ACCREDITATION EVIDENCE

Title: Western Health Sciences Level II Executive Summary

Evidence Type: Corroborating

Date: 11 February 2021

WAN: 22-0520

Classification: Report

PII: No

Redacted: No

Western Wyoming Community College
Level II Study - Health Sciences Wing

Selected Material

plan one / architects

hord | coplan | macht

February 11, 2021

plan one / architects

hord | coplan | macht

February 11, 2021

Dr. Kimberly Dale
President
Western Wyoming Community College
2500 College Drive
Rock Springs, WY 82901

Dear Dr. Dale:

Plan One/Architects and Hord Coplan Macht, together with our consultants, are pleased to present Western Wyoming Community College with this Level II Study for the proposed expansion of the Health Sciences Program. We have put together a comprehensive study that is detailed in the following pages. An Executive Summary of our findings is outlined below:

Executive Summary

This document marks the completion of the Level II Feasibility Study for the Health Science Building/ Wing for Western Wyoming Community College (Western). This study represents the State of Wyoming's next required step for funding following the completion of the Level I Nursing Program Consolidation Study in 2019. This Level II Study was commissioned by Western to analyze the space needs and growth potential of the College's Nursing, EMS/Paramedics and Phlebotomy programs, which are currently located in various locations throughout both the Rock Springs and Green River campuses, with the goal of integrating them into a consolidated Health Science facility.

Project History

Western commissioned a campus master plan in 2017 which proposed consolidating the nursing program into existing facility space around the existing nursing skills and simulation labs. The consolidation space would have been made available after existing programs moved into a proposed addition adjacent to the west main entry. The addition would have allowed the nursing program to grow into an expanded nursing simulation lab. The IT department has since moved into the area proposed for the nursing simulation lab expansion, and the overall nursing program needs have expanded since that time, therefore, this proposed strategy no longer works for the College.

Subsequently, Western commissioned an abbreviated Level I study in late 2018 to create a stop-gap alternative plan to consolidate the nursing program spaces into one location. The basic strategy employed was to present an option that could minimize the project budget because of limited funding options. The Level I analysis focused on existing program enrollment and facilities and assumed a one for one replacement of program spaces in a consolidated location. Western reviewed several options including a full renovation, renovation/additions, and a new stand-alone building. In order to minimize the impact on existing programs the College decided on a 10,680 SF new stand-alone building proposed to be located on the southeast corner of campus at an existing parking lot. The estimated construction cost at that time was $3,813,000.

Since that time the College has realized that there are severe facility deficiencies in the Emergency Management Services (EMS)/Paramedicine and Phlebotomy programs as well as the nursing programs. Currently the Certified Nursing Assistant (CNA) program and portions of the EMS/Paramedicine programs are taught at the Green River campus because of space deficiencies. Additionally, program certification agencies have alerted the College that the skills labs and simulation facilities for nursing and for EMS/Paramedicine are inadequate and do not provide the type of facilities to support the simulation skills required for certification. Based on these deficiencies, Western made the decision to self-fund the design fees and expand the project scope for the Level II Feasibility Study to include the Nursing, Certified Nursing Assistant programs, as well as the EMS/Paramedicine and Phlebotomy programs.

PROJECT ANALYSIS

The following document outlines the process of analysis of the three proposed sites, the sites analyzed on the Rock Springs campus, the program summary, the conceptual site plan, floor plan and massing design for the addition and surrounding site, the building system requirements for the renovation and addition and an estimated opinion of cost for the renovation/addition and necessary soft costs, including specialized equipment for health sciences simulation and skills practice.

The analysis from this Level II study and related cost estimate have been compiled in such a manner, and with sufficient documentation, that they can be submitted to the State of Wyoming Community College Commission for project approval and for potential funding approval by the State.

GUIDING PRINCIPLES

Western created an Executive Committee to provide input to the design team on the needs, priorities, goals and budget that they would ultimately use to determine the success of the project. The committee was comprised of members of the College administration, health science leaders and an enrolled student. The intent of including such a diverse group was to provide insight into each program considered for the project and to comment on the overall campus culture, standards and deficiencies at multiple user levels. The committee contributed to a visioning exercise to clarify the high-level project priorities and needs which were developed into the following project Guiding Principles:

Plan for Smart Growth

Improve existing space constraints on current programs.

Provide flexibility for growth in new programs that can be adapted as the job market changes.

Design Efficiently

Create an efficient design that allows for smart growth so that the project is fundable and the program does not outgrow it immediately.

Space should be beautiful yet functional to aid in student attraction and retention.

Spaces That Facilitate Real World Learning

Incorporate state-of-the-art technology so there is not be a gap in learning between the academic setting and the real world.

Be mindful of existing relationship with Memorial Hospital of Sweetwater County to ensure space provides cohesive environments.

Budget and Quality At The Forefront

Provide balance between budget and quality.

Explore existing opportunities before assuming new construction is the best option.

Once the project priorities were identified, these principles provided an overarching set of rules to guide the rest of the project.

SITE OPTIONS

Initially, Western tasked the design team with analyzing three potential locations for the facility to determine the best fit and understand budget implications of each. The following options we studied by the design team and discussed with the Executive Committee:

1. A new building or addition on the Rock Springs campus: The design team analyzed a series of sites across the campus for potential stand alone facility options; as well as test fitting of the program into potential renovation and renovation/addition scenarios within the existing facility.

2. A renovation at the Green River campus: Located approximately 17 miles due west of the Rock Springs Campus was discussed as a possible relocation option. While a test fit of the program indicated there was adequate square footage available at the site to house Health Sciences, the overall efficiency of the program would suffer due to existing constraints of the building. Additional pros and cons of the site were discussed, and with a price tag of approximately $7.98 million for the renovation and equipment, it was ultimately determined not to be an optimal solution.

3. Or a renovation of the existing three-story Sweetwater County Building: Located less than two miles from the Rock Springs campus, the Sweetwater County Building previously housed the City's hospital. Again, the facility would provide adequate square footage for the program; however, the existing structural grid is not conducive to the larger skills labs required and a portion of the program would have to be located in the basement which is not ideal for access or daylighting. Additionally, with the overall age of the building, many spaces and systems would have to be brought up to current code. The estimated project cost for this option is approximately $8.44.

The professional analysis of the three locations, in concert with the discussions of the Executive Committee, resulted in the decision to locate the facility on the Rock Springs campus. This option allows those enrolled in the program to take advantage of the adjacencies to existing student programs and amenities on campus, and allows for more convenient access to other educational programs that are required for the health science students.

PROGRAMMATIC JUSTIFICATION

The certification boards for Nursing, Certified Nursing Assistant, and Emergency Medical Services/ Paramedics have flagged the Western academic facilities as being deficient for adequate skills and simulation training and recommended that the College provide improved settings to meet certification requirements. These deficiencies are a key concern from the Western Administration and faculty that is driving the urgency for this proposed expanded facility. Additionally, the Certified Nurse Assistant (CNA) program and EMS/Paramedics programs are currently providing skills labs on the Green River campus because of space deficiencies on the Rock Springs campus. The solution proposed in this study aims to correct all of these circumstances through thoughtful planning and design.

Nursing Program

Western offers an Associate Degree in Nursing (ADN) with a Practical Nursing (LPN) option, and a CNA. They would like to grow the Nursing program from their current enrollment of 80 students per year, or five (5) cohorts of 8 students each semester, to 96 students per year or 48 students per semester in six (6) cohorts. This projected growth is supported, as they currently are only able to accept 1/3 – 1/2 of the applicants to the program based on space and clinical limitations.

The Nursing program will likely not be able to grow beyond six cohorts per semester because of limitations for on-site clinical opportunities for students, which are needed to meet licensing requirements. Growth of local and or regional medical facilities would have a direct impact on the opportunities available to Western's students.

It is anticipated that the growth to 48 Nursing students per semester will be divided into two groups of 24 students for the skills classroom labs. Based on this assumption, the program developed includes two Nursing skills labs with 12 beds each, to allow two students to be assigned to each bed for healthcare skills practice.

EMS / Paramedics and Phlebotomy

There is expected to be growth in the EMS/Paramedic program. The Phlebotomy and EMS/ Paramedics program currently share a classroom as Phlebotomy classes are during the day and EMS/Paramedics classes are held on nights and weekends with no change to this schedule anticipated due to the nature of the students signing up for these classes. These programs can continue to share a skills lab in the proposed space as long as there is abundant storage for the EMS/Paramedic equipment currently stored in Green River because of existing space limitations on the Rock Springs campus. The potential for continued shared space is also dependent on the ability so have a simulation space for Ambulance, ER and Home/Apartment skills practice as well.

Clinical Simulation

A primary goal for the nursing program is to grow their capabilities to provide simulated skills practice in a setting that mimics real world health care environments. Their current simulation facilities are limited and do not mimic real world settings. A prime example of this is a simulation setting held in a storage closet due to space constraints.

Western would like to increase the number of clinical hours in a simulated setting that they can offer students on campus from the current 10% of required clinical hours to 20%-25% of required clinical hours. This increase is desired to help make up for the limitations of on-site clinical opportunities in the region available to their students. To meet this goal, the program includes a dedicated high-fidelity simulation suite comprised of four single-bed simulation hospital room settings with dedicated AV control room for instructors to operate the manikins in each bed, and to provide video capture of skills practice for debriefs with students. Adjacent debrief rooms can offer direct visibility into the simulation hospital rooms and will have audiovisual connection via speakers and monitors so that groups of students can discuss skills strategies while observing students practice their skills.

The simulation suite will also address home/apartment simulations that include a simulation bathroom, bed, and kitchen with observation from a control room to manage a manikin that can be set up for multiple types of skills practice for both the nursing and the EMS/Paramedic students.

For the EMS/Paramedic program the simulation suite will include an ambulance simulation room that includes a simulation ambulance box and an emergency room bed setting to allow students to practice skills managing patient transfer between the ambulance to the emergency room bed. An AV control room will have direct visibility into this room as well for instructors to observe student’s skills and manage video capture

Future Programs

Western would like to grow a Medical Assisting program in the future. The MA program's space needs could be shared within the Phlebotomy and EMS/Paramedics skills lab.

Based on the deficiencies identified above and the anticipated growth of existing and new programs, the College has determined that the creation of this proposed dedicated health science facility is an urgent priority.

PROGRAM SPACE REQUIREMENTS & FACILITY LOCATION

The design team analyzed each program's current and projected enrollment, class schedules, and existing program spaces to determine the ideal future space allocation for each program; allowing for shared use of program spaces where applicable to optimize space efficiency. The overall program assignable space needs are estimated to be 12,200 square feet.

Once the space needs were identified, the analysis then focused on the ideal location on the Rock Springs Campus for the Health Science facility to determine whether the facility should be a new stand-alone building, a hybrid renovation/addition, or solely a renovation to the existing building. After analyzing a wide range of potential locations across the Rock Springs campus, it was ultimately determined to locate the facility adjacent to the existing west main entry into the building. That location is most convenient to existing health science program spaces, provides an opportunity to improve the visibility to a new primary entry from the west campus entry, and can provide an improved entry that can better protect from high winds. Additionally, this location supports the proposed Health Sciences addition location identified in the 2017 master plan.

In order to balance the program space needs with the budget it was determined that the project should be a hybrid renovation/addition project to minimize construction costs. The conceptual plan includes renovating approximately 6,600 GSF of the existing building at the locations of the existing math, geology and general education classrooms (rooms 1220, 1223 and 1225) and the existing nursing skills lab room 1314. An 11,450 GSF addition with a more prominent west entry will infill between the two renovation areas for a total project size of 18,050 GSF. The facility will also require a basement for mechanical systems that is estimated to be 6,000 GSF, however, this size will be minimized to the greatest extent possible once actual MEP systems are determined with the Level III design process.

PROJECT DESCRIPTION

The conceptual design for the addition responds to the existing material and massing context of the existing building. The goal to create a more prominent, highly visible western entry that provides protection from the strong west winds is provided with a contemporary gabled mass that references the highly prominent existing gabled light monitors throughout the main building that provide daylighting into interior spaces which were originally designed to reference the regional mine tipples. The height of the entry extends into the oversized lobby space which creates space for students to meet in 'huddle' rooms for group collaboration or quiet study, or to study or socialize in comfortable lounge areas. Skylights at the peak of the gable structure will provide abundant daylighting into the lobby/lounge area.

The health science faculty and administration offices are located immediately adjacent to the lounge area for convenient accessibility to students.

The high-fidelity simulation suite is conveniently located between the nursing skills labs and the EMS/Paramedics/ Phlebotomy skills lab, which will be shared by all of the health science programs. EMS/Paramedics will have direct access from their skills lab into the ambulance/ER simulation room. This simulation room will also have direct access to the exterior where students can practice skills outside for simulations that mimic day to day emergency situations. The home/apartment simulation suite and the ambulance/ER simulation room share an AV control room with direct visibility from the control room into both spaces. The high-fidelity simulation portion of the suite is comprised of four single-bed simulation hospital room settings arranged in pairs so that they can open-up to two-bed hospital rooms with an operable partition subdividing the two rooms. Each pair of simulation

hospital rooms have a dedicated AV control room for instructors to operate manikins in each bed, and to provide video capture of skills practice for debriefs with students. Adjacent debrief rooms can offer direct visibility into the simulation hospital rooms and will have audiovisual connection via speakers and monitors so that groups of students can discuss skills strategies while observing students practice skills. The debrief rooms will also provide back-up classroom space for the 8 student cohorts and can also provide additional meeting spaces for the campus.

FINANCIAL PLAN

The State had reviewed the Level I project goals and budget and had approved the project to proceed with Level III design and construction. However, once Western understood the need to expand the project scope to include EMS/Paramedicine and Phlebotomy, they requested that the State defer the project funding so that the College could commission a more detailed Level II study to determine the impact to the project's scale and budget. The State will need to review this expanded program which has necessitated the size of the project increase and therefore the project budget as well.

The Executive Committee challenged the design team to define a project that meets their current and future growth needs within a $7 million total project budget. The anticipated approach to financing the project is that half of the project budget will be raised by Western, and the other half will be requested from the State.

In order to balance the program space needs with the budget it was determined that the project should be a hybrid renovation/addition project to minimize construction costs. The conceptual plan includes renovating approximately 6,600 GSF of the existing building at the locations of the existing math, geology and general education classrooms (rooms 1220, 1223 and 1225) and the existing nursing skills lab room 1314. A 10,450 GSF addition, with a more prominent west entry, will infill between the two renovation areas for a total project size of 17,050 GSF. As rooftop mechanical units are not practical because of our sever weather conditions, the facility will also require a basement expansion for mechanical systems that is estimated to be 3,200 GSF.

The massing for the addition was designed to integrate brick and metal panel colors and textures that exist throughout the building, with a contrasting higher volume gabled entry to improve the visibility of the western campus entry and provide protection from high westerly winds, as suggested in the recent campus master plan.

Once the plan and systems were determined to be as efficient as possible, without losing needed program spaces, the proposed renovation and additions were provided to a professional cost estimator who estimated the project cost at $7,688,075 including design fees, permits/fees, escalation and public art allowance. An additional $1,470,731 is estimated for the health sciences medical equipment, simulation audiovisual platform, and classroom and office furniture. To supplement the funding for the project Western is anticipating pursuing funding sources such as Perkins Grants for furniture, fixtures and equipment (FFE), and they will also consider pursuing programs such as the Economic Development Authority grants to help support the needs for additional FFE for this expanded facility.

CLOSING

We would like to take this opportunity to thank Western Wyoming Community College for the opportunity to be of service to them on this project; and we would particularly like to thank the administrators and staff who worked so diligently to bring this study to fruition:

Cabinet Members

Dr. Kimberly Dale, President, Western Wyoming Community College

Dr. Cliff Wittstruck, Vice President for Student Learning

Mr. Burt Reynolds, Vice President for Administrative Services (Also served on Executive Committee)

Ms. Joy Adams, Assoc. Vice President of Human Resources

Ms. Tammy Register, Administrative Services Officer (Also served on Executive Committee)

Executive Committee

Heidi Brown- Interim Nursing Program Director

Shelby Williams- Assistant Professor of Nursing

Sunny Thomas- Assistant Professor of Nursing

Andy Appleby- Instructor of EMS and Paramedicine, Program Director

Jeannette Hileman – Emergency Medical Technology Professor

Jennifer Baguma – Nursing program student

Western Stakeholders

Derek Robinson – Director of IT Services

Korey Heikes – Building Automation Systems Specialist

Mel Horrocks – Maintenance Supervisor

We look forward to continuing our relationship with Western as it takes the next steps in the process. Should anyone have questions regarding any of the information included in this study, please do not hesitate to contact me or Ms. Gilley at any time.

Sincerely,

William W. Wheatley, AIA
Vice President

Gwen Gilley, AIA, LEED AP BD+C
Principal

WESTERN WYOMING COMMUNITY COLLEGE

PROJECT: **HEALTH SCIENCES**
PHASE: **CONCEPTUAL**
ESTIMATE DATE: **2/5/2021**
BID DATE: **1/2024**
PREPARED BY: **PLAN ONE ARCHITECTS, JP**

PROJECT SUMMARY

BUILDING		BUILDING AREA (SF)	COST/SF	TOTAL COST
NEW CONSTRUCTION COSTS				
SITE DEVELOPMENT				$307,386
NEW BUILDING ADDITION & RENOVATION		20,000	$328.36	$6,567,230
TOTAL CONSTRUCTION COSTS (BASE BID)		20,000	$343.73	$6,874,617
NON-CONSTRUCTION COSTS				
ARCHITECTURAL / MPE DESIGN	6.80%			$467,474
CIVIL DESIGN	0.75%			$51,560
SPECIALTY CONSULTANT	0.75%			$51,560
PERMITS & FEES				$71,000
ASBESTOS ABATEMENT ALLOWANCE	1.50%			$103,119
PUBLIC ART ALLOWANCE	1.00%			$68,746
TOTAL NON-CONSTRUCTION COSTS		20,000	$40.67	$813,459
TOTAL CONSTRUCTION COSTS + NON-CONSTRUCTION COSTS		**20,000**	**$384.40**	**$7,688,075**
OWNER CARRIED COSTS				
CONSTRUCTION CONTINGENCY	5.00%			$343,731
FF&E				$200,000
EQUIPMENT (SEE DIVISION 11 FOR DESCRIPTIONS)				$927,000
TOTAL OWNER CARRIED COSTS		20,000	$73.54	$1,470,731
TOTAL ANTICIPATED PROJECT COST		**20,000**	**$457.94**	**$9,158,806**
ADD ALTERNATE 1 - PARKING LOT EXPANSION				$342,584

ESTIMATE SUMMARY - SITE DEVELOPMENT

WESTERN WYOMING COMMUNITY COLLEGE

PROJECT: **HEALTH SCIENCES** CSI DIVISION: **SUMMARY**

PHASE: **CONCEPTUAL** SITE SF:

BID DATE: **1/2024** ESTIMATE DATE: **2/5/2021**

PREPARED BY: PLAN ONE ARCHITECTS

				COST / SF	TOTAL
CSI DIVISION 31,32,33	**SITE CONSTRUCTION - NEW DEVELOPMENT**				**$218,715**
SUBTOTAL HARD COSTS					**$218,715**
CONTINGENCY					
	ESTIMATING CONTINGENCY	10.00%			**$21,872**
	MARKET FACTOR	0.00%			**$0**
SUBTOTAL CONSTRUCTION COSTS					**$240,587**
MARK-UPS					
	GENERAL CONDITIONS	8.00%			$19,247
	OVERHEAD & PROFIT	6.00%			$15,590
	INSURANCE & BONDS	1.00%			$2,754
SUBTOTAL MARK-UPS					**$37,591**
SUBTOTAL CONSTRUCTION COSTS & MARK-UPS					**$278,178**
ESCALATION	36 MONTHS AT 3.5% ANNUAL	10.50%			**$29,209**
SUBTOTAL CONSTRUCTION COSTS, MARK-UPS & ESCALATION					**$307,386**
TOTAL BASE BID ESTIMATE		COST PER SF:	#DIV/0!		**$307,386**

ESTIMATE SUMMARY

WESTERN WYOMING COMMUNITY COLLEGE

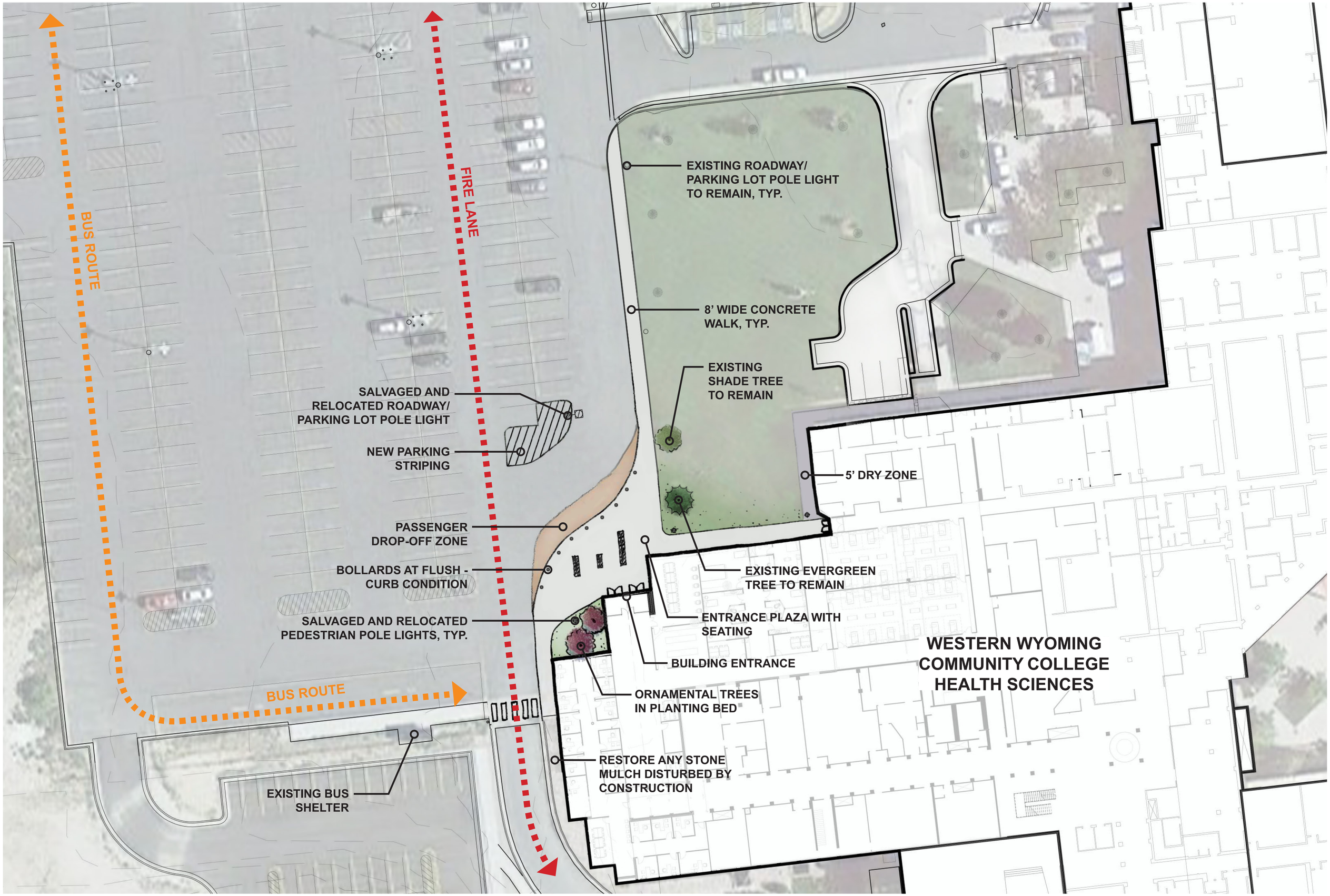
PROJECT: **HEALTH SCIENCES** CSI DIVISION: **SUMMARY**

PHASE: **CONCEPTUAL** BLDGSF: **20,000**

BID DATE: **1/2024** ESTIMATE DATE: **2/5/2021**

PREPARED BY: PLAN ONE ARCHITECTS

				COST / SF	TOTAL
CSI DIVISION 1	**GENERAL REQUIREMENTS**	**(SEE BELOW)**		$0.00	**$0**
CSI DIVISION 2	**EXISTING CONDITIONS**			$2.86	**$57,150**
CSI DIVISION 3	**CONCRETE**			$18.00	**$359,987**
CSI DIVISION 4	**MASONRY**			$0.00	**$0**
CSI DIVISION 5	**METALS**			$28.63	**$572,617**
CSI DIVISION 6	**WOOD & PLASTICS**			$0.23	**$4,638**
CSI DIVISION 7	**THERMAL & MOISTURE PROTECTION**			$15.50	**$310,033**
CSI DIVISION 8	**DOORS & WINDOWS**			$28.90	**$578,007**
CSI DIVISION 9	**FINISHES**			$47.68	**$953,580**
CSI DIVISION 10	**SPECIALTIES**			$4.34	**$86,850**
CSI DIVISION 11	**EQUIPMENT**			$0.00	**$0**
CSI DIVISION 12	**FURNISHINGS**			$3.41	**$68,288**
CSI DIVISION 13	**SPECIAL CONSTRUCTION**			$0.00	**$0**
CSI DIVISION 14	**CONVEYING SYSTEMS**			$0.00	**$0**
CSI DIVISION 20,21,22,23,25	**MECHANICAL**			$45.58	**$911,641**
CSI DIVISION 26,27,28	**ELECTRICAL**			$38.50	**$770,000**
CSI DIVISION 31,32,33	**SITE CONSTRUCTION**			$0.00	**$0**
SUBTOTAL HARD COSTS				$233.64	**$4,672,790**
CONTINGENCY					
	ESTIMATING CONTINGENCY		10.00%		**$467,279**
	MARKET FACTOR		0.00%		**$0**
SUBTOTAL CONSTRUCTION COSTS					**$5,140,069**
MARK-UPS					
	GENERAL CONDITIONS		8.00%		$411,206
	OVERHEAD & PROFIT		6.00%		$333,076
	INSURANCE & BONDS		1.00%		$58,844
SUBTOTAL MARK-UPS					**$803,126**
SUBTOTAL CONSTRUCTION COSTS & MARK-UPS					**$5,943,195**
ESCALATION	36 MONTHS AT 3.5% ANNUAL		10.50%		**$624,035**
SUBTOTAL CONSTRUCTION COSTS, MARK-UPS & ESCALATION					**$6,567,230**
TOTAL BASE BID ESTIMATE			COST PER SF:	$328.36	**$6,567,230**



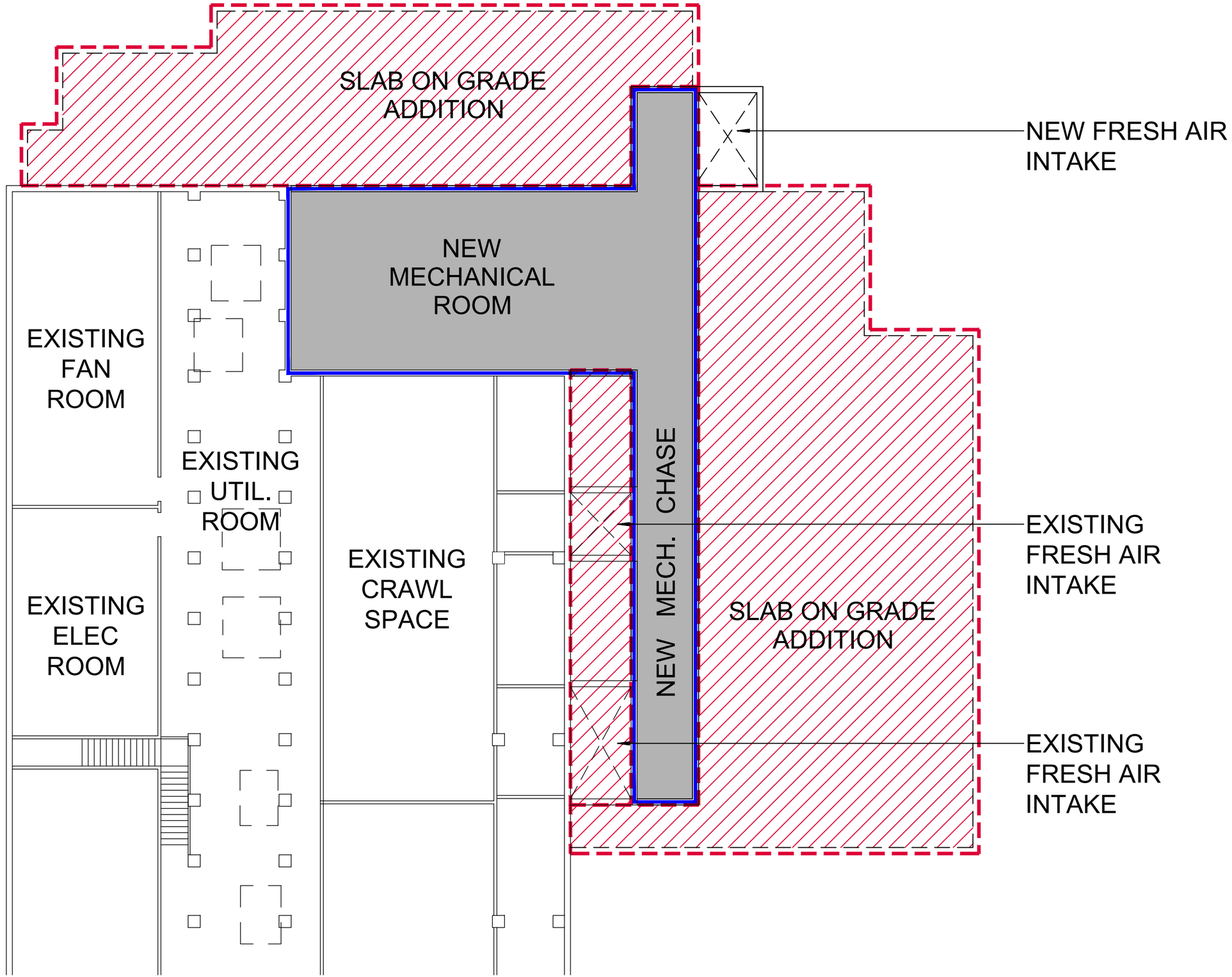
A1 SITE PLAN ENLARGEMENT - ENTRY PLAZA (BASE BID)

1”=16’-0”

SCALE: 1” = 16’-0”

0’ 8’ 16’ 32’ 48’


OFFICE SUITE
LOBBY
GROUP STUDY
IT/AV
EXISTING
TO REMAIN
EMS & PHLEBOTOMY
SKILLS LAB
AMBULANCE
SIMULATION
HI FIDELITY
SIMULATION
HOME SIMULATION
NURSING & CNA SKILLS LAB(S)
12 BED


SLAB ON GRADE ADDITION
NEW FRESH AIR INTAKE
NEW MECHANICAL ROOM
EXISTING FAN ROOM
EXISTING UTIL. ROOM
EXISTING CRAWL SPACE
NEW MECH. CHASE
EXISTING FRESH AIR INTAKE
SLAB ON GRADE ADDITION
EXISTING ELEC ROOM
EXISTING FRESH AIR INTAKE


STUDY ROOM
#1
12 to 1
77
25
67 / 39
21