produced in accordance with Section 5-04 Hot Mix Asphalt of the WSDOT 2018 Standards Specifications. Aggregate Base material shall comply with Section 9-03.9(3) Crushed Surfacing of the *WSDOT 2018 Standards Specifications*. Aggregate base or pavement materials should not be placed when the surface is wet.

9.11 Concrete Flatwork/ Pathways

The concrete sidewalk (pathways) section shall be 4" PCC over 4" crushed aggregate top course (3/4" minus rock). To impede the wicking of moisture beneath pathways, we recommend a 4-inch layer of free draining ¾" minus crushed aggregate fill be placed. Material meeting the WSDOT Specification 9-03.9 (3), "Top Course", may be acceptable provided it contains less than 5% passing the No. 200 sieve (fines). The crushed rock material shall be compacted to at least 95% of the maximum dry density as determined by ASTM D1557 method. Prior to placing the crushed aggregate fill, the subgrade soils shall be proof rolled to a non-yielding surface and to at least 95%

of the maximum dry density as determined by ASTM D1557 method. Any areas pumping during proof-compacted shall be over-excavated and re-compacted.

9.12 Subgrade Protection

The degree to which construction grading problems develop is expected to be dependent, in part, on the time of year that construction proceeds and the precautions which are taken by the contractor to protect the subgrade. The near-surface fine-grained soils currently present on site are considered to be moisture and disturbance sensitive due to their fines content and may become unstable (pumping) if allowed to increase in moisture content and are disturbed (rutted) by construction traffic if wet. If necessary, the construction access road should be covered with a layer of gravel or quarry spalls course. The soils are also susceptible to erosion in the presence of moving water. The soils shall be stabilized to minimize the potential of erosion into the foundation excavation. The site shall be graded to prevent water from ponding within construction areas and/or flowing into excavations. Accumulated water must be removed immediately along with any unstable soil. Foundation concrete shall be placed and excavations backfilled as soon as possible to protect the bearing grade. We further recommend that soils that become unstable are to be either:

- Removed and replaced with structural compacted gravel fill, or
- Mechanically stabilized with a coarse crushed aggregate (possibly underlain with a geotextile) and compacted into the subgrade.

9.13 Wet Weather Conditions

The near surface soils are fine-grained and sensitive to moisture during handling and compaction. Proceeding with site earthwork operations using these soils during wet weather could add project costs and/or delays. The stability of exposed soils may rapidly deteriorate due to a change in moisture content. Therefore, if at all possible, complete site clearing, preparation, and earthwork during periods of warm, dry weather when soil moisture can be controlled by aeration. During or subsequent to wet weather, drying or compacting the on-site soils will be difficult. It may be necessary to amend the on-site soils or import granular materials for use as structural fill. If earthwork takes place in wet weather or wet conditions, the following recommendations should be followed:

- Fill material should consist of clean, granular soil, and not more than 3 percent fines (by weight) should pass the No. 200 sieve. Fines should be non-plastic. These soils would have to be imported to the site.
- Earthwork should be accomplished in small sections and carried through to completion to reduce exposure to wet weather. Soils that becomes too wet for compaction should be removed and replaced with clean, granular material.
- The construction area ground surface should be sloped and sealed to reduce water infiltration, to promote rapid runoff, and to prevent water ponding.
- To prevent soil disturbance, the size or type of equipment may have to be limited.
- Work areas and stockpiles should be covered with plastic. Straw bales, straw wattles, geotextile silt fences, and other measures should be used as appropriate to control soil erosion.
- Excavation and fill placement should be observed on a full-time basis by a representative of GER to determine that unsuitable materials are removed and that suitable compaction and site drainage is achieved.

9.14 Surface Drainage

With respect to surface water drainage, we recommend that the ground surface be sloped to drain away from the structure. Final exterior site grades shall promote free and positive drainage from the building areas. Water shall 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 5% for a minimum distance of 10 feet from the building perimeter be provided, except in paved locations. In paved areas, a minimum gradient of 1% should be provided unless provisions are included for collection/disposal of surface water adjacent to the structure. Catch basins, drainage swales, or other drainage facilities should be aptly located. All surface water such as that coming from roof downspouts and catch basins be collected in tight drain lines and carried to a suitable discharge point, such as a storm drain system. Surface water and downspout water should not discharge into a perforated or slotted subdrain, nor should such water discharge onto the ground surface adjacent to the building. Cleanouts should be provided at convenient locations along all drain lines.

10.0 CONTINUING GEOTECHNICAL SERVICES

GNN recommends that the Client should maintain an adequate program of geotechnical consultation, construction monitoring, and soils testing during the final design and construction phases to monitor compliance with GNN's geotechnical recommendations. Maintaining GNN as the geotechnical consultant from beginning to end of the project will provide continuity of services. If GN Northern, Inc. is not retained by the owner/developer and/or the contractor to provide the recommended geotechnical inspections/observations and testing services, the geotechnical engineering firm or testing/inspection firm providing tests and observations shall assume the role and responsibilities of Geotechnical Engineer-of-Record.

GNN can provide construction monitoring and testing as additional services. The costs of these services are not included in our present fee arrangement, but can be obtained from our office. The recommended construction monitoring and testing includes, but is not necessarily limited to, the following:

- Consultation during the design stages of the project.
- Review of the grading and drainage plans to monitor compliance and proper implementation of the recommendations in GNN's Report.
- Observation and quality control testing during site preparation, grading, and placement of engineered fill as required by the local building ordinances.
- Geotechnical engineering consultation as needed during construction

11.0 LIMITATIONS OF THE GEOTECHNICAL SITE INVESTIGATION REPORT

This GEOTECHNICAL SITE INVESTIGATION REPORT ("Report") was prepared for the exclusive use of the Client. GN Northern, Inc.'s (GNN) findings, conclusions and recommendations in this Report are based on selected points of field exploration, and GNN's understanding of the proposed project at the time the Report is prepared. Furthermore, GNN's findings and recommendations are based on the assumption that soil, rock and/or groundwater conditions do not vary significantly from those found at specific exploratory locations at the project site. Variations in soil, bedrock and/or groundwater conditions could exist between and beyond the exploration points. The nature and extent of these variations may not become evident until during or after construction. Variations in soil, bedrock and groundwater may require additional studies, consultation, and revisions to GNN's recommendations in the Report.

In many cases the scope of geotechnical exploration and the test locations are selected by others without consultation from the geotechnical engineer/consultant. GNN assumes no responsibility and, by preparing this Report, does not impliedly or expressly validate the scope of exploration and the test locations selected by others.

This Report's findings are valid as of the issued date of this Report. However, changes in conditions of the subject property or adjoining properties can occur due to passage of time, natural processes, or works of man. In addition, applicable building standards/codes may change over time. Accordingly, findings, conclusions, and recommendations of this Report may be invalidated, wholly or partially, by changes outside of GNN's control. Therefore, this Report is subject to review and shall not be relied upon after a period of **one (1) year** from the issued date of the Report.

In the event that any changes in the nature, design, or location of structures are planned, the findings, conclusions and recommendations contained in this Report shall not be considered valid unless the changes are reviewed by GNN and the findings, conclusions, and recommendations of this Report are modified or verified in writing.

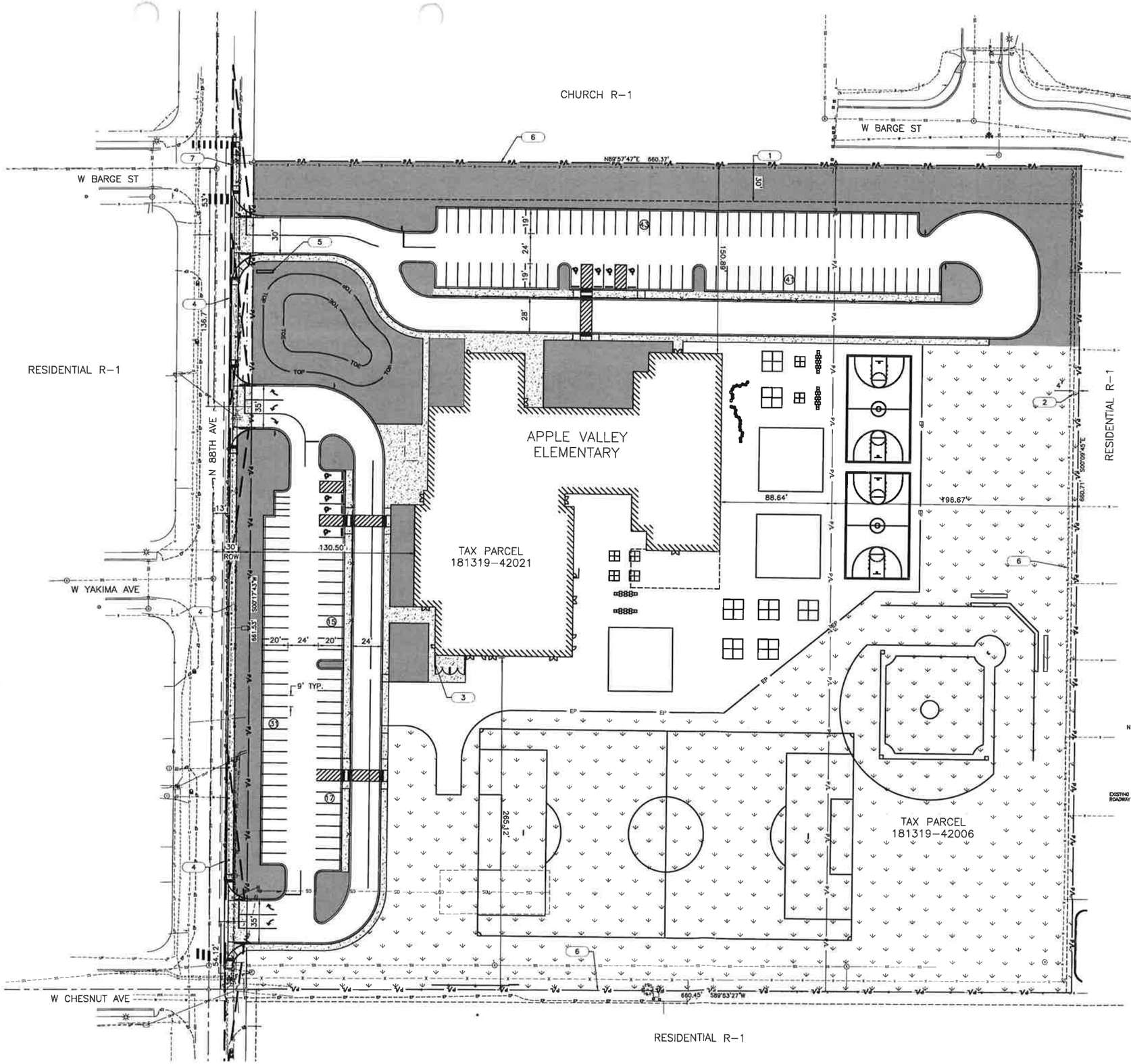
This Report is issued with the understanding that the owner or the owner's representative has the responsibility to bring the findings, conclusions, and recommendations contained herein to the attention of the architect and design professional(s) for the project so that they are incorporated

into the plans and construction specifications, and any follow-up addendum for the project. The owner or the owner's representative also has the responsibility to verify that the general contractor and all subcontractors follow such recommendations during construction. It is further understood that the owner or the owner's representative is responsible for submittal of this Report to the appropriate governing agencies. The foregoing notwithstanding, no party other than the Client shall have any right to rely on this Report and GNN shall have no liability to any third party who claims injury due to reliance upon this Report, which is prepared exclusively for Client's use and reliance.

GNN has provided geotechnical services in accordance with generally accepted geotechnical engineering practices in this locality at this time. GNN expressly disclaims all warranties and guarantees, express or implied.

Client shall provide GNN an opportunity to review the final design and specifications so that earthwork, drainage and foundation recommendations may be properly interpreted and implemented in the design and specifications. If GNN is not accorded the review opportunity, GNN shall have no responsibility for misinterpretation of GNN's recommendations.

Although GNN can provide environmental assessment and investigation services for an additional cost, the current scope of GNN's services does not include an environmental assessment or an investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater, or air on, below, or adjacent to the subject property.



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CHECKED BY MW
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Kennewick, WA 99336
Phone: 509.783.2144
www.jub.com

MARSAL S. MARSE STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER

APPLE VALLEY ELEMENTARY
7 N 88TH AVE
YAKIMA, WASHINGTON 98908

DATE 10/17/19

SHEET NAME
GENERAL OVERALL SITE PLAN

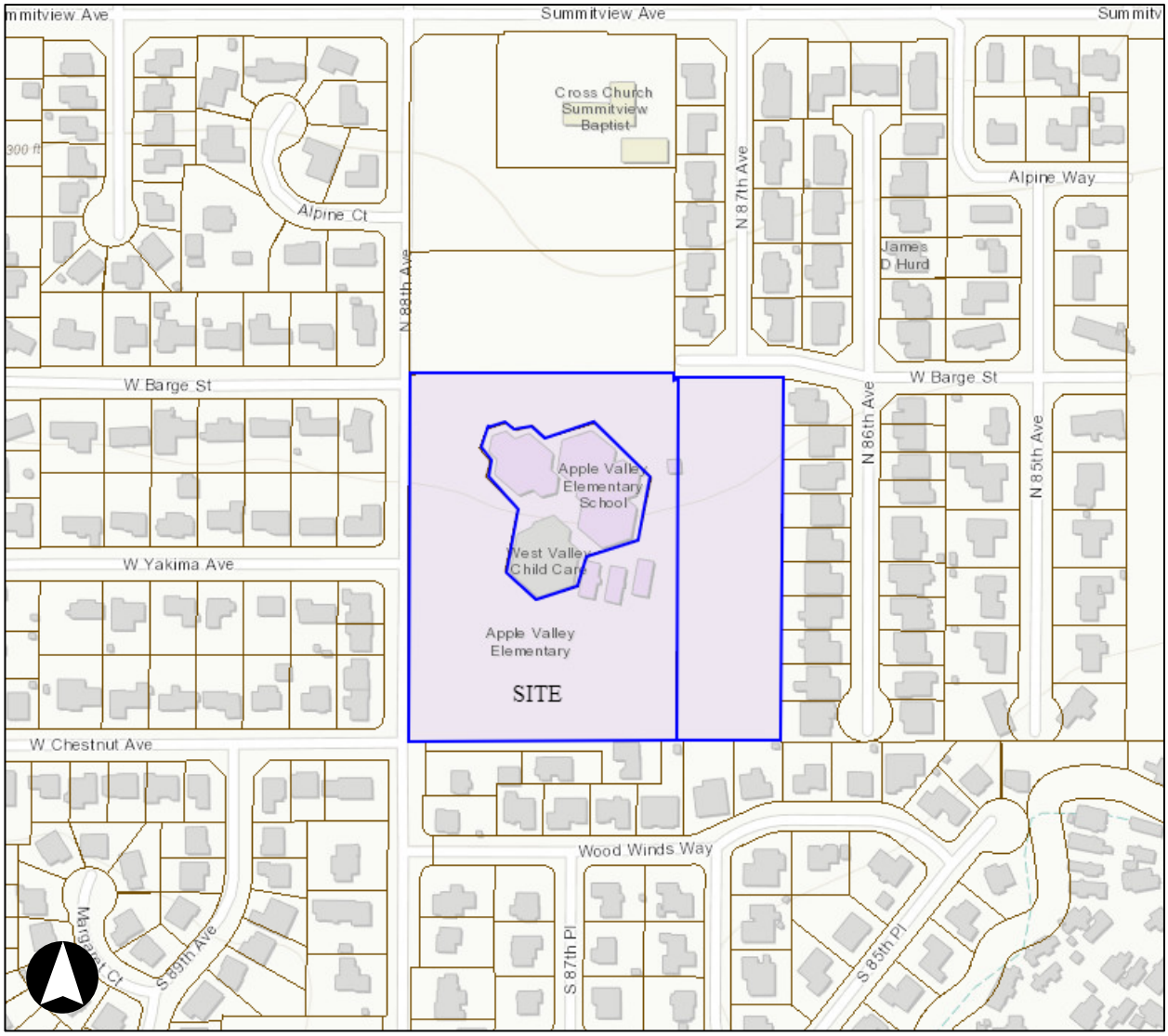
SHEET
C-100A

VICINITY MAP

File Number: CL3#010-19, ADJ#027-19, VAR#004-19, CAO#027-19 & SEPA#038-19

Project Name: WEST VALLEY SCHOOL DISTRICT – APPLE VALLEY ELEMENTARY

Site Address: 7 N 88TH AVE



Proposal: Proposal to construct a new 60,000 sq ft elementary school building in the R-1 zoning district with 147 parking spaces and other associated site amenities and improvements. This request includes a variance to exceed the building height limitation of 35 ft in this zoning district to allow a height of 44 ft, a critical areas review due to the site being in a wellhead protection area, and an administrative adjustment for the following: request to waive the sitescreening requirement that would impose a 6-ft view-obscuring fence, installation of a digital sign and wall signs which are not otherwise allowed in residential zoning districts, and adjust the maximum height of 10 ft for signs set back more than 15 ft from the right-of-way to allow a height of 11 ft 6 inches.

Contact the City of Yakima Planning Division at (509) 575-6183

Date Created: 12/20/2019