TOWN OF JACKSON
PLANNING & BUILDING DEPARTMENT

TRANSMITTAL MEMO

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☒Building
☐Title Company
☒Town Attorney
☒Police
Joint Town/County
☒Parks and Recreation
☒Pathways
☒Joint Housing Dept
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☐Planning Division
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☐DEQ
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Utility Providers
☐Qwest
☐Lower Valley Energy
☐Bresnan Communications
Special Districts
☒START
☒Jackson Hole Fire/EMS
☐Irrigation Company

Date: December 5, 2023

Item #: P23-213,214

Planner: Tyler Valentine

Phone: 733-0440 ext. 1305

Email: tvalentine@jacksonwy.gov

Owner
Fremont Community College District
DBA Central Wyoming College
2660 Peck Avenue
Riverton, WY 82501

Applicant
Jorgensen Associates
PO Box 9550
Jackson, WY 83002

REQUESTS:

The applicant is submitting a request for a Sketch Plan and Conditional Use Permit for Central Wyoming College's Jackson Campus on High School Road at the parcel legally described as PT. NE1/4SW1/4 SEC. 6, TWP. 40, RNG. 116 (CWC PARCEL)

PIDN: 22-40-16-06-3-00-019

For questions, please call Tyler Valentine at 733-0440 x 1305 or email the address shown below. Thank you.

Please respond by: December 26, 2023 (with Comments)

RESPONSE: For Departments not using SmartGov, please send responses via email to: planning@jacksonwy.gov

Central Wyoming College
Jackson Center
Sketch Plan and
Conditional Use Permit
Application

Applicant:

Central Wyoming College
2660 Peck Avenue
Riverton, WY 82501

Prepared by:

JORGENSEN
It's About People, Trust and Know How

Jorgensen Associates, Inc.
Engineers, Land Surveyors, & Planners
1315 Highway 89 South, Suite 201
P.O. Box 9550
Jackson, WY 83002
307.733.5150

Town of Jackson
Submittal Date: November 22, 2023
Jorgensen Associates, Inc.
Project No. 22070

CONTENTS

SECTION 1 - PROJECT BACKGROUND, OVERVIEW, FINDINGS AND RESPONSE TO SUBMITTAL CHECKLIST

A. PROJECT BACKGROUND & HISTORY

Central Wyoming College's (CWC) Jackson Center is a two-year college serving Fremont, Lincoln, Hot Springs, and Teton County, WY, as well as Teton County, ID. The main campus is located in Riverton, Wyoming and serves that region with outreach centers in Lander, Jackson, and Dubois, each designed to meet the needs of their associated communities. CWC currently offers associate degrees and certificates in 58 academic areas as well as many community education courses including foundational courses for English as a Second Language, Adult Basic Education and High School Equivalency. The Jackson Center focuses on programs in Nursing, Culinary Arts, Science, and Computer Science.

CWC was founded in 1966 and serves under the direction of the Wyoming Community College Commission and is accredited by the Higher Learning Commission. CWC's academic programs have articulation agreements with the University of Wyoming as well as many notable Universities. The CWC-Jackson Outreach Center (CWC-Jackson) opened in 1976. Growth over the years led it to move locations several times. CWC-Jackson currently operates out of the Center for the Arts where it has resided since the construction of the building. However, the Culinary Arts program has had to make do with various locations including a mobile classroom in recent years. While all the academic programs have grown, the biggest classroom challenges come from the Science, Nursing, and Culinary Arts programs which require specialized lab and classroom spaces. Partnerships with Jackson Hole High School, St. John's Medical Center and the Elks Lodge provide auxiliary spaces and help alleviate some of the classroom demands currently, however, these are temporary solutions. The new Jackson Center described in this application will consolidate these programs under one roof with up-to-date technology in dedicated classroom and lab space, which will allow CWC to provide quality programs, improve graduation rates, and better serve the larger Teton County community.

In 2022 the Jackson Hole community voted via referendum of the Special Purpose Excise Tax (SPET) to fund the acquisition of land and construction of a new CWC facility in the Town of Jackson (TOJ). $10 million dollars was allocated to this project. A 2.0-acre parcel of land (PIDN: 22-40-16-06-3-00-019) on High School Road was purchased and annexed into the Town of Jackson on September 18th, 2023. The new CWC-Jackson Center has been designed to accommodate the specifics of the site, requirements of the CCRs which encumber the property, and the Town of Jackson Land Development Regulations (LDRs).

Central Wyoming College also has a partnership with the Jackson Hole High School and allows students to take classes at CWC for additional credits.

B. LOCATION & ZONING

The site is located just west of Jackson Hole High School on High School Road and across from the Cottonwood Park subdivision. It is specifically described as PT. NE1/4SW1/4 of Section 5, Township 40 North, Range 116 West, Teton County, WY. Map T-313H depicts the parcel and its easements.

The site is close (1,440 ft and 980 ft) to the Highschool and Corner Creek START bus locations. It will include a new pathway for future multimodal transportation connection to existing and planned pathway network. The character of the surrounding neighborhood is comprised of a mix of uses including education, service, retail, large scale commercial, office, and housing, and the immediately adjacent property is long-standing agricultural. Workforce housing is present in a variety of types that include single-family and multifamily structures in nearby neighborhoods. The site is on High School Road just west of its intersection with Middle School Road and the pathway network. It is directly across from Corner Creek Lane and the Cottonwood neighborhood. The Jackson Hole High School and the Jackson Hole Middle School are to the east.

The site was rezoned from Suburban (S) and Rural 1 (R-1) zones to Public/Semi-Public (P/SP) via ZMA2022-0004 submitted 10/19/2022. This property is within the Scenic Resource Overlay (SRO) but not the Natural Resource Overlay (NRO).

C. OWNER & PROJECT TEAM INFORMATION

PROPERTY OWNER & APPLICANT:
Fremont Community College District DBA Central Wyoming College
2660 Peck Avenue
Riverton, WY 82501

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Wilson, WY 83014
307-264-2600
www.prospectjh.com

D. CURRENT PROGRAMMING & DEVELOPMENT PROPOSAL

The new CWC-Jackson Center will provide proper programmatic spaces for unique education programs which include dedicated science laboratories, simulation nursing labs, lab space for allied health programs, and the culinary arts program. The programming for this facility was selected by the CWC Board after a carefully executed design process led by the architect. The Level II Report for the project is currently being compiled by the State offices.

CWC will have 52 courses available in Fall, Spring, and Summer semesters that encompass the 13 fields of study offering associate degrees and certificates available through a combination of online study and the CWC Jackson Center. The majority of CWC programming uses a traditional schedule with fall and spring semesters. Fall semester begins on the last Monday of August and ends the 2nd week of December. Spring semester begins the 2nd or 3rd week of January and continues through the 1st or 2nd week of May. These semesters are 15 weeks long. The summer schedule begins the day after Memorial Day and generally lasts 10 weeks, though attendance is notably lower. The hours of operation for the campus will be from 8:00 AM to 9:00 PM.

The Culinary and Hospitality Program runs under a condensed schedule to accommodate the employment needs of Teton County's resorts, hotels, and restaurants. Most in-person classes are offered for 9 weeks in the fall (10/1 to 12/1) and in the spring (3rd week of March to before Memorial Day). Students are involved in work-study internships during the summer and winter seasons.

The location for the center is in the Public/Semi-Public Zone of the Town of Jackson (P/SP). According to Section 5.2.1 Public/Semi-Public –Town of Jackson Land Development Regulations (LDRs)…

> “*The purpose of the Public/Semi-Public – Town (P/SP) is to provide locations for new and existing uses and facilities of a public or semi-public nature. In particular, the P/SP zone is intended to allow flexibility for public and semi-public uses and facilities that often have unique functional needs, such as for height, floor area, setbacks, and impervious surface, that cannot be accommodated in other zoning districts. Land in the P/SP zone and/or facilities operated therein may be under the control of federal, state, or local governments, or other governmental entities such as a school district or hospital district.”*

The design and function of the building complies with this zone.

There will be 20 short-term bike racks and five (5) long-term bike lockers with outlets for electric bike charging. There will be a pathway connection to the existing and proposed pathway network. There will also be space reserved for future Town e-bike sharing programs.

E. FINDINGS FOR APPROVAL

I. 8.3.1.C. Sketch Plan - Findings for Approval

1. ***Is consistent with the desired future character described for the site in the Jackson/Teton County Comprehensive Plan (Comp Plan).***

   <u>Complies.</u> The site is currently located within Jackson/Teton County Comprehensive Plan (Comp Plan) District 5 – Sub-area 5.6 – Northern South Park (attached in Section 2). The site borders Subarea 5.4 – School Campus. Thus, the provisions of both Subarea 5.4 and Subarea 5.6 are relevant and govern this site’s relationship with the Comprehensive Plan, which states the following:

   Subarea 5.4 School Campus is a STABLE Subarea that will continue to provide the necessary land for future community schools and recreational amenities. The community will continue to support and plan for the possible expansion of the School District Campus. Particular attention needs to be given to addressing the traffic congestion in this area due to the pulse of single occupancy vehicle and school bus traffic associated with the school and recreational uses. Possible solutions will come in many forms, including a shift in current behaviors away from the use of single occupancy vehicle and complete street improvements to High School, Middle School and South Park Loop Roads, including improved pedestrian and bicycle connectively throughout the subarea and from surrounding districts into the Subarea.

Subarea 5.6 Northern South Park is TRANSITIONAL Subarea and is identified as a possible location for future residential development at a similar density to the adjacent West Jackson residential (Subarea 5.5) neighborhoods. While the priority of the community is to first infill and redevelop other already developed Stable/Transitional Subareas to meet the Growth Management Goals of the plan; if necessary, this subarea is a suitable location to meet those goals due to its close proximity to many existing Complete Neighborhood amenities. This subarea has been the subject of the recently approved Northern South Park Neighborhood Plan, which leaves out the CWC campus from the proposed neighborhood zoning, so this area goal is not in conflict.

CWC is, by its definition, a Community College, and fits within the concept of "future community schools" desired for this subarea. A traffic study to be submitted under separate cover will address the additional guidance provided by this section. However, anecdotally, the traffic impact of this college campus, with its inherent flexibility for class timing and capacity for strategic scheduling, will have a smaller scale effect on local traffic patterns and congestion than any future residential development that would be contemplated in this District. A traffic statement is included in Section 2. Further, this proposal complies with guidance associated with Subarea 5.6 in that it proposes additional development that is non-residential that addresses the goals for "transitional" subareas. Transitional subareas, under the Comprehensive Plan, are places where "most of the community would agree that development/redevelopment or a change in character would be beneficial" and would benefit from "reinvestment and revitalization," where development goals "include improving access to jobs, housing and services and reducing reliance on single occupancy trips." (Comp. Plan, p. CV-2-4)

Finally, it is critical to recognize the relationship between Subareas 5.4 and 5.6. The Comprehensive Plan is a vision document, and it does not have "hard" boundaries: "all mapped features are illustrative of the character of an area and do not imply desired regulatory boundaries or specific locations for certain attributes." Comp. Plan, p. IV-8.

Property that lies on the depicted boundaries of Comprehensive Plan subareas needs to be evaluated under the criteria of both of the relevant subareas, and can contain the characteristics of both areas, so as to provide an intermediate mix of the subareas' characteristics.

2. ***Achieves the standards and objective of the Natural Resource Overlay (NRO) and Scenic Resources Overlay (SRO), if applicable.***

   Complies. The CWC-Jackson Center property is located within the Scenic Resource Overlay (SRO) but not the Natural Resource Overlay (NRO). The campus will comply with all provisions of the SRO and the applicant will work with the Design Review Committee to ensure that the building meets their standards.

   The development will be one story, and building design will be coordinated to minimize adverse visual impacts from the street. The CCRs require screening trees on the south and east sides, which will be installed to prevent impact to potential future development nearby. The campus will be designed to be a welcoming space, with native landscaping, pedestrian and bicycle access, and modern, energy efficient design. Cars will be partially screened from the street by trees and shrubs.

3. ***Does not have significant impact on public facilities and services, including transportation, potable water and wastewater facilities, parks, schools, police, fire, and EMS facilities.***

   Complies. Police, ambulance, and fire services currently serve the area from TOJ and Teton County. This non-residential development is not expected to generate the need for more capacity at local schools as would a residential development. CWC Jackson is consolidating the existing use that is currently satisfied by multiple facilities around town into one convenient location close to multiple modes of transportation which will reduce traffic locally.

   Water will be provided by extending existing TOJ lines under High School Road to the subject property, and wastewater will be connected to via private agreement for a short span and then into TOJ infrastructure near the High School. TOJ will charge capacity fees to offset the impact of this project on our local water and sewer treatment systems.

4. ***Complies with all relevant standards of these LDRs and other Town Ordinances as can be determined by the level of detail of a sketch plan.***

   Complies. The purpose of Sketch Plan review is to determine general consistency with the LDRs at a preliminary, conceptual level before development is fully designed, with the objective of identifying opportunities to achieve desired community character, development related issues, discuss alternative designs that may better implement the LDRs and identify natural and scenic resource protection requirements. This project currently complies with all relevant standards of the LDRs.

5. ***Is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.***

   Complies. There are no currently approved permits on the site. The project will comply with all setbacks and provisions established by the LDRs. The approved rezone included a condition that the property change ownership to a public entity (CWC) and that has occurred.

II. 8.4.3.C. Conditional Use Permit - Findings for Approval

1. ***Is compatible with the desired future character of the area.***

   Complies. See above Finding #1.

2. ***Complies with the use specific standards of Division 6.1.***

   Complies. Section 6.1.8.C of the LDRs defines a school as an Institutional Use. The requirements are as follows:

   2. Standards:
   a. Wyoming Statutes. Each daycare or education use shall comply with the relevant provisions of the Wyoming Statutes and with local health, safety and fire codes.

   The CWC Jackson Center is a state school that will comply with the relevant provisions of the Wyoming Statues and with local health, safety, and fire codes.

3. ***Minimizes adverse visual impacts.***

   Complies. See above Finding #2.

4. ***Minimizes adverse environmental impacts.***

   Complies. The development will minimize adverse environmental impacts through the choice in building materials, including energy efficient design elements, and by providing conduits for EV charging stations, bike racks, pathway access, and close proximity to START bus stops. Classes will be scheduled outside of peak traffic hours as much as possible to keep traffic from slowing unnecessarily. Landscaping will be chosen to comply with Town of Jackson regulations and will be native trees and shrubs wherever possible and will not include wildlife attractants.

5. ***Minimizes adverse impacts from nuisances.***

   Complies. The development minimizes adverse impacts from nuisances by maintaining hours of operation between 8:00 AM and 9:00 PM, and will schedule classes as much as possible to coincide with off-peak traffic times. There are no noise or visual impacts anticipated outside of regular business hours.

6. ***Minimizes adverse impacts on public facilities.***

   Complies. The development minimizes impact on public facilities by concentrating the activity of the CWC Jackson coursework to one single location instead of depending on other facilities as it has done in the past. Since CWC already has a presence in the Town of Jackson, this proposal will simply move, or lessen, the current impact on public facilities rather than increase.

7. ***Complies with all other relevant standards of these LDRs and all other Town Ordinances.***

   Complies. The development complies with all other relevant standards of the LDRs and all other Town Ordinances.

8. ***Is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.***

   Complies. The development is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.

F. PROPOSED DEVELOPMENT PROGRAM

I. Structure, Location, and Mass – See SD set (Section 3) for details. The proposed building is one-story, in roughly a U-shape, and is currently designed as 20,528sf. There will be areas devoted to nursing, science, culinary / hospitality, classrooms, offices, and shared building support. It is located within the setbacks prescribed by the P/SP zone and CCRs, facing to the west, and accessible via a pedestrian access from High School Road and a driveway off same.

II. Maximum Scale of Development – the building is currently 20,528 sf

III. Lot Coverage – not applicable in P/SP zone

IV. Minimum LSR – not applicable in P/SP zone

G. FENCING

The property will be fenced along the southern and eastern boundaries as required by the CCRs, which will be permitted through Teton County.

H. EXTERIOR LIGHTING

Will comply with the LDRs and be determined at Development Plan.

I. LANDSCAPING

Will be finalized at Development Plan with a landscape plan and bond estimate. Draft landscaping plans are included with the site plan.

J. SIGNS

Will comply with the LDRs and be determined at Development Plan.

K. GRADING, EROSION CONTROL, STORMWATER MANAGEMENT

See Engineers Report **Section 2,** Site Plan **Section 3**.

L. ALLOWED USES

CWC-Jackson is classified Institutional: School under the LDRs. This application contains a Conditional Use Permit to allow this use on the subject property, as is required for an Institutional Use in P/SP zone.

M. PARKING AND LOADING

See Engineer's Report **Section 2.**

N. SUBDIVISION

No subdivision is contemplated in this application.

O. EMPLOYEE HOUSING

Exempt under Division 6.3.2.C.13 of the LDRs because the site is in the Public/Semi-Public zone.

P. TRANSPORTATION FACILITY

CWC-Jackson will take access off of High School Road and will construct a section of pathway along the northern boundary to allow for future connection to planned expansion of the pathway network. An upgraded pedestrian crosswalk at Corner Creek Lane may also be installed as needed.

Q. REQUIRED UTILITIES

See Engineer's Report **Section 2.**

R. MAXIMUM SCALE OF USE

P/SP does not require a maximum scale of use.

S. OPERATIONAL STANDARDS

CWC-Jackson will have onsite refuse and recycling that will be located as part of the Development Plan.

T. OTHER

A Neighborhood Meeting was conducted at the Presbyterian Church of Jackson Hole from 3:00 to 5:00 pm on July 26th, 2023. The summary can be found in **Section 4**.

SECTION 2 – ENGINEER'S REPORT

A. INTRODUCTION

The Central Wyoming College – Jackson Outreach Center will be a 20,365 square-foot single-story single building college campus facility. The college will consist of traditional classrooms, instructional kitchen areas, faculty offices, and a medical nursing training facility. Central Wyoming College is a public two-year college that is based in Riverton, WY with outreach programs in Jackson, Dubois, and Lander, WY. The facility will provide traditional college courses, career development courses, and classes for personal/community enrichment. The Outreach Center will also provide a space for visiting speakers, conferences, and serve as a cultural hub for the Town of Jackson.

The site is located along High School Road just west of Jackson High School. The project site is currently undeveloped and was formally operated as part of the surrounding ranch. The site is bordered by High School Road to the north and ranch land to the south, east and west. The parcel is 2 acres in size, currently zoned Public/Semi Public and was recently annexed to the Town of Jackson. An address will be assigned to the parcel at a later date.

Preliminary findings and the proposed plan to address the site/civil aspects of the project are discussed below. A preliminary site plan is included with this application for reference.

B. SOILS

A Geotechnical Engineering Report was completed for the project on June 2, 2023. A total of four test pits were excavated as part of the geotechnical exploration on May 4, 2023. The test pits showed the site is covered by a relatively thin layer of topsoil approximately one-foot thick, underlain by sandy gravel and cobble alluvium of the Snake River alluvial flood plain. The alluvium was logged as 15% cobbles by volume, and the remaining soils comprising 60% gravel, 30% sand, and 10% fines by mass. The stony alluvial soils underlying the topsoil are anticipated to provide adequate support for the proposed construction. For further information regarding the site soils, see attached Geotechnical Engineering Report in **Section 4.**

C. GROUNDWATER

Three groundwater monitoring standpipe piezometers were installed in the open test pits to facilitate groundwater monitoring during the spring and summer months of 2023. Two data loggers were installed in the standpipe piezometers in test pits JG-1 and JG4 of which collected groundwater data every four hours for approximately 4.5 months. Peak groundwater was measured at 3.13 and 3.21-feet below the ground surface JG-1 and JG-4 on July 5 and July 4, 2023, respectively. It is assumed the groundwater is most heavily influenced by irrigation practices on adjacent agricultural fields. A full summary of the groundwater monitoring effort can be found in the attached Groundwater Monitoring Report dated November 15, 2023 in **Section 4.**

D. CABLE UTILITIES AND GAS

The project proposes to bring electrical power from existing lines and vaults located to the North and West of the site. The power and communication lines will be buried from the connection points to the property where a transformer will be located. Natural gas will be brought in from an existing line on High School Road as shown on the site overview sheet. There is on-going coordination for a private fiber connection via the Jackson Hole High School. Schematics of the new routing and pedestal placements are shown on the accompanying site plan (see Section 2) and will be finally coordinated with the utility companies prior to Development Plan.

E. WATER SUPPLY

Water supply is proposed to be provided by the Town of Jackson for domestic water, necessary hydrants and fire suppression for the building. An existing 12-inch diameter water main exists along the north side of High School Road. A water service is proposed to be extended to the site from this existing water main as shown on the preliminary site plan to provide domestic water and fire suppression service to the building.

Service line sizes and water demands for the site will be determined prior to the Final Development Plan submittal. Water for irrigation is proposed to be provided by a groundwater well to be installed on-site.

F. WASTEWATER

Sanitary sewer service is proposed to be provided by future private sewer main to be installed in High School Road as part of the Porter Ranch Subdivision project. This future main will be connected to an existing 15-inch sanitary sewer main owned and operated by the Town of Jackson a short distance to the east of the CWC parcel. Connection and maintenance agreements will need to be developed between CWC and Porter Ranch to allow for this connection.

Due to existing elevations of the existing/proposed sewer mains in High School Road gravity service from the sight does not appear feasible. Therefore, a private lift station and force main is proposed for connection to the sewer main in High School Road. A grease trap is also proposed for the kitchen facilities in the building. A proposed layout of the sanitary sewer service facilities is shown on the preliminary site plan.

Service line sizes and wastewater flows for the site will be determined prior to the Final Development Plan submittal along with the final design details of the lift station and grease trap.

G. TRAFFIC

The proposed site access aligns at the current three-way intersection of Highway School Road and Corner Creek Lane. The proposed four-way intersection will consist of a two-way stop-controlled intersection, with a stop sign at Corner Creek Lane and the CWC access. Corner Creek Lane is a two-lane local road which serves residences within the Cottonwood Park subdivision. High School Road is a two-lane major collector road, which connects to South Park Loop Road to the west and

Highway 89 to the east of the site. Pathways are provided along part of High School Road on the north side and nearly adjacent to the CWC site where they go through the High School. There are no sidewalks on High School Road. South Park Loop Road is a two-lane major collector road with a separated pathway on the west side of the road. Highway 89 is a 5-lane principal arterial highway with a separated pathway on the west side of the roadway.

To assist with Traffic Demand Management, the project will utilize various strategies. The CWC school programing and course schedule will be designed to minimize overlaps with the start and finishing times of the schools within the area and existing peak travel hours on High School Road. The project will encourage active travel and use of public transit by providing bus passes to students and sufficient bicycle parking on-site. The location of the campus within the Town of Jackson will allow CWC users to commute via foot and bicycle. Pathway will be constructed on the north side of the property to eventually connect to future pathway contemplated for High School Road. A START Bus stop is located on High School Road, at the intersection of Middle School Road and High School Road and will facilitate access to public transportation for students and employees of Central Wyoming College. The addition of a crosswalk will be necessary at the intersection of Corner Creek Lane and High School Road to provide bus riders and pedestrians a safe way to access CWC from the north side of High School Road. CWC will coordinate with START to identify any future improvements to the START program to aid in ridership.

A more detailed Traffic Impact Statement and Memo is attached as part of this Sketch Plan submittal in **Section 4.**

H. ROADS AND ACCESS

Vehicular access to the parking lot will be from a private access road via High School Road as shown on the site plans. The access road will be built in accordance to TOJ standards. A multi-use path is also proposed parallel to High School Road along the property frontage as shown on the preliminary site plan and will provide pedestrian connectivity via a sidewalk to the parking lot and building.

I. PARKING

Parking standards for this Institutional Use are determined through an independent calculation in the P/SP zone. In order determine a conservative parking regulation we make the following assumptions: there are seven fulltime staff on site all day; 14 adjunct staff that only attend when they teach; students will come and go all day/evening spreading out the need for parking; scheduling of all classes is adaptable[1] if needed; the availability of multimodal transportation options can reduce parking demands by up to 20%.[2]

With an independent calculation of 1.5 parking spaces per 1,000 SF floor area. The 20,528 SF

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[1] Exception is Culinary & Hospitality and Nursing on fixed times that is ideal to those curriculums. Usually the evening.

[2] All students will be provided with Start Bus information and lockable bicycle racks will be provided.

building generates a parking requirement of 30.75 parking spaces. 37 parking spaces will be provided, two of which are dedicated to handicap usage. Handicap parking stalls are located near the entrance to the building. The parking lot will be per TOJ standards and will include accessible parking as well as loading/unloading areas. Snow storage for the parking lot is proposed north of the parking lot in the stormwater detention area. Bike racks are also proposed near the entrance of the building as shown on the site plan.

J. STORMWATER

The site stormwater plan is to collect, treat, and route the stormwater from the site according to the Town's stormwater standards. The TOJ requires new developments to detain the 100-year storm. Stormwater is proposed to be managed by collecting the stormwater combination of surface flow, inlets and pipes and will be treated and stored in the proposed stormwater detention area north of the parking lot.

K. SNOW STORAGE

As indicated on the accompanying Sketch Plan Drawings, snow storage areas equal to or greater than 2.5% of the plowed area will be provided. This area is the functional space to stack the large amounts of snow that can build up during heavy snowfall years. Snow storage will primarily be in the area to the West of the main parking lot. As with many area developments during a heavy snow year it may be necessary to load and haul off snow piles from time to time during the winter.

L. WATER BODY AND WETLAND BUFFERS

The site is not adjacent to any body of water and impacts on water quality or wetlands are not foreseen.

An existing irrigation ditch exists along the north side of the property parallel to High School Road along with some irrigation laterals that flow to the south. This is the Leek ditch which provides irrigation water to the properties west and south of the site. As shown on the proposed plan, the ditch will be relocated and modified by a series of proposed irrigation pipes to continue to provide irrigation water to the adjacent properties. No modification to existing flows are anticipated. The proposed plan is being developed in coordination with the adjacent landowner and Town regulations will be followed to obtain consent from 50% of ditch owners when the plan is finalized.

SECTION 3 – SKETCH PLAN DESIGN

- **CWC JACKSON CENTER SITE PLANS, ELEVATIONS, FLOOR PLANS, & CHARACTER SKETCHES BY ANDERSON MASON DALE ARCHITECTS**

- **CWC JACKSON CENTER CIVIL SET BY JORGENSEN ASSOCIATES, INC.**

Central Wyoming College - Jackson Outreach Center

Schematic Design Report 05 June 2023

AndersonMasonDale
Architects

Table of Contents

Acknowledgments

Project Team

Owner

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President of the College

Steering Committee

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Director of Culinary and Hospitality Programs

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Cator Ruma

Blake Winter

Cost Estimating
Vermeulens

Melissa Chabot

Executive Summary

The Central Wyoming College Jackson Outreach Center updated Level II Study commenced in Spring 2023. This effort is an update to the Level II study completed in 2017 as the College has purchased a new two-acre site just west of the Jackson Hole High School. The project is consistent with a continuation of the Central Wyoming College Master Plan, last updated in 2012.

The existing CWC Jackson Center is housed primarily in the Jackson Center for the Arts. It has functioned in this location since the construction of The Center in leased space. In this location and assorted other local facilities, CWC offers a broad array of courses, as defined in the attached program space utilization appendix. As defined in the CWC Master Plan, the purpose of the new Jackson Center is to provide proper programmatic space for the unique educational programs offered by the college. These include the culinary arts program, dedicated science laboratories, simulation nursing labs, and lab space for allied health programs. The unique requirements of these program areas demand specialized educational spaces, which the college does not presently possess. This report includes program information and diagrammatic layouts for educational spaces which will serve these programs most effectively.

This updated Level II report was completed in April and May of 2023 via a series of workshops with CWC educators and administrators, and representation from the State of Wyoming. During these workshops, curriculum and enrollment have been reviewed as a basis of projecting the space needed to offer the courses presently offered by the college, and with an eye to future enrollments and needs.
In addition to the specialized course offerings of the Jackson Center, a key program component of this facility will be spaces that will be available to the local community. Community partnerships are an essential part of the mission of the CWC Jackson Center, and these program areas will serve this purpose in addition to providing general education classrooms.

The primary purpose of the updated Level II study has been to determine the size and cost of the new facility. The new Jackson Center is programmed at 20,600 gross square feet and will cost approximately $15 million in construction costs including construction contingency. An additional $4.5 million in soft costs are required to execute the work. The total project cost has been modeled taking into account the unique economic conditions of building in Jackson, Wyoming.

Design Process

The design process for the new CWC Jackson Center is an extension of work begun in 2012 and 2017 on the Central Wyoming College Master Plan update. Work completed at that time defined the areas of academic instruction in need of new spaces. That work has been the basis of a multi workshop-based process which has produced this updated Level II report.

Three primary workshops were the basis of the design process for this document. Beginning in April 2023, building users, administrators, and the design team met to review programmatic needs and spatial types. The first workshop was used to confirm spatial types and quantities. Programmatic adjacencies were discussed and goals for overall building function were explored. The College directed the design team to explore a one-story and two-story building diagram on the new site west of the Jackson Hole High School.

The second workshop was used to review alternatives for building stacking, building organization, program adjacencies and basic building conceptual diagrams. At the conclusion of this meeting, the College asked the design team to develop a one-story diagram. The one-story diagram has a slightly smaller area because it does not require stairs or an elevator. It should also be faster to construct than a two story diagram.

The third workshop explored exterior character and floor plans. Additional faculty reviewed the floor plans, and their comments were incorporated into the exhibits included in this report. At the end of this workshop, the design team was charged with developing a concept utility plan with the civil engineer and a detailed rendering of the exterior of the building.

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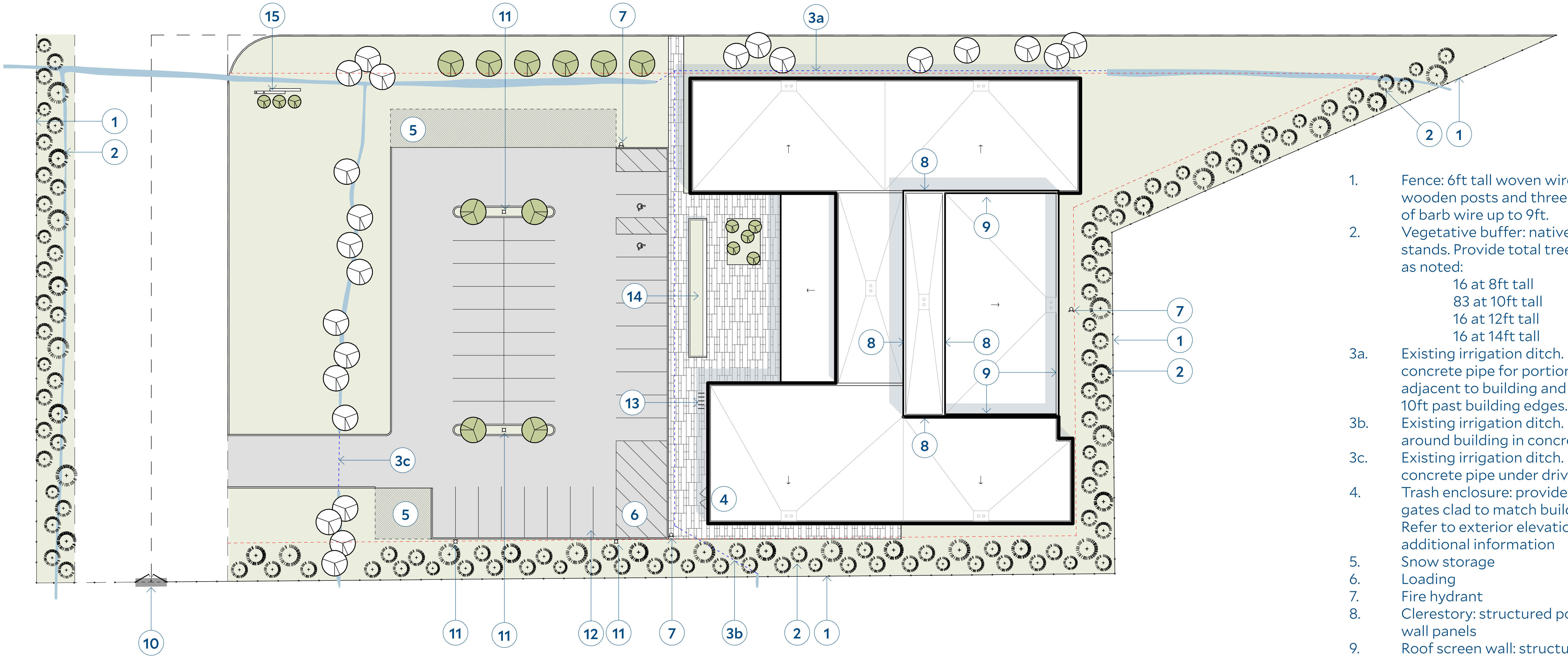
Space	Area	Qty	Net Area	Remarks
Nursing			**2,835**	
Labs			**2,205**	
Skills Lab RN	630	1	630	4 beds
Skills Lab Simulation	945	1	945	2 - 175 SF surgery suites, 1 - 125 SF control, 1 - 65 SF Supply, 1 - 65 SF Meds, 1 - 480 SF Nurse Station
Skills Lab CNA	630	1	630	
Lab Support			**630**	
Storage	315	1	315	Shared for all labs
Debrief	315	1	315	1 - shared
Science			**1,620**	
Labs			**1,260**	
Microbiology / Chemistry	630	1	630	16 stations - fixed utilities - 2 hoods - need prep
Biology / Anatomy / Physiology / Physics / Earth + Env Science	630	1	630	16 stations - movable tables - no hoods - need prep - fixed equipment at perimeter, adjacent to supply and chemical storage, storage for student kits
Lab Prep			**360**	
Stock Room	120	1	120	added 3/20/23
Lab Prep	120	1	120	added 3/20/23
Research	120	1	120	added 3/20/23
Culinary / Hospitality			**1,760**	
Kitchen			**1,760**	
Com. / Entrepreneurial Kitchen / Baking	960	1	960	16 stations, includes storage, pantry, adjacent to dock, see kitchen from hallway (60 SF/Station)
Scullery	150	1	150	
Cooler	150	1	150	
Freezer	150	1	150	
Custodial / Washer-Dryer	100	1	100	
Pantry	150	1	150	
Storage	100	1	100	
Shared Space	**-**		**8,483**	
Classrooms			**4,220**	
Classroom - General	630	2	1,260	16 students, Operable partition to create one large room for 32 students. Video conference classroom.
Classroom - Science	-	-	-	Shared with nursing classroom
Classroom - Nursing	630	1	630	16 students. Video conferencing classroom. ICN
Computer Lab - General	630	2	1,260	16 students, Operable partition to create one large room for 32 students.
Flex Class	630	1	630	Was the second kitchen. Call "student center" 04/27/2023
Tutoring	220	2	440	Similar to Debrief. Seating for 8 - operable partition to seat 16, Video conferencing
Offices			**2,158**	
Faculty Office	110	12	1,320	1-director, 1-academic affairs, 1-student affairs, 2-nursing, 1-science, 1-culinary, 1-math, 1-english, 3-professors
Workstations	48	6	288	6 to 15 adjuncts share these stations
Huddle Room	110	3	330	used by adjuncts, need AV and camera so students could use for testing or in the evening
Mail / Copy / Print	110	1	110	Paper storage, printer, shredder
Staff Break Room	110	1	110	Fridge, coffee, micro
Shared Building Support			**2,105**	
Staff Shower Room	90	1	90	Includes Toilet, Sink, Shower
General Storage	150	2	300	Tables and Chairs
Student Break Room	110	1	110	Fridge, coffee, micro, adjacent to Flex Classroom called "student center"
Dock	300	1	300	Needs garage door. Does not need to be elevated.
Mother's Room	80	1	80	added in 04/27/23 workshop
Unisex washroom				in gross number below - provide changing station. Label "family washroom" 04/27/23
Custodial Storage	100	1	100	
Custodial Closet	100	1	100	
Mechanical	275	3	825	
Electrical	100	1	100	
IT	100	1	100	
Total NSF			**14,698**	



🟩 Grasss / Planting area

▭ Concrete walkway

○ Existing tree to remain

● New tree

— — Property line

- - - - Build-to line

1. Fence: 6ft tall woven wire with wooden posts and three-strands of barb wire up to 9ft.
2. Vegetative buffer: native spruce stands. Provide total tree quantities as noted:
   - 16 at 8ft tall
   - 83 at 10ft tall
   - 16 at 12ft tall
   - 16 at 14ft tall

3a. Existing irrigation ditch. Provide concrete pipe for portion of ditch adjacent to building and extending 10ft past building edges.

3b. Existing irrigation ditch. Reroute around building in concrete pipe.

3c. Existing irrigation ditch. Provide concrete pipe under drive.

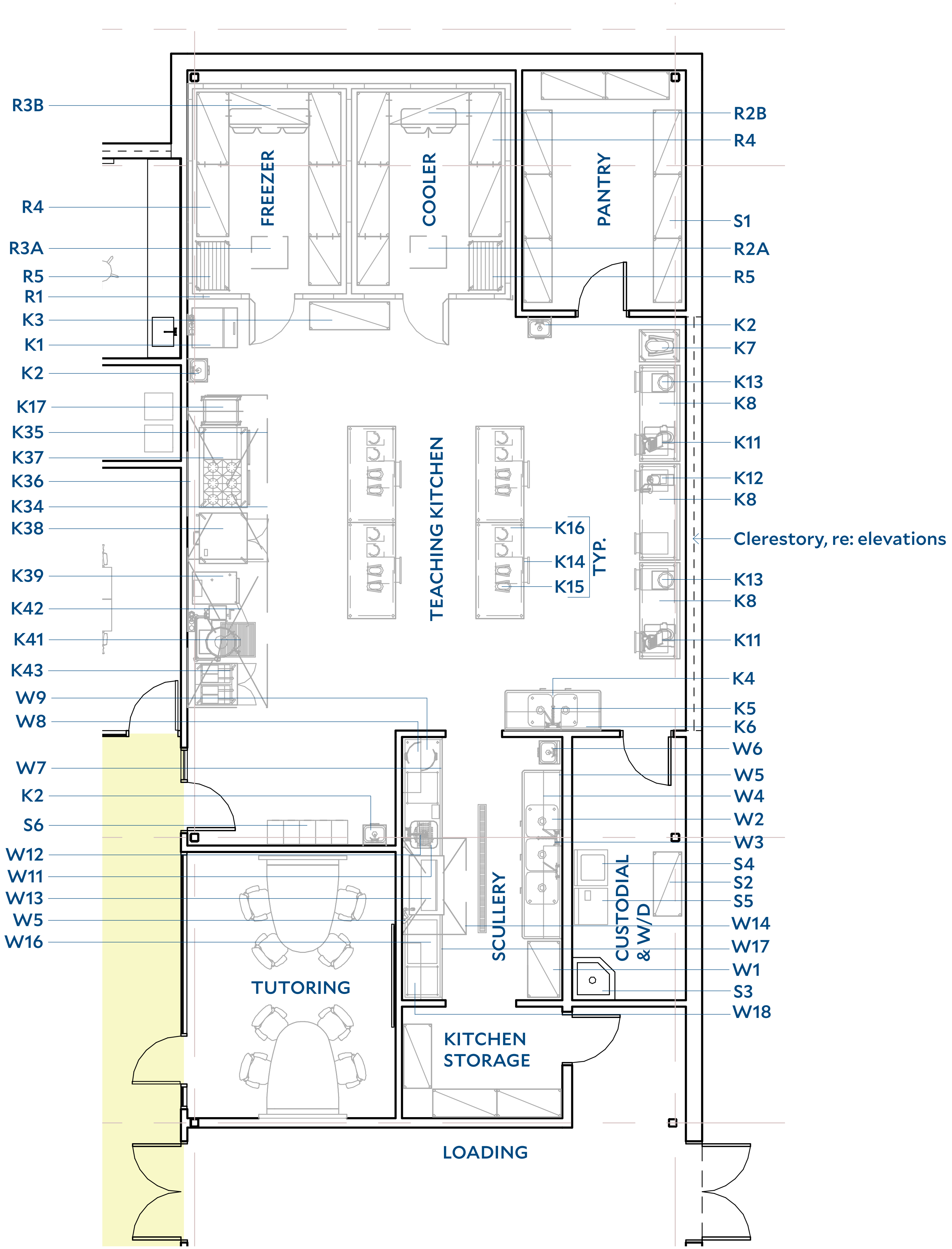
4. Trash enclosure: provide (2) 6ft wide gates clad to match building cladding. Refer to exterior elevations for additional information
5. Snow storage
6. Loading
7. Fire hydrant
8. Clerestory: structured polycarbonate wall panels
9. Roof screen wall: structured polycarbonate wall panels, with HSS frame backup and LED backlighting
10. (2) 6ft cattle gates and cattle guard
11. Parking lot pole light
12. Provide conduits for (2) future EV charging stations
13. Bike racks. Provide outlets for electric bike charging
14. Raised planter, with herb garden and bench seat. Refer to exterior elevations for additional information
15. Monument signage. Provide power for integral lighting of fixed sign. Provide (2) flagpoles at sign location

Site Plan and Roof Plan

1. Vestibule
2. Office
3. Open Office
4. Workroom
5. Breakroom
6. Hoteling / Small Meeting
7. Tutoring
8. Classroom
9. Computer Classroom
10. RN Skills Lab
11. CNA Skills Lab
12. Simulation Lab
13. Surgery
14. Control Room
15. Med Prep
16. Program Storage
17. Debrief
18. Micro / Chem Lab
19. BAPPEES Lab
20. Lap Prep
21. Teaching Kitchen
22. Walk-in Freezer
23. Walk-in Cooler
24. Pantry
25. Scullery
26. Kitchen Storage
27. Custodial / Washer-Dryer
28. Custodial
29. Forum / Prefunction
30. IT
31. Electrical
32. Mechanical
33. Restroom
34. Staff Restroom / Shower
35. Wellness / Mothers Room
36. Loading
37. Building Storage
38. Trash / Recycling Enclosure*

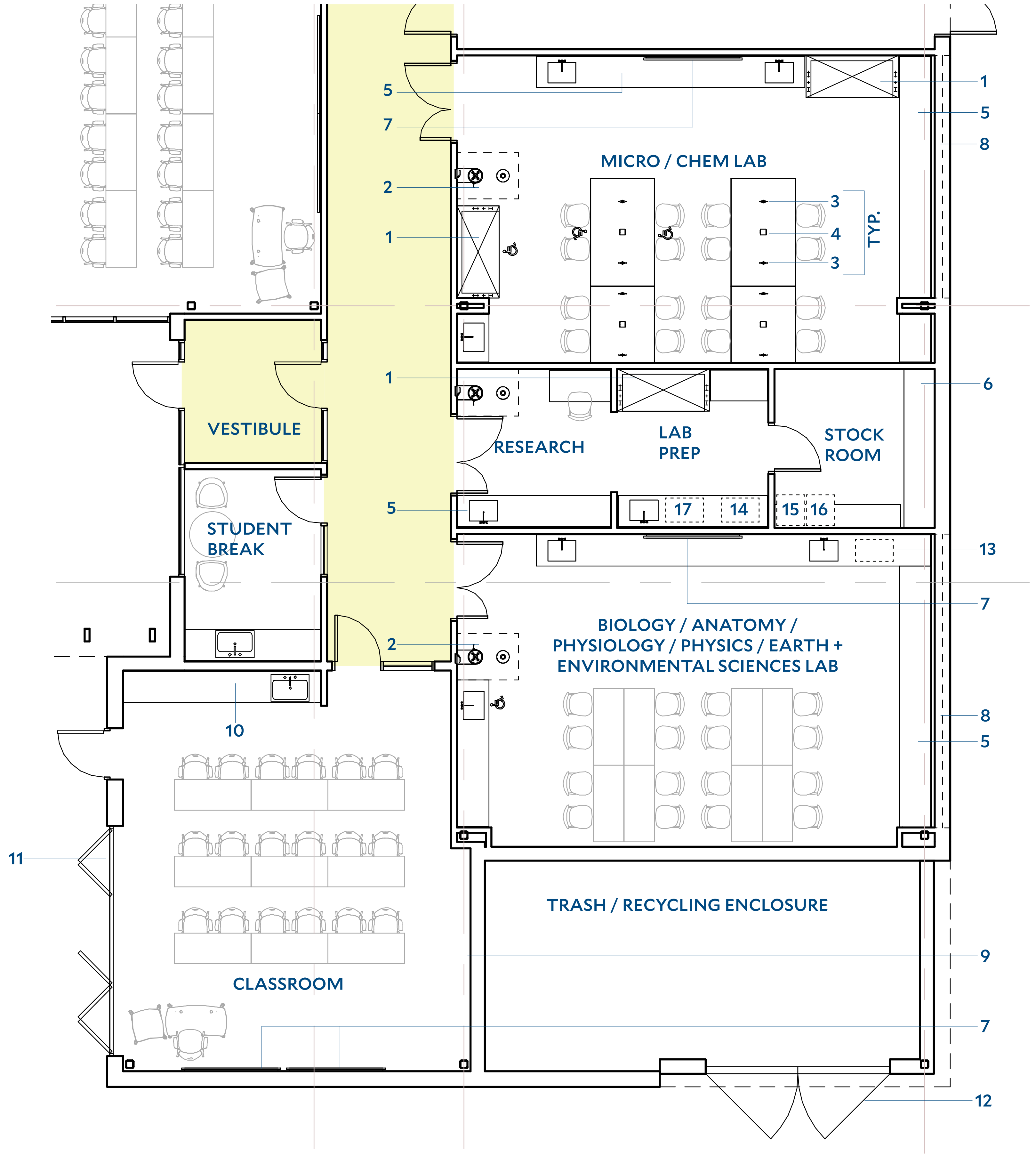
* non-conditioned space

Floor Plan



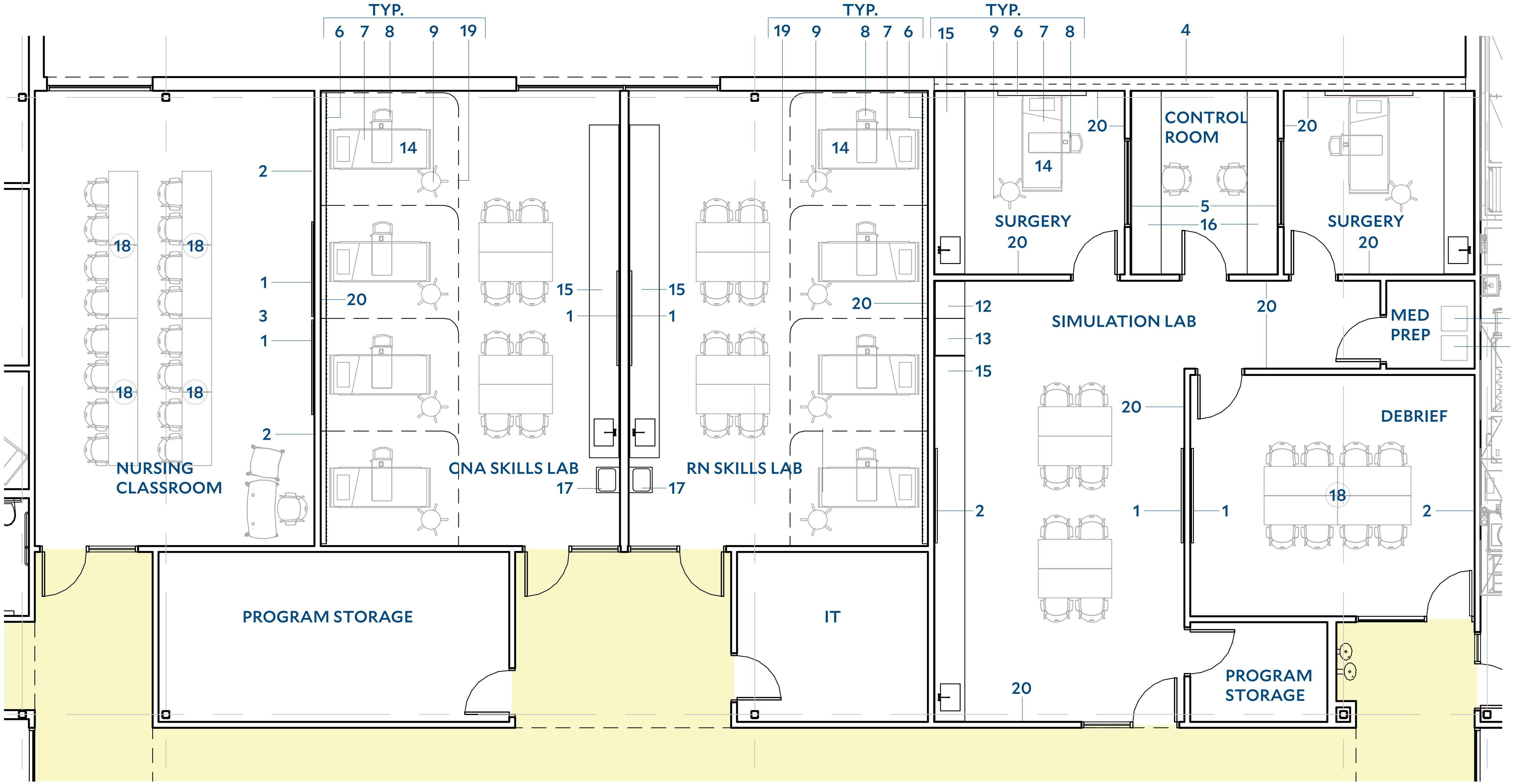
K1	Ice maker and bin: with filter
K2	Wall mount hand sink: with foot valve
K3	Kitchen shelving
K4	Stainless steel prep sink
K5	Pre-rinse spray/faucet
K6	Stainless steel split wall shelf
K7	20 quart mixer: with mobile stand
K8	Stainless steel work table
K9	Stainless steel wall shelf
K11	Slicer: automatic
K12	Vertical food cutter
K13	Bowl food processor
K14	Stainless steel island work table
K15	5 quart mixer
K16	Blender
K17	Speed rack: mobile
K34	Stainless steel exhaust hood: type I
K35	Fire protection system
K36	Stainless steel wall flashing
K37	Six burner / flat top griddle range: oven base, gas.
K38	Stacked convection oven: gas
K39	Steamer: Gas
K41	25 gallon tilt kettle: gas
K42	Stainless steel floor trough
K43	Fryer: double pot with filter: gas
R1	Walk-in Cooler and Freezer box
R2A	Cooler Ref. System: condenser
R2B	Cooler Ref. System: blower coil
R3A	Freezer Ref. System: condenser
R3B	Freezer Ref. System: blower coil
R4	Walk-in cooler & freezer shelving
R5	Walk-in cooler & freezer dunnage rack
S1	Dry storage shelving
S2	Janitor shelving
S3	Janitor sink: plumbing section
S4	Clothes washer: residential
S5	Clothes dryer: residential
S6	Lockers: two-tier, digital lock
W1	Shelving
W2	Stainless steel pot sink
W3	Pre-rinse spray/faucet
W4	Stainless steel split pot rack / wall shelf
W5	Stainless steel wall flashing
W6	Wall mount hand sink
W7	Stainless steel dirty dish table
W8	Stainless steel dish rack wall shelf
W9	Tran container
W11	Disposer
W13	Dishwasher: gas
W14	Stainless steel vent hood: type II
W16	Booster heater: gas
W17	Stainless steel clean dish table
W18	Stainless steel split wall shelf

Equipment Plan: Teaching Kitchen



1	Chemical fume hood
2	Emergency eye-wash / shower
3	Lab gas valve: counter mount
4	Quad power: counter mount
5	Epoxy counter, metal lab base and upper cabinets, electrical raceway
6	Adjustable shelving
7	Display screen
8	Clerestory glazing: refer to exterior elevations
9	Markerboard
10	Solid surface countertop with plam base cabinets
11	Folding glass partition
12	(2) 6ft wide gates. Lockable. Clad to match building cladding.
13	Lab growth chamber
14	Autoclave
15	Refrigerator
16	Ice machine
17	Glassware washer

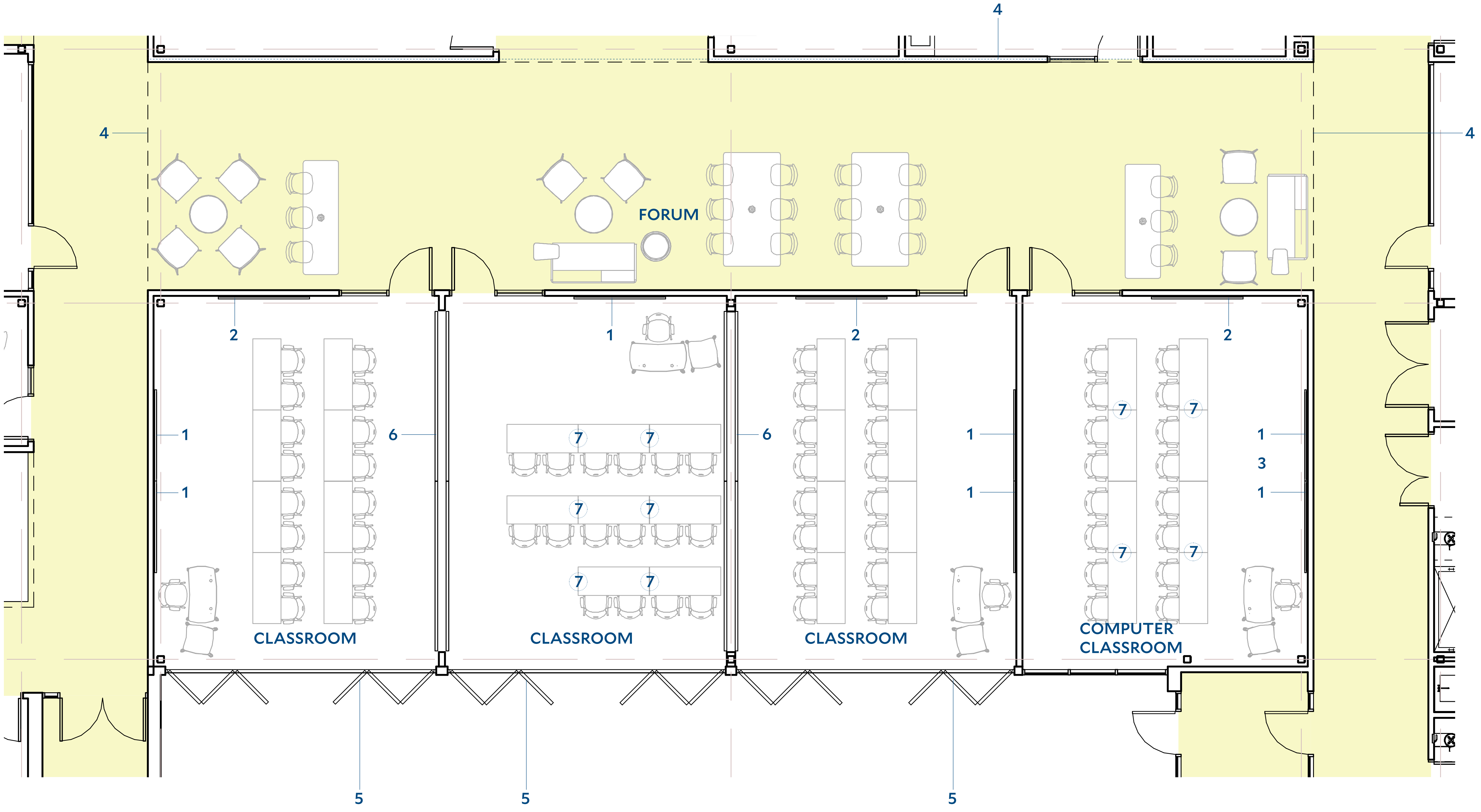
Equipment Plan: Science Labs



1	Display screen
2	Markerboard
3	Camera (at front and rear of room) and audio for zoom capable classroom
4	Clerestory glazing: refer to exterior elevations
5	One-way glazing
6	Nursing head wall
7	Medical surgery bed
8	Over bed table
9	Exam stool
10	Medical Refrigerator
11	Medstation
12	Crash cart
13	PALS cart
14	Simulation manikin equipment
15	Solid surface counter with plam base cabinets
16	Plam counter with knee space
17	Hand sink
18	Floor box with power and data
19	Hospital curtain
20	Crash rail - full length of wall

Equipment Plan: Nursing Labs

1	Display screen
2	Markerboard
3	Camera (at front and rear of room) and audio for zoom capable classroom
4	Clerestory glazing: refer to exterior elevations
5	Folding glass partition
6	Operable partition: overhead, motorized, whiteboard panels
7	Floor box with power and data



Equipment Plan: Classrooms

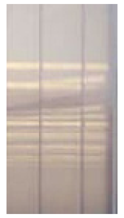
Exterior Elevation - West

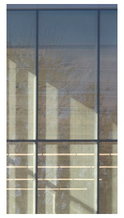
Materials

1.  Ultra High Performance Concrete Wall Panels,

   1a. Door Panels

2.  Variated Width Charred Wood Cladding

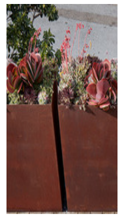
3.  Structural Polycarbonate Wall System

4.  Structurally Glazed Curtain Wall System, Aluminum Frame

5.  Mass Timber Posts, Roof

6.  Nana-Wall Operable Facade System

7.  Aluminum Pin-Mounted Letters

8.  Cor-ten Metal Panel Planter

9.  Steel Doors

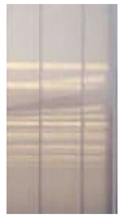
10.  Metal Clad Wood Windows

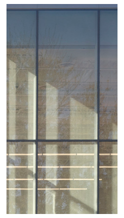
Materials

1.  Ultra High Performance Concrete Wall Panels,

1a. Door Panels

2.  Variated Width Charred Wood Cladding

3.  Structural Polycarbonate Wall System

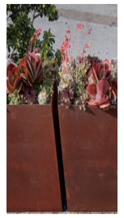
4.  Structurally Glazed Curtain Wall System, Aluminum Frame

5.  Mass Timber Posts, Roof

6.  Nana-Wall Operable Facade System

7. 

Aluminum Pin-Mounted Letters

8.  Cor-ten Metal Panel Planter

9.  Steel Doors

10.  Metal Clad Wood Windows

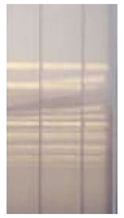
Exterior Elevation - North

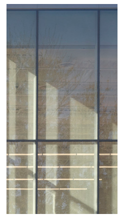
Materials

1.  Ultra High Performance Concrete Wall Panels,

1a. Door Panels

2.  Variated Width Charred Wood Cladding

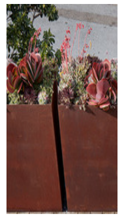
3.  Structural Polycarbonate Wall System

4.  Structurally Glazed Curtain Wall System, Aluminum Frame

5.  Mass Timber Posts, Roof

6.  Nana-Wall Operable Facade System

7.  Aluminum Pin-Mounted Letters

8.  Cor-ten Metal Panel Planter

9.  Steel Doors

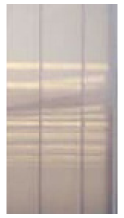
10.  Metal Clad Wood Windows

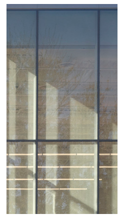
Exterior Elevation - East

Materials

1.  Ultra High Performance Concrete Wall Panels, Door Panels

2.  Variated Width Charred Wood Cladding

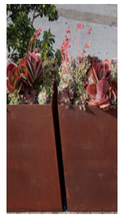
3.  Structural Polycarbonate Wall System

4.  Structurally Glazed Curtain Wall System, Aluminum Frame

5.  Mass Timber Posts, Roof

6.  Nana-Wall Operable Facade System

7.  Aluminum Pin-Mounted Letters

8.  Cor-ten Metal Panel Planter

9.  Steel Doors

10.  Metal Clad Wood Windows

Exterior Elevation - South

Rendered Perspective - Aerial From Southwest

Rendered Perspective - Aerial From Northwest

Rendered Perspective - View Of Northwest Office

Rendered Perspective - View From Parking Lot

Rendered Perspective - View of Entrance & Plaza

Rendered Perspective - View From Parking Lot Entrance

Current Adopted Codes – Town of Jackson, Wyoming

2021 International Building Code
2021 International Energy Conservation Code
2020 National Electrical Code-NFPA 70
2021 International Fire Code and International Wildland-Urban Interface
2021 International Fuel Gas Code
2021 International Mechanical Code
2021 International Plumbing Code

New Building:
Construction Type: V-B
Sprinklered: Yes
Fire Walls: No
Occupancy Separations: No
Allowable building height above grade plane based on A occupancy: 60ft (Table 504.3)
Allowable number of stories based on A-3 occupancy: 2 (Table 504.4)
Allowable Area based on A-3 occupancy 	one-story, fully sprinklered: 24,000 SF (Table 506.2)
Allowable Area per equation 5-3
Allowable Area = At+(NS x If)
At = 24,000 SF (Table 506.2)
NS = 6,000 (Table 506.2)
If = 0.75
{24,000+(6,000*0.75)} = 28,500 SF
Actual Area - 20,500 SF

Section 505.2 Mezzanines.- A mezzanine or mezzanines in compliance with Section 505.2 shall be considered a portion of the story below. Such mezzanines shall not contribute to either the building area or number of stories as regulated by Section 503.1. The area of the mezzanine shall be included in determining the fire area. The clear height above and below the mezzanine floor construction shall be not less than 7 feet (2134 mm).

Section 508.3 Nonseparated occupancies.
Buildings or portions of buildings that comply with the provisions of this section shall be considered as nonseparated occupancies.

Section 508.3.1Occupancy classification.
Nonseparated occupancies shall be individually classified in accordance with Section 302.1. The requirements of this code shall apply to each portion of the building based on the occupancy classification of that space. In addition, the most restrictive provisions of Chapter 9 that apply to the nonseparated occupancies shall apply to the total nonseparated occupancy area.

Section 508.3.2Allowable building area, height and number of stories.
The allowable building area, height and number of stories of the building or portion thereof shall be based on the most restrictive allowances for the occupancy groups under consideration for the type of construction of the building in accordance with Section 503.1.

Section 508.3.3Separation - No separation is required between nonseparated occupancies.

Table 601 – Fire-resistance rating requirements for building elements (hours) Type V B
Primary structural frame (see Section 202) - 0
Bearing walls
    Exterior – 0
    Interior - 0
Nonbearing walls and partitions
    Exterior – 0, Fire separation distance is greater than or equal to 30 feet, Table 705.5
Nonbearing walls and partitions
    Interior - 0
Floor construction and associated secondary structural members - 0
Roof construction and associated secondary structural members - 0

602.5Type V.
Type V construction is that type of construction in which the structural elements, exterior walls and interior walls are of any materials permitted by this code.

Table 1004.5 Floor Area Per Occupant
Assembly – Concentrated – 7 net
Standing – 5 net
Unconcentrated – 15 net
Business – 150 gross
Classroom Area – 20 net
Vocational Rooms – 50 net

Section 1005 - Exit widths
36" door provides 33" clear width with egress capacity of 165 people
Double 36" door provide 66" clear width and capacity of 330 people

Table 1006.2.1
Common path of travel shall not exceed 100 ft for B occupancies and 75 ft for A occupancies, IBC Table 1006.2.1. Refer to drawings for common path distances which are less than allowable.

Section 1007.1.1Two exits or exit access doorways.
Where two exits, exit access doorways, exit access stairways or ramps, or any combination thereof, are required from any portion of the exit access, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between them.

Section 1017 Exit Access Travel Distance (with sprinkler system)
A occupancy – 250 feet
B occupancy – 300 feet

Table 1020.2 Corridor Fire-Resistance Rating (with sprinkler system)
A, B, E – 0 hours

1020.5Dead ends.
Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead-end corridors do not exceed 20 feet (6096 mm) in length.

Exceptions:
1.In Group I-3, Condition 2, 3 or 4, occupancies, the dead end in a corridor shall not exceed 50 feet.
2.In occupancies in Groups B, E, F, I-1, M, R-1, R-2, S and U, where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the length of the dead-end corridors shall not exceed 50 feet.

IECC Table C402.1.3 Opaque Thermal Envelope Insulation Component Minimum Requirements, R-Value
Climate Zone – 7
Roof insulation entirely above deck = R-35ci
Metal Framed Walls, Above Grade = R-13+R12.5 ci
Walls, Below Grade = R-15ci
Unheated slab on grade = R-20 for 48"

IECC Table C402.4 building Envelope Fenestration Maximum U-Factor and SHGC Requirements
Fixed Fenestration – 0.29 U, 0.4 SHGC
Operable Fenestration – 0.36 U, 0.36 SHGC
Operable Doors – 0.63 U

IECC C402.4.1 Maximum area.
The vertical fenestration area, not including opaque doors and opaque spandrel panels, shall be not greater than 30 percent of the gross above-grade wall area. The skylight area shall be not greater than 3 percent of the gross roof area.

Sustainability

Consider designing the new facility to be a Net Zero or Net Zero Ready facility. Because of the low cooling loads in Jackson, Wyoming, this building could be designed to have mechanical heating and ventilation, with cooling loads met through natural ventilation and hybrid ventilation. Nighttime flushing will be in the sequence in controls to reduce cooling demand.

This building will be fully electric. The cost per kW in Teton County is low. The College is seeking a grant for a geo-exchange system to be installed on site. This addresses the College's carbon commitment. The flat roof is ideal for photovoltaics. The approximate area for PV panels is 9,000 SF. This would provide a 90kW system.

Consider sizing one boiler smaller so that at minimum heating requirements are met at minimum turndown ratio of boiler. With LED lights, aim for lighting power density of less than 0.7 W/sf; may achieve less than 0.5 W/sf in many spaces. Specify daylighting controls in all spaces with natural light and installed lighting of greater than 0.5 W/sf.

The anticipated primary structural system is as follows:
Foundations: concrete frost walls bearing on concrete spread footings
Main Level Floor: concrete slabs on grade
Roof:
Steel roof deck supported by steel bar joists, structural steel girders, and square steel HSS (tube) columns
Exterior Walls: non-load bearing cold formed metal framing
Lateral System: steel braced frames and reinforced masonry shear walls.

Design Criteria:

The structural design of the CWC Jackson Outreach Center will include consideration of the following criteria:

- Floor gravity loads due occupancy uses
- Roof gravity loads due to snow (including drifting)
- Wind (including uplift on the cantilevered elements)
- Seismic loads
- Movements due to
    - Gravity load deflections
    - Wind
    - Seismic
    - Thermal expansion
    - Shrinkage and creep of concrete element

Code Summary:

Construction Type: V-B

Live Loads:

Roof	0 to 200 sf:	20 psf
	200 to 600 sf:	24 - 0.02Area, but not less than 12 psf
	over 600 sf:	12 psf
Classroom Areas		40 psf
Partitions		15 psf
Storage Areas		125 psf

Dead Loads:

Floor	(Composite Steel)	80 psf
Roof	(Steel Option)	27 psf
Roof	(Steel Joist Option)	26 psf
Roof	(Wood option)	27 psf

Wind Design Data:

Ultimate Design Wind Speed	115	mph
Nominal Design Wind Speed	89	mph
Risk Category	II	
Mean Roof Ht (h)	33 ft	
Exposure Category	C	
Enclosure Classification	Enclosed Building	
Internal pressure Coef.	+/-0.18	
Directionality (Kd)	0.85	

Roof Snow Loads:

Ground Snow Load (Pg)	120 psf
Importance Factor (I)	1.00
Snow Exposure Factor (Ce)	1.00
Thermal Factor (Ct)	1.00
Sloped-roof Factor (Cs)	1.00

Drifting and unbalanced snow loading will follow ASCE 7 design requirements

Earthquake Design Data:

Risk Category	II
Importance Factor (I)	1.00
Mapped spectral response accelerations	
	$S_s =$ 118.5 %g
	$S_1 =$ 36.1 %g
Site Class	D (per Geotechnical Report)
Spectral Response Coefficient	
	$S_{ds} =$ 0.811
	$S_{d1} =$ 0.404
Seismic Design Category	D
Seismic Resisting System	Special Reinforced Masonry Shear Walls Steel Concentrically Braced Frames
Design Base Shear (V)	0.147W
Seismic Response Coefficient (Cs)	0.147
Response Modification Factor (R)	5.5 (Special Reinforced Masonry Walls) 6.0 (Steel Concentrically Braced Frames)
Analysis Procedure	Equivalent Lateral-Force Analysis

Component and Cladding Ultimate Wind Pressures:

Roof Surface Pressure (psf)

Area	10 sf	50 sf	100 sf
Negative Zone 1	-36.9	-36.9	-36.9
Negative Zone 2	-42.7	-40.7	-39.8
Negative Zone 3	-57.1	-45.0	-39.8
Positive All Zones	16.0	16.0	16.0
Overhang Zone 1 & 2	-51.3	-49.3	-48.5
Overhang Zone 3	-80.2	-60.0	-51.3

Solid Parapet Pressure (psf)

Area		10 sf	100 sf	500 sf
CASE A:	Interior zone	64.2	56.7	53.4
	Corner zone	78.8	56.7	53.4
CASE B:	Interior zone	-55.2	-45.9	-39.4
	Corner zone	-63.1	-49.1	-39.4

Wall Surface Pressure (psf)

Area	10 sf	100 sf	500 sf
Negative Zone 4	-33.7	-29.2	-26.0
Negative Zone 5	-41.5	-32.4	-26.0
Positive Zone 4 & 5	31.1	26.6	23.4

Foundation Design Criteria from the Geotechnical Report:

Allowable bearing pressure	6,500 psf (2ft continuous footing) 8,400 psf (6 ¼’ x 6 ¼’ isolated footing)
Lateral Static Pressures	
At Rest	58 pcf
Active	37 pcf
Passive	498 pcf
Lateral Seismic Pressures	
Active	44 pcf
Passive	472 pcf
Soil Friction	0.58
Frost Depth	34” below finished grade

Foundations:

The Geotechnical Report is forthcoming. A conventional shallow spread footing foundation system is the likely recommended foundation system for the building. All foundation elements shall bear on native stony alluvium or approved structural fill and extend a minimum of 34” below finished grade. The use of concrete slabs on grade for the main level floors is recommended with a minimum slab thickness of 4”.

Anticipated Foundation Sizes:

Perimeter Foundation Walls:

12” wide by 42” tall foundation walls reinforced with #4 hooked vertical footing dowels at 16” on center on each face and #4 horizontal bars top and bottom and 12” on center on each face of the wall.

Perimeter Wall Footings:

12” thick by 20” wide reinforced will (3) #4 continuous bars. Footing dowels shall match the size and spacing of the wall vertical reinforcement.

Isolated Pad Footings beneath interior columns including perimeter columns at overhang:

14” thick by 5’-0” square footings reinforced with (6) #5 bars each way bottom.

Isolated Pad Footings beneath exterior columns in perimeter walls:

12” thick by 4’-0” square footings reinforced with (6) #4 bars each way bottom.

Braced Frame Footings:

16” thick by 6’-0” square footings reinforced with (8) #5 bars each way top and bottom. will be #4 at 16” on center vertical each face and #4 at 12” on center horizontal each face.

Main Level Floor Framing:

The main level floor system will be a 4” thick concrete slab on grade reinforced with #4 at 16” on center each way at the mid-depth of the slab. The slab on grade will be placed on a vapor retarder on 6” of free-draining material. The subgrade prep would follow any subgrade recommendations provided in the Geotechnical Report for the site. It is unknown at this time whether radon mitigation or under-slab drainage will be required at this site. The slab on grade will be isolated from the perimeter frost wall and are interior columns to allow it to move independently from the foundation. The slab on grade will be cast over the top of the concrete frost wall at door locations. Control joints will be cut into the slab at approximately 15 feet on center in each direction for crack control.

Roof Framing:

Steel Bar Joist:

- Steel roof deck is 1 ½” 20 gauge with a two span minimum.
  - Provide acoustical deck at Forum space. Cellular acoustical deck with flat, perforated bottom panel.
- Roof framing is laid out such that girder beams run north-south along grid lines and steel bar joists run east-west between girders and are spaced at approximately 4 ½ feet on center.
- Overall steel weight is approximately 5 pounds per square foot
- Anticipated Beam depths are:
  - Girders = 14 - 18 inches
  - Bar Joists = 24” for 30’ spans; 16” elsewhere
- Steel columns will be HSS5x5 typical.

Wall Framing:

Wall framing will be a 6” cold-formed steel by-pass curtain wall stud framing system. Built-up cold formed steel header and jambs will be utilized around smaller door and windows. Strip windows will require steel girts that span between columns behind the wall system to support the top of the windows.

Stud sizes and spacing are anticipated to be:

- Spans up to 17 feet = 600S162-54 studs at 16” on center
- Spans 17 feet to 21 feet = 600S162-68 studs at 12” on center

Lateral System:

The primary lateral system for the building will consist of a steel roof deck diaphragm supported by steel braced frames classified in the IBC as “Steel special concentrically braced frames”. Steel braces will be HSS framing.

There will be four braced frames running north south and four running east west internal to the building.

There will be one steel braced frame on each of the exterior walls and will consist of HSS tube columns, a wide flange steel roof beam, and HSS tube diagonal braces.

Miscellaneous Issues:

Roof-top mechanical units are anticipated on the roof. Roof joist/beam spacing, miscellaneous steel around mechanical openings and curb requirements will be coordinated once roof top unit information is provided by the mechanical engineer.

Material Properties:

Concrete:

Structural Element	**Minimum compressive strength at 28 days**	**Assumed density**
Footings	4000 psi	145 pcf
Frost Walls	4500 psi	145 pcf
Interior Slabs on Grade	4000 psi	145 pcf
Exterior Slabs on Grade	4500 psi	145 pcf
All other concrete	4500 psi	145 pcf

Cement:
- ASTM C150, Type I/II (Type V cement may be required if Geotechnical Report states that there are sulfates in the site soils for all concrete exposed to on-site soils)

Reinforcing:
- Bars
  - ASTM 615-grade 60 typical
  - ASTM 706-grade 60 for bars to be welded
- Welded Wire Fabric
  - ASTM A185

Steel:

Structural Element	ASTM Reference	Minimum Strength
Wide Flange and WT Sections	ASTM A990 or ASTM 572 Grade 50	F_y = 50 ksi
Other rolled shapes M, S, HP, C, MC, Angles, & Rods	ASTM A36	F_y = 36 ksi
Pipe	ASTM A53	F_y = 35 ksi
Round HSS	ASTM A500 Grade B	F_y = 42 ksi
Square and Rectangular HSS	ASTM A500 Grade B	F_y = 46 ksi
Plates 4” thick or less	ASTM A36	F_y = 36 ksi
Headed Stud Anchor	ASTM A108	F_u = 65 ksi
High Strength Bolts – A325	ASTM A325	F_u = 120 ksi
High Strength Bolts – A490	ASTM A490	F_u = 150 ksi
Common Bolts – A307	ASTM A307 Grade A	F_u = 60 ksi

Steel Bar Joists:

Steel bar joists shall conform to SJI-K-2010.

Cold Formed Steel:

- Galvanized steel, G60, conforming to the requirement of ASTM A446
- Minimum yield strength:
  - 12, 14, and 16 gage joists and studs: Grade D, Fy = 50 ksi minimum
    18 gage and lighter: Grade A, Fy = 33 ksi minimum

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PRELIMINARY PROJECT DESCRIPTION

Date: 05 June, 2023
Project #: 21-281
Project: CWC Jackson Outreach Center

As defined by the Construction Specifications Institute, the emphasis of the Preliminary Project Description (PPD) is on describing the physical requirements of the project. It is organized to describe the various groupings of facility construction systems and components in a logical sequence from the ground up and from the outside in. This Preliminary Project Description follows the CSI UniFormat.

PROJECT DESCRIPTION

The project is in Jackson, WY and consists of a new one-story building that is approximately 20,600GSF. The program consists of classrooms, computer classrooms, nursing skills labs, simulation labs, science labs, a teaching kitchen, tutoring spaces, lounge spaces, office space, office supporting spaces (workrooms, breakroom, etc) and various supporting programs (storage, etc).

A Sub-structure

A10 Foundations

- Refer to structural narrative.

B Shell

B10 Superstructure

- Refer to structural narrative.

B20 Exterior Enclosure

B2010131 – Ultra High-Performance Concrete

- UHPC wall panel assembly: UHPC material wall panel, installed on sub-girt framing with concealed clips on 2.5” dual density rigid mineral wool insulation on fluid-applied air barrier over 5/8” glass-mat gypsum sheathing on metal stud framing, with 5.5” glass-fiber blanket, faced insulation in stud cavity, and 5/8” type X, mold-resistant gypsum board at interior face.
  - UHPC material basis of design:
    - Taktl: Korsa Aggregate

B2010187 – Wood Siding

- Wood siding wall assembly: Shou Sugi Ban charred Accoya wood siding, installed on sub-girt framing on 2.5” dual density rigid mineral wool insulation on fluid-applied air barrier over 5/8” glass-mat gypsum sheathing on metal stud framing, with 5.5” glass-fiber blanket, faced insulation in stud cavity, and 5/8” type X, mold-resistant gypsum board at interior face.
  - Wood siding material basis of design:
    - reSAWN Timber Co: Shou Sugi Ban, Accoya Wood, Ikigai.

B2010210 – Metal Wall Caps and Trim

- Aluminum sills, copings, etc. w/ 3-coat fluoropolymer finish.

B2010600 – Wood Plank Soffits

- Wood plank exterior soffits: 6” wide 2X tongue and groove, fire-resistant wood decking, installed on fluid-applied membrane air barrier over ½” plywood sheathing on metal stud framing.
  - Wood species: western red cedar

B2020 Exterior Windows

B2020140 – Aluminum Clad Wood Windows

- Aluminum clad wood windows, thermally broken.
  - Basis of Design: Anderson Windows and Doors, E-series
- Glazing:
  - IGU-1 Clear Glazing (Typical Unless otherwise noted): Provide 1 inch insulated glazing units with low-e coating on 2nd surface.
    - Basis of design: Solarban 60 by Vitro Architectural Glass.

B2020550 – Structured Polycarbonate Wall Panels

- Polycarbonate translucent wall panel systems
  - Basis of Design: Dalyte: EcoWall
  - Where used as screen wall element, provide HSS frame backup and LED backlighting

B2030 Exterior Doors

B2030110 – Exterior Glazed Doors – Aluminum

- Heavy-Duty exterior aluminum entrance doors in storefront frames, with thermal glazing. 3-coat custom fluoropolymer finish.

B2030220 - Exterior Solid Doors - Steel

- Exterior doors and frames to be Commercial Hollow-Metal doors and frames, meeting NAAMM-HMMA 861, factory primed and field painted. Exterior doors to be insulated with expanded polystyrene insulation.

B2030901 – Folding Glass Panel Partitions

- Folding Glass Panel Partition Basis of Design:
  - Solar Innovations: Commercial Folding Glass Wall – G3 Thermal Folding Glass Wall.

B30 Roof Assemblies

B2010122 – Roofing – Single Ply Membrane - KEE

- Fully adhered, 60 mil,KEE roofing membrane over ¼” cover board, and 2 equal layers polyisocyanurate foam board insulation providing minimum R35, and vapor retarder. Mechanically fasten first layer of insulation to decking and adhere top layer and cover board. Roofing system to meet UL Class A and FM Global I-90 requirements. Provide 20 year warranty.

Specifications Required

- 03 30 00 Cast-in-Place concrete
- 05 12 00 Structural Metal Framing
- 05 40 00 Cold-formed Metal Framing
- 05 50 00 Metal Fabrications
- 06 10 00 Rough Carpentry
- 06 15 00 Wood Decking
- 06 16 00 Sheathing
- 06 18 00 Glued-Laminated Wood Construction
- 07 11 13 Bituminous Dampproofing
- 07 13 26 Self-Adhering Sheet Waterproofing
- 07 21 00 Thermal Insulation
- 07 21 19 Foamed-In-Place Insulation (for misc. gaps and parapets)
- 07 27 26 Fluid-Applied Membrane Air Barriers
- 07 42 47 Ultra High-Performance Concrete Panels
- 07 46 23 Wood Siding
- 07 54 16 Ethylene Interpolymer (KEE) Roofing
- 07 62 00 Sheet Metal Flashing and Trim
- 07 72 00 Roof Accessories
- 07 92 00 Joint Sealants
- 08 11 13 Hollow Metal Doors and Frames
- 08 41 13 Aluminum-Framed Entrances and Storefronts
- 08 45 13 Structured-Polycarbonate Panel Assemblies
- 08 52 13 Aluminum-Clad Wood Windows
- 08 71 00 Door Hardware
- 08 80 00 Glazing
- 08 90 00 Louvers and Vents
- 09 96 00 High Performance Coatings (for exterior exposed structural steel)

C Interiors

C10 Interior Construction

C1010 - Partitions

C1010145 – Partitions – Drywall w/ Metal Stud

- STC55-59 walls around mechanical rooms: 3 5/8" (or 6" as needed) metal studs, (4) total layers 5/8" type 'x' gypsum board, 3 ½" sound attenuation blanket, to deck.
- STC 50-54 walls around debrief room, tutoring and hoteling rooms, restrooms, wellness rooms, teaching spaces, and between corridors and the office suite or teaching spaces: 3 5/8" (or 6" as needed) metal studs, (3) total layers of 5/8" type 'x' gypsum board, 3 ½" sound attenuation blanket, to deck.
- STC 45-49 walls between offices, break rooms, workrooms, electrical and IT rooms, custodial rooms, and vestibules: 3 5/8" (or 6" as needed) metal studs, (2) total layers of 5/8" type 'x' gypsum board, 3 ½" sound attenuation blanket, to deck.

- STC 40-45 walls between all other spaces: 3 5/8" (or 6" as needed) metal studs, (2) total layers of 5/8" type 'x' gypsum board, 3 ½" sound attenuation blanket. Gypsum board to 6" above ceiling.

C1010313 – Partitions – Vertical Accordion

- Basis of Design: Skyfold – opaque, high STC rated with markerboard surface and acoustical fabric surfaces.

C1010200 – Demountable Partitions

C1010220 – Partitions – Demountable, Glazed Systems

- Office fronts
- Mfr. to provide sliding glass door as indicated on drawings.

C1010701 – Interior Storefront

- 3-coat fluoropolymer finish. ½" laminated clear glazing.
    - Typical Height 10'-0"
    - Provide at Hoteling rooms, Tutoring rooms, Debrief, Breakrooms, and interior vestibule doors.
    - Provide partial height translucent privacy film, starting at 18" AFF up to 6'-0" AFF where indicated on drawings.

C1020 - Doors

C1020310 - Interior Metal Doors with Metal Frames

- At service rooms. 8'-0" tall.

C1020320 – Interior Wood Doors with Metal Frames

- At all interior doors unless noted otherwise. 8'-0" tall.
- Factory-applied paint finish at frames.
- Provide sidelights where indicated on drawings.
- Provide door lites at all suite entry doors, classrooms, breakrooms, labs, and simulation rooms.

C1020410 - Door Hardware

- Provide card access at all exterior doors, office suite entry doors, labs and lab prep rooms, teaching kitchen, storage rooms, med supply room, custodial rooms, mechanical room, IT and electrical room.

C1030 - Fittings

C1030108 – Hospital Curtains

- 3-sided, overhead track at RN and CNA rooms.

C1030200 – Bath & Toilet Accessories – Commercial-grade

- Including shower equipment, shower seat, soap dish, robe hook and diaper changing station. As well as typical accessories.

C1030312 – Athletic Lockers

- Two-tier, phenolic lockers with electronic locks, at Teaching Kitchen.

C1030400 – Fabricated Cabinets & Counters

- Plastic-laminate base and upper cabinets

- Solid Surface Window Stools at all exterior Storefront and Windows that terminate above finish floor at sill height.
- (see section E for custom wood casework)

C1030413 – Laboratory Casework
- Metal lab casework, epoxy counters with integral sinks
- Include at lab and lap prep spaces.

C1030455 - Solid Surface Counters
- Solid surface countertops typical throughout, aside from lab and lab prep.

C1030500 - Identifying/Visual Aid Specialties
C1030514 – Panel Signage
C1030545 – Whiteboards

C1030630 – Wall Protection Rails
- Where shown on plans.
- Basis of design: C/S Group – CS Acrovyn: Crash Rail, SCR-40.

C1030640 - Corner Guards
- Painted steel corner guards in public areas.

C30 Interior Finishes

C3010 - Wall Finishes
C3010150 – Wall Finishes – Tile
- All restroom walls, up to 9ft AFF.
    - Assume $25/SF material allowance.

C3010210 – Wall Finishes – Paint
- All gypsum board to be finished and painted – paint colors TBD

C3010400 - Fabric-wrapped sound absorbing acoustic panels
- 1” tackable fiberglass panel with fabric wrap.
- Include at 25% of wall surfaces in classrooms.

C3020 - Floor Finishes
C3020300 - Hardeners and Sealers
- Sealed concrete floors at MEP rooms, IT room, storage rooms, custodial rooms, trash/recycling, and the dock.

C3020310 - Flooring- Polished concrete.
- Dark grey, 3/8” aggregate. ¼” grind depth.
- At public corridors, the forum space (see note below), breakrooms, workrooms, science labs and lab prep.

C3020412 – Flooring – Resinous Flooring
- At Teaching Kitchen and supporting spaces.
- Provide integral resinous cove base.
- Basis of design: Sherwin Williams Company – High Performance Flooring: FasTop Topfloor SL57.

C3020430 – Flooring – Tile
- Porcelain tile at restrooms.
    - Assume $30/SF material allowance.

C3020445 - Flooring – Rubber Sheet Flooring
- At RN, CNA, Simulation suite, and Debrief room.
    - Basis of design: Nora – Noraplan/Environcare.

C3020515 – Carpet Broadloom
- At 50% of the forum space

C3020520 – Carpet Tile
- At all classrooms, offices and open office, hoteling rooms and tutoring rooms.
    - Assume $40/SY material allowance.
- Provide entrance flooring carpet at all vestibules.
    - Basis of design: C/S Group – CS Acrovyn: DesignStep.

C3020610 - Rubber Base
- Provide rubber base throughout at all drywall partitions, unless otherwise noted.

C3030 - Ceiling Finishes
C3030210 – Suspended Ceilings – Acoustical Panel
- APC-1: 2’x4’ mineral fiber ceiling tile, with square tegular panel edge and 9/16” T-grid.
    - Basis of design: Armstrong, Optima Tegular
    - At all offices, open office, workrooms, breakrooms, hoteling spaces, classrooms, simulation rooms, skills labs, debrief, labs, lab prep, classrooms and corridors (not including the forum space which is exposed to structure)
- APC-2: 2’x’4 mineral fiber ceiling tile, with square tegular panel edge and 9/16” T-grid.
    - Basis of design: Armstrong, Kitchen Zone
    - At teaching kitchen and supporting spaces.

C3030212 - Suspended Ceilings - Acoustical Panel – Wood
- Acoustical wood ceiling panel with acoustic backing.
    - Basis of design: Rulon, Aluratone A750 micro-perforated
- At tutoring rooms.

C3030220 – Suspended Ceilings – Gypsum Board
- At all restrooms, wellness rooms, and med storage room.

Specifications Required
- 03 35 43 Polished Concrete
- 05 50 00 Metal Fabrications
- 05 70 00 Decorative Metal
- 06 10 53 Miscellaneous Rough Carpentry
- 06 20 23 Interior Finish Carpentry
- 07 92 00 Joint Sealants
- 08 11 13 Hollow Metal Doors and Frames
- 08 14 16 Flush Wood Doors
- 08 31 13 Access Doors and Frames
- 08 41 13 Aluminum-Framed Entrances and Storefronts

- 08 71 00 Door Hardware
- 08 80 00 Glazing
- 09 22 16 Non-Structural Metal Framing
- 09 29 00 Gypsum Board
- 09 30 13 Ceramic Tiling
- 09 51 13 Acoustical Panel Ceilings
- 09 54 26 Suspended Wood Ceilings
- 09 65 13 Resilient Base and Accessories
- 09 65 16 Resilient Sheet Flooring
- 09 67 23 Resinous Flooring
- 09 68 13 Tile Carpeting
- 09 84 33 Sound-absorbing Wall Units
- 09 91 23 Interior Painting
- 10 11 00 Visual Display Units
- 10 14 23 Panel Signage
- 10 21 13 Toilet Compartments
- 10 26 00 Wall and Door Protection
- 10 28 00 Toilet and Bath Accessories
- 10 51 29 Phenolic Core Lockers
- 12 32 16 Manufactured Plastic-laminate Clad Casework
- 12 35 52.13 Metal Laboratory Casework
- 12 36 61.16 Solid Surfacing Countertops

D Services

D30 HVAC
Refer to narrative

D40 Fire Protection
- Fully sprinklered building

D4030200 - Fire Extinguisher Cabinets
- Fire extinguishers and recessed or semi-recessed stainless steel fire extinguisher cabinets.

D50 Electrical
Refer to room matrix

Specifications Required
- 10 44 13 Fire Extinguisher Cabinets
- 10 44 16 Fire Extinguishers

E Equipment and Furnishings
See Interiors and Services above.
E10 Equipment

E1010 Commercial Equipment
E1010800 – Office Equipment
- Owner furnished, Owner installed.

E1020 Institutional Equipment
E1020500 – Audio-visual Equipment
- Owner furnished, Owner installed equipment. GC to provide backboxes and cabling as needed.

E1020710 – Laboratory Equipment
- Lab gas valves

E1020730 – Laboratory Hoods
- Chemical fume hoods with cup sinks, water and gas.

E1020800 – Medical Equipment
- Nursing head walls with compressed air and suction (non-medical grade) and power.
- OFOI hospital beds and simulation mannikins.

E20 Furnishings
E2010 Fixed Furnishings
- Owner furnished, Owner installed.

E2010320 - Window Treatments - Roller Shades
- Direction below subject to review by Owner.
- Dual Manual Roller shades at all exterior windows not at public corridors or the forum space.

Specifications Required
- 06 41 13 Wood-Veneer-Faced Architectural Cabinets
- 11 52 00 Audio-Visual Equipment
- 11 53 13 Laboratory Fume Hoods
- 11 73 00 Patient Care Equipment
- 12 24 13 Roller Shades

F Special Construction and Demolition
F10 Special Construction
F1010 - Special Structures

F20 Selective Building Demolition
F2020 – Demolition of Site Components
- Landscape demolition (clear and grub).
- Tree removal
- Tree protection

Specifications Required

- 31 10 00 Clearing & Grubbing
- 31 32 50 Watering
- 32 93 00 Trees, Plants, & Groundcovers

G Building Sitework

G10 Site Preparation

G1010 - Site Clearing

- Removal of existing vegetation within the project boundary, excepting the trees which shall be protected in place as shown on site plan.

G20 Site Improvement

G2010 – Roadways

G2020 - Parking Lots

- New curb & gutter, and pavements for new parking areas.

G2030 - Pedestrian Paving

- New sidewalks and pedestrian ramps where shown.

G2050 - Landscaping

- Site furnishings (benches, trash/recycling receptacles, bike racks).
- Signage:
  - Wayfinding.
  - Monument/Marquis
- Landscape planting:
  - Trees, perennials, ornamental grasses, groundcovers.
  - Wood mulch.
  - Rock mulch (gravel).
- Irrigation system:
  - Assume all new system.

G30 Site Mechanical Utilities

G3010 - Water Supply

G3020 - Sanitary Sewer

G90 Other Site Construction

Specifications Required

- 01 15 13 Temporary Erosion and Sediment Control
- 01 14 53 Site Traffic Signage
- 03 30 00 Cast in Place Concrete
- 12 83 00 Site Furnishings
- 31 10 00 Site Clearing
- 31 20 00 Earth Moving
- 31 32 50 Watering
- 32 12 16 Asphalt Paving
- 32 13 13 Concrete Walks, Curbs, Bands, and Misc. Flatwork

- 32 15 40 Crushed Stone Paving
- 32 17 23 Pavement Markings
- 32 80 00 Irrigation Systems
- 32 84 33 Automatic Irrigation Controllers
- 32 61 13 Soil Preparation
- 32 91 20 Topsoil
- 32 92 20 Native Seeding
- 32 92 23 Sodding
- 32 93 00 Trees, Plants, & Groundcovers
- 33 10 00 Water Utilities
- 33 30 00 Sanitary Sewage Utilities

GENERAL

Central Wyoming College has expressed interest in modifying the original design intent of the building systems serving the Jackson Outreach Center to include geothermal wells as a source. It is our understanding that the College seeks a system that can outperform baseline systems with respect to energy conservation and consider adjacent sustainability goals such as electrification/decarbonization of the systems that serve this program.

The previous schematic design phase specified an airside system that consisted of gas-fired/DX main VAV units on the roof that served the buildings conditioning and ventilation needs. Additionally, two (2) make up air units were specified to serve the kitchen area. Zone control was specified to consist of terminal hydronic reheat coils fed from a central boiler plant.

This narrative describes HVAC systems that were discussed with AMD in concept and can be used for rough order magnitude pricing of options.

MECHANICAL SYSTEMS

The mechanical design will take into consideration the program of this building. A small lab with fume hood will demand ventilation for pressurization. The exhaust system serving the lab will aim to be right-sized, but at the time of this report, we've assumed that the laboratory space will be fully exhausted including the fume hood, and general exhaust terminals within the space. A kitchen will require ventilation and conditioning. The remainder of the space will be classroom-style spaces that include simulation spaces and administration areas. We've also assumed that the scheduling of the building will be consistent and no programs will require after-hours use. This narrative will address:

A. Environment
B. Supply Air Systems
C. Exhaust Air Systems
D. Cooling System
E. Heating System
F. Plumbing Systems
G. Fire Protection Systems
H. Building Automation System

A. ENVIRONMENT

Mechanical load calculations will be performed based on the ASHRAE Climate Data for Jackson, WY with the following outside air conditions:

Heating Design: -16°F (January)
Cooling Design: 88°F (July)

Indoor space temperature ranges are anticipated to range between 68-75 degrees Fahrenheit for heating and 72-78 degrees Fahrenheit for cooling. Humidity control will not be provided. Humidity within the building will vary based on outside conditions.

B. SUPPLY AIR SYSTEMS

Option 1: Central Custom VAV Air Handling Units with Heat Pump Sections

A single, central VAV air handling unit will be provided in either a rooftop penthouse, or in a ground-level mechanical room to serve the building. The ventilation (minimum outside air) will be (over)sized to accommodate the heavily ventilated kitchen and laboratory spaces. The unit will consist of:

- Supply Fan Section
- Prefilters
- Final Filters
- Air Blender
- Return Fan and Mixing Section
- Water-cooled heat pump section (geo water)
- Electric Pre-Heat Coil for Design Heating Operation
- Energy Recovery Section

The supply air will be ducted via medium pressure duct to terminal boxes equipped with electric reheat. Supplemental heating at areas with extensive glazing will be provided via perimeter electric heating equipment. Electric cabinet unit heaters will be provided at all entry vestibules into the building.

Option 2: Multiple Packaged VAV Air Handling Units Heating/Chilled Water Coils

One (1), central VAV air handling unit will be provided to serve the areas of the building where recirculated air is available to return to the unit. The ventilation (minimum outside air) will be sized to accommodate the normal ventilation density of classrooms and administrative functions within the program. The unit will consist of:

- Supply Fan Section
- Prefilters
- Final Filters
- Air Blender
- Return Fan and Mixing Section
- Water-cooled heat pump section (geo water)
- Electric Pre-Heat Coil for Design Heating Operation
- Energy Recovery Section

In addition to the unit describe above one (1) additional, central 100% outside air VAV air handling unit will be provided to serve the kitchen and laboratory areas. The unit will consist of:

- Supply Fan Section
- Prefilters
- Final Filters
- Hydronic Heating Preheat Coil
- Hydronic Cooling Chilled Water Coil
- Electric Pre-Heat Coil for Design Heating Operation
- Energy Recovery Section

The supply air will be ducted via medium pressure duct to terminal boxes equipped with hydronic reheat fed from the central heating loop piped throughout the building. Supplemental heating at areas with extensive glazing will be provided via perimeter hydronic heating equipment. h cabinet unit heaters will be provided at all entry vestibules into the building.

Type of Duct	Maximum Pressure Drop (Inch W.C. per 100ft of Duct)	Maximum Duct Velocity (FPM)
Medium Pressure	0.2	2,000
Low Pressure	0.05	1,200

Medium pressure supply duct will be wrapped with an insulating blanket to limit duct heat loss/gain. Low pressure supply ductwork will have internal liner to minimize heat loss/gain and increase the acoustic performance of the mechanical system.

C. EXHAUST AIR SYSTEMS

General exhaust from restrooms, janitor's closets, and other non-grease duct systems shall be routed to the energy recovery system. The ductwork serving this shall be galvanized duct.

Laboratory fume hood exhaust shall be routed to a dedicated centrifugal upblast fan located on the roof equipped with a discharge stack. Ductwork serving the laboratory fume hood shall be constructed of stainless steel, or PVC coated ductwork. Fan, stack, and ductwork shall all be constructed or coated to prevent premature degradation caused by chemical fumes. Fume hood exhaust shall not be routed to the energy recovery.

The kitchen ductwork from the Type 1 kitchen hoods shall be constructed in accordance with code and routed to a UL 762 grease exhaust compliant fan. Grease exhaust will not be routed to the energy recovery, but other general exhaust in the area will.

The following is the criteria for sizing exhaust ductwork:

Type of Duct	Maximum Pressure Drop (Inch W.C. per 100ft of Duct)	Maximum Duct Velocity (FPM)
Low Pressure	0.07	1,200

D. COOLING SYSTEM

The cooling load is anticipated to be approximately 40 Tons on a design cooling day. In both options, the mechanical systems will reject heat to a geothermal well field provided on the project site. Without knowing site-specific geotechnical information, we've assumed that the bore field will require approximately 35-45 wells installed on 15'-25' centers and bored 500' deep. The closed-loop piping from each well will be routed to a common header and pumped from the mechanical room. The field system will utilize redundant base-mounted pumps to circulate the field water and will be decoupled from the building systems utilizing a flat-plate heat exchanger.

Option 1: Central Custom VAV Air Handling Units with Heat Pump Sections

A building-side closed loop distribution system will be installed on the building side of the flat plate heat exchanger. The "heat rejection" water will be distributed to the central VAV air handler via redundant base-mounted or inline pumps. The heat rejection loop will be utilized in the heat pump section of the VAV air handler for conditioning.

Option 2: Multiple Packaged VAV Air Handling Units Heating/Chilled Water Coils

The building-side closed loop distribution system will be utilized in the mechanical room to provide heat rejection from an array of 6-pipe modular heat pumps. The Heat Pump array will be sized to accommodate simultaneous heating and cooling and will provide low temperature heating water and chilled water to equipment throughout the building. The array will be sized to accommodate design cooling days with simultaneous reheat needs, and also design heating days with simultaneous process cooling needs.

A chilled water distribution piping system will be installed in the building. The head end equipment will be located in the mechanical room and will include a base-mounted distribution pump, chemical storage and feed system, minimum flow bypass, and accessories/controls.

E. HEATING SYSTEM

The heating load is anticipated to be approximately 900 MBH on a design heating day. In both options, the mechanical systems will reject heat to a geothermal well field provided on the project site. Without knowing site-specific geotechnical information, we've assumed that the bore field will require approximately 35-45 wells installed on 15'-25' centers and bored 500' deep. The closed-loop piping from each well will be routed to a common header and pumped from the mechanical room. The field system will utilize redundant base-mounted pumps to circulate the field water and will be decoupled from the building systems utilizing a flat-plate heat exchanger.

Option 1: Central Custom VAV Air Handling Units with Heat Pump Sections

A building-side closed loop distribution system will be installed on the building side of the flat plate heat exchanger. The "heat rejection" water will be distributed to the central VAV air handler via redundant base-mounted or inline pumps. The heat rejection loop will be utilized in the heat pump section of the VAV air handler for conditioning.

Option 2: Multiple Packaged VAV Air Handling Units Heating/Chilled Water Coils

The building-side closed loop distribution system will be utilized in the mechanical room to provide heat rejection from an array of 6-pipe modular heat pumps. The Heat Pump array will be sized to accommodate simultaneous heating and cooling and will provide low temperature heating water and chilled water to equipment throughout the building. The array will be sized to accommodate design cooling days with simultaneous reheat needs, and also design heating days with simultaneous process cooling needs.

A heating water distribution piping system will be installed in the building. The head end equipment will be located in the mechanical room and will include two (2) redundant base-mounted distribution pumps, chemical storage and feed system, minimum flow bypass, and accessories/controls.

F. PLUMBING SYSTEMS

Domestic Hot Water: In both options, it is preferred for domestic hot water to be generated by a heat pump. Both of the following options should be priced:

Option 1: Air-Cooled Heat Pump Water Heater

Provide a packaged air-cooled heat pump in the mechanical room for domestic water heating. The unit shall be sized to include storage and be semi-instantaneous. An electric water heater shall be installed in series to generate 140 degree water for the kitchen loop. The domestic hot water system shall include a recirculation system including a return pump.

Option 2: Air-Cooled Heat Pump Water Heater

Provide side-arm domestic water heater in the mechanical room that utilizes the hydronic hot water being generated by the 6-pipe heat pump system as a source. The unit shall be sized to include storage and be semi-instantaneous. An electric water heater shall be installed in series to boost all of the water being stored to 140 degrees. A master-mixing valve will be installed in the mechanical room to mix the general hot water down to 120 degrees while the direct line to the kitchen will remain at 140 degrees. The domestic hot water system shall include a recirculation system including a return pump.

G. FIRE PROTECTION SYSTEM

The building will include a wet fire protection system installed in accordance with NFPA-13. All areas being sprinkled will be conditioned utilizing the systems described above.

H. BUILDING AUTOMATION SYSTEM

Provide a building automation system to accommodate the sophisticated building systems described above – including the geothermal heat rejection field located on the site. The BAS should include a modern cloud-based interface accessible from a remote command center or mobile devices.

ELECTRICAL SYSTEMS GENERAL:

The HVAC systems above have a varied electrical power load density requirement. When pricing the HVAC systems, take into consideration the electrical power infrastructure requirements for each option.

The following table summarizes the services that are anticipated to be provided to each space occupancy type, and the types of systems that are required to provide these services:

Spatial Type	Services	Systems Required
Classrooms	• Comfort heating/cooling • Demand control ventilation • General power • Lighting • Phone, computer, printer connectivity • Audiovisual presentation • Bell and paging/intercom	• Space dedicated terminal VAV with electric reheat • Space dedicated Tstat and CO2 sensor • Receptacles • Light Fixtures • Wall phone outlet, distributed voice/data outlets, wireless access point • LCD projector; LED/LCD displays • Multimedia loudspeakers • Paging loudspeakers, wireless clock
Private Offices	• Comfort heating/cooling • General power • Lighting • Phone, computer, printer connectivity • Paging/intercom	• Grouped perimeter/central offices to terminal VAV with electric reheat • Tstat located in every two offices • Receptacles • Light Fixtures • Distributed voice/data outlets • Paging loudspeaker, wireless clock
Computer Labs	• Comfort heating/cooling • Demand control ventilation • High heat rejection cooling load, even during heating season. • Distributed power • Lighting • High volume computer, print connectivity • Audiovisual presentation • Bell and paging/intercom	• Space dedicated terminal VAV with electric reheat • Space dedicated Tstat and CO2 sensors • Receptacles • Floorbox receptacles • Light Fixtures • Distributed data outlets, WAP • LCD projector; LED/LCD displays • Multimedia loudspeakers • Paging loudspeakers, wireless clock

Space Occupancy Type	Space Services	Systems Required
Commercial and Teaching Kitchens	• Comfort heating/cooling • Demand control ventilation • Makeup air • General exhaust required • Domestic CW, HW, HWC • NG for appliances • Sanitary waste and vent • Grease waste and vent • Power for kitchen appliances • General Power • Lighting • Phone, printer connectivity	• Space dedicated parallel FPB VAV with electric reheat • Dedicated MAU for Type 1 and Type 2 hoods • Space dedicated Tstat • Standard domestic water piping • Sanitary W/V piping • Grease interceptor, dedicated grease W/V piping • Receptacles • Light Fixtures • Equipment power connections • Wall phone outlet, distributed data outlets
Chemistry/Microbiology Lab	• Comfort heating/cooling • Demand control ventilation • Two fume hoods • Make up air for fume hoods • General exhaust required • Domestic CW, HW, HWC • NG for Bunsen burners • Sanitary waste and vent • Emergency shower and eye wash • Compressed air stations • Lab vacuum stations • Distilled water stations • Acid neutralization per sink • Emergency gas shut-off valve • Distributed power connection • Power for fume hoods • Lighting • Phone, computer connectivity • Audiovisual presentation • Bell and paging/intercom	• Space dedicated parallel FPB VAV with electric reheat • Fume hood exhaust fan and ducting system, per hood • Fume hood make up air requirement to be incorporated with ventilation air requirements • Space dedicated Tstat and CO2 sensors • Standard domestic water piping • Sanitary W/V piping • Central compressed air system • Central vacuum system • Acid waste neutralization system • Receptacles • Light Fixtures • Distributed voice/data outlets, wireless access point • LCD projector; LED/LCD displays • Multimedia loudspeakers • Paging loudspeakers, wireless clock

Space Occupancy Type	Space Services	Systems Required
Anatomy/Biology/Physics Lab	• Comfort heating/cooling • Demand control ventilation • General exhaust required • Domestic CW, HW, HWC • Emergency shower and eye wash • NG for Bunsen burners • Sanitary waste and vent • Compressed air stations • Lab vacuum stations • Emergency gas shut-off valve • Distributed power connection • Lighting • Phone, computer connectivity • Audiovisual presentation • Bell and paging/intercom	• Space dedicated parallel FPB VAV with electric reheat • Space dedicated Tstat CO2 sensors • Standard domestic water piping • Sanitary W/V piping • Central compressed air system • Central vacuum system • Receptacles • Light Fixtures • Distributed voice/data outlets, wireless access point • LCD projector; LED/LCD displays • Multimedia loudspeakers • Paging loudspeakers, wireless clock
Nursing/Skills Classrooms	• Comfort heating/cooling • Demand control ventilation • Sanitary waste and vent • Medical air stations • Medical vacuum stations • Domestic CW, HW, HWC • Computer connectivity • Bell and paging/intercom • Patient headboard power connections • Simulation emergency power • Lighting • Simulation nurse call	• Space dedicated terminal VAV with electric reheat • Space dedicated Tstat and CO2 sensor • Standard domestic water piping • Sanitary W/V piping • Central compressed air system • Central vacuum system • Receptacles • Light Fixtures • Switched receptacles for power outage simulation • Single data outlet • Paging loudspeakers, wireless clock • Nurse Call, Staff Alert, Code Blue buttons and lights
Nursing Simulation Rooms	• Comfort heating/cooling • Patient headboard power connections • Lift connection for manikin • Simulation emergency power • Lighting • Computer connectivity • Bell and paging/intercom • Simulation nurse call • Access controlled entrances	• Space dedicated terminal VAV with electric reheat • Space dedicated Tstat • Receptacles • Light Fixtures • Switched receptacles for power outage simulation • Distributed data outlets, wireless access points • Paging loudspeakers, wireless clock • Notification lights/loudspeaker for Nurse Call • Electronic door hardware (card reader, electric locks, door position switch)
Corridors/Common Areas	• Comfort heating/cooling • General power • Lighting • Bell and paging • Video surveillance	• Space dedicated terminal VAV with electric reheat • Space dedicated Tstat • Receptacles • Light Fixtures • Paging loudspeakers • CCTV cameras
Staff Breakroom	• Comfort heating/cooling • General exhaust required • Domestic CW, HW, HWC • Sanitary waste and vent • Distributed power • Lighting • Phone, printer connectivity • Bell and paging	• Grouped with other internal office spaces, terminal VAV with electric reheat • Single Tstat • Receptacles • Light Fixtures • Wall phone outlet, distributed data outlets • Paging loudspeakers, wireless clock
Storage Rooms	• HVAC conditioning • General power • Lighting	• Systems as needed determined by space conditioning requirements • Receptacles • Light Fixtures
Electrical Rooms	• Exhaust as required • Electrical equipment • General power • Lighting	• Dedicated exhaust fan • Receptacles • Light Fixtures
IT Rooms	• Process cooling • Power for IT equipment • Lighting	• Cooling only packaged mini-split system • Single Tstat located in space • Receptacles • Light Fixtures

Space Occupancy Type	Space Services	Systems Required
Restrooms	• Code mandated exhaust air • Domestic CW, HW, HWC • Sanitary waste and vent • General Power • Bell and paging	• Space dedicated ceiling exhaust fans, ducted to single exhaust louver • Plumbing fixtures • Thermostatic mixing valves • Receptacles • Light Fixtures • Shutoff valves • Paging loudspeakers

AndersonMasonDale
Architects

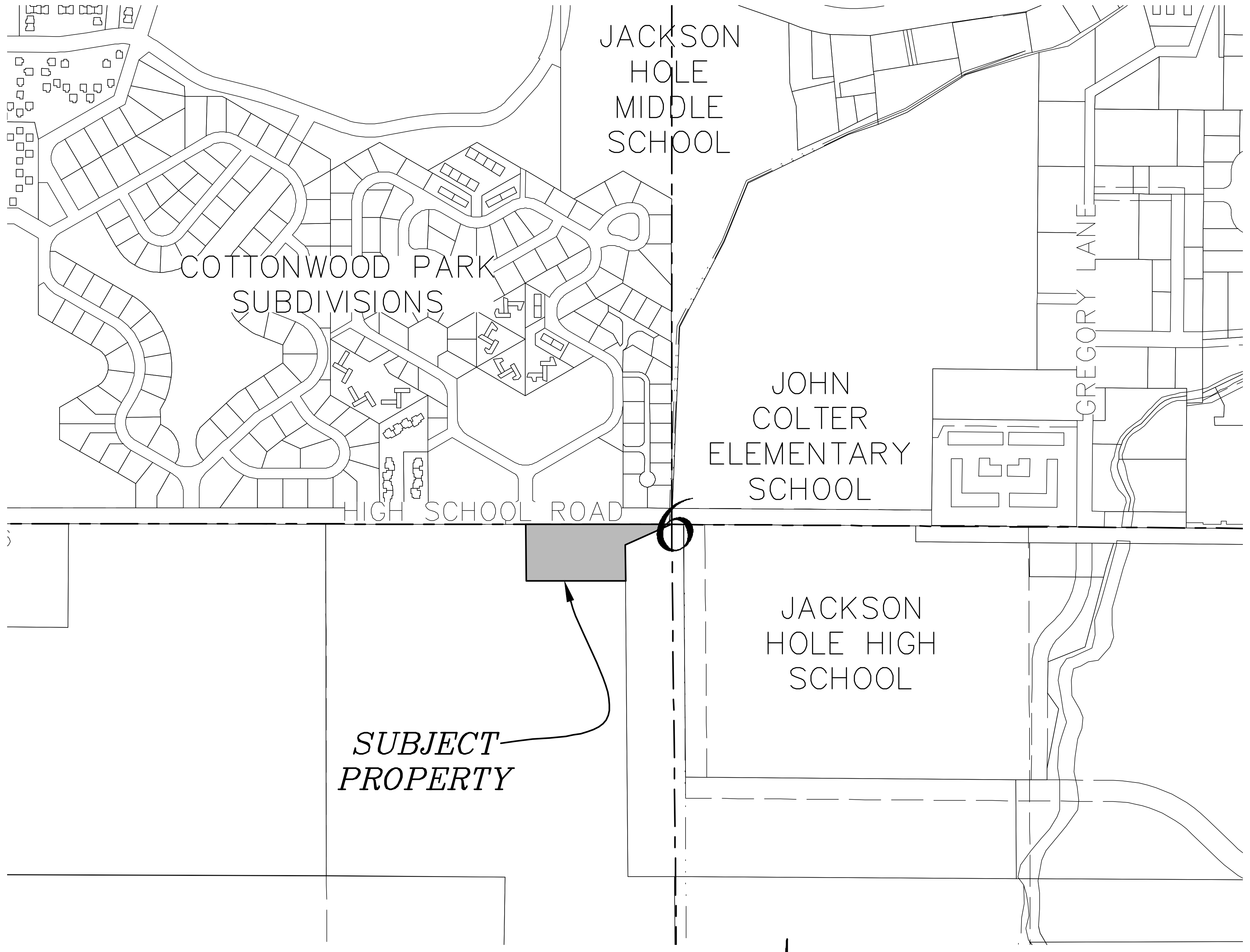
Ver. 18.0
Plotted by PYantzi on Nov 16, 2023 - 4:20pm

CENTRAL WYOMING COLLEGE
JACKSON OUTREACH CENTER

SKETCH PLAN

CWC PARCEL, HIGH SCHOOL ROAD
JACKSON, WYOMING

LOCATED WITHIN THE NE ¼SW¼ & SE¼NW¼ SEC 6,
T40N, R116W, 6TH P.M.
TETON COUNTY, WYOMING



VICINITY MAP
1" = 400' for 22x34 Prints
1" = 800' for 11x17 Prints

OWNER
Fremont County Community
College District
2660 Peck Ave., Main Hall, 104C
Riverton, WY 82501

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Jorgensen Associates, Inc.
1315 S. Highway 89, #201
PO Box 9550
Jackson, WY 83002-9550
(307) 733-5150

ARCHITECT & LANDSCAPE DESIGN
Prospect Studio
4030 W Lake Cr. Dr., Ste. 104
PO Box 1870
Wilson, WY 83014
Danny Wicke
(307) 264-2600

AMD Architects
3198 Speer Boulevard
Denver, CO 80211
John Graham
(303) 294-9448

INDEX OF SHEETS

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– PRELIMINARY –
SUBJECT TO CORRECTION
AND APPROVAL

JORGENSEN
JACKSON, WYOMING
307.733.5150
www.jorgeng.com

PROJECT TITLE:
CENTRAL WYOMING COLLEGE
SKETCH PLAN SUBMITTAL
CWC PARCEL, HIGH SCHOOL ROAD
JACKSON, WYOMING

SHEET TITLE:
COVER

DESIGNED BY:	PY
REVIEWED BY:	PD

PLAN VERSION	DATE
SKETCH PLAN	11/17/2023

PROJECT NUMBER
22070

SHEET
C1.0

P:\2022\22070-CWC-High School Rd\10-Civil\CAD\22070 - C1.0 COVER & NOTES.dwg

GENERAL PROJECT NOTES:

1. PROJECT SCOPE: PROVIDE ACCESS, UTILITY INFRASTRUCTURE, GRADING, AND NECESSARY SITE DEVELOPMENT FOR PROPOSED COLLEGE OUTREACH CENTER.
2. PROJECT SCHEDULE: UTILITY INSTALLATION WILL BEGIN IN SPRING 2024 AND END IN FALL 2024.
3. PROPERTY IS ZONED P/SP IN THE TOWN OF JACKSON.
4. PROPERTY AREA: +/- 2.0 ACRES
5. THE PROPERTY IS NOT WITHIN THE WILD LAND URBAN INTERFACE, THE NATIONAL WILD AND SCENIC RIVER CORRIDOR, OR THE NATURAL RESOURCES OVERLAY. THE PROPERTY IS LOCATED WITHIN THE SCENIC RESOURCES OVERLAY. PROPERTY IS NOT LOCATED WITHIN A FLOODPLAIN.
6. A GEOTECHNICAL SITE INVESTIGATION AND REPORT OF THE PROPERTY WAS PERFORMED BY JORGENSEN GEOTECHNICAL, LLC IN MAY, 2023. REFER TO THE GEOTECH REPORT FOR MORE DETAILED INFORMATION.
7. TOPOGRAPHIC SURVEYS FOR THIS PROPERTY WERE PERFORMED BY JORGENSEN ASSOCIATES, INC. IN NOVEMBER 2022. SPECIFIC COORDINATE DATA IS AVAILABLE UPON REQUEST.
8. THE PROPERTY IS LOCATED SOUTH OF HIGH SCHOOL ROAD IN PREVIOUS AGRICULTURAL LAND PRIMARILY USED FOR GRAZING WITH EXISTING VEGETATION AND GROUND COVER CONSISTING OF LEVEL GRASSLAND AND POCKETS OF TREES.
9. VERBAL NOTICE OF ANY CHANGES OR MODIFICATIONS THAT ARE NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE BUILDING PERMIT SHALL BE GIVEN TO THE TOWN ENGINEERING DEPARTMENT AT 307 733-3079. THE TOWN ENGINEERING DEPARTMENT MAY REQUIRE ADDITIONAL WRITTEN NOTICE OR INFORMATION BE SUBMITTED THROUGH THE TOWN'S BUILDING DEPARTMENT AND ADDITIONAL REVIEW FEES MAY APPLY.
10. PRIOR TO START OF CONSTRUCTION ACTIVITIES, THE APPLICANT SHALL CONTACT THE TOWN OF JACKSON ENGINEERING DEPARTMENT AND SCHEDULE A PRE-CONSTRUCTION MEETING. FAILURE TO MEET WITH THE ENGINEERING DEPARTMENT PRIOR TO START OF CONSTRUCTION ACTIVITIES WILL RESULT IN STOPPAGE OF WORK ON SITE. THE TOWN ENGINEER SHALL BE NOTIFIED 48-HOURS PRIOR TO COMMENCING ANY LAND DISTURBING ACTIVITIES.
11. THE DESIGN ENGINEER OF RECORD FOR ALL INFRASTRUCTURE AND GRADING SHALL INSPECT AND PROVIDE WRITTEN APPROVAL OF CONSTRUCTION PRIOR TO CERTIFICATE OF OCCUPANCY. THE TOWN ENGINEERING DEPARTMENT SHALL BE NOTIFIED TO ALLOW FOR WITNESSING OF ANY TESTING. FIELD REPORTS REGARDING THE INSTALLATIONS SHALL BE KEPT AND MAY BE REQUIRED BY THE TOWN ENGINEERING DEPARTMENT. RECORD DRAWINGS OF THE INSTALLATION SHALL BE PROVIDED ALONG WITH A CERTIFICATE OF COMPLETION.
12. ALL PROPOSED ROADS, SIDEWALKS, WATER, SEWER, CABLE UTILITIES, STORM AND DRAINAGE INFRASTRUCTURE LOCATED ONSITE SHALL BE PRIVATELY OWNED, OPERATED AND MAINTAINED. THE CONSTRUCTION OF THE ONSITE IMPROVEMENTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND SHALL BE PROVIDED FOR IN A SUBDIVISION IMPROVEMENTS AGREEMENT TO BE APPROVED WITH EACH SUBDIVISION PLAT.
13. RECORD DESIGN PLANS SHALL BE SUBMITTED ELECTRONICALLY TO THE TOWN OF JACKSON IN PORTABLE DOCUMENT FORMAT (PDF) WITH A CORRESPONDING AUTOCAD COMPATIBLE (DWG) AND A GIS SHAPE FILE.

GENERAL CONSTRUCTION NOTES & SPECIFICATIONS:

1. ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF WYOMING PUBLIC WORKS STANDARD SPECIFICATIONS AND THE TOWN OF JACKSON LAND DEVELOPMENT REGULATIONS. ANY CONSTRUCTION RELATED ACTIVITIES NOT IN CONFORMANCE WITH APPROVED AND PERMITTED PLANS AND/OR SEQUENCING MAY RESULT IN TERMINATION OF WORK.
2. THE APPROVED EROSION CONTROL PLAN SHALL BE LOCATED ON SITE. EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAIN AND AT LEAST ONCE EACH WEEK. EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS AS A RESULT OF LAND DEVELOPING OR DISTURBING ACTIVITIES SHALL BE REPAIRED IMMEDIATELY.
3. THE TOWN ENGINEER SHALL BE ALLOWED TO ENTER THE SITE FOR THE PURPOSE OF INSPECTING COMPLIANCE WITH THE EROSION CONTROL PLAN OR FOR PERFORMING ANY WORK NECESSARY TO BRING THE SITE INTO COMPLIANCE WITH THE EROSION CONTROL PLAN.
4. COPIES OF ALL AGREEMENTS AND/OR EASEMENTS SHALL BE PROVIDED TO THE TOWN OF JACKSON PRIOR TO GRADING ON ADJACENT PROPERTIES FOR TEMPORARY OR PERMANENT CONSTRUCTION ACTIVITIES.
5. CONSTRUCTION WORK HOURS SHALL BE CONSISTENT WITH CURRENT TOWN OF JACKSON POLICIES.
6. ALL PUBLIC STREETS SHALL BE MAINTAINED CLEAR OF DEBRIS DURING CONSTRUCTION. SHOULD DEBRIS BE TRACKED ONTO PUBLIC STREETS FROM THE CONSTRUCTION SITE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN THE AFFECTED STREETS.
7. CONSTRUCTION SITE DELINEATION FENCING SHALL BE PROVIDED AS NEEDED TO PROTECT THE PUBLIC FROM HAZARDS DURING CONSTRUCTION. THE FENCE SHALL REMAIN IN PLACE AND INTACT FOR AS LONG AS NECESSARY TO PROTECT THE PUBLIC.
8. APPROVED SEDIMENTATION CONTROLS AND SILT RETENTION SHALL BE PLACED AND PROVIDED DURING CONSTRUCTION AS NEEDED TO PREVENT OFFSITE STORM FLOW AS IDENTIFIED IN THE APPROVED GRADING AND EROSION CONTROL PLAN. THE TOWN ENGINEER SHALL BE NOTIFIED UPON COMPLETION OF EROSION CONTROL MEASURES WITHIN 2 CALENDAR DAYS AFTER INSTALLATION.
9. IF NECESSARY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WYPDES STORMWATER PERMIT AND / OR CONSTRUCTION DEWATERING PERMIT PRIOR TO COMMENCING ANY LAND DISTURBING ACTIVITIES.
10. PRIOR TO CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A CONSTRUCTION MANAGEMENT AND SEQUENCING PLAN TO MEET THE REQUIREMENTS OF THE TOWN OF JACKSON.
11. CONTRACTOR SHALL VERIFY LOCATION OF ALL BURIED AND OVERHEAD UTILITIES PRIOR TO ANY EXCAVATION IN THE VICINITY. UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. ENGINEER DOES NOT WARRANT THE ACCURACY NOR COMPLETENESS OF THE INFORMATION SHOWN FOR EXISTING UTILITIES. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO INSTALLING IMPROVEMENTS. PRIVATE UNDERGROUND UTILITIES EXIST IN THE PROJECT AREA. CONTACT ENGINEER TO LOCATE EXISTING WATER LINES, SEWER LINES.
12. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND SHALL PROMPTLY NOTIFY THE ENGINEER OF ANY VARIATIONS OR DISCREPANCIES.
13. ALL EXCAVATION ACTIVITIES SHALL COMPLY WITH PERMIT REQUIREMENTS ISSUED FOR THE PROJECT. CONTRACTOR SHALL REVIEW AND BE RESPONSIBLE FOR PERMIT COMPLIANCE.
14. CONTRACTOR TO CONFIRM STOCKPILE AND STAGING LOCATIONS WITH THE OWNER.
15. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
16. FILL MATERIAL SHALL BE SUITABLE ON-SITE OR IMPORTED MATERIAL WITH ROCK NO LARGER THAN 6 INCHES IN DIAMETER. LARGER MATERIAL MAY BE PLACED ONLY WHEN AUTHORIZED BY THE ENGINEER.
17. SUBGRADE, PIT RUN SUBBASE, AND SITE FILL MATERIALS SHALL BE MECHANICALLY COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (AASHTO T-99 - STANDARD PROCTOR DENSITY) IN LIFTS NOT TO EXCEED 8 INCHES IN LOOSE THICKNESS.
18. CRUSHED GRAVEL BASE MATERIAL SHALL BE GRADING H OR GRADING W.
19. CRUSHED GRAVEL BASE COURSES SHALL BE MECHANICALLY COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 (AASHTO T-180 - MODIFIED PROCTOR DENSITY).
20. DESTRUCTION AND DAMAGE TO TREES AND OTHER NATURAL VEGETATION SHALL BE MINIMIZED AND ALL DISTURBED SURFACES SHALL BE RESEEDED AS SOON AS PRACTICABLE IN ACCORDANCE TO THE REVEGETATION SPECIFICATIONS.
21. STRIP AND SALVAGE TOPSOIL FROM ALL EXCAVATED AREAS.
22. WEEDS SHALL BE CONTROLLED BY SPRAYING, LIMITING DISTURBANCE AREA, OR OTHER MEANS. FOLLOW INVASIVE SPECIES MANAGEMENT PLAN SUBMITTED WITH GRADING PERMIT. REDUCE THE SPREAD OF NOXIOUS WEEDS AND INTRODUCTION OF OTHER INVASIVE SPECIES PRIOR TO CONSTRUCTION, DURING CONSTRUCTION, DURING REVEGETATION, AND AFTER CONSTRUCTION.
23. FUGITIVE DUST WILL BE CONTROLLED BY WATERING DURING DRY PERIODS OR AS REQUIRED BY ENGINEER.
24. ANY MUD TRACKED ONTO ADJOINING STREETS SHALL BE SWEPT UP ON A DAILY BASIS OR OTHERWISE REQUESTED BY THE TOWN OF JACKSON.
25. CONSTRUCTION SITE SHALL REMAIN CLEAN AND ALL TRASH AND CONSTRUCTION DEBRIS SHALL NOT ENTER INTO ADJACENT PROPERTIES.
26. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED AND PROCESSED ON-SITE ONLY AT LOCATIONS AS DESIGNATED ON THE PLANS.
27. TOPS OF CUT AND FILL SLOPES SHALL BE ROUNDED TO AVOID RAVELING AND EROSION.
28. A FOUR INCH MINIMUM LAYER OF TOPSOIL SHALL BE PLACED ON ALL SLOPES AND AREAS STRIPPED FOR GRADING.
29. CUT AND FILL SLOPES SHALL NOT EXCEED 2:1 WITHOUT SPECIAL STABILIZATION AND APPROVAL FROM ENGINEER.
30. IRRIGATION WATER SHALL BE SUPPLIED BY AN ISOLATED SYSTEM METERED SEPARATELY FROM DOMESTIC USE. BACKFLOW AND METER EQUIPMENT TO BE LOCATED WITHIN THE ADJACENT BUILDING MECHANICAL ROOM. LIMITS OF IRRIGATION BETWEEN THE PROPERTY AND STREET SCAPE LANDSCAPE IMPROVEMENTS TO BE COORDINATED BETWEEN THE OWNER AND THE TOWN OF JACKSON.
31. REFER TO UTILITY INFRASTRUCTURE PLAN SHEETS FOR UTILITY NOTES AND SPECIFICATIONS.

REVEGETATION SPECIFICATIONS:

(FOLLOW MITIGATION PLAN. FOLLOW THESE SPECIFICATIONS WHERE NOTHING
IS SPECIFIED ON MITIGATION PLANS OR BY LANDSCAPE ARCHITECT.)

1. SEED MIXTURE:

COMMON NAME	LBS./ACRE
MOUNTAIN BROME	10 LBS./ACRE
THICKSPIKE WHEATGRASS	12 LBS./ACRE
IDAHO FESCUE	6 LBS./ACRE
WESTERN WHEATGRASS	12 LBS./ACRE
ALPINE TIMOTHY	12 LBS./ACRE
TOTAL PURE LIVE SEED APPLICATION RATE	52 LBS./ACRE

2. SEED MIXES CONTAINING NATIVE FLOWERING PLANTS SUCH AS LUPINE, YARROW AND PAINTBRUSH ARE ACCEPTABLE.
3. ALL SEED SHALL COMPLY WITH WYOMING SEED LAW. SEED SHALL BE PURCHASED FROM A DEALER LICENSED WITH THE WYOMING DEPARTMENT OF AGRICULTURE. CERTIFICATIONS FOR THE SEED MIX SHALL BE PROVIDED TO THE ENGINEER PRIOR TO SEEDING.
4. TOPSOIL SHALL BE UNIFORMLY SPREAD ON PREPARED SURFACES PRIOR TO SEEDING. REMOVE FOREIGN MATERIALS, WEEDS AND UNDESIRABLE PLANTS FROM THE PREPARED SOIL PRIOR TO SEEDING.
5. HARD PACKED OR CAKED TOPSOIL SURFACES SHALL BE SCARIFIED OR DISKED PRIOR TO SEEDING.
6. SEED SHALL BE UNIFORMLY DISTRIBUTED OVER THE SURFACE BY APPROVED MECHANICAL BROADCASTING DEVICES AND THE GROUND SHALL BE IMMEDIATELY RAKED OR DRAGGED TO COVER THE SEED.
7. SEEDING SHALL BE PERFORMED BETWEEN THE TIME THE FROST LEAVES THE GROUND IN THE SPRING AND BEFORE THE FROST ENTERS THE GROUND IN THE FALL. REVEGETATION SHALL OCCUR UPON COMPLETION OF CONSTRUCTION.

ACTIVE CONSTRUCTION MANAGEMENT STRATEGIES:

1. ALL CONSTRUCTION EQUIPMENT WILL BE CLEANED PRIOR TO ENTERING
2. SOIL STOCKPILES WILL BE ROUTINELY CHECKED AND TREATED FOR INVASIVE SPECIES.
3. DISTURBANCE OUTSIDE OF THE CONSTRUCTION ZONE SHALL BE KEPT ON ACTIVE MANAGEMENT. THIS AREA WILL BE MONITORED AND TREATED TWICE EACH GROWING SEASON.

POST CONSTRUCTION MANAGEMENT STRATEGIES:

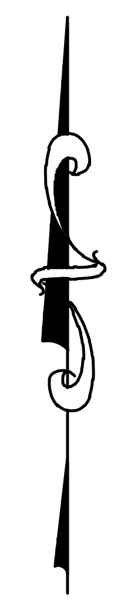
1. REVEGETATION WILL OCCUR IMMEDIATELY AFTER CONSTRUCTION IS COMPLETE TO PREVENT ESTABLISHMENT OF INVASIVE SPECIES IN THE DISTURBED AREAS.
2. NURSERY STOCK WILL BE USED IN ACCRODANCE WITH W.S. 11-9-101-109 (WYOMING NURSERY STOCK LAW), CERTIFIED WEED FREE, AND ACQUIRED THROUGH DEALER LICENSED BY WYOMING DEPARTMENT OF AGRICULTURE.
3. CERTIFIED WEED FREE STRAW, GRAVEL, AND SOIL WILL BE UTILIZED AS POSSIBLE.
4. TCWP WILL BE CONTACTED TO CREATE A POST-CONSTRUCTION INVENTORY.

LINE LEGEND

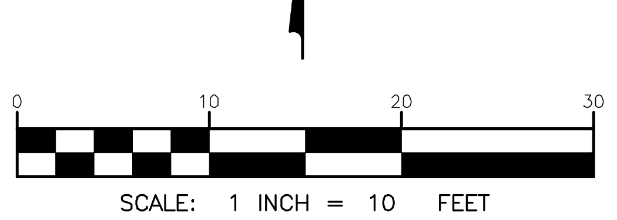
EXISTING	PROPOSED	
━━━━		measured property boundary
────		adjoining property boundary
▨	━━━━	building perimeter
────		building perimeter on adjoining property
─x──x─		chain link fence
── OH ──		overhead wire
── s ──	── S ──	underground sewer line
── stm ──	── STM ──	underground storm sewer line
── w ──	── W ──	underground water line
── gas ──	── GAS ──	underground gas line
── com ──	── UT ──	underground telecommunications line
── ugp ──		underground power line
⌒⌒⌒⌒	── P ──	dripline of bushes and shrubs
────		window well
━━━━	━━━━	top back of curb
── - - - ──		flowline of curb
▨		wooden boardwalk/deck
░		concrete
▒		asphalt
▦		gravel
▧		flagstone walkway
── 6220' ──	── 6225 ──	index contours
── 6224' ──	── 6223 ──	intermediate contours

SYMBOL LEGEND

⋈	water valve
⬡	curbstop valve
○☼	light pole
─○─	utility pole
─o─	street sign
◕	wooden post
○	fire hydrant
Ⓢ	sanitary sewer manhole
Ⓓ	storm sewer manhole
☰	storm sewer catch basin
⊠	air conditioning unit
Ⓔ	electrical meter
ϟ	electrical pedestal
⊘	cleanout
TV	cable box
○ MW	monitoring well
+ 6224.8'	spot elevation
12"	cottonwood tree - approx. trunk diameter shown
12"	spruce tree - approx. trunk diameter shown
12"	aspen tree - approx. trunk diameter shown
12"	deciduous tree - approx. trunk diameter shown
12"	shrub - approximately to scale



- PRELIMINARY -
SUBJECT TO CORRECTION
AND APPROVAL



SCALE: 1 INCH = 10 FEET
THIS SCALE VALID ONLY FOR 22x34 PRINTS

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PROJECT TITLE:
CENTRAL WYOMING COLLEGE
SKETCH PLAN SUBMITTAL
CWC PARCEL, HIGH SCHOOL ROAD
JACKSON, WYOMING

SHEET TITLE:
GENERAL NOTES & LEGEND

DESIGNED BY:	PY
REVIEWED BY:	PD
PLAN VERSION	DATE
SKETCH PLAN	11/17/2023

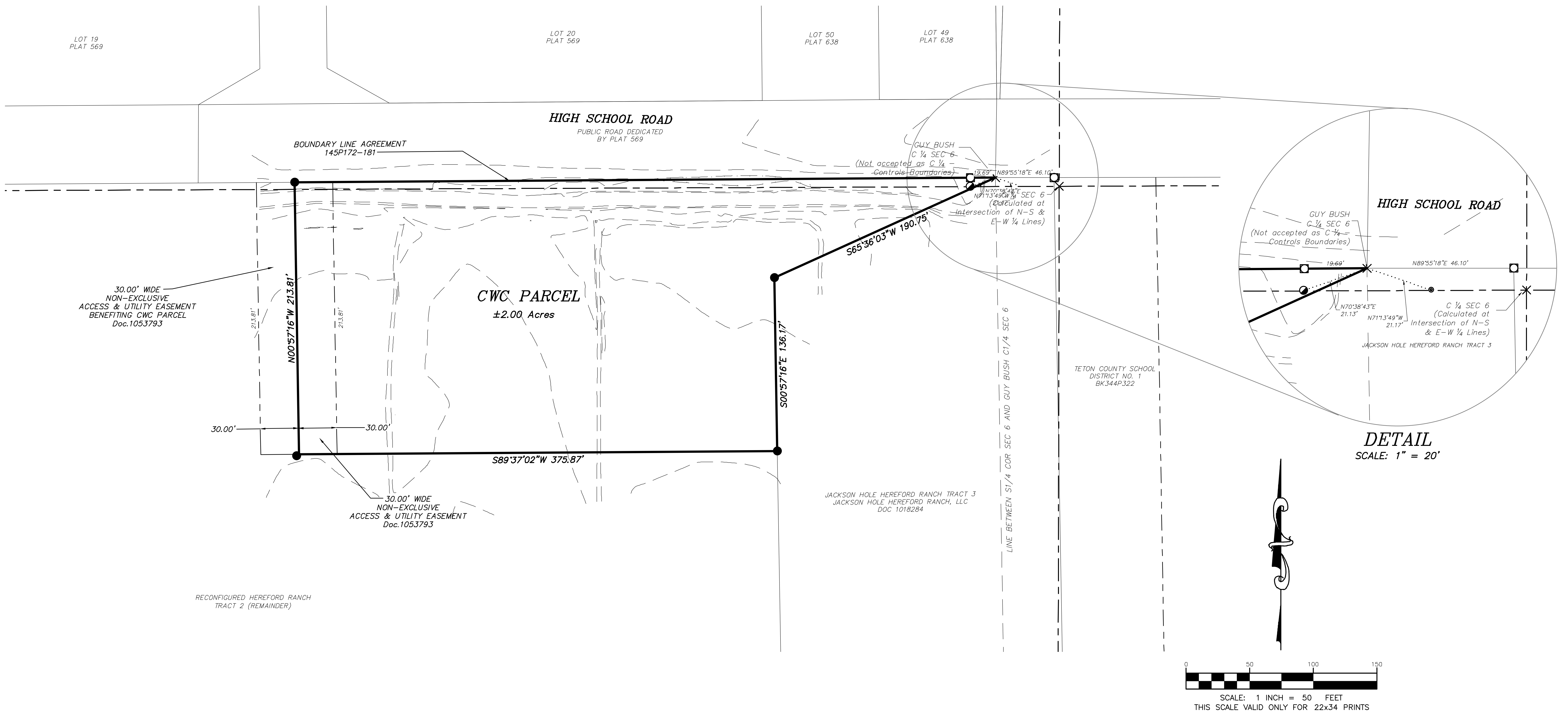
PROJECT NUMBER
22070

SHEET
C1.1

Ver. 18.0
Plotted by PYantzi on Nov 16, 2023 - 4:20pm
P:\2022\22070-CWC-High School Rd\10-Civil\CAD\22070 - C1.0 COVER & NOTES.dwg

Ver. 18.0 Plotted by PYantzi on Nov 16, 2023 - 4:20pm

P:\2022\22070-CWC-High School Rd\10-Civil\CAD\22070 - C2.0 EXISTING CONDITIONS.dwg



DETAIL
SCALE: 1" = 20'

SCALE: 1 INCH = 50 FEET
THIS SCALE VALID ONLY FOR 22x34 PRINTS

LEGEND

▣	aluminum pipe with 3" diameter aluminum cap inscribed "PLS 3831" with other appropriate markings
◐	reinforcing steel bar with 1-1/2" diameter aluminum cap inscribed "NELSON ENGR LS"
●	reinforcing steel bar with 2" diameter aluminum cap inscribed "JORGENSEN ASSOCIATES INC. PLS 13002" set this survey
✕	no monument found or set, depicted for drawing clarity only
— - — - —	sectional subdivision line
━━━━	boundary, subject property
────	boundary, adjoining property
— — — —	boundary, road right-of-way

LEGAL DESCRIPTION

A parcel of land lying within the NE1/4SW1/4 and SE1/4NW1/4 of Section 6, T.40N., R.116W., 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the Guy Bush position for the center one-quarter corner of said Section 6 as shown on map T-313A on file in the Office of the Clerk of Teton County, Wyoming;

THENCE S65°36'03"W, 190.75 feet, along the westerly line of Jackson Hole Hereford Ranch Tract 3 as described in that Quitclaim Deed recorded as doc. no.1018284 in said Office to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S00°57'16"E, 136.17 feet, continuing along said westerly line to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S89°37'02"W, 375.87 feet, parallel with that boundary agreement line set forth in doc. no. 0248124 in said Office to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N00°57'16"W, 213.81 feet, parallel with said westerly line of Jackson Hole Hereford Ranch Tract 3 to a point of intersection with said boundary agreement line, marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N89°37'02"E, 550.88 feet, along said boundary agreement line to the Point of Beginning.

Said parcel encompasses 2.00 acres, more or less.

The basis of bearings for this description is N00°04'18"W along the west line of said Section 6.

CERTIFICATE OF SURVEYOR

I, Matthew P. Gotham, Wyoming Professional Land Surveyor No. 13002 do hereby certify:

that this map was prepared from data collected during field surveys performed under my direction in November & December, 2022; from previous surveys performed by Jorgensen Associates, P.C. and Jorgensen Associates, Inc., and from information of record in the Office of the Clerk of Teton County, Wyoming;

that to the best of my belief and knowledge, it correctly represents the parcel described hereon to be annexed to the Town of Jackson, Wyoming.

LS 13002
Date

Matthew P. Gotham, Wyoming PLS 13002

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SHEET TITLE:
EXISTING CONDITIONS

DESIGNED BY:	PY
REVIEWED BY:	PD
PLAN VERSION	DATE
SKETCH PLAN	11/17/2023

PROJECT NUMBER
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SHEET
C2.0

Plotted by PYantzi on Nov 16, 2023 - 4:20pm

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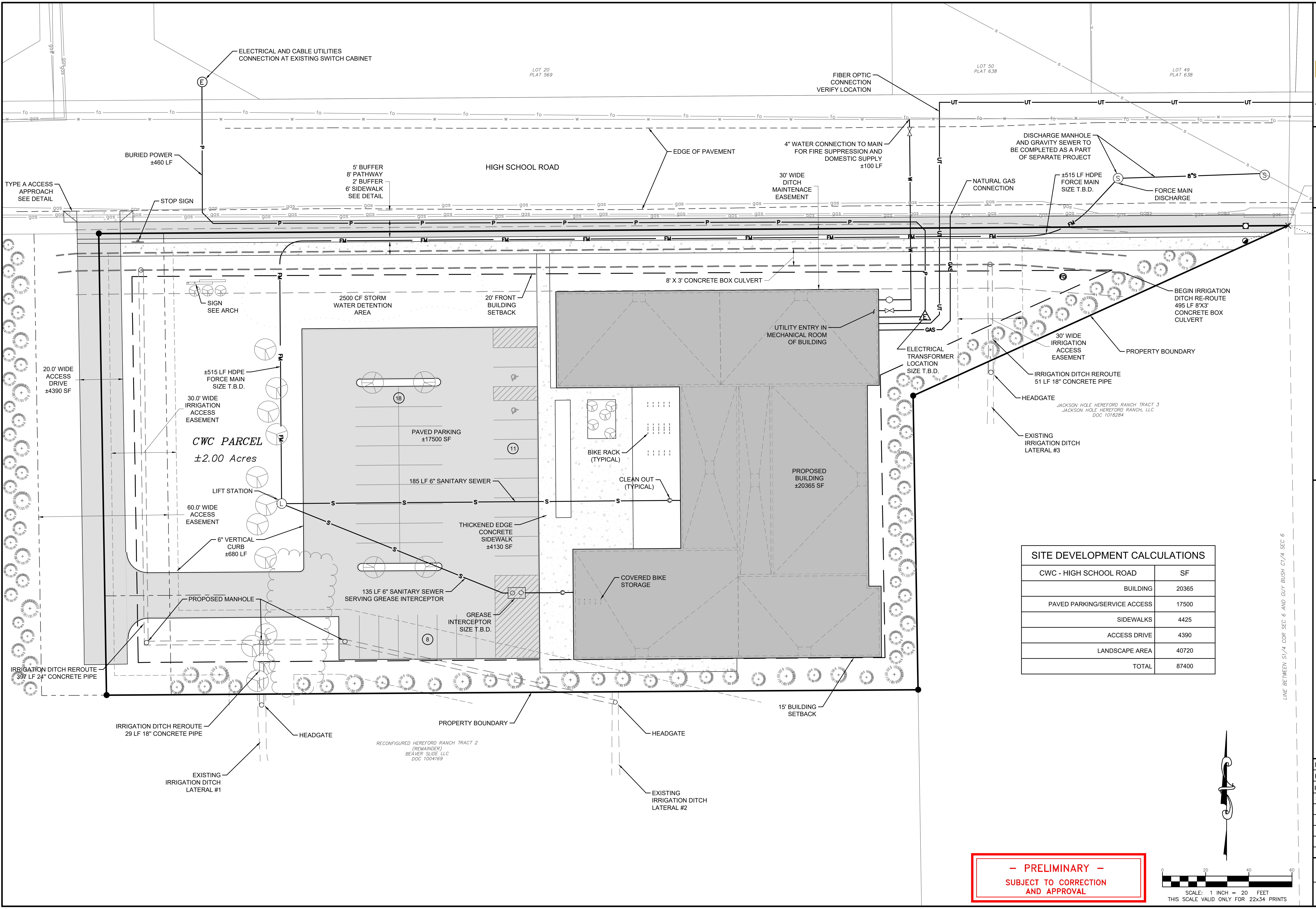

SITE DEVELOPMENT CALCULATIONS

CWC - HIGH SCHOOL ROAD	SF
BUILDING	20365
PAVED PARKING/SERVICE ACCESS	17500
SIDEWALKS	4425
ACCESS DRIVE	4390
LANDSCAPE AREA	40720
TOTAL	87400

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AND APPROVAL

SCALE: 1 INCH = 20 FEET
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JACKSON, WYOMING

SHEET TITLE:
SITE OVERVIEW

DRAFTED BY:	PY
REVIEWED BY:	PD
PLAN VERSION	DATE
SKETCH PLAN	11/17/2023

PROJECT NUMBER
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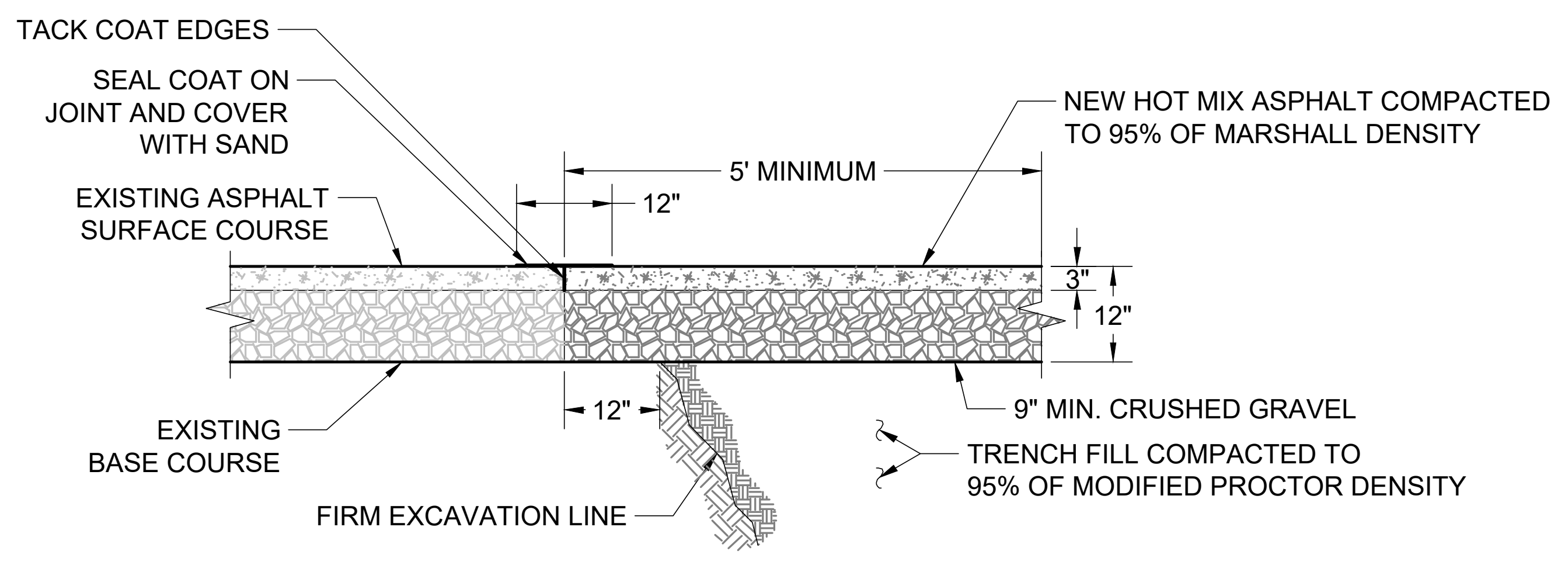
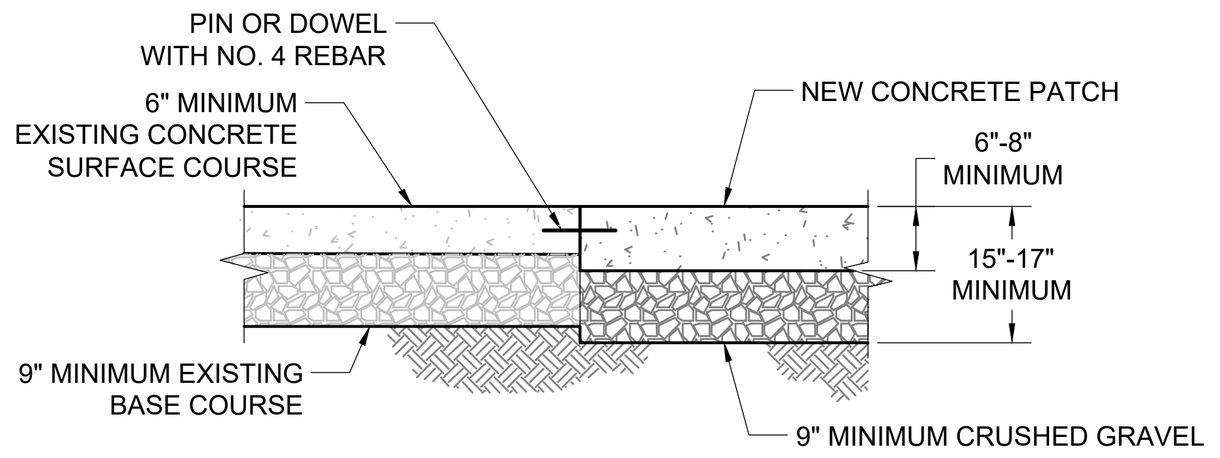
SHEET
C2.1

P:\2022\22070-CWC-High School Rd\10-Civil\CAD\22070 - C2.1 SITE OVERVIEW.dwg

Ver. 18.0 Plotted by PYantzi on Nov 16, 2023 - 4:20pm



ASPHALT PATCH REPAIR DETAIL



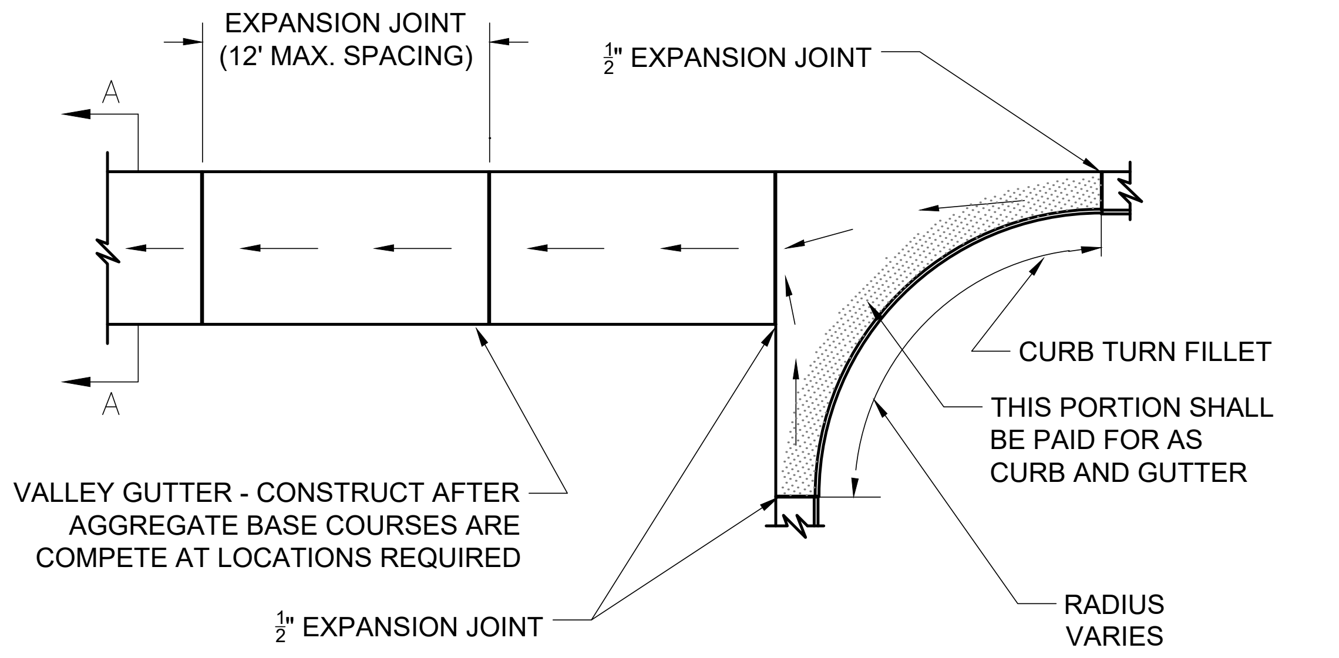
CONCRETE PATCH REPAIR DETAIL

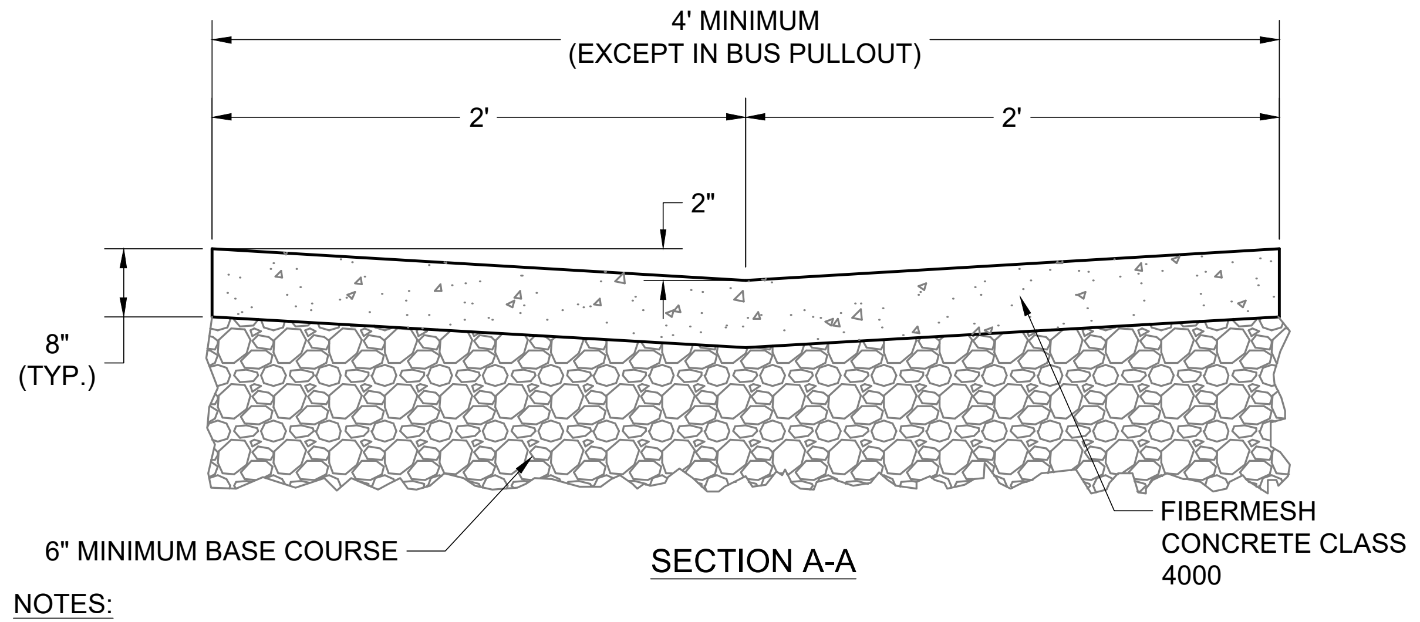
NOTE

1. REPLACEMENT ASPHALT SHALL BE 1" THICKER THAN EXISTING WITH A MINIMUM THICKNESS OF 3".
2. ASPHALT SHALL BE PLACED IN TWO (2) LIFTS, EACH NO LESS THEN $1\frac{1}{2}$" IN THICKNESS, AND COMPACTED TO 95% OF MARSHALL DENSITY.
3. BITUMINOUS MATERIAL SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 02545 BITUMINOUS MATERIAL OF WYOMING PUBLIC WORKS STANDARDS AND SPECIFICATIONS.
4. PORTLAND CEMENT CONCRETE PAVEMENT SHALL MEET APPLICABLE REQUIREMENTS OF SECTION 02520, 02776 AND 03304 AS DIRECTED BY TOWN OF JACKSON PUBLIC WORKS DEPARTMENT.

CONCRETE AND ASPHALT PATCH DETAIL

NOT TO SCALE TOJ ST-118





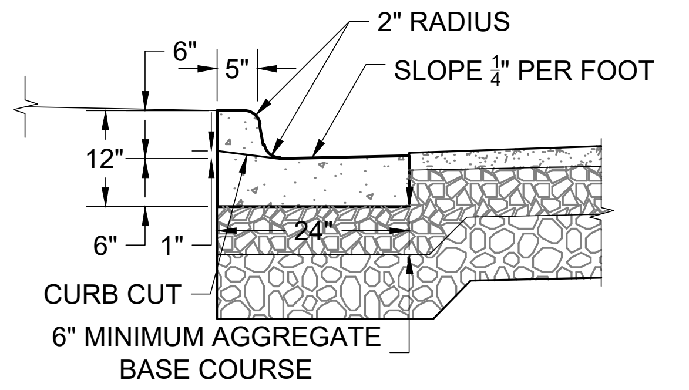
SECTION A-A

NOTES:

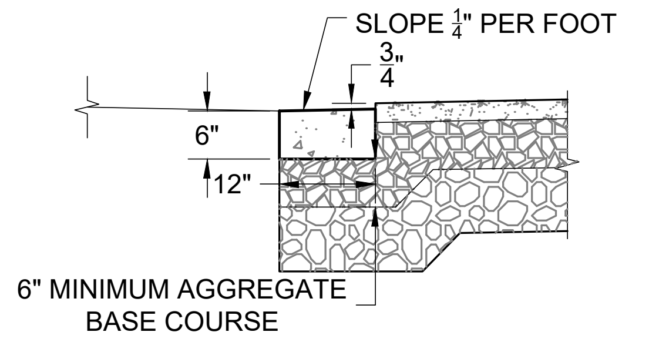
1. VALLEY GUTTERS AND CURB TURN FILLETS SHALL CONFORM TO WPWSS SECTION 02528, EXCEPT THAT PORTLAND CEMENT CONCRETE SHALL BE FIBERMESH CLASS 4000 CONCRETE CONFORMING WITH WPWSS SECTION 03304, PART 2.08.
2. AGGREGATE BASE COURSE SHALL BE SIX INCH MINIMUM THICKNESS, CONFORM TO WPWSS SECTION 02190, PART 2.03, GRADING H, AND BE INSTALLED PER WPWSS SECTION 02231, PART 3.03.
3. REMOVAL AND REPLACEMENT OF VALLEY GUTTER SHALL TAKE PLACE IN FULL PANELS.
4. CURB AND GUTTER SECTION SHALL BE POURED SEPARATE OF VALLEY PAN AS WELL AS PEDESTRIAN RAMP AND/OR SIDEWALK.

VALLEY GUTTER DETAIL

NOT TO SCALE TOJ ST-109



VERTICAL CURB



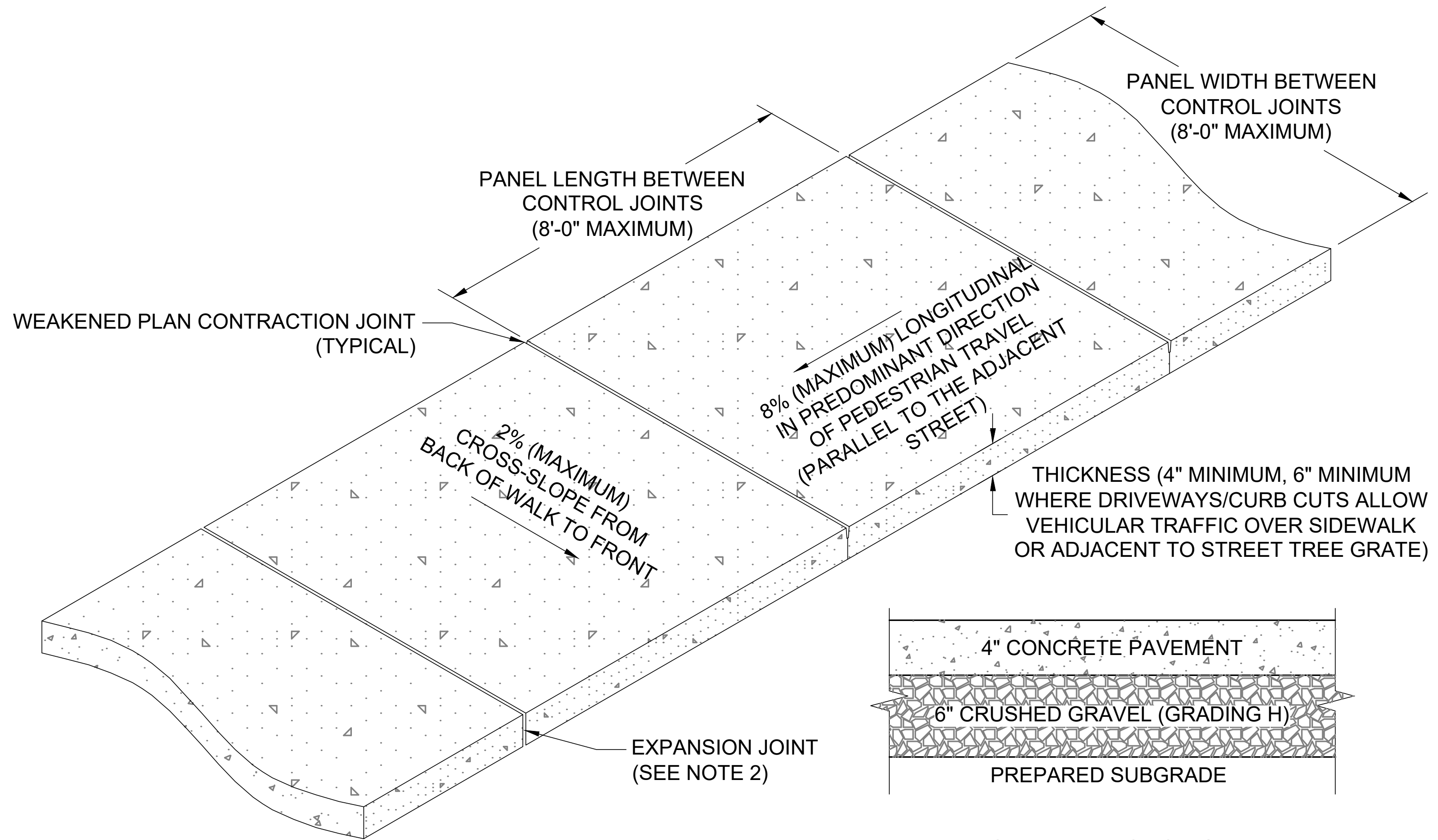
RIBBON CURB

NOTE

1. CURBS SHALL CONFORM TO WPWSS SECTION 02525, EXCEPT THAT PORTLAND CEMENT CONCRETE SHALL BE FIBERMESH-REINFORCED CLASS 4000 CONCRETE CONFORMING WITH WPWSS SECTION 03304, PART 2.07.
2. AGGREGATE BASE COURSE SHALL BE SIX INCH MINIMUM THICKNESS, CONFORM TO WPWSS SECTION 02190, PART 2.03, GRADING H, AND BE INSTALLED PER WPWSS SECTION 02231, PART 3.03.
3. REMOVAL AND REPLACEMENT OF CURB SHALL TAKE PLACE IN FULL PANELS.
4. ROLL CURB SHALL NOT BE ALLOWED.

CURB SECTION DETAIL

NOT TO SCALE TOJ ST-110



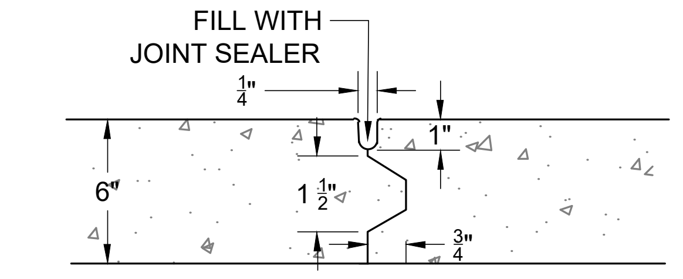
SIDEWALK SECTION

NOTE

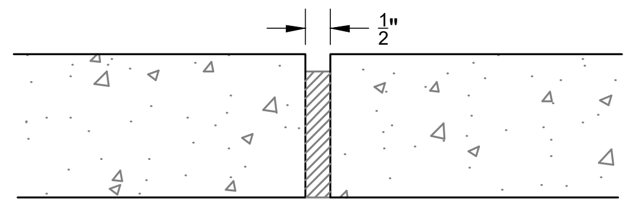
1. SIDEWALK SHALL CONFORM TO ALL APPLICABLE ADA STANDARD REQUIREMENTS SIDEWALKS SHALL CONFORM TO WPWSS SECTION 02776, EXCEPT THAT PORTLAND CEMENT CONCRETE SHALL BE FIBERMESH-REINFORCED CLASS 4000 CONCRETE CONFORMING WITH WPWSS SECTION 03304, PART 2.07.
2. EXPANSION JOINTS SHALL BE PLACED IN SIDEWALK AT THE SAME LOCATIONS AS THOSE IN CURB AND GUTTER WHEN SIDEWALK IS ADJACENT TO CURB. (PER WPWSS SECTION 03251, PART 3.04 SPACING SHALL NOT EXCEED 32'-0" ON CENTER.)
3. FOR SIDEWALKS GREATER THAN EIGHT FEET IN WIDTH, A LONGITUDINAL CONTROL JOINT SHALL BE INSTALLED AT THE CENTER OF THE WALK.
4. REMOVAL AND REPLACEMENT OF SIDEWALK SHALL TAKE PLACE IN FULL PANELS.
5. AGGREGATE BASE COURSE SHALL BE FOUR INCH MINIMUM THICKNESS, CONFORM TO WPWSS SECTION 02190, PART 2.03 GRADING H, AND BE INSTALLED PER WPWSS SECTION 02231, PART 3.03.
6. CLEAR VEGETATION AND STRIP TOPSOIL TO SUBGRADE. SCARIFY, CONDITION, AND COMPACT. PROOF ROLL IN THE PRESENCE OF THE ENGINEER
7. MATERIAL STRIPPED TO DEPTH LOWER THAN SUBGRADE SHALL BE REPLACED WITH STRUCTURAL MATERIAL TO SUBGRADE ELEVATION.
8. WHERE UNSUITABLE SUBGRADE SOIL EXISTS, OVER EXCAVATION AND REPLACEMENT WILL BE REQUIRES. GEOGRID MAY BE SUBSTITUTED FOR OVER EXCAVATION UPON APPROVAL FROM GEOTECHNICAL ENGINEER.

TYPICAL CONCRETE SIDEWALK DETAIL

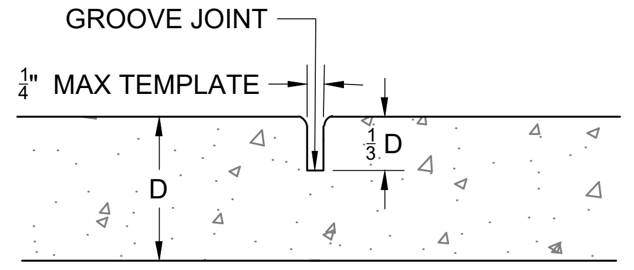
NOT TO SCALE TOJ ST-127



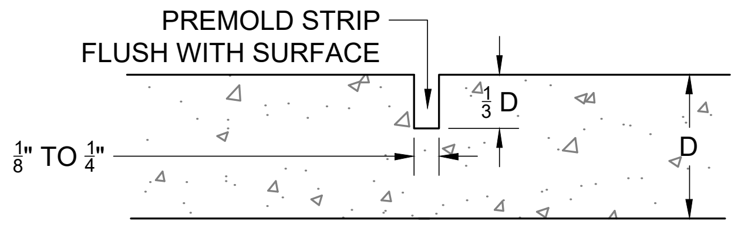
LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINT
(SEE NOTE 1)



EXPANSION JOINT
(SEE NOTE 2)



CONTRACTION JOINT
(SEE NOTE 3)



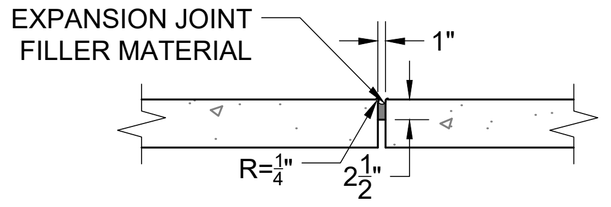
SAWED OR PREMOLDED STRIP LONGITUDINAL OR TRANSVERSE JOINT

NOTES:

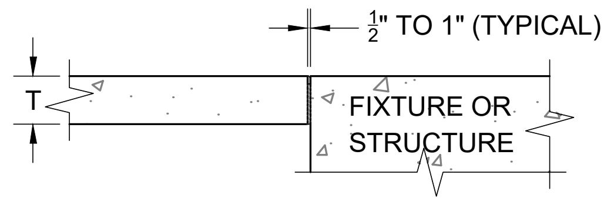
1. KEYWAY FORMED BY FASTENING METAL KEY TO FORM.
2. $\frac{1}{2}$" PREMOLDED NON-EXTRUDING EXPANSION JOINT MATERIAL TO MEET AASHTO M-59. EXPANSION MATERIAL SHALL BE INSTALLED WHEN ABUTTING EXISTING CONCRETE OR FIXED STRUCTURES SUCH AS INLETS AND DRIVEWAYS, AND EVER 300' ON LONG STRAIGHT CONCRETE STRETCHES.
3. FORM WITH TEMPLATE OR SAWCUT JOINTS. IF SAWCUT JOINTS ARE USED, THEY SHALL BEGIN AS SOON AS CONCRETE IS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT EXCESSIVE RAVELING AND BEFORE UNCONTROLLED CRACKING OCCURS. MINIMUM DISTANCE BETWEEN JOINTS IS 5'.
4. JOINT LAYOUT FOR CONCRETE STREETS IS TO BE SUBMITTED TO THE TOWN ENGINEER FOR APPROVAL.

PAVING AND CONCRETE JOINT DETAILS

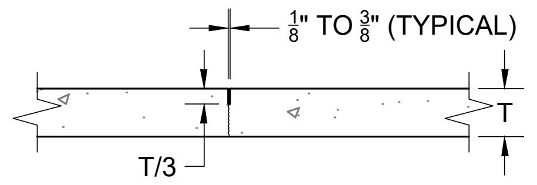
NOT TO SCALE TOJ ST-123



EXANSION JOINT



ISOLATION JOINT
UNDOWELED - LONGITUDINAL



CONTRACTION JOINT
UNDOWELED - TRANSVERSE AND
UNITED - LONGITUDINAL

NOTE

1. INSTALL ISOLATION JOINTS WHEN ABUTTING A FIXED STRUCTURE. USE EXPANSION JOINT MATERIAL EXTENDING THE FULL DEPTH AND LENGTH OF THE CONCRETE SURFACE.
2. TRANSVERSE AND LONGITUDINAL CONSTRUCTION JOINTS ARE NOT INCLUDED IN THE JOINT LAYOUT PLAN. USE TRANSVERSE AND LONGITUDINAL CONSTRUCTION JOINTS SPARINGLY. SUBMIT PLANNED CONSTRUCTION JOINT LOCATIONS TO THE CO FOR APPROVAL.
3. MAINTAIN JOINT SEALANT SHAPE FACTOR 1:1 EXCEPT WHEN SILICONE SEALANT IS USED, THE WIDTH TO DEPTH SHAPE FACTOR IS 2:1 OR AS RECOMMENDED BY SEALANT MANUFACTURER.

CONCRETE SIDEWALK JOINT DETAIL

NOT TO SCALE

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JACKSON, WYOMING

SHEET TITLE:
ROAD DETAILS 1

DRAFTED BY:	PY
REVIEWED BY:	PD
PLAN VERSION	DATE
SKETCH PLAN	11/17/2023

PROJECT NUMBER
22070

SHEET
C4.0

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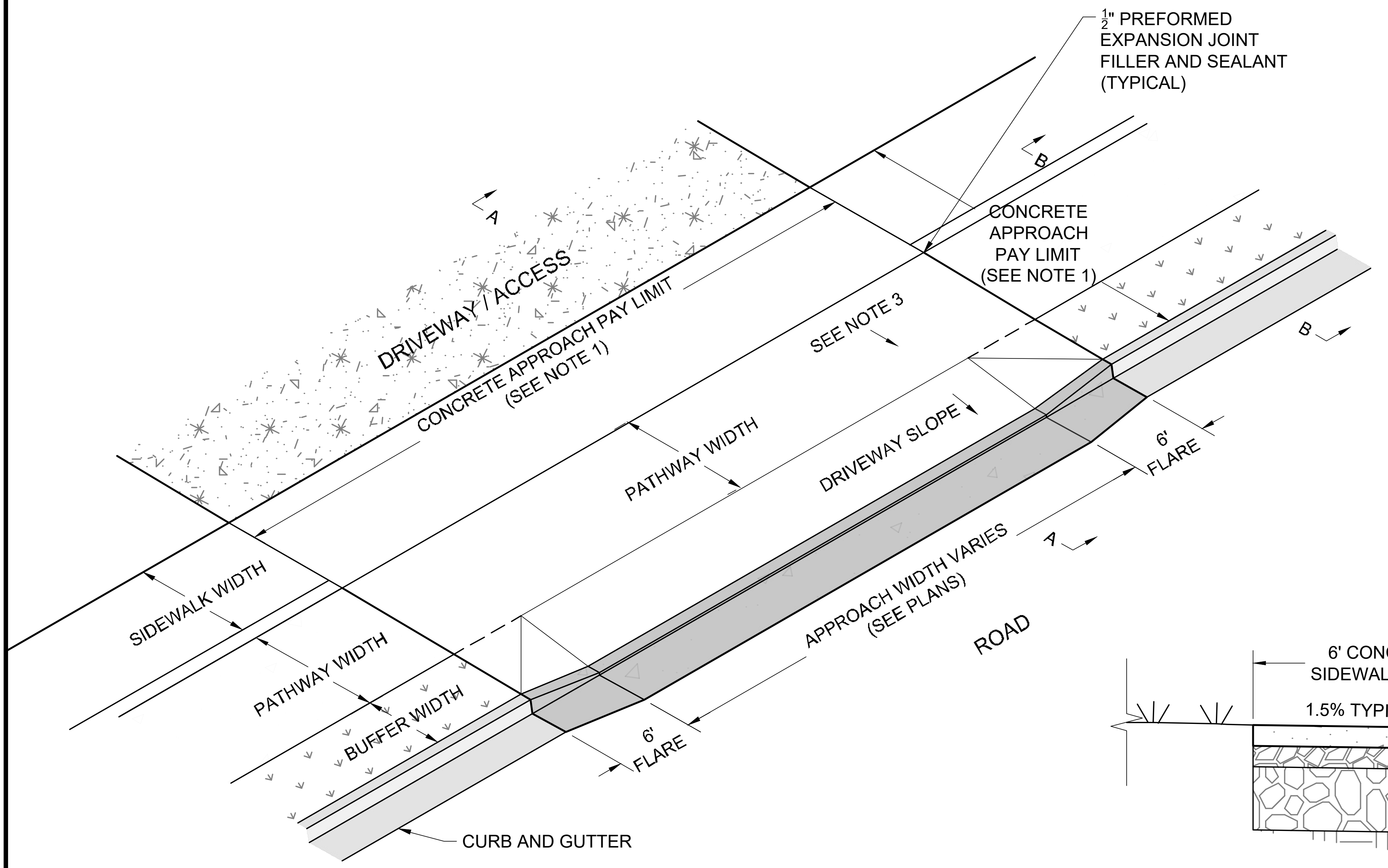
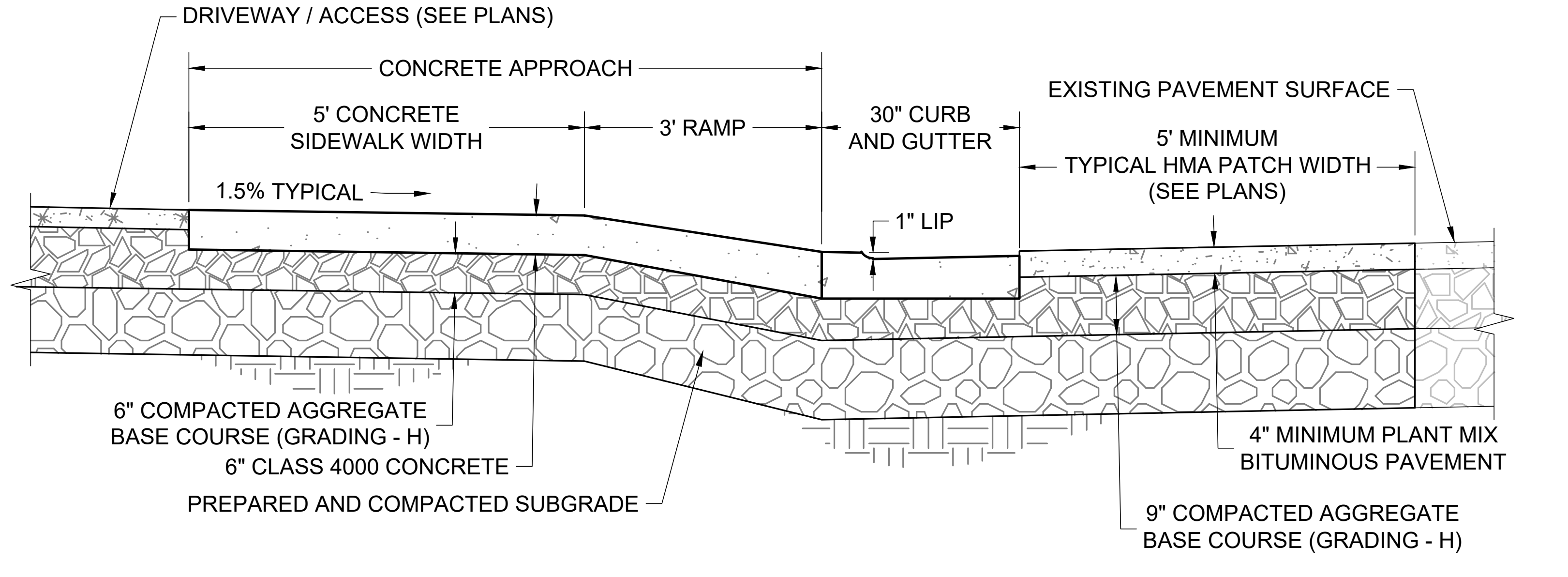


NOTE

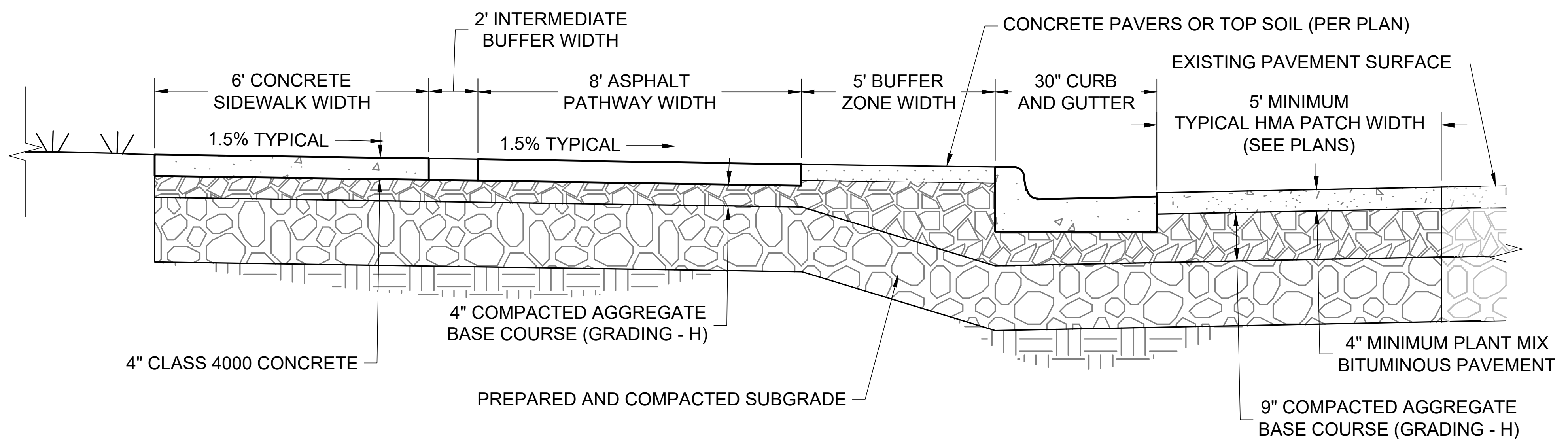
1. **DRIVEWAYS AND ALLEYWAY APPROACHES:** LABELED AREAS ARE PAY LIMITS FOR "CONCRETE APPROACH" BID ITEM. THE FLARES AND/OR RAMPS SHALL BE THE SAME THICKNESS AS THE APPROACH.
2. **RAMP SLOPE:** DO NOT EXCEED A 1C:12H RAMP SLOPE.
3. **CROSS SLOPE:** SLOPE SIDEWALK TOWARD STREET. DO NOT EXCEED 1X:50H (2%).

TYPE "A" DRIVEWAY/ACCESS APPROACH DETAIL

NOT TO SCALE TOJ ST-TBD



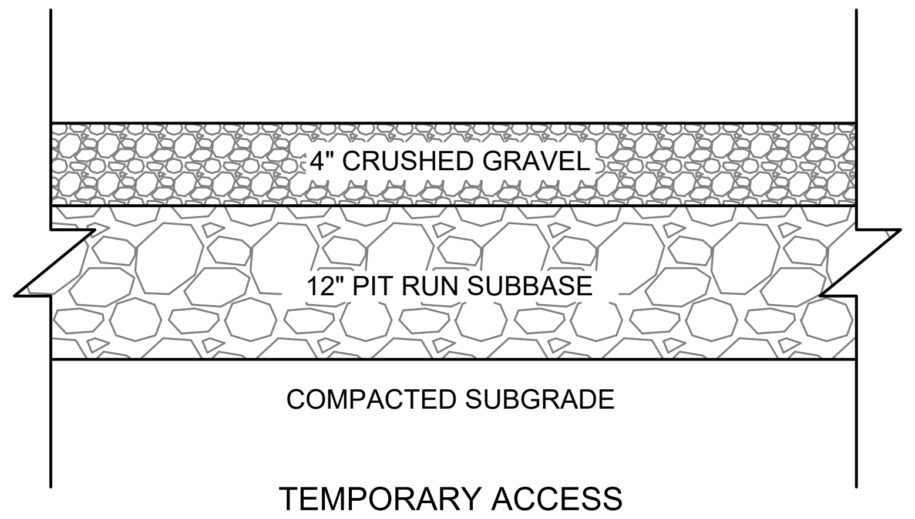
SECTION A-A
CONCRETE APPROACH



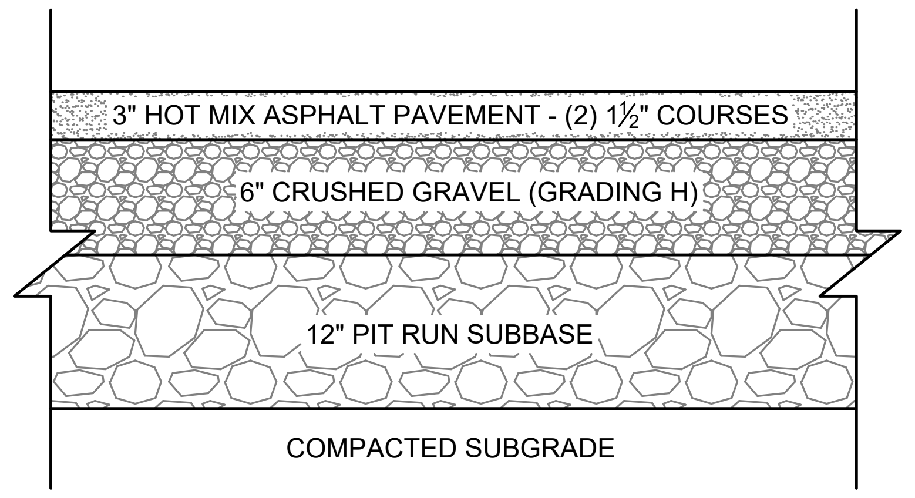
SECTION B-B
DETACHED CONCRETE SIDEWALK AND BUFFER ZONE

TYPE "A" DRIVEWAY/ACCESS APPROACH SECTIONS

NOT TO SCALE TOJ ST-TBD



TEMPORARY ACCESS
ALL-WEATHER SURFACE



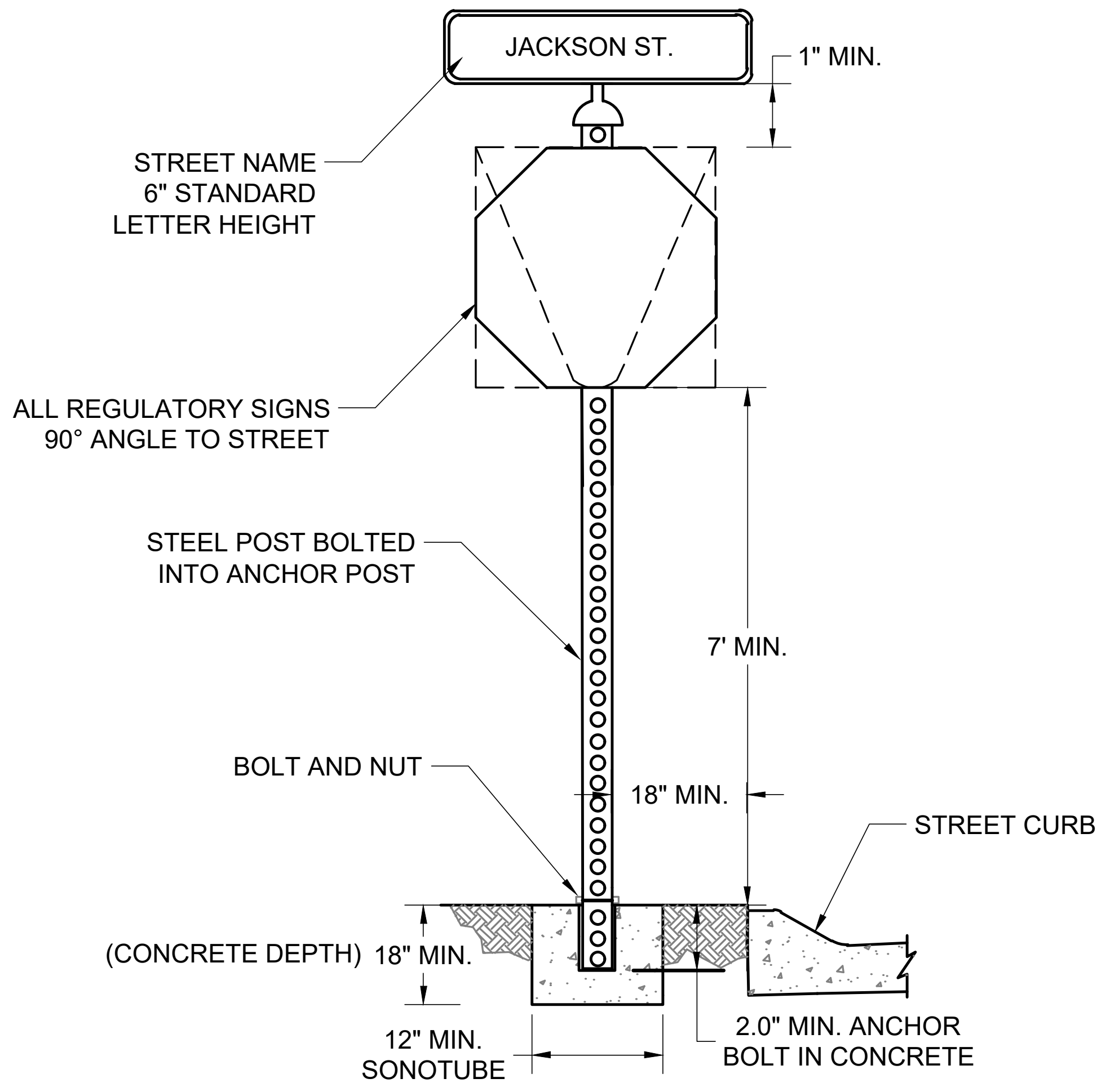
FINAL ROAD SECTION
ROAD & PARKING SURFACES

NOTES:

1. CLEAR VEGETATION AND STRIP TOPSOIL TO SUBGRADE. SCARIFY, CONDITION, AND COMPACT. PROOF ROLL IN THE PRESENCE OF THE ENGINEER.
2. MATERIAL STRIPPED TO DEPTH LOWER THAN SUBGRADE SHALL BE REPLACE WITH STRUCTURAL MATERL TO SUBGRADE ELEVATION.
3. WHERE UNSUITABLE SUBGRADE SOIL EXISTS, OVER EXCAVATION AND REPLACEMENT WILL BE REQUIRED. GEOGRID MAY BE SUBSTITUTED FOR OVER EXCAVATION UPON APPROVAL FROM GEOTECHNICAL ENGINEER.

ROAD SECTION DETAIL

NOT TO SCALE



NOTES:
1. ALL REGULATORY SIGNS SHALL BE DIAMOND GRADE .060" ALUMINUM.
2. SIZES SHALL MEET THE MIN REQUIREMENTS OF WYDOT AND MUTCD.
3. ALL OTHER SIGN FACE MATERIAL SHALL BE MIN. H.I.P. (HIGH INTENSITY PRIZMATIC) GRADE TYPES (REFLECTIVE)
4. POST SIZES & MATERIALS: POST-2" SQUARE PERFORATED STEEL POST POWDERCOATED BROWN.. ANCHOR POST-2 ¼" SQUARE SOLID STEEL ANCHOR POST. POSTS SHALL BE MIN. 12' IN HEIGHT AND SHALL BE TRIMMED OF EXCESS AFTER SIGN PLACEMENT.
5. HARDWARE-BOLTS & NUTS
6. STREET NAME SIGNS SHALL HAVE 6" WHITE LETTERING ON GREEN H.I.P. SHEETING, BE DOUBLE BLADED, AND BE NO LESS THAN 1" ABOVE STOP SIGNS AND/OR YIELD SIGNS.
7. MINIMUM EMBEDMENT OF ANCHOR POST SHALL BE 18" FROM GROUND LEVEL.
8. ALL SIGNS SHALL BE INSTALLED SUCH THAT THE FACE IS PERPENDICULAR TO THE DRIVE LANE.

SIGN DETAIL

NOT TO SCALE TOJ ST-104

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SHEET TITLE:
ROAD DETAILS 2

DRAFTED BY:	PY
REVIEWED BY:	PD
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SHEET
C4.1

Ver. 18.0 Plotted by PYantzi on Nov 16, 2023 - 4:20pm
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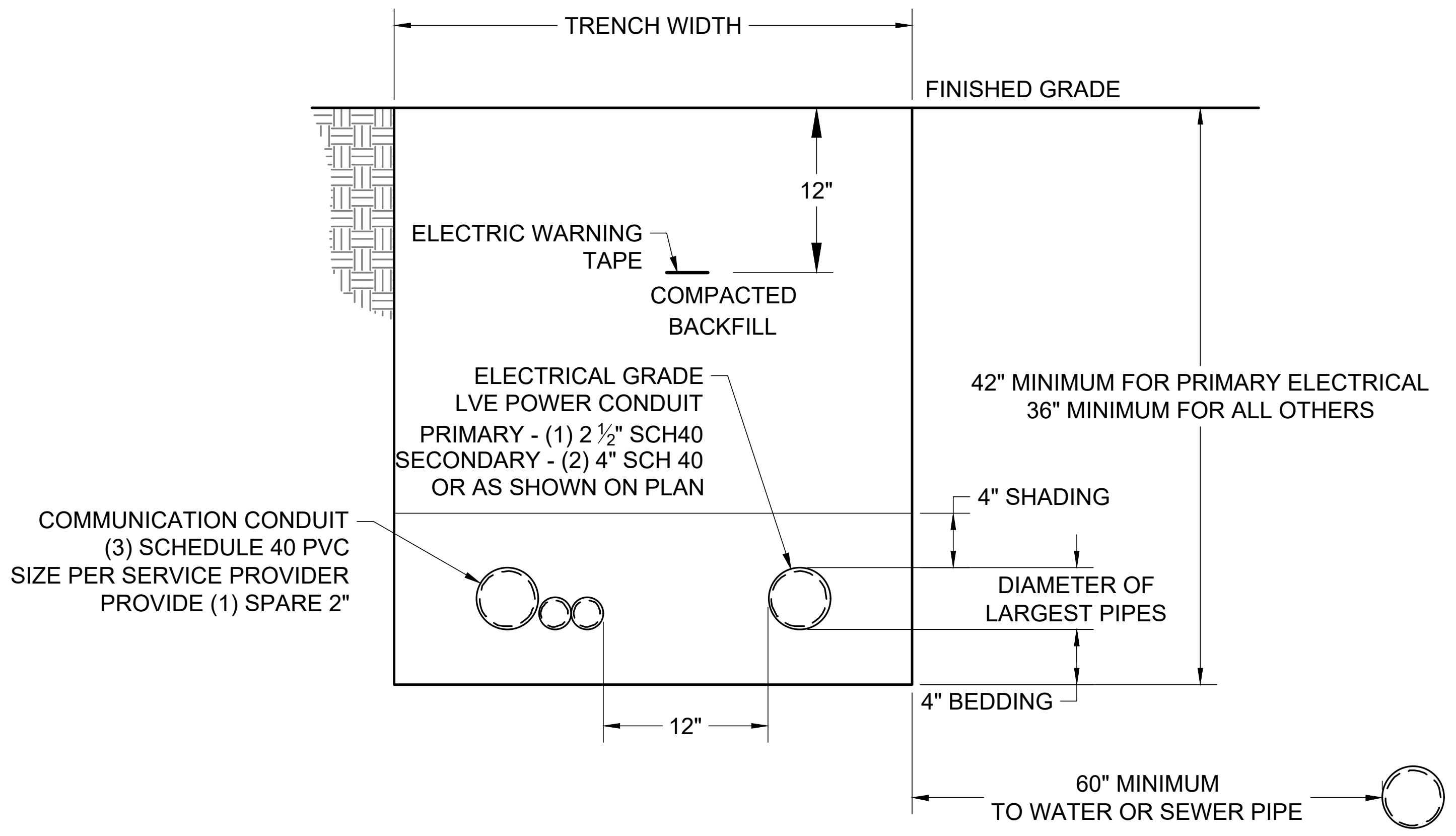
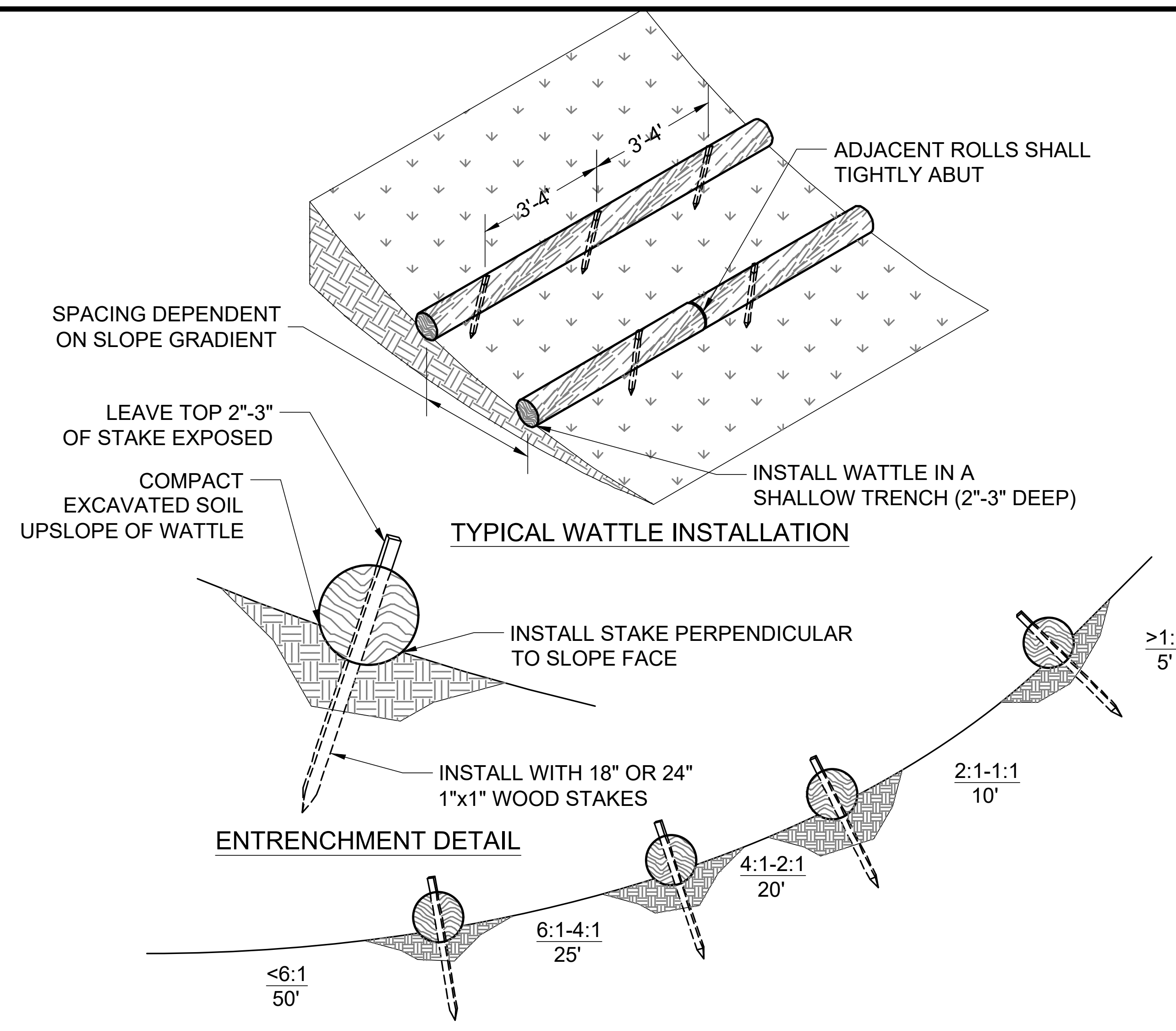


GENERAL NOTES:

1. WHEN ELECTRICAL CONDUCTORS CROSS OVER OR UNDER WATER AND/OR SEWER PIPES THERE SHALL BE A MINIMUM OF 12" VERTICAL SEPARATION. IN ADDITION, THE ELECTRICAL CONDUCTORS SHALL BE PROTECTED WITH NOT LESS THAN 48" OF SUITABLE PVC OR RIGID STEEL CONDUIT WITH NO LESS THAN 24" ON EITHER SIDE OF THE CROSSING.
2. CUSTOMER INSTALLED CONDUIT MUST BE INSPECTED PRIOR TO BACKFILLING. IF NOT INSPECTED, TRENCH MAY BE REJECTED.
3. ALL TRENCHES ARE TO BE INSPECTED PRIOR TO BACKFILLING.
4. 18" SEPARATION MUST BE OBTAINED BETWEEN HDPE GAS PIPE AND POWER CABLE OR TRENCH WILL BE REJECTED.
5. BEDDING AS SHADING MATERIAL MUST BE SMOOTH, FREE OF ROCKS, AND MUST BE ABLE TO SIFT THROUGH A $\frac{1}{4}$" SCREEN (SAND RECOMMENDED).
6. SEAL SPARE CONDUIT WITH PUSH ON CAP AND MARK. WITH 2X4 POST FROM END OF THE CONDUIT TO 3FT ABOVE GROUND. BURY 24" #5 REBAR 3" BELOW FINISHED GRADE TO MARK WOOD POST.

TYPICAL UTILITY TRENCH DETAIL

NOT TO SCALE



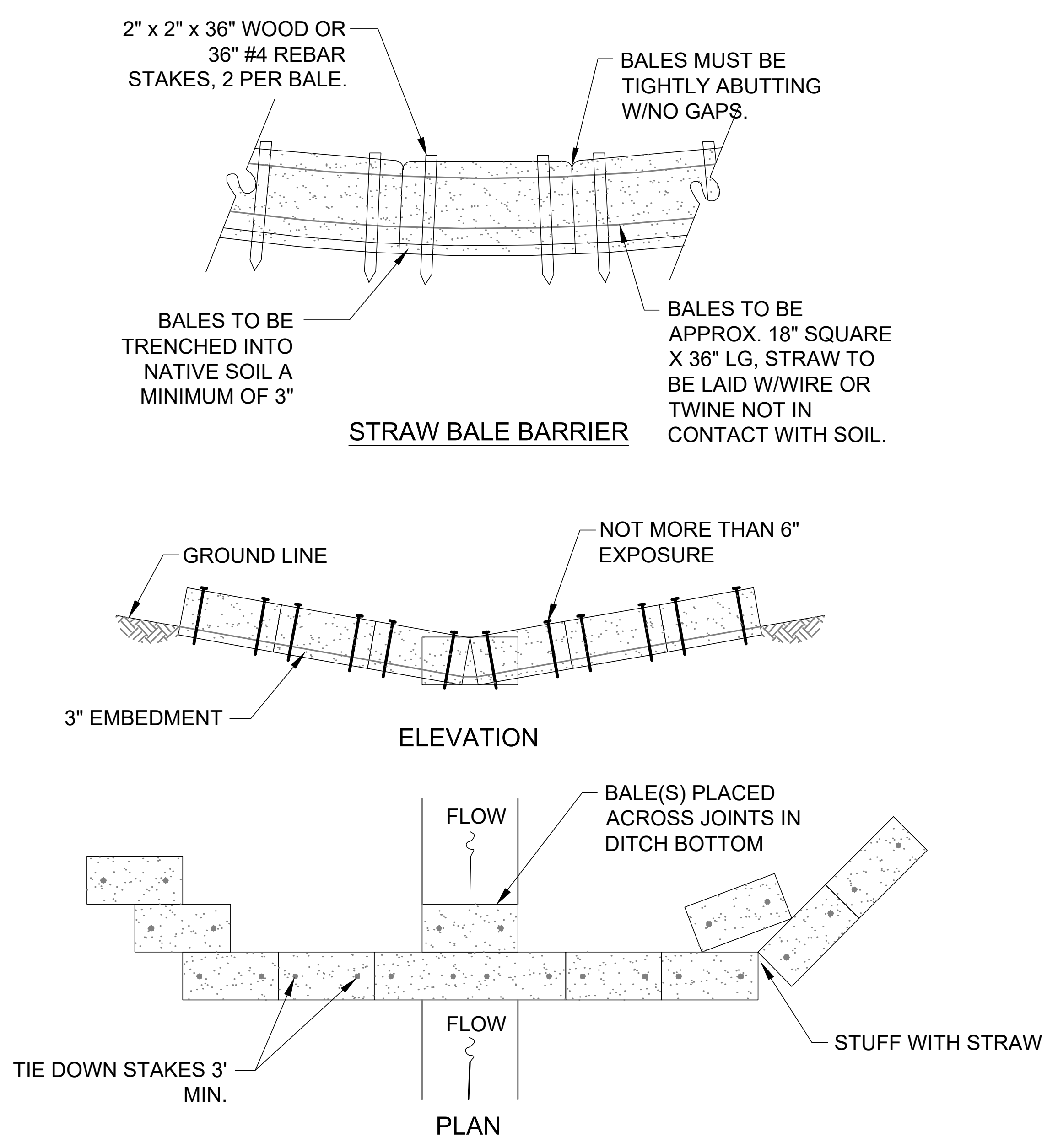
TYPICAL WATTLE SPACING BASE ON SLOPE GRADIENT

NOTE

1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2"-3" DEEP BY 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHALL BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 18"-24" STAKES EVERY 3'-4' AND WITH A STAKE ON EACH END. STAKES SHALL BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2"-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHALL BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.
4. EROSION CONTROL PLAN AND LOCATION OF STRAW WATTLES SHALL BE APPROVED BY THE TOWN OF JACKSON PUBLIC WORKS DEPARTMENT.

TYPICAL STRAW WATTLE DETAIL

NOT TO SCALE TOJ STM-107



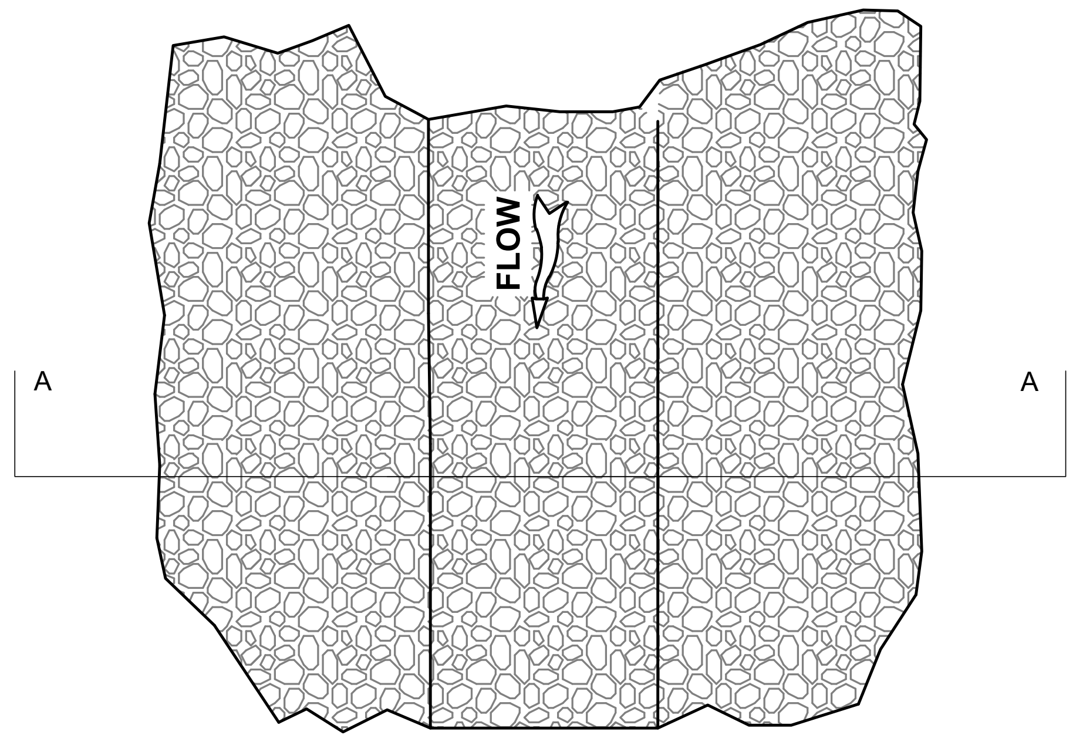
TYPICAL STRAW BALE SEDIMENT FILTER

NOTE:

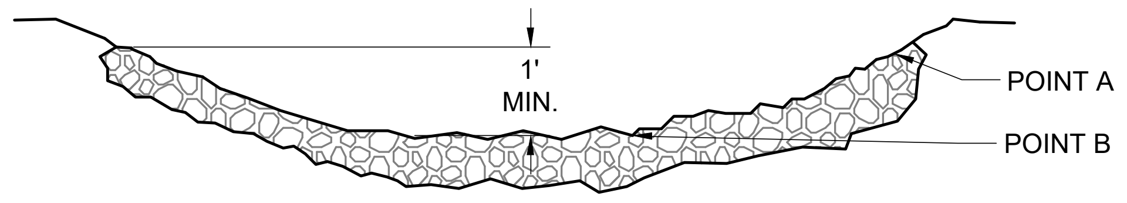
1. STRAW BALE LAYOUT MUST BE PRE-APPROVED BY THE TOWN PUBLIC WORKS DEPARTMENT.

STRAW BALE DETAIL

NOT TO SCALE TOJ STM-106



PLAN VIEW



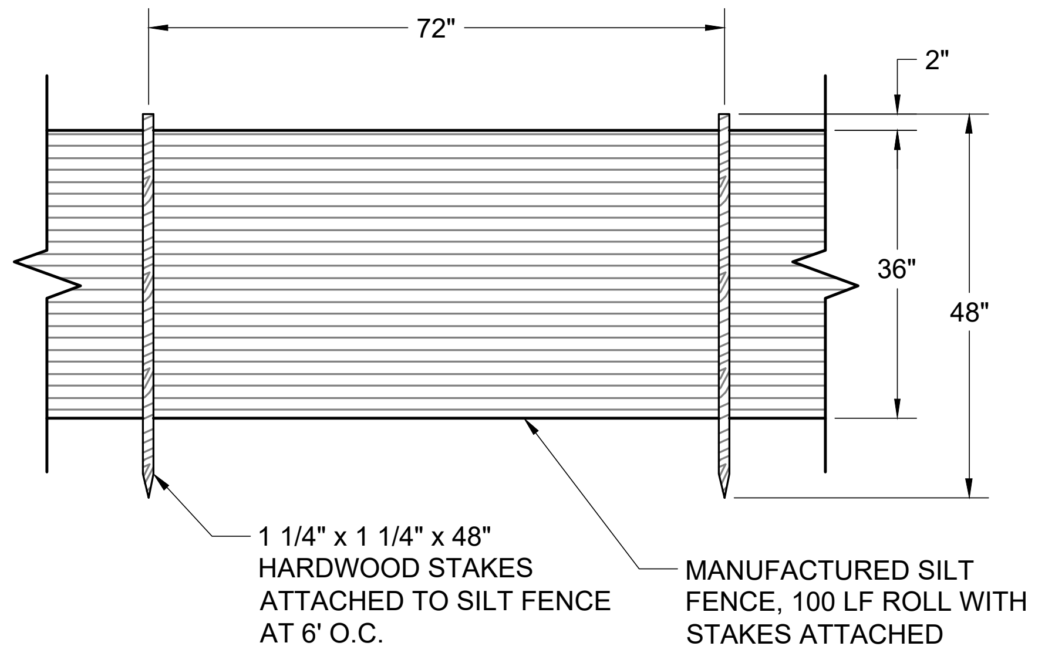
SECTION A-A

ELEVATION: POINT A SHOULD BE HIGHER THAN POINT B.

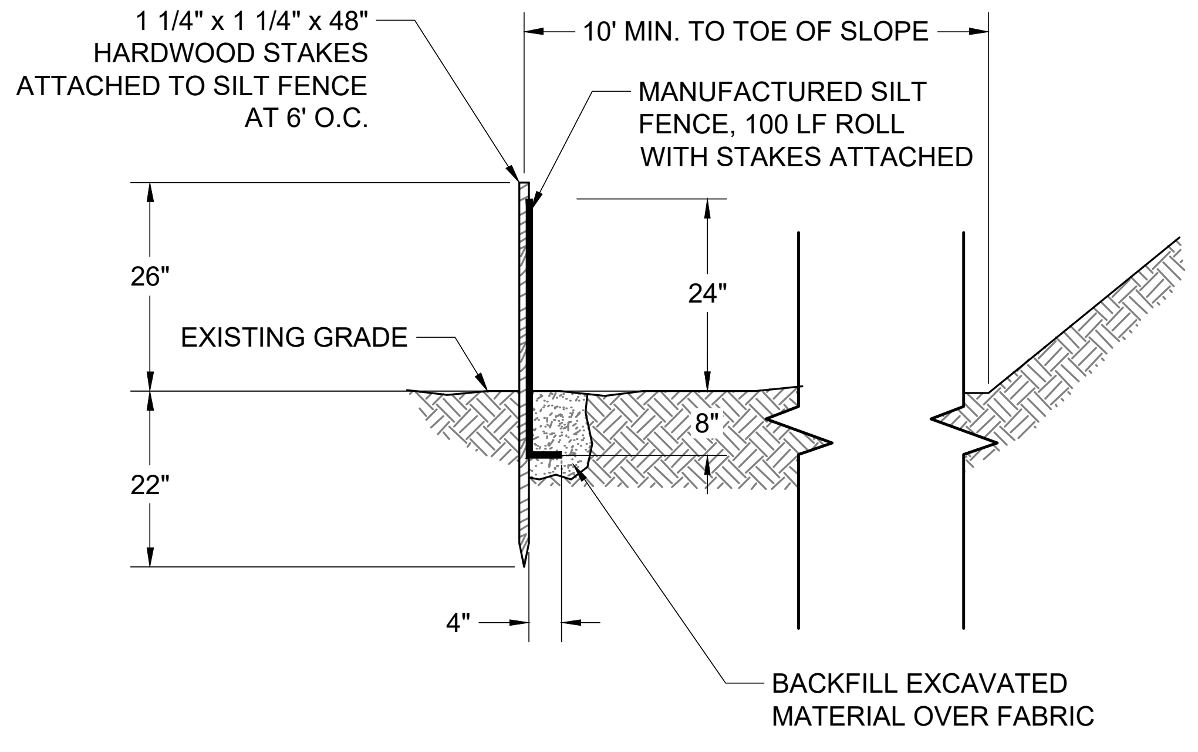
USE 6" OF 2" CRUSH TO LINE DRAINAGE DITCH

DRAINAGE DITCH DETAIL

NOT TO SCALE



FRONT VIEW



SIDE VIEW

MANUFACTURED SILT FENCE DETAIL

NOT TO SCALE

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CENTRAL WYOMING COLLEGE
SKETCH PLAN SUBMITTAL
CWC PARCEL, HIGH SCHOOL ROAD
JACKSON, WYOMING

SHEET TITLE:
GRADING DETAILS

DRAFTED BY:	PY
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PLAN VERSION	DATE
SKETCH PLAN	11/17/2023

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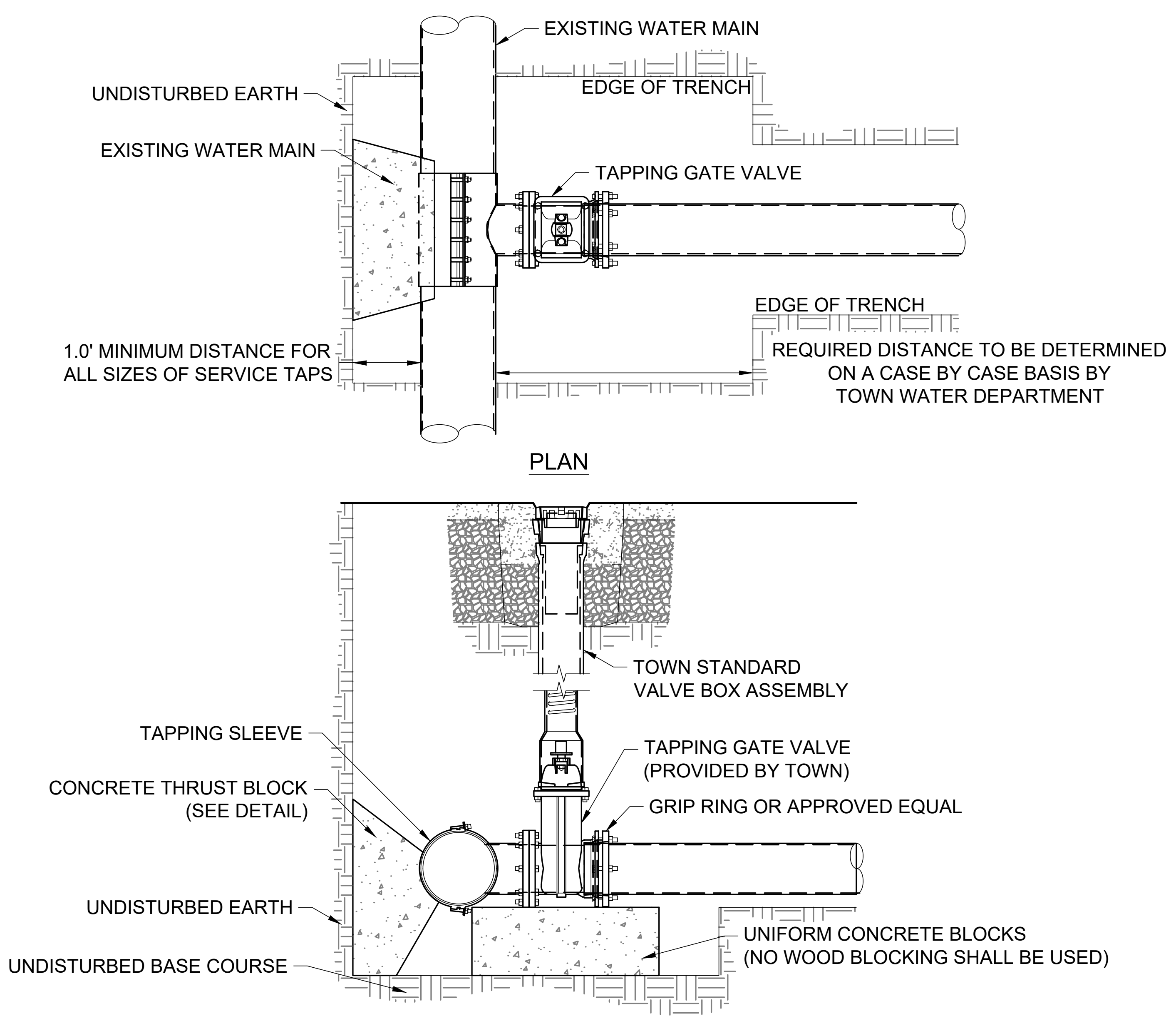


PLAN

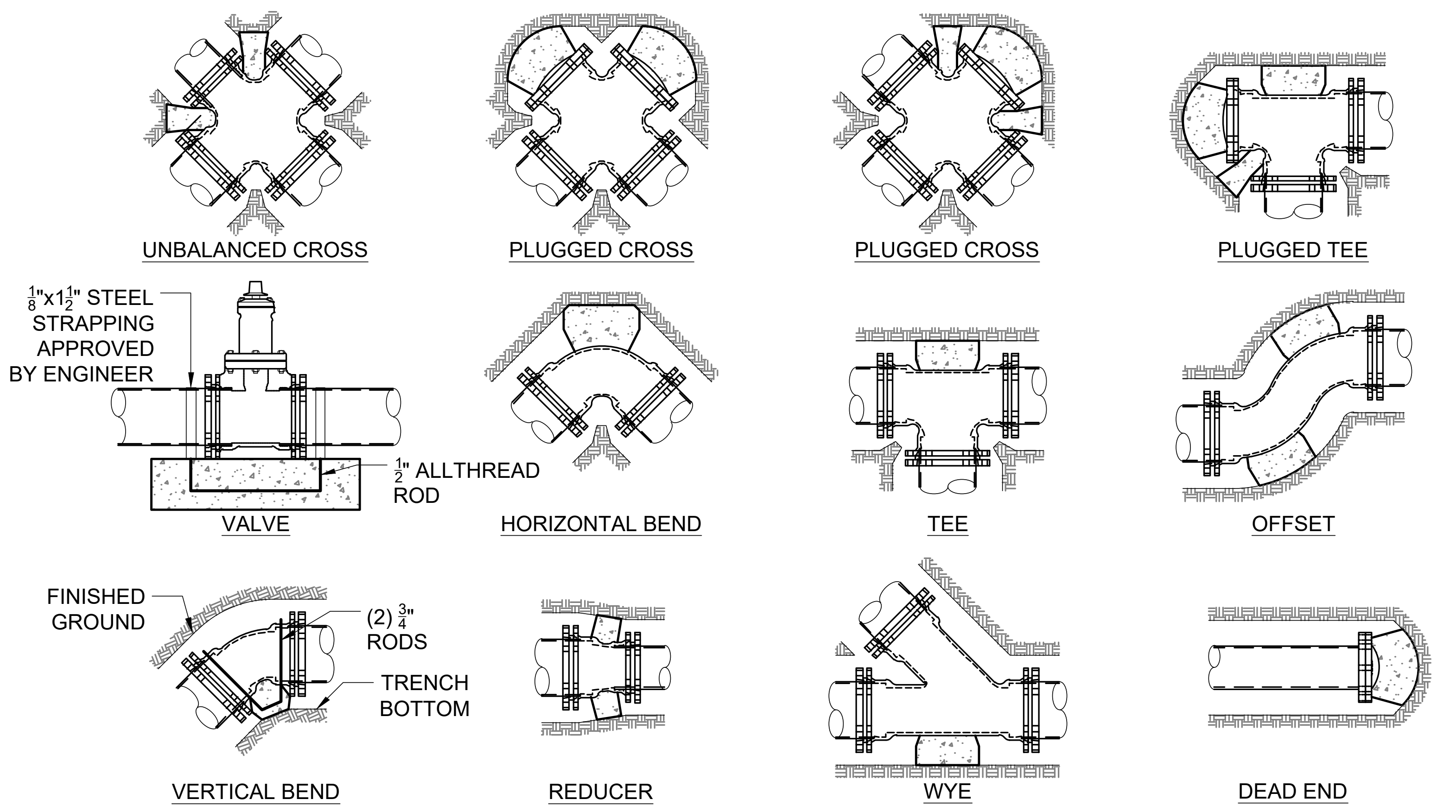
ELEVATION

NOTE

1. THE TOWN SHALL COMPLETE THE TAPPING OF THE MAIN. NO OTHER PERSONS SHALL COMPLETE TAP WITHOUT CONSENT OF THE TOWN. ALL OTHER WATER MAIN WORK SHALL BE THE RESPONSIBILITY OF THE OWNER.
2. TRENCH WILL BE EXCAVATED TO MEET ALL WYOSHA STANDARDS PRIOR TO TAPPING.
3. EXCAVATION OF TAPPING LOCATION SHALL BE APPROVED BY TOJ WATER DEPARTMENT PRIOR TO TAPPING.

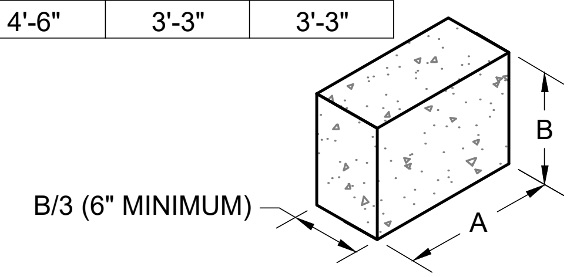
WATER MAIN TAPPING DETAIL

NOT TO SCALE TOJ W-118



MINIMUM DIMENSIONS FOR THRUST BLOCKING NOTES

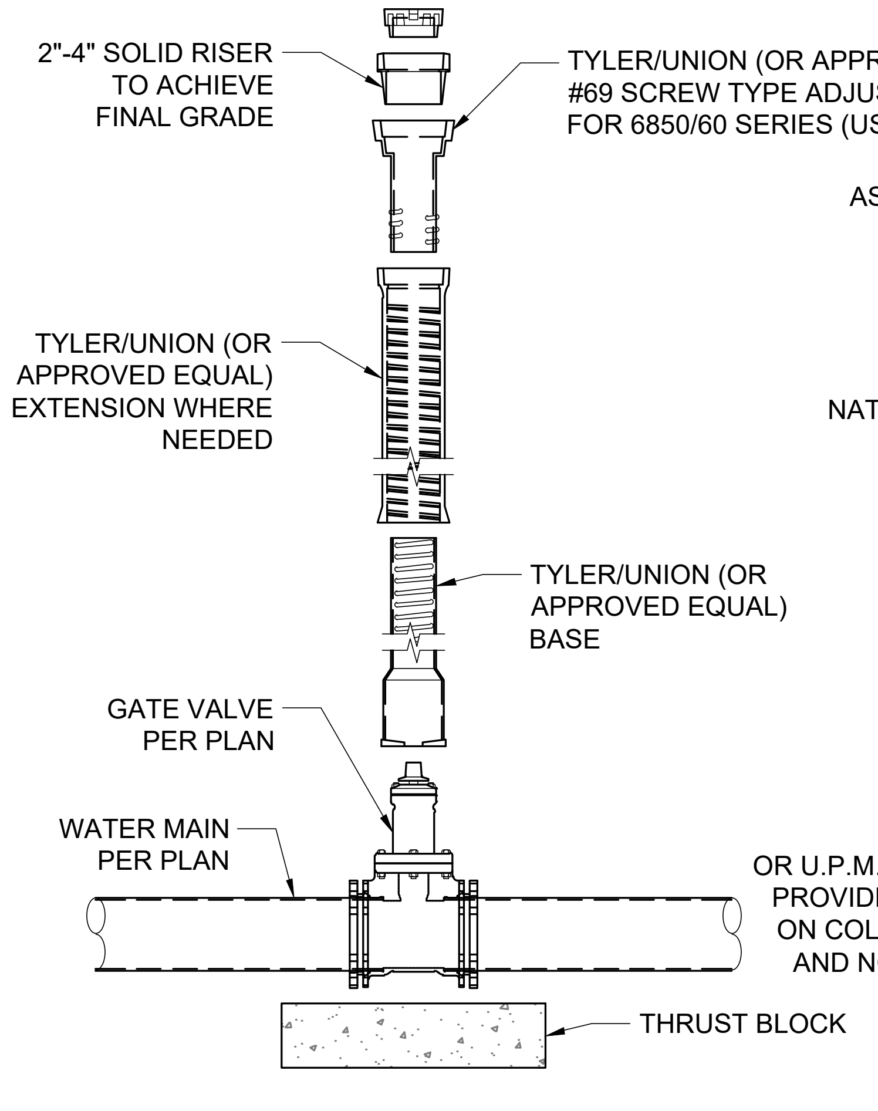
FITTING SIZE	TEES AND PLUGS		90° BENDS		45° BENDS AND WYES		REDUCERS AND 22 1/2° BENDS		11 1/2° BENDS	
	A	B	A	B	A	B	A	B	A	B
4"	1'-7"	1'-2"	1'-9"	1'-6"	1'-8"	0'-10"	1'-7"	0'-6"	0'-6"	0'-6"
6"	2'-0"	1'-11"	2'-5"	2'-2"	1'-10"	1'-7"	1'-9"	0'-10"	1'-0"	0'-6"
8"	2'-8"	2'-6"	3'-2"	3'-0"	2'-5"	2'-1"	1'-9"	1'-6"	1'-0"	1'-0"
10"	3'-4"	3'-3"	4'-0"	3'-10"	3'-0"	2'-9"	2'-2"	1'-11"	1'-6"	1'-0"
12"	4'-0"	3'-10"	4'-8"	4'-8"	3'-8"	3'-3"	2'-7"	2'-3"	2'-0"	1'-0"
14"	5'-5"	3'-10"	6'-6"	4'-11"	4'-9"	3'-5"	3'-5"	2'-5"	2'-0"	1'-6"
20"	5'-0"	5'-0"	6'-0"	6'-0"	5'-0"	4'-0"	3'-6"	3'-0"	3'-0"	2'-0"
24"	6'-0"	6'-0"	7'-0"	7'-0"	5'-0"	5'-0"	4'-6"	3'-0"	3'-0"	3'-0"
30"	7'-6"	7'-6"	8'-0"	8'-0"	6'-3"	6'-3"	4'-9"	4'-6"	3'-3"	3'-3"



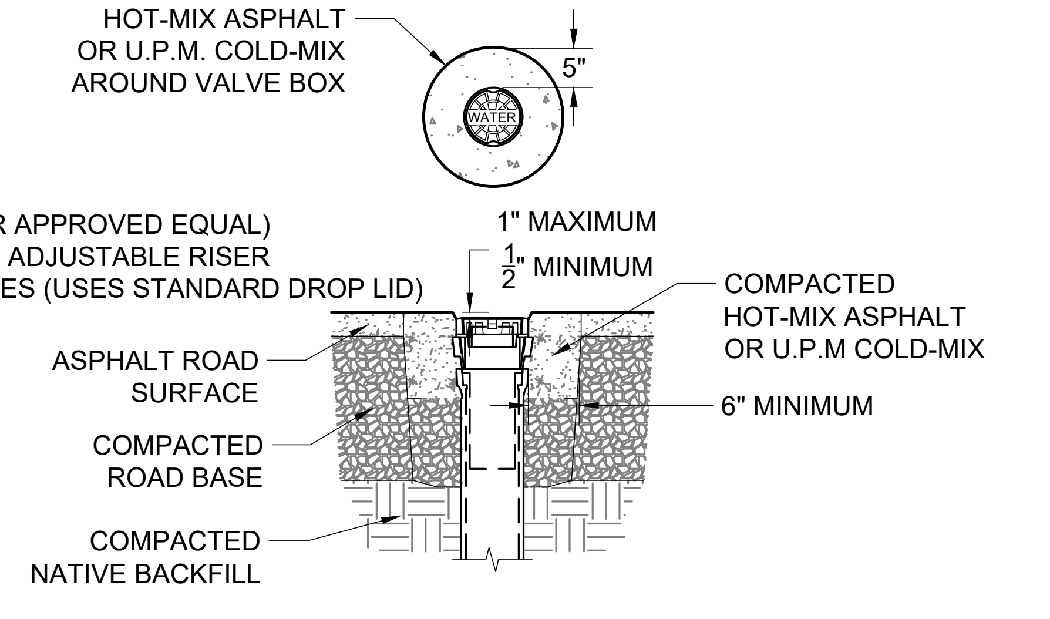
NOTE
1. SIZE BLOCKS SHALL BE A MINIMUM OF 6" THICK
2. ALL BLOCKING SHALL BEAR AGAINST UNDISTRIBUTED MATERIAL
3. DESIGN IS BASED ON 150 PSI MAIN PRESSURE AND 2000 PSF SOIL BEARING CAPACITY.
4. 4 MIL POLYETHELENE PLASTIC BOND BREAKER SHALL BE PROVIDED BETWEEN THRUST BLOCK AND WATER PIPE

THRUST BLOCK DETAIL

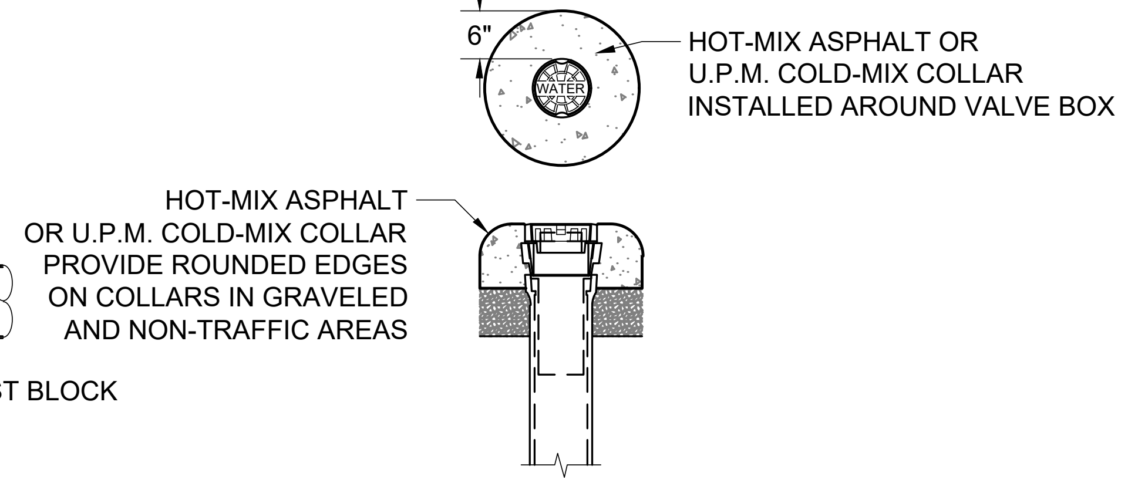
NOT TO SCALE TOJ W-111



WATER VALVE BOX



WATER VALVE COVER IN ROAD

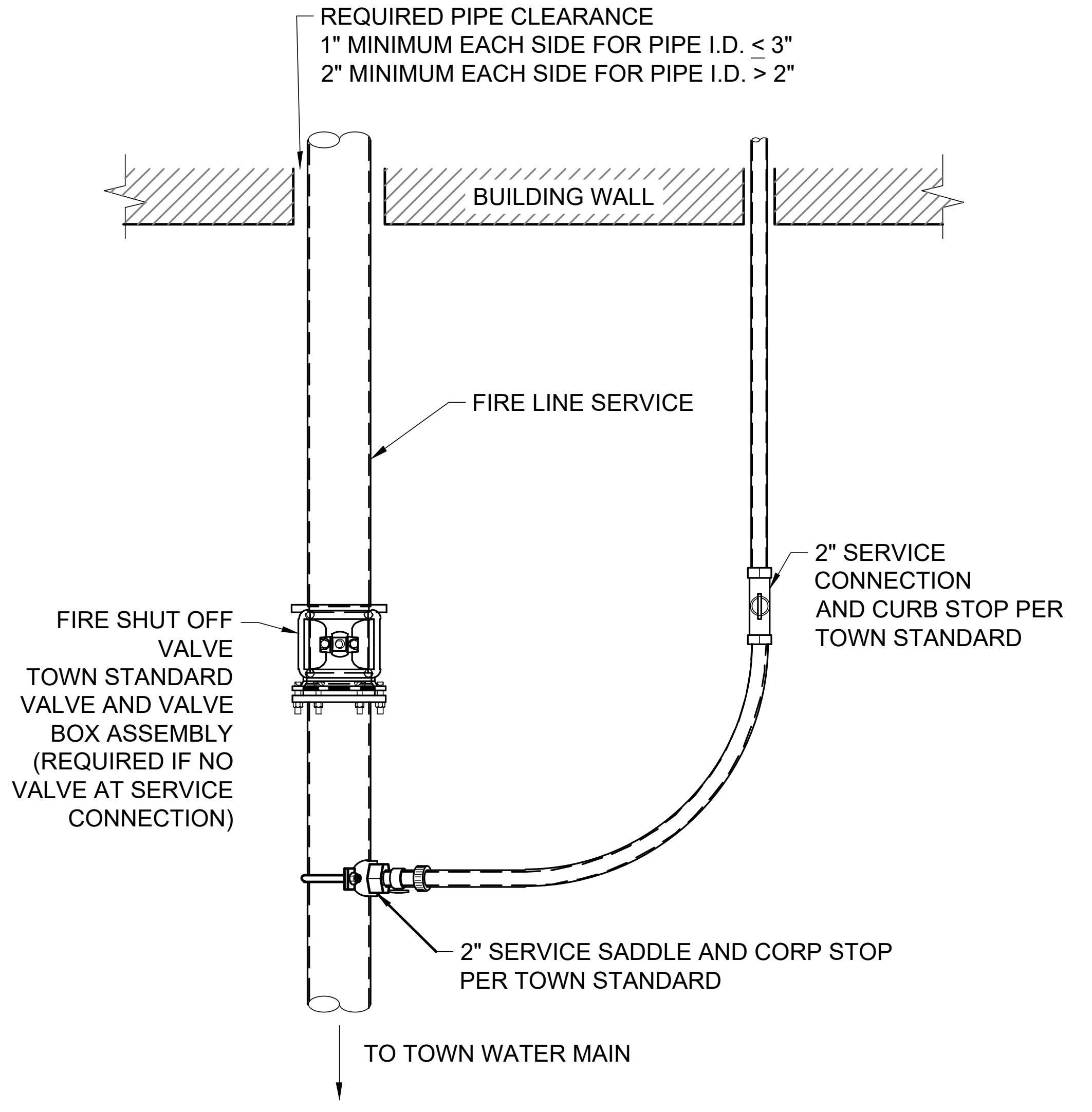


WATER VALVE COVER IN GRAVELED AND NON-TRAFFICED AREAS

NOTE
1. ADJUST WATER VALVE BOX UPWARD OR DOWNWARD AS REQUIRED. FINAL ADJUSTMENT SHALL BE MADE AFTER PAVING AND BEFORE SEAL COATING
2. THE TOWN SHALL INSPECT THE VERTICAL ALIGNMENT BEFORE AND AFTER BACKFILLING.
3. MUD PLUGS ARE REQUIRED TO BE PLACED IN ALL VALVE BOXES

WATER GATE VALVE DETAIL

NOT TO SCALE TOJ W-106

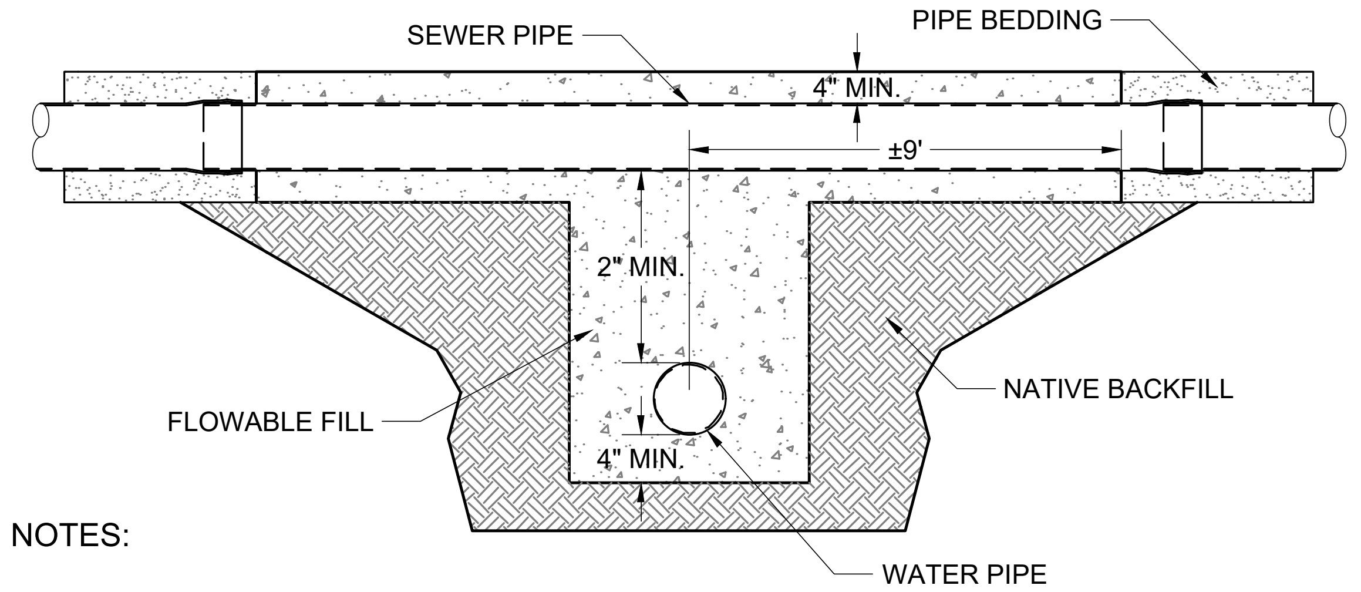


NOTE

1. FIRE SERVICE LINE ENTRY INTO BUILDING OR STRUCTURE SHALL BE SUBJECT TO REGULATIONS OF AND REVIEW BY THE TOWN OF JACKSON BUILDING DEPARTMENT AND FIRE MARSHALL.

FIRE LINE WITH 2" WATER SERVICE DETAIL

NOT TO SCALE TOJ W-110



NOTES:

PARALLEL INSTALLATION:

NORMAL CONDITIONS: SEWER MAINS AND MANHOLES SHALL BE LAID AT LEAST 10' HORIZONTALLY FROM ANY WATER MAIN WHENEVER POSSIBLE.

UNUSUAL CONDITIONS: WHEN LOCAL CONDITIONS PREVENT A HORIZONTAL SEPARATION OF 10 FEET, A SEWER MAIN MAY BE LAID CLOSER TO A WATER MAIN, PROVIDED THAT:

1. THE TOP OF THE SEWER MAIN IS AT LEAST 18" BELOW THE BOTTOM OF THE WATER MAIN;
2. WHERE 18" VERTICAL SEPARATION AS NOTED CANNOT BE OBTAINED, THE SEWER MAIN SHALL BE:
   - 2.1. CONSTRUCTED OF MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION, AND TESTED TO ASSURE WATERTIGHTNESS BY SEWER LINE METHODS, OR;
   - 2.2. PLACED IN A SEPARATE CASING PIPE, OR;
   - 2.3. THE PIPE ENCASED IN CEMENT TREATED FILL (FLOW FILL).

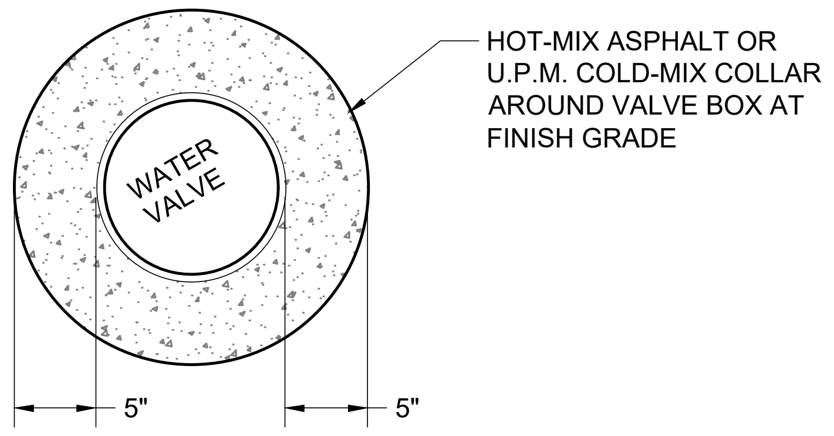
CROSSING:

NORMAL CONDITIONS: SEWERS CROSSING WATER MAINS SHALL BE LAID BELOW THE WATER MAINS TO PROVIDE A VERTICAL SEPARATION OF AT LEAST 18" WHENEVER POSSIBLE. THE DISTANCE SHALL BE MEASURED BETWEEN THE BOTTOM OF THE WATER MAIN AND THE TOP OF THE SEWER.

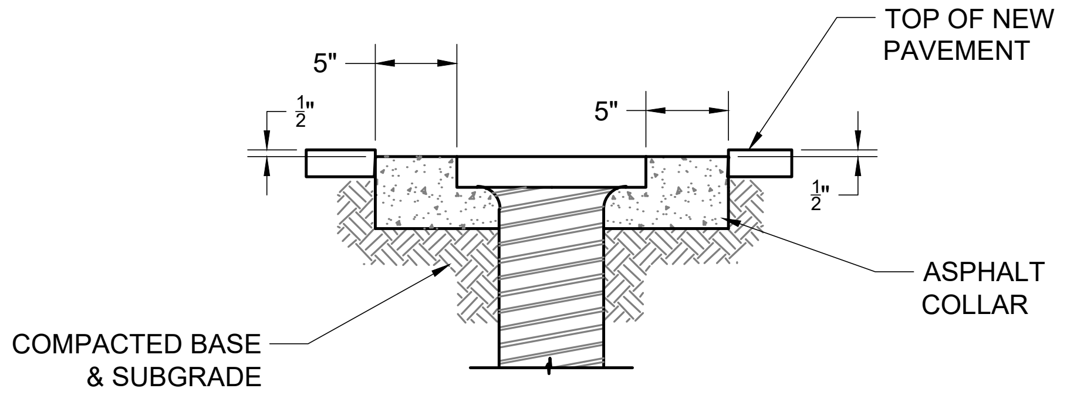
UNUSUAL CONDITIONS: WHEN LOCAL CONDITIONS PREVENT A VERTICAL SEPARATION OF AT LEAST 18" AS NOTED ABOVE, THE FOLLOWING CONSTRUCTION SHALL BE USED:
1. THE SANITARY SEWER, STORM SEWER OR WATER MAIN SHALL BE PLACED IN A SEPARATE CASING PIPE EXTENDING A MINIMUM OF 9' EACH SIDE OF THE CROSSING; OR
2. THE SEWER LINE SHALL BE CONSTRUCTED OF MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION AND TESTED TO ASSURE WATER TIGHTNESS BY SEWER LINE METHODS, AND SHALL EXTEND A MINIMUM OF 9' EACH SIDE OF THE CROSSING.
3. WATER MAINS PASSING UNDER A SEWER LINE SHALL, IN ADDITION TO THE ABOVE REQUIREMENTS, BE PROTECTED BY PROVIDING ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER LINE. SOIL STRUCTURAL SUPPORT SHALL CONSIST OF CEMENT TREATED BACKFILL (FLOW FILL).

WATER / SEWER CROSSING

NOT TO SCALE



WATER VALVE COVER



WATER VALVE ADJUSTMENT

NOTES:
1. ADJUST WATER VALVES UPWARD OR DOWNWARD AS REQUIRED. FINAL ADJUSTMENT SHALL BE MADE AFTER PAVING AND BEFORE SEAL COATING. NO PAYMENT SHALL BE MADE FOR ADJUSTMENT OF NEW VALVES TO FINAL GRADE.

WATER VALVE ADJUSTMENT DETAIL

NOT TO SCALE

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SKETCH PLAN SUBMITTAL
CWC PARCEL, HIGH SCHOOL ROAD
JACKSON, WYOMING

SHEET TITLE:
WATER DETAILS

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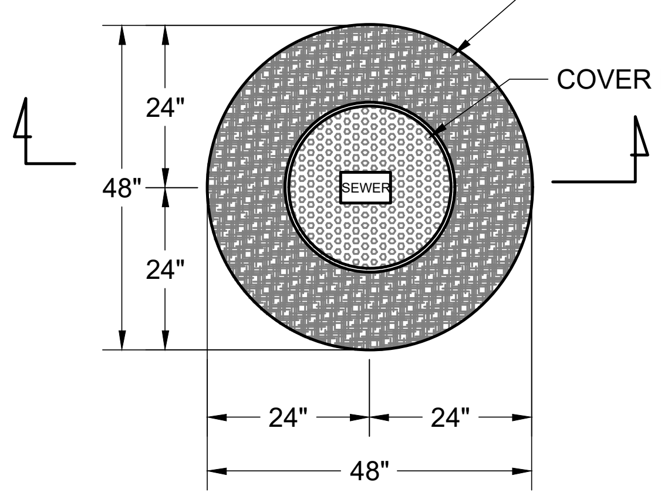
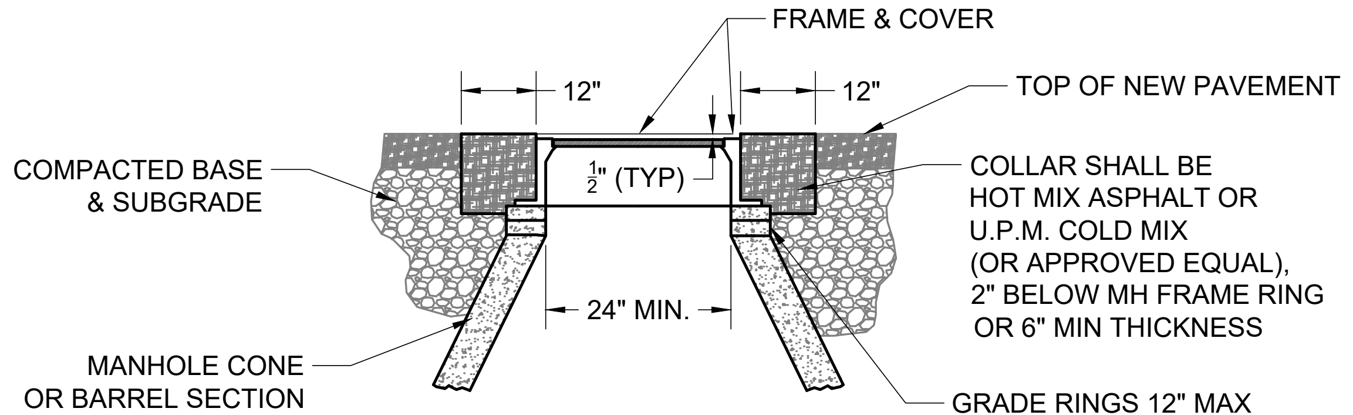


COVER AND COLLAR PLAN



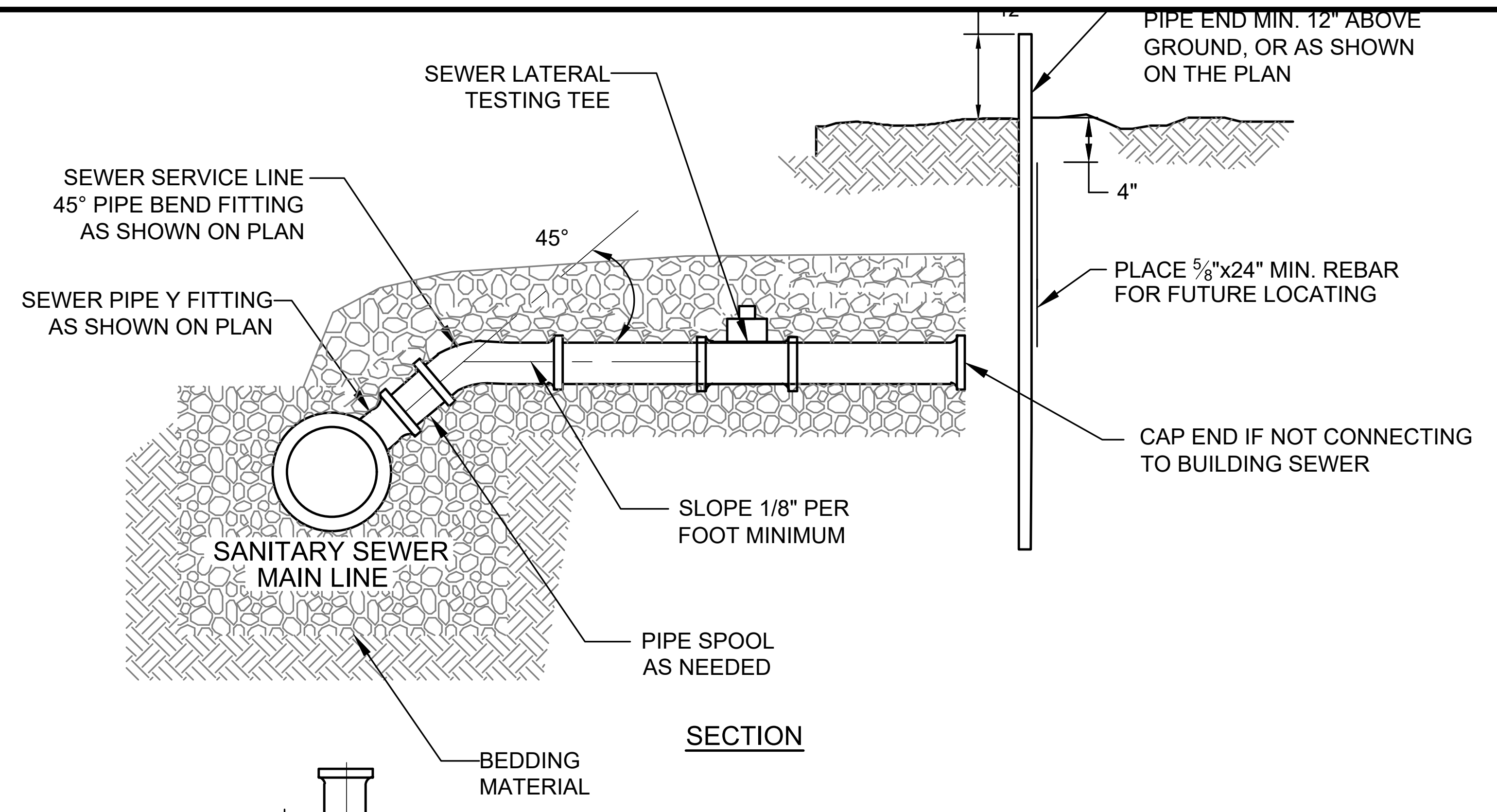
ADJUSTMENT DETAIL

NOTES:

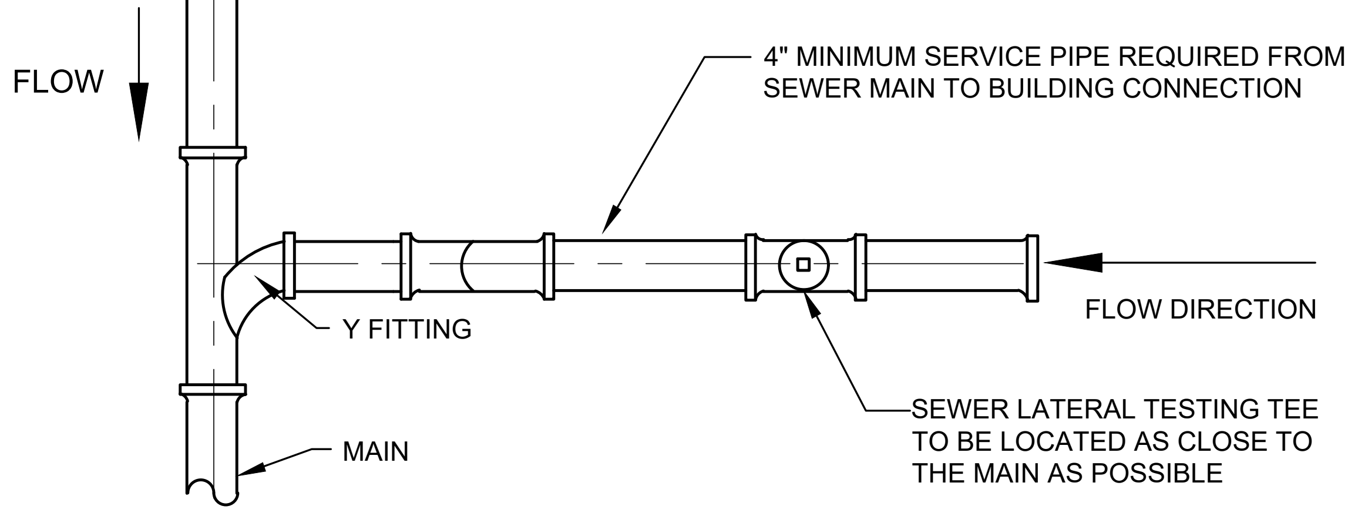
1. ADJUST MANHOLE UPWARD WITH ADJUSTING RINGS UNDER FRAME. ADJUST MANHOLE DOWNWARD BY REMOVING A PORTION OF THE MANHOLE RISER AND REBUILDING TO PROPER HEIGHT. SLOPE MANHOLE RING AS REQUIRED TO MATCH STREET GRADE AND CROSS SLOPE. MAKE FINAL MANHOLE ADJUSTMENT AFTER PAVING AND BEFORE SEAL COATING.
2. IF MANHOLE IS WITHIN UNPAVED AREA USE TAPERED COLLAR. SEE TOWN SANITARY SEWER DETAIL SS-110.

MANHOLE ADJUSTMENT & COLLAR FOR ASPHALT

NOT TO SCALE TOJ SS-109



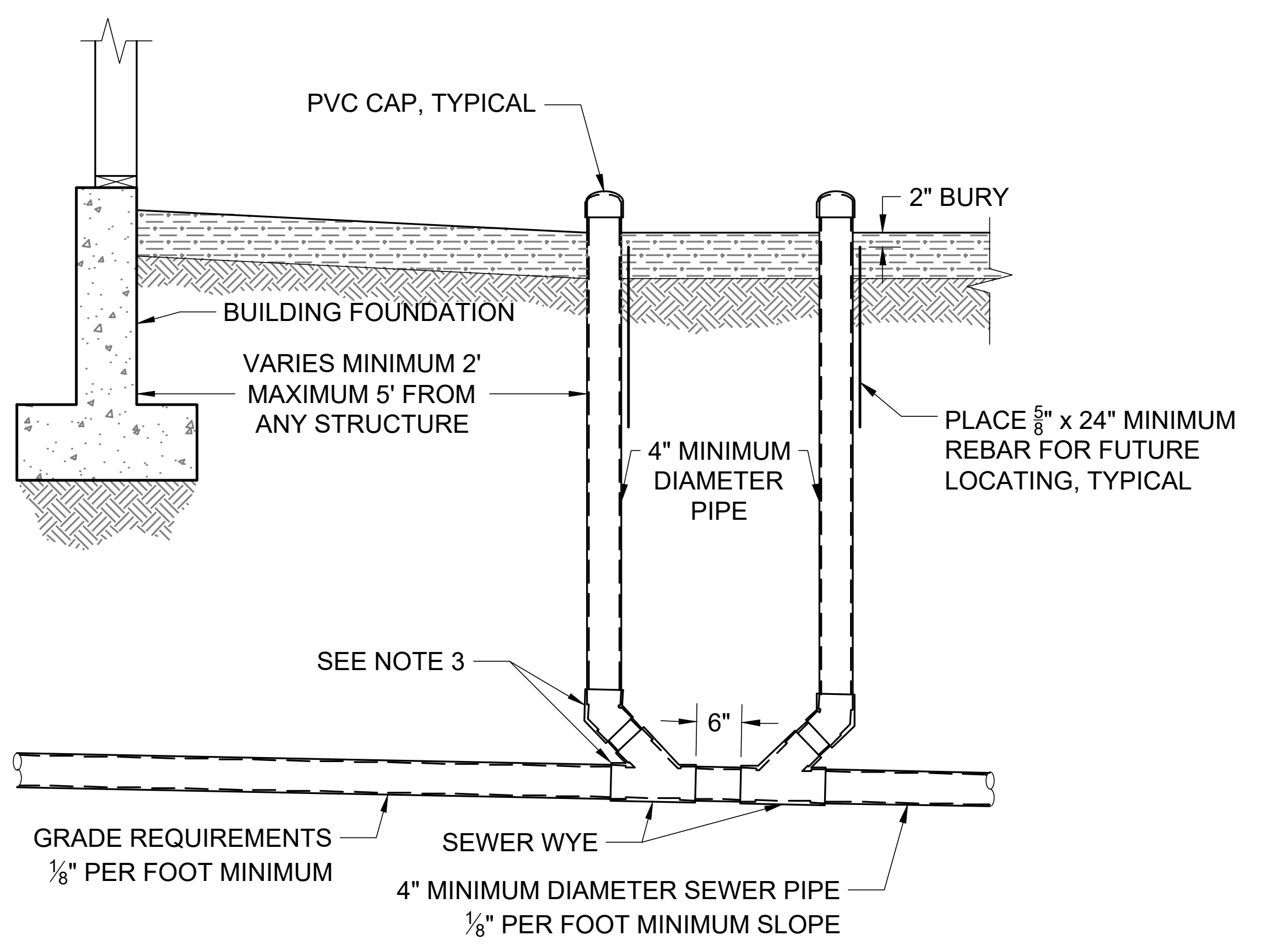
SECTION



PLAN VIEW

NOTES:

1. NEW SERVICE CONNECTIONS TO EXISTING SANITARY SEWER MAINS SHALL BE COMPLETED BY TOWN OF JACKSON. THE PRIVATE PARTY BEING SERVED BY THE NEW CONNECTION SHALL BE RESPONSIBLE FOR CARRYING OUT BACKFILL OPERATIONS.
2. BACKFILL OPERATIONS AT NEW SERVICES CONNECTED TO EXISTING SANITARY SEWER MAINS SHALL BE COMPACTED PER TOWN STANDARDS.
3. CLEANOUT TO BE PROVIDED ADJACENT TO BUILDING AND EVERY 100' INTERVAL.



NOTES:

1. PRIOR TO BACKFILLING THE TOWN PUBLIC WORKS DEPARTMENT MUST INSPECT ALL PIPE, FITTINGS, COUPLINGS, GRADE AND COMPLETE LEAK TESTING.
2. INSTALL AND COMPACT ALL BACKFILL MATERIAL PER TOWN PUBLIC WORKS DEPARTMENT STANDARD SPECIFICATIONS AND AS SHOWN WITHIN THE TRENCH DETAIL.
3. ALL PVC FITTINGS SHALL MEET ASTM D3034 SPECIFICATIONS, AND SHALL ALSO MEET ASTM D312 SPECIFICATIONS FOR RUBBER GASKETED BELL AND SPIGOT TYPE WITH INTEGRAL BELL.

BUILDING CLEANOUT DETAIL

NOT TO SCALE

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JACKSON, WYOMING

SHEET TITLE:
SEWER DETAILS

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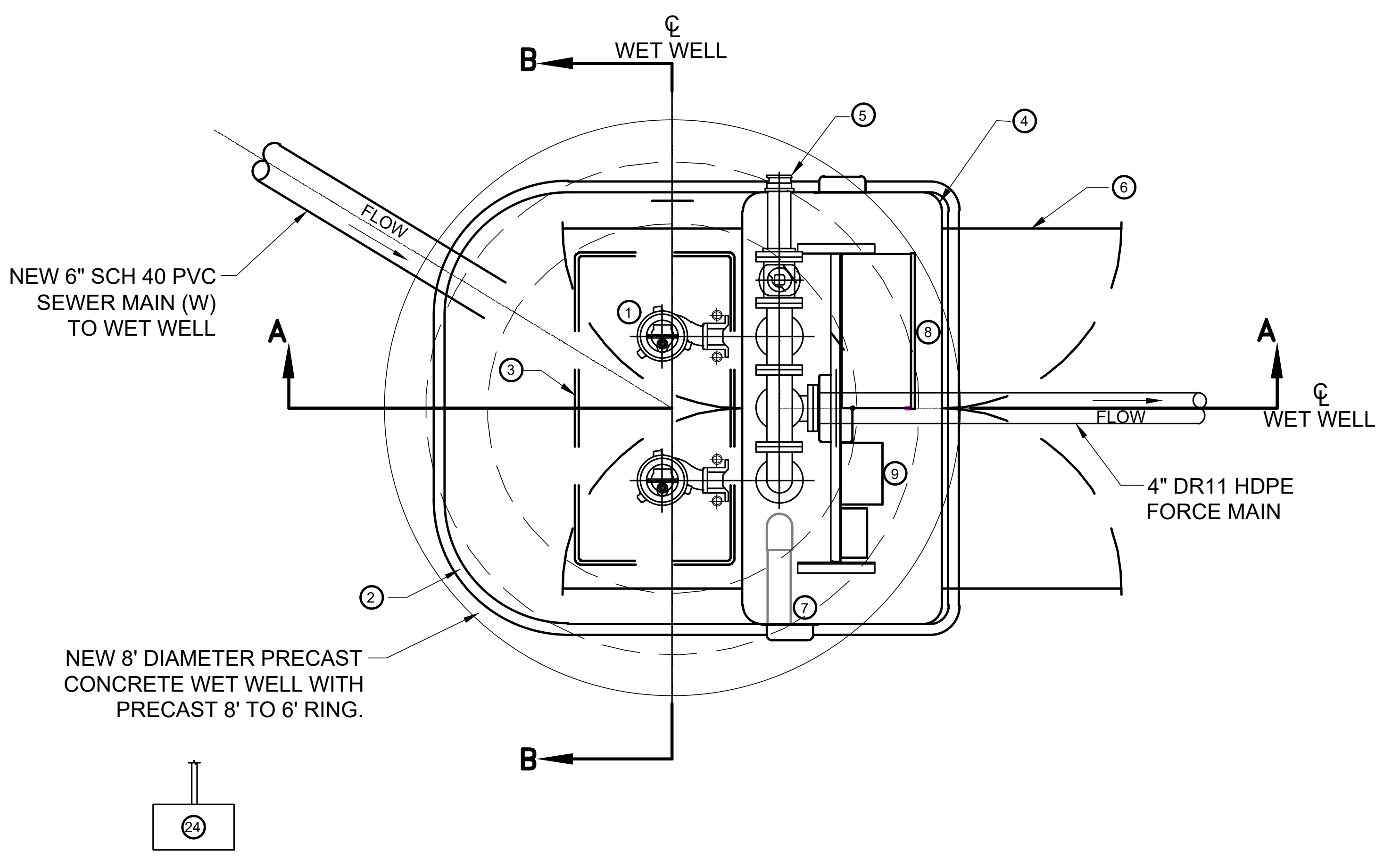
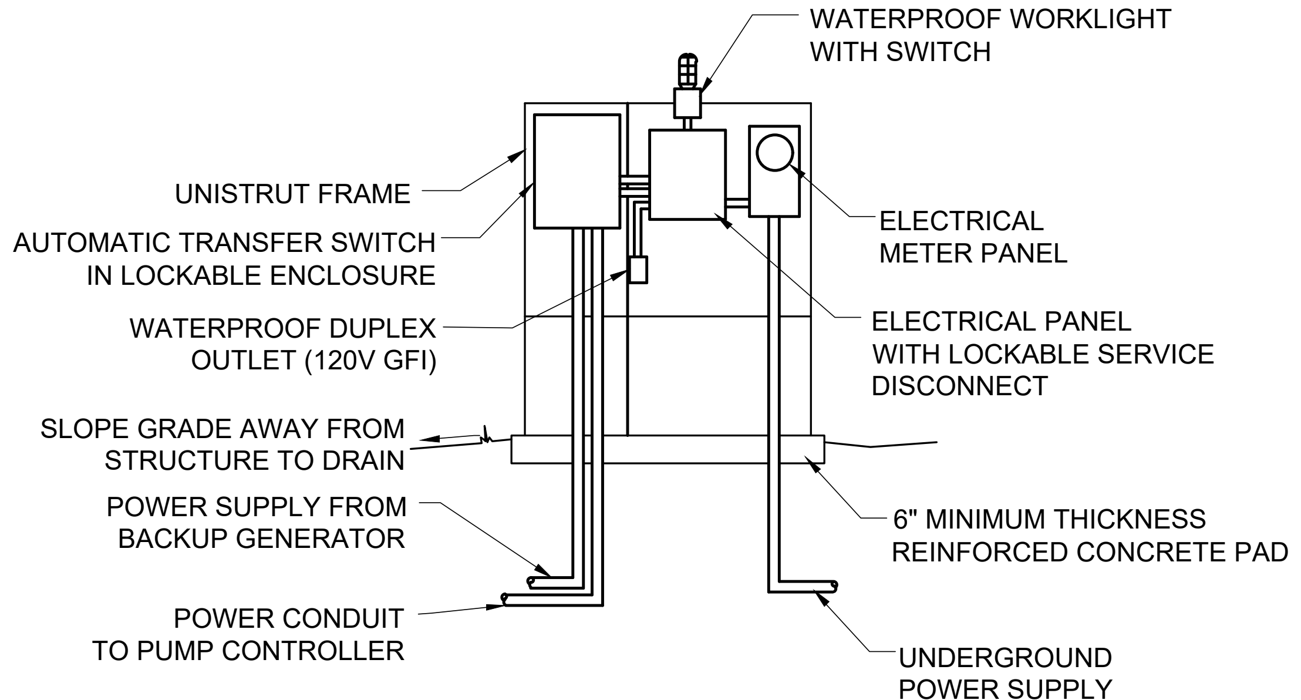
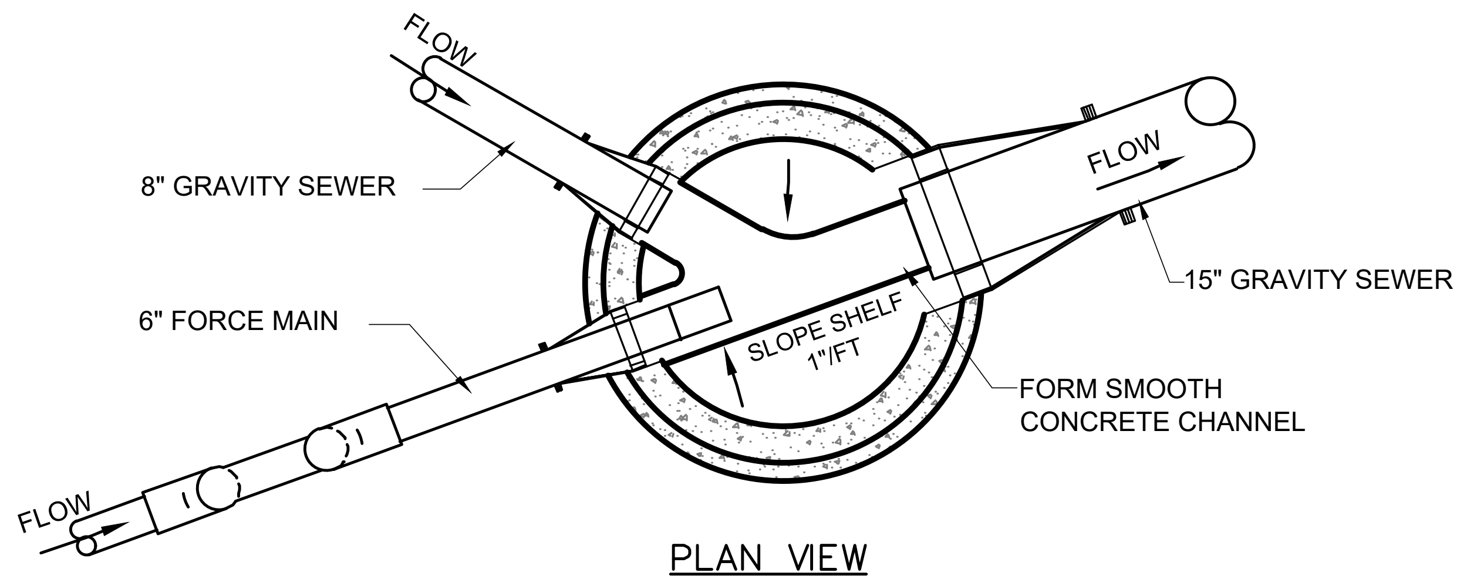


=PLAN VIEW=
WET WELL & PUMP STATION
NO SCALE

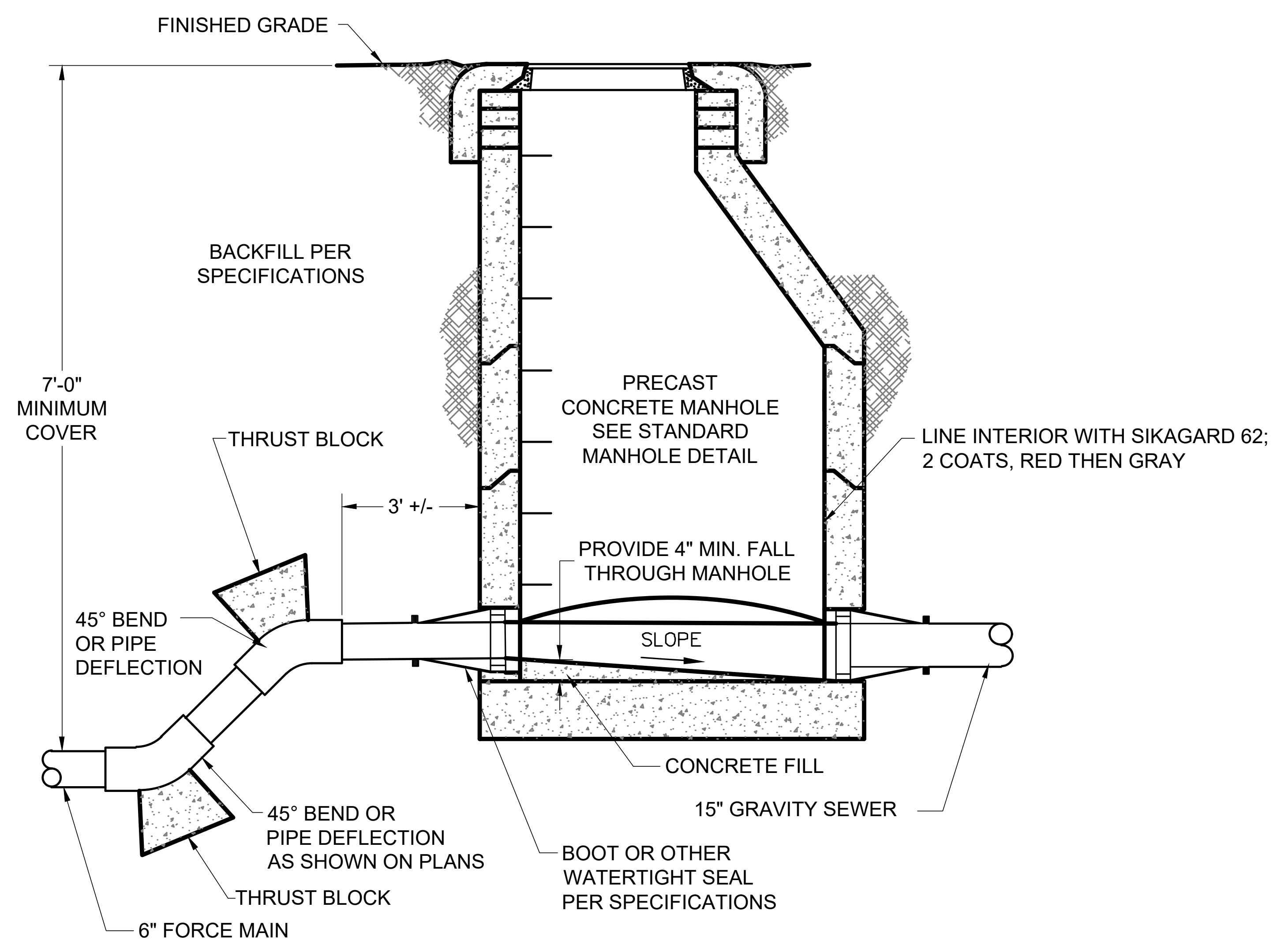


NOTES:
1. ELECTRICAL AND CONTROL PANELS TO BE LOCATED ON A UNISTRUT FRAME.
2. ELECTRICAL DESIGN AND CONSTRUCTION SHALL CONFORM TO NEC.
3. ALL ELECTRICAL PANELS SHALL BE LOCKABLE AND SUITABLE FOR OUTDOOR INSTALLATION.
5. ALL CONDUIT ABOVE GROUND TO BE SCH 40 GALVANIZED STEEL.

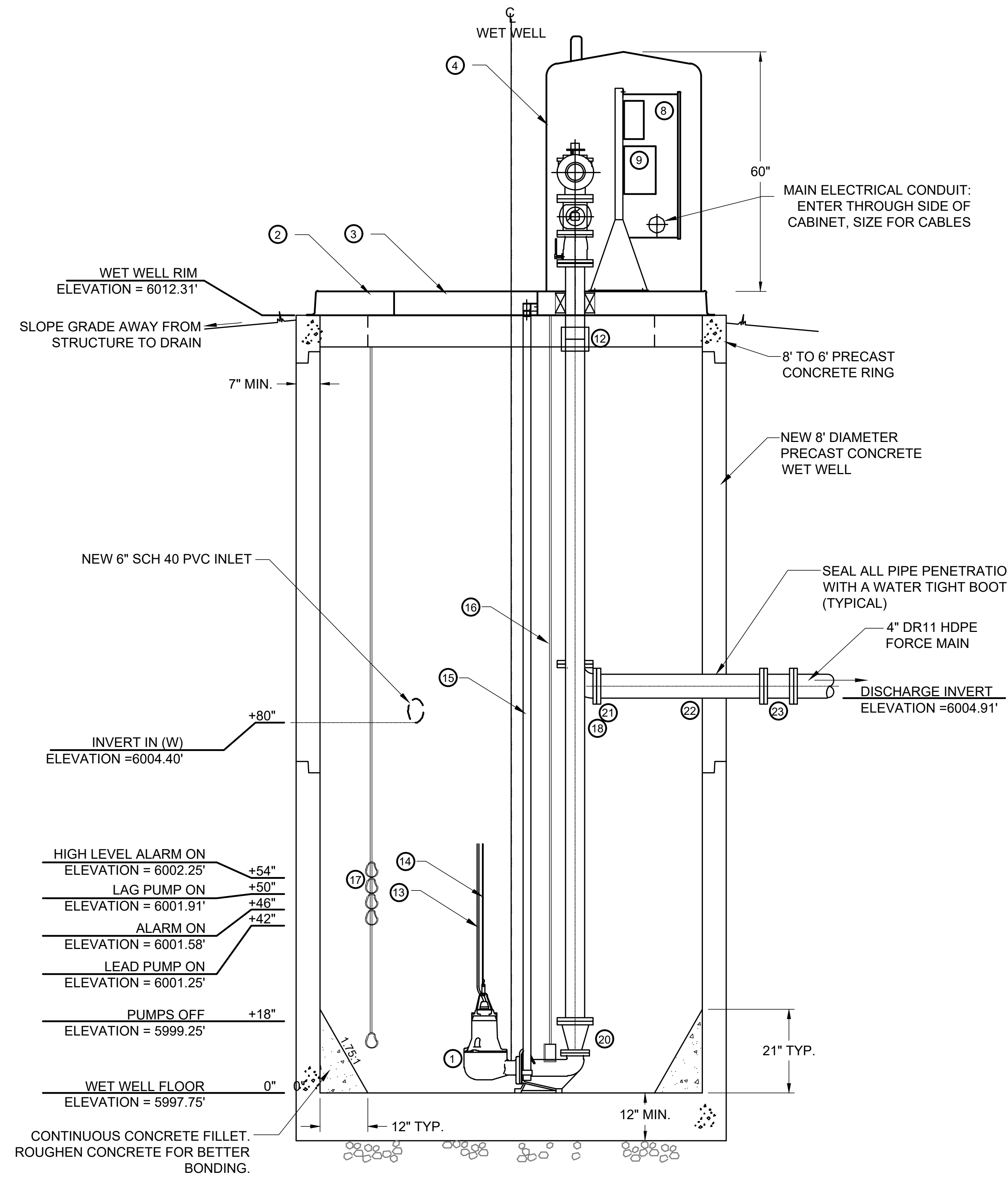
ELECTRICAL PANEL
NO SCALE



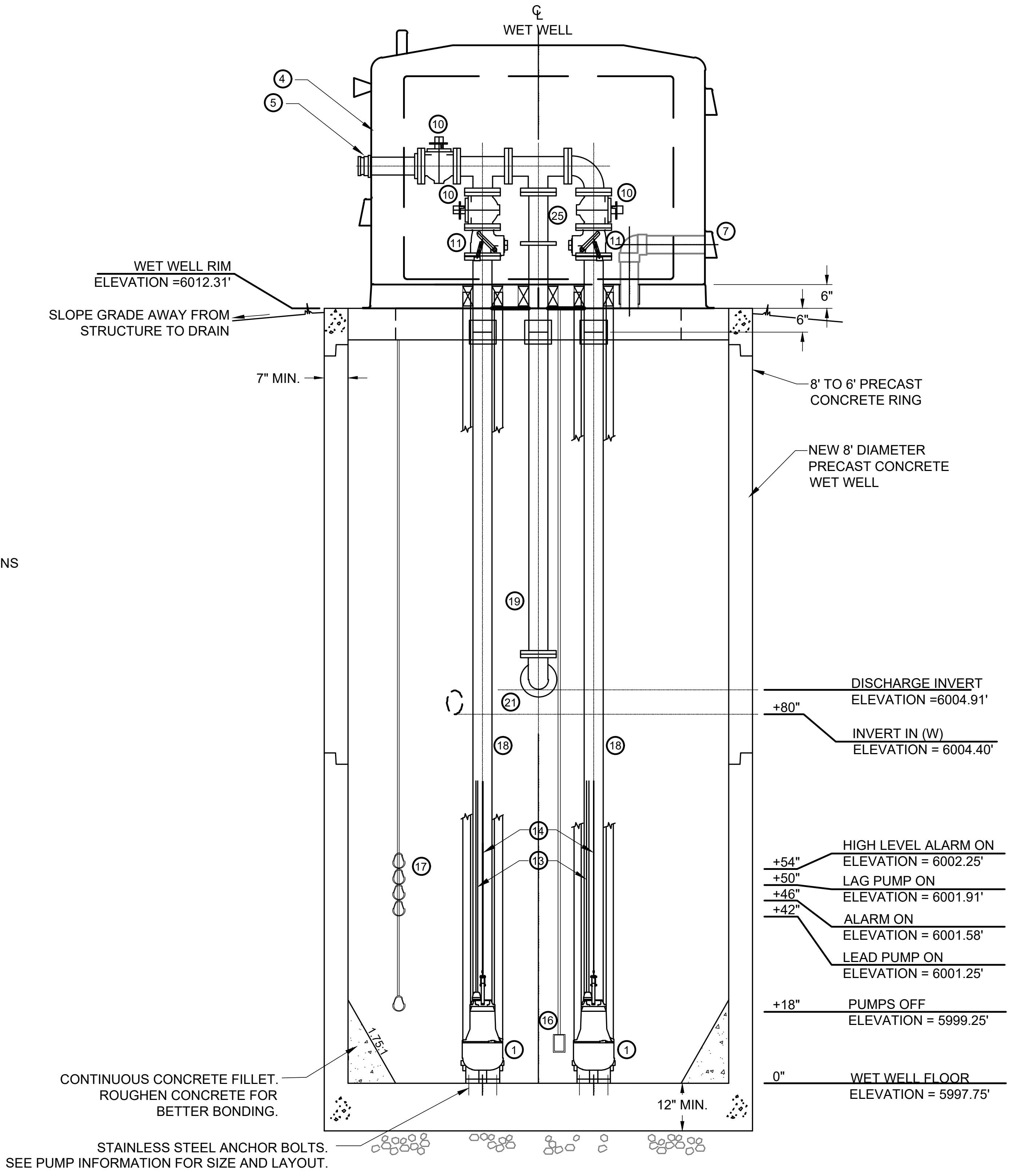
PLAN VIEW



FORCE MAIN CONNECTION TO GRAVITY MANHOLE
NOT TO SCALE



=SECTION A-A VIEW=
WET WELL & PUMP STATION
NO SCALE



=SECTION B-B VIEW=
WET WELL & PUMP STATION
NO SCALE

DESIGN CRITERIA

1. 100 GPM DESIGN FLOW BASED ON DATA PROVIDED BY ARCHITECTURAL DRAWINGS AND DEVELOPMENT DRAINAGE FIXTURE UNITS. CONNECTION TO THE EXISTING 6" PVC FORCE MAIN AT ANTICIPATED NORMAL OPERATING CONDITIONS PRODUCES OPERATING POINTS OF 144 GPM @ 158.7 FT TDH. DETAILED FLOW RATES AND FLOW VELOCITIES ARE LISTED IN THE TABLE BELOW.

2. WASTEWATER PUMPS SHALL AUTOMATICALLY ALTERNATE BETWEEN PUMPING CYCLES.

3. NEW FORCE MAIN TO BE 4" DR11 HDPE. LIQUID VELOCITY AT ANTICIPATED OPERATIONAL PUMPING RATES OF 144 GPM IS APPROXIMATELY 3.67 FT/SEC. NEW FORCE MAIN LAID WITH SLIGHTLY RISING SLOPE.

4. FLOW METER AND HOUR METERS AND/OR PUMP START COUNTERS SHALL BE PROVIDED FOR FLOW MEASURING.

WASTEWATER DESIGN PUMPS 1 & 2:

MYERS WGX150H-43-25 15HP, 60 HZ, 3Ø, 460V OR APPROVED EQUAL

OPERATING POINT: 122 GPM AT 182.9 FT TDH

WET WELL PUMPING VOLUME 752 GALLONS ±

PUMP RUN TIME: 5.2 MINUTES

LIFT STATION NOTES

1. ALLOW A MINIMUM OF 6" BETWEEN WALL AND FLANGE FOR ACCESS TO BOLTS.

2. ALL FASTENERS INTERIOR TO THE WET WELL SHALL BE STAINLESS STEEL.

3. CONTRACTOR RESPONSIBLE FOR FINAL LENGTHS OF FLG. x PE SPOOLS WITH ±. LENGTHS SHOWN ARE GENERAL AND DEPENDANT ON ACTUAL LENGTHS OF MATERIALS SUPPLIED. FLANGE COUPLING ADAPTER USED TO VARY LENGTH. FINAL LENGTH DETERMINED IN THE FIELD. EPOXY KIT REQUIRED ON FIELD CUTS.

4. DUCTILE IRON PIPE SHALL BE AWWA C-151. FLANGED FITTINGS SHALL BE DUCTILE IRON CLASS 250, AWWA C-110 or C-115, EPOXY LINED. DUCTILE IRON PIPE AND FITTINGS WITHIN THE WET WELL SHALL BE EPOXY COATED.

5. ALL PIPING SHALL BE PAINTED, GRAY FOR RAW SEWAGE, PRIOR TO INTRODUCING SEWAGE INTO THE WET WELL.

6. ELECTRICAL DESIGN AND CONSTRUCTION WITHIN WET WELL SHALL CONFORM TO NEC CLASS 1, DIVISION 1, GROUP D AREA.

7. PROVIDE ELECTRICAL CONTROLS SUCH THAT GENERATOR HOOKUP IS READILY AVAILABLE IN THE EVENT OF POWER OUTAGE.

LEGEND

①	SUBMERSIBLE, NON-CLOG, EXPLOSION PROOF SUBMERSIBLE PUMPS, SEE SPECIFICATIONS FOR DETAILS
②	ABOVE GROUND VALVE PACKAGE KIT: PRE-CAST CONCRETE BASE
③	36"X60" BILCO LOCKABLE DOUBLE ACCESS HATCH, OR APPROVED EQUAL
④	ABOVE GROUND VALVE PACKAGE KIT WITH: FIBERGLASS REINFORCED PLASTIC ENCLOSURE COMPLETLEY REMOVABLE FOR MAJOR SERVICE REQUIREMENTS, PLUG VALVES, CHECK VALVES, PIPING, TRANSFORMER, HEATER, AND UTILITY MOUNTING FRAME WITH ALARM HORN AND LIGHT.
⑤	OPW ALUMINUM 4" QUICK CONNECT ADAPTER WITH CAP
⑥	35" HINGED LOCKING ACCESS PANELS
⑦	4" VENT TO EXTERIOR
⑧	STAINLESS STEEL PUMP CONTROL PANEL
⑨	SENSAPHONE MODEL 1104 AUTO-DIALER OR APPROVED EQUAL
⑩	4" PLUG VALVE
⑪	4" SWING CHECK VALVE
⑫	4" COUPLINGS SHALL BE SLEEVE-TYPE ROCKWELL TYPE 411, DRESSER STYLE 38, OR APPROVED EQUAL, WITH TYPE 304 SS BOLTS
⑬	POWER AND CONTROL CABLES
⑭	STAINLESS STEEL LIFTING CABLE
⑮	1½" NOMINAL SIZED STAINLESS STEEL GUIDE RAILS
⑯	AIR BUBBLER LIQUID CONTROL SYSTEM
⑰	FLOAT LIQUID CONTROL SYSTEM
⑱	4" PEXFL DIP SPOOL; 14'-0" ± EPOXY LINED AND COATED
⑲	4" PEXFL DIP SPOOL; 5'-6" ± EPOXY LINED AND COATED
⑳	3"x4" CONCENTRIC FLANGED REDUCER EPOXY LINED AND COATED
㉑	4" DIP 90° BEND FLANGED ; EPOXY LINED AND COATED
㉒	4" PEXFL DIP SPOOL; 4'-6" ± EPOXY LINED AND COATED
㉓	DIP SOLID SLEEVE WITH MEGALUG RETAINER GLAND AND HDPE MJ ADAPTER
㉔	ELECTRICAL H-FRAME WITH DISCONNECTS AND METER. LOCATE PER NEC.
㉕	4" MCCROMETER ULTRA MAG FLOW METER OR APPROVED EQUAL

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JACKSON, WYOMING

SHEET TITLE:
LIFT STATION DETAILS

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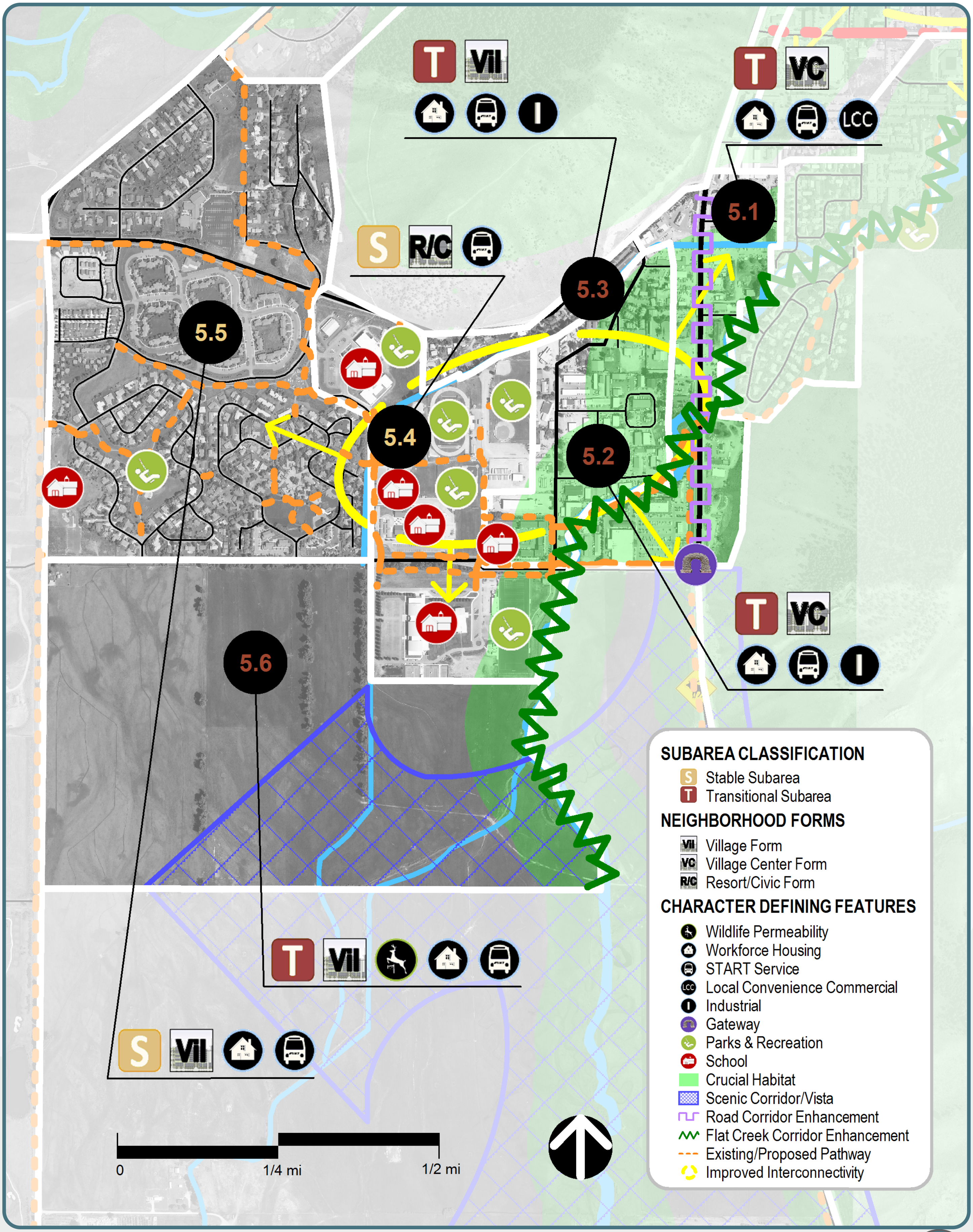
C4.5

SECTION 4 – SUPPORTING MATERIALS

- TETON COUNTY COMPREHENSIVE PLAN DISTRICT 5.4 AND 5.6 SCHOOL CAMPUS AND NORTHERN SOUTH PARK
- NEIGHBORHOOD MEETING SUMMARY
- GEOTECHNICAL REPORT
- GROUNDWATER MONITORING REPORT
- TRAFFIC IMPACT MEMO AND ZMA2019-003 TRAFFIC IMPACT STUDY


T
Vil
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1/4 mi
1/2 mi
SUBAREA CLASSIFICATION
S Stable Subarea
T Transitional Subarea
NEIGHBORHOOD FORMS
Vil Village Form
VC Village Center Form
R/C Resort/Civic Form
CHARACTER DEFINING FEATURES
Wildlife Permeability
Workforce Housing
START Service
LCC Local Convenience Commercial
I Industrial
Gateway
Parks & Recreation
School
Crucial Habitat
Scenic Corridor/Vista
Road Corridor Enhancement
Flat Creek Corridor Enhancement
Existing/Proposed Pathway
Improved Interconnectivity

2012 + Future Desired Characteristics

West Jackson currently exists as one of the most Complete Neighborhoods within the community, with its most significant characteristic being its wide variety of land uses. This diverse district is highly automobile-oriented and contains a variety of non-residential uses, a variety of residential types and sizes, light industrial and the majority of the community's public schools. It also contains a large undeveloped agricultural area south of High School Road, and Flat Creek as a prominent natural feature.

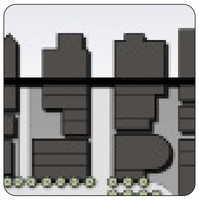
The future goal of the district will be to take advantage of the existing variety of land uses and Complete Neighborhood amenities and develop them into a more attractive and well connected district. The continuation of light industrial uses is necessary to support the local economy. The preservation of residential areas that provide workforce housing, will be essential in meeting the Growth Management and workforce housing goals of the community. Enhancement of the southern gateway into Town into a mixed use corridor with improved connectivity and visual appearance will also be important. A key challenge of the district will be to address transportation congestion, safety and connectivity issues. Possible solutions may come in many forms, including consideration of an east/west connector south of High School Road and/or the Tribal Trails connector, complete street improvements to collector roads including High School, Middle School, Gregory Lane and South Park Loop and improved alternative mode connectivity throughout the district.

Policy Objectives

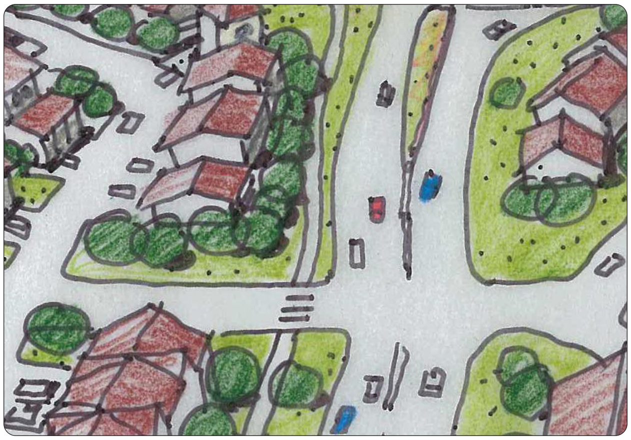
Common Value 1: Ecosystem Stewardship	N/A
Common Value 2: Growth Management	4.1.b: Emphasize a variety of housing types, including deed-restricted housing 4.1.d: Maintain Jackson as the economic center of the region 4.2.c: Create vibrant walkable mixed use Subareas 4.3.a: Preserve and enhance Stable Subareas 4.3.b: Develop Transitional Subareas 4.4.b Enhance Jackson gateways
Common Value 3: Quality of Life	5.3.b: Preserve existing workforce housing stock 6.2.b: Support businesses located in the community because of our lifestyle 6.2.c: Encourage local entrepreneurial opportunities 6.2.d Promote light industry 7.1.a: Increase the capacity for walking, biking, carpooling and riding transit 7.1.f: Complete major transportation projects based on Major Capital Group approach

Character Defining Features

5.1: West Jackson Highway Corridor

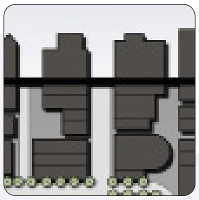


Village Center Form

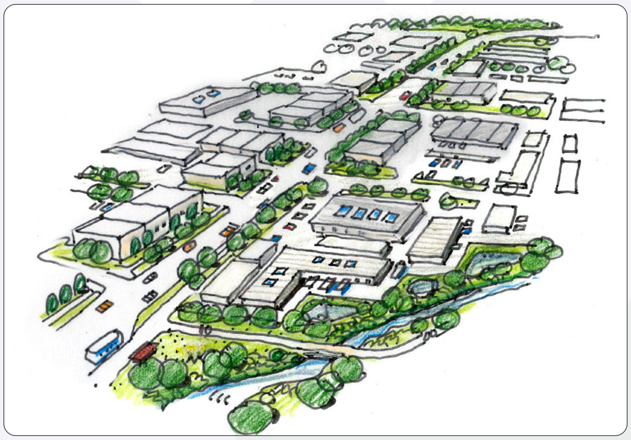


This mixed use, TRANSITIONAL Subarea is dominated by South Highway 89 and acts as the southern gateway to the Town. In the future, the enhancement of the Highway 89 corridor will be achieved by high quality mixed use development with improved internal circulation between lots and adjacent residential areas. Specific attention should be given to consolidating the multiple access points to the highway in this area. Development intensity should be oriented towards the corridor and configured in two and three story mixed use buildings with an adequate landscape buffer from the busy highway corridor. Parking areas should be predominantly in the rear or screened from view. On lower levels of buildings, a variety of non-residential uses catering to locals will be desirable, with residential uses predominantly located on the upper levels or to the rear of lots and not adjacent to the highway. Future structures will be predominantly mixed use, while multifamily will be allowed if it properly addresses the street. Some single use and auto-oriented uses (e.g. gas stations and auto dealers) will still be needed in the future. These uses should follow the desired building form and pattern as much as possible, including providing connectivity by all travel modes to adjacent lots.

5.2: Gregory Lane Area

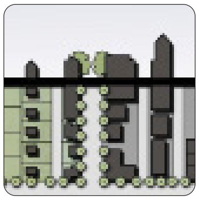


Village Center Form



This TRANSITIONAL Subarea will support the community goal of maintaining and promoting light industry uses to support the local economy while continuing to accommodate a significant amount of residential use. Light industrial development and redevelopment will be promoted, and bulk, scale and use allowances will first and foremost accommodate light industry and heavy retail uses. The current development pattern will be intensified to accommodate larger structures in more creative land use patterns, including live-work development. In the future, complete street improvements are desired but will need to be balanced with the need to accommodate large vehicle traffic. Livability enhancements through improved site and building design will be a goal but secondary to promoting light industry uses. Providing improved pedestrian/bike amenities to connect the existing and future resident populations with the surrounding Complete Neighborhood amenities will be a focus of improved livability. A third priority will be future improvements to Flat Creek, including the establishment of an appropriate setback to support the health of this natural feature for wildlife and residents.

5.3: High School Butte



Village Form

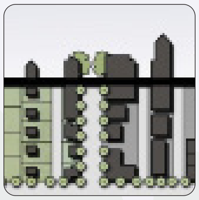
This TRANSITIONAL Subarea will be comprised of a variety of housing types and forms including single family, duplex, tri-plex, and multifamily occupied primarily by the local workforce. Mixed use will also be desirable to provide additional opportunities for local entrepreneurial and industrial and service uses. The future development pattern should take advantage of the substantial grade change in this area to allow for two to three story single and mixed use structures screened from view.

5.4: School Campus

Resort/ Civic Form

This STABLE Subarea will continue to provide the necessary land for future community schools and recreational amenities. The community will continue to support and plan for the possible expansion of the School District Campus. Particular attention needs to be given to addressing the traffic congestion in this area due to the pulse of single occupancy vehicle and school bus traffic associated with the school and recreational uses. Possible solutions will come in many forms, including a shift in current behavior away from the use of the single occupancy vehicle and complete street improvements to High School, Middle School and South Park Loop Roads, including improved pedestrian and bicycle connectivity throughout the subarea and from surrounding districts into the subarea.

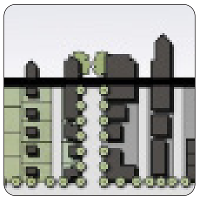
5.5: West Jackson Residential



Village Form

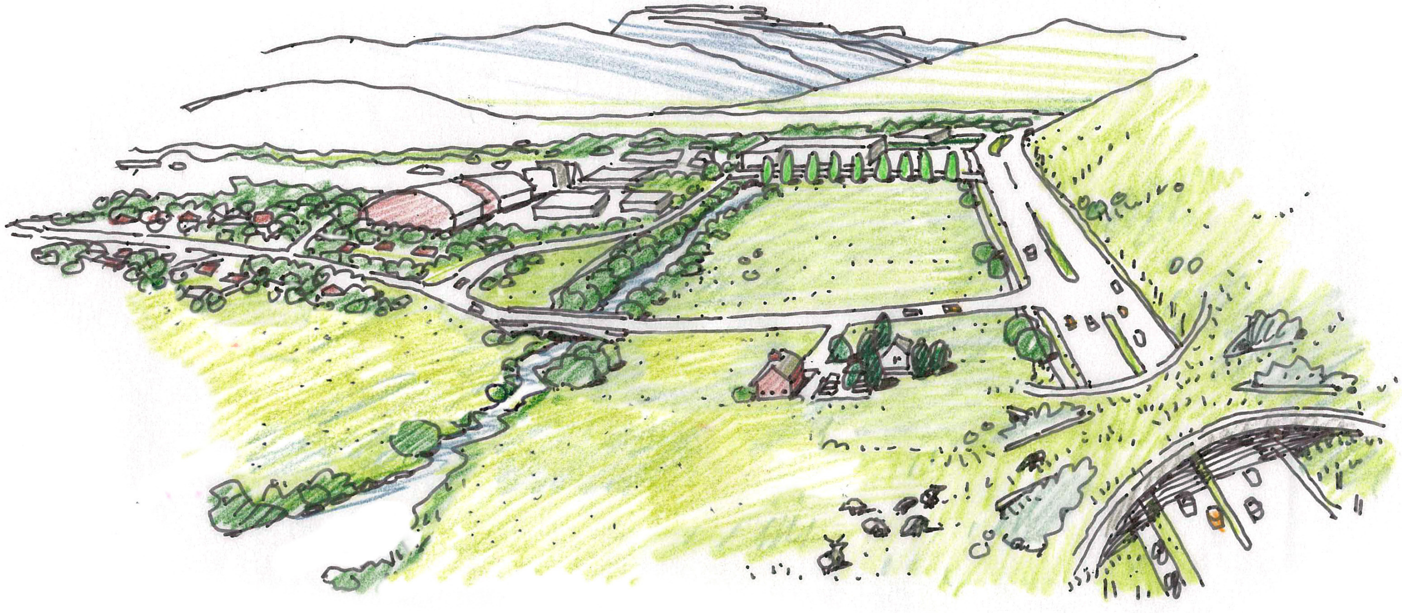
This residential, STABLE Subarea provides much of the community's workforce housing in a wide variety of housing types, including single family, duplex, tri-plex and multifamily. In the future, effort should be made to ensure that this neighborhood retains its vitality, cohesiveness and accessibility for the local workforce. An important goal of the subarea will be to maintain a strong sense of ownership and community in the area.

5.6: Northern South Park



Village Form

This TRANSITIONAL Subarea is identified as a location for future residential development at a similar density to the adjacent West Jackson Residential (Subarea 5.5) neighborhoods. While the priority of the community is to infill and redevelop other already developed Stable/ Transitional Subareas to meet the Growth Management goals of the Plan, this subarea is also a suitable location to meet those goals due to its close proximity to many Complete Neighborhood amenities. The development of the subarea may be guided by a neighborhood planning effort (referenced in Strategy 3.3.S.5) completed in a timely manner by the County in consultation with the Town and the landowners within the Subarea. Any resulting neighborhood plan will include options to improve transportation, circulation, and connectivity within and around the Subarea. An appropriate Flat Creek buffer will also need to be established to ensure the wildlife, natural and scenic values associated with this community resource are maintained.



July 14, 2023

Central Wyoming College
Jackson Center

Central Wyoming College (CWC) will be seeking administrative approval to build the SPET-funded CWC Jackson Center on the 2.0-acre parcel (PIDN: 22-40-16-06-3-00-019) on High School Road west of Jackson Hole High School. This campus is partially funded by voter approved SPET funds to provide appropriate classroom settings for the unique educational opportunities offered by CWC in Jackson and allow CWC to better serve the Greater Teton area. The programs offered that do not have the proper educational settings at the present time include culinary arts, nursing, and science. The Jackson Center will provide essential science laboratories, simulation nursing labs, lab space for allied health programs, and a fully equipped commercial teaching kitchen. Additionally, the building will provide offices, classrooms, computer classrooms, and meeting space.

The proposed single-story building will be approximately 20,600 GSF and will include design elements to make the building more energy efficient. CWC will schedule classes so as not to intersect with peak traffic times to the extent possible and reduce the impact to High School Road. CWC will work to ensure pedestrian connectivity in the area to provide easy access to public transportation.

The project team is composed of AMD Architects, Prospect Studio, and Jorgensen Associates, Inc.

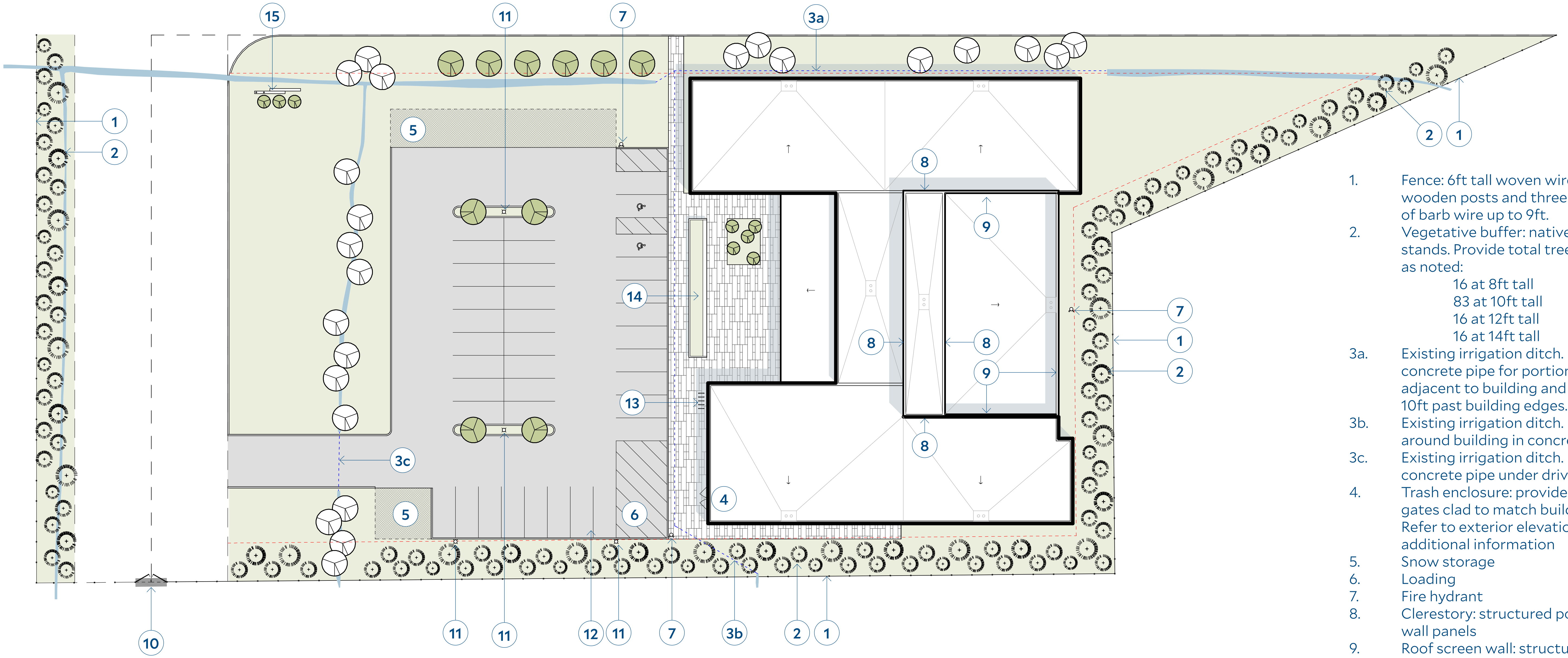
You are invited to attend a neighborhood meeting to learn more about the proposed development. The meeting will be held at:

The Genesis Room
The Presbyterian Church of Jackson Hole
Wednesday, July 26th, 2023
3:00pm – 5:00pm

Attached:

1) Site Plan
2) Floor Plan

For questions please contact:
Mila Dunbar-Irwin – mdi@jorgeng.com



1. Fence: 6ft tall woven wire with wooden posts and three-strands of barb wire up to 9ft.
2. Vegetative buffer: native spruce stands. Provide total tree quantities as noted:
    16 at 8ft tall
    83 at 10ft tall
    16 at 12ft tall
    16 at 14ft tall

3a. Existing irrigation ditch. Provide concrete pipe for portion of ditch adjacent to building and extending 10ft past building edges.
3b. Existing irrigation ditch. Reroute around building in concrete pipe.
3c. Existing irrigation ditch. Provide concrete pipe under drive.

4. Trash enclosure: provide (2) 6ft wide gates clad to match building cladding. Refer to exterior elevations for additional information
5. Snow storage
6. Loading
7. Fire hydrant
8. Clerestory: structured polycarbonate wall panels
9. Roof screen wall: structured polycarbonate wall panels, with HSS frame backup and LED backlighting
10. (2) 6ft cattle gates and cattle guard
11. Parking lot pole light
12. Provide conduits for (2) future EV charging stations
13. Bike racks. Provide outlets for electric bike charging
14. Raised planter, with herb garden and bench seat. Refer to exterior elevations for additional information
15. Monument signage. Provide power for integral lighting of fixed sign. Provide (2) flagpoles at sign location

🟩 Grass / Planting area
▭ Concrete walkway
○ Existing tree to remain
● New tree
— — Property line
- - - - Build-to line

Site Plan and Roof Plan

1. Vestibule
2. Office
3. Open Office
4. Workroom
5. Breakroom
6. Hoteling / Small Meeting
7. Tutoring
8. Classroom
9. Computer Classroom
10. RN Skills Lab
11. CNA Skills Lab
12. Simulation Lab
13. Surgery
14. Control Room
15. Med Prep
16. Program Storage
17. Debrief
18. Micro / Chem Lab
19. BAPPEES Lab
20. Lap Prep
21. Teaching Kitchen
22. Walk-in Freezer
23. Walk-in Cooler
24. Pantry
25. Scullery
26. Kitchen Storage
27. Custodial / Washer-Dryer
28. Custodial
29. Forum / Prefunction
30. IT
31. Electrical
32. Mechanical
33. Restroom
34. Staff Restroom / Shower
35. Wellness / Mothers Room
36. Loading
37. Building Storage
38. Trash / Recycling Enclosure*

* non-conditioned space

Floor Plan

Central Wyoming College - Jackson Outreach Center

Schematic Design Report

05 June 2023

AndersonMasonDale Architects

Central Wyoming College Jackson Center

Neighborhood Meeting

Sketch Plan Application

Wednesday, July 26th, 2023

	NAME	PHYSICAL ADDRESS	E-MAIL
1	K. Milici	1940 W. Homestead Dr.	KariMilici@gmAIL
2	Jessica Jaubert	10825 S Highway 89	jessicajaubert@gmail.c
3	Lori Clark-Erickson	2168 Corner Creek lane	lclarkerickson@gmail.com
4	Deb Wuersch	3021 Rangeview	debrawuersch@gmail.com
5	Donna Bauer		
6			
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17			
	Thank you for your participation!		

JORGENSEN
GEOTECHNICAL, LLC

PO Box 9550 · 1315 HWY 89 S., Suite 201
Jackson, WY 83002
PH: 307.733.5150
www.jorgeng.com

June 2, 2023

Central Wyoming College
Attn: Willie Noseep
2660 Peck Ave. MH 106F
Riverton, WY 82501

RE: GEOTECHNICAL-ENGINEERING REPORT, JACKSON OUTREACH CENTER, CENTRAL WYOMING COLLEGE, HIGH SCHOOL ROAD, TETON COUNTY, WYOMING
PROJECT NO: 22070

Dear Mr. Noseep,

We are pleased to present this report of our geotechnical-engineering exploration for the proposed college outreach center of the Central Wyoming College (CWC) along High School Road in Teton County, Wyoming. This report describes site conditions observed during the subsurface exploration and presents engineering analyses and recommendations to support the design and construction of foundation elements for the outreach building.

In summary, the site is underlain by alluvial deposits likely originating from the Snake River floodplain. The alluvium is primarily comprised of gravels and cobbles in a sandy matrix with trace fines. The stony alluvial deposits appear to be an adequate bearing layer to support the anticipated foundation loads.

Groundwater was not encountered during the site exploration but is expected to be higher in the spring and summer months when runoff creates increased flows in the Snake River and local irrigation practices in the surrounding properties begin. Depending on the depth of the foundation elements and the time of the year construction begins, **groundwater is likely to be within or near the foundation excavation**. Sandy gravels and cobbles will slough and are difficult, if not impossible to compact in high groundwater conditions, creating unstable conditions for subgrade preparation. If groundwater is near the foundation elevation, groundwater mitigation techniques or an alternative building schedule during construction may be required.

If you have any questions about this report, or if we may provide other services to you, please contact us. As the project progresses, we will be available to answer questions.

Respectfully submitted,

JORGENSEN GEOTECHNICAL

Marlie Schell, M.S.	Dominique Brough, P.G.	Harrison Carter, P.E.
Geotechnical Design Engineer Technician	Geotechnical Project Manager	Geotechnical Project Manager

GEOTECHNICAL-ENGINEERING REPORT

Central Wyoming College Outreach Center
High School Road | Teton County, Wyoming

Prepared for:

Central Wyoming College
Willie Noseep
2660 Peck Ave. MH 106F
Riverton, WY 82501

Prepared by:

JORGENSEN
GEOTECHNICAL, LLC

PO Box 9550
Jackson, WY 83002

Professional Engineer
HARRISON CARTER
17289
Date: 6/2/23
WYOMING

June 2, 2023

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LIST OF TABLES

LIST OF APPENDICES

1.0 REPORT SUMMARY

Jorgensen Geotechnical (JG) explored subsurface conditions by excavating four (4) exploratory test pits on the subject site. Overall, the soils at the site consisted of sandy, coarse-grained gravels and cobbles overlain by topsoil. These soils are estimated to be alluvial in origin. Samples were obtained at the time of the exploration but due to their stony nature and our experience with similar soils in the area, the samples were not submitted for lab testing.

We identified the following as site-specific geotechnical-engineering considerations for this project site:

- site soils include coarse-grained alluvium
- the sandy alluvium appears to be adequate for the anticipated foundation loads,
- groundwater was not observed but is predicted to pose issues with design and construction depending on the time of year construction begins, and
- seismic and fault-related hazards exist – with the risk generally understood to be low.

2.0 INTRODUCTION

Jorgensen Geotechnical, LLC (JG), was commissioned by Central Wyoming College (CWC) to perform a subsurface exploration for the proposed college outreach building for CWC located along High School Road, in Teton County, Wyoming (Figure 1). Our specific scope of services is below. The purposes of the exploration were to provide information and geotechnical-engineering recommendations pertaining to:

- Subsurface soil conditions
- Groundwater conditions
- Site preparation and earthwork
- Seismic site classification per the International Building Code
- Evaluation of settlement potential
- Lateral earth pressures
- Foundation design and construction
- Slabs-on-grade design and construction

The scope of services for this project included excavating and logging four (4) exploratory test pits to depths ranging from 7 to 8.5-ft below ground surface (bgs). Test pit locations were surveyed by Jorgensen and are shown in Figure 2. In addition, JG installed three (3) groundwater monitoring standpipes to facilitate groundwater monitoring during the spring 2023 runoff and summer irrigation season. A detailed description of the subsurface exploration and graphical logs are shown in Appendix A.

3.0 PROJECT DESCRIPTION

Preliminary plans provided by Prospect Architects dated July 2022 indicate the building and parking lot locations. We understand that the building location has changed, and the new location has yet to be determined at the time of this Report. We have assumed that building construction plans have not changed since July 2022, and that the project will consist of constructing a two-story, above grade, outreach building using a combination of slab-on-grade and crawlspace construction. We have assumed traditional timber-frame construction techniques.

4.0 SITE CONDITIONS

4.1 Description

JG developed the following description of the site based on site visits, meetings with CWC and the Architect, our review of available historical aerial imagery, and observations made during the subsurface exploration.

Item	Description
Location and Parcel Information	The site is located along High School Road, in Teton County, Wyoming. The lot is located on land previously utilized for agricultural purposes. Agriculture property borders the parcel to the east, south and west, and High School Road borders the parcel to the north. Various irrigation ditches run near or through the property.
Current Ground Cover	At the time of the exploration, ground cover consisted of moist soil with grass.
Existing Topography	According to the Teton County GIS Mapserver, the site is relatively flat with elevations ranging from 6,116 to 6,120-ft-ft above sea level (AMSL). The site is situated approximately 1,800-ft west of Flat Creek and 2.5-mi east of the Snake River.
Geologic Setting	▪ The project site is found on the Geologic Map of the Jackson Quadrangle, Teton County, Wyoming (Love, 2004) which is adapted as Figure 1. The map shows the location of surficial deposits and geologic structures (i.e., faults and folds). The map indicates the project site is covered by Quaternary-aged flood plain deposits (Qfp) deposits originating from the Snake River Floodplain. JG observed sandy gravels indicative of the alluvial deposits (Qal) that are mapped further west from the project site. ▪ Bedrock was not encountered in any test pits during the subsurface exploration. The depth to bedrock is estimated to be deep. ▪ Numerous Quaternary faults (i.e., relatively young and potentially active) are mapped throughout the area, most notably, the Teton Fault and Phillips Valley Fault systems, approximately 7.5 miles northwest of the site (Zellman, 2019). Slip rates in the southern sections of Teton fault southern are typically ranging from 0.2 to 1 mm/year. The Phillips Valley Fault slip rate is less than 0.2 mm/yr. Older faults mapped nearby are believed to be old and inactive.

Figure 1: Site Location and Geologic Map

4.2 Subsurface Soil Conditions

Three soil layers were observed in all test pits; topsoil underlain by a gravel with silt and sand, with coarse grained sandy gravels and cobbles observed below the gravels with silt and sand, until termination of the test pits. To evaluate the site's soil-engineering properties, we developed a model consisting of three layers: a layer of topsoil, gravel with silt and sand, and stony coarse-grained alluvium. Detailed test pit logs are represented graphically in Appendix A.

Layer	Layer Name	Description
1	**Topsoil**	The topsoil consists of a sandy silt with 0-20% gravel by mass, extending from the ground surface to a depth of approximately 1.0 to 1.2-ft bgs.
2	**Gravel with Silt and Sand**	A gravel with silt and sand was logged in the field as slightly moist to moist, dark orangish brown, and medium dense. The soil was estimated in the field to comprise approximately 10% cobbles, 50% gravel, 30% sand with 20% fines (i.e., silt and clay). The gravel varied in thickness across the site from approximately 1.0-ft to 2.7-ft.
4	**Coarse-grained Alluvium**	Stony gravels and cobbles with sand were observed to underly the gravel with silt and sand, and extended to the bottom of all test pits, ranging from 7.0-ft to 8.5-ft bgs. In the field they were visually logged as moist, orangish brown, medium dense, clast-supported, and was observed to comprise 15% boulders and cobbles by volume, 60% gravel, 30% sand, and 10% clay and silt by mass.

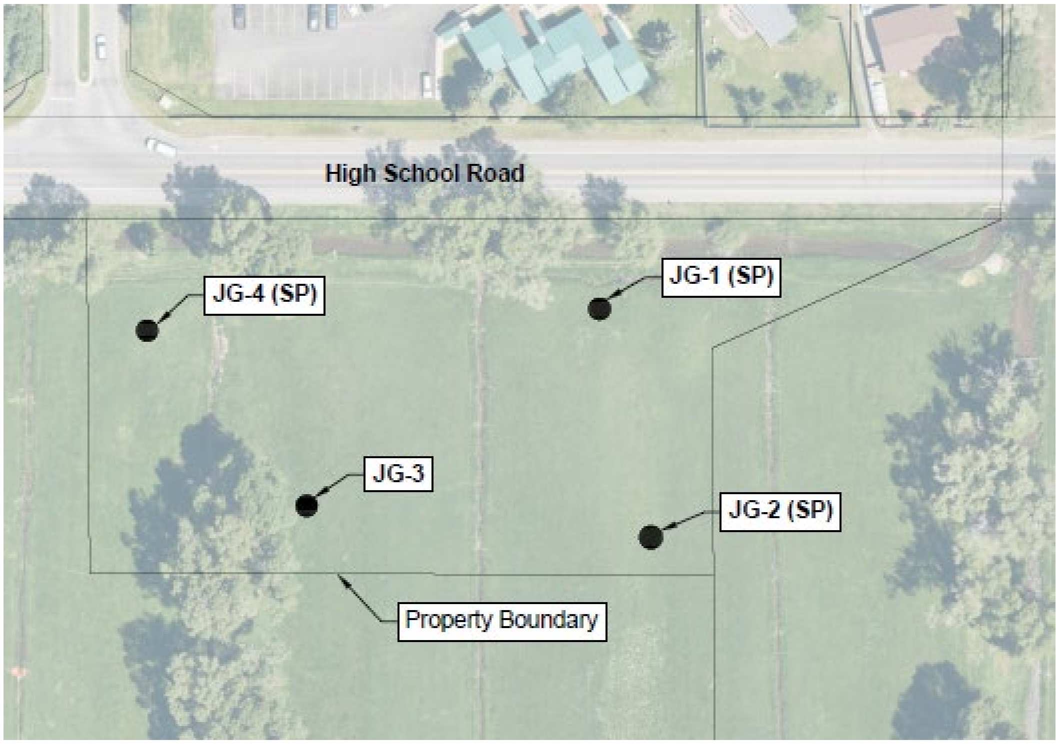

Figure 2: Test Pit and Standpipe Location Map

4.3 Groundwater

Groundwater was not encountered in any of the test pits at the time of excavation. May is predicted to be a time where seasonal runoff is beginning, but from past observations and measurements in the area, usually still considered low and peaks around mid-June. Groundwater levels fluctuate in response to seasonal snowmelt, local irrigation, and flow levels in nearby rivers and streams.

We expect groundwater to pose an issue with the proposed construction depending on the excavation depth and time of year foundation excavation is completed. If foundation excavation occurs during the spring and summer when groundwater levels are anticipated to be high, the contractor should be prepared to manage groundwater during excavation, possibly through a dewatering system. Additionally, if construction begins at a time of year when groundwater levels are high, compaction efforts may be difficult, if not impossible if groundwater is encountered within two-feet of bottom of the excavation due to the soil “pumping” during compaction. Dewatering efforts, if deemed necessary, should reduce the water level to a minimum of 4-feet below the bottom of the excavation.

Standpipe piezometers were installed in three of the four test pits during the subsurface exploration. They are indicated with the label “SP” on Figure 2. We proposed to use the standpipe piezometers to observe seasonal fluctuations in groundwater. Three data loggers from Heron Instruments were installed at the time of the subsurface exploration. The data loggers collect groundwater level data continuously and these data can be used to create a water level profile through the 2023 spring runoff and irrigation season. This method provides a continuous site-specific water level. These data will be collected during the spring and summer until groundwater levels begin to recede. We will conclude the monitoring no later than mid-autumn and submit a final groundwater monitoring report.

4.4 Earthquakes and Ground Shaking

Jackson Hole is located within the Intermountain Seismic Belt, a zone of seismicity that extends from southern Utah through eastern Idaho, western Montana, and Western Wyoming (Smith and Arabasz, 1991). The Teton fault is considered an important structural element of the Intermountain Seismic Belt. Predicted recurrence intervals for maximum credible earthquakes have passed for most of the fault systems capable of generating magnitude 7.5 earthquakes in western Wyoming (Case, 1997), implying the chance of major earthquakes is relatively high. The owner should be aware that in the event of a large magnitude earthquake (i.e., approximately 7.5), strong ground shaking, liquefaction, or slope movement could potentially cause damage to structures (Smith, et al., 1993).

Ground motion accelerations should be derived for the project site in accordance with the general procedure defined in the International Building Code (IBC). We assumed that the outreach center is classified as a Class III building per the IBC guidelines. The IBC references ASCE 7-16 to determine the ground motion accelerations. Based on subsurface soils, the mapped geology, and our experience in the area, the site is classified as Site Class D ("Stiff Soil"). For your convenience, Seismic Design Maps (SEAOC, 2019) values are summarized in Table 4-1.

Table 4-1: U.S. Seismic Design Maps Summary

<table>
<tr><th colspan="4">Maximum Considered Earthquake (MCE) Spectral Response Acceleration Parameters</th></tr>
<tr><td colspan="2">Short Period (S_s) =</td><td colspan="2">1.055</td></tr>
<tr><td colspan="2">1-Second Period (S_1) =</td><td colspan="2">0.347</td></tr>
<tr><th colspan="4">Site Coefficients and Adjusted MCE Spectral Response Acceleration Parameters</th></tr>
<tr><td>F_a =</td><td>1.078</td><td>S_{MS} =</td><td>1.137</td></tr>
<tr><td>*F_v =</td><td>1.953</td><td>*S_{M1} =</td><td>0.678</td></tr>
<tr><th colspan="4">Design Spectral Response Parameters</th></tr>
<tr><td colspan="2">S_{DS} =</td><td colspan="2">0.758</td></tr>
<tr><td colspan="2">*S_{D1} =</td><td colspan="2">0.452</td></tr>
<tr><td colspan="4">*Note: Values for F_v, S_{M1}, and S_{D1} were determined in accordance with Section 11.4.4 of ASCE 7-16. Per Section 11.4.8 of ASCE 7-16, if the proposed structure foundation will include seismic isolators or damping systems, a site response analysis shall be performed in accordance with Section 21.1.</td></tr>
</table>

The project site is located in an area of moderate seismic activity. The current peak horizontal acceleration (PGA) with a probability of occurrence of 2% in 50 years is approximately 0.468g (SEAOC, 2019). This has been applied for the analysis of seismic lateral loading on retaining walls in Section 5.4.

The provisions of the IBC are intended to provide uniform levels of performance for structures depending on their intended occupancy and use, and the risk inherent to their failure. The approach adopted in the IBC is intended to provide a uniform margin of safety against collapse at the design motion. The design earthquake ground motion is selected at a ground shaking level that is 2/3 of the maximum considered earthquake (MCE) ground motion, which has a likelihood of exceedance of 2% in 50 years (corresponding to a return period of 2,500 years). The owner should be aware that the IBC is not intended to prevent damage or loss of function during a major earthquake; it is intended to reduce the risk of loss of life. Structural design should follow the level of risk tolerable to the owner.

4.5 Geologic and Geotechnical Hazards

4.5.1 Seismic and Fault Related Hazards

The owner should be aware that in the event of a large magnitude earthquake (i.e., approximately 7.5), strong ground shaking and ground cracking could potentially cause damage to structures (Smith, et al., 1993). The owner may wish to consider the option of carrying earthquake insurance in addition to homeowner's insurance. Surface rupture or displacement due to faulting is **unlikely**.

Loose, saturated sands and silty sand, and in some cases, silts and gravels may liquefy when exposed to seismic shaking. The gravels and cobbles observed throughout the site appear too stony and are unlikely to liquefy in a seismic event. Liquefaction at depth, if it were to occur, could cause minor differential settlement. However, liquefaction is unlikely to cause lateral spreading, which is major slope movement commonly responsible for catastrophic damage during earthquakes, at this relatively flat site. Slope instability associated with liquefaction (e.g., lateral spreading and lateral flow) are **not predicted to occur.**

5.0 GEOTECHNICAL RECOMMENDATIONS

5.1 Recommendations Overview

The topsoil and gravel with silt and sand represent a risk of potential settlement and foundations should not be placed in direct contact with them. If topsoil and gravel with silt and sand are found beneath foundation elements, they should be over-excavated and replaced with an approved structural fill to reduce the risk of future settlement. The coarse-grained stony alluvium underlying the gravel with silt and sand is estimated to be a suitable bearing layer.

5.2 Shallow Foundations

We recommend the following considerations for shallow foundation systems, assuming recommendations in the following sections for site preparation and compaction are followed:

Item	Description
Bearing Layer	Stony alluvial deposits and/or recompacted approved fill is anticipated to be an adequate bearing layer.
Settlement	Settlement greater than 1-inch is not anticipated if foundation elements are placed directly on native stony alluvium or compacted approved engineered fill.
Bearing Capacity[1,2,3,4]	Allowable bearing capacity of the stony alluvial deposits or recompacted fill is 5,500 psf.
Frost Depth	Footings should be placed at a minimum depth of 34 inches below finished grade, with a minimum foundation exposure of 6 inches above finished grade.
Ultimate Soil Friction	tan(30°) = 0.58 – for the interface of cast-in-place concrete on structural fill

1. Assuming a footing width of 2-ft, placed 3-ft below existing grade, with groundwater 3-ft below final grade. Groundwater conditions will be verified during 2023 groundwater monitoring effort.
2. Soil parameters were derived based on visual soil classification.
3. Bearing capacity of soil refers to its ability to resist shear failure under load and was calculated using Terzaghi's bearing capacity equation for isolated strip footings (Bowles, 1996).
4. If footing size and depth differs remarkable from these assumptions, this office should be notified to evaluate our recommendations.

5.3 Earthwork

5.3.1 Site Preparation

Prior to the placement of any fill, foundation elements, or slabs, the site should be cleared and stripped of topsoil and all organic debris. No brush, roots, frozen material, or other deleterious or unsuitable materials shall be incorporated in the foundation subgrade or structural fill. All exposed subgrade surfaces should be free of mounds and depressions which could prevent uniform compaction. If unexpected fills or obstructions are encountered during site clearing or excavation, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

During the excavation, the excavation equipment may disturb and loosen the surface of the **native subgrade**. All disturbed areas should be compacted with a smooth-drum vibratory roller, in vibratory mode with a minimum of three passes, prior to the placement of structural fill and foundation construction. The actual number of passes should be determined by observing whether the surface is yielding after each pass. If the surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed and approved by a representative of this office.

5.3.2 Fill Material Types

Engineered fill to replace any unsuitable material may consist of imported or approved site derived, stony material (i.e., “pit-run” or similar). Structural fill will compact into a dense strong state, with minimal settlement anticipated

Approved coarse-grained stony alluvium or imported pit run may be used for the following:

- Exterior backfills
- Utility trench backfill
- General grading
- Subbase under interior and exterior slabs
- Under foundation elements

Non-structural fill may consolidate and should not be used to support foundation elements, but can be used for non-load supporting applications. Approved site-derived non-structural soil – including the silty and sandy gravels – may be used for the following:

- Exterior backfill
- Utility trench backfill
- General grading

5.3.3 Final Backfilling and Grading

Properly compacted backfill and site drainage are important. Stony fill (e.g., site-derived sandy gravel and cobble alluvium or imported “pit-run”) will compact into a dense, strong, well-draining engineered fill, and strict moisture control is usually not required, making it a preferred alternative for many contractors for exterior backfills, utility trenches, and subbase under interior and exterior slabs.

Exterior backfills should be placed as early as possible. However, do not over-compact exterior backfills against “green” foundation walls. Utility trenches should also be backfilled in lifts and compacted. Stony soils will require a vibrating smooth-drum roller or vibratory plate (i.e., hoe-pack or “jumping jack”) for compaction.

5.3.4 Compaction

Compaction testing of stony soils, or "pit-run," with a nuclear density gauge is usually problematic due to the presence of large stones. Therefore, we recommend compacting stony fills using a **method specification**, for which Table 5-1 provides initial guidelines.

Table 5-1: Compaction Parameters for Stony Fill

Compactor Type	Lift Thickness	Maximum Particle Size	Minimum Number of Passes[1]
5-ton vibratory	12 inches	9-inch[2]	3
1.5-ton vibratory	9 inches	6-inch	5
Hand-held	4 inches	4-inch	5

1. The actual number of passes should be determined by observing whether the surface is yielding after each pass. If the surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed.
2. Occasional clasts to 12-inch are permitted, if encountered, but should not be nested.

The method specification may be established as follows:

- The contractor will place fill in loose lifts no greater than specified in Table 5-1for whichever class of compactor is used.
- Fill will be compacted with the *minimum* number of passes specified inTable 5-1. The actual number of passes should be determined by observing compaction after each pass to determine if the surface is non-yielding. If the fill surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed.
- Once the number of passes is determined, this **method** (unique to the material type, compactor, lift thickness, and number of passes) may be continued for the rest of the project as long as fill material properties and subgrade soil conditions remain the same.

It is important to establish a method specification as early in the construction as possible and apply it consistently for the entirety of the project. JG should observe lift thickness, number of passes, and equipment used during compaction. Additional guidance on construction observations may be found in Section 5.3.9.

5.3.5 Compaction Requirements

We recommend the compaction and moisture requirements for site-derived or imported "pit-run" meet the minimum compaction requirement of a non-yielding condition and typical moisture of 6-8%. Clean stone stony soils are typically moisture insensitive and field observations are usually adequate to estimate when soils achieve the proper moisture.

We recommend compaction of fills be observed and tested during construction. If stony fill is not observed to be in a non-yielding condition, the area represented by the test should be reworked and retested as required to meet the requirements.

5.3.6 Crawlspace Ventilation and Radon

Evaluation of radon was beyond the scope of work; local codes should be followed and specialty contractors employed, if necessary. The building contractor is ultimately responsible for following local building codes. Ventilation to reduce moisture and potential accumulation of radon gas is required by code for habited and inhabited spaces below grade. A capillary break layer, as described in Section 5.5.1, may also accommodate a radon vent pipe.

5.3.7 Reinforcing, Utilities Testing, and Concrete Considerations

Footings, slabs, and foundation walls should be reinforced to resist differential movement. Consultation with a Structural Engineer to specify adequate reinforcement is suggested. Water and sewer lines should be pressure tested before backfilling. Exterior concrete should contain 5% to 7% entrained air. ***Note***: Minor cracks in the foundation walls, floor slabs, and sheetrock are normal and should not be a cause for concern.

5.3.8 Excavation and Cut Slope Stability

OSHA regulations (29CFR1926) appear to classify the fissured loess at the site as Type C soil. For planning and design purposes, simple cut slopes should be no steeper than 1.5H:1V. According to OSHA, any cut slope greater than 20 feet in height requires additional analysis. These recommendations are based on observations made at the time of the site exploration. <u>The contractor shall be responsible for adherence to OSHA and other safety regulations by observing soil conditions at the time of construction.</u>

5.3.9 Observation during Construction

Recommendations in this report are contingent upon our involvement. If any unexpected soils or conditions are revealed during construction, this office should be notified immediately to survey the conditions and make necessary modifications. All excavations and foundation subgrades should be observed by a representative of JG prior to fill or concrete placement, especially if questionable materials are exposed. Notice shall be provided at a minimum of 24 hours before the requested observation.

We are able to provide the most value observing site conditions at the following times:

1. Upon completion of site preparation to verify all organics and unsuitable material have been removed in accordance with Section 5.3.1,
2. Upon completion of the over-excavation (Section 5.3.2) to verify soil conditions and to confirm the use of a separation fabric, and
3. Observe placement and compaction of fill and aid in the development of a method specification, Section 5.3.5.

5.4 Lateral Earth Pressures

Lateral pressures were calculated using methods suggested by Bowles (1996) for at-rest, active, and passive conditions and are presented in Table 5-2. These values assume native coarse-grained material will be used as non-structural backfill. We have assumed an estimated internal friction angle of 35° and a unit weight of 135 pcf, based on visual classification of soils (CANMET, 1982). Calculations assume level backfill against foundation walls or retaining walls.

Table 5-2: Lateral Pressure Parameters for Compacted Coarse-grained Alluvium

Condition	Coefficient of Earth Pressures	γK (equivalent fluid pressure)
Static Conditions Level Backfill	$K_o = 0.43$ $K_a = 0.27$ $K_p = 3.69$	58 pcf 37 pcf 498 pcf
Earthquake Conditions Level Backfill	$K_{ae} = 0.43$ $K_{pe} = 3.20$	57 pcf 432 pcf

Lateral earth pressure design will be estimated based on the concept of equivalent fluid pressures, in which the soil pressure-distribution is triangular against the foundation or retaining wall. The following sections summarize each design situation.

5.4.1 Active Pressures

Application	Retaining walls, which are allowed to deflect and develop an active soil wedge
Resultant Force Calculation	$\frac{1}{2}\gamma K_a H^2$; pounds per horizontal foot of wall
Resultant Force Location	one-third the wall height (1/3 H) above the base
Seismic Acceleration[1]	$k_h = 0.234g$ (½ PGA) per the SEAOC (2019)
Seismic Calculation Basis	Mononobe-Okabe equations (Bowles, 1996)
Seismic Resultant Force	$\frac{1}{2}(\gamma K_{ae} - \gamma K_a) H^2$; pounds per horizontal foot of wall
Seismic Resultant Force Location[2]	Applied at 60% of the wall height above the base

1. Because the maximum acceleration occurs only briefly during an earthquake, it is common practice when designing dams and other earth structures to reduce the design acceleration to ½ of the maximum design acceleration (Hynes-Griffin and Franklin, 1984).
2. Research has indicated that lateral pressures due to earthquakes are non-hydrostatic in distribution, and the resultant acts above the lower third-point of the wall (Bakeer, et al, 1990).

5.4.2 At-Rest Pressures

Application[1]	Basement walls, or other walls which are restrained and not allowed to deflect
Resultant Force Calculation	$\frac{1}{2}\gamma K_0 H^2$; pounds per horizontal foot of wall
Resultant Force Location	One-third the wall height (1/3 H) above the base

1. Design control of such walls shall be whichever generates the higher resultant force: at-rest pressures or active seismic pressures.

5.4.3 Passive Pressures

Application[1]	Toe of retaining walls where the wall is allowed to move away from retained soil
Resultant Force Calculation	$\frac{1}{2} \gamma K_p H^2$; pounds per horizontal foot of wall
Resultant Force Location	One-third the wall height (1/3 H) above the base
Seismic Acceleration	$k_h = 0.234g$ (½ PGA) per the SEAOC (2019)
Seismic Calculation Basis	Mononobe-Okabe equations (Bowles, 1996)
Seismic Resultant Force Location[2]	One-third the wall height (1/3 H) above the base

1. Passive pressure design should neglect loose fill and soil located within the frost zone.

5.5 Slabs-on-Grade

5.5.1 Interior Slabs-on-Grade

Interior slabs should be at least 4 inches thick, and any slabs bearing vehicles should be at least 6 inches thick, or as approved by a Structural Engineer. Minor floor cracking of slab-on-grade construction is difficult, if not impossible, to prevent. Such cracking is normal and should be expected to occur with time. Buildings are almost never free of cracks, and cracking is caused by many factors other than soil movement, such as concrete shrinkage or curling, or daily and seasonal variability in temperature and humidity.

An impermeable layer (usually plastic) is suggested beneath interior slabs, underlain by 4 inches of clean drain gravel that will act as a capillary break to reduce dampness. Two options are available to reduce the tendency for the concrete to crack or curl as it dries:

1. A blotter layer may be placed under the slab. In the past, loose sand has been used for this purpose, but is no longer recommended. A cover of 4 inches of trimmable, compactible, granular material may be placed over the impermeable layer to receive the concrete slab. This material usually consists of "crusher run material", which varies in size from about 1.5-inch down to rock dust. Alternatively, 3 inches of compacted, fine-graded material such as crusher fines or manufactured sand may be used.

2. The blotter layer may be eliminated if the concrete is reinforced properly. The attached article entitled "Controlling Curling and Cracking in Floors to Receive Coverings" provides a discussion of proper floor slab reinforcement. If the contractor needs additional guidance on reinforcement, a Structural Engineer should provide it.

Three articles from the American Concrete Institute (ACI) that discuss these options can be found in the references section (ACI, 1997; Suprenant and Malisch, 1998 & 1999). We are able to offer additional guidance if requested.

5.5.2 Exterior Slabs-on-Grade

Exterior slabs (e.g., sidewalks, patios, driveways, etc.) typically sustain the greatest damage. Cracking is almost impossible to avoid, and freeze-thaw adds to the difficulty caused by soil movement. Performance of exterior slabs in areas underlain by topsoil or the gravels with silt and sand will be improved by over-excavation and replacing it with “pit-run” or approved site derived material compacted per Section 5.3.5. A minimum 6-inch road mix gravel (e.g. WYDOT Grading H) is recommended be placed and compacted directly below the slab. Prior to placement and compaction of the gravel, the surface of the exposed excavation should be separated from the sandy alluvium using a non-woven separation fabric (e.g., Mirafi 140N).

Exterior slabs should be at least 4 inches thick, 6 inches if supporting vehicles, or as directed by the Structural Engineer. Exterior slabs should not be tied to foundation walls. Any movement of exterior slabs may be transmitted to the foundation walls, resulting in damage. Posts for patios or other exterior columns should not bear on exterior slabs. If the slabs settle or rise, the movement can be transmitted to the post, resulting in damage to the structure. Landscaping elements placed on topsoil and/or sandy alluvium may experience settlement.

6.0 LIMITATIONS

This report has been prepared based on a limited amount of data. Actual site conditions may vary. These services have been performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty is made or implied.

This report is site-specific and has been prepared in support of the proposed project. The report is for the sole use of the current property owner and their design and construction team, and shall be considered non-transferable to future property owners without the written consent of Jorgensen Geotechnical. Under no circumstances are the figures and text to be used separately.

7.0 REFERENCES

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APPENDIX A

Site Exploration Procedures and Subsurface Exploration Logs

Field Exploration: Excavated Test Pits

Test Pit Locations and Elevations

Test pit locations were determined by Jorgensen Geotechnical (JG) staff to characterize the four corners of the property. Locations of the test pits are presented on Figure 2. The accurate location and elevation of each test pit and standpipe were surveyed by Jorgensen Associates.

Subsurface Exploration Procedure

JG conducted a site exploration on May 4, 2023. The test pits were excavated to approximately 7 to 8.5-ft below the existing ground surface (bgs). Test pit locations were chosen to bracket the site. Soil type, consistency, and relative moisture content were observed and documented by JG personnel. Samples were not collected during the exploration due to the stony soil conditions encountered and out experience with similar soils. The location of the outreach center was unknown at the time the exploration was performed. Test pits were backfilled immediately after they were logged.

Photo 1: Typical Test Pit Excavation

Test Pit Logs

Field data were digitally collected in the field using the application pLog on a tablet. Draft logs were reviewed in the office, and final versions are presented below. The final logs represent JG's interpretation of the subsurface soil conditions, and, although site conditions appear consistent across the property, actual soil conditions may differ from those observed in the test pits.

Photo 2: Groundwater monitoring piezometer installation JG-2

Photo 3: Test Pit JG-4

JORGENSEN
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1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Test Pit ID: JG-1

Sheet 1 of 1

Project Name: Central Wyoming College
Client: CWC
Project Number: 22070
Date Started: May 04 2023 **Completed:** May 04 2023
Contractor: Fish Creek Excavation
Equipment: John Deere 310SJ
▽ At time of excavation not encountered

Project Location: High School Road, Teton County, Wyoming
Logged By: Marlie Schell **Checked By:** HC
Latitude: 43.458228 **Longitude:** -110.804581 **Elevation:** 6112.55
Notes:
-Backfilled with spoils
-Stopped due to test pit wall collapse

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits			Well
									Liquid Limit	Plastic Limit	Plasticity Index	
						SANDY SILT (ML): slightly moist, dark brown, medium stiff, homogeneous, 25 % sand, 75 % fines, low plasticity, Worm casts and heavy roots [TOPSOIL].						
1						Well-Graded GRAVEL with Silt and Sand (GW-GM): slightly moist to moist, dark orangish brown, medium dense, clast supported, 10% cobbles, 50 % gravel, 30 % sand, 20 % fines, rounded, well graded, [ALLUVIUM].						
2			HG-1	1.00								
3						Well-Graded GRAVEL with Sand (GW): moist, orangish brown, medium dense, clast supported, 15% cobbles, 60 % gravel, 30 % sand, 10 % fines, rounded, well graded, [ALLUVIUM].						
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Test Pit ID: JG-2

Sheet 1 of 1

Project Name: Central Wyoming College
Project Location: High School Road, Teton County, Wyoming
Client: CWC
Logged By: Marlie Schell **Checked By:** HC
Project Number: 22070
Latitude: 43.457902 **Longitude:** -110.804419 **Elevation:** 6113.49
Date Started: May 04 2023 **Completed:** May 04 2023
Notes:
Contractor: Fish Creek Excavation
-Backfilled with spoils
Equipment: John Deere 310SJ
-Stopped due to test pit wall collapse
▽ At time of excavation not encountered

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits Liquid Limit	Atterberg Limits Plastic Limit	Atterberg Limits Plasticity Index	Well
						SANDY SILT with Gravel (ML): slightly moist, dark brown, medium stiff, homogeneous, 20 % gravel, 15 % sand, 65 % fines, low plasticity, Worm casts and heavy roots [TOPSOIL].						
1						Well-Graded GRAVEL with Silt and Sand (GW-GM): slightly moist to moist, dark orangish brown, medium dense, clast supported, 10% cobbles, 50 % gravel, 30 % sand, 20 % fines, rounded, well graded, [ALLUVIUM].						
2						Well-Graded GRAVEL with Sand (GW): moist, orangish brown, medium dense, clast supported, 15% cobbles, 60 % gravel, 30 % sand, 10 % fines, rounded, well graded, cobbles increase in size with depth [ALLUVIUM].						
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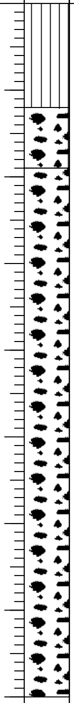
Telephone: 307.733.5150

Test Pit ID: JG-3
Sheet 1 of 1

Project Name: Central Wyoming College
Project Location: High School Road, Teton County, Wyoming
Client: CWC
Logged By: Marlie Schell **Checked By:** HC
Project Number: 22070
Latitude: 43.457792 **Longitude:** -110.805227 **Elevation:** 6111.44
Date Started: May 04 2023 **Completed:** May 04 2023
Contractor: Fish Creek Excavation
Equipment: John Deere 310SJ
▽ At time of excavation not encountered

Notes:
-Backfilled with spoils
-Stopped due to test pit wall collapse



Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits			Well
									Liquid Limit	Plastic Limit	Plasticity Index	
1						SANDY SILT with Gravel (ML): slightly moist, dark brown, medium stiff, homogeneous, 20 % gravel, 15 % sand, 65 % fines, low plasticity, Worm casts and heavy roots [TOPSOIL].						
2			HG- 1			Well-Graded GRAVEL with Silt and Sand (GW-GM): slightly moist to moist, dark orangish brown, medium dense, clast supported, 10% cobbles, 50 % gravel, 30 % sand, 20 % fines, rounded, well graded, [ALLUVIUM].						
3 4 5 6 7 8						Well-Graded GRAVEL with Sand (GW): moist, orangish brown, medium dense, clast supported, 15% cobbles, 60 % gravel, 30 % sand, 10 % fines, rounded, well graded, cobbles increase in size and moisture increases with depth [ALLUVIUM].						
9 10 11 12 13 14												

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Telephone: 307.733.5150

Test Pit ID: JG-4

Sheet 1 of 1

Project Name: Central Wyoming College
Project Location: High School Road, Teton County, Wyoming
Client: CWC
Logged By: Marlie Schell **Checked By:** HC
Project Number: 22070
Latitude: 43.458152 **Longitude:** -110.805541 **Elevation:** 6113.15
Date Started: May 04 2023 **Completed:** May 04 2023
Notes:
Contractor: Fish Creek Excavation
-Backfilled with spoils
Equipment: John Deere 310SJ
-Stopped due to test pit wall collapse
▽ At time of excavation not encountered

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits			Well
									Liquid Limit	Plastic Limit	Plasticity Index	
						SANDY SILT (ML): slightly moist, dark brown, medium stiff, homogeneous, 20 % gravel, 15 % sand, 65 % fines, low plasticity, Worm casts and heavy roots [TOPSOIL].						
1						Well-Graded GRAVEL with Silt and Sand (GW-GM): slightly moist to moist, dark orangish brown, medium dense, clast supported, 10% cobbles, 50 % gravel, 30 % sand, 20 % fines, rounded, well graded, rough transition zone to the more sandy alluvial layer [ALLUVIUM].						
2						Well-Graded GRAVEL with Sand (GW): moist, orangish brown, medium dense, clast supported, 15% cobbles, 60 % gravel, 30 % sand, 10 % fines, rounded, well graded, cobbles increase in size and moisture increases with depth [ALLUVIUM].						
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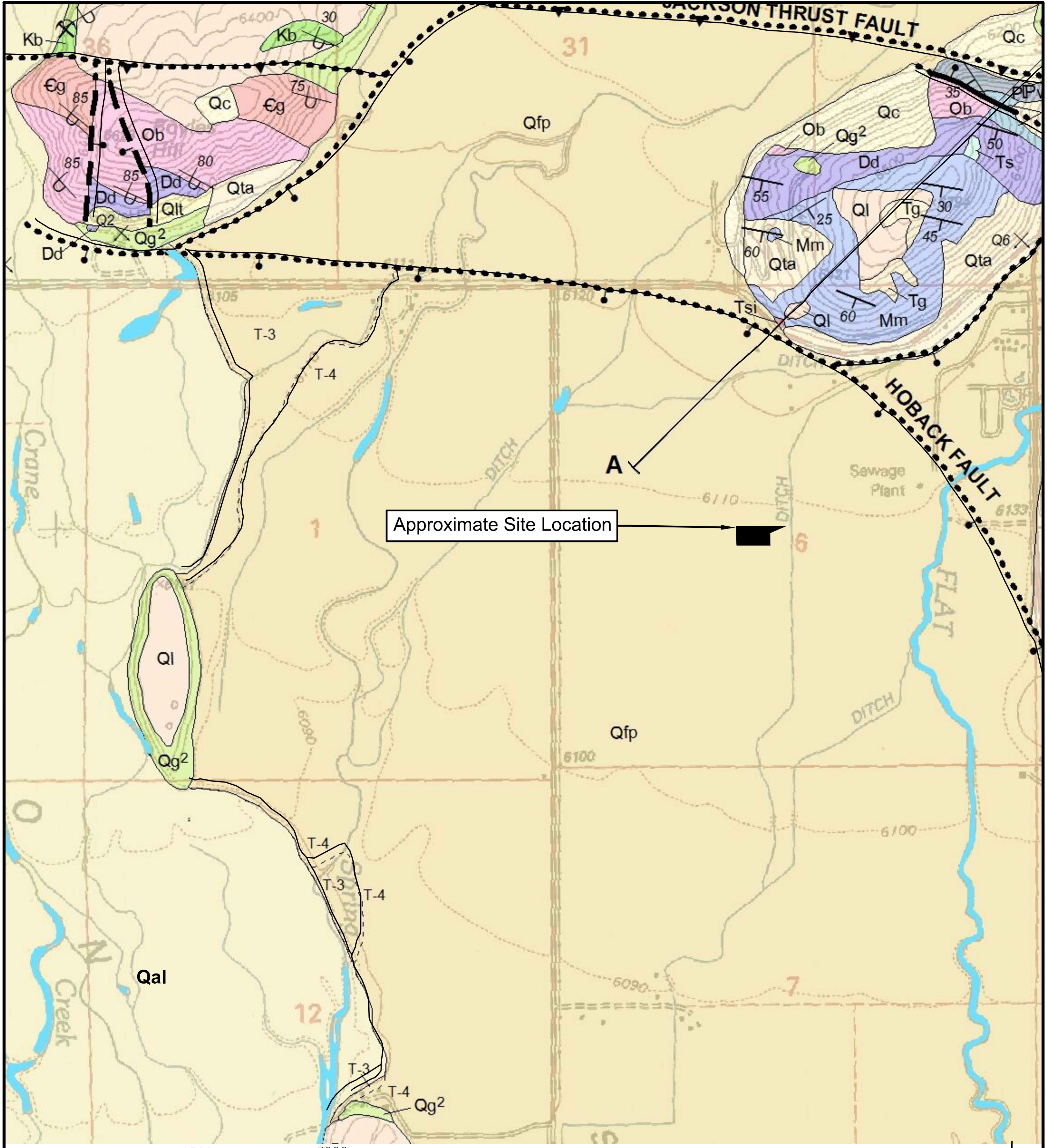
APPENDIX B

Figures



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SCALE: 1 INCH = 1500 FEET

THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

Map symbols:

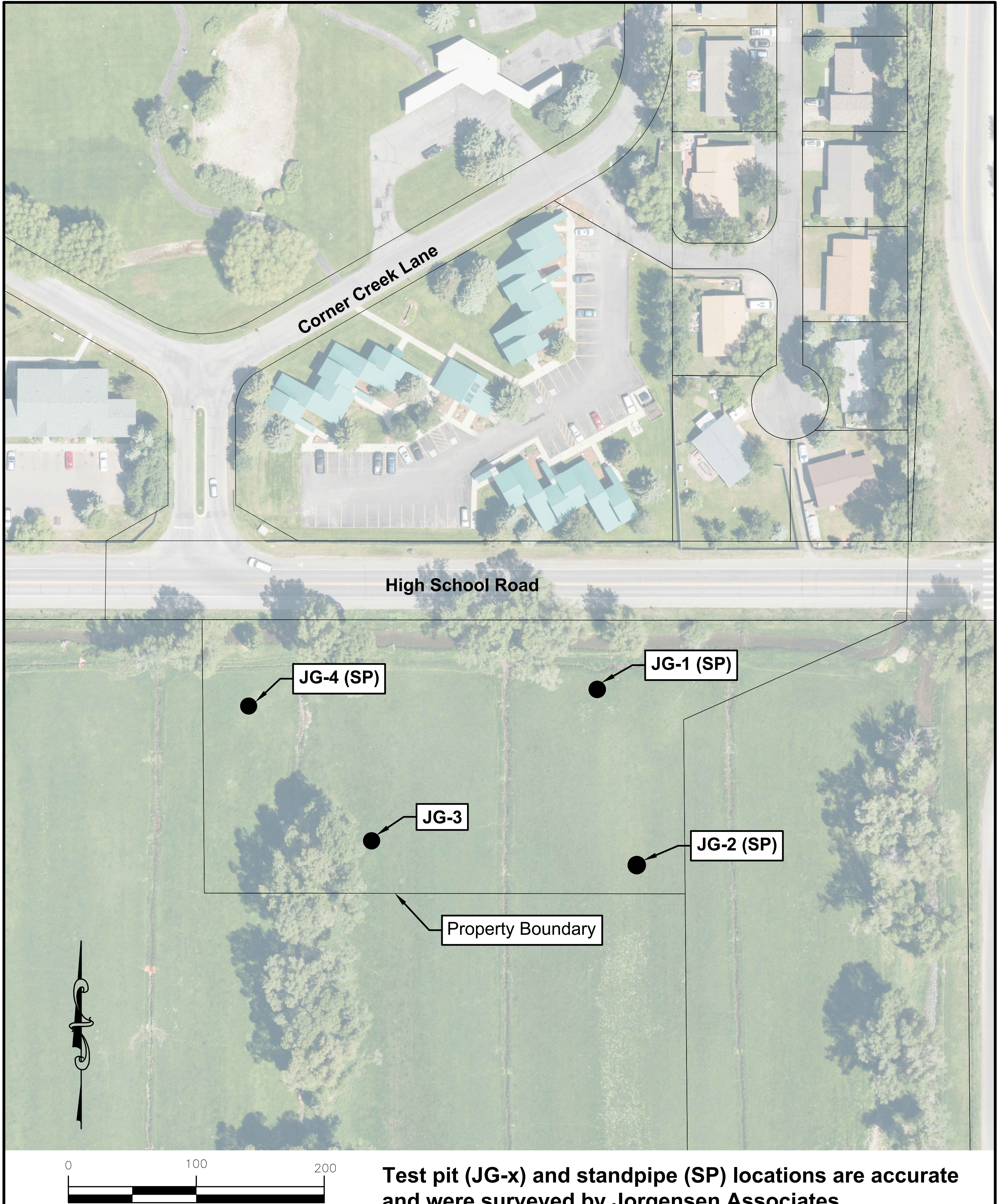
Qal - Alluvium - stream and river deposits

Qfp - Flood Plain Deposits - sand. silt and clay

Ql - Loess - silt

Love and Albee, Geologic Map of the Jackson Quadrangle, 2004.

DRAFTED BY: MS REVIEWED BY: HC PROJECT NUMBER 22070	SHEET TITLE: Figure 1 Site Location and Geologic Map	PROJECT TITLE: Geotechnical-Engineering Report Central Wyoming College Teton County, Wyoming	JORGENSEN Geotechnical, LLC 307-733-5150 www.jorgeng.com



Test pit (JG-x) and standpipe (SP) locations are accurate and were surveyed by Jorgensen Associates.

DRAFTED BY:	MS	SHEET TITLE: Figure 2 Test Pit and Standpipe Location Map	PROJECT TITLE: Geotechnical-Engineering Report Central Wyoming College Teton County, Wyoming
REVIEWED BY:	HC		
PROJECT NUMBER 22070			

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November 15, 2023

Central Wyoming College
Attn: Willie Noseep
2660 Peck Ave. MH 106F
Riverton, WY 82501

RE: GROUNDWATER MONITORING REPORT, JACKSON OUTREACH CENTER, CENTRAL WYOMING COLLEGE, HIGH SCHOOL ROAD, TETON COUNTY, WYOMING
PROJECT NO: 22070

Dear Mr. Noseep,

We are pleased to submit this report summarizing the results of the 2023 spring and summer groundwater monitoring for the proposed college outreach center of the Central Wyoming College (CWC) along High School Road in Teton County, Wyoming.

Two Heron Instrument groundwater dataloggers were installed in groundwater monitoring standpipe piezometers JG-1 and JG-4 on May 4, 2023, at depths of 7.5-ft and 6.0-ft below the existing ground surface (bgs), respectively. Approximate locations of the standpipe piezometers are shown on the attached Figure 1.

Once the dataloggers were installed, groundwater data was collected every four hours for approximately 4.5 months until the data was downloaded on October 13, 2023. A manual measurement was taken on May 4, 2023, and August 14, 2023, to supplement and verify data from the loggers. One datalogger (JG-1) stopped recording in August for unknown reasons. The dataloggers can only record groundwater levels when they are submerged, so the “flat line” on the attached groundwater plots represent dry conditions, where groundwater is deeper than the dataloggers installation depth. These readings represent conditions at the site prior to when local irrigation practices occur.

Elevations are estimated based on approximate standpipe locations and topographic data provided by Jorgensen Associates. General fluctuations in groundwater levels during the monitoring period appear consistent between JG-1 and JG-4. Peak groundwater levels were recorded on July 5, and July 4, 2023 in monitoring piezometers JG-1 and JG-4, respectively. Peak groundwater levels are summarized in Table 1 below and shown graphically on the attached plots.

Table 1: Groundwater Data Summary

	JG-1	JG-4
Instrument Depth (Feet below ground surface)	7.5	6.0
Date of Peak Groundwater	7/5/2023	7/4/2023
Peak Recorded Groundwater (Feet below ground surface)	3.13	3.21
Peak Recorded Groundwater* (Based on surveyed elevation)	6109.4	6109.9

These data consist of recordings in spring and summer 2023 only and may not be representative of all possible groundwater conditions. It is prudent to take a conservative approach to site groundwater levels as they tend to fluctuate seasonally; 2023 likely does *not* represent the highest possible groundwater levels.

If you have any questions, please contact our office. We are happy to provide additional observations and recommendations as the project progresses.

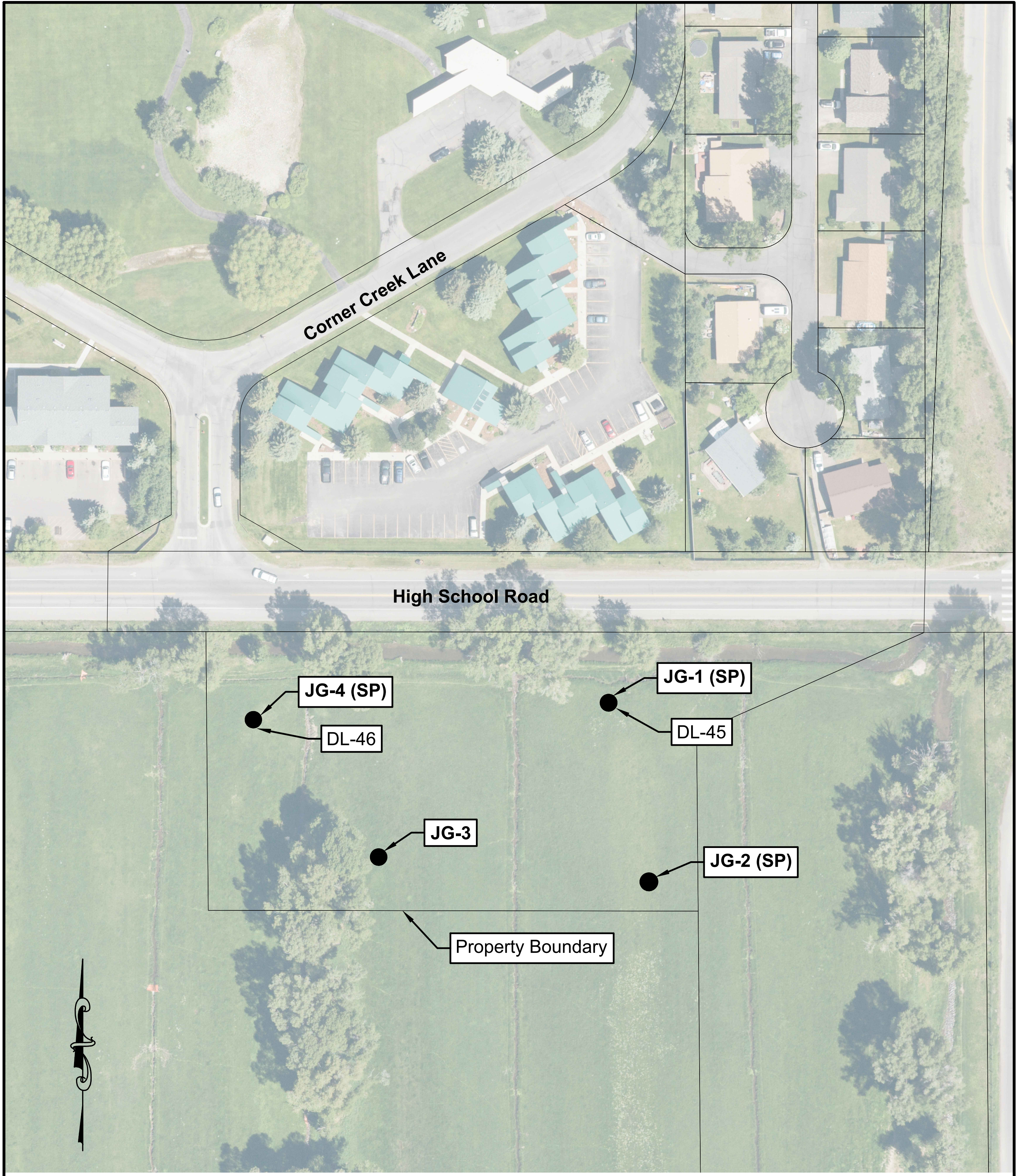
Respectfully submitted,
Jorgensen Geotechnical, LLC

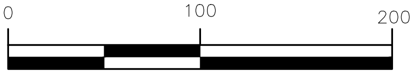
Marta Bollinger

Marta Bollinger
Engineer Intern

Harrison Carter, P.E.
Geotechnical Project Manager

Attached: Figure 1 – Groundwater Monitoring Well Location Map
Plot of Groundwater Depth Below Ground Surface
Plot of Approximate Groundwater Elevation

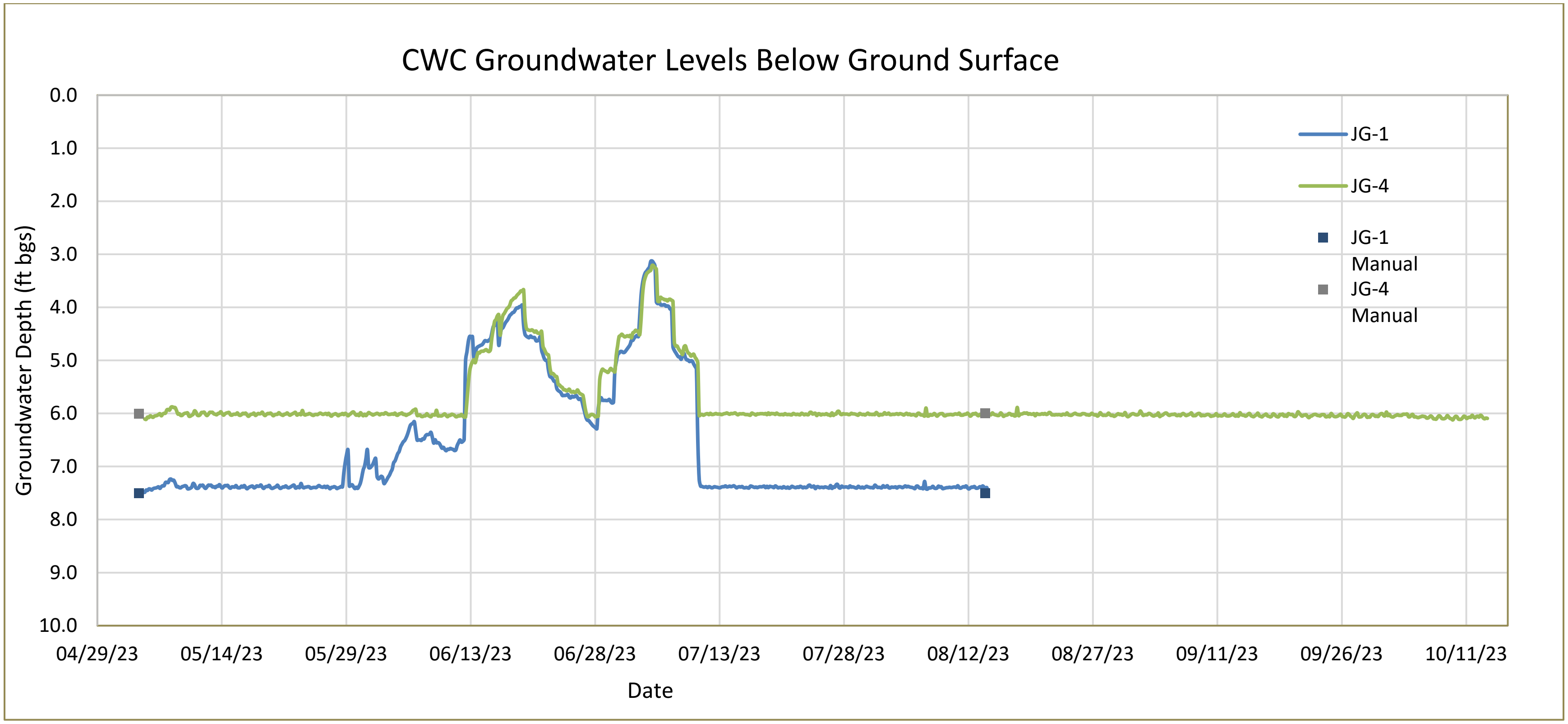


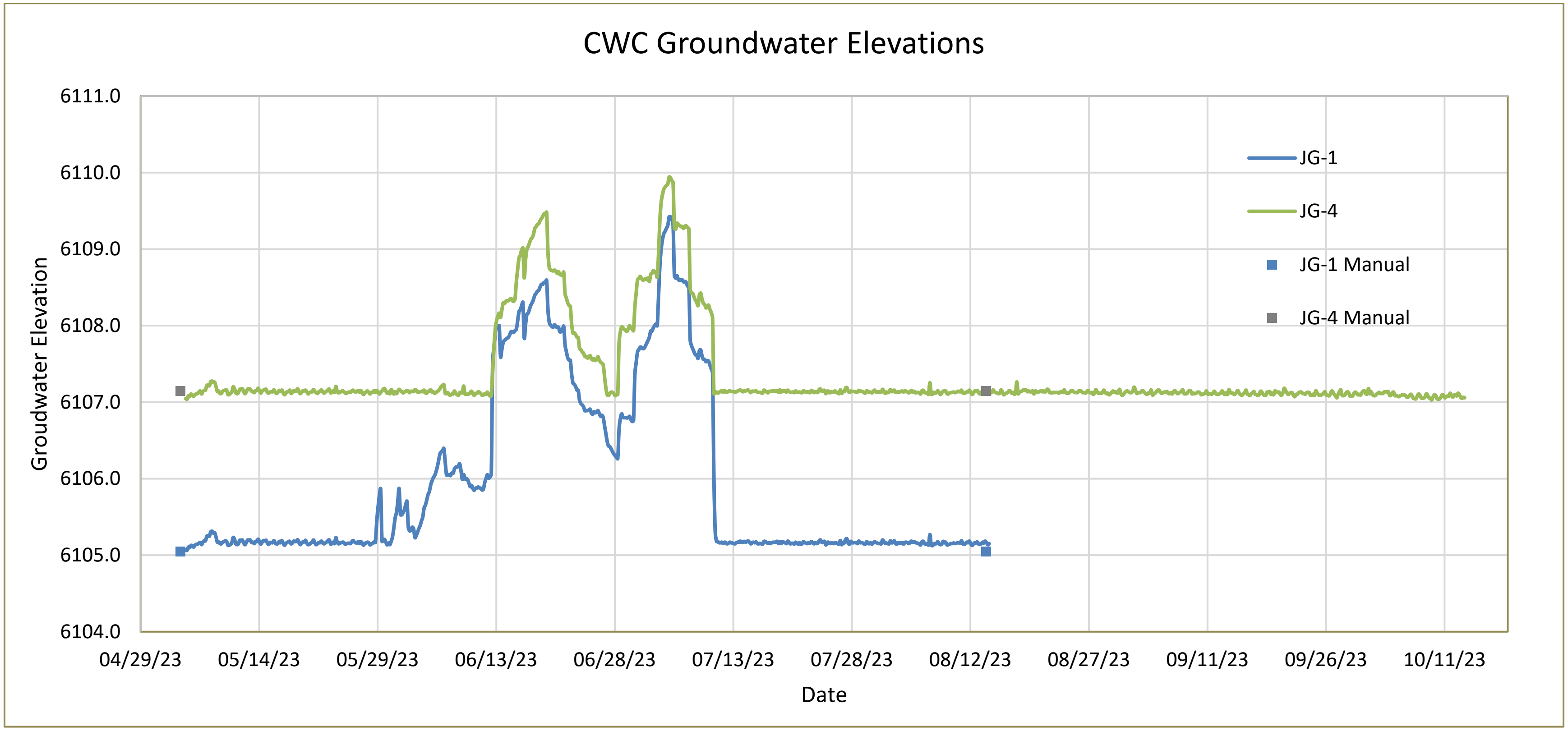


SCALE: 1 INCH = 100 FEET
THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

Test pit (JG-x) and standpipe (SP) locations were surveyed by Jorgensen Associates. DL-xx indicates a datalogger was installed in the standpipe.

DRAFTED BY: MS REVIEWED BY: HC PROJECT NUMBER 22070	SHEET TITLE: Figure 1 Test Pit and Standpipe Location Map	PROJECT TITLE: Groundwater Monitoring Report Central Wyoming College Teton County, Wyoming	JORGENSEN Geotechnical, LLC 307-733-5150 www.jorgeng.com


CWC Groundwater Levels Below Ground Surface
Groundwater Depth (ft bgs)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
04/29/23
05/14/23
05/29/23
06/13/23
06/28/23
07/13/23
07/28/23
08/12/23
08/27/23
09/11/23
09/26/23
10/11/23
Date
JG-1
JG-4
JG-1 Manual
JG-4 Manual


CWC Groundwater Elevations
Groudwater Elevation
6111.0
6110.0
6109.0
6108.0
6107.0
6106.0
6105.0
6104.0
04/29/23
05/14/23
05/29/23
06/13/23
06/28/23
07/13/23
07/28/23
08/12/23
08/27/23
09/11/23
09/26/23
10/11/23
Date
JG-1
JG-4
JG-1 Manual
JG-4 Manual

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Jackson, WY 83002
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MEMORANDUM

TO: Erin Monroe/Teton County Planning

FROM: Reed Armijo, PE

DATE: October 10, 2022

SUBJECT: CWC Traffic – High School Road Location

PROJECT NO.: 22070.00

On December 30, 2019, Jorgensen Associates, Inc. (Jorgensen) completed a detailed Traffic Impact Study (TIS) for the Central Wyoming College (CWC) – Jackson Campus. The TIS was prepared for a location east of the revised proposed location. This study was prepared as a comprehensive TIS in accordance with Teton County LDR's and the WYDOT Traffic Studies Manual, March 2011 Edition. The TIS is attached to this memo. The purpose of this memo is to summarize how the TIS applies to the revised proposed location.

The previous location was a parcel of land approximately 1,500 feet east of the revised proposed location. Both locations would take access from High School Road with the previous location taking access from an intersection that aligns with Gregory Lane. The revised proposed location's access is proposed for an intersection that aligns with Corner Creek Lane. The discussion below follows the sections outlined in the TIS addressing the revised location.

Study Area- The study area remains the same, as the TIS analyzed the complete length of High School Road, including the new location.

Methodology – The methodology utilized for the TIS followed acceptable TIS practices and conformed with the Teton County and WYDOT regulations and requirements.

Past Studies - The past studies referenced in the TIS are applicable to the new location.

Existing Land Use and Transportation System – The existing land use of the new location is the same as the previous location. The intersection for the revised proposed location's access will now be aligned with High School Road and Corner Creek Lane.

Proposed Conditions - The proposed conditions remain unchanged as CWC's program remains the same. The building itself is identical to the building proposed for the previous location.

Trip Generation – Because the program is unchanged, the trip generation is the same. The background generation and annual growth rates remain applicable.

Trip Distribution – The TIS assumed that the 2021 and 2031 ingress/egress traffic of the CWC Campus follows the same traffic trends of the existing transportation network. The 2021 baseline and buildout trip distribution conditions were evaluated for AM, PM and School PM peak hours. These assumptions remain valid for the new location.

Traffic Analysis – The new location will have lesser traffic impacts than the previous location. The average daily traffic volumes on the High School Road segment of the new CWC location are less than half (3,330 vehicles per day) compared with those at the previous location (7,470 vpd). In addition, the previous location intersected High School Road at the Gregory Lane intersection. This intersection has the lowest level of service of any intersection along High School Road. The traffic volumes on Corner Creek Lane are substantially less than Gregory Lane. This in conjunction with the lower traffic volume on this segment of High School Road will have lesser traffic impacts than the previous location.

Other Considerations – As with the previous location, the revised proposed location will be conducive in meeting the goals of the *Jackson/Teton Integrated Transportation Plan* adopted by the Teton County Board of County Commissioners and Jackson Town Council in 2015 for encouraging multi-modal shifts of trips (vehicle, pedestrian, bike, and transit) based upon its proximity to schools, grocery shopping, and other trips for basic and essential services.

Conclusion – The revised proposed location of the CWC - Jackson Campus, from the previous location that the TIS was based on, will have less traffic impacts on High School Road.

Please contact me if you have any comments or questions.

Kristi Malone

From: Reed Armijo <rarmijo@jorgeng.com>
Sent: Friday, December 27, 2019 4:13 PM
To: Kristi Malone
Cc: Amy Ramage; Jazmine Watson; Brendan Schulte; Hayley Ruland
Subject: ZMA2019-0003 CWC Traffic Impact Study
Attachments: Response to TC Engineer Comments.pdf; Response to TCSD Comments.pdf; 12-27-2019_19037 _CWC_Traffic Impact Statement (1).pdf

Kristi –

Hope you've had a great holiday! Enclosed please find the updated TIS to address comments received. Please not that we have also included responses to TC Engineering and TCSD comments. The WYDOT responses are incorporated in the document as that is where Darin Kaufman/WYDOT included his.

Please note that I have referenced the appendices to "available upon request" to keep this in the 45 page range and not the 160 page range!

Please let me know if you have any comments or questions and have a Happy New Year.

Reed

Reed Armijo P.E.
Principal Engineer
PO Box 9550 · 1315 HWY 89 S., Suite 201
Jackson, WY 83002
TEL: (307) 733-5150 x314
CELL: 307.413.6501
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December 27, 2019

Ms. Amy Ramage, P.E.
Teton County Engineer
PO Box 3594
Jackson, Wyoming 83001

Via E-mail: aramage@tetoncountywy.gov

RE: ZMA2019-0003 CWC Rezone Application – Traffic Impact Study Review Comments Response

Dear Ms. Ramage,

Thank you for meeting with us regarding the CWC traffic study and for the feedback provided in your December 4th, 2019 Traffic Impact Study Review. This letter addresses those comments. Please see below for your comments and our responses, provided in red:

Comment:
POINT OF ACCESS
There are 3 identified locations for points of access to the CWC site:

a. East to S. Hwy 89
b. East of soccer fields (Gregory Lane/HS Road)
c. West of the JHHS Parking Lot (MS Road/HS Road)

From our discussion it seems that the applicant's preferred access point is (b), East of soccer fields. This will be directly adjacent to the existing Teton County owned sewer dump station building. Currently there is a looped approach to this building on HS Road. I have concerns that the approach will now have to be altered to fall on the new access road and may not meet standards for separation distance from the new intersection at HS Road. This will need further review by County staff once a more detailed plan is developed.

Response:
If the Gregory Lane access is selected, we agree that the sewer dump egress will require improvements and suggest that it exits to the CWC access road instead of directly to High School Road. Because the easement has been approved and is available, and the traffic volumes generated by the sewer dump station are relatively low, we believe that with proper design the CWC access can adequately accommodate the dump station egress and CWC. This will be addressed and coordinated with Teton County in the development of the design.

Comment:
While the approach on S Hwy 89 (a) is not the applicants preferred alternative for accessing the site, the county commission may want to consider larger transportation network opportunities that requiring the approach onto Hwy 89 could provide in relation to network connectivity, redundancy, and reduction of traffic volumes on High School Road which has poor levels of service at peak hours. This deserves consideration particularly in relation to future development potential of the surrounding parcels of land in the greater South Park area.

Response:

We agree that this access deserves consideration as part of the development of the lands in the greater South Park area. This is confirmed by its inclusion in the Teton County Integrated Transportation Plan to serve an east-west connector connecting US 89 with South Park Loop Road as that area develops. Language to this effect has been added to the TIS. As discussed in the TIS, we believe developing this connector is beyond the feasibility, scope, and need for only serving the CWC campus, and is therefore not analyzed as part of the study.

Comment:

ROAD TYPICAL SECTION

It was discussed that the new road typical section would be based upon the TOJ complete streets model. County staff encourages thoughtful design on pedestrian and bicycle access and travel lane widths that discourage speeding in this area of high pedestrian and playfield usage. Fencing for ball containment may also be necessary adjacent to the fields.

Response:

We agree and have included the following in the recommendation regarding bicycle and pedestrian access:

> *A pathway should be developed along the access to provide continuity within the pathway network system and to comply with Town of Jackson complete streets standards that are being proposed for the improvements to Gregory Lane. The school speed limit zone should be expanded along High School Road to the east side of the Gregory Lane intersection to make the pedestrian and bicycle crossing safer at the High School Road and Gregory Lane intersection. The school zone should reduce traffic speeds down to 20 mph for a minimum distance of 400' on each side of the crosswalk. This can be accomplished through the proper signage along High School Road per the MUTCD.*

Comment:

ROAD EASEMENT

In limited time available, I was not able to locate the easement documents for any of the access road approach locations. It is not clear who will eventually own and maintain the new access road or if easements may need to be modified for the current proposal.

Response:

A non-exclusive interest to the road easements is reserved by Lockhart (please see attached warranty deed for the TCSD parcel expressing this interest). We have added language in the TIS indicating that CWC will maintain the access road until future development occurs requiring shared use of the road.

Comment:

FLAT CREEK/FLOODPLAIN

If the HS Road/Gregory Lane approach is utilized, the setback from Flat Creek will need to be considered in the design.

Response:

An environmental analysis has been prepared by Alder Environmental that confirms the complete street corridor can be constructed to accommodate the required setback for this portion of Flat Creek.

Comment:

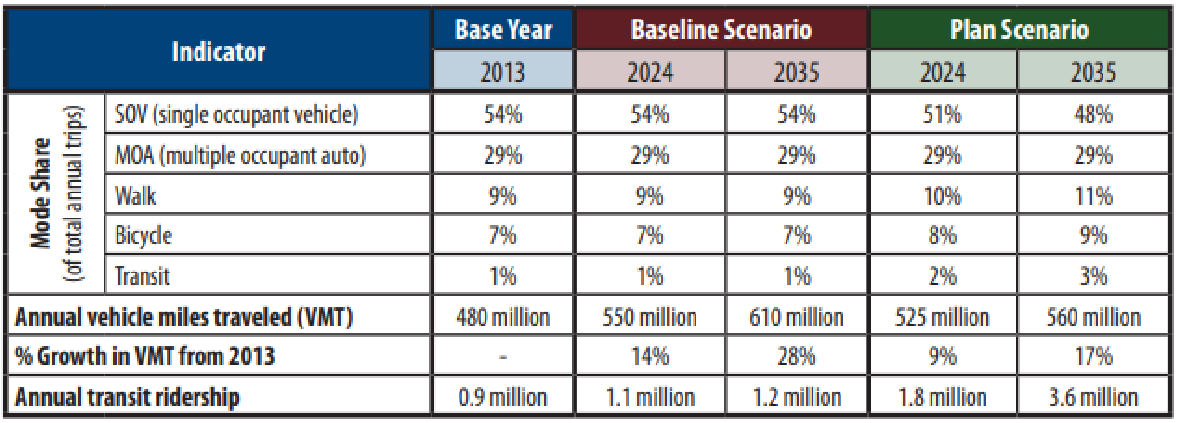
Upon further review after our meeting, the floodplain boundary encroaches on the HS Road/Gregory Lane access point road easement, therefore it appears that a floodplain permit would be necessary for road improvements that fall within the special flood hazard area. As discussed, frazil ice issues also exist in this area of Flat Creek.

Response:
We concur that the design will need to meet floodplain requirements and address the frazil ice issue.

Comment:
TRAVEL DEMAND MANAGEMENT
Finally, I strongly encourage CWC to develop a robust Travel Demand Management Program (TDM) to encourage and reward multi-modal transportation by the students, staff and faculty. In the study, currently no trips are allocated to transit due to the relative proximity of the bus stops. However, it seems that the HS Road stops are not too far to preclude use, even if a dedicated stop is not achievable.

Response:
CWC is committed to a robust TDM and as an educational institution sees this as an opportunity to educate their students and staff on the merits of and benefits of single occupant vehicle (SOV) trip reduction as it relates to road capacity and associated cross sectional widths, as well as CO2 emissions. Wellness and health benefits of biking and walking can also be messaged through the nursing program. We have also had good discussions with START Bus who believes the proposed campus can be well served by the current service along High School Road, including in 2021. As indicated in the comments, we have assigned no trips to START ridership based upon the low percentage of ridership in the community identified in the ITP. START Bus is also encouraged by its ability to serve the area when all of the road easements are built out thereby allowing for a looped service to the area. We have added language emphasizing these points to the TDM.

The multimodal transportation numbers were based on the *Jackson/Teton Integrated Transportation Plan.* The 2021 numbers are baseline numbers which are expected to occur if recent trends in Jackson continue into the future, combines with no change in current travel behavior. The 2031 percentage values are interpolated Plan Scenario values using the 2024 and 2035 estimates. The table below is the referenced data from the ITP. We concur that a site plan that is bike/pedestrian friendly is important to achieve these goals



Indicator		Base Year	Baseline Scenario		Plan Scenario	
		2013	2024	2035	2024	2035
Mode Share (of total annual trips)	SOV (single occupant vehicle)	54%	54%	54%	51%	48%
	MOA (multiple occupant auto)	29%	29%	29%	29%	29%
	Walk	9%	9%	9%	10%	11%
	Bicycle	7%	7%	7%	8%	9%
	Transit	1%	1%	1%	2%	3%
Annual vehicle miles traveled (VMT)		480 million	550 million	610 million	525 million	560 million
% Growth in VMT from 2013		-	14%	28%	9%	17%
Annual transit ridership		0.9 million	1.1 million	1.2 million	1.8 million	3.6 million

We appreciate the opportunity to respond to your comments and look forward to continued cooperation.

Respectfully,
JORGENSEN ASSOCIATES, INC.

Reed Armijo, P.E.
Senior Principal Engineer

TETON COUNTY WYOMING

PUBLIC WORKS DEPARTMENT
Engineering
Road & Levee
Pathways
Integrated Solid Waste & Recycling

December 4, 2019

TO: Angie Martell, Teton County Associate Long Range Planner
Delivery via email: armartell@tetoncountywy.gov

RE: ZMA2019-0003 CWC rezone application – Traffic Impact Study review

Dear Angie,

Thank you for meeting with me regarding the CWC traffic impact study related to the rezone application currently being considered.

Following are my primary comments on the document.

POINT OF ACCESS
There are 3 identified locations for points of access to the CWC site:
a. East to S. Hwy 89
b. East of soccer fields (Gregory Lane/HS Road)
c. West of the JHHS Parking Lot (MS Road/HS Road)

From our discussion it seems that the applicant's preferred access point is (b), East of soccer fields. This will be directly adjacent to the existing Teton County owned sewer dump station building. Currently there is a looped approach to this building on HS Road. I have concerns that the approach will now have to be altered to fall on the new access road and may not meet standards for separation distance from the new intersection at HS Road. This will need further review by County staff once a more detailed plan is developed.

While the approach on S Hwy 89 (a) is not the applicants preferred alternative for accessing the site, the county commission may want to consider larger transportation network opportunities that requiring the approach onto Hwy 89 could provide in relation to network connectivity, redundancy, and reduction of traffic volumes on High School Road which has poor levels of service at peak hours. This deserves consideration particularly in relation to future development potential of the surrounding parcels of land in the greater South Park area.

ROAD TYPICAL SECTION
It was discussed that the new road typical section would be based upon the TOJ complete streets model. County staff encourages thoughtful design on pedestrian and bicycle access and travel lane widths that discourage speeding in this area of high pedestrian and playfield usage. Fencing for ball containment may also be necessary adjacent to the fields.

ROAD EASMENT
In limited time available, I was not able to locate the easement documents for any of the access road approach locations. It is not clear who will eventually own and maintain the new access road or if easements may need to be modified for the current proposal.

(Continued on next page)

FLAT CREEK/FLOODPLAIN

If the HS Road/Gregory Lane approach is utilized, the setback from Flat Creek will need to be considered in the design.

Upon further review after our meeting, the floodplain boundary encroaches on the HS Road/Gregory Lane access point road easement, therefore it appears that a floodplain permit would be necessary for road improvements that fall within the special flood hazard area. As discussed, frazil ice issues also exist in this area of Flat Creek.

TRAVEL DEMAND MANAGEMENT

Finally, I strongly encourage CWC to develop a robust Travel Demand Management Program (TDM) to encourage and reward multi-modal transportation by the students, staff and faculty. In the study, currently no trips are allocated to transit due to the relative proximity of the bus stops. However, it seems that the HS Road stops are not too far to preclude use, even if a dedicated stop is not achievable.

Related to encouraging multi-modal transportation, assure that your site plan is bike/ped friendly and provides adequate bike parking.

Thank you for the opportunity to review and provide comment.

Sincerely,

Amy Ramage, PE
Teton County Engineer

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December 27, 2019

Ms. Kristi Malone
Teton County Senior Long-Range Planner
PO Box 3594
Jackson, Wyoming 83001

Via E-mail: kmalone@tetoncountywy.gov

RE: ZMA2019-0003 CWC Rezone Application
Teton County School District No. 1 - Traffic Impact Study (TIS) Review Comments Response

Dear Ms. Malone,

We are in receipt of Teton County School District No. 1's (TCSD) comments dated November 20, 2019. This letter addresses those comments that are related to transportation and traffic. Please see below for TCSD's comments and our responses, provided in red:

Access:

There are three points of access associated with the proposal (in no particular order):

1. East to 89. TCSD has no concerns with option 1. It would appear to create a needed redundancy and relieve congestion along High School Road (HSR) which often functions at an LOS D or F. It would also accommodate future growth associated with the remainder of the parcel not being utilized by CWC.

   Response: We agree that this access deserves consideration as part of the development of the lands in the greater South Park area. This is confirmed by its inclusion in the Teton County Integrated Transportation Plan to serve an east-west connector connecting US 89 with South Park Loop Road as that area develops. Language to this effect has been added to the TIS. As discussed in the TIS, we believe developing this connector is beyond the feasibility, scope, and need for only serving the CWC campus, and is therefore not analyzed as part of the study.

2. East of Turf Fields to Gregory Lane: TCSD has no insurmountable concerns with this proposal. It is noted the ROW is narrow and would require special dispensation from the County Engineer and the Fire Marshall for permitting. TCSD has spoken to Jorgensen about specific safety concerns related to field use proximate to the proposed road. With proper fencing along the fields, the District believes safety concerns could be addressed. The larger issue of safety will be addressed later in these comments. Trips are routed on to HSR which may further reduce the LOS for HSR. The District would request that any construction activities associated with this route be conducted during the summer months when school is not in session.

   Response: We concur that mitigation is required between the complete street corridor and the athletic fields to ensure the safety of field users. These will be incorporated in the planning and design of the corridor. As confirmed in the TIS, the LOS of High School Road is an issue and that CWC will be implementing measures to mitigate their impact including offsetting class times from peak hour traffic, a robust transportation demand management plan, and considerations in the design of the High School Road and Gregory Lane Road in concert with the planning and design of the Town of Jackson's Gregory Lane improvement project (approved in the Teton County/Town of Jackson 2019 SPET election and tentatively slated for 2021).

3. North/South; West of JHHS Student Parking Lot It should be noted that the west part of JHHS parking lot - along which the ROW exists - is not built to roadway standards. The paved area is built as a parking lot. Thus, should CWC and the County determine this is the best point of access, the County should condition the project with an off-site requirement such that the applicant is required to bring that portion of the parking lot up to roadway standards. It is further requested than any construction activities on the parking lot be executed while students are out of school for the summer. Having unfettered access to this route during the school year is vital to the operations of JHHS. This solution would mix District traffic and CWC traffic.

Response: We concur that a conditions assessment and standards upgrades would be necessary should this road easement be selected, and that construction occur outside of the school year. The TIS concluded that while the intersection LOS for CWC would function slightly better at this intersection than the Gregory Lane intersection, this does not offset the adverse impacts of introducing CWC traffic with TCSD traffic in the JHHS access and parking lot area.

Traffic:

TCSD has worked vigorously in recent years to reduce trips along HSR. Presently this road functions at and LOS D & F at certain times of day. The District is working to implement its own TDM plan. The District provides transportation and encourages students to use it. JHHS charges a fee for students to park. This fee is imposed in the hope that it will decrease SOV trips, encourage ride sharing and increase bus ridership. The District coordinates and staggers start times at the various schools in order to reduce congestion and increase safety along HWY89, HSR and Middle School Road (MSR). The Board of Trustees may entertain the implementation of more strategies in the future.

It is the hope of TCSD that the County will ensure the LOS along HSR does not diminish as a result of this use due to the safety concerns that arise. Moreover, the District would welcome strategies that would work to improve the LOS and therefore safety. Underparking the project, transit requirements and paid parking are all examples of strategies the applicant and County could work to consider. At a minimum, the applicant should propose a TDM plan that will offset impacts.

Response: We concur with TCSD's concerns with congestion. CWC is committed to a robust TDM and as an educational institution sees this as an opportunity to educate their students and staff on the merits of and benefits of single occupant vehicle (SOV) trip reduction as it relates to road capacity and associated cross sectional widths, as well as CO2 emissions. Wellness and health benefits of biking and walking can also be messaged through the nursing program. We have also had good discussions with START Bus who believes the proposed campus can be well served by the current service along High School Road, including in 2021. We have assigned no trips to START ridership based upon the low percentage of ridership in the community identified in the ITP. We acknowledge that ridership is will occur at the CWC opening in 2021. START Bus is also encouraged by its ability to serve the area when all of the road easements are built out thereby allowing for a looped service to the area. We have added language emphasizing these points to the TDM.

The multimodal transportation numbers were based on the *Jackson/Teton Integrated Transportation Plan.* The 2021 numbers are baseline numbers which are expected to occur if recent trends in Jackson continue into the future, combines with no change in current travel behavior. The 2031 percentage values are interpolated Plan Scenario values using the 2024 and 2035 estimates. The table below is the referenced data from the ITP. We intend to develop site plan that is bike/pedestrian friendly is important to achieve these goals

Safety/Security. Much has changed concerning school operations in the last decade in the way schools and grounds are administered as a result of senseless violence that often targets schools. Historically, schools were planned as centerpieces in many communities; as gathering places. Both school and civic events often occurred on school grounds. As a result of recent increases in violence, schools are transitioning to postures which would exclude any member of the public who does not have an express educational or parental reason to be at a school or on school grounds. TCSD is making significant investments in safety and security. It is important that adjacent uses not diminish TCSD's efforts to provide for the safety and security of our students and staff. While the proposed CWC use is appropriate for the area, two of the access points could conceivably grant any member of the public access to portions of the JHHS campus. To manage toward TCSD security objectives, it is requested that Planning Staff impose fencing requirements along the route described in option two. Further, if option three is the preferred access alternative, it is requested that the applicant's agent Jorgensen Engineering work with TCSD to develop designs and mitigation that will discourage the public from entering onto JHHS property outside of the ROW.

Response: We are committed to working with TCSD to develop designs and mitigation that will discourage the public entering TCSD property outside of the road rights-of-way. CWC safety staff has engaged with TCSD to ensure concerns are identified and addressed.

Emergency Egress: As noted above, HSR operates at an unacceptable LOS at certain times of the day. During the propane fire a few years ago, HWY 89 was closed, HSR was closed, South Park Loop Road (SPLR) was clogged from HSR to the intersection of HWY 89 and SPLR. Emergency egress was diminished or not available. The County is asked to assure emergency egress is attended to - not only with this application but with future applications as well.

Response: We concur that emergency access is essential. To that end, the TIS is recommending an all-weather fire lane be constructed from the north/south road west of JHHS Student Parking Lot and the future east-west connector be constructed should further development occur.

Screening: The District hopes the applicant will provide a landscape plan designed to soften and partially screen the proposed use. The District understands the State often only funds a limited landscaping plan however; we know Jorgensen will provide the very best effort with the resources available from the State.

Response: We will provide screening to the greatest extent possible with the available resources from the State.

We appreciate the opportunity to respond to these comments and look forward to continued cooperation.

Respectfully,
JORGENSEN ASSOCIATES, INC.

Reed Armijo, P.E.
Senior Principal Engineer

From: Jeff Daugherty
To: Angie Martell
Subject: CWC RFC Comments
Date: Wednesday, November 20, 2019 9:57:14 AM

Angie,

Here are the comments you and I discussed yesterday concerning the CWC application. Thanks for your great work on this application. Jorgensen has been excellent to work with on it as well.

Let me know if you require anything further from me.

Jeff

Access:
There are three points of access associated with the proposal (in no particular order):
1: East to 89.
TCSD has no concerns with option 1. It would appear to create a needed redundancy and relieve congestion along High School Road (HSR) which often functions at an LOS D or F. It would also accommodate future growth associated with the remainder of the parcel not being utilized by CWC.

2.. East of Turf Fields to Gregory Lane: TCSD has no insurmountable concerns with this proposal. It is noted the ROW is narrow and would require special dispensation from the County Engineer and the Fire Marshall for permitting. TCSD has spoken to Jorgensen about specific safety concerns related to field use proximate to the proposed road. With proper fencing along the fields, the District believes safety concerns could be addressed. The larger issue of safety will be addressed later in these comments. Trips are routed on to HSR which may further reduce the LOS for HSR. The District would request that any construction activities associated with this route be conducted during the summer months when school is not in session.

3. North/South; West of JHHS Student Parking Lot
It should be noted that the west part of JHHS parking lot - along which the ROW exists - is not built to roadway standards. The paved area is built as a parking lot. Thus, should CWC and the County determine this is the best point of access, the County should condition the project with an off-site requirement such that the applicant is required to bring that portion of the parking lot up to roadway standards. It is further requested than any construction activities on the parking lot be executed while students are out of school for the summer. Having unfettered access to this route during the school year is vital to the operations of JHHS. This solution would mix District traffic and CWC traffic.

Traffic:
TCSD has worked vigorously in recent years to reduce trips along HSR. Presently this road functions at and LOS D & F at certain times of day. The District is working to implement its

own TDM plan. The District provides transportation and encourages students to use it. JHHS charges a fee for students to park. This fee is imposed in the hope that it will decrease SOV trips, encourage ride sharing and increase bus ridership. The District coordinates and staggers start times at the various schools in order to reduce congestion and increase safety along HWY89, HSR and Middle School Road (MSR). The Board of Trustees may entertain the implementation of more strategies in the future.

It is the hope of TCSD that the County will ensure the LOS along HSR does not diminish as a result of this use due to the safety concerns that arise. Moreover, the District would welcome strategies that would work to improve the LOS and therefore safety. Underparking the project, transit requirements and paid parking are all examples of strategies the applicant and County could work to consider. At a minimum, the applicant should propose a TDM plan that will offset impacts.

Safety/Security.
Much has changed concerning school operations in the last decade in the way schools and grounds are administered as a result of senseless violence that often targets schools. Historically, schools were planned as centerpieces in many communities; as gathering places. Both school and civic events often occurred on school grounds. As a result of recent increases in violence, schools are transitioning to postures which would exclude any member of the public who does not have an express educational or parental reason to be at a school or on school grounds. TCSD is making significant investments in safety and security. It is important that adjacent uses not diminish TCSD's efforts to provide for the safety and security of our students and staff.

While the proposed CWC use is appropriate for the area, two of the access points could conceivably grant any member of the public access to portions of the JHHS campus. To manage toward TCSD security objectives, it is requested that Planning Staff impose fencing requirements along the route described in option two. Further, if option three is the preferred access alternative, it is requested that the applicant's agent Jorgensen Engineering work with TCSD to develop designs and mitigation that will discourage the public from entering onto JHHS property outside of the ROW.

Emergency Egress:
As noted above, HSR operates at an unacceptable LOS at certain times of the day. During the propane fire a few years ago, HWY 89 was closed, HSR was closed, South Park Loop Road (SPLR) was clogged from HSR to the intersection of HWY 89 and SPLR. Emergency egress was diminished or not available. The County is asked to assure emergency egress is attended to - not only with this application but with future applications as well.

Screening:
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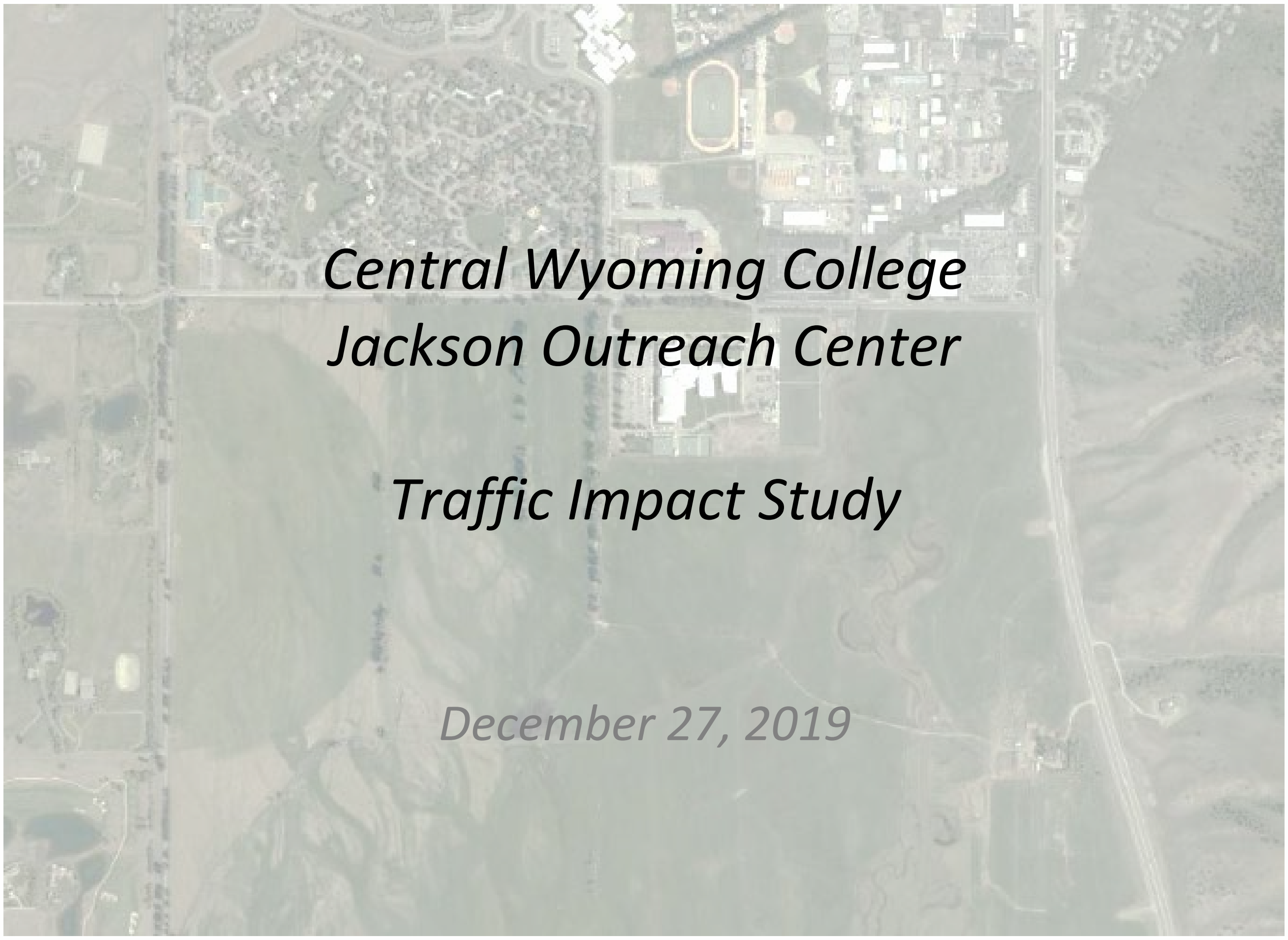


Central Wyoming College
Jackson Outreach Center

Traffic Impact Study

December 27, 2019

Prepared For:

Central Wyoming College

240 S. Glenwood St #124
P.O. Box 4795
Jackson, WY 83001

Prepared By:

JORGENSEN
It's About People, Trust and Know How

1315 Hwy 89 S Suite #201
PO Box 9550
Jackson, WY 83001

Table of Contents

I. INTRODUCTION

The Central Wyoming College, Jackson Outreach Center (CWC) is proposing to construct a campus in Jackson, Wyoming south of High School Road. CWC has been serving the Jackson community for nearly four decades by providing courses for a diverse population of students within Teton County. Lacking a dedicated campus, these courses have been held at several locations throughout Jackson. The new CWC campus will provide a single location for students and reduce offsite courses to the current program at Jackson Hole High School (with the exception of night classes, which will be moved to the new campus), clinicals for the nursing classes at St. John's Medical Center, and clinicals for CNA at St. John's Medical Center.

Jorgensen Associates, Inc. (Jorgensen) has been contracted to complete a Traffic Impact Study (TIS) for the proposed project in order to assess the campus' impact on the adjacent transportation system. The site does not have a constructed access road and will require construction of a new road for adequate access. Three roadway easements serve the development, two from High School Road and one from US 89. This study provides analysis of three different access options utilizing the two easements connecting to High School Road. The roadway easement from US 89 was not evaluated in this TIS. This easement is identified as part of a regional east-west connector road corridor should this area of South Park ever develop, and therefore is beyond the scope of the CWC project. The three options analyzed include access from High School Road using the easement extending south from the Middle School Road intersection, access from the High School Road using the easement south from the Gregory Lane intersection, and access using the combination of both these easements/intersections. CWC will construct and maintain the access road until future development occurs requiring shared use of the road.

This study is prepared as a comprehensive TIS in accordance with Teton County LDR's. The WYDOT Traffic Studies Manual, March 2011 Edition, was utilized as a reference for the study.

II. STUDY AREA

The proposed site for the CWC is southeast of the existing High School located at 1910 High School Road. A schematic of the site and study area is shown in Figure 1 Study Area. The subject property is located within Teton County and will comply with Teton County Land Development Regulations (LDR's). The access road will connect to High School Road. High School Road from US 89 to Middle School Road is currently within the Town of Jackson (Town) city limits. From Middle School Road to South Park Loop Road, High School Road is in Teton County. Teton County is currently evaluating revising the Town/County boundary so that all of High School Road is in the Town. The Town currently maintains the entire length.

Proposed Site Legal Description

The property is located within the jurisdiction of Teton County (CR 22-1) and is a 2-acre portion of the parcel with the legal description of PT. NW1/4 SE1/4 & PT. NE ¼ SW ¼ Section 6, Township 40, Range 116 of the Hereford Ranch, Tract 3. The project study area public road boundaries, for purposes of this study, are generally described as follows:

1. East Boundary – U.S. Highway 26/89/189/191 (referred to as US 89 in this study)
2. West Boundary – South Park Loop Road (No easement or right-of-way presently exists for a road corridor connecting to South Park Loop Road.)
3. North Boundary – High School Road
4. South Boundary – South Park Loop Road. (No easement or right-of-way presently exists for a road corridor connecting to South Park Loop Road.)

The following primary intersections within the study area were analyzed as part of this study:

1. South Park Loop Road/High School Road
2. High School Road/Middle School Road
3. High School Road/Gregory Lane
4. High School Road/US 89

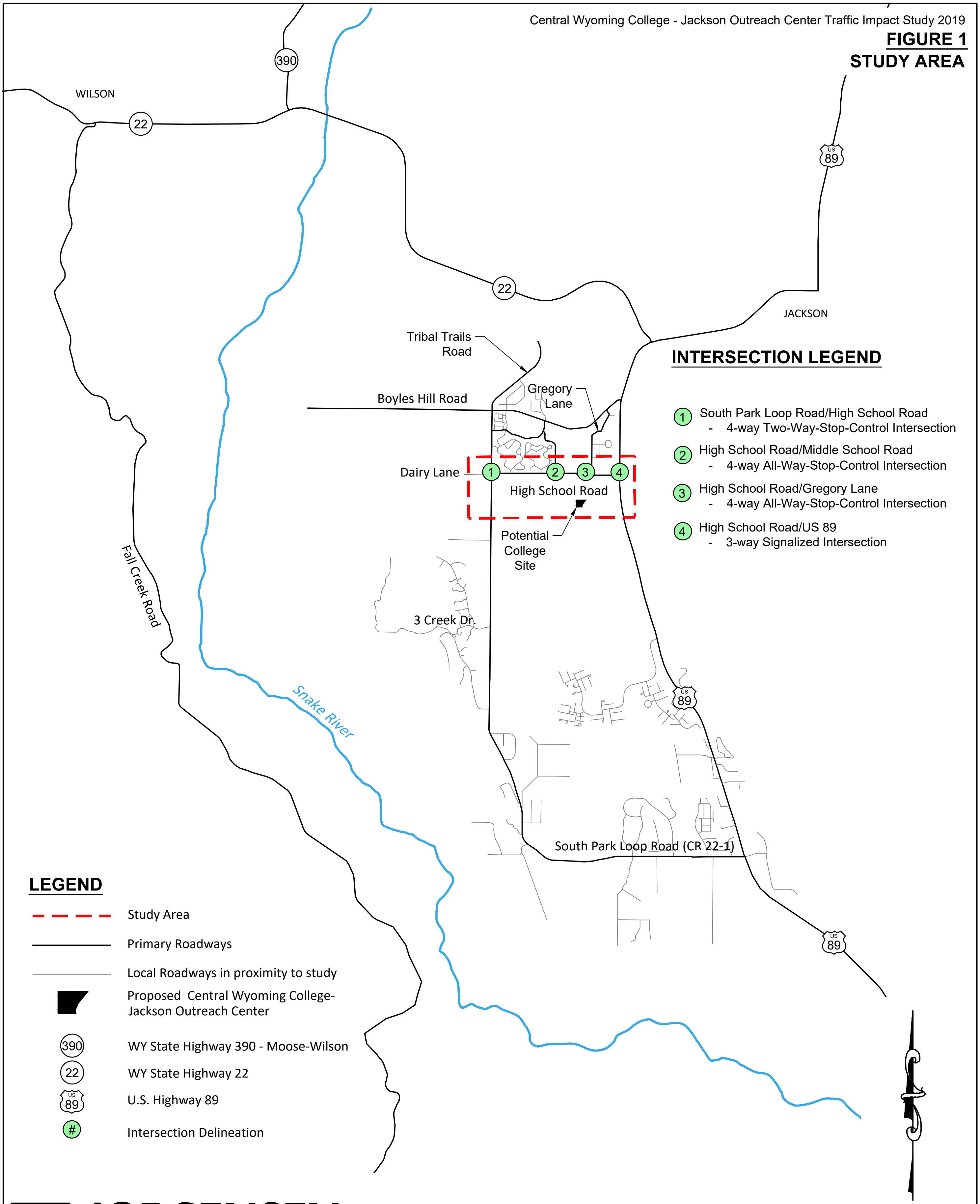
The existing roadway easements include the following, as shown in Figure 2 Roadway easements:

1. **Easement BK344P322-326.** This 80-foot easement is a southern extension of Middle School Road and located west of the High School. The use of this easement will require that the current road, of approximately 800' in length and 28-feet in width be widened to 30-feet to meet Teton County standards for a Minor Collector. A new street will need to be constructed along the south boundary of the High School to reach the CWC campus. This distance is approximately 1000-feet.
2. **Easement BK344P327-334**. This 60-foot easement is a southern extension of Gregory Lane and is located on the east side of the High School Recreation Complex. The use of this easement will require full street development in the easement of approximately 1,000' in length to reach the CWC campus. The current approach to the intersection of High School Road and Gregory Lane from the Teton County Septage Dump Station will also need to be improved and will need to be designed to properly accommodate and incorporate the dump station access. The design will also need to be coordinated with the Town of Jackson's Gregory Lane Improvements Project.
3. **Easement BK344P327-334.** The 80-foot easement east of this parcel extending to US 89. The access approach from US 89 constructed from the highway to the right-of-way line. This approach is permitted by WYDOT for agricultural use. Should new development occur, an access permit will need to be obtained from WYDOT to address the change in use, and traffic impacts will need to be addressed. The road development from US 89 to the proposed CWC site would be approximately 1,500' in length and would require a bridge over Flat Creek. This easement is the location of the future East – West Connector identified in the Teton County Integrated Transportation Plan (see discussion below), and is considered beyond the feasibility, scope, and need for only serving the CWC campus, and is therefore not analyzed as part of the study.

Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

FIGURE 1

STUDY AREA



INTERSECTION LEGEND

① South Park Loop Road/High School Road
- 4-way Two-Way-Stop-Control Intersection

② High School Road/Middle School Road
- 4-way All-Way-Stop-Control Intersection

③ High School Road/Gregory Lane
- 4-way All-Way-Stop-Control Intersection

④ High School Road/US 89
- 3-way Signalized Intersection

LEGEND

- - -	Study Area
―	Primary Roadways
―	Local Roadways in proximity to study
■	Proposed Central Wyoming College- Jackson Outreach Center
390	WY State Highway 390 - Moose-Wilson
22	WY State Highway 22
US 89	U.S. Highway 89
#	Intersection Delineation

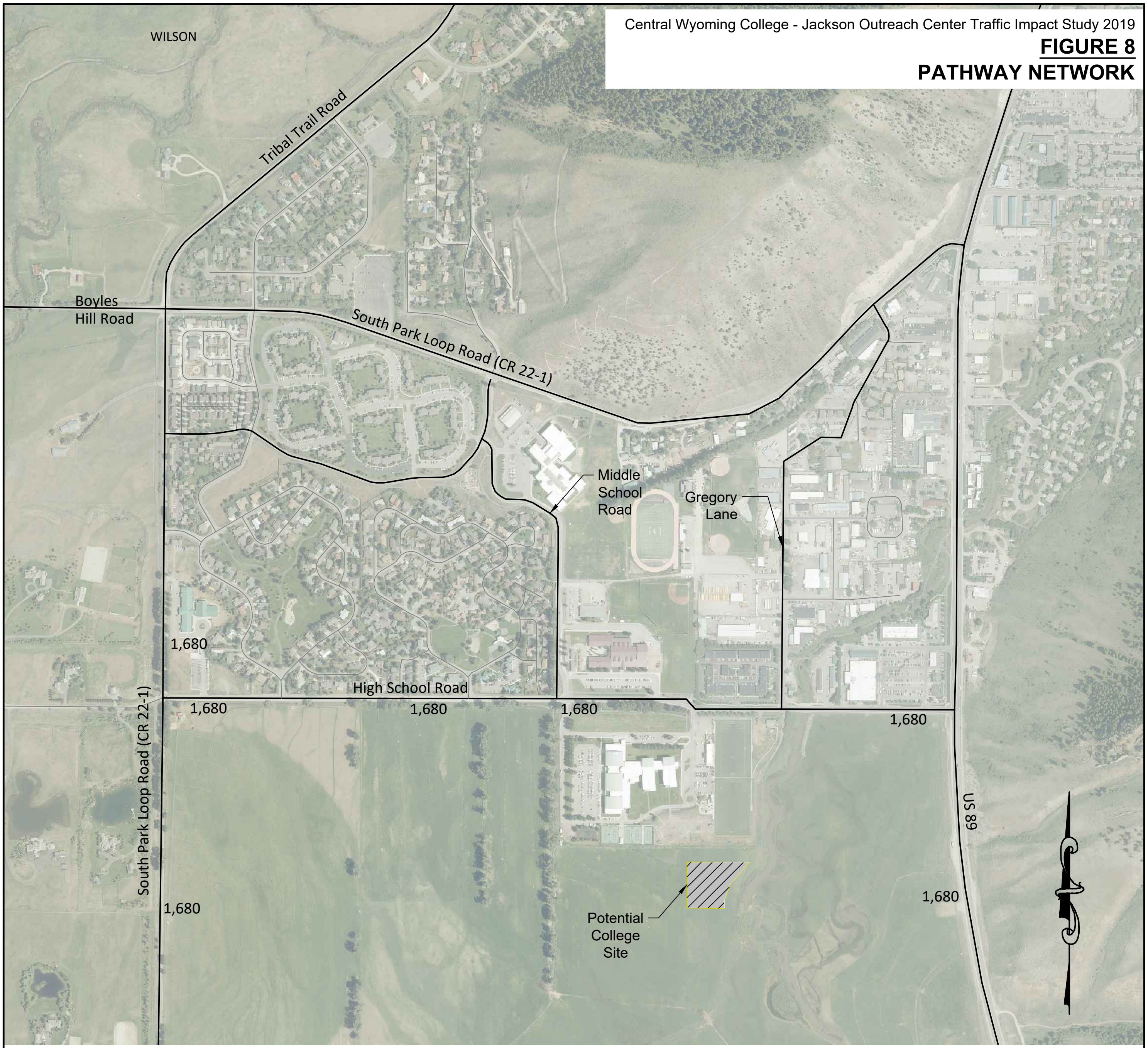
JORGENSEN
JACKSON, WYOMING 307.733.5150
www.jorgeng.com

PREPARED BY: HRR MAP PREPARED: 9/27/2019 PROJECT NUMBER: 19037

Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

FIGURE 8

PATHWAY NETWORK



LEGEND

###	Average Daily Traffic
▬	Primary Roadways
—	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center

0 1000 2000

SCALE: 1 INCH = 1000 FEET

THIS SCALE VALID ONLY FOR 8x11 PRINTS

JORGENSEN
JACKSON, WYOMING 307.733.5150
www.jorgeng.com

PREPARED BY: AMP MAP PREPARED: 9/27/2019 PROJECT NUMBER: 19037

III. METHODOLOGY

This study evaluates the impacts of CWC on current traffic levels and assesses the expected impacts assuming a 10-year buildout/occupancy of the project. Note that this 10-year horizon is consistent with WYDOT's recommended horizon duration used on other recent TIS' prepared by Jorgensen. Expected completion of CWC construction is 2021, and therefore for purposes of this analysis, the baseline year is assumed to be 2021 (completion of construction). Traffic data collected was projected to 2021 for baseline conditions. Impacts were assessed using existing traffic data sources available and additional data collected over the past two years. Build out conditions were assessed for 2031 conditions assuming enrollment goals provided by the CWC.

Data Collection

Jorgensen has corresponded with WYDOT and Teton County to acquire available traffic data within the project area. Data sources include:

1. WYDOT *Vehicle Miles Book* ML 10B Route (US 89).

   Annual Average Daily Traffic estimates (AADTs) completed by WYDOT are derived from three primary sources of data: permanent traffic recorders, portable traffic recorders, and manual traffic classification counts. WYDOT documents the data in the WYDOT Vehicle Miles Book. Data is available for four segments along ML 10B (US 89) within the project area dating back to 1970. The most available data set from WYDOT is the 2017 Vehicle Miles Book. Data is limited to average daily vehicle counts and truck counts. The data is very complete and will aid in basic understandings of traffic growth and expected Average Annual Daily Traffic (AADT) within the study area.
2. WYDOT – Jackson Urban Traffic Counts

   Peak Season counts collected by the WYDOT Planning Section during the summer season. While not considered AADT counts, these counts are useful in evaluating peak season performance of the transportation system. On South Park Loop Road, eight (8) counters are located within proximity to the study area while an additional five (5) counters are located along High School Road. Data is available from 2017, 2014, 2011, 2006, and 2002 for most of these counters. The 2017 counts were completed at the end of June, 2017.
3. Intersection Turn Counts
   - WYDOT provided traffic counts for the signalized intersection of U.S. Hwy 89/High School Road for three different times:
     - US Hwy 89/High School Road Signalized Intersection Dated July 17, 2013
     - US Hwy 89/High School Road Signalized Intersection Dated September 29, 2015
     - US Hwy 89/High School Road Signalized Intersection Dated February 6, 2018
   - ▪ Jorgensen completed traffic counts at the intersections of High School Road/South Park Road, High School Road/Middle School Road and High School Road/US 89 on May 23, 2017 and May 25, 2017. Traffic counts were collected at the intersection of High School Road/Gregory Lane on September 24, 2019 and September 26, 2019.

Traffic counts completed at different times resulted in small fluctuations in traffic volumes. Very similar and consistent trends and volumes were observed in the data collected.

4. Signal Timings

Signal timings for the signalized intersection of U.S. Hwy 89/High School Road were provided by WYDOT for traffic analysis. The proposed CWC will be in session annually with the majority of courses taking place between September and May. For analysis purposes, traffic timings/traffic levels for signalized intersection analysis were used for the school season.

Trip Generation

Trip generation was completed based on program and course information provided by the CWC. The Institute of Transportation Engineers (ITE) *Trip Generation Manual* was not utilized for trip generation since CWC's size is not represented within this manual and we have very specific information on how CWC will operate (i.e. staff and enrollment sizes, class times and durations, etc.). Trip generation was formulated based on this information. Once total trips were approximated, data from the *Jackson/Teton Integrated Transporation Plan* adopted by the Teton County Board of County Commissioners and Jackson Town Council in 2015 was utilized in approximating multi-modal distribution of trips (vehicle, pedestrian, bike).

Trip assignments were based on traffic count observations of existing traffic trends. An Origin-Destination Study was not conducted as part of this study. It is assumed that existing traffic trends as observed during normal school operating periods will continue as enrollment increases at the CWC.

Highway Capacity Analysis

Analysis is completed using process and analysis methods from the *Highway Capacity Manual* (TRB, 2010) and associated Highway Capacity Software (HCS7). This analysis identifies the Level of Service (LOS) of users based on assumed traffic levels and basic traffic principles. Level of Service is defined by the HCM2010 as a qualitative measure used to relate the quality of traffic service based on roadway capacity and vehicle delay. Level of Service is described for movements through a designation of A to F where LOS A represents the best operation and LOS F represents congestion/failing traffic conditions. Each type of intersection is evaluated using different methodologies. (Transportation Research Board, 2010)

This study includes four intersections, of which three are stop-controlled and the fourth is signalized. High School Road and South Park Loop Road and High School Road and Gregory Lane are both Two-Way-Stop-Controlled intersections and High School Road and Middle School Road is an All-Way-Stop-Controlled Intersection. High School Road and US 89 is a three-way signalized intersection.

Stop Controlled Intersections

For Two-Way-Stop-Controlled Intersections (TWSC), the LOS is determined by the computed or measured control delay. Control delay can be measured for each minor-street movement (or shared movement) as well as major-street left turning vehicles. Through vehicles are assumed to experience 'zero' delay. As such, a LOS can be approximated or calculated for each minor movement, each minor approach, and left turning major approach vehicles. LOS is not computed as an intersection delay due to fact that through moving traffic is not subject to intersection delay. Reporting such a control delay or LOS would mask important quality or traffic service issues on minor approaches. Analysis is completed per Chapter 19 of HCM2010.

For All-Way-Stop-Controlled Intersections (AWSC), the LOS is determined by the computed or measured control delay. Control delay can be measured for all approaches as well as an average for the intersection as a whole. An overall intersection LOS can be assumed because all vehicles are subject to control delay, unlike in Two-Way-Stop-Controlled Intersections. Analysis is completed per Chapter 20 of HCM2010. The LOS thresholds based on control delay for both TWSC and AWSC are presented below in Table 1.

Table 1: Stop Controlled Intersection, LOS Criteria

Control Delay (s/veh)	***LOS by Volume-to-Capacity Ratio***	
	≤1.0	***>1.0***
≤10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

Note: For approach-based and intersection wide assessments, LOS is defined solely by control delay

Signalized Intersections

For signalized intersections, LOS can be determined for the entire intersection, each approach, and each lane group. Control delay is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. LOS for signalized intersections are analyzed per Chapter 18 of HCM2010. The criteria for LOS are located in Table 2.

Table 2: Signalized Intersection, LOS Criteria

Control Delay (s/veh)	***LOS by Volume-to-Capacity Ratio***	
	≤1.0	***>1.0***
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

Note: For approach-based and intersection wide assessments, LOS is defined solely by control delay

Per Teton County Land Development Regulations, the Level of Service for rural roadways shall be designed at a Level of Service D at buildout (Section 7.6.4 Subsection G, Teton County Land Development Regulations, Adopted October 20, 2014).

The traffic scenarios studied include the following:

1. **2021 Existing Conditions.** This scenario examines traffic levels on the existing road network. Existing conditions were completed in this report for 2021.
2. **2021 CWC Opening Conditions**. This scenario examines traffic impacts at the completion of construction and initial opening of CWC.
3. **2031 Baseline Conditions**. This scenario examines traffic levels of the transportation network assuming typical background traffic growth and no development of CWC.
4. **2031 Impacted Conditions**. This scenario examines traffic impacts of CWC on the 2031 Baseline Conditions.

Conclusions and recommendations are described at the end of the report.

IV. PAST STUDIES

Teton County School District (TCSD) #1 Elementary School Traffic Study

December 14, 2016
Jorgensen Associates, P.C.

TCSD #1 recently constructed Munger Mountain Elementary School along US Highway 89, south of Jackson, WY. The traffic study analyzed the impact to the traffic conditions at the intersection of Swinging Bridge Road / Munger Mountain Elementary School and Evans Road / US 89. The school is approximately 77,000 square foot with a 584 student capacity at a 10 year build out and employ approximately 80 staff members. The elementary school is expected to generate 753 daily trips at the 10 year build out.

This study utilized a 1.8% growth rate as the growth factor to be used in the 10 year forecasting analyses. This was based on historical traffic growth from WYDOT Vehicle Miles Books and discussion with WYDOT. Since 2000, traffic growth on WYDOT Vehicle Miles Book “Route 10B” has been 1.48% while Vehicle Miles Book #000032 has experienced 1.77% growth. As discussed in the initial team meeting and through conversations with WYDOT, a 1.8% growth rate was utilized as the expected growth factor to be used in forecasting analyses.

While the proposed CWC is located approximately 7 miles north of the Munger Mountain Elementary School, the CWC location is within close proximity of US 89 and also just south of the Town of Jackson’s south boundary. This growth data provides valuable insight into traffic growth factors, hourly directional distributions, seasonal changes, and traffic trends on US HWY 26/89. The 1.8% growth was adopted for this study to forecast traffic from 2021 to 2031.

South Park Sub Area and High School Road Corridor Transportation Analysis

June 23, 2010

Felsburg Holt & Ullevig

With Teton County considering a northerly extension of Tribal Trails Road (Connector) to intersect with WY 22 in the proximity of the WY22/Coyote Road Intersection, the Wyoming Department of Transportation (WYDOT) analyzed the effects of the connector at a "macro level". The referenced study's purpose was to analyze the impacts of the connector relative to local impacts including the effects on South Park Loop Road and High School Road. The study focuses on how the Tribal Trail Connector could impact the LOS of localized traffic in the region and divert/change existing traffic tendencies. A Future Collector road, located south and parallel to High School road, connecting South Park Loop and US 89, was also considered with the study. As part of the study, four conditions were evaluated:

1. Existing Conditions (2008)
2. Existing Volumes with Tribal Trial Connector
3. 2030 Baseline Conditions with Future Collector
4. 2030 Condition with Tribal Trail Connector and Future Collector

This study historically provided the most in-depth understanding of potential traffic levels in the area and at intersections at a forecasted 2030 year both with and without the Tribal Trail Connector and Future Collector. The study included data collection and analysis of High School Road with the intersections of South Park Loop Road, Middle School Road, and US 89.

In communications with the WYDOT District 3 Traffic Engineer and Teton County Public Works, the Tribal Trail Connector should not be viewed as an absolute. It can be considered as an alternative, but not a certainty. In addition, the *South Park Sub Area and High School Road Corridor Transportation Analysis* Tribal Trail Connector analysis is considered somewhat antiquated and yields conservatively high traffic contributions to the High School Road corridor. Based upon this information and the connector's uncertainties, the Connector is not included in this analysis. Rather, it was deemed more appropriate to use a growth factor from the 2021 data rather than the forecasted values from this study.

The Jackson Hole Classical Academy - Traffic Impact Study

2500 South Park Loop Road

March 13, 2019

Jorgensen Associates, P.C.

The Jackson Hole Classical Academy will be constructing a campus adjacent to South Park Loop Road with expected buildout completion in 2021. The JHCA will include a K-12 school system, eight (8) onsite faculty housing units, as well as other school campus amenities such as a gymnasium, an auditorium, administrative offices, amphitheater, athletic fields, and a performance hall. The school would replace the current school operations at the Community Bible Church of Jackson Hole Campus located at 1450 South Park Loop Road, Jackson, Wyoming. The existing JHCA is K-8 and has an enrollment of approximately 100 students with 22 staff and faculty. The school anticipates initial enrollment of 208 students, with a maximum capacity of 245 students, as well as 45 projected staff and faculty.

2020 and 2030 impacted conditions were assessed and laid out in the report. The 2021 traffic values were forecasted using a 1% growth factor and the 2030 values were based on the traffic values provided in the Felsburg Holt & Ullevig, 2010 traffic study previously discussed. The traffic counts collected at the intersections of High School Road with South Park Loop and Middle School Road were utilized for this report. The trip generation data developed in this report is assumed to be included in the background traffic growth as we are assuming trips generated by the Classical Academy will avoid the congested High School Road corridor by utilizing South Park Loop Road.

The Jackson/Teton Integrated Transportation Plan

September 2015

Charlier Associations, Inc.

The Integrated Transportation Plan was developed based on the multimodal transportation vision set forth in the 2012 Update to the Town and County Comprehensive Plan, Chapter 3.

This study was utilized to estimate the number of CWC student and staff trips generated by walking, biking and use of the transit system.

Teton County Traffic Model

Ongoing

Cambridge Systematics

In July of 2019, Cambridge Systematics, Inc. published the Teton County Travel Demand Model Technical Report summarizing the Teton County Travel Demand Model (TCTDM). The model is a tool that can aid in transportation improvements by estimating the existing travel and forecasting future year scenarios. The TCTDM estimates trip generation, mode choice, and trip assignments for residents, commuters, visitors, and trucks that travel to, from, through, and within the Teton County model area. Presently, the TCDM predicts traffic volumes on identified key corridors to identify the traffic implications of new corridors such as the Tribal Trail Connector. It should be noted that the model shows a reduction in daily traffic on the east segment of High School Road. Subsequently, Teton County purchased a new program from Cambridge Systematics to allow for microsimulation, a closer analysis of intersection functionality and behavior under different test circumstances. This model is currently under development.

V. EXSTING LAND USE AND TRANSPORTATION SYSTEM

Existing Land Uses

The existing site is a 2-acre section of a 17.30-acre parcel of undeveloped lot zoned Rural 1 (R1) in Teton County. To the north-east of the full parcel, and within Teton County, is Jackson Hole High School and Recreation Complex, zoned Public/Semi-Public (P/SP). The remaining land to the south of High School Road is primarily used for agricultural purposes. The land north of High School Road is located within the Town of Jackson. Cottonwood Park subdivision is located between South Park Loop Road and Middle School Road, Colter Elementary School, the Community School, and a business complex is between Middle School Road and Gregory Lane, and additional businesses including Smiths Food and Drugs are located between Gregory Lane and US 89.

Existing Transportation System and Intersections

High School Road is an east-west collector which connects South Park Loop Road to US 89. This two-way street is a mile in length and includes a 60-foot right-of-way along its entirety. As described earlier in this study, the western portion of High School Road is within Teton County while the eastern portion is within the Town of Jackson. At this time, the Town maintains the road. Jackson High School is located midway between South Park Loop Road and US 89 along the south side of the road.

The major intersecting roads with High School Road include South Park Loop, Middle School Road, Gregory Lane and US 89. Two minor residential access streets connect from north of High School Road along the western portion of the High School Road. The High School also has an additional access located midway on High School Road between Middle School Road and Gregory Lane. Additional commercial accesses connect from north of the High School Road of the east of Middle School Road intersection.

South Park Loop Road / High School Road Intersection

This intersection includes a two-way stop control, with South Park Loop Road as the major thruway. This intersection is the starting point of High School Road, as the street entering from the west of the intersection is Dairy Lane which services the Dairy Subdivision. South Park Loop Road, within the study area, consists of two lanes with minimal shoulder area. The roadway is characterized by a narrow corridor and cottonwoods lining the road limiting site distances and site triangles for roadway approaches. The posted speed limit is 40 miles per hour (mph). South Park Loop Road is classified as a Major Collector in the Jackson/Teton County Urban Roadway Functional Classification.

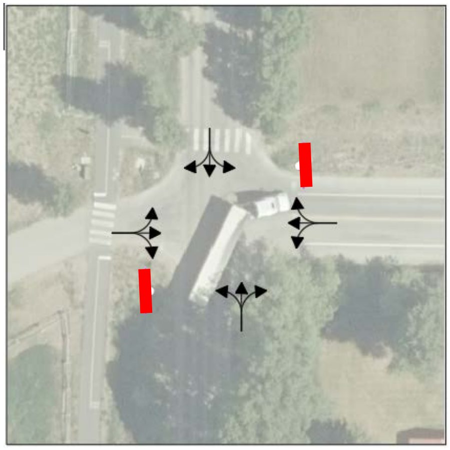


Figure 3. South Park Loop Road and High School Road

High School Road / Middle School Road Intersection

This intersection includes an all-way-stop-controlled intersection. Middle School Road is a two-lane road allowing all movements at the intersection. High School Road to the west of the intersection is two lanes with bike lanes on both sides. High School Road to the east of the intersection is three lanes, one eastbound , and two westbound, one as a left turning lane and the other for thru traffic and right turns. For this section of roadway, the pathways are detached. Middle School Road is classified as a Major Collector in the Jackson/Teton County Urban Roadway Functional Classification.

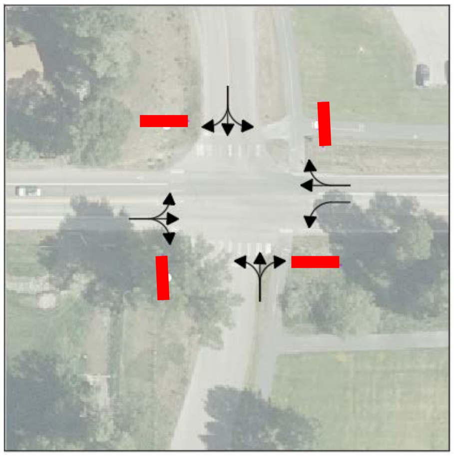


Figure 4. Middle School Road and High School Road

High School Road and Gregory Lane Intersection

This intersection includes a two-way-stop-control with High School Road as the major thruway. The approach from the south of the intersection serves minimal traffic as the exit for Teton County Septage Dump Station. Gregory Lane and High School Road are two-lane streets with all movements permitted at the intersection. Gregory Lane is classified as a Major Collector in the Jackson/Teton County Urban Roadway Functional Classification.

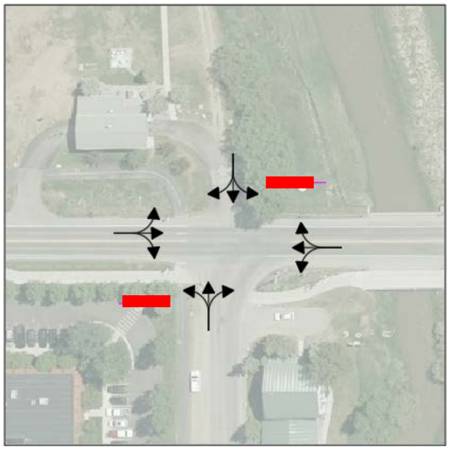


Figure 5 Gregory Lane and High School Road

High School Road and US 89 Intersection

This intersection consists of a signalized three-way intersection and is the termination point for High School Road. US 89 is a five-lane highway with right and left-hand turning lanes from the highway to High School Road. High School is a three-lane road with one lane for westbound traffic the other two eastbound lanes for turning lanes onto US 89. US 89 is classified as a Principal Arterial in the Jackson/Teton County Urban Roadway Functional Classification.

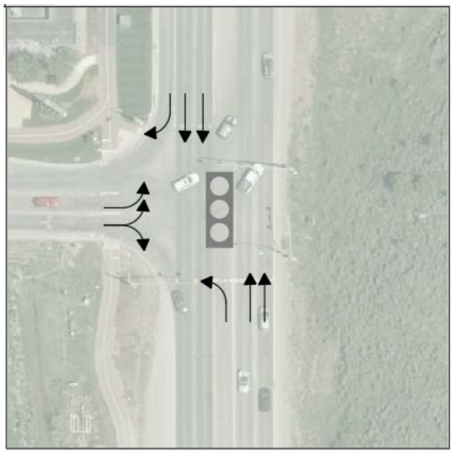


Figure 6. US 89 and High School Road

West of Middle School Road, High School Road is classified as a Major Collector, and east of Middle School Road it is classified as a Minor Arterial. It has a posted speed limit of 25 mph, aside for the 20 mph school speed limit zone. Refer to Figure 7. School Speed Limit Zones.

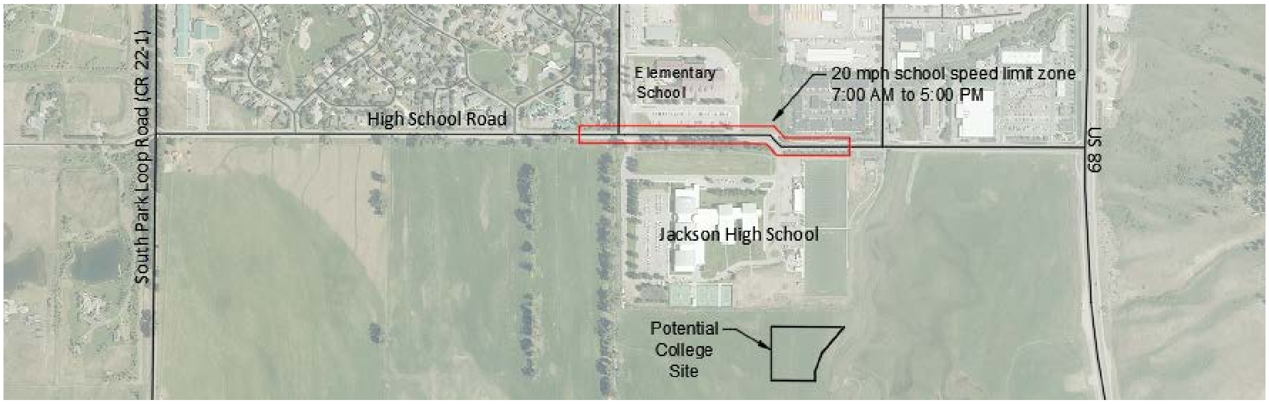


Figure 7. School Speed Limit Zones

The east section from Highway 89 to the Flat Creek Bridge has 13-foot lanes and 7.5-foot shoulders. The middle section from the Flat Creek Bridge to Middle School Road has 12-foot lanes and 6-foot shoulders. The west section from Middle School Road to South Park Loop Road and has 13-foot lanes with 8-foot shoulders.

Existing Sidewalks/Pathways

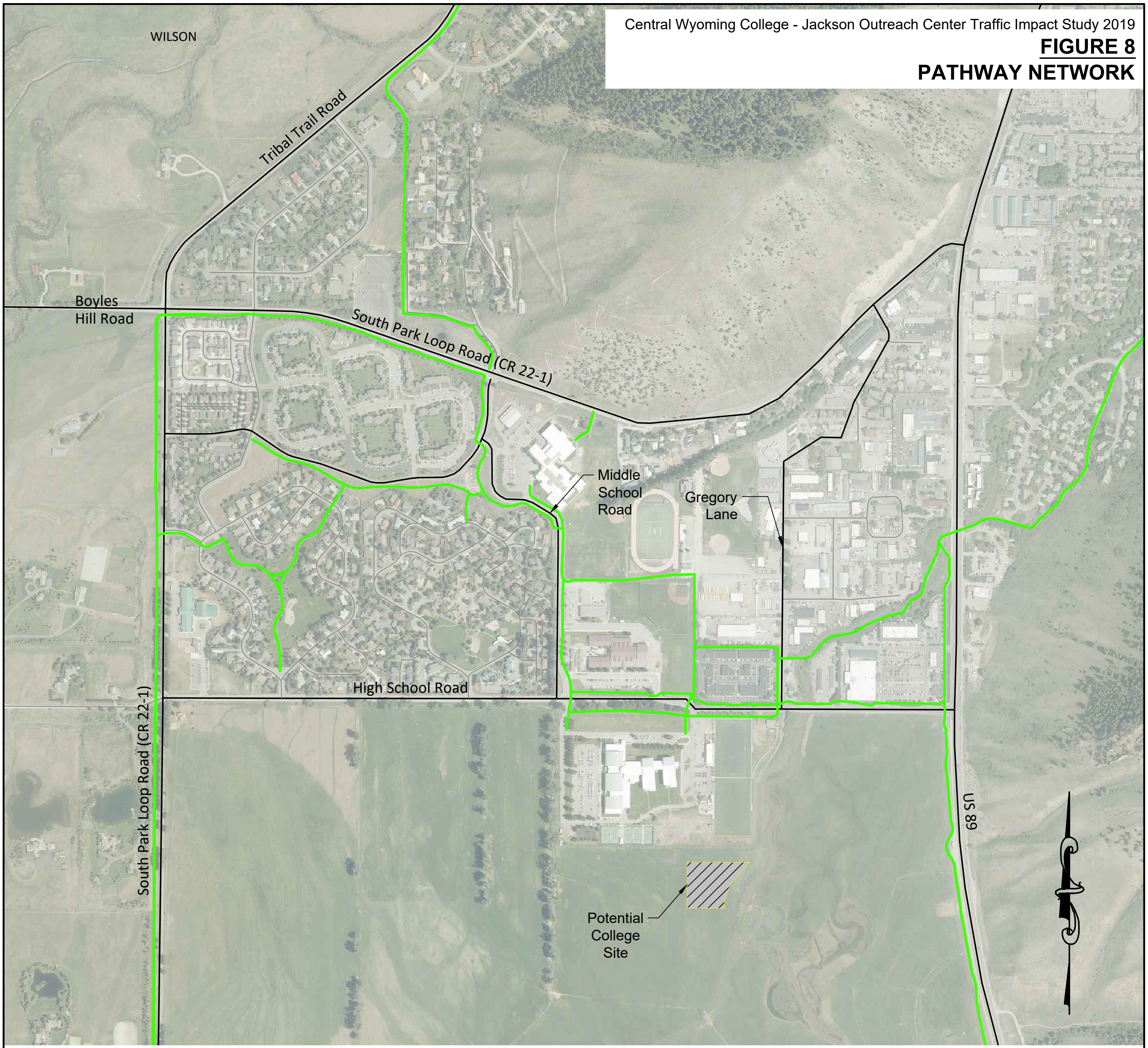
A vast network of sidewalks and pathways are available for use within the study area, refer to Figure 8 for the pathway network. High School Road has pathways along its entirety (mixed shoulder and detached pathways) as well as multiple connections to various other pathways. High School Road is heavily used by pedestrians and bicyclists to access the High School, various school campus facilities, and Cottonwood Park.

Overall, the site is located within a vast network for pedestrian and bicycle facilities allowing connection to various residential areas to the north and west and commercial areas to the north.

Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

FIGURE 8

PATHWAY NETWORK



LEGEND

- 🟩 Pathway Network
- — Primary Roadways
- — Local Roadways in proximity to study
- ▨ Proposed Central Wyoming College-Jackson Outreach Center

0 1000 2000

SCALE: 1 INCH = 1000 FEET

THIS SCALE VALID ONLY FOR 8x11 PRINTS

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PREPARED BY: AMP

MAP PREPARED: 9/27/2019

PROJECT NUMBER: 19037

Existing Traffic

Several sources were utilized for traffic data when evaluating the current traffic levels within the study area. Reference the Part 3. Methodologies section of this study for the different sources utilized in analyzing local traffic. Community wide, seasonal peak traffic occurs in July and August when visitation to Teton County is highest. However, utilizing traffic volume data when schools are in session (September through mid-June) is most appropriate in evaluating impacts of the proposed school. For CWC, traffic counts from the previous Jackson Hole Classical study (collected in May 2017) were utilized for the intersection of South Park Loop and High School Road and Middle School Road and High School Road. Traffic counts for the intersection of High School Road and US 89 were provided by WYDOT.

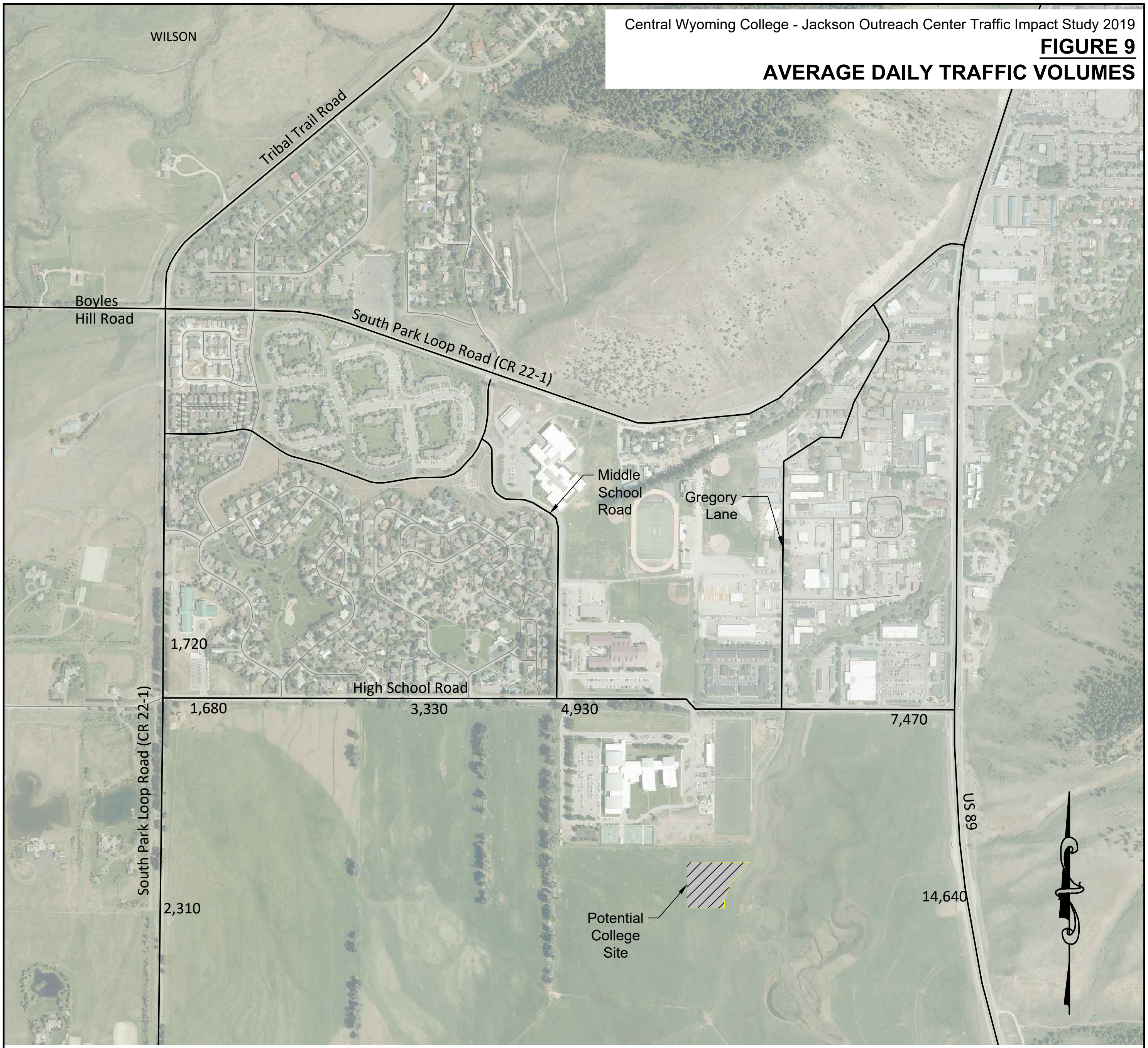
Because traffic counts are necessary for the intersection of Gregory Lane and High School Road in order to analyze this CWC access alternative, and traffic counts in the previous May were not collected, counts were completed by Jorgensen at this intersection in September 2019. September and May are characterized by similar traffic trends in the area, most impacted by the school operations of the High School, Elementary School, Middle School and the school related activities, which generate traffic on High School Road. Traffic counts can be found in Appendix B – Traffic Counts. More detailed data is available upon request. These counts were completed on each of the intersections of interest located within the project area. Segment counts were not completed as part of data collection.

Average Daily Traffic volumes for streets and roads are shown in Figure 9. These volumes were obtained from WYDOT annual communitywide traffic counts.

Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

FIGURE 9

AVERAGE DAILY TRAFFIC VOLUMES



LEGEND

- ### Average Daily Traffic
- Primary Roadways
- Local Roadways in proximity to study
- ▨ Proposed Central Wyoming College-Jackson Outreach Center

SCALE: 1 INCH = 1000 FEET
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PREPARED BY: AMP MAP PREPARED: 9/27/2019 PROJECT NUMBER: 19037

Existing Traffic Conditions

Utilizing traffic counts completed during May 2017, May-June 2018 and September 2019, Jorgensen evaluated the current traffic service of the network. Traffic associated with schools operate very differently than commercial, industrial, or residential developments. The greatest traffic generation occurs during the morning peak hour (7:45-8:45 AM), at school dismissal (3:15 - 4:15 PM), and in the evening (5:00 – 6:00 PM). Based on traffic counts, these three different peak hour time frames were analyzed along High School Road to provide a full representation of the transportation network.

1. AM Peak Hour 7:45 – 8:45 AM
2. PM Peak Hour 5:00 – 6:00 PM
3. School PM Peak Hour 3:15 – 4:15 PM

Each of these time frames were assessed as part of the Traffic Impact Study to evaluate impacts of CWC on the transportation network.

As part of the evaluation of peak hourly traffic at each intersection, the peak hour factors provided on Table 3. Intersection Peak Hour Factor were observed. The peak hour factor (PHF) is the hourly volume during the analysis hour divided by the peak 15-minute flow rate within the analysis hour and it is a measure of the traffic demand fluctuation within the analysis hour. The PHF in urban areas generally range between 0.80 and 0.98. PHF over 0.95 are often indicative of high traffic volumes, sometimes with capacity constraints on flowing during the peak hour. PHFs under 0.8 occur in locations with highly peaked demand, such as schools, factories with shift changes, and venues with scheduled events (HCM 2010, Ch. 4). The PHFs were utilized in the 2021 and 2031 analysis.

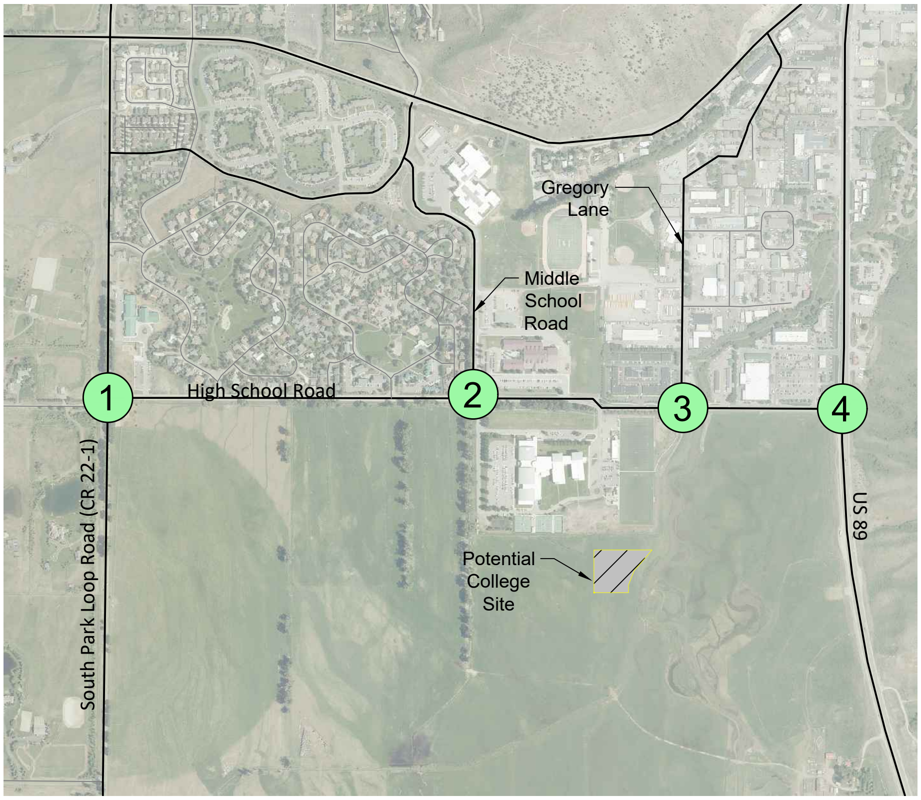
Table 3. Intersection Peak Hour Factor

	High School Road &South Park Loop	High School & Middle School Road	High School & Gregory Lane	High School & US 89
AM Peak Hour	0.71	0.85	0.94	0.91
PM Peak Hour	0.89	0.87	0.96	0.96
PM School Peak Hour	0.91	0.68	0.76	0.83

The 2021 baseline hourly traffic volumes and LOS for each intersection at the various peak hours are depicted on Figures 10 thru 12. In summary, the intersections of High School Road with South Park Loop Road and Middle School Road are operating at LOS B conditions throughout the day. The signalized intersection of High School Road and US 89 is operating at an acceptable LOS B. However, the eastbound approach at this intersectionis nearing capacity, as drivers entering US 89 from High School Road are currently experiencing LOS D conditions during all three of the peak hours analyzed. Southbound traffic at the Gregory Lane and High School Road intersection is currently experiencing LOS D in the morning and evening peak hours and LOS F during school peak hours. This is due to the number of southbound vehicles turning left from Gregory Lane onto High School Road. Because the northbound traffic at Gregory Lane is very minimal, including one or two vehicles per hour at most from the Teton County Septage Dump Station, the LOS was not evaluated for the baseline.

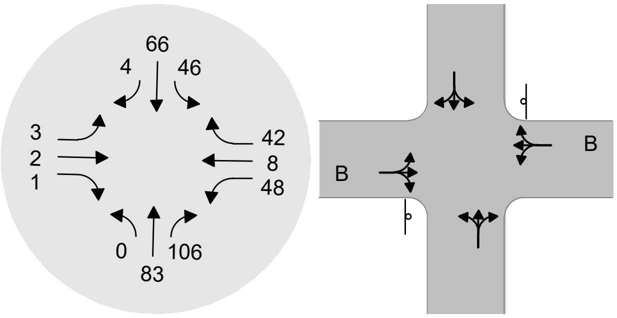
FIGURE 10

2021 BASELINE TRAFFIC CONDITIONS A.M. PEAK HOUR (7:45-8:45 A.M.)

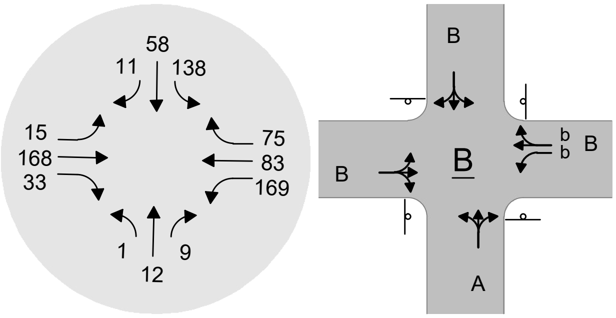


LEGEND

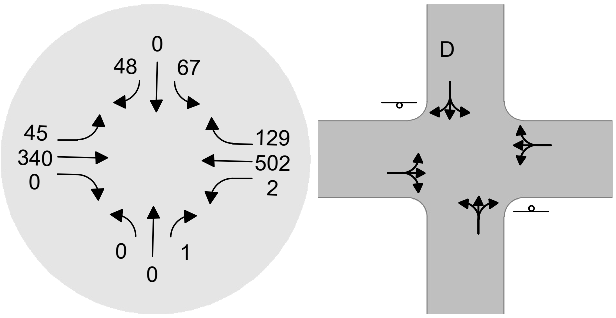
—	Primary Roadways
—	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
#	Intersection Delineation
	Stop Sign
	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
A	Intersection LOS (if applicable)



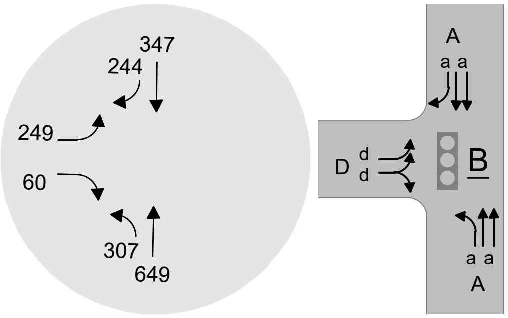
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

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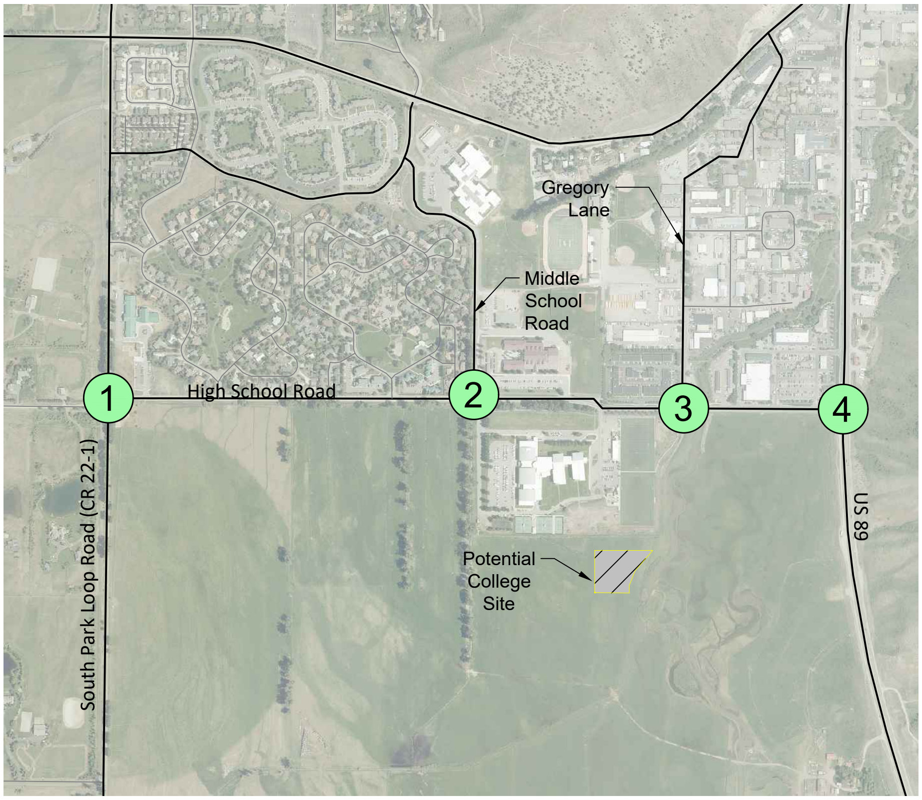
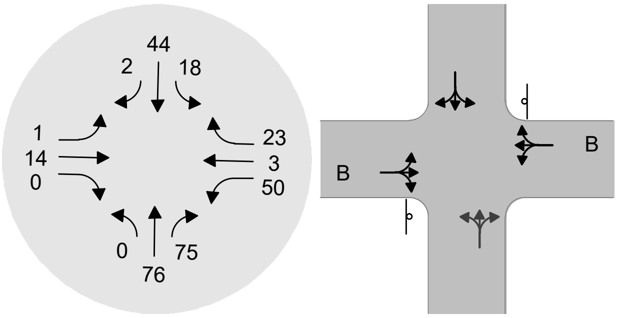
FIGURE 11
2021 BASELINE TRAFFIC CONDITIONS P.M. PEAK HOUR (5:00 - 6:00 P.M.)

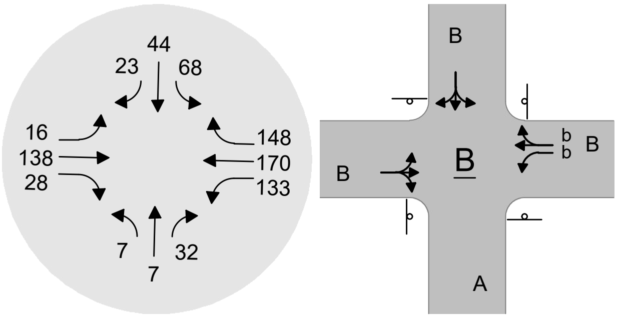


LEGEND

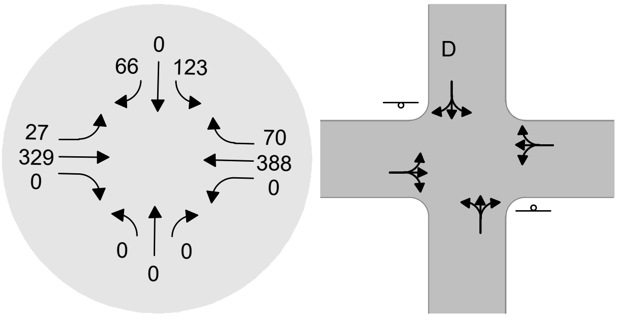
──	Primary Roadways
─	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
#	Intersection Delineation
─o─	Stop Sign
●	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
A	Intersection LOS (if applicable)



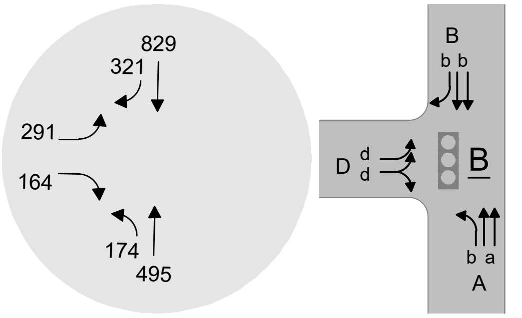
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

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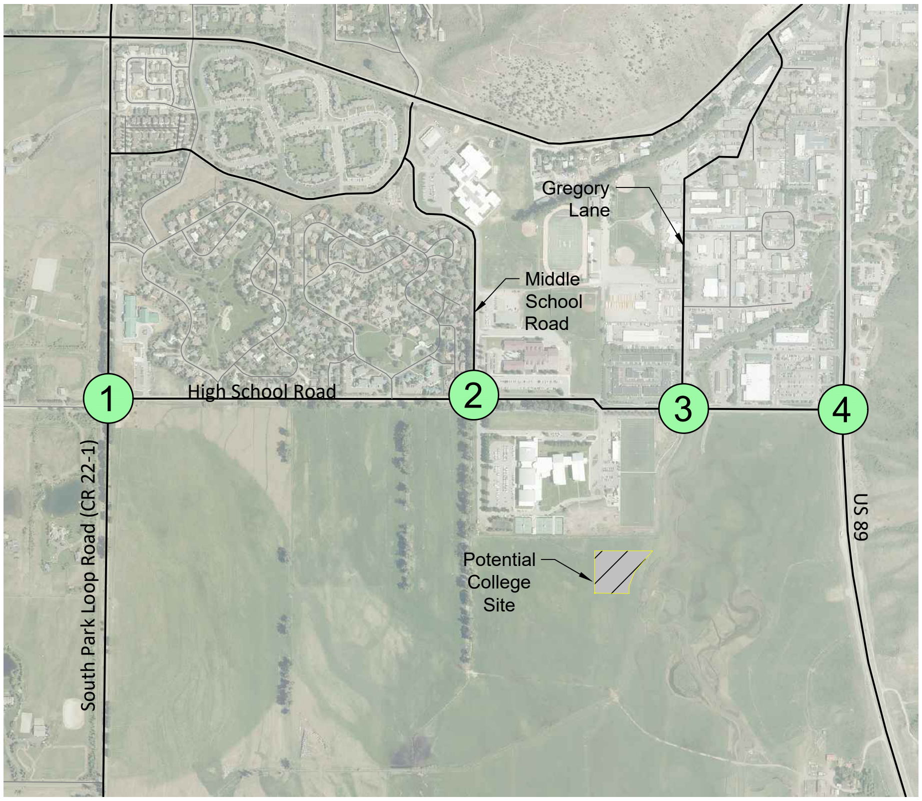
FIGURE 12

2021 BASELINE TRAFFIC CONDITIONS SCHOOL P.M. PEAK HOUR (3:15 - 4:15 P.M.)



LEGEND

Primary Roadways

Local Roadways in proximity to study

▨ Proposed Central Wyoming College-Jackson Outreach Center

\# Intersection Delineation

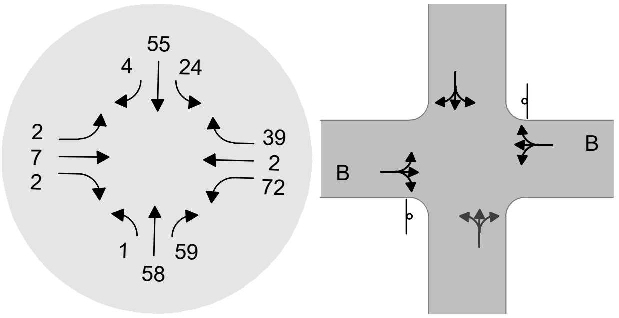
Stop Sign

Signalized Intersection

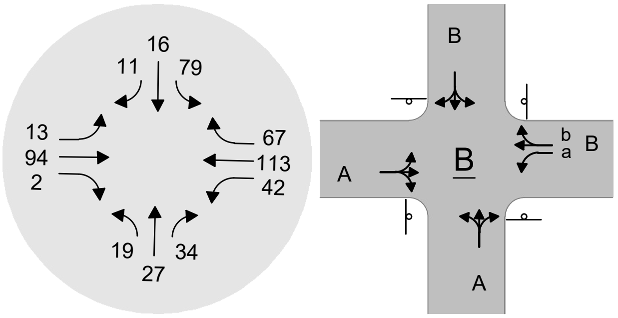
a Lane group LOS (if applicable)

A Approach LOS (if applicable)

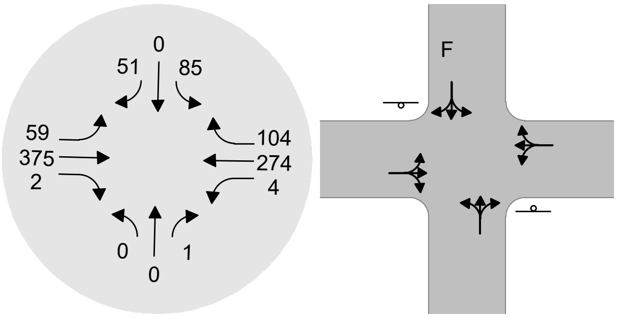
A Intersection LOS (if applicable)



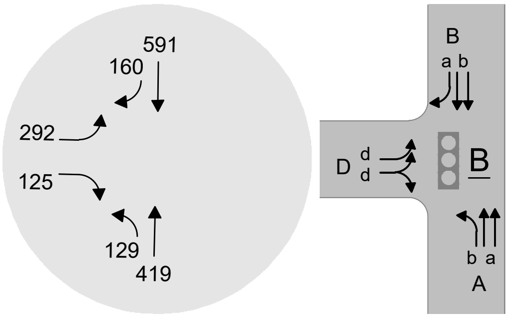
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

2031 Traffic Conditions

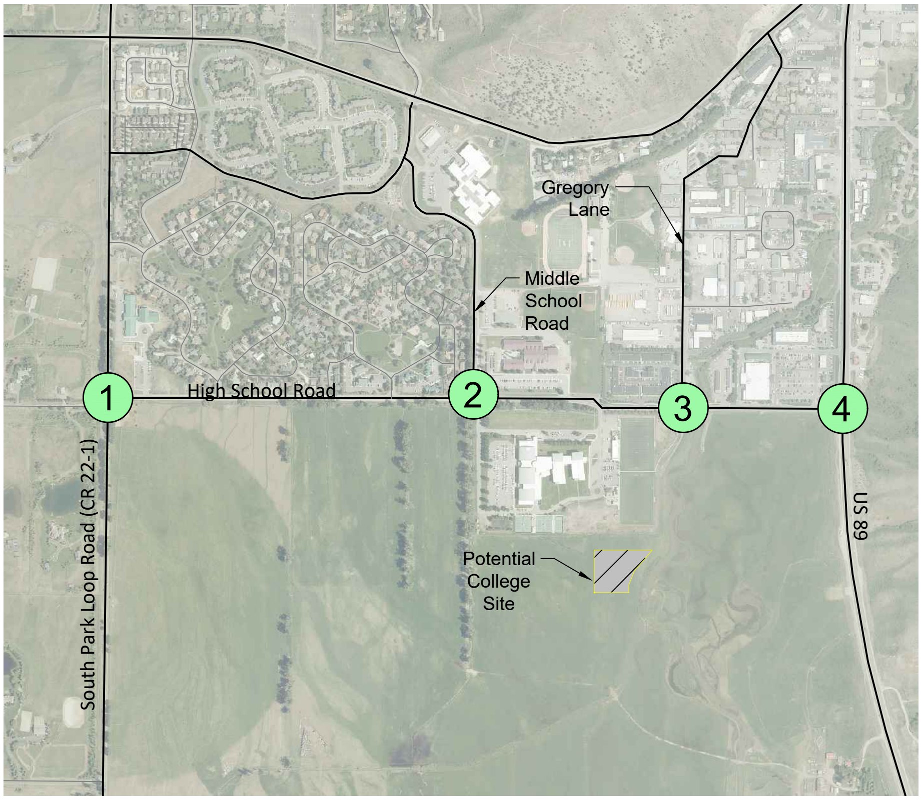
A 1.0% growth factor was used to forecast traffic 2017-2019 to 2021 (2019, *The Jackson Hole Classical Academy - Traffic Impact Study*), expanding to 1.8% for growth from 2021 to 2031 (2016, *Teton County School District #1 Elementary School Traffic Study*). The VMB 2018 shows a 2.76% increase between 2013 and 2017 and a 5.68% increase between 2017 and 2018 at the High School Road and US 89 intersection. Due to the percent increase variation of this data and the time of year the data was collected (during the peak summer months (July and August), and not during the school year (September through May) when traffic volumes are considerably lower, Jorgensen used the more annualized information available from the previous traffic study and used 1.8% growth. From discussions with the County, if the Tribal Trail connector takes place, the traffic on High School Road is expected to decrease according to modeling results from Cambridge Systematics.

Note that this study does not include the proposed Tribal Trails Connector. This project connecting Tribal Trails to WY 22 is currently under study and evaluation and is not an absolute. As discussed previously, the *South Park Sub Area and High School Road Corridor Transportation Analysis* Tribal Trails Connector analysis is considered somewhat antiquated and yields conservatively high traffic contributions to the High School Road corridor. Teton County has included the connector as an alternative in the Travel Demand Model developed by Cambridge Systematics. This model currently predicts traffic volumes on corridor segments and actually shows a decrease in daily traffic volumes on the east leg of High School Road with the addition of the Tribal Trails Connector. The model is now being refined to intersection analysis at selected intersections. This work is not yet completed. Because the timeframe and/or actual implementation of the connecter are unknown, the connector is not included in this analysis. However, should the project move forward, the data included in this study is available for inclusion in the TCTDM so that the impacts of the CWC campus on Tribal Trails can be estimated.

The 2031 baseline hourly traffic volumes and LOS for each intersection at the various peak hours are depicted on Figures 13 thru 15. In summary, the intersections of High School Road with South Park Loop Road and Middle School Road are operating at LOS B conditions throughout the day,. The intersection of High School Road and U.S. 89 is at a LOS B in the morning and LOS C for the two evening peak hours. Drivers entering US 89 from High School Road are currently experiencing LOS D conditions during all three peak hours analyzed. Southbound traffic at the Gregory Lane and High School Road intersection is expected to operate at an LOS F during all three peak hours in 2031 compared with only the school peak hour in 2021. Because the northbound traffic at Gregory Lane is very minimal, including one or two vehicles per hour at most from the Teton County Septage Dump Station, the LOS was not evaluated for the baseline.

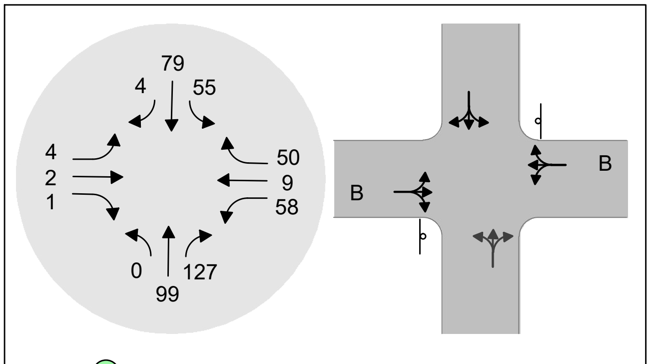
Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

FIGURE 13
2031 BASELINE TRAFFIC CONDITIONS A.M. PEAK HOUR (7:45-8:45 A.M.)

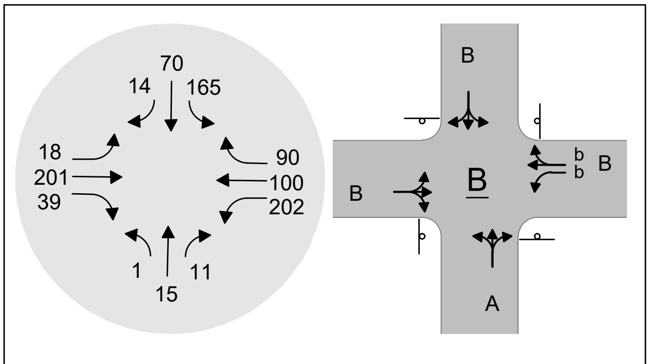


LEGEND

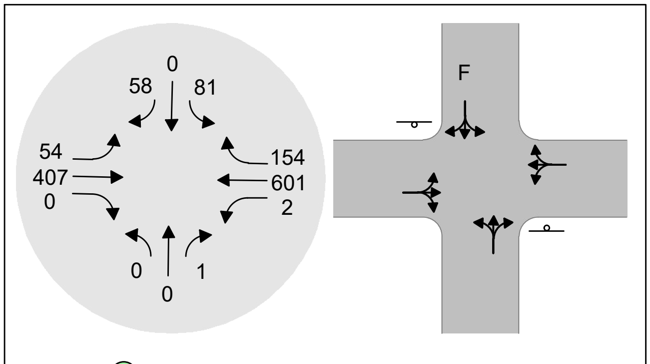
—	Primary Roadways
—	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
(#)	Intersection Delineation
⊸	Stop Sign
⦿	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
A	Intersection LOS (if applicable)



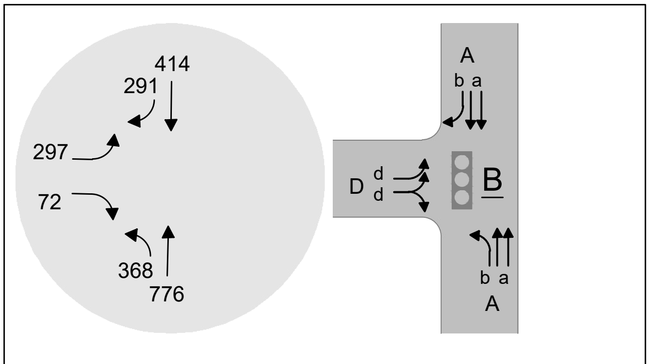
① South Park Loop Road/High School Road



② High School Road/Middle School Road

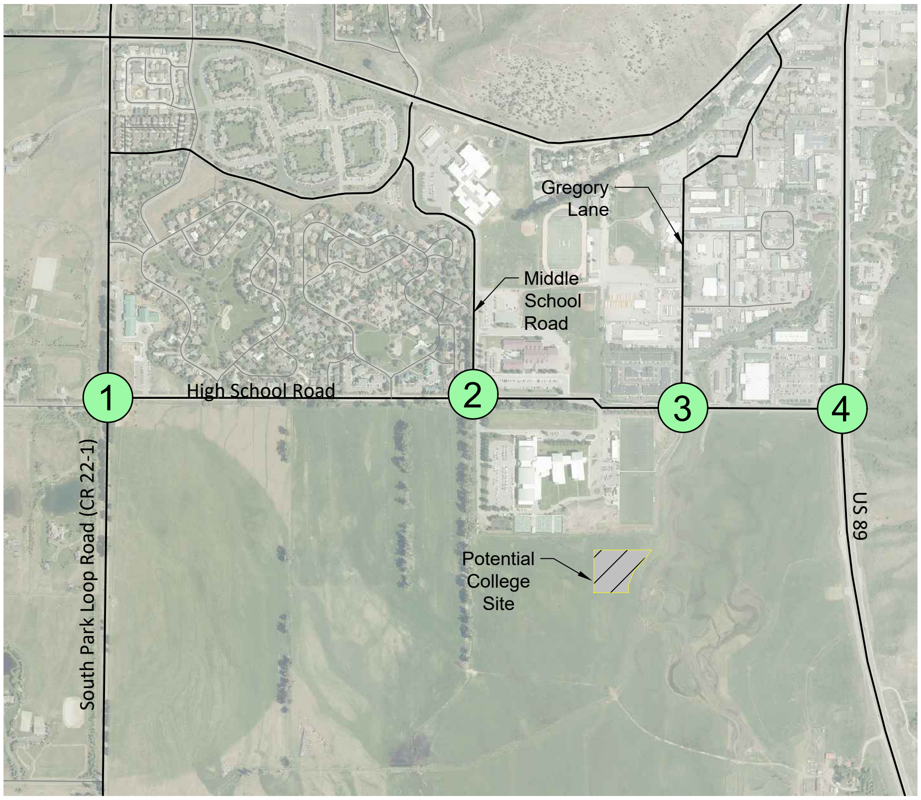


③ High School Road/Gregory Lane



④ High School Road/US 89

FIGURE 14
2031 BASELINE TRAFFIC CONDITIONS P.M. PEAK HOUR (5:00 - 6:00 P.M.)



LEGEND

― Primary Roadways

― Local Roadways in proximity to study

▨ Proposed Central Wyoming College-Jackson Outreach Center

Intersection Delineation

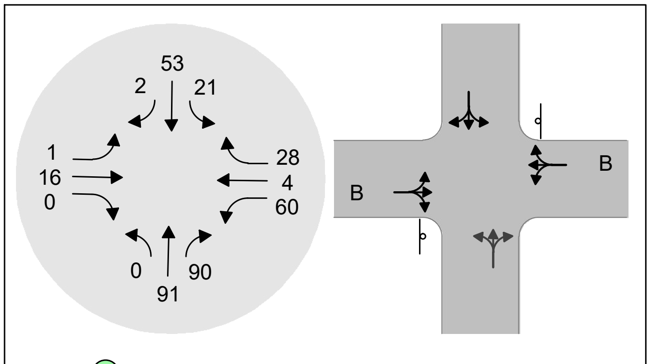
Stop Sign

Signalized Intersection

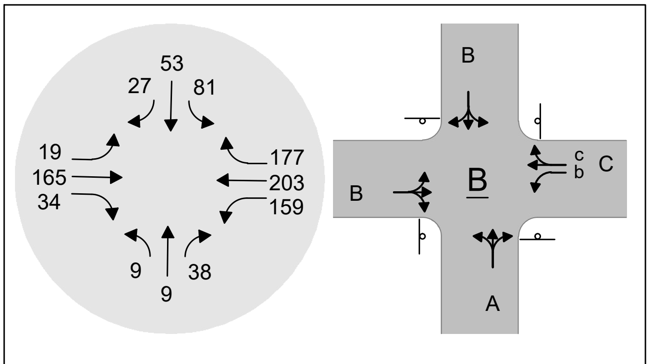
a Lane group LOS (if applicable)

A Approach LOS (if applicable)

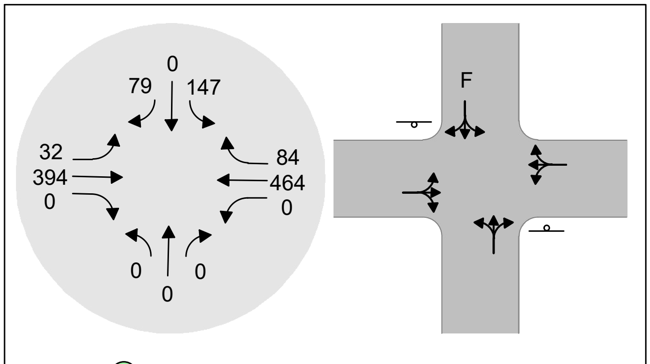
A Intersection LOS (if applicable)



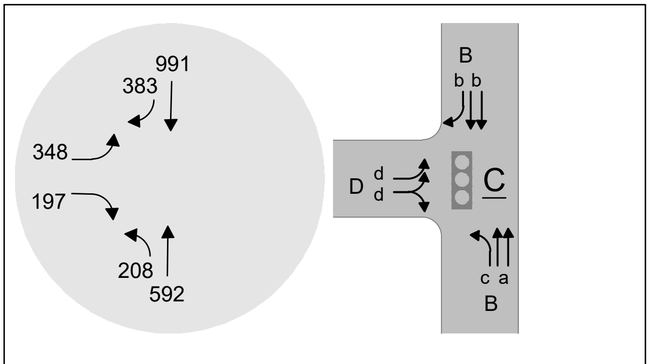
① South Park Loop Road/High School Road



② High School Road/Middle School Road

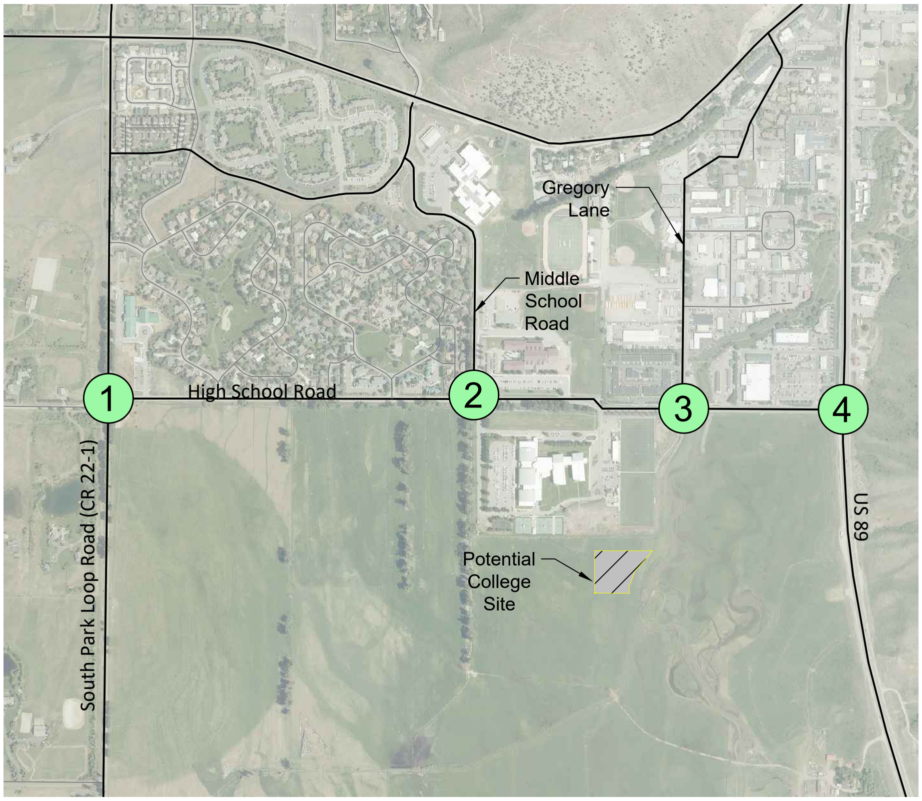


③ High School Road/Gregory Lane



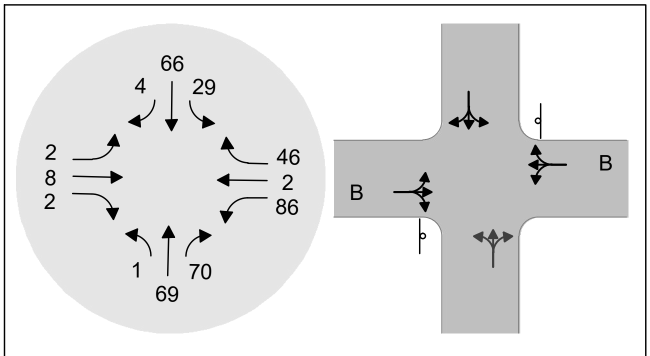
④ High School Road/US 89

FIGURE 15
2031 BASELINE TRAFFIC CONDITIONS SCHOOL P.M. PEAK HOUR (7:45-8:45 A.M.)

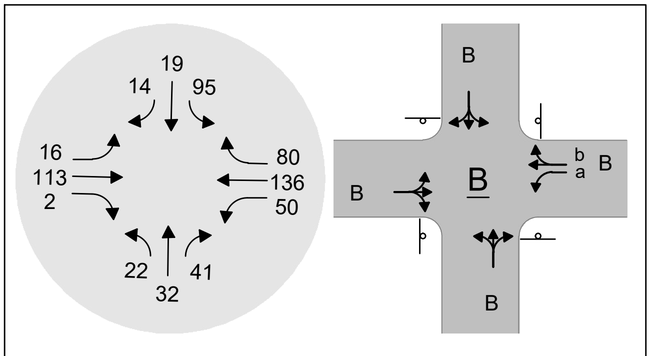


LEGEND

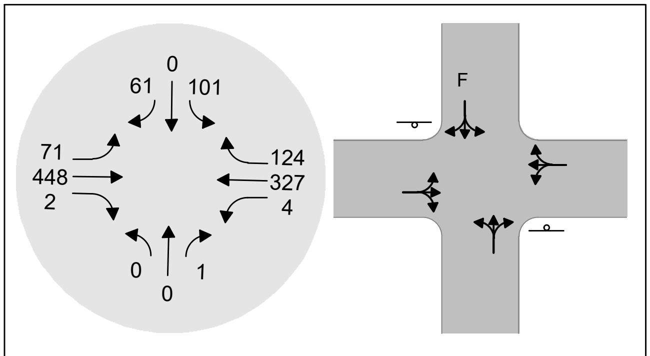
―	Primary Roadways
―	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
#	Intersection Delineation
⊸	Stop Sign
⦿	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
A	Intersection LOS (if applicable)



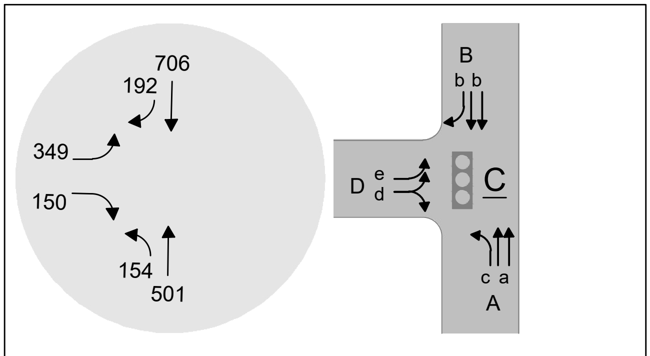
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

VI. PROPOSED CONDITIONS

The subject two-acre property will include the Central Wyoming College and a parking lot for student and faculty use. There are three parcels adjacent to the 2-acre site. They total in 95.3 acres, and consist of a 15.3 acre parcel (not including the 2-acre CWC site), a 35 acre parcel, and a 45 acre parcel.

By right, 3 dwelling units are allowed on each of these parcels that are allowed a main residence and an accessory residential unit (ARU) for a total of 6 total potential residential structures.

VII. TRIP GENERATION

The CWC courses are currently hosted at various locations within Jackson and currently contribute to trip generation throughout the transportation network. The new CWC will consolidate the current trips to the one central campus. Trip generation for 2021 and 2031 was completed based on CWC program and course information. CWC provided a comprehensive weekly schedule for 2021 which included the course names, classroom information, as well as course times and estimated enrollments. As a community college serving a variety of student types (traditional and non-traditional), many of CWC classes are offered after normal working hours to best serve working students. This allows some flexibility in scheduling, and as such, Jorgensen worked with CWC staff to adjust class times to not coincide with the peak hour traffic times to a large extent.

Trip Generation Assumptions

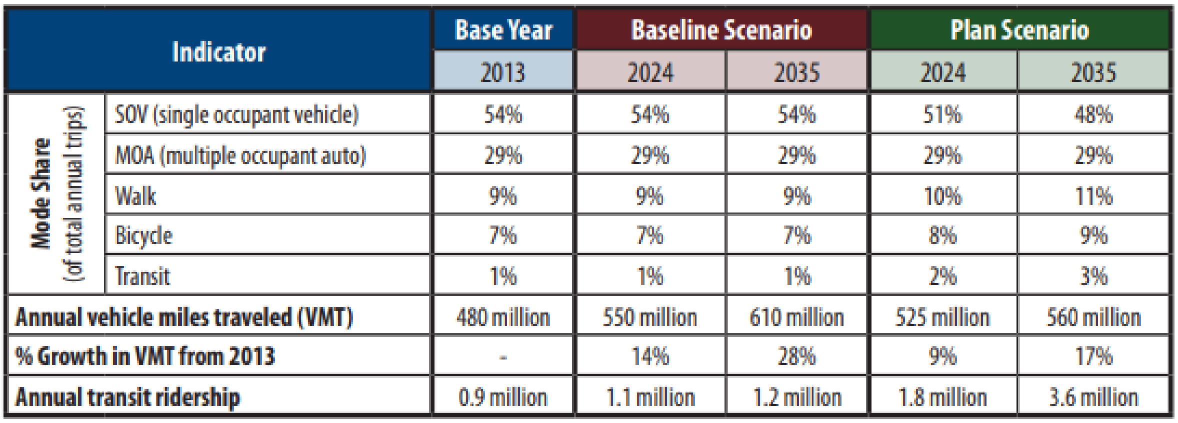
Jorgensen worked closely with CWC staff to understand student and staff travel behavior. Based on these discussions, for the purpose of this study, the following was assumed for 2021 and 2031 trip generation:

1. Estimated enrollment for 2021 is 226 students. Estimated enrollment for 2031 is 75 students in the summer, 375 in the fall, and 320 in the spring. These numbers reflect in-person credit courses, English as a Second Language and High School Equivalency courses.
2. High school enrollment is assumed to have no impact on the baseline trip generation. CWC offers concurrent enrollment to the Jackson Hole High School, located adjacent to the proposed property. These classes are taught within the High School curriculum during school hours by High School instructors. In 2018 enrollment was 167. Concurrent enrollment will not impact the use of the new CWC building. CWC is seeking approval of dual enrollment classes, which would allow high school students to take courses at the CWC campus. Dual enrollment will most likely include certified nursing assistant, culinary and science classes. CWC estimates that High School dual enrollment will not impact traffic generation students as will be able to walk from the High School to the CWC campus. This may ultimately result in decreased traffic from the High School onto High School Road during peak hours; however, it was not accounted for.
3. Not all students will arrive right when class begins or leave right when a class ends. Based on the weekly course schedule, it was assumed that 50% of students arrive within 30 minutes before class starts and the remainder arrive at the start of class time. It is also assumed that 50% of

additional classes, to meet with teachers, and to study. One third are assumed to leave after one hour, another third after 2 hours and the remaining third after 3 hours. For evening classes, the exit stagger is reduced and 50% are assumed to leave right after class ends and the remaining after a half hour.

4. The CWC program has been developed to minimize impact on the transportation network during peak hours, by attempting to minimize start and end time of courses during the peak hours.
5. 2021 estimates 5 faculty/staff who are on campus throughout the day from 8:00 AM until 5:00 PM. By 2031 this is estimated to increase to 7 with an additional 2 faculty/staff who will be on campus from 4:30 PM to 9:00 PM. The faculty and staff are assumed to total approximately 10% of the student population with adjunct faculty following similar ingress and egress patterns as the students. The adjunct faculty were included with student numbers.
6. Alternative transportation assumed 7% bicyclists and 9% walkers for 2021 and respectively 10.3% and 8.3% for 2031 (Source: *Jackson/Teton Integrated Transportation Plan*). Refer to Table 4. Key Indicators Under the Baseline and Plan Scenario (Teton County), for the referenced data. The 2021 numbers are baseline numbers which are expected to occur if recent trends in Jackson continue into the future combined with no change in current travel behavior. The 2031 percentage values are interpolated Plan Scenario values using the 2024 and 2035 estimates. Transit transportation was not included as a mode of transportation in 2021 trip generation since the current existing START Bus stops along High School Road are over a quarter mile away. However, based upon further conversations with START, they believe the stops along High School Road are in close enough to the CWC campus that ridership will occur in 2021. This is especially the case with the access incorporating quality pedestrian facilities. 2.6% transit transportation was assumed for 2031, which would provide adequate time for a transit transportation plan to be implemented for CWC.

Table 4. Key Indicators Under the Baseline and Plan Scenario (Teton County)



Indicator		Base Year	Baseline Scenario		Plan Scenario	
		2013	2024	2035	2024	2035
Mode Share (of total annual trips)	SOV (single occupant vehicle)	54%	54%	54%	51%	48%
	MOA (multiple occupant auto)	29%	29%	29%	29%	29%
	Walk	9%	9%	9%	10%	11%
	Bicycle	7%	7%	7%	8%	9%
	Transit	1%	1%	1%	2%	3%
Annual vehicle miles traveled (VMT)		480 million	550 million	610 million	525 million	560 million
% Growth in VMT from 2013		-	14%	28%	9%	17%
Annual transit ridership		0.9 million	1.1 million	1.2 million	1.8 million	3.6 million

7. 2021 trip generation numbers assumed enrollment of 226 students and that classes would be at 60% capacity of the assigned classroom capacity. Because the course schedule provided is weekly, this assumption aids in distributing trip generation throughout the week since all courses

will not be held on a single day (i.e. some classes will follow a Monday, Wednesday, Friday schedule, while others will follow a Tuesday, Thursday schedule.

8. The 2031 trip generation accounted for an increased enrollment of 166% to 375 students based on estimated fall enrollment numbers. The number of individuals entering and exiting the facility on a daily basis was again assumed to be 60% to distribute the trip generation throughout the week.
9. The Institute of Transportation Engineers (ITE) *Trip Generation Manual* was not utilized for trip generation since the college size is not represented within this manual and CWC was able to provide very specific information on staff and student numbers and behavior as well as class schedule.

Trip generation calculations can be found in Appendix C – Trip Generation Calculations. The trip generation resulted in the following:

Table 5. 2021 Trip Generation

Number of Students: 226

			Directional Distribution			
Analysis Period		*Trips*	*Entering*	*Exiting*	*Entering*	*Exiting*
DAILY	Weekday	*264*	50%	50%	132	132
AM Peak Hour (7:15-8:15)	Weekday	*27*	100%	0%	27	0
PM Peak Hour (3:15-4:15)	Weekday	*19*	17%	83%	3	15
PM Peak Hour (5:00-6:00)	Weekday	*33*	63%	37%	20	13
Alternative Modes of Transportation	Weekday	*110*	50%	50%	55	55

Table 6. 2031 Trip Generation

Number of Students: 375

			Directional Distribution			
Analysis Period		*Trips*	*Entering*	*Exiting*	*Entering*	*Exiting*
DAILY	Weekday	*416*	50%	50%	208	208
AM Peak Hour (7:15-8:15)	Weekday	*42*	100%	0%	42	0
PM Peak Hour (3:15-4:15)	Weekday	*29*	17%	83%	5	24
PM Peak Hour (5:00-6:00)	Weekday	*51*	62%	38%	32	20
Alternative Modes of Transportation	Weekday	*230*	50%	50%	115	115

VIII. TRIP DISTRIBUTION

An Origin-Destination Study was not completed as part of the 2021 baseline study and assumptions had to be made to assign generated trips to the transportation network. It was confirmed with CWC staff that 2021 and 2031 ingress/egress traffic of the CWC Campus follows the same traffic trends of the transportation network. The 2021 baseline and buildout trip distribution conditions were evaluated for AM, PM and School PM peak hours.

Figures 11, 12, and 13 show the assumed trip generation for three different access alternatives studied for the various time periods. The accesses studied include the use of the easement south of Middle School Road, referred to as the Middle School Road Access, the use of the easement south of Gregory Lane, referred to the Gregory Lane Access, and the use of the combination of both easements south of Middle School Road and Gregory Lane, referred to as Dual Access. Each map includes the percentage of ingress/egress traffic associated with each movement. Ingress movements are labeled in green and egress movements in red. Each map also includes the associated number of movements for the 2021 baseline condition (normal nomenclature) and the 2031 buildout condition (in parenthesis).

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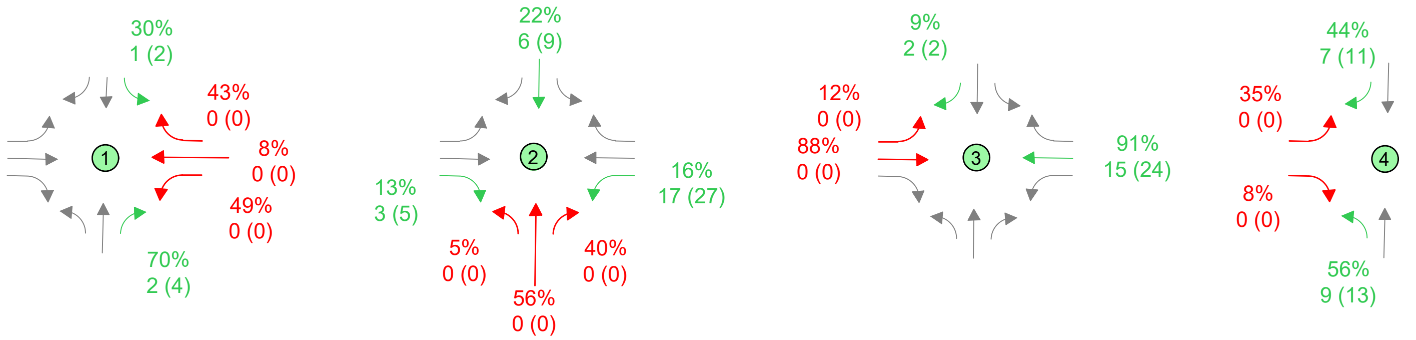
FIGURE 16

TRIP DISTRIBUTION
MIDDLE SCHOOL ROAD ACCESS

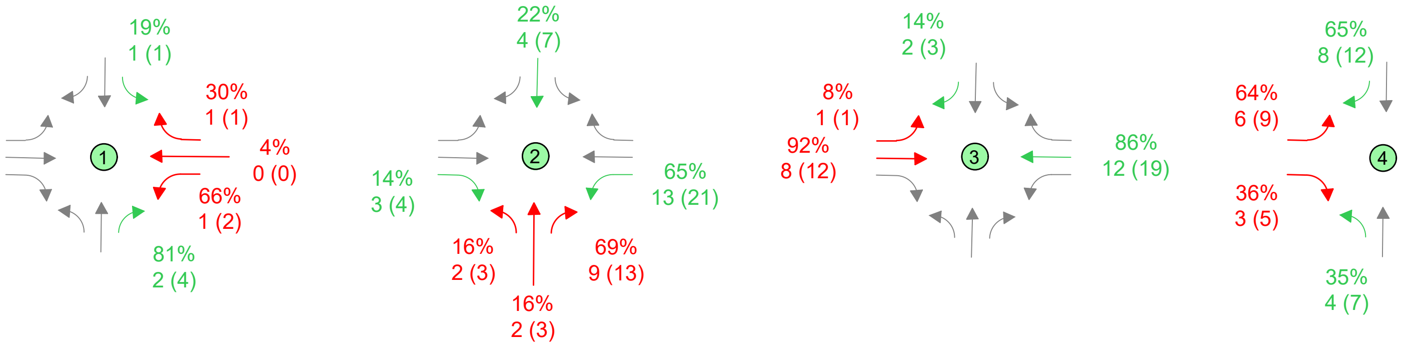
LEGEND

##	Ingress Movement
##	Egress Movement
##%	% vehicles in movement - 2021
##	# Vehicles in Movement - 2021 Baseline Conditions
(##)	# Vehicles in Movement - 2031 Buildout Conditions

AM Peak Hour



PM Peak Hour



School Peak Hour

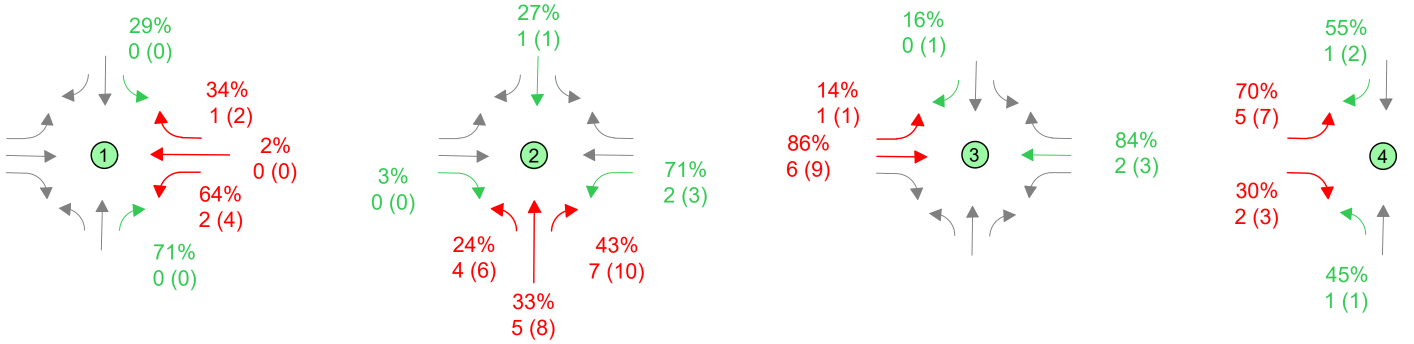


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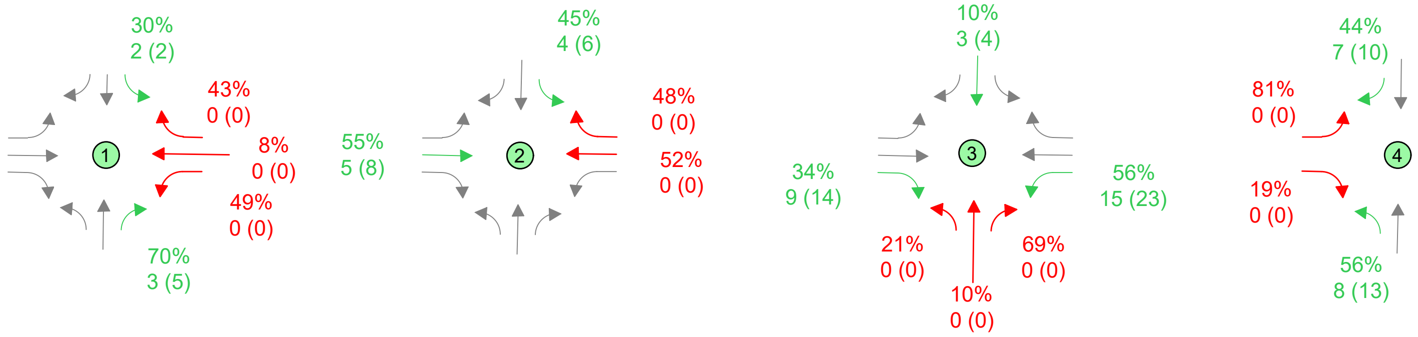
FIGURE 17

TRIP DISTRIBUTION
GREGORY LANE ACCESS

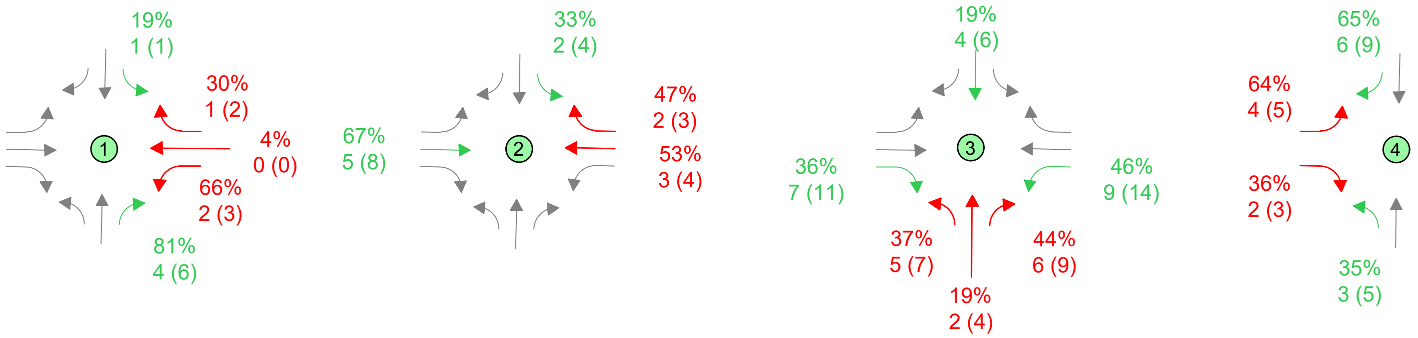
LEGEND

##	Ingress Movement
##	Egress Movement
##%	% vehicles in movement - 2021
##	# Vehicles in Movement - 2021 Baseline Conditions
(##)	# Vehicles in Movement - 2031 Buildout Conditions

AM Peak Hour



PM Peak Hour



School Peak Hour

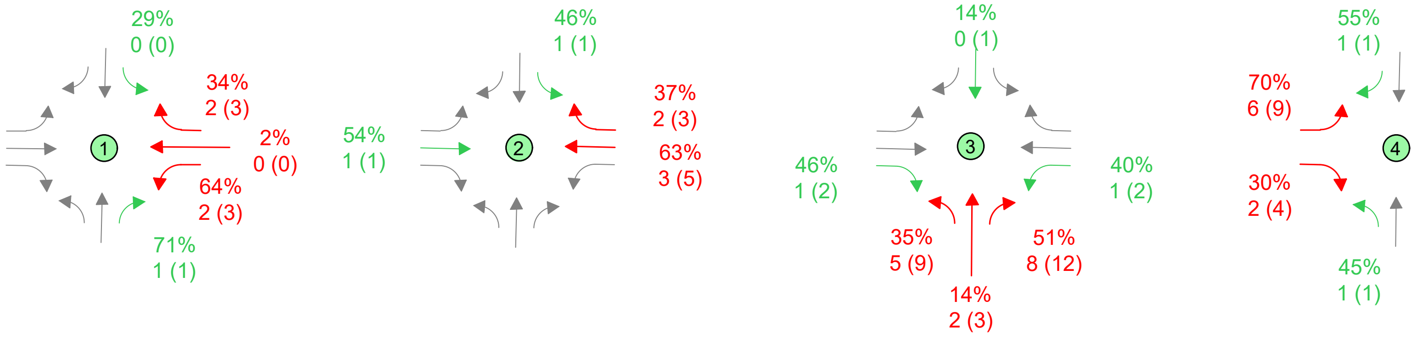


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FIGURE 18

TRIP DISTRIBUTION
DUAL ACCESS

LEGEND

Ingress Movement

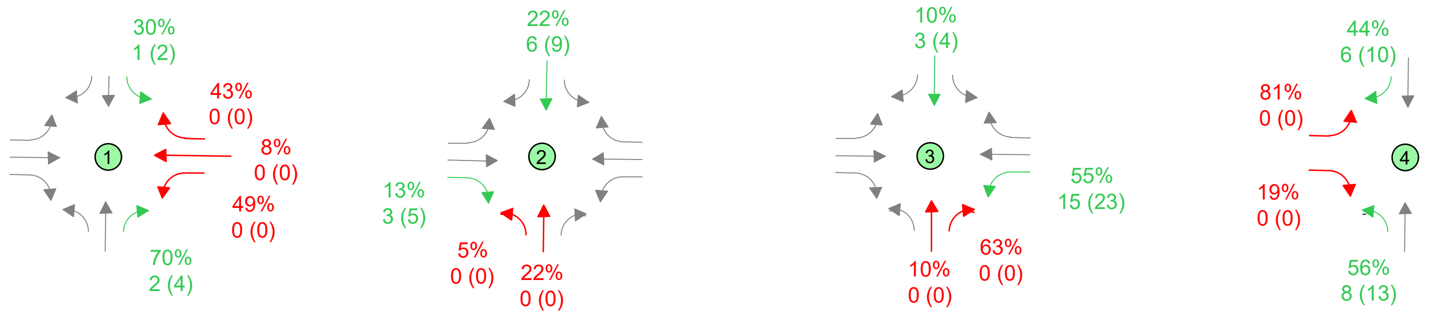
Egress Movement

##% % vehicles in movement - 2021

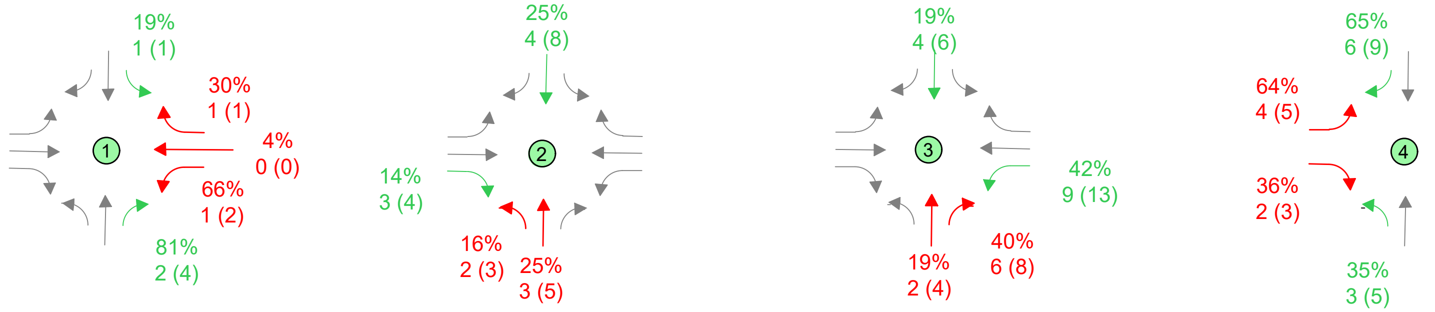
Vehicles in Movement - 2021
Baseline Conditions

(##) # Vehicles in Movement - 2031
Buildout Conditions

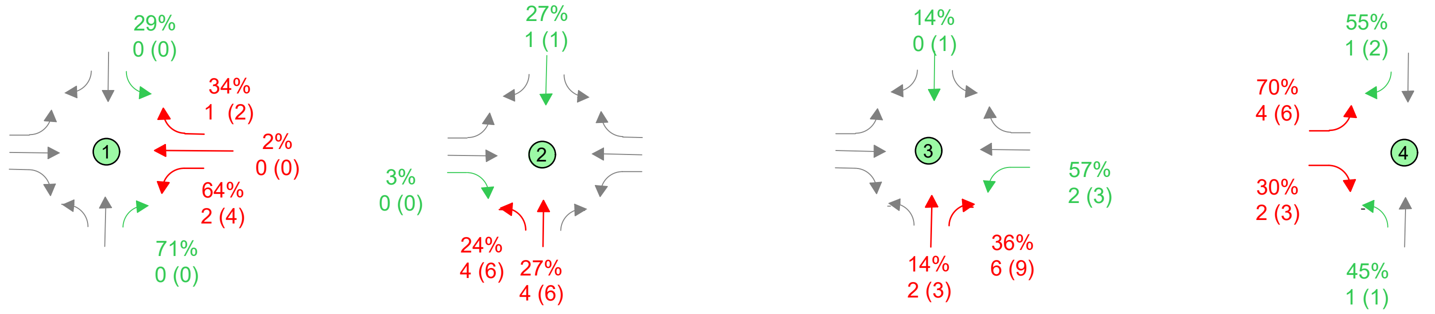
AM Peak Hour



PM Peak Hour



PM Peak Hour



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Traffic Summary

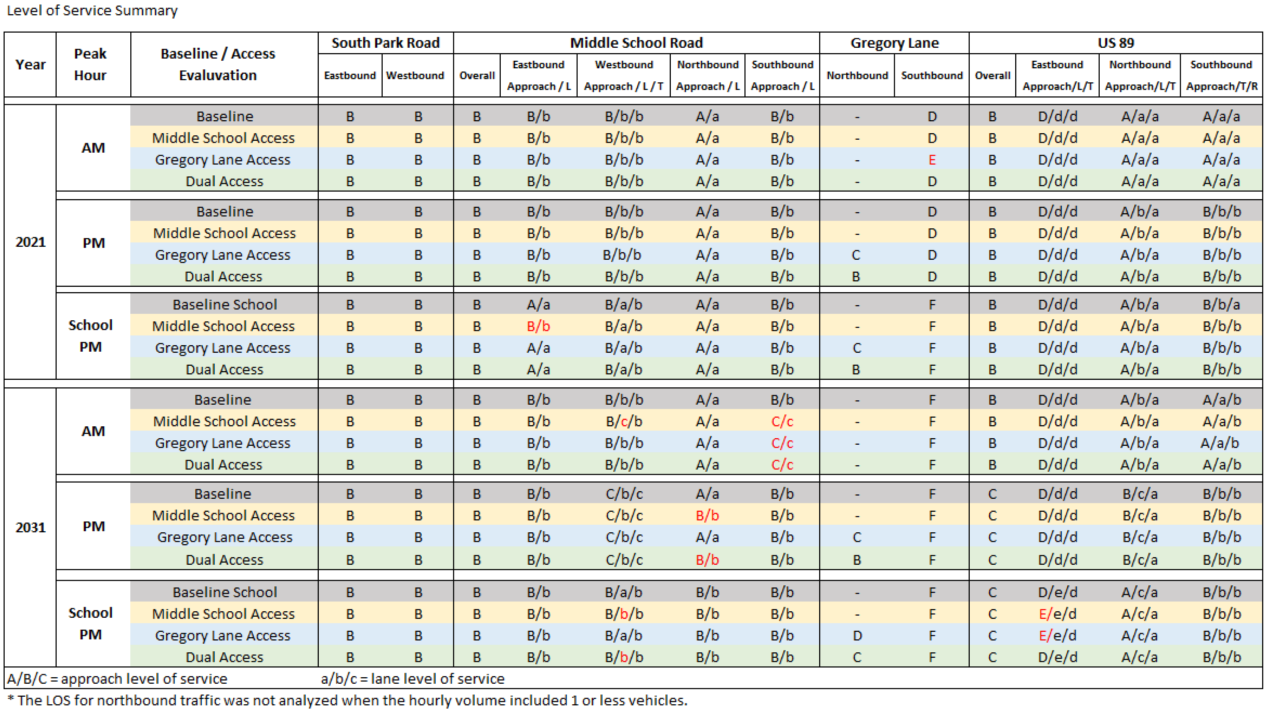
High School Road baseline conditions in 2021 and 2031 operate at a satisfactory level of service. The southbound traffic at the intersection of Gregory Lane and High School Road is currently experiencing a D to F LOS, which is not unexpected for a minor stop-controlled approach. The southbound approach at this intersection will continue to fail in 2031 with or without CWC if the transportation network and circulation remains as is. The eastbound approach at the High School Road and US 89 is currently operating at a LOS D, as are the left and right turn lanes; the left turn lane is expected to decrease to LOS E by 2031.

IX. TRAFFIC ANALYSIS

The trip generation values for CWC were added to the 2021 and 2031 baseline values and analyzed to determine the impact on the transportation system. Table 3 provides a summary of the LOS for each intersection and intersection approaches. The LOS in red text is a decrease in LOS from the baseline that is attributable to CWC traffic. Overall, the intersection of Gregory Lane and High School Road receive the largest impact from the development of the CWC in all three alternatives as this intersection currently has issues related to southbound Gregory Lane traffic.

For the analysis, the intersections will be referred to by the north/southbound intersecting roads since High School Road is the east/westbound street for all intersections.

Table 7. 2021 and 2031 Level of Service Summary



Level of Service Summary

Year	Peak Hour	Baseline / Access Evaluvation	South Park Road		Middle School Road					Gregory Lane		US 89			
			Eastbound	Westbound	Overall	Eastbound Approach / L	Westbound Approach / L / T	Northbound Approach / L	Southbound Approach / L	Northbound	Southbound	Overall	Eastbound Approach/L/T	Northbound Approach/L/T	Southbound Approach/T/R
2021	AM	Baseline	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/a/a	A/a/a
		Middle School Access	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/a/a	A/a/a
		Gregory Lane Access	B	B	B	B/b	B/b/b	A/a	B/b	-	E	B	D/d/d	A/a/a	A/a/a
		Dual Access	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/a/a	A/a/a
	PM	Baseline	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/b/a	B/b/b
		Middle School Access	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/b/a	B/b/b
		Gregory Lane Access	B	B	B	B/b	B/b/b	A/a	B/b	C	D	B	D/d/d	A/b/a	B/b/b
		Dual Access	B	B	B	B/b	B/b/b	A/a	B/b	B	D	B	D/d/d	A/b/a	B/b/b
	School PM	Baseline School	B	B	B	A/a	B/a/b	A/a	B/b	-	F	B	D/d/d	A/b/a	B/b/a
		Middle School Access	B	B	B	B/b	B/a/b	A/a	B/b	-	F	B	D/d/d	A/b/a	B/b/b
		Gregory Lane Access	B	B	B	A/a	B/a/b	A/a	B/b	C	F	B	D/d/d	A/b/a	B/b/b
		Dual Access	B	B	B	A/a	B/a/b	A/a	B/b	B	F	B	D/d/d	A/b/a	B/b/b
2031	AM	Baseline	B	B	B	B/b	B/b/b	A/a	B/b	-	F	B	D/d/d	A/b/a	A/a/b
		Middle School Access	B	B	B	B/b	B/c/b	A/a	C/c	-	F	B	D/d/d	A/b/a	A/a/b
		Gregory Lane Access	B	B	B	B/b	B/b/b	A/a	C/c	-	F	B	D/d/d	A/b/a	A/a/b
		Dual Access	B	B	B	B/b	B/b/b	A/a	C/c	-	F	B	D/d/d	A/b/a	A/a/b
	PM	Baseline	B	B	B	B/b	C/b/c	A/a	B/b	-	F	C	D/d/d	B/c/a	B/b/b
		Middle School Access	B	B	B	B/b	C/b/c	B/b	B/b	-	F	C	D/d/d	B/c/a	B/b/b
		Gregory Lane Access	B	B	B	B/b	C/b/c	A/a	B/b	C	F	C	D/d/d	B/c/a	B/b/b
		Dual Access	B	B	B	B/b	C/b/c	B/b	B/b	B	F	C	D/d/d	B/c/a	B/b/b
	School PM	Baseline School	B	B	B	B/b	B/a/b	B/b	B/b	-	F	C	D/e/d	A/c/a	B/b/b
		Middle School Access	B	B	B	B/b	B/b/b	B/b	B/b	-	F	C	E/e/d	A/c/a	B/b/b
		Gregory Lane Access	B	B	B	B/b	B/a/b	B/b	B/b	D	F	C	E/e/d	A/c/a	B/b/b
		Dual Access	B	B	B	B/b	B/b/b	B/b	B/b	C	F	C	D/e/d	A/c/a	B/b/b

A/B/C = approach level of service a/b/c = lane level of service

* The LOS for northbound traffic was not analyzed when the hourly volume included 1 or less vehicles.

2021 Baseline Conditions

In 2021, the intersection of High School Road with South Park Loop Road, Middle School Road and US 89 will operate with a LOS B throughout the day. The US 89 eastbound approach will operate at a LOS D throughout the day. The Gregory Lane southbound approach will operate at a LOS D during the AM and PM peak hours and will function at a LOS F during the School PM peak hour. The northbound approach on Gregory Lane currently receives minimal traffic and the LOS was not analyzed for a baseline.

2021 Traffic Conditions with CWC

The addition of the CWC results in minimal impact to the transportation network for the three different access scenarios. The South Park Road and US 89 intersections will not be impacted. The Gregory Lane and Middle School Road intersections receive impact by the CWC addition, which are described as followed for each access scenario:

1. **Middle School Road Access:** The eastbound approach at the Middle School Road intersection is expected to decreased from a LOS A to a LOS B during the School PM peak hour. The Gregory Lane intersection will not be impacted with additional CWC traffic.
2. **Gregory Lane Access**: The Gregory Lane southbound approach is expected to decrease from a LOS D to E in the AM peak hour with the CWC. With the added northbound traffic at Gregory Lane intersection in the PM and School PM hours, a LOS C is established for the evening peak hours. The Middle School Road intersection is not impacted with additional CWC traffic.
3. **Dual Access**: The Gregory Lane southbound approach remains consistent with the baseline throughout the day, the Gregory Lane northbound approach is expected to operate at a LOS B in the PM and School PM peak hours with the CWC. The difference in LOS from the Gregory Lane Access is a result in decreased left-hand turn movements generated by CWC, which are anticipated to take place at Middle School Road during this scenario. The Middle School Road intersection will not be impacted with additional CWC traffic.

2031 Baseline Conditions

The LOS for the 2031 baseline conditions are similar to that of the 2021 baseline conditions, with the following differences in service for 2031:

1. Gregory Lane southbound traffic is expected to experience a LOS F during all periods of the day.
2. Middle school westbound traffic is expected to decrease from a LOS B to a LOS C for the westbound approach during the PM peak hour.
3. The overall LOS for the intersection of US 89 and High School Road is expected to decrease from a LOS B to C in the PM and School PM peak hours. The northbound approach is expected to decrease from a LOS A to B in the PM and the northbound left-hand turn is expected to decrease from a LOS B to a LOS C in the evening hours.

2031 Traffic Conditions with CWC

The addition of the CWC is expected to have an impact to the transportation network in 2031 for all three access scenarios. The South Park Loop Road intersection is expected remain at a LOS B for all scenarios. The Middle School southbound approach, for all three access scenarios, will experience a decrease in LOS from a B to a C during the AM peak hours. The Gregory Lane southbound approach will continue to operate with a LOS F throughout the day. The three access scenarios will result in the following unique impacts to the transportation network:

1. **Middle School Road Access:** The Middle School Road southbound left turning movement will decrease from a LOS B to C during the AM Peak hour and decrease from a LOS A to B in the school

PM peak hour. The Middle School Road northbound approach and left turning movement will decrease from a LOS A to a B in the PM peak hours. Gregory Lane and High School Road is not impacted with the CWC addition. The eastbound approach at the US 89 intersection is forecasted to decrease from a LOS D to an LOS E.

2. **Gregory Lane Access**: The Gregory Lane northbound approach is expected to operate with LOS C during the PM peak hour and LOS D during the School PM peak hour. The eastbound approach at the US 89 intersection is forecasted to decrease from a LOS D to a LOS E.
3. **Dual Access:** The Gregory Lane northbound approach receives a LOS B and C during the PM and School PM peak hours, respectively. The Middle School Road northbound approach and left turning movement will decrease from a LOS A to B during the PM peak hour.

X. OTHER CONSIDERATIONS

High School Traffic

Refer to Figure 19. High School Traffic, for an image showing the traffic circulation network for the High School campus. While this traffic impact study gained a better understanding of the four major intersections along High School Road, it did not account for the three-way stop-controlled intersection located between Middle School Road and Gregory Lane. As previously discussed, the High School contributes a surge of additional traffic to the transportation network during the School PM peak hour, 3:15 to 4:15 PM. During the School PM peak hour, specifically from 4:00-4:15 PM, traffic between Middle School Road and this three-way intersection is highly congested. Vehicles heading eastbound are queued on High School Road and within the High School parent pick up area during this high impact time period. With two stop-controlled intersections, this section of road operates poorly during this peak 15-minutes. TCSD is taking measures to mitigate traffic generated by parents and students. This school year (2019-2020), Jackson Hole has implemented paid parking for students, and have two teams in the engineering class working on the parking lot/traffic issues at JHHS and High School Road. The High School Project Lead the Way class has identified this traffic as an ongoing issue for the school and is studying the traffic patterns to see if improvements can be made. Jorgensen is providing technical assistance to help with the final recommendation by the class.

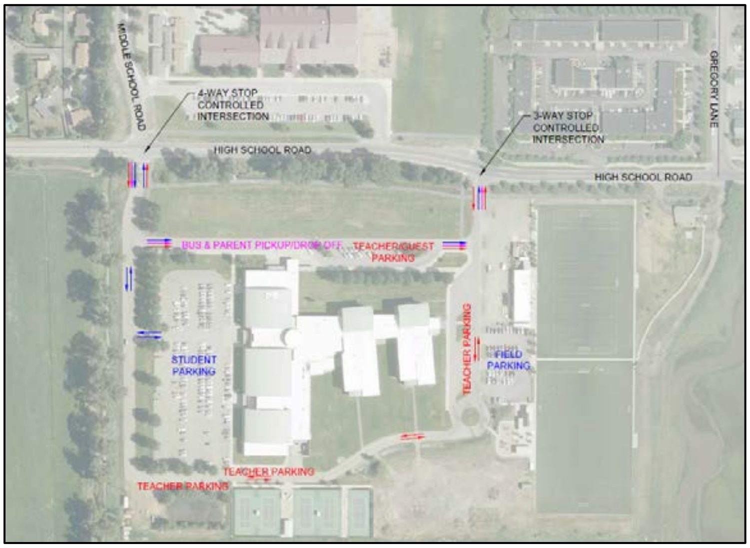


Figure 19. High School Traffic

Gregory Lane Improvements

Gregory Lane is identified as a roadway corridor in need of multiple improvements. The improvements include street, stormwater and sewer infrastructure, and a safe route to school for pedestrians and bicyclists. The Gregory Lane improvements initiative was approved as part of the Teton County and Town of Jackson SPET election on November 5, 2019. These improvements will include improvements to the intersection of Gregory Lane and High School Road. Presently, the Town of Jackson's Gregory Lane Improvements Project includes a dedicated Gregory Lane southbound left turn lane and a combined through/right turn lane. Addressing current capacity and circulation issues at this intersection will be a part of this project. While the timing of this project is still be determined, the Town has communicated they would like to implement this project in 2021.

Tribal Trail Connector & East-West Connector

The Integrated Transportation Plan identifies major capital projects designed to address existing (or future) traffic congestion and multimodal connectivity. The Tribal Trails Connector and East-West Connector are identified as key local connections. WYDOT and Teton County are in the planning stages to develop the Tribal Trails Connector Road, which would include a new segment of the Tribal Trails Road, approximately 0.5 miles, extending from Cherokee Lane north to Wyoming Highway 22. An East-West connector was also identified in the ITP was also recommended, which would provide a connector between South Park Loop Road and US 89, to the south of High School Road. This connector will also serve as an additional access to CWC. As previously mentioned, in communications with the WYDOT District 3 Traffic Engineer and Teton County Public Works, these connectors were not be viewed as an absolute. The development of both of these connectors could have an impact to the transportation network and the origin and destination of the CWC trips. The East-West Connector will directly impact the CWC since its proposed location could provide an access to the side of the CWC from the east and west. A portion of this easement has been created.

Parking

All parking is anticipated to be contained on-site. Parking will be analyzed to meet the demand and incorporated in the site plan. This is in the preliminary planning stages and will be adjusted as the CWC project proceeds.

Traffic Circulation

The traffic circulation is dependent on the access location. If Middle School Road or Gregory Lane is used for the access, ingress and egress will take place at the same intersection. If the dual access is selected, ingress and egress will take place from both intersections.

Upon final design, the school site shall contain consistent signage and markings consistent with the Manual on Uniform Traffic Control Devices (MUTCD) latest edition. An additional resource for site signage and markings is the WYDOT Pedestrian and School Traffic Control Manual.

START Bus Service

START Bus presently provides service along High School Road with stops at Smiths, the intersection of the east access to the High School, west of the Corner Creek Lane intersection, and the Rangeview Drive intersection. CWC has been in conversations with START to identify the best way for START to serve CWC and these discussions will be furthered once the access location to CWC has been determined.

Pedestrian/Bicycle Connectivity

Currently, pedestrian/bicycle access is not directly available to the site, but should be incorporated in the selected access alternative. The surrounding pedestrian/bicycle network on High School Road, South Park Loop Road and US 89 is developed and will provide good connectivity to CWC when the connection is developed in conjunction with the new access.

XI. CONCLUSIONS

Study Assumption Review

1. CWC construction is expected to be complete in 2021 with enrollment of 262 students, 5 full time staff and faculty and approximately 21 additional adjunct faculty.
2. Estimated enrollment for 2031 is 75 students in the summer, 375 in the fall and 320 in the spring. Staff/faculty is expected to increase to 7 full time during business hours, 2 faculty/staff who will be consistent during evening hours and approximately 30 adjunct faculty.
3. A 1.0% growth factor was used to forecast traffic 2017-2019 to 2021 (2019, The Jackson Hole Classical Academy – Traffic Impact Study), expanding to 1.8% for growth from 2021 to 2031 (2016, Teton County School District #1 Elementary School Traffic Study).

CWC Campus Traffic Impacts

1. The CWC currently holds classes throughout the Jackson community. The development of the CWC will relocate these trips to a centralized campus. The site is expected to generate 264 daily trips in 2021 and 416 trips in 2031.
2. The CWC program has been developed to minimize impact on the transportation network during peak hours.
3. Southbound traffic on Gregory Lane and High School road is currently failing without the addition of the CWC. Eastbound traffic at the intersection of High School Road and US 89 is operating at a LOS D. The addition of the CWC will increase traffic at these intersections, but will have minimal impact on the operation level.

Recommendation

The proposed CWC is expected to increase trips on the adjacent transportation network at full buildout in 2021 and in 2031. Based on the intersection analysis, the High School transportation network, potential improvements to Gregory Lane and uncertainties of the development of the Tribal Trails connector and East-West Connector, Jorgensen recommends the development of the Gregory Lane access with an emergency access available from the High School.

The Middle School access is not recommended for sole ingress and egress to the CWC based on the intersection analysis and the existing High School traffic circulation. This access would be shared by CWC and High School traffic. While the major transportation network will not be largely impacted by the development of the Middle School access, the internal network of the High School and CWC will be impacted with the shared access during the PM High School release due to the large queueing of vehicles picking students up in the afternoon and the portion of High School Road between the stop controlled intersection at Middle School Road and the east access to the High School. Based upon visual observations of traffic operations, keeping CWC traffic separated from TCSD traffic and east of the High School Road segment adjacent to Jackson Hole High School and Colter Elementary School is recommended.

The scenario analysis for 2021 and 2031 indicate that the dual access is not necessary since the use of two access points will not greatly benefit the transportation network. The dual access is beneficial for emergency purposes, but cannot be justified based on the results.

At this time, the Gregory Lane access is recommended for the access to the CWC. The southbound approach of Gregory Lane and High School Road is currently operating poorly because of the number of left-hand turns onto High School Road. The addition of the CWC, will result in additional southbound thru traffic and northbound traffic, which will decrease the LOS for the intersection. To improve the Gregory Lane LOS with the additional CWC access, the following options should be considered, which will improve the current level of service for the High School Road and Gregory Lane intersection:

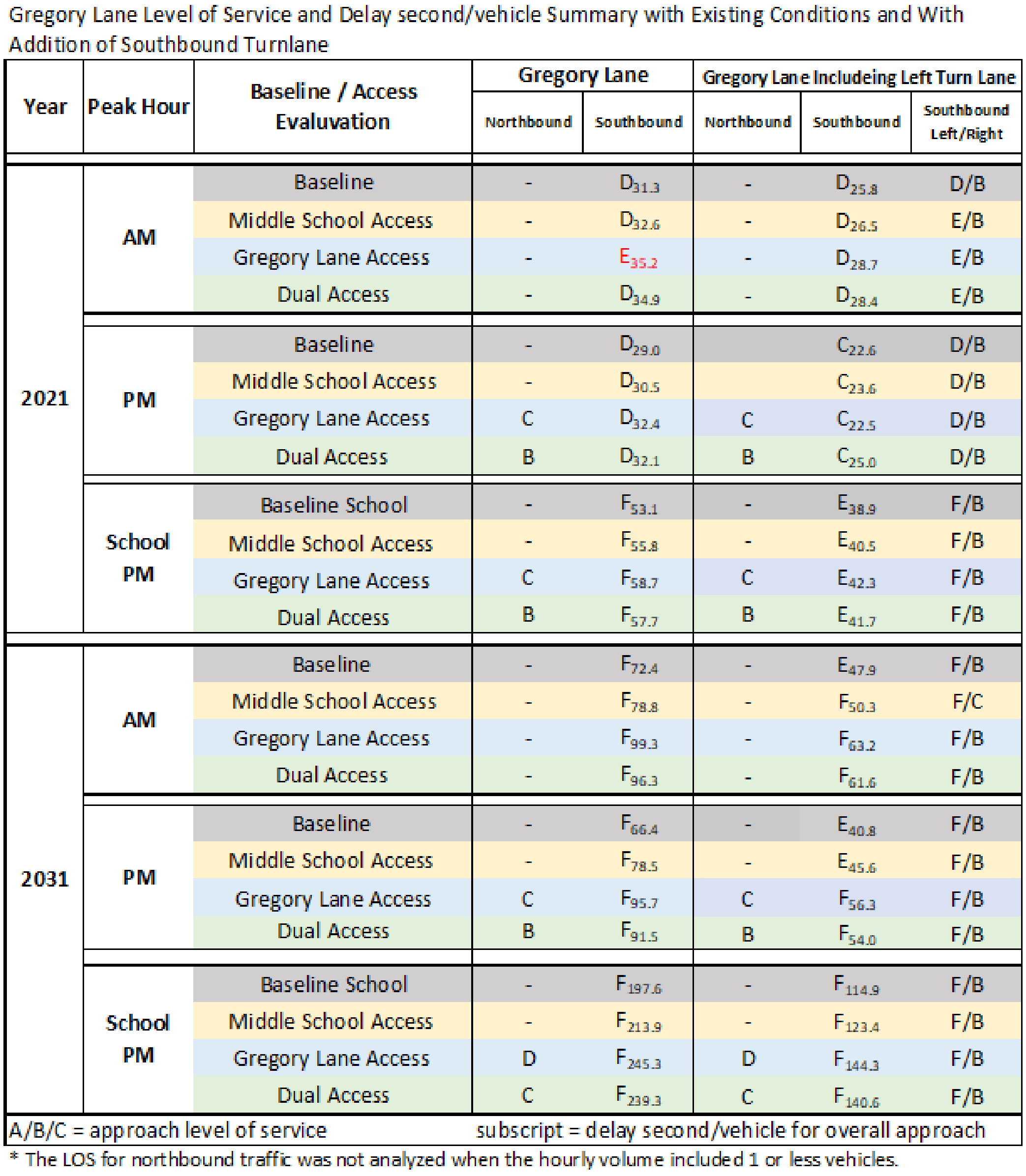
1. Gregory Lane / High School Road northbound traffic movement: To improve the northbound LOS at the intersection, a right-hand turn only for the CWC egress could be implemented during peak hours.
2. Gregory Lane / High School Road southbound traffic movement:
    a. An auxiliary right-hand turn lane could be added to the southbound approach at the intersection of High School Road and Gregory Lane. This addition would improve the level of service for southbound traffic and decrease the delay seconds/vehicle. Refer to Table 8 Gregory Lane LOS Comparison with Turning Lane for the anticipated improvements to the intersection with the additional southbound turning lane. A roundabout was not analyzed as a recommendation due to the right-of-way limited size of 60-feet and student pedestrian concerns.
    b. Gregory Lane could be modified from a two-way to one-way street, with traffic traveling northbound. This would eliminate all southbound left-hand turns which is the movement that adversely impacts this intersection the most. The Town of Jackson has discussed this potential, and may analyze this option during the Gregory Lane Improvement Project.
    c. These suggestions could be considered by the Town when evaluating the Gregory Lane improvement project in the future.
    d. The development of a robust Travel Demand Management Program (TDM) is recommended to encourage and reward multi-modal transportation by students, staff and faculty. As an educational institution, CWC sees this as an opportunity to educate their students and staff on the merits of and benefits of single occupant vehicle (SOV) trip reduction as it relates to road capacity and associated cross sectional widths, as well as CO2 emissions. Wellness and health benefits of biking and walking can also be messaged through the nursing program. We have also had good discussions with START Bus who believes the proposed campus can be well served by the current service along High School Road, including in 2021. As indicated in the comments, we have assigned no trips to START ridership based upon the low percentage of ridership in the community identified in the ITP. START Bus is also encouraged by its ability to serve the area when all of the road easements are built out thereby allowing for a looped service to the area. We have added language emphasizing these points to the TDM.
3. A gravel emergency access from the CWC to the High School transportation network should be developed.
4. A pathway should be developed along the access to provide continuity within the pathway network system and to comply with Town of Jackson complete streets standards. The school

speed limit zone should be expanded along High School Road to the east side of the Gregory Lane intersection to make the pedestrian and bicycle crossing safer at the High School Road and Gregory Lane intersection. The school zone should reduce traffic speeds down to 20 mph for a minimum distance of 400’ on each side of the crosswalk. This can be accomplished through the proper signage along High School Road per the MUTCD.

5. This analysis assumes no changes in the signal timing at the US 89 and High School Road intersection. The opportunity to make timing adjustments will be coordinated with WYDOT.

The Gregory Lane access, with adoption of the included recommendations, should be adequate for the CWC. This access should be reevaluated in the future to determine the adequacy of the access and evaluated if a secondary access will be required. The reevaluation is suggested if the Gregory Lane improvements, Tribal Trail connector and/or High School Road corridor take place in the future and impact the transportation network.

Table 8 Gregory Lane LOS Comparison with Turning Lane



Gregory Lane Level of Service and Delay second/vehicle Summary with Existing Conditions and With Addition of Southbound Turnlane

Year	Peak Hour	Baseline / Access Evaluvation	Gregory Lane		Gregory Lane Includeing Left Turn Lane		
			Northbound	Southbound	Northbound	Southbound	Southbound Left/Right
2021	AM	Baseline	-	$D_{31.3}$	-	$D_{25.8}$	D/B
		Middle School Access	-	$D_{32.6}$	-	$D_{26.5}$	E/B
		Gregory Lane Access	-	$E_{35.2}$	-	$D_{28.7}$	E/B
		Dual Access	-	$D_{34.9}$	-	$D_{28.4}$	E/B
	PM	Baseline	-	$D_{29.0}$		$C_{22.6}$	D/B
		Middle School Access	-	$D_{30.5}$		$C_{23.6}$	D/B
		Gregory Lane Access	C	$D_{32.4}$	C	$C_{22.5}$	D/B
		Dual Access	B	$D_{32.1}$	B	$C_{25.0}$	D/B
	School PM	Baseline School	-	$F_{53.1}$	-	$E_{38.9}$	F/B
		Middle School Access	-	$F_{55.8}$	-	$E_{40.5}$	F/B
		Gregory Lane Access	C	$F_{58.7}$	C	$E_{42.3}$	F/B
		Dual Access	B	$F_{57.7}$	B	$E_{41.7}$	F/B
2031	AM	Baseline	-	$F_{72.4}$	-	$E_{47.9}$	F/B
		Middle School Access	-	$F_{78.8}$	-	$F_{50.3}$	F/C
		Gregory Lane Access	-	$F_{99.3}$	-	$F_{63.2}$	F/B
		Dual Access	-	$F_{96.3}$	-	$F_{61.6}$	F/B
	PM	Baseline	-	$F_{66.4}$	-	$E_{40.8}$	F/B
		Middle School Access	-	$F_{78.5}$	-	$E_{45.6}$	F/B
		Gregory Lane Access	C	$F_{95.7}$	C	$F_{56.3}$	F/B
		Dual Access	B	$F_{91.5}$	B	$F_{54.0}$	F/B
	School PM	Baseline School	-	$F_{197.6}$	-	$F_{114.9}$	F/B
		Middle School Access	-	$F_{213.9}$	-	$F_{123.4}$	F/B
		Gregory Lane Access	D	$F_{245.3}$	D	$F_{144.3}$	F/B
		Dual Access	C	$F_{239.3}$	C	$F_{140.6}$	F/B

A/B/C = approach level of service subscript = delay second/vehicle for overall approach

* The LOS for northbound traffic was not analyzed when the hourly volume included 1 or less vehicles.

XII. REFERENCES

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Transportation Research Board. (2010). *HCM2010.* TRB.

XIII. LIST OF APPENDICES

Due to significant number of pages, the appendices are available upon request.

Appendix B – Traffic Counts

Appendix C – Trip Generation Calculations

Appendix D – 2021 Intersection Traffic Analysis
- D.1 – 2021 Baseline
- D-2 – 2021 with CWC and Middle School Road Access
- D.3 – 2021 with CWC and Gregory Lane Access
- D.4 – 2021 with CWC and Dual Access

Appendix E – 2031 Intersection Traffic Analysis
- E.1 – 2031 Baseline
- E.2 – 2031 with CWC and Middle School Road Access
- E.3 – 2031 with CWC and Gregory Lane Access
- E.4 – 2031 with CWC and Dual Access

Appendix F – Agency Comments

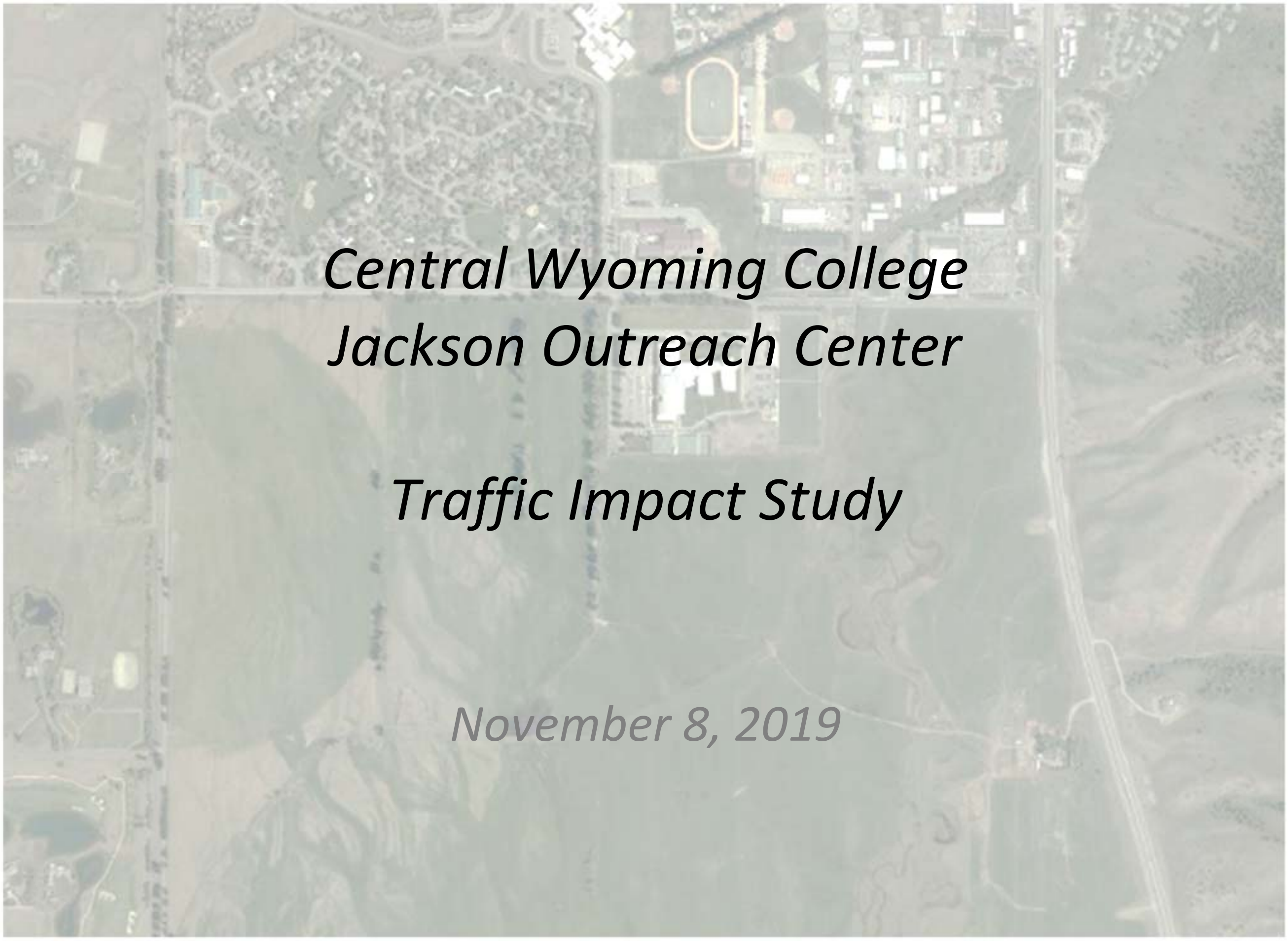
XIV. CERTIFICATION

I hereby certify that this Traffic Impact Study (TIS) was prepared by an engineer under my direct responsible charge, and that both the engineer and I have experience and training in the field of traffic and transportation engineering and that I am a registered professional engineer in the State of Wyoming.

____

Joseph R. Armijo, P.E.
Wyoming P.E. 8309

Draft Traffic Study with WYDOT Comments



Central Wyoming College
Jackson Outreach Center

Traffic Impact Study

November 8, 2019

Prepared For:

Central Wyoming College

240 S. Glenwood St #124
P.O. Box 4795
Jackson, WY 83001

Prepared By:

JORGENSEN
It's About People, Trust and Know How

1315 Hwy 89 S Suite #201
PO Box 9550
Jackson, WY 83001

Project Number: 19037

-PRELIMINARY-
Subject to change pending review

Table of Contents

I. INTRODUCTION

The Central Wyoming College, Jackson Outreach Center (CWC) is proposing to construct a campus in Jackson, Wyoming south of High School Road. CWC has been serving the Jackson community for nearly four decades by providing courses for a diverse population of students within Teton County. Lacking a dedicated campus, these courses have been held at several locations throughout Jackson. The new CWC campus will provide a single location for students and reduce offsite courses to the current program at Jackson Hole High School (with the exception of night classes, which will be moved to the new campus), clinicals for the nursing classes at St. John's Medical Center, and clinicals for CNA at St. John's Medical Center.

Jorgensen Associates, Inc. (Jorgensen) has been contracted to complete a Traffic Impact Study (TIS) for the proposed project in order to assess the campus' impact on the adjacent transportation system. The site does not have a constructed access road and will require construction of a new road for adequate access. Three roadway easements serve the development, two from High School Road and one from US 89. This study provides analysis of three different access options, utilizing the two easements connecting to High School Road. The roadway easement from US 89 was not evaluated as an access as part of this report as this easement is identified as part of a regional east-west connector road corridor and is beyond the scope of the CWC project. The three options analyzed include access from High School Road using the easement extending south from the Middle School Road intersection, access from the High School Road using the easement south from the Gregory Lane intersection, and access using the combination of both these easements/intersections.

This study is prepared as a comprehensive TIS in accordance with Teton County LDR's. The WYDOT Traffic Studies Manual, March 2011 Edition, was utilized as a reference for the study.

II. STUDY AREA

The proposed site for the CWC is southeast of the existing High School located at 1910 High School Road. A schematic of the site and study area is shown in Figure 1 Study Area. The subject property is located within Teton County and will comply with Teton County Land Development Regulations (LDR's). The access road will connect to High School Road. High School Road from US 89 to Middle School Road is currently within the Town of Jackson (Town) city limits. From Middle School Road to South Park Loop Road, High School Road is in Teton County. Teton County is currently evaluating revising the Town/County boundary so that all of High School Road is in the Town. The Town currently maintains the entire length.

Proposed Site Legal Description

The property is located within the jurisdiction of Teton County (CR 22-1) and is a 2-acre portion of the parcel with the legal description of PT. NW1/4 SE1/4 & PT. NE ¼ SW ¼ Section 6, Township 40, Range 116 of the Hereford Ranch, Tract 3. The project study area public road boundaries, for purposes of this study, are generally described as follows:

1. East Boundary – U.S. Highway 26/89/189/191 (referred to as US 89 in this study)

2. West Boundary – South Park Loop Road (No easement or right-of-way presently exists for a road corridor connecting to South Park Loop Road.)
3. North Boundary – High School Road
4. South Boundary – South Park Loop Road. (No easement or right-of-way presently exists for a road corridor connecting to South Park Loop Road.)

The following primary intersections within the study area were analyzed as part of this study:

1. South Park Loop Road/High School Road
2. High School Road/Middle School Road
3. High School Road/Gregory Lane
4. High School Road/US 89

The existing roadway easements include the following, as shown in Figure 2 Roadway easements:

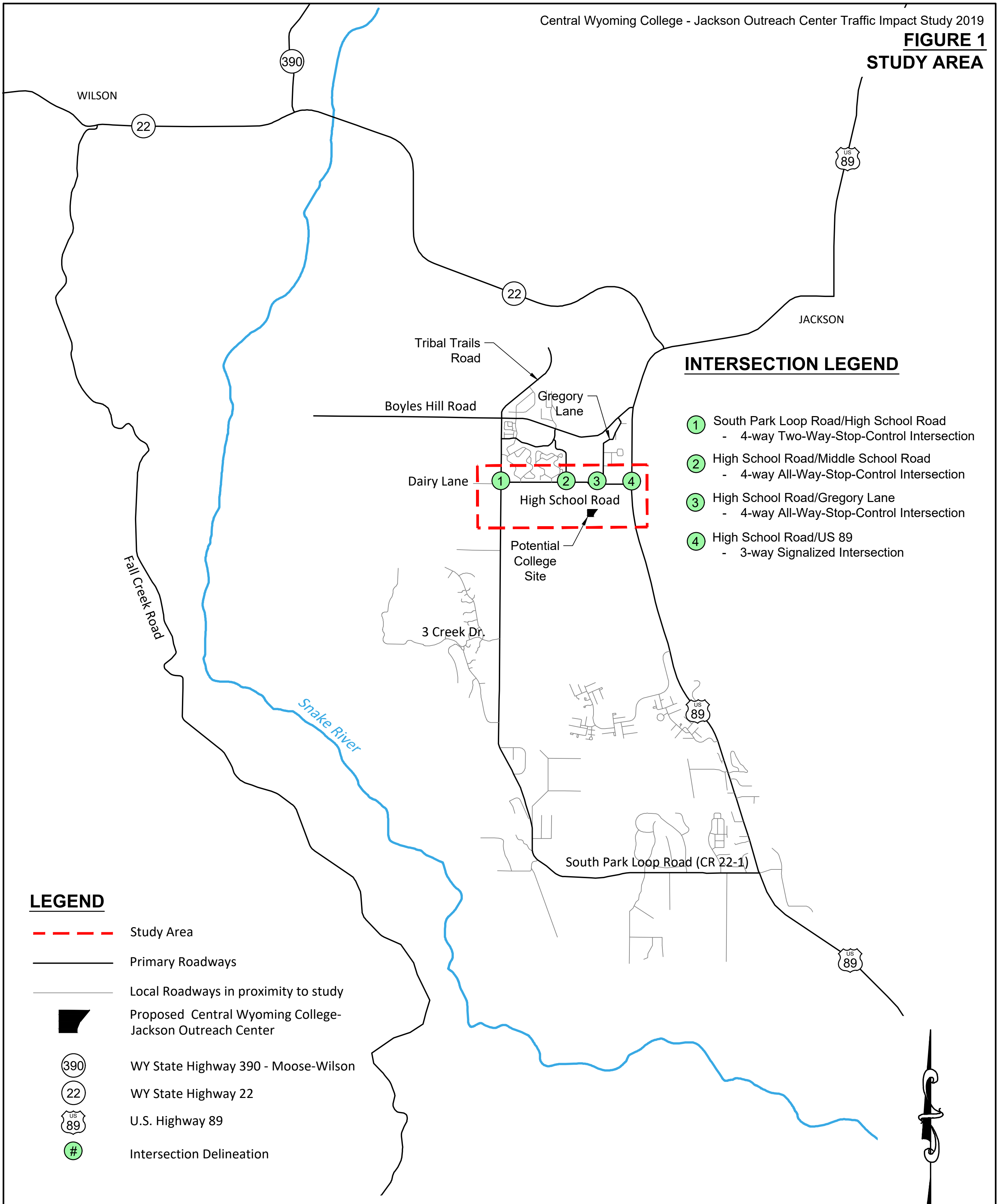
1. **Easement BK344P322-326.** This 80-foot easement is a southern extension of Middle School Road and located west of the High School. The use of this easement will require that the current road, of approximately 800' in length and 28-feet in width be widened to 30-feet to meet Teton County standards for a Minor Collector. A new street will need to be constructed along the south boundary of the High School to reach the CWC campus. This distance is approximately 1000-feet.
2. **Easement BK344P327-334**. This 60-foot easement is a southern extension of Gregory Lane and is located on the east side of the High School Recreation Complex. The use of this easement will require full street development in the easement of approximately 1,000' in length to reach the CWC campus. The current approach to the intersection of High School Road and Gregory Lane from the Teton County Septage Dump Station will also need to be improved. It is anticipated that this street will be constructed with the same complete street typical section that is proposed in the Gregory Lane preliminary design (12-foot lanes, 2-foot curb and gutter, 5-foot planter strip, and a 5-foot sidewalk). It should be noted that this preliminary design also includes a southbound left turn lane and a southbound right turn lane).
3. **Easement BK344P327-334.** The 80-foot easement east of this parcel extending to US 89. The access approach from US 89 is permitted by WYDOT and constructed from the highway to the right-of-way line. The road development would be approximately 1,500' in length and would require a bridge over Flat Creek. This easement is the location of the future East – West Connector identified in the Teton County Integrated Transportation Plan (see discussion below), and is considered beyond the feasibility, scope, and need for only serving the CWC campus, and is therefore not analyzed as part of the study.

Highlighted above - does not identify who or which entity is planning or responsible for improvements - please consider including.

Currently approach is allowed as a field agricultural use, until such time new development & change in use occurs an access permit will need to be obtained from WYDOT and traffic impacts will need to be addressed.

Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

FIGURE 1
STUDY AREA



INTERSECTION LEGEND

① South Park Loop Road/High School Road
- 4-way Two-Way-Stop-Control Intersection

② High School Road/Middle School Road
- 4-way All-Way-Stop-Control Intersection

③ High School Road/Gregory Lane
- 4-way All-Way-Stop-Control Intersection

④ High School Road/US 89
- 3-way Signalized Intersection

LEGEND

▬ ▬ ▬	Study Area
▬▬▬	Primary Roadways
───	Local Roadways in proximity to study
■	Proposed Central Wyoming College-Jackson Outreach Center
390	WY State Highway 390 - Moose-Wilson
22	WY State Highway 22
US 89	U.S. Highway 89
#	Intersection Delineation

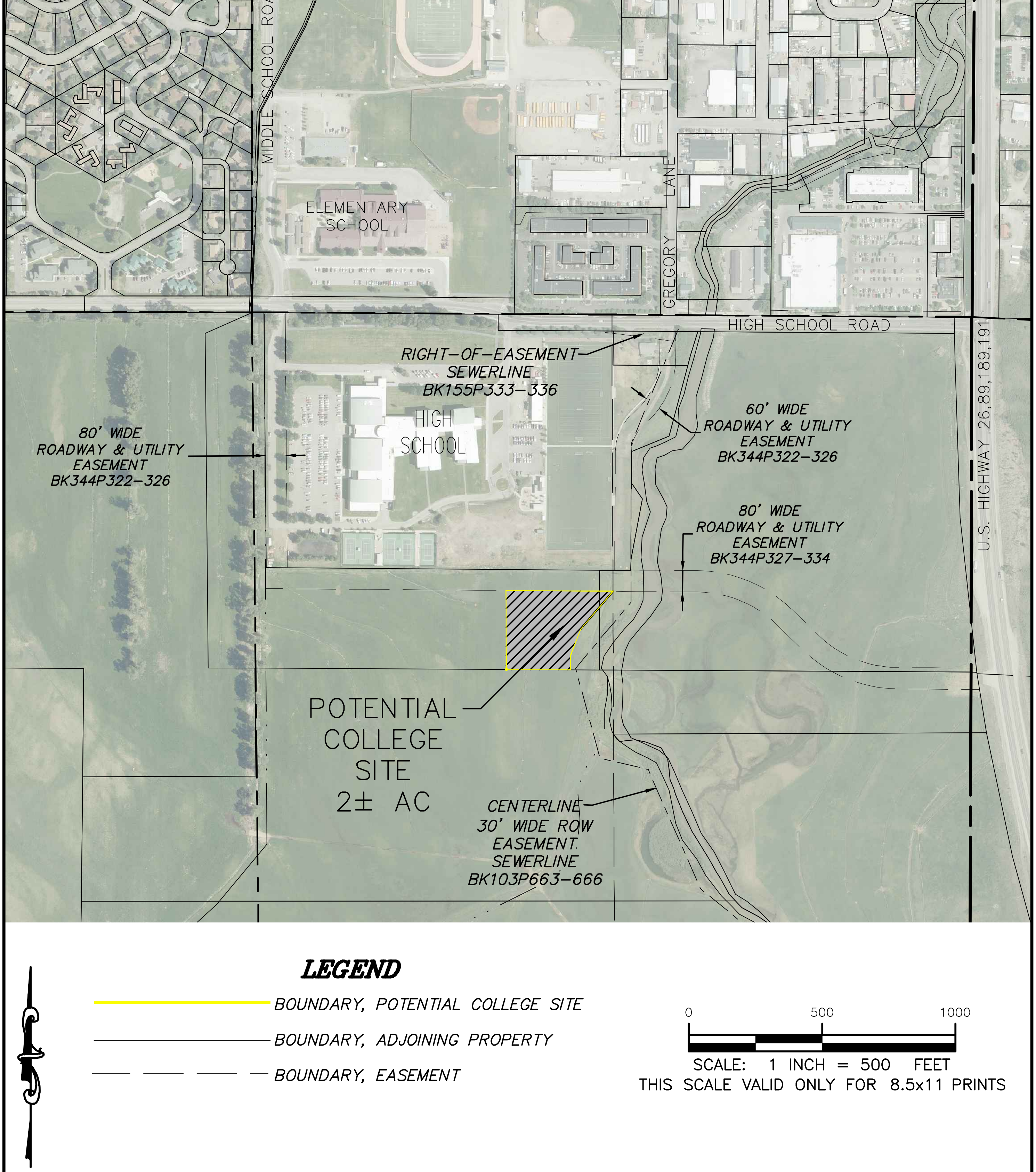
JORGENSEN
JACKSON, WYOMING 307.733.5150
www.jorgeng.com

PREPARED BY: HRR MAP PREPARED: 9/27/2019 PROJECT NUMBER: 19037

Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

FIGURE 2

ROADWAY EASEMENTS



SCALE: 1 INCH = 500 FEET
THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

JORGENSEN
JACKSON, WYOMING 307.733.5150
www.jorgeng.com

PREPARED BY: RHL MAP PREPARED: 08/21/2019 PROJECT NUMBER: 19037.20

III. METHODOLOGY

This study evaluates the impacts of CWC on current traffic levels and assesses the expected impacts assuming a 10-year buildout/occupancy of the project. Note that this 10-year horizon is consistent with WYDOT's recommended horizon duration used on other recent TIS' prepared by Jorgensen. Expected completion of CWC construction is 2021, and therefore for purposes of this analysis, the baseline year is assumed to be 2021 (completion of construction). Traffic data collected was projected to 2021 for baseline conditions. Impacts were assessed using existing traffic data sources available and additional data collected over the past two years. Build out conditions were assessed for 2031 conditions assuming enrollment goals provided by the CWC.

ML10B Route (US 89)

Data Collection

Jorgensen has corresponded with WYDOT and Teton County to acquire available traffic data within the project area. Data sources include:

2017 data is available

1. WYDOT *Vehicle Miles Book* Route 10B.

   Annual Average Daily Traffic estimates (AADTs) completed by WYDOT are derived from three primary sources of data: permanent traffic recorders, portable traffic recorders, and manual traffic classification counts. WYDOT documents the data in the WYDOT Vehicle Miles Book. Data is available for four segments along Route 10B (US Hwy 89) within the project area dating back to 1970. The most available data set from WYDOT is the 2015 Vehicle Miles Book. Data is limited to average daily vehicle counts and truck counts. The data is very complete and will aid in basic understandings of traffic growth and expected Average Annual Daily Traffic (AADT) within the study area.

   sp? "an"

2. WYDOT – Jackson Urban Traffic Counts

   Peak Season counts collected by the WYDOT Planning Section during the summer season. While not considered AADT counts, these counts are useful in evaluating peak season performance of the transportation system. On South Park Loop Road, eight (8) counters are located within proximity to the study area while and additional five (5) counters are located along High School Road. Data is available from 2017, 2014, 2011, 2006, and 2002 for most of these counters. The 2017 counts were completed at the end of June, 2017.

3. Intersection Turn Counts

   - WYDOT provided traffic counts for the signalized intersection of U.S. Hwy 89/High School Road for three different times:
     - US Hwy 89/High School Road Signalized Intersection Dated July 17, 2013
     - US Hwy 89/High School Road Signalized Intersection Dated September 29, 2015
     - US Hwy 89/High School Road Signalized Intersection Dated February 6, 2018
   - Jorgensen completed traffic counts at the intersections of High School Road/South Park Road, High School Road/Middle School Road and High School Road/US 89 on May 23, 2017 and May 25, 2017. Traffic counts were collected at the intersection of High School Road/Gregory Lane on September 24, 2019 and September 26, 2019.

Traffic counts completed at different times resulted in small fluctuations in traffic volumes. Very similar and consistent trends and volumes were observed in the data collected.

4. Signal Timings

   Signal timings for the signalized intersection of U.S. Hwy 89/High School Road were provided by WYDOT for traffic analysis. The proposed CWC will be in session annually with the majority of courses taking place between September and May. For analysis purposes, traffic timings/traffic levels for signalized intersection analysis were used for the school season.

Trip Generation

Trip generation was completed based on program and course information provided by the CWC. The Institute of Transportation Engineers (ITE) *Trip Generation Manual* was not utilized for trip generation since CWC's size is not represented within this manual and we have very specific information on how CWC will operate (i.e. staff and enrollment sizes, class times and durations, etc.). Trip generation was formulated based on this information. Once total trips were approximated, data from the *Jackson/Teton Integrated Transporation Plan* adopted by the Teton County Board of County Commissioners and Jackson Town Council in 2015 was utilized in approximating multi-modal distribution of trips (vehicle, pedestrian, bike).

Trip assignments were based on traffic count observations of existing traffic trends. An Origin-Destination Study was not conducted as part of this study. It is assumed that existing traffic trends as observed during normal school operating periods will continue as enrollment increases at the CWC.

Highway Capacity Analysis

Analysis is completed using process and analysis methods from the *Highway Capacity Manual* (TRB, 2010) and associated Highway Capacity Software (HCS7). This analysis identifies the Level of Service (LOS) of users based on assumed traffic levels and basic traffic principles. Level of Service is defined by the HCM2010 as a qualitative measure used to relate the quality of traffic service based on roadway capacity and vehicle delay. Level of Service is described for movements through a designation of A to F where LOS A represents the best operation and LOS F represents congestion/failing traffic conditions. Each type of intersection is evaluated using different methodologies. (Transportation Research Board, 2010)

This study includes four intersections, of which three are stop-controlled and the fourth is signalized. High School Road and South Park Loop Road and High School Road and Gregory Lane are both Two-Way-Stop-Controlled intersections and High School Road and Middle School Road is an All-Way-Stop-Controlled Intersection. High School Road and US 89 is a three-way signalized intersection.

Stop Controlled Intersections

For Two-Way-Stop-Controlled Intersections (TWSC), the LOS is determined by the computed or measured control delay. Control delay can be measured for each minor-street movement (or shared movement) as well as major-street left turning vehicles. Through vehicles are assumed to experience ‘zero’ delay. As such, a LOS can be approximated or calculated for each minor movement, each minor approach, and left turning major approach vehicles. LOS is not computed as an intersection delay due to fact that through moving traffic is not subject to intersection delay. Reporting such a control delay or LOS would mask important quality or traffic service issues on minor approaches. Analysis is completed per Chapter 19 of HCM2010.

For All-Way-Stop-Controlled Intersections (AWSC), the LOS is determined by the computed or measured control delay. Control delay can be measured for all approaches as well as an average for the intersection as a whole. An overall intersection LOS can be assumed because all vehicles are subject to control delay, unlike in Two-Way-Stop-Controlled Intersections. Analysis is completed per Chapter 20 of HCM2010. The LOS thresholds based on control delay for both TWSC and ALSC are presented below in Table 1.

AWSC

Table 1: Stop Controlled Intersection, LOS Criteria

Control Delay (s/veh)	***LOS by Volume-to-Capacity Ratio***	
	≤1.0	***>1.0***
≤10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

Note: For approach-based and intersection wide assessments, LOS is defined solely by control delay

Signalized Intersections

For signalized intersections, LOS can be determined for the entire intersection, each approach, and each lane group. Control delay is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. LOS for signalized intersections are analyzed per Chapter 18 of HCM2010. The criteria for LOS are located in Table 2.

Table 2: Signalized Intersection, LOS Criteria

Control Delay (s/veh)	***LOS by Volume-to-Capacity Ratio***	
	≤1.0	***>1.0***
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

Note: For approach-based and intersection wide assessments, LOS is defined solely by control delay

Per Teton County Land Development Regulations, the Level of Service for rural roadways shall be designed at a Level of Service D at buildout (Section 7.6.4 Subsection G, Teton County Land Development Regulations, Adopted October 20, 2014).

The traffic scenarios studied include the following:

1. **2021 Existing Conditions.** This scenario examines traffic levels on the existing road network. Existing conditions were completed in this report for 2021.
2. **2021 CWC Opening Conditions**. This scenario examines traffic impacts at the completion of construction and initial opening of CWC.
3. **2031 Baseline Conditions**. This scenario examines traffic levels of the transportation network assuming typical background traffic growth and no development of CWC.
4. **2031 Impacted Conditions**. This scenario examines traffic impacts of CWC on the 2031 Baseline Conditions.

Conclusions and recommendations are described at the end of the report.

IV. PAST STUDIES

Teton County School District (TCSD) #1 Elementary School Traffic Study

December 14, 2016

Jorgensen Associates, P.C.

TCSD #1 recently constructed Munger Mountain Elementary School along US Highway 89, south of Jackson, WY. The traffic study analyzed the impact to the traffic conditions at the intersection of Swinging Bridge Road / Munger Mountain Elementary School and Evans Road / US 89. The school is approximately 77,000 square foot with a 584 student capacity at a 10 year build out and employ approximately 80 staff members. The elementary school is expected to generate 753 daily trips at the 10 year build out.

This study utilized a 1.8% growth rate as the growth factor to be used in the 10 year forecasting analyses. This was based on historical traffic growth from WYDOT Vehicle Miles Books and discussion with WYDOT. Since 2000, traffic growth on WYDOT Vehicle Miles Book "Route 10B" has been 1.48% while Vehicle Miles Book #000032 has experienced 1.77% growth. As discussed in the initial team meeting and through conversations with WYDOT, a 1.8% growth rate was utilized as the expected growth factor to be used in forecasting analyses.

While the proposed CWC is located approximately 7 miles north of the Munger Mountain Elementary School, the CWC location is within close proximity of US 89 and also just south of the Town of Jackson's south boundary. This growth data provides valuable insight into traffic growth factors, hourly directional distributions, seasonal changes, and traffic trends on US HWY 26/89. The 1.8% growth was adopted for this study to forecast traffic from 2021 to 2031.

would the traffic growth within the vicinity have a different traffic growth. Please confirm with data in the area.

South Park Sub Area and High School Road Corridor Transportation Analysis

June 23, 2010
Felsburg Holt & Ullevig

With Teton County considering a northerly extension of Tribal Trail Road (Connector) to intersect with WY 22 in the proximity of the WY22/Coyote Road Intersection, the Wyoming Department of Transportation (WYDOT) analyzed the effects of the connector at a “macro level”. The referenced study’s purpose was to analyze the impacts of the connector relative to local impacts including the effects on South Park Loop Road and High School Road. The study focuses on how the Tribal Trails Connector could impact the LOS of localized traffic in the region and divert/change existing traffic tendencies. A Future Collector road, located south and parallel to High School road, connecting South Park Loop and US 89, was also considered with the study. As part of the study, four conditions were evaluated:

1. Existing Conditions (2008)
2. Existing Volumes with Tribal Trial Connector
3. 2030 Baseline Conditions with Future Collector
4. 2030 Condition with Tribal Trail Connector and Future Collector

This study historically provided the most in-depth understanding of potential traffic levels in the area and at intersections at a forecasted 2030 year both with and without the Tribal Trail Connector and Future Collector. The study included data collection and analysis of High School Road with the intersections of South Park Loop Road, Middle School Road, and US 89.

In communications with the WYDOT District 3 Traffic Engineer and Teton County Public Works, the Tribal Trail Connector should not be viewed as an absolute. It can be considered as an alternative, but not a certainty. In addition, the *South Park Sub Area and High School Road Corridor Transportation Analysis* Tribal Trails Connector analysis is considered somewhat antiquated and yields conservatively high traffic contributions to the High School Road corridor. Based upon this information and the connector’s uncertainties, the Connector is not included in this analysis. Rather, it was deemed more appropriate to use a growth factor from the 2021 data rather than the forecasted values from this study.

The Jackson Hole Classical Academy - Traffic Impact Study

2500 South Park Loop Road
March 13, 2019
Jorgensen Associates, P.C.

Assume this data
to be used with
background data

The Jackson Hole Classical Academy will be constructing a campus adjacent to South Park Loop Road with expected buildout completion in 2021. The JHCA will include a K-12 school system, eight (8) onsite faculty housing units, as well as other school campus amenities such as a gymnasium, an auditorium, administrative offices, amphitheater, athletic fields, and a performance hall. The school would replace the current school operations at the Community Bible Church of Jackson Hole Campus located at 1450 South Park Loop Road, Jackson, Wyoming. The existing JHCA is K-8 and has an enrollment of approximately 100 students with 22 staff and faculty. The school anticipates initial enrollment of 208 students, with a maximum capacity of 245 students, as well as 45 projected staff and faculty.

2020 and 2030 impacted conditions were assessed and laid out in the report. The 2021 traffic values were forecasted using a 1% growth factor and the 2030 values were based on the traffic values provided in the Felsburg Holt & Ullevig, 2010 traffic study previously discussed. The traffic counts collected at the intersections of High School Road with South Park Loop and Middle School Road were utilized for this report.

The Jackson/Teton Integrated Transportation Plan

September 2015
Charlier Associations, Inc.

The Integrated Transportation Plan was developed based on the multimodal transportation vision set forth in the 2012 Update to the Town and County Comprehensive Plan, Chapter 3.

This study was utilized to estimate the number of CWC student and staff trips generated by walking, biking and use of the transit system.

Teton County Traffic Model

Ongoing
Cambridge Systematics

Typical, no "s", Trail

In July of 2019, Cambridge Systematics, Inc. published the Teton County Travel Demand Model Technical Report summarizing the Teton County Travel Demand Model (TCTDM). The model is a tool that can aid in transportation improvements by estimating the existing travel and forecasting future year scenarios. The TCTDM estimates trip generation, mode choice, and trip assignments for residents, commuters, visitors, and trucks that travel to, from, through, and within the Teton County model area. Presently, the TCDM predicts traffic volumes on identified key corridors to identify the traffic implications of new corridors such as the Tribal Trails Connector. It should be noted that the model shows a reduction in daily traffic on the east segment of High School Road. Subsequently, Teton County purchased a new program from Cambridge Systematics to allow for microsimulation, a closer analysis of intersection functionality and behavior under different test circumstances. This model is currently under development.

V. EXSTING LAND USE AND TRANSPORTATION SYSTEM

Existing Land Uses

The existing site is a 2-acre section of a 17.30-acre parcel of undeveloped lot zoned Rural 1 (R1) in Teton County. To the north-east of the full parcel, and within Teton County, is Jackson Hole High School and Recreation Complex, zoned Public/Semi-Public (P/SP). The remaining land to the south of High School Road is primarily used for agricultural purposes. The land north of High School Road is located within the Town of Jackson. Cottonwood Park subdivision is located between South Park Loop Road and Middle School Road, Colter Elementary School, the Community School, and a business complex is between Middle School Road and Gregory Lane, and additional businesses including Smiths Food and Drugs are located between Gregory Lane and US 89.

Existing Transportation System and Intersections

High School Road is an east-west collector which connects South Park Loop Road to US 89. This two-way street is a mile in length and includes a 60-foot right-of-way along its entirety. As described earlier in this within

study, the western portion of High School Road is within Teton County while the eastern portion is with the Town of Jackson. At this time, the Town maintains the road. Jackson High School is located midway between South Park Loop Road and US 89 along the south side of the road.

The major intersecting roads with High School Road include South Park Loop, Middle School Road, Gregory Lane and US 89. Two minor residential access streets connect from north of High School Road along the western portion of the High School Road. The High School also has an additional access located midway on High School Road between Middle School Road and Gregory Lane. Additional commercial accesses connect from north of the High School Road of the east of Middle School Road intersection.

South Park Loop Road / High School Road Intersection

This intersection includes a two-way stop control, with South Park Loop Road as the major thruway. This intersection is the starting point of High School Road, as the street entering from the west of the intersection is Dairy Lane which services the Dairy Subdivision. South Park Loop Road, within the study area, consists of two lanes with minimal shoulder area. The roadway is characterized by a narrow corridor and cottonwoods lining the road limiting site distances and site triangles for roadway approaches. The posted speed limit is 40 miles per hour (mph). South Park Loop Road is classified as a Major Collector in the Jackson/Teton County Urban Roadway Functional Classification.

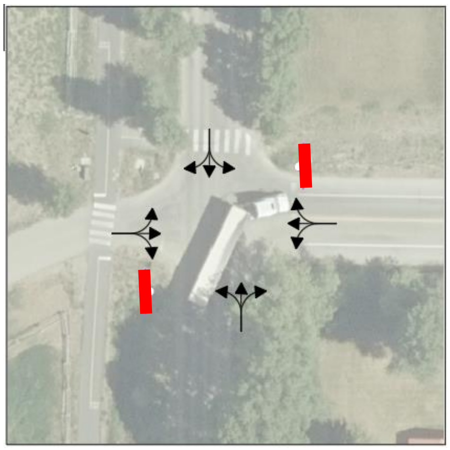


Figure 3. South Park Loop Road and High School Road

High School Road / Middle School Road Intersection

This intersection includes an all-way-stop-controlled intersection. Middle School Road is a two-lane road allowing all movements at the intersection. High School Road to the west of the intersection is two lanes with bike lanes on both sides. High School Road to the east of the intersection is three lanes, one westbound, and two eastbound, one as a left turning lane and the other for thru traffic and right turns. For this section of roadway, the pathways are detached. Middle School Road is classified as a Major Collector in the Jackson/Teton County Urban Roadway Functional Classification.

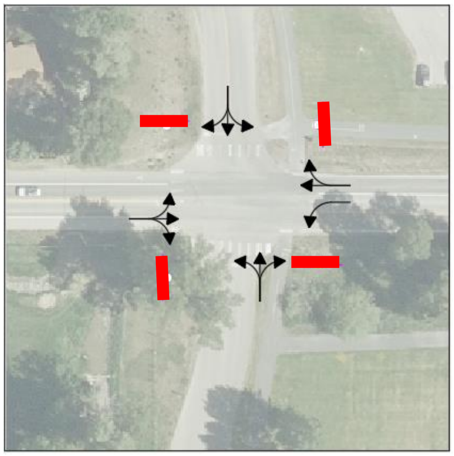


Figure 4. Middle School Road and High School Road

High School Road and Gregory Lane Intersection

This intersection includes a two-way-stop-control with High School Road as the major thruway. The approach from the south of the intersection serves minimal traffic as the exit for Teton County Septage Dump Station. Gregory Lane and High School Road are two-lane streets with all movements permitted at the intersection. Gregory Lane is classified as a Major Collector in the Jackson/Teton County Urban Roadway Functional Classification.

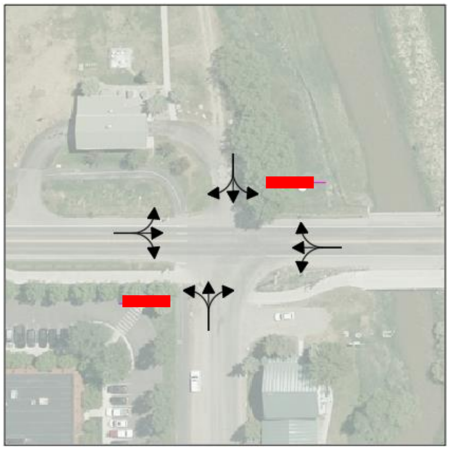


Figure 5 Gregory Lane and High School Road

five-lane

High School Road and US 89 Intersection

This intersection consists of a signalized three-way intersection and is the termination point for High School Road. US 89 is a six-lane highway with right and left-hand turning lanes from the highway to High School Road. High School is a three-lane road with one lane for westbound traffic the other two eastbound lanes for turning lanes onto US 89. US 89 is classified as a Principal Arterial in the Jackson/Teton County Urban Roadway Functional Classification.

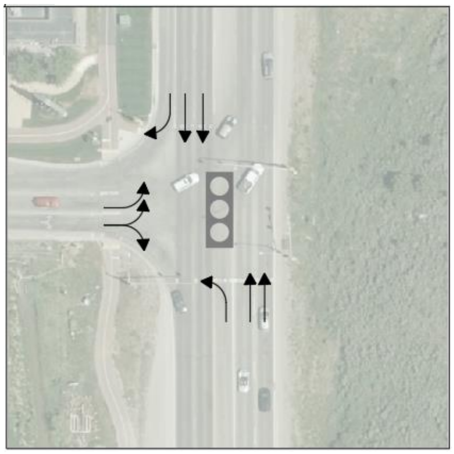


Figure 6. US 89 and High School Road

West of Middle School Road, High School Road is classified as a Major Collector, and east of Middle School Road it is classified as a Minor Arterial. It has a posted speed limit of 25 mph, aside for the 20 mph school speed limit zone. Refer to Figure 7. School Speed Limit Zones.

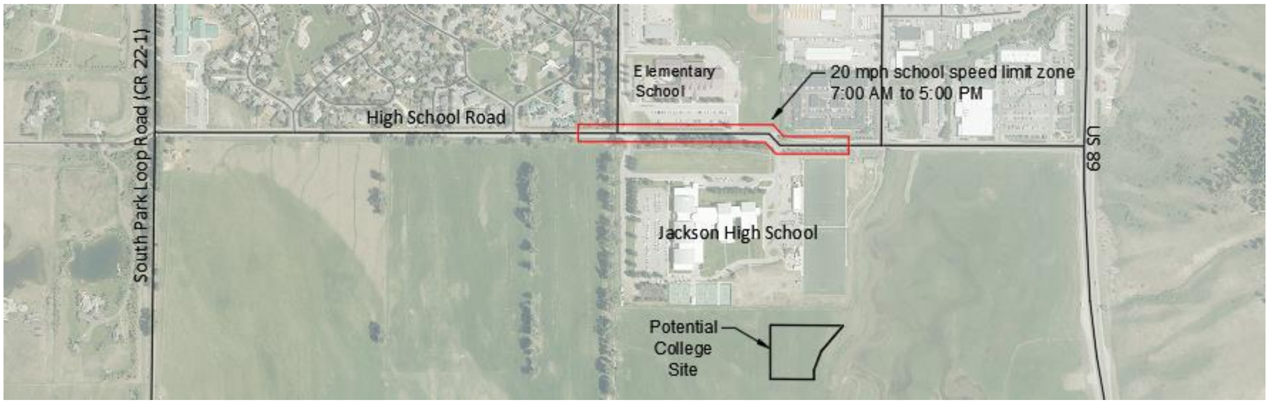


Figure 7. School Speed Limit Zones

The east section from Highway 89 to the Flat Creek Bridge ~~and~~ has 13-foot lanes and 7.5-foot shoulders. The middle section from the Flat Creek Bridge to Middle School Road has 12-foot lanes and 6-foot shoulders. The west section from Middle School Road to South Park Loop Road and has 13-foot lanes with 8-foot shoulders.

Existing Sidewalks/Pathways

A vast network of sidewalks and pathways are available for use within the study area, refer to Figure 8 for the pathway network. High School Road has pathways along its entirety (mixed shoulder and detached pathways) as well as multiple connections to various other pathways. High School Road is heavily used by pedestrians and bicyclists to access the High School, various school campus facilities, and Cottonwood Park.

Overall, the site is located within a vast network for pedestrian and bicycle facilities allowing connection to various residential areas to the north and west and commercial areas to the north.

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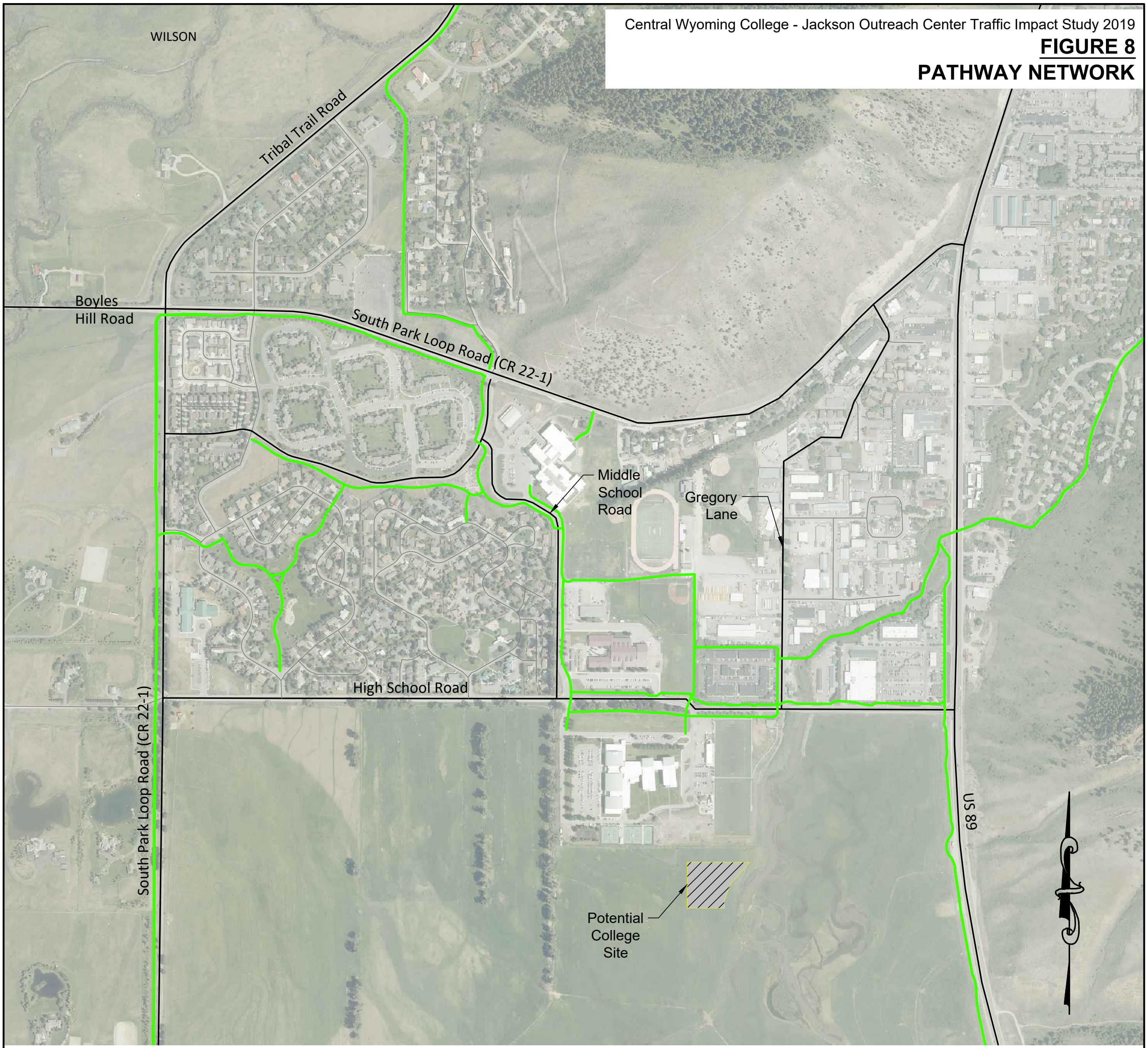
FIGURE 8

PATHWAY NETWORK



LEGEND

🟩	Pathway Network
—	Primary Roadways
—	Local Roadways in proximity to study
▨	Proposed Central Wyoming College- Jackson Outreach Center

0 1000 2000

SCALE: 1 INCH = 1000 FEET

THIS SCALE VALID ONLY FOR 8x11 PRINTS

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MAP PREPARED: 9/27/2019

PROJECT NUMBER: 19037

Existing Traffic

Several sources were utilized for traffic data when evaluating the current traffic levels within the study area. Reference the Part 3. Methodologies *section* of this study for the different sources utilized in analyzing local traffic. Community wide, seasonal peak traffic occurs in July and August when visitation to Teton County is highest. However, utilizing traffic volume data when schools are in session (September through mid-June) is most appropriate in evaluating impacts of the proposed school. For CWC, traffic counts from the previous Jackson Hole Classical study (collected in May 2017) were utilized for the intersection of South Park Loop and High School Road and Middle School Road and High School Road. Traffic counts for the intersection of High School Road and US 89 were provided by WYDOT.

Because traffic counts are necessary for the intersection of Gregory Lane and High School Road in order to analyze this CWC access alternative, and traffic counts in the previous May were not collected, counts were completed by Jorgensen at this intersection in September 2019. September and May are characterized by similar traffic trends in the area, most impacted by the school operations of the High School, Elementary School, Middle School and the school related activities, which generate traffic on High School Road. Traffic counts can be found in Appendix B – Traffic Counts. More detailed data is available upon request. These counts were completed on each of the intersections of interest located within the project area. Segment counts were not completed as part of data collection.

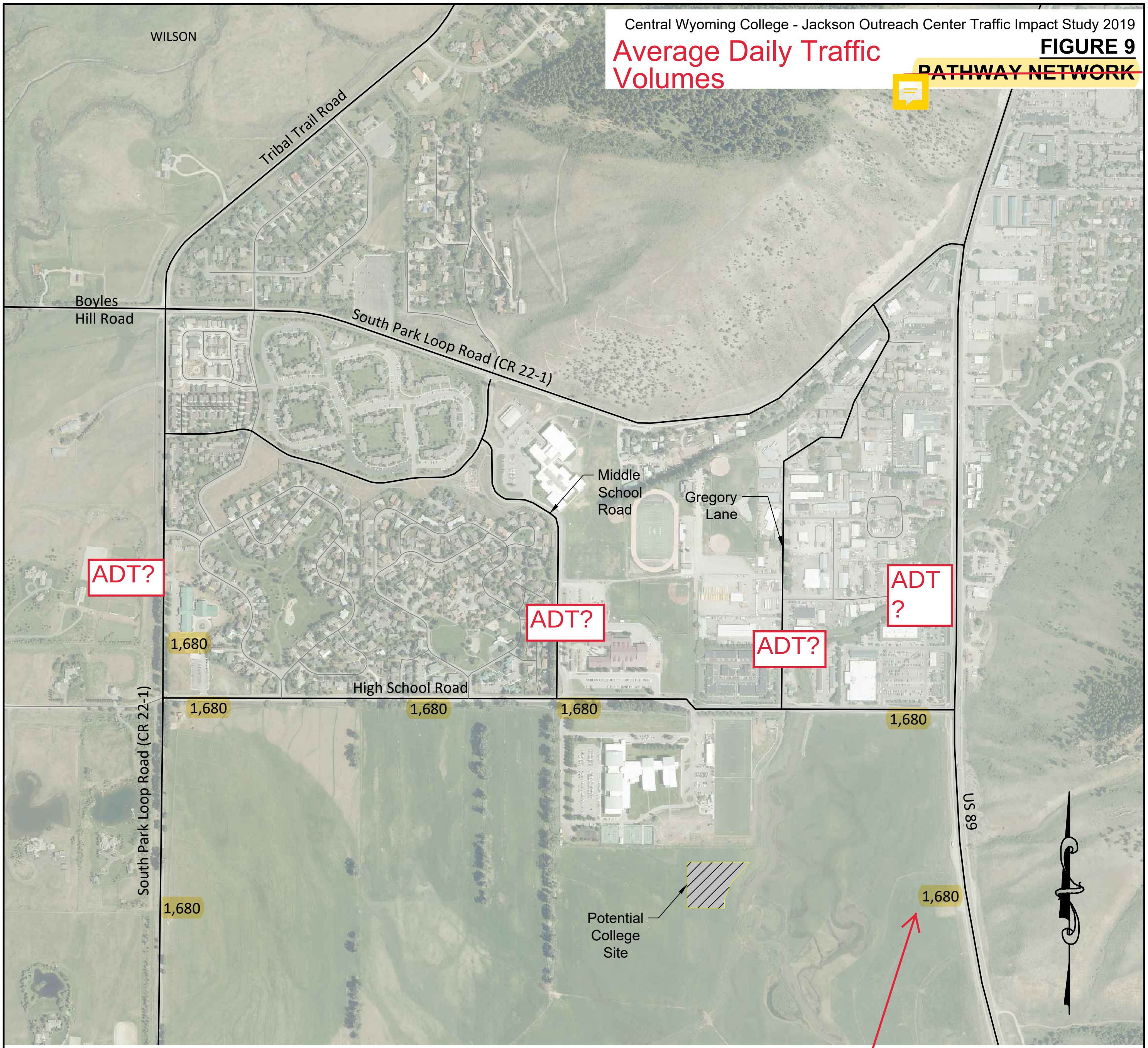
Average Daily Traffic volumes for streets and roads are shown in Figure 9. These volumes were obtained from WYDOT annual communitywide traffic counts.

Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

FIGURE 9

Average Daily Traffic Volumes

~~PATHWAY NETWORK~~



traffic data all the same?

LEGEND

Average Daily Traffic

Primary Roadways

Local Roadways in proximity to study

▨ Proposed Central Wyoming College-Jackson Outreach Center

0 1000 2000

SCALE: 1 INCH = 1000 FEET

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MAP PREPARED: 9/27/2019

PROJECT NUMBER: 19037

Existing Traffic Conditions

Utilizing traffic counts completed during May 2017, May-June 2018 and September 2019, Jorgensen evaluated the current traffic service of the network. Traffic associated with schools operate very differently than commercial, industrial, or residential developments. The greatest traffic generation occurs during the morning peak hour (7:45-8:45 AM), at school dismissal (3:15 - 4:15 PM), and in the evening (5:00 – 6:00 PM). Based on traffic counts, these three different peak hour time frames were analyzed along High School Road to provide a full representation of the transportation network.

1. AM Peak Hour 7:45 – 8:45 AM
2. PM Peak Hour 5:00 – 6:00 PM
3. School PM Peak Hour 3:15 – 4:15 PM

Each of these time frames were assessed as part of the Traffic Impact Study to evaluate impacts of CWC on the transportation network.

Confirm definition. See suggested changes

any

As part of the evaluation of peak hourly traffic at each intersection, the peak hour factors provided on Table 3. Intersection Peak Hour Factor were observed. The peak hour factor (PHF) is ~~the~~ hourly volume during ~~the maximum-volume hour of~~ the day divided by the peak 15-minute flow rate within the peak hour; a measure of traffic demand fluctuations with the peak hour. The PHF in urban areas generally range between 0.80 and 0.98. PHF over 0.95 are often indicative of high traffic volumes, sometimes with capacity constraints on flowing during the peak hour. PHFs under 0.8 occur in locations with highly peaked demand, such as schools, factories with shift changes, and venues with scheduled events (HCM 2010, Ch. 4). The PHFs were utilized in the 2021 and 2031 analysis.

Table 3. Intersection Peak Hour Factor

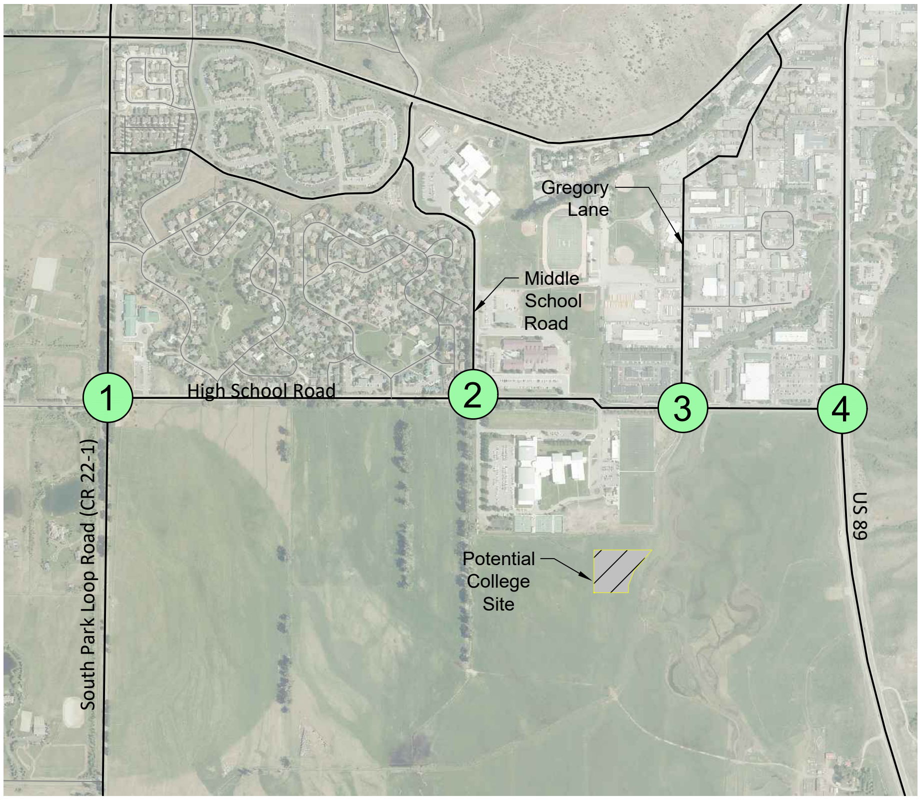
	High School Road &South Park Loop	High School & Middle School Road	High School & Gregory Lane	High School & US 89
AM Peak Hour	0.71	0.85	0.94	0.91
PM Peak Hour	0.89	0.87	0.96	0.96
PM School Peak Hour	0.91	0.68	0.76	0.83

The 2021 baseline hourly traffic volumes and LOS for each intersection at the various peak hours are depicted on Figures 10 thru 12. In summary, the intersections of High School Road with South Park Loop Road and Middle School Road are operating at LOS B conditions throughout the day. The intersection of High School Road and U.S. 89 is nearing capacity and drivers entering US 89 from High School Road are currently experiencing LOS D conditions during all three of the peak hours analyzed. Southbound traffic at the Gregory Lane and High School Road intersection is currently experiencing LOS D in the morning and evening peak hours and LOS F during school peak hours. This is due to the number of southbound vehicles turning left from Gregory Lane onto High School Road. Because the northbound traffic at Gregory Lane is very minimal, including one or two vehicles per hour at most from the Teton County Septage Dump Station, the LOS was not evaluated for the baseline.

please consider. That the eastbound approach is nearing capacity, however as a signalized intersection it is operating at an accceptable LOS B.

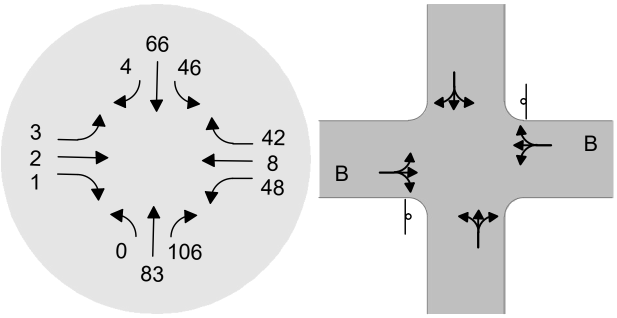
FIGURE 10

2021 BASELINE TRAFFIC CONDITIONS A.M. PEAK HOUR (7:45-8:45 A.M.)

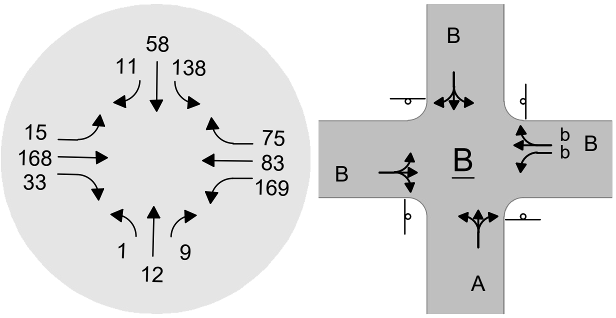


LEGEND

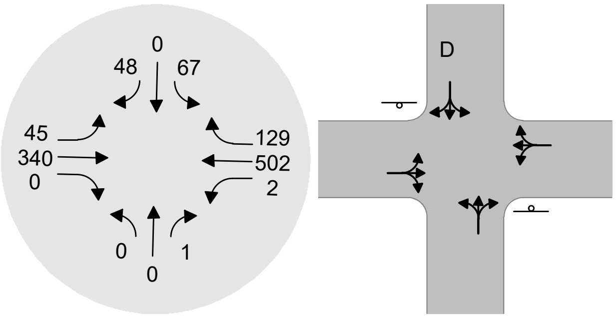
─	Primary Roadways
─	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
#	Intersection Delineation
⊸	Stop Sign
●	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
A	Intersection LOS (if applicable)



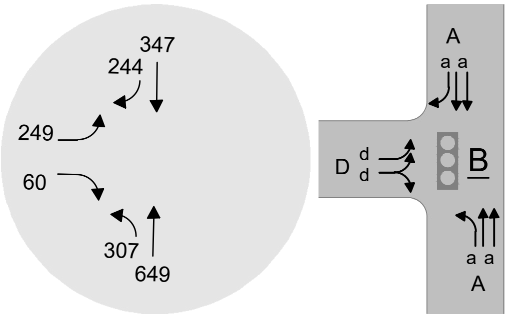
① South Park Loop Road/High School Road



② High School Road/Middle School Road

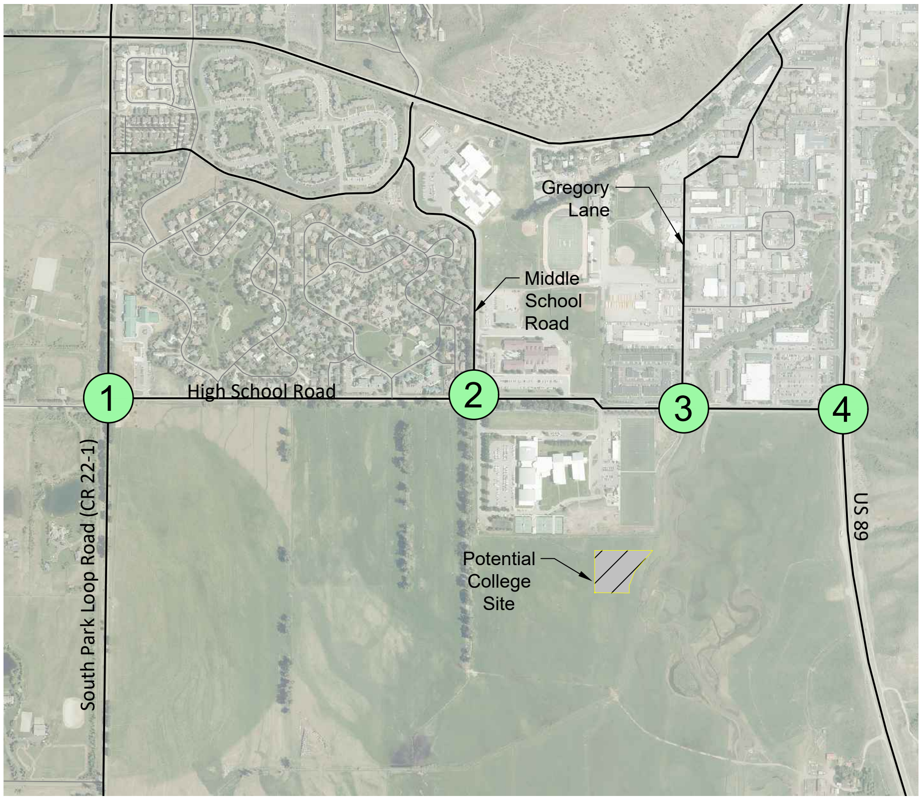


③ High School Road/Gregory Lane



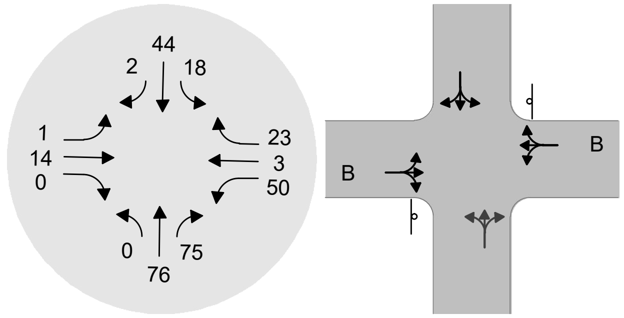
④ High School Road/US 89

FIGURE 11
2021 BASELINE TRAFFIC CONDITIONS P.M. PEAK HOUR (5:00 - 6:00 P.M.)

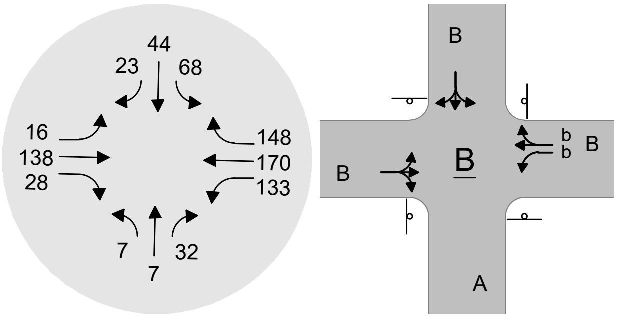


LEGEND

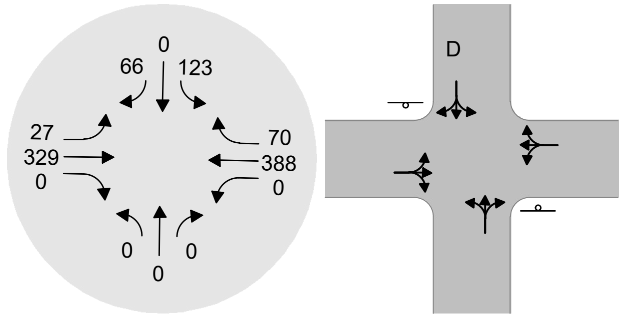
──	Primary Roadways
─	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
#	Intersection Delineation
─o─	Stop Sign
○○○	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
A	Intersection LOS (if applicable)



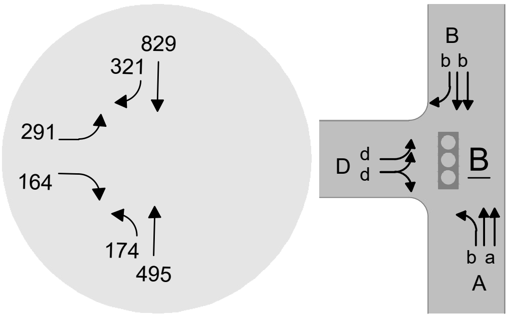
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

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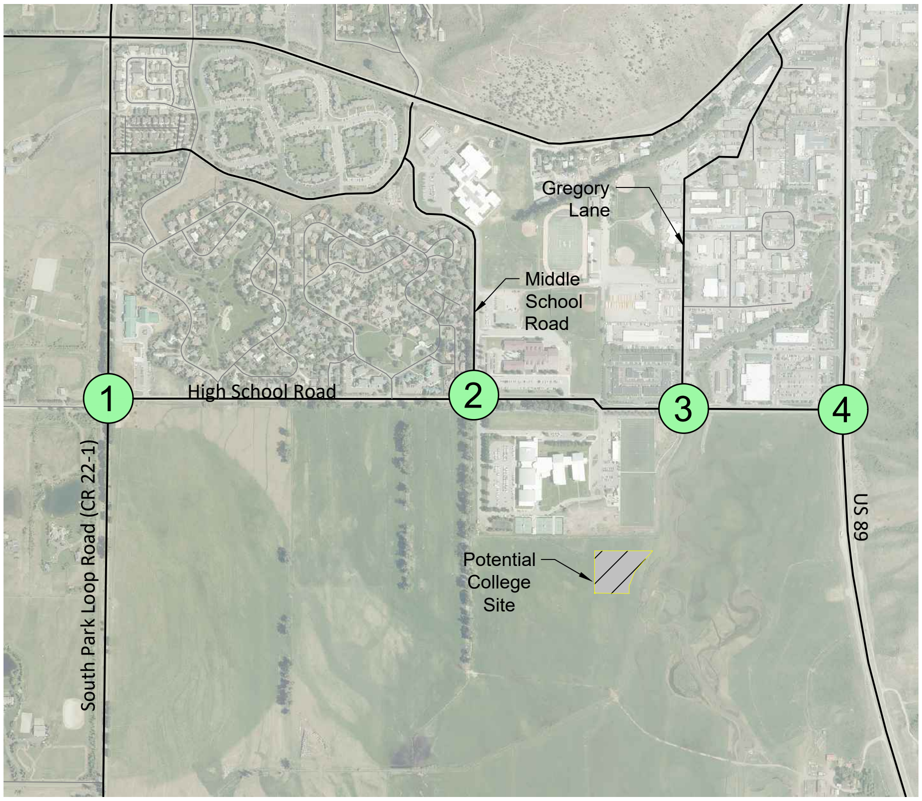
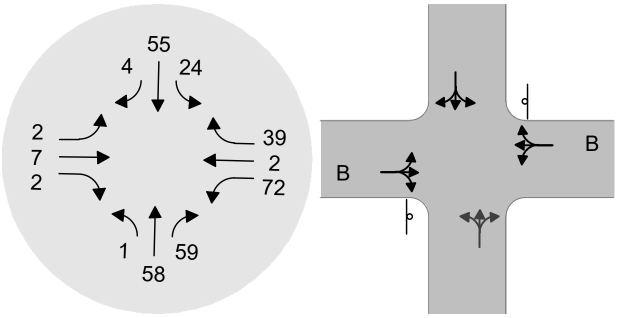
FIGURE 12
2021 BASELINE TRAFFIC CONDITIONS SCHOOL P.M. PEAK HOUR (3:15 - 4:15 P.M.)

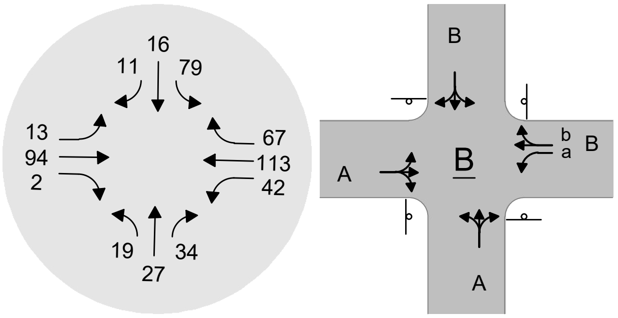


LEGEND

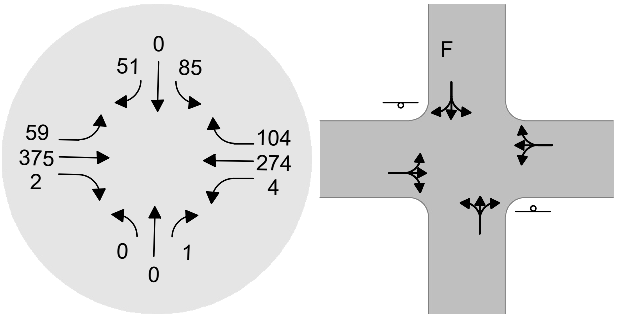
—	Primary Roadways
—	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
(#)	Intersection Delineation
—o—	Stop Sign
🚦	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
<u>A</u>	Intersection LOS (if applicable)



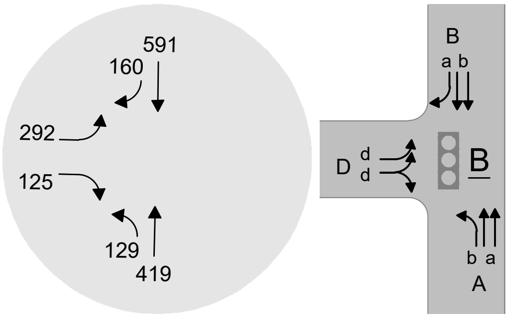
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

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2031 Traffic Conditions

A 1.0% growth factor was used to forecast traffic 2017-2019 to 2021 (2019, *The Jackson Hole Classical Academy - Traffic Impact Study*), expanding to 1.8% for growth from 2021 to 2031 (2016, *Teton County School District #1 Elementary School Traffic Study*). The explanation for these growth factors is further described in Part IV. Past Studies.

Note that this study does not include the proposed Tribal Trails Connector. This project connecting Tribal Trails to WY 22 is currently under study and evaluation and is not an absolute. As discussed previously, the *South Park Sub Area and High School Road Corridor Transportation Analysis* Tribal Trails Connector analysis is considered somewhat antiquated and yields conservatively high traffic contributions to the High School Road corridor. Teton County has included the connector as an alternative in the Travel Demand Model developed by Cambridge Systematics. This model currently predicts traffic volumes on corridor segments and actually shows a decrease in daily traffic volumes on the east leg of High School Road with the addition of the Tribal Trails Connector. The model is now being refined to intersection analysis at selected intersections. This work is not yet completed. Because the timeframe and/or actual implementation of the connecter are unknown, the connector is not included in this analysis. However, should the project move forward, the data included in this study is available for inclusion in the TCTDM so that the impacts of the CWC campus on Tribal Trails can be estimated.

The 2031 baseline hourly traffic volumes and LOS for each intersection at the various peak hours are depicted on Figures 13 thru 15. In summary, the intersections of High School Road with South Park Loop Road and Middle School Road are operating at LOS B conditions throughout the day,. The intersection of High School Road and U.S. 89 is at a LOS B in the morning and LOS C for the two evening peak hours. Drivers entering US 89 from High School Road are currently experiencing LOS D conditions during all three peak hours analyzed. Southbound traffic at the Gregory Lane and High School Road intersection is expected to operate at an LOS F during all three peak hours in 2031 compared with only the school peak hour in 2021. Because the northbound traffic at Gregory Lane is very minimal, including one or two vehicles per hour at most from the Teton County Septage Dump Station, the LOS was not evaluated for the baseline.

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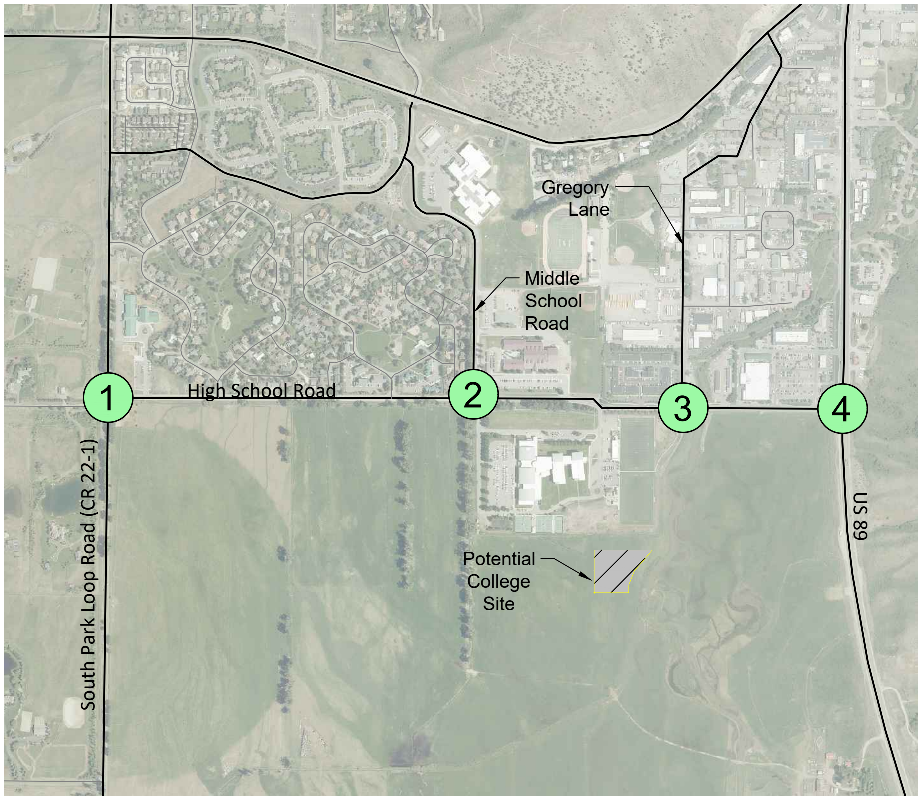
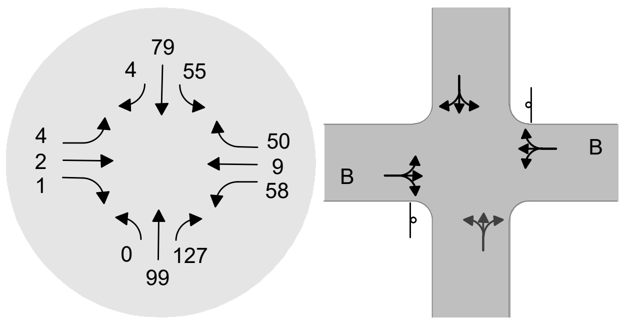
FIGURE 13
2031 BASELINE TRAFFIC CONDITIONS A.M. PEAK HOUR (7:45-8:45 A.M.)

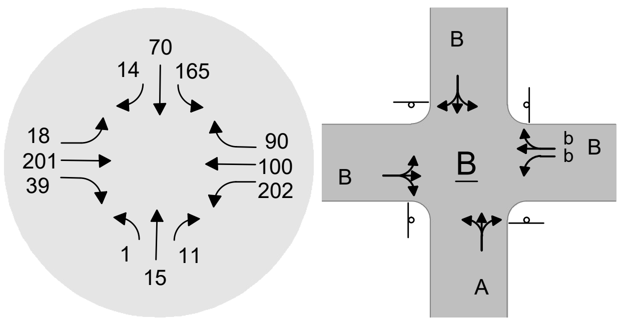


LEGEND

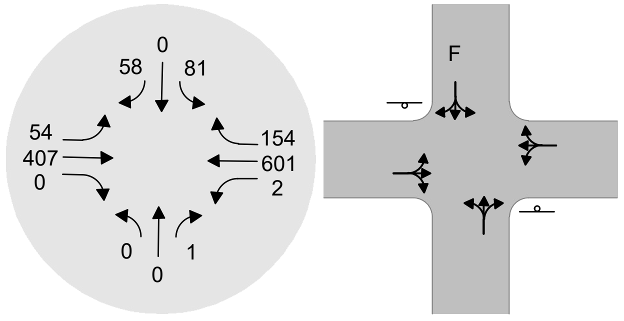
—	Primary Roadways
—	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
(#)	Intersection Delineation
⊸	Stop Sign
🚦	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
<u>A</u>	Intersection LOS (if applicable)



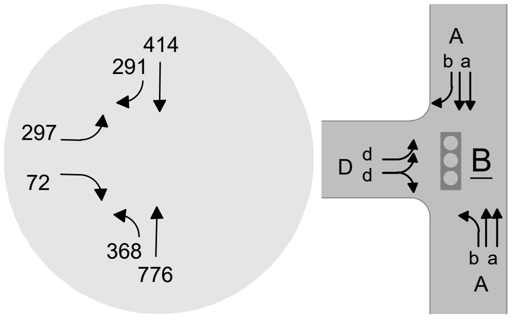
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

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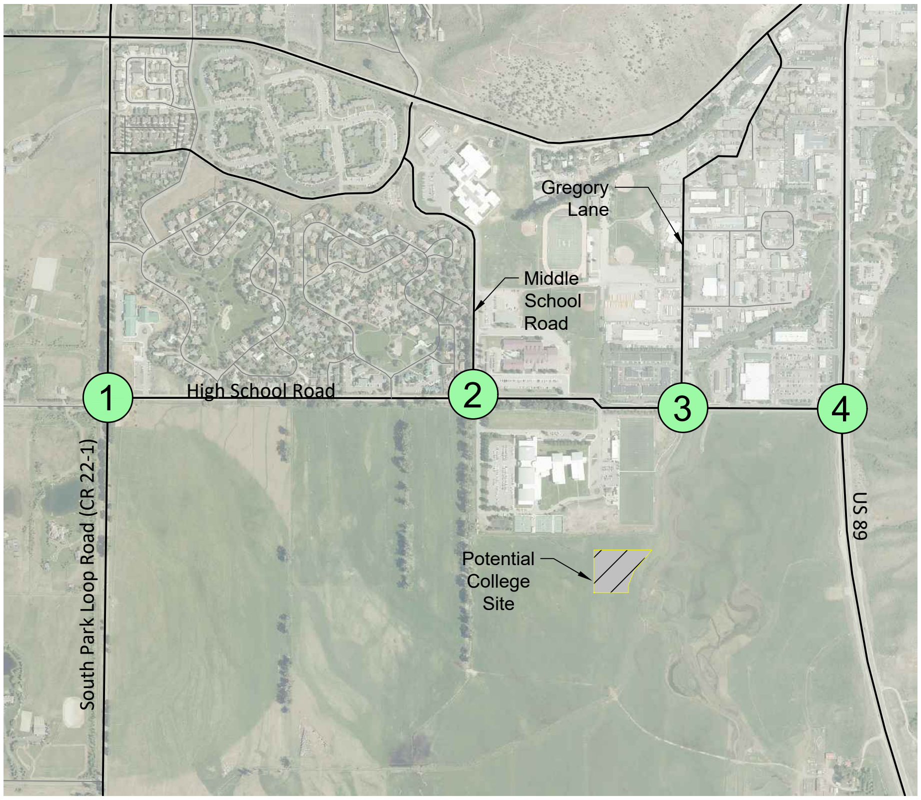
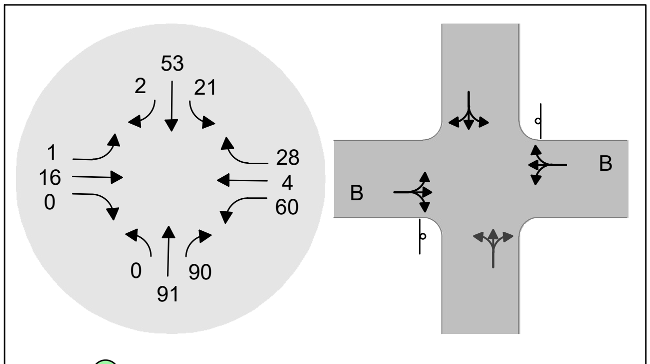
FIGURE 14
2031 BASELINE TRAFFIC CONDITIONS P.M. PEAK HOUR (5:00 - 6:00 P.M.)

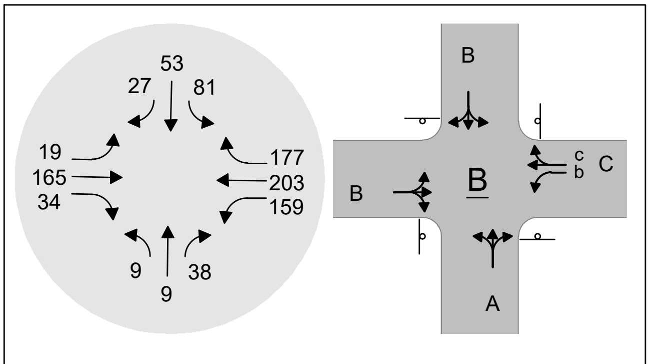


LEGEND

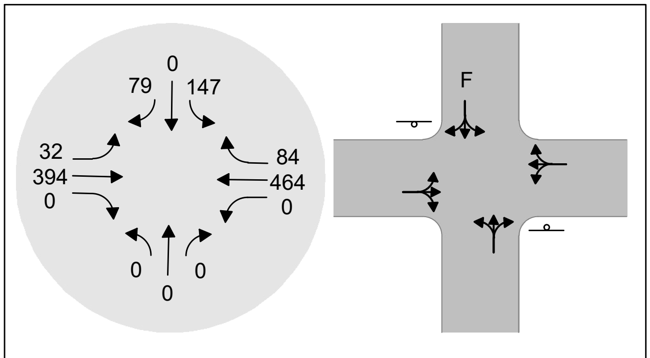
—	Primary Roadways
—	Local Roadways in proximity to study
▨	Proposed Central Wyoming College-Jackson Outreach Center
#	Intersection Delineation
	Stop Sign
	Signalized Intersection
a	Lane group LOS (if applicable)
A	Approach LOS (if applicable)
A	Intersection LOS (if applicable)



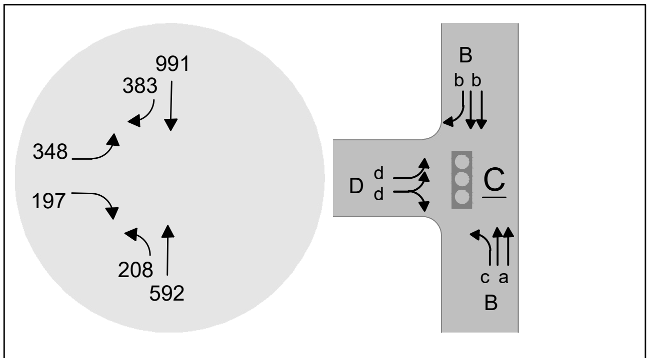
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

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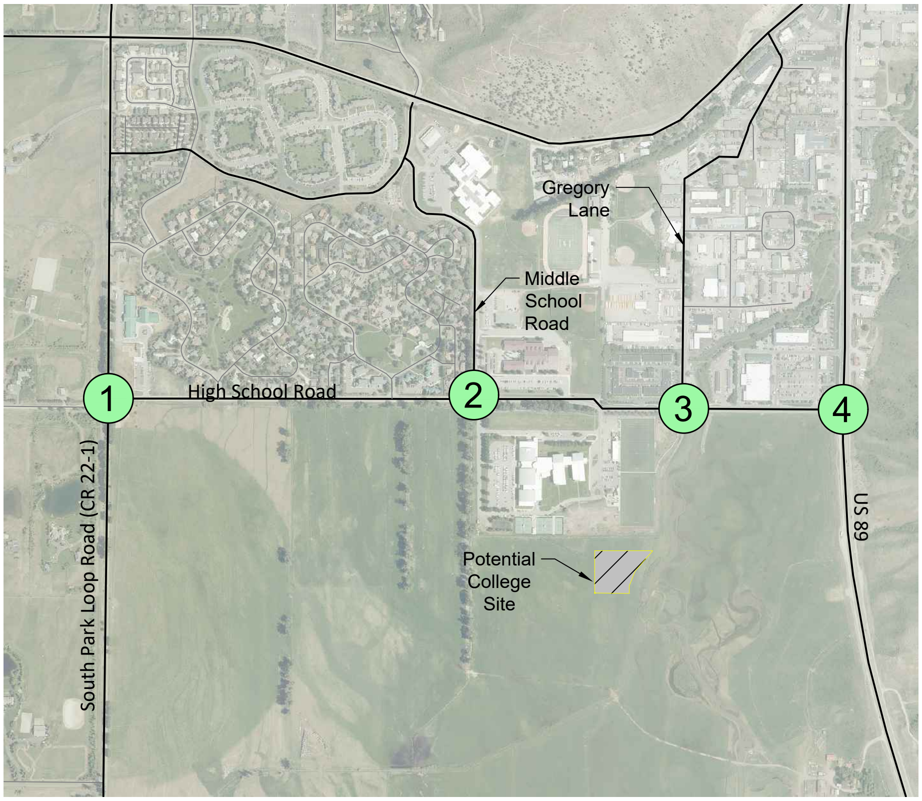
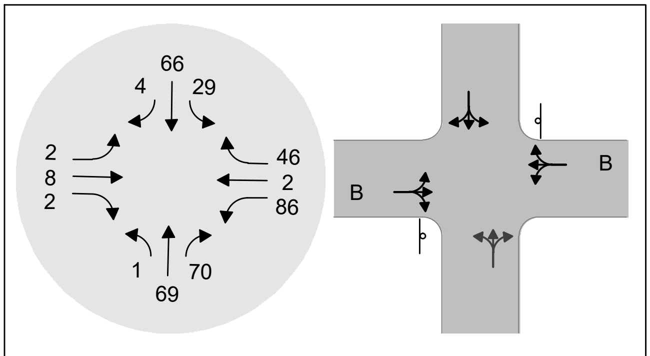
FIGURE 15
2031 BASELINE TRAFFIC CONDITIONS SCHOOL P.M. PEAK HOUR (3:15-4:15 P.M.)

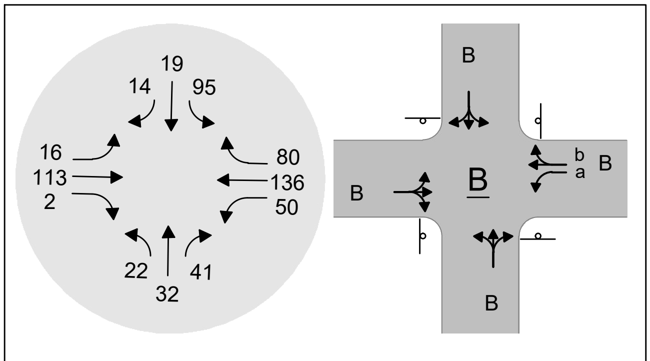


LEGEND

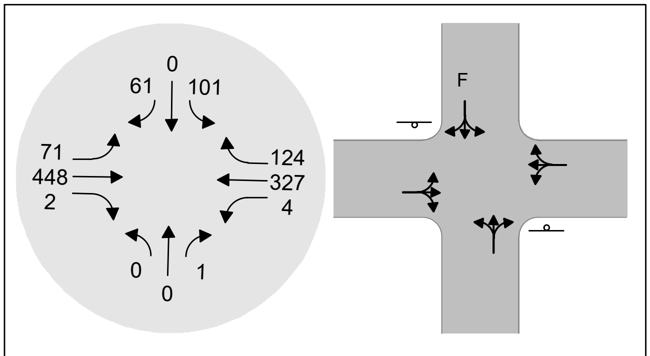
- Primary Roadways
- Local Roadways in proximity to study
- ▨ Proposed Central Wyoming College-Jackson Outreach Center
- # Intersection Delineation
- Stop Sign
- Signalized Intersection
- a Lane group LOS (if applicable)
- A Approach LOS (if applicable)
- A Intersection LOS (if applicable)



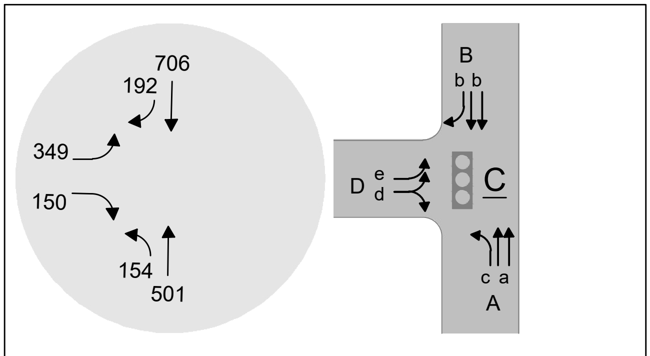
① South Park Loop Road/High School Road



② High School Road/Middle School Road



③ High School Road/Gregory Lane



④ High School Road/US 89

VI. PROPOSED CONDITIONS

The subject two-acre property will include the Central Wyoming College and a parking lot for student and faculty use. There are three parcels adjacent to the 2-acre site. They total in 95.3 acres, and consist of a 15.3 acre parcel (not including the 2-acre CWC site), a 35 acre parcel, and a 45 acre parcel.

By right, 3 dwelling units are allowed on each of these parcels that are allowed a main residence and an accessory residential unit (ARU) for a total of 6 total potential residential structures.

VII. TRIP GENERATION

The CWC courses are currently hosted at various locations within Jackson and currently contribute to trip generation throughout the transportation network. The new CWC will consolidate the current trips to the one central campus. Trip generation for 2021 and 2031 was completed based on CWC program and course information. CWC provided a comprehensive weekly schedule for 2021 which included the course names, classroom information, as well as course times and estimated enrollments. As a community college serving a variety of student types (traditional and non-traditional), many of CWC classes are offered after normal working hours to best serve working students. This allows some flexibility in scheduling, and as such, Jorgensen worked with CWC staff to adjust class times to not coincide with the peak hour traffic times to a large extent.

Trip Generation Assumptions

Jorgensen worked closely with CWC staff to understand student and staff travel behavior. Based on these discussions, for the purpose of this study, the following was assumed for 2021 and 2031 trip generation:

1. Estimated enrollment for 2021 is 226 students. Estimated enrollment for 2031 is 75 students in the summer, 375 in the fall, and 320 in the spring. These numbers reflect in-person credit courses, English as a Second Language and High School Equivalency courses.
2. High school enrollment is assumed to have no impact on the baseline trip generation. CWC offers concurrent enrollment to the Jackson Hole High School, located adjacent to the proposed property. These classes are taught within the High School curriculum during school hours by High School instructors. In 2018 enrollment was 167. Concurrent enrollment will not impact the use of the new CWC building. CWC is seeking approval of dual enrollment classes, which would allow high school students to take courses at the CWC campus. Dual enrollment will most likely include certified nursing assistant, culinary and science classes. CWC estimates that high school dual enrollment will not impact traffic generation students will be able to walk from the High School to the CWC campus.

trip reduction?

3. Not all students will arrive right when class begins or leave right when a class ends. Based on the weekly course schedule, it was assumed that 50% of students arrive within 30 minutes before class starts and the remainder arrive at the start of class time. It is also assumed that 50% of students leave at the end of the class and the remaining 50% will remain at the college for additional classes, to meet with teachers, and to study. One third are assumed to leave after one hour, another third after 2 hours and the remaining third after 3 hours. For evening classes, the

exit stagger is reduced and 50% are assumed to leave right after class ends and the remaining after a half hour.

4. The CWC program has been developed to minimize impact on the transportation network during peak hours, by attempting to minimize start and end time of courses during the peak hours.
5. 2021 estimates 5 faculty/staff who are on campus throughout the day from 8:00 AM until 5:00 PM. By 2031 this is estimated to increase to 7 with an additional 2 faculty/staff who will be on campus from 4:30 PM to 9:00 PM. The faculty and staff are assumed to total approximately 10% of the student population with adjunct faculty following similar ingress and egress patterns as the students. The adjunct faculty were included with student numbers.
6. Alternative transportation assumed 7% bicyclists and 9% walkers for 2021 and respectively 10.3% and 8.3% for 2031 (Source: *Jackson/Teton Integrated Transportation Plan*). Transit transportation was not included as a mode of transportation in 2021 trip generation since the current existing START Bus stops along High School Road are over a quarter mile away. 2.6% transit transportation was assumed for 2031, which would provide adequate time for a transit transportation plan to be implemented for CWC.
7. 2021 trip generation numbers assumed enrollment of 226 students and that classes would be at 60% capacity of the assigned classroom capacity. Because the course schedule provided is weekly, this assumption aids in distributing trip generation throughout the week since all courses will not be held on a single day (i.e. some classes will follow a Monday, Wednesday, Friday schedule, while others will follow a Tuesday, Thursday schedule.
8. The 2031 trip generation accounted for an increased enrollment of 166% to 375 students based on estimated fall enrollment numbers. The number of individuals entering and exiting the facility on a daily basis was again assumed to be 60% to distribute the trip generation throughout the week.
9. The Institute of Transportation Engineers (ITE) *Trip Generation Manual* was not utilized for trip generation since the college size is not represented within this manual and CWC was able to provide very specific information on staff and student numbers and behavior as well as class schedule..

these %'s seem high for location of CWC on southern limits of town, distance to travel, inclement weather during winter months, and type of trips dependent upon origin from other locations work/home/ errands etc. Is this assuming the mode of transportation the individual initiated with from other destinations does not change while hauling texts/ laptops and other necessary items for classes/ study.

Trip generation resulted in the following:

please consider include trip rates

Vehicle trips?

Table 4. 2021 Trip Generation

Number of Students: 226

			Directional Distribution			
Analysis Period		*Trips*	*Entering*	*Exiting*	*Entering*	*Exiting*
DAILY	Weekday	*264*	50%	50%	132	132
AM Peak Hour (7:15-8:15)	Weekday	*27*	100%	0%	27	0
PM Peak Hour (3:15-4:15)	Weekday	*19*	17%	83%	3	15
PM Peak Hour (5:00-6:00)	Weekday	*33*	63%	37%	20	13
Alternative Modes of Transportation	Weekday	*110*	50%	50%	55	55

this seems to figure to be approximately 29% vs the 16% mentioned above of total daily trips.

Table 5. 2031 Trip Generation

Number of Students: 375

			Directional Distribution			
Analysis Period		*Trips*	*Entering*	*Exiting*	*Entering*	*Exiting*
DAILY	Weekday	*416*	50%	50%	208	208
AM Peak Hour (7:15-8:15)	Weekday	*42*	100%	0%	42	0
PM Peak Hour (3:15-4:15)	Weekday	*29*	17%	83%	5	24
PM Peak Hour (5:00-6:00)	Weekday	*51*	62%	38%	32	20
Alternative Modes of Transportation	Weekday	*230*	50%	50%	115	115

is this Daily, or hourly?

this seems to figure to be approximately 35% vs the 18% mentioned above of total daily trips.

VIII. TRIP DISTRIBUTION

An Origin-Destination Study was not completed as part of the 2021 baseline study and assumptions had to be made to assign generated trips to the transportation network. It was confirmed with CWC staff that 2021 and 2031 ingress/egress traffic of the CWC Campus follows the same traffic trends of the transportation network. The 2021 baseline and buildout trip distribution conditions were evaluated for AM, PM and School PM peak hours.

Figures 11, 12, and 13 show the assumed trip generation for the three different access alternatives studied for the various time periods. Each map includes the percentage of ingress/egress traffic associated with each movement. Ingress movements are labeled in green and egress movements in red. Each map also includes the associated number of movements for the 2021 baseline condition (normal nomenclature) and the 2030 buildout condition (in parenthesis).

2031?

Please explain further. Add discussion here to introduce and define each access scenario. confusing for remaining sections of report when reviewing without this.

Central Wyoming College - Jackson Outreach Center Traffic Impact Study 2019

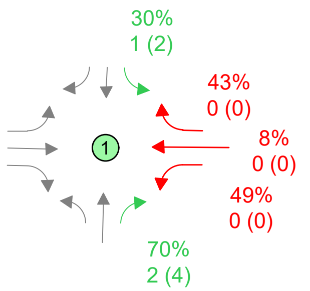
FIGURE 16

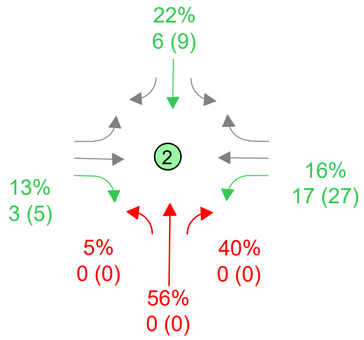
TRIP DISTRIBUTION
MIDDLE SCHOOL ROAD ACCESS

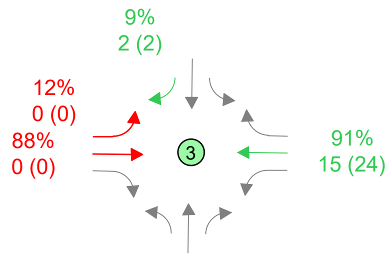
LEGEND

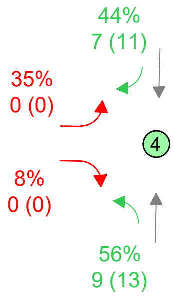
##	Ingress Movement
##	Egress Movement
##%	% vehicles in movement - 2021
##	# Vehicles in Movement - 2021 Baseline Conditions
(##)	# Vehicles in Movement - 2031 Buildout Conditions

AM Peak Hour

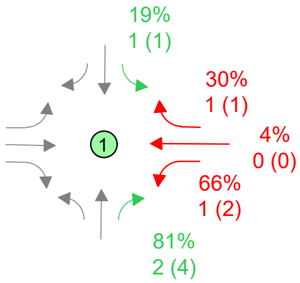


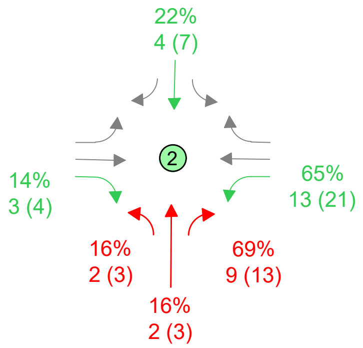


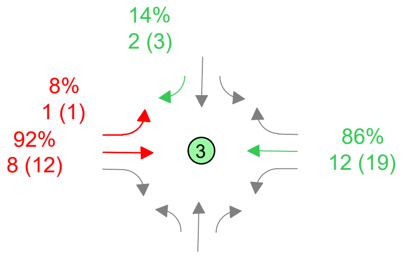


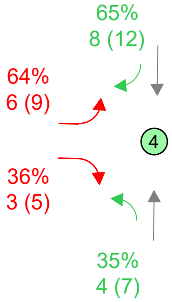


PM Peak Hour

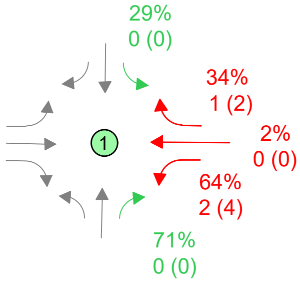


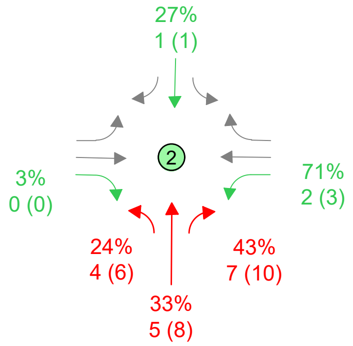


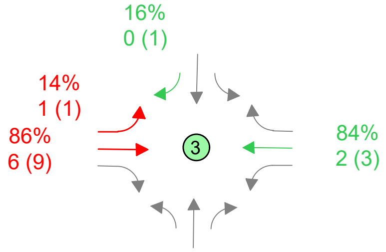




School Peak Hour







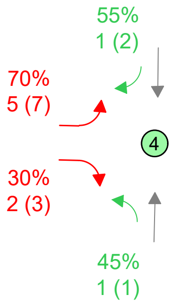


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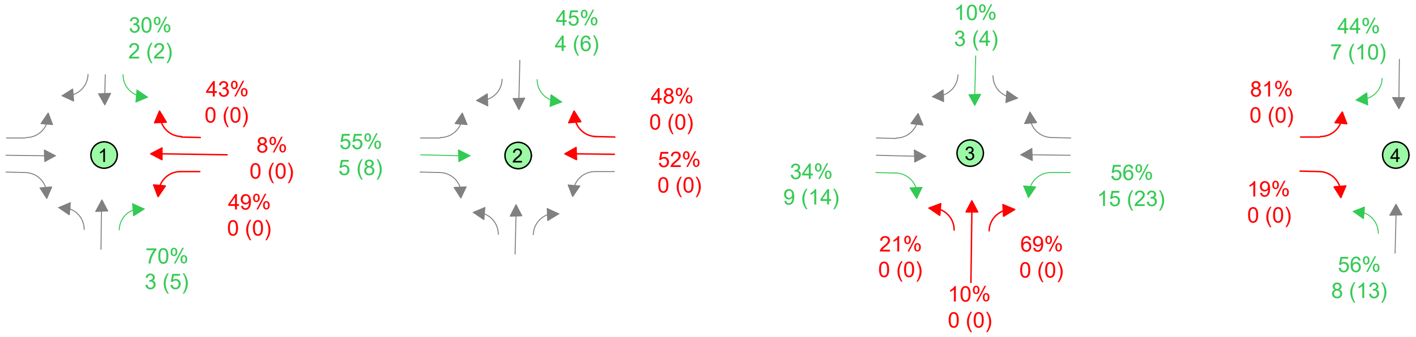
FIGURE 17

TRIP DISTRIBUTION
GREGORY LANE ACCESS

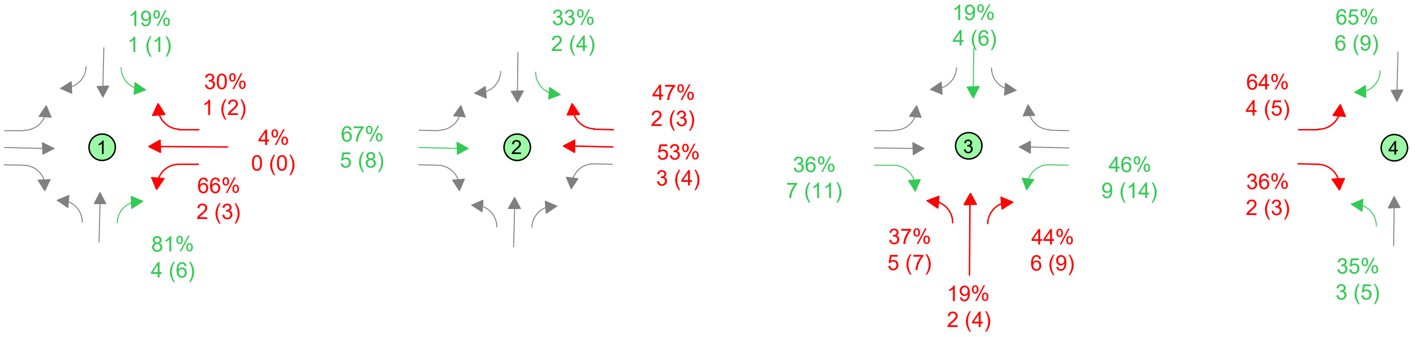
LEGEND

##	Ingress Movement
##	Egress Movement
##%	% vehicles in movement - 2021
##	# Vehicles in Movement - 2021 Baseline Conditions
(##)	# Vehicles in Movement - 2031 Buildout Conditions

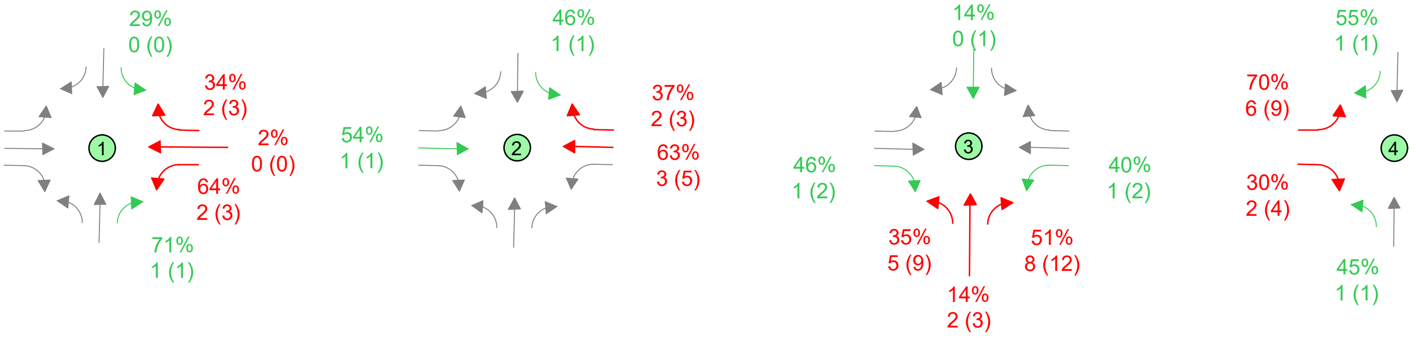
AM Peak Hour



PM Peak Hour



School Peak Hour



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PREPARED BY: HRR

MAP PREPARED: 10/28/2019

PROJECT NUMBER: 19037

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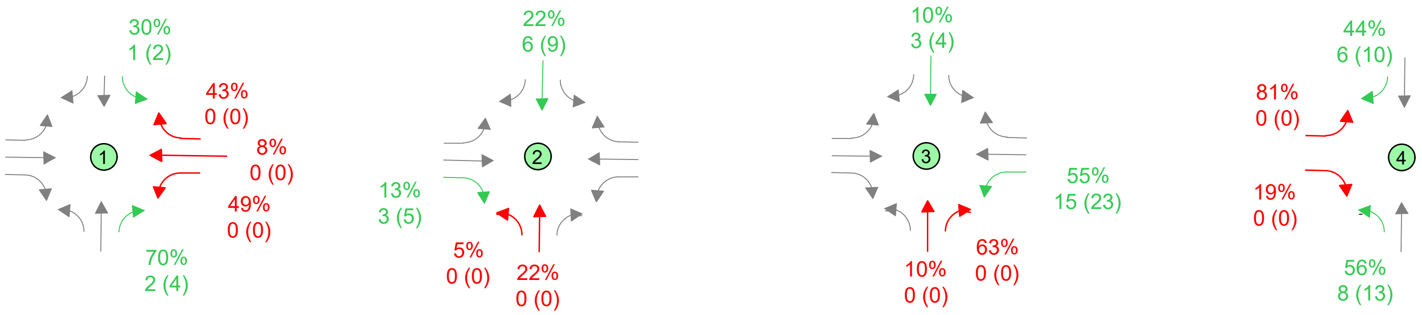
FIGURE 18

TRIP DISTRIBUTION
DUAL ACCESS

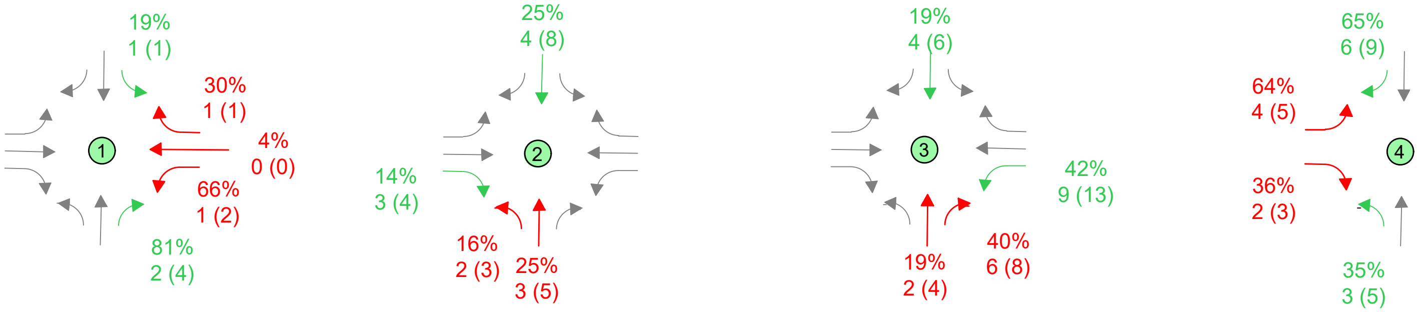
LEGEND

##	Ingress Movement
##	Egress Movement
##%	% vehicles in movement - 2021
##	# Vehicles in Movement - 2021 Baseline Conditions
(##)	# Vehicles in Movement - 2031 Buildout Conditions

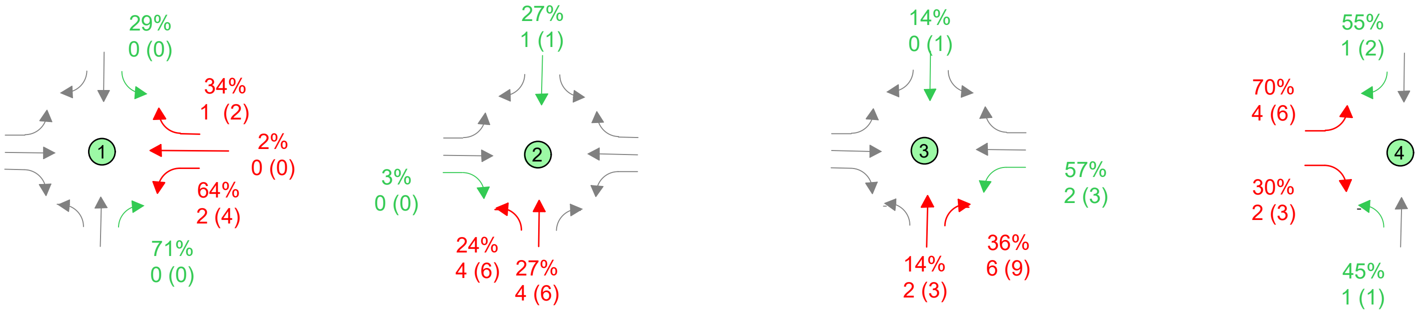
AM Peak Hour



PM Peak Hour



PM Peak Hour



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PREPARED BY: HRR MAP PREPARED: 10//28/2019 PROJECT NUMBER: 19037 not unexpected for a minor stop control approach

Traffic Summary

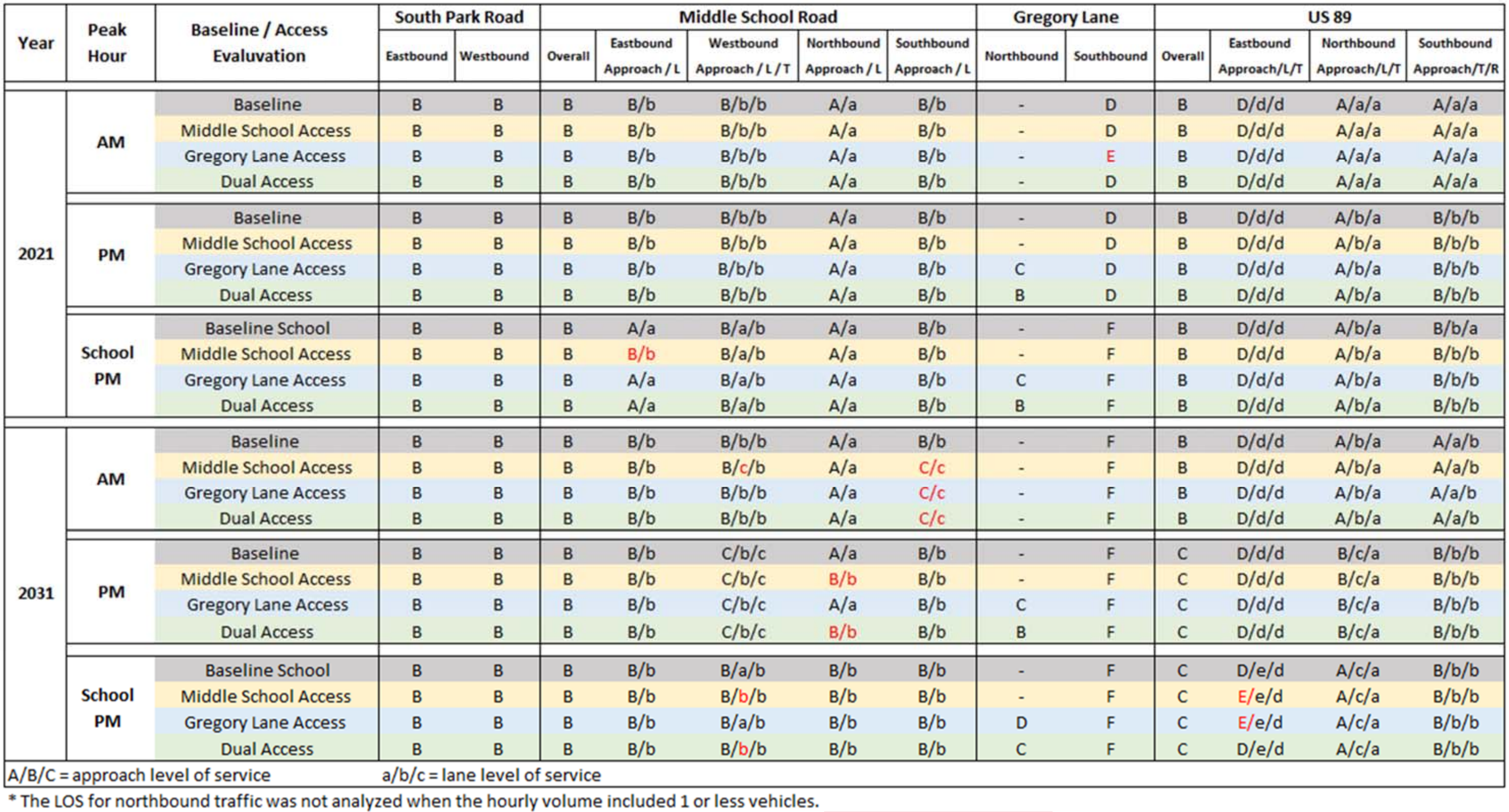
High School Road baseline conditions in 2021 and 2031 operate at a satisfactory level of service. The southbound traffic at the intersection of Gregory Lane and High School Road is of concern since it is currently experiencing a D to F LOS. The southbound approach at this intersection will continue to fail in 2031 with or without CWC if the transportation network and circulation remains as is. The eastbound approach at the High School Road and US 89 is currently operating at a LOS D, as are the left and right turn lanes; the left turn lane is expected to decrease to LOS E by 2031.

IX. TRAFFIC ANALYSIS

The trip generation values for CWC were added to the 2021 and 2031 baseline values and analyzed to determine the impact on the transportation system. Table 3 provides a summary of the LOS for each intersection and intersection approaches. The LOS in red text is a decrease in LOS from the baseline that is attributable to CWC traffic. Overall, the intersection of Gregory Lane and High School Road receive the largest impact from the development of the CWC in all three alternatives as this intersection currently has issues related to southbound Gregory Lane traffic.

For the analysis, the intersections will be referred to by the north/southbound intersecting roads since High School Road is the east/westbound street for all intersections.

Table 6. 2021 and 2031 Level of Service Summary



Year	Peak Hour	Baseline / Access Evaluvation	South Park Road		Middle School Road					Gregory Lane		US 89			
			Eastbound	Westbound	Overall	Eastbound Approach / L	Westbound Approach / L / T	Northbound Approach / L	Southbound Approach / L	Northbound	Southbound	Overall	Eastbound Approach/L/T	Northbound Approach/L/T	Southbound Approach/T/R
2021	AM	Baseline	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/a/a	A/a/a
		Middle School Access	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/a/a	A/a/a
		Gregory Lane Access	B	B	B	B/b	B/b/b	A/a	B/b	-	E	B	D/d/d	A/a/a	A/a/a
		Dual Access	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/a/a	A/a/a
	PM	Baseline	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/b/a	B/b/b
		Middle School Access	B	B	B	B/b	B/b/b	A/a	B/b	-	D	B	D/d/d	A/b/a	B/b/b
		Gregory Lane Access	B	B	B	B/b	B/b/b	A/a	B/b	C	D	B	D/d/d	A/b/a	B/b/b
		Dual Access	B	B	B	B/b	B/b/b	A/a	B/b	B	D	B	D/d/d	A/b/a	B/b/b
	School PM	Baseline School	B	B	B	A/a	B/a/b	A/a	B/b	-	F	B	D/d/d	A/b/a	B/b/a
		Middle School Access	B	B	B	B/b	B/a/b	A/a	B/b	-	F	B	D/d/d	A/b/a	B/b/b
		Gregory Lane Access	B	B	B	A/a	B/a/b	A/a	B/b	C	F	B	D/d/d	A/b/a	B/b/b
		Dual Access	B	B	B	A/a	B/a/b	A/a	B/b	B	F	B	D/d/d	A/b/a	B/b/b
2031	AM	Baseline	B	B	B	B/b	B/b/b	A/a	B/b	-	F	B	D/d/d	A/b/a	A/a/b
		Middle School Access	B	B	B	B/b	B/c/b	A/a	C/c	-	F	B	D/d/d	A/b/a	A/a/b
		Gregory Lane Access	B	B	B	B/b	B/b/b	A/a	C/c	-	F	B	D/d/d	A/b/a	A/a/b
		Dual Access	B	B	B	B/b	B/b/b	A/a	C/c	-	F	B	D/d/d	A/b/a	A/a/b
	PM	Baseline	B	B	B	B/b	C/b/c	A/a	B/b	-	F	C	D/d/d	B/c/a	B/b/b
		Middle School Access	B	B	B	B/b	C/b/c	B/b	B/b	-	F	C	D/d/d	B/c/a	B/b/b
		Gregory Lane Access	B	B	B	B/b	C/b/c	A/a	B/b	C	F	C	D/d/d	B/c/a	B/b/b
		Dual Access	B	B	B	B/b	C/b/c	B/b	B/b	B	F	C	D/d/d	B/c/a	B/b/b
	School PM	Baseline School	B	B	B	B/b	B/a/b	B/b	B/b	-	F	C	D/e/d	A/c/a	B/b/b
		Middle School Access	B	B	B	B/b	B/b/b	B/b	B/b	-	F	C	E/e/d	A/c/a	B/b/b
		Gregory Lane Access	B	B	B	B/b	B/a/b	B/b	B/b	D	F	C	E/e/d	A/c/a	B/b/b
		Dual Access	B	B	B	B/b	B/b/b	B/b	B/b	C	F	C	D/e/d	A/c/a	B/b/b

A/B/C = approach level of service a/b/c = lane level of service

* The LOS for northbound traffic was not analyzed when the hourly volume included 1 or less vehicles.

may want to consider including in table delay sec/veh for each overall approach and major approach

2021 Baseline Conditions

In 2021, the intersection of High School Road with South Park Loop Road, Middle School Road and US 89 will operate with a LOS B throughout the day. The US 89 eastbound approach will operate at a LOS D throughout the day. The Gregory Lane southbound approach will operate at a LOS D during the AM and PM peak hours and will function at a LOS F during the School PM peak hour. The northbound approach on Gregory Lane currently receives minimal traffic and the LOS was not analyzed for a baseline.

2021 Traffic Conditions with CWC

The addition of the CWC results in minimal impact to the transportation network for the three different access scenarios. The South Park Road and US 89 intersections will not be impacted. The Gregory Lane and Middle School Road intersections receive impact by the CWC addition, which are described as followed for each access scenario:

1. **Middle School Road Access:** The eastbound approach at the Middle School Road intersection is expected to decreased from a LOS A to a LOS B during the School PM peak hour. The Gregory Lane intersection will not be impacted with additional CWC traffic.
2. **Gregory Lane Access**: The Gregory Lane southbound approach is expected to decrease from a LOS D to E in the AM peak hour with the CWC. With the added northbound traffic at Gregory Lane intersection in the PM and School PM hours, a LOS C is established for the evening peak hours. The Middle School Road intersection is not impacted with additional CWC traffic.
3. **Dual Access**: The Gregory Lane southbound approach remains consistent with the baseline throughout the day, the Gregory Lane northbound approach is expected to operate at a LOS B in the PM and School PM peak hours with the CWC. The difference in LOS from the Gregory Lane Access is a result in decreased left-hand turn movements generated by CWC, which are anticipated to take place at Middle School Road during this scenario. The Middle School Road intersection will not be impacted with additional CWC traffic.

2031 Baseline Conditions

The LOS for the 2031 baseline conditions are similar to that of the 2021 baseline conditions, with the following differences in service for 2031:

1. Gregory Lane southbound traffic is expected to experience a LOS F during all periods of the day.
2. Middle school westbound traffic is expected to decrease from a LOS B to a LOS C for the westbound approach during the PM peak hour.
3. The overall LOS for the intersection of US 89 and High School Road is expected to decrease from a LOS B to C in the PM and School PM peak hours. The northbound approach is expected to decrease from a LOS A to B in the PM and the northbound left-hand turn is expected to decrease from a LOS B to a LOS C in the evening hours.

2031 Traffic Conditions with CWC

The addition of the CWC is expected to have an impact to the transportation network in 2031 for all three access scenarios. The South Park Loop Road intersection is expected remain at a LOS B for all scenarios. The Middle School southbound approach, for all three access scenarios, will experience a decrease in LOS from a B to a C during the AM peak hours. The Gregory Lane southbound approach will continue to operate with a LOS F throughout the day. The three access scenarios will result in the following unique impacts to the transportation network:

1. **Middle School Road Access:** The Middle School Road southbound left turning movement will decrease from a LOS B to C during the AM Peak hour and decrease from a LOS A to B in the school PM peak hour. The Middle School Road northbound approach and left turning movement will

decrease from a LOS A to a B in the PM peak hours. Gregory Lane and High School Road is not impacted with the CWC addition. The eastbound approach at the US 89 intersection is forecasted to decrease from a LOS D to an LOS E.

2. **Gregory Lane Access**: The Gregory Lane northbound approach is expected to operate with LOS C during the PM peak hour and LOS D during the School PM peak hour. The eastbound approach at the US 89 intersection is forecasted to decrease from a LOS D to a LOS E.
3. **Dual Access:** The Gregory Lane northbound approach receives a LOS B and C during the PM and School PM peak hours, respectively. The Middle School Road northbound approach and left turning movement will decrease from a LOS A to B during the PM peak hour.

X. OTHER CONSIDERATIONS

High School Traffic

Refer to Figure 19. High School Traffic, for an image showing the traffic circulation network for the High School campus. While this traffic impact study gained a better understanding of the four major intersections along High School Road, it did not account for the three-way stop-controlled intersection located between Middle School Road and Gregory Lane. As previously discussed, the High School contributes a surge of additional traffic to the transportation network during the School PM peak hour, 3:15 to 4:15 PM. During the School PM peak hour, specifically from 4:00-4:15 PM, traffic between Middle School Road and this three-way intersection is highly congested. Vehicles heading eastbound are queued on High School Road and within the High School parent pick up area during this high impact time period. With two stop-controlled intersections, this section of road operates poorly during this peak 15-minutes. TCSD is taking measures to mitigate traffic generated by parents and students. This school year (2019-2020), Jackson Hole has implemented paid parking for students, and have two teams in the engineering class working on the parking lot/traffic issues at JHHS and High School Road.

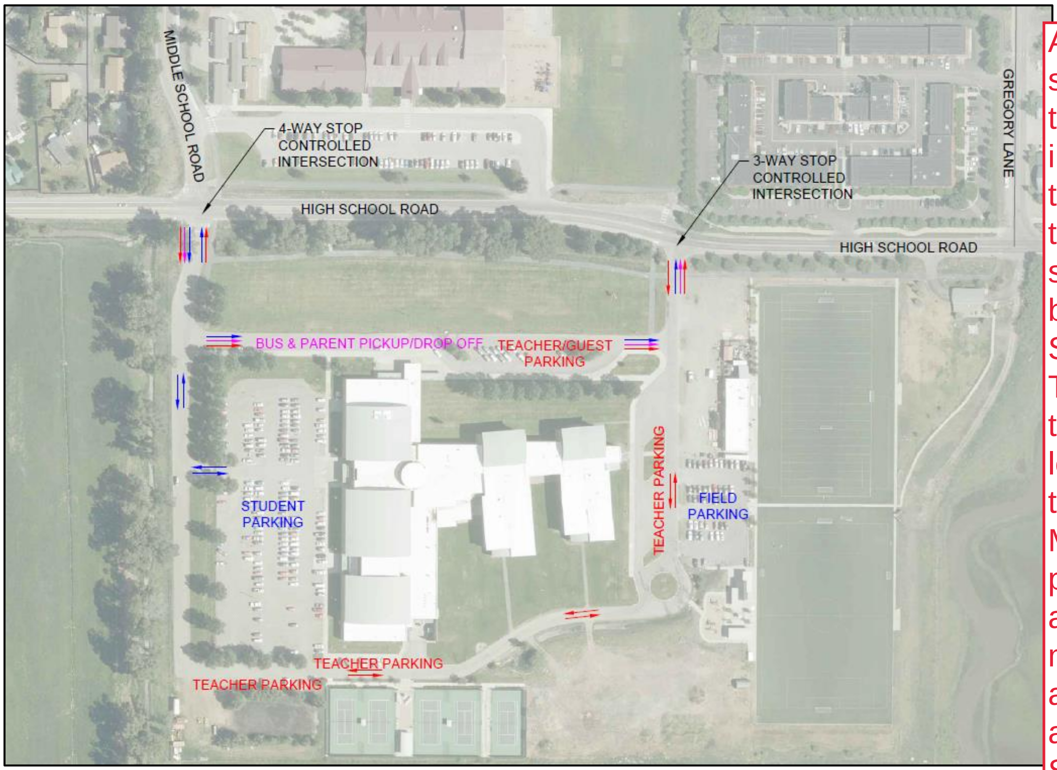


Figure 19. High School Traffic

Any other suggested ideas in the works? i.e. has any thought been given to reroute SB school buses between Middle School Rd and Teacher Parkig, via the service road located south of the High School? Minimize student parking access approach to maximize distance and queuing NB approaching High School Rd during PM hours?

what improvements are proposed?

Gregory Lane Improvements

Gregory Lane is identified as a roadway corridor in need of multiple improvements. The improvements include street, stormwater and sewer infrastructure, and a safe route to school for pedestrians and bicyclists. The Gregory Lane improvements initiative was approved as part of the Teton County and Town of Jackson SPET election on November 5, 2019. These improvements will include improvements to the intersection of Gregory Lane and High School Road. Addressing current capacity and circulation issues at this intersection will be a part of this project. While the timing of this project is still be determined, the Town has communicated they would like to implement this project in 2021.

Tribal Trail Connector & East-West Connector

The Integrated Transportation Plan identifies major capital projects designed to address existing (or future) traffic congestion and multimodal connectivity. The Tribal Trails Connector and East-West Connector are identified as key local connections. WYDOT and Teton County are in the planning stages to develop the Tribal Trails Connector Road, which would include a new segment of the Tribal Trails Road, approximately 0.5 miles, extending from Cherokee Lane north to Wyoming Highway 22. An East-West connector was also identified in the ITP was also recommended, which would provide a connector between South Park Loop Road and US 89, to the south of High School Road. This connector will also serve as an additional access to CWC. As previously mentioned, in communications with the WYDOT District 3 Traffic Engineer and Teton County Public Works, these connectors were not be viewed as an absolute. The development of both of these connectors could have an impact to the transportation network and the origin and destination of the CWC trips. The East-West Connector will directly impact the CWC since its proposed location could provide an access to the side of the CWC from the east and west. A portion of this easement has been created.

Parking

All parking is anticipated to be contained on-site. Overall, 37 parking units are provided with 2 Handicap spaces. Refer to Appendix A – Site plan for the layout of parking spaces. The site plan also includes space for an addition of 38 future parking spaces. This is in the preliminary planning stages and may be adjusted as the CWC project proceeds.

Traffic Circulation

The traffic circulation is dependent on the access location. If Middle School Road or Gregory Lane is used for the access, ingress and egress will take place at the same intersection. If the dual access is selected, ingress and egress will take place from both intersections.

Upon final design, the school site shall contain consistent signage and markings consistent with the Manual on Uniform Traffic Control Devices (MUTCD) latest edition. An additional resource for site signage and markings is the WYDOT Pedestrian and School Traffic Control Manual.

START Bus Service

START Bus presently provides service along High School Road with stops at Smiths, the intersection of the east access to the High School, west of the Corner Creek Lane intersection, and the Rangeview Drive intersection. CWC has been in conversations with START to identify the best way for START to serve CWC and these discussions will be furthered once the access location to CWC has been determined.

access

Pedestrian/Bicycle Connectivity

Currently, pedestrian/bicycle assess is not directly available to the site, but should be incorporated in the selected access alternative. The surrounding pedestrian/bicycle network on High School Road, South Park Loop Road and US 89 is developed and will provide good connectivity to CWC when the connection is developed in conjunction with the new access.

XI. CONCLUSIONS

Study Assumption Review

1. CWC construction is expected to be complete in 2021 with enrollment of 262 students, 5 full time staff and faculty and approximately 21 additional adjunct faculty.
2. Estimated enrollment for 2031 is 75 students in the summer, 375 in the fall and 320 in the spring. Staff/faculty is expected to increase to 7 full time during business hours, 2 faculty/staff who will be consistent during evening hours and approximately 30 adjunct faculty.
3. A 1.0% growth factor was used to forecast traffic 2017-2019 to 2021 (2019, The Jackson Hole Classical Academy – Traffic Impact Study), expanding to 1.8% for growth from 2021 to 2031 (2016, Teton County School District #1 Elementary School Traffic Study).

CWC Campus Traffic Impacts

1. The CWC currently holds classes throughout the Jackson community. The development of the CWC will relocate these trips to a centralized campus. The site is expected to generate 264 daily trips in 2021 and 416 trips in 2031.
2. The CWC program has been developed to minimize impact on the transportation network during peak hours.
3. Southbound traffic on Gregory Lane and High School road is currently failing without the addition of the CWC. Westbound traffic at the intersection of High School Road and US 89 is operating at a LOS D. The addition of the CWC will increase traffic at these intersections, but will have minimal impact on the operation level.

Eastbound

Recommendation

The proposed CWC is expected to increase trips on the adjacent transportation network at full buildout in 2021 and in 2031. Based on the intersection analysis, the High School transportation network, potential improvements to Gregory Lane and uncertainties of the development of the Tribal Trails connector and East-West Connector, Jorgensen recommends the development of the Gregory Lane access with an emergency access available from the High School.

The Middle School access is not recommended for sole ingress and egress to the CWC based on the intersection analysis and the existing High School traffic circulation. This access would be shared by CWC and High School traffic. While the major transportation network will not be largely impacted by the development of the Middle School access, the internal network of the High School and CWC will be impacted with the shared access during the PM High School release due to the large queueing of vehicles picking students up in the afternoon and the portion of High School Road between the stop controlled intersection at Middle School Road and the east access to the High School. Based upon visual observations of traffic operations, keeping CWC traffic separated from TCSD traffic and east of the High School Road segment adjacent to Jackson Hole High School and Colter Elementary School is recommended.

would guess this decision is ultimately up to local entity, High School, & CWC?

compared with Dual Access Scenario, which one has the least LOS impact on study intersections

The scenario analysis for 2021 and 2031 indicate that the dual access is not necessary since the use of two access points will not greatly benefit the transportation network. The dual access is beneficial for emergency purposes, but cannot be justified based on the results.

At this time, the Gregory Lane access is recommended for the access to the CWC. The southbound approach of Gregory Lane and High School Road is currently operating poorly because of the number of left-hand turns onto High School Road. The addition of the CWC, will result in additional southbound thru traffic and northbound traffic, which will decrease the LOS for the intersection. To improve the Gregory Lane LOS with the additional CWC access, the following options should be considered, which will improve the current level of service for the High School Road and Gregory Lane intersection:

1. Gregory Lane / High School Road northbound traffic movement: To improve the northbound LOS at the intersection, a right-hand turn only for the CWC egress could be implemented during peak hours.

What would be the resulting LOS with right turn lane

2. Gregory Lane / High School Road southbound traffic movement:
    a. An auxiliary right-hand turn lane could be added to the southbound approach at the intersection of High School Road Gregory Lane.
    b. Gregory Lane could be modified from a two-way to one-way street, with traffic traveling northbound. This would eliminate all southbound left-hand turns which is the movement that adversely impacts this intersection the most. The Town of Jackson has discussed this potential, and may analyze this option during the Gregory Lane Improvement Project.
    c. These suggestions could be considered by the Town when evaluating the Gregory Lane improvement project in the future.

should this include and analyze other alternative intersection improvement options

3. A gravel emergency access from the CWC to the High School transportation network should be developed.
4. A pathway should be developed along the access to provide continuity within the pathway network system and to comply with Town of Jackson complete streets standards. The school speed limit zone should be expanded along High School Road to the east side of the Gregory Lane intersection to make the pedestrian and bicycle crossing safer at the High School Road and Gregory Lane intersection. The school zone should reduce traffic speeds down to 20 mph for a minimum distance of 400’ on each side of the crosswalk. This can be accomplished through the proper signage along High School Road per the MUTCD.
5. This analysis assumes no changes in the signal timing at the US 89 and High School Road intersection. The opportunity to make timing adjustments will be coordinated with WYDOT.

The Gregory Lane access, with adoption of the included recommendations, should be adequate for the CWC. This access should be reevaluated in the future to determine the adequacy of the access and evaluated if a secondary access will be required. The reevaluation is suggested if the Gregory Lane improvements, Tribal Trail connector and/or High School Road corridor take place in the future and impact the transportation network.

any consideration given to geometric or auxiliary lane configuration improvements warranted? Right-turn has been expressed by the Town. May be a separate project that would be initiated by the Town. Problem exists prior to CWC.

XII. REFERENCES

Felsburg Holt & Ullevig. (2010). *South Park Sub Area and High School Road Corridor Transportation Analysis.* Jackson, WY: Teton County Planning and Development.

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XIII. LIST OF APPENDICES

Appendix A – Site Plan

Appendix B – Traffic Counts

Appendix C – 2021 Intersection Traffic Analysis
- C.1 – 2021 Baseline
- C-2 – 2021 with CWC and Middle School Road Access
- C.3 – 2021 with CWC and Gregory Lane Access
- C.4 – 2021 with CWC and Dual Access

Appendix D – 2031 Intersection Traffic Analysis
- D.1 – 2031 Baseline
- D.2 – 2031 with CWC and Middle School Road Access
- D.3 – 2031 with CWC and Gregory Lane Access
- D.4 – 2031 with CWC and Dual Access

XIV. CERTIFICATION

I hereby certify that this Traffic Impact Study (TIS) was prepared by an engineer under my direct responsible charge, and that both the engineer and I have experience and training in the field of traffic and transportation engineering and that I am a registered professional engineer in the State of Wyoming.

Joseph R. Armijo, P.E.
Wyoming P.E. 8309

Appendix A

Site Plan

JORGENSEN

SNOW STORAGE:
PROVIDED = 2,500 SF
IMPERVIOUS AREA = 25,000 SF
2% IMPERVIOUS AREA = 500 SF

— - — PROPERTY LINE
- - - - EASEMENT
🟩 GRASS / PLANTING
▭ CONCRETE WALK
▨ PLAZA PAVER

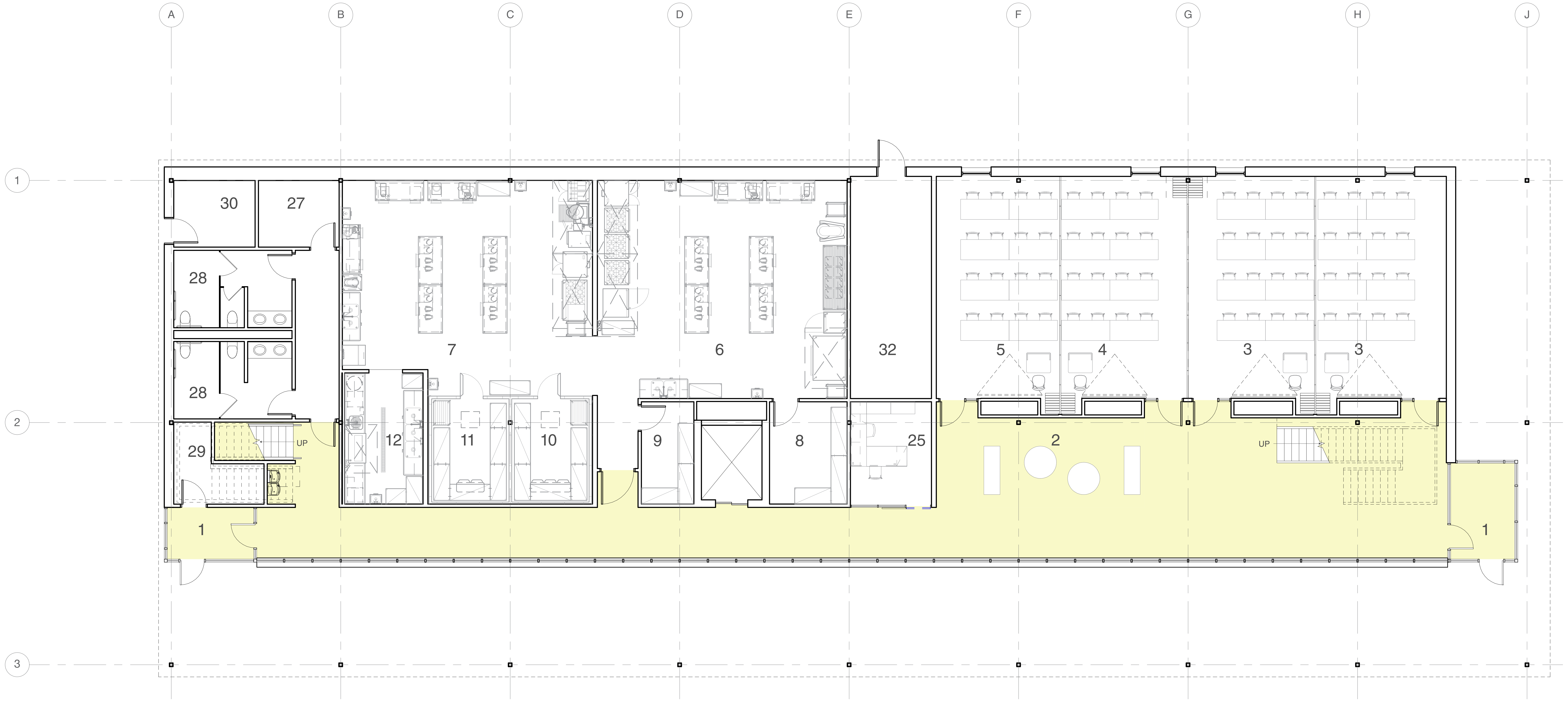
Site Plan

Potential New Site
September 2019

Jackson Outreach Center
Central Wyoming College

0' 20' 40' 80'

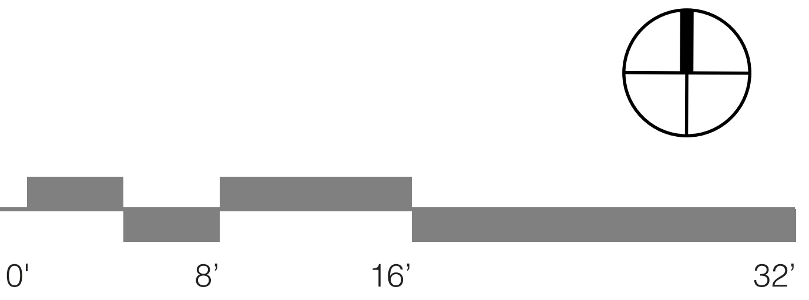
AndersonMasonDale Architects
CARNEY LOGAN BURKE ARCHITECTS



1 Entry
2 Student Study Lounge
3 General Classroom
4 General Computer
5 Computer Classroom
6 Teaching Kitchen
7 Commercial Kitchen
8 Pantry
9 Culinary Storage
10 Walk-in Freezer
11 Walk-in Cooler
12 Scullery

13 Bio/Anatomy/Physics/Physiology
14 Micro/Chem Lab
15 Skills Lab RN
16 Skills Lab CNA
17 Lab Storage
18 Simulation Lab
19 Med Prep
20 Surgery
21 Control
22 Nursing Classroom
23 Tutoring
24 Staff Breakroom

25 Admin. Office
26 Office
27 Storage
28 Restroom
29 Custodial Closet
30 Electrical
31 IT
32 Mechanical

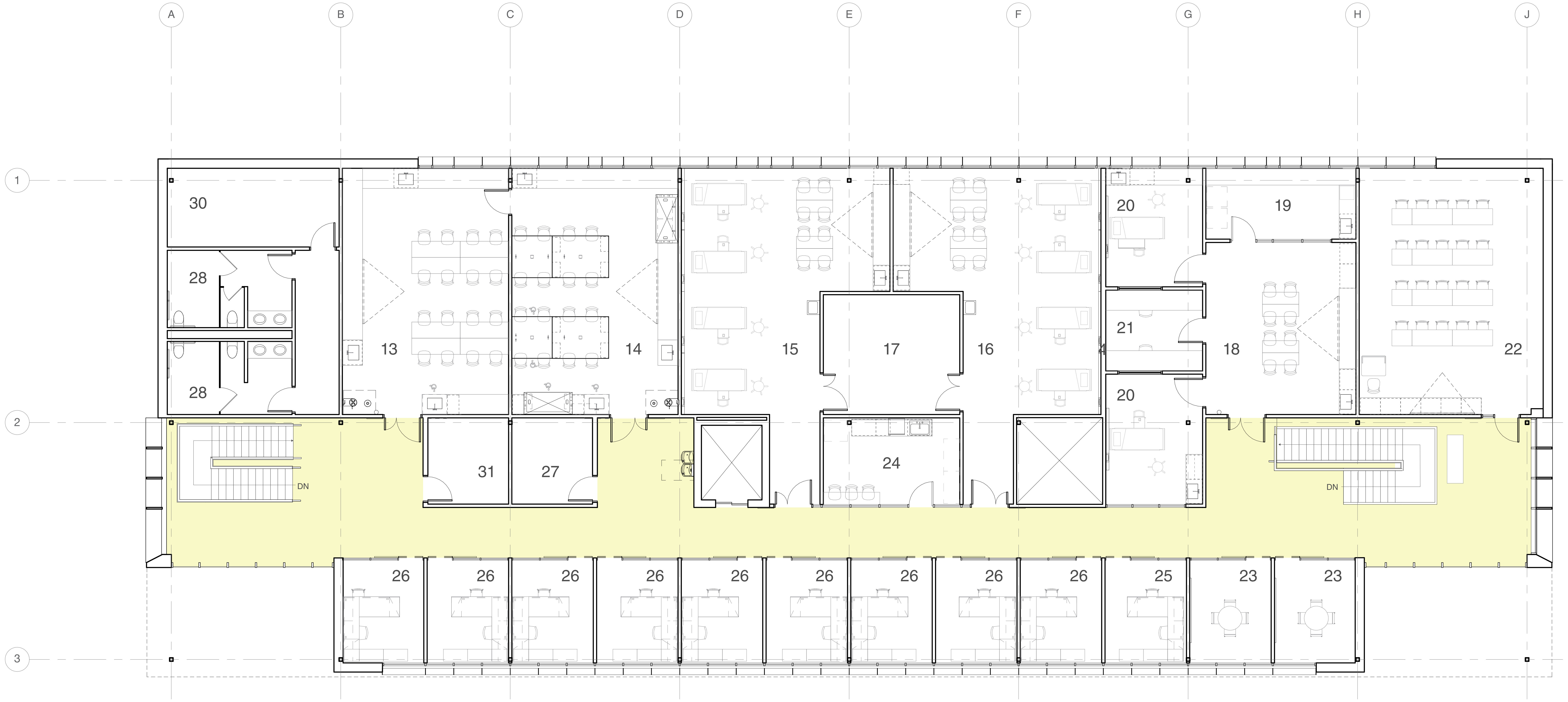


Level One Floor Plan

Potential New Site
September 2019

Jackson Outreach Center
Central Wyoming College

AndersonMasonDale Architects
CARNEY LOGAN BURKE ARCHITECTS



1 Entry
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4 General Computer
5 Computer Classroom
6 Teaching Kitchen
7 Commercial Kitchen
8 Pantry
9 Culinary Storage
10 Walk-in Freezer
11 Walk-in Cooler
12 Scullery

13 Bio/Anatomy/Physics/Physiology
14 Micro/Chem Lab
15 Skills Lab RN
16 Skills Lab CNA
17 Lab Storage
18 Simulation Lab
19 Med Prep
20 Surgery
21 Control
22 Nursing Classroom
23 Tutoring
24 Staff Breakroom

25 Admin. Office
26 Office
27 Storage
28 Restroom
29 Custodial Closet
30 Electrical
31 IT
32 Mechanical

Level Two Floor Plan

Potential New Site
September 2019

Jackson Outreach Center
Central Wyoming College

0' 8' 16' 32'

AndersonMasonDale Architects
CARNEY LOGAN BURKE ARCHITECTS

Appendix B

Traffic Counts

JORGENSEN

South Park Loop and High School Road

A.M. Peak Hour for transportation network is 7:45-8:45 AM. PM Peak Hours for network is 5:00-6:00 PM, School PM Peak Hour is 3:15-4:15 PM Values from traffic counts completed on May 23 and May 25th utilized in determining A.M. Peak Hour traffic volumes on network during normal off-peak season in the area.

A.M. PEAK HOUR (transportation network)

Tuesday May 23, 2017

Time Period	Dairy Lane EB				Highschool Road WB				South Southpark NB				North South Park SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	0	0	0	0	5	1	8	0	0	18	18	0	7	21	0	78	**389**	0
8:00 AM	0	1	0	0	0	14	0	19	0	0	23	41	0	22	16	2	138	385	0
815 AM	0	0	0	1	0	14	5	11	0	0	21	17	0	3	8	0	80	247	0
8:30 AM	0	0	0	0	0	8	1	3	0	0	22	29	0	13	17	0	93	167	0
	0	1	0	1	0	41	7	41	0	0	84	105	0	45	62	2	389		0

Thursday May 25, 2017

Time Period	Dairy Lane EB				Highschool Road WB				South Southpark NB				North South Park SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	3	0	0	0	10	4	3	0	0	21	23	0	11	17	2	94	**396**	0
8:00 AM	0	0	1	0	0	19	2	21	0	0	21	34	0	20	19	0	137	391	0
815 AM	0	0	1	1	0	13	0	14	0	0	13	16	0	6	14	2	80	254	0
8:30 AM	0	2	1	0	0	10	2	1	0	0	20	26	0	7	15	1	85	174	0
	0	5	3	1	0	52	8	39	0	0	75	99	0	44	65	5	396		0

Average

Time Period	Dairy Lane EB				Highschool Road WB				South Southpark NB				North South Park SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	2	0	0	0	8	3	6	0	0	20	21	0	9	19	1	86		
8:00 AM	0	1	1	0	0	17	1	20	0	0	22	38	0	21	18	1	138		
815 AM	0	0	1	1	0	14	3	13	0	0	17	17	0	5	11	1	80		
8:30 AM	0	1	1	0	0	9	2	2	0	0	21	28	0	10	16	1	89		
	0	3	2	1	0	47	8	40	0	0	80	102	0	45	64	4	393		

P.M. PEAK HOUR (transportation network)

Tuesday May 23, 2017

Time Period	Dairy Lane EB				Highschool Road WB				South Southpark NB				North South Park SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
5:00 PM	0	1	5	0	0	17	0	7	0	0	19	15	0	0	0	0	64	**305**	0
5:15 PM	0	0	4	0	0	16	1	1	0	0	24	18	0	7	8	0	79	241	0
5:30 PM	0	0	6	0	0	13	1	7	0	0	18	21	0	7	13	0	86	162	0
5:45 PM	0	0	3	0	0	7	2	5	0	0	14	19	0	4	20	2	76	76	0
	0	1	18	0	0	53	4	20	0	0	75	73	0	18	41	2	305		0

Thursday May 25, 2017

Time Period	Dairy Lane EB				Highschool Road WB				South Southpark NB				North South Park SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
5:00 PM	0	0	2	0	0	18	0	8	0	0	15	6	0	3	13	0	65	**283**	0
5:15 PM	0	0	2	0	0	6	2	8	0	0	22	17	0	7	9	0	73	218	0
5:30 PM	0	0	1	0	0	9	0	5	0	0	23	25	0	3	13	1	80	145	0
5:45 PM	0	0	3	0	0	11	0	4	0	0	12	23	0	3	9	0	65	65	0
	0	0	8	0	0	44	2	25	0	0	72	71	0	16	44	1	283		0

Average

Time Period	Dairy Lane EB				Highschool Road WB				South Southpark NB				North South Park SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	1	4	0	0	18	0	8	0	0	17	11	0	2	7	0	65		
8:00 AM	0	0	3	0	0	11	2	5	0	0	23	18	0	7	9	0	76		
815 AM	0	0	4	0	0	11	1	6	0	0	21	23	0	5	13	1	83		
8:30 AM	0	0	3	0	0	9	1	5	0	0	13	21	0	4	15	1	71		
	0	1	13	0	0	49	3	23	0	0	74	72	0	17	43	2	294		

P.M. PEAK HOUR (Generator)

Tuesday May 23, 2017

Time Period	0				0				0				0				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
3:15 PM	0	0	2	0	0	11	1	8	0	0	19	10	0	4	12	0	67	**299**	0
3:30 PM	0	0	0	0	0	10	1	4	0	0	10	21	0	6	11	0	63	298	0
3:45 PM	0	3	2	0	0	19	0	14	0	1	13	13	0	12	14	1	92	292	0
4:00 PM	0	0	0	0	0	25	0	12	0	0	12	8	0	2	17	1	77	258	0
	0	3	4	0	0	65	2	38	0	1	54	52	0	24	54	2	299		0

Thursday May 25, 2017

Time Period	0				0				0				0				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
3:15 PM	0	1	3	2	0	17	0	8	0	0	11	15	0	10	10	2	79	**321**	0
3:30 PM	0	0	4	0	0	14	1	5	0	0	11	13	0	6	14	3	71	303	0
3:45 PM	0	0	2	1	0	14	0	8	0	0	20	15	0	4	14	0	78	296	0
4:00 PM	0	0	0	0	0	28	1	15	0	0	15	18	0	2	14	0	93	268	0
	0	1	9	3	0	73	2	36	0	0	57	61	0	22	52	5	321		0

Average

Time Period	0				0				0				0				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	1	3	1	0	14	1	8	0	0	15	13	0	7	11	1	73		
8:00 AM	0	0	2	0	0	12	1	5	0	0	11	17	0	6	13	2	67		
815 AM	0	2	2	1	0	17	0	11	0	1	17	14	0	8	14	1	85		
8:30 AM	0	0	0	0	0	27	1	14	0	0	14	13	0	2	16	1	85		
	0	2	7	2	0	69	2	37	0	1	56	57	0	23	53	4	310		

Middle School and High School Road

A.M. Peak Hour for transportation network is 7:45-8:45 AM. PM Peak Hours for network is 5:00-6:00 PM, School PM Peak Hour is 3:15-4:15 PM Values from traffic counts completed on May 23 and May 25th utilized in determining A.M. Peak Hour traffic volumes on network during normal off-peak season in the area.

A.M. PEAK HOUR (transportation network)

Tuesday May 23, 2017

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	2	43	1	0	20	17	19	0	0	1	2	0	37	6	1	149	**742**	0
8:00 AM	0	10	56	8	0	19	18	12	0	0	1	3	0	65	10	3	205	769	0
8:15 AM	0	1	31	6	0	38	32	18	0	0	0	0	0	16	6	5	153	564	0
8:30 AM	0	2	27	23	0	93	13	18	0	1	10	5	0	13	28	2	235	411	0
	0	15	157	38	0	170	80	67	0	1	12	10	0	131	50	11	742		0

Thursday May 25, 2017

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 am	0	2	62	3	0	22	21	19	0	0	3	4	0	43	6	0	185	**745**	0
8:00 am	0	10	51	3	0	25	22	19	0	1	1	1	0	63	10	7	213	766	0
8:15 am	0	1	30	7	0	37	21	17	0	0	0	1	0	19	9	2	144	553	0
8:30 am	0	1	23	12	0	70	16	23	0	0	8	1	0	10	37	2	203	409	0
	0	14	166	25	0	154	80	78	0	1	12	7	0	135	62	11	745		0

Average

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	2	53	2	0	21	19	19	0	0	2	3	0	40	6	1	167		
8:00 AM	0	10	54	6	0	22	20	16	0	1	1	2	0	64	10	5	209		
815 AM	0	1	31	7	0	38	27	18	0	0	0	1	0	18	8	4	149		
8:30 AM	0	2	25	18	0	82	15	21	0	1	9	3	0	12	33	2	219		
	0	15	162	32	0	162	80	73	0	1	12	9	0	133	56	11	744		

PHF

P.M. PEAK HOUR (transportation network)

Tuesday May 23, 2017

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
5:00 PM	0	4	37	0	0	16	46	32	0	0	3	8	0	15	2	3	166	**864**	0
5:15 PM	0	8	33	6	0	19	45	53	0	0	2	13	0	15	4	5	203	698	0
5:30 PM	0	5	34	14	0	55	34	46	0	3	2	8	0	14	24	11	250	495	0
5:45 PM	0	2	31	13	0	52	40	34	0	2	1	18	0	10	28	14	245	245	0
	0	19	135	33	0	142	165	165	0	5	8	47	0	54	58	33	864		0

Thursday May 25, 2017

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
5:00 PM	0	2	19	3	0	5	45	28	0	4	4	4	0	24	0	3	141	**700**	0
5:15 PM	0	3	36	4	0	26	31	41	0	3	1	4	0	18	5	2	174	559	0
5:30 PM	0	4	37	4	0	35	46	30	0	2	1	6	0	18	12	3	198	385	0
5:45 PM	0	2	39	10	0	47	39	21	0	0	0	0	0	16	10	3	187	187	0
	0	11	131	21	0	113	161	120	0	9	6	14	0	76	27	11	700		0

Average

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	3	28	2	0	11	46	30	0	2	4	6	0	20	1	3	154		
8:00 AM	0	6	35	5	0	23	38	47	0	2	2	9	0	17	5	4	189		
815 AM	0	5	36	9	0	45	40	38	0	3	2	7	0	16	18	7	224		
8:30 AM	0	2	35	12	0	50	40	28	0	1	1	9	0	13	19	9	216		
	0	15	133	27	0	128	163	143	0	7	7	31	0	65	43	22	782		

P.M. PEAK HOUR (Generator)

Tuesday May 23, 2017

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
3:15 PM	0	2	24	0	0	4	26	11	0	0	1	4	0	17	1	1	91	**527**	0
3:30 PM	0	3	24	1	0	12	31	15	0	1	0	3	0	3	6	1	100	528	0
3:45 PM	0	5	23	2	0	20	20	23	0	5	5	11	0	31	7	7	159	544	0
4:00 PM	0	4	22	0	0	13	37	14	0	13	22	14	0	31	4	3	177	493	0
	0	14	93	3	0	49	114	63	0	19	28	32	0	82	18	12	527		0

Thursday May 25, 2017

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
3:15 PM	0	2	30	0	0	2	28	12	0	1	0	1	0	8	1	2	87	**465**	0
3:30 PM	0	2	25	0	0	11	23	16	0	0	1	7	0	16	3	1	105	470	0
3:45 PM	0	5	13	0	0	4	15	15	0	1	6	3	0	19	4	1	86	450	0
4:00 PM	0	2	20	0	0	14	38	22	0	15	16	23	0	27	4	6	187	457	0
	0	11	88	0	0	31	104	65	0	17	23	34	0	70	12	10	465		0

Average

Time Period	W Highschool Rd EB				E Highschool Rd WB				S Middleschool RD NB				N Middleschool RD SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	2	27	0	0	3	27	12	0	1	1	3	0	13	1	2	89		
8:00 AM	0	3	25	1	0	12	27	16	0	1	1	5	0	10	5	1	103		
815 AM	0	5	18	1	0	12	18	19	0	3	6	7	0	25	6	4	123		
8:30 AM	0	3	21	0	0	14	38	18	0	14	19	19	0	29	4	5	182		
	0	13	91	2	0	40	109	64	0	18	26	33	0	76	15	11	496		

US 89 and High School Road

A.M. Peak Hour for transportation network is 7:45-8:45 AM. PM Peak Hours for network is 5:00-6:00 PM, School PM Peak Hour is 3:15-4:15 PM Values from traffic counts completed on May 23 and May 25th utilized in determining A.M. Peak Hour traffic volumes on network during normal off-peak season in the area.

A.M. PEAK HOUR (transportation network)

Tuesday May 23, 2017

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	52	0	16	0	0	0	0	0	105	206	0	0	0	80	51	510	**1906**	0
8:00 AM	0	57	0	24	0	0	0	0	0	69	207	0	0	0	62	46	465	1839	0
815 AM	0	56	0	11	0	0	0	0	0	62	190	0	0	0	90	82	491	1374	0
8:30 AM	0	61	0	11	0	0	0	0	0	86	151	0	0	0	66	65	440	883	0
	0	226	0	62	0	0	0	0	0	322	754	0	0	0	298	244	1906		0

Thursday May 25, 2017

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	71	0	20	0	0	0	0	0	101	111	0	0	0	91	74	468	**1664**	0
8:00 AM	0	75	0	15	0	0	0	0	0	46	160	0	0	0	90	60	446	1596	0
8:15 AM	0	75	0	13	0	0	0	0	0	62	99	0	0	0	44	40	333	1150	0
8:30 AM	0	31	0	5	0	0	0	0	0	60	123	0	0	0	143	50	417	817	0
	0	252	0	53	0	0	0	0	0	269	493	0	0	0	368	224	1664		0

Average

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	62	0	18	0	0	0	0	0	103	159	0	0	0	86	63	489		
8:00 AM	0	66	0	20	0	0	0	0	0	58	184	0	0	0	76	53	456		
815 AM	0	66	0	12	0	0	0	0	0	62	145	0	0	0	67	61	412		
8:30 AM	0	46	0	8	0	0	0	0	0	73	137	0	0	0	105	58	426		
	0	239	0	58	0	0	0	0	0	296	624	0	0	0	333	234	1783		

P.M. PEAK HOUR (transportation network)

Tuesday May 23, 2017

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
5:00 PM	0	90	0	40	0	0	0	0	0	37	116	0	0	0	197	56	536	**2205**	0
5:15 PM	0	81	0	39	0	0	0	0	0	57	118	0	0	0	240	70	605	1669	0
5:30 PM	0	70	0	34	0	0	0	0	0	53	102	0	0	0	181	84	524	1064	0
5:45 PM	0	63	0	27	0	0	0	0	0	23	118	0	0	0	187	122	540	540	0
	0	304	0	140	0	0	0	0	0	170	454	0	0	0	805	332	2205		0

Thursday May 25, 2017

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
5:00 PM	0	59	0	39	0	0	0	0	0	39	143	0	0	0	229	48	557	**2167**	0
5:15 PM	0	65	0	39	0	0	0	0	0	37	115	0	0	0	213	64	533	1610	0
5:30 PM	0	59	0	44	0	0	0	0	0	50	119	0	0	0	188	95	555	1077	0
5:45 PM	0	73	0	54	0	0	0	0	0	39	121	0	0	0	158	77	522	522	0
	0	256	0	176	0	0	0	0	0	165	498	0	0	0	788	284	2167		0

Average

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	75	0	40	0	0	0	0	0	38	130	0	0	0	213	52	547		
8:00 AM	0	73	0	39	0	0	0	0	0	47	117	0	0	0	227	67	569		
815 AM	0	65	0	39	0	0	0	0	0	52	111	0	0	0	185	90	540		
8:30 AM	0	68	0	41	0	0	0	0	0	31	120	0	0	0	173	100	531		
	0	280	0	158	0	0	0	0	0	168	476	0	0	0	797	308	2186		

P.M. PEAK HOUR

Tuesday May 23, 2017

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
3:15 PM	0	48	0	30	0	0	0	0	0	17	107	0	0	0	130	4	336	**1599**	0
3:30 PM	0	39	0	20	0	0	0	0	0	28	87	0	0	0	119	47	340	1665	0
3:45 PM	0	91	0	20	0	0	0	0	0	20	95	0	0	0	153	50	429	1729	0
4:00 PM	0	87	0	39	0	0	0	0	0	37	133	0	0	0	163	35	494	1744	0
	0	265	0	109	0	0	0	0	0	102	422	0	0	0	565	136	1599		0

Thursday May 25, 2017

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
3:15 PM	0	52	0	34	0	0	0	0	0	30	72	0	0	0	145	19	352	**1699**	0
3:30 PM	0	59	0	28	0	0	0	0	0	36	105	0	0	0	148	41	417	1810	0
3:45 PM	0	81	0	30	0	0	0	0	0	36	86	0	0	0	146	48	427	1872	0
4:00 PM	0	104	0	40	0	0	0	0	0	44	120	0	0	0	131	64	503	1932	0
	0	296	0	132	0	0	0	0	0	146	383	0	0	0	570	172	1699		0

Average

Time Period	W Highschool RD EB				N/A				S US 89 NB				N US 89 SB				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	Vehicles	Running Hourly	Peds
7:45 AM	0	50	0	32	0	0	0	0	0	24	90	0	0	0	138	12	344		
8:00 AM	0	49	0	24	0	0	0	0	0	32	96	0	0	0	134	44	379		
815 AM	0	86	0	25	0	0	0	0	0	28	91	0	0	0	150	49	428		
8:30 AM	0	96	0	40	0	0	0	0	0	41	127	0	0	0	147	50	499		
	0	281	0	121	0	0	0	0	0	124	403	0	0	0	568	154	1649		

Turn Count Summary

Location: at ,
GPS Coordinates: Lat=43.458397, Lon=-110.797361
Date: 2019-09-24
Day of week: Tuesday
Weather:
Analyst:

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00	10	0	2	0	25	14	0	0	0	2	13	0	66
07:15	6	0	2	0	39	22	0	0	0	1	23	0	93
07:30	8	0	5	0	64	31	0	0	0	8	40	0	156
07:45	11	0	10	1	141	32	0	0	0	9	85	0	289
08:00	21	0	16	1	104	43	0	0	0	15	96	0	296
08:15	22	0	9	1	122	23	0	0	0	5	58	0	240
08:30	17	0	15	0	125	23	0	0	1	15	86	0	282
08:45	23	0	13	0	77	23	0	0	0	24	90	0	250
09:00	28	0	11	0	35	34	0	0	0	2	47	0	157
09:15	9	0	5	0	33	13	0	0	0	6	31	0	97
09:30	5	0	6	0	27	10	0	0	0	2	30	0	80
09:45	14	0	4	0	42	21	0	0	0	10	23	0	114
10:00	0	0	1	0	3	0	0	0	0	0	2	0	6

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00	10	0	2	0	25	14	0	0	0	2	13	0	66
07:15	6	0	2	0	39	22	0	0	0	1	23	0	93
07:30	8	0	5	0	64	31	0	0	0	8	40	0	156
07:45	11	0	10	1	141	32	0	0	0	9	85	0	289
08:00	21	0	16	1	104	43	0	0	0	15	96	0	296
08:15	22	0	9	1	122	23	0	0	0	5	57	0	239
08:30	17	0	15	0	125	23	0	0	1	15	86	0	282
08:45	23	0	13	0	77	23	0	0	0	24	90	0	250
09:00	28	0	11	0	35	34	0	0	0	2	47	0	157
09:15	9	0	5	0	33	13	0	0	0	6	31	0	97
09:30	5	0	6	0	27	10	0	0	0	2	30	0	80
09:45	14	0	4	0	42	21	0	0	0	10	23	0	114
10:00	0	0	1	0	3	0	0	0	0	0	2	0	6

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	1	0	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

07:45 - 08:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	71	0	50	3	492	121	0	0	1	44	325	0	1107
Factor	0.81	0.00	0.78	0.75	0.87	0.70	0.00	0.00	0.25	0.73	0.85	0.00	0.93
Approach Factor	0.82			0.89			0.25			0.83			

Peak Hour Vehicle Summary

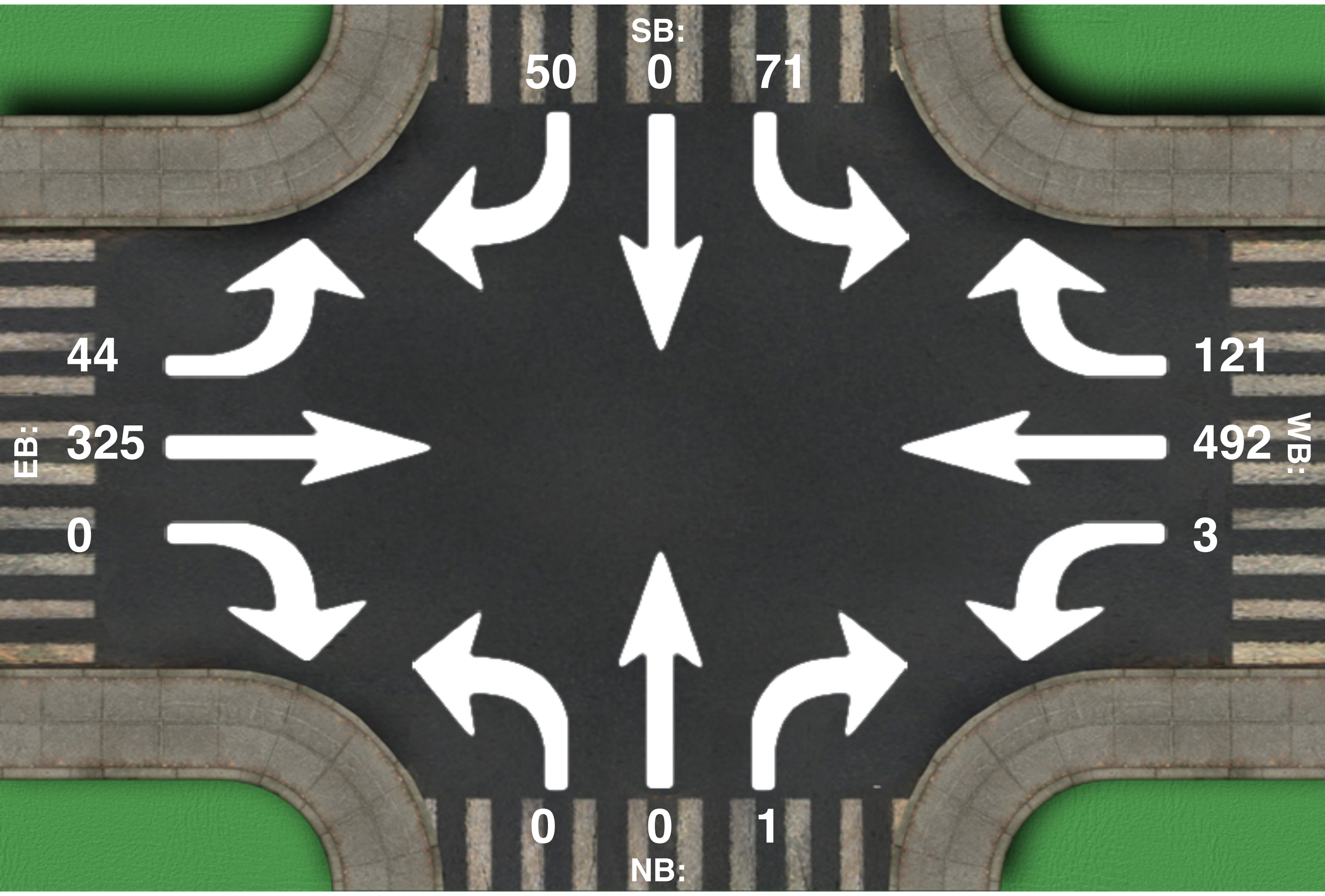
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	71	0	50	3	492	121	0	0	1	44	324	0	1106
Truck	0	0	0	0	0	0	0	0	0	0	1	0	1

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

Location: at ,
GPS Coordinates: Lat=43.458397, Lon=-110.797361
Date: 2019-09-24
Day of week: Tuesday
Weather:
Analyst:



Intersection Peak Hour

07:45 - 08:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	71	0	50	3	492	121	0	0	1	44	325	0	1107
Factor	0.81	0.00	0.78	0.75	0.87	0.70	0.00	0.00	0.25	0.73	0.85	0.00	0.93
Approach Factor	0.82			0.89			0.25			0.83			

Turn Count Summary

Location: at ,
GPS Coordinates: Lat=43.458397, Lon=-110.797361
Date: 2019-09-24
Day of week: Tuesday
Weather:
Analyst:

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:00	30	0	10	1	61	20	0	0	0	9	43	0	174
15:15	17	0	12	0	49	27	0	0	0	12	60	0	177
15:30	20	0	22	1	84	19	0	0	1	8	53	0	208
15:45	18	0	15	3	71	32	0	0	1	10	111	3	264
16:00	32	0	7	0	53	37	0	0	0	29	179	0	337
16:15	27	0	11	0	51	33	0	0	0	12	63	0	197
16:30	26	0	9	1	55	27	0	0	0	7	44	0	169
16:45	45	0	9	0	68	21	0	0	0	13	55	0	211
17:00	35	0	17	0	84	23	0	0	0	7	103	0	269
17:15	29	0	19	0	122	23	0	0	0	4	86	0	283
17:30	36	0	17	0	97	13	0	0	0	6	78	0	247
17:45	28	0	10	0	71	21	0	0	0	10	75	0	215
18:00	0	0	0	0	0	0	0	0	0	0	1	0	1

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:00	30	0	10	1	61	20	0	0	0	9	43	0	174
15:15	17	0	12	0	49	27	0	0	0	12	60	0	177
15:30	20	0	22	1	84	19	0	0	1	8	53	0	208
15:45	17	0	15	3	71	32	0	0	1	10	110	3	262
16:00	32	0	7	0	53	37	0	0	0	29	178	0	336
16:15	27	0	11	0	51	33	0	0	0	12	63	0	197
16:30	26	0	9	1	55	27	0	0	0	7	44	0	169
16:45	45	0	9	0	68	21	0	0	0	13	55	0	211
17:00	35	0	17	0	84	23	0	0	0	7	103	0	269
17:15	29	0	19	0	121	23	0	0	0	4	86	0	282
17:30	36	0	17	0	97	13	0	0	0	5	78	0	246
17:45	28	0	10	0	71	21	0	0	0	10	75	0	215
18:00	0	0	0	0	0	0	0	0	0	0	1	0	1

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	1	0	0	0	0	0	0	0	0	0	1	0	2
16:00	0	0	0	0	0	0	0	0	0	0	1	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	1	0	0	0	0	0	0	0	1
17:30	0	0	0	0	0	0	0	0	0	1	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
15:00	0	0	0	2	0	2	0	0	0	0	0	0	2
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

17:00 - 18:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	128	0	63	0	374	80	0	0	0	27	342	0	1014
Factor	0.89	0.00	0.83	0.00	0.77	0.87	0.00	0.00	0.00	0.68	0.83	0.00	0.90
Approach Factor	0.90			0.78			0.00			0.84			

Peak Hour Vehicle Summary

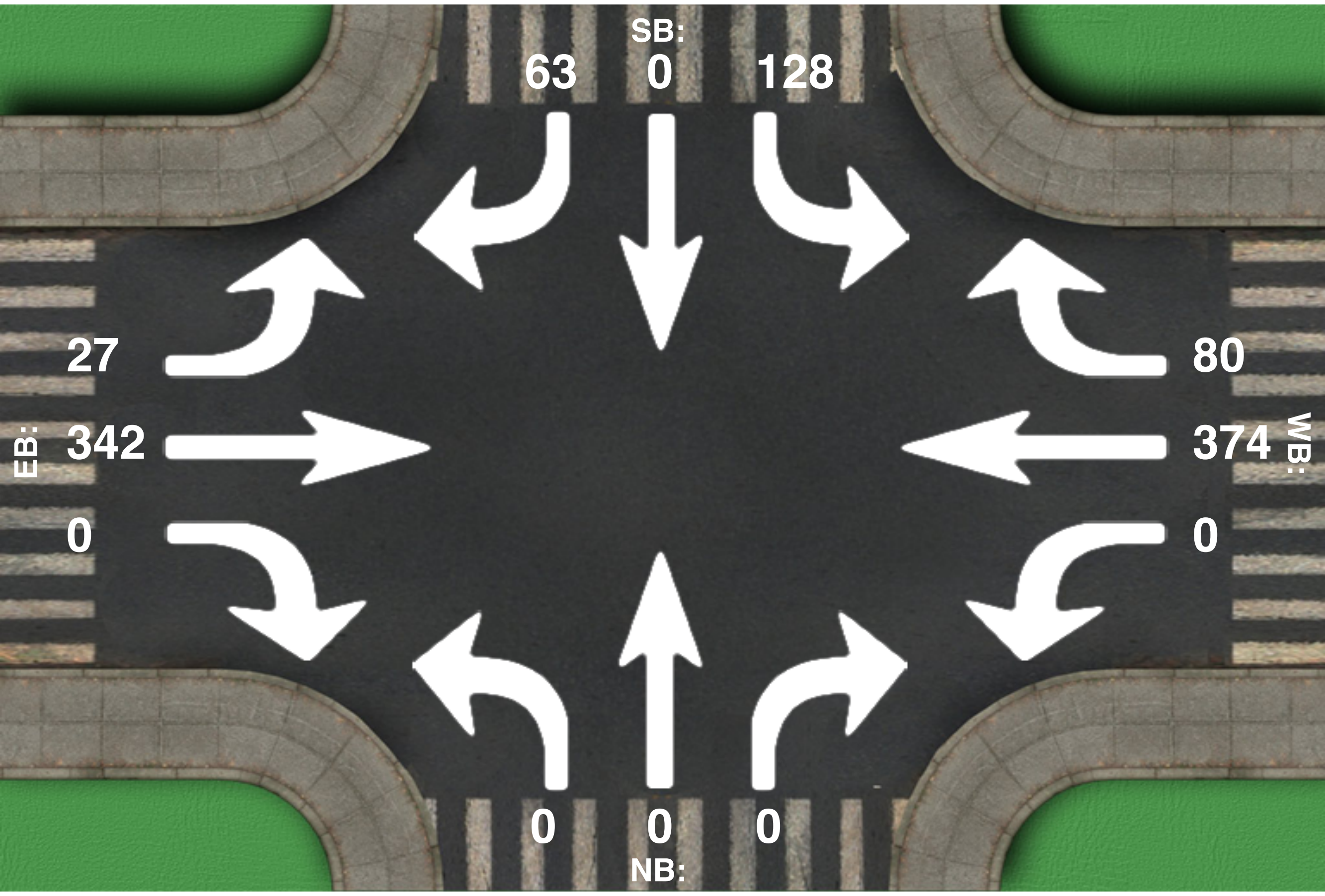
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	128	0	63	0	373	80	0	0	0	26	342	0	1012
Truck	0	0	0	0	1	0	0	0	0	1	0	0	2

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

Location: at ,
GPS Coordinates: Lat=43.458397, Lon=-110.797361
Date: 2019-09-24
Day of week: Tuesday
Weather:
Analyst:



Intersection Peak Hour

17:00 - 18:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	128	0	63	0	374	80	0	0	0	27	342	0	1014
Factor	0.89	0.00	0.83	0.00	0.77	0.87	0.00	0.00	0.00	0.68	0.83	0.00	0.90
Approach Factor	0.90			0.78			0.00			0.84			

, ,

Turn Count Summary

Location: at ,
GPS Coordinates:
Date: 2019-09-26
Day of week: Thursday
Weather:
Analyst:

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00	7	0	3	0	10	14	0	0	0	4	16	0	54
07:15	13	0	2	0	46	33	0	0	0	4	26	0	124
07:30	15	0	5	0	70	31	0	0	1	7	47	1	177
07:45	12	0	11	0	128	45	0	0	0	10	80	0	286
08:00	16	0	11	0	113	36	0	0	0	11	109	0	296
08:15	16	0	9	0	113	23	0	0	0	8	80	0	249
08:30	17	0	14	0	139	27	0	0	0	15	73	0	285
08:45	10	0	8	0	80	29	0	0	0	25	88	0	240
09:00	24	0	5	1	39	27	0	0	1	4	43	0	144
09:15	17	0	2	1	23	20	0	0	1	3	33	0	100
09:30	21	0	5	0	24	19	0	0	0	7	35	0	111
09:45	15	0	8	1	38	28	0	0	0	5	31	0	126

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00	7	0	3	0	10	14	0	0	0	4	16	0	54
07:15	13	0	2	0	46	33	0	0	0	4	26	0	124
07:30	15	0	5	0	70	31	0	0	1	7	47	1	177
07:45	12	0	11	0	128	45	0	0	0	10	80	0	286
08:00	16	0	11	0	113	36	0	0	0	11	109	0	296
08:15	16	0	9	0	113	23	0	0	0	8	80	0	249
08:30	17	0	14	0	139	27	0	0	0	15	73	0	285
08:45	10	0	8	0	80	29	0	0	0	25	88	0	240
09:00	24	0	5	1	39	27	0	0	1	4	43	0	144
09:15	17	0	2	1	23	20	0	0	1	3	33	0	100
09:30	21	0	5	0	24	19	0	0	0	7	35	0	111
09:45	15	0	8	1	38	28	0	0	0	5	31	0	126

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
07:00	0	1	1	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	1	1	0	0	0	0	0	0	0	0	0	1
07:45	0	3	3	2	0	2	0	0	0	0	0	0	5
08:00	0	3	3	0	1	1	0	0	0	0	0	0	4
08:15	0	12	12	0	3	3	0	0	0	0	0	0	15
08:30	0	13	13	0	0	0	0	0	0	0	0	0	13
08:45	0	3	3	0	1	1	0	0	0	0	0	0	4
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	1	1	3	1	4	0	0	0	0	0	0	5
09:30	0	1	1	0	0	0	0	0	0	0	0	0	1
09:45	0	3	3	2	0	2	2	0	2	0	0	0	7

Intersection Peak Hour

07:45 - 08:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	61	0	45	0	493	131	0	0	0	44	342	0	1116
Factor	0.90	0.00	0.80	0.00	0.89	0.73	0.00	0.00	0.00	0.73	0.78	0.00	0.94
Approach Factor	0.85			0.90			0.00			0.80			

Peak Hour Vehicle Summary

Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	61	0	45	0	493	131	0	0	0	44	342	0	1116
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	0	31	31	2	4	6	0	0	0	0	0	0	37

Intersection Peak Hour

Location: at ,

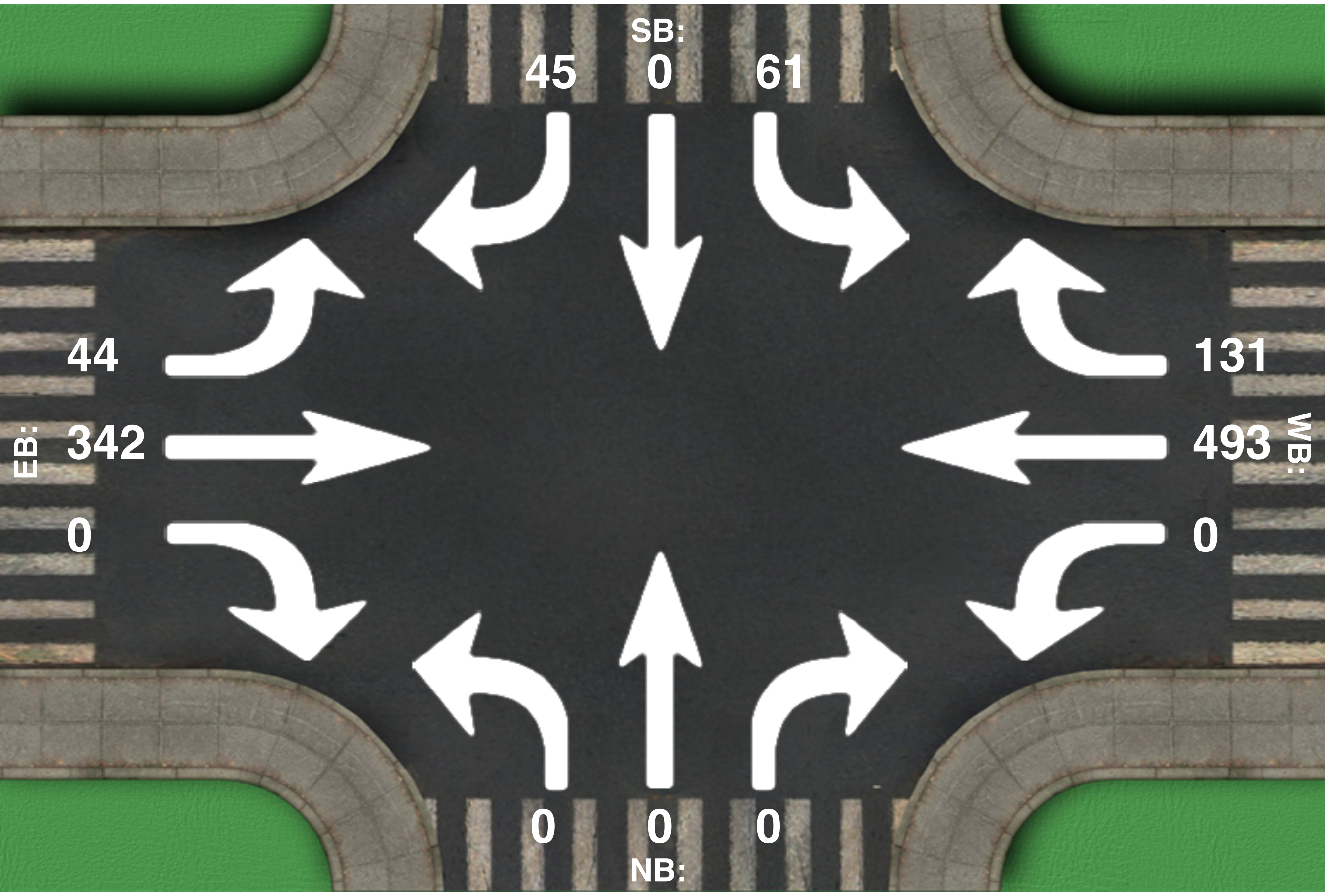
GPS Coordinates:

Date: 2019-09-26

Day of week: Thursday

Weather:

Analyst:



Intersection Peak Hour

07:45 - 08:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	61	0	45	0	493	131	0	0	0	44	342	0	1116
Factor	0.90	0.00	0.80	0.00	0.89	0.73	0.00	0.00	0.00	0.73	0.78	0.00	0.94
Approach Factor	0.85			0.90			0.00			0.80			

Turn Count Summary

Location: at ,
GPS Coordinates: Lat=43.422384, Lon=-110.773804
Date: 2019-09-26
Day of week: Thursday
Weather:
Analyst:

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:00	13	0	4	0	44	15	0	0	0	8	49	0	133
15:15	12	0	9	0	81	19	0	0	0	10	37	0	168
15:30	31	0	16	0	58	19	0	0	0	4	36	0	164
15:45	16	0	11	1	85	33	0	0	0	20	108	0	274
16:00	20	0	8	2	56	18	0	0	0	23	151	0	278
16:15	27	0	15	2	67	24	0	0	0	16	74	0	225
16:30	35	0	9	0	63	24	0	0	0	10	80	0	221
16:45	24	0	11	1	90	26	0	1	1	10	66	0	230
17:00	40	0	18	0	89	17	0	0	0	5	78	0	247
17:15	29	0	21	0	118	10	0	0	0	10	64	0	252
17:30	26	0	19	0	99	16	0	0	0	5	98	0	263
17:45	18	0	8	0	81	15	0	0	0	6	64	0	192
18:00	3	0	0	0	1	1	0	0	0	1	0	0	6

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:00	13	0	4	0	44	15	0	0	0	8	49	0	133
15:15	12	0	9	0	81	19	0	0	0	10	37	0	168
15:30	31	0	16	0	58	19	0	0	0	4	36	0	164
15:45	16	0	11	1	85	33	0	0	0	20	108	0	274
16:00	20	0	8	2	56	18	0	0	0	23	151	0	278
16:15	27	0	15	2	67	24	0	0	0	16	74	0	225
16:30	35	0	9	0	63	24	0	0	0	10	80	0	221
16:45	24	0	11	1	90	26	0	1	1	10	66	0	230
17:00	40	0	18	0	89	17	0	0	0	5	78	0	247
17:15	29	0	21	0	118	10	0	0	0	10	64	0	252
17:30	26	0	19	0	99	16	0	0	0	5	98	0	263
17:45	18	0	8	0	81	15	0	0	0	6	64	0	192
18:00	3	0	0	0	1	1	0	0	0	1	0	0	6

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
15:00	0	1	1	5	1	6	0	0	0	0	0	0	7
15:15	0	0	0	1	0	1	0	0	0	0	0	0	1
15:30	0	2	2	7	0	7	0	0	0	0	0	0	9
15:45	1	2	3	22	0	22	0	0	0	0	0	0	25
16:00	0	7	7	45	0	45	7	0	7	0	0	0	59
16:15	0	8	8	2	7	9	0	0	0	0	0	0	17
16:30	0	8	8	22	4	26	2	0	2	0	0	0	36
16:45	0	7	7	5	0	5	3	0	3	0	0	0	15
17:00	1	6	7	0	3	3	0	0	0	0	0	0	10
17:15	0	0	0	1	3	4	0	0	0	0	0	0	4
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	2	0	2	0	0	0	0	0	0	2
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

15:45 - 16:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	98	0	43	5	271	99	0	0	0	69	413	0	998
Factor	0.70	0.00	0.72	0.62	0.80	0.75	0.00	0.00	0.00	0.75	0.68	0.00	0.90
Approach Factor	0.80			0.79			0.00			0.69			

Peak Hour Vehicle Summary

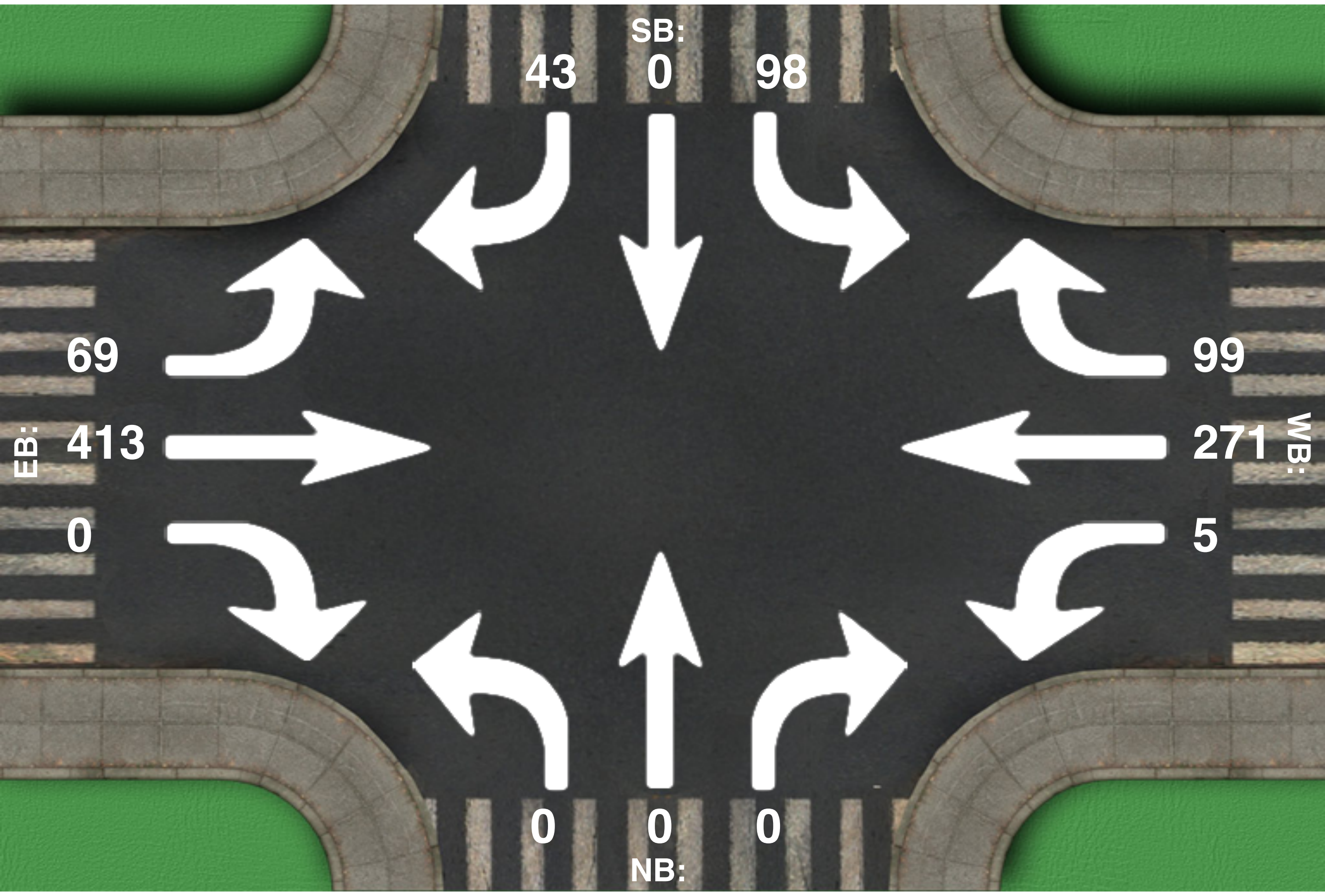
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	98	0	43	5	271	99	0	0	0	69	413	0	998
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	1	25	26	91	11	102	9	0	9	0	0	0	137

Intersection Peak Hour

Location: at ,
GPS Coordinates: Lat=43.422384, Lon=-110.773804
Date: 2019-09-26
Day of week: Thursday
Weather:
Analyst:



Intersection Peak Hour

15:45 - 16:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	98	0	43	5	271	99	0	0	0	69	413	0	998
Factor	0.70	0.00	0.72	0.62	0.80	0.75	0.00	0.00	0.00	0.75	0.68	0.00	0.90
Approach Factor	0.80			0.79			0.00			0.69			

Appendix C

2021 Intersection Analysis

JORGENSEN

Appendix C-1

2021 Baseline Analysis

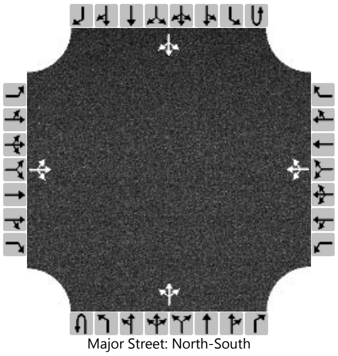
JORGENSEN

HCS7 Two-Way Stop-Control Report

General Information | Site Information

Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	AM Peah Hour	Peak Hour Factor	0.71
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 Baseline AM Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	2	1		48	8	42		0	83	106		46	66	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

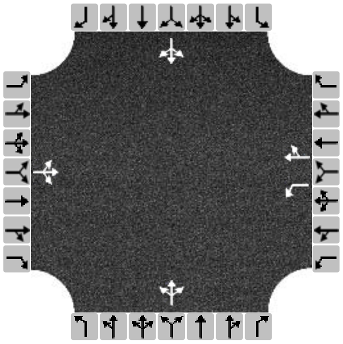
Flow Rate, v (veh/h)			8				138			0				65		
Capacity, c (veh/h)			497				620			1494				1298		
v/c Ratio			0.02				0.22			0.00				0.05		
95% Queue Length, Q_{95} (veh)			0.1				0.8			0.0				0.2		
Control Delay (s/veh)			12.4				12.5			7.4				7.9		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	12.4				12.5				0.0				3.4			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information / Site Information

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.85
Time Analyzed	A.M. Peak Hour		
Project Description	2021 Traffic Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	15	168	33	169	83	75	1	12	9	138	58	11
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	254			199	186		26			244		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.226			0.177	0.165		0.023			0.216		
Final Departure Headway, hd (s)	5.30			6.17	5.33		5.81			5.66		
Final Degree of Utilization, x	0.374			0.341	0.275		0.042			0.383		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.30			3.87	3.03		3.81			3.66		

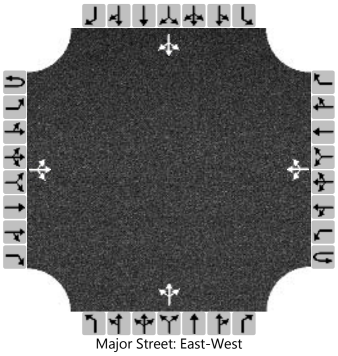
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	254			199	186		26			244		
Capacity	679			583	676		620			636		
95% Queue Length, Q_{95} (veh)	1.7			1.5	1.1		0.1			1.8		
Control Delay (s/veh)	11.4			12.0	10.0		9.1			12.1		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	11.4			11.1			9.1			12.1		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	11.4						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 Baseline AM Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		45	340	0		2	502	129		0	0	1		67	0	48
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

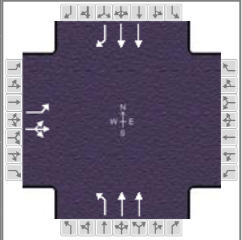
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		48				2					1				122	
Capacity, c (veh/h)		919				1197					683				256	
v/c Ratio		0.05				0.00					0.00				0.48	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				2.4	
Control Delay (s/veh)		9.1				8.0					10.3				31.3	
Level of Service (LOS)		A				A					B				D	
Approach Delay (s/veh)	1.6				0.0				10.3				31.3			
Approach LOS									B				D			

HCS™ TWSC Version 7.8.5 Generated: 10/3/2019 12:54:16 PM
2021 Baseline High School Road and Gregory Lane_AM Peak Hour.xtw

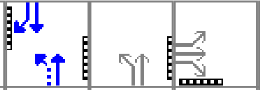
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 7:45
Intersection	US 89/High School Road	File Name	US89_High School Road_A.M. Peak Hour_2021.…		
Project Description	2021 A.M. Peak Hr cord. plan 2				

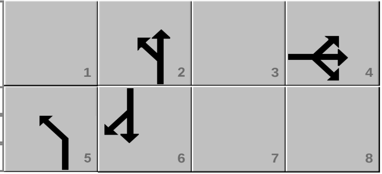


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	249	0	60				307	649			347	244

Signal Information			
Cycle, s	85.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	52.8	4.3	13.4	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		17.6			9.3	67.4		58.1
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (g_s), s		11.9			2.0			
Green Extension Time (g_e), s		1.5			0.7	0.0		0.0
Phase Call Probability		1.00			1.00			
Max Out Probability		0.27			1.00			

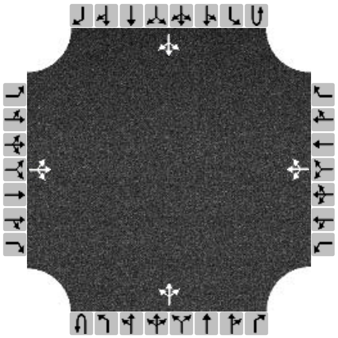
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	192	148					337	713			381	268
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1581	1504					1556	1606			1581	1407
Queue Service Time (g_s), s	9.9	8.1					0.0	6.5			4.4	7.6
Cycle Queue Clearance Time (g_c), s	9.9	8.1					0.0	6.5			4.4	7.6
Green Ratio (*g/C*)	0.16	0.16					0.67	0.73			0.62	0.62
Capacity (*c*), veh/h	249	237					714	2346			1963	874
Volume-to-Capacity Ratio (*X*)	0.768	0.624					0.472	0.304			0.194	0.307
Back of Queue (*Q*), ft/ln (95 th percentile)	192.2	153.5					140.3	67.9			58.9	95.6
Back of Queue (*Q*), veh/ln (95 th percentile)	7.5	6.0					5.4	2.7			2.3	3.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.48	0.38					0.28	0.14			0.12	0.60
Uniform Delay (d_1), s/veh	34.3	37.1					9.6	4.0			6.9	7.5
Incremental Delay (d_2), s/veh	8.2	4.5					0.2	0.3			0.2	0.9
Initial Queue Delay (d_3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	42.5	41.6					9.7	4.3			7.2	8.4
Level of Service (LOS)	D	D					A	A			A	A
Approach Delay, s/veh / LOS	42.1		D	0.0			6.1		A	7.7		A
Intersection Delay, s/veh / LOS	12.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.62	B	1.94	B
Bicycle LOS Score / LOS	1.05	A			1.35	A	1.02	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.89
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 Baseline PM Peak Hour		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	14	0		50	3	23		0	76	75		18	44	2
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

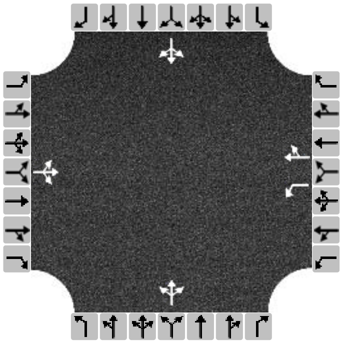
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17				85			0				20		
Capacity, c (veh/h)			638				759			1554				1408		
v/c Ratio			0.03				0.11			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.4			0.0				0.0		
Control Delay (s/veh)			10.8				10.3			7.3				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.8				10.3				0.0				2.2			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	P.M. Peak Hour 5-6		
Project Description	2021 Traffic Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16	138	28	133	170	148	7	7	32	68	44	23
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	209			153	366		53			155		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.186			0.136	0.325		0.047			0.138		
Final Departure Headway, hd (s)	5.18			5.88	5.05		5.51			5.67		
Final Degree of Utilization, x	0.301			0.250	0.512		0.081			0.244		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.18			3.58	2.75		3.51			3.67		

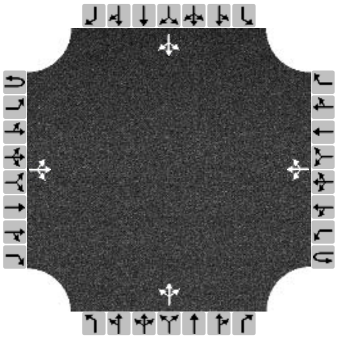
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	209			153	366		53			155		
Capacity	695			612	713		653			635		
95% Queue Length, Q_{95} (veh)	1.3			1.0	3.0		0.3			1.0		
Control Delay (s/veh)	10.4			10.5	12.9		9.0			10.5		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	10.4			12.2			9.0			10.5		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	11.3						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 PM Peak Hour		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		27	336	0		0	388	70		0	0	0		123	0	66
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

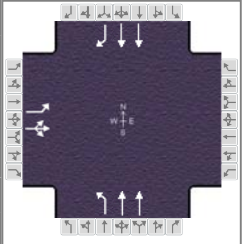
Flow Rate, v (veh/h)		28				0					0				197	
Capacity, c (veh/h)		1085				1209									341	
v/c Ratio		0.03				0.00									0.58	
95% Queue Length, Q_{95} (veh)		0.1				0.0									3.4	
Control Delay (s/veh)		8.4				8.0									29.0	
Level of Service (LOS)		A				A									D	
Approach Delay (s/veh)	0.9				0.0								29.0			
Approach LOS													D			

HCS™ TWSC Version 7.8.5 Generated: 10/4/2019 12:41:23 PM

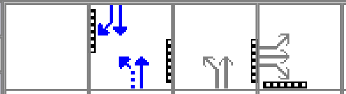
2021 Baseline High School Road and Gregory Lane_PM Peak Hour.xtw

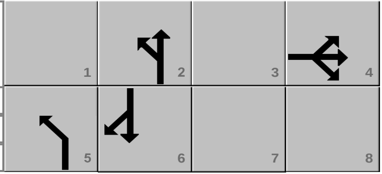
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.96
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_P.M. Peak Hour_Baseli…		
Project Description	2021 Existing P.M. Peak Hr-				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	291	0	164				174	495			829	321





Signal Information										
Cycle, s	84.0	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	49.1	4.2	16.2	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		20.4			9.2	63.6		54.4
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (g_s), s		14.8			2.0			
Green Extension Time (g_e), s		1.4			0.5	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

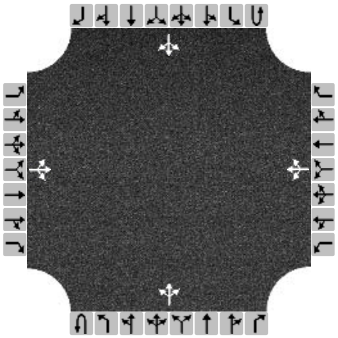
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	255	219					181	516			864	334
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1477					1606	1593			1581	1418
Queue Service Time (g_s), s	12.8	12.0					0.0	5.0			13.1	10.8
Cycle Queue Clearance Time (g_c), s	12.8	12.0					0.0	5.0			13.1	10.8
Green Ratio (*g/C*)	0.19	0.19					0.63	0.69			0.58	0.58
Capacity (*c*), veh/h	309	285					437	2212			1847	829
Volume-to-Capacity Ratio (*X*)	0.823	0.771					0.414	0.233			0.468	0.404
Back of Queue (*Q*), ft/ln (95 th percentile)	247.8	218.7					103.1	56.5			184.7	142.4
Back of Queue (*Q*), veh/ln (95 th percentile)	9.8	8.7					4.1	2.2			7.2	5.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.62	0.55					0.21	0.11			0.37	0.89
Uniform Delay (d_1), s/veh	32.5	33.9					16.1	4.7			10.0	9.5
Incremental Delay (d_2), s/veh	13.6	10.3					0.2	0.2			0.9	1.5
Initial Queue Delay (d_3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	46.1	44.2					16.3	4.9			10.8	11.0
Level of Service (LOS)	D	D					B	A			B	B
Approach Delay, s/veh / LOS	45.2	D		0.0			7.9	A		10.9	B	
Intersection Delay, s/veh / LOS	16.9						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.27	A			1.06	A	1.48	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM School Peak Hour	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 baseline		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	7	2		72	2	39		1	58	59		24	55	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

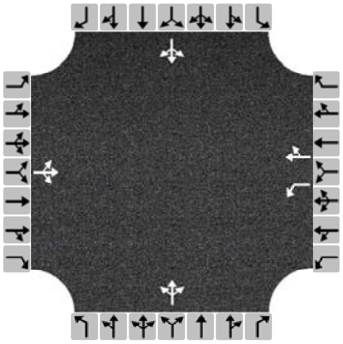
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			12				124			1				26		
Capacity, c (veh/h)			694				786			1537				1457		
v/c Ratio			0.02				0.16			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.6			0.0				0.1		
Control Delay (s/veh)			10.3				10.4			7.3				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.3				10.4				0.1				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.68
Time Analyzed	P.M. Peak Hour 3:15-4:15		
Project Description	2021 Traffic Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	13	94	2	42	113	67	19	27	34	79	16	11
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	160			62	265		118			156		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.142			0.055	0.235		0.105			0.139		
Final Departure Headway, hd (s)	5.25			5.98	5.21		5.21			5.43		
Final Degree of Utilization, x	0.234			0.103	0.383		0.170			0.235		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.25			3.68	2.91		3.21			3.43		

Capacity, Delay and Level of Service

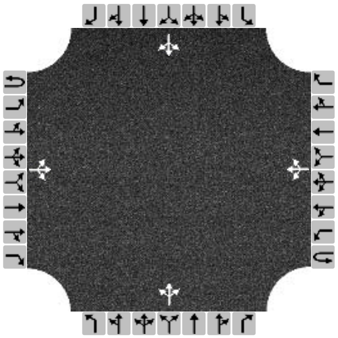
Flow Rate, v (veh/h)	160			62	265		118			156		
Capacity	686			602	691		691			663		
95% Queue Length, Q_{95} (veh)	0.9			0.3	1.8		0.6			0.9		
Control Delay (s/veh)	9.8			9.4	11.1		9.3			10.1		
Level of Service, LOS	A			A	B		A			B		
Approach Delay (s/veh)	9.8			10.8			9.3			10.1		
Approach LOS	A			B			A			B		
Intersection Delay, s/veh | LOS	10.2						B					

HCS7 Two-Way Stop-Control Report

General Information / Site Information

Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	School Peak Hour	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 Baseline School Peak Hour		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		59	375	2		4	274	104		0	0	1		85	0	51
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

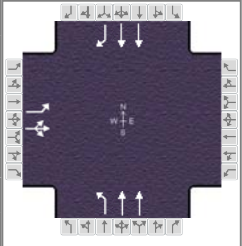
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		78				5					1				179	
Capacity, c (veh/h)		1067				1068					575				241	
v/c Ratio		0.07				0.00					0.00				0.74	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				5.2	
Control Delay (s/veh)		8.6				8.4					11.3				53.1	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	1.9				0.1				11.3				53.1			
Approach LOS									B				F			

HCS7 Signalized Intersection Results Summary

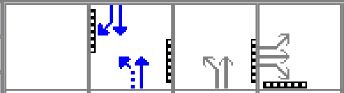
General Information			
Agency			
Analyst		Analysis Date	5/25/2018
Jurisdiction		Time Period	
Urban Street	US 89	Analysis Year	2018
Intersection	US 89/High School Road	File Name	US89_High School Road_School P.M. Peak Hour…
Project Description	2021 Existing School P.M. Peak Hr		

Intersection Information	
Duration, h	0.250
Area Type	Other
PHF	0.83
Analysis Period	1> 17:00

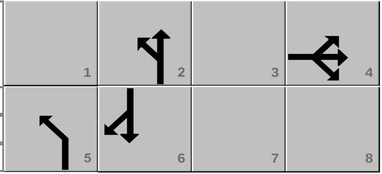


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	292	0	125				129	419			591	160

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	47.5	4.2	17.9	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		22.1			9.2	61.9		52.8
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		16.9			2.0			
Green Extension Time (*g* $_e$), s		0.9			0.4	0.0		0.0
Phase Call Probability		1.00			0.97			
Max Out Probability		1.00			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	296	207					155	505			712	193
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1486					1606	1593			1581	1418
Queue Service Time (*g* $_s$), s	14.9	11.0					0.0	5.2			10.6	5.7
Cycle Queue Clearance Time (*g* $_c$), s	14.9	11.0					0.0	5.2			10.6	5.7
Green Ratio (*g/C*)	0.21	0.21					0.61	0.67			0.56	0.56
Capacity (*c*), veh/h	341	316					486	2149			1786	801
Volume-to-Capacity Ratio (*X*)	0.865	0.655					0.320	0.235			0.399	0.241
Back of Queue (*Q*), ft/ln (95 th percentile)	293.2	195.1					78	61.5			152.1	76.8
Back of Queue (*Q*), veh/ln (95 th percentile)	11.6	7.8					3.1	2.4			5.9	3.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.73	0.49					0.16	0.12			0.30	0.48
Uniform Delay (*d* $_1$), s/veh	31.9	32.6					14.1	5.3			10.3	9.2
Incremental Delay (*d* $_2$), s/veh	18.7	5.1					0.1	0.3			0.7	0.7
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	50.6	37.7					14.2	5.6			10.9	9.9
Level of Service (LOS)	D	D					B	A			B	A
Approach Delay, s/veh / LOS	45.3	D		0.0			7.6	A		10.7	B	
Intersection Delay, s/veh / LOS	18.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.32	A			1.03	A	1.23	A

Appendix C-2

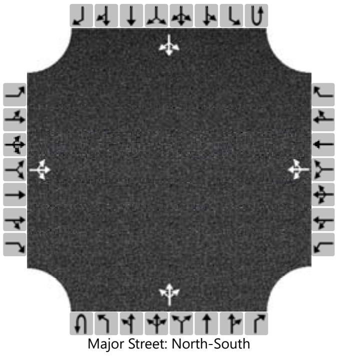
2021 Analysis
With Middle School Road as Access

JORGENSEN

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.71
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 AM Peak Hour- Middle School Road as Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	2	1		48	8	42		0	83	109		48	66	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

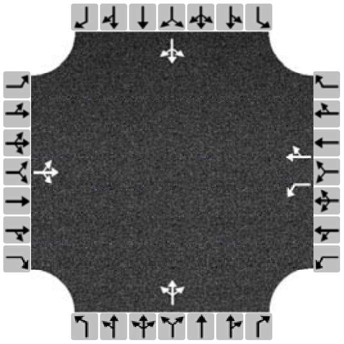
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8				138			0				68		
Capacity, c (veh/h)			491				614			1494				1293		
v/c Ratio			0.02				0.22			0.00				0.05		
95% Queue Length, Q_{95} (veh)			0.1				0.9			0.0				0.2		
Control Delay (s/veh)			12.5				12.6			7.4				7.9		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	12.5				12.6				0.0				3.5			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		**Site Information**	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/23/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.85
Time Analyzed	A.M. Peak Hour		
Project Description	2021 with CWC Middle School Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	15	168	36	186	83	75	1	12	9	138	64	11
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	258			219	186		26			251		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.229			0.195	0.165		0.023			0.223		
Final Departure Headway, hd (s)	5.35			6.21	5.37		5.90			5.72		
Final Degree of Utilization, x	0.383			0.377	0.277		0.042			0.398		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.35			3.91	3.07		3.90			3.72		

Capacity, Delay and Level of Service

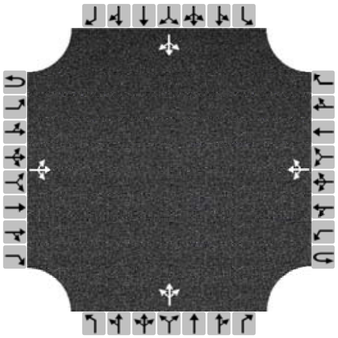
Flow Rate, v (veh/h)	258			219	186		26			251		
Capacity	672			580	671		610			629		
95% Queue Length, Q_{95} (veh)	1.8			1.8	1.1		0.1			1.9		
Control Delay (s/veh)	11.6			12.6	10.1		9.2			12.5		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	11.6			11.5			9.2			12.5		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	11.7						B					

HCS7 Two-Way Stop-Control Report

General Information / Site Information

Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 w CWC Middle School Road Access AM Peak Hour		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		45	340	0		2	518	129		0	0	1		67	0	50
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

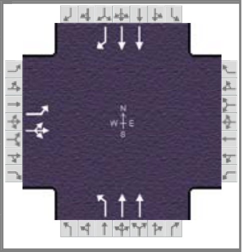
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		48				2					1				124	
Capacity, c (veh/h)		906				1197					683				251	
v/c Ratio		0.05				0.00					0.00				0.50	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				2.5	
Control Delay (s/veh)		9.2				8.0					10.3				32.6	
Level of Service (LOS)		A				A					B				D	
Approach Delay (s/veh)	1.6				0.0				10.3				32.6			
Approach LOS									B				D			

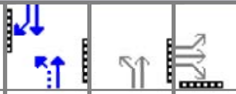
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 7:45
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_A.M. Peak Ho…		
Project Description	2021 A.M. Peak Hr plan 2- MS Road Access				

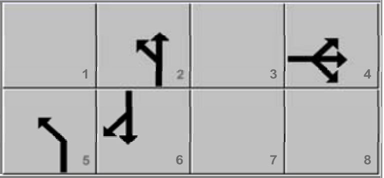


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	249	0	60				317	649			347	251

Signal Information			
Cycle, s	85.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	52.8	4.3	13.4	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		17.6			9.3	67.4		58.1
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		11.9			2.0			
Green Extension Time (*g* $_e$), s		1.5			0.7	0.0		0.0
Phase Call Probability		1.00			1.00			
Max Out Probability		0.27			1.00			

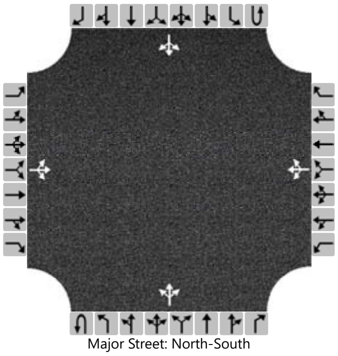
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	192	148					348	713			381	276
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1581	1504					1556	1606			1581	1407
Queue Service Time (*g* $_s$), s	9.9	8.1					0.0	6.5			4.4	7.9
Cycle Queue Clearance Time (*g* $_c$), s	9.9	8.1					0.0	6.5			4.4	7.9
Green Ratio (*g/C*)	0.16	0.16					0.67	0.73			0.62	0.62
Capacity (*c*), veh/h	249	237					714	2346			1963	874
Volume-to-Capacity Ratio (*X*)	0.768	0.624					0.488	0.304			0.194	0.316
Back of Queue (*Q*), ft/ln (95 th percentile)	192.2	153.5					147.2	67.9			58.9	99.6
Back of Queue (*Q*), veh/ln (95 th percentile)	7.5	6.0					5.7	2.7			2.3	3.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.48	0.38					0.29	0.14			0.12	0.62
Uniform Delay (*d* $_1$), s/veh	34.3	37.1					9.7	4.0			6.9	7.6
Incremental Delay (*d* $_2$), s/veh	8.2	4.5					0.2	0.3			0.2	0.9
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	42.5	41.6					9.9	4.3			7.2	8.5
Level of Service (LOS)	D	D					A	A			A	A
Approach Delay, s/veh / LOS	42.1		D	0.0			6.1		A	7.7		A
Intersection Delay, s/veh / LOS	12.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.62	B	1.94	B
Bicycle LOS Score / LOS	1.05	A			1.36	A	1.03	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.89
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC PM Peak Hour Middles School Rd Acces		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	14	0		52	3	24		0	76	77		18	44	2
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

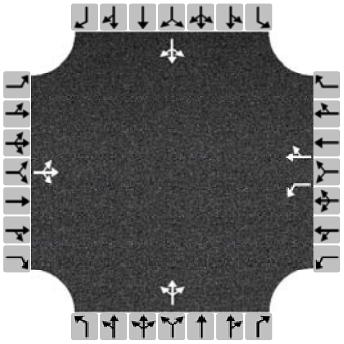
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17				89			0				20		
Capacity, c (veh/h)			636				758			1554				1405		
v/c Ratio			0.03				0.12			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.4			0.0				0.0		
Control Delay (s/veh)			10.8				10.4			7.3				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.8				10.4				0.0				2.2			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	P.M. Peak Hour 5-6		
Project Description	2021 with CWC Middle School Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16	138	31	148	170	146	9	9	41	68	49	23
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	213			170	363		68			161		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.189			0.151	0.323		0.060			0.143		
Final Departure Headway, hd (s)	5.29			5.98	5.15		5.62			5.79		
Final Degree of Utilization, x	0.313			0.282	0.519		0.106			0.259		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.29			3.68	2.85		3.62			3.79		

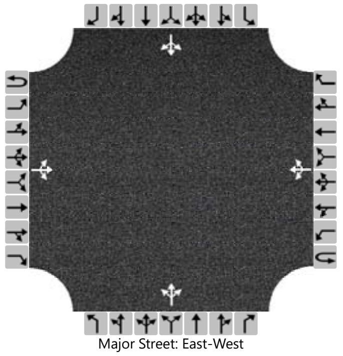
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	213			170	363		68			161		
Capacity	680			602	699		641			622		
95% Queue Length, Q_{95} (veh)	1.3			1.2	3.0		0.4			1.0		
Control Delay (s/veh)	10.7			11.0	13.3		9.3			10.8		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	10.7			12.6			9.3			10.8		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	11.6						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description			

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		28	338	0		0	400	70		0	0	0		123	0	68
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

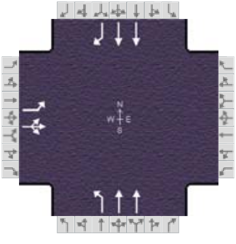
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		29				0					0				199	
Capacity, c (veh/h)		1074				1207									334	
v/c Ratio		0.03				0.00									0.60	
95% Queue Length, Q_{95} (veh)		0.1				0.0									3.6	
Control Delay (s/veh)		8.4				8.0									30.5	
Level of Service (LOS)		A				A									D	
Approach Delay (s/veh)	0.9				0.0								30.5			
Approach LOS													D			

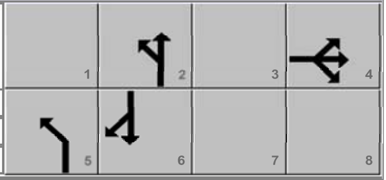
HCS7 Signalized Intersection Results Summary

General Information				**Intersection Information**	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.96
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_P.M. Peak Ho…		
Project Description	2021 Existing P.M. Peak Hr- MS Access				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	297	0	168				179	495			829	328

Signal Information										
Cycle, s	84.0	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	48.8	4.2	16.4	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		20.6			9.2	63.4		54.1
Change Period, ($Y+R_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (g_s), s		15.0			2.0			
Green Extension Time (g_e), s		1.4			0.5	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

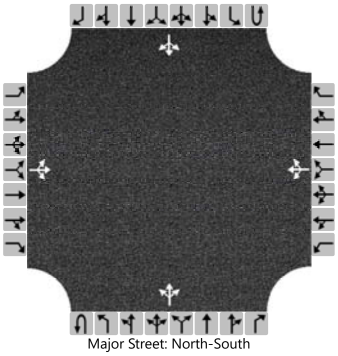
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	260	225					186	516			864	342
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1477					1606	1593			1581	1418
Queue Service Time (g_s), s	13.0	12.3					0.0	5.0			13.2	11.2
Cycle Queue Clearance Time (g_c), s	13.0	12.3					0.0	5.0			13.2	11.2
Green Ratio (*g/C*)	0.20	0.20					0.63	0.69			0.58	0.58
Capacity (*c*), veh/h	314	289					435	2203			1837	824
Volume-to-Capacity Ratio (*X*)	0.827	0.777					0.429	0.234			0.470	0.414
Back of Queue (*Q*), ft/ln (95 th percentile)	252.7	224.2					108.7	57.8			186.5	148
Back of Queue (*Q*), veh/ln (95 th percentile)	10.0	9.0					4.3	2.3			7.3	5.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.63	0.56					0.22	0.12			0.37	0.92
Uniform Delay (d_1), s/veh	32.4	33.8					16.5	4.8			10.1	9.7
Incremental Delay (d_2), s/veh	14.1	10.8					0.2	0.2			0.9	1.5
Initial Queue Delay (d_3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	46.5	44.7					16.8	5.0			11.0	11.2
Level of Service (LOS)	D	D					B	A			B	B
Approach Delay, s/veh / LOS	45.7	D		0.0			8.1	A		11.1	B	
Intersection Delay, s/veh / LOS	17.2						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.29	A			1.07	A	1.48	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM School Peak Hour	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC and Middle School Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	7	2		74	2	40		1	58	59		24	55	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

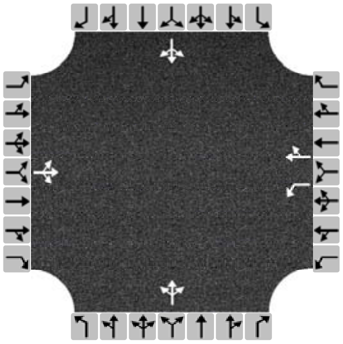
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			12				127			1				26		
Capacity, c (veh/h)			694				786			1537				1457		
v/c Ratio			0.02				0.16			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.6			0.0				0.1		
Control Delay (s/veh)			10.3				10.5			7.3				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.3				10.5				0.1				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.68
Time Analyzed	P.M. Peak Hour 3:15-4:15		
Project Description	2021 with Middle School Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	13	94	2	44	113	67	25	32	41	79	16	11
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	160			65	265		144			156		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.142			0.058	0.235		0.128			0.139		
Final Departure Headway, hd (s)	5.35			6.06	5.30		5.24			5.50		
Final Degree of Utilization, x	0.238			0.109	0.390		0.210			0.238		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.35			3.76	3.00		3.24			3.50		

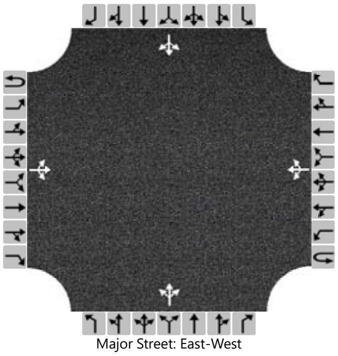
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	160			65	265		144			156		
Capacity	673			594	680		687			655		
95% Queue Length, Q_{95} (veh)	0.9			0.4	1.8		0.8			0.9		
Control Delay (s/veh)	10.0			9.5	11.3		9.6			10.2		
Level of Service, LOS	B			A	B		A			B		
Approach Delay (s/veh)	10.0			11.0			9.6			10.2		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	10.4						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	School Peak Hour	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC Middle School School Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		60	381	2		4	276	104		0	0	1		85	0	51
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

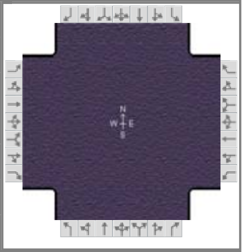
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		79				5					1				179	
Capacity, c (veh/h)		1064				1061					569				237	
v/c Ratio		0.07				0.00					0.00				0.76	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				5.3	
Control Delay (s/veh)		8.7				8.4					11.3				55.8	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	1.9				0.1				11.3				55.8			
Approach LOS									B				F			

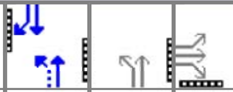
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.83
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_School P.M. Peak Hour…		
Project Description	2021 Existing School PM Peak Middle School Access				

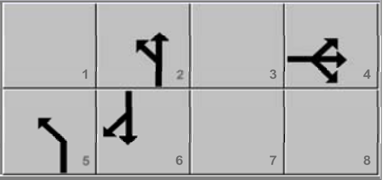


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	297	0	127				130	419			591	161

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	47.2	4.2	18.1	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		22.3			9.2	61.7		52.5
Change Period, (Y+R c), s		4.2			5.3	5.3		5.3
Max Allow Headway (MAH), s		5.7			3.1	0.0		0.0
Queue Clearance Time (g s), s		17.2			2.0			
Green Extension Time (g e), s		0.9			0.4	0.0		0.0
Phase Call Probability		1.00			0.97			
Max Out Probability		1.00			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (v), veh/h	301	210					157	505			712	194
Adjusted Saturation Flow Rate (s), veh/h/ln	1606	1486					1606	1593			1581	1418
Queue Service Time (g s), s	15.2	11.2					0.0	5.2			10.7	5.8
Cycle Queue Clearance Time (g c), s	15.2	11.2					0.0	5.2			10.7	5.8
Green Ratio (g/C)	0.22	0.22					0.61	0.67			0.56	0.56
Capacity (c), veh/h	345	319					484	2141			1778	798
Volume-to-Capacity Ratio (X)	0.870	0.658					0.324	0.236			0.401	0.243
Back of Queue (Q), ft/ln (95 th percentile)	299.1	197.9					79.8	62.5			153.5	78
Back of Queue (Q), veh/ln (95 th percentile)	11.9	7.9					3.2	2.5			6.0	3.1
Queue Storage Ratio (RQ) (95 th percentile)	0.75	0.49					0.16	0.13			0.31	0.49
Uniform Delay (d 1), s/veh	31.8	32.5					14.3	5.4			10.4	9.3
Incremental Delay (d 2), s/veh	19.4	5.2					0.1	0.3			0.7	0.7
Initial Queue Delay (d 3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (d), s/veh	51.3	37.7					14.4	5.6			11.1	10.0
Level of Service (LOS)	D	D					B	A			B	B
Approach Delay, s/veh / LOS	45.7		D	0.0			7.7		A	10.8		B
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.33	A			1.03	A	1.24	A

Appendix C-3

2021 Analysis
With Gregory Lane as Access

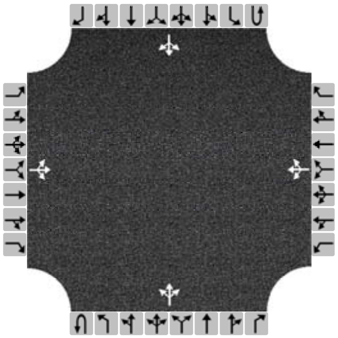
JORGENSEN

HCS7 Two-Way Stop-Control Report

General Information | Site Information

Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.71
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 AM Peak Hour with CWC and Gregory Lane Access		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	2	1		48	8	42		0	83	110		48	66	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

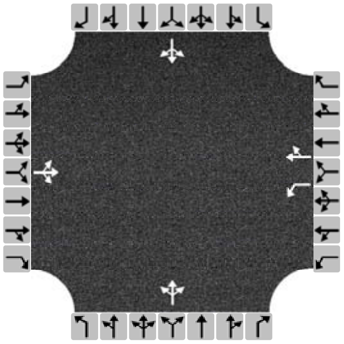
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8				138			0				68		
Capacity, c (veh/h)			490				614			1494				1291		
v/c Ratio			0.02				0.22			0.00				0.05		
95% Queue Length, Q_{95} (veh)			0.1				0.9			0.0				0.2		
Control Delay (s/veh)			12.5				12.6			7.4				7.9		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	12.5				12.6				0.0				3.5			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.85
Time Analyzed	A.M. Peak Hour		
Project Description	2021 with CWC Gregory Lane as Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	15	173	33	169	83	75	1	12	9	143	58	11
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	260			199	186		26			249		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.231			0.177	0.165		0.023			0.222		
Final Departure Headway, hd (s)	5.33			6.20	5.36		5.84			5.68		
Final Degree of Utilization, x	0.385			0.342	0.277		0.042			0.394		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.33			3.90	3.06		3.84			3.68		

Capacity, Delay and Level of Service

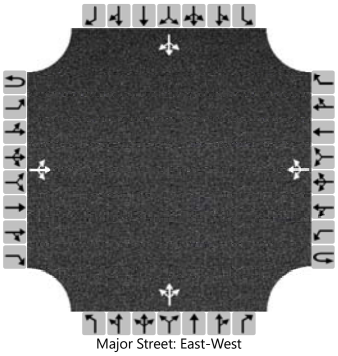
Flow Rate, v (veh/h)	260			199	186		26			249		
Capacity	676			581	672		616			633		
95% Queue Length, Q_{95} (veh)	1.8			1.5	1.1		0.1			1.9		
Control Delay (s/veh)	11.6			12.1	10.1		9.1			12.3		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	11.6			11.1			9.1			12.3		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	11.5						B					

HCS7 Two-Way Stop-Control Report

General Information / Site Information

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC AM Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		45	340	9		16	502	129		0	0	1		67	3	48
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

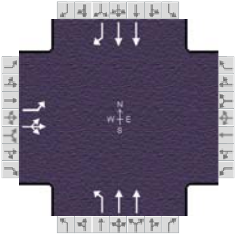
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Flow Rate, v (veh/h)		48				17					1				126	
Capacity, c (veh/h)		919				1187					679				240	
v/c Ratio		0.05				0.01					0.00				0.52	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				2.8	
Control Delay (s/veh)		9.1				8.1					10.3				35.2	
Level of Service (LOS)		A				A					B				E	
Approach Delay (s/veh)	1.6				0.4				10.3				35.2			
Approach LOS									B				E			

HCS™ TWSC Version 7.8.5 Generated: 10/24/2019 8:37:38 AM

2021 w CWC High School Road and Gregory Lane_AM Peak Hour.xtw

HCS7 Signalized Intersection Results Summary

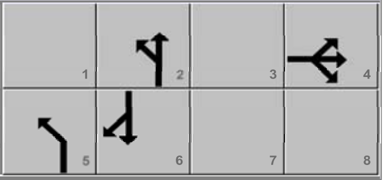
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 7:45
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_A.M. Peak Ho…		
Project Description	2021 A.M. Peak Hr plan 2- Gregory Ln Access				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	249	0	60				316	649			347	250

Signal Information			
Cycle, s	85.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	52.8	4.3	13.4	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		17.6			9.3	67.4		58.1
Change Period, (*Y+R c*), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g s*), s		11.9			2.0			
Green Extension Time (*g e*), s		1.5			0.7	0.0		0.0
Phase Call Probability		1.00			1.00			
Max Out Probability		0.27			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	192	148					347	713			381	275
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1581	1504					1556	1606			1581	1407
Queue Service Time (*g s*), s	9.9	8.1					0.0	6.5			4.4	7.8
Cycle Queue Clearance Time (*g c*), s	9.9	8.1					0.0	6.5			4.4	7.8
Green Ratio (*g/C*)	0.16	0.16					0.67	0.73			0.62	0.62
Capacity (*c*), veh/h	249	237					714	2346			1963	874
Volume-to-Capacity Ratio (*X*)	0.768	0.624					0.486	0.304			0.194	0.314
Back of Queue (*Q*), ft/ln (95 th percentile)	192.2	153.5					145.8	67.9			58.9	98.8
Back of Queue (*Q*), veh/ln (95 th percentile)	7.5	6.0					5.6	2.7			2.3	3.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.48	0.38					0.29	0.14			0.12	0.62
Uniform Delay (*d 1*), s/veh	34.3	37.1					9.7	4.0			6.9	7.6
Incremental Delay (*d 2*), s/veh	8.2	4.5					0.2	0.3			0.2	0.9
Initial Queue Delay (*d 3*), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	42.5	41.6					9.9	4.3			7.2	8.5
Level of Service (LOS)	D	D					A	A			A	A
Approach Delay, s/veh / LOS	42.1		D	0.0			6.1		A	7.7		A
Intersection Delay, s/veh / LOS	12.6						B					

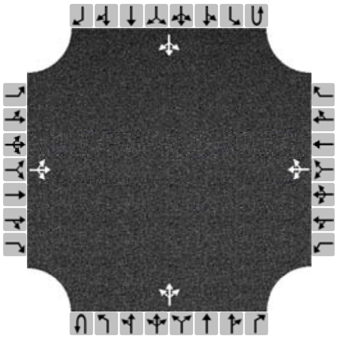
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.62	B	1.94	B
Bicycle LOS Score / LOS	1.05	A			1.36	A	1.03	A

HCS7 Two-Way Stop-Control Report

General Information / Site Information

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.89
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC PM Peak Hour Gregory Lane		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	14	0		52	3	25		0	76	79		19	44	2
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

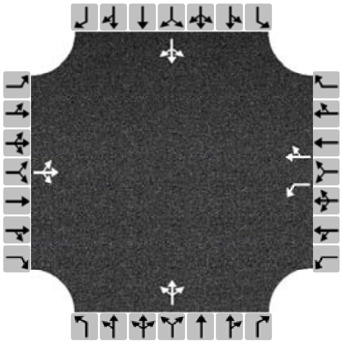
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17				90			0				21		
Capacity, c (veh/h)			632				756			1554				1402		
v/c Ratio			0.03				0.12			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.4			0.0				0.0		
Control Delay (s/veh)			10.9				10.4			7.3				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.9				10.4				0.0				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	P.M. Peak Hour 5-6		
Project Description	2021 with CWC Gregory Lane Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16	143	28	133	172	150	7	7	32	70	44	23
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	215			153	370		53			157		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.191			0.136	0.329		0.047			0.140		
Final Departure Headway, hd (s)	5.20			5.90	5.06		5.55			5.70		
Final Degree of Utilization, x	0.310			0.250	0.521		0.081			0.249		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.20			3.60	2.76		3.55			3.70		

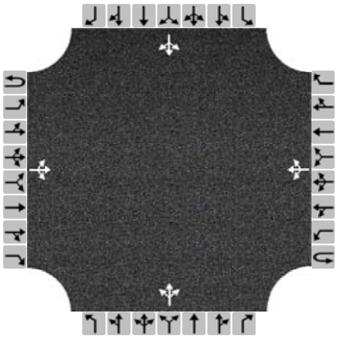
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	215			153	370		53			157		
Capacity	693			610	711		649			631		
95% Queue Length, Q_{95} (veh)	1.3			1.0	3.0		0.3			1.0		
Control Delay (s/veh)	10.5			10.6	13.1		9.0			10.6		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	10.5			12.4			9.0			10.6		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	11.5						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC PM Peak Hour		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		27	329	7		9	388	70		5	2	6		123	4	66
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

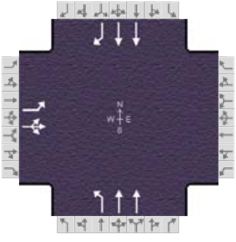
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

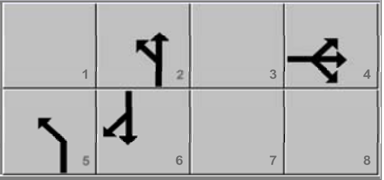
Flow Rate, v (veh/h)		28				9					14				201	
Capacity, c (veh/h)		1085				1209					336				325	
v/c Ratio		0.03				0.01					0.04				0.62	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.1				3.9	
Control Delay (s/veh)		8.4				8.0					16.2				32.4	
Level of Service (LOS)		A				A					C				D	
Approach Delay (s/veh)	0.9				0.2				16.2				32.4			
Approach LOS									C				D			

HCS7 Signalized Intersection Results Summary



General Information				**Intersection Information**	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.96
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_P.M. Peak Ho…		
Project Description	2021 with CWC P.M. Peak Hr- Gregory Lane				

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	295	0	166				178	495			829	326



Signal Information										
Cycle, s	84.0	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	48.9	4.2	16.3	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		20.5			9.2	63.5		54.2
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		15.0			2.0			
Green Extension Time (*g* $_e$), s		1.4			0.5	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

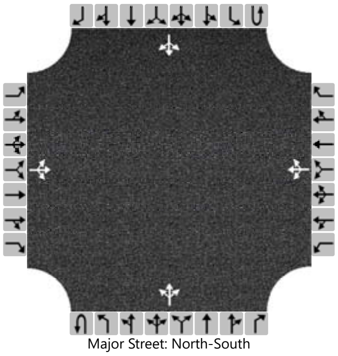
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	258	222					185	516			864	340
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1477					1606	1593			1581	1418
Queue Service Time (*g* $_s$), s	13.0	12.1					0.0	5.0			13.2	11.0
Cycle Queue Clearance Time (*g* $_c$), s	13.0	12.1					0.0	5.0			13.2	11.0
Green Ratio (*g/C*)	0.19	0.19					0.63	0.69			0.58	0.58
Capacity (*c*), veh/h	313	287					436	2206			1841	826
Volume-to-Capacity Ratio (*X*)	0.826	0.773					0.426	0.234			0.469	0.411
Back of Queue (*Q*), ft/ln (95 th percentile)	251.1	221.2					107.4	57.2			185.3	146.6
Back of Queue (*Q*), veh/ln (95 th percentile)	10.0	8.8					4.3	2.3			7.2	5.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.63	0.55					0.21	0.11			0.37	0.92
Uniform Delay (*d* $_1$), s/veh	32.5	33.9					16.4	4.7			10.1	9.6
Incremental Delay (*d* $_2$), s/veh	13.9	10.5					0.2	0.2			0.9	1.5
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	46.4	44.4					16.7	5.0			10.9	11.2
Level of Service (LOS)	D	D					B	A			B	B
Approach Delay, s/veh / LOS	45.4		D	0.0			8.1		A	11.0		B
Intersection Delay, s/veh / LOS	17.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.28	A			1.07	A	1.48	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM School Peak Hour	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC and Gregory Lane Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	7	2		74	2	40		1	58	59		24	55	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

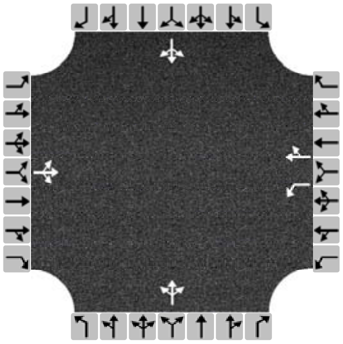
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			12				127			1				26		
Capacity, c (veh/h)			694				786			1537				1457		
v/c Ratio			0.02				0.16			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.6			0.0				0.1		
Control Delay (s/veh)			10.3				10.5			7.3				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.3				10.5				0.1				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.68
Time Analyzed	P.M. Peak Hour 3:15-4:15		
Project Description	2021 with Gregory Lane Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	13	95	2	42	117	69	19	27	34	80	16	11
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	162			62	274		118			157		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.144			0.055	0.243		0.105			0.140		
Final Departure Headway, hd (s)	5.27			5.99	5.22		5.24			5.46		
Final Degree of Utilization, x	0.237			0.103	0.397		0.171			0.239		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.27			3.69	2.92		3.24			3.46		

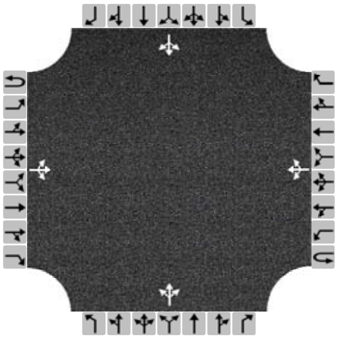
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	162			62	274		118			157		
Capacity	683			601	689		687			660		
95% Queue Length, Q_{95} (veh)	0.9			0.3	1.9		0.6			0.9		
Control Delay (s/veh)	9.9			9.4	11.3		9.3			10.2		
Level of Service, LOS	A			A	B		A			B		
Approach Delay (s/veh)	9.9			11.0			9.3			10.2		
Approach LOS	A			B			A			B		
Intersection Delay, s/veh | LOS	10.3						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	School Peak Hour	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC Gregory Lane School Peak Hour		

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		59	375	3		5	274	104		5	2	9		85	0	51
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

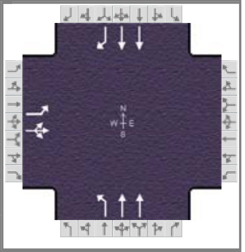
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

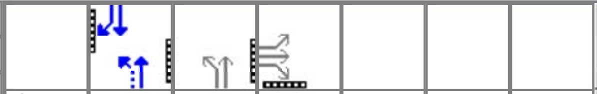
Flow Rate, v (veh/h)		78				7					21				179	
Capacity, c (veh/h)		1067				1067					263				232	
v/c Ratio		0.07				0.01					0.08				0.77	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.3				5.5	
Control Delay (s/veh)		8.6				8.4					19.9				58.7	
Level of Service (LOS)		A				A					C				F	
Approach Delay (s/veh)	1.9				0.2				19.9				58.7			
Approach LOS									C				F			

HCS7 Signalized Intersection Results Summary

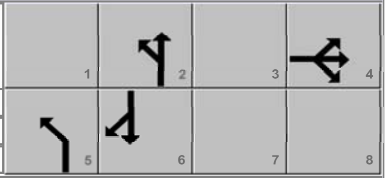
General Information				**Intersection Information**	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.83
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_School P.M. Peak Hour…		
Project Description	2021 Existing School PM PeakGregory Access				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	297	0	128				130	419			591	161



Signal Information										
Cycle, s	84.0	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	47.2	4.2	18.1	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		22.3			9.2	61.7		52.5
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		17.2			2.0			
Green Extension Time (*g* $_e$), s		0.9			0.4	0.0		0.0
Phase Call Probability		1.00			0.97			
Max Out Probability		1.00			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	301	211					157	505			712	194
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1486					1606	1593			1581	1418
Queue Service Time (*g* $_s$), s	15.2	11.3					0.0	5.2			10.7	5.8
Cycle Queue Clearance Time (*g* $_c$), s	15.2	11.3					0.0	5.2			10.7	5.8
Green Ratio (*g/C*)	0.22	0.22					0.61	0.67			0.56	0.56
Capacity (*c*), veh/h	345	319					484	2141			1778	798
Volume-to-Capacity Ratio (*X*)	0.870	0.662					0.324	0.236			0.401	0.243
Back of Queue (*Q*), ft/ln (95 th percentile)	299.1	199.2					79.8	62.5			153.5	78
Back of Queue (*Q*), veh/ln (95 th percentile)	11.9	8.0					3.2	2.5			6.0	3.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.75	0.50					0.16	0.13			0.31	0.49
Uniform Delay (*d* $_1$), s/veh	31.8	32.5					14.3	5.4			10.4	9.3
Incremental Delay (*d* $_2$), s/veh	19.4	5.3					0.1	0.3			0.7	0.7
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	51.2	37.9					14.4	5.6			11.1	10.0
Level of Service (LOS)	D	D					B	A			B	B
Approach Delay, s/veh / LOS	45.7		D	0.0			7.7		A	10.8		B
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.33	A			1.03	A	1.24	A

Appendix C-4

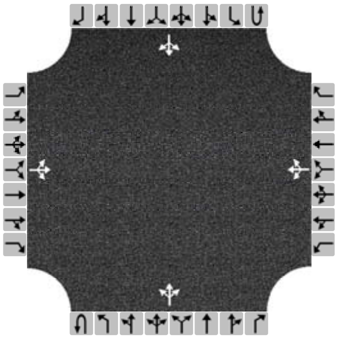
2021 Analysis
With Dual Access

JORGENSEN

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.71
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 AM Peak Hour with CWC and Dual Access		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	2	1		48	8	42		0	83	108		47	66	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

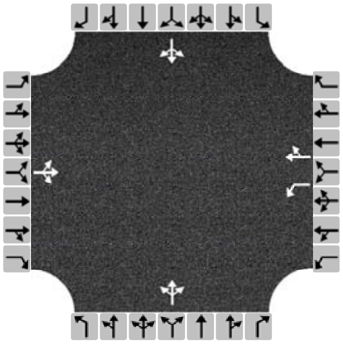
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8				138			0				66		
Capacity, c (veh/h)			494				617			1494				1295		
v/c Ratio			0.02				0.22			0.00				0.05		
95% Queue Length, Q_{95} (veh)			0.1				0.9			0.0				0.2		
Control Delay (s/veh)			12.4				12.5			7.4				7.9		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	12.4				12.5				0.0				3.4			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.85
Time Analyzed	A.M. Peak Hour		
Project Description	2021 Traffic Conditions with CWC dual access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	15	168	36	169	83	75	1	12	9	138	65	11
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	258			199	186		26			252		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.229			0.177	0.165		0.023			0.224		
Final Departure Headway, hd (s)	5.32			6.20	5.36		5.84			5.67		
Final Degree of Utilization, x	0.381			0.343	0.277		0.042			0.397		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.32			3.90	3.06		3.84			3.67		

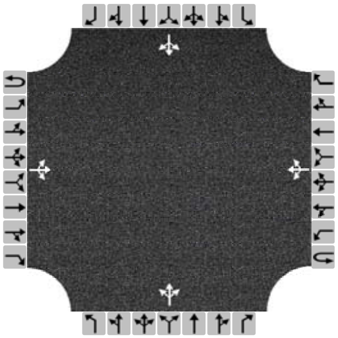
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	258			199	186		26			252		
Capacity	676			580	671		616			635		
95% Queue Length, Q_{95} (veh)	1.8			1.5	1.1		0.1			1.9		
Control Delay (s/veh)	11.6			12.1	10.1		9.1			12.4		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	11.6			11.1			9.1			12.4		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	11.5						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC AM Peak Hour Dual Access		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		45	340	0		16	502	129		0	0	1		67	3	48
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

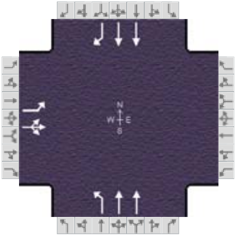
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

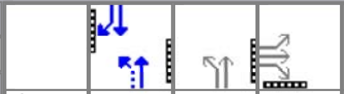
Flow Rate, v (veh/h)		48				17					1				126	
Capacity, c (veh/h)		919				1197					683				242	
v/c Ratio		0.05				0.01					0.00				0.52	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				2.7	
Control Delay (s/veh)		9.1				8.1					10.3				34.9	
Level of Service (LOS)		A				A					B				D	
Approach Delay (s/veh)	1.6				0.4				10.3				34.9			
Approach LOS									B				D			

HCS7 Signalized Intersection Results Summary

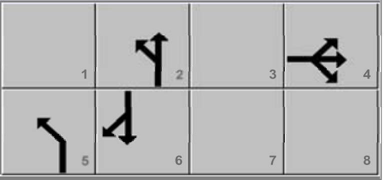
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 7:45
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_A.M. Peak Ho…		
Project Description	2021 A.M. Peak Hr plan 2- Dual Access				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	249	0	60				316	649			347	250



Signal Information										
Cycle, s	85.0	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	52.8	4.3	13.4	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		17.6			9.3	67.4		58.1
Change Period, (*Y+R* c), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* s), s		11.9			2.0			
Green Extension Time (*g* e), s		1.5			0.7	0.0		0.0
Phase Call Probability		1.00			1.00			
Max Out Probability		0.27			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	192	148					347	713			381	275
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1581	1504					1556	1606			1581	1407
Queue Service Time (*g* s), s	9.9	8.1					0.0	6.5			4.4	7.8
Cycle Queue Clearance Time (*g* c), s	9.9	8.1					0.0	6.5			4.4	7.8
Green Ratio (*g/C*)	0.16	0.16					0.67	0.73			0.62	0.62
Capacity (*c*), veh/h	249	237					714	2346			1963	874
Volume-to-Capacity Ratio (*X*)	0.768	0.624					0.486	0.304			0.194	0.314
Back of Queue (*Q*), ft/ln (95 th percentile)	192.2	153.5					145.8	67.9			58.9	98.8
Back of Queue (*Q*), veh/ln (95 th percentile)	7.5	6.0					5.6	2.7			2.3	3.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.48	0.38					0.29	0.14			0.12	0.62
Uniform Delay (*d* 1), s/veh	34.3	37.1					9.7	4.0			6.9	7.6
Incremental Delay (*d* 2), s/veh	8.2	4.5					0.2	0.3			0.2	0.9
Initial Queue Delay (*d* 3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	42.5	41.6					9.9	4.3			7.2	8.5
Level of Service (LOS)	D	D					A	A			A	A
Approach Delay, s/veh / LOS	42.1	D		0.0			6.1	A		7.7	A	
Intersection Delay, s/veh / LOS	12.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.62	B	1.94	B
Bicycle LOS Score / LOS	1.05	A			1.36	A	1.03	A

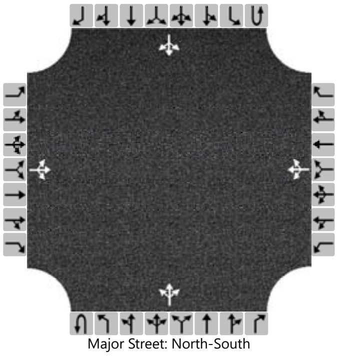
HCS7 Two-Way Stop-Control Report

General Information

Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.89
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC PM Peak Hour Dual Access		

Site Information

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	14	0		52	3	24		0	76	77		18	44	2
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

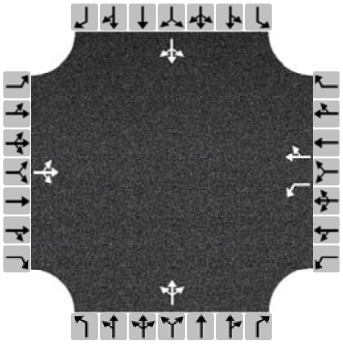
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			17				89			0				20		
Capacity, c (veh/h)			636				758			1554				1405		
v/c Ratio			0.03				0.12			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.4			0.0				0.0		
Control Delay (s/veh)			10.8				10.4			7.3				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.8				10.4				0.0				2.2			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		**Site Information**	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	P.M. Peak Hour 5-6		
Project Description	2021 with CWC dual access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16	138	31	133	170	148	9	10	32	68	49	23
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	213			153	366		59			161		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.189			0.136	0.325		0.052			0.143		
Final Departure Headway, hd (s)	5.22			5.93	5.09		5.59			5.70		
Final Degree of Utilization, x	0.308			0.252	0.517		0.091			0.255		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.22			3.63	2.79		3.59			3.70		

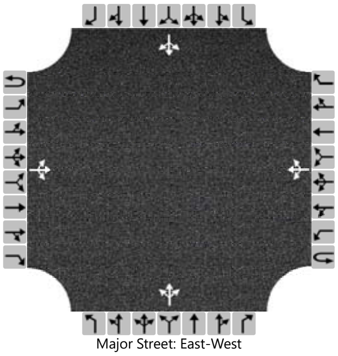
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	213			153	366		59			161		
Capacity	690			607	707		644			631		
95% Queue Length, Q_{95} (veh)	1.3			1.0	3.0		0.3			1.0		
Control Delay (s/veh)	10.5			10.6	13.1		9.1			10.6		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	10.5			12.4			9.1			10.6		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	11.5						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 PM Peak Hour Dual Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		27	329	0		9	388	70		0	2	6		123	4	66
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

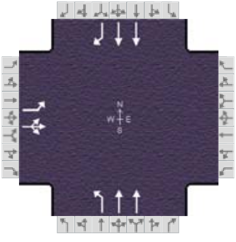
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

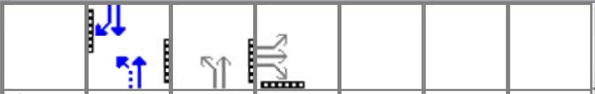
Flow Rate, v (veh/h)		28				9					8				201	
Capacity, c (veh/h)		1085				1216					499				327	
v/c Ratio		0.03				0.01					0.02				0.61	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.1				3.8	
Control Delay (s/veh)		8.4				8.0					12.3				32.1	
Level of Service (LOS)		A				A					B				D	
Approach Delay (s/veh)	0.9				0.2				12.3				32.1			
Approach LOS									B				D			

HCS7 Signalized Intersection Results Summary

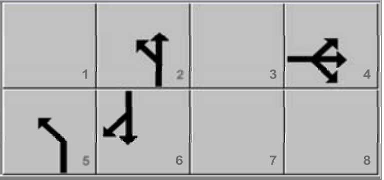
General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst		Analysis Date	5/25/2018	Area Type	Other	
Jurisdiction		Time Period		PHF	0.96	
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00	
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_P.M. Peak Ho…			
Project Description	2021 with CWC P.M. Peak Hr- Dual Access					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	295	0	166				178	495			829	327

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	48.9	4.2	16.3	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		20.5			9.2	63.5		54.2
Change Period, ($Y+R_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (g_s), s		15.0			2.0			
Green Extension Time (g_e), s		1.4			0.5	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

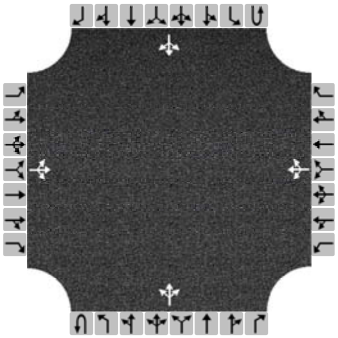
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (v), veh/h	258	222					185	516			864	341
Adjusted Saturation Flow Rate (s), veh/h/ln	1606	1477					1606	1593			1581	1418
Queue Service Time (g_s), s	13.0	12.1					0.0	5.0			13.2	11.1
Cycle Queue Clearance Time (g_c), s	13.0	12.1					0.0	5.0			13.2	11.1
Green Ratio (g/C)	0.19	0.19					0.63	0.69			0.58	0.58
Capacity (c), veh/h	313	287					436	2206			1841	826
Volume-to-Capacity Ratio (X)	0.826	0.773					0.426	0.234			0.469	0.412
Back of Queue (Q), ft/ln (95 th percentile)	251.1	221.2					107.4	57.2			185.3	147
Back of Queue (Q), veh/ln (95 th percentile)	10.0	8.8					4.3	2.3			7.2	5.8
Queue Storage Ratio (RQ) (95 th percentile)	0.63	0.55					0.21	0.11			0.37	0.92
Uniform Delay (d_1), s/veh	32.5	33.9					16.4	4.7			10.1	9.6
Incremental Delay (d_2), s/veh	13.9	10.5					0.2	0.2			0.9	1.5
Initial Queue Delay (d_3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (d), s/veh	46.4	44.4					16.7	5.0			10.9	11.2
Level of Service (LOS)	D	D					B	A			B	B
Approach Delay, s/veh / LOS	45.4	D		0.0			8.1	A		11.0	B	
Intersection Delay, s/veh / LOS	17.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.28	A			1.07	A	1.48	A

HCS7 Two-Way Stop-Control Report

General Information		**Site Information**	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM School Peak Hour	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC and Dual Access		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	7	2		74	2	40		1	58	59		24	55	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

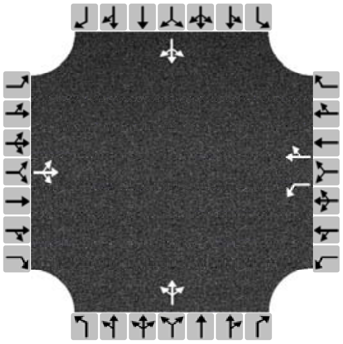
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			12				127			1				26		
Capacity, c (veh/h)			694				786			1537				1457		
v/c Ratio			0.02				0.16			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.6			0.0				0.1		
Control Delay (s/veh)			10.3				10.5			7.3				7.5		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.3				10.5				0.1				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.68
Time Analyzed	School P.M. Peak Hour		
Project Description	2021 with CWC dual access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	13	94	2	42	113	67	24	31	34	79	16	11
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	160			62	265		131			156		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.142			0.055	0.235		0.116			0.139		
Final Departure Headway, hd (s)	5.30			6.02	5.26		5.25			5.46		
Final Degree of Utilization, x	0.236			0.103	0.387		0.191			0.236		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.30			3.72	2.96		3.25			3.46		

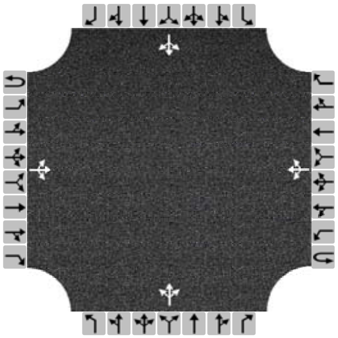
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	160			62	265		131			156		
Capacity	679			598	685		685			659		
95% Queue Length, Q_{95} (veh)	0.9			0.3	1.8		0.7			0.9		
Control Delay (s/veh)	9.9			9.4	11.2		9.5			10.1		
Level of Service, LOS	A			A	B		A			B		
Approach Delay (s/veh)	9.9			10.9			9.5			10.1		
Approach LOS	A			B			A			B		
Intersection Delay, s/veh | LOS	10.3						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	School Peak Hour	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 with CWC Dual Access School Peak Hour		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		59	375	2		5	274	104		0	2	7		85	0	51
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

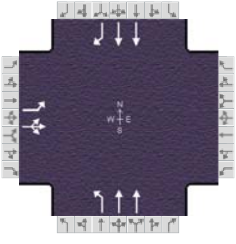
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		78				7					12				179	
Capacity, c (veh/h)		1067				1068					380				234	
v/c Ratio		0.07				0.01					0.03				0.77	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.1				5.5	
Control Delay (s/veh)		8.6				8.4					14.8				57.7	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	1.9				0.2				14.8				57.7			
Approach LOS									B				F			

HCS7 Signalized Intersection Results Summary

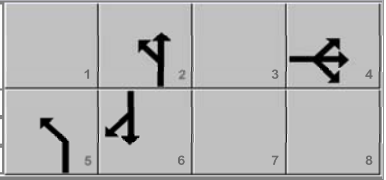
General Information				**Intersection Information**	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.83
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_School P.M. Peak Hour…		
Project Description	2021 Existing School PM PeakDual Access				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	296	0	127				130	419			591	161

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	47.3	4.2	18.0	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		22.2			9.2	61.8		52.6
Change Period, (*Y+R* *c*), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* *s*), s		17.1			2.0			
Green Extension Time (*g* *e*), s		0.9			0.4	0.0		0.0
Phase Call Probability		1.00			0.97			
Max Out Probability		1.00			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	300	210					157	505			712	194
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1486					1606	1593			1581	1418
Queue Service Time (*g* *s*), s	15.1	11.2					0.0	5.2			10.7	5.8
Cycle Queue Clearance Time (*g* *c*), s	15.1	11.2					0.0	5.2			10.7	5.8
Green Ratio (*g/C*)	0.21	0.21					0.61	0.67			0.56	0.56
Capacity (*c*), veh/h	345	319					484	2142			1779	798
Volume-to-Capacity Ratio (*X*)	0.869	0.659					0.323	0.236			0.400	0.243
Back of Queue (*Q*), ft/ln (95 th percentile)	297.7	197.7					79.8	62.5			153.5	78
Back of Queue (*Q*), veh/ln (95 th percentile)	11.8	7.9					3.2	2.5			6.0	3.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.74	0.49					0.16	0.13			0.31	0.49
Uniform Delay (*d* *1*), s/veh	31.9	32.5					14.3	5.4			10.4	9.3
Incremental Delay (*d* *2*), s/veh	19.3	5.2					0.1	0.3			0.7	0.7
Initial Queue Delay (*d* *3*), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	51.1	37.8					14.4	5.6			11.0	10.0
Level of Service (LOS)	D	D					B	A			B	B
Approach Delay, s/veh / LOS	45.6	D		0.0			7.7	A		10.8	B	
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.33	A			1.03	A	1.24	A

Appendix D

2031 Intersection Analysis

JORGENSEN

Appendix D-1

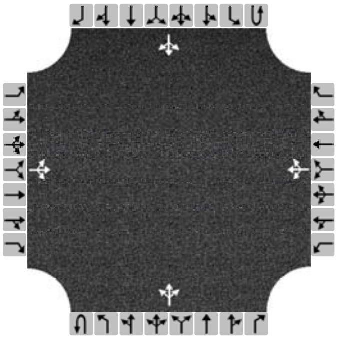
2031 Baseline Analysis

JORGENSEN

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	AM Peah Hour	Peak Hour Factor	0.71
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 Baseline AM Peak Hour		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	2	1		58	9	50		0	99	127		55	79	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

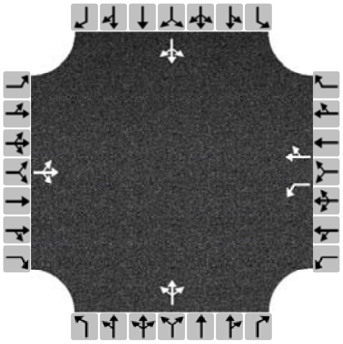
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			10				165			0				77		
Capacity, c (veh/h)			423				557			1472				1242		
v/c Ratio			0.02				0.30			0.00				0.06		
95% Queue Length, Q_{95} (veh)			0.1				1.2			0.0				0.2		
Control Delay (s/veh)			13.7				14.2			7.4				8.1		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	13.7				14.2				0.0				3.6			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.85
Time Analyzed	A.M. Peak Hour		
Project Description	2031 Traffic Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	18	201	39	202	100	90	1	15	11	165	70	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	304			238	224		32			293		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.270			0.211	0.199		0.028			0.260		
Final Departure Headway, hd (s)	5.68			6.53	5.68		6.38			6.02		
Final Degree of Utilization, x	0.479			0.431	0.353		0.056			0.490		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.68			4.23	3.38		4.38			4.02		

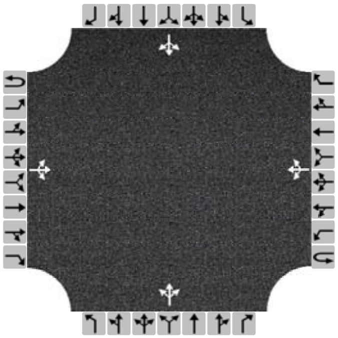
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	304			238	224		32			293		
Capacity	634			552	633		564			598		
95% Queue Length, Q_{95} (veh)	2.6			2.2	1.6		0.2			2.7		
Control Delay (s/veh)	13.8			14.1	11.4		9.8			14.7		
Level of Service, LOS	B			B	B		A			B		
Approach Delay (s/veh)	13.8			12.8			9.8			14.7		
Approach LOS	B			B			A			B		
Intersection Delay, s/veh | LOS	13.5						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 Baseline AM Peak Hour		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		54	407	0		2	601	2		0	0	1		81	0	58
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

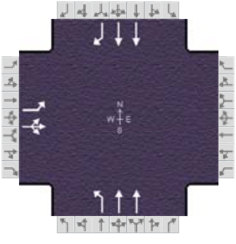
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		57				2					1				148	
Capacity, c (veh/h)		943				1127					623				213	
v/c Ratio		0.06				0.00					0.00				0.69	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				4.4	
Control Delay (s/veh)		9.1				8.2					10.8				52.9	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	1.7				0.1				10.8				52.9			
Approach LOS									B				F			

HCS7 Signalized Intersection Results Summary

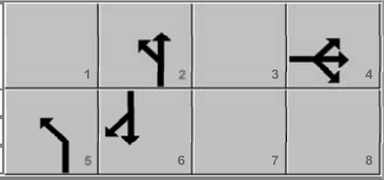
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 7:45
Intersection	US 89/High School Road	File Name	2031_US89_High School Road_A.M. Peak Hour.…		
Project Description	2031 A.M. Peak Hr cord. plan 2				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	297	0	72				368	776			414	291

Signal Information			
Cycle, s	85.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	50.8	4.3	15.4	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		19.6			9.3	65.4		56.1
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		13.8			2.0			
Green Extension Time (*g* $_e$), s		1.7			0.9	0.0		0.0
Phase Call Probability		1.00			1.00			
Max Out Probability		0.53			1.00			

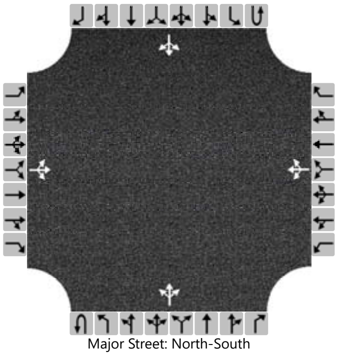
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	228	177					404	853			455	320
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1581	1503					1556	1606			1581	1407
Queue Service Time (*g* $_s$), s	11.8	9.7					0.0	9.0			5.8	10.1
Cycle Queue Clearance Time (*g* $_c$), s	11.8	9.7					0.0	9.0			5.8	10.1
Green Ratio (*g/C*)	0.18	0.18					0.64	0.71			0.60	0.60
Capacity (*c*), veh/h	287	273					642	2270			1889	841
Volume-to-Capacity Ratio (*X*)	0.797	0.649					0.630	0.376			0.241	0.380
Back of Queue (*Q*), ft/ln (95 th percentile)	224.2	184					228.5	101.4			79.4	132
Back of Queue (*Q*), veh/ln (95 th percentile)	8.8	7.2					8.8	4.0			3.1	5.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.56	0.46					0.46	0.20			0.16	0.82
Uniform Delay (*d* $_1$), s/veh	33.3	36.4					13.7	5.0			8.0	8.9
Incremental Delay (*d* $_2$), s/veh	10.0	4.4					1.5	0.5			0.3	1.3
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	43.3	40.8					15.2	5.4			8.3	10.2
Level of Service (LOS)	D	D					B	A			A	B
Approach Delay, s/veh / LOS	42.2	D		0.0			8.6	A		9.1	A	
Intersection Delay, s/veh / LOS	14.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.62	B	1.94	B
Bicycle LOS Score / LOS	1.16	A			1.52	B	1.13	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.89
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 Baseline PM Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	16	0		60	4	28		0	91	90		21	53	2
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

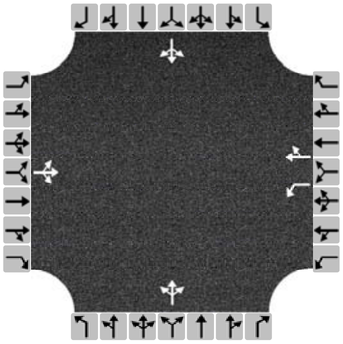
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			19				103			0				24		
Capacity, c (veh/h)			595				714			1541				1368		
v/c Ratio			0.03				0.14			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.5			0.0				0.1		
Control Delay (s/veh)			11.2				10.9			7.3				7.7		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	11.2				10.9				0.0				2.2			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	P.M. Peak Hour 5-6		
Project Description	2021 Traffic Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	19	165	34	159	203	177	9	9	38	81	53	27
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	251			183	437		64			185		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.223			0.162	0.388		0.057			0.164		
Final Departure Headway, hd (s)	5.52			6.15	5.32		6.02			6.07		
Final Degree of Utilization, x	0.384			0.312	0.645		0.108			0.312		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.52			3.85	3.02		4.02			4.07		

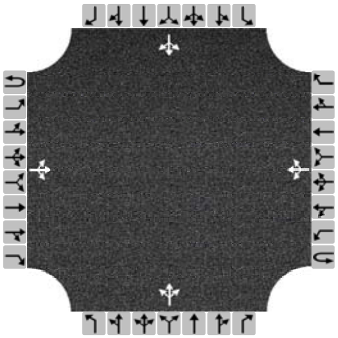
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	251			183	437		64			185		
Capacity	652			585	677		598			593		
95% Queue Length, Q_{95} (veh)	1.8			1.3	4.7		0.4			1.3		
Control Delay (s/veh)	11.9			11.6	17.2		9.7			11.8		
Level of Service, LOS	B			B	C		A			B		
Approach Delay (s/veh)	11.9			15.5			9.7			11.8		
Approach LOS	B			C			A			B		
Intersection Delay, s/veh | LOS	13.8						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 PM Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		32	394	0		0	464	84		0	0	0		147	0	79
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

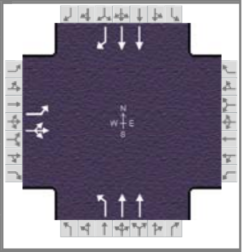
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				0					0				235	
Capacity, c (veh/h)		1002				1148									271	
v/c Ratio		0.03				0.00									0.87	
95% Queue Length, Q_{95} (veh)		0.1				0.0									7.4	
Control Delay (s/veh)		8.7				8.1									66.4	
Level of Service (LOS)		A				A									F	
Approach Delay (s/veh)	1.0				0.0								66.4			
Approach LOS													F			

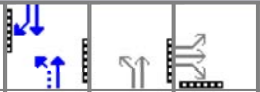
HCS7 Signalized Intersection Results Summary

General Information				**Intersection Information**	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.96
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	2031_US89_High School Road_P.M. Peak Hour_...		
Project Description	2031 Baseline P.M. Peak Hr-				

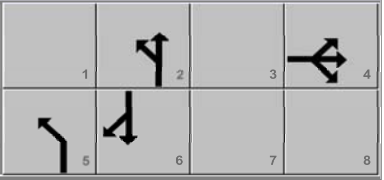


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	348	0	197				208	592			991	383

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	46.9	4.3	18.3	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		22.5			9.3	61.5		52.2
Change Period, (*Y+R* *c*), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* *s*), s		17.4			2.0			
Green Extension Time (*g* *e*), s		0.9			0.6	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

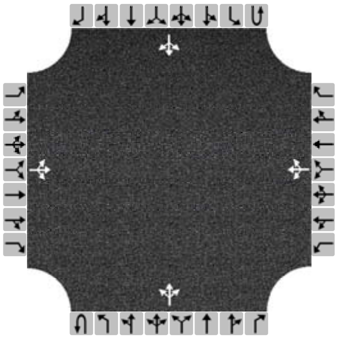
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	305	263					217	617			1032	399
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1477					1606	1593			1581	1418
Queue Service Time (*g* *s*), s	15.4	14.4					0.0	6.7			18.0	14.5
Cycle Queue Clearance Time (*g* *c*), s	15.4	14.4					0.0	6.7			18.0	14.5
Green Ratio (*g/C*)	0.22	0.22					0.61	0.67			0.56	0.56
Capacity (*c*), veh/h	350	322					352	2132			1766	792
Volume-to-Capacity Ratio (*X*)	0.870	0.818					0.616	0.289			0.585	0.504
Back of Queue (*Q*), ft/ln (95 th percentile)	302.3	265.4					186.3	80.6			245.1	198.1
Back of Queue (*Q*), veh/ln (95 th percentile)	12.0	10.6					7.4	3.2			9.6	7.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.76	0.66					0.37	0.16			0.49	1.24
Uniform Delay (*d* *1*), s/veh	31.7	33.3					25.4	5.7			12.1	11.4
Incremental Delay (*d* *2*), s/veh	19.5	14.8					2.4	0.3			1.4	2.3
Initial Queue Delay (*d* *3*), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	51.2	48.0					27.8	6.0			13.6	13.7
Level of Service (LOS)	D	D					C	A			B	B
Approach Delay, s/veh / LOS	49.7		D	0.0			11.7		B	13.6		B
Intersection Delay, s/veh / LOS	20.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.42	A			1.18	A	1.67	B

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM School Peak Hour	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 baseline		

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	8	2		86	2	46		1	69	70		29	66	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

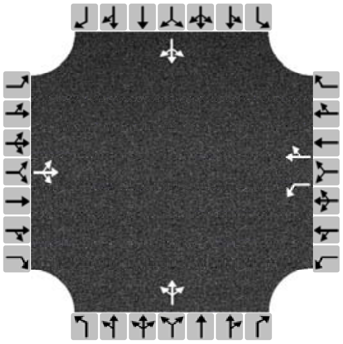
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			13				147			1				32		
Capacity, c (veh/h)			648				743			1522				1428		
v/c Ratio			0.02				0.20			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.7			0.0				0.1		
Control Delay (s/veh)			10.7				11.0			7.4				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.7				11.0				0.1				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.68
Time Analyzed	P.M. Peak Hour 3:15-4:15		
Project Description	2031 Traffic Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16	113	2	50	136	80	22	32	41	95	19	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	193			74	318		140			188		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.171			0.065	0.282		0.124			0.167		
Final Departure Headway, hd (s)	5.63			6.28	5.52		5.63			5.82		
Final Degree of Utilization, x	0.301			0.128	0.487		0.219			0.304		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.63			3.98	3.22		3.63			3.82		

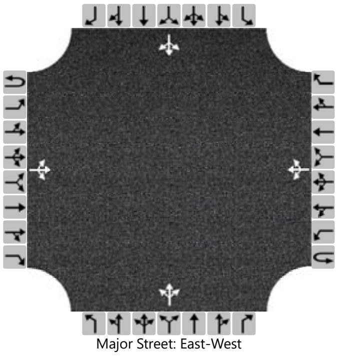
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	193			74	318		140			188		
Capacity	640			573	653		639			619		
95% Queue Length, Q_{95} (veh)	1.3			0.4	2.7		0.8			1.3		
Control Delay (s/veh)	11.0			9.9	13.3		10.2			11.3		
Level of Service, LOS	B			A	B		B			B		
Approach Delay (s/veh)	11.0			12.7			10.2			11.3		
Approach LOS	B			B			B			B		
Intersection Delay, s/veh | LOS	11.7						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	School Peak Hour	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 Baseline School Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		71	448	2		4	327	124		0	0	1		101	0	61
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

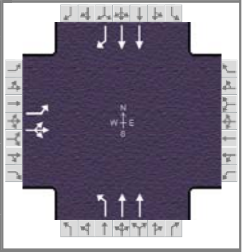
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		93				5					1				213	
Capacity, c (veh/h)		983				984					507				173	
v/c Ratio		0.10				0.01					0.00				1.23	
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.0				11.8	
Control Delay (s/veh)		9.0				8.7					12.1				197.6	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	2.3				0.1				12.1				197.6			
Approach LOS									B				F			

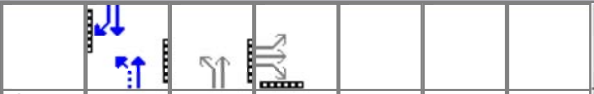
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.83
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_School P.M. Peak Hour…		
Project Description	2031 baseline				

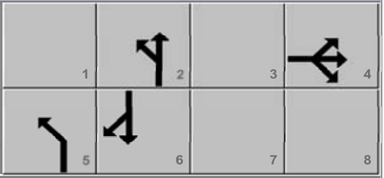


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	349	0	150				154	501			706	192

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.5	4.2	19.8	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		24.0			9.2	60.0		50.8
Change Period, ($Y+R_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (g_s), s		20.1			2.0			
Green Extension Time (g_e), s		0.0			0.5	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (v), veh/h	353	248					186	604			851	231
Adjusted Saturation Flow Rate (s), veh/h/ln	1606	1486					1606	1593			1581	1418
Queue Service Time (g_s), s	18.1	13.2					0.0	6.8			14.2	7.5
Cycle Queue Clearance Time (g_c), s	18.1	13.2					0.0	6.8			14.2	7.5
Green Ratio (*g/C*)	0.24	0.24					0.59	0.65			0.54	0.54
Capacity (*c*), veh/h	379	350					404	2075			1710	767
Volume-to-Capacity Ratio (*X*)	0.933	0.708					0.459	0.291			0.497	0.301
Back of Queue (*Q*), ft/ln (95 th percentile)	374.8	233.2					121.5	86.3			205.1	102.7
Back of Queue (*Q*), veh/ln (95 th percentile)	14.9	9.3					4.8	3.4			8.0	4.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.94	0.58					0.24	0.17			0.41	0.64
Uniform Delay (d_1), s/veh	31.4	32.1					19.8	6.3			12.1	10.6
Incremental Delay (d_2), s/veh	30.2	7.5					0.3	0.4			1.0	1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	61.7	39.5					20.1	6.7			13.1	11.6
Level of Service (LOS)	E	D					C	A			B	B
Approach Delay, s/veh / LOS	52.5	D		0.0			9.8	A		12.8	B	
Intersection Delay, s/veh / LOS	21.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.64	B	1.94	B
Bicycle LOS Score / LOS	1.48	A			1.14	A	1.38	A

Appendix D-2

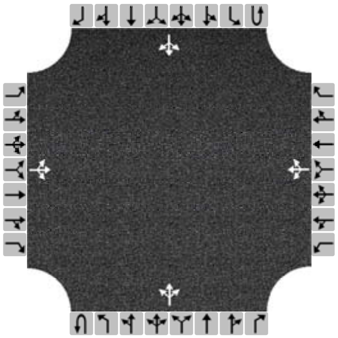
2031 Analysis
With Middle School Road as Access

JORGENSEN

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.71
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC and Middle School Access		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	2	1		58	9	50		0	99	131		57	79	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

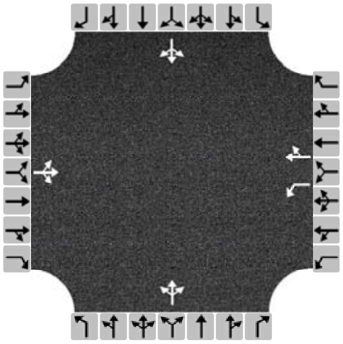
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			10				165			0				80		
Capacity, c (veh/h)			416				551			1472				1236		
v/c Ratio			0.02				0.30			0.00				0.06		
95% Queue Length, Q_{95} (veh)			0.1				1.2			0.0				0.2		
Control Delay (s/veh)			13.9				14.3			7.4				8.1		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	13.9				14.3				0.0				3.6			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.85
Time Analyzed	A.M. Peak Hour		
Project Description	2031 Middle School with CWC		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	18	201	44	229	100	90	1	15	11	165	79	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	309			269	224		32			304		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.275			0.239	0.199		0.028			0.270		
Final Departure Headway, hd (s)	5.77			6.60	5.76		6.55			6.12		
Final Degree of Utilization, x	0.496			0.494	0.358		0.058			0.516		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.77			4.30	3.46		4.55			4.12		

Capacity, Delay and Level of Service

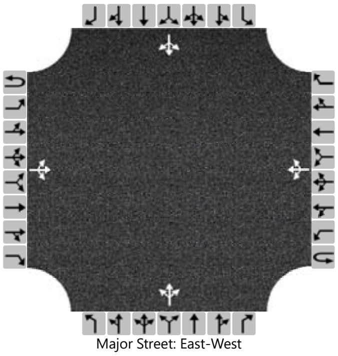
Flow Rate, v (veh/h)	309			269	224		32			304		
Capacity	624			545	625		550			588		
95% Queue Length, Q_{95} (veh)	2.8			2.7	1.6		0.2			3.0		
Control Delay (s/veh)	14.3			15.6	11.6		9.9			15.5		
Level of Service, LOS	B			C	B		A			C		
Approach Delay (s/veh)	14.3			13.8			9.9			15.5		
Approach LOS	B			B			A			C		
Intersection Delay, s/veh | LOS	14.3						B					

HCS7 Two-Way Stop-Control Report

General Information / Site Information

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2021 w CWC Middle School Road Access AM Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		54	407	0		2	624	154		0	0	1		80	0	60
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

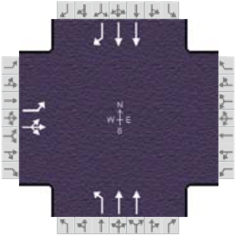
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

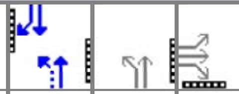
Flow Rate, v (veh/h)		57				2					1				149	
Capacity, c (veh/h)		804				1127					623				182	
v/c Ratio		0.07				0.00					0.00				0.82	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				5.7	
Control Delay (s/veh)		9.8				8.2					10.8				78.8	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	2.0				0.1				10.8				78.8			
Approach LOS									B				F			

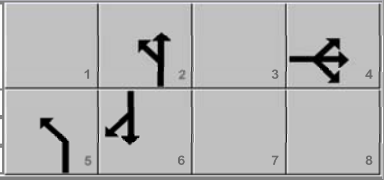
HCS7 Signalized Intersection Results Summary



General Information				**Intersection Information**	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 7:45
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_A.M. Peak Ho…		
Project Description	2021 A.M. Peak Hr plan 2- MS Road Access				

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	297	0	72				381	776			414	302





Signal Information										
Cycle, s	85.0	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	50.8	4.3	15.4	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		19.6			9.3	65.4		56.1
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		13.8			2.0			
Green Extension Time (*g* $_e$), s		1.7			0.9	0.0		0.0
Phase Call Probability		1.00			1.00			
Max Out Probability		0.53			1.00			

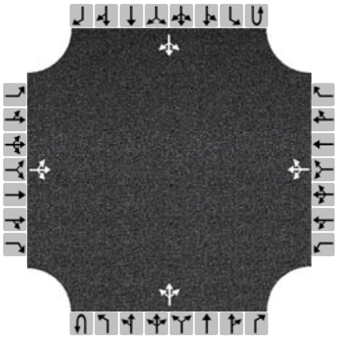
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	228	177					419	853			455	332
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1581	1503					1556	1606			1581	1407
Queue Service Time (*g* $_s$), s	11.8	9.7					0.0	9.0			5.8	10.6
Cycle Queue Clearance Time (*g* $_c$), s	11.8	9.7					0.0	9.0			5.8	10.6
Green Ratio (*g/C*)	0.18	0.18					0.64	0.71			0.60	0.60
Capacity (*c*), veh/h	287	273					642	2270			1889	841
Volume-to-Capacity Ratio (*X*)	0.797	0.649					0.652	0.376			0.241	0.395
Back of Queue (*Q*), ft/ln (95 th percentile)	224.2	184					242.1	101.4			79.4	138.1
Back of Queue (*Q*), veh/ln (95 th percentile)	8.8	7.2					9.3	4.0			3.1	5.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.56	0.46					0.48	0.20			0.16	0.86
Uniform Delay (*d* $_1$), s/veh	33.3	36.4					14.0	5.0			8.0	9.0
Incremental Delay (*d* $_2$), s/veh	10.0	4.4					1.9	0.5			0.3	1.4
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	43.3	40.8					15.9	5.4			8.3	10.4
Level of Service (LOS)	D	D					B	A			A	B
Approach Delay, s/veh / LOS	42.2		D	0.0			8.9		A	9.2		A
Intersection Delay, s/veh / LOS	14.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.62	B	1.94	B
Bicycle LOS Score / LOS	1.16	A			1.54	B	1.14	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.89
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC PM Peak Hour Middles School Rd Acces		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	16	0		62	4	29		0	91	93		22	53	2
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

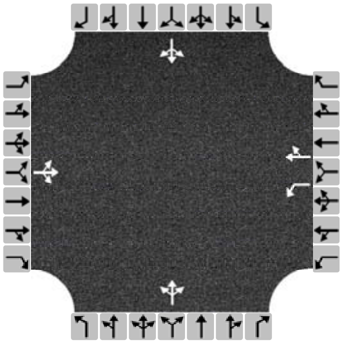
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			19				107			0				25		
Capacity, c (veh/h)			590				710			1541				1364		
v/c Ratio			0.03				0.15			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.5			0.0				0.1		
Control Delay (s/veh)			11.3				11.0			7.3				7.7		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	11.3				11.0				0.0				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	P.M. Peak Hour 5-6		
Project Description	2031 with CWC Middle School Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	19	165	38	179	203	177	12	12	51	81	60	27
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	255			206	437		86			193		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.227			0.183	0.388		0.077			0.172		
Final Departure Headway, hd (s)	5.68			6.29	5.46		6.14			6.21		
Final Degree of Utilization, x	0.402			0.360	0.662		0.147			0.333		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.68			3.99	3.16		4.14			4.21		

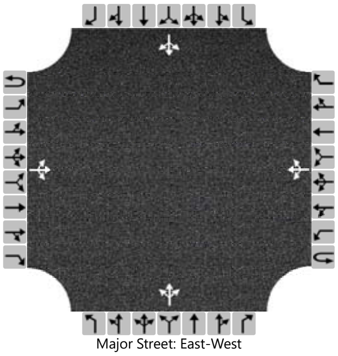
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	255			206	437		86			193		
Capacity	634			572	660		586			580		
95% Queue Length, Q_{95} (veh)	1.9			1.6	5.0		0.5			1.5		
Control Delay (s/veh)	12.4			12.5	18.2		10.2			12.3		
Level of Service, LOS	B			B	C		B			B		
Approach Delay (s/veh)	12.4			16.4			10.2			12.3		
Approach LOS	B			C			B			B		
Intersection Delay, s/veh | LOS	14.4						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC Middle School Road AccesPM Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		33	406	0		0	483	84		0	0	0		147	0	82
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

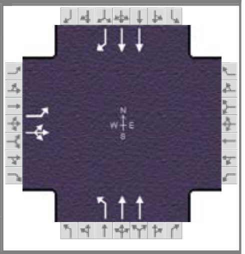
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

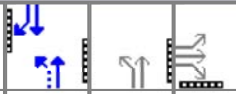
Flow Rate, v (veh/h)		34				0					0				239	
Capacity, c (veh/h)		985				1136									260	
v/c Ratio		0.03				0.00									0.92	
95% Queue Length, Q_{95} (veh)		0.1				0.0									8.2	
Control Delay (s/veh)		8.8				8.2									78.5	
Level of Service (LOS)		A				A									F	
Approach Delay (s/veh)	1.0				0.0								78.5			
Approach LOS													F			

HCS7 Signalized Intersection Results Summary

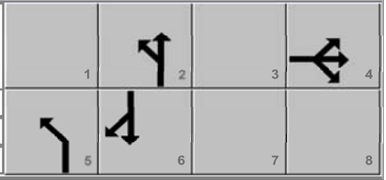
General Information				**Intersection Information**	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.96
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_P.M. Peak Ho…		
Project Description	2031 P.M. Peak Hr- CWC with MS Access				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	357	0	201				215	592			991	395



Signal Information										
Cycle, s	84.0	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	46.6	4.3	18.6	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		22.8			9.3	61.2		51.9
Change Period, (*Y+R* *c*), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* *s*), s		17.8			2.0			
Green Extension Time (*g* *e*), s		0.8			0.6	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

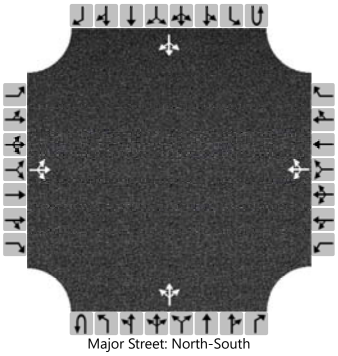
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	312	269					224	617			1032	411
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1477					1606	1593			1581	1418
Queue Service Time (*g* *s*), s	15.8	14.7					0.0	6.7			18.1	15.3
Cycle Queue Clearance Time (*g* *c*), s	15.8	14.7					0.0	6.7			18.1	15.3
Green Ratio (*g/C*)	0.22	0.22					0.60	0.67			0.56	0.56
Capacity (*c*), veh/h	356	327					349	2121			1755	787
Volume-to-Capacity Ratio (*X*)	0.879	0.822					0.642	0.291			0.588	0.523
Back of Queue (*Q*), ft/ln (95 th percentile)	312.2	271.1					199.3	82.2			247.7	206.9
Back of Queue (*Q*), veh/ln (95 th percentile)	12.4	10.8					7.9	3.2			9.7	8.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.78	0.68					0.40	0.16			0.50	1.29
Uniform Delay (*d* *1*), s/veh	31.6	33.2					26.2	5.8			12.3	11.7
Incremental Delay (*d* *2*), s/veh	20.7	15.3					3.1	0.3			1.5	2.5
Initial Queue Delay (*d* *3*), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	52.3	48.4					29.3	6.2			13.8	14.2
Level of Service (LOS)	D	D					C	A			B	B
Approach Delay, s/veh / LOS	50.5	D		0.0			12.3	B		13.9	B	
Intersection Delay, s/veh / LOS	20.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.45	A			1.18	A	1.68	B

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM School Peak Hour	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC and Middle School Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	8	2		90	2	48		1	69	70		29	66	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

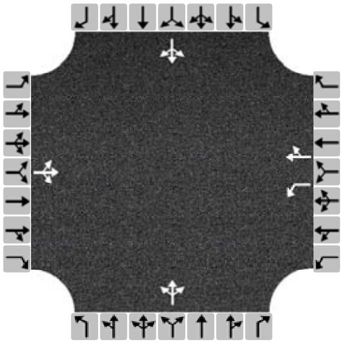
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			14				154			1				32		
Capacity, c (veh/h)			645				743			1522				1428		
v/c Ratio			0.02				0.21			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.8			0.0				0.1		
Control Delay (s/veh)			10.7				11.1			7.4				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.7				11.1				0.1				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.68
Time Analyzed	P.M. Peak Hour 3:15-4:15		
Project Description	2031 with Middle School Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16	113	2	53	136	80	28	40	52	95	20	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	193			78	318		176			190		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.171			0.069	0.282		0.157			0.169		
Final Departure Headway, hd (s)	5.79			6.43	5.66		5.69			5.94		
Final Degree of Utilization, x	0.310			0.139	0.499		0.279			0.313		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.79			4.13	3.36		3.69			3.94		

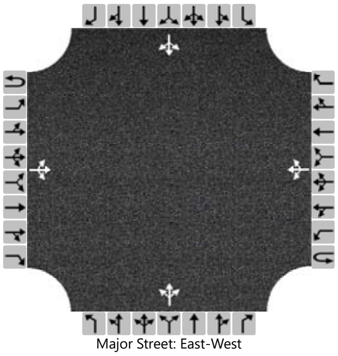
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	193			78	318		176			190		
Capacity	621			560	636		633			606		
95% Queue Length, Q_{95} (veh)	1.3			0.5	2.8		1.1			1.3		
Control Delay (s/veh)	11.4			10.2	13.9		10.9			11.6		
Level of Service, LOS	B			B	B		B			B		
Approach Delay (s/veh)	11.4			13.1			10.9			11.6		
Approach LOS	B			B			B			B		
Intersection Delay, s/veh | LOS	12.1						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	School Peak Hour	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC Middle School AccessSchool Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		72	457	2		4	330	124		0	0	1		101	0	62
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

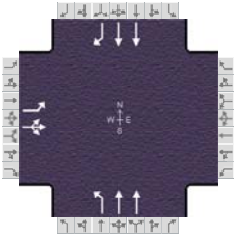
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		95				5					1				214	
Capacity, c (veh/h)		979				974					499				169	
v/c Ratio		0.10				0.01					0.00				1.27	
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.0				12.3	
Control Delay (s/veh)		9.1				8.7					12.2				213.9	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	2.4				0.1				12.2				213.9			
Approach LOS									B				F			

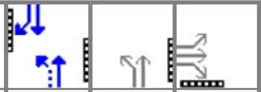
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.83
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_School P.M. Peak Hour…		
Project Description	2031 School PM PeakMiddle School Access				

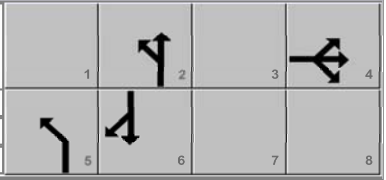


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	356	0	153				156	501			706	193

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.4	4.3	19.8	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		24.0			9.3	60.0		50.7
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (g_s), s		20.6			2.0			
Green Extension Time (g_e), s		0.0			0.5	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	360	253					188	604			851	233
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1486					1606	1593			1581	1418
Queue Service Time (g_s), s	18.6	13.5					0.0	6.8			14.2	7.6
Cycle Queue Clearance Time (g_c), s	18.6	13.5					0.0	6.8			14.2	7.6
Green Ratio (*g/C*)	0.24	0.24					0.59	0.65			0.54	0.54
Capacity (*c*), veh/h	379	350					404	2075			1710	767
Volume-to-Capacity Ratio (*X*)	0.951	0.722					0.465	0.291			0.497	0.303
Back of Queue (*Q*), ft/ln (95 th percentile)	393.4	239.5					123.8	86.3			205.1	103.8
Back of Queue (*Q*), veh/ln (95 th percentile)	15.6	9.6					4.9	3.4			8.0	4.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.98	0.60					0.25	0.17			0.41	0.65
Uniform Delay (d_1), s/veh	31.6	32.2					19.9	6.3			12.1	10.6
Incremental Delay (d_2), s/veh	34.1	8.2					0.3	0.4			1.0	1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	65.8	40.4					20.2	6.7			13.1	11.6
Level of Service (LOS)	E	D					C	A			B	B
Approach Delay, s/veh / LOS	55.3		E	0.0			9.9		A	12.8		B
Intersection Delay, s/veh / LOS	22.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.64	B	1.94	B
Bicycle LOS Score / LOS	1.50	A			1.14	A	1.38	A

Appendix D-3

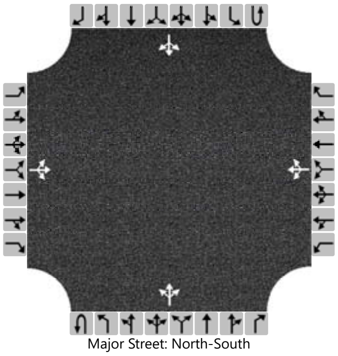
2031 Analysis
With Gregory Lane as Access

JORGENSEN

HCS7 Two-Way Stop-Control Report

General Information		**Site Information**	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.71
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 AM Peak Hour with CWC and Gregory Lane Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	2	1		58	9	50		0	99	132		58	79	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			10				165			0				82		
Capacity, c (veh/h)			413				548			1472				1234		
v/c Ratio			0.02				0.30			0.00				0.07		
95% Queue Length, Q_{95} (veh)			0.1				1.3			0.0				0.2		
Control Delay (s/veh)			13.9				14.4			7.4				8.1		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	13.9				14.4				0.0				3.7			
Approach LOS	B				B											

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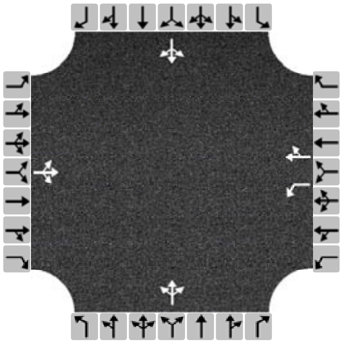
2021_w CWC_Gregory Lane access_High School Road and South Park Loop_AM Peak Hour.xtw

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.85
Time Analyzed	A.M. Peak Hour		
Project Description	2031 with CWC Gregory Lane as Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	18	209	39	202	100	90	1	15	11	172	70	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	313			238	224		32			301		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.278			0.211	0.199		0.028			0.268		
Final Departure Headway, hd (s)	5.72			6.58	5.74		6.46			6.06		
Final Degree of Utilization, x	0.497			0.435	0.356		0.057			0.507		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.72			4.28	3.44		4.46			4.06		

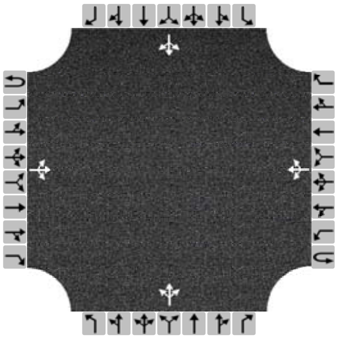
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	313			238	224		32			301		
Capacity	629			547	627		558			594		
95% Queue Length, Q_{95} (veh)	2.8			2.2	1.6		0.2			2.9		
Control Delay (s/veh)	14.2			14.2	11.6		9.8			15.1		
Level of Service, LOS	B			B	B		A			C		
Approach Delay (s/veh)	14.2			13.0			9.8			15.1		
Approach LOS	B			B			A			C		
Intersection Delay, s/veh | LOS	13.8						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC AM Peak Hour Gregory Access		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		54	407	14		25	601	154		0	0	1		80	4	58
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

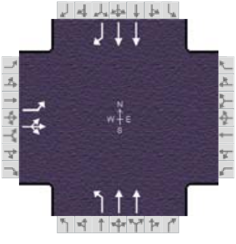
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

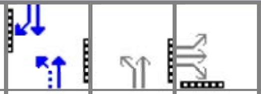
Flow Rate, v (veh/h)		57				27					1				151	
Capacity, c (veh/h)		821				1112					617				168	
v/c Ratio		0.07				0.02					0.00				0.90	
95% Queue Length, Q_{95} (veh)		0.2				0.1					0.0				6.5	
Control Delay (s/veh)		9.7				8.3					10.8				99.3	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	1.9				0.6				10.8				99.3			
Approach LOS									B				F			

HCS7 Signalized Intersection Results Summary

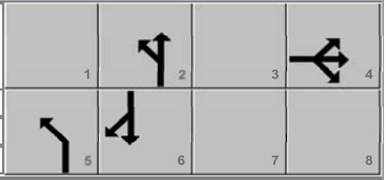
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 7:45
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_A.M. Peak Ho…		
Project Description	2031 A.M. Peak Hr plan 2- Gregory Ln Access				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	297	0	72				381	776			414	301



Signal Information										
Cycle, s	85.0	Reference Phase	2							
Offset, s	0	Reference Point	Begin	Green	50.8	4.3	15.4	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		19.6			9.3	65.4		56.1
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		13.8			2.0			
Green Extension Time (*g* $_e$), s		1.7			0.9	0.0		0.0
Phase Call Probability		1.00			1.00			
Max Out Probability		0.53			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	228	177					419	853			455	331
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1581	1503					1556	1606			1581	1407
Queue Service Time (*g* $_s$), s	11.8	9.7					0.0	9.0			5.8	10.5
Cycle Queue Clearance Time (*g* $_c$), s	11.8	9.7					0.0	9.0			5.8	10.5
Green Ratio (*g/C*)	0.18	0.18					0.64	0.71			0.60	0.60
Capacity (*c*), veh/h	287	273					642	2270			1889	841
Volume-to-Capacity Ratio (*X*)	0.797	0.649					0.652	0.376			0.241	0.393
Back of Queue (*Q*), ft/ln (95 th percentile)	224.2	184					242.1	101.4			79.4	138.1
Back of Queue (*Q*), veh/ln (95 th percentile)	8.8	7.2					9.3	4.0			3.1	5.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.56	0.46					0.48	0.20			0.16	0.86
Uniform Delay (*d* $_1$), s/veh	33.3	36.4					14.0	5.0			8.0	9.0
Incremental Delay (*d* $_2$), s/veh	10.0	4.4					1.9	0.5			0.3	1.4
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	43.3	40.8					15.9	5.4			8.3	10.4
Level of Service (LOS)	D	D					B	A			A	B

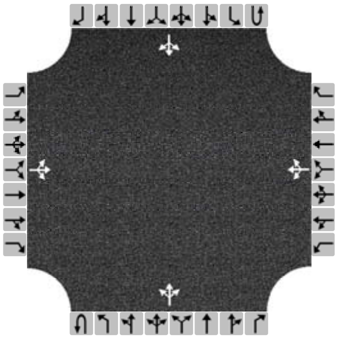
Approach Delay, s/veh / LOS	42.2	D	0.0		8.9	A	9.2	A
Intersection Delay, s/veh / LOS	14.5				B			

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.62	B	1.94	B
Bicycle LOS Score / LOS	1.16	A			1.54	B	1.14	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.89
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC PM Peak Hour Gregory Lane		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	16	0		63	4	30		0	91	96		23	53	2
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

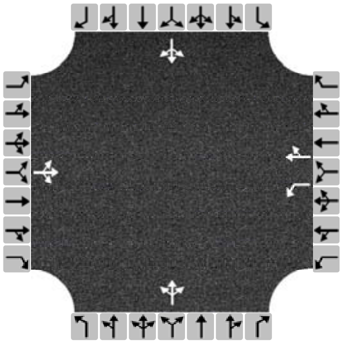
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			19				109			0				26		
Capacity, c (veh/h)			586				707			1541				1361		
v/c Ratio			0.03				0.15			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.5			0.0				0.1		
Control Delay (s/veh)			11.4				11.0			7.3				7.7		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	11.4				11.0				0.0				2.4			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	P.M. Peak Hour 5-6		
Project Description	2031 with CWC Gregory Lane Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	19	173	34	159	207	181	9	9	38	85	53	27
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	260			183	446		64			190		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.231			0.162	0.396		0.057			0.169		
Final Departure Headway, hd (s)	5.56			6.19	5.36		6.10			6.13		
Final Degree of Utilization, x	0.402			0.314	0.664		0.109			0.323		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.56			3.89	3.06		4.10			4.13		

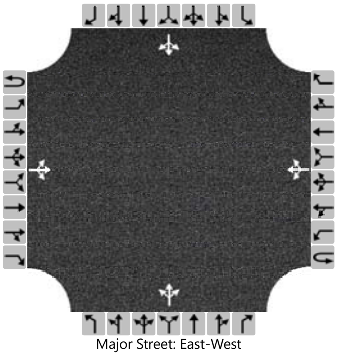
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	260			183	446		64			190		
Capacity	647			581	672		590			587		
95% Queue Length, Q_{95} (veh)	1.9			1.3	5.0		0.4			1.4		
Control Delay (s/veh)	12.2			11.7	18.0		9.8			12.0		
Level of Service, LOS	B			B	C		A			B		
Approach Delay (s/veh)	12.2			16.2			9.8			12.0		
Approach LOS	B			C			A			B		
Intersection Delay, s/veh | LOS	14.2						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC PM Peak Hour Gregory Lane Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		32	394	11		14	464	84		7	4	9		147	6	79
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

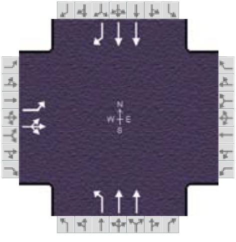
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				15					21				242	
Capacity, c (veh/h)		1002				1137					253				246	
v/c Ratio		0.03				0.01					0.08				0.98	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.3				9.2	
Control Delay (s/veh)		8.7				8.2					20.5				95.7	
Level of Service (LOS)		A				A					C				F	
Approach Delay (s/veh)	1.0				0.4				20.5				95.7			
Approach LOS									C				F			

HCS7 Signalized Intersection Results Summary

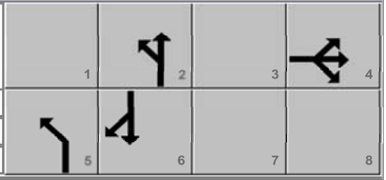
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.96
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_P.M. Peak Ho…		
Project Description	2031 with CWC P.M. Peak Hr- Gregory Lane				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	354	0	200				213	592			991	392

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	46.7	4.3	18.5	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		22.7			9.3	61.3		52.0
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		17.6			2.0			
Green Extension Time (*g* $_e$), s		0.8			0.6	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

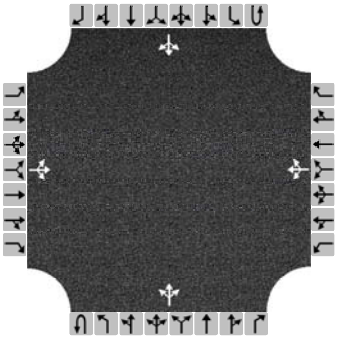
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	310	267					222	617			1032	408
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1477					1606	1593			1581	1418
Queue Service Time (*g* $_s$), s	15.6	14.7					0.0	6.7			18.1	15.1
Cycle Queue Clearance Time (*g* $_c$), s	15.6	14.7					0.0	6.7			18.1	15.1
Green Ratio (*g/C*)	0.22	0.22					0.60	0.67			0.56	0.56
Capacity (*c*), veh/h	354	325					350	2124			1758	789
Volume-to-Capacity Ratio (*X*)	0.876	0.822					0.635	0.290			0.587	0.518
Back of Queue (*Q*), ft/ln (95 th percentile)	308.7	269.9					195.5	81.8			246.7	204.7
Back of Queue (*Q*), veh/ln (95 th percentile)	12.2	10.8					7.8	3.2			9.6	8.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.77	0.67					0.39	0.16			0.49	1.28
Uniform Delay (*d* $_1$), s/veh	31.6	33.2					26.0	5.8			12.3	11.6
Incremental Delay (*d* $_2$), s/veh	20.3	15.2					2.9	0.3			1.4	2.4
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	51.9	48.4					28.9	6.1			13.7	14.0
Level of Service (LOS)	D	D					C	A			B	B
Approach Delay, s/veh / LOS	50.3		D	0.0			12.1		B	13.8		B
Intersection Delay, s/veh / LOS	20.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.44	A			1.18	A	1.68	B

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM School Peak Hour	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC and Gregory Access		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	8	2		89	3	49		1	69	71		29	66	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

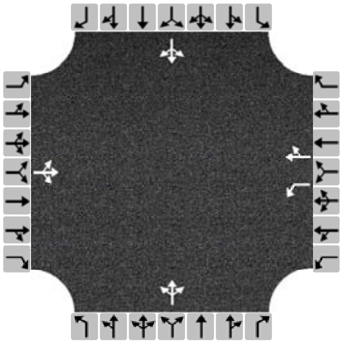
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			14				155			1				32		
Capacity, c (veh/h)			644				743			1522				1427		
v/c Ratio			0.02				0.21			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.8			0.0				0.1		
Control Delay (s/veh)			10.7				11.1			7.4				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.7				11.1				0.1				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.68
Time Analyzed	P.M. Peak Hour 3:15-4:15		
Project Description	2031 with Gregory Lane Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16	114	2	50	141	83	22	32	41	96	19	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	194			74	329		140			190		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.173			0.065	0.293		0.124			0.169		
Final Departure Headway, hd (s)	5.66			6.30	5.53		5.68			5.86		
Final Degree of Utilization, x	0.305			0.129	0.506		0.220			0.309		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.66			4.00	3.23		3.68			3.86		

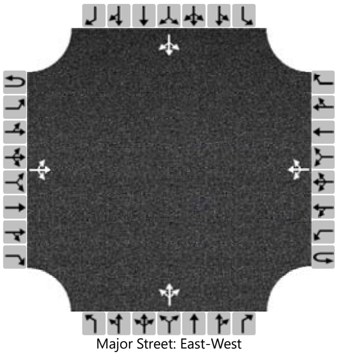
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	194			74	329		140			190		
Capacity	636			571	651		634			615		
95% Queue Length, Q_{95} (veh)	1.3			0.4	2.9		0.8			1.3		
Control Delay (s/veh)	11.1			9.9	13.8		10.3			11.5		
Level of Service, LOS	B			A	B		B			B		
Approach Delay (s/veh)	11.1			13.1			10.3			11.5		
Approach LOS	B			B			B			B		
Intersection Delay, s/veh | LOS	11.9						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	School Peak Hour	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC Gregory Lane AccessSchool Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		71	448	4		6	327	124		9	3	14		101	1	61
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

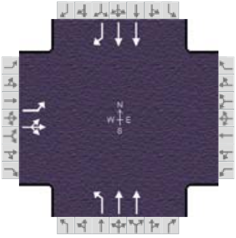
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		93				8					34				214	
Capacity, c (veh/h)		983				981					178				160	
v/c Ratio		0.10				0.01					0.19				1.34	
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.7				13.0	
Control Delay (s/veh)		9.0				8.7					30.0				245.3	
Level of Service (LOS)		A				A					D				F	
Approach Delay (s/veh)	2.3				0.2				30.0				245.3			
Approach LOS									D				F			

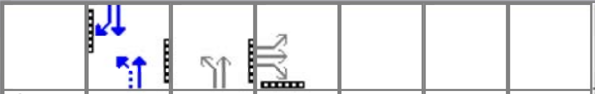
HCS7 Signalized Intersection Results Summary

General Information				**Intersection Information**	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.83
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_School P.M. Peak Hour…		
Project Description	2031 School PM PeakGregory Access				

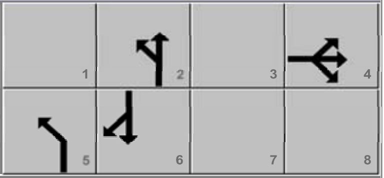


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	358	0	154				155	501			706	193

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.5	4.2	19.8	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		24.0			9.2	60.0		50.8
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		20.7			2.0			
Green Extension Time (*g* $_e$), s		0.0			0.5	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	362	255					187	604			851	233
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1486					1606	1593			1581	1418
Queue Service Time (*g* $_s$), s	18.7	13.6					0.0	6.8			14.2	7.6
Cycle Queue Clearance Time (*g* $_c$), s	18.7	13.6					0.0	6.8			14.2	7.6
Green Ratio (*g/C*)	0.24	0.24					0.59	0.65			0.54	0.54
Capacity (*c*), veh/h	379	350					404	2075			1710	767
Volume-to-Capacity Ratio (*X*)	0.957	0.727					0.462	0.291			0.497	0.303
Back of Queue (*Q*), ft/ln (95 th percentile)	398.5	241.5					122.5	86.3			205.1	103.8
Back of Queue (*Q*), veh/ln (95 th percentile)	15.8	9.7					4.9	3.4			8.0	4.1
Queue Storage Ratio (*RQ*) (95 th percentile)	1.00	0.60					0.25	0.17			0.41	0.65
Uniform Delay (*d* $_1$), s/veh	31.7	32.2					19.8	6.3			12.1	10.6
Incremental Delay (*d* $_2$), s/veh	35.3	8.4					0.3	0.4			1.0	1.0
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	67.0	40.6					20.2	6.7			13.1	11.6
Level of Service (LOS)	E	D					C	A			B	B
Approach Delay, s/veh / LOS	56.1		E	0.0			9.8		A	12.8		B
Intersection Delay, s/veh / LOS	22.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.64	B	1.94	B
Bicycle LOS Score / LOS	1.51	B			1.14	A	1.38	A

Appendix D-4

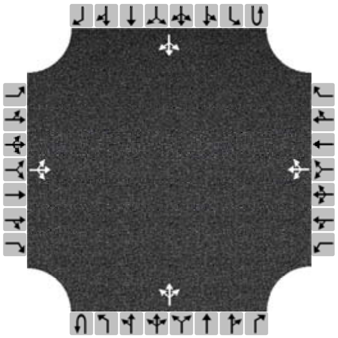
2031 Analysis
With Dual Access

JORGENSEN

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.71
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 AM Peak Hour with CWC and Dual Access		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	2	1		58	9	50		0	99	131		57	79	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

	EB U	EB L	EB T	EB R	WB U	WB L	WB T	WB R	NB U	NB L	NB T	NB R	SB U	SB L	SB T	SB R
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

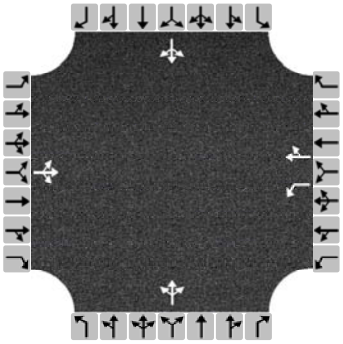
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			10				165			0				80		
Capacity, c (veh/h)			416				551			1472				1236		
v/c Ratio			0.02				0.30			0.00				0.06		
95% Queue Length, Q_{95} (veh)			0.1				1.2			0.0				0.2		
Control Delay (s/veh)			13.9				14.3			7.4				8.1		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	13.9				14.3				0.0				3.6			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.85
Time Analyzed	A.M. Peak Hour		
Project Description	2031 Traffic Conditions with CWC dual access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	18	201	44	202	100	90	1	15	11	165	79	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	309			238	224		32			304		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.275			0.211	0.199		0.028			0.270		
Final Departure Headway, hd (s)	5.72			6.58	5.74		6.45			6.05		
Final Degree of Utilization, x	0.491			0.435	0.356		0.057			0.510		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.72			4.28	3.44		4.45			4.05		

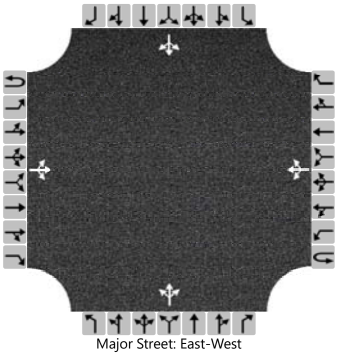
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	309			238	224		32			304		
Capacity	630			547	627		558			595		
95% Queue Length, Q_{95} (veh)	2.7			2.2	1.6		0.2			2.9		
Control Delay (s/veh)	14.1			14.2	11.6		9.8			15.2		
Level of Service, LOS	B			B	B		A			C		
Approach Delay (s/veh)	14.1			13.0			9.8			15.2		
Approach LOS	B			B			A			C		
Intersection Delay, s/veh | LOS	13.8						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC AM Peak Hour Dual Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		54	407	0		25	601	154		0	0	1		80	4	58
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

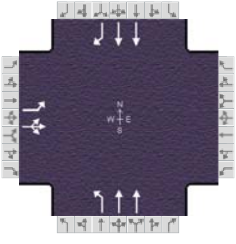
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		57				27					1				151	
Capacity, c (veh/h)		821				1127					623				170	
v/c Ratio		0.07				0.02					0.00				0.89	
95% Queue Length, Q_{95} (veh)		0.2				0.1					0.0				6.4	
Control Delay (s/veh)		9.7				8.3					10.8				96.3	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	1.9				0.6				10.8				96.3			
Approach LOS									B				F			

HCS7 Signalized Intersection Results Summary

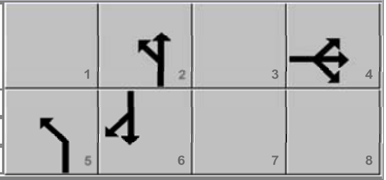
General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 7:45
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_A.M. Peak Ho…		
Project Description	2031 A.M. Peak Hr plan 2- Dual Access				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	297	0	72				380	776			414	301

Signal Information			
Cycle, s	85.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	50.8	4.3	15.4	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		19.6			9.3	65.4		56.1
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (g_s), s		13.8			2.0			
Green Extension Time (g_e), s		1.7			0.9	0.0		0.0
Phase Call Probability		1.00			1.00			
Max Out Probability		0.53			1.00			

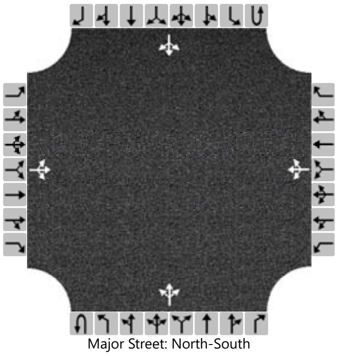
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	228	177					418	853			455	331
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1581	1503					1556	1606			1581	1407
Queue Service Time (g_s), s	11.8	9.7					0.0	9.0			5.8	10.5
Cycle Queue Clearance Time (g_c), s	11.8	9.7					0.0	9.0			5.8	10.5
Green Ratio (*g/C*)	0.18	0.18					0.64	0.71			0.60	0.60
Capacity (*c*), veh/h	287	273					642	2270			1889	841
Volume-to-Capacity Ratio (*X*)	0.797	0.649					0.650	0.376			0.241	0.393
Back of Queue (*Q*), ft/ln (95 th percentile)	224.2	184					240.6	101.4			79.4	138.1
Back of Queue (*Q*), veh/ln (95 th percentile)	8.8	7.2					9.3	4.0			3.1	5.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.56	0.46					0.48	0.20			0.16	0.86
Uniform Delay (d_1), s/veh	33.3	36.4					14.0	5.0			8.0	9.0
Incremental Delay (d_2), s/veh	10.0	4.4					1.8	0.5			0.3	1.4
Initial Queue Delay (d_3), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	43.3	40.8					15.9	5.4			8.3	10.4
Level of Service (LOS)	D	D					B	A			A	B
Approach Delay, s/veh / LOS	42.2	D		0.0			8.9	A		9.2	A	
Intersection Delay, s/veh / LOS	14.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.62	B	1.94	B
Bicycle LOS Score / LOS	1.16	A			1.54	B	1.14	A

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.89
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC PM Peak Hour Dual Access		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	16	0		62	4	29		0	91	93		22	53	2
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

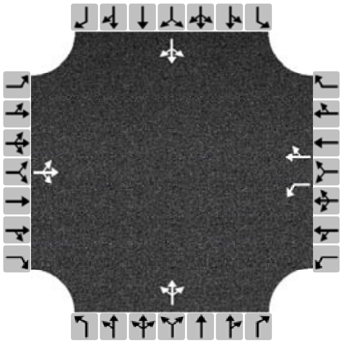
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			19				107			0				25		
Capacity, c (veh/h)			590				710			1541				1364		
v/c Ratio			0.03				0.15			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.5			0.0				0.1		
Control Delay (s/veh)			11.3				11.0			7.3				7.7		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	11.3				11.0				0.0				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	P.M. Peak Hour 5-6		
Project Description	2031 with CWC dual access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	19	165	38	159	203	177	12	14	38	81	61	27
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	255			183	437		74			194		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.227			0.162	0.388		0.065			0.173		
Final Departure Headway, hd (s)	5.60			6.24	5.41		6.15			6.14		
Final Degree of Utilization, x	0.397			0.317	0.656		0.126			0.331		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.60			3.94	3.11		4.15			4.14		

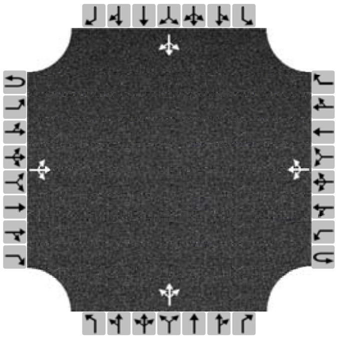
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	255			183	437		74			194		
Capacity	642			577	666		585			587		
95% Queue Length, Q_{95} (veh)	1.9			1.4	4.9		0.4			1.4		
Control Delay (s/veh)	12.2			11.8	17.8		10.0			12.1		
Level of Service, LOS	B			B	C		B			B		
Approach Delay (s/veh)	12.2			16.0			10.0			12.1		
Approach LOS	B			C			B			B		
Intersection Delay, s/veh | LOS	14.1						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 PM Peak Hour Dual Access		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		32	394	0		13	464	84		0	4	8		147	6	79
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

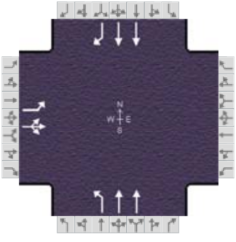
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				14					13				242	
Capacity, c (veh/h)		1002				1148					377				250	
v/c Ratio		0.03				0.01					0.03				0.97	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.1				9.0	
Control Delay (s/veh)		8.7				8.2					14.9				91.5	
Level of Service (LOS)		A				A					B				F	
Approach Delay (s/veh)	1.0				0.3				14.9				91.5			
Approach LOS									B				F			

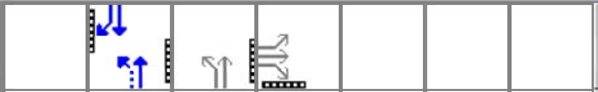
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.96
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_w CWC_P.M. Peak Ho…		
Project Description	2031 with CWC P.M. Peak Hr- Dual Access				

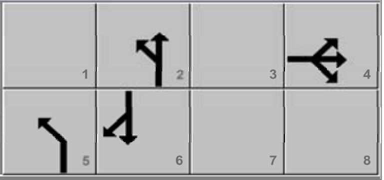


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	353	0	199				213	592			991	392

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	46.8	4.3	18.5	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		22.7			9.3	61.3		52.1
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		17.6			2.0			
Green Extension Time (*g* $_e$), s		0.9			0.6	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	309	266					222	617			1032	408
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1477					1606	1593			1581	1418
Queue Service Time (*g* $_s$), s	15.6	14.6					0.0	6.7			18.1	15.1
Cycle Queue Clearance Time (*g* $_c$), s	15.6	14.6					0.0	6.7			18.1	15.1
Green Ratio (*g/C*)	0.22	0.22					0.60	0.67			0.56	0.56
Capacity (*c*), veh/h	353	325					350	2126			1760	790
Volume-to-Capacity Ratio (*X*)	0.875	0.820					0.634	0.290			0.587	0.517
Back of Queue (*Q*), ft/ln (95 th percentile)	307.6	268.2					195.4	81.8			246.6	204.6
Back of Queue (*Q*), veh/ln (95 th percentile)	12.2	10.7					7.8	3.2			9.6	8.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.77	0.67					0.39	0.16			0.49	1.28
Uniform Delay (*d* $_1$), s/veh	31.7	33.2					25.9	5.8			12.3	11.6
Incremental Delay (*d* $_2$), s/veh	20.2	15.0					2.8	0.3			1.4	2.4
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	51.8	48.2					28.8	6.1			13.7	14.0
Level of Service (LOS)	D	D					C	A			B	B

	EB		WB		NB		SB	
Approach Delay, s/veh / LOS	50.1	D	0.0		12.1	B	13.8	B
Intersection Delay, s/veh / LOS	20.6				C			

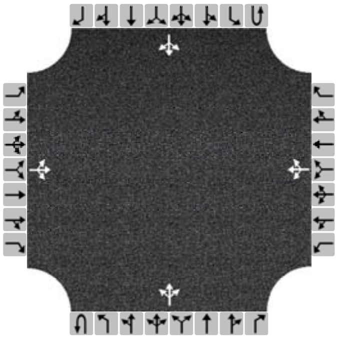
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.63	B	1.94	B
Bicycle LOS Score / LOS	1.44	A			1.18	A	1.68	B

HCS7 Two-Way Stop-Control Report

General Information | Site Information

Analyst	Hayley Ruland	Intersection	South Park Lp/HS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	South Park Loop Road
Time Analyzed	PM School Peak Hour	Peak Hour Factor	0.91
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC and Dual Access		

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	8	2		89	3	48		1	69	70		29	66	4
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

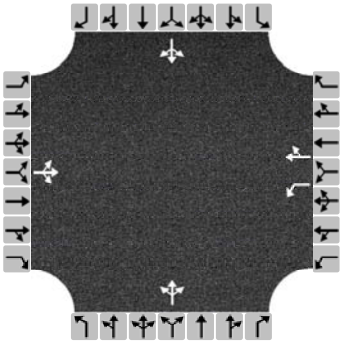
Flow Rate, v (veh/h)			13				154			1				32		
Capacity, c (veh/h)			647				742			1522				1428		
v/c Ratio			0.02				0.21			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.1				0.8			0.0				0.1		
Control Delay (s/veh)			10.7				11.1			7.4				7.6		
Level of Service (LOS)			B				B			A				A		
Approach Delay (s/veh)	10.7				11.1				0.1				2.3			
Approach LOS	B				B											

HCS7 All-Way Stop Control Report

General Information / Site Information

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / MS Rd
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/3/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Middle School Road
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.68
Time Analyzed	P.M. Peak Hour 3:15-4:15		
Project Description	2031 with Dual Access		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16	113	2	50	136	80	28	38	41	95	20	14
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			L	TR		LTR			LTR		
Flow Rate, v (veh/h)	193			74	318		157			190		
Percent Heavy Vehicles	2			2	2		2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20			3.20		
Initial Degree of Utilization, x	0.171			0.065	0.282		0.140			0.169		
Final Departure Headway, hd (s)	5.71			6.36	5.59		5.70			5.88		
Final Degree of Utilization, x	0.306			0.130	0.493		0.249			0.310		
Move-Up Time, m (s)	2.0			2.3	2.3		2.0			2.0		
Service Time, ts (s)	3.71			4.06	3.29		3.70			3.88		

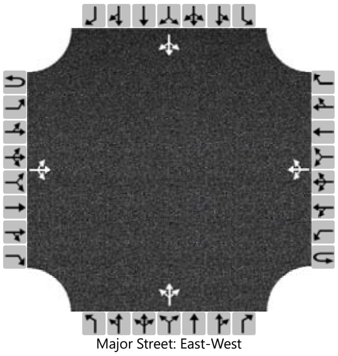
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	193			74	318		157			190		
Capacity	630			566	644		632			613		
95% Queue Length, Q_{95} (veh)	1.3			0.4	2.7		1.0			1.3		
Control Delay (s/veh)	11.2			10.0	13.6		10.6			11.5		
Level of Service, LOS	B			B	B		B			B		
Approach Delay (s/veh)	11.2			12.9			10.6			11.5		
Approach LOS	B			B			B			B		
Intersection Delay, s/veh | LOS	11.9						B					

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Hayley Ruland	Intersection	HS Rd / Gregory Lane
Agency/Co.	Jorgensen	Jurisdiction	Teton County
Date Performed	10/24/2019	East/West Street	High School Road
Analysis Year	2019	North/South Street	Gregory Lane
Time Analyzed	School Peak Hour	Peak Hour Factor	0.76
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	2031 with CWC Dual AccessSchool Peak Hour		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		71	448	2		7	327	124		0	3	10		101	1	61
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

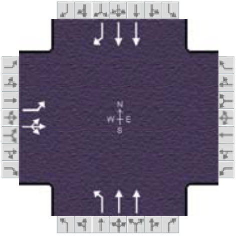
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		93				9					17				214	
Capacity, c (veh/h)		983				984					291				161	
v/c Ratio		0.10				0.01					0.06				1.33	
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.2				12.9	
Control Delay (s/veh)		9.0				8.7					18.1				239.3	
Level of Service (LOS)		A				A					C				F	
Approach Delay (s/veh)	2.3				0.3				18.1				239.3			
Approach LOS									C				F			

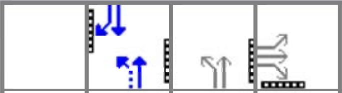
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst		Analysis Date	5/25/2018	Area Type	Other
Jurisdiction		Time Period		PHF	0.83
Urban Street	US 89	Analysis Year	2018	Analysis Period	1> 17:00
Intersection	US 89/High School Road	File Name	US89_High School Road_School P.M. Peak Hour…		
Project Description	2031 School PM Peak Dual Access				

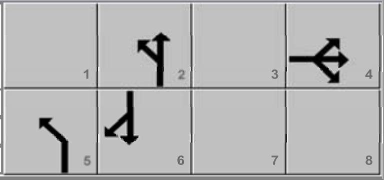


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	355	0	152				155	501			706	193

Signal Information			
Cycle, s	84.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	45.5	4.2	19.8	0.0	0.0	0.0
Yellow	4.3	4.0	3.2	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4			5	2		6
Case Number		10.0			1.0	4.0		7.4
Phase Duration, s		24.0			9.2	60.0		50.8
Change Period, (*Y+R* $_c$), s		4.2			5.3	5.3		5.3
Max Allow Headway (*MAH*), s		5.7			3.1	0.0		0.0
Queue Clearance Time (*g* $_s$), s		20.5			2.0			
Green Extension Time (*g* $_e$), s		0.0			0.5	0.0		0.0
Phase Call Probability		1.00			0.99			
Max Out Probability		1.00			1.00			

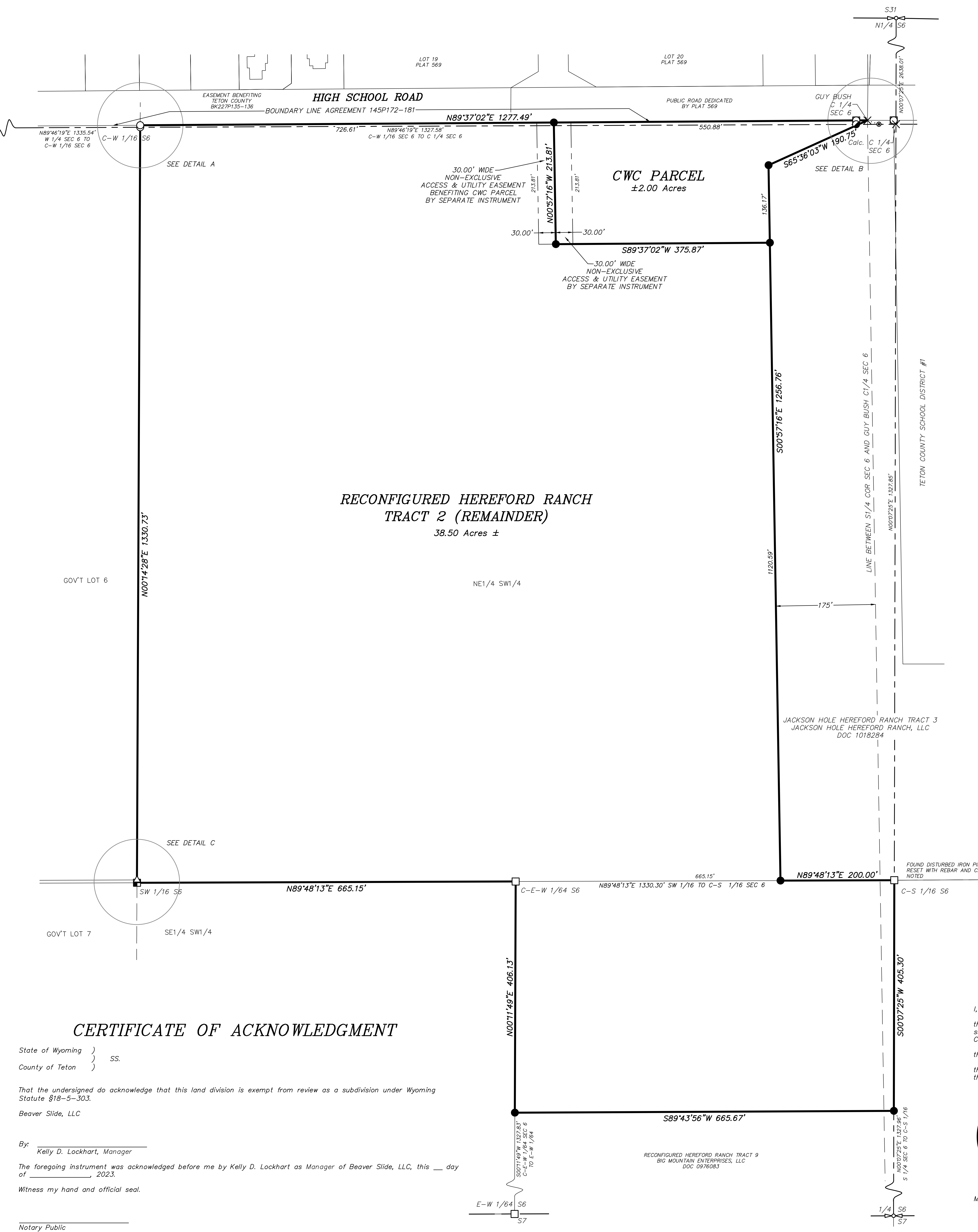
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				5	2			6	16
Adjusted Flow Rate (*v*), veh/h	359	252					187	604			851	233
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1606	1486					1606	1593			1581	1418
Queue Service Time (*g* $_s$), s	18.5	13.4					0.0	6.8			14.2	7.6
Cycle Queue Clearance Time (*g* $_c$), s	18.5	13.4					0.0	6.8			14.2	7.6
Green Ratio (*g/C*)	0.24	0.24					0.59	0.65			0.54	0.54
Capacity (*c*), veh/h	379	350					404	2075			1710	767
Volume-to-Capacity Ratio (*X*)	0.949	0.718					0.462	0.291			0.497	0.303
Back of Queue (*Q*), ft/ln (95 th percentile)	390.5	237.7					122.5	86.3			205.1	103.8
Back of Queue (*Q*), veh/ln (95 th percentile)	15.5	9.5					4.9	3.4			8.0	4.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.98	0.59					0.25	0.17			0.41	0.65
Uniform Delay (*d* $_1$), s/veh	31.6	32.2					19.8	6.3			12.1	10.6
Incremental Delay (*d* $_2$), s/veh	33.6	8.0					0.3	0.4			1.0	1.0
Initial Queue Delay (*d* $_3$), s/veh	0.0	0.0					0.0	0.0			0.0	0.0
Control Delay (*d*), s/veh	65.2	40.1					20.2	6.7			13.1	11.6
Level of Service (LOS)	E	D					C	A			B	B
Approach Delay, s/veh / LOS	54.8	D		0.0			9.8	A		12.8	B	
Intersection Delay, s/veh / LOS	22.2						C					

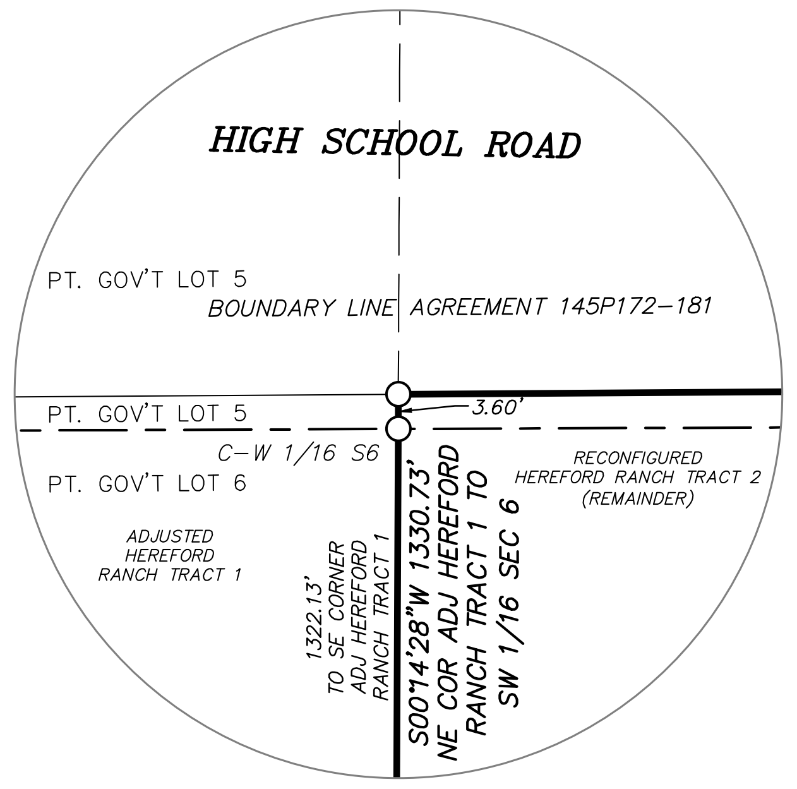
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	1.64	B	1.94	B
Bicycle LOS Score / LOS	1.50	A			1.14	A	1.38	A

HCS™ Streets Version 7.8.5 Generated: 10/25/2019 10:57:13 AM

SECTION 5 – TITLE DOCUMENTS

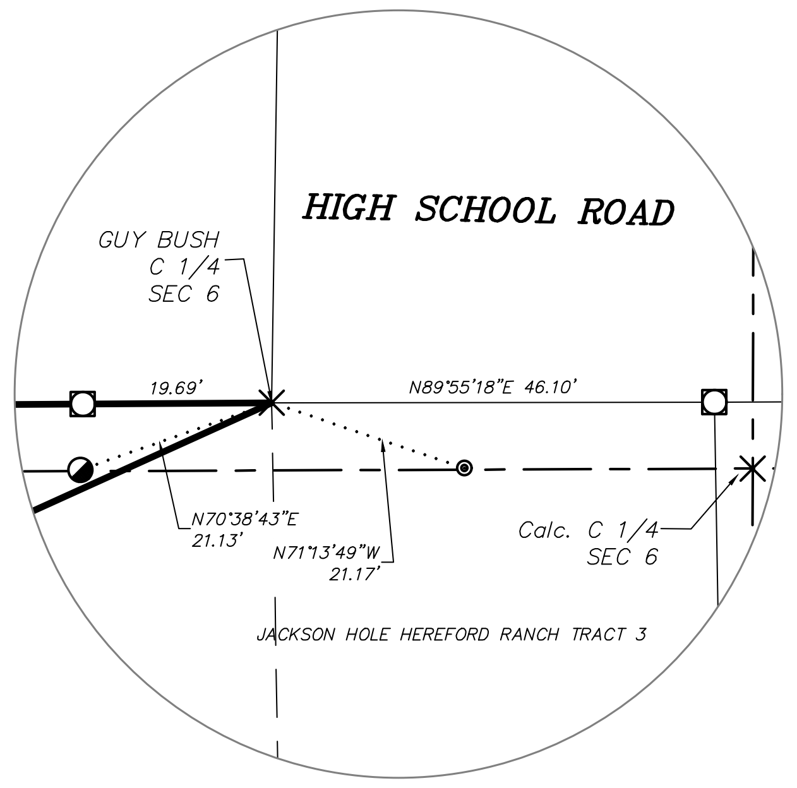
- **EXD MAP OF SURVEY**
- **COVENANTS, CONDITIONS & RESTRICTIONS**





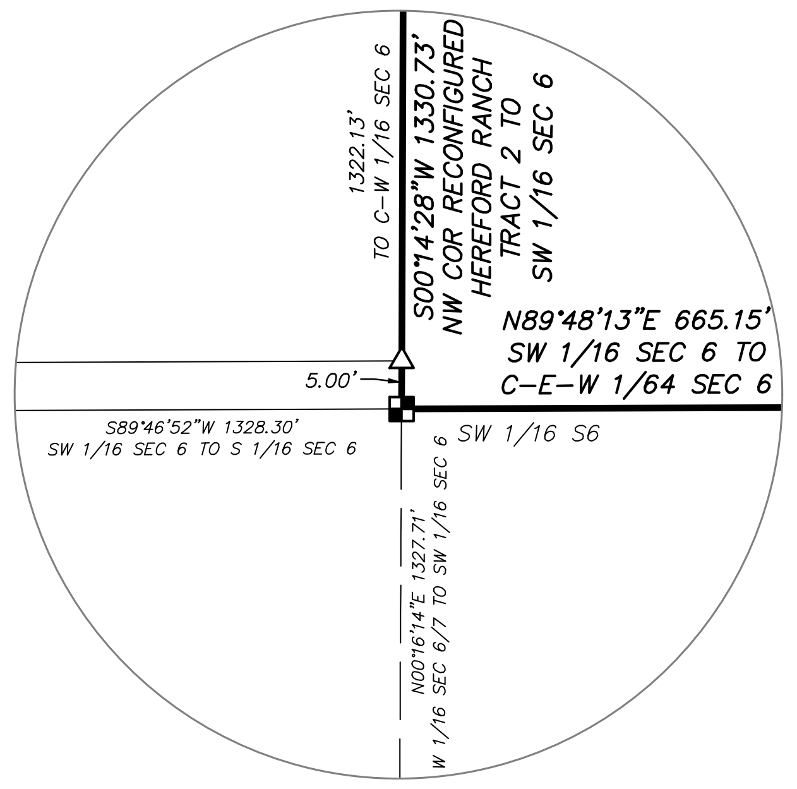
DETAIL A

SCALE: 1" = 20'



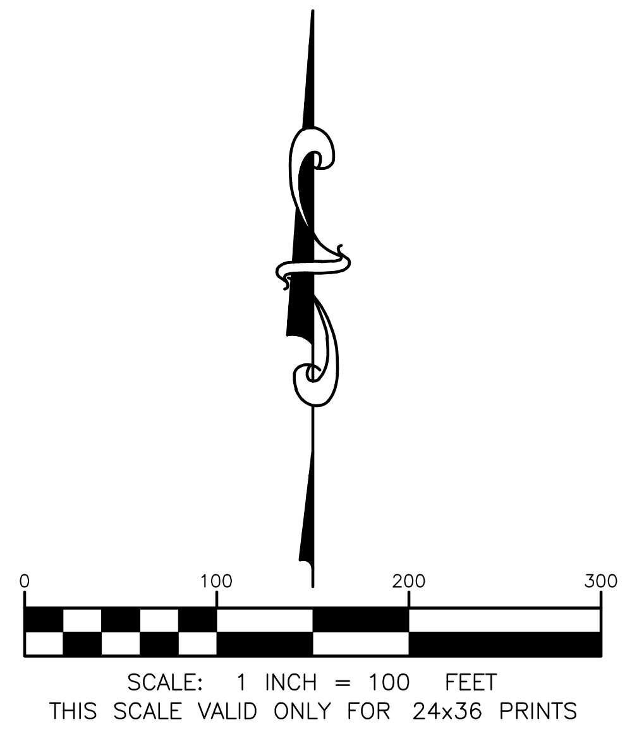
DETAIL B

SCALE: 1" = 20'



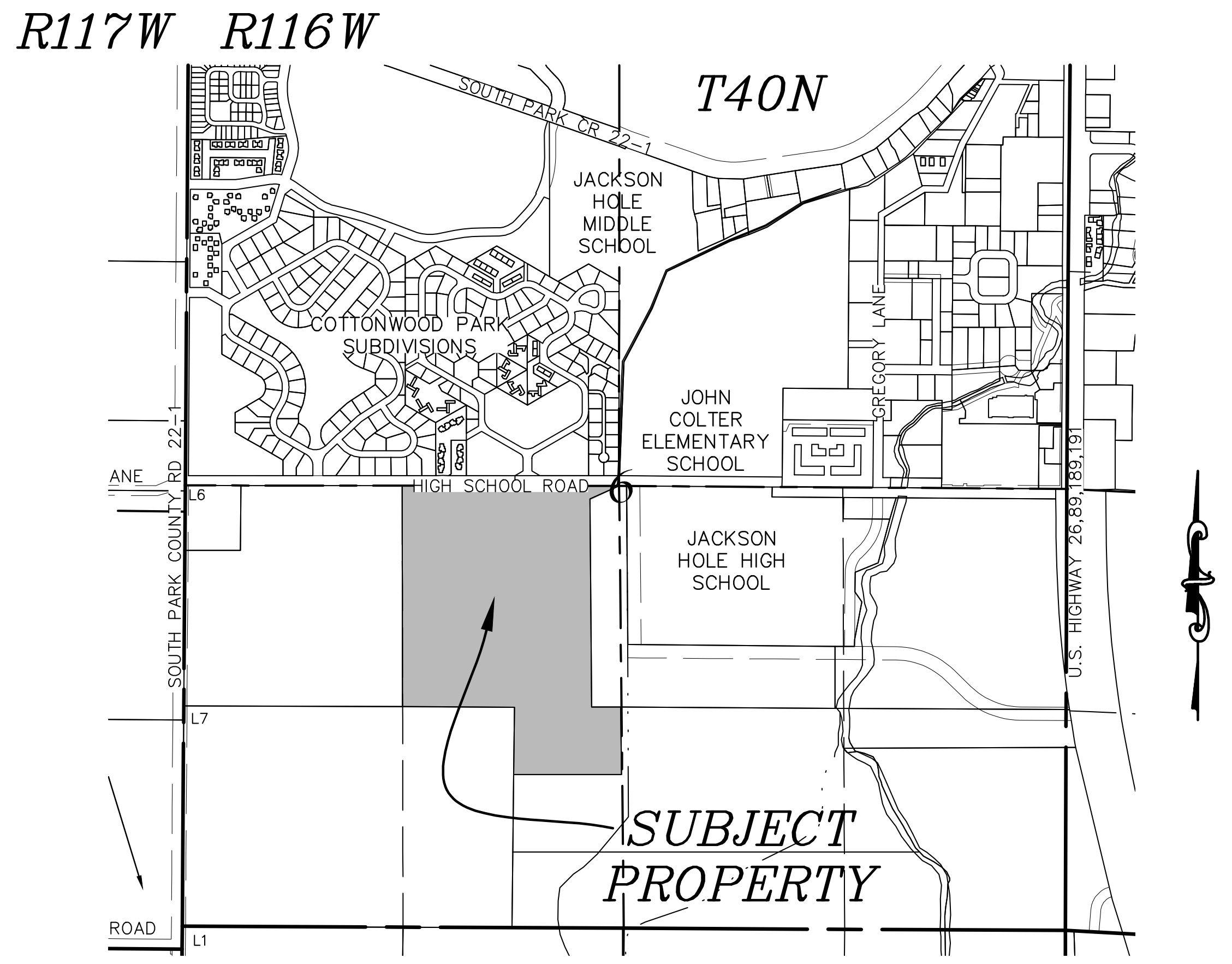
DETAIL C

SCALE: 1" = 20'



NOTES

The basis of bearings for this survey is N00°04'18'W along the west line of Section 6 between the SW and NW section corners.



VICINITY MAP

SCALE: 1" = 1000'

LEGEND

⧖ ⋈	indicates a monument with Land Corner Recordation Certificate of record in the Office of the Clerk of Teton County, Wyoming
⊡	aluminum pipe with 3" diameter aluminum cap inscribed "PLS 3831" with other appropriate markings
□	reinforcing steel bar with 3" diameter aluminum cap inscribed "JORGENSEN ASSOCIATES PLS 13002" with other appropriate markings
△	reinforcing steel bar with 2" diameter aluminum cap inscribed "JORGENSEN ASSOCIATES INC. PLS 13002"
◎	reinforcing steel bar without cap
◕	reinforcing steel bar with 1-1/2" diameter aluminum cap inscribed "NELSON ENGR LS"
○	reinforcing steel bar with 1-1/2" diameter aluminum cap inscribed "NELSON ENGR PLS 6193"
▚	iron pipe with 3" diameter brass cap inscribed "NELSON ENGINEERING PLS 6193 2008" with other appropriate markings
●	reinforcing steel bar with 2" diameter aluminum cap inscribed "JORGENSEN ASSOCIATES INC. PLS 13002" set this survey
×	no monument found or set, depicted for drawing clarity only
——— — ———	section line
—— – —— – ——	sectional subdivision line
━━━━━━	boundary, subject properties
──────	boundary, adjoining property
—— – – —— – – ——	boundary, road right-of-way
– – – – – – – –	boundary, record easement, as noted

CERTIFICATE OF ACKNOWLEDGMENT

State of Wyoming)
) SS.
County of Teton)

That the undersigned do acknowledge that this land division is exempt from review as a subdivision under Wyoming Statute §18-5-303.

Beaver Slide, LLC

By: ______________________
Kelly D. Lockhart, Manager

The foregoing instrument was acknowledged before me by Kelly D. Lockhart as Manager of Beaver Slide, LLC, this __ day of ______________, 2023.

Witness my hand and official seal.

____
Notary Public
My Commission Expires:

CERTIFICATE OF SURVEYOR

I, Matthew P. Gotham, Wyoming Professional Land Surveyor No. 13002 do hereby certify:

that this map was prepared from data collected during field surveys performed under my direction in November & December, 2022; from previous surveys performed by Jorgensen Associates, P.C. and Jorgensen Associates, Inc., and from information of record in the Office of the Clerk of Teton County, Wyoming;

that all corners will be monumented as depicted hereon by March 31, 2023.

that to the best of my belief and knowledge, it correctly represents the that parcel of record described in Document 1004169 in said Office and the exempt land division thereof.

MATTHEW P. GOTHAM
LS 13002
Date

Matthew P. Gotham, Wyoming PLS 13002

JORGENSEN
JACKSON, WYOMING 307.733.5150
www.jorgeng.com

MAP OF SURVEY
Central Wyoming College Exempt Land Division

LOCATED WITHIN
NE1/4SW1/4, PT. GLO Lot 5, Section 6
T.40N., R.116W., 6th P.M.
Teton County, Wyoming

PREPARED BY: MPG
MAP PREPARED: 2022-01-05
PROJECT NUMBER: 22070.60

Plotted by LShiverick on Feb 02, 2023 - 4:15pm

P:\2022\22070-CWC-High School Rd\60-Survey\CAD\22070 EXD Map of Survey.dwg

Wyoming Title & Escrow - Jackson
1110 Maple Way
Jackson, Wyoming 83001

GRANTOR: LOCKHART, KELLY
GRANTEE: THE PUBLIC
Doc 1053788 Filed At 16:43 ON 02/06/23
Maureen Murphy Teton County Clerk fees: 134.00
By Corrina Dorman Deputy Clerk

RESTRICTIVE COVENANTS
FOR
CWC PROPERTY

These Restrictive Covenants for CWC Property (the "**Covenants**") are made by Kelly Lockhart and Elizabeth Lockhart (collectively, and subject to the provisions of Section 25, the "**Declarant**") and Beaver Slide LLC, a Wyoming close limited liability company ("**Fee Owner**"), as the owner of the "Property" defined below, and shall be effective as of the date of recordation in the land records of Teton County, Wyoming (the "**Effective Date**").

Preamble

Fee Owner owns the real property legally described in the attached Exhibit "A" (the "**Property**"). Fee Owner is owned by the Declarant. Other entities owned by Declarant own the real property described herein at Exhibit "B" (the "**Benefitted Parcels**"). Declarant and Fee Owner are contemplating the sale of the Property for use as a community college campus and desire to impose certain restrictive covenants on the Property governing the use and development of the Property. Each owner of the Property (other than Fee Owner or Declarant), or any portion thereof (the "**Owner**"), shall, by acceptance of a deed or other conveyance of any portion of the Property, be deemed to have consented and agreed to all of the terms and conditions of these Covenants.

USE AND CONDUCT

1. Development and Use Restriction. The Property shall only be used as the Jackson Campus for Central Wyoming College or other early childhood, primary, secondary or tertiary education. The term "**Jackson Campus for Central Wyoming College**" means (i) a use that is authorized, empowered or required to be performed under or pursuant to the Wyoming Community College System Code, W.S. § 21-18-101 or any successor statute, or regulations adopted thereunder and any post-secondary, community-college, graduate, college, vocational or long-distance education use, which may include the education of high school students and other students at classes for such education or other early childhood, primary, secondary or tertiary education that is conducted by a public entity or private entity, (ii) joint, collective, collaborative or partnership efforts and ventures with public and private parties to perform any of the uses in (i) above, (iii) Owner-authorized public or private parties that perform any of the above, (iv) student services, student recreational activities, outdoor recreation, wilderness skills outdoor education, and leadership training, (v) faculty and staff housing uses, (vi) practicum, clinical classes, laboratories and experimental activities that are accretive to the foregoing, whether or not provided by a public or a private entity, (vii) uses that are ancillary to the foregoing, (viii) community meetings in the buildings on the Property, occasional outdoor fundraising and social events on the Property which outdoor events shall be limited to 5 events per year and capped at 50 people, though one additional event not to exceed 300 people may occur each calendar year (any outdoor events may use amplified sound and shall end by 10:30 pm) and (ix) the use of the Property for any of the foregoing by the Owner's invitees, guests, students, staff, customers, employees and agents (collectively "**Permitted Uses**"). The allowance of a Permitted Use shall not be construed to be an allowance for floor area above the 21,000 square feet of floor area permitted under Section 2.

a. The following is a non-exclusive list of uses which are strictly prohibited on the Property: (i) uses of temporary structures such as trailers, tents, shacks and bully barns, (ii) the use of the Property in a manner that presents a material risk that Hazardous Substances could be spilled onto, leach into or otherwise damage the Property or any adjacent real property, (iii) outdoor sports fields for football, soccer, lacrosse or similar outdoor team sports other than purely intramural competitions among students who take classes that are allowed as part of the Permitted Use, provided, however, that any intramural competitions shall not be lighted or involve amplified sound, (iv) any other use outside of a Building or Mobile Instruction Unit (as defined below) that could constitute a nuisance to neighboring property owners, including without limitation, the Benefited parcels, and (v) the presence of all animals, except for service animals qualified as such under the Americans With Disabilities Act and the periodic (up to 4 times per calendar year) butchering of cattle, provided that cattle are present on the Property for no more than 2 days prior to being butchered and all butchering takes place either within an enclosed structure or Building or within a mobile butchering trailer placed on the Property for no more than 5 days. "**Hazardous Substances**" shall mean all hazardous or toxic materials, substances, pollutants, contaminants, or wastes currently identified as a hazardous substance or waste in the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (commonly known as "CERCLA"), as amended, the Superfund Amendments and Reauthorization Act (commonly known as "SARA"), the Resource Conservation and Recovery Act (commonly known as "RCRA"), or any other similar federal, state or local legislation or ordinances applicable to the Property.

b. It is the intent of the parties to these Covenants that the Permitted Uses shall be conducted within permanent Buildings to the maximum extent practical. To the extent that any Permitted Uses are conducted outside of permanent Buildings meeting the then-applicable building code for commercial or residential structures, as applicable, such activities shall (i) not cause any nuisance or disturbance to neighboring properties, including the Benefited Parcels, by virtue of noise produced, smell or unsightliness, and (ii) be screened or maintained and conducted in a slightly manner, provided, however, that as to "occasional outdoor fundraising and social events on the Property" that are part of the Permitted Use and such events may be conducted within a tent or similar structure which shall not remain on the Property for more than an aggregate of 6 days surrounding an event as necessary to coordinate setup and takedown of the tent or similar structure. All activities conducted within a given Building shall not produce noise that is audible beyond the boundary of the Property.

c. Notwithstanding that any State of Wyoming agency requires or proposes a requirement that the Owner provide any good or service that is authorized, empowered or required to be performed under or pursuant to the Wyoming Community College System Code, W.S. § 21-18-101 or any successor statute, any such use not expressly allowed in these Covenants is prohibited.

2. Site Restrictions. The minimum distance (i.e., setback) between the boundary property line of the Property and any structure or mobile instruction units shall be 15 feet. Construction trailers are permitted during the time period when an active building permit has been approved. Owner shall locate any construction trailers on the northern half of the Property. The maximum floor

area of all Buildings, mobile instructional units, "pole-barns" or other structures that may only have one or two walls and are not fully enclosed, on the Property shall be 21,000 square feet, provided, however, that a temporary construction trailer shall not count towards the 21,000 square foot cap.

The term "floor area" shall mean the area of all floors interior to an enclosed Building that have at least 5 feet of clearance between floor and ceiling. Floor area shall be measured to the exterior face of the structural members of the wall. Roofed architectural recesses and open covered porches are not considered interior to the building. Floor area shall not include any basements. A basement is any story for which the finish floor of the story above is less than 4 feet above finished grade for at least 50% of the perimeter of the story and at no point greater than 10 feet above finished grade. Finished grade means the final elevation of the ground surface after physical development of a Building or other development. The term "finished grade" may also mean natural grade when no terrain alteration is proposed, or where otherwise applicable. Fill which is not necessary to achieve positive drainage or slope stabilization, or which is otherwise proposed clearly to manipulate the measurement of another standard of these Covenants, shall not be considered finished grade

The maximum height of any Building on the Property shall be 38' feet, except for the following, which may exceed that limit: (i) architectural projections such as chimneys, vents and roof-top mechanical equipment, such as HVAC systems, which shall not exceed the maximum height by more than 4 feet, or (ii) antenna used for the reception or broadcast of communication systems. Any third story of a Building must be stepped back 10' from the façade, except that encroachments in the step-back are allowed up to 20% of each overall façade width. The external materials of all physical development shall be non-reflective and the exterior colors of all physical development on the Property shall either be of "earth tone" materials or "traditional ranch colors," which shall include, but not be limited to, shades of grey, red or brown, or simulated barn wood, except for any fencing required under these Covenants, where (i) the colors and general types of materials described on Exhibit "C" are deemed approved, and (ii) to the extent colors or types of materials other than are described on Exhibit "C" are to be used, such colors and materials shall be subject to the prior written approval of Declarant in accordance with the foregoing standards, not to be unreasonably denied; provided, however, that to the extent that any other colors are mandated by any State of Wyoming agency for physical development of the Property, then such other colors shall be permitted. The term "**Building**" means any structure having a roof supported by columns or walls, including any enclosed structure. There shall not be any unshielded light trespass directly projecting from the Property onto adjacent parcels or the Benefitted Parcels, where the parties acknowledge that shielded and properly directed lighting shall be required for parking and exterior areas on the Property, such lighting shall be compliant with best management practices of the International Dark-Sky Association or a similar organization as to such lighting. Erosion on the site shall be controlled at all times. No development of the Property shall cause any increase in peak flow rate or flow velocity across the Property's boundary lines. The design of the Buildings and other improvements on the Property shall be subject to the reasonable approval of the Declarant, not to be unreasonably withheld, provided, however, that the general Building designs described on Exhibit "C" or additional Buildings with similar design characteristics are deemed approved by the Declarant.

Owner, at its expense, shall also install a vegetative buffer on the Property along the south property line, along the inside of the access and utility easements that runs along the west property line, and along the inside of the eastern property line. The vegetative buffer shall be installed prior to issuance of any final certificate of occupancy for any structure on the Property. The vegetative buffer shall consist of tapering age native spruce stands to provide an effective visual screen between the CWC property and adjacent properties. The buffer must provide 90% screening up to a height of 10' and 80% screening above 10' at the time of installation, or a similar species and diameter as approved by Declarant in its sole discretion. Prior to installation of the vegetative buffer, Owner shall provide Declarant with a landscape plan prepared by a licensed landscape architect showing the vegetative buffer for Declarant's approval, which approval shall not be unreasonably withheld so long as the landscape plan satisfies the conditions herein.

Owner shall be solely responsible for installing and maintaining the vegetative buffer in good condition. If any trees or other approved vegetation within the vegetative buffer are deemed dead, diseased, or hazardous, Owner shall timely remove and replace said trees or vegetation at its sole expense. Owner shall also be responsible for all damage and repair to the Required Fencing (as defined below) caused by the vegetative buffer.

3. Fencing. The Owner shall be responsible for the construction and perpetual maintenance and replacement of Required Fencing along the entire Property boundary, with exits along the easements described in the Western Easement referenced in Section 4 below. The term "Required Fencing" means, to the extent permitted by Teton County, (i) so long as livestock are grazed or penned on or along the relevant eastern, western or southern Property boundary or the land surrounding the Property is zoned "suburban" "rural" or a similar category as "Rural-1" "Rural-2" or "Rural-3" as exist under Teton County zoning, 6' tall fencing with woven wire (chain link), wooden posts and three strands of barb wire above the woven wire fence for a total height of 9' along such southern and eastern Property boundaries and along the outside boundary of the access and utility easement running along the western property line (within the Benefitted Parcels and wholly outside of the Property) pursuant to the Western Easement, which fences shall be tied to any existing fencing on such boundaries or in such areas, where such fence shall be of sufficient quality to exclude livestock stock from the Property, and (ii) when livestock are grazed or penned on or along the relevant eastern, western or southern Property, then a fence of at least 6' of materials approved pursuant to the following provision. To the extent that residential development has been constructed adjacent to either the eastern, western or southern Property boundary, then fencing shall be consistent with such residential development. Design and construction of such fence, and any substitute materials, shall be coordinated with, and subject to, Declarant's written approval which shall not be unreasonably withheld. Fencing shall be installed prior to removal of the existing fencing on the CWC Property and prior to any construction or site grading taking place on the Property. Until such time as the fencing contemplated in this section is installed, Owner accepts that Declarant's agricultural operations will continue on the Property (including but not limited to, grazing, irrigating and cultivation of pastures). For the avoidance of doubt, there should be no fencing along the northern boundary line of the Property and Benefitted Parcels abutting the public right-of-way that restricts access to the Property via a multimodal network trail.

4. Easements. Contemporaneously with the recording of these Covenants, an Access and Utility Easement will be recorded in the Teton County, Wyoming real property records encumbering the Property and other portions of land constituting the Benefitted Parcels (the "**Western Easement**").

5. Irrigation Ditches. The Owner, prior to submitting any request for development of the Property to any governmental authority, shall abandon all surface water rights for irrigation of land on the Property. The Owner shall be responsible for the relocation of irrigation ditches on the Property if required for the Owner's development of the Property. Such relocation of the irrigation ditches shall be at the Owner's sole expense and to the Declarant's reasonable satisfaction, with the exclusive criteria for satisfaction being uninterrupted and unaffected historical irrigation flows off the Property for downstream ditch users' water rights to irrigate such downstream areas at the same flow rate and quantity as existed prior to any such relocation with all ditches being piped in concrete pipes on the Property. Prior to any ditch relocation, the Owner shall provide Declarant with an engineer's report as to the relocation design for such irrigation ditches. Until such relocation of irrigation ditches occurs, the Declarant maintains the right to enter the Property to maintain, repair and improve irrigation ditches. Upon the foregoing criteria, the Owner may relocate the irrigation ditches, where such relocation may be to areas within the Benefitted Parcels and wholly outside of the Property, subject to the ability to maintain uninterrupted and unaffected historical irrigation flows.

6. Maintenance. Prior to the construction of improvements, the Owner shall maintain the Property in a garbage, weed and nuisance-free condition. If the Owner fails to maintain the Property as required herein, the Declarant, after 30 days' advance written notice, shall have the right to perform such maintenance on the Owner's behalf without liability, and the costs of such maintenance shall be paid by Owner within 30 days of request by Declarant.

7. Vehicle Parking, Storage, Operation and Repair. No boats, trailers, buses, motorhomes, campers (off-road vehicles), snow mobiles, recreational vehicles, golf carts, industrial or commercial vehicles (both cabs or trailers), abandoned or inoperable vehicles (not displaying a current motor vehicle license plate or which has not been driven on its own power for up to 3 weeks or longer), or other similar vehicles may be parked or stored outside of Buildings, and no repair or maintenance of any of the foregoing may be conducted outside of Buildings. Notwithstanding the foregoing, (i) cars, motorcycles, truck, bicycles and similar vehicles used for the transport of faculty, staff and other users to and from the Property may park on a temporary parking basis on paved parking lots outside of an existing Buildings so long as such parking is related to the provision of Permitted Uses on the Property, and where the Owner can park its owned vehicles for use as permitted herein, which parking may include overnight parking.

8. Mobile Instruction Units. Mobile Instruction Units are defined as structures or vehicles attached to a chassis which are connected to power and may be connected to water and sewer whose primary purpose is to provide space for instruction of Permitted Uses. Mobile Instruction Units must be semi-permanent and are permissible until the earlier to occur of the following: (i) 5 years following the recordation of this Declaration; or (ii) 60 days following the issuance of a certificate of occupancy for the primary educational instruction Building on the Property. The Mobile instruction Units are permitted to allow the Owner the benefit of the Permitted Uses prior to the

completion of permanent structures on the Property, but no longer. Mobile Instruction Units shall count towards the 21,000 sf cap.

9. Garbage & Storage. The Property shall be kept in a clean and orderly fashion. Garbage shall be stored in wildlife-proof containers and screened from view from the adjacent properties. No outdoor storage of any materials (including, but not limited to, debris, trash, building materials, or abandoned vehicles) is permitted provided, however, that (i) temporary construction storage in conjunction with building or remodeling improvements on the Property is permitted during the time period when an building permit from the relevant governmental authority with jurisdiction over the Property is active, (ii) the uses described in Section 7 are permitted in relation to the Jackson Campus for Central Wyoming College, and (iii) a fully enclosed in a structure no larger than 650 sq. ft is permitted for dumpster and similar outdoor maintenance or trash uses. Such trash structure need not be airtight, but must be set back 30' from any Property Line.

10. Nuisance. No noxious or offensive activity shall be carried on upon the Property, nor shall anything be done or placed on the Property which may be or become a nuisance to the Benefitted Parcels. Without limiting the foregoing, no horns, whistles, bells or other sound devices, except security devices used exclusively to protect the security of the Property and persons thereon and such items as are routinely included as safety elements in vehicles, bicycles and similar modes of travel, shall be placed on the Property.

11. Adjacent Uses. The Owner acknowledges that at the time of the recordation of these Covenants, portions of the adjacent property are being used as an active agricultural operation which includes breeding, raising, and feeding livestock and hay production. Inherent in the agricultural operation are noises, odors, lights, and work which can occur at all times of the day or night. The Owner, by taking title to the Property, explicitly acknowledges such uses may constitute a nuisance and waives all rights at law or equity to claim the agricultural uses as nuisance and release and hold the adjacent landowners harmless from any and all claims related in any way to the adjacent agricultural operation.

12. No Mining, Excavating or Drilling. The Property shall not be used for mining, quarrying, drilling, or exploring for or removing geothermal resources, oil, gas, or other hydrocarbons, minerals, crocks, stones, gravel and, topsoil or earth. This section shall not be construed to limit earth disturbing activities for the uses permitted by these Covenants.

RIGHT OF ENTRY REVERSIONARY INTEREST

13. Right of Entry Reversionary Interest. The Declarant reserves a right of entry reversionary interest in the Property, on the following terms and conditions: (a) in the event the Property ceases to be used as the Jackson Campus for Central Wyoming College and its Permitted Uses for a period of 1 year, and (b) subsequent to such 1 year period Declarant sends written notice to the Owner and the Owner does not cause the property to be used (on a substantial and material basis) for the Jackson Campus for Central Wyoming College within 120 days of delivery of such written notice, then upon (i) a written election recorded by Declarant within 12 months of the Owner failing to cure during such 120 day period, and (ii) the Declarant's payment to Owner of the fair market value of the Property at the time of the reversionary interest conveyance, the Owner shall execute

all necessary documentation to re-convey the Property, and all improvements thereon, to the Declarant. The fair market value shall be the sum of:

a. $3,200,000 increased by the percentage increase (rounded to two (2) decimal places), if any, in (A) the Cost of Living Index (hereinafter defined) published for the month of the Effective Date, over (B) the Cost of Living Index published for the month that is two (2) months prior to the date the fair market value is paid;
b. the value (positive or negative) of any improvements on the Property, as to a reasonable use, given all relevant circumstances or cost to be removed, as a may be determined by an independent appraiser; and
c. Less the diminution in value due to (i) encumbrances placed on the Property by CWC after the date the Property is conveyed to CWC or (ii) any conveyance of any portion of the Property by CWC which limits the developable square footage of the Property, as such diminution in value may be determined by an independent appraiser.

The term "**Cost of Living Index**" shall mean the U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index for Urban Wage Earners and Clerical Workers, West Urban, All Items, 1982-84 = 100, published by the Bureau of Labor Statistics, U.S. Department of Labor or any successor thereto, or a reasonable successor index. In the event that Declarant does not record such written election within 12 months of the Owner failing to cure within such 120 day period, then Owner shall be deemed to have waived the specific default that gave rise to the right of entry reversionary interest, but the right of entry reversionary interest shall be deemed to continue to exist as to all other aspects of the Property and the use of it as the Jackson Campus for Central Wyoming College. In the event that the Property is vacant, such vacancy shall be deemed to be Permitted Use of the Jackson Campus for Central Wyoming College and an absence of activities on the Property shall not cause Declarant to have any rights in relation to the right of entry reversionary interest.

14. <u>No Subdivision</u>. The Property shall not be subdivided or its dimensions reconfigured in any manner without the prior approval of Declarant.

15. <u>Governmental Exactions; Mitigation Fees</u>. The Owner shall pay, at its sole expense, all monetary exactions and mitigation fees imposed by Teton County or the Town of Jackson (should the Property be annexed) on the Property, and the development thereon.

LANDSCAPING AND CONSTRUCTION

16. <u>Noxious Weeds</u>. The Owner shall be responsible for controlling all noxious weeds on the Property. In the event the Owner fails to do so, Declarant may, after 30 days' advance written notice to the Owner, enter onto the Property to abate any weed issues and shall be entitled to charge the costs of such abatement. In such event, the Owner shall pay, within 30 calendar days of receipt of such written notice, such sums to the Declarant.

17. <u>Landscaping</u>. All plantings shall be plant species native to Teton County, other than gardens or horticultural activities that are part of the Jackson Campus for Central Wyoming College.

18. <u>Construction</u>. Once Owner commences the construction of any Building or other improvement, Owner shall diligently pursue the completion of such structure.

GENERAL

19. Enforcement. Any structure, non-structural improvement, grading, clearing or landscaping placed on the Property in violation of these Covenants shall be deemed nonconforming. Upon written request from the Declarant, the Owner shall, at its own cost and expense, remove such nonconformity and restore the Property to substantially the same condition as existed prior to the nonconforming work. Should an Owner fail to remove and restore the Property as required where the Owner does not commence and reasonably pursue to completion within 60 days of written request by Declarant, the Declarant shall have the right to, at Declarant's sole election: (i) commence an action to cause Owner to comply with its obligations under these Covenants or (ii) enter the Property, remove the violation, and restore the Property to substantially the same condition as previously existed without liability to the Declarant. All costs, together with interest at a rate of 12% per year from the date that is 30 days after demand from payment, shall be paid by Owner to the Declarant within 30 days of receipt of an invoice along with reasonable attorney's fees incurred by Declarant in obtaining such compliance.

DISPUTE RESOLUTION

20. Exclusive Methods of Resolving Disputes; Venue. All parties bound by these Covenants agree that any dispute, claim, cause of action arising out of or relating to the interpretation, application or enforcement of these Covenants shall be resolved using alternative dispute resolution in lieu of filing suit in any court through the processes set forth in Sections 22 and 23, subject however, to those specific rights of enforcement provided in Section 21 below. The sole venue for the mediation and arbitration pursuant to Sections 22 and 23 shall be a mediator or arbitrator practicing in Teton County, and any court action pursuant to Section 21 shall be in Teton County.

21. Items Not Subject to Mandatory Mediation or Arbitration. Temporary restraining orders or equivalent emergency equitable relief, and suits in which an indispensable party is not a party to mediation or arbitration and cannot be joined or made a party to such mediation or arbitration, are not subject to Sections 22 and 23 of these Covenants.

22. Mediation. Parties to these covenants are encouraged to engage in direct negotiations to resolve disputes. Any matter not resolved by such direct negotiations shall be submitted to mediation through a mutually agreeable independent mediation agency providing (or willing to provide) dispute resolution services in Teton County, Wyoming. The timing and format of such mediation shall be determined by the mediator. Any settlement of a claim through mediation shall be documented in writing by the mediator and signed by the parties. If a claim is not settled within 30 days of the submittal to mediation, then the mediator shall issue a notice of termination of mediation setting forth that the parties are at an impasse and the date the mediation was terminated. Each party shall bear its own costs and attorney fees in conjunction with the mediation, and the parties shall the allocate a pro-rata share of the costs of the mediator.

23. Arbitration. Within 20 days of a notice of termination of mediation, any party has the right to pursue such claims through binding arbitration, which is the exclusive remedy other than as set forth in Section 21 above. The arbitration shall be in accordance it the Uniform Arbitration Act as adopted by Wyoming, as may be amended, W.S. § 1-36-101 *et seq.* and shall be limited as follows,

arbitration shall be no more than 3 days, discovery shall be limited to 4 depositions per side, 10 interrogatories, 20 requests for production and 20 requests to admit. Except to the extent provided in the Uniform Arbitration Act as adopted by Wyoming, discovery shall be governed by the Wyoming Rules of Civil Procedure. The arbitration demand shall be submitted in writing to the other parties. Arbitration shall be conducted in Teton County by a single arbitrator. In the event the parties are unable to agree upon an arbitrator, any party may apply to the Teton County District Court to appoint an arbitrator. The award rendered by the arbitrator shall be final and judgment shall be entered upon it in and enforced through the Teton County District Court. The prevailing party shall be entitled to recover from the other party the arbitrator's fees, reasonable attorney's fees, and costs and expenses incurred in bringing the arbitration, including statutory interest. All defenses and claims otherwise available to the parties in any court proceeding under Wyoming law in relation to these Covenants shall be available in arbitration.

MISCELANEOUS

24. Binding Effect; Termination & Right to Enforce. The Property shall be owned, conveyed and used subject to the provisions of these Covenants. These Covenants benefit the Benefitted Parcels, subject to the provisions of this Section. These Covenants shall be binding upon all persons having any right, title or interest in any portion of the Property, their heirs, successors, and assigns. These Covenants shall be enforceable by the Declarant and shall inure and be enforceable by the owner of Benefitted Parcels. These Covenants shall be appurtenant to both the Property and the Benefitted Parcels on the terms of this Section. The Covenants shall run with both the Property and the Benefitted Parcels, shall burden the Property and benefit the Benefitted Parcels, on the terms of this Section.

   a. The Benefitted Parcels are made up of +/- 380.1 acres, divided into 11 parcels of land. Such parcels as they as may be further divided as of the time one of events described in Section 24(b) occur, are each referred to as an "**Individual Benefitted Parcel**." To the extent that any of the events described in Section 24(b) occur as to an Individual Benefitted Parcel, then such Individual Benefitted Parcel shall be deemed to no longer be part of the Benefitted Parcels and the owner or owners of such Individual Benefitted Parcel shall be deemed to have automatically released such Individual Benefitted Parcel from the benefits and burdens of these Covenants.

   b. To the extent that any Individual Benefitted Parcel is no longer wholly or partially owned by Kelly Lockhart or Elizabeth Lockhart or any of their lineal descendants, then such Individual Benefitted Parcel shall be deemed to no longer be part of the Benefitted Parcels.

   c. Within 15 days of request by the Owner of the Property, the owners of an Individual Benefitted Parcel shall execute and record a statement as to whether any of the foregoing events have occurred, but failure to execute and record such statement shall not affect the validity of the foregoing provisions.

   d. Notwithstanding any other provision in these Covenants, to the extent that the area adjacent to the Property has been developed for residential use, the Owner may (i) be annexed into the adjacent neighborhood and subject itself to the covenants governing such neighborhood, (ii) to the extent annexation is not permitted or approved by the adjacent neighborhood, be subjected to covenants that are substantially similar to that governing the adjacent neighborhood, or (iii) or may remain under these Covenants. In the event of such annexation or covenant imposition meeting the foregoing requirements, these Covenants shall be terminated by Declarant.

e. Separate from the provisions and rights pursuant to Section 24(d), in addition to the provisions of Section 1 and the defined terms "Jackson Campus for Central Wyoming College" and "Permitted Use," in the event that the Owner determines that the Property is no longer usable or sufficient for Owner's use as the Jackson Campus for Central Wyoming College, then Owner may sell or otherwise transfer the Property to a third party for use for (i) early childhood, primary or secondary or (to the extent administered by the State of Wyoming or an agency of the State of Wyoming) tertiary education subject to these Covenants or (ii) residential use in conjunction with being annexed into the adjacent neighborhood and subjected to the covenants governing such neighborhood, or (iii) to the extent annexation is not permitted or approved by the adjacent neighborhood, residential use in conjunction with being subjected to covenants that are substantially similar to that governing the adjacent neighborhood. In the event of such annexation or covenant imposition meeting the foregoing requirements, these Covenants shall be terminated by Declarant.

25. Declarant Rights. Any of the rights or obligations of the Declarant set forth in these Covenants shall automatically be deemed transferred to the single person or entity who holds legal title to the majority of acreage that comprises the Benefitted Parcels, and the rights of the Declarant shall be deemed to automatically transfer to such majority acreage owner and be appurtenant to the owner of the majority of acreage of the Benefitted Parcels, without the need to record any written assignment. The rights of Declarant hereunder will be exercisable solely by such single, majority acreage owner, and any notices or payments by Owner hereunder shall be made solely to such single, majority acreage owner.

26. Severability. If any provision of these Covenants is deemed invalid or unenforceable by a court of competent jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of any other provisions in these Covenants.

27. Headings. Article and Section headings contained herein are for informational purposes only and shall not control or affect the meaning or construction of any of the provisions contained herein.

28. Governing Law. These Covenants shall be governed by the laws of Wyoming, without regard to its conflict of law principles.

29. Amendment. These Covenants may be amended by an instrument signed and acknowledged by the Owner and the owners of the Benefitted Parcels.

30. Notices. Notices under these Covenants shall be sent by U.S. Mail, return receipt requested, postage prepaid to the address of record on the County Assessor/Treasurer website, and in the case of the Owner, also: (i) to the following address, Attn: President, Central Wyoming College,

Main Campus, 2660 Peck Ave, Riverton, WY 82501, or such other address as Owner may inform Declarant, and (ii) by e-mail to the President of Central Wyoming College.

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IN WITNESS WHEREOF, the undersigned have executed these Covenants on the date of signature below.

Kelly Lockhart

Kelly Lockhart

STATE OF WYOMING)
) ss
COUNTY OF TETON)

On this 2nd day of February, 2023, before me, the undersigned Notary Public, personally appeared Kelly Lockhart.

S.J. FODOR
NOTARY PUBLIC
STATE OF WYOMING
COMMISSION ID: 152060
MY COMMISSION EXPIRES: 08/16/2028

SJ Fodor
Notary Public

Elizabeth Lockhart

Elizabeth Lockhart

STATE OF WYOMING)
) ss
COUNTY OF TETON)

On this 2nd day of February, 2023, before me, the undersigned Notary Public, personally appeared Elizabeth Lockhart.

S.J. FODOR
NOTARY PUBLIC
STATE OF WYOMING
COMMISSION ID: 152060
MY COMMISSION EXPIRES: 08/16/2028

Notary Public

IN WITNESS WHEREOF, the undersigned have executed these Covenants on the date of signature below.

Beaver Slide LLC, a Wyoming close limited liability company

By: Kelly Lockhart
Name: Kelly Lockhart
Title: Manager

STATE OF WYOMING)
) ss
COUNTY OF TETON)

On this 2nd day of FEBRUARY, 2023, before me, the undersigned Notary Public, personally appeared Kelly Lockhart, as Manager of Beaver Slide LLC, a Wyoming close limited liability company.

S.J. FODOR
NOTARY PUBLIC
STATE OF WYOMING
COMMISSION ID: 152060
MY COMMISSION EXPIRES: 08/16/2028

Notary Public

EXHIBIT A
Legal Description of Property

A parcel of land lying within the NE1/4SW1/4 and SE1/4NW1/4 of Section 6, T.40N., R.116W., 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the Guy Bush position for the center one-quarter corner of said Section 6 as shown on map T-313A on file in the Office of the Clerk of Teton County, Wyoming;

THENCE S65°36'03"W, 190.75 feet, along the westerly line of Jackson Hole Hereford Ranch Tract 3 as described in that Quitclaim Deed recorded as doc. no.1018284 in said Office to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S00°57'16"E, 136.17 feet, continuing along said westerly line to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S89°37'02"W, 375.87 feet, parallel with that boundary agreement line set forth in doc. no. 0248124 in said Office to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N00°57'16"W, 213.81 feet, parallel with said westerly line of Jackson Hole Hereford Ranch Tract 3 to a point of intersection with said boundary agreement line, marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N89°37'02"E, 550.88 feet, along said boundary agreement line to the Point of Beginning.

Said parcel encompasses 2.00 acres, more or less.

The basis of bearings for this description is N00°04'18"W along the west line of said Section 6.

December 12, 2022
Jorgensen Associates, Inc.

TMP 006057

EXHIBIT B
Legal Description & Depiction of the 11 Benefitted Parcels--attached

EXHIBIT "B"
LEGAL DESCRIPTION
OF
RECONFIGURED HEREFORD RANCH TRACT 2 (REMAINDER)

A parcel of land lying within the NE1/4SW1/4, E1/2SE1/4SW1/4, and SE1/4NW1/4 of Section 6, T.40N., R.116W., 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the SW 1/16 corner of said Section 6, marked by a 3" diameter brass cap inscribed Nelson Engineering PLS 6193";

THENCE N00°14'28"E, 1330.73 feet, along the west line of said NE1/4SW1/4 to the C-W 1/16 corner of said Section 6, marked by a 5/8" rebar with a 1-1/2" diameter aluminum cap inscribed "Nelson Engineering PLS 6193";

THENCE continuing N00°14'28"E, 3.60 feet to an intersection with that boundary agreement line set forth in doc. no. 0248124 in the Office of the Clerk of Teton County, Wyoming, marked by a 5/8" rebar with a 1-1/2" diameter aluminum cap inscribed "Nelson Engineering PLS 6193";

THENCE N89°37'02"E, 726.61 feet, along said boundary agreement line to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S00°57'16"E, 213.81 feet, parallel with the westerly line of Jackson Hole Hereford Ranch Tract 3 as described in that Quitclaim Deed recorded as doc. no.1018284 in said Office to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N89°37'02"E, 375.87 feet, parallel with said boundary agreement line to a point on said west line of Jackson Hole Hereford Ranch Tract 3 to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S00°57'16"E, 1120.59 feet, along said westerly line of Tract 3 to a point of intersection with the south line of said NE1/4SW1/4, marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N89°48'13"E, 200.00 feet, along said south line of the NE1/4SW1/4 to the C-S 1/16 corner of said Section 6, marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002" driven inside a found 3-1/4" iron pipe;

THENCE S00°07'25"W, 405.30 feet, along the east line of said E1/2SE1/4SW1/4 to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S89°43'56"W, 665.67 feet to a point of intersection with the west line of said E1/2SE1/4SW1/4, marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N00°11'49"E, 406.13 feet, along said west line of the E1/2SE1/4SW1/4 to the C-E-W 1/64 corner of Section 6, marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S89°48'13"W, 665.15 feet, along the south line of said NE1/4SW1/4 to the Point of Beginning.

Said parcel encompasses 38.50 acres, more or less.

The basis of bearings for this description is N00°04'18"W along the west line of said Section 6.

December 12, 2022
Jorgensen Associates, Inc.
P:\2022\22070-CWC-High School Rd\60-Survey\Docs\Legal Descriptions\22070_Tract 2 Remainder Legal Description.docx

TMP 006056

EXHIBIT "B"

Exhibit B continued

Legal Description for South Beaver Slide Property
PIDN 22-40-16-06-3-00-017

A parcel of land in the S1/2SE1/4 and SE1/4SW1/4 of Section 6 and the N1/2NE1/4 of Section 7, T. 40 N., R. 116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the quarter corner common to said Sections 6 and 7;

THENCE along the line common to said Sections 6 and 7, S 89°46'32" W, 666.82 feet to a point;

THENCE departing said common line, N 00°09'13" E, 454.98 feet to a point;

THENCE N 89°29'02" E, 2450.4 feet, more or less, to a point on the thread of Flat Creek,

THENCE along said thread, which is approximated by the following courses:

S 44°45' E, 34.6 feet to a point;
S 61°43' E, 71.0 feet to a point;
S 56°18' E, 55.7 feet to a point;
S 47°28' E, 42.9 feet to a point;
S 25°59' E, 39.2 feet to a point;
S 05°34' E, 15.3 feet to a point;
S 27°36' W, 24.5 feet to a point;
S 01°41' W, 75.5 feet to a point;
S 08°30' W, 67.8 feet to a point;
S 04°02' W, 54.2 feet to a point;
S 01°09' E, 98.2 feet to a point;
S 01°05' E, 144.9 feet to a point;
S 02°21' E, 115.0 feet to a point;

THENCE departing said thread, S 89°20'31" W, 1949.7 feet, more or less, to a point on the north-south center section line of Section 7;

THENCE N00°06'21" W, 292.68 feet to the **POINT OF BEGINNING.**

Said parcel encompasses 40.2 acres more or less.

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P.M., Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193.

This description was written from record data and from said 2008 boundary survey performed by John Batson.

Exhibit B continued

Legal Description of Leeks Canyon Property-PIDN 22-40-16-06-4-00-006

A parcel of land in the N1/2SE1/4 of Section 6 and the NW1/4SW1/4 Section 5, T 40 N., R. 116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the SE1/16 corner of said Section 6;

THENCE along the south line of said N1/2SE1/4 S 89°50'16" W, 50.00 feet to a point,

THENCE departing said south line N 00°39'08" W, 373.66 feet to a point on the south line of the High School parcel as shown on that map recorded as T-313C in the Office of the Clerk of Teton County;

THENCE along the south line of said parcel N 89°57'40" E, 118.04 feet to the southeast corner of said parcel;

THENCE along the east line of said parcel N 00°04'31" W, 42.00 feet to a point;

THENCE continuing along said east line N 10°19'24" E, 231.12 feet to a point;

THENCE continuing along said east line N 35°11'39" W, 72.33 feet to a point;

THENCE continuing along said east line N 00°02'35" E, 117.46 feet to a point;

THENCE continuing along said east line N 67°19'59" E, 150.29 feet to a point;

THENCE continuing along said east line N 14°25'31" E, 314.30 feet to a point;

THENCE continuing along said east line N 16°25'24" E, 92.61 feet to a point on the southerly Right-of-Way line of High School County Road No. 22-12;

THENCE along said Right-of-Way line N 89°53'12" E, 961.94 feet to an intersection with the westerly Right-of-Way line of US Highway 26/89/189/191;

THENCE along said highway Right-of-Way line S 01°17'40" E, 110.31 feet to a point of curvature;

THENCE continuing along said highway Right-of-Way line following a non-tangent curve to the left with an arc length of 1164.10 feet, a radius of 7698.40 feet and whose chord bears S 04°30'47" E, a distance of 1163.00 feet to a point of intersection with the south line of said NW1/4SW1/4 of said Section 5;

THENCE along said south line N 87°31'43" W, 21.27 feet to the S1/16 corner common to said Sections 5 and 6;

THENCE along said south line S 89°50'16" W, 1341.42 feet to the **POINT OF BEGINNING.**

Said parcel encompasses 35.1 acres more or less.

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P.M., Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193.

This description was written from record data and from said 2008 boundary survey performed by John Batson.

2/1/2010
Pierson Land Works LLC
08135

Page 1 of 1

Exhibit B continued

Legal Description of Leeks Canyon Property—PIDN 22-40-16-07-2-00-012

A parcel of land in the N1/2NE1/4 of Section 7, T.40 N., R.116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

COMMENCING at the C1/4 corner of said Section 7;

THENCE along the north-south center section line, N 00°06'21" W, 2362.88 feet to the **POINT OF BEGINNING;**

THENCE N 89°20'31" E, 1949.7 feet, more or less, to a point on the thread of Flat Creek;

THENCE along said thread, which is approximated by the following courses:

S 03°15' E, 177.9 feet to a point;
S 04°38' E, 149.1 feet to a point;
S 19°13' W, 75.3 feet to a point;
S 04°17' W, 108.4 feet to a point;
S 05°51' W, 36.7 feet to a point;
S 13°02' W, 90.9 feet to a point;
S 01°01' E, 56.6 feet to a point;
S 04°36' E, 70.5 feet to a point;
S 10°43' W, 29.6 feet to a point;

THENCE departing said thread, S 89°25'02" W, 1914.5 feet, more or less, to a point on the north-south center section line of said section 7;

THENCE along said north-south center section line, N 00°06'21" W, 783.59 feet to the **POINT OF BEGINNING.**

Said parcel encompasses 35.0 acres more or less.

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P.M., Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193.

This description was written from record data and from said 2008 boundary survey performed by John Batson.

Exhibit B continued

Legal Description of Leeks Canyon Property—PIDN 22-40-16-07-2-00-013

A parcel of land in the NE1/4 of Section 7, T.40 N., R.116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

COMMENCING at the C1/4 corner of said Section 7;

THENCE along the north-south center section line, N 00°06'21" W, 1579.29 feet to the **POINT OF BEGINNING;**

THENCE departing said north-south center section line, N 89°25'02" E, 1914.5 feet, more or less, to a point on the thread of Flat Creek;

THENCE along said thread, which is approximated by the following courses:

S 10°43' W, 18.7 feet to a point;
S 08°10' W, 76.1 feet to a point;
S 01°30' E, 107.4 feet to a point;
S 05°57' W, 31.7 feet to a point;
S 30°39' E, 47.9 feet to a point;
S 18°47' E, 54.5 feet to a point;
S 03°45' E, 50.7 feet to a point;
S 18°40' W, 62.8 feet to a point;
S 21°16' E, 6.0 feet to a point;
S 27°45' E, 55.4 feet to a point;
S 16°13' E, 33.0 feet to a point;
S 22°05' W, 15.8 feet to a point;
S 14°55' W, 34.9 feet to a point;
S 40°54' W, 51.4 feet to a point;
S 02°24' W, 27.4 feet to a point;
S 25°28' E, 39.9 feet to a point;
N 79°45' E, 63.2 feet to a point;
S 83°06' E, 31.2 feet to a point;
S 33°25' E, 22.2 feet to a point;
S 21°49' E, 20.0 feet to a point;
S 04°18' E, 60.9 feet to a point;
S 03°29" W, 24.2 feet to a point;

THENCE departing said thread, S 89°19'23" W, 2044.1 feet, more or less, to a point on the north-south center section line of said section 7;

THENCE along said north-south center section line, N 00°06'21" W, 791.58 feet to the **POINT OF BEGINNING.**

Said parcel encompasses 35.2 acres more or less.

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P.M., Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193.

This description was written from record data and from said 2008 boundary survey performed by John Batson.

Exhibit B continued

Leeks Canyon Ranch Property—PIDN 22-40-16-07-1-00-017

A parcel of land in the S1/2NE1/4 of Section 7, T.40 N., R.116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the C1/4 corner of said Section 7,

THENCE along the north-south center section line, N 00°06'21" W, 787.71 feet to a point;

THENCE departing said line, N 89°19'23" E, 2044.1 feet, more or less, to a point on the thread of Flat Creek;

THENCE along said thread, which is approximated by the following courses:

S 03°29' W, 24.0 feet, more or less, to a point;
S 21°09' E, 30.6 feet, more or less, to a point;
S 03°00' E, 42.7 feet, more or less, to a point;

THENCE departing said thread, S 13°03'39" W, 459.1 feet, more or less, to a point on the thread of Flat Creek;

THENCE along said thread, which is approximated by the following courses:

S 34°13' E, 59.6 feet, more or less, to a point;
S 14°40' E, 37.1 feet, more or less, to a point;
S 01°50' W, 55.4 feet, more or less, to a point;
S 13°57' W, 126.4 feet, more or less, to a point of intersection on the east-west center section line;

THENCE departing said thread, along said east-west center section line, S 89°48'52" W, 1961.2 feet, more or less, to the **POINT OF BEGINNING.**

Said parcel encompasses 36.5 acres more or less.

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P.M., Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193.

This description was written from record data and from said 2008 boundary survey performed by John Batson.

Exhibit B continued

Legal Description of Leeks Canyon Ranch Property—PIDN 22-40-16-05-3-00-013

A parcel of land in the SW1/4SW1/4 of Section 5, SE1/4SE1/4 of Section 6, NE1/4NE1/4 of Section 7 and the NW1/4NW1/4 of Section 8, T. 40 N., R. 116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at a point of curvature (PC) at Station 249+50.59 on the westerly Right-of-Way line of US Highway 26/87/189/191 as shown on that map recorded as T-302C in the Office of the Clerk of Teton County Wyoming, from which the corner common to Sections 5, 6, 7 & 8 bears S56°53'56" W, 337.23;

THENCE along said westerly Right-of-Way line, S 17°36'07" E, 211.07 feet to the northeast corner of Tract A as described in Book 134 of Photo, page 664-666;

THENCE along the northerly boundary line of said Tract, N 87°23'09" W, 294.78 feet to the northwest corner of said Tract;

THENCE along the westerly boundary line of said tract, S 02°36'11" E, 395.80 feet to the southwest corner of said Tract;

THENCE S 60°01'15" W, 937.5 feet, more or less, to a point on the thread of Flat Creek;

THENCE along said thread, which is approximated by the following courses:

THENCE N 13°02' E, 46.4 feet to a point;
THENCE N 05°51' E, 36.7 feet to a point;
THENCE N 04°17' E, 108.4 feet to a point;
THENCE N 19°13' E, 75.3 feet to a point;
THENCE N 04°38' W, 149.1 feet to a point;
THENCE N 03°15' W, 177.9 feet to a point;
THENCE N 02°21' W, 115.0 feet to a point;
THENCE N 01°05' W, 144.9 feet to a point;
THENCE N 01°09' W, 98.2 feet to a point;
THENCE N 04°02' E, 54.2 feet to a point;
THENCE N 08°30' E, 67.8 feet to a point;
THENCE N 01°41' E, 75.5 feet to a point;
THENCE N 27°36' E, 24.5 feet to a point;
THENCE N 05°34' W, 15.3 feet to a point;
THENCE N 25°59' W, 39.2 feet to a point;
THENCE N 47°28' W, 42.9 feet to a point;
THENCE N 56°18' W, 55.7 feet to a point;
THENCE N 61°43' W, 71.0 feet to a point;
THENCE N 44°45' W, 69.3 feet to a point;
THENCE N 28°52' W, 69.7 feet to a point;
THENCE N 33°54'W, 25.1 feet to a point;
THENCE N 29°25' W, 58.8 feet to a point;
THENCE N 32°10' W, 119.9 feet to a point;
THENCE N 25°52' W, 80.1 feet to a point;
THENCE N 23°31' W, 72.5 feet to a point;

GRANTOR: HEREFORD CAPITAL CO LLC
GRANTEE: LEEKS CANYON RANCH LLC
Doc 0906227 bk 921 pg 810-811 Filed At 11:54 ON 06/06/16
Sherry L. Daigle Teton County Clerk fees: 15.00
By Mary Smith Deputy

THENCE N 16°41' W, 22.8 feet to a point;

THENCE N 22°23' W, 34.3 feet to a point;

THENCE N 06°05' W, 39.6 feet to a point;

THENCE N 09°37' W, 37.8 feet to a point;

THENCE N 30°33' W, 49.8 feet to a point;

THENCE N 69°04' W, 59.9 feet to a point;

THENCE N 78°17' W, 42.5 feet to a point;

THENCE S 82°36' W, 57.7 feet to a point;

THENCE N 42°17' W, 37.1 feet to a point;

THENCE departing said thread N 89°18'31" E, 1399.0 feet, more or less, to a point on the westerly Right-of-Way line of U.S. Highway 26/89/189/191, being a point on a non-tangent curve concave to the east, and bearing S 79°56'57" W from the radius point of said curve;

THENCE along said westerly Right-of-Way line, following said non-tangent curve to the left with an arc length of 946.91 feet, a radius of 7698.40 fee and whose chord bears S 14°04'28" E, a distance of 946.31 feet to the POINT OF BEGINNING.

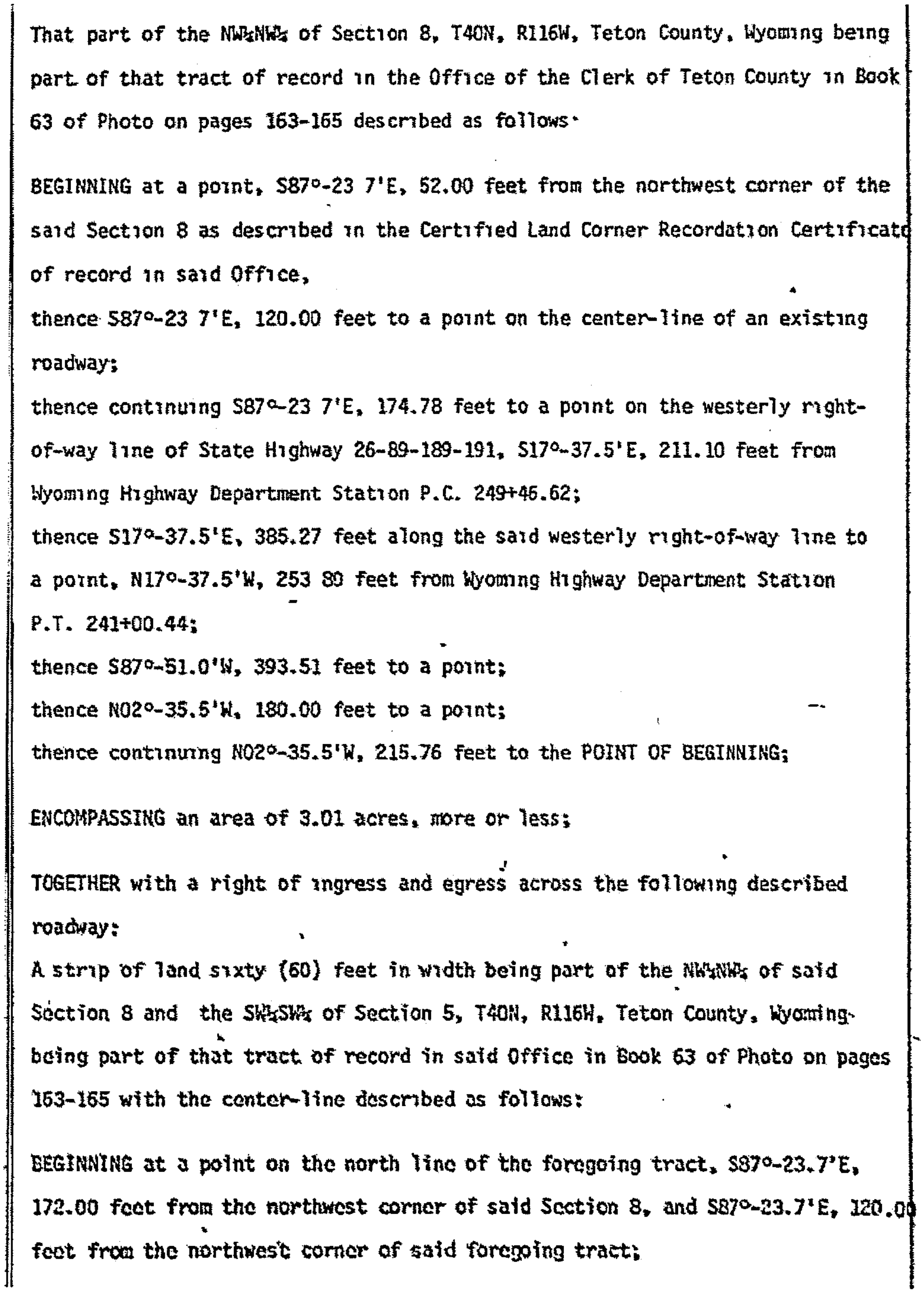
Said parcel encompasses 39.1 acres more or less.

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P.M, Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193.

This description was written from record data and from said 2008 boundary survey performed by John Batson.

Exhibit B continued

Legal Description of Lockharts Property—PIDN 22-40-16-08-2-00-004



That part of the NW¼NW¼ of Section 8, T40N, R116W, Teton County, Wyoming being part of that tract of record in the Office of the Clerk of Teton County in Book 63 of Photo on pages 163-165 described as follows:

BEGINNING at a point, S87°-23 7'E, 52.00 feet from the northwest corner of the said Section 8 as described in the Certified Land Corner Recordation Certificat of record in said Office,
thence S87°-23 7'E, 120.00 feet to a point on the center-line of an existing roadway;
thence continuing S87°-23 7'E, 174.78 feet to a point on the westerly right-of-way line of State Highway 26-89-189-191, S17°-37.5'E, 211.10 feet from Wyoming Highway Department Station P.C. 249+46.62;
thence S17°-37.5'E, 385.27 feet along the said westerly right-of-way line to a point, N17°-37.5'W, 253 80 feet from Wyoming Highway Department Station P.T. 241+00.44;
thence S87°-51.0'W, 393.51 feet to a point;
thence N02°-35.5'W, 180.00 feet to a point;
thence continuing N02°-35.5'W, 215.76 feet to the POINT OF BEGINNING;

ENCOMPASSING an area of 3.01 acres, more or less;

TOGETHER with a right of ingress and egress across the following described roadway:
A strip of land sixty (60) feet in width being part of the NW¼NW¼ of said Section 8 and the SW¼SW¼ of Section 5, T40N, R116W, Teton County, Wyoming being part of that tract of record in said Office in Book 63 of Photo on pages 163-165 with the center-line described as follows:

BEGINNING at a point on the north line of the foregoing tract, S87°-23.7'E, 172.00 feet from the northwest corner of said Section 8, and S87°-23.7'E, 120.0 feet from the northwest corner of said foregoing tract;

Description for Kelly and Elizabeth Lockhart from R. Bruce Porter Estate

Tract A

thence N04°-23.3'E, 133.08 feet to a point;

thence Northeasterly, 140.75 feet along a circular curve to the right through a central angle of 64°-55' and radius of 124 23 feet to a point,

thence N69°-18 3'E, 55 78 feet to a point within the right-of-way of said State Highway 26-89-191-189, N51°-20 5'E, 402 30 feet from the said northwest corner of Section 8; the said easement to be prolonged or shortened to meet at angle-point intersections at the north line of the foregoing tract and within the said right-of-way;

the base bearing for this description is the west line of the NW¼ of said Section 8 being S00°-15'E,

each "point" marked by a steel T-shaped stake 24" long with metal cap inscribed "PAUL N SCHERBEL RLS164 SURVEY POINT",

each "station" marked by a 6"x6" concrete post with brass marked inscribed "STATE HIGHWAY DEPT R O W MARKER" and appropriate details,

all in accordance with the plat prepared and to be filed in said Office titled "PLAT TO ACCOMPANY LOT DIVISION APPLICATION FOR R BRUCE PORTER ESTATE KELLY & ELIZABETH LOCKHART BEING PART OF NW¼NW¼ SECTION 8 N½NE¼ SECTION 7 T40N R116W TETON COUNTY, WYOMING" dated 16 June 1982 and revised 28 October 1982, consisting of two sheets

Exhibit B continued

Legal Description of Crane Creek Property—PIDN 22-40-16-07-1-00-015

A parcel of land in the E1/2NE1/4 of Section 7 and the W1/2NW1/4 of Section 8, T 40 N , R. 116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the southeast corner of that Tract A recorded in Book 134 of Photo Page 664-666, being part of the original westerly Right-Of-Way line of US Highway 26/89/189/191, and being coincident with that easterly line of that Right-Of-Way easement recorded in Book 361 of Photo, Page 806-807, from which the corner common to Sections 5, 6, 7 & 8 bears N 50°18'36" W, 601.64 feet;

THENCE along the westerly line of said original Highway Right-of-Way and easterly line of said Right-of-Way easement S 17°34'05" E, 253.56 feet to a point;

THENCE continuing along said westerly Right-of-Way following a non-tangent curve to the right with an arc length of 1048.41 feet, a radius of 11194.90 feet and whose chord bears S 14°54'55" E, a distance of 1048.07 feet to a point;

THENCE departing said Right-of-Way line S 88°15'17" W, 1562.5 feet, more or less, to a point a point on the thread of Flat Creek;

THENCE along said thread, which is approximated by the following courses:

THENCE N 02°24'E, 10.5 feet more or less, to a point;
THENCE N 40°54' E, 51.4 feet, more or less, to a point;
THENCE N 14°55' E, 34.9 feet, more or less, to a point;
THENCE N 22°05' E, 15.8 feet, more or less, to a point;
THENCE N 16°13' W, 33.0 feet, more or less, to a point;
THENCE N 27°45' W, 55.4 feet, more or less, to a point;
THENCE N 21°16' W, 6.1 feet, more or less, to a point;
THENCE N 18°40' E, 62.8 feet, more or less, to a point;
THENCE N 03°45' W, 50.8 feet, more or less, to a point;
THENCE N 18°47' W, 54.5 feet, more or less, to a point;
THENCE N 30°39' W, 47.9 feet, more or less, to a point;
THENCE N 05°57' E, 31.7 feet, more or less, to a point;
THENCE N 01°30' W, 107.4 feet, more or less, to a point;
THENCE N 08°10' E, 76.1 feet, more or less, to a point;
THENCE N 10°43' E, 48.3 feet, more or less, to a point;
THENCE N 04°36' W, 70.5 feet, more or less, to a point;
THENCE N 01°01' W, 56.6 feet, more or less, to a point;
THENCE N 13°02' E, 44.5 feet, more or less, to a point;

THENCE departing said thread N 60°01'15" E, 937.5 feet, more or less, to the southwest corner of said Tract A;

THENCE along the southerly line of said Tract A, N 87°51'24" E, 393.38 feet to the **POINT OF BEGINNING.**

Said parcel encompasses 36.1 acres more or less.

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P.M., Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193.

Exhibit B continued

Legal Description of Buckrake Property—PIDN 22-40-16-07-1-00-016

A parcel of land in the SE1/4NE1/4 of Section 7 and the SW1/4NW1/4 of Section 8, T 40 N., R. 116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the 1/4 corner common to said Sections 7 and 8;

THENCE along the E-W center section line of said Section 7, S 89°48'52" W, 710.3 feet, more or less, to a point on the thread of Flat Creek;

THENCE along said thread approximated by the following courses:

THENCE N 13°57' E, 126.4 feet, more or less, to a point;
THENCE N 01°50' E, 55.4 feet, more or less, to a point;
THENCE N 14°40' W, 37.1 feet, more or less, to a point;
THENCE N 34°13' W, 59.6 feet, more or less, to a point;

THENCE departing said thread, N 13°03'39" E, 459.1 feet, more or less, to a point on the thread of Flat Creek;

THENCE along said thread approximated by the following courses:

THENCE N 03°00' W, 42.7 feet, more or less, to a point;
THENCE N 21°09' W, 30.6 feet, more or less, to a point;
THENCE N 03°29' E, 48.2 feet, more or less, to a point;
THENCE N 04°18' W, 60.9 feet, more or less, to a point;
THENCE N 21°49' W, 20.0 feet, more or less, to a point;
THENCE N 33°25' W, 22.2 feet, more or less, to a point;
THENCE N 83°06' W, 31.2 feet more or less, to a point;
THENCE S 79°45' W, 63.2 feet, more or less, to a point;
THENCE N 25°28' W, 39.9 feet, more or less, to a point;
THENCE N 02°24' E, 16.9 feet, more or less, to a point;

THENCE departing said thread, N 88°15'17" E, 1562.5 feet, more or less, to a point on the westerly Right-of-Way line of U.S. Highway 26/89/189/191, being coincident with the easterly line of that Right-of-Way line easement recorded in Book 361 of Photo, Page 800-801 in the Office of the Clerk of Teton County, Wyoming, being a point on a curve concave to the west, and bearing N 77°46'04" E from the radius point of said curve;

THENCE along said original westerly Right-of-Way line and easterly line of said Right-of-Way easement, following a curve to the left with an arc length of 28.81 feet, a radius of 11194.90 feet and whose chord bears S 12°09'30" E, a distance of 28 81 feet to a point of tangency (PT);

THENCE continuing along said Right-of-Way line S 12°05'05" E, 175.90 feet to a point of curvature (PC);

THENCE continuing along said Right-of-Way line following a curve to the left with an arc length of 881.07 feet, a radius of 11315.03 feet and whose chord bears S 14°18'56" E, a distance of 880.84 feet to a point of intersection south line of said SW1/4NW1/4 of Section 8;

THENCE departing said westerly Right-of-Way line along said south line of the SW1/4NW1/4 of Section 8, N 88°04'54" W, 1061 55 feet to the **POINT OF BEGINNING**

Said parcel encompasses 36 8 acres more or less

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P M , Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193

This description was written from record data and from said 2008 boundary survey performed by John Batson

Exhibit B continued

Legal Description for Big Mountain Property—PIDN 22-40-16-05-3-00-014

A parcel of land in the SW1/4SW1/4 of Section 5 and the E1/2SE1/4SW1/4 and S1/2SE1/4 of Section 6, T. 40 N., R. 116 W. 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the SE1/16th corner of said Section 6,

THENCE along the north line of said S1/2SE1/4 of said Section 6, N 89°50'16" E, 1341.42 feet to the S1/16th corner common to said Sections 5 and 6;

THENCE along the north line of said SW1/4SW1/4 of section 5, S 87°31'43" E, 21.27 feet to a point on the westerly right-of-way line of U.S. Highway 26/89/189/191, being a point on a non-tangent curve concave to the east, and bearing S 81°09'45" W from the radius point of said curve;

THENCE along said westerly right-of-way, following said non-tangent curve to the left with an arc length of 229.20 feet, a radius of 7698.40 feet and whose chord bears S 09°41'52" E, a distance of 229.19 feet to a point;

THENCE departing said westerly right-of-way, S 89°18'31" W, 1399.0 feet, more or less, to a point on the thread of Flat Creek;

THENCE along said thread, which is approximated by the following courses:

S 42°17' E, 37.1 feet to a point;
N 82°36' E, 57.7 feet to a point;
S 78°17' E, 42.5 feet to a point;
S 69°04' E, 59.9 feet to a point;
S 30°33' E, 49.8 feet to a point;
S 09°37' E, 37.8 feet to a point;
S 06°05' E, 39.6 feet to a point;
S 22°23' E, 34.3 feet to a point;
S 16°41' E, 22.78 feet to a point;
S 23°31' E, 72.5 feet to a point;
S 25°52' E, 80.0 feet to a point;
S 32°10' E, 119.9 feet to a point;
S 29°25' E, 58.8 feet to a point;
S 33°54' E, 25.1 feet to a point;
S 28°52' E, 69.7 feet to a point;
S 44°45' E, 34.7 feet to a point;

THENCE departing said thread, S 89°29'02" W, 2450.4 feet, more or less, to a point on the West line of said E1/2SE1/4SW1/4 of said Section 6;

THENCE along said West line of said E1/2SE1/4SW1/4, N 00°09'13" E, 466.52 feet to a point;

THENCE N 89°21'53" E, 648.50 feet to a point to a point on the north-south center section line of said Section 6;

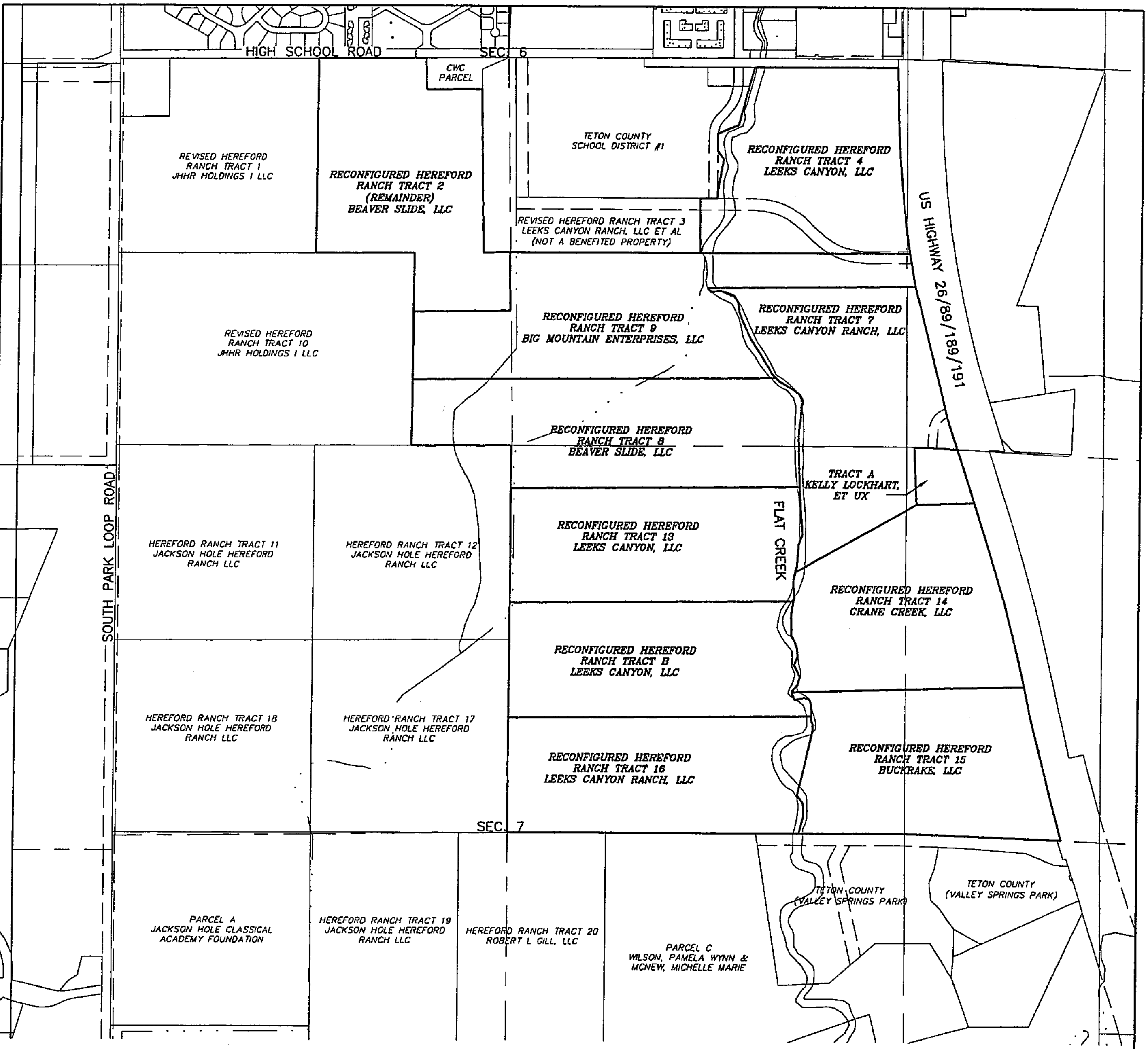
THENCE along said north-south center section line, N 00°58'58" W, 405.24 feet to a point coincident with the C-S 1/16th corner of said Section 6;

THENCE departing said north-south center section line, N 89°50'16" E, 1341.42 feet along the North line of said S1/2SE1/4 of said Section 6 to the **POINT OF BEGINNING;**

Said parcel encompasses 45.1 acres more or less.

The base bearing for this description is N 00°06'21" W along the north-south center section line between the center one-quarter corner and the north quarter corner of Section 7, Township 40 North, Range 116 West, 6th P.M., Teton County, Wyoming, per the 2008, boundary survey performed by John Batson, PLS 6193.

This description was written from record data and from said 2008 boundary survey performed by John Batson.



LEGEND

section line
sectional subdivision line
boundary, Lockhart Entity Parcel
boundary, adjoining property
boundary, easement

NOTES

Parcel boundaries shown hereon are per Teton County GIS data and have not been surveyed.

0 200 400 600
SCALE: 1 INCH = 200 FEET
THIS SCALE VALID ONLY FOR 8x11 PRINTS

EXHIBIT B
Map of
Benefitted *Parcels*

LOCATED WITHIN
Sections 5, 6, 7 & 8
T.40N., R.116W., 6th P.M.
Teton County, Wyoming

JORGENSEN
JACKSON, WYOMING 307.733.5150
www.jorgeng.com

PREPARED BY: RF MAP PREPARED: 2023-02-01 PROJECT NUMBER: 22070

P:\2022\22070-CWC-High School Rd\60-Survey\CAD\EXHIBITS\22070_Exhibit C-1 - Lockhart Properties.dwg

EXHIBIT C
Pre-Approved Palate--attached

Exhibit C to CWC CCRS

Exterior Wall Construction:

1. Board formed concrete
2. Weathered-steel wall panels
3. Aluminum wall cladding with wood veneer powder coated finish
4. Aluminum windows and doors with three-coat fluoropolymer finish.
5. Low-E insulated glazing

Roofing:

1. Low Slope Roof - Poly-vinyl chloride membrane
2. Weathered-steel standing seam roof
3. Simulated standing seam roof – Poly-vinyl chloride membrane

[END OF DOCUMENT]

SECTION 6 – APPLICATION MATERIALS

- **SKETCH PLAN AND CONDITIONAL USE PERMIT APPLICATION**
- **PREAPPLICATION CONFERENCE CHECKLIST**
- **DEEDS & LETTER OF AUTHORIZATION**

PLANNING PERMIT APPLICATION
Planning & Building Department

150 E Pearl Ave.
P.O. Box 1687
Jackson, WY 83001

ph: (307) 733-0440
www.townofjackson.com

For Office Use Only

Fees Paid________________

Date & Time Received ____________________________

Application #s ________________ ________________ ________________

Please note: *Applications received after 3 PM will be processed the next business day.*

PROJECT.

Name/Description: Central Wyoming College Jackson Campus

Physical Address: PT. E1/2SW1/4 SEC. 6, TWP. 40, RNG 116 RECONFIGURED HEREFORD RANCH TRACT 2

Lot, Subdivision: ________________

PIDN: 22-40-16-06-3-00-019

PROPERTY OWNER.

Name: Fremont Community College dba Central Wyoming College

Phone: (307)332-3394

Mailing Address: P.O. Box 2812, Jackson, WY

ZIP: 83001

E-mail: ________________

APPLICANT/AGENT.

Name: Jorgensen Associates, Inc., attn: Mila Dunbar-Irwin

Phone: (307)733-5150

Mailing Address: P.O. Box 9550, Jackson, WY

ZIP: 83002

E-mail: mdi@jorgeng.com

DESIGNATED PRIMARY CONTACT.

_______Property Owner X_______Applicant/Agent

TYPE OF APPLICATION. *Please check all that apply; review the type of application at www.townofjackson/200/Planning*

Use Permit

_______Basic Use

X_______Conditional Use

_______Special Use

Relief from the LDRs

_______Administrative Adjustment

_______Variance

_______Beneficial Use Determination

_______Appeal of an Admin. Decision

Physical Development

X_______Sketch Plan

_______Development Plan

_______Design Review

Subdivision/Development Option

_______Subdivision Plat

_______Boundary Adjustment (replat)

_______Boundary Adjustment (no plat)

_______Development Option Plan

Interpretations

_______Formal Interpretation

_______Zoning Compliance Verification

Amendments to the LDRs

_______LDR Text Amendment

_______Map Amendment

Miscellaneous

_______**Other:**____________________

_______Environmental Analysis

PRE-SUBMITTAL STEPS. *To see if pre-submittal steps apply to you, go to www.townofjackson.com/200/Planning and select the relevant application type for requirements. Please submit all required pre-submittal steps with application.*

Pre-application Conference #: P23-172 Environmental Analysis #: ________

Original Permit #: ________ Date of Neighborhood Meeting: 7/26/23

SUBMITTAL REQUIREMENTS. *Please ensure all submittal requirements are included. The Planning Department will not hold or process incomplete applications. Partial or incomplete applications will be returned to the applicant. Go to www.townofjackson.com/200/Planning and select the relevant application type for submittal requirements.*

Have you attached the following?

X **Application Fee.** Fees are cumulative. Go to www.townofjackson.com/200/Planning and select the relevant application type for the fees.

X **Notarized Letter of Authorization.** A notarized letter of consent from the landowner is required if the applicant is not the owner, or if an agent is applying on behalf of the landowner. Please see the Letter of Authorization template at http://www.townofjackson.com/DocumentCenter/View/845/LetterOfAuthorization-PDF.

X **Response to Submittal Requirements**. The submittal requirements can be found on the TOJ website for the specific application. If a pre-application conference is required, the submittal requirements will be provided to applicant at the conference. The submittal requirements are at www.townofjackson.com/200/Planning under the relevant application type.

Note: Information provided by the applicant or other review agencies during the planning process may identify other requirements that were not evident at the time of application submittal or a Pre-Application Conference, if held. Staff may request additional materials during review as needed to determine compliance with the LDRs.

Under penalty of perjury, I hereby certify that I have read this application and associated checklists and state that, to the best of my knowledge, all information submitted in this request is true and correct. I agree to comply with all county and state laws relating to the subject matter of this application, and hereby authorize representatives of Teton County to enter upon the above-mentioned property during normal business hours, after making a reasonable effort to contact the owner/applicant prior to entering.

Signature of Property Owner or Authorized Applicant/Agent

Date

Jorgensen Associates, Inc., attn: Mila Dunbar-Irwin

Name Printed

Deputy Planning Manager

Title

PRE-APPLICATION CONFERENCE SUMMARY
Planning & Development Department
Planning Division

150 E Pearl Ave.
P.O. Box 687
Jackson, WY 83001

ph: (307) 733-o440
fax: (307) 734-3563
www.townofjackson.com

This Summary will be prepared by Planning Staff. The applicant, or the applicant's agent, shall receive a copy of this summary for their reference in submitting a sufficient application.

Staff may request additional materials during review as needed to determine compliance with the LDRs.

PRE-APPLICATION MEETING GENERAL INFORMATION.

PAP#: P23-172

Date of Conference: 10/27/23

Planning Staff: Tyler Valentine

PROJECT.

Name/Description: Central Wyoming College Jackson Center

Physical Address: No address assigned

Lot, Subdivision: PIDN: 22-40-16-06-3-00-019

Zoning District(s): Public/Semi-Public

Overlay(s):

STAKEHOLDERS.

Applicant: Jorgensen Associates – Mila Dunbar-Irwin

Owner: Beaver Slide, LLC

Agent:

REQUIRED APPLICATIONS. *This project will require the following applications:*

Application	Reason	Fee
Neighborhood Meeting (Sec. 8.2.3)	Required prior to Sketch Plan submittal	n/a
Sketch Plan (Sec. 8.3.2)	Required for projects that exceed 15,000 sf of base FAR (Sec. 4.2.1.B.12)	$3,198
Conditional Use Permit (Sec. 8.4.3)	Required for Institutional Uses – Education (Sec. 4.2.1.C.1)	$640
Development Plan (Sec. 8.3.3)	Required for projects that exceed 5,000 sf of base FAR (Sec. 4.2.1.B.12)	$3,198
Design Review Committee (DRC)	Required for Sketch Plan & Development Plan (Sec. 4.2.1.B.3)	$255 each submittal
Grading Pre-App (Sec. 8.2.1)	Required prior to Building Permit for site disturbance greater than 3,000 sf	$192

Building Permit (Sec. 8.3.4)	Required for all physical development.	TBD
Right-Of-Way Permits	Required to do work in the ROW (i.e., water/sewer connection, road/lane closures, etc.)	TBD

MEETING ATTENDEES:

Name	**Company**	**Phone/Email**
Tyler Valentine	Town Planning	tvalentine@jacksonwy.gov
Brian Schilling	Pathways	bschilling
Brian Lenz	Town Engineering	Blenz@jacksonwy.gov
Mila Dunbar-Irwin	Jorgensen Associates	mdi@joreng.com
Pat Davies	Jorgensen Associates	pdavies@jorgeng.com
Brendan Schulte	Jorgensen Associates	bschulte@jorgeng.com
Jessica Jaubert	Three Elephants PR	jessica@threeelephantpr.com
	CWC	sdurfee@cwc.edu
	CWC	wnoseep@cwc.edu

TIMELINES. *This table is intended to provide general information regarding the review process and timing of decisions. See Article 8 for a complete explanation of the review process.*

The following timelines are generally applicable:

Application Types:	**Sufficiency**	**Decision-Maker**	**Timeline**
Neighborhood Meeting	n/a	n/a	Needs to be completed before Sketch Plan submittal
Sketch Plan	14 days	Town Council	120 - 150 days
Conditional Use Permit	14 days	Town Council	120 - 150 days
Development Plan	14 days	Town Council	120 - 150 days
DRC (concurrent with Sketch Plan & Development Plan)		Design Review Committee	DRC: Meets 2nd Wednesday of each month
Grading Pre-App (submittal after Development Plan approval)	1 week	Town Engineer	2-3 weeks
Building Permit (submittal after Development Plan approval)	Upon submittal	Building Official	-First round of review is 8 weeks. -Subsequent reviews are 30 days
Right-of-way Permits (can occur after the building is under construction and near completion)	14 days	Staff	TBD

Checklist Key.

√ ***Required****. Applicant must demonstrate compliance with this requirement.*

N/A ***Not Applicable****. Review requirement is not applicable to this project.*

General Information

Requirement		Notes
√	**Planning Permit Application.** The application should list all pertinent permits (use, physical development, interpretation, relief from the LDRs, Development Option/Subdivisions, Amendments to the LDRs) for which you are applying.	
√	**Notarized Letter of Authorization.** See "Permit and Applications" section on Planning Department website for copy of form.	Required if the applicant is different than owner.
√	**Application Fees.** Fees are cumulative. Applications for multiple types of permits, or for multiple permits of the same type, require multiple fees. See the currently adopted Fee Schedule in the Administrative Manual for more information.	Please see above.
N/A	**Review fees.** The applicant is responsible for paying any review fees and expenses from consulting services necessitated by the review of the application by the County Surveyor, Town Engineer, Title Company and any other required consultant. Such fees shall be paid prior to approval of the permit.	
√	**Mailed Notice fee.** See Section 8.2.14.C.2 for notice requirements. If mailed notices are required, the applicant is responsible for paying for any mailing in excess of 25 notices.	Landowners within two hundred (200) feet of the land subject to the application. Done by Town Staff.
√	**Digital Format.** All applications submitted to the Town Planning Department must be submitted in digital format.	Please provide a digital copy of the application.
√	**Response to Submittal Checklist.** All applications require a response to applicable review standards. For applications where a pre-application conference is required, applicable standards are identified below. If a pre-application conference is optional, see the submittal checklist for the relevant application type, established in the Administrative Manual.	This checklist serves as a guideline for the process but has additional concerns/recommendations throughout.
N/A	**Title Report.** A title report, title certificate or record document guarantee prepared within the last six months that includes evidence of ownership and all encumbrances on the subject property. Copies of the documents referenced in the report should not be submitted unless requested by the planner during review.	
√	**Narrative description of the proposed development.** Describe in detail the existing condition of the property and the proposed development, use, or subdivision for which you are seeking approval.	
√	**Findings for approval.** Include in your narrative a response to the findings for approval found in LDR Sec. 8.3.2, as applicable.	Findings for each application must be provided in each application.

√	**Proposed Development Program.** Provide a table that summarizes the projects compliance with the primary development standards (setbacks, heights, FAR, LSR, etc.).	
√	**Site Plan.** Provide a detailed site plan of the proposed project. A list of minimum standards for a site plan are established in the Administrative Manual.	Please provide a site plan to scale and dimensioned.
√	**Floor Plans.** Include floor plans for any existing buildings that will be occupied by a proposed use. If changes to existing buildings are proposed, indicate those on the floor plans.	Floor plans need to be dimensioned and show square footages for all areas.
√	**Neighborhood Meeting Summary.** See Section 8.2.3 for Neighborhood Meeting requirements.	
√	**Posted Notice.** See Section 8.2.14.C.4 for Posted Notice requirements for all public hearings.	

ARTICLES 2 (COMPLETE NEIGHBORHOODS), 3 (RURAL AREA ZONES), and 4 (SPECIAL PURPOSE ZONES).

Applicable Zone: Public/Semi-Public (P/SP)

Applicable LDR Section: Sec. 4.2.1

PHYSICAL DEVELOPMENT. *Please see Subsection B in the applicable Zone District for specific standards.*

Requirement		**Notes**
√	**Structure Location and Mass** (setbacks, height, FAR, etc.)	Show proposed setbacks, FAR, height, etc.
N/A	**Maximum Scale of Development** (individual building size)	
√	**Design Review** (Design Guidelines and Design Review Committee)	DRC meets second Wednesday of each month.
√	**Site Development** (Driveway and Access limits)	
√	**Landscaping** (see Div. 5.5 for more information)	
√	**Fencing** (see Sec. 5.1.2 for more information)	
√	**Environmental Standards (see Div. 5.1 and 5.2 for more information)** • Natural Resource Buffers • Irrigation Ditch Setback • Wild Animal Feeding • Natural Resource Overlay Standards • Bear Conflict Area Standards	
√	**Scenic Standards (see Div. 5.3 for more information)** • Exterior Lighting • Scenic Resource Overlay (SRO) Standards	Provide exterior lighting worksheet with building permit submittal, and provide manufacturer cut sheets.

√	**Natural Hazards to Avoid (see Div. 5.4 for more information)** • Steep Slopes • Areas of Unstable Soils • Fault Areas • Floodplains • Wildland Urban Interface	Only if applicable
√	**Signs (see Div. 5.6 for more information)**	Signs approved separately.
√	**Grading, Erosion Control, Stormwater (see Div. 5.7 for more information)** • Grading • Erosion Control • Stormwater Management	Grading pre-app will be required. All grading info will be included in the building permit.

USE STANDARDS. *Please see Subsection C in the applicable Zone District for specific standards.*

Requirement		Notes
√	**Allowed Uses** (see Div. 6.1 for more information)	Education use falls under “Institutional” which requires a CUP.
√	**Parking** (see Div. 6.2 for more information)	Education uses requires an independent calculation to determine the necessary amount of parking to meet the needs of the school.
N/A	**Affordable Workforce Housing** (see Div. 6.3 for more information)	Exempt because the project is located in the P/SP zone.
√	**Maximum Scale of Use**	
√	**Operational Standards (see Div. 6.4 for more information)** • Outside Storage • Refuse and Recycling • Noise • Vibration • Electrical Disturbances • Fire and Explosive Hazards • Heat and Humidity • Radioactivity	Refuse and recycling enclosure req’d. Please show on site plan.

DEVELOPMENT OPTIONS. *Please see Subsection D in the applicable Zone District for specific standards.*

Requirement

Notes

N/A **Allowed Subdivision and Development Options** (see Div. 7.1 and 7.2 for more information)

N/A **Residential Subdivision Requirements** (see Div. 7.4 and 7.5 for more information)

- School and Parks Exactions

√ **Infrastructure** (see Div. 7.6 and 7.7 for more information)

- Transportation Facilities
- Required Utilities

OTHER APPLICABLE LDR STANDARDS

Requirement **Notes:**

N/A **Division 1.9, Nonconformities**

1.9.2 Nonconforming Physical Development
1.9.3 Nonconforming Uses
1.9.4 Nonconforming Development Options and Subdivisions
1.9.5 Nonconforming Signs

N/A **Division 7.3, Open Space Standards**

7.3.3 Configuration and Location of Required Open Space
7.3.4 Use of Open Space
7.3.5 Physical Development Permitted in Open Space
7.3.6 Record of Restriction
7.3.7 Ownership of Open Space

ADDITIONAL COMMENTS

1. **Staff was made aware that CWC may have the entire project reviewed by the state which may not involve Town Building Permits. The applicant stated that they plan to know how they plan to proceed by the end of 2023.**

2. **HOUSING MITIGATION: This development is exempt from housing per the P/SP zone.**

3. **PEDESTRIAN IMPROVEMENTS: Planning will defer to Engineering and Pathways on pedestrian and/or pathway improvements along this stretch of High School Road. Based on the meeting is was clear that a pathway will likely be built along the northern portion of the property.**

4. **FENCING: Based on the meeting the applicant clarified that the original 9’ fence has been replaced with a 6’ tall fence. The new fence would straddle the property line and would be considered a county fence.**

5. **EV PARKING: EV parking standards will apply to this development. 30% of required parking falls under the EV requirements (5% must be EV installed and 25% must be EV capable)**

6. **BIKE PARKING: The new bike parking standards will likely apply to this development as those standards should be effective in mid/late December 2023.**

7. **UPCOMING LDR CLEAN-UP: It is possible that the new LDR clean-up items will apply to this development. Notable changes would be the increase in snow storage requirements from 2.5% to 10%. Those standards should be effective in mid/late December 2023**

8. **LIGHTING: Dark sky lighting is required per Sec. 5.3.1.**

9. **LANDSCAPE SURFACE RATIO AND PLANT UNITS: Although this zone is exempt from Landscaping, the CUP has separate findings that require minimizing adverse visual impacts. This finding addresses how a building, site and/or use is viewed from adjacent properties and thus screening this site from the street and sides is highly recommended in order to meet this finding.**

10. **PARKING REQUIRED: Need clarification on the amount of parking required. Education uses require an independent calculation to determine how much parking is needed to meet the demands. Is the high school to the east allowing shared parking?**

11. **TRASH AND RECYCLING: Required for this project. Please refer to Sec. 6.4.2.**

12. **FINDINGS FOR A CUP: A conditional use permit shall be approved upon finding the application:**
    1. **Is compatible with the desired future character of the area;**
    2. **Complies with the use specific standards of Division 6.1;**
    3. **Minimizes adverse visual impacts;**
    4. **Minimizes adverse environmental impacts;**
    5. **Minimizes adverse impacts from nuisances;**
    6. **Minimizes adverse impacts on public facilities;**
    7. **Complies with all other relevant standards of these LDRs and all other Town Ordinances; and**
    8. **Is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.**

PLAN REVIEW COMMITTEE. *The Plan Review Committee consists of the following listed agencies. Planning Staff will transmit pertinent portions of the application to each agency.* ***Other agencies and individuals not checked off on this list may be added to the PRC if necessary.***

	Agency	**Required for:**
√	Building Official	
√	Town Attorney	
√	Town Engineer	
√	Title Company – for subdivision plat	
√	County Surveyor – for subdivision plat	
√	Jackson Hole Fire EMS	
√	Housing Authority	
	Integrated Solid Waste & Recycling	
	National Park Service	

___√___ Parks and Recreation Department
___√___ Pathways Coordinator
________ Public and Environmental Health
___√___ Police Department
________ Teton Conservation District
________ Teton County School District
________ Teton County (required when subdividing land within one mile of the Teton County)
________ U.S. Forest Service (if adjacent to or accessing through forest service lands)
________ Wyoming Department of Environmental Quality
________ Wyoming Department of Game & Fish
________ WYDOT

Teton County Planning and Building Department
200 S. Willow, P.O. Box 1727
Jackson, WY 83001
Phone (307)733-7030

LETTER OF AUTHORIZATION BY OWNER

THE LETTER OF AUTHORIZATION IS TO BE SUBMITTED ONLY IF THE APPLICANT/AGENT IS NOT THE RECORDED OWNER OF THE PROPERTY. THE RECORDED OWNER MUST SIGN THE LETTER OF AUTHORIZATION AND HAVE IT NOTARIZED.

OWNER, CO-OWNER, OR CORPORATE OWNER:

Name: Fremont County Community College District dba Central Wyoming College
Physical Address of Property: N/A
Mailing Address: 2660 Peck Avenue Riverton, WY
Zip code: 82501 Phone: 307-855-2149
Email: wnoseep@cwc.edu

AGENT OR CONTRACTOR: (If authorizing Agent and Contractor, fill out a form for each)

Name: Jorgensen Associates P.C.
Mailing Address: PO Box 9950
Zip code: 83302 Phone: 307-733-5150
Email: mdi@jorgeng.com

Owner, Co-Owner, or Corporate Owner, ("Owner") which property is specifically described as N/A
hereby authorizes Agent or Contractor, as stated above, to represent and/or act for Owner in making application for, receiving, and accepting on Owner's behalf, any permits or other action by the Teton County Commissioners, Planning and Development, Building, and/or Engineering Departments relating to Owner's Property in Teton County, and the modification, development, planning, platting, replatting, improvements, use or occupancy of land, or energy mitigation in Teton County. Owner acknowledges and agrees to be bound and must abide by the written terms or conditions of issuance of any such named Agent or Contractor, whether actually delivered to Owner or not. Owner agrees that no modification, development, planning, platting or replatting, improvements, use or occupancy of land, or energy mitigation involved in any application, as it relates to Owner's Property, shall take place until approved by the appropriate official(s) of Teton County, in accordance with all applicable codes and regulations. Owner agrees to pay any fines and/or mitigation fees to Teton County and will be liable for any other penalties arising out of the failure to comply with the terms of any permit or arising out of any violation of the applicable laws, codes, and/or regulations applicable to the action sought to be permitted by the application authorized herein. Owner agrees and authorizes Agent or Contractor to pay any fines and/or mitigation fees to Teton County and for the Agent or Contractor to accept and receive any reimbursement or fee payments due to Owner from Teton County, including but not limited to energy mitigation fees.

Under penalty of perjury, the undersigned swears that the foregoing is true and, if signing on behalf of a corporation, partnership, limited liability company or other entity, the undersigned swears that this authorization is given with the appropriate approval of such entity, if required.

OWNER, CO-OWNER, CORPORATE OWNER:

Print Name: Willie Noseep

Signature:

Title: Vice President for Administrative Services

STATE OF Wyoming

COUNTY OF Fremont

SS.

Subscribed and sworn to before me by Jenna Hague this

14 day of November, 2023.

WITNESS my hand and official seal.

JENNA L. HAGUE
NOTARY PUBLIC
STATE OF WYOMING
COMMISSION ID: 168021
MY COMMISSION EXPIRES: 01/13/2029

Jenna L. Hague
Notary Public

My commission expires: 1/13/2029

Wyoming Title & Escrow - Jackson
1110 Maple Way
Jackson, Wyoming 83001

GRANTOR: BEAVER SLIDE LLC
GRANTEE: FREMONT COUNTY COMMUNITY COLLEGE
Doc 1053789 Filed At 16:44 ON 02/06/23
Maureen Murphy Teton County Clerk fees: 18.00
By Corrina Dorman Deputy Clerk

SPECIAL WARRANTY DEED

As of February 3, 2023, **BEAVER SLIDE LLC**, a Wyoming close limited liability company, GRANTOR, for Ten Dollars ($10.00) and other good and valuable consideration in hand paid, receipt of which is hereby acknowledged, CONVEYS AND SPECIALLY WARRANTS against all who claim by, through or under the Grantor, but none other, to **Fremont County Community College District d/b/a Central Wyoming College**, GRANTEE, whose mailing address is 2660 Peck Avenue, MAIN HALL 104C, Riverton, WY, 82501, the real estate described in the attached Exhibit A, situated in the County of Teton, State of Wyoming, together with and including all improvements thereon and all appurtenances and hereditaments thereunto belonging; subject to all covenants, conditions, restrictions, easements, encumbrances, reservations, and rights-of-way of record or that would be shown by an accurate survey, and taxes not yet due and payable. Grantor hereby releases and waives all rights under and by virtue of the homestead exemption laws of the State of Wyoming.

[REMAINDER OF PAGE INTENTIONALLY BLANK]

WITNESS the due execution and delivery of this Special Warranty Deed as of the date first set forth above.

BEAVER SLIDE LLC, a Wyoming close limited liability company

By: Kelly D. Lockhart

Name: Kelly D. Lockhart

Its: Manager

STATE OF Wyoming)

) ss

COUNTY OF Teton)

This instrument was acknowledged before me on this 3 day of February, 2023 by Kelly D. Lockhart, as Manager of BEAVER SLIDE LLC, a Wyoming close limited liability company.

Notary Public

My Commission Expires:____________________

JEREMY J. GOSINSKI
NOTARY PUBLIC
STATE OF WYOMING
COMMISSION ID: 102006
MY COMMISSION EXPIRES: 10/30/2028

EXHIBIT A

to

SPECIAL WARRANTY DEED

A parcel of land lying within the NE1/4SW1/4 and SE1/4NW1/4 of Section 6, T.40N., R.116W., 6th P.M., Teton County, Wyoming, being more particularly described as follows:

BEGINNING at the Guy Bush position for the center one-quarter corner of said Section 6 as shown on map T-313A on file in the Office of the Clerk of Teton County, Wyoming;

THENCE S65°36'03"W, 190.75 feet, along the westerly line of Jackson Hole Hereford Ranch Tract 3 as described in that Quitclaim Deed recorded as doc. no.1018284 in said Office to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S00°57'16"E, 136.17 feet, continuing along said westerly line to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE S89°37'02"W, 375.87 feet, parallel with that boundary agreement line set forth in doc. no. 0248124 in said Office to a point marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N00°57'16"W, 213.81 feet, parallel with said westerly line of Jackson Hole Hereford Ranch Tract 3 to a point of intersection with said boundary agreement line, marked by a 5/8"x24" rebar with aluminum cap inscribed "PLS 13002";

THENCE N89°37'02"E, 550.88 feet, along said boundary agreement line to the Point of Beginning.

Said parcel encompasses 2.00 acres, more or less.

The basis of bearings for this description is N00°04'18"W along the west line of said Section 6.

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