Butte-Glenn Community College District
3536 Butte Campus Drive
Oroville, CA 95965

NOTICE OF REGULAR MEETING

September 16, 2020 | 1:00 p.m.

Teleconference

Butte College is a student-centered learning institution which provides quality education and support services that are continuously evaluated and improved, to prepare students to be productive members of a diverse, sustainable, and ever-changing global society. We provide career and transfer pathways for students to become life-long learners and critical thinkers through the mastery of basic skills, workforce training, and the achievement of degrees and certificates.

This meeting is being conducted by teleconference
Meeting Link: https://cccconfer.zoom.us/j/585525830
iPhone one-tap: +12532158782,585525830#
Telephone Dial: +1 312 626 6799 (US Toll);
Meeting ID: 585 525 830

Notice: This meeting will be held in accordance with Executive Order N-25-20, N-29-20 and N-33-20 issued by California Governor Gavin Newsom on March 12, 17, and 19, 2020, the Ralph M. Brown Act, and the Federal American With Disabilities Act.

The teleconference is open to the public and any member of the public has an opportunity to address the Board of Trustees by emailing their comment to Shannon McCollum at mccollumsh@butte.edu **24 hours** before the start of the meeting.

Public comment must be submitted in advance, no later than 24 hours before the start of the meeting and must be no more than 250 words, via email to: mccollumsh@butte.edu.
Please submit the following information:
1. Name
2. Meeting Name and Date
3. Agenda Item Number
4. Comment (no more than 250 words)

Such comments will be read by District staff during the appropriate time during the meeting. Upon entry into the meeting; all computers and telephones except for the Board of Trustees, the Superintendent-President, and essential staff shall be muted.

AGENDA

Call to Order

Mr. John Blacklock, President
Mr. John Dahlmeier, Vice President
Ms. Julie Boss, Clerk
Mr. Michael Boeger
Mr. Rick Krepelka
Mr. Eugene Massa
Mr. William McGinnis
Ms. Carla Vazquez, Student Trustee

Pledge of Allegiance to the Flag

1. **Agenda Approval**

2. **Spotlight Presentation**

Mental Health & Health Services

3. **Communications from the Public – Consent Agenda**

This time is set aside for comments on the Consent Agenda. The Board may undertake discussion only to provide clarification to the public or schedule a matter for a future meeting.

Public comment must be submitted in advance, no later than 24 hours before the start of the meeting and must be no more than 250 words, via email to: mccollumsh@butte.edu.

4. **Approval of Consent Agenda**

Approval of Minutes August 12, 2020 (Special)	Action	
Approval of Minutes August 12, 2020	Action	
Approval of Warrants	Action	20-8024
Ratification of Contracts	Action	20-8025
Authorization to Destroy Class 3 – Disposable Records	Action	20-8026
Donation of District Personal Property: Miscellaneous Electronic Equipment	Action	20-8027
Approval and/or Ratification of Personnel Actions	Action	20-8028

Management
Employments
Academic Employees
Employments, Temp Increase, Assignments, and At-Will
Classified Employees
Out-of-Class and Temp Increase
Temporary Employees
Substitutes, Professional Expert, and Sort Term/Seasonal

5. **Information-Reports**

Academic Senate President's Report
Classified Senate President's Report
Student Trustee Comments
Superintendent/President's Report
Board Comments

6. **Communications from the Public**

At this time, members of the public have the opportunity to address the Board of Trustees on any item within the subject matter jurisdiction of the Board. Public comment must be submitted in advance, no later than 24 hours before the start of the meeting and must be no more than 250 words, via email to: mccollumsh@butte.edu.

7. **Contracts**

Approval of Contracts	Action	20-8029
Resolution No 795: Approval to Contract with Department of Parks and Recreation, Contract No. C2011000	Action	20-8030

8. **Facilities Planning & Management**

Approval to Purchase Real Property and Improvements from Vista La Mesa, LLC in Orland, California, APN 040-310-013-000	Action	20-8031

9. **Finance**

Public Hearing and Adoption of 2020-21 Final Budget	Action	20-8032

10. **Student Services**

Open for Public Comment and Approval: College and Career Access Pathways (CCAP) Appendix which identify specific Dual Enrollment course details for the 2020/21 school year with Las Plumas and Orland High Schools.	Action	20-8033

11. **Administration**

Proposed Revisions, Review, and Adoption of Board Policies	Information	20-8034

12. **Future Dates**

October 14, 2020	Regular Meeting	Teleconference	1:00 p.m.
November 18, 2020	Regular Meeting	Teleconference	1:00 p.m.

13. **Closed Session**

The Board of Trustees of the Butte-Glenn Community College District will adjourn to closed session under authority of Government Code Section 54954.5 to conduct the following business:

Pursuant to Government Code section 54957:

a. EMPLOYEE DISCIPLINE/DISMISSAL/RELEASE/COMPLAINT

Pursuant to Government Code section 54956.95:

b. LIABILITY CLAIM – Update on claims filed against the District
   Claimant: Joy Gollihar
   Agency: Butte-Glenn Community College District

14. **Adjournment**

For Information concerning this Agenda, please contact:
Butte College President's Office, 3536 Butte Campus Drive, Oroville, CA 95965 (530) 895-2484

Persons requiring disability accommodation, please notify this office 48 hours prior to the scheduled meeting. Meetings are held in wheelchair accessible locations.

Any public records distributed to the Board of Trustees less than 72 hours in advance of the meeting, and relating to an open session item, are available for public inspection at the Office of the President during normal business hours.

Butte-Glenn Community College District
3536 Butte Campus Drive
Oroville, CA 95965

MINUTES OF SPECIAL MEETING

August 12, 2020

The Board of Trustees of the Butte-Glenn Community College District met in special session on Wednesday, August 12, 2020 at 11:00 AM, via teleconference.

Board Members Present	Mr. John Blacklock, President (via teleconference) Mr. John Dahlmeier, Vice President (via teleconference) Ms. Julie Boss, Clerk (via teleconference) Mr. Michael Boeger (via teleconference) Mr. Rick Krepelka (via teleconference) Mr. Eugene Massa (via teleconference) Mr. William McGinnis (via teleconference)
Board Member Absent	None
Staff Members Present	Dr. Samia Yaqub, Superintendent/President (via teleconference) Ms. Shannon McCollum, Executive Asst to the President and Board Mr. Allen Renville, Vice President (via teleconference) Mr. Carey Carlson, Chief of Police Ms. Rachel Wood, Program Coord., International Student Recruitment Mr. David Shippen, Director, CCC Technology Center
Guests	Mr. Stan Thompson (via teleconference) Mr. Scott Chalmers (via teleconference) Multiple guests via phone (no names)

President Blacklock announced this meeting is being conducted pursuant to California Government Code Section 54953(b) concerning teleconferencing of meetings. Trustees Blacklock, Boeger, Boss, Dahlmeier, Krepelka, Massa, and McGinnis participated in this meeting by teleconference. Trustees Blacklock, Boeger, Boss, Dahlmeier, Krepelka, Massa, and McGinnis could hear the proceedings and the Trustees teleconferencing in.

Trustee McGinnis led the Pledge of Allegiance to the Flag

1. **Agenda Approval**
   It was moved by Trustee Boss, seconded by Trustee Krepelka, to approve the agenda as presented.

   Motion carried by the following roll call vote:
   Ayes – Trustees Blacklock, Dahlmeier, Boss, Boeger, Krepelka, Massa, and McGinnis
   Nos – none
   Absent – none

2. **Communications from the Public**
   There were no public comments.

3. **Discussion on Mission and Direction of Butte College Foundation**
   Board President Blacklock presented the Mission Statement and there was a discussion about the Foundation fitting withing this statement. Trustee Krepelka discussed his vision for what the Foundation could be, more than just a scholarship program.

Conversation amongst all Trustees was had about the Foundation's goals and plans. Concerns were addressed that over the years, goals and plans were made but never followed through with. Discussions on how to keep the Foundation on track including staffing and leadership matters were debated. Consideration was given to the change to Title V that would allow the Foundation to discontinue the $75,000 annual reimbursement to the District for costs to run the Foundation was considered. $75,000 is less that half of the District's costs to run the Foundation. Trustees expressed desires to see a plan on what the Foundation would do with this funding. A consensus was made that the Trustees need to support the Foundation for the Foundation to be successful.

Trustees agree to create a committee consisting of Trustee Krepelka and Trustee Boss and solicit two Foundation representatives to give advice in addressing the Title V change, needs, next steps, and direction the Foundation should take.

4. **Adjournment**
   Board President Blacklock adjourned the meeting at 12:08 PM.

Butte-Glenn Community College District
3536 Butte Campus Drive
Oroville, CA 95965

MINUTES OF REGULAR MEETING

August 12, 2020

The Board of Trustees of the Butte-Glenn Community College District met on Wednesday, August 12, 2020, at 1:00 PM, via teleconference.

Board Members Present	Mr. John Blacklock, President (via teleconference) Mr. John Dahlmeier, Vice President (via teleconference) Ms. Julie Boss, Clerk (via teleconference) Mr. Michael Boeger (via teleconference) Mr. Rick Krepelka (via teleconference) Mr. Eugene Massa (via teleconference) Mr. William McGinnis (via teleconference) Ms. Carla Vazquez, Student Trustee (via teleconference)
Board Member Absent	None
Staff Members Present	**(All attended via teleconference)** Dr. Samia Yaqub, Superintendent/President Ms. Shannon McCollum, Executive Asst to the President and Board Ms. Virginia Guleff, Vice President Mr. Allen Renville, Vice President Mr. Greg Stoup, Vice President Mr. Andy Suleski, Vice President Mr. Kenneth Bearden, Academic Senate President Mr. Peter Dahl, Classified Senate President Ms. Teresa Doyle, Dean of Instruction Ms. Stephanie Jimenez, Title IX Coordinator Ms. Kim Jones, Director, Facilities Planning & Management Mr. Joel Keebler, Dean of Instruction Mr. Chris Little, Executive Director of Human Resources Ms. Andrea Mox, Chief Technology Officer Mr. David Shippen, Director CCC Technology Center Mr. Clinton Slaughter, Dean of Student Services Ms. Denise Adams Dean of Instructions Ms. Christie Lee, Supervisor Facilities Planning & Mgmt Ms. Carrie Monlux, Dean of Instruction Mr. Casey Carlson, Chief of Police Ms. Kelly Munson, Advisor Associate Students Ms. Rachel Wood, Program Coord, International Student Recruitment
Guests	Multiple guests/staff via phone (no names)

Trustee Krepelka led the Pledge of Allegiance to the Flag

President Blacklock announced this meeting is being conducted pursuant to California Government Code Section 54953(b) concerning teleconferencing of meetings. Trustees Blacklock, Boeger, Boss, Dahlmeier, Krepelka, Massa, and McGinnis participated in this meeting by speaker phone. Trustees

Blacklock, Boeger, Boss, Dahlmeier, Krepelka, Massa, and McGinnis could hear the proceedings and the Trustees teleconferencing in.

1. **Agenda Approval**
   It was moved by Trustee McGinnis, seconded by Trustee Boss, to approve the agenda as presented.

   Motion carried by the following roll call vote:
   Ayes – Trustees Blacklock, Dahlmeier, Boss, Boeger, Krepelka, Massa, and McGinnis
   Nos – none
   Absent – none
   Student Trustee – Aye

2. **Communications from the Public – Consent Agenda**
   There were no public comments.

3. **Approval of Consent Agenda, Item 20-8015 to 20-8019**
   It was moved by Trustee McGinnis, seconded by Trustee Dahlmeier, to approve the consent agenda.

   Motion carried by the following roll call vote:
   Ayes – Trustees Blacklock, Dahlmeier, Boss, Boeger, Krepelka, Massa, and McGinnis
   Nos – none
   Absent – none
   Student Trustee – Aye

4. **Information Reports**

   Academic Senate President's Report – Kenneth Bearden
   Mr. Bearden stated Senate shortened the virtual Academic Senate Assembly since they won't be honoring the Emeritus recipient. They are moving that honor to the spring and hope to do something in person. Mr. Bearden listed a few Flex Week seminars.

   Classified Senate President's Report – Peter Dahl
   Mr. Dahl stated the Classified Senate went over last year's goals and he's please with their accomplishments. They are formalizing the virtual format of meetings since more staff like and can participate in this format.

   Student Trustee Comment – Carla Vazquez
   Ms. Vasquez state Associated Student Officers are currently attending Officer Training over the next few days. Students have been attending racism webinars offered by the District and learning a lot. Students have been actively involved in the Book In Common, *How to Be an Antiracist* by Ibram X. Kendi, committee and they are creating an Antiracist Taskforce.

   Superintendent/President's Report – Dr. Samia Yaqub
   Dr. Yaqub stated with the beginning of the semester, staff trainings and orientations are happening remotely these trainings include anti-racism and diversity. She stated the district received two federal TRIO grants which will help to serve 240 students. Enrollment continues to decline, like most community colleges, but we continue to expand our CCAP program and hope this will help. Dr. Yaqub updated the Trustees on the Guided Pathways project as well as the website. She also provided information on COVID-19 as it relates to Butte College and Title IX changes. Dr. Yaqub concluded her report by introducing Desiree Gonzalez, the new Butte College Development Officer.

Board Comments

Trustee McGinnis stated the Trustee Fellowship's work is focused on diversity. They are reviewing policies with a lens on diversity. Trustee Dahlmeier brought to the Board's attention that working parents are also helping with their virtual K-12 students at home. Asked the district to take that into consideration faculty, staff, and students with kids at home. Trustee Krepelka stated there were a lot of unknowns especially for a rural area and connectivity is a major issue. He also expressed his appreciation of the Title IX changes summary. Trustee Boeger thanked the grant writers for their 100% score on the TRIO grants. Trustee Boss thanked all Butte College employees for their efforts in reinventing instruction. Trustee Massa state connectivity in Glenn is a big problem. He expressed his concerns for students with learning disabilities and how distant learning is affecting them. Trustee Blacklock thanked Dr. Yaqub for providing the Trustees with the Book in Common: *How to Be an Antiracist.*

5. **Communications from the Public – Items Not on the Agenda**

   There were no public comments.

6. **Contracts**

   Approval of Contracts, Item 20-8020

   It was moved by Trustee McGinnis, seconded by Trustee Krepelka, to approve the contracts listed on the Contracts Approval Report and authorize the Superintendent/President or designee to enter into the contracts and execute necessary contract documents.

   Motion carried by the following roll call vote:
   Ayes – Trustees Blacklock, Dahlmeier, Boss, Boeger, Krepelka, Massa, and McGinnis
   Nos – none
   Absent – none
   Student Trustee – Aye

7. **Instruction**

   Open for Public Comment and Approval: College and Career Access Pathways (CCAP) Appendix which identify specific Dual Enrollment course details for the 2020/21 school year with Durham, Gridley, Hamilton, Inspire School of Arts & Sciences, and Willows High Schools, Item 20-8021

   Board President Blacklock stated the Course Outline for DFT 2: Engineering Graphics for Durham High School was mistakenly attached to the Appendix. This is not part of the classes being offered at Durham High School at this time. He requested Item be amended by removing the Course Outline.

   Board President Blacklock opened the meeting for public comment on the College and Career Access Pathway Partnership Appendices. Receiving no public comments, the session was closed at 1:42 pm.

   It was moved by Trustee Boss, seconded by Trustee Boeger, to approve the amended CCAP Appendix which identify specific Dual Enrollment course details for the 2020/21 school year with Durham, Gridley, Hamilton, Inspire School of Arts & Sciences, and Willows High Schools.

   Motion carried by the following roll call vote:
   Ayes – Trustees Blacklock, Dahlmeier, Boss, Boeger, Krepelka, Massa, and McGinnis
   Nos – none
   Absent – none
   Student Trustee – Aye

8. **Administration**

Approval of 2020-2021 Board Goals, Item 20-8022
It was moved by Trustee McGinnis, seconded by Trustee Dahlmeier, to approve the 2020-2021 Board Goals.

Motion carried by the following roll call vote:
Ayes – Trustees Blacklock, Dahlmeier, Boss, Boeger, Krepelka, Massa, and McGinnis
Nos – none
Absent – none
Student Trustee – Aye

Approval of 2020-2021 Superintendent/President Goals, Item 20-8023
It was moved by Trustee Dahlmeier, seconded by Trustee Massa, to approve the 2020-2021 Superintendent/President Goals.

Motion carried by the following roll call vote:
Ayes – Trustees Blacklock, Dahlmeier, Boss, Boeger, Krepelka, Massa, and McGinnis
Nos – none
Absent – none
Student Trustee – Aye

9. **Closed Session**
There was no closed session.

10. **Adjournment**
Board President Blacklock adjourned the meeting at 1:53 PM.

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Approval of Warrants	**Item No:** 20-8024 **Enclosure:** Yes ☐ No ☒
Category: Finance	**Action** ☒ **Information** ☐ **Regular** ☐ **Consent** ☒
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

It is recommended that the Board of Trustees approve the vendor, payroll, and financial aid warrants for the period of July 27, 2020 to August 30, 2020.

Type of Warrant	**Check/Voucher Sequence**	**Total**
Vendor	659525 - 660114	$ 13,199,638.31
Payroll	523817 – 523897	$ 3,127,251,27
Financial Aid	320641 – 323170	$ 2,717,050.04

Warrant registers are available for review in the Business Office.

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Ratification of Contracts	**Item No.:** 20-8025 **Enclosure:** Yes ☒ No ☐
Category: Contracts	**Action** ☒ **Information** ☐ **Regular** ☐ **Consent** ☒
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Background
Pursuant to Board Policy 6340, the Board has delegated the authority to enter into contracts on behalf of the District to the Superintendent/President or designee. Contracts made pursuant to such delegation are not enforceable obligations until the Board ratifies them.

Status
The attached Contracts Ratification Report represents contracts entered into on behalf of the District during the month of August 2020. The Superintendent/President or Vice President for Administration has executed the necessary documents.

Recommendation
It is recommended that the Board of Trustees ratify the contracts presented on the attached Contracts Ratification Report.

Butte-Glenn Community College District

CONTRACTS RATIFICATION REPORT
Contracts Signed by the Superintendent/President or Vice President for Administration
July-August 2020

Contract Effective Date	Contract Expiration Date	Contractor	Contract Purpose	Contract Value Revenue / (Cost)	Funding Source (Fund)	Originated by: District Department	Approved by: District Administrator
7/2/20	8/4/20	Santy Gray	Race Zone Training for Student Services Managers	($400.00)	Unrestricted General	Student Equity & Achievement	Renville
7/1/20	6/30/21	Dr. Sidarth Bagga	Medical Guidance	($10,000.00)	Unrestricted General	Respiratory Therapy	Guleff
8/20/20	8/20/20	Erica Jane Flores	Keynote virtual presentation for Roadrunner Rush	($1,500.00)	Restricted General	Welcome Center	Renville
8/18/20	8/18/20	Center for Transformation & Change, LLC	Facilitate 2-hour Virtual Training	($3,000.00)	Unrestricted General	Academic Senate	Guleff
8/6/20	8/6/20	Center for Transformation & Change, LLC	Student Services Institute Day presentation	($3,000.00)	Unrestricted General	Student Equity & Achievement	Renville
8/5/20	8/6/20	Martha Andrade McLemore	Workshops on racial, potentially triggering, issues for Student Services Institute Week	($375.00)	Unrestricted General	Student Equity & Achievement	Renville
8/5/20	8/5/20	Edward C. Bush	Speaker for Student Services Institute Day	($3,000.00)	Unrestricted General	Student Equity & Achievement	Renville
8/24/20	5/28/21	Gridley Unified School District	College & Career Access Pathways Partnership Agreement Appendix detailing Courses offered	($2,800.00)	Restricted General	School Relations	Renville
8/24/20	5/28/21	Willows Unified School District	College & Career Access Pathways Partnership Agreement Appendix detailing Courses offered	($6,000.00)	Restricted General	School Relations	Renville
8/24/20	5/28/21	Inspire School of Arts & Sciences	College & Career Access Pathways Partnership Agreement Appendix detailing Courses offered	($800.00)	Restricted General	School Relations	Renville
7/1/20	6/30/23	CORE Butte Charter School	College & Career Access Pathways Partnership Agreement	$0.00	Restricted General	School Relations	Renville
8/24/20	12/18/20	CORE Butte Charter School	College & Career Access Pathways Partnership Agreement Appendix detailing Courses offered	($400.00)	Restricted General	School Relations	Renville
8/24/20	12/18/20	Durham Unified School District	College & Career Access Pathways Partnership Agreement Appendix detailing Courses offered	($1,200.00)	Restricted General	School Relations	Renville
8/24/20	5/28/21	Hamilton Unified School District	College & Career Access Pathways Partnership Agreement Appendix detailing Courses offered	($800.00)	Restricted General	School Relations	Renville
2/1/20	6/30/20	Corning Unified High School District	Counselor Services provided at High School	$6,372.85	Restricted General	Student Equity & Achievement	Renville
8/14/20	Service Complete	Career Soft, LLC	Career Fair Plus Terms of Services for Virtual Job/Housing Fair	($6,000.00)	Unrestricted General	Job Placement	Renville
7/15/20	5/31/21	Sierra Joint Community College District	Services to support Institutional Effectiveness Program Initiative California Conservation Corps Liaison	$15,000.00	Restricted General	Student Services	Renville
6/25/20	8/31/20	MC2	Amendment to Contract extending Term	$0.00	Restricted General	Financial Aid	Renville
6/25/20	8/31/20	MC2	Amendment to Contract extending Term	$0.00	Restricted General	Financial Aid	Renville
Upon final signature	6/30/21	The Regents of the University of California on behalf of Undergraduate Admissions	Amendment to Contract extending Term	($7,000.00)	Restricted General	Transfer Counseling	Renville
7/21/20	7/20/21	Plexuss, Inc.	Potential Student Connections	($7,500.00)	Unrestricted General	International Student Recruitment & Services	Renville
7/1/20	6/30/21	Virtual VRI	Virtual Remote Sign Language Services and Virtual Remote Real Time Captioning Services	($50,000.00)	Unrestricted General	DSPS	Renville
8/20/20	6/30/21	Virtual VRI	Amendment to Contract updating Fee Schedule	$0.00	Unrestricted General	DSPS	Renville
10/1/20	9/30/25	California Department of Parks & Recreation	Instructional Service Agreement to conduct Park Ranger/Lifeguard Law Enforcement Academy	($1,105,410.00)	Unrestricted General	Career & Technical Education	Guleff
7/1/20	12/31/20	Shasta Tehama Trinity Joint Community College District	Memorandum of Understanding to conduct classes outside district's boundaries	$0.00	Unrestricted General	Special Programs	Guleff

Butte-Glenn Community College District

CONTRACTS RATIFICATION REPORT
Contracts Signed by the Superintendent/President or Vice President for Administration
July-August 2020

Contract Effective Date	Contract Expiration Date	Contractor	Contract Purpose	Contract Value Revenue / (Cost)	Funding Source (Fund)	Originated by: District Department	Approved by: District Administrator
7/1/20	6/30/21	North Valley Community Foundation	Facilities Agreement to provide facilities for SPE and CPE instructional programs in Chico and Oroville, CA 95965	($236,772.00)	Unrestricted General	Special Programs	Guleff
7/1/20	6/30/21	Work Training Center for the Handicapped	Instructional Service Agreement to provide Community Partners in Education (CPE) Courses	($182,760.00)	Unrestricted General	Special Programs	Guleff
7/1/20	6/30/21	Tehama County Opportunity Center, Inc. dba North Valley Services	Instructional Service Agreement to provide Community Partners in Education (CPE) and Occupational Life Skills (OLS) Courses	($35,000.00)	Unrestricted General	Special Programs	Guleff
2/2/20	4/30/20	Cassidy White (Ryan)	Amendment to Contract extending Term	$0.00	Unrestricted General	Cosmetology & Barbering	Guleff
Upon Delivery	Until Terminated	B-Line Medical, LLC	SimCapture Node Pro, Standard AV Package, Additional PTZ Camera Purchase Terms and Conditions and Software License and Services Agreement	($32,228.62)	Restricted General	Health Occupations	Guleff
8/1/20	7/31/21	Maverick Networks	Master Maintenance Agreement for Telephone System	($15,400.00)	Unrestricted General	Information Technology	Stoup
8/28/20	8/28/21	TechSmith Corporation	Camtasia End User License Agreement	($3,461.39)	Unrestricted General	Technology Mediated Instruction	Guleff
8/28/20	8/28/21	TechSmith Corporation	Snagit End User License Agreement	$0.00	Unrestricted General	Technology Mediated Instruction	Guleff
7/1/20	6/30/21	City of Chico	Community Development Block Grant Funds to provide technical assistance to microenterprises in City of Chico	$50,000.00	Restricted General	Small Business Development Center	Guleff
8/24/20	12/31/20	Hmong Cultural Center of Butte County	One-on-One Business Consulting and Training translations, presentations, business outreach, referrals and promotion specifically focused on Hmong and other Asian under-served communities impacted by COVID-19	($5,000.00)	Restricted General	Small Business Development Center	Guleff
4/1/20	3/31/21	Humboldt State University Sponsored Programs Foundation	Subaward Agreement SBA CARES Project	$97,514.00	Restricted General	Small Business Development Center	Guleff
8/18/20	9/30/20	Humboldt State University Sponsored Programs Foundation	Amendment to Sub Award Agreement for GO-BIZ TAEP 19-20 decreasing budget	($75,000.00)	Restricted General	Small Business Development Center	Guleff
8/1/20	12/31/20	Tasha Forks	Business Consulting and Training	($20,000.00)	Restricted General	Small Business Development Center	Guleff
6/23/20	7/31/20	Abernathy-VM Services	Amendment to extend contract term & fee	($5,000.00)	Foundation Agency Account	Contract Education	Guleff
2/1/19	9/30/20	Avalon Care Center Merced Hy-Lond, LLC	Employer Participation Agreement Employment Training Panel (ETP) Training Project	Est. ETP Funding $65,000.00	Restricted General	Contract Education	Guleff
5/27/20	6/30/21	County of Butte Behavioral Health	Amendment to Contract extending Term	$0.00	Restricted General	Contract Education	Guleff
4/7/20	1/31/21	California Employment Training Panel	Amendment to Contract decreasing Contract Amount	($30.00)	Restricted General	Contract Education	Guleff
7/1/20	7/24/20	Davey Tree Surgery Company	Utility Line Clearance Arborist instructional design consulting	($5,000.00)	Foundation Agency Account	Contract Education	Guleff
8/1/20	7/31/23	Department of Water Resources	Provide Equipment Safety Training Services on an as-needed basis to the DWR Sutter Maintenance Yard	$300,000.00	Restricted General	Contract Education	Guleff
7/1/20	7/24/20	Firestorm Wildland Fire Suppression Inc.	Utility Line Clearance Arborist instructional design consulting	($7,200.00)	Foundation Agency Account	Contract Education	Guleff
7/1/20	6/30/21	Law Office of Ann M. Wicks	Human Resources, Labor Law, and AB1825 Trainings	($40,500.00)	Restricted General	Contract Education	Guleff
7/1/20	6/30/21	Margaret Schmidt Business Solutions	Training, Design, Development, and Special Project Management Services	($5,000.00)	Restricted General	Contract Education	Guleff
7/1/20	6/30/21	Safe Food Alliance	Food safety training	($12,000.00)	Restricted General	Contract Education	Guleff

Butte-Glenn Community College District

CONTRACTS RATIFICATION REPORT
Contracts Signed by the Superintendent/President or Vice President for Administration
July-August 2020

Contract Effective Date	Contract Expiration Date	Contractor	Contract Purpose	Contract Value Revenue / (Cost)	Funding Source (Fund)	Originated by: District Department	Approved by: District Administrator
7/1/20	12/31/22	Big Valley Joint Unified School District	Grant Agreement for K-12 Strong Workforce Program North Far North Regional Consortium	($13,558.00)	Restricted General	Strong Workforce Program	Guleff
7/1/20	12/31/22	East Nicolaus Joint Union High Schools	Grant Agreement for K-12 Strong Workforce Program North Far North Regional Consortium	($258,594.00)	Restricted General	Strong Workforce Program	Guleff
7/1/20	12/31/21	Los Rios Community College District	Allocation Agreement for Strong Workforce Program North Far North Regional Consortium to support Co-Chair for NFNRC	($167,975.00)	Restricted General	Strong Workforce Program	Guleff
5/4/20	12/31/21	Mendocino-Lake Community College District	Allocation Agreement for Strong Workforce Program North Far North Regional Consortium	($560,427.00)	Restricted General	Strong Workforce Program	Guleff
7/1/20	12/31/22	Plumas County Office of Education	Grant Agreement for K-12 Strong Workforce Program North Far North Regional Consortium	($178,080.00)	Restricted General	Strong Workforce Program	Guleff
5/4/20	12/31/21	Sierra Joint Community College District	Allocation Agreement for Strong Workforce Program North Far North Regional Consortium	($1,011,300.00)	Restricted General	Strong Workforce Program	Guleff
7/1/20	12/31/22	Twin Rivers Unified School District	Grant Agreement for K-12 Strong Workforce Program North Far North Regional Consortium	($762,241.00)	Restricted General	Strong Workforce Program	Guleff
5/4/20	6/30/20	Woodland Community College District	Allocation Agreement for Strong Workforce Program North Far North Regional Consortium	($401,450.00)	Restricted General	Strong Workforce Program	Guleff
7/1/20	12/31/22	Yuba County Office of Education	Grant Agreement for K-12 Strong Workforce Program North Far North Regional Consortium	($214,139.00)	Restricted General	Strong Workforce Program	Guleff
8/6/20	12/31/21	Association of College and University Educators (ACUE)	Master Services Agreement for Education Software and Related Services for PIC Faculty Training for Online Instruction	($40,000.00)	Restricted General	North Far North Regional Consortium	Guleff
8/5/20	12/31/20	Chabin Concepts	Amendment to Contract extending Term	$0.00	Restricted General	North Far North Regional Consortium	Guleff
Upon Delivery	1 Year	HelpSystems, LLC	Cobalt Strike Software End User License Agreement	($2,500.00)	Restricted General	CCC Technology Center	Stoup
9/1/20	6/30/21	Higher Digital, LLC	Strategic enterprise architecture role in providing consulting and research supporting Ethos for MyPath (and SuperGlue) and in building a solution to use CCCApply data to create a student in an Ellucian ERP without intervention by an end user	($29,800.00)	Restricted General	CCC Technology Center	Stoup
8/6/20	8/6/25	Kern Community College District	Institution Participation Agreement for use of Systems owned or provided by Chancellor's Office California Community Colleges	$0.00	Restricted General	CCC Technology Center	Stoup
8/3/20	8/3/25	Los Angeles Community College District	Institution Participation Agreement for use of Systems owned or provided by Chancellor's Office California Community Colleges	$0.00	Restricted General	CCC Technology Center	Stoup
9/1/20	8/31/21	L-Soft International, Inc.	ListPlex Yearly Node and Service Terms of Use and Service Level Agreement	($7,310.35)	Restricted General	CCC Technology Center	Stoup
Date of payment	1 Year	Open VPN, Inc.	Client License for Access Server Terms of Use	($180.00)	Restricted General	CCC Technology Center	Stoup
8/3/20	8/3/25	Rancho Santiago Community College District	Institution Participation Agreement for use of Systems owned or provided by Chancellor's Office California Community Colleges	$0.00	Restricted General	CCC Technology Center	Stoup
8/21/20	Upon Payment	SHI International Corp.	SHI Online Customer Resale Terms and Conditions for Camtasia/Snagit Bundle 2020	($625.05)	Restricted General	CCC Technology Center	Stoup

Butte-Glenn Community College District

CONTRACTS RATIFICATION REPORT
Contracts Signed by the Superintendent/President or Vice President for Administration
July-August 2020

Contract Effective Date	Contract Expiration Date	Contractor	Contract Purpose	Contract Value Revenue / (Cost)	Funding Source (Fund)	Originated by: District Department	Approved by: District Administrator
Upon Delivery	1 Year	TechSmith Corporation	Camtasia End User License Agreement	$0.00	Restricted General	CCC Technology Center	Stoup
Upon Delivery	1 Year	TechSmith Corporation	Snagit End User License Agreement	$0.00	Restricted General	CCC Technology Center	Stoup
8/6/20	Upon Payment	SHI International Corp.	SHI Online Customer Resale Terms and Conditions for IntelliJ IDEA Ultimate	($486.21)	Restricted General	CCC Technology Center	Stoup
Upon Delivery	One Year	JetBrains Americas, Inc.	IntelliJ IDEA Ultimate Annual Subscription Terms and Conditions of Purchase and License Agreement	$0.00	Restricted General	CCC Technology Center	Stoup
8/27/20	8/27/25	Sonoma County Junior College	Institution Participation Agreement for use of Systems owned or provided by Chancellor's Office California Community Colleges	$0.00	Restricted General	CCC Technology Center	Stoup
7/1/20	6/30/21	Veridion Security, Inc.	Statement of Work pursuant to CMAS Contract to provide expert security consultant services to support CCC Security Center	($880,257.00)	Restricted General	CCC Technology Center	Stoup
7/7/20	6/30/21	Boyd Pyatt	Bus Driver Training	($2,220.00)	Restricted General	Facilities Planning & Management	Suleski
10/16/19	6/30/20	Boyd Pyatt	Amendment to contract to increase Fee	($595.00)	Restricted General	Facilities Planning & Management	Suleski
2/1/21	6/30/21	Inland Portable Services, Inc.	Clean and inspect domestic water tank	($4,421.00)	Measure J	Facilities Planning & Management	Suleski
8/6/20	9/30/20	MJ Shelton General Engineering, Inc.	Furnish and install (1) fire hydrant at Technology swing space	($16,750.00)	Measure J	Facilities Planning & Management	Suleski
7/27/20	12/1/20	Northern California Fence	Fence and gates at water tower	($12,240.00)	Measure J	Facilities Planning & Management	Suleski
7/1/20	6/30/21	NorthStar	Engineer Services Agreement for Infrastructure Audit & Upgrades Project	($10,000.00)	Measure J	Facilities Planning & Management	Suleski
8/6/20	8/31/20	Santos Excavating	Dredge Effluent Ponds and remove vegetation	($50,000.00)	Measure J	Facilities Planning & Management	Suleski
8/10/20	8/14/20	School Sport, Inc.	Inspect & Services Basketball Backboards	($3,150.00)	Unrestricted General	Facilities Planning & Management	Suleski
7/1/20	6/30/21	Shirah Builders	Project Management Services for Technology Remodel Project	($30,000.00)	Measure J	Facilities Planning & Management	Suleski
7/1/20	6/30/21	Shirah Builders	Project Management Services for Scenario Village Project	($40,000.00)	Measure J	Facilities Planning & Management	Suleski
7/1/20	6/30/21	Shirah Builders	Project Management Services for Science Building Project	($10,000.00)	Measure J	Facilities Planning & Management	Suleski
8/1/20	8/31/20	Sierra Range Electric	EVOC Track Pathways	($24,135.00)	Measure J	Facilities Planning & Management	Suleski
7/1/20	6/30/21	ThyssenKrupp Elevator Corporation	Annual elevator inspections	($38,452.00)	Unrestricted General	Facilities Planning & Management	Suleski
8/1/20	10/30/20	United Building Contractors	Effluent pipe replacement	($12,930.00)	Measure J	Facilities Planning & Management	Suleski

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Authorization to Destroy Class 3 – Disposable Records	**Item No:** 20-8026 **Enclosure:** Yes ☒ No ☐
Category: Administration	**Action** ☒ **Information** ☐ **Regular** ☐ **Consent** ☒
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Background
Title 5 of the California Code of Regulations Subchapter 2.5 Sections 59020 - 59033 allows for the classification, retention and destruction of district records.

Status
Title 5, commencing with Section 59025 allows for the destruction of Class 3 – Disposable Records that have been retained for at least three fiscal years after the year in which they were originally created. In accordance with Board Policy 3310 and Administrative Procedure 3310, a list of records recommended for destruction must be submitted to the Board of Trustees to specify that the identified records are to be destroyed. No records included on the attached list are in conflict with applicable laws, regulations or District procedures.

Recommendation
It is recommended that the Board authorize the destruction of records as listed in accordance with Administrative Procedure 3310.

DISPOSABLE RECORDS DESTRUCTION INVENTORY

Box #	Fiscal Yr	Dept.	Description	Destroy Date
2019-D1	2014/2015	HR	Recruitment files	Jul-19
2019-D2	2014/2015	HR	Recruitment files	Jul-19
2019-D3	2014/2015	HR	Recruitment files	Jul-19
2019-D4	2014/2015	HR	Recruitment files	Jul-19
2019-D5	2014/2015	HR	Recruitment files	Jul-19
2019-D6	2014/2015	HR	Recruitment files	Jul-19
2019-D7	2014/2015	HR	Recruitment files	Jul-19
2020-D1	2015/2016	HR	Recruitment files	Jul-19
2020-D2	2015/2016	HR	Recruitment files	Jul-20
2020-D3	2015/2016	HR	Recruitment files	Jul-20
2020-D4	2015/2016	HR	Recruitment files	Jul-20
2020-D5	2015/2016	HR	Recruitment files	Jul-20
2020-D6	2015/2016	HR	Recruitment files	Jul-20
2020-D7	2015/2016	HR	Recruitment files	Jul-20
2020-D8	2015/2016	HR	Recruitment files	Jul-20
2020-D9	2015/2016	HR	Recruitment files	Jul-20
2020-D10	2015/2016	HR	Recruitment files	Jul-20
				Jul-20

Submitted by:___Chris Little/Deana Sweeney_____ Date:_____9/2/2020_____

Board Approval Date:_____

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Donation of District Personal Property: Miscellaneous Electronic Equipment	**Item No:** 20-8027 **Enclosure:** Yes ☒ No ☐
Category: Finance/Contracts	**Action** ☒ **Information** ☐ **Regular** ☐ **Consent** ☒
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Background
The Butte-Glenn Community College District is owner of the electronic equipment listed on Exhibit A attached to this item. The District has determined that the electronic equipment listed is no longer required for District purposes and is unsatisfactory and not suitable for District use due to a change in technology.

Under California Education Code Section 81452 (c), if the board, by a unanimous vote of those members present, finds that the property is of insufficient value to defray the costs of arranging a sale, the property may be donated to a charitable organization deemed appropriate by the board, or it may be disposed of in the local public dump on order of any employee of the district empowered for that purpose by the board.

Status
The District's Facilities Planning & Management Department, in collaboration with Information Technology Systems Department, determined the electronic equipment listed on Exhibit A is of insufficient value to defray the costs of arranging a sale, and the donation to the Computers for Classrooms to be in accordance with District's Board Policy 6550 and held in the District's best interests. The Computers for Classrooms has agreed to accept this property.

Recommendation
It is recommended that the Board of Trustees find that the surplus property described as electronic equipment listed on Exhibit A attached to this item, is of insufficient value to defray the costs of arranging a sale.

It is further recommended that the Board of Trustees authorize the surplus property described as electronic equipment listed on Exhibit A be donated to the Computers for Classrooms as a donation of the District's personal property.

EXHIBIT A
BOARD MEETING DATE: SEPTEMBER 16, 2020

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.
ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

Butte College Asset No. / Product Serial/Model No.	Item Description	Item Status
501450	RECORDER/TRANSCRIBER	DONATE
505216	SPEAKER	DONATE
505218	SPEAKER	DONATE
510788	COMPUTER TOWER	DONATE
510798	COMPUTER TOWER	DONATE
512903	DVD RECORDER	DONATE
513695	MONITOR	DONATE
514104	COMPUTER TOWER	DONATE
514227	RECORDER/TRANSCRIBER	DONATE
520369	COMPUTER TOWER	DONATE
520456	COMPUTER TOWER	DONATE
520732	COMPUTER TOWER	DONATE
520787	COMPUTER TOWER	DONATE
520788	COMPUTER TOWER	DONATE
521008	MONITOR	DONATE
521023	MONITOR	DONATE
521066	MONITOR	DONATE
522723	MONITOR	DONATE
523266	MONITOR	DONATE
523273	COMPUTER TOWER	DONATE
523274	COMPUTER TOWER	DONATE
523303	MONITOR	DONATE
523695	MONITOR	DONATE
523906	PRINTER	DONATE
524122	COMPUTER TOWER	DONATE
524123	COMPUTER TOWER	DONATE
524133	COMPUTER TOWER	DONATE
524134	COMPUTER TOWER	DONATE
524465	MONITOR	DONATE
524688	COMPUTER TOWER	DONATE
524691	COMPUTER TOWER	DONATE
524695	COMPUTER TOWER	DONATE
524696	COMPUTER TOWER	DONATE
524708	COMPUTER TOWER	DONATE
524716	COMPUTER TOWER	DONATE
524884	COMPUTER TOWER	DONATE
524884	COMPUTER TOWER	DONATE
524896	COMPUTER TOWER	DONATE
525099	COMPUTER TOWER	DONATE
525100	COMPUTER TOWER	DONATE

EXHIBIT A
BOARD MEETING DATE: SEPTEMBER 16, 2020

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.
ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

Butte College Asset No. / Product Serial/Model No.	Item Description	Item Status
525101	COMPUTER TOWER	DONATE
525234	COMPUTER TOWER	DONATE
525355	COMPUTER TOWER	DONATE
525428	MONITOR	DONATE
525430	MONITOR	DONATE
525431	MONITOR	DONATE
525435	MONITOR	DONATE
525441	MONITOR	DONATE
525449	MONITOR	DONATE
525451	MONITOR	DONATE
525463	MONITOR	DONATE
525467	MONITOR	DONATE
525468	MONITOR	DONATE
525469	MONITOR	DONATE
525471	MONITOR	DONATE
525474	MONITOR	DONATE
525478	MONITOR	DONATE
525482	MONITOR	DONATE
525509	MONITOR	DONATE
525582	COMPUTER TOWER	DONATE
525685	MONITOR	DONATE
525696	NOTEBOOK COMPUTER	DONATE
525750	COMPUTER TOWER	DONATE
525785	COMPUTER TOWER	DONATE
525791	COMPUTER TOWER	DONATE
525792	COMPUTER TOWER	DONATE
525794	COMPUTER TOWER	DONATE
525805	COMPUTER TOWER	DONATE
525809	COMPUTER TOWER	DONATE
525814	COMPUTER TOWER	DONATE
525827	COMPUTER TOWER	DONATE
525828	COMPUTER TOWER	DONATE
525829	COMPUTER TOWER	DONATE
525832	COMPUTER TOWER	DONATE
525834	COMPUTER TOWER	DONATE
525835	COMPUTER TOWER	DONATE
525836	COMPUTER TOWER	DONATE
525848	COMPUTER TOWER	DONATE
525894	COMPUTER TOWER	DONATE
525895	COMPUTER TOWER	DONATE

EXHIBIT A
BOARD MEETING DATE: SEPTEMBER 16, 2020

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.
ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

Butte College Asset No. / Product Serial/Model No.	Item Description	Item Status
525896	COMPUTER TOWER	DONATE
525903	COMPUTER TOWER	DONATE
525923	MONITOR	DONATE
525941	MONITOR	DONATE
525971	MONITOR	DONATE
526057	COMPUTER TOWER	DONATE
526069	COMPUTER TOWER	DONATE
526070	COMPUTER TOWER	DONATE
526169	MONITOR	DONATE
526338	TABLET COMPUTER	DONATE
526470	COMPUTER TOWER	DONATE
526746	COMPUTER TOWER	DONATE
526885	MONITOR	DONATE
527251	COMPUTER TOWER	DONATE
527252	COMPUTER TOWER	DONATE
527255	COMPUTER TOWER	DONATE
527256	COMPUTER TOWER	DONATE
528519	MONITOR	DONATE
528684	COMPUTER TOWER	DONATE
528687	COMPUTER TOWER	DONATE
528692	MONITOR	DONATE
529447	AV SWITCH	DONATE
529450	AV SWITCH	DONATE
531813	TABLET COMPUTER	DONATE
528430	COMPUTER TOWER	DONATE
528422	COMPUTER TOWER	DONATE
528399	COMPUTER TOWER	DONATE
528431	COMPUTER TOWER	DONATE
528439	COMPUTER TOWER	DONATE
528414	COMPUTER TOWER	DONATE
528400	COMPUTER TOWER	DONATE
528427	COMPUTER TOWER	DONATE
528408	COMPUTER TOWER	DONATE
528426	COMPUTER TOWER	DONATE
528428	COMPUTER TOWER	DONATE
528417	COMPUTER TOWER	DONATE
528434	COMPUTER TOWER	DONATE
528423	COMPUTER TOWER	DONATE
528346	COMPUTER TOWER	DONATE
525051	COMPUTER TOWER	DONATE

EXHIBIT A
BOARD MEETING DATE: SEPTEMBER 16, 2020

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.
ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

Butte College Asset No. / Product Serial/Model No.	Item Description	Item Status
516434	VISUAL PRESENTER	DONATE
516431	VISUAL PRESENTER	DONATE
516435	VISUAL PRESENTER	DONATE
516421	VISUAL PRESENTER	DONATE
516423	VISUAL PRESENTER	DONATE
516428	VISUAL PRESENTER	DONATE
516439	VISUAL PRESENTER	DONATE
516430	VISUAL PRESENTER	DONATE
516440	VISUAL PRESENTER	DONATE
516438	VISUAL PRESENTER	DONATE
516436	VISUAL PRESENTER	DONATE
516432	VISUAL PRESENTER	DONATE
516422	VISUAL PRESENTER	DONATE
528194	COMPUTER TOWER	DONATE
528173	COMPUTER TOWER	DONATE
528096	COMPUTER TOWER	DONATE
525507	COMPUTER TOWER	DONATE
525406	COMPUTER TOWER	DONATE
528222	COMPUTER TOWER	DONATE
525112	COMPUTER TOWER	DONATE
526952	COMPUTER TOWER	DONATE
525404	COMPUTER TOWER	DONATE
522504	COMPUTER TOWER	DONATE
528124	COMPUTER TOWER	DONATE
528239	COMPUTER TOWER	DONATE
522209	COMPUTER TOWER	DONATE
524697	COMPUTER TOWER	DONATE
522506	COMPUTER TOWER	DONATE
522419	COMPUTER TOWER	DONATE
528093	COMPUTER TOWER	DONATE
527300	COMPUTER TOWER	DONATE
528322	COMPUTER TOWER	DONATE
526856	COMPUTER TOWER	DONATE
524806	COMPUTER TOWER	DONATE
527254	COMPUTER TOWER	DONATE
512512	COMPUTER TOWER	DONATE
525479	MONITOR	DONATE
525372	MONITOR	DONATE
524095	MONITOR	DONATE
525442	MONITOR	DONATE

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.

ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

514506	MONITOR	DONATE

513866	MONITOR	DONATE
525439	MONITOR	DONATE
525569	MONITOR	DONATE
524788	MONITOR	DONATE
522613	MONITOR	DONATE
513876	MONITOR	DONATE
513859	MONITOR	DONATE
522540	MONITOR	DONATE
521033	MONITOR	DONATE
513711	MONITOR	DONATE
521625	MONITOR	DONATE
526597	MONITOR	DONATE
528692	MONITOR	DONATE
525567	MONITOR	DONATE
529603	MONITOR	DONATE
521015	MONITOR	DONATE
522592	MONITOR	DONATE
525383	MONITOR	DONATE
522489	MONITOR	DONATE
522595	MONITOR	DONATE
525443	MONITOR	DONATE
522614	MONITOR	DONATE
525532	MONITOR	DONATE
513896	MONITOR	DONATE
521037	MONITOR	DONATE
521040	MONITOR	DONATE
513965	MONITOR	DONATE
521036	MONITOR	DONATE
524026	MONITOR	DONATE
513163	MONITOR	DONATE
521294	MONITOR	DONATE
FCB45L2694	SERVER	DONATE
523030	DVD PLAYER	DONATE
525321	PRINTER	DONATE
528823	TABLET COMPUTER	DONATE
527410	NOTEBOOK COMPUTER	DONATE
524959	NOTEBOOK COMPUTER	DONATE
521894	NOTEBOOK COMPUTER	DONATE
528301	NOTEBOOK COMPUTER	DONATE
528029	NOTEBOOK COMPUTER	DONATE
521642	NOTEBOOK COMPUTER	DONATE

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.

ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

522109	NOTEBOOK COMPUTER	DONATE
523063	NOTEBOOK COMPUTER	DONATE
522111	NOTEBOOK COMPUTER	DONATE
528303	NOTEBOOK COMPUTER	DONATE
531071	NOTEBOOK COMPUTER	DONATE
528782	NOTEBOOK COMPUTER	DONATE
528785	NOTEBOOK COMPUTER	DONATE
524960	NOTEBOOK COMPUTER	DONATE
528368	NOTEBOOK COMPUTER	DONATE
CNF5032756	NOTEBOOK COMPUTER	DONATE
512651	PRINTER	DONATE
527973	SWITCH	DONATE
AZPH842R0004	PROJECTOR	DONATE
AZPH841R0431	PROJECTOR	DONATE
330430142	CARD READER	DONATE
520168	CARD READER	DONATE
522173	CARD READER	DONATE
527047	CARD READER	DONATE
522160	PROJECTOR	DONATE
514426	SCANNER	DONATE
FZ6V073504	SCANNER	DONATE
524927	UNINTERRUPTIBLE POWER SUPPLY	DONATE
525291	UNINTERRUPTIBLE POWER SUPPLY	DONATE
525280	UNINTERRUPTIBLE POWER SUPPLY	DONATE
525289	UNINTERRUPTIBLE POWER SUPPLY	DONATE
525279	UNINTERRUPTIBLE POWER SUPPLY	DONATE
524077	UNINTERRUPTIBLE POWER SUPPLY	DONATE
525281	UNINTERRUPTIBLE POWER SUPPLY	DONATE
525285	UNINTERRUPTIBLE POWER SUPPLY	DONATE
525282	UNINTERRUPTIBLE POWER SUPPLY	DONATE
QS1012151984	UNINTERRUPTIBLE POWER SUPPLY	DONATE
QS1012151981	UNINTERRUPTIBLE POWER SUPPLY	DONATE
QS1012151980	UNINTERRUPTIBLE POWER SUPPLY	DONATE
QS1012151985	UNINTERRUPTIBLE POWER SUPPLY	DONATE
521604	SERVER	DONATE
524144	SERVER	DONATE
521378	SERVER	DONATE
525082	MONITOR	DONATE
525072	MONITOR	DONATE
525076	MONITOR	DONATE
525069	MONITOR	DONATE
525068	MONITOR	DONATE
525087	MONITOR	DONATE

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.

ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

525088	MONITOR	DONATE
525078	MONITOR	DONATE
525071	MONITOR	DONATE
525079	MONITOR	DONATE
525083	MONITOR	DONATE
525084	MONITOR	DONATE
525086	MONITOR	DONATE
525085	MONITOR	DONATE
525090	MONITOR	DONATE
525089	MONITOR	DONATE
525067	MONITOR	DONATE
525073	MONITOR	DONATE
525070	MONITOR	DONATE
525091	MONITOR	DONATE
525092	MONITOR	DONATE
525097	MONITOR	DONATE
525093	MONITOR	DONATE
525080	MONITOR	DONATE
525074	MONITOR	DONATE
525075	MONITOR	DONATE
525077	MONITOR	DONATE
525081	MONITOR	DONATE
525094	MONITOR	DONATE
525095	MONITOR	DONATE
533592	MONITOR	DONATE
513861	MONITOR	DONATE
513849	MONITOR	DONATE
513723	MONITOR	DONATE
513706	MONITOR	DONATE
525065	COMPUTER TOWER	DONATE
525038	COMPUTER TOWER	DONATE
525030	COMPUTER TOWER	DONATE
525043	COMPUTER TOWER	DONATE
525063	COMPUTER TOWER	DONATE
525036	COMPUTER TOWER	DONATE
525056	COMPUTER TOWER	DONATE
525053	COMPUTER TOWER	DONATE
525040	COMPUTER TOWER	DONATE
525033	COMPUTER TOWER	DONATE
525054	COMPUTER TOWER	DONATE
525050	COMPUTER TOWER	DONATE
525058	COMPUTER TOWER	DONATE
525049	COMPUTER TOWER	DONATE

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.

ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

525035	COMPUTER TOWER	DONATE
525032	COMPUTER TOWER	DONATE
528347	COMPUTER TOWER	DONATE
525044	COMPUTER TOWER	DONATE
525045	COMPUTER TOWER	DONATE
525060	COMPUTER TOWER	DONATE
525062	COMPUTER TOWER	DONATE
525031	COMPUTER TOWER	DONATE
525057	COMPUTER TOWER	DONATE
525055	COMPUTER TOWER	DONATE
525059	COMPUTER TOWER	DONATE
525061	COMPUTER TOWER	DONATE
525034	COMPUTER TOWER	DONATE
525037	COMPUTER TOWER	DONATE
525064	COMPUTER TOWER	DONATE
525047	COMPUTER TOWER	DONATE
525042	COMPUTER TOWER	DONATE
525739	COMPUTER TOWER	DONATE
525048	COMPUTER TOWER	DONATE
525052	COMPUTER TOWER	DONATE
525046	COMPUTER TOWER	DONATE
525378	MONITOR	DONATE
525391	MONITOR	DONATE
525384	MONITOR	DONATE
524589	MONITOR	DONATE
525483	MONITOR	DONATE
525389	MONITOR	DONATE
524575	MONITOR	DONATE
524574	MONITOR	DONATE
524576	MONITOR	DONATE
524573	MONITOR	DONATE
524590	MONITOR	DONATE
524561	MONITOR	DONATE
524572	MONITOR	DONATE
524570	MONITOR	DONATE
524581	MONITOR	DONATE
524580	MONITOR	DONATE
524583	MONITOR	DONATE
524585	MONITOR	DONATE
524557	MONITOR	DONATE
524579	MONITOR	DONATE
524566	MONITOR	DONATE
524564	MONITOR	DONATE

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.

ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

524560	MONITOR	DONATE
524569	MONITOR	DONATE
524558	MONITOR	DONATE
524568	MONITOR	DONATE
524571	MONITOR	DONATE
524562	MONITOR	DONATE
524577	MONITOR	DONATE
524591	MONITOR	DONATE
524582	MONITOR	DONATE
524588	MONITOR	DONATE
524563	MONITOR	DONATE
525342	MONITOR	DONATE
525370	MONITOR	DONATE
525350	MONITOR	DONATE
520977	MONITOR	DONATE
520779	MONITOR	DONATE
CN0T940171618588AE3S	MONITOR	DONATE
521010	MONITOR	DONATE
520991	MONITOR	DONATE
520972	MONITOR	DONATE
521068	MONITOR	DONATE
520996	MONITOR	DONATE
521079	MONITOR	DONATE
520936	MONITOR	DONATE
520994	MONITOR	DONATE
520913	MONITOR	DONATE
520940	MONITOR	DONATE
520938	MONITOR	DONATE
520989	MONITOR	DONATE
520943	MONITOR	DONATE
520945	MONITOR	DONATE
520932	MONITOR	DONATE
520979	MONITOR	DONATE
520983	MONITOR	DONATE
521007	MONITOR	DONATE
520982	MONITOR	DONATE
521069	MONITOR	DONATE
520950	MONITOR	DONATE
520976	MONITOR	DONATE
521061	MONITOR	DONATE
520993	MONITOR	DONATE
520973	MONITOR	DONATE
520924	MONITOR	DONATE

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.

ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

513600	MONITOR	DONATE
520935	MONITOR	DONATE
521091	MONITOR	DONATE
520917	MONITOR	DONATE
520948	MONITOR	DONATE
521065	MONITOR	DONATE
520931	MONITOR	DONATE
520920	MONITOR	DONATE
521064	MONITOR	DONATE
521004	MONITOR	DONATE
520918	MONITOR	DONATE
520984	MONITOR	DONATE
520906	MONITOR	DONATE
520910	MONITOR	DONATE
520947	MONITOR	DONATE
520909	MONITOR	DONATE
520933	MONITOR	DONATE
520916	MONITOR	DONATE
521084	MONITOR	DONATE
521080	MONITOR	DONATE
520930	MONITOR	DONATE
521005	MONITOR	DONATE
520980	MONITOR	DONATE
520919	MONITOR	DONATE
520925	MONITOR	DONATE
520985	MONITOR	DONATE
520992	MONITOR	DONATE
520904	MONITOR	DONATE
520951	MONITOR	DONATE
520939	MONITOR	DONATE
520927	MONITOR	DONATE
520990	MONITOR	DONATE
520912	MONITOR	DONATE
520915	MONITOR	DONATE
520928	MONITOR	DONATE
520949	MONITOR	DONATE
520937	MONITOR	DONATE
520978	MONITOR	DONATE
521001	MONITOR	DONATE
520934	MONITOR	DONATE
520946	MONITOR	DONATE
528424	COMPUTER TOWER	DONATE
528411	COMPUTER TOWER	DONATE

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.

ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

528405	COMPUTER TOWER	DONATE
528433	COMPUTER TOWER	DONATE
528412	COMPUTER TOWER	DONATE
528344	COMPUTER TOWER	DONATE
528406	COMPUTER TOWER	DONATE
528413	COMPUTER TOWER	DONATE
528409	COMPUTER TOWER	DONATE
528404	COMPUTER TOWER	DONATE
528402	COMPUTER TOWER	DONATE
528419	COMPUTER TOWER	DONATE
528407	COMPUTER TOWER	DONATE
528418	COMPUTER TOWER	DONATE
528401	COMPUTER TOWER	DONATE
528337	COMPUTER TOWER	DONATE
528356	COMPUTER TOWER	DONATE
528341	COMPUTER TOWER	DONATE
528348	COMPUTER TOWER	DONATE
528364	COMPUTER TOWER	DONATE
528342	COMPUTER TOWER	DONATE
528363	COMPUTER TOWER	DONATE
528345	COMPUTER TOWER	DONATE
528362	COMPUTER TOWER	DONATE
528354	COMPUTER TOWER	DONATE
528351	COMPUTER TOWER	DONATE
528360	COMPUTER TOWER	DONATE
528359	COMPUTER TOWER	DONATE
528361	COMPUTER TOWER	DONATE
528349	COMPUTER TOWER	DONATE
528355	COMPUTER TOWER	DONATE
528340	COMPUTER TOWER	DONATE
528343	COMPUTER TOWER	DONATE
528338	COMPUTER TOWER	DONATE
528335	COMPUTER TOWER	DONATE
528358	COMPUTER TOWER	DONATE
528336	COMPUTER TOWER	DONATE
528357	COMPUTER TOWER	DONATE
528429	COMPUTER TOWER	DONATE
528403	COMPUTER TOWER	DONATE
528416	COMPUTER TOWER	DONATE
528415	COMPUTER TOWER	DONATE
528410	COMPUTER TOWER	DONATE
528420	COMPUTER TOWER	DONATE
528441	COMPUTER TOWER	DONATE

EXHIBIT A

BOARD MEETING DATE: SEPTEMBER 16, 2020

DISPOSAL OF DISTRICT PROPERTY: ELECTRONIC EQUIPMENT AND MISCELLANEOUS MATERIALS PURCHASED BETWEEN FEBRUARY 04, 2004 TO MARCH 06, 2017.

ITEM STATUS OPTIONS: DONATE, SELL, SURPLUS, SCRAP/SALVAGE/OTHER

528443	COMPUTER TOWER	DONATE
528436	COMPUTER TOWER	DONATE
528442	COMPUTER TOWER	DONATE
528440	COMPUTER TOWER	DONATE
528438	COMPUTER TOWER	DONATE
528435	COMPUTER TOWER	DONATE
528421	COMPUTER TOWER	DONATE
528432	COMPUTER TOWER	DONATE
528437	COMPUTER TOWER	DONATE

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Approval and/or Ratification of Personnel Actions	**Item No:** 20-8028 **Enclosure:** Yes ☒ No ☐
Category: Human Resources	**Action** ☒ **Information** ☐ **Regular** ☐ **Consent** ☒
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Recommendation
It is recommended that the Board of Trustees approve and/or ratify the personnel actions as follows:

Management*
1. Employment of North Far North Regional Chair – Blaine Smith
   Full-time, 40 hours per week, 12 months per year
   Salary: MSC - 17
   Effective: September 1, 2020

2. Amended: Employment of Interim Retention Specialist (CCC Homeless & Housing Pilot Program) – Maisue Thao
   Full-time, 40 hours per week, 12 months per year
   Salary: MSC - 4
   Effective: 8/4/20 – 6/30/21

Academic*
3. Employment of Full-Time, Temporary Non-Tenure Track Grant Funded, Construction Instructor – Brooke Kinner
   Status: Temporary
   Salary: Placement on the Academic Salary Schedule as determined by education and experience
   Effective: 8/1/20 – 5/28/21

4. Employment of Full-Time, Temporary, Non-Tenure Track Grant Funded, Advanced Manufacturing Instructor – Gar Norlund
   Status: Temporary
   Salary: Placement on the Academic Salary Schedule as determined by education and experience
   Effective: 8/1/20 – 5/28/21

5. Employment of Full-Time, Temporary, Non-Tenure Track, Nursing - Clinical Instructor (Nursing) – Robert Smith
   Status: Temporary
   Salary: Placement on the Academic Salary Schedule as determined by education and experience
   Effective: 8/1/20 – 5/28/21

6. Employment of Full-Time, Temporary, Non-Tenure Track, Career Planning Instructor/Adult Basic Education (CalWORKS)– Kim Scott
   Status: Temporary
   Salary: Placement on the Academic Salary Schedule as determined by education and experience
   Effective: 7/1/20 – 6/30/21

7. Temporary Increase of Position, Associated Students & Student Activities Advisor – Kelly Munson
   From: 75%
   To: 100%
   Effective: 8/1/20 – 12/31/20

8. Assignment as Dual Enrollment Coordinator (CARES Act Grant) (20%) – Susan Craig
   Effective: Academic Year 2020-2021

9. Assignment as Dual Enrollment Coordinator (30%) – Susan Craig
   Effective: Academic Year 2020-2021

10. Assignment as Curriculum Committee Chair (50%) – Robert White
    Effective: Academic Year 2020-2021

11. Assignment as Curriculum Committee Chair (CARES Act) (10%) – Robert White
    Effective: Academic Year 2020-2021

12. Assignment as Makerspace (30%) – Daniel Donnelly
    Effective: Academic Year 2020-2021

13. Assignment as Professional Development Coordinator (50%) – Teresa Ward
    Effective: Academic Year 2020-2021

14. Assignment as Accreditation Committee Chair (50%) – Teresa Ward
    Effective: Academic Year 2020-2021

15. Assignment as Ascending Scholars Research (20%) – Teresa Ward
    Effective: Academic Year 2020-2021

16. Assignment as Ascending Scholars Research (Chancellor's Office grant) (10%) – Teresa Ward
    Effective: Academic Year 2020-2021

17. Assignment as Sustainability Coordinator (20%) – Robert Landry
    Effective: Academic Year 2020-2021

18. Assignment as Head Football Coach (10%) – Robert Snelling
    Effective: Academic Year 2020-2021

19. Assignment as Chair 1, Health, Kinesiology & Athletics (50%) – Frances Babich
    Effective: Academic Year 2020-2021

20. Assignment as Paramedic Program Director (20%) – James Cuneo
    Effective: Academic Year 2020-2021

21. Assignment as Director of Clinical Education (20%) – Gina Maclean
    Effective: Academic Year 2020-2021

22. Assignment as Chair II, Biology (40%) – Gary Lechner
    Effective: Academic Year 2020-2021

23. Assignment as Chair II, Physical Science (40%) – Jason Trento
    Effective: Academic Year 2020-2021

24. Assignment as Chair I, Mathematics (50%) – Brooke Kennedy
    Effective: Academic Year 2020-2021

25. Assignment as Chair IV, Developmental (Remedial) Math (20%) – Tamsen Herrick-Wing
    Effective: Academic Year 2020-2021

26. Assignment as Honda PACT Coordinator (20%) – George Medina
    Effective: Academic Year 2020-2021

27. Assignment as Coordinator of Honors (20%) – Deborah McCabe
    Effective: Academic Year 2020-2021

28. Assignment as Chair III, Automotive Technology (30%) – Robert Holt
    Effective: Academic Year 2020-2021

29. Assignment as Chair I, Agriculture (50%) – Thomas Williams
    Effective: Academic Year 2020-2021

30. Assignment as Chair II, Welding & Manufacturing (40%) – Russell Pitter
    Effective: Academic Year 2020-2021

31. Employment of At-Will and Uncompensated Temporary Academic Employee (Employed through Instructional Service Agreement – ARC of Butte County) – Jim Anderson, Maurice Clavano Nelson Corwin, Dino Fazlic, Marisela Gutierrez-Soria, Angela Rathbun, Jim Scudmore, Theresa Wycoff
    Effective: August 3, 2020 – June 30, 2021

32. Employment of At-Will and Uncompensated Temporary Academic Employee (Employed through Instructional Service Agreement – Mains'l) – Michael Bone, Lynn Kennedy, Jeannie Schroeder
    Effective: August 11, 2020 – June 30, 2021

33. Employment of At-Will and Uncompensated Temporary Academic Employee (Employed through Instructional Service Agreement – Mains'l) – Sean Green, Michael Duchs
    Effective: August 25, 2020 – June 30, 2021

34. Employment of At-Will and Uncompensated Temporary Academic Employee (Employed through Instructional Service Agreement – Work Training Center) – Paul Anderson, Deborah Antoine, Amy Brown, Teah Cain, David Christian, Chris Colson, Kim Cook, Pam Easter, Terrie Fry, Scott Hostettler-Lewis, Daniel Jones, Kim Shaughnessy, Rosanne Whyte
    Effective: August 25, 2020 – June 30, 2021

35. Employment of At-Will and Uncompensated Temporary Academic Employee (Employed through Instructional Service Agreement – North Valley Services) – Marcelo Chavez, Jessica Kordzilowski, Eryn Mundo
    Effective: August 25, 2020 – June 30, 2021

36. Employment of Temporary Academic Employees (Instructors and Student Development)
    Part-Time Faculty recommended for employment effective Fall Semester 2020
    (See Attachment A)

Classified Employees*

37. Employee working Out-of-Class: Program Assistant (CDC) – Nicole Cancilla
    Effective: 8/1/20 – 6/30/21

38. Temporary Increase in hours from 50% to 100% Instructional Aide (Cosmetology & Barbering Center) – Kimberlynn Deter, Caitlin Torres
    Effective: 8/17/20 – 12/31/20

Temporary Employees*

39. **Substitutes**

    Special Programs Clerk (Career & Academic Assessment Center) – Robin Cripe
    Salary: $18.50 per hour 8/1/20 – 6/30/21
    Lab Tech Welding/Adv. Manufacturing (Welding/Manufacturing) – Ruben Flores-Cobarrubia
    Salary: $25.00 per hour 7/1/20 – 6/30/21
    Financial Aid/Veterans Assistant II (Financial Aid and Veterans Services) – Benny Hawthorne, II
    Salary: $20.00 per hour 7/1/20 – 6/30/21
    Custodian I (FPM) – Toni Bartolini, Gregory Dubie, Samuel Gimple, Cameron Sloan, Jordan Yang
    Salary: $16.75 per hour 8/20/20 – 6/30/21
    Bus Operator (FPM) – Steve Suihkonen, James Goebl, Jonathon Jehle, Judy Plaster, Susan Swartz
    Salary: $18.50 per hour 8/24/20 – 6/30/21
    USS Technician (USS) – Eric Shell
    Salary: $23.25 per hour 7/1/20 – 6/30/21

40. **Professional Expert**

    Manipulative Skills/Evaluator – Corey Broin, Stephen Burt, Daniel Hart, Ryan Jones, Makaila Stritzel,
    Salary: $14.50/16.75 per hour 8/13/20 – 6/30/21
    Manipulative Skills/Evaluator – Benjamin Gheller, Mason James, Kyle Lake, Derek Langston, Michael Mandy, Jordan McFarren, Jake Miille, Benjamin Sullivan, Nicki Taylor, Ricky Teasley, Kelly Upson, Austin Yount
    Salary: $14.50/16.75 per hour 7/1/20 – 6/30/21
    Manipulative Skills Assistant – John Laufer, Mary Barker, Ryan Gsell, Jerilyn Houseworth, Heath Rasmussen, Marc Reed, Jarrod Valdes
    Salary: $23.75 per hour 7/1/20 – 6/30/21
    EMT/Paramedic – Willow Allen, Trevor Hubanks, Dan Hornyak, Jordon McFarren, William Perkins, Alyssa Vannucci
    Salary: $14.50 per hour 8/1/20 – 6/30/21
    EMT/Paramedic – Elizabeth Hunt
    Salary: $14.50 per hour 8/24/20 – 6/30/21
    Nursing – Jennifer Bedene, Heidi Irby, Heather Jacoboni
    Salary: $45.00 per hour 8/24/20 – 6/30/21
    Nursing – Amber Taylor
    Salary: $45.00 per hour 8/19/20 – 6/30/21
    Crime Scene Actor – Erik Lara, Benjamin Lawrence, Dustin Shahrok, Daniel Spring,
    Salary: $13.00 per hour 8/13/20 – 6/30/21
    Crime Scene Actor – Lucas Lapant, Trinity Maxey
    Salary: $13.00 per hour 7/1/20 – 6/30/21
    Sign Language Interpreter (DSPS) – Serena Smith
    Salary: $32.00 per hour 7/1/20 – 6/30/21
    Sign Language Interpreter (SS) – Joye McCormick, Christina Walborn
    Salary: $42.00 per hour 7/1/20 – 6/30/21
    Sign Language Interpreter (SS) – Serena Smith
    Salary: $32.00 per hour 7/1/20 – 6/30/21
    Supervising Medical Director (SHC) – Richard Turner
    Salary: $130.00 per hour 7/1/20 – 6/30/21

41. **Short Term/Seasonal**

Communication Planning – Innovation Award (Institutional Effectiveness) – Allen Bee
Salary: $55.00 per hour 7/1/20 – 6/30/21
Short Term Special Project (HR) – Angela Bell
Salary: $35.00 per hour 8/24/20 – 6/30/21
Bus Driver (FPM) – Steve Suihkonen, James Goebl, Jonathon Jehle, Judy Plaster, Susan Swartz
Salary: $18.50 per hour 8/10/20 – 6/30/21
Grant Manager (Office of Instruction) – Meredith Henrick
Salary: $37.25 per hour 7/1/20 – 6/30/21
Mental Health Specialist (Student Health Clinic) – Karen Johnson
Salary: $31.75 per hour 7/1/20 – 6/30/21
Lab Technician-Art (Arts CCC Makerspace) – Ty Mendoza
Salary: $20.50 per hour 8/18/20 – 6/30/21
IA-Reading & Writing (CAS) – Rae Morrison
Salary: $23.50 per hour 6/8/20 – 7/17/20
Administrative Secretary, Grants (CCCTC) – Amber Tamagni
Salary: $22.00 per hour 7/1/20 – 9/30/20
Safe Place Intern (Safe Place/Queer Resource Center) – Cara Campbell
Salary: $14.00 per hour 8/3/20 – 12/18/20
Safe Place Intern (Safe Place/Queer Resource Center) – Cara Campbell
Salary: $15.00 per hour 1/18/21 – 5/21/21
Safe Place Intern (Safe Place/Queer Resource Center) – Sierra Mullett-Kennedy
Salary: $14.00 per hour 8/24/20 – 12/18/20
Safe Place Intern (Safe Place/Queer Resource Center) – Sierra Mullett-Kennedy
Salary: $15.00 per hour 1/18/21 – 5/21/21
Intern (EOPS/POWER Center) – Yvonne Martin
Salary: $14.00 per hour 8/17/20 – 12/18/20
Foster Kinship Care Education Workshops (Foster/Kinship Care Education Program) – Senta Burton, Sara Gordon, Lisa Jackson-Cattrell
Salary: $55.00 per hour 8/26/20 – 6/30/21
Foster Kinship Care Education Workshops (Foster/Kinship Care Education Program) – Virginia Haskell
Salary: $50.00 per hour 8/26/20 – 6/30/21
Foster Kinship Care Education Workshops (Foster/Kinship Care Education Program) – Russell Hansen
Salary: $65.00 per hour 8/26/20 – 6/30/21

42. **Retirements/Resignations**

Retirement, Shipping/Receiving & Mail Services (FPM) - Emilian Buzatu
Effective: October 1, 2020
Resignation, Laboratory Technician (Welding & Advanced Manufacturing) - Ryan Widmer
Effective: August 7, 2020
Resignation, Project Manager (CCCTC) - Dana Hipchen
Effective: August 29, 2020
Retirement, Administrative Assistant (SS) - Tami Vanskike
Revised Effective Date: March 8, 2021

*Contingent upon successful completion of background check. All regular salary placements will be in accordance with the rules and regulations for placement on the Board of Trustees approved salary schedules.

Attachment A

Full Name
Alexander, Jesse
Alexis, Jared
Ament, Derek
Anderson, Heidi
Anderson, Tiffani
Appel, Rolfe
Armstrong, Elizabeth
Arteaga, Rachel
Asbury, Timothy
Ashba, Tammy
Azevedo, Daniel
Baca, John
Bachman, Tracy
Bailey, David
Bailey, Leonard
Bantum, Camilla
Barnett, Robert
Bass, Mark
Basurto, Nathan
Battles, Cheryl
Bearden, Stacy
Beck, Corinne
Bellamy, Jennifer
Belmonte, Linda
Beneke, Arlyn
Berry, Joannie
Bianchini, Elizabeth
Blachley, John
Boek, Stacey
Bokavich, Casey
Bond, Joseph
Booth, Lillian
Boothe, Todd
Bootman, Scott
Bordin, Steven
Bordoli, Guy
Borgman, Anthony
Boyd, Steve
Braten, James
Brindley, Peter
Brisolara, Sharon
Bromley, Kyleen
Brown, Robert
Browne, April
Buckhout, Robert
Burke, John
Burks, Stacey
Butler, Brett
Buzan, Melinda
Calkins, Matthew
Camodeca, Michael
Campbell, Donald
Candelaria, Kelly
Cannon, Beth
Cantrell, Heidi
Cantwell, Gary
Carey, Margaret
Carlisle, Donald
Carlson, Devon
Carrillo, John
Cavaness, Linda
Cavenecia, Melana
Caywood, Alissa
Cervantes, Matthew
Charles-Tollerup, Jennifer
Chavez, Mark
Christopher, Madeline
Clain, Kimberly
Coates, Stephen
Collins, Susan
Connell, Sarah
Connelly, Annie
Connolly, Brian
Cook, Alan
Cooke, Bradley
Cooper, Andrew
Cowell, Jean
Crosthwaite, John
Daly, Jennifer
Daniell, Dana
Danner, Rick
Davidson, Ryan
Davila, Christian
Davis, Adria
Davis, David
Davis, Michelle
Davis, Regina
Davison, Bryce
DeMasi, Adelle
Delarocha, Dana
Demaggio, Julie
Deromedi, Lia
Devine, Shannon
Diamond, Nicole
Dineen, Leland
Dipietro-Hawkins, Danielle
Doty, Kelly
Du, Kseniya
Duch, Andrew
Duitsman, Stan
Dunne, Anne
Dunning, Melissa
Duran, Hannah
Duran-Roach, Australia
Durfee, Peter
Durkin, Jeffrey
Dyer, Jason
Eagan, Travis
Earley, Charleen
Edgmon, Michael
Edsill, Julia
Ellis, Amanda
Ensslin, Teresa
Evaro, Heidi
Favorite, Brian
Fazlic, Dijana
Fedrizzi, Victor
Fellers, Ryan
Feltman, Joshua
Fennel, Jeffrey
Ferrin, Josiah
Ferro, Sam
Finch, Richard
Fischer, Linda
Flagg, Joseph
Flesher, Devin
Flores, Sheena
Frank, Lanae
Frank, Scott
Franssen, Scott
Frawley, Susan
Frazer, Cristin
Fridrich, Tonia
Fry, Brandon
Fry, Chuck
Fuchs, Delina
Funk, Herbert
Furry, Ashley
Garcia, Timothy
Garner, David
Gebbia, Joseph
Gee, Travis
Genna, Kristi
Gerrard, Jeremy
Gilmette, Edward
Givens, Teresa
Gonzalez, Eduardo

Gordon, Scott
Graves, William
Grenko, Suellen
Griffin, Michael
Griggs, Daniel
Grimes, Ruth
Grothe, Kerstin
Gruber, Corey
Gurlides, Despina
Gust, Karen
Haasl, David
Hall, David
Hall, Steven
Hames, John
Hanley, Kevin
Hannah, Michael
Haraughty, Gema
Hard, Keith
Harr, Becky
Harrington, Kelsey
Harrington, Lori
Harrington, Steven
Harrison, Stephen
Hart, Diane
Hartley, Laurel
Hasek, Bruce
Hatter, Amber
Hawkins, Zackary
Hayes, Billy
Hayes, Timothy
Hays, Jonathan
Hearne-Essary, Robyn
Herrera, Eric
Heston, Koby
Higbee, Jarrod
Hilderbrand, Suzanne
Hill, Jeanna
Hope, Martha
Howard, Sue
Huffman, Robin
Hughes, Gary
Hull, Patrick
Hutcheson, Donald
Ikemoto, Jennifer
Jackson, Jessica
Jenks, Bradley
Johal, Rajdeep
Johnson, Michael
Keating, Michael
Keefe, Dorothy
Kelleher, John
Kelly, Cameron
Kelso, John
Kennedy, Joseph
Kidd, Carey
Kieselbach, Tanya
Kimple, Kevin
King, Cedric
King, Daniel
Kious, Randi
Klein, John
Knowlton, Sarah
Kokinakes, Maxwell
Kongkeoviman, Bounpon
Kraemer, Finn
Krug, Susan
Krulder, Joseph
Kutil, Devin
Laczko, Kaitlyn
Lance, Tomoko
Landry, Robert
Lara, Anthony
Lara, Jose
Lavin, Andrew
Lefkowitz, Todd
Lephart, Chris
Liebenberg, Ibe
Light, Pauline
Llamas, Samuel
Lucanic, James
Luden, William
Lundy, Dennis
Lunel, Ezra
Lydon, Dean
Magneson, Lauren
Main, David
Maletic, Stephen
Manning, Phillip
Marsh, David
Marshall, Bryan
Marshall, Sheri
Martin, Doug
Martin, John
Marvier, Alexis
Maxey, Justin
McDonald, Leslie
McFadden, Greg
McJunkin, Shawn
McLaughlin, Melanie
McMillin, Jaide
Memmott, Lara
Meneley, Chris
Metroka, Wesley
Meyer, Adam
Meyer, Nancy
Mickelson, Christopher
Miko, Katalin
Miller, Cherise
Miller, Robert
Minetaka, Shigemi
Minton, Douglas
Miro, Edward
Montgomery, Mark
Moore, Jolene
Moore, Ty
Morales, Lisa
Morris, Jason
Mortimer, Brandon
Muelrath, Lani
Murphy, Mark
Murphy, Michael
Muster, Kevin
Nako, Adam
Neher, Jeanine
Nelms, Kimberly
Nelson-Hall, Jena
Neufeld, Megan
Newton, Tyler
Nicodemus, Christopher
Nilsson, Sharon
Nissen, Karen
Norton, Kelsey
O'Malley, Mike
O'Quin, Sharon
Oelrichs, Amy
Ortiz, Antoinette
Ozanne, Nick
Paisley, Dustin
Parisio, Erin
Park, Michael
Parrott, James
Parsons, Michelle
Parsons, Sophia
Patience, Hosanna
Pearson, Sally
Peloso, Dominick
Peperkamp, Maximus
Perez, Jenna
Pershing, Jeffrey
Person, Johnny
Peter, Eric
Peters, Mari
Peterson, Sue
Piazza, Jason

Pickering, Robert
Pierce, Robert
Pilakowski, Michael
Ping, Jean
Pittman, David
Pollard, Jeremy
Porter, Ford
Portillo, Matthew
Raven, Susan
Reese, Norman
Reinhardt, Dennis
Reizgeviciute, Agne
Richardson, Robert
Rios, Albert
Robertson, Craig
Robson, Devin
Roeder, Miriam
Rogers, Greg
Rohrer, Judith
Ross, Stephen
Ruiz, David
Sanchez, Gloria
Sandberg, Ross
Sanders, Allen
Sanfilippo, Dominic
Sathrum, Luke
Schildhauer, Cynthia
Schleiger, Rachel
Schmidt, Rebecca
Schoelkopf, John
Scholar, Gary
Scholz, Dara
Schreder, Karen
Schuft, Caitlyn
Schwyzer, Cedric
Sederquist, Janessa
Seghieri, Richard
Shahid, Maria
Shelly, Rebecca
Siegel, Joshua

Silliman, Miranda
Simpson, Bryan
Singleton, Valerie
Sjolund, Garrett
Skaggs, Michael
Skinner, Kelley
Smith, Alan-Dean
Smith, Eva
Smith, Kenneth
Smith, Olav
Smith, Shawn
Smith-Peters, Bruce
Spath, Lisa
Spencer, Errin
Spencer, Ivy
Spirk, Stefan
St. Cin, Denise
Stephens, Bettye
Stevens, Belinda
Stevens, Robert
Stone, Gail
Stone, Kathy
Strahan, Lori
Switzer, Charles
Sylvia, Kathryn
Szczepanski, Catherine
Talley, Laura
Tan, Huiyuan
Tange, Mark
Teagarden, Katherine
Teixeira, Katharina
Tello, Bernadette
Thomas, Brian
Thomas, Michael
Thomas, William
Thompson, Daniel
Thomson, Rodney
Tindill, Teresa
Tochterman, Alan
Townsley, Wesley

Traulsen, Andrew
Treuhaft, Melanie
Trider, Alicia
Trolinger, John
Twitchell, Erika
Vader, Bethany
Vasquez, Crystal
Vincent, Zu
Wade, Erin
Wadsworth, Mark
Walker, Alicia
Walker, Chadwick
Ward, Jacob
Welton, David
Wenger, Christopher
Westwood, Lisa
White, Jennifer
Wicks, Michael
Wikum, Ryan
Wilkins, Valinda
Williams, Dacia
Williams, Lisa
Willmann, Hans
Wilson, Lauren
Wines, Jason
Winton, Jason
Winzenz, Thaddaeus
Wittsell, Ricky
Wolfe, Matthew
Woodard, Tyler
Worthington, Sean
Wright, Kathline
Wymore, Gretel
Xiong, Moua
Yeager, Melody
York, Kevin
York, Stayce
Young, Peter
Ziegenmeyer, Logan
Zuniga, Yvette

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Approval of Contracts	**Item No:** 20-8029 **Enclosure:** Yes ☒ No ☐
Category: Contracts	**Action** ☒ **Information** ☐ **Regular** ☒ **Consent** ☐
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Background
Pursuant to Board Policy 6340, the Board has delegated the authority to enter into contracts on behalf of the District to the Superintendent/President or designee. Contracts for work to be done, services to be performed, or for goods, equipment, or supplies to be furnished or sold to the District that exceed the amounts specified in Public Contract Code Section 20651 require prior approval by the Board.

Pursuant to the District's Informal Bidding Procedures under the Uniform Public Construction Cost Accounting Act, the Vice President for Administration or Director for Facilities Planning & Management are authorized to award contracts for public projects not exceeding the Informal Bid Limit prescribed by Public Contract Code Section 22032. Contracts for public projects that exceed the Informal Bid Limit require a formal bidding procedure and approval by the Board.

Status
The relevant amount specified in Public Contract Code Section 20651 as adjusted annually is currently $95,200.00 for contracts to purchase equipment, materials, supplies, services, and repair. The relevant amount specified in Public Contract Code Section 22032 is $200,000.00 for public projects contracts.

The District proposes to enter into the contract(s) described on the attached Contracts Approval Report. All contracts are put through an approval process which includes verification of funds available in the budget.

Recommendation
It is recommended that the Board of Trustees approve the contract(s) listed on the Contracts Approval Report and authorize the Superintendent/President or designee to enter into the contract(s) in accordance with Board Policy 6340 prior to ratification by the Board at a subsequent meeting, contingent upon available funding and contingent upon successful completion of negotiation of terms with the contractor(s).

Butte-Glenn Community College District
Board of Trustees Meeting
September 16, 2020

CONTRACTS APPROVAL REPORT

Contract Effective Date	Contract Expiration Date	Contractor	Contract Purpose	Contract Value Revenue / (Cost)	Funding Source	Originated by: District Department	Approved by: District Administrator
7/1/20	9/30/21	Rancho Santiago Community College District	Regional Director for Employer Engagement ICT/Digital Media	$200,000.00	Restricted General	Regional Directors	Guleff
7/1/20	9/30/21	Rancho Santiago Community College District	Regional Director for Employer Engagement Energy, Construction, & Utilities	$200,000.00	Restricted General	Regional Directors	Guleff
7/1/20	9/30/21	Rancho Santiago Community College District	Regional Director for Employer Engagement Health	$200,000.00	Restricted General	Regional Directors	Guleff
10/1/20	9/30/21	California Manufacturing Technology Consulting (MCTC)	Cost Share Subrecipient Agreement under Cooperative Agreement Hollings Manufacturing Extension Partnership for The Training Place to provide consulting, customized on-site training, and consortia or group delivery services and trainings to emerging and existing manufacturing establishments in California Manufacturing Region 1	$110,000.00 ($110,000.00)	Restricted General	Contract Education	Guleff
10/1/20	9/30/24	Microsoft Corporation	Enrollment for Education Solutions to place orders for products under the Foundation for California Community Colleges and Microsoft Corporation Campus and School Agreement for Volume Licensing	($569,305.60)	Unrestricted General	Information Technology	Stoup
8/1/20	12/31/20	Chabot Las Positas Community College District	Funding for work surrounding the design and roll out of the C-ID.net website	$119,916.00	Restricted General	CCC Technology Center	Stoup
9/1/20	12/31/25	Antelope Valley College	Funding for upgrade of network services to provide Frontier 10GB Circuit under CENIC Master Services Agreement	$195,433.00	Restricted General	CCC Technology Center	Stoup
9/1/20	8/31/25	Los Angeles Community College District	Funding for upgrade of network services to provide two Frontier 100GB Circuit under CENIC Master Services Agreement	$728,776.00	Restricted General	CCC Technology Center	Stoup
7/15/20	Notice of Completion	Slater & Son	Change Order #8 to Butte College Welding and Manufacturing Facility Project Contract to Modify owner supplied welding booths to match owner provided mock-up and owner provided design	($483,023.00)	Measure J	Facilities Planning & Management	Suleski

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Resolution No 795: Approval to Contract with Department of Parks and Recreation, Contract No. C2011000	**Item No:** 20-8030 **Enclosure:** Yes ☒ No ☐
Category: Contracts	**Action** ☒ **Information** ☐ **Regular** ☒ **Consent** ☐
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Background
On March 16, 2020, the District's Public Safety Education & Training Center submitted a proposal to California Department of Parks and Recreation (DPR) to provide educational courses as required to conduct the Park Ranger/Lifeguard Law Enforcement Academy for DPR sponsored students.

Status
The District's Public Safety Education & Training Center will offer to the DPR educational courses for sponsored students who have been admitted to the College and met any applicable prerequisites for the Park Ranger/Lifeguard Law Enforcement Academy courses. DPR will pay the applicable enrollment fees for enrolled DPR sponsored students in accordance with the current District Fee Schedule.

The District proposes to enter into a contract with the DPR in the amount of $1,024,125.00 to provide educational courses for the period of October 1, 2020, through August 31, 2025.

The DPR requires a Board resolution to establish authority to contract.

Recommendation
It is recommended that the Board of Trustees adopt Resolution No. 795 certifying approval of the California Department of Parks and Recreation Contract No. 2011000 and authorizing the designated personnel to sign the contract documents and any future amendments to this contract prior to ratification by the Board at a subsequent meeting.

BUTTE-GLENN COMMUNITY COLLEGE DISTRICT
Meeting of the Board of Trustees

September 16, 2020

RESOLUTION NO. 795

AUTHORIZATION TO CONTRACT WITH THE CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

WHEREAS, the Butte-Glenn Community College District wishes to enter into a contract with the California Department of Parks and Recreation (DPR), under Contract Number C2011000, in the amount of $1,024,125.00 for the purpose of providing educational courses for DPR sponsored students for the period of October 1, 2020, through August 31, 2025;

WHEREAS, the Board of Trustees of the Butte-Glenn Community College District is permitted by California Education Code Section 81655 to delegate its power to contract;

NOW THEREFORE BE IT RESOLVED, that the Butte-Glenn Community College Board of Trustees authorizes the District to enter into the above described contract with the DPR; and

BE IT FURTHER RESOLVED, that the Butte-Glenn Community College District Board of Trustees hereby designates Samia Yaqub and/or Andrew Suleski as its representatives to execute necessary contract documents, including any future amendments to the contract, for the above described contract prior to ratification by the Board at a subsequent meeting.

The foregoing resolution was introduced by Board Member who moved its adoption, seconded by Board Member , and adopted on September 16, 2020, by the following roll call vote:

AYES:

NOES:

ABSENT:

SO ORDERED:

_____
John Blacklock, President
Board of Trustees

ATTEST:

_____
Samia Yaqub, Ph.D., Secretary
Board of Trustees

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Approval to Purchase Real Property and Improvements from Vista La Mesa, LLC in Orland, California, APN 040-310-013-000	**Item No:** 20-8031 **Enclosure:** Yes ☒ No ☐
Category: Facilities Planning & Management	**Action** ☒ **Information** ☐ **Regular** ☒ **Consent** ☐
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Background
The District has identified 6.17 acres of unimproved property in the City of Orland, California with APN number 040-310-013-000 currently owned by Vista La Mesa, LLC and which is suitable for development of improvements to serve as the District's Glenn County Education Center ("Orland Property"). The District presently offers education programs in Glenn County in a leased commercial facility. The Orland Property provides the District the opportunity to terminate the current commercial lease and use the Orland Property as a permanent District-owned facility. Vista La Mesa, LLC has expressed the willingness to develop and construct facilities on the Orland Property in strict accordance with a Construction Work Letter, attached to the Purchase Sale Agreement as Exhibit A, that ensures the site and building meets the District's program needs and is constructed in accordance with the Department of the State Architect and District Building Standards. Upon completion of the development of Orland Property, Vista La Mesa shall thereafter sell the improved Orland Property to the District.

In May 2020, the Board of Trustees authorized the Superintendent/President to execute the Letter of Intent on behalf of the District and to authorize the Superintendent/President or such District staff as she may designate to negotiate terms for the District's purchase of certain real property and improvements in Orland, California with APN number 040-310-013-000 from Vista La Mesa, LLC.

Status
The District and Vista La Mesa, LLC have met and conferred to establish a framework and principal terms and conditions to a Purchase Sale Agreement for the District's purchase of the Orland Property. The enclosed Purchase Sale Agreement and all of its attachments expresses the framework and principal terms of the Orland Property purchase for a fixed purchase price of $12,389,000.00. Vista La Mesa, LLC has reviewed and accepted the terms of the Purchase Sale Agreement.

Recommendation
It is recommended that the Board of Trustees approve the purchase of certain real property containing 6.17 acres and improvements located in the City of Orland, California with an APN number 040-310-013-000 from Vista La Mesa, LLC for a fixed purchase price of $12,389,000.00.

It is recommended that the Board of Trustees authorize the Superintendent/President or designee to undertake all necessary actions and to execute all necessary documents to include the enclosed Purchase Sale Agreement to purchase certain real property and improvements as described.

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT ("Agreement") is made and entered into as of _____ __, 2020 ("Effective Date"), by and between VISTA LA MESA, LLC ("Seller") and BUTTE-GLENN COMMUNITY COLLEGE DISTRICT ("Buyer"). Buyer and Seller are referred to individually as a "Party", and collectively as the "Parties". This Agreement is entered into by the Parties with reference to the following recitals, each of which are incorporated herein by this reference.

RECITALS

A. Seller is the fee title owner of that certain undeveloped real property identified as Glenn County Assessor Parcel Number 040-310-013-000, consisting of approximately 6.17 acres located in the City of Orland, County of Glenn, State of California and more particularly described in Exhibit A ("Real Property").

B. Seller intends to improve the Real Property for the benefit of Buyer by construction of improvements consisting of: (i) an approximately thirteen thousand seven hundred (13,700) square feet building, with interior improvements and building systems necessary for Buyer's use as an education facility ("Building"); (ii) an approximately One Hundred Fifty (150) space passenger vehicle parking lot ("Parking Lot"); (iii) a photovoltaic solar generating system that conforms to the specifications set forth in the Work Letter ("PV System"); and (iv) related sitework (drainage, utilities, hardscape, landscape, etc.) ("Sitework"); the foregoing are collectively referred to as "the Improvements" and are generally described in the Construction Work Letter, attached hereto as Exhibit B ("Work Letter").

C. Seller wishes to sell and Buyer wishes to buy the Real Property and Improvements (collectively, "Property") on the terms and conditions set forth herein.

ARTICLE 1.
PURCHASE AND SALE OF THE PROPERTY

1.1 The Property. Seller agrees to sell to Buyer, and Buyer agrees to purchase from Seller, all of Seller's right, title and interest in the Property with all rights and appurtenances pertaining to the Property, including, without limitation, all of Seller's right, title and interest, if any, in and to (i) all minerals, oil, gas, and other hydrocarbon substances thereon or thereunder, (ii) all adjacent strips, streets, roads, alleys and rights-of-way, public or private, open or proposed, (iii) all covenants, easements, privileges, appurtenances and hereditaments pertaining thereto whether or not of record, and (iv) all access, air, water, riparian, development, utility, and solar rights.

1.2 Improvements. The Improvements forming a part of the Property shall be designed and constructed for the Buyer's delivery of higher education services. Design and construction of the Improvements shall conform to the Work Letter and provisions of this Agreement, including without limitation, Article 3 hereof.

1.2.1. Personal Property. The Improvements include all of Seller's right, title, and interests in and to: (i) mechanical systems, fixtures, machinery and equipment comprising a part of or attached to, or located upon or within the Improvements or Property; (ii) maintenance equipment and tools, if any, used in connection with, and located in or at, the Improvements; (iii) site plans, surveys, plans and specifications, construction shop drawings/submittals, "as-built" drawings, materials test/inspection reports, warranties, equipment manuals and operating instructional materials; and (iv) all other tangible personal property, and located in or on, the Property or Improvements as of the Closing Date (collectively, "Personal Property").

1.2.2. Intangibles. The Property includes all contracts, rights, warranties, guaranties and licenses to which the Seller is party and which relate to design or construction of the Improvements and all environmental materials (including, but not limited to, all environmental

assessments, environmental impact reports, negative declarations), governmental entitlements (including map approvals, conditional use permits, building permits and certificates of occupancy for the Improvements), approvals, and permits which relate to the Property or Improvements. The foregoing includes all of warranty rights of the Seller (whether arising by contract or operation of law) relating to the Improvements and Seller's latent defect rights relating to the design or construction of the Improvements. As requested by the Buyer, Seller shall execute and deliver such instruments or take such actions necessary to effectuate the intent of the foregoing.

ARTICLE 2.
PURCHASE PRICE AND ESCROW

2.1 The purchase price ("Purchase Price") for the Property is Twelve Million Three Hundred Eighty-Nine Thousand Dollars and Zero Cents ($12,389,000.00).

2.2 Buyer Installment Payments of Purchase Price. The Purchase Price shall be deposited in Escrow by Buyer within thirty-five (35) days of the opening of escrow and disbursed to Seller by the Escrow in installments based on Seller's achievement of certain milestones (each, a "Purchase Price Payment Milestone") as set forth in the schedule below ("Milestone Schedule"):

	Purchase Price Payment Milestones	**Purchase Price Portion**
(i)	Buyer's waiver of the buyer contingencies set forth below a. Buyer shall have approved a preliminary title report for the Real Property ("Preliminary Title Report") in accordance with Section 6.3 hereof; b. Buyer shall have approved schematic drawings for the Improvements; c. Seller shall have delivered to Buyer a geotechnical engineering report for the Property; and d. Seller shall have delivered to Buyer a Phase I Environmental Assessment for the Real Property. The amount of this Purchase Price Payment Milestone reflects Seller's predevelopment costs which include land acquisition costs. ("Contingency Waiver Payment")	12%
(ii)	a. Buyer and Seller shall have reached an agreement on the form and content of a recordable instrument for an ingress, egress, and public utility easement burdening the Property and benefiting Seller's Property (as defined in Section 6.4 below). b. Division of State Architect issuance of an authorization to construct the Improvements (together, the "DSA Payment")	4%
(iii)	Completion of offsite utility and infrastructure improvements ("Infrastructure Payment")	4%
(iv)	Completion of Building foundations and slab on grade ("Foundation Payment")	18%
(v)	Completion of Building "Warm Shell" (including, mechanical, electrical, and plumbing equipment and systems) ("Warm Shell Payment")	12%
(vi)	Substantial completion of Parking Lot ("Parking Lot Payment")	10%
(vii)	Completion of all Building interior improvements rough-in evidenced by readiness for sheetrock ("Rough-In Interiors Payment")	15%

(vii)	Substantial Completion of interior improvements including interior fixtures and finishes, but not including any fixtures and furnishings to be installed by the Buyer ("SC Interiors Payment")	11%
(viii)	Completion of the PV System ("Solar Payment")	10%
(ix)	Completion of landscaping and installation of signage, and submission of forms DSA 6-AE, DSA 6-PI and DSA 6-C by Buyer to DSA ("Occupancy and Closing Payment")	4%
	Total:	**100%**

2.2.1. Disbursement Request. After achievement of a Purchase Price Payment Milestone; Seller shall submit a disbursement request to Buyer setting forth the following (each, a "Purchase Price Payment Request" and collectively "Purchase Price Payment Requests"): (i) the amount of the Purchase Price Payment Request; and (ii) the Purchase Price Payment Milestone for which the Purchase Price Payment Request is requested.

2.2.2. Buyer Disbursement Request Review. The form of Purchase Price Payment Request shall be as mutually agreed by the Seller, Buyer and Escrow. Within ten (10) business days following receipt of a Purchase Price Payment Request, Buyer shall notify the Seller and Escrow in writing of the Buyer's approval or disapproval of all or a portion of each Purchase Price Payment Request. If the Buyer disapproves any portion of a Purchase Price Payment Request, Buyer and Seller shall meet and confer in good faith and use commercially reasonable best efforts to reach an agreement on Buyer's disapproval of all or a portion of a Purchase Price Payment Request within ten (10) business days following the Buyer's written notice. If the Buyer and Seller are unable to resolve the Buyer's disapproval of any portion of a Purchase Price Payment Request after such meet and confer procedures, resolution of such remaining disapproved portion of a Purchase Price Payment Request shall be in accordance with the dispute resolution procedures set forth in this Agreement. If the Buyer approves any portion of a Purchase Price Payment Request, Buyer shall within five (5) days of approval provide written authorization to the Escrow Agent to immediately release the amount of the Purchase Price Payment Request not in dispute to Seller.

2.2.3. Purchase Price Payment Requests. Buyer's approval of the Purchase Price Payment Requests for the Infrastructure Payment, Foundation Payment, Warm Shell Payment, Parking Lot Payment, Rough-In Interiors Payment, SC Interiors Payment, Solar Payment, and Occupancy and Closing Payment (collectively "Construction Payments") shall be subject to Seller's submittal of reasonably satisfactory written evidence of: (i) payment in full to material suppliers, laborers, subcontractors and others for labor, materials, equipment and services to complete the work subject to the Construction Payment (i.e., Conditional/Unconditional Waivers and Release on Progress/Final Payment); (ii) payment in full to material suppliers, laborers, subcontractors and others for labor, materials, equipment and services to complete the work subject to the immediately preceding Construction Payment, if not already received in connection with such preceding payment request (i.e., Conditional/Unconditional Waivers and Release on Progress/Final Payment); (iii) preparation and submittal of Certified Payroll Records to the Department of Industrial Relations ("DIR") for labor utilized to complete work of a Construction Payment; and (iv) that the Work subject to a Construction Payment has been completed in accordance with the Plans and Specifications approved by the Department of State Architect ("DSA").

2.3 Escrow. The purchase and sale of the Property shall be consummated through an escrow established at Mid Valley Title and Escrow Company, 601 Main Street, Chico, California 95928 ("Escrow").

2.3.1. Escrow Instructions. This Agreement, upon execution by Seller and Buyer, shall be delivered to the Escrow within five (5) days after it is fully executed. Escrow shall be opened when the Escrow accepts in writing its duties as Escrow hereunder and Seller and Buyer have executed such other agreements as may be required by the Escrow. This Agreement, the Escrow's standard escrow instructions and amendments thereto as mutually agreed in writing by Buyer and Seller shall constitute Escrow Instruments. This Agreement shall not be merged into such Escrow Instructions, and the latter shall be deemed auxiliary to this Agreement. In the event of a conflict between such Escrow Instructions and the provisions of this Agreement, the provisions of this Agreement shall govern and control.

2.3.2. Close of Escrow. Escrow shall close as of the Closing Date (as defined hereinafter) in accordance with Section 4.1 hereof.

ARTICLE 3.
IMPROVEMENTS

3.1 General. The Parties agree that the Real Property is unimproved and an express condition precedent to Buyer's approval of Disbursement Request is Seller's design and construction of the Improvements in accordance with the terms of this Agreement and the Work Letter.

3.2 Work Letter. Specific requirements of the Improvements and component parts of the Improvements are set forth in the Work Letter attached hereto as Exhibit B. The Work Letter incorporates the following Exhibits; subject to adjustments approved by the Buyer in accordance with terms of the Work Letter, the Improvements shall conform to the Work Letter Exhibits:

Exhibit WL-1	Glenn Center Schematic Site Plan, April 10, 2020 ("Schematic Site Plan")
Exhibit WL-2	Glenn Center Schematic Floor Plan, April 10, 2020 ("Schematic Floor Plan")
Exhibit WL-3	Glenn Center Furniture Layout Plan, April 28, 2020 ("FFE Layout")
Exhibit WL-4	Standard Materials/Equipment, February 4, 2020 ("Materials Standards")

3.3 DSA and Plans and Specifications. The Seller, at its expense, shall secure all necessary development entitlements to construct the Improvements and for use of the Property for delivery of education services.

3.3.1. Division of State Architect ("DSA"). Seller shall secure authority from all governmental and quasi-governmental agencies with jurisdiction over any portion of the Property as necessary for the construction of the Improvements for use of the Property for delivery of education services, including without limitation, approvals and construction authorization issued by DSA. DSA is the California Division of the State Architect including without limitation the DSA's Office of Construction Services, Office of Design Services and the Office of Regulatory Services; references to DSA shall mean the DSA, its offices and its authorized employees and agents. Seller acknowledges that obtaining DSA approval for construction of the Improvements is an express condition precedent to the Buyer's approval of the Disbursement Request for the DSA Payment.

3.3.2. Plans and Specifications. The Seller shall cause drawings, specifications, calculations and other similar materials describing and defining the Improvements sufficient for DSA to issue an approval to construct the Improvements ("Plans and Specifications"). Plans and Specifications shall incorporate the programmatic designations within the Building and other Improvements as set forth in the Work Letter and its Exhibits. The Buyer's review and acceptance of Plans and Specifications shall be in accordance with the Work Letter. Notwithstanding the Improvements and Building requirements established in the Work Letter, the Work Letter Exhibits or the Buyer's review/acceptance of Plans and Specifications, the Seller remains solely responsible for complete and accurate Plans and Specifications which

conform to the Work Letter requirements.

3.3.3. Architect and Design Consultants. Seller shall cause Plans and Specifications for the Improvements to be completed by a California licensed architect ("Architect") who shall be acceptable to the Buyer. The Architect shall have experience with design of education facilities subject to DSA jurisdiction and shall serve as the "Architect of Record" for the Improvements. The term "Architect" shall include the architect and all other design consultants, whether under contract to the architect or the Seller, necessary to complete Plans and Specifications for the Improvements, obtain DSA approval to construct the Improvements, and to assist the Seller during construction of the Improvements. Buyer shall approve or disapprove of Seller's proposed architect and design consultants within five (5) business days of a request for approval from the Seller. If Buyer does not approve or disapprove within such five-day period, Buyer shall be deemed to have approved the proposed architect or design consultants.

3.3.4. Post-Construction Architect Documents. Upon Seller's completion of the Improvements, the Architect shall prepare and deliver to Buyer Architect prepared "as-built" set of Plans and Specifications as a condition to Closing.

3.4 Improvements Construction. The Seller shall cause the Improvements to be constructed in accordance with the Plans and Specifications approved by DSA for construction of the Improvements. The Seller is responsible for causing the Improvements to be completed and submitting Form DSA-168 to DSA no later than fifteen (15) months after DSA issuance of an authorization to construct the Improvements. The Buyer shall be responsible for the cost of the DSA Inspector for the Improvements and related testing lab services. All other DSA costs shall be the responsibility of the Seller.

3.4.1. Contractor Contract. The Seller will contract with Modern Building, Inc. ("Contractor") as the general contractor for construction of the Improvements; the Buyer consents to the Seller's contracting with the Contractor for construction of the Improvements. The terms of the Construction Contract between the Seller and Contractor, for construction of the Improvements shall incorporate express provisions establishing the Buyer as an intended third-party beneficiary to such Construction Contract. Upon Buyer's written request, Seller shall deliver to Buyer copies of the Construction Contract between Seller and the Contractor.

3.4.2. Subcontractors Contracts. The terms of the subcontracts between the Contractor and its subcontractors for construction of any portion of the Improvements shall incorporate express provisions establishing the Buyer as an intended third-party beneficiary to all such subcontracts. Upon Buyer's written request, Seller shall deliver to Buyer copies of all contracts entered into by the Contractor and a subcontractor relating to the Improvements.

3.4.3. Field Act Compliance. Seller acknowledges that the Improvements are intended for use by Buyer as a community college education facility that is subject to compliance with the Field Act (Education Code §81130 et seq) as implemented and administered by DSA. Buyer acknowledges that the Seller will design and construct the Improvements in accordance with and under the jurisdiction of DSA in addition to the jurisdiction of the City of Orland.

3.4.4. Prevailing Wages. Seller shall require Contractor and all subcontractors for construction of the Improvements to pay labor to construct the Improvements at least the public works prevailing wage rate determined by the Director of the Department of Industrial Relations ("DIR") for the classification of work performed. Buyer shall not be responsible for penalties or assessments for failure to pay applicable prevailing wage rates.

3.4.5. Certified Payroll Records. Seller shall require the Contractor and all subcontractors to maintain accurate payroll records pursuant to California Labor Code §1776, showing the name, address, social security number, work classification, straight time, and overtime hours worked

each day and week, and the actual per diem wages paid to each person employed for construction of the Improvements.

3.4.6. Performance Bond. Prior to commencement of construction, the Seller shall require the Contractor to secure (i) a Performance Bond as security for its faithful performance of its obligations under its contract with the Seller to complete the Improvements and (ii) a Labor and Material Payment Bond as security for payment of persons or entities performing work, labor, or furnishing materials in connection with Seller's construction of the Improvements. The penal sum of the Performance Bond and the Labor and Material Payment Bond required hereunder shall be one hundred percent (100%) of the contract price under the contract between the Seller and the Contractor. Each bond shall name the Buyer as a co-obligee. The Surety on any bond required under this Agreement shall be: (i) an Admitted Surety Insurer as that term is defined in California Code of Civil Procedure §995.120; and (ii) AM Best rated A-/VII or better. Seller shall deliver copies of the Performance Bond and the Payment Bond to the Buyer prior to commencement of construction; the Seller further acknowledges and agrees that delivery of the Performance Bond and the Payment Bond is an express condition precedent to commencement of construction of the Improvements. The form and content of the Performance Bond and the Labor and Materials Payment Bond shall be as set forth respectively in Exhibits C and D to this Agreement.

3.5 Insurance.

3.5.1. Contractor Insurance. The Seller shall require the Contractor for the Improvements to maintain policies of insurance at all times performing work on the Property as follows:

3.5.1.1. Workers' Compensation Insurance. Workers' Compensation Insurance with coverage limits in accordance with California law, and Employers Liability Insurance with coverage limits of at least $1,000,000.

3.5.1.2. Commercial General Liability Insurance. Commercial General Liability insurance of not less than $1,000,000 per occurrence and $2,000,000 in the aggregate and $1,000,000 products/completed operations aggregate. Such insurance shall include, without limitation, coverage for premises operations, products/completed operations hazard, owner's and contractor's protective liability (covering all subcontractors), contractual liability and broad form property damage.

3.5.1.3. Commercial Automobile Liability Insurance. Commercial Automobile Liability insurance of not less than $1,000,000 per occurrence covering liability arising out of owned, hired and non-owned vehicles used by the Contractor in conjunction with the construction of the Improvements.

3.5.1.4. Pollution Liability Insurance. The Pollution Liability policy of insurance shall be issued on a "claims made" basis and shall cover pollution and other environmental damage resulting from construction operations. Coverage limits under the Pollution Liability insurance policy shall be at least One Million Dollars ($1,000,000) per claim and Two Million Dollars ($2,000,000) in the aggregate.

3.5.1.5. Builders' Risk Insurance. The Contractor shall purchase and maintain Builders Risk insurance covering the Improvements to the full insurable value thereof and shall insure against the perils of fire and extended coverage which includes "all risk" insurance of physical loss or damage including, without duplication of coverage, theft, vandalism or malicious mischief.

3.5.1.6. Excess Liability Insurance. Excess General Liability insurance with coverage

limits of not less than $10,000,000.

3.5.2. Architect and Design Consultants Insurance. The Architect and its Design Consultants for Improvements shall maintain policies of insurance with the minimum coverage limits set forth below:

3.5.2.1. Workers' Compensation Insurance. Workers' Compensation Insurance with coverage limits in accordance with California law, and Employers Liability Insurance with coverage limits of at least $1,000,000.

3.5.2.2. Commercial General Liability Insurance. Commercial General Liability insurance of not less than $1,000,000 per occurrence (combined single limit) and $2,000,000 in the aggregate.

3.5.2.3. Commercial Automobile Liability Insurance. Commercial Automobile Liability insurance of not less than $1,000,000 per occurrence covering liability arising out of owned, hired and non-owned vehicles used by the contractor in conjunction with the construction of the Improvements.

3.5.2.4. Professional Liability Insurance. Professional liability insurance with coverage limits of not less than $1,000,000 each claim and $2,000,000 in the aggregate. Such policy shall include "tail" coverage acceptable to Buyer.

3.5.3. Policy Requirements. Each policy of insurance required under Section 3.5 herein shall: (i) be issued by an insurance company which is licensed to do business in the State of California and AM Best rated at least A-/VII; and (ii) state that not less than thirty (30) days' written notice shall be given to the Buyer prior to cancellation (or not less than ten days' written notice, where cancellation is due to non-payment of premiums). The Seller shall deliver to the Buyer certificates of insurance as evidence of compliance with the requirements herein prior to commencement of construction on the Improvements. The insurance policies required by this Agreement shall not relieve Seller from, nor limit Seller's liability with respect to, its obligations under this Agreement, including the obligation to indemnify the Buyer.

3.5.4. Improvements Damage or Destruction; Builders Risk Insurance Proceeds. The Seller is solely responsible for the risk of loss, damage or destruction to the Improvements until the Closing. If any portion of the Improvements are damaged or destroyed during construction and such loss is covered by the Builders Risk insurance policy, the Seller: (i) shall be solely responsible for payment of the deductible arising out of such loss claim; (ii) apply all Builders Risk insurance proceeds to repair, restoration or replacement of the damaged or destroyed portions of the Improvements; and (iii) be solely responsible, without adjustment of the Purchase Price for all other costs to repair, restore or replace damaged or destroyed Improvements which exceeds Builders Risk insurance proceeds.

3.6 Post-CO Punchlist. Notwithstanding issuance of the Improvements COC (as defined below), if upon issuance of the Improvements COC there are remaining punchlist or other completion items necessary for completion of the Improvements ("Punchlist"), the Seller shall cause all Punchlist items to be promptly completed. Completion of all Punchlist items is an express condition precedent to the Closing.

3.7 Indemnity. Seller shall indemnify, defend and hold Buyer and/or its Board of Trustees, individual members of the Board of Trustees, authorized agents, employees, consultants, contractors and representatives free and harmless of and from all costs, expenses, damages, claims, liabilities, attorneys' fees and costs or charges arising out of, or in any way connected with Seller's and its affiliate(s) development and construction on the Real Property and Seller's and its affiliate(s)

development of the Improvements as referenced in this Article 3. Notwithstanding the foregoing, however, the Seller shall not be obligated to defend, hold harmless, or indemnify Buyer for any losses or claims caused in whole or in part by the intentional acts or negligence of Buyer or any of Buyer's indemnified parties.

ARTICLE 4.
CONSTRUCTION COMPLETION/CLOSING DATE

4.1 Closing Date. The consummation of the transactions contemplated hereby ("Closing") shall occur through Escrow in the customary manner for the consummation of real estate transactions in Glenn County, California, on the date ("Closing Date") that is no later than thirty (30) calendar days after DSA issues a Certificate of Compliance ("Improvements COC") which authorize use and occupancy of the Improvements for the Buyer's education purposes. If the Improvements COC is not issued on or before July 29, 2022 ("Outside Closing Date") for Non-Excusable Delays (as defined below), the Purchase Price shall be reduced by the per diem Liquidated Damages set forth below in Section 4.2 for each day after the Outside Closing Date until the Closing occurs. The Outside Closing Date assumes that DSA issuance of an authorization to construct the Improvements will occur within three (3) calendar months of submittal of the Plans and Specifications to DSA, which Seller agrees shall occur no later than January 29, 2021. So long as Seller is using commercially reasonable best efforts to obtain DSA approval, the Outside Closing Date shall be extended by each day past April 29, 2021 that DSA approval is received.

4.2 Liquidated Damages. If the Escrow does not Close by the Outside Closing Date due to Non-Excusable Delays, the Purchase Price shall be reduced by the per diem Liquidated Damages of Four Hundred Seventy-Five Dollars ($475) from the Outside Closing Date until the Closing occurs. Seller acknowledges and agrees that the Liquidated Damages constitute a reasonable estimate of the damages to Buyer pursuant to California Civil Code §1671 *et seq*. if the Closing does not occur by the Outside Closing Date. Buyer and Seller agree that it would be impractical or impossible to presently predict what monetary damages Buyer would if the Closing does not occur by the Outside Closing Date. Seller desires to limit the monetary damages for which it might be liable hereunder and Buyer and Seller desire to avoid the costs and delays they would incur if a legal proceeding is commenced to recover damages or otherwise enforce Buyer's rights for failure of the Closing to occur by the Outside Closing Date.

4.3 Force Majeure Delays. For purposes of this Agreement, "Force Majeure" means an event which is beyond the reasonable control of Seller or Buyer, including acts of God or a public enemy or terrorist, act of military, civil or regulatory authority, change in any law or regulation, pandemics (including any delays resulting from stay-at-home orders and material shortages or availability), fire, flood, earthquake, abnormal adverse weather conditions, strikes, labor disputes, legal actions attacking the validity of Seller's or Buyer's use or occupancy of the Property, or any other casualties beyond the reasonable control of either party, except casualties directly or indirectly resulting from the acts or omissions the party. If the Closing is delayed on account of a Force Majeure event, Seller and Buyer shall use diligent, good faith efforts to mitigate and limit the delays resulting from any such Force Majeure event. The required delivery dates provided herein shall be extended by the number of days delayed by the Force Majeure event. Buyer shall not be obligated to Seller for any increased costs paid or incurred by Seller to design, obtain DSA authorization to construct, construct and complete construction of the Improvements as a result of the Force Majeure, whether in the form of an increase in the Purchase Price or otherwise, and Seller shall pay all such excess costs.

4.4 Buyer Delays. For purposes of this Agreement, "Buyer Delays" means delay in the completion of the Improvements resulting from any or all of the following: (i) Buyer's request for material changes

to the Plans and Specifications approved by DSA for construction; (ii) Buyer's request for materials, finishes, or installations which are not readily available; (iii) Buyer's delay in authorizing an undisputed Disbursement Request; (iv) Buyer's delay in approving submittals of Plans and Specifications in accordance with the Work Letter; or, (v) Buyer's default of any material provision hereunder. The required delivery dates provided herein shall be extended by the number of days delayed by Buyer Delays.

4.5 Non-Excusable Delays. For purposes of this Agreement, "Non-Excusable Delays" means any delay in Closing caused by events or factors other than Force Majeure Delays and Buyer Delays, including but not limited to delays caused by (i) normal weather conditions, including average rainfall for the city in which the Real Property is located; (ii) Contractor/Subcontractor elected means and methods; (iii) untimely procurement of necessary equipment and materials (other than caused by pandemic related delays); (iv) changes in Contractor/subcontractor personnel; and (v) subcontractor substitutions. The required delivery dates provided herein shall not be extended for delays resulting from Non-Excusable Delays.

ARTICLE 5.
DEED OF TRUST

5.1 Deed of Trust. Concurrently with execution of this Agreement, Seller shall execute, acknowledge, and deliver to the Escrow a Deed of Trust in favor of the Buyer securing performance of Seller's obligations under this Agreement set forth herein in the form and content attached hereto as Exhibit E ("Deed of Trust").

5.2 Execution, Delivery and Recordation. The Escrow shall be authorized to record the Deed of Trust upon receipt from the Seller. Except for the Deed of Trust, Seller shall not record, or permit to be recorded, against the Property any other lien, encumbrance, or deed of trust without the prior written consent of the Buyer (which may be granted, conditioned or denied in the Buyer's sole but reasonable discretion).

5.3 Deed of Trust Remedies. If Seller is in default of its obligations hereunder, the Buyer may exercise rights and remedies of the Buyer pursuant to the Deed of Trust, provided that Buyer's rights/remedies under the Deed of Trust and the Buyer's exercise thereof are in addition to and not in lieu of any other right or remedy arising under this Agreement or by operation of law, except as limited by California's one form of action rules as codified in California Code of Civil Procedure Section 726(a) and California's anti-deficiency laws as codified in California Code of Civil Procedure Sections 580b, 580e and 726.

5.4 Reconveyance. Upon the Closing the Buyer shall execute such instruments and take such other actions reasonably necessary to reconvey the Deed of Trust. Recordation of the Reconveyance of the Deed of Trust shall occur concurrently with recordation of the Grant Deed to the Property upon the Closing.

ARTICLE 6.
TITLE

6.1 State of Title to be Conveyed. Title to the Property shall be conveyed to Buyer free from all liens, encumbrances, encroachments and other exceptions to title except those that are expressly accepted in writing by Buyer in accordance with Section 6.3 below ("Permitted Exceptions"). Evidence of title shall be the issuance by Mid Valley Title and Escrow Company ("Title Company") at Closing of its ALTA Coverage Policy of Title Insurance covering the Property in the full amount of the Purchase Price, subject only to the Permitted Exceptions ("Title Policy").

6.2 Title Report. [Intentionally Omitted]

6.3 Preliminary Title Report Acceptance Contingency. Seller has delivered to Buyer a Preliminary Title Report for the Real Property issued by First American Title Insurance Company dated August 24, 2020 ("Preliminary Title Report"), along with copies of the documents underlying the exceptions noted therein. Buyer shall have ten (10) business days to accept in writing the Permitted Exceptions. Buyer has requested the removal of the following exceptions and Seller has agreed to use commercially reasonable best efforts to cause the removal of such exceptions: 1) non-exclusive easement for ingress and egress, parking, and utilities recorded June 11, 1982 in Book 707 of Official Records, Page 10, and 2) pipeline easement recorded April 30, 1965 in Book 477 of Official Records, Page 434 (together, "Disapproved Exceptions"). Seller's failure to remove the Disapproved Exceptions despite its best efforts shall not constitute an event of default hereunder or result in the termination of this Agreement.

6.4 Closing Title Report. As a condition to Closing, the Seller shall deliver to Buyer an updated Preliminary Title Report with copies of the documents underlying the exceptions noted therein, ("Closing Title Report") ten (10) days before the date of anticipated Closing confirming that the Property remains free from all liens, encumbrances, encroachments and other exceptions to title except the Permitted Exceptions and the following: (i) public utility easements necessary for the Improvements, (ii) an Easement and Maintenance Agreement for ingress, egress, and public utility easements burdening the Real Property and benefiting Parcel 2 as depicted in the Parcel Map 2020-01 filed for records in the Office of the Glenn County Recorder on August 24, 2020 in Book 14 of Parcel Maps at Page 8 ("Seller's Property") which shall include ingress and egress rights through both South Street and Cortina Drive; the terms of the Easement and Maintenance Agreement shall be subject to the mutual agreement of Buyer and Seller; and (iii) the Disapproved Exception, to the extent Seller fails to remove such exceptions despite its best efforts Upon Buyer's receipt of a conforming Closing Title Report, the Buyer will notify the Escrow of Buyer's acceptance of the Closing Title Report. As a condition to Closing and immediately before the Closing, the Escrow and Seller shall send Buyer a written confirmation that no additional liens, encumbrances, encroachments, or other exceptions to title has been recorded on Title between the date of Buyer's acceptance of the Closing Title Report and date of Closing.

ARTICLE 7.
REPRESENTATIONS AND WARRANTIES

7.1 Seller's Warranties and Representations. As a material inducement for Buyer to enter into this Agreement, Seller makes the following representations to Buyer:

7.1.1. Work Warranties. Seller warrants to Buyer that the Improvements will be constructed in accordance with the Work Letter, in a workmanlike manner, with all materials, equipment incorporated into the Improvements in good and proper operating condition as of the Closing. Seller's warranty shall not extend to, or provide a remedy for, abuse, defects caused by Buyer's improper alteration or modification of the Improvements, improper or insufficient maintenance, improper operation, and normal wear and tear under normal usage. Seller's warranty obligations shall commence at the time of Closing. If within one (1) year after Closing any portion of the Improvements is found not to be in accordance with the foregoing, Seller shall, after receipt of written notice from Buyer, promptly correct, or cause the Contractor to correct, such work. Seller hereby agrees to execute any documentation reasonably required to effectuate the purpose of this Section. In no event shall Seller be liable to Buyer for any patent construction defects that are not asserted by Buyer within one (1) year after the Closing Date and in no event shall Seller be liable to Buyer for any latent construction defects that are not asserted by Buyer within ten (10) years after Substantial Completion of the Improvements.

7.1.2. Organization. Seller is duly formed and validly existing under the laws of the jurisdiction of its organization and is qualified to transact business in the jurisdiction where the

Property is located.

7.1.3. Authority/Consent. Seller possesses all requisite power and authority, and has taken all actions required by its organizational documents and applicable law, has obtained all necessary consents, to execute and deliver this Agreement and will, by Closing, have taken all actions required by its organizational documents and applicable law to consummate the transactions contemplated by this Agreement. This Agreement and the Seller's Closing Documents (defined in Section 9.1.2) are, or will be when executed and delivered by Seller, legally binding on, and enforceable against, Seller, in accordance with their respective terms, except as the same may be limited by applicable bankruptcy, insolvency, reorganization, receivership and other similar laws affecting the rights and remedies of creditors generally and by general principles of equity. As of the Closing Date, Seller will own fee simple title to the Property subject to all matters of record and no third party has any right to purchase all or any part of the Property.

7.1.4. No Conflict. The execution and delivery of this Agreement by Seller and the consummation by Seller of the transactions contemplated hereby will not: (i) violate any judgment, order, injunction, or decree to which Seller is subject, or (ii) conflict with, result in a breach of, or constitute a default under the organizational documents of Seller or any lease, mortgage, loan agreement, covenant, or other agreement or instrument to which Seller is a party or by which Seller is bound.

7.1.5. Foreign Person. Seller is not a "foreign person," "foreign trust" or "foreign corporation" (as those terms are defined in the Internal Revenue Code of 1986, as amended, and related Income Tax Regulations). Seller and its respective direct owners (other than shareholders if a party is a publicly-traded company), managers, general partners, directors and officers ("Covered Parties") are in compliance with all applicable money laundering laws and regulations including (to the extent applicable), without limitation, the United States Bank Secrecy Act, the United States Money Laundering Control Act of 1986, the United States International Money Laundering Abatement and Anti-Terrorist Financing Act of 200 I, Trading with the Enemy Act (50 U.S.C. Section l et seq., as amended), or any foreign asset control regulations of the United States Treasury Department (31 CFR, Subtitle B, Chapter V, as amended) or any executive order relating thereto. Seller represents and warrants to, and covenants with Buyer that (i) none of its Covered Parties currently are, or shall be at any time during the term hereof, in violation of any applicable laws relating to terrorism or money laundering (collectively, the "Anti-Terrorism Laws"), including without limitation Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001, and regulations of the U.S. Treasury Department's Office of Foreign Assets Control (OFAC) related to Specially Designated Nationals and Blocked Persons (SDNs) (OF AC Regulations), and/or the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Public Law 107-56) ("USA Patriot Act"); and (ii) none of its Covered Parties is or shall be during the term hereof a "Prohibited Person" which is defined as a person or entity owned or controlled by, affiliated with, or acting for or on behalf of, any person or entity that is identified as an SON on the then-most current list published by OF AC at its official website, http://www.treas.gov/offices/eotffc/ofac/sdn/tl l sdn.pdf or at any replacement website or other replacement official publication of such list.

7.1.6. Bankruptcy. No petition in bankruptcy (voluntary or otherwise), assignment for the benefit of creditors, or petition seeking reorganization or arrangement or other action under Federal or State bankruptcy laws is pending against or contemplated by Seller.

7.1.7. Litigation. Seller has not been served with or received written notice of any suit, action, arbitration, or legal or other proceeding or governmental investigation which (1) if determined

adversely to Seller, materially and adversely affects the construction, use or value of the Property; (2) questions the validity of this Agreement or any action taken or to be taken pursuant hereto; (3) involves condemnation or eminent domain proceedings involving the Property; or (4) are not adequately covered by Seller's existing insurance.

7.1.8. Violations. As used in this Agreement, "Legal Requirements" means: all laws, statutes, codes, acts, ordinances, judgments, decrees, injunctions, rules, regulations, permits, licenses, authorizations, directions and requirements of all governments and governmental authorities having jurisdiction over the Property and the operation of the Improvements thereon. To Seller's knowledge there are not (i) any pending or threatened condemnation proceedings affecting the Property, or any part thereof; or (ii) any violations of any other Legal Requirements (including any environmental law) relating to the Property which have not been heretofore been cured.

7.1.9. Environmental Condition. As of the date hereof, Seller has no knowledge of any and has received no notices from any governmental authority of any Hazardous Conditions relating to the Real Property. As used herein, "Hazardous Conditions" refers to the presence on, in or about the Real Property (including ground water) of Hazardous Materials, the concentration, condition, quantity, location or other characteristic of which fails to comply with the standards applicable, relevant, or appropriate under applicable environmental laws. The term "Hazardous Materials" shall mean any chemical, substance, waste, material defined as hazardous, toxic, a pollutant, a contaminant, or otherwise regulated under any environmental law, including but not limited to, a petroleum and petroleum products, waste oil, halogenated and non-halogenated solvents, PCBs and asbestos/asbestos containing materials.

7.1.10. Survival. Each representation and warranty of Seller contained in this Section: (i) is true in all material respects as of the date hereof, (ii) shall be deemed remade by Seller, and shall be true in all material respects, as of the date of Closing, and (iii) shall survive the Closing. The truth and accuracy of each of the representations and warranties, and the performance of all covenants of Seller contained in this Agreement are conditions precedent to the Closing and Close of Escrow. Seller shall immediately notify Buyer of any fact or circumstance that becomes known to Seller, which would make any of the foregoing representations or warranties untrue.

7.2 Buyer's Warranties and Representations. As a material inducement for Seller to enter into this Agreement, Buyer makes the following representations to Seller: Buyer is a community college district duly organized, validly existing, and in good standing under the laws of the State of California; this Agreement is, and all documents executed by Buyer which are to be delivered to Seller at the Closing will be duly authorized, executed and delivered by Buyer; this Agreement is, and all documents executed by Buyer which are to be delivered to Seller at the Closing will be, legal, valid and binding obligations of Buyer. Each of the representations and warranties of Buyer contained in this Section: (i) is true in all material respects as of the date hereof, (ii) shall be deemed remade by Buyer, and shall be true in all material respects as of the date of Closing, and (iii) shall survive the Closing.

ARTICLE 8.
CONDITIONS PRECEDENT TO CLOSING

8.1 Buyer's Conditions to Closing. Buyer's obligation to purchase the Property is subject to satisfaction on or before the Closing Date of the following conditions, any of which may be waived in writing by Buyer in Buyer's sole and absolute discretion:

8.1.1. Title. The Title Company shall have given Buyer its unconditional and irrevocable commitment to issue the ALTA Title Policy in favor of Buyer insuring Buyer as the

fee owner of the Property upon the Closing.

8.1.2. Closing Documents. Seller shall have delivered to Escrow Agent the documents set forth in Section 10.1, below ("Seller's Closing Documents")

8.1.3. Improvements. Seller shall have completed the Improvements in accordance with this Agreement and the Work Letter.

8.1.4. Covenants, Representations and Warranties. Seller shall not be in material breach of any of covenants it has made in this Agreement. All representations and warranties of Seller set forth in this Agreement shall be true and correct in all material respects as if made on the Closing Date.

8.2 Seller's Conditions to Closing. Seller's obligation to sell the Property is subject to satisfaction on or before the Closing Date of the following conditions, any of which may be waived in writing by Seller in Seller's sole and absolute subjective discretion:

8.2.1. Purchase Price. The Purchase Price shall have been fully disbursed to Seller.

8.2.2. Covenants, Representations and Warranties. Buyer shall not be in material breach of any of covenants it has made in this Agreement. All representations and warranties of Buyer set forth in this Agreement shall be true and correct in all material respects as if made on the Closing Date.

8.2.3. Closing Documents. Buyer shall have delivered to Escrow Agent the documents set forth in Section 9.3, below ("Buyer's Closing Documents").

8.3 Failure of a Condition. If the conditions to closing as stated above are not satisfied (or waived by the imposing Party) by the Outside Closing Date, then, Section 11 of this Agreement (Default, Cure, and Remedies) shall apply.

ARTICLE 9.
CLOSING; CLOSE OF ESCROW

9.1 Seller's Deliveries at Closing. At Closing, Seller will deliver to the Escrow of the following:

(i) An original of the Deed executed and acknowledged by Seller, as grantor;

(ii) An original of an Assignment of Intangible Property, in the form attached hereto as Exhibit ("Intangible Assignment"), executed by Seller, as assignor;

(iii) An affidavit directed to Buyer giving Seller's taxpayer identification number and confirming that Seller is not a "foreign person," which affidavit shall be, in form and substance, sufficient to relieve Buyer of any withholding obligation under §1445 of the Internal Revenue Code ("Seller's Foreign Person Affidavit"), together with a duly executed California Franchise Tax Board Form 593-C (the "Cal FIRPTA");

(iv) An assignment, without recourse and on a non-exclusive basis of all contractor and manufacturer warranties regarding the Improvements;

(v) A Certificate of Representations and Warranties from Seller affirming that all representations and warranties of Seller under this Agreement are materially true and correct as of the Closing Date;

(vi) The Architect's "as-builts" for the Improvements;

(vii) The Personal Property documents identified in Section 1.2.1(iii);

(viii) Master Keys, combinations, key cards, and security codes.

(ix) Seller's portion of the Closing Costs (defined in Section 9.5);

(x) Any document that the Escrow Agent or the Title Company may reasonably require for the proper consummation of the transaction contemplated by this Agreement, including but not limited to Mechanics Lien Waivers; and

(xi) Any other items necessary to consummate the transaction contemplated hereby.

9.2 Buyer's Deliveries at Closing. At Closing, Buyer will deliver to the Escrow all of the following:

(i) Buyer's portion of the Closing Costs;

(ii) Reconveyance of the Deed of Trust;

(iii) Any document that the Escrow or the Title Company may reasonably require for the proper consummation of the transaction contemplated by this Agreement; and

(iv) Any other items necessary to consummate the transaction contemplated hereby

9.3 Closing Procedure. Seller and Buyer shall cause the following to occur at Closing on the Closing Date:

9.3.1. The Deed, duly executed and acknowledged by Seller, shall be recorded in the applicable land records.

9.3.2. The Escrow shall as of the Closing Date deliver to Buyer the items listed in Section 9.1(ii) – (xii), the Owner's ALTA Title Policy.

9.3.3. The Escrow Agent shall as of the Closing Date deliver the Closing Payment to Seller, reduced by any Liquidated Damages assessed pursuant to Section 4.2 of this Agreement.

9.4 Prorations. All items of income and expense relating to the Property, (including, without limitation, taxes and assessments), other than interest on any deed of trust, other lien to be paid off at or prior to the Closing, the Purchase Price in Escrow, premiums on any policy of insurance which shall not continue after the Closing, or other expenses which shall not continue after the Closing, shall be prorated between Buyer and Seller as of the Closing Date in the customary manner for real estate transactions in Glenn County, California.

9.5 Closing Costs. Costs of the Closing ("Closing Costs") shall be allocated as follows:

(i) Buyer shall pay the costs of recording the Deed;

(ii) Seller shall pay all documentary transfer taxes imposed in connection with transferring the property and recording the Deed including City and County transfer taxes.

(iii) Buyer and Seller shall each pay one-half of the premium for the ALTA Title Policy

(iv) Buyer and Seller shall each pay one-half of the fees of the Escrow.

(v) Buyer and Seller shall each pay their respective attorneys' fees and other costs, fees or expenses.

ARTICLE 10.
CONDEMNATION

10.1 Condemnation. If Seller receives written notice from a condemning authority advising of a condemnation of all or any portion of the Property ("Condemnation Notice"), Seller shall immediately advise Buyer of same in writing and deliver therewith a copy of the Condemnation Notice.

10.2 Buyer Election. Within ten (10) business days after Buyer's receipt of the Condemnation Notice, Buyer shall notify Seller of its election to either (i) terminate this Agreement and the Escrow

with the right of reimbursement of the Purchase Price disbursed to the Seller or (ii) purchase the Property with the Purchase Price adjusted for the portion of the Purchase Price not disbursed to Seller as of the Condemnation Notice and Buyer receives an assignment of condemnation proceeds as set forth herein. If Buyer elects to terminate this Agreement, Escrow shall immediately terminate upon Sellers' receipt of Buyer's notice of election to terminate this Agreement, and Escrow Agent shall thereupon promptly return all documents, items and non-distributed monies in its possession to the Party who deposited same with Escrow Agent; and Seller shall return to the Buyer all Purchase Price Payments. In the event of such termination, each party shall pay one half (½) of the Escrow fees. If Buyer elects to purchase the Property, Seller shall transfer to Buyer at the Close of Escrow all proceeds from condemnation or Sellers' right to receive all such proceeds. If Buyer fails to notify Seller of its election under this Section 10.1, Buyer shall be deemed to have elected to purchase the Property. The terms "condemnation" or "condemned" as used in this section shall mean the exercise of, or intent to exercise, the power of eminent domain expressed in writing, as well as the filing of any action or proceeding for such purpose, by any person, entity, body, agency or authority having the right or power of eminent domain ("condemning authority"), except for the Buyer.

ARTICLE 11.
DEFAULT, CURE AND REMEDIES

11.1 Default and Cure. The failure by either Party to observe or perform any of the covenants or provisions of this Agreement, where such a failure shall continue for a period of five (5) days after written notice thereof from the non-breaching party to the breaching party, shall constitute a breach under this Agreement. If the nature of the breaching party's default is non-monetary and such that more than five (5) days are reasonably required for its cure, then the breaching party shall not be deemed to be in default if the breaching party shall commence such cure within said five (5) day period and thereafter diligently prosecute such cure to completion, which completion shall occur not later than thirty (30) days from the date of such notice or not later than the Outside Closing Date if the breach relates to Seller's failure to substantially complete the Improvements. If a breaching party fails to cure or commence to cure the default after notice, the non-breaching party may, without terminating this Agreement, suspend performance under this Agreement.

11.2 Remedies. Buyer and Seller acknowledge and agree that Seller is constructing the improvements to accommodate Buyer's business requirements. Seller would not construct the improvements but for the agreement of Buyer under this Agreement and Buyer would place the Purchase Price in Escrow but for the Agreement of Seller under this Agreement. If either Party breaches its obligations hereunder, then the non-breaching party shall have the right of specific performance against the breaching party. In addition to an action for specific performance, the non-breaching party may commence judicial reference proceedings for damages pursuant to Section 12.3 of this Agreement. Each of the Party's rights and remedies under this Agreement shall be cumulative and no one of them shall be exclusive of the other except as otherwise provided in this Agreement. For action for specific performance, the prevailing party shall be entitled to all reasonable attorneys' fees and costs. In no event shall either party be liable under this Agreement to the other party for lost profits or punitive, consequential, or indirect damages.

11.3 Mandatory Non-Binding Mediation and Judicial Reference. Claims, disputes or disagreements arising out of this Agreement shall be subject to mandatory non-binding mediation prior to initiation of any other dispute resolution procedure provided for under this Agreement or arising by operation of law. Non-binding mediation shall be conducted under the Commercial Mediation Rules of Judicial Arbitration and Mediation Services ("JAMS") at the JAMS regional office in Sacramento, California. The mediator shall be selected by mutual agreement of Buyer or Seller; the mediator shall be a retired judicial officer. If the Buyer and Seller are unable to reach mutual agreement for selection of a mediator, the mediator shall be appointed pursuant to Code of Civil Procedure §1281.6. Claims seeking

specific performance shall be determined by the Superior Court for Shasta County. Any other disputes, claims and controversies arising out of this Agreement or the transactions contemplated hereby shall be heard by a referee and resolved by judicial reference pursuant to California Code of Civil Procedure Sections 638 et seq. The referee shall be a retired California state court judge with experience in relevant real estate matters. The Parties shall not seek to appoint a referee that may be disqualified pursuant to California Code of Civil Procedure Section 641 or 641.2 without the prior written consent of all Parties. If the parties are unable to agree upon a referee within ten (10) calendar days after one Party serves a written notice of intent for judicial reference upon the other Party or Parties, then the referee will be selected by the court in accordance with California Code of Civil Procedure Section 640(b). The referee shall render a written statement of decision and shall conduct the proceedings in accordance with the California Code of Civil Procedure, the Rules of Court, and California Evidence Code, except as otherwise specifically agreed by the parties and approved by the referee. The referee's statement of decision shall set forth findings of fact and conclusions of law. The decision of the referee shall be entered as a judgment in the court in accordance with the provisions of California Code of Civil Procedure Sections 644 and 645. The decision of the referee shall be appealable to the same extent and in the same manner that such decision would be appealable if rendered by a judge of the superior court.

ARTICLE 12.
MISCELLANEOUS

12.1 Assignment; Successors and Assigns. Buyer shall not voluntarily or by operation of law assign or transfer any rights, interests and/or obligations hereunder prior to the Closing without Seller's express prior consent in writing, which consent shall not be unreasonably withheld. Notwithstanding the foregoing, Buyer shall have the right to assign its rights under this Agreement, without the consent of Seller to an "Affiliate". For purposes of this Agreement, an "Affiliate" shall mean an entity controlled by, or under common control with, Buyer. In the event that Buyer assigns its rights under this Agreement to an Affiliate, Buyer shall provide to Seller not less than five (5) days' prior written notice. Such assignment of Buyer's rights under this Agreement shall not relieve Buyer of its obligations hereunder. Except as allowed by this Section, neither this Agreement nor the rights of either Party hereunder may be assigned by either Party. This Agreement shall be binding upon, and inure to the benefit of, the Parties hereto and their respective successors, heirs, administrators and permitted assigns.

12.2 Notices. Any notice, consent or approval required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been given upon (i) hand delivery, (ii) one business day after being deposited with Federal Express or another reliable overnight courier service for next day delivery, (iii) electronic mail transmission (except that if the date of such transmission is not a business day, then such notice shall be deemed to be given on the first business day following such transmission), or (iv) two business days after being deposited in the United States mail, registered or certified mail, postage prepaid, return receipt required, and addressed as follows:

If to Buyer:

Butte-Glenn Community College District
3536 Butte Campus Drive
Oroville, CA 95965
Attn: Andrew Suleski, Vice President for Administration
Telephone: (530) 895-2353
E-mail: suleskian@butte.edu

and

Butte-Glenn Community College District
3536 Butte Campus Drive
Oroville, CA 95965
Attn: Kimberly Jones, Director of Facilities Planning and Management
Telephone: (530) 879-6144
E-mail: joneski@butte.edu

With a copy to:

Public Agency Law Group
875 N. Douglas Street
El Segundo, CA 90245
Attn: Sherman Wong, Esq.
Telephone: (310) 640-0800
E-mail: swong@palg.net

If to Seller:

Vista La Mesa, LLC
PO Box 772
Chico, California 95927
Attn: James Seegert
Telephone: (530) 891-4533
E-mail: james@modernbuildinginc.com

With a copy to:

Odu & Associates, PC
31805 Temecula Valley Parkway #720
Temecula, CA 92592
Attn: Nkechi C. Odu, Esq.
Telephone: (951) 215-6212
E-Mail: nkechi@odulaw.com

If to Escrow Agent:

Escrow
_____
_____
Attn: _____
Telephone: (___) ___-_____
E-mail: _____

or such other address as either Party may from time to time specify in writing to the other.

12.3 Brokers; Consultants. Seller and Buyer each represents to the other that it has employed no broker or finder in connection with the transaction contemplated hereby and agrees to indemnify the other and its successors hereunder against, and hold such indemnified party and its successors hereunder harmless from, any and all actions, suits, claims, demands, debts, losses, liabilities or expenses (including without limitation reasonable attorneys' fees and costs of investigation and defense) arising from or in connection with any brokerage or finder's fees, charges or commissions which are (or are claimed to be) payable in connection with the transaction contemplated hereby by reason of the actions (or alleged actions) of such indemnifying party. The provisions of this Section 12.3 shall survive the Closing or termination of this Agreement.

12.4 California Law; Jurisdiction. This Agreement shall be construed under and in accordance with the laws of the State of California. Each party to this Agreement agrees that the courts located in the

County of Glenn, State of California shall have sole and exclusive personal jurisdiction over each of them for the purpose of litigating any dispute, controversy, or proceeding arising out of or related to this agreement. In connection thereto, the parties hereby waive any claim of jurisdiction in another state and specifically consent to personal jurisdiction in the County of Glenn, State of California.

12.5 Severability. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereto, and the remainder of the provisions of this Agreement shall continue in full force and effect without impairment.

12.6 Waiver. The waiver by either party of a breach of any provision of this Agreement shall not be deemed a waiver of any subsequent breach whether of the same or another provision of this Agreement.

12.7 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

12.8 No Obligation to Third Parties. The execution and delivery of this Agreement shall not be deemed to confer any rights upon, nor obligate either of the parties hereto to, any person or entity not a party to this Agreement.

12.9 Amendments in Writing. The provisions of this Agreement may not be amended or altered except by a written instrument duly executed by each of the parties hereto.

12.10 Interpretation. Whenever the context hereof shall so require, the singular shall include the plural, the male gender shall include the female gender and the neuter, and vice versa. The headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation hereof. As used herein, the term "Person" shall mean and refer to any individual, corporation, partnership, limited liability company, trust, governmental entity, or quasi-governmental entity.

12.11 Attorneys' Fees. If legal action is commenced to enforce or to declare the effect of any provision of this Agreement, the prevailing Party shall be entitled to recover from the non-prevailing Party reasonable attorneys' fees and other litigation costs. In addition to the foregoing award of attorneys' fees and other litigation costs to the prevailing Party, the prevailing Party in any lawsuit on this Agreement shall be entitled to its attorneys' fees and other litigation costs incurred in any post-judgment proceedings to collect or enforce the judgment. This provision is separate and several and shall survive the merger of this Agreement into any judgment on this Agreement. This provision shall survive Closing or termination of this Agreement.

12.12 Further Acts. Each of the Parties shall execute such other and further documents and do such further acts as may be reasonably required to effectuate the intent of the Parties and carry out the terms of this Agreement.

12.13 Time for Performance. Wherever the time for performance of any obligation hereunder or if, pursuant to this Agreement, a party must act by a particular time, or an act is effective only if done by a particular time, and the last date for the performance of such obligation or the doing or effectiveness of such act falls upon a day other than a business day, the time for the performance of such obligation or the doing or effectiveness of such act shall be extended to the next succeeding business day. If the Closing Date shall fall on a business day that does not immediately follow a business day, the Closing Date shall be postponed to the next succeeding business day that immediately follows a business day. As used herein, the term "business day" shall mean any day which is not a Saturday, Sunday, national or state holiday, or day on which the Office of the County Recorder of Glenn County is closed or otherwise not accepting documents for recording.

12.14 Time of Essence. Time is expressly made of the essence of this Agreement.

12.15 Reasonable Consent. Whenever a Party's approval or consent is required by this Agreement, such approval or consent shall not be unreasonably withheld or delayed.

12.16 Entire Agreement. This Agreement and the following Exhibits set forth the entire agreement and understanding between the Parties concerning the subject matter hereof, superseding all prior negotiations, discussions, understandings or agreement relating to the subject matter hereof. Exhibits forming a part of this Agreement are:

Exhibit A Real Property Description
Exhibit B Work Letter
Exhibit WL-1 Glenn Center Schematic Site Plan, April 10, 2020 ("Schematic Site Plan")
Exhibit WL-2 Glenn Center Schematic Floor Plan, April 10, 2020 ("Schematic Floor Plan")
Exhibit WL-3 Glenn Center Furniture Layout Plan, April 28, 2020 ("FFE Layout")
Exhibit WL-4 Standard Materials/Equipment, February 4, 2020 ("Materials Standards")
Exhibit C Performance Bond
Exhibit D Labor and Materials Payment Bond
Exhibit E Deed of Trust

IN WITNESS WHEREOF, the Parties have executed this Purchase and Sale Agreement as of the Effective Date.

SELLER:
VISTA LA MESA, LLC, a California limited liability company

By: _____
Name: _____
Title: _____

BUYER:
BUTTE-GLENN COMMUNITY COLLEGE DISTRICT

By: _____
Name: _____
Title: _____

EXHIBIT A
[REAL PROPERTY LEGAL DESCRIPTION]

APN: PORTION 040-310-013-000

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF GLENN, STATE OF CALIFORNIA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL ONE:

PARCEL 1 AS SHOWN ON PARCEL MAP NO. 2020-01 FILED FOR RECORD IN THE OFFICE OF THE GLENN COUNTY RECORDER ON AUGUST 24, 2020 IN BOOK 14 OF PARCEL MAPS AT PAGE 8.

RESERVING THEREFROM THAT NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AND PUBLIC UTILITY PURPOSES OVER THE EASTERLY PORTION OF SAID LAND AS SHOWN ON PARCEL MAP NO. 2020-01 FILED FOR RECORD IN THE OFFICE OF THE GLENN COUNTY RECORDER ON AUGUST 24, 2020 IN BOOK 14 OF PARCEL MAPS AT PAGE 8.

SAID EASEMENT IS APPURTENANT TO AND FOR THE BENEFIT OF PARCEL 2 AS SHOWN ON PARCEL MAP NO. 2020-01 FILED FOR RECORD IN THE OFFICE OF THE GLENN COUNTY RECORDER ON AUGUST 24, 2020 IN BOOK 14 OF PARCEL MAPS AT PAGE 8.

PARCEL TWO:

A RIGHT OF WAY FOR DRIVEWAY ACCESS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF THE EAST ONE-HALF OF THE EAST ONE HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 28 FROM WHICH THE NORTHEAST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHEAST QUARTER BEARS SOUTH 89° 03' 45" EAST, 330.64 FEET; THENCE FROM SAID POINT OF BEGINNING SOUTH 00°

52' 36" WEST, 160.00 FEET; THENCE NORTH 89° 03' 45" WEST, 64.44 FEET TO A POINT ON A NON TANGENT CURVE FROM WHICH THE RADIUS POINT OF SAID CURVE BEAR NORTH 77° 01' 16" WEST,

200.00 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE 42.24 FEET THROUGH CENTRAL ANGLE OF 12° 06' 05" TO THE END OF SAID CURVE; THENCE ALONG A TANGENT TO SAID CURVE NORTH 00° 52' 36" EAST, 98.08 FEET TO THE BEGINNING OF A CURVE CONCA VE TO THE SOUTHWEST HAYING A RADIUS OF 20.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE

31.40 FEET THROUGH A CENTRAL ANGLE OF 89° 56' 21" TO THE END OF SAID CURVE; THENCE SOUTH 89° 03' 45" EAST 79.98 FEET TO THE POINT OF BEGINNING.

PARCEL THREE:

A RIGHT OF WAY FOR DRIVEWAY ACCESS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

COMMENCING AT A POINT ON THE NORTH BOUNDARY OF SAID SECTION 28 FROM WHICH THE NORTHEAST CORNER OF THE SAID NORTHWEST QUARTER OF THE NORTHEAST QUARTER BEARS SOUTH 89° 03' 45" EAST, 411.09 FEET; THENCE SOUTH 78° 18' 49" WEST, 99.94 FEET TO THE TRUE POINT OF BEGINNING; THENCE FROM SAID TRUE POINT OF BEGINNING SOUTH 00° 52' 36" WEST,

105.16 FEET; THENCE SOUTH 89° 03' 45" EAST, 117.80 FEET TO A POINT ON A NON-TANGENT CURVE FROM WHICH THE RADIUS POINT OF SAID CURVE BEAR NORTH 89° 33' 43" WEST, 200.00 FEET; THENCE SOUTHERLY ALONG SAID CURVE 33.31 FEET THROUGH A CENTRAL ANGLE OF 09° 32' 29" TO THE END OF SAID CURVE; THENCE LEAVING SAID CURVE ON A NON-TANGENT LINE NORTH

89° 03' 45" WEST, 133.56 FEET; THENCE NORTH 00° 52' 36" EAST. 133/65 FEET; THENCE NORTH 78° 18' 49" EAST, 20.49 FEET TO THE TRUE POINT OF BEGINNING.

[END OF DOCUMENT]

EXHIBIT B
[WORK LETTER]

EXHIBIT B
CONSTRUCTION WORK LETTER

ARTICLE 1. THE SCOPE WORK

1.1 Site Improvements: Provide site improvements utilizing the Exhibit WL-1 Glenn Center Schematic Site Plan ("Schematic Site Plan"). Site improvements will take their cues from Welding and Manufacturing Building located on the main campus in Oroville, California. Key features and issues requirements for the development of the site, include, but are not limited to:

- 1.1.1. Building and site that is welcoming, inviting from Cortina Drive and I-5 corridor
- 1.1.2. Parking spaces as per Exhibit WL-1 Schematic Site Plan
  - 1.1.2.1. Type "A" Asphalt Concrete
    - 1.1.2.1.1. Standard Section – 3" AC; 9" Class 2 AB; 12" Compacted Subgrade or as recommended by the Geotechnical Engineering Investigation Report
    - 1.1.2.1.2. Concrete vertical curbs where required
    - 1.1.2.1.3. No wheel stops/Parking blocks
    - 1.1.2.1.4. All striping, lettering, and symbols on asphalt and concrete shall be painted (Exception to Exhibit WL-4 Materials Standards)
  - 1.1.2.2. Ensure approximately 150 parking spaces provided will meet the local jurisdiction's parking requirements for the subject 14,000 SF education center building and an approximate additional 35,000 square feet of future B Occupancy buildings.
  - 1.1.2.3. Provide all accessible parking as close to building entrance as possible.
  - 1.1.2.4. Provide vehicle charging stations as required by local Department of the State Architect standards.
    - 1.1.2.4.1. District shall provide required bollard mounted EV Charge Station equipment, hardware, cord and charging ports;
    - 1.1.2.4.2. Seller's Contractor to provide required two independent 40 Amp branch circuits and distribution conduit and conductors per charging station
  - 1.1.2.5. Site Concrete
    - 1.1.2.5.1. Non-Traffic Rated Sidewalks
      - i. 4" thick with 2" added thickened edges
      - ii. 4" Cl. 2 Aggregate Base
      - iii. #3 Rebar 18" O.C.
      - iv. Score joints every 5'-0" and expansion joints 40'-0" maximum spacing
    - 1.1.2.5.2. Traffic rated concrete in accordance with Exhibit WL-4 Materials Standards (Trash Enclosure)
  - 1.1.2.6. Trash and Recycling Enclosure
    - 1.1.2.6.1. Locate fully enclosed and secure trash and recycling for facility with easy access for service vehicles in accordance with Exhibit WL-1 Schematic Site Plan.
    - 1.1.2.6.2. Block structure with metal service gates and man gate
    - 1.1.2.6.3. Concrete service apron in front of service doors
    - 1.1.2.6.4. Covered metal roofing system
    - 1.1.2.6.5. Enclosed as necessary to provide a secured structure
  - 1.1.2.7. Bike racks located in close proximity to front entry into building

1.1.2.8. Accessibility clear wayfinding and directional signage from pedestrian path of travel from Cortina Drive public right-of-way to building entrance, accessible parking and accessible exit pathway from building required exits to public right-of-way in accordance with applicable code and Department of the State Architect.

1.1.3. Emergency access to building site

1.1.3.1. Provide northerly emergency exit utilizing existing northerly recorded ingress and egress easement from the northeast corner of the property to South Street as depicted on the Exhibit WL-1 Schematic Site Plan.

1.1.3.2. Improve the ingress/egress easement area with compacted aggregate road base rock from the parking lot to property line. Easement area from parcel property line to South Street can remain unimproved.

1.1.3.3. Install lockable pipe gate at the point where the parking lot ends and the easement to South street continues as per WL-1 Schematic Site Plan.

1.1.4. City of Orland sewer, water, and storm drain utilities; PG&E & AT&T services

1.1.4.1. Provide city approved storm drainage system utilizing either an existing drainage canal to the west of the property or through underground leach field systems. On-site bio cell(s) should be the last alternative.

1.1.4.2. Pacific Gas & Electric (PG&E) gas and electric utility service meeting the requirements for the building and site including, without limitation:

1.1.4.2.1. Provide 277/480V electric service voltage

1.1.4.2.2. Standard Net Energy Metering (NEM) Interconnection Agreement with PG&E for interconnection of carport and/or Roof Mounted Photovoltaic (PV) to the PG&E grid

1.1.4.3. Exterior site lighting shall take its cues from District's Main Campus Welding and Manufacturing Building. Exterior site lighting circuits shall be controllable and programable by the District's Building Automation System (BAS) for scheduling and light level enabling.

1.1.4.4. Provide 120 V power for District furnish message board to be installed adjacent to the I-5 Corridor in the southwest corner of the site in accordance with WL-1 Schematic Site Plan.

1.1.4.5. Underground utility distribution installed in a way the underground is away from building and future building footprints with consideration for minimizing disruption for future repair, maintenance work and new construction.

1.1.4.6. AT&T fiber terminated on a fiber network switch in the Building Data Room. AT&T service to Building is essential to maintain the District's connections to its infrastructure of buildings and to CENIC, a high-capacity network designed to meet the unique requirements of a vast majority of K-20 students together with educators, researchers, and others at vital public-serving institutions.

1.1.4.7. Infrastructure for future site utilities

1.1.4.7.1. Provide exterior PG&E meter panel separate of the building's switchgear

1.1.4.7.2. Provide electrical pathways from the meter panel for future building pad development that extends beyond the hardscape

1.1.4.7.3. Provide a minimum of four (4) four-inch conduits under roadways/hardscape as required to feed electrical, data/communications to the site's future building pad areas

1.1.4.7.4. Provide minimum two (2) four-inch conduits and four two inch conduits for future electrical and data communications from the Electrical Room to the outside of the building

1.1.4.7.5. Provide some additional conduits adjacent to meter panel for future PV tap pathway/AC disconnect

1.1.4.8. Landscaping and Irrigation

1.1.4.8.1. Minimize ongoing maintenance requirements through careful selection of planting and irrigation including, without limitation, drought tolerant and native plant materials.

1.1.4.8.2. Landscaping and irrigation to take cues from Main Campus Welding and Manufacturing Building including, but not limited to:

i. Hunter IMMS compatible irrigation controller with remote programming capability
ii. Hunter valves w/ isolation valves and unions
iii. Two wire system
iv. Conduits for future use under hardscape between landscape areas

1.1.5. Photovoltaic solar generating system(s) (PV) shall meet the following minimal requirements:

1.1.5.1. PV system shall include Revenue Grade Metering of aggregate PV System energy production along with inverter-level monitoring with connection to building's network in Data Room.

1.1.5.2. Building Roof Mounted, Carport Photovoltaic or a combination of the two Solar Power Generating Systems are permissible.

1.1.5.2.1. Parking Lot PV structures shall provide shade to parking stalls and shall be oriented to take advantage of seasonal sun angles as required to maximize efficiency of the photovoltaic panels.

1.1.5.2.2. Parking Lot PV structures shall be DSA Pre-Checked designed approved.

1.1.5.2.3. Rooftop PV panels shall not be installed where shaded by rooftop mechanical equipment or building components and shall be oriented to take advantage of seasonal sun angles and to maximize efficiency of the photovoltaic panels.

1.1.5.2.4. Control panels, meters and PV infrastructure shall be accessible for maintenance.

1.1.5.2.5. Balance of PV system electrical and data equipment should be located adjacent to Electric Room on the south side of the parcel adjacent to the south property line inside a chain link fence structure as per the Schematic Site Plan. Fenced structure shall take its cues from similar installations in Main Campus Lot 1E.

1.1.5.2.6. Data conduit shall be provided from electrical and data fenced area into Building Data Room as required to meet the requirement for data logging and metering of solar production.

1.1.5.2.7. Provide infrastructure pathways (underground conduit) necessary for expansion of PV in the parking lot to serve future building sites on the site.

1.1.5.3. The PV shall have a generating capability that will offset the building PG&E electrical utility service costs annually. Annual PV generating capability needed to offset electrical utility service costs shall be substantiated by 1) an energy consumption model of the proposed building; 2) a PV generation model of the proposed PV system; and 3) a cost avoidance analysis to show that the proposed PV system is sized to offset NEM energy charges in a

given true-up year, in order to meet the District's intent of not adding on-going utility costs as much as possible.

1.1.5.3.1. PV system shall be sized to offset costs for the consumption model at 110% based on the energy consumption model.

1.1.5.3.2. Cost avoidance analysis shall utilize the proposed rates and time of use schedules "B" rates as those will be succeeding the "A" rates and times of use the District is currently on starting in November 2020 for new services.

1.1.5.3.3. Electrical building loads plus 10% shall be substantiated by engineered building electrical load calculations. Building load calculations shall be based on the building being used Monday through Friday; 7:00 am to 10:00 pm in the evening. The building will be closed weekends and Monday through Friday approximately (10) days annually for holidays.

1.1.5.3.4. Seller's Contractor shall provide a minimum 10-year warranty for solar system that shall include shall include, but not necessarily be limited to guarantees for **solar panel** performance and equipment. **Panel** performance **warranty** will **guarantee** 90% production at **10** years and 80% at 25 years. Equipment **warranty** will g**uarantee 10**-12 years without failing.

ARTICLE 2. BUILDING SHELL

2.1 Building Shell Improvements: Building Shell Improvements shall be designed to provide an approximately 14,000 OGSA (Outside Gross Area) building utilizing the building space plan provided on Exhibit WL-2 Schematic Floor Plan as a basis for design. The exterior should reflect up-to-date architectural design and takes its cues from the Kinesiology and Athletic Performance Center located on the main campus in Oroville, California. The building shall have one primary means of ingress and egress with other required exists utilized for emergency egress only. The I-5 corridor side of the building shall have a "building front" appearance and appropriately lit signage on west elevation visible from the freeway. The building front shall also have an appealing "building front" with appropriate non-lit signage. Final building shell improvements are those approved by District and Seller pursuant to the Purchase Sale Agreement including, but not limited to:

2.2 Building Substructure in accordance with Exhibit WL-4 Materials Standards

- 2.2.1. Standard foundations (poured concrete, strip and spread footings)
- 2.2.2. 5-inch thick reinforce slab-on-grade (Exception to Exhibit WL-4 Materials Standards)
- 2.2.3. At grade ingress and egress (no ramps for building ingress and egress)

2.3 Building Shell Construction

- 2.3.1. Exterior wall construction metal and/or wood stud; insulated
- 2.3.2. Roof construction metal and/or wood; insulated
- 2.3.3. Exterior enclosure
  - 2.3.3.1. Combination of tri-coat stucco system and metal wall and soffit panels that takes its cues from Kinesiology and Athletic Performance Center located on the main campus in Oroville, California and the Skyway Center located at 2480 Notre Dame Blvd, Chico, California.
    - 2.3.3.1.1. The building exterior shall use a similar palate of colors and materials as found on the Kinesiology and Athletic Performance Center.

2.3.3.1.2. Stucco shall not be painted in accordance with Exhibit WL-4 Materials Standard with exception being given to bright colors.

2.3.3.2. All exterior storefront and glazing framework shall be aluminum. All glass systems shall be insulated, double pane glass. Thermal break frame construction is preferred but will not be required. This is an exception to Exhibit WL-4 Materials Standards.

2.3.3.3. The primary means of ingress and egress shall have an automatic door opening system (Powered Operated Doors) installed on one of the two double entry doors as required to meet accessibility. Main entrance is not required to have a proximity card reader lock type. This is an exception to Exhibit WL-4 Materials Standards.

2.3.4. Built-up roofing systems shall include, but not necessarily be limited to the following criteria:

2.3.4.1. Basis of Design Modified Bitumen Roofing (MBR) or Thermoplastic Polyolefin TPO roofing systems

2.3.4.2. Roofing systems shall be designed to 30-year standards and have a 30-year watertight warranty from one manufacturer. Multiple warranties will not be allowed.

2.3.4.3. Systems shall be a two ply using a protective base sheet or underlayment.

2.3.4.3.1. Layers shall be applied in accordance with manufacturer's recommendation

2.3.4.3.2. Inspections are required by the system manufacturer a minimum of three days per week during the installation.

2.4 Building exterior lighting circuits shall be controllable and programable to the District's Building Automated System (BAS) for scheduling and light level enabling as provided in the Site Improvement criteria.

2.5 Building exterior lit and non-lit signage shall take its cues from District's Chico Center located at 2320 Forest Avenue, Chico. Building exterior signage shall include, without limitation:

2.5.1. East Elevation: Locate "Butte College Glenn Center" non-lit signage on the parapet wall at the south end of the elevation. Butte College lettering 20" height; Glenn Center 18" height. Locate "GC" (District building identification lettering) and the building address on the parapet wall at the north end of the elevation. GC lettering and address numbers 12" height.

2.5.2. West Elevation: Locate "Butte College Glenn Center" halo lit channel lettering and 6' diameter Panaflex logo on the parapet wall at the south end of the elevation. Butte College lettering 24" height; Glenn Center 20" height.

2.5.3. South Elevation: Locate "Butte College Glenn Center" non-lit signage on the parapet wall at the west end of the elevation. Butte College lettering 24" height; Glenn Center 20" height.

2.5.4. North Elevation: Locate "Butte College Glenn Center" non-lit signage on the parapet wall to the west of main entrance. Butte College lettering 24" height; Glenn Center 18" height.

ARTICLE 3. INTERIOR IMPROVEMENTS

3.1 Interior Improvements: The Interior Improvements will include certain interior improvements and related space layout constructed pursuant to:

3.1.1. Exhibit WL-2 Glenn Center Schematic Floor Plan ("Schematic Floor Plan")

3.1.2. Exhibit WL-3 Glenn Center Furniture Layout Plan ("FFE Layout")

3.1.3. Exhibit WL-4 Standards Materials and Equipment ("Material Standards")

3.2 Rooms for the building interior shall also take their cues ("Visual Listening") from the following Main Campus Buildings and correlating rooms unless otherwise noted. Glenn Center rooms as provided on the Schematic Floor Plan are listed first followed by the correlating "Visual Listing" rooms the design shall take their cues. Criteria for rooms are furnished to provide clarity and are not meant to be comprehensive.

3.2.1. Computer Lab – Reference Welding and Manufacturing Computer Classroom No. 114

3.2.1.1. Exception – flooring shall be carpet squares as per *General Note*s herewith.

3.2.1.2. Provide and install PolyVision whiteboards as per *General Notes* herewith and Exhibit WL-3 FFE Layout plan.

3.2.1.3. Provide backing for District furnished and installed tackboards. Tackboard as per classroom arrangement and Exhibit WL-3 FFE Layout plan.

3.2.1.4. Provide and install cable tray for data and electric as per Classroom No. 114 arrangement. Computer Classroom data cabling quantity to cable trays shall be one (1) Cat6 cable per Student Load plus 10% as per the Building Standards.

3.2.1.4.1. Open Computer Lab (24 Students) shall have cable tray for data and electric installed on the West wall as per Exhibit WL-3 FEE Layout

3.2.1.4.2. Computer Lab (32 Students) shall have cable tray for data and electric installed on the north and south walls typical of Welding and Manufacturing Computer Classroom No. 114

3.2.1.5. Provide and install two (2) four quad data drops with ports and duplex electric outlets on the corridor demising wall, side wall and back wall. Provide and install one (1) four quad data drop with ports and duplex electric outlets on the front wall opposite the podium as per the classroom arrangement.

3.2.1.6. Provide and install one (1) wall phone plate with one (1) data outlet terminated and tested within 10 feet of the instructor podium. Phone provided by District.

3.2.1.7. Provide and install all AV/IT/Smart Classroom cabling/wiring installations in accordance with classroom arrangement, Exhibit WL-4 Material Standards and *General Notes* herewith. AV and IT equipment are District furnished and installed and include the podium, projector (excluding the projector mount), speakers, pull down screen, computers and phone. Seller's Contractor shall provide all backing for District furnished equipment. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to "plug and play" all District furnished equipment.

3.2.2. Classroom Nos. 3, 4, 5 & 6 - Reference Kinesiology and Athletic Performance Center Rooms Nos. 214, 215 and 216

3.2.2.1. Provide and install PolyVision whiteboards and as per *General Notes* herewith and Exhibit WL-3 FFE Layout plan.

3.2.2.2. Provide backing for District furnished and installed tackboards. Tackboard as per classroom arrangement and Exhibit WL-3 FFE Layout plan.

3.2.2.3. Provide and install data cabling and data ports and duplex electric outlets as per the Building Standards including, but not limited to, two (2) quad drops with data ports and electric on the back wall; one (1) quad drop with data ports and electric on each side wall, and one (1) quad drop with data ports on the corridor wall as per classroom arrangement.

3.2.2.4. Provide one (1) wall phone plate with one (1) data outlet terminated and tested within 10 feet of the instructor podium. Phone provided by District.

3.2.2.5. Provide and install all AV/IT/Smart Classroom cabling/wiring installations in accordance with classroom arrangement, Exhibit WL-4 Material Standards and *General Notes* herewith. AV and IT equipment are District furnished and installed and include the podium, projector (excluding the projector mount), speakers, pull down screen, computers and phone. Seller's Contractor shall provide all backing for District furnished equipment. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to "plug and play" all District furnished equipment.

3.2.3. Classroom No. 2 - Kinesiology and Athletic Performance Center Rooms Nos. 214, 215 and 216

3.2.3.1. Provide and install PolyVision whiteboards and as per *General Notes* herewith and Exhibit WL-3 FFE Layout plan. Ensure there is not a whiteboard "butt joint" in the center of the classroom as per the FEE Layout Plan.

3.2.3.2. Provide and install data cabling with data ports and duplex electric outlets as per the Building Standards including, but not limited to, two (2) quad drops with data ports and electric on the back wall; one (1) quad drop with data ports and electric on each side wall, and one (1) quad drop with data ports on the corridor wall as per classroom arrangement.

3.2.3.3. Provide one (1) wall phone plate with one (1) data outlet terminated and tested within 10 feet of the instructor podium. Phone provided by District.

3.2.3.4. Provide and install all AV/IT/Smart Classroom cabling/wiring installations in accordance with classroom arrangement, Exhibit WL-4 Material Standards and *General Notes* herewith. AV and IT equipment are District furnished and installed and include the podium, projector (excluding the projector mount), speakers, pull down screen, computers and phone. Seller's Contractor shall provide all backing for District furnished equipment. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to "plug and play" all District furnished equipment.

3.2.3.4.1. Classroom exception:

i. Classroom No. 2 shall have two separate projectors and pull down screen as per Exhibit WL-3 FFE Layout Plan

3.2.4. Bio Lab – Reference Physical Science Building Science Lab Classroom 108 (PS 108)

3.2.4.1. Provide and install cabinets; countertops; electrical including, without limitation, dedicated outlets provided herewith; mechanical including fume hoods and room exhaust and conditioning systems; plumbing as provided herewith including, without limitation, hot and cold water, deionized water, gases, compressed air, vacuum, waste and vent for Chemistry Lab chemical waste, drainage for fume hoods, floor drain for eye wash and shower, and diverters in strict accordance with Physical Science Building Lab Classroom 108 installed systems and millwork.

3.2.4.1.1. Student islands cabinetry to provide drawers and doors in strict accordance with PS108 cabinet arrangement including locking student storage drawers. All cabinet doors to be provided and installed with locks.

3.2.4.1.2. District to provide and install 20 student bookbag storage lockers in corridor outside Bio Lab as per WL-3 FFE Layout Plan. Seller's Contractor to provide and install required back for locker installation.

3.2.4.1.3. Provide and install fire extinguisher and cabinet
3.2.4.1.4. District to furnish hand held Emergency Hand Held Eyewash and Emergency Blanket.
3.2.4.1.5. Bio-Lab Direct-Waste-Vent (DWV) plumbing system
    i. Waste and vent materials disposed on-site in the lab is for General Chemistry classes and are quite benign. No heavy metals are utilized. Small amounts of other chemicals would be disposed of as solid waste, mostly associated with cleanup after spills. Plumbing sink waste should be safely disposed of in the building ABS drain-waste-vent piping systems. Acid neutralizing basin will not be required.
3.2.4.1.6. Countertops and sinks to be provided and installed in strict accordance with PS 108
    i. Faucets for student islands, Instructor Island and perimeter cabinet sink in accordance with Exhibit WL-2 Schematic Floor Plan (12 sinks and 20 faucets for student islands as required to provide a faucet per student)
    ii. Cold water only to student island sink faucets
    iii. Hot and cold water to Instructor sink and perimeter cabinet sink faucets
    iv. Deionized water to Instructor sink and perimeter cabinet sink
    v. Natural gas, compressed air, vacuum at all student sink faucets, Instructor Island and perimeter cabinet sink faucets
    vi. Cold water, natural gases, compressed air, vacuum at Fume Exhaust Hoods
3.2.4.1.7. Provide eyewash and shower as per room arrangement
3.2.4.1.8. Provide two Fume Hoods in strict accordance with PS 108
3.2.4.1.9. Provide Mechanical Equipment Room equipment, electrical and mechanical as required to furnish compressor, deionized water system, vacuum, water softener and other lab related equipment necessary to meet the Bio Lab plumbing and mechanical requirements in accordance with Exhibit WL-2 Schematic Floor Plan and WL-3 FFE Layout Plan
3.2.4.1.10. Provide and install 20 dedicated 20 amp outlets to student lab stations as required for each student to have a dedicated electrical outlet. Double faucet sinks will have fourplex outlets and single faucet sinks will have duplex outlets as per room arrangement. Provide and install one dedicated 20 amp fourplex electric outlet at Instructor's island sink and one dedicated 20 amp fourplex outlet for AV equipment in Instructor's island. Provide and install dedicated duplex electrical outlets above perimeter counters every 6'-0" on-center. Electrical requirements as per room arrangement.
3.2.4.1.11. Provide and install PolyVision whiteboards as per *General Notes* herewith and Exhibit WL-3 FFE Layout plan.
3.2.4.1.12. Provide and install data cabling as per the Exhibit WL-4 Material Standards including, but not limited to one (1) data quad and data ports on each wall over the counter adjacent to electrical duplex outlet.

3.2.4.1.13. Provide and install one (1) wall phone plate with one (1) data outlet terminated and tested within 10 feet of the Instructor island. Phone provide and installed by District.

3.2.4.1.14. Provide AV/IT/Smart Classroom requirements to Instructor Island installed in accordance with room arrangement, Exhibit WL-4 Material Standards and *General Notes* herewith. *General Notes* provide AV cabling/wiring requirements. AV and IT equipment are District furnished and installed and include the projector (excluding the projector mount), speakers, pull down screen, computers and phone. The Instructor Island will serve as the podium for the Science Classroom. A "whip" and FRS box described in the *General Notes* for podium installations will not be required. The conduits required for the FRS box and all other cabling, wiring and electrical will be provided and installed in the island as per PS 108 room arrangement. Seller's Contractor shall provide all backing for District furnished equipment. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to "plug and play" all District furnished equipment.

3.2.5. Bio Lab Storage Room – Reference Physical Science Building Science Lab Classroom 108

3.2.5.1. Specifications for cabinets and countertop shall be as provided for perimeter cabinets in classroom PS 108. Provide larger sink as per perimeter cabinet sink in room arrangement.

3.2.5.2. Provide and install all gases, air, deionize water, vacuum sink and hot and cold water as provided in the Instructor's Island as provided in classroom PS 108. Direct-Waste-Vent (DWV) plumbing system criteria are the same as for Bio-Lab Classroom.

3.2.5.3. Electrical/Dishwasher/Mechanical

3.2.5.3.1. Provide dedicated 20 amp duplex outlet for full refrigerator as per WL-3 FFE Layout plan. Refrigerator provided by District.

3.2.5.3.2. Provide and install a commercial grade dishwasher as per WL-3 FFE Layout plan and related electrical service outlet.

3.2.5.3.3. Provide and install over the counter dedicated 20 amp duplex outlets 6'-0" on-center above lower cabinets. As a matter of note, Program will have an autoclave and incubator that will be placed on the countertops. Each is approximately 2'-0"x3'-0" and require a dedicated 20 amp outlet. The outlets spaced 6'-0" on-center should provide for the electrical requirement for these District furnished items.

3.2.5.3.4. Provide and install dedicated 20 amp fourplex outlets in the end of the Storage Room island.

3.2.5.3.5. Provide under the cabinet lighting (task lighting)

3.2.5.3.6. Provide and install data cabling as per the Exhibit WL-4 Material Standards including, but not limited to one (1) data quad and data ports on each wall over the counter adjacent to electrical duplex outlet.

3.2.5.3.7. Provide and install duplex electric outlets every 6'-0" on-center on all non-cabinet walls

3.2.5.3.8. Provide and install separately switched room exhaust fan

3.2.5.4. Provide lockset for doors per Exhibit 4 WL-4 Material Standards

3.2.6. Manager/Dean/Student Services/Office/Private Faculty Offices – Reference Welding and Manufacturing: Room No. 113 & Kinesiology and Athletic Performance Center Room No. 207

3.2.6.1. Provide two (2) data quads and ports with fourplex electrical outlets per office as per room arrangement

3.2.6.2. Provide backing for District furnished and installed overhead shelving in each office

3.2.6.3. Each office shall be individually thermostatically controlled

3.2.6.4. 50 SF Student Services Room

3.2.6.4.1. Provide one (1) data quads and ports with fourplex electrical outlets at desk return and opposite wall per office as per Exhibit WL-3 FFE Layout plan

3.2.6.4.2. Provide one (1) 120v power and Cat6 data with home run to Manager Office for camera for Manager to observe/proctor room. Terminate and test cabling.

3.2.6.5. Provide backing for District furnished and installed overhead shelving above corridor copier

3.2.7. Conference/Training Room – Reference Welding and Manufacturing: Room No. 118 & Kinesiology and Athletic Performance Center Room No. 203

3.2.7.1. Provide and install PolyVision whiteboards as per *General Notes* herewith and Exhibit WL-3 FFE Layout plan.

3.2.7.2. Provide and install data cabling with data ports and duplex electric outlets as per the Building Standards including, but not limited to, two (2) quad drops with data ports and electric on the back wall; one (1) quad drop with data ports and electric on each side wall, and one (1) quad drop with data ports on the corridor wall.

3.2.7.3. Seller's Contractor to provide and install the following Audio Visual electrical, cabling and wiring for flat screen televisions and controllers as per Exhibit WL-3 FFE Layout plan

3.2.7.3.1. Provide and install fourplex electric box and outlets 72" to top of box above finished floor within 20" of center of the television.

3.2.7.3.2. Provide and install a 4" square box adjacent to fourplex electrical outlet behind television adjacent to electrical fourplex outlet 72" to top of box above finished floor. Provide and install three (3) Cat6 data cables from data box in back of television with 6'-0" lead to IDF in Data Room. Install data jacks on the ends of leads and terminate data cabling in IDF Room and test.

3.2.7.3.3. Provide and install 4" square box for District furnished MLC Plus 100 AV Controller to the left of the television 42" above finished floor to top of box with 2 gang rings as per room arrangement. Install one Cat6 cable from box to IDF in Data Room. Install data jack on box end of cable and terminate cable in IDF Room and test.

3.2.7.3.4. Install ¾" conduit from MLC Plus 100 AV Controller box to data box behind television for future use.

3.2.7.3.5. Flat screen television, computer and multi-media equipment, 100 AV Controller provided and installed by the District. Television to be installed in accordance with

Exhibit WL-3 FFE Layout plan. Seller's contractor to install required backing for District furnished equipment.

3.2.7.3.6. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to "plug and play" all District furnished equipment.

3.2.7.4. Provide and install one (1) wall phone plate with one (1) data outlet in close proximity to the entry door on the strike side of the door in the room. Install one (1) Cat6 cable from phone plate to Data Room; terminate and test.

3.2.8. Training Room – Reference Welding and Manufacturing: Room No. 118 & Kinesiology and Athletic Performance Center Room No. 203

3.2.8.1. Provide and install PolyVision whiteboard as per *General Notes* herewith and Exhibit WL-3 FFE Layout plan.

3.2.8.2. Provide backing for District furnished and installed tackboards. Tackboard as per classroom arrangement and Exhibit WL-3 FFE Layout plan.

3.2.8.3. Provide and install data cabling with data ports and duplex electric outlets as per the Building Standards including, but not limited to, two (2) quad drops with data ports and electric on the back wall opposite training wall with AV; one (1) quad drop with data ports and electric on each side wall, and one (1) quad drop with data ports on the AV training wall.

3.2.8.4. Audio Visual (AV) shall be installed similar to a typical classroom with the demising wall between the Training Room and CAS/Breakout Room set-up with a District furnished 7'-0" pull down screen with speakers on each side of the screen and a multi-media podium in the corner of the room. A District furnished ceiling projector will be provided in front of the pull down screen. Seller's Contractor to provide and install the following Audio Visual electrical, cabling and electrical wiring as per Exhibit WL-3 FFE Layout. Provide and install all AV/IT/Smart Classroom cabling/wiring installations in accordance with classroom arrangement, Exhibit WL-4 Material Standards and *General Notes* herewith. AV and IT equipment are District furnished and installed and include the podium, projector (excluding the projector mount), speakers, pull down screen, computers and phone. Seller's Contractor shall provide all backing for District furnished equipment. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to "plug and play" all District furnished equipment.

3.2.8.5. Provide and install one (1) wall phone plate with one (1) data outlet in close proximity to the entry door on the strike side of the door in the room. Install one (1) Cat6 cable from phone plate to Data Room; terminate and test.

3.2.9. CAS Area – Reference Butte College Chico Center Room No. 222

3.2.9.1. Provide and install PolyVision whiteboards as per *General Notes* herewith and Exhibit WL-3 FFE Layout plan.

3.2.9.2. Provide backing for District furnished and installed tackboards. Tackboard as per referenced room arrangement and Exhibit WL-3 FFE Layout plan.

3.2.9.3. Seller's Contractor to provide and install the following Audio Visual electrical, cabling and wiring for flat screen television and controller as per Exhibit WL-3 FFE Layout plan

3.2.9.3.1. Provide and install fourplex electric box and outlets 72" to top of box above finished floor within 20" of center of the television.

3.2.9.3.2. Provide and install a 4” square box adjacent to fourplex electrical outlet behind television adjacent to electrical fourplex outlet 72” to top of box above finished floor. Provide and install three (3) Cat6 data cables from data box in back of television with 6’-0” lead to IDF in Data Room. Install data jacks on the ends of leads and terminate data cabling in IDF Room and test.

3.2.9.3.3. Provide and install 4” square box for District furnished MLC Plus 100 AV Controller to the left of the television 42” above finished floor to top of box with 2 gang rings as per room arrangement. Install one Cat6 cable from box to IDF in Data Room. Install data jack on box end of cable and terminate cable in IDF Room and test.

3.2.9.3.4. Install ¾” conduit from MLC Plus 100 AV Controller box to data box behind television for future use.

3.2.9.3.5. Flat screen television, computer and multi-media equipment, 100 AV Controller provided and installed by the District. Television to be installed in accordance with Exhibit WL-3 FFE Layout plan. Seller’s contractor to install required backing for District furnished equipment.

3.2.9.3.6. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to “plug and play” all District furnished equipment.

3.2.9.4. District to furnish computer and tables along demising wall between the CAS area and Training Room/Training Room Office; one of which will be accessible. Seller’s Contractor to provide and install quad drops with data ports and duplex electric outlets for the four computer locations. Provide and install data cabling and data ports and duplex electric outlets as per the Building Standards including, without limitation, one (1) four port data outlet and electric outlet on the wall between the Library and CAS Area; and on the wall between the Training Room and CAS Area.

3.2.9.5. Provide and install data cabling with data ports and fourplex electric outlet as per the Building Standards including, but not limited to, two (2) quad drops with data ports and electric on the back wall; one (1) quad drop with data ports and electric on each side wall, and one (1) quad drop with data ports on the corridor wall as per classroom arrangement.

3.2.9.6. Provide one (1) Cat6 quad drops with data ports and fourplex electric outlet at typical 18” above finished floor height in the demising wall between the CAS Area and Breakout/Library rooms below the television for students to utilize to charge phones, laptops and iPads.

3.2.9.7. Provide one (1) Cat6 quad drops with data ports and fourplex electric outlet approximately 4’-0” from the strike side of the entry door for a phone and computer station to check students into the room.

3.2.9.8. Provide one (1) Cat6 quad drops with data ports and fourplex electric outlet at typical 18” above finished floor height in the corridor demising wall below the 6’-0” whiteboard for students to utilize to charge phones, laptops and iPads.

3.2.9.9. Provide two (2) Cat6 quad drops with data ports and fourplex electric outlets at typical 18” above finished floor height in the demising wall between the CAS Area and Training Room below and on both sides of the 6’-0” whiteboard for students to utilize to charge phones, laptops and iPads.

3.2.9.10. Provide systems furniture power feed connect for the CAS systems furniture cubical. Locate power feed junction box below the return work surface. Provide one 20 amp 120V circuit. Provide junction box and Cat6 quad cabling with minimum 12'-0" lead for distribution in systems furniture raceway. Terminate and test two surface mounted four port data boxes on cubical raceway.

3.2.10. Breakout Rooms - Reference Butte College Library 3rd Floor Breakout Rooms

3.2.10.1. Furnish and install whiteboard, backing for District furnish AV cabling and electric for Multi-Media flat screen television. With exception of the multi-media flat screen television, the arrangement is similar to what is provided in the Library Breakout Rooms on Main campus.

3.2.10.2. Provide half-light glazing in entry door into Breakout Rooms from CAS area for viewing.

3.2.10.3. Provide one (1) 3'-0"x4'-0" window next to the entry doors from the CAS Area into Breakout Room for viewing as per Exhibit WL-3 FFE Layout plan.

3.2.10.4. Provide ½ glass lites in doors servicing Breakout Room from CAS Area.

3.2.10.5. Provide and install PolyVision whiteboard as per *General Notes* herewith and Exhibit WL-3 FFE Layout plan.

3.2.10.6. Provide duplex electrical outlets per on two walls in the Breakout Room

3.2.10.7. Seller's Contractor to provide and install the following Audio Visual electrical, cabling and wiring for flat screen televisions and controllers in each of two (2) Breakout Rooms as per Exhibit WL-3 FFE Layout plan.

3.2.10.7.1. Provide and install fourplex electric box and outlets 72" to top of box above finished floor within 20" of center of the television.

3.2.10.7.2. Provide and install a 4" square box adjacent to fourplex electrical outlet behind television adjacent to electrical fourplex outlet 72" to top of box above finished floor. Provide and install three (3) Cat6 data cables from data box in back of television with 6'-0" lead to IDF in Data Room. Install data jacks on the ends of leads and terminate data cabling in IDF Room and test.

3.2.10.7.3. Provide and install 4" square box for District furnished MLC Plus 100 AV Controller to the left of the television 42" above finished floor to top of box with 2 gang rings as per room arrangement. Install one Cat6 cable from box to IDF in Data Room. Install data jack on box end of cable and terminate cable in IDF Room and test.

3.2.10.7.4. Install ¾" conduit from MLC Plus 100 AV Controller box to data box behind television for future use.

3.2.10.7.5. Flat screen television, computer and multi-media equipment, 100 AV Controller provided and installed by the District. Television to be installed in accordance with Exhibit WL-3 FFE Layout plan. Seller's contractor to install required backing for District furnished equipment.

3.2.10.7.6. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to "plug and play" all District furnished equipment.

3.2.11. Library - Reference Butte College Chico Center Room No. 222

3.2.11.1. Provide and install two (2) data cabling and data ports and two duplex electric outlets on the wall for the two computer stations in the room as per Exhibit WL-3 FFE Layout plan and as per the Building Standards.

3.2.11.2. For the proctoring camera provide two (2) 120v power and Cat6 data with one (1) home run to the Manager Office for Manager to observe/proctor room and one (1) home run to the CAS systems furniture cubical data junction box with a 12'-0" lead to observe/proctor room. Terminate and test cabling.

3.2.12. Men's and Women's Restrooms – Reference Kinesiology and Athletic Performance Center Room Nos. 112 and 114.

3.2.12.1. Flooring Westcoat Epoxy Coat EPOXY MORTAR QUARTZ Granite 104

3.2.12.2. Automatic door openers for accessibility on Men's and Women's Restrooms

3.2.12.2.1. The use of a magnetic hold open with a connection to the fire alarm system is not a requirement. This is an exception to Exhibit WL-4 Materials Standards.

3.2.12.3. Drinking fountains with bottle fillers in corridor (See Exhibit WL-2 Schematic Floor Plan)

3.2.13. All Gender Restroom – Reference Welding and Manufacturing: Room Nos. 133, 134

3.2.13.1. Flooring Westcoat Epoxy Coat EPOXY MORTAR QUARTZ Granite 104

3.2.13.2. No automatic opener required for All Gender Restroom

3.2.14. Lactation Room – Reference Allied Health Public Safety Building Room 208

3.2.14.1. Flooring Westcoat Epoxy Coat EPOXY MORTAR QUARTZ Granite 104

3.2.14.2. Wall hung lavatory

3.2.15. Staff Lounge – Reference Butte College Chico Center Room No. 159

3.2.15.1. Provide and install laminate upper and lower cabinets/millwork with sink as per Exhibit WL-2 Schematic Floor Plan. Provide for microwave in upper cabinet and space for full size refrigerator. Sink base cabinet to be open with garbage disposal meeting accessibility requirements as per room arrangement.

3.2.15.2. Flooring VCT with rubber cove base as per Exhibit WL-3 FFE Layout plan

3.2.15.3. Provide and install one (1) dedicated 20 amp duplex outlet for microwaves in cabinet and one (1) dedicated 20 amp duplex outlet for general purpose use above lower cabinet.

3.2.15.4. Provide and install one (1) wall phone plate with one (1) data outlet to the strike side of the door inside the room. Install one (1) Cat6 cable from phone plate to Data Room; terminate and test. District to furnish phone.

3.2.15.5. Exception – flooring will be VCT tile with rubber cove base

3.2.15.6. Provide backing for District furnished and installed tackboards. Tackboard as per classroom arrangement and Exhibit WL-3 FFE Layout plan.

3.2.16. Student Lounge – Reference Butte College Chico Center Room No. 159

3.2.16.1. District shall provide and install approximately 10'-0" of tables for students to utilize to charge phones, laptops and iPads along the south wall as indicated in Exhibit WL-3 FFE Layout plan. Seller's Contractor shall provide and install duplex electric outlets spaced 2'-0" on-center (typical 18" above finished floor height) in the wall under table furnishings.

3.2.16.2. Provide and install a combination of walk-off carpet and VCT floor finishes in accordance with Exhibit WL-3 FFE Layout plan.

3.2.16.3. Provide and install three (3) 120v dedicated duplex outlets for vending machines as space planned on Exhibit WL-2 Schematic Floor Plan. Vending machines provided by District vendors.

3.2.16.4. Provide and install laminate upper and lower cabinets/millwork as per Exhibit WL-2 Schematic Floor Plan

3.2.16.5. Provide and install two (2) dedicated duplex outlets for two (2) microwaves in upper cabinets and two (2) dedicated duplex outlet for general purpose use above lower cabinet

3.2.16.6. Provide and install one (1) dedicated 120v outlet and Cat6 data and data ports for ATM as space planned on Exhibit WL-2 Schematic Floor Plan. Terminate and test data. ATM furnished by District vendor.

3.2.16.7. Seller's Contractor to provide and install the following Audio Visual electrical, cabling and wiring for flat screen televisions and controllers as per Exhibit WL-3 FFE Layout plan

3.2.16.7.1. Provide and install fourplex electric box and outlets 72" to top of box above finished floor within 20" of center of the television.

3.2.16.7.2. Provide and install a 4" square box adjacent to fourplex electrical outlet behind television adjacent to electrical fourplex outlet 72" to top of box above finished floor. Provide and install three (3) Cat6 data cables from back of television with 6'-0" lead to IDF in Data Room. Install data jacks on the ends of leads and terminate data cabling in IDF Room and test.

3.2.16.7.3. Provide and install 4" square box for District furnished MLC Plus 100 AV Controller to the left of the television 42" above finished floor to top of box with 2 gang rings as per room arrangement. Install one Cat6 cable from box to IDF in Data Room. Install data jack on box end of cable and terminate cable in IDF Room and test.

3.2.16.7.4. Install ¾" conduit from MLC Plus 100 AV Controller box to data box behind television for future use.

3.2.16.7.5. Flat screen television, computer and multi-media equipment, 100 AV Controller provided and installed by the District. Television to be installed in accordance with Exhibit WL-3 FFE Layout plan. Seller's contractor to install required backing for District furnished equipment.

3.2.16.7.6. All electrical, data and AV wiring, cabling and data ports shall be installed, terminated and tested as required for the District to "plug and play" all District furnished equipment.

3.2.17. <u>Data Room – Reference Welding and Manufacturing Room No. 113</u>

3.2.17.1. Room layout to take its cues from Welding Manufacturing Room No. 113 and Exhibit WL-4 Material Standards.

3.2.17.2. Contractor to provide data racks, ladder racks, patch panels, wire management, plywood, sequential wire numbering as required to provide complete and proper Information Technology installation required to terminate data, communications, AV, cameras, Wireless Access Points (WAPs); internet connections to lighting control, data logging, and the like. and audio visual cabling in accordance with the Work Letter and Exhibit WL-4 Materials Standards. District furnished equipment as per Exhibit WL-4 Building Standards.

3.2.17.3. Provide dedicated 120v power and grounding in accordance with the Exhibit WL-4 Materials Standards.

3.2.17.4. Floor finish VCT flooring with rubber cove base. This is an exception to the epoxy flooring requirement per Exhibit WL-4 Materials Standards.

3.2.18. Electrical Room – Reference Welding and Manufacturing: Room No. 128

3.2.18.1. Electrical Room shall be sealed concrete. This is an exception to the epoxy flooring requirement per Exhibit WL-4 Materials Standards.

3.2.19. Custodial – Reference Kinesiology and Athletic Performance Center Room No. 115

3.2.19.1. Custodial Room shall be sealed concrete. This is an exception to the epoxy flooring requirement per Exhibit WL-4 Materials Standards.

3.2.19.2. Custodial Room shall be epoxy flooring as per Exhibit WL-3 FFE Layout plan and Exhibit WL-4 Material Standards

3.2.19.3. Provide higher energy efficient hot water tank and locate on outside wall of Custodial Room

3.2.19.4. Mop sink with 8'-0" high FRP panel on wet walls a minimum of 4'0" wide as per Kinesiology and Athletic Performance Center Room No. 115. Provide backing for District furnished and installed wall racking, equipment, and dispensers to be installed on FRP panel as per Custodial Room arrangement.

3.2.19.5. Furnish and install electrical duplex outlet on two walls.

3.2.19.6. Provide and install roof access ladder in Custodial Closet.

3.2.20. Storage – Reference Welding and Manufacturing: Room No. 112

3.2.20.1. Provide and install a minimum of two (2) dedicated duplex outlets for computer charging carts in the Storage Room. Locate the outlets in the demising wall between the Storage Room and Lobby entrance and install outlets 44" above the finished floor. The first outlet shall be located 2'-0" from the northeast inside corner of the room and the second 3'-0" on-center from the first outlet. Provide and install one additional duplex electrical service outlet on the east, north and west walls.

3.2.20.2. District to furnish and install free standing storage racking/shelving. Seller's Contractor to provide necessary backing.

3.2.20.3. Exception – flooring shall be epoxy flooring as per Exhibit WL-3 FFE Layout plan and Exhibit WL-4 Material Standards

3.2.21. Reception - Reference Student Administrative Services (SAS) Room 344

3.2.21.1. Provide an electronic door lock release for entry door into Reception Area from corridor operated from Receptionist desk and Manager's office.

3.2.21.2. Reception area furniture shall be District furnished and installed furnishings. Seller's Contractor to provide backing for any wall hung shelving and seismic requirements for floor mounted shelving and storage cabinets.

3.2.21.3. Data/communication and electric outlet requirements shall minimally provide:

3.2.21.3.1. Provide and install five (5) data quads and data ports with fourplex electrical outlets adjacent to data quad boxes/plates. Install data/electric arrange as follows: two (2) on main entry corridor wall; one (1) on Manager wall; one (1) on Dean Wall and one (1) on outside wall.

3.2.21.3.2. One electric device in the fourplex outlet on the demising between the Dean's Office and Reception area shall be a dedicated 20 amp circuit for copier

3.2.21.3.3. Room to be individually thermostatically controlled

3.2.21.3.4. Furnish and install laminate transaction counters at transaction window along entry Lobby corridor demising wall that takes its cues from the referenced SAS Room 344.

3.2.21.3.5. Transaction counter and storefront glazing furnished and install by Seller's Contractor. Windows and transaction counter as per "Visual Listening" SAS Room 344, Exhibit WL-2 Schematic Floor Plan and Exhibit WL-3 FFE Layout plan as required to ensure a secured Reception area from the main entrance corridor and lobby

3.2.21.3.6. Provide fixed window between Manager office and Reception area to match storefront glazing.

3.2.22. Lobby Entry/Corridors (No "Visual Listening" Room Provided)

3.2.22.1. Provide data and electric for one (1) television as per the Exhibit WL-3 FFE Layout plan

3.2.22.1.1. Provide fourplex electric 72" to top of box above finished floor within 20" of center of the television

3.2.22.1.2. Provide a 4" square data box adjacent to fourplex electrical outlet behind television. Provide and install three (3) Cat6 data cables from back of television with 6'-0" lead to IDF in Data Room. Install data jacks on the ends of leads and terminate data cabling in IDF Room and test.

3.2.22.1.3. Provide duplex electrical outlets in corridor a minimum of 50'-0" on-center

3.2.22.2. Furnish and install "walk-off" carpet tiles at entries and in Student Lounge carpet as indicated in Exhibit WL-3 FFE Layout plan; as per *General Notes* and Exhibit WL-4 Material Standards

3.2.23. Mechanical Room – Reference Physical Science Room 140

3.2.23.1. Mechanical Room shall be sealed concrete. This is an exception to the epoxy flooring requirement per Exhibit WL-4 Materials Standards.

3.2.23.2. Seller's contractor shall furnish and install the following equipment as required to provide complete and proper Science Lab mechanical systems. Equipment shall include, but not necessarily be limited to:

3.2.23.2.1. Deionizer

3.2.23.2.2. Air Compressor

3.2.23.2.3. Water Softener

3.2.23.2.4. Vacuum

3.2.23.3. Preferred location to provide and install irrigation controls is the Building's Fire Riser Room if designed. If a Fire Riser Room is not designed, provide and install the irrigation controls in the Mechanical Room.

3.2.24. General Notes:

3.2.24.1. District Furnished FFE

3.2.24.1.1. AV

i. Podium
ii. Projectors
iii. Speakers
iv. Pull down screens

3.2.24.1.2. IT

i. Wireless Access Points (WAPS)
ii. Phone/Phone Systems
iii. Cameras
iv. Computer and computer related equipment

3.2.24.1.3. Window Coverings
3.2.24.1.4. Tackboards
3.2.24.1.5. Furniture and furnishings not attached/installed
3.2.24.1.6. Refrigerator
3.2.24.1.7. Vending Machines
3.2.24.1.8. ATM Machine
3.2.24.1.9. Interior non-code signage

3.2.24.2. Energy Efficiency and Conservation Goals –
3.2.24.2.1. Project shall at a minimum to outperform by at least 15% the current Title 24 Standards (California Energy Code) for new construction

3.2.24.3. Interior Improvements: Interior improvements shall meet the minimum requirements established in Exhibit WL-4 Material Standards including, without limitation:
3.2.24.3.1. Classroom Demising Wall STC Rating
i. STC 53 rating for classroom-to-classroom
ii. "Visual Listening" room references utilize one layer acoustical gypsum each side 5/8" metal studs (full height stud, full height insulation, full height gypsum one side and 6" above ceiling other side)

3.2.24.4. Front Entry Door System: Main entry door shall be accessible by an automatic door opening system on one of the two double entry doors. Main entrance is not required to have a proximity card reader lock type. This is an exception to Exhibit WL-4 Materials Standards.

3.2.24.5. Interior Door Hardware: All interior doors have locking hardware. Refer to Exhibit WL-4 Material Standards for door lockset and door hardware requirements including panic hardware. Note: all panic hardware shall be dogged with a key.

3.2.24.6. Whiteboards: Whiteboards shall be PolyVision porcelain enamel steel writing surface with a ½" particleboard with a 0.005" aluminum backing sheet as per classroom arrangement and Exhibit WL-3 FFE Layout plan. Whiteboards provided and installed by Seller's Contractor.

3.2.24.7. Tackboards:
3.2.24.7.1. Furnished and installed by District. Seller's Contractor to provide backing. Tackboards as per classroom arrangement and Exhibit WL-3 FFE Layout plan.

3.2.24.8. Window Coverings:
3.2.24.8.1. Furnished and installed by District

3.2.24.9. Interior Signage:
3.2.24.9.1. Seller's contractor to furnish and install all interior signage required by applicable codes with exception of the All Gender Restroom. Room identification and numbering and other non-code required signage will be furnished and installed by the District. Seller's contractor shall coordinate the specification for any size and color requirements with the District to ensure consistency (mostly applies to interior room exit signs with braille).

3.2.24.10. Backing:
3.2.24.10.1. Provide backing for District furnished and installed furnishings, shelving and equipment provided as per

Exhibit WL-3 FFE Layout plan and this Work Letter. Seller's Contractor shall coordinate backing requirements for District furnished and install furnishings, shelving, cabinets and equipment with designated District representatives. and installed by Seller's Contractor. Offices with return desk depicted on Exhibit WL-3 Layout Plan will have a 5'-0" wide wall hung overhead shelf with flipper door over the desk returns that will require backing.

3.2.24.11. Floor Coverings: Interior flooring shall be a combination of "walk-off" carpet tiles at entries and carpet tiles meeting Exhibit WL-4 Material Standards unless otherwise noted.

3.2.24.11.1. Classrooms/Offices/Corridors

i. MFG: Patcraft
ii. Style: 10279 Flex
iii. Type: Carpet Tile
iv. Color: 00502 Torque (Ashlar Install)

3.2.24.11.2. Walk-Off Carpet

i. MFG: Patcraft
ii. Style: 10316 Paseo\
iii. Type: Carpet Tile
iv. Color: 1-316 Obsidian (1/4turn install)

3.2.24.11.3. Walk-off Carpeted Areas

i. Main Entrance – Carpet to the beginning of Classroom Corridor
ii. East Exit – Carpet to the Conference/Training Room hinge side of the door
iii. West Exit – Carpet 8'-0" in from outside door
iv. South Student Lounge as per Exhibit WL-3 FFE Layout plan

3.2.24.11.4. Epoxy Flooring Restrooms/All Gender/Lactation

i. Flooring Westcoat Epoxy Coat EPOXY MORTAR QUARTZ Granite 104

3.2.24.12. Private Utility Metering and Electrical:

3.2.24.12.1. Seller to provide the following private utility metering and related monitoring.

i. Building & site electric load metering system with software monitoring solution preferred to be hosted on a Butte College server.
ii. Gas meter consumption monitoring to be connected using same electric site/building data logging electrical metering system.

3.2.24.12.2. Type **MC cable** can be **used for** general uses (feeders and branch circuits) in accordance with many Section 330.10 of the National Electrical Code.

3.2.24.13. Wireless Access Points (WAP): WAPs shall be furnished and installed by the District as indicated on Exhibit WL-3 FFE Layout plan. Seller's Contractor shall provide two (2) Cat6 cables with data jacks at each WAP location. Seller's contractor to terminate cable in Data Room and test.

3.2.24.14. AV/IT/Smart Classroom: AV/IT/Smart Classroom data and electrical requirements as per Exhibit WL-3 FFE Layout Plan. Installations shall be

coordinated and installed as per room arrangement provided, Exhibit WL-4 Material Standards, and include, without limitation:

3.2.24.14.1. Audio Visual (AV) podiums and equipment

i. For the purposes of this Agreement, references to "plug and play" shall be defined as an Information Technology/Audio Visual system installed in a manner that allows an electronic device to be used as soon as it is connected to the system.

ii. Refer to Exhibit WL-3 FFE Layout plan for podium layouts

iii. Provide and in-wall FSR Box (#PWB-200-WHT 2-1/2" Deep, Dual Power, Divided Media Junction Box) located maximum 3'-0" from inside corner in front of classroom for District furnished podium. FRS box provides 1" conduit for electrical and 1-1/4" conduit for data.

iv. Two data drops from the IDF shall be punched down (terminated) and tested within the box.

v. Speakers will be District furnished and installed. Seller's contractor shall install speaker wiring for speakers in the ceiling tile and wall speakers on each side of the pull down screen as per the room arrangements provided from the speakers to the FRS Box and podium as required for the District to "plug and play."

vi. Provide three (3) speaker wires (1 from each wall speaker and 1 from the daisy chain of speakers in the ceiling); one (1) data Black Cat6 Extron cable and one (1) data Cat6 cable terminated and tested on both from the projector; one (1) 20'-0" patch cable and electric extension cord from the FSR box to the podium.

vii. The cabling from the FSR Box to the podium shall be secured by a black sheath.

viii. Audio Visual (AV) equipment identified in Paragraph 3.2.24.1.1 and 3.2.24.1.2 will be furnished and installed by District. All AV pathways, cabling, boxes and terminations and testing by Seller's Contractor.

ix. Cabling to be terminated and tested at all teaching podiums and projector locations as required for the District to install, plug, and play AV equipment.

x. Projector mounts are lay-in ceiling type supported by guy wire cabling.

3.2.24.15. Security:

3.2.24.15.1. Furnish cameras in accordance with Glenn Center Furniture Layout

3.2.24.15.2. Provide 120v power and Cat6 data with home run to Data Room at each camera

3.2.24.15.3. Camera equipment furnished and installed by District

3.2.24.16. Mechanical Systems:

3.2.24.16.1. Building mechanical systems shall be controllable and programmed to the District's Building Automation System (BAS) for scheduling and maintenance of the systems

3.2.24.16.2. Each office, Reception Area, CAS work area, Breakout Room, Conference Room, Training Room and

Classrooms shall be individually thermostatically controlled

3.2.24.16.3. All room thermostats shall be controllable and programmed to the District's Building Automation System (BAS) for scheduling of conditioning of rooms

3.2.24.16.4. Individual Packaged Air Conditioning Units are acceptable for classrooms, lab, training/conference rooms and common areas. Typical AC packaged unit for efficiency is a Trane Model WHC060H4RBA or equal. Size units to condition area of room.

3.2.24.16.5. Indoor Cassette Air Terminal Units shall be used for offices and small rooms. Typical Indoor Cassette Air Terminal Unit for efficiency is a Mitsubishi Model PLFY-EP08NEMU-E or equal. Size units to condition area of room.

3.2.24.16.6. Data Room shall be cool only. Unit can be a wall mounted mini-split or ducted VRF unit.

3.2.24.16.7. Seller's Mechanical Engineer shall work with District on mechanical unit sequence of operation for integration BAS.

ARTICLE 4. FINAL AGREED PLANS

4.1 "Plans and Specifications" are defined as those construction drawings and specifications which are prepared by Seller's architect in accordance with this Work Letter Agreement and which present a full and complete accounting of the scope of the District's Site, Building Shell and Interior Improvement program requirements. The Plans and Specifications shall be prepared in accordance with applicable codes, City of Orland Planning and Public Works Departments and meet the minimum requirements of the Department of the State Architect. District program requirements are set forth in Article 1 through 3 hereof and the following documents attached hereto ("Program Requirements"):

4.1.1. Exhibit WL-1 Glenn Center Schematic Site Plan, April 10, 2020 ("Schematic Site Plan")

4.1.2. Exhibit WL-2 Glenn Center Schematic Floor Plan, April 10, 2020 ("Schematic Floor Plan")

4.1.3. Exhibit WL-3 Glenn Center Furniture Layout Floor Plan, April 28, 2020 ("FFE Layout")

4.1.4. Exhibit WL-4 Butte College Standards Materials and Equipment, February 4, 2020 ("Materials Standards")

4.2 District has provided Seller with District's Program Requirements and all criteria necessary to enable Seller's architect to prepare Plans and Specifications for the Site, Building Shell and Interior Improvements consistent with the Work Letter Requirements.

4.3 The Plans and Specifications shall be completed and provided to District by Seller for review and comment. Plans and Specifications are to be approved or disapproved with comments and returned to Seller within five (5) business days after District's receipt. Any further revisions by Seller shall similarly be responded to by the District within five (5) business days after District's receipt of the Plans and Specifications.

4.4 Final agreed plans shall be the DSA approved plans for construction and shall become a part of the Work Letter Agreement and Purchase Sale Agreement. Improvements shown in the DSA Final approved Plans and Specifications will be used for bidding and negotiations with the Seller's Contractor.

4.5 Revisions by the Seller to the Final Agreed Plans, if any, are to be accommodated by Field Change Orders. A "Field Change Order" is a document which outlines the scope of a requested change to

any work set forth in the Final Agreed Plans and bears the signature of District and Seller representatives approving such change in scope. All such plans, specifications, and Field Change Orders shall be approved by Seller and District prior to being executed or acted upon by the Seller's Contractor. In order to avoid delays in construction, in the event the cost of the work included in a Field Change Order request is Ten Thousand Dollars ($10,000) or less, the District will provide the necessary approval orally without requiring the documentation set forth above, with written confirmation to follow. In the event the Field Change Order; other discretionary changes and/or the remedying unforeseen conditions initiated by Seller increases the construction costs, Seller shall be solely responsible for such increased cost. Revisions requested by the District to the Final Agreed Plans, if any, shall evidence by an amendment to the Purchase Sale Agreement bearing the signature of District and Seller representatives authorized to approve such amendment in accordance with the Purchase Sale Agreement in addition to a Field Change Order for purposes of construction Administration. The cost of any such District-mandated changes shall be borne entirely by the District through an increase in the Purchase Price. Disbursement for the cost of the approved change will be in accordance with the Purchase Agreement.

4.6 District agrees that it shall designate a field representative who shall be available on not more than four-hour notice to be present at the job site to respond to questions and Field Change Order issues. District agrees to approve or disapprove any Field Change Order within three (3) business days of receipt of same.

END OF DOCUMENT

PROPERTY LINE

NO CURB

UNIMPROVED EMERGENCY EXIT

PIPE GATE

147 PARKING SPOTS PROVIDED

COVERED AREA

57

54

FLAG POLE

BIKE RACKS

36

CONCRETE

EXTERIOR BUILDING SIGN WITH LIGHTS

ELECTRONIC MESSAGE BOARD. PROVIDE 120V POWER

NEW BUILDING 13,680 SF

AREA TO BE WEED BARRIER WITH BARK

FENCED SOLAR EQUIPMENT AREA

BIKE LANE

COBBLE AND TREES

2'-0"

5'-0"

2'-0"

BIKE LANE

COBBLE AND TREES

Cortina Dr

Exhibit WL-1

Revision

SHIRAH Builders
Project & Construction Services Managers
Phone: 530-682-0353

Exhibit WL-1
Glenn Center Schematic Site Plan

Butte College
BUTTE - GLENN COMMUNITY COLLEGE DISTRICT

4/10/2020

Sheet

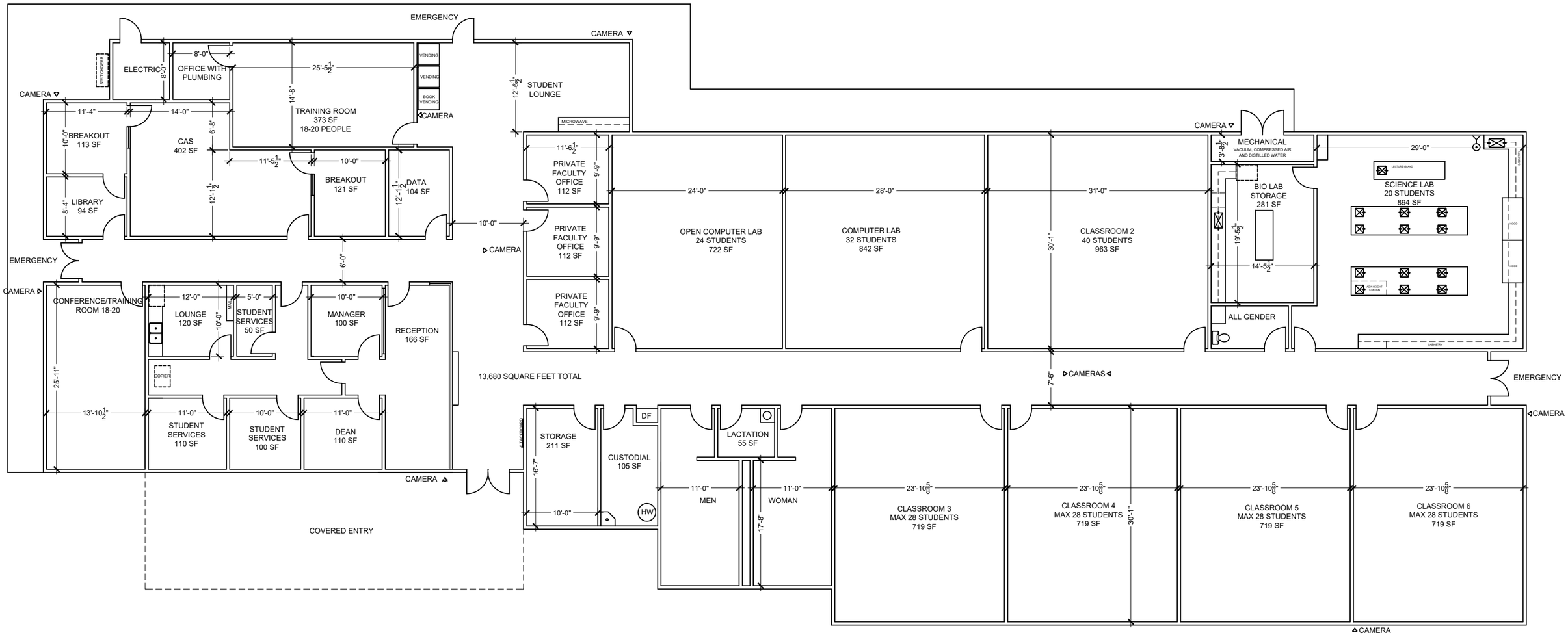

Exhibit WL-2

Revision

SHIRAH Builders
Project & Construction Services Managers
Phone: 530-682-2033

Exhibit WL-2
Glenn Center Schematic Floor Plan

Butte College

BUTTE - GLENN COMMUNITY COLLEGE DISTRICT

4/10/2020

Sheet

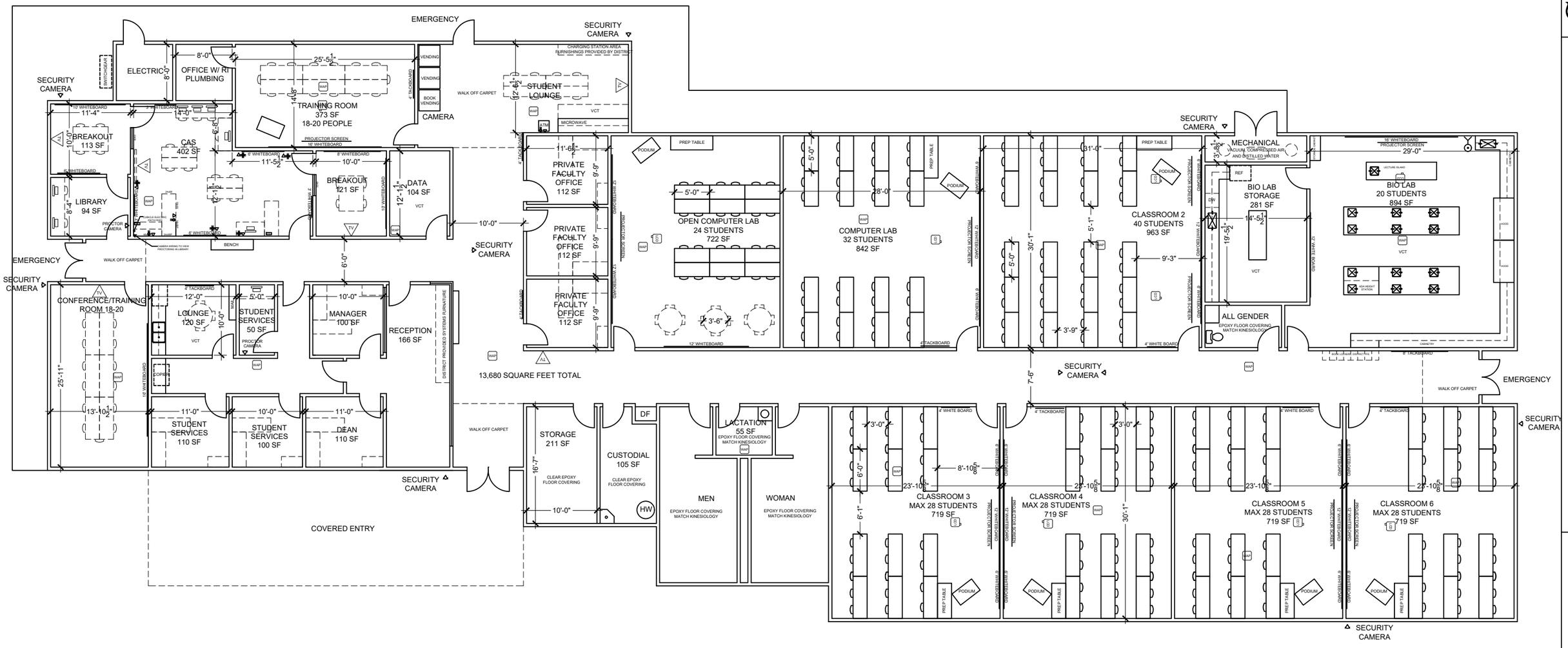

Exhibit WL-3

Revision

SHIRAH Builders
Project & Construction Services Managers
Phone: 530-682-0353

Exhibit WL-3
Glenn Center Furniture Layout Plan

Butte College
BUTTE-GLENN COMMUNITY COLLEGE DISTRICT

4/28/2020

Sheet

Standard Materials and Equipment

02/04/2020

Table of Contents

INTRODUCTION

On March 25, 2009, the Butte-Glenn Community College District Board of Trustees adopted Resolution 638, which directs the development and issuance of the district Standard Materials and Equipment (SME). This manual sets forth those criteria and district standards that are critical to all facilities on the campuses of Butte College. They define the minimum standards for materials and equipment. The information in this manual shall be used in the design, construction, furnishing, and equipping of any facilities on the campuses of Butte College. All projects and maintenance activities on campus must comply with these standards or be granted an exception.

Additionally, the Accrediting Commission for Community and Junior Colleges (ACCJC), in Standard III.B.4, requires that capital planning reflect the total cost of ownership (TCO) of new facilities and equipment. These standards were developed to promote the lowest TCO of district facilities and to assist design professionals and district staff with identification of those items and systems that support this goal.

Total cost of ownership is defined as a financial estimate that reflects the sum of all costs associated with ownership of any item. This typically includes programming, design, construction, operations, maintenance (both preventive and corrective), capital renewal, and finally demolition or disposal.

The information in this manual is in the form of guidelines rather than specifications. The design of projects is left in the hands of the designers. The responsibility for the complete and accurate design of facilities, as well as compliance with the appropriate codes, remains with the design professional. The guidelines presented here are considered to be over and above the scope of normal design work. The experience of the district over the years has shown that certain kinds of construction are better for campus applications. This manual records that experience.

The information in the SME is organized by building systems, not by Construction Specifications Institute (CSI) divisions. A review of the Table of Contents will quickly reveal the various systems used. In some instances, some material will be relevant to more than one section. In those cases, the material has usually been presented in only one place, with a cross reference located in the other relevant passage.

Questions or suggestions regarding these standards should be addressed to the office of Facilities Planning and Management at 530-895-2381.

1. **SITE WORK**
    A. Landscaping
        1. General Requirements:
            a. All landscape design shall support the District's Strategic Initiative of Modeling Sustainability.
            b. In addition to required code compliance, all landscape shall comply with the current version of the following:
                1. Division of State Architect CALGreen outdoor water use regulation.
                2. Department of Water Resource Model Water Efficient Landscape ordinance.
            c. Landscape design shall seek to minimize long-term maintenance. Any areas that deviate from this goal must be discussed in advance with the District.
            d. A limited palette of plants materials is preferred. Plants must be selected from those proven to thrive in the District's environment. The designer is reminded that the main campus is a wildlife refuge, which can have an impact on survivability of plants. In general, native plants are preferred.
            e. Irrigation materials will be submitted via submittal to District for approval. The designer shall work with the District to develop a complete materials list as early in the design as practical.
            f. Use plant massing, boulders, cobble and fencing to restrict pedestrian and vehicle traffic.
            g. New landscape installations should seek to complement and enrich existing and surrounding landscape.
            h. All site access shall be clearly shown on project drawings.
            i. All construction fencing shall be shown on the project drawings, including fencing for protection of trees.
                a. Plant locations shall permit normal plant development
                b. Plants shall be grouped into similar hydro zones while considering sun and shade requirement.
        2. Tree and Shrub:
            a. Consult District for existing underground placement utilities prior to design.
        3. Erosion:
            a. Cobble for slope erosion control may be considered.
            b. Non-organic jute is prohibited.
        4. Weed Control:
            a. High density, high weight commercial weed barrier cloth is required in all planting BEDS.
            b. Minimum 4" of organic chips on top of weed barrier cloth.
        5. Preferred Trees:
            a. Oak, maple, zelkova
    B. Parking Lots
        1. The maximum desired slope is 4%. The District must approve slopes greater than 4%.
        2. All striping, lettering, and symbols applied on asphalt shall be thermo

plastic. Paint shall be used on concrete surfaces; no thermoplastic paint on concrete surfaces.

3. Paint colors shall be white (Product Data from Apply-A-Line) for all parking lot striping except the following: Red curbs for no parking and fire lanes, Bus Lanes should be painted bright red and marked as "Bus Parking Only", blue for disabled and accessible parking, yellow for loading and unloading, and green for timed parking zones such as 15 minute parking.
4. Parking spaces shall typically be 9’ in width.
5. Concrete surfaced lots shall have a minimum cross section of 6” of concrete and 6” of Class II AB for the base. The concrete shall be Portland cement concrete with a heavy broom finish. All joints shall be shown on the plans and shall be sealed with traffic grade caulking and non-extruding sealant.
6. At locations where a parking lot is adjacent to lawn areas, a mowing strip shall be incorporated into the design of the parking lot. A mowing strip is a strip of concrete, 18”-24” in width, on the lawn side of the curb or parking bumpers that allows the lawn to be mowed while the parking spaces are occupied.

C. Sidewalks, Ramps and Patio Concrete (Nonstructural)

1. The preferred material for sidewalks, ramps, and other paved, exterior walking surfaces is concrete. No material shall be used for a walking surface that may become slippery when wet.
2. All concrete used in sidewalks, ramps and patios shall have a minimum strength of 2,500 psi, with a history of reaching 4,000 psi in 28 days.
3. In all sidewalk and patio concrete, a minimum No.3 rebar shall be used and placed every 18" on center in each direction.
4. All sidewalks shall have a minimum width of 7’ and a minimum thickness of 6” to establish a traffic rating. Where a sidewalk is adjacent to a road or driveway, the minimum width is 9’. Walks adjacent to roads or driveways shall not have grass strips between the sidewalk and the road or driveway.
5. Sidewalk and patio concrete should be underlain with a minimum 4-inch-thick crushed rock or Class II Aggregate Base Rock Layer. The rock layer should be placed and compacted to a minimum of 95 percent.
6. The bearing soil under the aggregate base shall be compacted to a minimum of 95% of maximum density at optimum moisture content. Excavation to undisturbed soil is not considered adequate.
7. Calcium chloride shall not be used in any concrete.
8. Sidewalks shall be designed with positive drainage away from walks. Drainage of surface water shall not cross sidewalks.
9. Sidewalks and ramps shall be designed to prevent water from entering a building. Overflow areas shall be provided if necessary.
10. Joints
    a. All joints shall be shown on the plans.

b. All expansion joints shall be sealed with traffic grade, non-asphalt, and non-extruding sealant.
c. Felt zip strip expansion joints will be provided against all buildings. Additional control joints shall be provided to adequately compensate for expansion and contraction of concrete. At a maximum, placement shall be 10' in all directions.
d. A medium broom finish shall be applied perpendicular to the traffic flow. All brooming directions shall be shown on the drawings and described in the specifications.
e. The use of calcium chloride shall not be permitted.

11. Testing
    a. All concrete used in sidewalks, ramps and patios having a minimum strength of 2,500 psi, with a history of reaching 4,000 psi in 28 days are not required to be tested.
    b. When testing is required the following are minimum standards.
    c. The concrete shall be tested for strength, air entrainment, temperature, and slump. The specifications shall indicate allowable limits for each.
    d. The district will retain the services of a testing firm. The contractor shall be responsible for scheduling the tests. The contractor shall be required to notify the District's representative a minimum of 48 hours prior to placement of all concrete.
    e. Concrete shall be tested at the minimum rate of one test for the first 25 cubic yards placed each day, and one test for each additional 50 cubic yards placed. The concrete may be tested more often at the discretion of the District’s representative.
    f. The specifications shall make it clear to the contractor that quality control is the responsibility of the contractor. The above testing in no way relieves the contractor of the responsibility to comply with the specifications.
12. Paving Brick
    a. Brick used as paving shall not be set in a sand base. An asphalt base shall be used.

D. Guardrails and Handrails:
1. This standard shall apply to all exterior guardrails and handrails that are not a significant part of a building’s architecture.
2. All railings shall comply with the latest version of the Americans with Disabilities Act.
3. Materials
    a. All guardrails and handrails shall be primarily constructed of steel pipe. The infill for guardrails shall be constructed of vertical balusters or panels.
    b. Prior to installation, the rails shall be painted with Black Durethane® DTM Urethane Mastic (Product No. 95-3314).

4. All railings shall be of welded construction.
5. Installation
    a. The preferred method of installation is to embed a galvanized pipe sleeve in the concrete of the ramp, sidewalk, etc., that has an inside diameter 1/2” greater than the outside diameter of the railing post. This space shall be filled with a non- shrinking grout to secure the post in place. The grout shall fill the space completely and shall be mounded or raised adjacent to the post to drain water away from the post. No welding shall be allowed at this connection.
    b. If necessary, the posts may be secured to the sidewall of the ramp, steps, etc. If this attachment is used, the design shall prevent trapping water.
    c. Alternatively, installation may be accomplished using a core drilling method. A core-drilled hole, ½” greater than the outside diameter of the pipe to be embedded shall be provided. Grout as indicated above.
    d. Screw anchors or Redheads are not a preferred method of anchoring.

E. Fencing Materials
1. Fabric:
    a. The chain link fencing fabric shall be woven with a 9-gauge galvanized steel wire in a 2-inch mesh with black vinyl coating and shall meet the requirements of galvanized steel fabric and conform to the requirements of ASTM F668, Class 2B.
2. Posts, Rails and Braces. Line posts, rails, and braces shall conform to the requirements of AST-F-1043 or ASTM F 1083 as follows:
    a. Posts and horizontal rails shall be black powder coated.
    b. End posts to be 4" import schedule 40, 5.79 lbs/ft (Set in concrete 12" wide x 36" deep).
    c. Line posts to be 2 3/8" import schedule 40, 3.65 lbs/ft (Set in concrete 12" wide x 30" deep, with 10' spacing).
    d. The top and bottom rail shall be 1'-5/8" import schedule 40, 2.27 lbs/ft.
    e. Double Swing Gate Posts shall be 4" import schedule 40, 9.10 lbs/ft (Set in concrete 12" wide x 36" deep).
3. Gate frames shall consist of black powder coated tubular steel pipe and shall conform to the specifications for the same material under paragraph 162-2.3. The fabric shall be of the same type material as used in the fence
4. Wire ties and tension wires:
    a. Wire ties for use in conjunction with a given type of fabric shall be of the same material and coating weight identified with the fabric type. Tension wire shall be 7-gauge marcelled steel wire with the same coating as the fabric type and shall conform to ASTM A 824. All material shall conform to Fed. Spec RR-F- 191/4D.
5. Miscellaneous fittings and hardware:
    a. Miscellaneous steel fittings and hardware for use with zinc- coated steel fabric shall be of commercial grade steel or better quality,

wrought or cast as appropriate to the article, and sufficient in strength to provide a balanced design when used in conjunction with fabric posts, and wires of the quality specified herein. Barbed wire support arms shall withstand a load of 50 Ibs (113kg) applied vertically to the outermost end of the arm.

6. Fencing Concrete: Concrete shall be of a commercial grade with a minimum 28-day compressive strength of 2,500 psi.

END SITE WORK

2. FOUNDATIONS

A. Site Evaluation

1. Prior to any boring or excavation work, all underground utilities shall be located using the Hydro Vac Potholing procedure.
2. Contractors shall schedule underground service 811 prior to any underground work.
3. Soil borings:
   a. Soil borings shall be located, to the extent possible, near the location of proposed footings.
   b. For each building, there shall be one boring for every 2,000 square feet of building footprint, with a minimum of four soil borings.

B. Excavation and Backfill

1. Rock excavation:
   a. All contract documents that include any excavation work shall include a specific amount of each kind of rock excavation in the base bid of the contract.
   b. A unit price shall be required for each kind of rock excavation that shall be used to adjust the base bid, for either more or less rock excavation than the amount included in the base bid.
   c. At a minimum, rock excavation shall be divided into two categories: trench and general. A specific definition shall be included in the specifications for each type of rock excavation.
2. Spread and Pad Footings:
   a. The bearing soil shall be compacted to a minimum of ~~95~~ 90% of maximum density at optimum moisture content (±2%), standard proctor. Excavation to undisturbed soil is not considered adequate.
   b. Immediately prior to installation of reinforcing steel and placement of concrete, the soils engineer shall inspect the soil. The District will retain the inspecting soils agency, but the contractor shall schedule the inspections.
3. Backfill:
   a. Backfill around foundations shall be installed in no more than 12” lifts. Specific situations or soils may require smaller lifts.
   b. Using a standard proctor at optimum moisture content (±2%), all backfill shall be mechanically compacted to a minimum of 80% and a maximum of 85% of maximum density under landscaped areas.
   c. The backfill shall be inspected and tested at the discretion of the District’s representative and soils engineer. The District shall retain the services of an engineering inspection and testing firm. The contractor shall be responsible for coordinating and scheduling the inspections.

C. Footings and Foundation Concrete

1. All concrete used in footings and/or foundations shall have a minimum

strength of 4,000 psi.

2. Calcium chloride shall not be used in any concrete.
3. Masonry units shall not be used for foundations walls below grade.

D. Concrete Slab-on-Grade (Interior, Structural)

1. General Requirements:
   a. Subgrade elevations on which the concrete slab-on-grade floors are to be constructed at a minimum of 6 inches above the elevation of the surrounding parking lots, driveways and landscaped areas. Elevating the building will reduce the potential for subsurface water to enter beneath the concrete slab-on-grade floors and exterior surfaces and underground utility trenches.
   b. The concrete slab-on-grade building floors should be evaluated by a California-licensed civil engineer for expected live and dead loads to determine if the minimum slab thickness and steel reinforcement recommendations presented below should be increased or redesigned.
   c. All slabs-on-grade shall rest on a minimum of 4" of clean 1" rock.
   d. The bearing soil under slabs on grade shall be compacted to a minimum of 95% of maximum density at optimum moisture content. Excavation to undisturbed soil is not considered adequate.
   e. The interior building concrete slab-on-grade floor components are described below from top to bottom.
      1. Minimum 6-Inch-Thick Concrete Slab: The concrete slab should be installed with a minimum 3,000 psi compressive strength after 28 days of curing. It is recommended that the concrete design use a water-to-cement ratio between 0.40 and 0.45 and should be placed with minimum and maximum slumps of 3 and 5 inches, respectively. The concrete mix design is the responsibility of the concrete supplier.
      2. Steel Reinforcement: Reinforcement should be used to improve the load-carrying capacity, to reduce cracking caused by shrinkage during curing and from both differential and repeated loadings. Concrete slabs that will be subjected to heavy loads should be designed with steel reinforcements by a California-licensed structural engineer.
      3. Rebar: As a minimum, use No.3 rebar (ASTM A615/A 615M-04 Grade 06), tied and placed with 18-inch centers in both directions (perpendicular) and supported on concrete "dobies" to position the rebar in the center of the slab during concrete pouring. The concrete slab-on-grade floors shall be constructed as independent structural members so that they can move (float) independently from the foundation structures, with exception of sidewalks and/or door

entry exterior concrete. Reinforcement of the concrete slab-on-grade floors shall be tied into the exterior concrete in these areas.

4. Underslab Vapor-Moisture Retarder Membrane: The underslab retarder membrane should be placed to minimize transmission of both liquid water and water vapor transmission through the concrete slab-on-grade floor. Utilizing a minimum 10-mil-thick, plastic, vapor-moisture, retarder membrane material such as Stego Wrap® underslab vapor retarder membranes or equivalents. Additionally, the following materials are recommended: Stego® Tape and Stego® Mastic or equivalents to seal membrane joints and any utility penetrations. Commercial sealants, polymer additives to the concrete at the batch plant, entrained air, flyash, and a reduced water-to-content ratio can be incorporated into the concrete slab-on-grade floor mix design to reduce its permeability and water-vapor transmissivity properties. A waterproofing consultant should be contacted to provide detailed recommendations if moisture sensitive flooring materials will be installed on the concrete slab-on-grade floors.
5. Minimum 4-Inch-Thick Crushed Rock or Class II Aggregate Base Rock Layer: Interior floors should be underlain by clean crushed rock, while exterior floors should use either crushed rock or Class II AB rock. The rock layer should be placed and compacted to a minimum of 95 percent. An alternative rock material for external slab-on-grade concrete surfaces would include AB rock meeting the specification of Caltrans Class II AB. Just prior to pouring the concrete slab, the rock layer should be moistened to a saturated surface dry (SSD) condition.
6. Subgrade Soil Preparation: The subgrade soil should be prepared and compacted. The top 12 inches of the non-expansive soil should be compacted to a minimum of 90 percent of the ASTM D1557 dry density with relatively uniform moisture content within ± 3 percentage points of the ASTM D1557 optimum moisture content.
7. Crack Control Grooves: Crack control grooves should be installed during placement or saw cuts should be made in accordance with the ACI and Portland Cement Association (PCA) specifications. Expansion joints shall be provided between the slab and perimeter footings, and that crack control grooves or saw cuts are installed on 10-foot-centers in both directions (perpendicular).

E. Rigid Concrete Pavement for Heavy Truck Traffic Areas

1. General Requirements:

a. The rigid concrete pavement components are described below from top to bottom. If static or intermittent live loads greater than 250 psf are anticipated, then a California-licensed structural engineer should design the necessary concrete slab-on-grade thickness and steel reinforcements.

1. Minimum 6-Inch-Thick Concrete Slab: The rigid concrete pavement should be installed with a minimum 3,500 pounds psi compressive strength after 28 days of curing. It is recommended that the concrete design uses a water-to-cement ratio between 0.40 and 0.45 and should be placed with minimum and maximum slumps of 4 and 6 inches, respectively. The concrete mix design is the responsibility of the concrete supplier.
2. Steel Reinforcements: The rigid concrete pavement sections should include steel reinforcement to improve the load carrying capacity and to minimize cracking caused by shrinkage during curing and from both differential and repeated loadings. Rigid concrete pavement that will be subjected to heavy loads should be designed with steel reinforcements by a California-licensed structural engineer.
3. Rebar: Use No.4 rebar (ASTM A615/A 615M-04 Grade 60), tied and placed with 12-inch centers in both directions (perpendicular) and supported on concrete "Dobbies" to position the rebar in the center of the slab during concrete pouring.
4. Minimum 8-Inch Caltrans Class II AB Layer: The rigid concrete pavement should be underlain by Class II AB placed and compacted to a minimum of 95 percent of the ASTM D1557 dry density with a moisture content of ± 3 percentage points of the ASTM D1557 optimum moisture content.
5. Subgrade Soil Preparation: The subgrade soil below rigid concrete pavement sections designed for vehicle traffic should be prepared and compacted. The top 12 inches of the non-expansive soil should be compacted to a minimum of 95 percent of the ASTM D1557 dry density with a relatively uniform moisture content of 0 to 4 percentage points greater than the ASTM D1557 optimum moisture content.
6. Crack Control Grooves: The rigid concrete pavement should include crack control and expansion joint grooves installed during placement or saw cuts should be made in accordance with the ACI and PCA specifications. Generally, it is recommended that expansion joints be provided between the slab and perimeter footings, and that crack control grooves or

saw cuts are installed on no greater than 10-foot-centers in both directions (perpendicular).

2. Joints:
    a. Joint spacing and joint detail shall be shown on the drawings.
    b. Expansion joints shall have dowel bars and shall allow load transfer and slab expansion. Non- extruding expansion joint material shall be used.
    c. Control joints shall be cut as soon as the concrete can be walked on without damage to the finish (soft cut). Control joints shall be cut a minimum of 2" deep or 25% to the slab thickness, whichever is greater.
    d. Slab flatness and levelness shall be within 1/8" in 10'. ASTM E1155 shall not be used to specify flatness and levelness unless the particular use requires a high level of accuracy. Areas that have floor drains shall not be required to meet the levelness tests, but shall have positive slope to the floor drain. The amount and direction of slope for floor drains shall be indicated on the drawings.
    e. All slabs on grade shall have a positive drainage system installed. This can be either a system of drain piping beneath the slab or provisions for a sump, with a sump pump, to collect and remove the water beneath the slab.

F. Reinforcement
    1. Reinforcing steel and accessories shall not be placed in contact with soil. Reinforcing steel shall not extend to the surface of the concrete. Chairs and other accessories shall be plastic, epoxy coated steel or concrete at the point of contact with the surface of the concrete.

G. Penetrations
    1. General Guidelines:
        a. All penetrations of foundation walls shall be leak proofed.
        b. All penetrations shall be individual pipes or conduits. Groups of pipes or conduits in a common penetration are not allowed.
        c. In instances where reinforcing steel is used to attach another mass of concrete to the foundation walls, the steel pins shall be attached to the foundation walls through the use of epoxy capsules similar to those supplied by Hilti.
    2. Electrical Duct Banks:
        a. Concrete encased duct banks shall terminate at the exterior surface of the foundation wall. The conduit shall make individual penetrations of the foundation well.
        b. All duct banks shall be attached to the foundation wall in one of two manners. In new construction, the reinforcing steel of the foundation wall may be extended into the concrete encasement of the duct bank at the time of placement. Alternately, reinforcing steel may be drilled into the foundation wall and extended into the duct bank concrete. The steel that is inserted

into the foundation wall shall be attached through the use of epoxy capsules, similar to those supplied by Hilti.

c. All duct conduit within 8' of the foundation wall penetration shall be rigid steel conduit. The conduit shall be installed with a grade away from the building.

d. The conduit shall penetrate the foundation wall in the following manner:

1. For new construction, the foundation wall shall have a steel sleeve installed that is 2” larger in diameter than the conduit to be installed. For existing construction, the hole shall be core drilled. In multiple duct situations, sufficient space shall remain between the penetrations to maintain the structural integrity of the foundation wall. As an advisory, for existing construction, consider using X-rays, depending on the situation.
2. A rubber seal, equal to Link-Seal, shall be installed in the space between the conduit and the sleeve or drilled hole, near the interior surface of the foundation wall. The same space shall have waterproofing installed on the exterior side of the rubber seal.

3. Other Pipe Penetrations:

a. The minimum strength of pipe penetrating foundation walls shall be equal to Schedule 40.

b. All penetrations shall be waterproofed in the same manner as described in paragraph 1.E.2.d.2.

H. Drainage Systems

1. Usable space below grade is not preferred, however, if there is a footing/foundation positive drainage system shall be installed. There are various methods and systems available to provide good foundation drainage. The following describes one type of system and should be considered to be the minimum amount of drainage required.

a. Place perforated Schedule 40 PVC drainpipe at the base of the foundation wall around the perimeter of the building, connected to a storm sewer. This pipe must have a filter fabric sock surrounding the pipe.

b. Embed the pipe in 12" of 3/4" clean rock on all sides of the pipe.

c. Install an 8" thick vertical layer of 1" clean rock on the exterior of the foundation wall from the footing to rough grade.

d. Filter fabric shall be added at all points between the clean rock and the soil.

2. Piping:

a. All pipe used in foundation drainage systems shall be a minimum of SDR 35.

b. Cleanouts shall be installed downstream of each 90 degree elbow,

within 12" of the elbow. On straight runs of pipe, cleanouts shall not be located more than 100’ apart. All cleanouts shall be supplied with brass plugs.

c. All drainage piping shall be connected to storm sewer piping, not sanitary sewer.

I. Crawl Spaces

1. Crawl spaces are not preferred, however, if a crawl space is installed, the following shall be the standard.
   a. Crawl spaces shall not have earth floors. The preferred treatment is the placement of concrete on the floor area.
   b. Crawl spaces shall be ventilated, have a drainage system to prevent standing water, and shall have lighting installed.

J. Equipment Pits

1. Equipment pits, wherever possible, shall be drained by gravity.
2. Where gravity drainage is not possible, a sump with a pump shall be installed. The sump shall have an alarm installed, connected to the campus security system or building automation system (BAS) whenever possible, to alert maintenance personnel whenever the water level rises and before the water overflows the pit. Where connection to the campus security system or BAS is not available, a local alarm shall be installed.

K. Moisture Protection

1. Waterproofing:
   a. All foundation walls shall be waterproofed below grade.

END FOUNDATIONS

3. SUPERSTRUCTURE SYSTEMS

A. General Requirements

1. Dead and live loads for all structural systems shall be noted on the drawings.
2. New structural systems shall not be structurally connected to existing structures, except when the new structures are constructed above the existing structure. Additions to existing structures shall be separate from the existing structure with an expansion joint at the point of attachment.

B. Cast in Place Concrete

1. General Requirements:
    a. Concrete shall be composed of cementitious materials, coarse aggregates, fine aggregates, and water.
    b. Exposed concrete shall be free of imperfections caused by the forms.
2. Testing:
    a. Concrete shall attain a minimum 28-day compressive strength of 2,500 PSI using not less than 6 sacks of cement per cubic yard of wet concrete.
    b. The concrete shall be tested for strength, air entrainment, temperature, and slump.
    c. The college will retain the services of a testing firm. The contractor shall be responsible for scheduling the tests. The contractor shall be required to notify the District's representative a minimum of 48 hours prior to all placement of concrete.
    d. Concrete shall be tested at the minimum rate of one test for the first 25 cubic yards each day, and one test for each additional 50 cubic yards placed. The concrete may be tested more often at the discretion of the District's representative.
    e. The specifications shall make it clear to the contractor that quality control is the responsibility of the contractor. The above testing in no way relieves the contractor of the responsibility to comply with the specifications.
3. Calcium chloride shall not be permitted.
4. Slab flatness and levelness shall be within 1/8" in 10'. ASTM E1155 shall not be used to specify flatness and levelness unless the particular use requires a high level of accuracy. Areas that have floor drains shall not be required to meet the levelness tests, but shall have a positive slope to the floor drain. The amount and direction of slope for floor drains shall be indicated on the drawings.

C. Steel Structures

1. The specification shall clearly state the responsibility for the design of steel connections. The responsibility may lie with the project designer

or with the steel supplier. The responsible party must seal the connection drawings.

2. Testing: The District will retain the services of an independent testing agency to test all steel connections. Early in the design phase, the designer shall estimate the cost of steel testing. The contractor shall be responsible for the cost of retesting any steel connections that fail any tests. The contractor shall provide a minimum 24-hour notice to the District's representative prior to the test.

D. Roof Structures

1. Gypsum decking shall not be used. The preferred decking material is steel or concrete.
2. All roof decks shall be designed with a minimum slope of 1/8" per foot. Positive slope for drainage shall be provided by the roof deck rather than by tapered insulation.

END SUPERSTRUCTURE SYSTEMS

4. EXTERIOR CLOSURE

A. Wall Types

1. General Requirements:
    a. Preferred materials for exterior finish, in order of preference, is stucco, metal, and exposed aggregate. Exterior finishes not allowed are wood siding, Exterior Insulation Finishing System (EIFS), and split-face concrete masonry units. Concrete masonry units, for uncontrolled environments and out buildings are allowable but not preferred. Stone and brick are allowable with District's approval.
    b. The District's leadership must approve exceptions to the above.
    c. All exterior CMU shall have a clear block sealer. The standard quality shall be H&C® HYDRO-DEFEND™ Concrete & Masonry Waterproofer Sealer.
2. Stucco:
    a. The preferred method is the three step or tri-coat system.
    b. The preferred cure time between the scratch (first) coat and the brown (second) coat is 48 hours. The cure time between the brown coat and the finishing coat shall be no shorter than 7 days.
    c. Stucco shall not be painted. If color is desired, it shall be incorporated into the third coat.
    d. The texture of the stucco shall not be heavier than medium.
3. Exposed Aggregate Concrete:
    a. When exposing aggregate, the water method shall be used and not the sandblast method.
    b. All accessories that touch the surface of the concrete shall be coated with plastic or epoxy to prevent rust.
    c. Testing:
        1. The concrete shall be tested for strength, temperature, and slump. The specifications shall indicate allowable limits on each.
        2. The district will retain the services of a testing firm. The contractor shall be responsible for scheduling the tests. The contractor shall be required to notify the District's representative a minimum of 48 hours prior to all placement of concrete.
        3. Concrete shall be tested at the minimum rate of one test for the first 25 cubic yards placed each day, and one test for each additional 50 cubic yards placed. The concrete may be tested more often at the discretion of the District's representative.

4. The specifications shall make it clear to the contractor that quality control is the responsibility of the contractor. The above testing in no way relieves the contractor of the responsibility to comply with the specifications.

d. Calcium chloride shall not be permitted.

4. Metal:
   a. Exterior walls shall have a maximum spacing between the standing ribs of 8" and a minimum gauge of 24.
   b. The standard of quality for finish is baked enamel.
5. Glass:
   a. All framework shall be aluminum, not steel, for glass exterior walls.
   b. All glass systems shall be insulated, double pane glass with thermal breaks frame construction.
   c. Window film is not allowed.
6. Masonry/Stone:
   a. The design and construction guidelines and technical notes of the Brick Institute of America shall be followed for brick construction, and the Masonry Advisory Council for concrete masonry unit construction.
   b. All brick shall comply with ASTM C216 and shall have a rating of “no efflorescence” when tested according to ASTM C67. The District shall retain an independent testing agency that will randomly test brick delivered to the site for compliance with the above.
   c. All shelf angles and other metal objects incorporated into masonry walls shall be hot dipped galvanized and shall have stainless steel fasteners.
   d. All flashings shall extend a minimum of ¼" beyond the face of the wall and shall be bent to form a drip edge.
   e. Weeps shall be installed above each flashing. The weeps may be tubes installed at 24" on center, or rope weeps, installed 16” on center. Other types of weeps may be used if the manufacturer’s recommendations are followed regarding the spacing and installation to ensure adequate drainage.
   f. The designer shall evaluate the expected movement for each wall and require adequate expansion joints to accommodate the movement.
   g. Wall ties shall be galvanized steel, of a quality equal to Simpson Strong Ties, Inc. or Ceejay Construction Joint Formers type. Movement must be allowed in wall ties.
   h. At joints of different types of materials, such as brick and stone,

brick and cast concrete, etc., the mortar shall be raked back a sufficient depth to allow the installation of a backer rod and sealant in the joint. The sealant installation details shall comply with the manufacturer's recommendations.

i. Masonry and stonewalls shall be installed without mortar dropping in the wall cavity.

j. Coping stones shall be secured with stainless steel anchors and pins and shall have a continuous rubber membrane flashing beneath the stones that extends flush to the surface of the wall, but not past the exterior surface. All head joints of coping stones shall have joint sealant installed rather than mortar or grout.

B. Penetrations

1. Doors and Frames:

a. All doors must be self-closing.

b. Doors must be lockable to prevent entry from outside.

c. Entrance doors shall not have interior or exterior walk-off grids.

d. Exterior doors shall have removable center mullions that will be key operated. These keys will be "maintenance restricted."

e. Removable mullion storage kits shall be installed adjacent to each installation of a removable mullion.

f. For non-stile type doors, a 10" kick plate shall be installed.

g. Regardless of stile, flip down door holders are prohibited.

h. Doorstops shall be integral to the closer.

i. All exterior pedestrian doors and frames shall be metal.

j. Stile-type doors and their frames shall be made of aluminum, with all welded construction. All material shall have a minimum thickness of 3/16" and shall be reinforced at hardware locations. Stile doors shall be 2" thick with a minimum stile width of 3 ½". All bottom rails shall be a minimum of 10" in height. All doors shall have a center-locking rail.

k. Low-usage or non-public doors (mechanical areas, etc.) may be steel doors with steel frames. All steel doors and door jambs shall be shop-primed and painted black semi-gloss All steel doors and frames shall be of welded construction. Steel doors shall have a top channel cap, secured in place and sealed.

l. Steel doors and frames shall be a minimum of 16 gauge, and shall be reinforced at hardware locations. All steel doors shall be 1 ¾" thick.

m. All pedestrian doors shall have a minimum size of 3' in width and 7' in height.

2. Door Hardware:

a. Locksets:

1. Doors must be lockable. The standard of design for locksets shall be Schlage ND53 locksets.
    i. Custodial closets shall be Schlage ND96.

b. Exit Devices:
    1. Exit devices shall be provided with cylinder dogging.
    2. The standard of quality of exit devices will be Von Duprin.
    3. If exiting alarm is desired, use integral ALK Kit.
    4. The standard of quality for security indicators is Von Duprin 98/99 with 2SI security indicator and keyed dogging.

c. Openers:
    1. The standard of quality for openers is LCN.

d. Closers:
    1. The standard of quality for closers is LCN's "4040XP Series" model.
    2. All doors and frames are to be reinforced.
    3. On heavy traffic doors, extra duty arms shall be present.
    4. Cushion and stop arms shall be provided as needed.

e. Hinges:
    1. All heavy use doors shall have continuous hinges. The standard of quality is Pimco.
    2. Low use doors shall have one and a half pairs of butts, ball bearing, and heavy weight, with non- rising pins. The standard of quality for door butts is Ives.

f. Thresholds:
    1. The standard of quality for thresholds is National Guard Products.

g. Colors:
    1. Door hardware color shall be 626 brushed chrome, unless otherwise indicated by District.

h. Keys and Cores:
    1. All locksets shall be compatible with Schlage cores. Keying shall be coordinated with the District.
    2. Keyways shall be Schlage standard six pin restricted multi-level keying system.
    3. Contractor shall provide a minimum 3 cut and

sequentially stamped keys per door. All keys shall be stamped with a Key Label (or "Key Code") and the Copy number.

4. Interchangeable cores are preferred.

i. Padlocks

1. Padlocks shall be American Lock, if not available the District will accept Schlage

3. Power Operated Doors:

a. Applications for Power Operated Doors

1. Every building must have at least one exterior power operated door.

b. Activating Devices

1. For existing construction, battery operated devices are not preferred. In new construction, battery operated devices are prohibited.

c. Locking and Security

1. All main entrances must have a proximity card reader lock type. The standard of quality for the reader shall be an aptiQ multi-technology single gang by Allegion.
2. If electronic or other types of locks are used, a key over ride is required.

d. Equipment

1. For power operated doors, the standard of quality for the activator shall be LCN 4642 Long Auto- Equalizer Power operator electro-hydraulic. All actuators shall be hardwired and set to the longest possible delay upon activation.

4. Windows:

a. General

1. All framework shall be aluminum, not steel.
2. All windows shall be double pane glass with thermal break frame construction.
3. Window film is not allowed.
4. Use care when designing daylight levels. Consider mechanized shading and occupant comfort.
5. Low E glass is preferred.
6. In specifying windows, consideration shall be given to the replacement of broken glazing and cleaning. It is preferred that replacement be possible from the interior of the building. Other types of windows require the approval of the District.
7. Windows shall be non-operable.

5. Exterior Signage:
    a. Letters to be mounted over plaster with no backing plate.
    b. 1/8" Brushed Aluminum Studded Letterset.
    c. Paint to be clear coat with a satin finish.
    d. Also refer to section 6.H. Interior Signage

END EXTERIOR CLOSURE

5. ROOFING SYSTEMS

A. General Requirements:

1. Whenever feasible, roofs with slopes greater than 3 inches per foot are preferred.
2. On low sloped roofs, the minimum slope shall be ½" per foot on new construction and on existing construction where possible, the slope shall be a minimum of ½" per foot.
3. For low sloped roofs, the following types are preferred: modified bitumen cap sheet with a tensile strength of 310 lbf/in minimum and a tear strength of 500 lbf. Traditional built-up is not allowed.
4. The specifications shall prohibit the use of asbestos containing materials.
5. Penetrations and placing of equipment on roofs shall be avoided as much as possible.
6. The designer shall ensure that the details support the manufacturer's warranty. Shop drawings from the roofing manufacturer are required.
7. New roofing systems shall not be installed over an existing roof
8. system.
9. The following references and guidelines should be used in roofing design:
    a. NRCA Roofing and Waterproofing Material, including NRCA Construction Details.
    b. SMACNA Architectural Sheet Metal Manual.
    c. FM Approval Guide, current addition.
10. All roofs to be designed per ASCE 7-10 wind up lift requirements.
11. The designed system shall be able to meet any specified wind uplift ratings.
12. All roofing systems shall include the use of vapor barrier.
13. The insulation specified shall be compatible with the application method required and other materials of the roofing system. The roofing membrane manufacturer shall be required to approve the insulation in writing
14. Use crickets, saddles, and edge strips to direct water flow away from penetrations and parapet walls. Provide twice the roof slope to ensure resulting finished surfaces are sloped, not flat. Show all cricket layouts on the roof plan.
15. Avoid mechanical attachment to concrete.
16. Locate interior drains at mid-spans and not at columns. Interior or hidden gutters shall not be used.
17. Color of any gutters shall be the same as the siding that it is up against.
18. Clearly show on drawings all demolition, existing materials to remain, and new materials and construction.

19. Penetrations:
    a. Minimize use of roof penetrations to the greatest extent possible. Maintain proper clearance between penetrations to allow for flashing installation. Do not install penetrations in valleys or near drains or scuppers.
    b. Maintain a minimum of 12" between penetrations.
    c. Show all penetrations on the roof plan and provide applicable details including detail references keyed on the roof plan or the legend. Clearly show all details of the construction requirements for the deck, insulation, membrane curbing, base flashing and counter flashing or other roofing components necessary to communicate requirements.
    d. Use pre-manufactured pipe boots whenever possible.
    e. All penetration flashings shall extend a minimum of 8” above the overflow system.
    f. Curbs:
        1. Cant strips shall be installed where the curb sits on the roof substrate.
        2. Use fiber mesh with mastic on all outside corners. Apply two coats of paint on 6" of mastic.
20. Use round shapes to construct equipment supports. Equipment supports shall be raised a minimum of 14", but not less than shown below. Note that these minimums apply at the end of the equipment support on the upslope side of the framing.

Width of the equipment	Height of Legs
Up to 25”	14”
25 to 37”	18”
37 to 49”	24”
49 to 61”	30”
Over 61”	48”

B. Build-Up Systems
    1. Modified Bitumen Roofing (MBR): Basis of Design The Garland Company, Inc. or equivalent
        a. All MBR roofs shall be designed to 30-year standards and have a 30-year watertight warranty from one manufacturer coving all standing seam metal and two ply modified bitumen roofing systems. Multiple warranties will not be allowed.
        b. All MBR systems shall be a two ply modified bitumen using a minimum 80 mil modified base sheet and a minimum 145 mil modified cap sheet.
        c. All membrane layers shall be applied with hot asphalt.
        d. Inspections are required by the system manufacturer a minimum of three days per week during the installation. Photo

reports of the progress shall be sent to the architect, District, and General Contractor weekly.

C. Metal Systems
   1. The standard of quality for metal systems shall be The Garland Company, Inc or equal.
   2. Metal roofing systems shall be of the standing seam type only. The minimum height for the seam shall be 2-3/8". The standard of quality for a Structural Standing Seam panel shall be Vertical Seam panels with 18' coverage and striations.
   3. Minimum metal thickness shall be 24-gauge.
   4. Mechanically crimped seams in the field seams are required. One-piece clips are required. Two-piece clips will not be accepted.
   5. The minimum slope for metal roofing systems shall be ¼" per foot.
   6. All metal wall panels shall be continuous, with no lateral splices. The standard of quality shall be The Garland Company, Inc. R-Mer Loc or pre-approved equal.
   7. The roof support systems shall be designed for the anticipated loadings; the metal shall not be permitted to span more than 5'.
   8. All fastening clips shall be concealed and shall allow for unlimited expansion and contraction of the metal.
   9. All accessories shall be pre-manufactured and approved as part of the roofing system by the roofing system manufacturer in the shop drawings provided by the manufacturer.
   10. All metal soffits shall be Garland's R-mer Soffit with a panel length of 20' maximum and 5' minimum or pre-approved equal.
   11. All fasteners shall be stainless steel.
   12. Underlayment shall be a modified self adhered provided by the manufacturer.
   13. For those roofs that need to be colored for aesthetic reasons, the standard of quality for the color finish is Metallic Silver coating. Roofs that do not need to be colored shall have a "Galvalum" finish.
   14. Warranty – Metal system must have a minimum 30-year watertight "No Dollar Limit." One warranty from one manufacturer covering all Modified Built Up Roofing and standing seam roofing is required. Multiple warranties will not be accepted.
   15. Inspections are required by the system manufacturer a minimum of three days per week during the installation. Photo reports of the progress shall be sent to the architect, District and GC weekly.

D. Other Systems
   1. Fiberglass Shingles:
      a. Fiberglass shingles shall be warranted for 40 years and must be of the seal-tab type.
      b. The minimum roof slope for fiberglass shingles is 3" per foot.

c. All fiberglass shingles shall have an underlayment of a modified self adhered R-Mer Seal or equal.

d. A galvanized drip edge shall be installed on all fiberglass shingle roofs.

2. Lightweight Concrete Tile Roofing:

a. Concrete tile shall be interlocking lightweight concrete tile of integral color with interlocking sides, head lugs, and weather checks of a standard of quality of “Ultralite” or approved equal.

b. Fastening devices shall be stainless steel.

3. Roof Hatches:

a. The standard of quality for roof hatches is Bilco.

b. Rails shall be aluminum.

END ROOF SYSTEMS

6. INTERIOR CONSTRUCTION

A. General Design Guidelines

1. For wet areas or wash down areas, the following wall system is preferred: Concrete masonry unit (CMU) wall.
2. Stairwells and elevator shafts are preferred to have masonry or concrete construction. Floors in stairwells shall be hard surfaced with a slip resistant covering.
3. All mechanical rooms shall have concrete floors and masonry or concrete walls.
4. The designer shall carefully evaluate the need for sound proofing for all walls.
5. In corridors and other public areas, no wall covering shall be used.
6. In all new buildings or major remodels, the installation of a single use gender neutral restroom is required.
7. Restrooms shall have ceramic tile on the floor and all walls to a minimum of 84” in height or up to the top of door jamb.
8. All colors shall be listed in the specifications.
9. For conference rooms and similar areas, the designer shall evaluate the need for chair rails to prevent wall damage.
10. Backers must be full length. If a metal stud is used, 20-gauge metal backing is preferred. If a wood stud is used, wood backing is preferred. Backing and board heights for whiteboards and tack boards shall be installed at 3ft (above finished floor) to 7ft (above finished floor).

B. Floor and Room Numbering:

1. Floors shall be numbered beginning with the lowest floor that has a grade level entrance. The floor that is immediately below the first floor shall be called the basement. Floors below the basement shall be called the first sub-basement, second sub-basement, etc. as needed.
2. Room numbering:
    a. Sub-basements rooms shall be labeled by alpha indicators only.
    b. Basement rooms shall be labeled with numbers 0-99.
    c. First floor rooms shall be labeled with numbers 100-199, second floor rooms with numbers 200-299, etc.
    d. For buildings with more than 100 rooms per floor, use prefixes of N, E, S, W, referencing the magnetic directions.
    e. Rooms that are not accessible from a corridor or common area shall be numbered by the use of an alpha suffix. The prefix and the number shall be the same as the room through which common access is available. For example, rooms accessible through room E101 shall be numbered E101A, E101B, etc.
    f. Room numbering shall be submitted to the District for approval.

C. Wall Types

1. Ceramic Tile:
    a. For new construction and major renovations, studs for ceramic

tile construction shall be metal. For minor renovations, metal or wood studs may be used. When metal studs are used, 20-gauge shall be the minimum thickness of the metal.

b. Drywall shall be a minimum of 5/8” thickness. Water resistant drywall shall be used in all rest rooms, washrooms, custodial closets, etc.
c. The drywall shall be attached to the studs with screws.
d. Tile shall be installed by utilizing a thinset with a bonding agent.
e. Tile Council of America (TCA) must certify all tiles and equal or exceed Standard Grade. Standard of quality is Daltile.

2. Stud and drywall:
    a. For new construction and major renovations, studs for drywall construction shall be metal. For minor renovations, metal or wood studs may be used. When metal studs are used, 20-gauge shall be the minimum thickness of the metal.
    b. Drywall shall be a minimum of 5/8” thickness. The need for water resistant type drywall should be considered. Water resistant drywall shall be used in all rest rooms, washrooms, custodial closets, etc.
    c. The drywall shall be attached to the studs with screws.
    d. A minimum of three coats of drywall finishing material shall be used to achieve a Level 3 finish.
3. Modular:
    a. The use of full height modular wall systems is not preferred. This type of wall should be used only to match existing conditions.

D. Wall Finishes
1. Paint:
    a. The standard quality will be Sherwin Williams.
    b. Flat paint shall not be used on walls. The preferred finish is “egg shell” or semi-gloss.
    c. Flat paint may be used on ceilings
    d. Clear lacquer is the preferred material for woodwork finishes and wood doors.
    e. If epoxy paints are needed, two part epoxies are preferred.
2. Ceramic Tile:
    a. The standard of quality will be Daltile.
    b. All 12"x24" ceramic tiles must be installed with a 1/3 inch offset. When applicable, any excess ceramic tile must be cut at bottom of wall.
    c. Restrooms:
        1. When no full length mirror is present (only individual mirrors) above sinks, ceramic tile shall be installed.
        2. Wall & Floor Tile (Main) – VL70 ‘Amplified Black’ 12"x24".
        3. Wall Tile (Accent) – VL73 ‘Stereo Grey’ 6"x6". Accent tiles are to be located at a random pattern throughout

entire wall (not randomly in one row) where 10% of wall tile being accent tile.
4. Coved Base – VL70 ‘Amplified Black’ 6"x12".
5. Bullnose Trim – VL70 ‘Amplified Black’ 3"x12".

d. Grout:
1. The grout shall be pigmented dark and sealed when ceramic tile is used.
2. The standard of quality will be Bostik. All grout in restrooms shall be H139 Charcoal Black.
3. All grout must be sealed. The standard quality shall be Miracle Sealant 511 Impregnator.

3. Drywall:
a. Electrical/Data Rooms:
1. Wall finishes shall be Level 3. All finished walls to be covered with fire resistant plywood 8' from finished floor, painted white semi-gloss with a 4" rubber cove base.

4. Wall Covering:
a. Wall covering shall not be used in public or high traffic areas. In general, it should be used only in private offices, conference rooms, or other low traffic areas. In these places it should be used sparingly due to the high cost and difficulty of repair and maintenance.
b. All wall covering shall be easily cleanable. Highly textured or other designs that do not lend themselves to cleaning shall not be used.
c. The minimum grade of wall covering acceptable is commercial grade. If vinyl wall covering is used it shall be Type II.

E. Doors/Penetrations
1. Doors:
a. All classroom and office doors must have an Entrance Lockset in which a Schlage ND53 turn/push button locking on the inside of the rooms.
b. The standard quality for all interior panic hardware shall be Von Duprin 98/99 with 2SI security indicator and thumbturn dogging.
c. Interior wood doors shall have a clear finish.
1. All typical interior hall to classroom doors shall be solid core wood painted (not stained) with STC rating of 32, filled sound insulation, with no bottom seal except for seals around the top and sides.
2. There shall be no vision lites on these doors.
d. Interior hollow metal doors shall have an STC rating of 50.
e. Restrooms:
1. Each restroom door shall have a 10” high stainless steel kick plate with a minimum standard of quality of Ives brand.

2. Whenever possible doors shall open outward.
3. Whenever possible, place doors so they can be propped open while maintaining privacy.
4. Provide the ability to hold open restroom doors through the use of a magnetic hold open with a connection to the fire alarm system or a fusible link.
5. All public restrooms must have handicap actuators.
6. In new construction and major remodels, automatic door openers shall be required for restrooms.

f. Door Hardware:
   1. Refer to section 4.B.2.

g. Access doors shall have a minimum size of 12”x12” for hand access and 24”x24” for crawl spaces.

F. Ceilings
1. General Requirements:
   a. No concealed spline or tongue-and-groove type ceiling tiles shall be used.
   b. Suspended grid type ceilings are generally preferred. Avoid the use of drywall on ceilings except in wet areas.
   c. All mechanical rooms and electrical rooms shall remain open. Data rooms shall have t-bar suspended ceilings.
2. Suspended Grid:
   a. Ceiling tiles of 2’ x 4’ size are generally preferred for the cost savings. Other sizes and types may be used as required.
   b. If other design considerations do not apply, use Armstrong 755B ceiling tiles. Do not use Mylar or foil faced fiberglass unless matching existing tile. Consideration should be given to the use of tiles with non-sag warranties in high humidity or unconditioned spaces.
   c. The ceiling grid shall be suspended directly from the building structure. Other objects shall not be attached to the ceiling support system. All light fixtures shall be supported independently of the ceiling support system.
   d. The standard of quality for the grid system is Chicago metallic 200 snap grid system.
3. Drywall ceilings, when used, shall be a minimum of 5/8” drywall, screwed to the support system, with a smooth finish.
4. Concrete, when exposed in occupied areas, shall be provided with a finish free from defects.

G. Floor Coverings
1. General Requirements:
   a. Use of Marmoleum is discouraged.
   b. Where carpet is used, use carpet tiles, not roll goods.
   c. The preferred floor covering for most areas is carpet tile or ceramic tile.

d. Ceramic tile is preferred over vinyl composition tile.
e. Gym floors shall be composed of hardwood and protected by Hillyard Gym Finish.
f. Do not mix types of floor covering within a room.

2. Standards for all carpet:
    a. The flammability Pill Test shall pass (ATSM D2859 or CPSC FF-1-70).
    b. f The Radiant Panel Test (ASTM E648) must have a rating of >.45 watts/cm2, Class 1.
    c. The Smoke Density rating (ASTM E662) shall be <300 Flaming Mode.
    d. The Dimensional Stability (Aachen Method DIN 54318) will have a <0.2% change.
    e. The Lightfastness (AATCC 16E) rating will be 4.0 after 60 hours.
    f. The Crocking (AATCC 165) will be at least 4.0 wet and dry.
    g. Cold Water Bleed must have a 4.0 rating or better.
    h. Must pass the 10,000 Impact Test.
    i. The Sublimation (AATCC 117), Gas Fade (AATCC 23), and the Ozone Fade (AATCC 109) must all have a 4.0 rating or better.
    j. Fungicidal Rating (AATCC 174, part III) must have no growth.
    k. Appearance Retention Rating (ASTM D-5252 or ASTM D-5417) must have a “severe use” classification rating.
    l. Carpet must pass the CRI Green Label Plus Air Quality Certification.
    m. The PPM Fluorine (AATCC 189) must be a minimum of 350ppm.
    n. If carpet is used in high traffic areas, the color shall be a dark color chosen to hide soil. The carpet for these areas shall be chosen for the ability to withstand traffic and abuse.
3. Standards for field carpet tiles:
    a. Tiles must be made of a minimum of 25% recycled material and must be 100% recyclable.
    b. Carpet tile shall be exactly 24”x24”.
    c. A minimum Tufted Yarn Weight of 18oz and consist of a multi-level pattern loop.
    d. Must be PVC free and Third Party “Cradle to Cradle” certified.
    e. Overall height must be between 4/32” low – 6/32” high.
    f. Carpet tile must have a Weight Density of 87,048.
    g. The Dye Method of said carpet tile will be 100% solution dyed.
    h. TARR classification shall be severe.
    i. The NSF 140 shall be of Platinum Certification.
    j. The adhesive used for the carpet will be Non Wet Pressure Sensitive Adhesive. It must be Cradle-to-Cradle Silver Certified, and must be able to install at 12pH, up to 10 pounds of moist pressure and 95% relative humidity.

4. Standards for entry carpet tiles:
    a. Tufted yarn weight shall be 32oz.
    b. The weight density of the entry carpet shall be of a 275,104 rating.
    c. Install a minimum of 8 feet carpet tiles for walk off mats at entryways.
    d. The standard of quality of carpet for walk off areas shall be Patcraft® Carpet Style Paseo Modular I0316 in color Obsidian 00595. Carpet tile shall use the 1/4 turn installation method.
5. Vinyl Composition Tile (VCT):
    a. VCT tiles are preferred over VCT roll goods.
    b. The use of VCT requires prior approval by the District.
    c. All tiles shall be a minimum of 1/8” thick
    d. It is preferred that VCT not be used in restrooms.
    e. Tile installed on slopes or inclines shall be slip resistant.
6. Ceramic Tile:
    a. Ceramic tile is the material for wet rooms such as bathrooms, kitchens, showers, etc.
    b. Tile shall be glazed with factory installed anti-microbial protection and shall be slip resistant. Dark tiles are preferred. The standard quality shall be VL70 ‘Amplified Black’ 12"x24".
    c. Grout shall be acrylic and dark colored. The standard quality is Custom Building Products.
    d. The standard of quality shall be Daltile glazed porcelain.
    e. All 12"x24" tiles must be installed with a 1/3 inch off set.
    f. All tile shall consist of 60% or higher Recycled Material Content (RMC).
    g. All glazed tiles shall not be less than 12” with dark grout.
7. Sealed Concrete:
    a. Concrete shall be used in mechanical rooms, custodial closets, electrical rooms, IDF rooms, and industrial shop areas.
    b. The standard of quality for concrete coating shall be Westcoat EC-32 High Build Epoxy Clear Topcoat or equivalent.

H. Signage

1. All exterior and interior signage for room/building identification shall be District furnished and installed with exception of the signage noted in section “b” below. Refer to Section 4.B.5 for Exterior Signage.
2. All required ADA/All Gender Restroom signage/Fire Life Safety signage shall be contractor furnished and installed. See Section “h” below for All Gender Restrooms.
3. The preferred color arrangement is light colored characters or symbols on a dark background. All signs within a building shall be the same color. The preferred colors are “Coffee Bean” for the background, with white characters and symbols.
4. Placement:

a. Signs shall be installed on the wall adjacent to the latch side of the door whenever possible. If wall space is not available on the latch side of the door, the placement of the sign shall be coordinated with the project manager.

5. Flag Mounted Interior Wall Signs:
    a. All characters or symbols shall be white vinyl on a 3/8" white Sintra painted satin black, to be set in a 1/4" Aluminum channel.
6. Interior Office Entrance Signs:
    a. Signs shall be 9"x9" clear non-glare acrylic with 1/32" raised copy and Braille.
    b. All signs to be painted with a satin black background and mounted with VHB tape.
    c. Name inserts shall have a height of 3/4" and width of 9".
    d. Signs shall contain routed channels for schedule with a height of 4" and a width of 6 1/2".
7. Interior Non-Office Entrance Signs:
    a. Signs shall be 4"x9"x1/8" clear non-glare acrylic with 1/32" raised copy and Braille.
    b. All signs to be painted with a satin black background and mounted with VHB tape.
8. All Gender Restroom signs shall be 1/4" thick blue acrylic mounted with VHB tape. See District for appropriate design.

I. Specialties
1. Restroom Accessories:
    a. All toilet paper, paper towel dispensers (not including the steel enclosure - See Section “3” below), sanitary napkin, seat cover dispensers and receptacles, and hand sanitizer stations, shall be provided and installed by District.
    b. Design of restrooms shall provide space for freestanding trash receptacles.
    c. In general, restrooms shall be equipped with Brushed Stainless Steel enclosure provided and installed by Contractor, which must be an ADA Compliant recess kit.
        1. The standard of quality for a recess kit shall be the Excel Dryer 40502 XLERATOR Recess Kit.
        2. Two recess kits shall be installed for each restroom. The height for installation of one recess kit must be at 34 inches from finish floor to bottom of recess kit. The height for installation of one recess kit must be at a height of 40 inches from finish floor to bottom of recess kit. There shall be a minimum of 12 inches separation between kits.
        3. For All Gender Restrooms, one recess kit shall be installed for each restroom at 34 inches from finish floor.
    d. Counter Tops:

1. Counter tops shall be of a solid surface composite material. The standard of quality is Hi-Macs. All counter tops shall have a gradient slope of -.5% away from the wall.
2. Counter tops shall have a square edge.
3. All counter tops shall have a minimum of a 4” back and side splash at all locations where a counter top meets any wall.
4. ADA protection panels under counter tops shall provided and be easily removable for maintenance. Clips are preferred to screws for attachment and panel width shall not exceed 48 inches.
5. Counter tops shall be at least ½” thick.

e. Toilet Partitions:
    1. Wall backing is required to secure all mounting brackets. To maintain manufacturer's warranty requirements, it is acceptable to secure partitions with 6" wide, vertical notched stud backing.
    2. Attachments: Four (4) angled-bracket attachments per screen/partition and backing is acceptable as long as the manufacturer's warranty is maintained.
    3. Performance requirements
        1. Graffiti Resistance:
            a. Cleanability: Five (5) required staining agents shall be cleaned off material
        2. Scratch Resistance:
            a. Maximum Load Value shall exceed 10 kilograms
        3. Impact resistance:
            a. Maximum Impact Force value shall exceed 30 Inch-Ibs.
        4. Fire Resistance: Partition material shall comply with the following requirements, when tested in accordance with ASTM E 84: Standard Test Method for Surface Burning Characteristic of Building Material.
    4. Manufacturers
        1. Model number for toilet partitions manufactured by Bobrick Washroom Equipment, INC., are listed to establish a standard of quality for design, function, materials, workmanship, and appearance. The District may submit other manufacturers for evaluation. Toilet partitions shall be the product(s) of a single

manufacturer.

5. Mounting Configurations
    1. Urinal Screen shall be:
        a. Wall-Hung (1095.67 Sierra Series)
6. Components/Materials
    1. Stiles, Panels, Doors, and Screens shall be manufactured from Solid Color Reinforced Composite material.
    2. Toilet partitions shall be constructed of Solid Color Reinforced Composite material, which is composed of dues, organic fibrous material, and polycarbonate/phenolic resins. Material shall have a non-ghosting, graffiti resistance surface integrally bonded to core through a series of manufacturing steps requiring thermal and mechanical pressure. Edges of material shall be the same color as the surface.
    3. Toilet partitions constructed of High Density Polyethylene (HDPE), High Density Polypropylene or color thru phenolic will not be acceptable.
    4. Finish Thickness
        a. Stiles and door shall be ¾” (19mm)
        b. Panels and benches shall be ½” (13mm)
    5. Hardware
        a. All hardware to be 18-8, type-304 stainless steel with satin finish. The standard for all hardware shall be Institutional Hardware (.67 option).
        b. Hardware of chrome-plated “Zamak”, aluminum, or extruded plastic is unacceptable.
    6. Latch
        a. Sliding door latch shall be 14 gauge (2mm) and shall slide on nylon track.
        b. Sliding door latch shall require less than 5-Ib force to operate. Twisting latch operation will not be acceptable.
        c. Latch track shall be attached to door by machine screws into factory-installed threaded brass inserts.
        d. Threaded brass inserts shall be

factory installed for door hinge and latch connections and shall withstand a direct pull exceeding 1,500 Ibs. per insert.

e. Through bolted, stainless steel, pin-in-head Torx sex bolt fasteners shall be used at latch keeper-to-stile connections and shall withstand direct pull force exceeding 1,500 Ibs. per fastener.

7. Hinges
    a. Hinges shall be 12-gauge stainless steel pin and barrel hinges.
    b. Hinges shall be attached to door and stile by theft-resistance, pin-in-head Torex stainless steel machine screws into factory-installed, threaded brass inserts.
    c. Fasteners secured directly into the core are not acceptable.
    d. Hinges shall be secured with stainless steel pin-in-head Torx machine screws into threaded brass insert.
    e. Threaded brass inserts shall withstand a direct pull force exceeding 1,500 Ibs. per insert.
8. Coat Hook
    a. Coat hook shall be constructed of stainless steel and shall project no more than 1-1/8” (29mm) from face of door
    b. Coat hook shall be secured by to door by through-bolted, theft-resistant, pin-in-head Torx stainless steel screws. Through-bolted fasteners shall withstand a direct pull force exceeding 1,500Ibs. per fasteners.
9. Mounting Brackets
    a. Mounting brackets shall be constructed of stainless steel and mounted inside compartment.
    b. Fasteners at locations connecting panels-to-stiles shall utilize through bolted, stainless steel, pin-in-head

Torx sex bolt fasteners. Through-bolted fasteners shall withstand direct pull force exceeding 1,500 lbs. per fastener.

c. Wall mounted urinal screen brackets shall be 11-gauge (3mm) double thickness.

10. Leveling device shall be 7-gauge, 3/16” (5mm) hot rolled steel bar; chromate-treated and zinc-plated; through-bolted to base of solid color reinforced composite stile.
11. Stile shoe stall shall be one-piece, 4” (102mm) high, type-304, 22-gauge (0.8mm) stainless steel with satin finish. Top shall have 90° return to stile. Shoe will be composed of one-piece of stainless steel and capable of being fastened (by clip) to stiles at wall line.
12. Headrail (overhead Braced) shall be satin finish, extruded anodized aluminum (.125” / 3mm thick) with anti-grip profile.

f. Mirrors:
   1. Mirrors shall be designed in such a manner that they are easy to remove. The bottom railing must not collect water. Mirrors shall be furnished complete with vandal-resistant mountings. The top of the mirror will not exceed 7 feet in height.
   2. The standard of quality is Bobrick.
   3. In restrooms, the standard quality of mirrors shall be 24"x36" frameless beveled mirror with 1/2" bevel. No full length mirrors are acceptable. Install with brushed Nickel 1/4" Standard Aluminum "J" Channel at bottom. Two mounting clips and screws at top.

g. Grab Bars:
   1. The standard quality is Bobrick.
   2. Grab bars shall be horizontal 1 1/2" (38mm) stainless steel bars with satin finish.
   3. Grab bars shall be Model B-6806 Series. The preferred length shall be 36", 42", and/or 48".

J. Window Coverings
   1. The Standard for window coverings are District furnished and installed as follows:
   2. Modular Buildings:
      a. 1” Mini Blind
      b. Manufacturer: Hunter Douglas – Enlightened Style or equal
      c. Material: Aluminum (8 Gauge)

d. Color: Plaster (Off-White) 127 T-8

3. Building Interiors:
    a. Roller/Solar Shades with valance
    b. Manufacturer: Enlightened Styles
    c. Fabric: Sheerweave
    d. Color: Oyster, Pearl Gray
    e. Control: Continuous Cord Loop

K. Whiteboards
1. Claridge whiteboards porcelain enamel writing surface with a minimum thickness of ½”.
2. All whiteboards shall be furnished and installed by the District. Backing for whiteboards provided by Contractor as needed

L. Lactation Rooms
1. In new construction, one lactation room with a sink shall be required.

END OF INTERIOR CONSTRUCTION

7. CONVEYING SYSTEMS

A. General Guidelines

1. Chair lifts are prohibited.

B. Elevators

1. Controls:
    a. All elevator control systems shall be such that any elevator repair company is able to troubleshoot, repair, maintain, or adjust the control system. No proprietary software or repair tools shall be allowed.
    b. All elevator controls and indicators shall use a vandalism-resistant design.
2. The installing vendor shall be responsible for all maintenance and service during the warranty period. Response to non-emergency service calls shall be within four hours of the call. Response to emergency service calls shall be within one- half hour of the call. The vendor shall be financially responsible for these calls except those caused by power outages, acts of God, vandalism, and false reports. The contract bid form shall provide a unit price for the hourly labor rate for these service calls at both the standard rate and overtime rate.
3. The preferred type of elevator system is hydraulic.
4. All elevator lighting shall be LED. There shall be concealed perimeter lighting and wall wash lighting. Canned lighting is prohibited.
5. All telephone equipment shall be compatible with the District's telecommunications system, shall have a backup system and shall be installed with copper wiring.
6. Proximity type detectors shall be used on elevator doors.
7. All access panels shall be tamper proof and vandal resistant.
8. Interior Finish:
    a. All wall panels shall be stainless steel.
    b. The ceiling shall be solid.
    c. A means of communication from inside the elevator is mandatory.
    d. Carpet tiles installed with lock dots shall be used for flooring.

END OF CONVEYING SYSTEMS

8. MECHANICAL SYSTEMS

A. General Mechanical Guidelines

1. The designer is hereby notified that the campus water distribution system operates at 70-80 psi. This may create the need for pressure reducing stations or other special considerations for specific applications.
2. All piping systems shall be labeled with the type of service and the direction of flow. Insulated piping shall be labeled as “non-asbestos”.
3. Mechanical joint piping systems (Victaulic, etc.) shall be used only for fire protection systems.

B. Building Plumbing Systems

1. General Guidelines:

a. Access doors

1. Access doors shall be supplied for all concealed valves or other equipment that may require operation or adjustment.
2. The access doors for valves and other equipment shall be a minimum size of 12” x 12”, the minimum size for crawl hole access doors shall be 24” x 24”.
3. Both the mechanical and architectural drawings shall note the need for access doors, the numbers of doors needed and the general locations. Exact locations are not desired. The design should require that access doors be located to allow access to the valves or other equipment.

b. Thermometers and gauges

1. All thermometers and gauges shall have dial faces between 2” and 5” in diameter. All thermometers installed more than 8’ from floor level, shall have a minimum dial face of 4” and shall be installed to allow reading from floor level.
2. All thermometers shall be of the dry well type. All thermometers shall be installed with thermal conductive material in the dry wells.
3. All thermometers and gauges shall be selected with the expected operating conditions near the middle of the range of the device.
4. Thermometers and pressure gauges shall be accurate to 1% of full scale.
5. All gauges shall be installed with gauge cocks.

c. Metering

1. All meters shall be installed with a three-valve bypass design. The bypass valve shall be full flow and capable of being locked. The valves shall be OS&Y rising stem gate valves. The meters shall be installed in a straight run with no obstructions 10 diameters upstream and 5 diameters

downstream. All meter installations shall have 40” of clear space above the location of the meter.

2. All meters shall be connected to data loggers supplied by the district. The contractor is responsible for mounting the data loggers, supplying the necessary 110v power, and connecting the meters to the data loggers. The water meters shall be connected to the panels with 16 gauge, 3 conductor, shielded, stranded control wire.

d. A water-sampling tap shall be installed on all water mains upon entering the building. The tap shall consist of a 1” tap with a ball valve installed at the 12 o’clock position. Two 90° elbows shall be installed to direct the water flow on the floor, similar to a faucet.

e. All piping systems, except natural gas, shall be tested at a minimum of one and one-half times the expected working pressure, or a minimum of 100 psig and a maximum of the design pressure of the pipe and fittings. All systems shall be tested for a minimum of four hours. For natural gas, the test pressure shall be at least twice the working pressure or a minimum of 3 psig. When the test pressure exceeds 125 psig, the test pressure shall not exceed a value, which produces a hoop stress in the piping greater than 50% of the specified minimum yield strength of the pipe.

f. All piping systems shall be installed with section valves at all branch connections.

g. All equipment, fixtures, or other appliances attached to any piping system shall have a shut off valve located at the connection to the piping system.

h. All piping shall be labeled at intervals no greater than 20 feet on straight runs including risers and drops, adjacent to each valve and fitting, and at each side of penetrations of structure or enclosure. All labeling shall comply with ANSI A13.1.

i. All valves shall be tagged with an engraved brass or plastic tag that describes the type of service and area controlled by the valve.

2. Domestic Water Systems:

a. Isolation Valves

1. In restrooms, at least one-isolation valves for the lavatories and at least one for the urinals and toilets shall be provided.

2. For each wall hydrant provide at least one-isolation valve in an access panel in the wall or ceiling.

3. The standard of quality for isolation valves is Nibco.
4. An access panel shall be provided for each valve location. The minimum size shall be 12”x12”. The fastener shall be vandal resistant.

b. Materials

1. No PVC piping shall be used for domestic water systems.
2. Propress fittings may be used.
3. All pipe and fittings, 3” and smaller, shall be copper, Type L, hard or soft drawn for solder joint connections. All solder shall be lead-free. For pipe sizes larger than 3”, galvanized pipe and fittings may be used.
4. Unions 2-1/2” and larger shall have flange joints.
5. Valves
    a. Gate valves, 4” to 12”, shall be flanged, cast iron, 125lb., solid wedge, bolted bonnet, OS&Y, Nibco F617-O or equal. Gate valves smaller than 4” shall not be used.
    b. Check valves 2” and smaller shall be soldered, bronze, 125 lb., horizontal swing, Nibco S-413 or equal. Check valves 2-1/2” to 8” shall be flanged, cast iron, 125 lb. bolted bonnet, horizontal swing, Nibco F- 918 or equal.
    c. Ball valves, 3” and smaller, shall be soldered, bronze, 125 lb., full port Nibco S-580 or equal.
    d. Butterfly valves, 6” and larger, shall be gear operated.
    e. Globe valves shall be 2” and smaller. Strainers, 2” and smaller, shall be threaded, bronze, 250 lb., 20 mesh stainless steel screen, Watts Model 777 or equal.
    f. Strainers 2-1/2” to 12” shall be flanged, cast iron, 125 lb., .045” perforated stainless steel screen, Hoffman Model 450 or equal.
    g. Low point drain valves shall be equipped with a hose adaptor fitting.

c. Hot Water Systems

1. In restrooms, break rooms, custodial closets, each lavatory, and as required by local health code shall have a demand water heater. Standard of design will be Chronomite. Point of use hot water systems are acceptable at isolated locations.
2. Other hot water systems shall have a standard of quality of State AOC Smith.
3. The standard of quality for boilers shall be

Patterson Kelly Boiler.

4. Water Heaters
    a. Instantaneous, tank less water heating systems are preferred whenever feasible. All installations should be evaluated for the possibility of using this type of system.
    b. All tank hot water systems shall have recirculating pumps systems that place the heater in close proximity to the use. Close proximity is considered to require less than 50’ of piping between the heat source and the farthest outlet system. The recirculating pumps shall be controlled by the building automation system to allow operation of the pumps only during normal building operation times.
5. Recirculating pumps in hot water systems shall be constructed of non-ferrous material.
6. The desired temperature for hot water is a maximum of 110°F at the point of usage for normal faucet applications. Other types of usage may require other temperatures (dishwashers, etc.) and should be evaluated individually. Where temperatures higher than 110°F are required at certain outlets for a particular intended use, separate heaters or tempering systems shall be installed for those outlets.
7. Expansion Tanks
    a. All hot water systems that have backflow preventers shall be designed and installed with provisions for thermal expansion.
    b. Each system shall be evaluated for the most efficient and cost effective method of providing for expansion.
    c. All pressure relief valves shall dump excess water into a floor sink.
    d. All expansion tanks shall be installed with provisions for draining and venting, and shall have a sight glass.
8. Water Softeners
    a. Water softening is required on all hot water systems. Other water shall not be softened except for specific applications that require softened water.
    b. Specifications for water softening

equipment shall be based on Culligan.

c. All water softening equipment shall be installed with a test port immediately downstream from the softening equipment.
d. Water softening systems shall be designed to supply water at less than 1 grain of hardness. The water supply on the campus typically has 6 grains per gallon of hardness.

d. Interior Drinking Fountains

1. All interior drinking fountains shall be of the refrigerated type.
2. The standard of quality for drinking fountains is Haws.
3. All drinking fountains shall be equipped with only one bottle filler per location. The standard of quality shall be Elkay LK1110. Where two drinking fountains are collocated at different heights, install the bottle filler on the lower drinking fountain.
4. Locations of interior drinking fountains shall be noted on electrical plan as well as plumbing and architectural plans. Tile shall be installed floor to ceiling matching restrooms at these locations.
5. Drinking fountain chillers to be on pig tail chord.

e. Hose Bibbs and Wall Hydrants

1. A hose connection shall be installed in each mechanical room.
2. One hose connection shall be installed per 1,000 square feet at each roof level. One hose connection shall be at a minimum of 100 feet apart.
3. The standard of quality shall be TBD
4. Hose connections shall be located on the exterior of each building. A minimum of one hose connection shall be installed on each side of the building. The preferred spacing for hose connections is one every 100’. Where feasible, hose connections should be installed within 15’ of the main entrance to the building.
5. All exterior hose connections shall be of the recessed socket type and installed in a secured enclosure keyed to District Standard CH751 key. The standard of

quality shall be Zurn.

f. Backflow Preventers

1. All domestic water systems shall have backflow prevention devices at the point of the building entry.
2. All backflow preventers shall be reduced pressure principle devices.
3. All backflow preventers shall be located and configured with an inground valve to allow isolation of backflow system for maintenance and testing. Minimum clearance is 24” in all directions.
4. No backflow preventers shall be located more than 4’ above floor level.
5. Pit installations of backflow preventers are not allowed.
6. Drainage from backflow preventers must be possible by gravity only, either to a floor drain or to the exterior of the building.
7. Contractor to provide and install insulation blanket for each backflow device.
8. Install bollards around backflow systems in areas adjacent to traffic for protection.

3. Sanitary Waste and Vent:

a. Materials

1. Piping may be cast iron, DWV copper, or DWV Schedule 40 PVC. Copper may be used above grade only. The cast iron may be either hubbed or no-hub. All piping systems shall be designed for the intended use.

b. All sanitary waste systems shall be designed for a maximum of 140°F material. No material shall be dumped in any sanitary waste system that has a temperature of more than 140°F. In some cases, this will require cooling units on waste discharge if equipment such as a dishwasher is installed that may discharge at higher temperatures. PVC piping may not be used until that discharge has cooled to 140°F or less.

c. Every piece of equipment that requires indirect waste (backflow preventers, autoclaves, etc.) shall be served by a drain at that piece of equipment. More than one piece of equipment may be served by a drain provided the pieces of equipment are close to each other and the sizing of the drain provides adequate drainage for the equipment. The preferred method for supplying this drain is by use of a floor sink, but other types of drains are acceptable, depending on the individual situation. In no case shall the drainage be accomplished by installing piping

across the floor to a central floor drain.

d. Floor Drains

1. All floor drains shall have a minimum pipe size of 2”, a minimum strainer size of 6 1/2”, and have a removable strainer.
2. Upon completion of the installation of the floor drain and the floor around it, each area shall be tested to ensure that water on the floor in the area is able to reach the drain by the force of gravity alone.
3. All mechanical rooms shall have a minimum of one floor drain. More floor drains shall be installed as required to maintain a ratio of one floor drain for every 500 square feet of floor area. These floor drains are in addition to those drains required for equipment.
4. Floor drains shall not have trap primers.
5. A minimum of one floor drain per restroom shall be provided.
6. Floors in the restrooms shall slope toward the drain. The designer shall lay out and include floor plans for restrooms such that the floor has a 1% slope toward the drain.

4. Fixtures:

a. In restrooms, no less than 1 recessed hose bibb with a lockable cover shall be provided in each restroom. The standard of quality is Zurn.
b. The standard of design for lavatories, toilets, and urinals shall be commercial grade china. The standard of quality is Sloan. All fixtures must be white, and hardware must be chrome.
c. Toilets shall be wall hung. The standard of quality flush valve is Sloan, exposed battery powered side mount sensor operated flushometer.
d. Custodian floor lavatories shall be cast iron, at least 24”x24” with a preferred size of 24”x36.” The standard of quality is Kohler.

1. FRP wall protection splash plates a minimum of 48” in height and the full length wall to wall of the lavatory shall be provided. In the case of a corner sink, splash plates shall be installed on both walls.
2. The standard of quality for floor lavatory faucets is Chicago 897-CP, chrome, with a hose connection and vacuum breaker, and reinforced to wall.
3. Sink edge cap shall be stainless steel with a standard of quality of Kohler.

4. All faucets shall be braced to the wall and no higher than 36” above the floor.

e. Lavatories

1. Lavatory sinks shall be under-counter mount.

f. Urinals

1. The standard of quality for urinals shall be Sloan SU-7009-A.
2. Urinals shall not be of waterless type.
3. Standard of quality for flush valves is Sloan EBV-89-A SMO, exposed battery powered side mount sensor operated flushometer.

g. Restroom faucets shall have a standard of quality of Sloan EBF-650.

1. All faucets shall be automatic and hardwired.
2. The wiring shall be noted on both electrical and plumbing plans.F
3. Faucets shall be single output faucets with mixing valves.
4. No lavatory shall have a pop up drain stopper.

h. Break Room Sinks

1. The sinks shall be top mounted stainless with a standard of quality of Blanco.
2. All sinks shall have a garbage disposal with a standard of quality being Insinkerator.
3. The faucet shall have a standard of quality of Delta D140-DST Chrome.

5. Special Systems:

a. Acid Waste

1. Pipe and fittings may be either Duriron, glass, or plastic. All materials must be rated and approved for acid waste use.

b. Emergency Showers and Eyewashes

1. All piping to emergency showers and eyewashes shall comply with ANSI Z358.1.
2. In all new construction, any situation requiring either an emergency shower or eyewash should have both installed. It is preferred that they be co-located.
3. All emergency showers shall have a local alarm to notify persons in the area that the shower is in use.
4. Designs for installations of emergency showers or eyewashes should consider the feasibility of providing an alarm connection to the building security system.

C. Underground Piping Systems

1. General Requirements:
    a. In locations where piping passes beneath roadways or driveways, the engineer shall evaluate the expected load and specify the appropriate materials to carry the load.
    b. All underground piping systems, except copper, shall have a #12 AWG wire attached to the pipe for a tracing wire. The wire shall be labeled and terminated in an accessible location.
    c. All underground piping systems shall have a warning tape, with appropriate wording, buried 24" above the pipe.
    d. Using a standard proctor at optimum moisture content (±2%), all backfill shall be mechanically compacted to a minimum of 88% and a maximum of 92% density under landscaped areas and a minimum of 95% under other areas.
2. Sanitary Sewer:
    a. Cast Iron Systems are not preferred.
    b. PVC Systems
        1. All piping shall be a minimum of Schedule 40.
        2. All fittings shall be DWV.
        3. PVC systems shall be protected by bedding material 6” above and on each side and 3” below the pipe. The bedding material may be sand, rolled stone, or other appropriate material that has no rocks larger than 3/4”.
        4. PVC shall not be used beneath buildings.
    c. Clean Outs
        1. All cleanouts shall be located in non-traffic areas.
        2. Clean outs shall be installed in a concrete surround that is a minimum of 12” x 12” and 4” thick.
        3. All cleanout plugs shall be cast bronze with a hex head.
    d. Testing
        1. All sanitary sewer systems shall be tested with 10’ of head pressure for not less than four hours.
3. Storm Sewer Systems:
    a. PVC piping may be used on storm sewer systems. For pipe sizes 8” and less, Schedule 40 shall be the minimum pipe used. For pipe sizes greater than 8”, SDR 71 piping may be used. All fittings shall be DWV.
    b. Cast iron pipe may be used. The same standards apply as for sanitary sewer above.
    c. Concrete pipe and corrugated metal pipe may be used.
    d. Clean outs
        1. All clean outs shall be located in non-traffic areas.

2. Clean outs shall be installed in a concrete surround that is a minimum of 12” x 12” and 4” thick.
3. All cleanout plugs shall be cast bronze with a hex head.

4. Water Distribution Systems:
   a. All piping systems shall comply with AWWA standards.
   b. All water piping shall have a minimum 32” of cover.
   c. To the extent possible, all water meters shall be located inside buildings.
   d. Valves shall be installed with a cast iron valve boxes, set in a concrete surround that is a minimum of 12” x 12” x 4” thick. The cover to the valve box shall be marked “Water.”
   e. The preferred material for water distribution systems is PVC.
   f. PVC systems
      1. All PVC piping shall be C900 installed according to AWWA M23.
      2. All fittings shall be ductile iron encased in polypropylene.
      3. All fittings shall be installed with UL listed and approved retainers. Thrust blocks are not desired.
      4. Valves shall be ductile iron, with resilient seats and bronze gates that conform to AWWA C509. No split (2 piece) gates shall be allowed.
   g. Copper Systems
      1. Copper shall only be used on pipe sizes 3” and smaller, and shall be used for building service only.
      2. All copper pipe shall be Type K, ASTM B88, installed per AWWA C800.
      3. Fittings shall be ANSI B16.22 wrought copper.
      4. Valves, 2 ½” and larger, shall be ductile iron, flanged, with key head and dielectric isolation. All bolts shall be stainless steel. Valves, 2” and smaller, shall have a key operated stop.
   h. All water systems shall be hydrostatically tested at 1 ½ times the expected working pressure, or 100 psig, whichever is greater, for a minimum of 4 hours.
   i. The water piping systems shall be cleaned according to AWWA M23.

D. Fire Protection Systems
1. Sprinkler Systems:
   a. All test valves shall be located in mechanical rooms in central locations. A minimum number of locations shall be used for test valves. In new construction it is preferred that all test valves be at one location.

b. A pressure gauge shall be installed on the main supply of each sprinkler system, upstream from the main test valve.
c. Drainage shall be provided for all test locations that is sufficient to carry the full flow of water that can be expected during testing of the systems. This is particularly important at the location for testing the main drain of a system. Directing test water to the exterior of the building is not acceptable.
d. All valves shall be located with sufficient room for maintenance or replacement.
e. All sprinkler systems shall have a fire alarm panel installed that is capable of monitoring and reporting flow in all zones and tampering with all valves of the system. The panel shall be equipped for sounding a local alarm and shall be capable of interfacing with the campus fire alarm system.
f. Materials
    1. All materials shall comply with NFPA.
    2. If mechanical joint systems are used, the fittings shall be equal to Victualic 005 Firelock Rigid. No cut grooves shall be allowed.
    3. All underground piping shall be C900 with ductile iron fittings. The fittings shall be coated and wrapped with polyethylene per AWWA C105.
    4. All fire sprinkler heads in t-bar ceilings shall be white with white trim, whereas all fire sprinkler heads in hard lid ceilings shall be chrome with chrome trim.
g. Testing
    1. All sprinkler systems shall be tested at no less than 200 psig for no less than four hours.

E. Refrigerant and Cooling Systems
1. General Design Guidelines:
    a. Design of cooling systems should avoid operating refrigerant systems when the outside air temperature is less than 55°F.
    b. Use of wastewater to cool units is not acceptable.
    c. All roof mounted condensing units shall be designed to 105°F outside air temperature.
    d. All equipment shall be installed in a location that gives adequate space for maintenance work.
2. Materials:
    a. All piping and fittings shall be copper except in an evaporative condenser, where steel piping is acceptable. Long radius fittings are preferred for HVAC systems where space allows and are required for refrigerant systems.
    b. All valves shall be full port. Isolation valves shall be provided on each side of driers. The designer shall evaluate the need for check valves on the discharge of compressors, especially when the condenser is located higher than the compressor.
    c. The discharge from all relief valves shall be piped to the exterior of the building.
    d. All solder shall be 15% silver solder or equivalent except on

dissimilar connections where high silver (56%) solder is required.

e. Suction and hot gas bypass in all locations, and discharge lines if exposed in occupied areas shall be insulated. For units above 5 tons, use 1” fiberglass insulation. For smaller units, use 3/4” closed cell foam insulation, minimum. All insulation on exterior piping shall be protected by an aluminum or PVC jacket.

f. All lines shall be labeled at all access points and every 20’ of exposed piping, indicating the type of refrigerant contained in the lines and direction of flow.

3. Equipment:

a. The designer shall evaluate the need for vibration eliminators, especially where the compressor is located inside the building.

b. Compressors

1. All compressors shall be supplied with a 5-year warranty.
2. Multiple units are preferred over larger single units.
3. Technology for compressor speed control will be considered.
4. All 3-phase units shall have voltage monitors for each phase, with manual reset.
5. High and low pressure switches shall be provided.
6. Anti-recycle timers and crankcase heaters shall be provided for all hermetic compressors.
7. All solenoid valves shall have a manual lift stem.
8. For freezer and other refrigeration equipment, driers shall be provided on all liquid line. Isolation valves shall be provided on each side of the driers.
9. Condensing units, if designed to operate at less than 55°F, shall be provided with a condenser fan cycle control operated from the head pressure.
10. All coils shall have copper tubes and aluminum fins.

F. Water Cooling Systems

1. General Requirements:

a. All new chilled water systems shall be Primary/Secondary systems with 2-way control valves. The secondary systems shall have variable speed pumps and 2-way control valves.

2. Interior Chilled Water Systems:

a. All loop systems shall be provided with a means of air relief at all high points. The preferred method for air relief is a “Hoffman Style” automatic valve with a ball valve between the piping and the relief.

b. Piping

1. PVC shall not be used for chilled water systems above ground.
2. Welded steel systems shall use black steel piping and fittings, ASTM A120, Schedule 40. The minimum pipe size shall be 3/4”.

3. Copper systems shall use a minimum of Type L copper. The solder shall be lead-free.

c. Valves

1. Control valves, for pipe sizes 3” and smaller, shall be globe valves. For pipe sizes larger than 3”, the control valves shall be butterfly valves. All butterfly valves shall be lug-type and gear operated.
2. Isolation valves, for pipe sizes 2” and smaller, shall be ball valves. For pipe sizes larger than 2”, the isolation valves shall be butterfly valves. All butterfly valves 6” and over shall be lug-type and gear operated.
3. The minimum standard of quality for a balancing valve shall be a Bell and Gosset Circuit Setter Plus. Valves 3 ½” and smaller shall utilize a full port ball valve. Valves over 4” shall utilize a globe style.
4. Butterfly valves shall be resilient seated with bronze or stainless steel discs and shall be bubble-tight.

d. Insulation

1. All insulation shall be fiberglass, flexible unicellular foam, or cellular glass.
2. The jackets shall have a smooth surface. Aluminum jackets shall be a minimum of 0.016” thick.
3. All interior piping that is exposed in occupied areas and is within 6’ of the finished floor shall have a PVC jacket installed. This jacket shall be painted to match the surrounding background.
4. All interior piping that is exposed in mechanical rooms and is within 6’ of the finished floor shall have a PVC or aluminum jack installed.

e. All chilled water systems shall have an air separator installed.

3. Condenser Water Systems:
   a. The designer shall evaluate the cost/benefit of using PVC or stainless steel piping instead of steel piping. It is preferred that steel piping be used. If PVC is used, it shall be schedule 80. If stainless steel is used, it shall be schedule 10.
4. Equipment:
   a. All equipment shall be mounted on isolation pads.
   b. Cooling Towers
      1. The minimum standard of quality shall be BAC or Evapco. The designer shall evaluate the cost/benefit of using a stainless steel tower for each installation. Fiberglass shall not be used.
      2. Consideration shall be given to the aesthetic qualities of any towers located in the view of the public. A screen or other method of removing the tower from view may be required.
      3. Pressurized flow distribution systems are preferred.
      4. All towers shall have easily removable covers located at each end of the basin.

5. A five-year warranty shall be provided with each cooling tower.
6. All cooling towers must have CTI certified performance.
7. Belt driven fans are preferred over direct coupled motor and fans. The designer shall evaluate the use of 2-speed or variable speed fans. All variable frequency drives shall be installed with a bypass switch, and voltage flux safety with manual resets.
8. All cooling towers shall have extended lubrication lines.
9. Roof mounted cooling towers that are elevated 4 feet above the surrounding grade shall have a deck installed around the perimeter of the tower.

c. Chillers

1. The designer shall consider efficiency losses over time when sizing a cooling tower for a chiller.
2. Chiller controls shall be digital type controls. All controls shall be integrated with the district Building Automation System (BAS). A hand-off- auto switch shall be provided to allow local control or BAS control. All control panels shall be provided with interface capabilities for BacNet connection to the BAS for demand control and chilled water reset.
3. Thermometers and pressure gauges shall be provided for the entering and leaving condenser and chilled water and the bypass lines. The thermometers shall be 6” dial type. Mercury thermometers are not allowed in this application.
4. Flow meter/switch combinations shall be provided on chilled water and condenser water lines.
5. Consideration shall be given to sound attenuation when designing the location and installation of a chiller.
6. All pipe connections to chillers shall be flanged.
7. All cold sections and lines shall be insulated.
8. All chillers shall be installed on housekeeping pads that are a minimum of 4” high.
9. Screw chillers shall have a discharge service valve installed between the compressor and the condenser barrel.

d. Pumps

1. All pumps shall have mechanical seals. Pumps 7-½ horsepower and greater shall have mechanical split seals.
2. All pump motors over 20 HP shall have shaft grounding rings installed, and overload protection.

e. Expansion Tanks

1. All expansion tanks shall be located on the suction side of pumps and shall be diaphragm type.

f. All condensing water systems shall have stainless steel strainers installed.
g. Water Treatment
    1. The designer shall coordinate the design of the district's water treatment system with the current water treatment provider.
    2. Schedule 80 UV rated PVC shall be used for all exposed piping.
    3. A rain tight enclosure shall be provided for outdoor mounted controls and chemical pumps.
    4. Two separate chemical pumps shall be provided, one for the scale inhibitor and the other for the biocide. The pumps may have a built-in or separate controller.
    5. Double walled chemical containment ranks shall be provided for each pump.

G. Hot Water HVAC Systems
1. Distribution:
    a. Pipe and Fittings
        1. All piping shall be black steel. Supply piping 2" and smaller shall be schedule 80. Supply piping larger than 2" shall be schedule 40.
        2. Fittings 2 1/2" and smaller shall be threaded only for appendages. Fittings for general piping shall be welded. Fittings 3" and larger shall be welded, and have flanged connections to valves and equipment. All fittings shall be forged steel.
    b. Valves 2 ½" and smaller shall be threaded OS&Y gate valves, 800 lb. class. Valves 3" and larger shall be flanged, cast steel, OS&Y, 150 lb. class.
    c. All anchors, guides, and other metal accessories shall be constructed of galvanized or painted metal, and shall not be mounted on the floor of manholes or chases. All support systems shall be wall mounted.
    d. All items that require maintenance shall be located to allow ease of access.
    e. Insulation
        1. Owens-Corning "Foamglass" shall be used as a standard of quality.
        2. Jackets of PVC or .020" smooth surfaced aluminum shall be installed in accessible areas. Insulation in non-accessible areas shall not have a jacket installed.

H. Air Handling Systems
1. General Requirements:
    a. The standard of quality for air handling systems will be Carrier or Trane.
    b. For mini split systems the standard of quality shall be Sanyo or Mitsubishi.

c. Economizer cycles are required. A return air fan is suggested to prevent over pressurization of the conditioned space.
d. All systems that use 100% outside air should be evaluated for the use of heat recovery systems.
e. All designers shall consider noise and ease of maintenance when locating equipment.
f. A drawing shall be mounted near the air handling unit showing the as- built locations of all fire dampers, balancing dampers, VAV boxes, coils, and other equipment in the ductwork served by that unit. Glass or other suitable material shall protect the drawing.
g. The location of outside air intakes shall be carefully considered to prevent intake of exhaust from other systems or equipment.

2. Comfort Systems:
    a. Air Handling Units
        1. For new construction, and existing buildings where possible, locate all air handling units inside the building or in a penthouse. Rooftop and above ceiling locations are not preferred. Variable air volume (VAV) boxes should be located in corridors or other common areas whenever possible.
        2. All units shall provide thorough mixing of outside and return air. Blow-through units are preferred over draw-through units. The designer shall evaluate the need for engineered mixing boxes, blenders, or other methods to prevent stratification of the air.
        3. Hinged access doors shall be provided on all units to provide access to filters, coils, fans, dampers, etc. Door handles shall be used on these doors. Bolted panels are not acceptable except on very small units.
        4. All drain pans shall be bottom drained. Provisions for cleaning shall include either a removable pan or ease of access for cleaning in place. Traps for drain systems shall be sized for the system served. Ensure adequate room for the size of the trap required. For example, if a unit requires a 6” trap, a 4” housekeeping pad would not be sufficient.
        5. All units shall have a magnehelic type filter pressure differential indicator installed with a manifold and valves to isolate the lines of each side of the filter.
        6. All oil and grease lines shall be extended to the exterior of the case.
        7. Air handling units shall have direct couple motors.
        8. All electric motors over 20 HP shall have shaft grounding rings.
    b. Filters
        1. Filter racks shall accommodate 2” disposable filters. The racks shall allow the filters to slide into place. Filter clips are not acceptable.
        2. Air filters shall be 2” MERV 8 disposable.

c. Dampers
    1. All dampers that will be used in a fully closed position shall be low-leakage type. The standard of quality is Ruskin CD60.
    2. All balancing dampers shall lock in position.
    3. The position of all dampers shall be marked on the shaft of the damper by the use of a groove or saw kerf.
    4. The standard of quality for fire damper actuators shall be Belimo brand.

d. Ductwork
    1. All main and branch ductwork shall be constructed of galvanized sheet metal. Other materials may not be used. Construction shall include the use of duct sealant.
    2. Maximum leakage for all duct systems is 5%.
    3. All branch duct takeoffs shall use the 45-degree design and shall have a balancing damper installed in each branch as close to the main duct as practical. No splitter dampers or air extractors shall be used.
    4. Only external insulation shall be used. In mechanical rooms or other places where ductwork is exposed, rigid fiberglass insulation shall be used. The rigid fiberglass insulation shall be a minimum of 2” thick and shall be glued and pinned.
    5. Flexible ductwork shall have a maximum length of 8’ and shall be properly supported. Flexible ductwork shall only be used for connecting the branch duct to the diffuser. In no case shall flexible ductwork be used upstream of VAV boxes.

e. Diffusers
    1. Diffusers with integral dampers shall not be used.
    2. Perforated diffusers shall not be used.
    3. In a suspended ceiling installation, it is preferred that diffusers use a 24” x 24” mounting plate. A small diffuser mounted in a large ceiling tile is not preferred.
    4. Diffusers for VAV systems shall be specified with consideration given to air dumping at low velocities.

f. Variable Frequency Drive (VFD) Systems
    1. The standard of quality for VFDs is ABB or Schnieder.
    2. In general, bypasses are not required. However, all installations of VFDs should be discussed with District personnel regarding the need for a bypass.

3. Fume Hoods and Laboratory Systems:

a. General Requirements
    1. All fume hood systems shall be designed using “high hazard” requirements.
    2. All systems shall be designed using variable air volume (VAV) concepts. Exceptions to this need life-cycle cost/benefit evaluations. If the complete exhaust-supply system cannot be installed at the time of fume hood installation, at a minimum VAV controllers for the new equipment shall be installed.
    3. All fume hood systems shall be designed according to ANSI Z9.5 with the following exception: The design face velocity at half- sash may be 100 fpm.
    4. Where feasible it is preferred that systems be grouped to use fewer pieces of equipment.
    5. Perchloric systems shall be completely separate from other exhaust systems.

b. Fume Hoods
    1. The standard of quality for fume hoods is Kewaunee Air Flow Supreme or LabConco.
    2. All fume hoods shall be equipped with a face velocity monitor and markings on the front of the hood indicating the maximum sash opening height and sash height for maximum airflow.
    3. All fume hoods must be certified by Keenan Safe Colleges.
    4. Fume hoods and supply air diffusers shall not be located so that a supply diffuser is in front of a fume hood.

c. Ductwork
    1. All fume hood and laboratory exhaust system ductwork shall be constructed with 304 stainless steel and shall be of welded construction.

4. Auditoriums:
    a. Design of air handling systems for auditoriums should consider use of CO2 monitors and occupancy monitors to control the amount of outside air required.
    b. Generally it is preferred that auditorium systems be separate from other building systems.
    c. Special consideration shall be given to noise problems in auditorium applications. Acoustic calculations for the mechanical equipment shall be submitted to the District. Particular attention shall be given to low frequency vibrations.

I. Control Systems

1. General Requirements:
    a. All systems shall be compatible with existing control systems.

END MECHANICAL SYSTEMS

9. ELECTRICAL SYSTEMS

A. General Requirements
   1. For electrical metering, the standard of quality shall be E-mon D-mon.
   2. When installing or changing equipment, the designer shall evaluate available fault currents and size the ampere interruption capacity accordingly.
   3. For every new system, provide an arc flash analysis with labeling for all metering, and update the district's records accordingly.
   4. For all drop cords, strain reliefs must be provided for support and to reduce tension on the wire.

B. Distribution Systems
   1. Duct bank systems:
      a. It is preferred that all duct banks have a minimum of 4'-6' of earth cover. The District must approve instances that do not allow this amount of cover (Refer to section "j" below for concrete encasement).
      b. There shall be a minimum of 6 inch sand bedding below and a minimum of 12 inches of sand backfill compacted to 90%.
      c. Duct shall be type DB PVC. In runs over 100', the designer shall evaluate the need for galvanized rigid steel sweep elbows to prevent damage during cable installation.
      d. All ducts terminating in a room/vault/switchgear shall be installed with duct sealant to prevent accumulation of water and access by pests.
      e. A metallic, detectable warning tape that is a minimum of 6" wide shall be installed on sand cover no more than 12" above all duct banks. Must say "Danger Electrical ! ! !" on warning tape.
      f. Upon completion of the installation of the duct and prior to pulling any cable in the duct, a mandrel sized per PG&E Greenbook Section 3.4.1 shall be pulled through the duct.
      g. Duct bank penetrations into manholes shall continue completely through the wall of the manhole and shall use one larger hole rather than several small holes. If the above method is not practical, the concrete may stop outside the manhole but must be pinned to the manhole with steel pins to prevent differential settlement.
         1. All penetrations in the manhole shall have all voids sealed with non-shrink grout.
         2. All conduits shall have bell ends installed.
      h. Duct bank penetrations of foundation walls shall comply with section 1.E.2 on page 6.
      i. All unused duct shall have a nylon or polypropylene pull string installed for future use. The pull string shall be Greenlee or equal with a minimum of 240 lbs. tensile strength, and shall be rot and mildew resistant with incremental footage markings. Wire shall not be used.
      j. Concrete Encasement
         1. The concrete shall cover the duct a minimum of 3" in all directions, with a maximum of 6" coverage.
         2. The concrete shall be 4,000 psi.
         3. The maximum concrete aggregate size shall be ¾".
         4. The concrete shall be placed with the aid of a

mechanical vibrator.

5. If trench erosion occurs, the use of forms may be required to prevent overly large masses of concrete.

k. Minimum reinforcing of concrete shall be as follows:

1. The minimum size is #4.
2. The reinforcing shall be installed longitudinally, at each corner of the duct (in cross section) and along the top, bottom, and sides with no more than 6" between reinforcing steel. All reinforcing steel shall have a minimum concrete cover of 1 ½"on all sides.
3. Reinforcing shall be installed latitudinal, as needed to hold the above in place during placement of the concrete.

2. Direct Burial Systems:
   a. Direct burial cable will not be acceptable.
3. Medium voltage (600 volts – 35,000 volts):
   a. Equipment
      1. Transformers
         a. The designer shall evaluate the anticipated building harmonics to determine the K rating for each transformer installation. The K factor shall be determined as follows:

Transformer K-Factor (Harmonic rating): The transformers shall be designed to operate at full kVA rating while carrying harmonic current contents as defined by the indicated K-Factor. Harmonic current content shall be defined as odd harmonics (3rd thru 15th order), which are all, equal in their percentage of the fundamental (60 hertz) frequency. K-Factor shall be defined as follows:

$$K=\frac{\sum_i (h_i)^2*(fh_i)^2}{\sum_i (fh_i)^2}$$

Where hi = harmonic frequency, given as an integral multiple of the fundamental frequency and fh_i = Harmonic distortion, for the ith harmonic, as percent of the unit fundamental frequency. Transformer nameplates shall be clearly marked with the transformer K-Factor rating.

b. Fusing of transformers shall coordinate with District's first upstream device.
c. In all transformer installations, especially retrofit or replacement, the secondary system fault current shall be analyzed.

d. All grounding/bonding to building steel shall be non-reversible i.e. Cadweld.

2. Switch Gear
    a. All pad-mounted switchgear shall be type PMU or System 2, as manufactured by S&C.
    b. All switch gear and switchgear components must be rated for 25KA (symm) available fault current and be tested to 5KA(symm) by an independent testing agency.
    c. Circuit breakers shall be GE double high vacuum, rated to 1,000 MVA, and designed to be electrically and mechanically interchangeable with the District's existing GE vacuum circuit breakers.

b. Execution
    1. All cable installations where the calculated pulling tension exceeds 67% of the manufacturer's recommended maximum tension shall be installed using tension-measuring equipment. The District's representative must be present to observe these installations. These cable runs shall be clearly marked on the plans.
    2. All cable pulled through wet or damp conduit shall be sealed on the end to prevent any moisture from entering the insulation.
    3. An acceptable pulling device is a "bullwheel" type cable puller or equal equipped with a tension-measuring device.
    4. Pulling with forklifts, trucks, or other like equipment is unacceptable.

c. Testing
    1. Medium Voltage Cable – Direct-current Voltage Test (D.C. HiPot): After installation and prior to being placed in service, all medium voltage cables shall be tested by use of a D.C. HiPot test. Test voltages and procedures shall be in accordance with ICEA Standard S-68-516/NEMA standard WC-8 (latest edition).
    2. Transformers: The following test shall be performed on each transformer prior to the unit being placed in service.
        a. Insulation resistance tests (5000 volt MEGGER) shall be performed on high voltage and low voltage windings prior to placing the transformer in service. The

transformer manufacturer prior to testing must approve this test.

b. Transformer turns ratio testing shall be done on all transformers prior to energizing.

c. Each transformer shall be energized from the low voltage bushings and voltages measured (phase to phase) across the high voltage bushings. All primary and secondary voltages shall be recorded and forwarded to the District.

3. All testing shall be witnessed by the District's Representative.

C. Secondary Circuits

1. General Requirements:

a. All neutral conductors shall be at least full size. The designer shall evaluate the need for oversized neutral conductors.

b. All Main Distribution Panels, subpanels, and associated equipment shall be provided with a properly sized, low-maintenance fault current path back to the source of the electrical supply per NEC Article 250.

c. The preferred method for grounding is through the use of a buried copper loop and the use of the concrete reinforcing steel. Use of the building steel for grounding shall not be allowed unless the steel was designed for this use or the grounding capability of the steel was tested and found adequate.

d. The designer shall evaluate anticipated building loads for potential harmonic design requirements.

e. No aluminum conductors or bussing shall be allowed. All conductors shall be copper.

f. Load centers shall not be allowed. The minimum level of quality is a panel board or a switchboard.

g. When installing or changing equipment, the designer shall evaluate available fault currents and size the ampere interruption capacity accordingly, as well as the proper size of wire to carry the load without loss.

h. Secondary service, feeder, and branch circuit conductors are required to be color coded with factory applied color as shown in the table below. This is not optional.

208/120Volts	Phase	480/277 Volts
Black	A	Brown
Red	B	Orange
Blue	C	Yellow
White	Neutral	White or Gray
Green	Ground	Green
Green/Yellow	Isolated	Green/Yellow

	Ground	

2. Service Entrance:
    a. In new installations, it is preferred that only one disconnect be installed per service entrance. However, if multiple disconnects are installed, no more than 4 disconnects shall be installed, with space allowed for a total of 6 disconnects.
    b. At the points where conduit penetrates concrete that is in contact with soil, that conduit shall be Schedule 80 PVC conduit. If the PVC has a bend of greater than 45 degrees, the bend shall be completely encased in concrete. Rigid Nipples at all exposed penetrations shall be at a minimum of 6" below the concrete surface.
3. Feeders:
    a. All feeders shall have a separate equipment grounding conductor installed. In no case shall the conduit or raceway be used as the grounding conductor.
    b. All conduit sizes and conductor numbers and sizes shall be shown in the drawings.
    c. All panel boards shall have separate grounding and neutral busses. All grounding and neutral wiring shall be terminated on the proper buss. No snap-in breakers shall be allowed. The preferred breaker is the bolt- in type.
    d. All panel boards shall be sized to allow a minimum of 20% of space for additional breakers, by count of breakers. Spare breakers shall be provided.
    e. No piggyback breakers shall be allowed.
4. Branch Circuits:
    a. All wiring systems shall be installed using conduit.
    b. General purpose outlets and lighting circuits for classrooms shall be assigned to dedicated circuits. Multiple classrooms shall not share the same circuits.
    c. The minimum conduit size shall be ¾”, except conduit enclosed in a wall, conduit used for switch legs, and conduit used for control wiring. These exceptions shall have a minimum of ½” conduit with bushings on ends.
    d. A separate equipment grounding conductor shall be installed. Use of the conduit or raceway is not an acceptable grounding method.
    e. All general purpose power circuits shall be a minimum of 20 amps.
    f. General purpose power circuits in office areas shall not have shared neutrals.
    g. Conduit shall be supported from the building structure. Attachment to the other pipes, conduits, ductwork, etc. shall not be allowed. All conduit couplers must be compression type, no set screw connectors are acceptable.
    h. Non-metallic conduit or boxes shall not be used except in wet

locations. In cases where it is used, conduit 2” and smaller shall be a minimum of Schedule 80.

i. All exposed conduit installed in a finished space shall be painted to match the background.

j. All lighting switching layouts shall be shown on the drawings. The drawings shall show the circuit numbers for each receptacle, and shall show the wire counts for all circuitry. All as-builts shall be included.

k. Panel boards shall be supplied with lighting sufficient for working at the panel board. In some cases this may require the installation of additional lighting. Labeling on panel boards should specify each location.

l. Dimming conductors, fire alarm, and switch leg conduit shall be color coded as follows:

Type	Color
Dimming Conductors	Purple/Grey
Fire Alarm	Red
Switch Legs	Non-native colors

D. Devices and Motors

1. For all devices and motors, as-builts must be provided if any changes occur.
2. Devices:
    a. All receptacles and switches shall have a minimum rating of 20 amps and shall be heavy duty specification grade. A standard of quality for switches is Leviton #1221 and receptacles are Hubbell #5362.
    b. The preferred color for receptacles and switches is white. Other colors may be used to match existing devices or for special uses.
    c. Each restroom shall have at least one receptacle and it shall be a GFCI receptacle.
    d. In areas that are required to have ground fault interrupting capability, it is preferred that GFCI receptacles be used rather than GFCI breakers.
    e. The designer shall evaluate the need for steel, nylon, or other special types of covers, depending on the usage of the area.
    f. All exterior devices shall be installed in weather resistant assemblies. The standard of quality shall be Intermatic WP1010MXD or equivalent.
3. Fuses:
    a. Renewable fuses shall not be used.
    b. As much as possible, equipment should be specified with fuse holders that accept fuses that are dimensionally the same as Class H fuses.
    c. Each project shall supply one set of three spare fuses for each type and size fuse installed.
    d. The designer shall evaluate the need for a box for storage of the

spare fuses. If box is installed, it shall be a metal box, designed to store fuses, mounted in a highly visible location, and labeled appropriately.

4. Safety Switches:
    a. All safety switches shall be heavy-duty grade.
    b. All safety switches shall have a durable label permanently attached to the inside of the cover that describes the fuse size, type, current limiting ability and devices controlled.
    c. All safety switches intended for use on circuits where current limiting fuses are required shall be specified with rejection clips designed to permit installation of class R fuses only.
    d. The covers on safety switches shall be provided with a method of opening the cover without opening the switch.
    e. Safety switches in mechanical rooms shall have NEMA 3R enclosures unless the environment or usage requires a different enclosure.
    f. All safety switches shall have a grounding bar.
    g. No terminals shall be double-tapped. If multiple conductors are being terminated, then a larger busbar or parallel terminal must be installed.
5. Motors:
    a. The designer shall evaluate the possibility of using 480v whenever practical.
    b. No motors shall be designed to operate in the service factor.
    c. All motors shall be designed with soft starting.
    d. All motors shall have overload protections.
    e. All motor service disconnects shall be labeled with breaker number and panel.

E. Alarm Systems
1. Fire Alarm Systems:
    a. All new buildings and major renovations shall include a central, zoned fire alarm system that must report to central panel in Facilities Planning and Management.
    b. All fire alarm systems must include all as-built drawings and is to be located in a properly labeled red enclosure, and as near as possible to the main fire alarm control panel. All Drawings for fire alarm systems shall include zoning and locations for each device on the plan view and a riser diagram.
    c. Acceptable brands for fire alarms systems are FCI, Wheelock, and Silent Knight.
    d. The vendor for fire alarms systems must show the ability to respond to requests for service within 24 hours and the ability to supply replacement parts for the system within 48 hours.
    e. All new fire alarm panels must be expandable. The future ability to provide fire alarm service for the entire building is desired.
    f. All fire alarm panels shall be equipped with a “walk test” feature. This allows activating device to be tested without the need to reset the panel after each device is activated.

g. All fire alarm panels must be connected to an emergency backup power or generator.
h. All fire alarm panels shall be equipped with a “building evacuate” switch.
i. All fire alarm panels shall be located at the main entrance of the building or shall have a remote annunciator located at the main entrance. A diagram of the building showing the various zones shall also be located at the main entrance.
j. Pull stations shall be located at all building and floor entrances.
k. If door hold-opens are used, they shall be wall-mounted, magnetic type with proper mounting blocking in the wall. Combination door closer/hold-opens shall not be used.
l. All pull stations shall be key operated, keyed the same as the building’s fire alarm panel. All keying shall be coordinated with the District.
m. Ionization type smoke detectors shall not be installed in mechanical rooms.
n. All smoke detectors or other activating devices shall be installed in locations that are readily accessible for maintenance. Beam detectors shall be used in atriums or other high ceiling areas.
o. When fire alarm systems are installed in buildings with elevators, provisions shall be included for alternate floor controls.
p. All wiring for fire alarm systems shall be Type FPLM, plenum rated cable.
q. Any conduit associated with the fire alarm system shall be painted red, along with junction boxes. All junction boxes shall be labeled with zone/circuit using printed labels with white background and black lettering.

2. Security Systems:
    a. For all new buildings and major renovations, the designer shall evaluate the need for a security system
    b. All security systems must be compatible with the existing system in use by the District. Design of security systems shall be coordinated with the College Police.
    c. Security systems shall be a part of the construction contract, not a separate project.

F. Lighting
1. General Requirements
    a. The standard of quality of lighting shall be Lithonia.
    b. All lighting will consist of LED lights. No can lighting will be used.
    c. All components of any lighting device must be readily

accessible from the occupied space.

d. Lighting fixtures with open tops are not preferred.
e. All LED light temperature colors shall be 4000K.

2. Restrooms:
    a. All restroom lighting must be controlled by motion sensors able to detect movement throughout the room. The sensors shall have a standard of quality of Leviton or Pass and Seymour.
3. Parking Lots/Roadway Lighting Fixtures:
    a. The standard of quality of lighting shall be KAD-LED Area Luminaire by Lithonia Lighting (60C-700-40K-R5-MVOLT-SPD04-DBLXD).
    b. All exterior anchor base light poles shall be Square Straight Steel Poles by Lithonia Lighting (SSS-25-4C-DM19-L/AB-DBLXD).
4. All emergency exit signs shall be hardwired with battery backup. The standard quality shall be Lithonia LED.
5. Walkway Lighting: **TBD**
6. Exterior Building Wallpacks: **TBD**

G. Solar
1. Provide 10-year “bumper to bumper” equipment warranty. All panels shall be mono crystalline.
2. System shall meet efficiency standards.
3. All conduit 9' above grade and minimum 8" below grade shall be rigid metal conduit (RMC) or intermediate metal conduit (IMC). No electric metallic tube (EMT) conduit shall be used.
4. All junction boxes at/on an array or structure shall be weather tight NEMA 3R or greater.

H. Electrical Vehicle Charging Stations
1. There will be not be any monetary funds collected for use of the charging stations on campus.

END ELECTRICAL SYSTEMS

10. INFORMATION SYSTEMS TECHNOLOGY

A. Office Spaces
   1. All offices shall have two (2) wall plates with four (4) data outlets each, located on opposite walls within sixteen inches of an AC outlet.

B. Classrooms and Office Workspaces
   1. All shall have a wall plate with four (4) data outlets every twelve feet of wall space with a minimum of two (2) plates per wall and located within sixteen inches of an AC outlet.
   2. Each classroom shall have a wall phone plate with on (1) data outlet located within 10 feet of the instructor podium.
   3. Each office workspace shall have a wall phone plate with one (1) data outlet located near the main entrance to the room.

C. Computer Labs
   1. Labs shall be constructed with a two-channel raceway with plates for data outlets and AC outlets located at intervals to match the desk configuration and height required.
      a. The amount of data outlets required shall match the number of workstations the raceway is serving plus an additional 10%.
   2. In addition to the raceway the front and back of the lab shall have a wall plate with four (4) data outlets every twelve feet of wall space with a minimum of two (2) plates per wall and located within sixteen inches of an AC outlet.
   3. Each lab shall have a wall phone plate with one (1) data outlet located within 10 feet of the instructor podium or check-in desk.

D. Roof Space
   1. In one location on the roof a NEMA 3R type cabinet with:
      a. Two (2) copper data outlets
      b. 6 strands of multi-mode (10g capable)
      c. 6 strands of single-mode fiber shall be installed
      d. 15 amp dedicated duplex outlet in box
   2. Four (4) North, West, South, East masts:
      a. 3-inch pipe
      b. 2 feet over parapet wall

E. IDF (Intermediate Distribution Frame)
   1. Each IDF shall be centrally located on each floor so that no data outlet location is more than two hundred feet from its closest IDF.
   2. The IDF shall be at a minimum ten feet wide with a length equal to 4’ x the number of data racks required, but no less than six feet in length.
   3. One (1) 7’ two post rack shall be installed for every two hundred (200) data patch panel ports. With an additional empty rack for active equipment.
      a. Vertical wire management shall be installed between each rack and on the end caps rack row.
      b. Horizontal wire management shall be installed between each patch panel at a suitable size to accommodate the patch panel.
      c. A 30amp (dedicated circuit) twist lock and a quad 20amp (dedicated circuit) AC outlet shall be installed at the base of each rack.
   4. A 12-inch ladder rack shall be installed around the perimeter of the room and across all racks.
   5. The main building IDF shall include a 24-strand OM4 multi-mode and

a 12-strand single-mode fiber optic cable from TE-136 and from LRC-114.

a. Each additional IDF shall have a 12-strand OM4 multi-mode and a 6-strand single-mode fiber optic cable from the main building IDF to each.
b. Each additional IDF shall have six (6) copper data outlets from the main IDF.

6. All riser and backbone fiber optic cables in underground or building conduits shall be protected inside an approved innerduct. Installation of (4) 1” innerduct is required in a 4” conduit, (3) 1” innerducts in a 3” conduit and (1) 1" innerduct in a 2” conduit.
7. The main building IDF shall have a 25 pair copper feeder cable from TE-136 terminated on 110 style protected building entrance terminal.
   a. Each additional IDF shall have a 25 pair copper feeder cable from the main IDF terminated on 110-style punch down blocks.
8. A networked environmental sensor shall be installed in each IDF.
9. Each IDF shall have at a minimum its own zone from the HVAC unit.

F. Telephones
   1. Each classroom and office workspace shall include a Mitel wall phone and license.
   2. Each office space desk shall include a Mitel desk phone and license.
   3. Each receptionist/secretary office space desk shall include a Mitel desk telephone and license.

G. Wireless Networking
   1. For every 1000 square feet of floor space one (1) Aruba access point and licenses shall be provided.
   2. For every Access point provided a data outlet shall be installed 6”-18” above the T-BAR ceiling or 8’-10’ from floor in an open ceiling room. (Locations to be provided by Butte College Wireless Admin)

H. Network Switches
   1. For the main building IDF an HP Chassis switch capable of both SFP+ 10G, SFP 1G, and 1G Copper covering 75% of building station ports shall be installed.
   2. For each secondary building IDF HP 1U stackable switches covering 75% of building station ports shall be installed.

END INFORMATION SYSTEMS TECHNOLOGY

11. SMART CLASSROOM EQUIPMENT

A. Communications

1. Offices:
    a. All single offices shall have two wall plates with four data outlets each, located on opposite walls within sixteen inches of an electrical outlet.
    b. All multiple office workspaces shall have one wall plate with four data outlets for every twelve linear feet of wall space with a minimum of two plates per wall, located within 16 inches of an electrical outlet. Provide one wall phone plate with one data outlet located near the main entrance to the room.
2. Classrooms:
    a. Provide one wall plate with four data outlets for every 12 linear feet of wall space with a minimum of two plates per wall, located within sixteen inches of an electrical outlet.
    b. Podiums
        1. Provide one wall phone plate with one data outlet located within 10 feet of the instructor podium.
        2. At each podium location, please provide the following:
            i. Two data runs to/from the IDF
            ii. Two data runs to/ from the projector location
            iii. One speaker wire (14 AWG) run to each of two different surface mounted speaker locations in the front of the room (left and right) that will be on each side of a pull down projector screen for source audio purposes in each classroom.
            iv. One speaker wire (14 AWG) run in a daisy chain fashion from the podium to four ceiling speakers to provide spoken word reinforcement.
            v. One Extron DTP XTP 24 wire run to/from the projector location
        3. An in-wall box from FSR (#PWB-200-WHT) along with other FSR parts (#PWB-20X-MNT, #PWB-2X0-ABB, #IPS-D720D-LB, #IPS-D723D) shall be used to house power and data with the wire for the podium coming from it. If the FSR box cannot be obtained and used, each podium location shall have a wall plate (single wall plate with a hole in it for wires to pass through) located at standard power outlet height within 12 inches of desired location, along with a single duplex receptacle outlet located within no more than 6 inches of said podium wall plate for power for podium.
            a. Provide 1 ½” raceway (conduit) for podium A/V cabling including the data runs to/from the projector from in-wall box to above ceiling with short radius 90 degree stub out with plastic bushing. The data cabling coming to/from the IDF location for the podium use shall also be run to the this location and housed in the FSR box with a 1 ¼” going to the bottom of the FSR box for this purpose.

4. There shall be extra wire run to the podium location that should be around 15 ft. of wire, but not to exceed 20 ft.

c. There shall be a manually operated projector screen located in each classroom that is no less than 8 feet wide with a widescreen format of 16x10 in each classroom. This projector screen shall be mounted no more than 8 inches below the ceiling tile grid to maximize viewing from the students, and located in the middle of the room. If the room is 40 ft. wide or less there shall be the need for only one screen. If the room is 40.1 ft. or more, the room shall require two projector screens.
d. There shall be a projector located in each classroom that has no less than 5500 lumens and that has a maximum native resolution of 1920x1080p, but no less than 1200x800 resolution, with an extra 15ft – 20ft wire length at projector location. Epson is the preferred brand, due to current monitoring technology on campus.
e. A Chief CMS440 projector tile kit shall be installed above tile and seismically braced to the building for the projector to mount to. If the Chief CMS440 cannot be installed, there shall be a female 1.5 NPT coupler (see Chief CMA110) located 6”-8” above the ceiling tile utilizing unistrut and all-thread. CMA110 should be braced (or will be braced) with ¾” rigid pipe using riser brace kit in a minimum of four points attached to the structural members so as to keep any lateral movement from happening to CMA110 (more bracing may need to be installed to accomplish this, depending on site conditions). This setup shall be located at no less than 13 ft., and no more than 18 ft. from the desired location of the projector screen. If this cannot happen due to structural above tile, a 120-volt duplex receptacle shall be located above the ceiling within 2ft no more than a maximum of 6” laterally from the CMA110 and 6” high from the top of the CMA110. Receptacle shall be mounted in a way as to not hinder the cable from running through the top of the CMA110. If this cannot happen, power may be installed in the CMS440 mount.
f. The speakers on the front wall will be no more than 2 feet in distance from each side of the projector screen and the top of the speaker when mounted to the wall should be equal in height to the top of the projector screen in which there should be a wood backing to mount the speaker to, and to have a single cutout ring for the speaker wire to be accessed.
g. All equipment for the classroom, excluding the projector, projector mount, projector pipe, wall speakers, ceiling speakers and the projector screen, shall be installed and mounted inside and on top of the podium for the classroom and shall be wired, labeled and programmed, by an Extron Certified programmer, to function properly and work within the Butte College network.
h. See Attachment “A” Butte College List of “Standard” Smart Classroom Equipment for equipment utilized in the Butte College classrooms.
i. Epson, Extron, Middle Atlantic, Spectrum, Da-Lite and Chief

are the brands used here on campus as all current classrooms (new and old) have these manufacturers located in them and are considered the standard.

END SMART CLASSROOM EQUIPMENT

12. CONSTRUCTION DOCUMENTS

A. Submittal Procedure

1. Submittal Schedule:

a. The submittal schedule shall be broken down per section from the contractor in the preconstruction phase.

ATTACHMENT "A"

BUTTE COLLEGE LIST OF "STANDARD" SMART CLASSROOM EQUIPMENT

Quantity	Item Description
1	Extron TLP Pro 1025M Touchpanel (#60-1566-02)
1	Extron RWM 2 recessed wall mount for touchpanel (#70-1141-23)
1	Extron IN1808 IPCP SA Scaling Switcher (#60-1615-02)
1	Extron IR Emitter and Shield Kit (#70-283-01)
1	Extron ShareLink Pro 1000 (#60-1679-01)
1	Extron XPA 2001-70V Amplifier (#60-850-01
2	Extron RSU 126 Rack Shelf Kit (#60-190-10)
1	Extron RSU 129 Rack Shelf Kit (#60-190-01)
10	Extron HDMI Ultra/6 (#26-663-06
2	Extron DPM-HDF/0.5 4K PLUS adapter (#26-713-01)
1	Extron 3.5mm Stereo Cable A Mini/6 (#26-571-03)
1	Extron DTP T UWP 4K 232 D Black (#60-1755-12)
1	Extron Cable Cubby 500 (#70-1045-02)
1	Extron AC+USB 224 US power for CC500 (#60-1697-01)
1	Extron AAP VGA and 3.5mm (#70-101-13)
1	Extron AAP HDMI and Cat5e pass through (#70-1220-02)
1	Extron HDMI Ultra/9 (#26-663-09)
2	Extron MVGA-A M-M/6' (#26-566-02)
1	Extron XTP DTP 24awg Jack, pkg 10 (#101-023-01)
3	Extron XTP DTP 24/6 cable (#26-702-06)
1	Extron SM 28 speaker(s) (#60-1309-02)
2	Extron SF 26CT 70 volt ceiling speaker (#60-1310-03)
1	Epson Powerlite L610U (#V11H901020)
1	Wolfvision Document camera (#VZ8-light4)
1	Da-Lite Model C w/CSR 69"x110" MW 16:10 screen (#34734)
1	Da-Lite screen brackets w/6" extension (#40932)
1	Chief Manufacturing Adjustable Extension Column (#CMS018024)
1	Chief Manufacturing mount for Epson Powerlite L610U (#RPAU)
1	Spectrum Honors ADA Lectern (#55178-20139)
0	Spectrum rear rack rail for 42" lectern (#55139) (Included)
0	Spectrum cutout for Extron TLP1025M and CC500 (#96504mod)
0	Spectrum document camera shelf (#55140FMB) (Included)
1	Spectrum Custom Cust Laser logo on rear of podium (#55145)
1	Spectrum Flat Panel Monitor Arm (#95512)
1	Planar 22" touch screen monitor (#PCT2265)
2	Middle Atlantic power supply (#PD-815R-PL)
1	Middle Atlantic Products shelf for Dell 3060 SFF (#RSH4A3M)
1	Middle Atlantic Products Utility drawer (#UD1)
1	Middle Atlantic Products plexiglass cover (#SL-3)
1	Shure Lavalier Wireless system (#GLXD14R/MX53-Z2)
1	Shure Rechargeable battery for GLXD1 and GLXD2 (#SB902)
1	Ubiquity 8 port small switch (#US-8)
12	Leviton 7ft patch cord (#22068187 or #62460-7E)
4	Leviton Cat 6 Black Jack (#22068148 or #61110-RE6)
1	Leviton patch panel (#49255-R24)
1	Apple TV 4K 5th generation (#MQD2LL/A)
1	Microsoft Wireless Display Adapter (#P3Q-00001)
1	Google Chromecast Ultra (#NC2-6A5-D)
1	Monoprice 10 ft A Male to A Female USB cable (#5434)
2	Monoprice 6 ft A Male to A Female USB cable (#5433)
1	C2G AC to USB 5V power supply (#22335)
2	C2G AC extension cord (#03137)
1	Thomas and Betts mounting head cable tie (#L-7-50MH-0-C)
1	Thomas and Betts cable tie (#L-11-40-0-C)
1	CA eWaste Recycle fee for 10" Touchpanel (#CARF)
1	CA eWaste Recycle fee for Planar Display (#CARF)
1	1 Dell 3060 SFF computer with keyboard and mouse w/no monitor

SECTION 270000 – COMMUNICATIONS BASIC REQUIREMENTS

PART 1 - General

1.1 SUMMARY

A. Section Includes: Communications systems required for this work includes labor, materials, equipment, and services necessary to complete installation of communications work shown on Drawings, specified herein or required for a complete operable facility and not specifically described in other Sections of these Specifications. Among the items required are:

1. Pathways for Communications Systems.
2. Structured Cabling Systems, including but not limited to Equipment Rooms, Backbone Cabling, Horizontal Cabling, Equipment Connecting Cords.
3. Data Communications.
4. Voice Communications.
5. Audio-Visual Communications.
6. Distributed Communication & Monitoring Systems, including but not limited to Public Address, Intercom and CATV Systems.

B. Products furnished but not installed under Division 27:

1. Equipment Connection Cords
2. Spare Parts

C. Work Specifically Excluded from Project:

1. Incoming common carrier services.
2. Private Branch Exchange Systems.
3. Wide Area Network Systems.

1.2 REFERENCES

A. The following Standards, Regulations and Codes apply to work specified in the Contract Documents.

1. Applicable State and Local Codes.
2. Manufacturers Recommendations.
3. NFPA 70 National Electrical Code, 2005 Edition.
4. BICSI TDMM (Telecommunications Distribution Methods Manual), 11th Edition 2006.
5. ANSI/TIA/EIA-568-B.1. Commercial Building Telecommunications Cabling Standard,
6. ANSI/TIA/EIA-568-B.1-2. Commercial Building Telecommunications Cabling Standard, Part 1: General Requirements, Addendum 2, Grounding and Bonding Specifications for Screened Balanced Twisted-Pair Horizontal Cabling.
7. ANSI/TIA/EIA-568-B.1-3. Commercial Building Telecommunications Cabling Standard

Part 1: General Requirements,
Addendum 3, Supportable Distances and Channel
Attenuation for Optical Fiber Applications by Fiber Type.

8. ANSI/TIA/EIA-568-B.1-4. Commercial Building Telecommunications Cabling Standard, Part 1: General Requirements, Addendum 4, Recognition of

Category 6 and Category Cat 6A and 50 nm Laser-Optimized 50/125 um Multimode Optical Fiber Cabling.

9. ANSI/TIA/EIA-568-B.1-2. Commercial Building Telecommunications Cabling Standard, Part 2: Balanced Twisted-Pair Cabling Components.
10. ANSI/TIA/EIA-568-B.2-1. Commercial Building Telecommunications Cabling Standard, Part 2: Balanced Twisted-Pair Cabling Components, Addendum 1, Transmission Performance Specifications for 4-Pair 100 Ohm Category 6 Cabling.
11. ANSI/TIA/EIA-568-B.2-10 (draft 2.0). Commercial Building Telecommunications Cabling Standard, Part 2: Balanced Twisted-Pair Cabling Components, Addendum 10,Transmission Performance Specifications for 4-Pair 100 Ohm Augmented Category 6 Cabling.
12. ANSI/TIA/EIA-568-B3.3 Optical Fibert Cabling Components Standard.
13. TIA-569-B. Commercial Building Standard for Telecommunications Pathways and Spaces.
14. ANSI/TIA/EIA-606-A. Administration Standard for Commercial Telecommunications Infrastructure.
15. ANSI/TIA/EIA-607-A. Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications.
16. TIA/EIA TSB-67 Transmission Performance Specifications for Field Testing of Unshielded Twisted-Pair Cabling Systems.
17. TIA/EIA TSB-72 Centralized Optical Fiber Cabling Guidelines.

1.3 DEFINITIONS

A. Following is a list of abbreviations generally used in Division 27:

1. ADA Americans With Disabilities Act
2. AHJ Authority Having Jurisdiction
3. ANSI American National Standards Institute
4. APWA American Public Works Association
5. ASTM American Society for Testing and Materials
6. CBC California Building Code
7. CEC California Electrical Code
8. CFC California Fire Code
9. FCC Federal Communications Commission
10. HVAC Heating, Ventilating and Air Conditioning
11. IEC International Electrotechnical Commission
12. IEEE Institute of Electrical and Electronics Engineers.
13. IETA International Electrical Testing Association
14. FM FM Global
15. NEMA National Electrical Manufacturers Association
16. NFPA National Fire Protection Association
17. OSHA Occupational Safety and Health Administration
18. UL Underwriters Laboratories Inc.

B. Provide: To furnish and install, complete and ready for the intended use.

C. Furnish: Supply and deliver to the project site, ready for unpacking, assembly and installation.

D. Install: Includes unloading, unpacking, assembling, erecting, installation, applying, finishing, protecting, cleaning and similar operations at the project site to complete items of work furnished by others.

E. Following is a list of commonly used terms in Division 27:

1. Active Equipment: Electronic equipment used to develop various WAN and LAN services.
2. Backbone: Collective term sometimes used to describe the campus and vertical distribution subsystem facilities and media interconnecting service entrances, communications rooms, and communications cabinets.
3. Bonding: Permanent joining of metallic parts to form an electrically conductive path which will assure electrical continuity and the capacity to conduct safely currents likely to be imposed on it.
4. Cabinet: Freestanding, floor-mounted modular enclosure designed to house and protect rack-mounted electronic equipment.
5. Cable Tray: Vertical or horizontal open supports, usually made of aluminum or steel, that are fastened to a building ceiling or wall. Cables are laid in and fastened to the trays. A cable tray is not a raceway.
6. Campus: Grounds and buildings of a multi-building premises environment.
7. Channel: The end-to-end transmission path between two points at which application specific equipment is connected; may include one or more links, cross-connect jumper and/or patch cords, and work area station cords. Does not include connection to active equipment.
8. Cross-Connect: Equipment used to terminate and tie together communications circuits.
9. Cross-Connect Jumper: A cluster of twisted-pair conductors without connectors used to establish a circuit by linking two cross-connect termination points.
10. Fiber Optic Distribution Unit (FDU): Cabinet with terminating equipment used to develop fiber optic cross-connect facilities.
11. Grounding: a conducting connection to earth, or to some conducting body that serves in place of earth.
12. Hinged Cover Enclosure: Wall-mounted box with a hinged cover that is used to house and protect electrical devices.
13. Horizontal: Pathway facilities and media connecting communications rooms to Telecommunications Outlets.
14. Jack: Receptacle used in conjunction with a plug to make electrical contact between communications circuits, e.g., eight-position/eight-contact modular jacks.
15. Link: A transmission path between two points, not including terminal equipment, work area cables, and equipment cables; one continuous section of conductors or fiber, including the connecting hardware at each end.
16. Local Area Network (LAN): Data transmission facility connecting a number of communicating devices, e.g., serial data, Ethernet, token ring, etc. Typically, the network is limited to a single site.
17. Main Equipment Room (MER): This room is used to distribute communications services to Telecommunication Rooms on the premises, and to interconnect premises services with the telephone companies. Typically, the MER contains passive equipment used for electrical protection (protectors) and main campus cross-connect, and active equipment used for PBX, WAN, and LAN.
18. Media: Twisted-pair, coaxial, and fiber optic cable or cables used to provide signal transmission paths.
19. Mounting Frame: Rectangular steel framework which can be equipment rack or wall mounted to support wiring blocks, patch panels, and other communications equipment.

20. Passive Equipment: Nonelectronic hardware and apparatus, e.g., equipment racks, cable trays, electrical protection, wiring blocks, FDUs, etc.
21. Patch Cords: A length of wire or fiber cable with connectors on one or both ends used to join communications circuits at a cross-connect.
22. Patch Panel: System of terminal blocks or connectors used with patch cords that Facilitate the administration of cross-connect fields.
23. Pathway: Facility for the placement of communications cable. A pathway facility can be composed of several components including conduit, wireway, cable tray, surface raceway, underfloor systems, raised floor, ceiling support wires, etc.
24. Private Branch Exchange (PBX): Private communications switching system located on the user's premises. A PBX switches voice and data calls within a building or premises and between the premises and facilities provided by public common carrier networks.
25. Protectors: Electrical protection devices used to limit foreign voltages on metallic communications circuits.
26. Raceway: An enclosed channel designed expressly for holding wires or cables; may beof metal or insulating material. The term includes conduit, tubing, wireway, underfloor raceway, and surface raceway; does not include cable tray.
27. Racks: An open, freestanding, floor-mounted structure, typically made of aluminum or steel, used to mount equipment; usually referred to as an equipment rack.
28. Telecommunication Outlet (TO): Connecting device mounted in a work area used to terminate horizontal cable and interconnect cabling with station equipment.
29. Telecommunications Room (TR): Distributes communications services to users within a serving zone and interconnects with the MER. Typically, the TR contains passive equipment used for cross-connect and active network equipment used for LANs.
30. Wide Area Network (WAN): Active communications transmission facilities extending beyond the premises.
31. Wiring Block: Punch down terminating equipment used to develop twisted-pair cross-connect facilities.

1.4 ADDITIONAL REQUIREMENTS TO DIVISION 01

A. Operation and Maintenance Documentation: Provide copies of certificates of code authority acceptance, test data, product data, guarantees, warranties, and the like.

B. Shop Drawings: When requested by individual Sections provide shop drawings which include physical characteristics, electrical characteristics, device layout plans, wiring diagrams, and the like. Refer to individual Specification Sections for additional requirements for the shop drawings.

C. Closeout Documentation: Submit electrical code authority certification of inspection. Include documentation of on-site communication testing that was performed.

D. Record Drawings:

1. Show changes and deviations from the Drawings. Include written Addendum and change order items.
2. Show exact routes of cable tray, surface raceway, conduits which are 2 inches in diameter and larger, and service entrance conduits.
3. Show exact location of racks, cabinets, mounting frames, maintenance vaults and the like.
4. Make changes to drawings in electronic format. Obtain electronic copy from Architect, use the same version of AutoCAD to prepare record drawings as was used by the Architect. Provide electronic copy and hard copy to Architect for review.

5. Provide a full size Record Drawing of the floor plan sealed in a plastic coating. Mount on the wall of each serving MER/TR for the floor plan area.

1.5 substitution limitations

A. Equivalent product(s) may be considered for substitution for those products specified, however, the equivalent product(s) must be approved and show demonstrated and documented equivalence to the product(s) specified. Documentation includes, but is not limited to: product samples, data sheets, and actual test data. The request for product substitution, and supporting documentation, must be submitted, in writing, prior to submitting the bid. Written approval for product substitution must be submitted with the bid in accordance with Division 01.

1.6 QUALITY ASSURANCE

A. Conform to requirements of the CEC, latest adopted version with amendments by local AHJs.

B. Conform to latest adopted version of the CBC with amendments by local AHJs.

C. Obtain and pay for electrical permits, plan review, and inspections from local AHJs.

D. Furnish products listed by UL or other testing firm acceptable to AHJ.

E. Conform to requirements of the serving electric, and telephone, and cable television utilities.

F. Contractor Qualifications:

1. Minimum of five years experience in the design, installation, testing and maintenance of communications systems.
2. Must employ at least one full time BICSI certified Registered Communications Distribution Designer (RCDD) who is involved in reviewing work performed by contractor on this project.
3. Maintain a local service facility which stocks spare devices and/or components for servicing systems.
4. Have performed successful installation and maintenance of at least three projects similarin scope and size. Be able to provide project references for these three projects, including scope of Work, project type, owner/user contact name and telephone number.

5. The contractor selected for this Project must be certified by the manufacturer of the products and utilize these components for completion of work.
6. Holds and maintains a valid California C-7 or C-10 State Contractors License and can exhibit validity upon request.
7. Submit a resume of qualifications with proposal indicating the following:
8. A list of recently completed projects of similar type and size with contact names and telephone numbers for each.
9. A list of test equipment proposed for use in verifying the installed integrity of metallic and fiber optic cable systems used.
10. A technical resume of experience for the contractor’s Project Manager and on-site installation supervisor who will be assigned to this project.
11. A list of technical product training attended by the contractor’s personnel that will install the specified manufacturer system.
12. List of Sub-Contractor(s) who will assist the contractor in performance of this work.

1.7 SEQUENCING AND SCHEDULING

A. For the proper execution of the work cooperate with other crafts and contracts as needed.

B. To avoid installation conflicts, thoroughly examine the complete set of Contract Documents. Resolve conflicts with Architect prior to installation.

C. Prior to installation of communications cable to equipment requiring connections, examine the manufacturer's shop drawings, wiring diagrams, product data, and installation instructions. Verify that the electrical characteristics detailed in the Contract Documents are consistent with the electrical characteristics of the actual equipment being installed. When inconsistencies occur request clarification from Architect.

1.8 WARRANTY

A. Provide an extended manufacturer's warranty on the Backbone and Horizontal Communications systems as specified in other sections of Division 27.

B. In addition to the standard warranty requirements, provide the following during the warranty period:

1. Within 24 hours after notification of a defect by the owner, make the necessary corrections and inform the owner of the planned corrective actions. Follow this initial contact with continuous effort and complete required corrective work within 15 days after notification.

C. Prepare Drawings as follows:

1. Prepare Drawings, to accurate scale, in latest AutoCAD graphics format printed to media as directed by Architect. Obtain construction document drawing files from the Architect, or Engineer, at cost plus. Drawings are to be same size as Contract Drawings and indicate location, size and elevation above finished floor of wall mounted and suspended devices and equipment.

2. Plans are to incorporate addenda items and change orders.
3. Distribute plans to trades and provide additional coordination as needed.

D. Advise Architect, in event a conflict occurs in location of equipment. Bear costs for relocation of equipment, resulting from failure to properly coordinate installation or failure to advise Architect of conflict.

E. Provide means of access to junction and pull boxes and concealed equipment which may require access, adjustment or servicing.

F. Final coordination drawings, with as-constructed information added, are to be submitted as record drawings at completion of project.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Provide like items from one manufacturer, such as jacks, patch panels, equipment connection cords, wall plates, and the like.

2.2 MATERIALS

A. Provide new electrical materials of the type and quality detailed, listed by UL, bearing their label wherever standards have been established. Indicated brand names and catalog numbers are used to establish standards of performance and quality. The description of materials listed herein governs in the event that catalog numbers do not correspond to materials described herein.

B. Provide material and equipment that is acceptable to AHJ as suitable for the use indicated. For example, provide plenum rated cable in ceilings that are utilized as air return plenums.

C. Include special features, finishes, accessories, and other requirements as described in the Contract Documents regardless of the item's listed catalog number.

D. Provide incidentals not specifically mentioned herein or noted on Drawings, but needed to complete the system, in a safe and satisfactory working condition.

2.3 FIRESTOPPING

A. For additional requirements see Division 07 "Firestopping."

B. Foam Sealant (non-rated walls): Foam sealant for use around conduit penetrations to prevent passage of smoke, fire, toxic gas or water. Maintain seal before, during and after fire. In and around conduit for thermal break at penetration of barrier between heated and unheated spaces. Chase Technology Corporation, Fire Foam, STI, or approved.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Construction Documents:

1. Drawings are diagrammatic with symbols representing communications equipment, outlets, and wiring.
2. Electrical symbols indicating wiring and equipment shown in the Contract Documents are included in the Contract unless specifically noted otherwise.
3. Examine the entire set of Drawings to avoid conflicts with other systems. Determine exact route and installation of communications wiring and equipment with conditions of construction.

B. Clarification:

1. The Drawings govern in matters of quantity, the Specification in matters of quality. In event of conflict on Drawings or in the Specifications, the greater quantity and the higher quality apply.
2. Should the Communications Documents indicate a condition conflicting with the governing codes and regulations, refrain from installing that portion of the work until clarified by Architect.

3.2 INSTALLATION

A. Install communications equipment complete as directed by manufacturer’s installation instructions. Obtain installation instructions from manufacturer prior to rough-in of the communications equipment, examine the instructions thoroughly. When requirements of the installation instructions conflict with the Contract Documents, request clarification from Architect prior to proceeding with the installation.

B. Determine the requirements for plenum rated cable. When doubt exists, seek prior determination in writing by AHJ.

C. Do not install communications equipment in obvious passages, doorways, scuttles or crawl spaces which would impede or block the area passage's intended usage.

D. Noise Control:

1. Do not install outlet boxes back to back. Do not use straight through boxes.
2. Do not place noise producing devices (above 78 decibels) on walls which are common to occupied spaces unless specifically called for on Drawings. Where such devices must be mounted on walls common to occupied spaces, mount or isolate in such a manner as to effectively prevent the transmission of their inherent noise to the occupied space.

E. Firestopping:

1. Coordinate with the Drawings the location of fire rated walls, ceilings, floors and the like. When these assemblies are penetrated by electrical equipment, seal around the equipment with approved firestopping material.
2. Install firestopping material complete as directed per the manufacturer’s installation instructions.

3.3 FIELD QUALITY CONTROL

A. Tests: Conduct tests of equipment and systems to demonstrate compliance with requirements specified in Division 27. Refer to individual Specification Sections for required tests. Document tests and include in Closeout Documents.

3.4 CLEANING

A. Remove dirt and debris caused by the execution of the communications work.

B. Leave the entire communications system installed under this Contract in clean, dust-free and proper working order.

C. Vacuum clean interiors of new and modified electrical signal and communication Equipment enclosures.

END OF SECTION 270000

SECTION 270500 – TELEPHONE/DATA RACEWAY SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. Work Included: Telephone/Data Raceway System.

1.2 REFERENCES

A. ANSI/TIA/EIA-569-A, Commercial Building Standard for Telecommunications Pathways and Spaces.

B. ANSI/TIA/EIA-607, Commercial Building Grounding and Bonding Requirements for Telecommunications.

1.3 SYSTEM DESCRIPTION

A. Performance Requirements: Provide an empty ANSI/TIA/EIA-569-A compliant raceway system for the building telephone/data wiring as indicated on Drawings and as specified herein.

B. Provide a complete raceway system from data outlet to MC/IC room designated to serve that outlet. Raceway system to include, but not limited to, wall/floor penetrations, boxes, sleeves, conduits, and surface raceway. Provide independent support from building structure for raceway components.

1.4 CLOSEOUT SUBMITTALS

A. Submit product data and shop drawings in accordance with Division 01.

B. Modify product data and shop drawings to reflect construction modifications.

PART 2 - PRODUCTS

2.1 RACEWAY

A. Provide defined pathways for open cable runs through protected accessible spaces.

B. Provide conduits and pull strings through inaccessible spaces.

C. Components as specified in related Sections.

2.2 TERMINAL BOARDS

A. Furnish and install plywood terminal boards, sized as shown on Drawings. Plywood is to be 3/4-inch-thick, void-free, and fire retardant, finished with two coats of enamel, white or ANSI grey. Hold plywood up 4-inches above finished floor.

B. Instruments and active equipment will be furnished and installed by others.

2.3 ACCESSORIES

A. D-Rings:

1. Die-cast aluminum.
2. Designed for holding cables on equipment mounting boards. Reference product: Allentel GB13A, B, and C.

B. J Hooks: Erico Caddy Cable Cat Clips, except the tee grid or drop wire style.

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

A. Install electrical work in telecommunications equipment rooms as shown on Drawings. Coordinate with the telephone company, Owner, and with other trades working in the area.

B. Provide independent support from building structure for raceway components and cable supports.

C. Install plastic-jacketed pull lines printed with accurate sequential footage in empty conduits.

D. Provide copper grounding bus bars and listed copper conductors at each terminal board, Bonded through to the main equipment room and to the building ground grid, per ANSI/EIA/TIA-607.

E. Provide insulated bushings on conduits and sleeves.

F. Conduit bodies (condulets) are not to be used in data raceway system.

3.2 INSTALLATION - OUTLET BOXES

A. Install conduit no smaller than 1.25-inch trade size from any signal outlet box, no smaller than 3/4-inch trade size from any wall phone outlet box.

B. Wall Boxes: Install minimum 2.5-inch deep double-gang (4- X 4-inch) box with a single-gang trim ring and minimum 1.25-inch conduit to accessible space. Use double-gang trim ring where required for 4- to 6-jack installation in one wall box.

C. Mount center of outlet boxes as required by ADA, or noted on drawings, the following distance above the floor:

1. Wall Phones: 46-inches.
2. Telecom Outlets: 18-inches.
3. Other Outlets: As indicated in other Sections of Specifications or as detailed on drawings.

3.3 INSTALLATION - RACEWAY AND PULLBOXES

A. Install no more than two 90 degree bends or a maximum of 180 degrees of curvature between pullboxes.

B. Install pullboxes along conduit at maximum 100-foot spacing.

C. Provide minimum 12- X 12- X 4-inch pullboxes with screw type lids, minimum four screws to secure lid.

D. Use long radius elbows for raceway bends; do not use pullboxes in place of a raceway bend.

E. Size recessed conduits to surface raceway serving multiple data outlets as follows. Sizing is based on TIA/EIA 569-A for 28 percent conduit fill, assuming Category 5e cables (nominal outer diameter 0.24-inch) to each data outlet. Provide recessed backbox between surface raceway and recessed conduit sized for conduit.

1 to 6 cables 1-inch conduit
7 to 10 cables 1-1/4-inch conduit
11 to 15 cables 1-1/2-inch conduit 16
to 20 cables 2-inch conduit

Above 20 cables Use multiple runs of conduit from surface raceway based on above table

F. Provide continuous sleeving through walls, floors and ceilings separating each data outlet from its respective MC/IC room, using sleeve conduit size as required on Drawings. Restore penetrations through rated assemblies to original fire rating per NFPA and local codes.

G. Locate sleeves as shown on Drawings. Where sleeves are not shown on Drawings, install sleeves above suspended ceilings, and locate to minimize length of pathway for future cable from data outlet to MC/IC rooms.

H. Where sleeves are routed between rooms with floating ceilings, extend conduits horizontally 2 feet over edge of floating ceiling to avoid exposed cabling from being seen at floor level.

I. Install three 4-inch conduits from MC to each IC, unless otherwise noted on Drawings.

3.4 INSTALLATION - EQUIPMENT MOUNTING BOARDS

A. Mount plywood backboard 4- inches from floor. Mount telecommunications ground busbar 24-inches above finished floor.

B. Install boards plumb, level, and secured to studs or solid concrete or masonry walls. Anchors for attaching equipment boards include: Material/Substrate Anchor Type Concrete/Masonry Expansion anchors - wedge type with washer located on the backside of the board Gypsum Wallboard Togglebolts - use pan head type

C. Power drive anchors, molly bolts, and tappets are not allowed.

D. Make floor penetrations no more than 4-inches from wall. Install conduit stubs to extend 4-inches from floor base. Cap conduits for protection.

END OF SECTION 270500

TELECOMMUNICATIONS PATHWAYS 270528 - 1
SECTION 270528 – TELECOMMUNICATIONS PATHWAYS

PART 1 - GENERAL

1.1 System Description

A. This Section includes general requirements specifically applicable to the communications sections of this project.

B. This Section specifies the requirements to provide communications conduit raceways, boxes, cable trays, innerduct and fittings including:

1. Communications conduit systems.
2. Wireway systems.
3. Surface raceway systems.
4. Telecommunications outlet boxes.
5. Pull box enclosures.
6. Cabinets.
7. Pulltape and duct plugs.
8. Raceway identification banding.

1.2 References

A. Use this Section in conjunction with specifications and related Contract Documents to establish the total requirements for communications raceways, boxes, innerduct, and cable trays.

B. Use of this Section without including the above-listed items will result in omission of basic requirements.

C. In the event of conflict regarding communications raceway, innerduct, and box requirements between this Section and other sections, the provisions of this Section to govern.

1.3 Definitions

A. Cabinet: A freestanding floor-mounted modular enclosure designed to house and protect rackmounted electronic equipment.

B. Conduit: Round raceway.

C. Conduit Body: Separate portion of a conduit or tubing system that provides access through removable cover(s) to the interior of the system at a junction of two or more sections of the system or at a terminal point of the system.

D. Pull Box Enclosure: Box with a cover installed in one or more runs of raceway to facilitate pulling conductors through the raceway system. There are no openings in the cover.

E. Raceway: Enclosed channel designed expressly for holding wires or cables. Metal or insulating material, and the term includes conduit, tubing, wireways, underfloor raceways, and surface raceways; does not include cable tray.

F. Surface Raceway: Surface-mounted metal channel or plastic duct with snap-in removable covers for housing and protecting electrical wires and cables. Raceway and fittings are

designed so sections can be electrically and mechanically coupled together without subjecting cables to abrasion.

G. Wireway: Sheet metal or nonmetallic troughs with hinged or removable covers for housing and protecting electrical wires and cables and in which conductors are laid in place after the wireway has been installed as a complete system.

H. Wire Basket Runway Systems: Includes, but are not limited to straight sections of type wire basket runway cable trays, bends, tees, elbows, drop-outs, supports and accessories.

1.4 SUBMITTALS

A. Product Data: Submit product data for system components including but not limited to conduits, raceways, ladder racking, cable tray, boxes, enclosures, J-hooks and associated hardware. Work may not begin until product data submittals are approved. Submit submittals in the following format:

1. Title sheet: Project title, location of project, date submitted, name of company and person preparing submittal, contractors address and contact information.
2. Index sheet: describing submittal document tabs.
   a. Tab 1…Business license, Contractor's license, Employee training certificates, and manufacturers certified installer certificate if applicable.
   b. Tab 2…Equipment rack and associated hardware cut sheets.
   c. Tab 3…Terminal block and connecting hardware data cut sheets.
   d. Tab 4…Supporting hardware data cut sheets.

3. After each tab there will a bill of material listing part numbers within that section and quantity of parts required for the project. Each data cut sheet will have identifying arrows pointing at part number being used for the project.
4. Deviations from this format may result in rejection of submittal.

B. Shop Drawings: Will include but is not limited to the following: conduit runs, ladder racking, cable tray, J-hook runs. Work may not begin until shop drawings are approved. Note: Intent of submitting shop drawings is for contractors to display a conceptual understanding of the issued Engineer drawings. Do not submit engineers drawing on your title block.

C. Assurance/Control Submittals:

1. Business License: Provide a copy of your current company business license.
2. Contractors License: Provide a copy of your current low voltage C-10 contractors license.
3. Certificates: Provide a copy of Certified Installer Certificates and warranty certificates for products proposed.
4. Manufacturer's Instructions: Provide copies of manufacturer's installation and testing instructions.

1.5 CLOSEOUT SUBMITTALS

A. Submit product data and shop drawings in accordance with Division 01.

B. Modify product data and shop drawings to reflect construction modifications.

PART 2 - PRODUCTS

2.1 ACCEPTABLE PRODUCTS

A. Raceways, Boxes, Enclosures, Cable Tray Materials and Equipment: Labeled and/or listed as acceptable to the authority having jurisdiction as suitable for the use intended.

B. The product identification codes used for the Communications Raceways and Boxes in Part 2, Products, are summarized in Table 1.

Table 1 – Product Identification
Product Designation Product Type
RGS Rigid galvanized steel.
CRS PVC externally coated RGS.
EMT Galvanized steel tubing. PVC
Polyvinylchloride conduit. ENT
Electrical nonmetallic tubing. LMC
LIquidtight metal conduit.

LNC LIquidtight nonmetal conduit.

2.2 Rigid Metal Conduit And Fittings

A. Conduit:

1. Type RGS: Rigid galvanized steel.
2. Type CRS: PVC externally coated conduit; rigid steel conduit with external PVC coating and internal galvanized surface.

B. Fittings and Conduit Bodies: In-line straight-through, threaded, galvanized steel fittings and Type C conduit bodies only; do not use bends or tees, e.g., Lbs.

C. Bonding and Grounding Locknuts and Wedges: Malleable iron with set screws and lug screws.

D. Insulated Bushing: Malleable iron with integral insulated throat, rated for 150C.

E. Bonding and Grounding Bushing: Malleable iron with integral insulated throat, rated for 150C, with solderless lugs or lug screws.

F. Sealing Fittings: Threaded type conduit seal fittings and sealing compound suitable for hazardous location installations in accordance with CEC:

1. Crouse-Hinds retrofit sealing fitting EYSR.
2. Crouse-Hind CHICO A sealing compound.

2.3 Electrical Metallic Tubing And Fittings

A. Type EMT: Electrogalvanized steel tubing.

B. Fittings and Conduit Bodies:

1. General: In-line straight-through steel or malleable iron fittings and Type C conduit bodies only; do not use bends or tees, e.g. Lbs.
2. Wet Areas: Steel compression-type couplings and nipples.
3. Dry Areas: Set screw-type couplings and nipples.

C. Bonding Locknuts: Malleable iron with set screws and lug screws.

D. Insulated Bushing: Malleable iron with integral insulated throat, rated for 150C.

E. Bonding and Grounding Bushing: Malleable iron with integral insulated throat, rated for 150C, with solderless lugs or lug screws.

2.4 Conduit Accessories

A. Duct Spacers: Nonmetallic base and intermediate duct spacers with locking keyways designed specifically for use with nonmetallic conduit; e.g., Carlon SNAP-LOC duct spacers for 4-inch (100 mm) diameter conduit with 1-1/2-inch (38 mm) separation.

1. Base Spacer: S288NHN.
2. Intermediate Spacer: S289NHN.

B. Expansion/Deflection Fittings: Similar to Crouse-Hinds XD expansion/deflection coupling or Appleton DF Series deflection and expansion coupling.

C. Pulltape: Measuring and pulling tape constructed of synthetic fiber with plastic jacket, printed with accurate sequential footage marks; e.g., George-Ingraham 1/2-inch (13 mm) tape 9216-JK.

D. Duct Plugs:

1. Aboveground Conduit Openings: Tapered PVC plugs with tab for pulltape; e.g., Carlon 4-inch (100 mm) PVC plugs with pull tab, P258NT.
2. Underground or Underslab Conduit Openings: Removable screwtight compression type duct plugs with wing-nut and corrosion resistant hardware; e.g., Pacific Plastics No.5900514, George-Ingraham 0605, or Vikimatic P4000WT.

2.5 Raceway Coating

A. Manufacturers: CSI ONLY USES “Manufacturers”

1. Koppers Bitumastic.
2. Scotchwrap.

B. Bitumastic material or plastic tape.

2.6 Penetration Sealing Systems

A. Firestopping: Provide fire barrier penetration sealing materials as specified in Firestopping section.

B. Duct Water Seal: Products suitable for closing underground and entrance duct openings, where innerduct or cable is installed, to prevent entry of gases, liquids, or rodents into the structure; e.g., SEMCO PR 851.

2.7 Telecommunications Outlet Boxes

A. Sheet Metal Outlet Boxes: Minimum 4.25-inch by 4.25-inch by 2.125-inch-deep (100 by 100 by 50 mm-deep) galvanized steel for use with single- and double-gang plaster rings.

B. Nonmetallic Outlet Boxes: Minimum 4.25-inch by 4.25-inch by 2.125-inch-deep (100 by 100by 50 mm-deep). Provide gasketed, watertight cover.

C. Cast Boxes: 4.25-inch by 4.25-inch by 2.125-inch-deep (100 by 100 by 54 mm-deep) cast Feralloy, gasketed single- or double-gang cover, threaded hubs. For hazardous locations, provide boxes approved for applicable atmosphere classification.

D. Floor Boxes for Installation in Cast-In-Place Concrete Floors: Flush mounted and fully adjustable formed steel as shown on the Drawings.

E. Plaster Rings: Single or double gang as shown on the Drawings.

2.8 Pull Boxes

A. Construction: NEMA Standard No. 250. Type 1 galvanized steel enclosures designed for use as junction boxes and pull boxes with flat screw-applied covers, with or without knockouts, and gray enamel finish.

2.9 Innerduct

A. Outdoor Innerduct: 1-inch (25 mm) and 1-1/4-inch (32 mm) inside diameter corrugated, ribbed, or smooth walled, semi rigid PVC or heavy-wall polyethylene tubing.

B. Indoor Innerduct: 1-inch (25 mm) and 1-1/4-inch (32 mm) inside diameter corrugated, ribbed, or smooth walled, semi rigid nonflammable PVC tubing, which meets UL94V-O vertical flame test for general applications.

C. Plenum-Listed Indoor Innerduct: 1-inch (25 mm) and 1-1/4-inch (32 mm) inside diameter corrugated walled innerduct for use in plenum air handling spaces.

2.10 Innerduct Fittings

A. Couplings: Metallic or nonmetallic quick-connect, reverse threaded, and Schedule 40 couplings for connecting sections of installed innerduct.

B. Conduit Plugs: Compression-type conduit plugs with locking nuts for sealing and securing the outside walls of one or more innerduct ends to the inside wall of 4-inch (100 mm) inside diameter conduits, e.g.:

1. Four 1-inch (25 mm) innerduct configuration.
2. Three 1-1/4-inch (32 mm) innerduct configuration.

C. Innerduct Plugs: 1-inch (25 mm) and 1-1/4-inch (32 mm) compression-type innerduct plugs for sealing innerducts, with wing nut for hand tightening and eyebolt for securing pulltape.

D. Innerduct Caps: Removable push-in caps for plugging 1-inch (25 mm) and 1-1/4-inch (32 mm) innerduct.

2.11 WIRE BASKET RUNWAY SYSTEMS

A. Manufacturers: Subject to compliance with these Specifications, install wire basket runway. Cablofil, GS Metals.

B. Cable Tray Sections and Components:

1. General: Except as otherwise indicated, provide metal wire basket runways, of types, classes and sizes indicated; with splice plates, bolts, nuts and washers for connecting units. Construct units with rounded edges and smooth surfaces; in

compliance with applicable standards; and with the following additional construction features.

2. Materials and Finish: Continuous steel welded and formed wire mesh, electro zinc finish.

C. Type of Runway System:

1. Tray sizes have 4-inch side height.
2. Supply straight sections in standard 120 inches, except where shorter lengths are permitted to facilitate tray assembly lengths as shown on Drawings.
3. Tray Widths: 12 inches, 18 inches, 24 inches.
4. Make splice plates the fast splice type as indicated below for each tray type.
   a. Make splice plates of yellow zinc dichromate steel.
   b. Furnish splice plates with straight sections and fittings as required by manufacturer.
   c. Finish: Electro zinc.
5. Wire Basket Runway Supports: Place so that the support spans do not exceed a maximum of 4 feet o.c.

D. Loading Capacities: Wire basket runways to meet NEMA Class Designations.

PART 3 - EXECUTION

3.1 WORKMANSHIP

A. Provide, condition, apply, install. connect and test manufactured products, materials, equipment, and components in accordance with the manufacturer's specifications and printed instructions.

B. The installation of system components to be carried out under the direction of qualified personnel. Appearance to be considered as important as mechanical and electrical efficiency. Workmanship to meet or exceed industry standards.

C. Place support for framing, raceways, cable trays, backboards, equipment racks, and cabinets.

3.2 Protection During Construction

A. Protect products from the effects of moisture, corrosion, and physical damage during construction. Except during installation activity in a section, keep openings in conduit, tubing, and wireway capped with manufactured seals during construction.

3.3 Minimum Conduit Size

A. 1.25-inch (31.75 mm) for aboveground embedded, and 4-inch (100 mm) for underground applications unless otherwise indicated on the Drawings.

3.4 Conduit Type To Be Used

A. Install the following types of circular communications raceway in the locations listed unless otherwise indicated on the Drawings.

1.Interior Dry Locations, Exposed: EMT with set screw fittings.
2. Interior Dry Locations, Concealed (Not Embedded in Concrete): EMT with set screw fittings.

3. Interior Wet Locations: EMT with compression fittings.
4. Exterior, Exposed Including Roof: Rigid steel conduit.
5. Concrete-Encased Duct Banks:
   a. PVC Schedule 40 conduit.
   b. Rigid steel conduit when additional protection is required.
6. Flexible Conduit (Interior Exposed):
   a. Liquidtight flexible metal conduit for use with copper cable.
   b. Liquidtight flexible nonmetallic conduit for use with fiber optic cable.

3.5 Conduit Bends And Sweeps

A. Make changes in direction of communications conduit runs with sweeps of the longest possible radius.

B. Make sweeps in parallel or banked runs of conduits, 2 inches (50 mm) and larger in diameter, from the same center or centerline so that sweeps are parallel and of neat appearance.

C. Field-Made Bends and Sweeps:

1. Use an acceptable hickey or conduit-bending machine.
2. Do not heat metal raceways to facilitate bending.
3. Before installing 4-inch (100 mm) field-made sweeps in duct banks, pull a 3-1/2-inch (89 mm) diameter by 12-inch (300 mm) long mandrel through duct sections to verify circularity and sweep radius.

D. The angular sum of the bends between pull points and/or pull boxes to not exceed 180 degrees.

E. Minimum Inside Bend Radius for Communications Conduit Bends, Sweeps, Boxes, and Fittings:

1. Underground or Underslab 4-inch (100 mm) Conduit: 60 inches. (1.5 m)
2. Other Conduit Runs:
   a. One-inch (25 mm) conduit, 11 inches (275 mm).
   b. Two-inch (50 mm) conduit, 21 inches (525 mm).
   c. Three-inch (75 mm) conduit, 31 inches (775 mm).
   d. Four-inch (100 mm) conduit, 40 inches (1000 mm).
   e. Other sizes, 10 times the inside diameter of the conduit.

F. Do not install boxes, bends, elbows, tees, conduit bodies, and other conduit fittings, which do not provide for the minimum inside cable bend radius specified in paragraph E above.

1. Conduit Bodies: In-line straight-through Type C condulet fittings can be used as pull boxes for conduit up to a maximum of 2 inches (50 mm) ID. Other conduit fittings, which include direction changes such as E, L, LB, LR, LL, LRT, TA, TB, and X, are not allowed.
2. Refer design or installation conflicts with these requirements to the Owner.

3.6 Penetrations

A. Seal conduit entering structures at the first box or outlet to prevent the entrance of gases, liquids, or rodents into the structure.

1. Empty Conduits: Removable screwtight duct plugs.

2. Innerduct Installed: Suitable duct water seal between conduit and innerduct. Manufactured seals in empty innerduct.
3. Cable Installed: Suitable duct water seal between conduit and cable, or between innerduct and cable.

B. Concrete Sleeves: Conduits routed perpendicular through floors, walls, or other concrete structures to pass through cast-in-place conduit sleeve openings wherever possible, or appropriate size holes to be bored to accommodate the installation of conduit sleeves. The size and location of the holes to not impair the structure's integrity.

1. Concrete Boring: Bore a hole in the concrete with a diameter of 1/2 to 1 inch (13 to 25 mm) larger than the conduit sleeve to be installed. Grout around the conduit sleeve and finish to match existing surroundings.
2. Conduits that rise vertically through a slab to be stubbed 6-inches (150 mm) above the floor and capped pending future use.

C. Drywall Sleeves: Install insulating throat bushings on both ends of conduit sleeves placed in fire-rated walls using drywall construction.

D. Where conduit enters a structure through a concrete roof or membrane waterproofed wall or floor:

1. Provide a watertight seal.
2. With Concrete Encasement: Install watertight entrance seal device on the accessible side.
3. Securely anchor malleable iron body of watertight entrance seal device into construction with one or more integral flanges.
4. Secure membrane waterproofing to watertight entrance seal device in a permanent, watertight manner.

E. Where raceways penetrate fire-rated walls, floors, or ceilings, firestop openings around communications penetrations to maintain the fire-resistance rating as specified in Firestopping section.

3.7 Above-Ground Conduit Installation

A. Support conduit installed in aboveground interior and exterior locations at a maximum of 7 feet (2.1 m) on center.

B. Group conduit in parallel runs where practical and use conduit rack constructed of steel channel with conduit straps or clamps.

C. Securely attach aboveground conduit under the provisions of this Section.

D. Conceal conduit in finished areas, leave exposed in unfinished areas and where not possible to conceal. In finished areas, the Owner will make the final decision on conduit concealment.

E. Run exposed and concealed conduits parallel or perpendicular to walls, structural members, or intersections of vertical planes to maintain headroom and provide a neat appearance. Follow surface contours as much as possible.

F. No section of conduit located within buildings to exceed 100 feet (30 m) in length between pull points and/or pull boxes.

G. Expansion/Deflection Joints:

1. Where indicated on the Drawings, provide specific purpose expansion/deflection fittings for conduit crossing building expansion/deflection joints in structures or concrete slabs. Expansion fittings to have copper bonding jumper.
2. For PVC conduit, provide expansion/deflection joints for 25F maximum temperature variation. Install in accordance with manufacturer's instructions.
3. For rigid steel conduit located in exterior areas, provide expansion/deflection joints for maximum site temperature variation, installed in accordance with manufacturer's instructions.

H. Provide each conduit passing from a nonhazardous or noncorrosive area to a hazardous area and each conduit entering an enclosure within a hazardous area with a sealing fitting in accordance with NEC Article 500. The sealing fitting to be UL listed and to be filled with approved sealing compound of the same manufacture.

I. Hubs, Bushings, and Insulating Sleeves:

1. Interior Box and Cabinet Connections: Install insulating throat connectors wherever conduit terminates in boxes or cabinets. In addition, install bonding type locknuts at metallic conduit terminations.
2. Wet and Hazardous Box and Cabinet Connections: Use watertight threaded conduit sealing hubs with insulated throat and bonding type locknuts for fastening rigid steel conduit to cast or sheet metal pull boxes.
3. Exposed Conduit Terminations: Cap exposed steel communication conduit ends with bushings or smooth collars to protect cable sheath.

J. Flexible Conduit:

1. Make no bends in flexible conduit that exceed allowable bending radius of the cable to be installed or that significantly restricts the conduit's flexibility.
2. A flexible conduit section to be long enough to allow the item to which it is connected to be withdrawn or moved off its base.
3. For final connection to TO's or equipment, where flexible connection is required to minimize vibration or where required to facilitate removal or adjustment of equipment, provide 12-foot (3600 mm) minimum lengths of flexible conduit or as indicated on the Drawings.

3.8 Pulltape And Duct Plugs

A. Following conduit installation, install pulltape (muletape) with preprinted foot markers in each empty conduit containing a bend or over 10 feet (3000 mm) in length, except sleeves, nipples, and runs with openings in cleanroom areas. Tie the pulltapes securely to duct plug or wall racking at each end.

B. Immediately after pulltape installation, install removable manufactured plugs in empty conduit and wireway openings. For underground conduit openings, use screwtight, removable, watertight, and dust-tight duct plugs.

C. Verify lengths at the time of installation and provide as-built documentation.

3.9 Wireway Type To Be Used

A. Install the following types of wireway in the locations listed unless otherwise indicated on the Drawings:

1. Interior, Exposed: Steel.
2. Interior, Concealed: Not approved.

3. Exterior, Exposed: Steel or nonmetallic.

3.10 Wireway Installation

A. Install wireway, as indicated on the Drawings.

B. Securely support wireways at intervals not to exceed 5 feet (1500 mm) and at each end or joint for individual sections.

C. Attach wireways and related materials under the provisions of this Section.

D. Run exposed wireways parallel or perpendicular to walls, structural members, or intersections of vertical planes to maintain headroom and provide a neat appearance.

E. Close dead ends of wireway with fittings by the same manufacturer.

F. Gasket each joint in oiltight gutter.

G. Mount raintight gutter in horizontal position only.

H. Maintain grounding continuity between raceway components to provide a continuous grounding path.

3.11 Telecommunications Outlet Box Installation

A. Provide 4.25-inch by 4.25-inch by 2.125-inch (100 mm by 100 mm by 54 mm) deep outlet boxes for mounting telecommunications outlets with single- or double-gang plaster rings as required, or as indicated on the Drawings.

B. Do not install outlet boxes back to back in walls. Provide minimum 6-inch (150 mm) separation, except provide minimum 24-inch (600 mm) separation i+n acoustic-rated walls.

C. Locate outlet boxes in masonry walls to require cutting of masonry unit corner only. Coordinate masonry cutting to achieve neat openings for outlet boxes. Use boxes with sufficient depth to permit conduit hubs to be located in masonry void spaces.

D. Provide knockout closures for unused openings.

E. Support telecommunications outlet boxes independently of conduit.

F. Use multiple-gang boxes where more than one device is mounted together; do not use sectional outlet boxes.

G. Install outlet boxes in walls without damaging wall insulation.

H. Coordinate mounting heights and locations of outlet boxes mounted above counters, benches, and backsplashes.

I. Provide recessed outlet boxes in finished areas; secure boxes to interior wall and partition studs, accurately positioning to allow for surface finish thickness. Use stamped steel stud bridges for flush outlet boxes in hollow stud wall.

J. Provide cast outlet boxes in exterior and wet locations.

3.12 Raceway Identification Banding

A. Degrease and clean surfaces to receive tape labels.

B. Exposed conduits and wireway, including raceways above lay-in or accessible ceilings, together with associated pull boxes to be banded at intervals of not over 10 feet (2500 mm) and at direction changes. Two-band identification to be different contrasting colors as follows:

Raceway Use Color
Grounding. Green.
Building fire alarm system/voice evacuation.. Red.
Telecom/datacom. Yellow.
Facility management system (FMS) and general control circuitry. Blue and black.
CCTV. White.
Building monitoring and security. Gray.
Controls (non-FMS). Brown and white.

3.13 General Cable Tray Installation Methods

A. Cut standard straight sections of materials to length in the field.

B. Deburr and file rough cable tray edges and cut sections.

C. Cable tray locations shown on the Drawings are approximate unless dimensioned.

D. Install cable tray as shown on the Drawings and securely attach under the provisions of this Section.

E. Cable tray ladder or trough to be accessible.

F. Maintain minimum 6-inch (150 mm) clearance between cable tray and piping. Locate cable tray at least 12 inches (300 mm) away from heat sources such as parallel runs of flues, steam or hot water pipes, and heating appliances.

G. Run exposed and concealed cable tray parallel or perpendicular to walls, structural members, or intersections of vertical planes to maintain headroom and provide a neat appearance.

H. Do not obstruct passageways.

I. Cable tray routed at the ceiling to be routed within the assigned communications utility space.

J. Install appropriate cable tray bends, dropouts, and other accessories to protect minimum cable bend radius and provide adequate support at locations where cable direction changes occur.

3.14 Penetrations

A. Provide removable heat-expanding pillows at fire barrier penetrations as specified in Firestopping section, and described as Firestop Material Type 7 (indicated as FSM-7).

3.15 Innerduct Type To Be Used

A. Underslab and Underground Conduit Installation: Outdoor or indoor innerduct.

B. Aboveground, Exterior, and Interior Conduit Installations: Indoor innerduct.

C. Interior Exposed Locations Including Cable Tray Installations:

1. Nonplenum Areas: Indoor innerduct.
2. Plenum Areas: Plenum-listed innerduct.

3.16 Innerduct Installation

A. Pull innerduct through conduit and wireways, or place innerduct in cable trays using continuous unspliced lengths of innerduct between pull boxes, and/or section termination points as indicated on the Drawings.

B. Cut innerduct square. Deburr cut ends.

C. Bring innerduct to the shoulder of fittings and couplings and fasten securely.

D. Wipe innerduct and fittings clean and dry before joining. Apply full, even coat of cement to entire area that will be inserted into fitting. Let joint cure for 20 minutes minimum.

E. Provide suitable innerduct slack in pull boxes, and at turns to ensure that there is no kinking or binding of the tubing.

F. Make changes in direction of communications innerduct runs with sweeps of the longest possible radius and at least 10 times the inside diameter of the innerduct.

G. During innerduct pulling, care to be taken to avoid excessive tension, which can cause deformation of the innerduct. Inspect innerduct following placement and replace damaged sections.

H. Indoor Conduit Installation:

1. Arrange innerduct neatly, cut to proper length, and remove surplus. Provide trained and bundled innerduct pigtails extending at least 18 inches (450 mm) beyond exposed conduit openings.

2. At locations where the ends of innerduct sections appear in a pull box, join the pulltape and then splice innerduct sections together using couplers which do not reduce the inside diameter of the innerduct.

I. Cable Tray Installation: Tie wrap innerduct to one side of vertical ladder rack every 2 feet (600 mm) minimum, and to one side of horizontal ladder-type cable tray every 5 feet (1500 mm) minimum.

J. Following installation, visually inspect innerduct, remove burrs at openings, and, if necessary, clean innerduct interior.

3.17 Pulltape And Duct Plug Installation

A. Following innerduct installation, install pulltape (muletape) with preprinted foot markers in innerduct sections, except runs with openings serving cleanroom areas. Tie the pulltape securely to wall racking at each location.

B. Verify lengths at the time of installation and provide as-built documentation.

C. Following innerduct and pulltape installation, cap or plug innerduct with manufactured seals to prevent moisture or foreign matter from entering until cable installation starts. Seal duct openings in underground or underslab innerduct sections immediately after installation using screwtight, removable, watertight, and dust-tight duct plugs.

3.18 Grounding

A. Provide ground connections and bonding continuity between raceway and cable tray sections, boxes, enclosures, cabinets, and fittings as required per code and industry standard.

END OF SECTION 270528

COMMUNICATIONS EQUIPMENT ROOMS 271000 - 1
SECTION 271000 – COMMUNICATIONS EQUIPMENT ROOMS

PART 1 - GENERAL

1.1 SUMMARY

A. The telecommunications equipment room is intended to house racks, cabinets and equipment necessary for the support of the voice and data cabling infrastructure as well as other lowvoltage systems.

1.2 SYSTEM DESCRIPTION

A. The communications room distribution subsystem refers to the passive components used to terminate cabling subsystems and distribute technology services. This subsystem includes installations in the Main Equipment Room (MER), Telecommunication Room (TR).

1.3 REFERENCES

A. Use this Section in conjunction with the other Division 27 sections and related Contract Documents to establish the total general requirements for the project technology systems and equipment.

1.4 SUBMITTALS

A. Product Data: Submit product data for system components including but not limited to equipment racks, server racks, ladder racking and associated hardware, grounding busbars, fire rated plywood, wire management, power plug strips, wiring blocks, and protection panels. Work may not begin until product data submittals are approved. Submit submittals in the following format:

1. Title sheet: Project title, location of project, date submitted, name of company and person preparing submittal, contractors address and contact information.
2. Index sheet: describing submittal document tabs.
   a. Tab 1…Business license, Contractor's license, Employee training certificates, and manufacturers certified installer certificate if applicable.
   b. Tab 2…Equipment rack and associated hardware cut sheets.
   c. Tab 3…Terminal block and connecting hardware data cut sheets.
   d. Tab 4…Supporting hardware data cut sheets.
3. After each tab there will a bill of material listing part numbers within that section and quantity of parts required for the project. Each data cut sheet will have identifying arrows pointing at part number being used for the project.
4. Deviations from this format may result in rejection of submittal.

B. Shop Drawings: Will include but is not limited to the following: rack placement, ladder racking, wall elevations showing components, rack elevations showing components, grounding systems, and connecting diagrams, Work may not begin until shop drawings are approved. Note: Intent of submitting shop drawings is for contractors to display a conceptual understanding of the issued Engineer drawings. Do not submit engineers drawing on your title block.

C. Assurance/Control Submittals:

1. Business License: Provide a copy of your current company business license.
2. Contractors License: Provide a copy of your current low voltage C-10 contractors

license.

3. Certificates: Provide a copy of Certified Installer Certificates and warranty certificates for products proposed.
4. Manufacturer's Instructions: Provide copies of manufacturer's installation and testing instructions.

1.5 CLOSEOUT SUBMITTALS

A. Submit product data and shop drawings in accordance with Division 01.

B. Modify product data and shop drawings to reflect construction modifications.

PART 2 - PRODUCTS

2.1 EQUIPMENT AND MATERIALS

A. Telecommunications Backboards: 3/4-inch AC plywood fire treated backboard.

B. Equipment Racks: 7-foot high, 19-inches wide, EIA free-standing rack, UL listed, black finish. Chatsworth 46053-703 Chatsworth 55053-703

C. Wall Mount Equipment Racks: 38-1/2 inches high, 18-inches deep, 19-inches wide, swing gate, UL listed, black. Chatsworth 11791-718

D. Vertical Wire Managers: 7-feet high, 10-inches wide, 12-inches deep with front and rear doors; and horizontal managers built-in, black finish. Chatsworth 30162-703

E. Horizontal Wire Managers:

1. 19-inches wide, two rack units high. Chatsworth 30130-719.
2. 19-inches wide, one rack units high. Chatsworth 30139-719.

F. Telecommunications Main Grounding Busbar: Solid copper bus bar kit, 20-inches long, 1/4-inch thick, wall mounted with standoffs. Chatsworth 40153-020 B-Line SB-476.

G. Telecommunications Grounding Busbar: Solid copper busbar kit, 10-inches long, 1/4-inch thick, wall-mounted with standoffs. Chatsworth 13622 B-Line SB-477.

H. Telecommunications Ground Terminal Block: Two hole ground terminal block holds two #4 wires. Chatsworth 08009-001.

I. Cable Runway:

1. 12-inches wide, 10-foot lengths, steel construction. Chatsworth 11275-712 B-Line SB-17-12FB.
2. Runway wall angle support. Chatsworth 11421-712 B-Line SB-2113-12 FB.
3. Runway to rack mounting bracket. Chatsworth 10595-712 B-Line SB-2132-12 YZN.

J. Rack Radius Drop: Rack radius drop for 3-inch channel. Chatsworth 12394-701 SB-2129-05FB

K. Runway Termination Kit: Chatsworth 11700-712 B-Line SB-2105-12FB.

L. Rear Cable Support Bars: Support bar AMP 406042-1 or approved.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Provide telecommunications backboards on walls of the equipment room as indicated. Place the bottom of the backboards approximately 4 inches above finished floor, extending to a minimum height above finished floor of 8 feet. Mount backboards with the smooth side facing away from the wall, and paint the backboard with two coats of fire resistant paint prior to mounting. Use a minimum of six appropriate fasteners for every 16 square feet of backboard.

B. Fasten free-standing equipment racks to the server room floor using a minimum of four 3/8-inch concrete anchors. Racks mounting on raised floors secured to floor beneath.

C. Position equipment racks according to drawings with a minimum of 3 feet of clearance in front and back. Field verify the dimensions of the room prior to installation of racks and report any discrepancies to the owner or owner's representative.

D. Bolt vertical wire managers for free-standing racks to the side of the rack using the manufacturers recommended hardware.

E. Bond equipment racks to the equipment room telecommunications grounding busbar (one per equipment room), connected to the electrical main switchboard or building steel using a 2AWG or larger, stranded copper conductor. Coordinate exact routing and connection points with Division 26 contractor.

F. Provide cable tray as shown in drawing package. The locations shown may need to be adjusted slightly in the field to assure proper placement.

G. Field cut to length tray sections with a minimum number of splice points. Make all field cuts using the manufacturers recommended equipment.

H. Deburr and file rough edges on cable tray.

I. Provide seismic bracing for installed cable trays.

3.2 LABELING

A. Label racks with the equipment room number and a unique identifier beginning with the number one, i.e. SVR1-1.

B. Label the telecommunications grounding busbar and bonding conductor with the server room number and a unique identifier, beginning with the number one, i.e. TGB-SVR1.

C. Label patch panels and wiring blocks with the server room number and a unique identifier, beginning with the AA, i.e. SVR-AA.

D. Submit labeling schemes to and approved by the Architect testing and labeling.

END OF SECTION 271000

SECTION 271300 – COMMUNICATIONS BACKBONE CABLING

PART 1 - GENERAL

1.1 SUMMARY

A. Work Included:

1. Backbone (riser) cabling and connecting hardware between the Entrance Facility (EF), Main Cross-Connect (MC) and other Telecommunications Rooms (TRs).
2. Supporting hardware, labeling, identification and grounding required to provide a standard ANSI/TIA/EIA compliant cabling system.

1.2 REFERENCES

A. ANSI/TIA/EIA-568-B, Commercial Building Telecommunications Wiring Standard.

B. ANSI/TIA/EIA-569-A, Commercial Building Standard for Telecommunications Pathways and Spaces.

C. ANSI/TIA/EIA-606-A, Administration Standard for Telecommunications Infrastructure of Commercial Buildings.

D. ANSI/TIA/EIA-607, Commercial Building Grounding and Bonding Requirements for Telecommunications.

E. BICSI, Telecommunications Distribution Methods Manual (TDMM).

1.3 DEFINITIONS

A. EF Entrance Facility: Area or location that contains entrance point (demarcation) cable and associated equipment for Telecommunication services entering the building.

B. MER Main Equipment Room: Area or location that contains backbone cabling associated with inter-building cable or cable that connects buildings together in a campus environment. ERs may contain Main Cross-connects, Intermediate Cross-connects, Horizontal Cross-connects, and Telecommunication Rooms.

C. MC Main Cross-Connect: Area or location that contains telecommunications equipment for connecting backbone cable to/from Intermediate Cross-connects and Horizontal Cross-connects. Active telecommunications equipment will often be contained in this area to serve as the telecommunications hub or headend. Backbone cable from Local

Exchange Carrier's point of demarcation will connect to building backbone cable or active telecommunications equipment at this location.

D. IC Intermediate Cross-Connect: Area or location that contains telecommunications equipment for connecting backbone cable from the MC to backbone cable distributing to one or many Horizontal Cross-connects. This location may contain active telecommunications equipment.

E. HC Horizontal Cross-Connect: Area or location that contains telecommunications equipment, cable terminations and cross-connect wiring. HC is the recognized connection point between backbone and horizontal pathway facilities.

F. TR Telecommunications Room: Area or location containing telecommunications equipment, cable terminations and cross-connect wiring. Three applications serviced by TRs are horizontal cable connections, backbone system interconnection and entrance facilities. The TR provides facilities (space, power, grounding, etc), for housing telecommunications equipment. TR may contain a MC, IC or HC and a demarcation point or an inter-building entrance facility.

G. Inter-Building Cable: Backbone cable associated with connecting buildings together in a multi building or campus environment.

H. Intra Building Cable: Backbone cable associated with connecting Entrance Facility, Equipment Rooms, Main Cross-connects, Intermediate Cross-connects, Horizontal Cross-connects, and Telecommunication rooms together on single floor or multi floor building.

I. BICSI Building Industry Consulting Service International.

J. ANSI American National Standards Institute.

K. EIA Electronic Industries Association.

L. TIA Telecommunications Industry Association.

M. IEEE Institute of Electrical and Electronics Engineers, Inc.

N. ISO International Standards Organization.

O. UBC Uniform Building Code.

1.4 SYSTEM DESCRIPTION

A. Provide a standards-based cable system to serve backbone communication systems requirements as specified herein and shown on Drawings. Closely follow ANSI/TIA/EIA, IEEE and ISO standards which apply to backbone communication systems.

B. Install inter-building (OSP) or intra-building backbone cables from MER to TRs through duct and tunnel raceway systems as shown on Drawings.

1.5 SUBMITTALS

A. Product Data: Submit product data for system components including but not limited to cable, patch panels, termination blocks, splice cases, fused protection panels, bullet bonds, splice modules, gel-blocking kits, breakout kits, racks, wire management systems. Work may not begin until product data submittals are approved. Submit submittals in the following format:

1. Title sheet: Project title, location of project, date submitted, name of company and person preparing submittal, contractors address and contact information.
2. Index sheet: describing submittal document tabs.
   a. Tab 1…Business license, Contractor’s license, Employee training certificates, and manufacturers certified installer certificate if applicable.
   b. Tab 2…Cable data cut sheets.
   c. Tab 3…Terminal block and connecting hardware data cut sheets.
   d. Tab 4…Supporting hardware data cut sheets.

3. After each tab there will a bill of material listing part numbers within that section and quantity of parts required for the project. Each data cut sheet will have identifying arrows pointing at part number being used for the project.
4. Deviations from this format may result in rejection of submittal.

B. Shop Drawings: Will include but is not limited to the following: Telecommunication Room layout, Telecommunication Room wall elevations, Equipment rack elevations, Cable routing, Cable connecting diagrams, Termination pin outs, Supporting hardware details, Block diagrams, Riser diagrams, Cable pathways. Work may not begin until shop drawings are approved. Note: Intent of submitting shop drawings is for contractors to display a conceptual understanding of the issued Engineer drawings. Do not submit engineers drawing on your title block.

C. Assurance/Control Submittals:

1. Business License: Provide a copy of your current company business license.
2. Contractors License: Provide a copy of your current low voltage C-10 contractors license.
3. Test Reports: Provide a copy of manufacturer’s test procedures and results for components or system products proposed.
4. Certificates: Provide a copy of Certified Installer Certificates and warranty certificates for products proposed.
5. Manufacturer's Instructions: Provide copies of manufacturer’s installation and testing instructions.
6. Cable Labeling: Submit procedures for cable labeling and identification, long term documentation methods and numbering scheme in accordance with ANSI/TIA/EIA-606-A.

D. Closeout Submittals:

1. Submit product data and shop drawings in accordance with Division 01.
2. Modify a full set of pre-project submittal drawings and product data sheets to reflect modification made during construction. Closeout submittal package will include but is not limited to a full set of drawings, product data cut sheets, O&M manuals (Test Results), and product certificates or warranties required for the project.
3. Copper Test Documentation: Provide electronic CD disk and hard copy test reports from an ANSI/TIA/EIA-568-B Level III cable system testing device for backbone and horizontal twisted pair cable runs. Test CAT3 or lower backbone cable for uniform impedance, cable length, and properly terminated ends with a TDR. Submit TDR test data in virgin format, as output by the testing device. Test CAT5e, CAT6 cables for NEXT, PSNEXT, ELFEXT, and PSELFEXT at each cable end, wire map, length, and attenuation, attenuation to crosstalk ratio, impedance, structural return loss, DC loop resistance, noise, and propagation delay skew. Submit test data in virgin format, as output by the testing device. Test reports that have been modified in any way, as with a word processor, will not be acceptable. Repair, replace and reterminate cables which do not meet the specified requirements. Retest and repair cable systems as necessary until
the entire cable system meets specified requirements. Failed test reports will not be accepted.
4. Fiber Test Documentation: Provide electronic CD disk and hard copy test reports from an ANSI/TIA/EIA-526-14A method B standards. Calculate a “Loss Budget” for each cable length based on cable length and connectors. Provide as a minimum, OTDR test results in the form of a printed waveform and text table for both 850 nm and 1300 nm for multi-mode fiber and 1350 nm and 1510 nm for single-mode fiber. Test fibers and connector systems for end-to-end Attenuation. Provide a Power

Meter test on fiber optic strands at both wavelengths A to B, B to A and OSPL (OSPL is as defined as La + Lb). Include the results of unsatisfactory tests, with an explanation of how the problem was corrected. Clearly label connector and fiber loss on test waveforms.

1.6 QUALITY ASSURANCE

A. Perform cable tests to generate the data required in close-out submittals, above, with a sample set of testing witnessed by Owner's Representative.

B. Perform a complete walk-through and inspection of the installation quality with Owner's Representative. Correct deviations from standards and requirements.

1.7 SCHEDULING

A. Coordinate installation of cabling with the installation of raceways and outlet box systems.

B. Coordinate location and installation of equipment racks and systems in the MC and other TRs with Owner's representative, and other trades working in those areas.

1.8 WARRANTY

A. Upon completion of installation, provide a manufacturer's extended product warranty and at least a 20-year assurance of compliant performance with current or future application based on ANSI/TIA/EIA-568-B for backbone and horizontal cable system infrastructure.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers shall have a recognized certified installer program in place for system components proposed. Cable will be approved with manufacturer system installed. Provide products with UL listing.

2.2 COMPONENTS

A. Provide system components that are necessary to construct a complete and operable system that meets the Specifications.

B. Cable:

1. Copper Backbone cable: 100 ohm, Cat 3, 24 AWG, OSP or ARMM multi-pair cable with an overall shield, ARMM or GFMW.
2. Fiber Backbone cable: 50/125, micron, laser optimized distribution cable with maximum attenuation of 3.0dB/km at 850 nm and 1.0dB/km at 1300 nm. Minimum bandwidth is 500MHZ-km at 850 nm and 500MHZ-km at 1300 nm.

C. Termination Fields: Wall mounted 110 termination frames with legs, S66-termination blocks with S89D bracket, 110 rack mounted multi-port patch panels. Mount as shown on Drawings.

D. Wire Management: Wire management troughs, rack mounted horizontal wire managers, rack mounted vertical wire managers. Mount as shown on Drawings.

E. Circuit Protectors: Wall mount Five-Pin circuit protector blocks. Provide multi pair tails or 110-style input/output terminations per application. Provide 5-pin, solid state surge arresters for each position on circuit protection panel. Systimax, Porta Systems, Circa or approved.

1. Fiber Optic: Provide rack mounted fiber termination units in the TRs for terminating and organizing fibers optic strands. Provide fully loaded fiber optic adapter panels with SC connectors for each fiber optic strand. Provide blank panels for unused positions.

F. Wire Management:

1. Termination Blocks: Provide a minimum of one wire manager block between each 300-pair set of 110-style termination blocks or S66 type wiring block. Provide at least one wire manager block at top and bottom of each column of termination blocks. Square off empty column spaces with wire manager blocks to provide a continuous wire management path across width of termination field.
2. Panels: Provide a minimum of one double row wire management panel between each patch panel and equipment item that uses patch cords. Provide at least one single row wire management panels at top and bottom of each column of patch panels and equipment. For enclosed cabinets or wall mounted racks, wire management panels shall have vertical management as an integral part of system. Back management must be provided where not integral to connector patch panels.
3. Equipment Racks: Provide a minimum of one 6-inch wide vertical wire manager between adjacent equipment racks and at each end of each row of adjacent racks.

G. Patch (Jumper) Cords:

1. Fiber Optic: Provide sufficient duplex fiber optic jumpers (patch cords) at each fiber termination point to cross-connect one-half the number and type of fibers terminated there. Provide lengths for a neat appearance not to exceed 15-feet. Some jumpers may require SC to ST connections to support existing or readily available hardware. Coordinate connector requirements with Owner's representative.
2. Cross-Connect Wire: Single-pair, 24 AWG twisted cross-connect wire. Blue, orange, green or brown. Coordinate color with owner.
3. Copper CAT6A Patch Cords: **Provide a Leviton 10’ Slim-Line patch cord for 60% of the patch panel ports and a 10’ standard patch cord for 60% of the station ports.**

H. Splice Cases: Provide splice cases within 50 feet of where OSP cable enters building in a duct or conduit system. Size splice cases to accommodate pair count of cable entering building. Properly bond cable entering and exiting splice case to Main Telecommunication Grounding Bus Bar (MTGB). Install end caps to properly seal cable from expanding water blocking gel. Use 25-pair 3M splice modules for splice connections. Manufacturers: Preformed and 3M

I. Miscellaneous: Provide supporting hardware, cable ties, labels, underground vault racking, bullet bonds, gel blocking kits, pull rope.

PART 3 - EXECUTION

3.1 ACCEPTABLE INSTALLERS

A. Must be certified CORNING NPI Installers, individually registered and trained by manufacturer for products submitted to meet Specifications.

B. Installer will demonstrate ability to perform this project by listing three references of projects equal or larger in size with contact names and phone numbers.

3.2 INSTALLATION

A. Twisted Pair Backbone Cabling:

1. Install CAT3 24AWG multiple twisted pair backbone cable with overall shield for close coupled grounding and bonding per ANSI/TIA/EIA-607.
2. Terminate twisted pair backbone cabling on 66-type / 110-style termination frames mounted on 3/4-inch fire rated plywood backboards at MC or rack-mounted 110-style termination blocks at the TR. Terminate and support cables in compliance with the ANSI/TIA/EIA-568-B and ANSI/TIA/EIA-569-A standards. Label cables in accordance with ANSI/TIA/EIA-606-A.
3. Cable sizes are shown on Drawings. Verify that as a minimum, two cable pairs are provided for each telephone user outlet in backbone cables from MC to each TR.
4. Determine requirements for plenum rated cable. When doubt exists, seek prior determination in writing by AHJ.

B. Fiber Optic Backbone Cabling:

1. Install specified fiber optic cable between MC and each other TR, as shown on Drawings.
2. Terminate fiber optic cable in rack-mounted fiber optic terminated units at each end using standard SC style bulkhead connectors.
3. Provide innerduct for fiber optic cable runs.
4. Install, terminate and support cables in compliance with ANSI/TIA/EIA-568-B and ANSI/TIA/EIA-569-A standards.

C. Supporting Hardware, Labeling and Identification:

1. Provide equipment racks with sufficient rack space and surge-protected power receptacles to support patch panels, termination blocks, hubs and wire management panels for the number of user outlets wired to each location.
2. Bond cabling, equipment racks and other hardware to ground bus in each TR per ANSI/TIA/EIA-607.
3. Provide proper seismic bracing and wire management from backboard to freestanding equipment racks, per CEC.
4. Support, identify and label cabling per ANSI/TIA/EIA-569-A and ANSI/TIA/EIA-606-A Specifications.
5. Seal conduits entering from outside the building and install listed firestop material in all conduits and sleeves to satisfy CEC and local codes.

END OF SECTION 271300

SECTION 271500 – HORIZONTAL COMMUNICATIONS CABLING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Horizontal (distribution) communications wiring and connecting hardware from Telecommunications Room (TR) to Telecommunication Outlets (TO).

1.2 RELATED REQUIREMENTS

A. Section 27 05 26 – Grounding and Bonding for Communications Systems.

B. Section 27 05 28 – Pathways for Communications Systems.

C. Section 27 10 00 – Structured Cabling.

D. Section 27 11 00 – Communications Equipment Room Fittings.

E. Section 27 13 00 – Communications Backbone Cabling.

F. Section 27 16 00 – Communications Connecting Cords, Devices, and Adapters.

1.3 REFERENCE STANDARDS

A. ANSI/TIA-492.AAAC-B – Detail Specification for 850-nm Laser-Optimized, 50-um Core Diameter/125-um Cladding Diameter Class 1a Graded-index Multimode Optical Fibers (OM3/OM4). Current Edition

B. ANSI TIA-492.CAAB – Detail Specification for Class Iva Dispersion-Unshifted Single-Mode Optical Fibers with Low Water Peak. Current Edition

C. ANSI/TIA 526 – OFSTP-19 Optical Signal-to-Noise Ratio Measurement Procedures for Dense Wavelength-Division Multiplexed Systems.

D. ANSI/TIA-568.0-D – Generic Communications Cabling for Customer Premises.

E. ANSI/TIA-568.1-D – Commercial Building Communications Cabling Standard Part 1: General Requirements.

F. ANSI/TIA 568-C.2 – Balanced Twisted-Pair Telecommunications Cabling and Components Standards

G. ANSI/TIA 568.3-D – Optical Fiber Cabling Components Standard

H. ANSI/TIA-569-D – Commercial Building Standard for Telecommunications Pathways and Spaces.

I. ANSI/TIA-606-B – Administration Standard for the Commercial Telecommunications Infrastructure.

J. ANSI/JSTD-607-C – Commercial Building Bonding and Grounding (Earthing) Requirements for Telecommunications.

K. NFPA 70 – National Electrical Code (NEC).

L. BICSI – TDMM, Building Industries Consulting Services International, Telecommunications Distribution Methods Manual (TDMM)

1.4 PRE-INSTALLATION MEETINGS

A. Convene pre-installation meeting 2 weeks before start of installation of communications horizontal cabling.

B. Require attendance of parties directly affecting work of this section, including Contractor, Architect, installer, and manufacturer's representative.

C. Review materials, installation, field quality control, labeling, protection, and coordination with other work.

1.5 SUBMITTALS

A. Comply with Section 01 33 00 – Submittal Procedures.

B. Product Data: Submit manufacturer's product data sheets, including installation instructions verifying that materials comply with specified requirements and are suitable for intended application.

C. Installer's Project References: Submit installer's list of successfully completed communications horizontal cabling projects, including project name and location, name of architect, and type and quantity of communications horizontal cabling installed.

1.6 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Manufacturer regularly engaged, for past 10 years, in manufacture of communications horizontal cabling of similar type to that specified.

B. Installer's Qualifications:

1. Approved Leviton Optimized Installer or Berk-Tek Oasis Optimized Integrator Optimized before, during, and through completion of the system installation. Supporting documentation will be required as part of the submittal.
2. Responsible for workmanship and installation practices in accordance with Leviton Optimized Installer Program and Berk-Tek Oasis Program.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Delivery and Acceptance Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Storage and Handling Requirements:

1. Store and handle materials in accordance with manufacturer's instructions.
2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
3. Store materials in clean, dry area indoors.

4. Protect materials during storage, handling, and installation to prevent damage.

1.8 WARRANTY

A. The horizontal communications cabling system installed shall be eligible for coverage by a Limited Lifetime Warranty to the end user.

1. Horizontal channels shall be completed with Leviton Network Solutions factory-terminated copper and/or fiber optic patch cords in order to be eligible for the applicable Berk-Tek or Leviton with channel performance guarantees.

2. Approved product shall be listed on the most recent version of the applicable Berk-Tek Leviton Technologies data sheets for each Berk-Tek Leviton Technologies solution.

B. The fiber communications cabling system installed shall be all Corning by a NPI to provide the end user up to a 25-year warranty for local area network (LAN) and data center (DC)
installations when all products in the fiber cabling solution are Corning covered products including fiber optic cables, hardware, connectivity, and preterminated systems.

C. Optimized Installer/Optimized Integrator shall provide labor, materials, and documentation in accordance with Berk-Tek, Leviton Network Solutions, and Corning requirements necessary to ensure that the Owner will be furnished with an manufacturer Warranty.

D. The installed structured cabling system shall provide a warranty guaranteeing installed channel performance above the ANSI/TIA 568-C requirements for Cat 5e, Cat 6, and/or Cat 6A cabling systems or ISO 11801 requirements for Cass D, Class E, and/or Class Ea.

1. Standards-compliant channel or permanent link performance tests shall be performed in the field with a Berk-Tek Leviton Technologies approved certification tester in the appropriate channel or permanent link test configuration. See 1.8 A.1 above for channel requirements.

E. Necessary documentation for warranty registration shall be provided to the manufacturer by the installer (within 10 days) following 100 percent testing of cables.

1. Submit test results to Leviton Network Solutions or to Berk-Tek, in the certification tester’s original software files.
2. Installer shall ensure that the warranty registration is properly submitted, with all required documentation within 10 days of project completion.
3. Optimized Contractor/Optimized Integrator must adhere to the terms and conditions of the respective manufacturer’s warranty programs.

F. Installer shall ensure that the Owner receives the manufacturer issued project warranty certificate within 60 calendar days of warranty registration.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Leviton Network Solutions, 2222 222nd Street SE, Bothell, Washington 98021. Phone 425-486-2222. Fax 425-485-3373. Website www.leviton.com.

Berk-Tek, A Nexans Company, 132 White Oak Road, New Holland, PA 17557 Phone: 717-354-6200. Fax 717-354-7944. Website www.berktek.com.

Corning Optical Communications, 800 17th Street NW, Hickory, North Carolina, 28601 Phone: 828-901-5000. Website www.corning.com

2.2 SYSTEM DESCRIPTION

A. Horizontal Distribution Subsystem: Intra-building twisted-pair and fiber optic communications cabling connecting Telecommunication Rooms (TRs) to Telecommunication Outlets (TOs) located at individual work areas.

B. Horizontal Cabling: Combination of the following types of cables from TR to TO:

1. Category 6A, from TRs to TOs
2. 50/125 µm, 850 nm Laser Optimized 50/125 µm, or singlemode optical fiber cables (2 strands). Port 2.

C. Communications Horizontal Cabling System: Includes cables, jacks, patch panels, connecting blocks, patch cords, fiber connectors, fiber adapter plates, fiber enclosures, jumpers, and necessary support systems, such as cable managers and faceplates.

D. Cables: Rout through conduit, cable trays, spaces below raised floors, open ceiling areas, non-ventilated spaces above ceiling tile, and through plenum air-handling spaces above ceiling tile.

E. Furnish and install all materials necessary for a complete and working communications horizontal cabling system.

2.3 STATION CABLING

A. Category 6A Unshielded Twisted Pair with innovative crosstalk prevention (XTP) technology: **CX6850 Cat 6A Premium+ UTP System** or **CX6700 Cat 6A Enhanced+ UTP System**.

1. 100 ohm, Category 6A, 23 AWG, 4-pair unshielded twisted pair with innovative crosstalk prevention (XTP) technology. LANmark-XTP, CMP rated.
   a. Color: Blue.
   b. Part Number: 11082057.
   c. Electrical Characteristics: Characterized to 750 MHz.
   d. Cable: Third-party verified by ETL.
   e. Maximum Cable Diameter: 0.275 inch.
   f. Berk-Tek LANmark-XTP CMP
   g. All category cabling manufacturers must be able to provide documentation from an independent third-party testing agency that verifies through random sampling that cable components perform at or above the levels contained on their product specifications, not simply at or above the standard.

2. 100 ohm, Category 6A, 23 AWG, 4-pair unshielded twisted pair with innovative crosstalk prevention (XTP) technology. LANmark-XTP, CMR rated.
   a. Color: Blue.

b. Part Number: 11082062.
c. Electrical Characteristics: Characterized to 750 MHz.
d. Cable: Third-party verified by ETL.
e. Maximum Cable Diameter: 0.275 inch.
f. Berk-Tek LANmark-XTP CMR
g. All category cabling manufacturers must be able to provide documentation from an independent third-party testing agency that verifies through random sampling that cable components perform at or above the levels contained on their product specifications, not simply at or above the standard.

3. Channel margin guarantees for a **CX6850 Cat 6A Premium+ UTP System** (margin vs. ANSI/TIA-568-C.2 and margin guarantees are for a 4-connector channel).

a.	Insertion Loss	3 %
b.	NEXT	5 dB
c.	PSNEXT	6 dB
d.	ACR-F (ELFEXT)	10 dB
e.	PSACR-F (PSELFEXT)	10 dB
f.	Return Loss	4 dB
g.	ACR-N	7 dB
h.	PSACR-N	7 dB
i.	PSANEXT	5 dB
j.	PSAACR-F	11 dB

4. Channel margin guarantees for a **CX6700 Cat 6A Enhanced+ UTP System** (margin vs. ANSI/TIA-568-C.2 and margin guarantees are for a 4-connector channel).

a.	Insertion Loss	3 %
b.	NEXT	4 dB
c.	PSNEXT	5 dB
d.	ACR-F (ELFEXT)	8 dB
e.	PSACR-F (PSELFEXT)	8 dB
f.	Return Loss	4 dB
g.	ACR-N	7 dB
h.	PSACR-N	7 dB
i.	PSANEXT	4 dB
j.	PSAACR-F	10 dB

B. Category 6A Unshielded Twisted Pair: **CX6650 Cat 6A Enhanced UTP System** or **CX6500 Cat 6A Standard UTP System**.

1. 100 ohm, Category 6A, 23 AWG, 4-pair unshielded twisted pair, LANmark-10G2,

a. Color: Blue.
b. Part Numbers: Reel: 10130484 Reel in Box: 11085339
c. Electrical Characteristics: Characterized to 750 MHz.
d. Cable: Third-party verified by ETL.
e. Maximum Cable Diameter: 0.300 inch.
f. Berk-Tek LANmark-10G2 CMP
g. All category cabling manufacturers must be able to provide documentation from an independent third-party testing agency that verifies through random sampling that cable components perform at or above the levels contained on their product specifications, not simply at or above the standard.

2. 100 ohm, Category 6A, 23 AWG, 4-pair unshielded twisted pair, LANmark-10G2, CMR rated.
   a. Color: Blue.
   b. Part Numbers: Reel: 10137700 Reel in Box: 11084689
   c. Electrical Characteristics: Characterized to 750 MHz.
   d. Cable: Third-party verified by ETL.
   e. Maximum Cable Diameter: 0.320 inch.
   f. Berk-Tek LANmark-10G2 CMR
   g. All category cabling manufacturers must be able to provide documentation from an independent third-party testing agency that verifies through random sampling that cable components perform at or above the levels contained on their product specifications, not simply at or above the standard.

3. Channel margin guarantees for a **CX6650 Cat 6A Enhanced UTP System** (margin vs. ANSI/TIA-568-C.2 and margin guarantees are for a 4-connector channel).
   a. Insertion Loss 3 %
   b. NEXT 4 dB
   c. PSNEXT 5 dB
   d. ACR-F (ELFEXT) 7 dB
   e. PSACR-F (PSELFEXT) 8 dB
   f. Return Loss 3 dB
   g. ACR-N 6 dB
   h. PSACR-N 7 dB
   i. PSANEXT 1 dB
   j. PSAACR-F 1 dB

4. Channel margin guarantees for a **CX6500 Cat 6A Standard UTP System** (margin vs. ANSI/TIA-568-C.2 and margin guarantees are for a 4-connector channel).
   a. Insertion Loss 3 %
   b. NEXT 2 dB
   c. PSNEXT 3 dB
   d. ACR-F (ELFEXT) 5 dB
   e. PSACR-F (PSELFEXT) 6 dB
   f. Return Loss 1 dB
   g. ACR-N 4 dB
   h. PSACR-N 5 dB
   i. PSANEXT 0 dB
   j. PSAACR-F 0 dB

D. Optical Fiber Cable. **OM4 Fiber Optic System**:

1. Each Multimode Fiber shall be:
   a) Graded-index optical fiber wave-guide with nominal **50/125µm**-core/cladding diameter.
   b) The fiber shall comply with the latest revision of ANSI/EIA/TIA-492AAAD.
   c) Attenuation shall be measured in accordance with ANSI/EIA/TIA-455-78.
   d) Information transmission capacity shall be measured in accordance with the latest revision of ANSI/EIA/TIA-455-204.
   e) The measurements shall be performed at 23°C ± 5°C.
   f) Maximum attenuation dB/km @ 850/1300 nm: 3.0/1.0
   g) EMB Bandwidth 4700 MHz-km @ 850nm.

h) OFL Bandwidth 500 MHz-km @ 1300nm.
i) Optical Fiber shall be Bend-insensitive Laser Optimized and guarantee 1Gigabit Ethernet distances of 1040m/600m for 850nm and 1300nm, respectively.
j) Optical fiber shall guarantee a 10 Gigabit Ethernet distance of 550m at 850nm

2. Physical Characteristics:
   a) Shall be suitable for use in indoors or in indoor/outdoor applications.
   b) Appropriately flame rated optical cable shall be suitable for use in risers, plenums and horizontal applications.
   c) Plenum rated optical cables shall have and be marked with an UL-OFNP and OFN FT6 Flame Rating. Riser rated optical cables shall have and be marked with an UL-OFNR and OFN FT4 Flame Rating
   d) Shall comply with the requirements of ICEA S-83-596 (Premises), ICEA S-104-696 (I/O), or ANSI/ICEA S-87-640 (Outside Plant, OSP).
   e) Suitable for underground or aboveground conduits.
   f) Optical cables and fibers shall be color coded in accordance with EIA/TIA-598-C.
   g) Shall have a ripcord for overall jacket.

3. Design Make:
   a) **Corning Plenum indoor optical fiber cable with OM4 Laser Optimized 50/125 micron fiber**
      xxxT8P-31190-29 (xxx strands Laser Optimized optical fibers, I/O Tight Buffer Freedm One cable)

      xxxT88-33190-29 (xxx strands Laser Optimized optical fibers, Indoor Tight Buffer MIC cable)

   b) **Corning Riser indoor optical fiber cable with OM4 Laser Optimized 50/125 micron fiber**
      xxxT8F-31190-29 (xxx strands Laser Optimized optical fibers, I/O Tight Buffer Freedm One cable)

      xxxT81-33190-24 (xxx strands Laser Optimized optical fibers, Indoor Tight Buffer MIC cable)

   c) **Corning OSP optical fiber cable with OM4 Laser Optimized 50/125 micron fiber Altos cable with Fast Access Technology**
      xxxTU4-T4790D20 (xxx strands Laser Optimized optical fibers, Loose Tube, gel buffer tube)

E. Single-Mode Optical Fiber Cable. **OS2 Fiber Optic System**:
   1. Each Single-mode Fiber shall be:
      a) Dispersion - unshifted single mode optical fibers with Low Water Peak complying with ITU-T G.652.D and with improved bending loss complying with ITU-T G.657.A1.
      b) The zero dispersion wavelength shall be between 1300 nm and 1320 nm. The ANSI/EIA/TIA-455-168 maximum value of the dispersion slope shall be no greater than 0.090 ps/km-nm^2. Dispersion measurements shall be made in accordance with ANSI/EIA/TIA-455-169 or ANSI/EIA/TIA-455-175-B.
      c) The nominal mode field diameter shall be 9.2 µm with a tolerance of ± 0.4 µm at 1310 nm when measured in accordance with ANSI/EIA/TIA-455-191-B.
      d) Transmission Characteristics:

e) Maximum cabled attenuation for loose tube fibers shall be 0.4/0.3 dB/km @ 1310/1550 nm.
f) Maximum cabled attenuation for tight buffer fibers shall be 0.7/0.7 dB/km @ 1310/1550 nm.
g) The cabled cutoff wavelength shall be ≤1260 nm when measured in accordance with ANSI/EIA/TIA-455-80-C.

2. Physical Characteristics:
   a) Shall be suitable for use in indoors or in indoor/outdoor applications.
   b) Appropriately flame rated optical cable shall be suitable for use in risers, plenums and horizontal applications.
   c) Plenum rated optical cables shall have and be marked with an UL-OFNP and OFN FT6 Flame Rating. Riser rated optical cables shall have and be marked with an UL-OFNR and OFN FT4 Flame Rating
   d) Shall comply with the requirements of ICEA S-83-596 (Premises), ICEA S-104-696 (I/O), or ANSI/ICEA S-87-640 (Outside Plant, OSP).
   e) Suitable for underground or aboveground conduits.
   f) Optical cables and fibers shall be color coded in accordance with EIA/TIA-598-C.
   g) Shall have a ripcord for overall jacket.

3. Design Make:
   a) **Corning Plenum indoor optical fiber cable with OS2 Singlemode fiber**
      xxxEWP-T4101D20 (xxx strands optical fibers, I/O Loose Tube Freedm)

      xxxE88-33131-29 (xxx strands optical fibers, Indoor Tight Buffer MIC cable)

   b) **Corning Riser indoor optical fiber cable with OS2 Singlemode fiber**
      xxxEUF-T4101D20 (xxx strands optical fibers, I/O Loose Tube Freedm)

      xxxE81-33131-24 (xxx strands optical fibers, Indoor Tight Buffer MIC cable)

   c) **Corning OSP optical fiber cable with OS2 Singlemode fiber Altos cable with fast access dielectric**
      xxxEU4-T4701D20 (xxx strands optical fibers, Loose Tube, gel buffer tube)

2.4 MODULAR JACKS AND FIBER ADAPTERS FOR WORKSTATION OUTLETS

A. Category 6A Modular Jacks:

1. 8-position eXtreme QuickPort modular jack, Category 6A, IDC terminals, T568A/B wiring scheme.
2. Channel-rated jack.
3. Each Jack: Identified on its face as CAT 6A.
4. Color: Blue.

5. Part Number: Leviton 6110G-RL6 (Blue).

2.5 WORK AREA OUTLETS

A. Flush-Mounted Plastic Faceplates:

1. 1-port single-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-1xx (xx – color)
2. 2-port single-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-2xx (xx – color)
3. 3-port single-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-3xx (xx – color)
4. 4-port single-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-4xx (xx – color)
5. 6-port single-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-6xx (xx – color)
6. 1-port dual-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-1xx (xx – color)
7. 2-port dual-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-2xx (xx – color)
8. 3-port dual-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-3xx (xx – color)
9. 4-port dual-gang plastic wallplate with ID windows.
   a. Colors: white
   b. Part Number: Leviton 42080-4xx (xx – color)
10. 6-port dual-gang plastic wallplate with ID windows.
    a. Colors: white
    b. Part Number: Leviton 42080-6xx (xx – color)
11. 8-port dual-gang plastic wallplate with ID windows.
    a. Colors: white
    b. Part Number: Leviton 42080-8xx (xx – color)
12. 12-port dual-gang plastic wallplate with ID windows.
    a. Colors: white
    b. Part Number: Leviton 42080-12xx (xx – color)
13. Faceplate Colors: Coordinate with Architect to match finish. Part numbers shown are for standard color of white. Also available in Light Almond, Ivory, Grey, and Black.

B. Flush-Mounted Stainless Steel Faceplates:

1. 1-port QuickPort faceplate with mounting lugs for wall phone, stainless steel, mounts onto single-gang wall box.
   a. Part Number: Leviton 4108W-0SP (flush plate).
2. 1-port QuickPort single-gang stainless steel wallplate, with ID windows
   a. Part Number: Leviton 43080-1L1.
3. 2-port QuickPort single-gang stainless steel wallplate, with ID windows
   a. Part Number: Leviton 43080-1L2.
4. 3-port QuickPort single-gang stainless steel wallplate, with ID windows

a. Part Number: Leviton 43080-1L3.
5. 4-port QuickPort single-gang stainless steel wallplate, with ID windows
   a. Part Number: Leviton 43080-1L4.
6. 6-port QuickPort single-gang stainless steel wallplate, with ID windows
   a. Part Number: Leviton 43080-1L6.
7. 2-port QuickPort dual-gang stainless steel wallplate, with ID windows
   a. Part Number: Leviton 43080-2L2.
8. 4-port QuickPort dual-gang stainless steel wallplate, with ID windows
   a. Part Number: Leviton 43080-2L4.
9. 6-port QuickPort dual-gang stainless steel wallplate, with ID windows
   a. Part Number: Leviton 43080-2L6.
10. 8-port QuickPort dual-gang stainless steel wallplate, with ID windows
    a. Part Number: Leviton 43080-2L8.
11. 12-port QuickPort dual-gang stainless steel wallplate, with ID windows
    a. Part Number: Leviton 43080-L12.

C. Surface-Mounted Outlet Boxes:

1. 1-port QuickPort surface-mount box, plastic, with ID window.
   a. Color: TBD
   b. Part Number: Leviton 41089-1xx (xx - color).
2. 2-port QuickPort surface-mount box, plastic, with ID window.
   a. Color: TBD
   b. Part Number: Leviton 41089-2xx (xx - color).
3. 4-port QuickPort surface-mount box, plastic, with ID window.
   a. Color: TBD
   b. Part Number: Leviton 41089-4xx (xx - color).
4. 6-port QuickPort surface-mount box, plastic, with ID window.
   a. Color: TBD
   b. Part Number: Leviton 41089-6xx (xx - color).
5. 12-port QuickPort surface-mount box, plastic, with ID window.
   a. Color: TBD
   b. Part Number: Leviton 41089-12xx (xx - color)
6. 2-port QuickPort surface-mount box, plastic, with ID window, extra-deep for shielded connectors, Cat 6A, other larger bend-radius cable applications.
   a. Color: TBD
   b. Part Number: Leviton 4S089-2xx (xx - color)
7. 4-port QuickPort surface-mount box, plastic, with ID window, extra-deep for shielded connectors, Cat 6A, other larger bend-radius cable applications.
   a. Color: TBD
   b. Part Number: Leviton 4S089-4xx (xx - color)
8. Surface Box Colors: available: White, Ivory, Grey, and Black. Coordinate with Architect to match finish.

D. Modular Furniture Faceplates:

1. 2-port furniture wallplate fits 1.38-inch by 2.63-inch furniture knockout, with ID window.
   a. Colors: TBD
   b. Part Number: Leviton 49910-xx2 (xx - color).
2. 4-port furniture wallplate fits 1.38-inch by 2.63-inch furniture knockout, with ID window.
   a. Colors: TBD
   b. Part Number: Leviton 49910-xx4 (xx- color).

3. 4-port furniture wallplate fits 1.38-inch by 2.63-inch furniture knockout, with ID window. Extra-deep version with additional room for cable bend radius.
   a. Colors: TBD
   b. Part Number: Leviton 49910-xx4 (xx - color).
4. 2-port furniture wallplate fits 1.88-inch by 2.98-inch Hermann-Miller furniture knockout, with ID window.
   a. Colors: TBD
   b. Part Number: Leviton 49910-xx2 (xx - color).
5. 4-port furniture wallplate fits 1.88-inch by 2.98-inch Hermann-Miller furniture knockout, with ID window.
   a. Colors: TBD
   b. Part Number: Leviton 49910-xx4 (xx - color).
6. Furniture Faceplate Colors: Part numbers shown are for white. Also available: Ivory, grey, and black. Coordinate with Architect to match finish.

E. Mounting Frames for QuickPort Jacks and Connectors

1. 1-port QuickPort Decora-style frame. Fits in Decora-style wallplate
   a. Colors: TBD
   b. Part Number: Leviton 41641-00x (x - color).
2. 2-port QuickPort Decora-style frame. Fits in Decora-style wallplate
   a. Colors: TBD
   b. Part Number: Leviton 41642-00x (x - color).
3. 3-port QuickPort Decora-style frame. Fits in Decora-style wallplate
   a. Colors: TBD
   b. Part Number: Leviton 41643-00x (x - color).
4. 4-port QuickPort Decora-style frame. Fits in Decora-style wallplate
   a. Colors: TBD
   b. Part Number: Leviton 41644-00x (x - color).
5. 6-port QuickPort Decora-style frame. Fits in Decora-style wallplate
   a. Colors: TBD
   b. Part Number: Leviton 41646-00x (x - color)
6. 2-port QuickPort Duplex 106-style frame. Fits in Duplex electrical-style wallplate
   a. Colors: TBD
   b. Part Number: Leviton 41087-2xP (x - color).
7. Decora-style wallplates for above mounting frames
   a. Single-gang, nylon: Leviton part number 80401-0Nx (x - color)
   b. Dual-gang, nylon: Leviton part number 80409-0Nx (x - color)
8. 4-port QuickPort Duplex 106-style frame. Fits in Duplex electrical-style wallplate
   a. Colors: TBD
   b. Part Number: Leviton 41087-QxP (x - color).
9. Duplex electrical-style wallplates for above mounting frames
   a. Single-gang, nylon: Leviton part number 80703-00x (x - color)
   b. Dual-gang, nylon: Leviton part number 80716-00x (x - color)
10. Mounting Frame colors: available: White, Light almond, ivory, grey, black (and brown for the Decora-style frames). Coordinate with Architect to match finish.

F. Multimedia Outlet System (MOS):

1. Single-gang Multimedia Outlet System wallplate, plastic, with ID windows. Holds a wide variety of copper, fiber, and/or audio-video inserts.
   a. Color: TBD
   b. Part Number: Leviton 41290-SMx (x - color).

2. Dual-gang Multimedia Outlet System wallplate, plastic, with ID windows. Holds a wide variety of copper, fiber, and/or audio-video inserts.
   a. Color: TBD
   b. Part Number: Leviton 41290-DMx (x - color).
3. Multimedia Outlet System wallplates, Stainless Steel, with ID windows. Holds a wide variety of copper, fiber, and/or audio-video inserts.
   a. Color: Stainless Steel
   b. Part Numbers: Single-gang Leviton 41290-SMS (Stainless).
      Dual-gang Leviton 41290-DMS (Stainless).
      Three-gang Leviton 41290-TMS (Stainless).
4. Fiber storage/spacer ring, plastic. Fits Dual-gang Multimedia Outlet System wallplate.
   a. Color: TBD
   b. Part Number: Leviton 41290-DRx (x - color).
5. 6-port Multimedia Outlet System surface-mount box, plastic, with ID window. Holds a wide variety of copper, fiber, and/or audio-video inserts.
   a. Color: TBD
   b. Part Number: Leviton 41290-SMx (x - color).
6. Multimedia Outlet System (MOS) colors: Part numbers shown are for white. Also available: Light almond, ivory, grey, and black (ivory, grey, and black for the fiber storage/spacer ring). Coordinate with Architect to match finish.
7. Multimedia Outlet System (MOS) Inserts: For a complete list of MOS Inserts available please visit www.leviton.com/mos

2.6 TERMINATION BLOCKS

A. Termination Blocks: May be used for Consolidation Point terminations, or for termination of multi-pair copper (voice) backbone cabling.

B. Category 6A, 110-Style Blocks:.
   1. Category 6A, 64 pair, 110-style, with mounting legs, wall mount. a. Part Number: Leviton 41D6A-1F4.

2.7 PATCH PANELS

A. Category 6A 110-style Modular Patch Panels: 24-port, flat, component-rated, 8-position modular jack panel, Category 6A, T568A/B universal wiring label.
   a. Part Number: Leviton 6A586-U24.
   2. 48-port, flat, component-rated, 8-position modular jack panel, Category 6A, T568A/B universal wiring label.
      a. Part Number: Leviton 6A586-U48.
   3. 24-port, angled, component-rated, 8-position modular jack panel, Category 6A, T568A/B universal wiring label.
      a. Part Number: Leviton 6A587-U24.
   4. 48-port, angled, component-rated, 8-position modular jack panel, Category 6A, T568A/B universal wiring label.
      a. Part Number: Leviton 6A587-U48.

B. QuickPort-Style Patch Panels: ,
   1. 24-port, 1RU, QuickPort, flat metal, patch panel, empty.
      a. Part Number: Leviton 49255-H24.
   2. 48-port, 1RU, QuickPort, flat metal, patch panel, empty.

a. Part Number: Leviton 49255-H48.
3. 24-port, 1RU, QuickPort, angled metal, patch panel, empty.
   a. Part Number: Leviton 49256-H24.
4. 48-port, 2RU, QuickPort, angled metal, patch panel, empty.
   a. Part Number: Leviton 49256-H48.
5. 48-port, 1RU high-density, QuickPort, flat metal, patch panel, empty.
   a. Part Number: Leviton 49255-Q48.
6. 48-port, 1RU high-density, QuickPort, angled metal, patch panel, empty.
   a. Part Number: Leviton 49256-D48.
7. 72-port, 2RU high-density, QuickPort, flat metal, patch panel, empty.
   a. Part Number: Leviton 49255-D72.
8. 72-port, 2RU high-density, QuickPort, angled metal, patch panel, empty.
   a. Part Number: Leviton 49256-D72.
9. 48-port, 1RU high-density, QuickPort, die-cast flat metal, patch panel, empty.
   a. Part Number: Leviton 49255-D48.

2.8 FIBER OPTIC TERMINATION ENCLOSURES and SPLICE TRAYS. Use for **OM3 Fiber Optic System**, **OM4 Fiber Optic System**, and **OS2 Fiber Optic System**

A. Corning Fiber Optic Enclosures: High-end appearance, metal and composite, rack mountable, holds various fiber adapter plates or MTP cassettes, based on connector choice and density requirements.

1. 1RU rack-mount Fiber Optic Enclosure, empty, with sliding trays.
   a. Capacity: 2 CCH panels or cassettes
   b. Part Number: Corning CCH-01U.
2. 2RU rack-mount Fiber Optic Enclosure, empty, with sliding trays.
   a. Capacity: 4 CCH panels or cassettes
   b. Part Number: Corning CCH-02U.
3. 4RU rack-mount Fiber Optic Enclosure, empty, with sliding trays.
   a. Capacity: 12 CCH panels or cassettes
      Part Number: Corning CCH-04U

B. Fiber Optic Wall-mount Enclosures: All metal enclosure, holds various fiber adapter plates, splice trays, or MTP modules, based on connector choice and density requirements. Part numbers shown have a split metal door with key lock. Other versions are available.

1. Small wall-mount Fiber Optic Enclosure, empty.
   a. Capacity: 1 CCH connector panel
   b. Part Number: Corning SPH-01P.
2. Medium wall-mount Fiber Optic Enclosure, empty.
   a. Capacity: 2 CCH panels or cassettes
   b. Part Number: Corning WCH-02P
3. Large wall-mount Fiber Optic Enclosure, empty.
   a. Capacity: 4 CCH panels or cassettes
   b. Part Number: Corning WCH-04P C.

Splice Trays

1. Holds 12 heat-shrink fusion splices, for splice closures
   a. Part Number: Corning M67-048
2. Holds 12 heat-shrink fusion splices, for rack-mountable housings
   a. Part Number: Corning M67-076
3. Holds 12 heat-shrink fusion splices, for wall-mountable housings
   a. Part Number: Corning M67-110

2.9 FIBER OPTIC ADAPTER PLATES

A. 50µm Laser-optimized Multimode (LOMM) Adapter Plates, for **OM3 Fiber Optic System**, **OM4 Fiber Optic System**.

1. 6-SC duplex (12-fiber) multimode OM3/OM4, aqua adapter plate, zirconia-ceramic sleeves.
   a. Part Number: Corning CCH-CP12-E7

B. Single Mode Adapter Plates, for **OS2 Fiber Optic System**.

1. 6-SC duplex (12-fiber) multimode OS1/OS2, blue adapter plate, zirconia-ceramic sleeves.
   a. Part Number: Corning CCH-CP12-59

2.10 FIBER OPTIC CONNECTORS

A. OM3 and OM4 Laser-optimized Multimode (LOMM) Fiber Optic Connectors (aqua): Use for **OM3 Fiber Optic System, OM4 Fiber Optic System**

1. UniCam SC Connector
   a. Part Number: Corning 95-050-41-X

B. OS1/OS2 Single Mode Fiber Optic Connectors (blue): Use for **OS2 Fiber Optic System**

1. UniCam SC Connector
   a. Part Number: Corning 95-200-41
2. UniCam APC SC Connector
   a. Part Number: Corning 95-200-44

2.11 PATCH CORDS/JUMPERS

A. Extreme Category 6A Modular Patch Cords:
   1. Slim-Line style, Category 6A, cord 4-pair, stranded wire construction.
      b. Color: 9 colors available.
      c. Part Numbers:
         1) Leviton 6AS10-03L (3 feet, Blue).
         2) Leviton 6AS10-05L (5 feet, Blue).
         3) Leviton 6AS10-07L (7 feet, Blue).
         4) Leviton 6AS10-10L (10 feet, Blue).
         5) Leviton 6AS10-15L (15 feet, Blue).
         6) Leviton 6AS10-20L (20 feet, Blue).

B. Standard style, Category 6A, cord 4-pair, stranded wire construction.Leviton 6210G-10L

C. OM3, aqua. Factory-terminated, double-ended, 2-strand multimode cordage. Use for

OM3 Fiber Optic System, OM4 Fiber Optic System

a. Duplex SC-Duplex LC:
   1) Corning (x meters)

C. Single Mode Fiber Optic Jumpers:

1. OS1/OS2, yellow. Factory-terminated, double-ended, 2-strand multimode cordage, UPC polish. Use for **OS2 Fiber Optic System**

   a. Duplex SC-Duplex LC:
      1) Corning (x meters)

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine areas to receive communications horizontal cabling.

B. Notify Architect of conditions that would adversely affect installation or subsequent use.

C. Do not begin installation until unacceptable conditions are corrected.

3.2 INSTALLATION – GENERAL

A. Install communications horizontal cabling in accordance with manufacturer's instructions, ANSI/TIA-568-C.0, ANSI/TIA-568-C.1, ANSI/TIA-569-C, BICSI TDMM, and NFPA 70.

B. Field Terminated Copper and Fiber Optic Patch Cords and Jumpers: Not allowed.

C. Copper Patch Cords and Fiber Jumpers: Manufactured by Leviton Network Solutions and Corning Cable Systems or Corning CAH Connection Gold Members

D. Install cables after building interior has been physically protected from weather and mechanical work likely to damage cabling has been completed.

E. Ensure cable pathways are completely and thoroughly cleaned before installing cabling.

F. Inspect installed conduit, wireway, cable trays, and innerduct.

G. Clean additional enclosed raceway and innerduct systems furnished.

H. Provide protection for exposed cables where subject to damage.

I. Abrasion Protection:

1. Provide abrasion protection for cable or wire bundles which pass through holes or across edges of sheet metal.
2. Use protective bushings to protect cables.

J. Cable Ties and Other Cable Management Clamps:

1. No more than hand tightened.
2. Fit snugly, but not compress, crimp, or otherwise change physical characteristics of cable jacket or distort placement of twisted-pair components.
3. Replace cables exhibiting stresses due to over tightening of cable management devices.
4. Use plenum-rated cable ties in plenum spaces.
5. Velcro wraps are preferred over cable ties for all cable bundles. Plenum-rated Velcro wraps are available from Leviton.

K. Where possible, route cables in overhead cable trays and inside wire management systems attached to equipment cabinets and racks.

1. Use Velcro, plastic ties or ducts to restrain cabling installed outside of wire management systems on racks or in cabinets.
2. Cable Trays: Do not exceed 50 percent fill.

L. Pull Cord:

1. Nylon, 1/8-inch minimum.
2. Co-install with cables installed in conduit.

M. Cable Raceways: Do not fill greater than ANSI/TIA-569-B maximum fill for particular raceway type.

N. Support horizontal cables at a maximum of 48-inch (1.2 to 1.5-m) irregular intervals, if J-hook or trapeze system is used to support cable bundles.

O. Do not allow cables to rest on acoustic ceiling grids, plumbing pipes, or electrical conduits.

P. Bundle horizontal distribution cables in groups of no more than amount of cables designed for by cable support manufacturer, based on cable OD and weight.

Q. Fire-Sprinkler System:

1. Install cables above fire-sprinkler system.
2. Do not attach cables to fire-sprinkler system or ancillary equipment or hardware.
3. Install cable system and support hardware so that it does not obscure valves, fire alarm conduit, boxes, or other control devices.

R. Do not attach cables to ceiling grid or lighting fixture wires.

S. Install appropriate carriers to support cabling, where support for horizontal cables are required.

T. Replace before final acceptance, cables damaged or exceeding recommended installation parameters during installation.

3.3 INSTALLATION – UNSHIELDED TWISTED-PAIR CABLES

A. Install unshielded twisted-pair cables in accordance with manufacturer’s instructions.

B. Install cables in continuous lengths from origin to destination, without splices, except for transition points or consolidation points.

C. Where transition points or consolidation points are allowed, they shall be located in accessible locations and housed in enclosure intended and suitable for the purpose.

D. Cable Minimum Bend Radius and Maximum Pulling Tension:

1. Do not exceed bend radius for UTP = 4 X Cable OD, FTP = 4 X Cable OD.
2. Install unshielded twisted-pair cables so that there are no bends smaller than 4 times cable outside diameter at any point in the run and at the termination field.
3. Pulling Tension on 4-Pair UTP Cables: Do not exceed 25 ft.lb. for 4-pair UTP cable.

E. Separation from Power Lines: Provide following minimum separation distances between pathways for copper communications cables and power wiring of 480 volts or less:

1. Open or Nonmetal Communications Pathways:
   a. Electric motors, fluorescent light fixtures, and unshielded power lines carrying up to 3 kVA: 12 inches.
   b. Electrical equipment and unshielded power lines carrying more than 5 kVA: 36 inches.
   c. Large electrical motors or transformers: 48 inches.

2. Grounded Metal Conduit Communications Pathways:
   a. Electrical equipment and unshielded power lines carrying up to 2 kVA: 2-1/2 inches.
   b. Electrical equipment and unshielded power lines carrying from 2 kVA to 5 kVA: 6 inches.
   c. Electrical equipment and unshielded power lines carrying more than 5 kVA: 12 inches.
   d. Power lines enclosed in grounded metal conduit (or equivalent shielding) carrying from 2 kVA to 5 kVA: 3 inches.
   e. Power lines enclosed in grounded metal conduit (or equivalent shielding) carrying more than 5 kVA: 6 inches.

3.4 INSTALLATION – UNSHIELDED TWISTED-PAIR TERMINATION

A. Coil cables to house cable coil without exceeding manufacturer’s bend radius.

1. In hollow wall installations where box eliminators are used, store excess wire in wall.
2. Store no more than 12 inches of UTP
3. Coil 3’ service loop and store in ceiling above each station drop location.

4. Provide a minimum 10’ service loop in the telecommunications closet.

B. Dress and terminate cables in sequential order by room number, plate number, jack number on patch panels and wall plates and in accordance with ANSI/TIA-568-C.0, ANSI/TIA- C.1, BICSI TDMM, and manufacturer's instructions.

C. Terminate 4-pair cables on jack and patch panels using T568-B or T568-A wiring scheme.

D. Pair Untwist at Termination: Do not exceed 12 mm (1/2 inch).

E. Bend Radius of Horizontal Cables:

1. Not less than 4 times OD of UTP cables.
2. Not less than 4 times OD of FTP cables.

F. Maintain cable jacket to within 25 mm (1 inch) of termination point.

G. Neatly bundle cables and dress to their respective panels or blocks.

1. Feed each panel or block by individual bundle separated and dressed back to point of cable entrance into rack or frame.

3.5 INSTALLATION – OPTICAL FIBER CABLES

A. Place fiber optic cables to maintain minimum cable bend radius limits specified by manufacturer or 15 times cable diameter, whichever is larger.

B. Use care when handling fiber optic cables.

1. Carefully monitor pulling tension so as not to exceed limits specified by manufacturer.

C. Do not splice horizontal fiber optic cables.
D. Provide a minimum 10’ service loop in the telecommunications closet.

3.6 FIELD QUALITY CONTROL

A. Cables and Termination Hardware: Test 100 percent for defects in installation and verify cabling system performance under installed conditions in accordance with ANSI/TIA-568-C.0.

1. Verify all pairs of each installed cable before system acceptance.
2. Defects in cabling system installation, including but not limited to cables, connectors, patch panels, and connector blocks shall be repaired or replaced to ensure 100 percent useable conductors in all cables installed.

B. Test all cables in accordance with this specification section, ANSI/TIA-568-C.2, and ANSI/TIA-568-C.3 standards, and Berk-Tek and Leviton Network Solutions instructions

1. If any of these are in conflict, bring discrepancies to the attention of the Architect for clarification and resolution.

C. Cables, Jacks, Connecting Blocks, and Patch Panels:

1. Verify all pairs of each installed cable before system acceptance.
2. Defects in cabling system installation, including but not limited to cables, connectors, patch panels, and connector blocks shall be repaired or replaced to ensure 100 percent useable conductors in all cables installed.

D. Testing Unshielded Twisted-Pair Cables: (**NOTE: Permanent Link Test results are recommended, and are the expected norm** – unless patch cords that will remain installed at the work area and cross-connect are also being tested, in which case Channel Test results would be expected and accepted).

1. Test twisted-pair copper cable links for continuity, pair reversals, shorts, opens, and performance as specified.
   a. Additional testing is required to verify Category performance.
   b. Test horizontal cabling using approved certification tester for Category 6A, Category 6, and Category 5e performance compliance in accordance with ANSI/TIA-568-C.2.
      (NOTE: Appropriate Fluke, Agilent, Ideal, or JDSU certification testers may be used).
   c. Category 6A shall conform to ANSI/TIA-568-C.2 for augmented Category 6 to 500 MHz.
2. Follow ANSI/TIA-568-C.2.
3. Basic Tests Required:
   a. Wire map.
   b. Length (feet).
   c. Insertion loss (dB), formerly attenuation.
   d. NEXT (Near end crosstalk) (dB).
   e. Return loss (dB).
   f. ELFEXT (dB).
   g. Propagation delay (ns).
   h. Delay skew (ns).
   i. PSNEXT (Power sum near-end crosstalk loss) (dB).
   j. PSELFEXT (Power sum equal level far-end crosstalk loss) (dB).
4. Test Category 6A by auto test to 500 MHz.
   a. Alien Crosstalk (AXT) testing and AXT test results are NOT required by Leviton or Berk-Tek for warranty of a Category 6A system. (**Note**: AXT testing may be required by the customer, in which case these tests WOULD have to be performed).
5. Test Category 6 by auto test to 250 MHz.
6. Test Category 5e by auto test to 100 MHz.
7. Provide test results in approved certification testers original software format on CD, with the following minimum information per cable:
   a. Circuit ID.
   b. Information from specified basic tests required.
   c. Test Result: “Pass” or “Fail”.
   d. Date and time of test.
   e. Project name.
   f. NVP.
   g. Software version.
8. An occasional asterisk-Pass (*Pass) will be accepted by Leviton or Berk-Tek at the manufacturer’s discretion, but rework of these links should be done in an attempt to achieve clean “Pass” results prior to submission of test results.
9. To receive Manufacturer’s Warranty for the project, submit software copy of test results, in original tester software format, to the Owner and to the Manufacturer (either Berk-Tek or Leviton).
10. Submit fully functional version of tester software for use by the Owner in reviewing test results.
11. Report in writing to the Owner immediately, along with copy of test results, failed test results that cannot be remedied through re-termination (as in the case of reversed or split pairs).

E. Optical Fiber:

1. Testing procedures shall be in accordance with the following:
   a. ANSI/TIA-568-C.3.
   b. ANSI/TIA-526-7, Method B.
   c. Proposed TSB-140 Tier One Fiber Certification, C.
   d. Encircled Flux testing per the TSB-4979 and TIA-526-14-B standard.
2. Test Equipment: Certification tester (Note: Fluke or Agilent testers may be used).
3. Testing:

   a. Test optical fibers at both 850 nm and 1300 nm wavelengths for multimode, 1310 nm and 1550 nm wavelengths for singlemode, end-to-end insertion loss, Telecommunications Room (TR) to Telecommunications Outlet (TO), Telecommunications Outlet (TO) to Telecommunications Room (TR).
   b. Maximum insertion loss for horizontal fiber optic cables without consolidation point: 2.0 dB.
   c. Test horizontal fiber runs TR to TO, TO to TR, at wavelength of operation to desktop applications.
4. Submit software copy of test results, in original tester software format, to the Owner and to the Manufacturer (Corning).

3.7 LABELING

A. All labeling is to be in accordance with ANSI/TIA-606-B and manufacturer's instructions.

B. Label horizontal cables using machine-printed label at each end of cable at approximately 12 inches from termination point and again at approximately 48 inches from termination point.
   1. Handwritten Labels: Not acceptable.

C. Label patch panel ports and TO ports with cable identifier.

D. Labels:

   1. Owner will provide specific labeling requirements. Coordinate with the Owner.

E. Note labeling information on as-built drawings.

3.8 PROTECTION

A. Protect installed communications horizontal cabling from damage during construction.

END OF SECTION

EXHIBIT C
[PERFORMANCE BOND AND RIDER]

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and MODERN BUILDING, INC., as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **VISTA LA MESA, LLC** ("the Obligee") for payment of the penal sum of _____ _____ _____ Dollars ($_____) in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Members has awarded to the Principal a Contract for the Work described as **NEW BUILDING FOR BUTTE COLLEGE– ORLAND, CA.**

WHEREAS, the Principal, has entered into an agreement with the Obligee for performance of the Work; the Agreement and all other Contract Documents set forth therein are incorporated herein and made a part hereof by this reference.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond ensuring the Principal's prompt, full and faithful performance of the Work of the Contract Documents.

NOW THEREFORE, if the Principal shall promptly, fully and faithfully perform each and all of the obligations and things to be done and performed by the Principal in strict accordance with the terms of the Contract Documents as they may be modified or amended from time to time; and if the Principal shall indemnify and save harmless the Obligee and all of its officers, agents and employees from any and all losses, liability and damages, claims, judgments, liens, costs, and fees of every description, which may be incurred by the Obligee by reason of the failure or default on the part of the Principal in the performance of any or all of the terms or the obligations of the Contract Documents, including all modifications, and amendments, thereto, and any warranties or guarantees required thereunder; then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The Surety, for value received, hereby stipulates and agrees that no change, adjustment of the Contract Time, adjustment of the Contract Price, alterations, deletions, additions, or any other modifications to the terms of the Contract Documents, the Work to be performed thereunder, or to the Specifications or the Drawings shall limit, restrict or otherwise impair Surety's obligations or Obligee's rights hereunder; Surety hereby waives notice from the Obligee of any such changes, adjustments of Contract Time, adjustments of Contract Price, alterations, deletions, additions or other modifications to the Contract Documents, the Work to be performed under the Contract Documents, or the Drawings or the Specifications.

In the event of the Obligee's termination of the Contract due to the Principal's breach or default of the Principal's obligations thereunder, within twenty (20) days after written notice from the Obligee to the Surety of the Principal's breach or default of the Contract Documents and Obligee's termination of the Contract, the Surety shall notify Obligee in writing of Surety's assumption of obligations hereunder by its election to either remedy the default or breach of the Principal or to take charge of the Work of the Contract Documents and complete the Work at its own expense ("the Notice of Election"); provided, however, that the procedure by which the Surety undertakes to discharge its obligations under this

[CONTINUED NEXT PAGE]

Bond shall be subject to the advance written approval of the Obligee, which approval shall not be unreasonably withheld, limited or restricted. The insolvency of the Principal or the Principal's denial of a failure of performance or default under the Contract Documents shall not by itself, without the Surety's prompt, diligent inquiry and investigation of such denial, be justification for Surety's failure to give the Notice of Election or for its failure to promptly remedy the failure of performance or default of the Principal or to complete the Work.

In the event the Surety fails to issue its Notice of Election to Obligee within the time provided for hereinabove, the Obligee may thereafter cause the cure or remedy of the Principal's failure of performance or default or to complete the Work. The Principal and the Surety shall be jointly and severally liable to the Obligee for all damages and costs sustained by the Obligee as a result of the Principal's failure of performance under the Contract Documents or default in its performance of obligations thereunder, including without limitation the costs of cure or completion of the Work exceeding the then remaining balance of the Contract Price; provided that the Surety's liability hereunder for the costs of performance, damages and other costs sustained by the Obligee upon the Principal's failure of performance or default under the Contract Documents shall be limited to the penal sum hereof, which shall be deemed to include the costs or value of any Changes to the Work which increases the Contract Price.

In the event that suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal shall be jointly and severally liable for payment to the Obligee of all costs, expenses and fees incurred by the Obligee therewith, including without limitation, attorneys' fees.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____day of _____, 20____ by their duly authorized agent or representative

_____
(Contractor-Principal Name)

By:_____
(Signature)

_____
(Typed or Printed Name)

Title:_____

(Attach Notary Public Acknowledgement of Principal's Signature)

_____
(Surety Name)

By:_____
(Signature of Attorney-In-Fact for

Contact name, address, telephone number and email address for notices to the Surety

_____
(Contact Name)

_____
(Street Address)

_____
(City, State & Zip Code)

(_____) _____
(_____) _____
Telephone Fax

_____
(Email address)

Dual Obligee Rider

This Rider is executed concurrently with and shall be attached to and form a part of Performance Bond No. TBD (hereafter "Bond") issued by the Fidelity and Deposit Company of Maryland, as Surety, on behalf of Modern Building, Inc., hereafter referred to as the Principal, in favor of Vista La Mesa, LLC, hereafter referred to as the "Owner" for New Building for Butte College- Orland, CA (the "Contract").

WHEREAS, the Owner requests that Surety and Principal add:

1. Butte-Glenn Community College District

an additional Obligee.

WHEREAS, the Surety and Principal agree to the above referenced changes requested by the Owner which are set forth in this Rider which is executed concurrently with the execution of the Bond upon the conditions herein stated.

NOW, THEREFORE, the undersigned hereby agree as follows:

1. Butte-Glenn Community College District is added to the Bond as an additional Obligee ("Additional Obligee"); as the Additional Obligee, Butte-Glenn Community College District shall have all rights and remedies of an Obligee whether arising out of the Bond or by operation of law.

2. The Surety shall not be liable under the Bond to the Owner, the Additional Obligee, or either of them unless the Owner, the Additional Obligee or either of them shall make payments to the Principal (or in the case the Surety arranges for completion of the Contract, to the Surety) in accordance with the terms of the Contract as to payments and shall perform all other obligations to be performed under the Contract at the time and in the manner therein set forth. Notwithstanding anything in the Contract to the contrary, the Surety shall have no obligations or liability to the Additional Obligees unless either or both fulfill all of the Owner's obligations under the Contract which shall include all of the Owner's payment obligations to the Principal.

3. The aggregate liability of the Surety under this Bond to any, all or either of the Owner or the Additional Obligee, as their interests may appear, is limited to the penal sum of the Bond as may be modified by the terms and conditions of this Rider. Further, the Additional Obligee's rights hereunder are subject to the same defenses Principal and/or Surety have against the Owner. The Surety may, at its option, make any payments under said Bond by check issued jointly to the Owner and the Additional Obligee.

4. Except as modified herein, all other terms and conditions of the Bond shall remain in full force and effect.

SIGNED, SEALED AND DATED this TBD day of_____, 2020.

Vista La Mesa, LLC

By_____

Fidelity and Deposit Company of Maryland

By: _____
TBD, Attorney-in-Fact

Modern Building, Inc.

By: _____

EXHIBIT D
[LABOR AND MATERIAL PAYMENT BOND AND RIDER]

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and MODERN BUILDING, INC., as Principal, are jointly and severally, along with theirrespective heirs, executors, administrators, successors and assigns, held and firmly bound unto**VISTA LA MESA, LLC** ("the Obligee") for payment of the penal sum the penal sum of _____ Dollars ($_____) in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Members has awarded to the Principal a Contract for the Work described as **NEW BUILDING FOR BUTTE COLLEGE– ORLAND,CA.**

WHEREAS, the Principal, has entered into an Agreement with the Obligee for performance of the Work, the Agreement and all other Contract Documents set forth therein are incorporated herein by this reference and made a part hereof.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond for the prompt, full and faithful payment to any Claimant, as hereinafter defined, for all labor materials or services used, or reasonably required for use, in the performance of the Work.

NOW THEREFORE, if the Principal shall promptly, fully and faithfully make payment: (i) to any Claimant for all labor, materials or services used or reasonably required for use in the performance of the Work; (ii) of amounts due under the Unemployment Insurance Code for work or labor performed under the Contract; and (iii) of amounts required to be deducted, withheld and paid to the Employment Development Department from wages of the employees of the Principal and its Subcontractors under Section 13020 of the Unemployment Insurance Code with respect to work and labor under the Contract then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The term "Claimant" shall refer to any person, corporation, partnership, proprietorship or other entity including without limitation, all persons and entities described in California Civil Code §1900, providing or furnishing labor, materials or services used or reasonably required for use in the performance of the Work under the Contract Documents, without regard for whether such labor, materials or services were sold, leased or rented. This Bond shall inure to the benefit of all Claimants so as to give them, or their assigns and successors, a right of action upon this Bond.

In the event that suit is brought on this Bond by any Claimant for amounts due such Claimant for labor, materials or services provided or furnished by such Claimant, the Surety shall pay for the same and reasonable attorney's fees pursuant to California Civil Code §9554.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, deletion, addition, or any other modification to the terms of the Contract Documents, the Work to be performed thereunder, the Specifications or the Drawings, or any other portion of the Contract Documents, shall in any way limit, restrict or otherwise affect its obligations under this Bond; the Surety hereby waives notice from the Obligee of any such change, extension of time, alteration, deletion, addition or other modification to the Contract Documents, the Work to be performed under the Contract Documents, the Drawings or the Specifications of any other portion of the Contract Documents.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20__ by their duly authorized agent or representative.

_____
(Contractor-Principal Name)

By:_____
(Signature)

_____
(Typed or Printed Name)

Title:
_____

(Attach Notary Public Acknowledgement of Principal's Signature)

_____
(Surety Name)

By:_____
(Signature of Attorney-In-Fact for

Contact name, address, telephone number and email address for notices to the Surety

_____
(Contact Name)

_____
(Street Address)

_____
(City, State & Zip Code)

(_____) _____ (_____) _____
Telephone Fax

_____
(Email address)

Dual Obligee Rider

This Rider is executed concurrently with and shall be attached to and form a part of Labor and Material Payment Bond No. TBD (hereafter "Bond") issued by the Fidelity and Deposit Company of Maryland, as Surety, on behalf of Modern Building, Inc., hereafter referred to as the Principal, in favor of Vista La Mesa, LLC, hereafter referred to as the "Owner" for New Building for Butte College- Orland, CA (the "Contract").

WHEREAS, the Owner requests that Surety and Principal add:

1. Butte-Glenn Community College District

an additional Obligee.

WHEREAS, the Surety and Principal agree to the above referenced changes requested by the Owner which are set forth in this Rider which is executed concurrently with the execution of the Bond upon the conditions herein stated.

NOW, THEREFORE, the undersigned hereby agree as follows:

1. Butte-Glenn Community College District is added to the Bond as an additional Obligee ("Additional Obligee"); as the Additional Obligee, Butte-Glenn Community College District shall have all rights and remedies of an Obligee whether arising out of the Bond or by operation of law.

2. The Surety shall not be liable under the Bond to the Owner, the Additional Obligee, or either of them unless the Owner, the Additional Obligee or either of them shall make payments to the Principal (or in the case the Surety arranges for completion of the Contract, to the Surety) in accordance with the terms of the Contract as to payments and shall perform all other obligations to be performed under the Contract at the time and in the manner therein set forth. Notwithstanding anything in the Contract to the contrary, the Surety shall have no obligations or liability to the Additional Obligees unless either or both fulfill all of the Owner's obligations under the Contract which shall include all of the Owner's payment obligations to the Principal.

3. The aggregate liability of the Surety under this Bond to any, all or either of the Owner or the Additional Obligee, as their interests may appear, is limited to the penal sum of the Bond as may be modified by the terms and conditions of this Rider. Further, the Additional Obligee's rights hereunder are subject to the same defenses Principal and/or Surety have against the Owner. The Surety may, at its option, make any payments under said Bond by check issued jointly to the Owner and the Additional Obligee.

4. Except as modified herein, all other terms and conditions of the Bond shall remain in full force and effect.

SIGNED, SEALED AND DATED this TBD day of_____, 2020.

Vista La Mesa, LLC

By_____

Fidelity and Deposit Company of Maryland

By: _____
TBD, Attorney-in-Fact

Modern Building, Inc.

By: _____

EXHIBIT E
DEED OF TRUST

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL TO:

BUTTE-GLENN COMMUNITY COLLEGE DISTRICT

_____

_____

(Space Above This Line For Recorder's Use)

DEED OF TRUST
(PERFORMANCE ASSURANCE)

THIS DEED OF TRUST ("**Deed of Trust**") is made on this ___ day of _____ 2020 by **VISTA LA MESA, LLC**, a California limited liability company, as trustor ("**Seller**") to _____ Title Company ("**Trustee**"), for the benefit of **BUTTE-GLENN COMMUNITY COLLEGE DISTRICT**, as beneficiary ("**Buyer**").

The Seller, in consideration of the promises recited and the trust created in this Deed of Trust, irrevocably grants and conveys to Trustee, in trust, with power of sale all of its right title and interest in and to that certain real property located in the City of Orland, County of Glenn, State of California, legally described in "Exhibit A" attached hereto and made a part hereof.

Together with all of the improvements now or hereafter erected on said property, and all easements, rights, appurtenances, rents (subject, however, to the rights and authorities given in this Deed of Trust to the Buyer to collect and apply such rents), royalties, mineral, oil and gas rights and profits, water, water rights, and water stock, and all fixtures now or hereafter attached to said property, all of which including replacements and additions thereto, shall be deemed to be and remain a part of the property covered by this Deed of Trust; and all of the foregoing, together with said property are referred to in this Deed of Trust as the "**Property**";

To secure for the benefit of Buyer the performance of each agreement and covenant of the Seller in that certain Purchase and Sale Agreement between the Buyer and the Seller, dated _____, 2020 (the "**Purchase Agreement**").

TO PROTECT THE SECURITY OF THIS DEED OF TRUST, SELLER AGREES:

1. Maintenance and Repair. To keep the Property in good condition and repair; not to remove or demolish any buildings on the Property; to complete or restore promptly and in good and workmanlike manner any building that may be constructed, damaged, or destroyed on the Property; to pay when due all claims for labor performed and materials furnished for the Property; to comply with all laws affecting the Property or requiring any alterations or improvements to be made on the Property; not to commit or permit waste of the Property; not to commit, suffer, or permit any act upon the Property in violation of law; and to cultivate and maintain the landscaping, and do all other acts that from the character or use of the Property may be reasonably necessary.

2. Defense of Security. To appear in and defend any action or proceeding purporting to affect the security of this Deed of Trust or the rights or powers of Buyer, or Trustee; and to pay all costs and expenses, including cost of evidence of title and attorneys' fees in a reasonable sum, in any such action or proceeding in which Buyer or Trustee may appear, and in any suit brought by Buyer to foreclose this Deed of Trust

3. Payment of Liens and Taxes. To pay all taxes and assessments affecting the Property prior to such payments becoming due, all encumbrances, charges, and liens, with interest, on the Property or any part of the Property, which appear to be prior or superior to this Deed of Trust, and all costs, fees, and expenses of this Trust. If Seller fails to make any payment or to do any act as provided in this Deed of Trust, then Buyer or Trustee may (but is not obligated to) make the payment or do the act in the required manner and to the extent deemed necessary by Buyer or Trustee to protect the security of this Deed of Trust. The performance by Buyer or Trustee of such an act shall not require notice to or demand upon Seller and shall not release Seller from any obligation under this Deed of Trust. Buyer or Trustee shall also have the following related rights and powers: to enter upon the Property for the foregoing purposes; to appear in and defend any action or proceeding purporting to affect the security of this Deed of Trust or the rights or powers of Buyer or Trustee; to pay, purchase, contest, or compromise any encumbrance, charge, or lien that in the judgment of either appears to be prior or superior to this Deed of Trust; to employ counsel; and to pay necessary expenses and costs, including attorneys' fees.

4. Reimbursement of Costs. To pay immediately and without demand all sums expended by Buyer or Trustee pursuant to this Deed of Trust, with interest from date of expenditure at the amount allowed by law in effect at the date of this Deed of Trust, and to pay any reasonable amount demanded by Buyer (up to the maximum allowed by law at the time of the demand) for any statement regarding the obligation secured by this Deed of Trust.

5. Use. That it will not permit or suffer the use of any of the Property for any purpose other than the use for which the same was intended at the time this Deed of Trust was executed.

6. Incorporation of Agreement. That the Purchase Agreement is incorporated herein by reference and made a part of this Deed of Trust.

7. Performance of Other Obligations. To perform, in a timely manner, each agreement and covenant by Seller on any and all notes, loans and deeds of trust that are senior to this Deed of Trust.

B. THE PARTIES AGREE THAT:

8. Full Reconveyance. Upon the Closing (as defined in the Purchase Agreement), Buyer shall reconvey this Deed of Trust.

9. Default; Foreclosure. Upon default by Seller under the Purchase Agreement, subject to the notice and cure rights contained in the Purchase Agreement, or in the performance of any obligation under this Deed of Trust beyond any applicable cure period, Buyer may declare all obligations secured by this Deed of Trust immediately due and payable by delivering to Trustee a written declaration of default and demand for sale and a written notice of default and election to sell the Property. Trustee shall cause the notice of default and election to sell to be recorded. After the required time period has lapsed following the recordation of the notice of default, and after notice of sale has been given as required by law, Trustee, without demand on Seller, shall sell the Property at the time and place specified in the notice of sale, either as a whole or in separate parcels, and in any order determined by Trustee, at public auction to the highest bidder for cash in lawful money of the United States, payable at the time of sale. Trustee may postpone sale of all or any portion of the Property by public announcement at the time and place of sale, and from time to time thereafter may postpone the sale by public announcement at the time fixed by the preceding postponement. Trustee shall deliver to the purchaser at the auction its deed conveying the Property sold, but without any covenant or warranty, express or implied. The recital in the deed of any matter or fact shall be conclusive proof of the truthfulness of the recital. Any person, including Seller, Trustee, or Buyer, may purchase at the sale. After deducting all costs, fees, and expenses of Trustee and Buyer under this paragraph, including costs of procuring evidence of title incurred in connection with sale, Trustee shall apply the proceeds of sale to payment of: all sums expended under the terms of this Deed of Trust, not then repaid, with accrued interest at the amount allowed by law in effect at the date of this Deed of Trust; all other sums then secured by this Deed of Trust; and the remainder, if any, to the person or persons legally entitled to the remaining proceeds

10. Due on Sale or Further Encumbrance. Should Seller agree to or actually sell, convey, transfer, or dispose of, or further encumber the Property, or any part of it, or any interest in it, without first obtaining the written consent of the Buyer, then all obligations secured by the Deed of Trust may be declared due and payable, at the option of the Buyer. Consent to one transaction of this type will not constitute a waiver of the right to require consent to future or successive transactions.

11. General Provisions. This Deed of Trust applies to, inures to the benefit of, and binds all

parties to this Deed of Trust and their heirs, legatees, devisees, administrators, executors, successors, and assigns. The term "Buyer" includes the successors and assigns of such person. In this Deed of Trust, whenever the context so requires, the masculine gender includes the feminine and/or neuter, and the singular number includes the plural.

12. Substitution of Trustees. Buyer, or any successor in ownership of any obligations secured by this Deed of Trust, may from time to time, by written instrument, substitute a successor or successors to any Trustee named in or acting under this Deed of Trust. The substitution instrument shall contain the name of the original Seller, Trustee, and Buyer under this Deed of Trust, the book and page where this Deed is recorded, and the name and address of the new Trustee. When executed by Buyer and duly acknowledged and recorded in the office of the recorder of the county or counties where the Property is situated, the substitution instrument shall be conclusive proof of proper substitution of the successor Trustee or Trustees. Any successor Trustee or Trustees shall, without conveyance from the Trustee predecessor, succeed to all its title, estate, rights, powers, and duties.

13. Cumulative Powers and Remedies. The powers and remedies conferred in this Deed of Trust are concurrent and cumulative to all other rights and remedies provided in this Deed of Trust or given by law. These powers and remedies may be exercised singly, successively, or together, and as often as deemed necessary.

14. Conclusiveness of Recitals. The recitals contained in any reconveyance, trustee's deed, or any other instrument executed by the Trustee from time to time under the authority of this Deed of Trust or in the exercise of its powers or the performance of its duties under this Deed of Trust, shall be conclusive evidence of their truth, whether stated as specific and particular facts, or in general statements or conclusions absent manifest error. Further, the recitals shall be binding and conclusive upon the Seller, its heirs, executors, administrators, successors, and assigns, and all other persons.

15. Attorneys' Fees. If any action is brought for the foreclosure of this Deed of Trust or for the enforcement of any provision of this Deed of Trust (whether or not suit is filed), Seller agrees to pay all costs and expenses of Buyer and Trustee, including reasonable attorneys' fees; and these sums shall be secured by this Deed of Trust.

16. Choice of Law. This Deed of Trust shall be governed by and construed in accordance with the laws of the State of California.

17. Authority to Sign. All individuals signing this Deed of Trust for a party which is a corporation, limited liability company, partnership or other legal entity, or signing under a power of attorney, or as a trustee, guardian, conservator, or in any other legal capacity, covenant to the Buyer that they have the necessary capacity and authority to act for, sign and bind the respective

entity or principal on whose behalf they are signing.

SELLER:

VISTA LA MESA, LLC, a California limited liability company

By: _____
Name: _____
Title: _____

A Notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) SS.
COUNTY OF _____)

On _____, before me, _____, a Notary Public in and for said State, personally appeared, _____, who proved to me the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity(ies) upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

[SEAL]

[END OF DOCUMENT]

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Public Hearing and Adoption of 2020-21 Final Budget	**Item No:** 20-8032 **Enclosure:** Yes ☒ No ☐
Category: Finance	**Action** ☒ **Information** ☐ **Regular** ☒ **Consent** ☐
Submitted By: Andrew Suleski Vice President	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Status
Attached for the Board's review is a copy of the proposed 2020-21 Final Budget for the Butte-Glenn Community College District. The document outlines the status of the State's and District's budgets.

Recommendation
It is recommended that the Board of Trustees open the Public Hearing for the purpose of taking comments from the public regarding the proposed 2020-21 Final Budget.

It is also recommended that the Board of Trustees adopt the attached 2020-21 Final Budget for the Butte-Glenn Community College District following the public hearing.

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Open for Public Comment and Approval: College and Career Access Pathways (CCAP) Appendix which identify specific Dual Enrollment course details for the 2020/21 school year with Las Plumas and Orland High Schools.	**Item No:** 20-8033 **Enclosure:** Yes ☒ No ☐
Category: Student Services	**Action** ☒ **Information** ☐ **Regular** ☒ **Consent** ☐
Submitted By: Al Renville	**Approved By:** Samia Yaqub Samia Yaqub, Ph.D. Superintendent/President

Background

Assembly Bill 288 (AB 288) was enacted January 1, 2016 and added to the California Education Code Section 76004. Assembly Bill 30 was enacted November 18, 2019, which amended the California Education Code Section 76004.

AB 288 enables the governing board of a community college district to enter into a College and Career Access Pathways (CCAP) Partnership Agreement with the governing board of a California public school district consistent with Education Code Section 76004. CCAP partnerships are for the purpose of offering and expanding dual enrollment opportunities for "students who may not already be college bound or who are underrepresented in higher education, with the goal of developing seamless pathways from high school, including continuation high school, to community college for career technical education or preparation for transfer, improving high school graduation rates, or helping high school pupils achieve college and career readiness."

As mandated by law, the governing board of each district, at an open public meeting of that board, shall present the dual enrollment partnership agreement at an open public meeting of that board, shall take comments from the public and approve or disapprove the proposed agreement. (Ed. Code, § 76004, subd. (b))

Status

Butte-Glenn Community College District has developed College and Career Access Pathways (CCAP) Partnership Agreements to provide high school students the opportunity to earn college and high school credit simultaneously while gaining a jump start on post-secondary education. Dual enrollment will help students achieve college and career readiness ensuring a smooth transition from high school to college.

Recommendation

It is recommended that the Board take comments from the public and approve the proposed CCAP Appendix which identify specific Dual Enrollment course details for the 2020/21 school year with Las Plumas and Orland High Schools.

BUTTE-GLENN COMMUNITY COLLEGE DISTRICT
3536 Butte Campus Drive, Oroville, CA 95965

COLLEGE AND CAREER ACCESS PATHWAYS PARTNERSHIP AGREEMENT

APPENDIX

WHEREAS, the College and Career Access Pathways Partnership Agreement ("CCAP Agreement') is between **Butte-Glenn Community College District** ("College") and **Oroville Union High School District** ("School District"); and

WHEREAS, the College and the School District agree to record College and School District specific components of the CCAP Agreement using the CCAP Agreement Appendix to specify additional detail regarding, but not limited to: the total number of high school students to be served; the total number of full-time equivalent students projected to be claimed by the College for those students; the scope, nature, time, location and listing of community college courses to be offered; and the criteria to assess the ability of pupils to benefit from those courses. (Ed. Code, § 76004, subd. (c)(1))

NOW THEREFORE, the College and School District agree as follows:

1. **CCAP AGREEMENT**

1.1. The College and School District entered into the CCAP Agreement on **July 1, 2018**, pursuant to action of the governing boards of the College and School District.

1.1.1. COLLEGE BOARD MEETINGS

Public Comment and Approval Board Meeting Date:	Agreement: 5/16/18	Appendix: 9/16/20

1.1.2. SCHOOL DISTRICT BOARD MEETINGS

Public Comment and Approval Board Meeting Date:	Agreement: 5/9/18	Appendix: 9/16/20

2. **POINTS OF CONTACT**

2.1. College and School District points of contact for this CCAP Agreement: (Ed. Code, § 76004 (c)(2))

COLLEGE

Name:	Tanna Neilsen	Title:	Program Administrator
Telephone:	(530)893-7586	Email:	neilsenta@butte.edu

SCHOOL DISTRICT

Name:	Paula Blaney	Title:	Executive Assistant
Telephone:	538-2300 x1107	Email:	pblaney@ouhsd.net

3. **STUDENT SELECTION**

3.1. College and School District shall adhere to the terms outlined in Section 3, Student Eligibility, Admission, Registration and Enrollment of the CCAP Agreement to select eligible students.

Required: Describe the criteria used to assess the ability of pupils to benefit from the courses(s) offered: (Ed. Code, § 76004 (c)(1))

SCHOOL DISTRICT counselors and pathway instructors select students based on academic readiness and alignment of course content to students' education and career goals.

4. **CCAP AGREEMENT EDUCATION PROGRAM(S) AND COURSE(S).** The College has identified the following: program year; educational program(s) and course(s) to be offered at the said date, time and location; term; number of sections; the total number of students to be served and projected FTES; and the instructor and employer of record.

PROGRAM YEAR:	2020/21	EDUCATIONAL PROGRAM:	
SCHOOL DISTRICT:	Oroville Union High School District	HIGH SCHOOL:	Las Plumas High

ESTIMATED NUMBER OF STUDENTS TO BE SERVED: 60	**TOTAL PROJECTED FTES: 6**

COURSE NAME	COURSE NUMBER	TERM	# OF SECTIONS	TIME	DAYS	INSTRUCTOR	EMPLOYER OF RECORD	LOCATION
Intro to Animal Science	AGS 40	FA20	1	7 - 3	M – F	Andree' Earley	☐ CC ☒ HS	☐ CC ☒ HS
Intro to Animal Science	AGS 40	FA20	1	7 - 3	M – F	Laura LaFayette	☐ CC ☒ HS	☐ CC ☒ HS
Tractors & Crawlers	AET 30	FA20	1	7 - 3	M – F	Brendan Close	☐ CC ☒ HS	☐ CC ☒ HS
							☐ CC ☐ HS	☐ CC ☐ HS

Required: Attach the course description for each course listed above. Each course description should include information regarding the nature and scope of the course.

5. **BOOKS AND INSTRUCTIONAL MATERIALS.** The total cost of books and instructional materials for School District students participating as part of this CCAP agreement will be borne by School District.

COURSE NAME	TEXT	COST	OTHER INSTRUCTIONAL MATERIALS	COST
N/A				

6. **REIMBURSEMENT.**

6.1. Use of School District Instructor. For those courses in which a School District instructor is responsible for the instructional services for a course offered as part of this CCAP Agreement, the College will reimburse School District as follows: **$400.00 per completed section**

6.2. Invoicing Procedures. Within 30 days after the end of each academic term, the School District shall provide an invoice to the College for reimbursement implied in this CCAP Agreement Appendix. The invoice must specify the course name, course number, term, instructor and the number of students served.

7. **FACILITIES USE.**

7.1. College and School District shall adhere to the terms outlined in Section 13, Facilities, of this CCAP Agreement.

7.2. School District as part of Section 13.1 of this CCAP Agreement, shall extend access and use of the following School District facilities:

BUILDING	CLASSROOM	DAYS	HOURS
LPHS	2001	M – F	7 - 3
LPHS	2001	M – F	7 - 3
LPHS	2010	M – F	7 - 3

8. **APPENDIX APPROVAL**

8.1. The College and School District shall ensure that the governing board of each district, at an open public meeting of that board, shall present this CCAP Appendix, take comments from the public, and approve or disapprove this CCAP Appendix. (Ed. Code, § 76004, subd. (b))

8.2. Upon approval of this Appendix by the governing boards of both the College and School District, the College will provide a copy of this Appendix to the Chancellor's Office of the California Community Colleges prior to the start of the course. (Ed. Code, § 76004, subd. (c)(3))

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties to the CCAP Agreement have executed this CCAP Agreement Appendix by their duly authorized representatives on the dates of their signatures.

BUTTE-GLENN COMMUNITY COLLEGE DISTRICT

By:_____
(Signature of person authorized to execute Appendix on behalf of College.)

Name:_____

Title: Vice President for Administration

Date: _____

OROVILLE UNION HIGH SCHOOL DISTRICT

By:_____
(Signature of person authorized to execute Appendix on behalf of School District.)

Name:_____

Title: Superintendent

Date: _____

TO BE COMPLETED BY COLLEGE ONLY The person preparing this contract must complete this section and obtain appropriate initials before contract will be approved.					
Initiating Department:	School Relations	Preparer's Name & ID:	TANNA NEILSEN / 3180821	Phone:	7586
Vendor Name:	OROVILLE UNION HIGH SCHOOL DISTRICT		Vendor ID:		
PO Description *(Max. 25 characters)*:	CCAP AGREEMENT APPENDIX 2020-21				
Budget Code:	TBD		PO Amount:	$1,200	
Contract Monitor Name *(Person Who Approves Invoices)*:	TANNA NEILSEN			Phone:	7586
Dept. Dean/Director Initials:		Dept. Vice President Initials:			
Business Contracts Approval:		**Purchase Order Number:**			

BUTTE COLLEGE
COURSE OUTLINE

I. CATALOG DESCRIPTION

AGS 40 - Introduction to Animal Science **3 Unit(s)**

Prerequisite(s): NONE
Recommended Prep: Reading Level III; English Level III; Math Level II
Transfer Status: CSU/UC
34 hours Lecture
51 hours Lab

This course is a scientific approach to the livestock industry encompassing aspects of animal anatomy, physiology, nutrition, genetics and epidemiology. There will be special emphasis on the origin, characteristics, adaptation and contributions of farm animals to the global agriculture industry. Analysis of the economic trends and career opportunities in animal agriculture will be covered.

II. OBJECTIVES

Upon successful completion of this course, the student will be able to:

A. Identify animal contributions to the development of human civilizations.
B. Describe economically significant breeds of animals and their unique adaptations.
C. Describe the function of the major body systems.
D. Identify reproductive cycles and biotechnological principles of animal reproduction.
E. Analyze genetic change through artificial/natural selection.
F. Discuss nutritional needs for various body functions.
G. Describe animal behavior as it relates to animal domestication, health and performance.
H. Explain basic strategies for disease control, prevention and management.
I. Utilize the scientific method to collect data, calculate production parameters and make scientifically-based management decisions.
J. Identify and discuss current issues affecting animal agriculture.

III. COURSE CONTENT

A. **Unit Titles/Suggested Time Schedule**

Lecture

Topics	Hours
1. Introduction to animal agriculture a. Career opportunities b. Importance of domestic animals to the world and to the United States c. Economic importance of animal agriculture d. Animal contributions to human needs e. Ethnic and cultural contributions to animal domestication	4.00
2. Unique adaptations of various species a. Natural selection vs artificial selection b. Meat animal use and production c. Fiber production d. Dairy production e. Recreational and companionship use of animals	4.00
3. Anatomy and physiology a. Identification of external anatomy for various species b. Analysis of body systems – reproductive, respiratory, digestive, immune, circulatory	3.00

4. Animal reproduction a. Animal breeding systems b. Reproductive management and technology c. Fertility assessment	3.00
5. Genetics a. Introduction and review of genetic principles b. Gene modification and genetic interactions c. Genetic improvement and variation d. Inheritance and population genetics	3.00
6. Nutrition a. Classes of nutrients b. Feed identification and composition c. Livestock feeding management practices	3.00
7. Animal behavior (ethology) a. Behavioral characteristics b. Animal handling and safety c. Conditioning	3.00
8. Animal health a. Biosecurity b. Vital Signs c. Indications of health vs disease d. Common diseases	3.00
9. The scientific method a. Research in animal agriculture b. Developing a research model c. Humane treatment of research animals	3.00
10. Issues affecting animal agriculture a. Animal welfare issues b. Advances in biotechnology c. Governmental and environmental concerns d. Food safety e. Public policy and consumer awareness	5.00
Total Hours	34.00

Lab

Topics	Hours
1. Beef and Dairy	3.00
2. Sheep and Swine	3.00
3. Meats lab, safety and processes	3.00
4. Grocery store - meat, cheese, butter, ice cream	3.00
5. Purebred Beef - Expected Progeny Differences (EPD)	3.00
6. Commerical cattle operation - weaning, castration	3.00
7. Dairy farm - production cycle	3.00
8. Milk processing - cheese plant	3.00
9. Sheep - lambing and handling	3.00
10. Purebred Sheep - production cyle	3.00
11. Swine - vaccination, selection, management	3.00
12. Poultry - quality of carcasses and eggs	3.00

13.	Horse - production cycle	3.00
14.	Selection workshop	3.00
15.	Biotechnology and environmental workshop	3.00
16.	North Valley Livestock Tour	6.00
Total Hours		51.00

IV. METHODS OF INSTRUCTION

A. Lecture
B. Class Activities
C. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
D. Discussion
E. Problem-Solving Sessions

V. METHODS OF EVALUATION

A. Exams/Tests
B. Class participation
C. Written Examinations
D. Practical Evaluations
E. Mid-term and final examinations

VI. EXAMPLES OF ASSIGNMENTS

A. Reading Assignments
   1. Read the chapter on genetic change through selection and be prepared to share your findings with the class.
   2. Read the chapter on market classes and grades of livestock and be able to discuss in a group setting the evaluative criteria for each grade of beef, pork and lamb.

B. Writing Assignments
   1. Read the chapter on animal behavior and and write a 2-3 page paper on the fields of animal behavior and systems of animal behavior.
   2. Read an article from a trade magazine on the issues in animal agriculture and write 2 page paper on animal welfare.

C. Out-of-Class Assignments
   1. Visit any livestock operation in the local area and be prepared to share with the class, the breeds, total numbers and management practices utilized at the operation.
   2. Use the Internet to check current pricing on the major market animals as well as breeding stock for swine, sheep, beef and dairy cattle. This information will be shared with the class.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

A. Taylor, R. Scientific Farm Animal Production. 10th Edition. Prentice Hall, 2012.

Materials Other Than Textbooks:

A. Materials: 3 ring notebook, proper clothing for labs

Created/Revised by: Bruce Hicks
Date: 10/20/2014

BUTTE COLLEGE
COURSE OUTLINE

I. **CATALOG DESCRIPTION**

AET 30 - Tractors and Crawlers **3 Unit(s)**

Prerequisite(s): NONE
Recommended Prep: Reading Level IV; English Level III; Math Level II
Transfer Status: CSU
34 hours Lecture
51 hours Lab

This course covers design principles, selection, maintenance, adjustment, and safe operation of wheel and crawler type tractors used in agriculture and in the construction industry. (C-ID AG-MA 108L).

II. **OBJECTIVES**

Upon successful completion of this course, the student will be able to:

A. List all the safety and operation rules for tractors and crawlers.
B. Operate wheel and track type tractors safely and properly.
C. Identify tractor parts and their function.
D. Describe power generation and transmission systems.
E. Select the proper equipment for a specific job.
F. Perform operator level maintenance and adjustment of tractor systems.
G. Diagnose and repair minor tractor problems.
H. Back a tractor and trailer through a course safely and accurately.
I. Attach implements to tractor safely and properly.
J. Communicate and work cooperatively with others.

III. **COURSE CONTENT**

A. **Unit Titles/Suggested Time Schedule**

Lecture

Topics	Hours
1. Introduction a. History of the tractor engine b. Types of tractors c. Terminology	5.00
2. 2. Safety a. California division of industrial safety b. Hand Signals c. Starting and stopping d. Hazards e. Transportation f. Cal OSHA regulations	5.00
3. Power systems a. Engine b. Clutch c. Transmissions d. Final Drives e. Hydraulic f. P.T.O.	5.00

	g. Electrical	
4.	Controls a. Starting and stopping b. Steering c. Hitches d. Hydraulic e. Electric f. Auto Guidance	5.00
5.	Implement a. Attachment b. Adjustments c. Efficiency	4.00
6.	Field operation a. Ballast b. Stability c. Daily maintenance d. Selecting speeds e. Hazardous situations	5.00
7.	Maintenance a. Operators manuals b. Tools c. Supplies d. Inspection, evaluation	5.00
Total Hours		34.00

Lab

Topics		Hours
1.	Functionality of safety equipment	5.00
2.	Proper application of electrical components	3.00
3.	Performing up-to-date maintenance of lubrication points	5.00
4.	Functionality of engine cooling and lubrication	5.00
5.	Maintenance and assembled fittings of hydraulics	5.00
6.	Proper inflation of tires	3.00
7.	Proper adjustment of implement	5.00
8.	Perform all pre-start procedures on a tractor	5.00
9.	Safe operation of tractors and implements	5.00
10.	Selection of the proper implement for the job	5.00
11.	How to troubleshoot tractor problems	5.00
Total Hours		51.00

IV. METHODS OF INSTRUCTION

A. Lecture
B. Instructor Demonstrations
C. Collaborative Group Work
D. Field Trips
E. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture

F. Discussion
G. Demonstrations
H. Reading Assignments
I. Multimedia Presentations
J. Laboratory (practical application)

V. METHODS OF EVALUATION

A. Exams/Tests
B. Quizzes
C. Projects
D. Demonstration
E. Homework
F. Class participation
G. Final Examination
H. Written Assignments
I. Practical Evaluations

VI. EXAMPLES OF ASSIGNMENTS

A. Reading Assignments
   1. Read the chapter on safety. Describe the proper technique for mounting and dismounting a tractor without falling off.
   2. Read assigned text chapter on power trains. Be prepared to describe the proper operation of the clutch.

B. Writing Assignments
   1. Use the Internet to research agricultural tires. Explain in a one-page paper the difference between an R1 tire and an R3 tire.
   2. Answer the essay questions on field patterns from this week's "Lab Howdy" and submit your answers to the instructor.

C. Out-of-Class Assignments
   1. Form a study group with your classmates to discuss transport safety. Questioning each other is an excellent method to enhance your learning and comprehension.
   2. Supplement your text reading with an on-line search for information about rubber-tracked tractors. Suggested sites are "How Stuff Works" and Wikipedia, or Google the topic you are researching.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

A. Deere & Company. John Deere Fundamentals of Machine Operation-Tractors. 4th Edition. Moline Illinois, 2008.

Materials Other Than Textbooks:

A. Various equipment manuals checked out of mechanics shop.
B. Clothing appropriate for operating equipment, including sleeved shirt, long pants, closed toe shoes.

Created/Revised by: Bruce Enyeart
Date: 11/03/2014

BUTTE-GLENN COMMUNITY COLLEGE DISTRICT
3536 Butte Campus Drive, Oroville, CA 95965

COLLEGE AND CAREER ACCESS PATHWAYS PARTNERSHIP AGREEMENT

APPENDIX

WHEREAS, the College and Career Access Pathways Partnership Agreement ("CCAP Agreement') is between **Butte-Glenn Community College District** ("College") and **Orland Unified School District** ("School District"); and

WHEREAS, the College and the School District agree to record College and School District specific components of the CCAP Agreement using the CCAP Agreement Appendix to specify additional detail regarding, but not limited to: the total number of high school students to be served; the total number of full-time equivalent students projected to be claimed by the College for those students; the scope, nature, time, location and listing of community college courses to be offered; and the criteria to assess the ability of pupils to benefit from those courses. (Ed. Code, § 76004, subd. (c)(1))

NOW THEREFORE, the College and School District agree as follows:

1. **CCAP AGREEMENT**

1.1. The College and School District entered into the CCAP Agreement on **July 1, 2018**, pursuant to action of the governing boards of the College and School District.

1.1.1. COLLEGE BOARD MEETINGS

Public Comment and Approval Board Meeting Date:	Agreement: 5/16/18	Appendix: 9/16/20

1.1.2. SCHOOL DISTRICT BOARD MEETINGS

Public Comment and Approval Board Meeting Date:	Agreement: 5/9/18	Appendix: 9/17/20

2. **POINTS OF CONTACT**

2.1. College and School District points of contact for this CCAP Agreement: (Ed. Code, § 76004 (c)(2))

COLLEGE

Name:	Tanna Neilsen	Title:	Program Administrator
Telephone:	(530)893-7586	Email:	neilsenta@butte.edu

SCHOOL DISTRICT

Name:	Ronne Blofsky	Title:	Executive Assistant
Telephone:	865-1200	Email:	rblofsky@orlandusd.net

3. **STUDENT SELECTION**

3.1. College and School District shall adhere to the terms outlined in Section 3, Student Eligibility, Admission, Registration and Enrollment of the CCAP Agreement to select eligible students.

Required: Describe the criteria used to assess the ability of pupils to benefit from the courses(s) offered: (Ed. Code, § 76004 (c)(1))

SCHOOL DISTRICT counselors and pathway instructors select students based on academic readiness and alignment of course content to students' education and career goals.

4. **CCAP AGREEMENT EDUCATION PROGRAM(S) AND COURSE(S).** The College has identified the following: program year; educational program(s) and course(s) to be offered at the said date, time and location; term; number of sections; the total number of students to be served and projected FTES; and the instructor and employer of record.

PROGRAM YEAR:	2020/21	EDUCATIONAL PROGRAM:	
SCHOOL DISTRICT:	Orland Unified School District	HIGH SCHOOL:	Orland High School

ESTIMATED NUMBER OF STUDENTS TO BE SERVED: 24	**TOTAL PROJECTED FTES: 2.4**

COURSE NAME	COURSE NUMBER	TERM	# OF SECTIONS	TIME	DAYS	INSTRUCTOR	EMPLOYER OF RECORD	LOCATION
Work Place Communication	OLS 324	FA20	1	8 - 3	M – F	Madison Harwell	☐ CC ☒ HS	☐ CC ☒ HS
Literacy for Career Building	OLS 325	SP21	1	8 - 3	M – F	Madison Harwell	☐ CC ☒ HS	☐ CC ☒ HS
							☐ CC ☒ HS	☐ CC ☒ HS
							☐ CC ☐ HS	☐ CC ☐ HS

Required: Attach the course description for each course listed above. Each course description should include information regarding the nature and scope of the course.

5. **BOOKS AND INSTRUCTIONAL MATERIALS.** The total cost of books and instructional materials for School District students participating as part of this CCAP agreement will be borne by School District.

COURSE NAME	TEXT	COST	OTHER INSTRUCTIONAL MATERIALS	COST
N/A				

6. **REIMBURSEMENT.**

6.1. Use of School District Instructor. For those courses in which a School District instructor is responsible for the instructional services for a course offered as part of this CCAP Agreement, the College will reimburse School District as follows: **$400.00 per completed section**

6.2. Invoicing Procedures. Within 30 days after the end of each academic term, the School District shall provide an invoice to the College for reimbursement implied in this CCAP Agreement Appendix. The invoice must specify the course name, course number, term, instructor and the number of students served.

7. **FACILITIES USE.**

7.1. College and School District shall adhere to the terms outlined in Section 13, Facilities, of this CCAP Agreement.

7.2. School District as part of Section 13.1 of this CCAP Agreement, shall extend access and use of the following School District facilities:

BUILDING	CLASSROOM	DAYS	HOURS
OHS	101	M – F	8 - 3
OHS	101	M – F	8 - 3

8. **APPENDIX APPROVAL**

8.1. The College and School District shall ensure that the governing board of each district, at an open public meeting of that board, shall present this CCAP Appendix, take comments from the public, and approve or disapprove this CCAP Appendix. (Ed. Code, § 76004, subd. (b))

8.2. Upon approval of this Appendix by the governing boards of both the College and School District, the College will provide a copy of this Appendix to the Chancellor's Office of the California Community Colleges prior to the start of the course. (Ed. Code, § 76004, subd. (c)(3))

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties to the CCAP Agreement have executed this CCAP Agreement Appendix by their duly authorized representatives on the dates of their signatures.

BUTTE-GLENN COMMUNITY COLLEGE DISTRICT

By:_____
(Signature of person authorized to execute Appendix on behalf of College.)

Name:_____

Title: Vice President for Administration

Date: _____

ORLAND UNIFIED SCHOOL DISTRICT

By:_____
(Signature of person authorized to execute Appendix on behalf of School District.)

Name:_____

Title: Superintendent

Date: _____

TO BE COMPLETED BY COLLEGE ONLY The person preparing this contract must complete this section and obtain appropriate initials before contract will be approved.					
Initiating Department:	School Relations	Preparer's Name & ID:	TANNA NEILSEN / 3180821	Phone:	7586
Vendor Name:	ORLAND UNIFIED SCHOOL DISTRICT		Vendor ID:		
PO Description *(Max. 25 characters)*:	CCAP AGREEMENT APPENDIX 2020-21				
Budget Code:	TBD		PO Amount:	$800	
Contract Monitor Name *(Person Who Approves Invoices)*:	TANNA NEILSEN			Phone:	7586
Dept. Dean/Director Initials:		Dept. Vice President Initials:			
Business Contracts Approval:		**Purchase Order Number:**			

BUTTE COLLEGE
COURSE OUTLINE

I. **CATALOG DESCRIPTION**

OLS 324 - Workplace Communication **0 Unit(s)**

Transfer Status: NT
85 hours Lab

This course provides training for students in the areas of workplace culture and environment. Topics include interpersonal skills development, professional conduct, workplace communication, safety, and problem-solving job readiness skills. Unlimited repeats. Satisfactory/Unsatisfactory Only. Open Entry/Open Exit.

II. **OBJECTIVES**

Upon successful completion of this course, the student will be able to:

A. Identify personal strengths and areas for growth.
B. Demonstrate professional conduct aligned with workplace culture.
C. Recognize common safety hazards and effectively communicate them to supervisors.
D. Effectively communicate with coworkers and supervisors.
E. Demonstrate problem-solving skills.

III. **COURSE CONTENT**

A. **Unit Titles/Suggested Time Schedule**

Lab

Topics	Hours
1. Essential attributes - self-advocacy	5.00
2. Essential attributes - attentive listening	5.00
3. Differences in relationships - workplace, family, customer	5.00
4. Personal space, positive behaviors	5.00
5. Recognizing talents and strengths - Step 1 Discovering talents	5.00
6. Recognizing talents and strengths - Step 2 Sorting employable skills	5.00
7. Recognizing talents and strengths - Step 3 Applying talents	5.00
8. Safety regulations	5.00
9. Electrical safety	5.00
10. Being attentive to surroundings	5.00
11. Workplace conduct - assertive language	5.00
12. Workplace conduct - non-verbal communication	5.00
13. Positive vs. negative communication	5.00
14. Workplace conduct - Team player	5.00
15. Basic steps to problem solving	5.00
16. Problem solving to handle anger and frustration	5.00
17. Worker to supervisor communication	5.00
Total Hours	85.00

IV. **METHODS OF INSTRUCTION**

A. Problem-Solving Sessions
B. Demonstrations
C. Group Discussions
D. Guest Speakers
E. Collaborative Group Work

V. **METHODS OF EVALUATION**

A. Homework
B. Class participation
C. Written Assignments
D. Peer Evaluation
E. Self-Evaluation

VI. **EXAMPLES OF ASSIGNMENTS**

A. Reading Assignments
    1. Read and review a case study involving a safety issue and provide alternative ways to solve the situation for the purpose of class discussion.
    2. Read a newspaper article about a local company and write a short summation to turn in.
B. Writing Assignments
    1. Write a script and role play a workplace situation.
    2. Compose an incident report based on a workplace scenario for a class discussion.
C. Out-of-Class Assignments
    1. Not applicable

VII. **RECOMMENDED MATERIALS OF INSTRUCTION**

Textbooks:

A. New Readers Press. Conversations for Work. 1st Edition. New Readers Press, 2011.
B. New Readers Press. Key Vocabulary for a Safe Workplace. 1st Edition. New Readers Press, 2011.

Materials Other Than Textbooks:

A. James Stanfield Curriculum
B. OSHA Safety Training Materials
C. Instructor designed materials

Created/Revised by: Julie Nuzum
Date: 11/07/2016

BUTTE COLLEGE
COURSE OUTLINE

I. **CATALOG DESCRIPTION**

OLS 325 - Literacy for Career Building **0 Unit(s)**

Transfer Status: NT
85 hours Lab

Vocational and academic language skills development for students seeking employment. Strategies for pre-writing, organization of text, and comprehension skills are emphasized to prepare job applications, cover letters, resumes, and business specific literature. Unlimited repeats. Satisfactory/Unsatisfactory Only. Open Entry/Open Exit.

II. **OBJECTIVES**

Upon successful completion of this course, the student will be able to:

A. Comprehend text and/or illustrations of occupation-specific materials.
B. Use a more advanced level of vocabulary compared to when they entered the class.
C. Apply strategies for organizing written communication.
D. Write an effective cover letter and resume.

III. **COURSE CONTENT**

A. **Unit Titles/Suggested Time Schedule**

Lab

Topics	Hours
1. Comprehension Strategies - bubbling - Locating main ideas vs. specific details - information in business manuals	5.00
2. Comprehension Strategies - mapping - indicating relationships between tasks within a given occupation	5.00
3. Comprehension Strategies - timelines - task completion - determining sequential job orientation	5.00
4. Comprehension Strategies - Diagrams - Extracting information from text in segments for task completion	5.00
5. Comprehension Strategies - listing/ordering - arrangement of ideas when considering options for alternative completion of job or task	5.00
6. Comprehension Strategies - outlines - multiple jobs with specific details within an occupation	5.00
7. Purpose in patterns of organization	5.00
8. Recognizing patterns for comprehension	5.00
9. Workplace Vocabulary Attainment	5.00
10. Comprehension scanning vs. skimming	5.00
11. Identifying occupation - specific vocabulary	5.00
12. Reading Occupational Safety and Health Administration (OSHA) standards	5.00
13. Reading industry trends	5.00
14. Reading industry standards and regulations	5.00
15. Writing an inquiry letter vs. cover letter	5.00
16. Writing and analyzing resumes	5.00

17. Writing to supervisor/boss	5.00
Total Hours	85.00

IV. METHODS OF INSTRUCTION

A. Problem-Solving Sessions
B. Demonstrations
C. Group Discussions
D. Collaborative Group Work
E. Class Activities
F. Reading Assignments
G. One-on-One tutoring

V. METHODS OF EVALUATION

A. Quizzes
B. Oral Presentation
C. Class participation
D. Written Assignments

VI. EXAMPLES OF ASSIGNMENTS

A. Reading Assignments
    1. Read the example cover letter and letter of inquiry provided by the instructor. Compare and determine the differences in an in-class discussion.
    2. Read and outline an article about an occupation to make a class presentation.
B. Writing Assignments
    1. Write a cover letter, fill out an application, and compile a resume to participate in a mock interview with a classmate.
    2. Create an occupational specific vocabulary log with definitions to submit to the instructor.
C. Out-of-Class Assignments
    1. Not applicable.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

A. Broderick, B., Langan, J. Groundwork for College Reading with Phonics. 4th Edition. Townsend Press, 2008.
B. Langan, J. Ten Steps to Building College Reading. 5th Edition. Townsend Press, 2011.
C. New Readers Press. Filling Out Forms. 1st Edition. New Readers Press, 2011.

Materials Other Than Textbooks:

A. Industry specific materials (e.g. brochures, manuals)
B. Instructor compiled and designed materials.

Created/Revised by: Julie Nuzum
Date: 11/07/2016

Butte-Glenn Community College District
Meeting of the Board of Trustees

September 16, 2020

Subject: Proposed Revisions, Review, and Adoption of Board Policies	**Item No:** 20-8034 **Enclosure:** Yes ☒ No ☐
Category: Administration	**Action** ☐ **Information** ☒ **Regular** ☒ **Consent** ☐
Submitted By: Samia Yaqub, Ph.D. Superintendent/President	**Approved By:** Samia Yaqub, Ph.D. Superintendent/President

Background

The District subscribes to the Community College League's Policy and Procedure subscription service which was created to assist districts develop, revise, and adopt policies and procedures based on criteria that are legally required, legally advised, or suggested as good practice for boards and districts.

As policy review is conducted, appropriate campus constituency areas are consulted. Once review and consultation is complete, policies are submitted to the President's Office for final review by the president and Trustees McGinnis and Dahlmeier representing the Board.

Status

The enclosed policies have been reviewed as described above and are submitted to the Board as informational. Any suggestions for change will be incorporated into the final version which will be presented for approval at the October 2020 Board meeting.

Board Policy	Title	Action
BP 2305	Annual Organizational Meeting	Revised
BP 3430	Prohibition of Harassment	Revised
BP 3433	Prohibition of Sexual Harassment Under Title IX	New
BP 3440	Service Animals	Review
BP 3500	Campus Safety	Revised
BP 3501	Campus Security and Access	Review
BP 3505	Emergency Response Plan	Review
BP 3510	Workplace Violence	Revised
BP 3515	Reporting Crimes	Revised
BP 3518	Child Abuse Reporting	Review
BP 3520	Local Law Enforcement	Review
BP 3530	Weapons on Campus	Review
BP 3540	Sexual and Other Assaults on Campus	Revised
BP 3560	Alcoholic Beverages	Review
BP 3570	Smoking on Campus	Review
BP 3710	Securing of Copyright	Review

Board Policy	Title	Action
BP 3715	Intellectual Property	Review
BP 3720	Computer and Network Use	Review
BP 3725	Information and Communications Technology Accessibility & Acceptable Use	New
BP 3730	Lending College-Owned Equipment	Rescind
BP 3820	Gifts	Revised
BP 3950	Emeritus	Review

BP 2305 Annual Organizational Meeting

References: Education Code Section 72000(c)(2)(A)

Adopted: May 28, 2008
Last Revised: October 10, 2018
Last Reviewed: October 10, 2018

The annual organizational meeting of the Board will be held at a regular meeting held after the second Friday in December of ~~before December 15~~ each calendar year. The purpose of the annual organizational meeting is to elect a President, Vice President, Clerk, and to conduct any other business as required by law or determined by the Board.

At the organizational meeting, in even-numbered years, the Board will fix the day, time, and places for its regular meetings for the next two calendar years.

There are no administrative procedures for this policy.

Butte-Glenn Community College District **BOARD POLICY**

BP 3430 Prohibition of Harassment

References:	Education Code Sections 212.5; 44100; 66252; 66281.5; Government Code Sections 12923, 12940, and 12950.1; Civil Code Section 51.9; Title 2 Sections 10500 et seq.; Title VII of the Civil Rights Act of 1964, 42 U.S. Code Annotated Section 2000e Age Discrimination in Employment Act of 1967 (ADEA); Americans with Disabilities Act of 1990 (ADA)
Adopted:	May 22, 2013
Last Revised:	April 17, 2019; October 16, 2019
Last Reviewed:	April 17, 2019

All forms of harassment are contrary to basic standards of conduct between individuals. ~~and are prohibited by state and federal law, as well as this policy, and will not be tolerated.~~ State and federal law and this policy prohibit harassment, and the District will not tolerate harassment. The District is committed to providing an academic and work environment that respects the dignity of individuals and groups. The District shall be free of sexual harassment and all forms of sexual intimidation and exploitation including acts of sexual violence. The District shall also be free of other unlawful harassment, including that which is based on any of the following statuses: race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation of any person, or military and veteran status, or because he/~~or~~ she/they is perceived to have one or more of the foregoing characteristics.

The District seeks to foster an environment in which all employees, students, unpaid interns, and volunteers feel free to report incidents of harassment without fear of retaliation or reprisal. Therefore, the District also strictly prohibits retaliation against any individual for filing a complaint of harassment or for participating in a harassment investigation. Such conduct is illegal and constitutes a violation of this policy. ~~All allegations of retaliation will be swiftly and thoroughly investigated. If the District determines that retaliation has occurred, it~~ The District will investigate all allegations of retaliation swiftly and thoroughly. If the District determines that someone has retaliated, will take all reasonable steps within its power to stop such conduct. Individuals who engage in retaliatory conduct are subject to disciplinary action, up to and including termination or expulsion.

Any student, employee, unpaid intern, or volunteer who believes that he/~~or~~ she/they has been harassed or retaliated against in violation of this policy should immediately report such incidents by following the procedures described in AP 3400. ~~Supervisors are mandated~~ The District requires supervisors to report all incidents of harassment and retaliation that come to their attention.

This policy applies to all aspects of the academic environment, including but not limited to classroom conditions, grades, academic standing, employment opportunities, scholarships,

recommendations, disciplinary actions, and participation in any community college activity. In addition, this policy applies to all terms and conditions of employment, including but not limited to hiring, placement, promotion, disciplinary action, layoff, recall, transfer, leave of absence, training opportunities, and compensation.

To this end the Superintendent/President or designee shall ensure that the institution undertakes education and training activities to counter ~~discrimination~~ harassment and to prevent, minimize and/or eliminate any hostile environment that impairs access to equal education opportunity or impacts the terms and conditions of employment.

The Superintendent/President or designee shall establish procedures that define harassment on campus. The Superintendent/President or designee shall further establish procedures for employees, students, unpaid interns, volunteers, and other members of the campus community that provide for the investigation and resolution of complaints regarding harassment and discrimination, and procedures for students to resolve complaints of harassment and discrimination. State and federal law and this policy prohibit ~~All participants are protected from~~ retaliatory acts by the District, its employees, students, and agents.

The District will publish and publicize this ~~This~~ policy and related written procedures (including the procedure for making complaints) shall be widely published and publicized to administrators, faculty, staff, students, unpaid interns, and volunteers particularly when they are new to the institution. The District will make this policy and related written procedures (including the procedure for making complaints) available in all administrative offices and will post them on the District's website.~~They shall be available for students, employees, unpaid interns, and volunteers in all administrative offices, and shall be posted on the District's website.~~

Employees who violate the policy and procedures may be subject to disciplinary action up to and including termination. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion. Unpaid interns who violate this policy and related procedures may be subject to disciplinary measure up to and including termination from the internship or other unpaid work experience program.

See Administrative Procedure 3400

Butte-Glenn Community College District **BOARD POLICY**

BP 3433 Prohibition of Sexual Harassment under Title IX

References: Title IX of the Education Amendments Act of 1972;
34 Code of Federal Regulations Part 106

Adopted:
Last Revised:
Last Reviewed:

All forms of sexual harassment are contrary to basic standards of conduct between individuals. State and federal law and this policy prohibit sexual harassment and the District will not tolerate sexual harassment. The District is committed to providing an academic and work environment that respects the dignity of individuals and groups. The District shall be free of sexual harassment and all forms of sexual intimidation and exploitation including acts of sexual violence.

The District seeks to foster an environment in which all employees, students, applicants for employment, and applicants for admission feel free to report incidents of sexual harassment in violation of this policy and Title IX, without fear of retaliation or reprisal. Therefore, the District also strictly prohibits retaliation against any individual for filing a complaint of sexual harassment in violation of this policy and Title IX or for participating, or refusing to participate, in a sexual harassment investigation. The District will investigate all allegations of Title IX retaliation swiftly and thoroughly. If the District determines that someone has retaliated, it will take reasonable steps within its power to stop such conduct. Individuals who engage in Title IX retaliatory conduct are subject to disciplinary action, up to and including termination or expulsion.

Any employee, student, applicant for employment, or applicant for admission who believes he/she/they has been harassed or retaliated against in violation of this policy should immediately report such incidents by following the procedures described in AP 3434. The District requires supervisors to report all incidents of harassment and retaliation that come to their attention.

This policy applies to all aspects of the academic environment, including but not limited to classroom conditions, grades, academic standing, employment opportunities, scholarships, recommendations, disciplinary actions, and participation in any community college activity. In addition, this policy applies to all terms and conditions of employment, including but not limited to hiring, placement, promotion, disciplinary action, layoff, recall, transfer, leave of absence, training opportunities, and compensation.

To this end the Superintendent/President or designee shall ensure that the institution undertakes education and training activities to counter sexual harassment and to prevent, minimize, or eliminate any hostile environment that impairs access to equal education opportunity or impacts the terms and conditions of employment.

The Superintendent/President or designee shall establish procedures that define sexual harassment on campus. The Superintendent/President or designee shall further establish procedures for employees, students, and other members of the campus community that provide for the investigation and resolution of complaints regarding sexual harassment in violation of this policy, and procedures to resolve complaints of sexual harassment in violation of this policy. State and federal law and this policy prohibit retaliatory acts against all participants by the District, its employees, students, and agents.

The District will publish and publicize this policy and related written procedures (including the procedure for making complaints) to administrators, faculty, staff, students, applicants for employment, and applicants for admission, particularly when they are new to the institution. The District will make this policy and related written procedures (including the procedures for making complaints) available in all administrative offices and will post them on the District's website.

Employees who violate the policy and procedures may be subject to disciplinary action up to and including termination. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion. Volunteers or unpaid interns who violate this policy and related procedures may be subject to disciplinary measure up to and including termination from the volunteer assignment, internship, or other unpaid work experience program.

See Administrative Procedure 3400

BP 3440 Service Animals

References:	The Americans with Disabilities Act of 1990 – 42 US Code Sections 12101 et seq.; 28 Code of Federal Regulations Part 35 and Part 36; 34 Code of Federal Regulations Part 104.44(b)
Adopted:	May 22, 2013
Last Revised:	
Last Reviewed:	May 22, 2013

In order to prevent discrimination on the basis of disability, the District will allow an individual with a disability to use a service animal or qualified miniature horse in District facilities and on District campuses in compliance with state and Federal law.

See Administrative Procedure 3440

Butte-Glenn Community College District **BOARD POLICY**

BP 3500 Campus Safety

References: Education Code 67380(a)(4)

Adopted: November 12, 2008
Last Revised:
Last Reviewed: November 12, 2008

The Board is committed to providing a safe and secure District work and learning environment. To that end, the Superintendent/President or designee shall establish a campus safety plan and ensure that it is posted or otherwise made available to students, faculty, and staff.

See Administrative Procedure 3500

Butte-Glenn Community College District **BOARD POLICY**

BP 3501 Campus Security and Access

References: 34 Code of Federal Regulations Part 668.46 subdivision (b)(3); ACCJC Accreditation Standard III.B.1

Deleted: 3

Adopted: May 22, 2013
Last Revised:
Last Reviewed: May 22, 2013

The Superintendent/President or designee shall establish procedures necessary for security and access to District facilities.

See Administrative Procedure 3501

Butte-Glenn Community College District **BOARD POLICY**

BP 3505 Emergency Response Plan

References:	Education Code Sections 32280 et seq. and 71095; Government Code Sections 3100 and 8607 subdivision (a); Homeland Security Act of 2002; National Fire Protection Association 1600; Homeland Security Presidential Directive-5; Executive Order S-2-05; 19 California Code of Regulations Sections 2400-2450; 34 Code of Federal Regulations Part 668.46 subdivision (g)
Adopted:	May 22, 2013
Last Revised:	
Last Reviewed:	May 22, 2013

The District shall have emergency response and evacuation procedures for notifying the campus community in the event of a significant emergency or dangerous situation involving an immediate threat to the health or safety of students or employees occurring on the campus.

The Superintendent/President shall establish procedures and a Disaster Preparedness Plan for the District to be activated in the event of an emergency, or when a natural disaster or hazardous condition occurs. The Disaster Preparedness Plan shall comply with the National Incident Management System (NIMS), the Standardized Emergency Management System (SEMS) and incorporate the functions and principles of the Incident Command System (ICS), the Master Mutual Aid Agreement (MMAA) and any other relevant programs. The Disaster Preparedness Plan shall also incorporate NIMS and SEMS to facilitate the coordination between and among agencies in the event of an emergency or natural disaster.

Compliance with NIMS and SEMS mandates include but are not limited to:

- Establishing disaster preparedness procedures or a plan; and
- Completion of training sessions by college personnel in compliance with NIMS and SEMS guidelines
    - Training requirements vary based on job titles or assigned roles within the emergency plan

District personnel will be informed that as public employees, they are also disaster service workers during national, state, and local emergencies. The District must ensure that its employees are in compliance with the disaster service worker oath requirements.
The Superintendent/President will establish a Crisis Response Team to carry out compliance with NIMS and SEMS mandates. The responses to emergencies or natural disasters are organized by SEMS into five categories:

- Field response
- Local government
- Operational areas
- Regions
- State

The Disaster Preparedness Plan should contain information regarding activation and chain of command responsibilities. The District will maintain compliance with NIMS mandates that require planning and incorporation for all phases of emergency management including mitigation and prevention, preparedness, response, and recovery. The District must ensure that its plan is updated regularly. Colleges must comply with NIMS and SEMS to receive Federal or state funding.

The Superintendent/President will communicate in a timely manner, and as necessary and practical, with the Board President during an emergency. Board members will make themselves available in the event an emergency Board meeting is necessary.

See Administrative Procedure 3505

Butte-Glenn Community College District **BOARD POLICY**

BP 3510 Workplace Violence

References:	Cal/OSHA: Labor Code §§ 6300 et seq; 8 Cal. Code Regs. § 3203; "Workplace Violence Safety Act of 1994" (Code of Civil Procedure § 527.8 and Penal Code §§ 273.6)
Adopted:	November 12, 2008
Last Revised:	
Last Reviewed:	November 12, 2008

The Board is committed to providing a District work and learning environment that is free of violence and any threats of violence. The Board's priority is the effective handling of critical workplace violence incidents, including those dealing with actual or potential violence.

The Superintendent/President or designee shall establish procedures that ensure employees are informed that work place violence or any threat of work place violence including hate crimes are prohibited and what actions are ~~regarding actions~~ considered violent acts, and require any employee who is the victim of any violent conduct in the workplace, or is a witness to violent conduct to report the incident, and that employees are informed that there will be no retaliation for such reporting.

See Administrative Procedure 3510

BP 3515 Reporting Crimes

References: Education Code Section 67380

Adopted: November 12, 2008
Last Revised:
Last Reviewed: November 12, 2008

The Superintendent/President or designee shall ensure that, as required by law, reports are prepared of all occurrences reported to campus police or campus security personnel of, and arrests for, crimes committed that involve violence, hate violence, theft or destruction of property, illegal drugs, or alcohol intoxication. Reports will include occurrences on all college owned/leased property and on all trips, travel, etc. sanctioned by the District.

The Superintendent/President or designee shall further ensure that required reports of non-criminal acts of hate violence are prepared. Such reports shall be made available as required by law and a summary of which shall be provided to the Board of Trustees in a public meeting.

See Administrative Procedure 3515

Butte-Glenn Community College District **BOARD POLICY**

BP 3518 Child Abuse Reporting

References:	Penal Code Sections 261, 264.1, 273a, 273d, 285, 286, 288, 288a, 289, 647a, and 11164-11174.3; Welfare and Institutions Code Sections 300, 318, and 601; Family Code Sections 7802, 7807, 7808, 7820-7827, 7890, and 7892
Adopted:	November 12, 2008
Last Revised:	
Last Reviewed:	November 12, 2008

The Superintendent/President or designee shall establish procedures related to the responsibility of employees, within the scope of employment or in their professional capacity, to report suspected abuse and neglect of children.

See Administration Procedure 3518

Butte-Glenn Community College District **BOARD POLICY**

BP 3520 Local Law Enforcement

References:	Education Code Sections 67381 and 67381.1; 34 Code of Federal Regulations Part 668.46 subdivision (b)(4)
Adopted:	May 22, 2013
Last Revised:	
Last Reviewed:	May 22, 2013

The District, on behalf of each campus or center, shall enter into a written agreement with local law enforcement agencies. The agreement shall clarify operational responsibilities for investigations of Part I violent crimes – defined by law as willful homicide, forcible rape, robbery, and aggravated assault.

The written agreement shall designate which law enforcement agency shall have operational responsibility for violent crimes and delineate the specific geographical boundaries of each agency's operational responsibility, including maps as necessary.

The written agreements required by this policy shall be public records and shall be made available for inspection by members of the public upon request.

See Administrative Procedure 3520

BP 3530 Weapons on Campus

References: Penal Code Section 626.9 and 626.10

Adopted: November 12, 2008
Last Revised:
Last Reviewed: November 12, 2008

Firearms or other weapons shall be prohibited on any College campus or District center or in any owned/leased facility and vehicles of the District except for activities conducted under the direction of District officials such as used as training at the appropriate facility or as authorized by an official law enforcement agency consistent with college procedures.

See Administrative Procedures 3530

BP 3540 Sexual and Other Assaults on Campus

References:	Education Code Sections 67382, 67385, and 67386; 20 U.S. Code Section 1092(f); 34 Code of Federal Regulations Section 668.46(b)(11)
Adopted:	November 12, 2008
Last Revised:	April 17, 2019
Last Reviewed:	April 17, 2019

Any sexual assault or physical abuse, including, but not limited to rape as defined by California law, whether committed by an employee, student, or member of the public, which occurs on District property, is a violation of District policies and procedures, and is subject to all applicable punishment, including criminal procedures and employee or student discipline procedures consistent with state and federal law. Students, faculty, and staff who may be victims of sexual and other assaults shall be treated with dignity and provided comprehensive assistance.

The Superintendent/President or designee shall establish administrative procedures that ensure that students, faculty, and staff who are victims of sexual and other assaults receive appropriate information and treatment, and that educational information about preventing sexual violence is provided and publicized as required by law.

The procedures shall meet the criteria contained in Education Code 67385, 67385.7, and 67386, and 34 Code of Federal Regulations Section 668.46.

See Administrative Procedure 3400

Butte-Glenn Community College District **BOARD POLICY**

BP 3560 Alcoholic Beverages

References:	34 Code of Federal Regulations Part 668.46 subdivision (b) Business and Professions Code Section 25608
Adopted:	November 12, 2008
Last Revised:	
Last Reviewed:	November 12, 2008

The Superintendent/President or designee is authorized to enact procedures as appropriate and permitted by law regarding serving alcoholic beverages on campus or at fund-raising events held to benefit non-profit corporations. Alcoholic beverages shall not be served on campus except in accordance with district procedures.

See Administrative Procedure 3560

BP 3570 Smoking

References:	Chico Municipal Code 8.28, Butte County Ordinance No. 3039, Glenn County Ordinance No. 1011, Government Code 19994.30 and 7597.1, Labor Code 6404.5, Health and Safety Code 118920, Education Code 76030, 76031, 76033
Adopted:	November 12, 2008
Last Revised:	
Last Reviewed:	November 12, 2008

Butte College shall be designated as a non-smoking college except in designated areas. Smoking is banned in all undeveloped areas.

The Superintendent/President or designee will establish designated smoking areas. No designated smoking area will be in an outdoor area within twenty-five (25) feet of a main exit or entrance to such a facility, in any service line, or in any passenger vehicle owned or leased by the District, including bus transportation.

See Administrative Procedure 3570.

Butte-Glenn Community College District **BOARD POLICY**

BP 3710 Securing of Copyrights and Use of Copyrighted Materials

References:	Education Code Sections 72207 and 81459 United States Code 201
Adopted:	April 20, 2011
Last Revised:	
Last Reviewed:	April 20, 2011

The Superintendent/President or designee is directed to develop appropriate administrative procedures to implement the provisions of the Education Code which authorize the securing of copyright protection for works, including but not limited to registering copyrights and policing infringements, on behalf of the District.

The procedures developed by the Superintendent/President or designee shall ensure that the District may use, sell, give, or exchange published materials and may license materials prepared by the District in connection with its curricular and special services.

See Administrative Procedure 3710

BP 3715 Intellectual Property

References: 17 USC 101 et seq.; 35 USC 101 et seq.; and 37 CFR 1.1 et seq

Adopted: April 20, 2011
Last Revised:
Last Reviewed: April 20, 2011

The Superintendent/President or designee shall develop procedures that define the rights, interests, protection, and transfer of intellectual property created by District employees and students.

See Administrative Procedure 3715

Butte-Glenn Community College District **BOARD POLICY**

BP 3720 Computer and Network Use

References:	Education Code Section 70902; 17 U.S.C. Section 101 et seq.; Penal Code Section 502, Cal. Const., Art. 1 Section 1; Government Code Section 3543.1(b)
Adopted:	June 24, 2009
Last Revised:	
Last Reviewed:	June 24, 2009

Employees, students, and guests who use District computers and networks and the information they contain, and related resources, have a responsibility not to abuse those resources. The District explicitly prohibits individuals from using its computer systems and networks to violate intellectual property and copyright laws. All users of District information technology resources shall secure appropriate prior permission to download and/or distribute protected material in any form, including computer software, text, photographic images, graphic illustrations, video, and audio including music. Employees, students, and guests will respect the integrity of computer-based information resources, refrain from seeking to gain unauthorized access, and respect the rights of other computer users.

The District encourages the use of Information Technology resources and makes them widely available to the District community. Nonetheless, the use of Information Technology resources is limited by restrictions that apply to all District property and by constraints necessary for the reliable operation of electronic systems and services. The District reserves the right to deny access to its Information Technology resources when necessary to satisfy these restrictions and constraints.

District departments may provide and use Information Technology resources to support the instructional and public service mission of the District or to support the administrative or student services functions that support this mission. District Information Technology resources may not be used for unlawful activities, personal or commercial use, and uses that violate other District or campus policies or guidelines. The latter include, but are not limited to, policies, procedures, and guidelines regarding intellectual property and all unlawful forms of harassment which creates a hostile work environment.

See Administrative Procedure 3720

Butte-Glenn Community College District **BOARD POLICY**

BP 3725 Information and Communications Technology Accessibility & Acceptable Use

References: Government Code Sections 7405, 11135, and 11546.7;
Section 504, Rehabilitation Act of 1973 (29 U.S. Code Section 701);
Section 508, Rehabilitation Act of 1973 (Federal Electronic and Information Technology) (29 U.S. Code Section 794d);
36 Code of Federal Regulations Parts 1194.1 et seq.

Adopted: NEW
Last Revised:
Last Reviewed:

The governing board shall ensure equal access to instructional materials and information and communication technology (ICT) for all and particularly for individuals with disabilities, in a timely manner.

As it relates to equally effective alternative access to instructional materials and ICT, timely manner means that the individual with a disability receives access to the instructional materials or ICT at the same time as an individual without a disability.

The Superintendent/President shall establish administrative procedures to comply with the requirements specified in Section 508 of the Rehabilitation Act and its implementing regulations.

See Administrative Procedure 3725

Also see BP/AP 3410 Nondiscrimination, BP/AP 3720 Computer and Network Use, AP 3725 Accessibility and Acceptable Use, BP/AP 5140 Disabled Student Programs and Services, and AP 6365 Contracts – Accessibility of Information Technology.

~~BP 3730 Lending College-Owned Equipment~~

~~References:~~ ~~Education Code 7220, 81600, 10912, 10913~~

~~Adopted:~~ ~~November 12, 2008~~
~~Last Revised:~~ Rescind: legal reference are not correct; this is covered by BP 6520
~~Last Reviewed:~~ ~~November 12, 2008~~

~~The Board believes that safeguarding college resources, including all equipment, is imperative and that it is a valuable resource which may be loaned for community use under certain conditions and provided that such use does not interfere with the educational program and college needs.~~

~~No item of District-owned equipment/supplies will be loaned for non-college use without authorization. If equipment is required for the use of those granted permission to use college facilities, it may be loaned in accordance with Board policy on the use of college equipment and with authorization.~~

~~The Board, or its designee, may lend specific items of equipment on the written request of the user and with approval granted by the chief administrative officer responsible for administrative services.~~

~~The user of District-owned equipment will release the District from any liability associated with use of the equipment and will be fully liable for any damage or loss occurring to the equipment during the period of its use. He or she will be responsible for its safe return.~~

~~College equipment may be removed from College property by students or staff members only when such equipment is necessary to accomplish tasks arising from their college job responsibilities. The consent of the chief administrative officer of the area in which the employee is assigned and of the administrator responsible for administrative services is required for such removal.~~

~~Equipment/supplies are for college use and related college functions only and removal of such from College property for personal use is prohibited.~~

~~In addition, District-owned equipment may also be loaned, used, or removed from the College property in cases where emergencies exist, and in accordance with established rules, regulations, and procedures.~~

BP 3820 Gifts

References: Education Code Section 72122

Adopted: May 22, 2013
Last Revised:
Last Reviewed: May 22, 2013

~~The Butte-Glenn Community College District Board of Trustees shall consider all gifts, donations, and bequests made to the District. The Board reserves the right to refuse to accept any gift which does not contribute toward the goals of the District, or the ownership of which would have the potential to deplete resources of the District.~~The Superintendent/President shall consider all gifts, donations, and bequests to be made to the District on behalf of the Board of Trustees of the Butte-Glenn CCD. The Superintendent/President may recommend the Board refuse to accept any gift which does not contribute toward the goals of the District, or the ownership of which would have the potential to deplete resources of the District. The Board retains the right to refuse any gift, donation or bequest that does not comply with this policy.

The District shall assume no responsibility for appraising the value of gifts made to the District. Acceptance of a gift shall not be considered endorsement by the District of a product, enterprise, or entity.

In no event shall the District accept a donation from any donor who engages in practices or policies, which discriminate against any person on the basis of national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, medical condition, genetic information, ancestry, sexual orientation, marital status, military or veteran status, physical or mental disability, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics; or when the stated purposes of the donation are to facilitate such discrimination in providing educational opportunity.

See Administrative Procedure 3820

BP 3950 Emeritus

References:

Adopted:	March 24, 2010
Last Revised:	
Last Reviewed:	March 24, 2010

In recognition of exceptional service rendered and continuing contributions of individuals to the District over time, the Board of Trustees hereby establishes the highest academic, classified, and management rank it can confer: that of Emeritus status.

Although retirement does not in and of itself qualify an individual for Emeritus rank, retirement normally is a requisite first step toward that status.

Recommendations from the Academic Senate for Faculty Emeritus; from the Classified Senate for Classified Emeritus, and from the Management Association for Management Emeritus, will be reviewed and approved by the appropriate vice presidents. Their approvals will be forwarded to the Superintendent/President for his/her consideration. Upon the Superintendent/President's approval, the Board of Trustees will confer the Emeritus rank.

See Administrative Procedure 3950