FINANCE & FACILITIES COMMITTEE | 5.24.2018

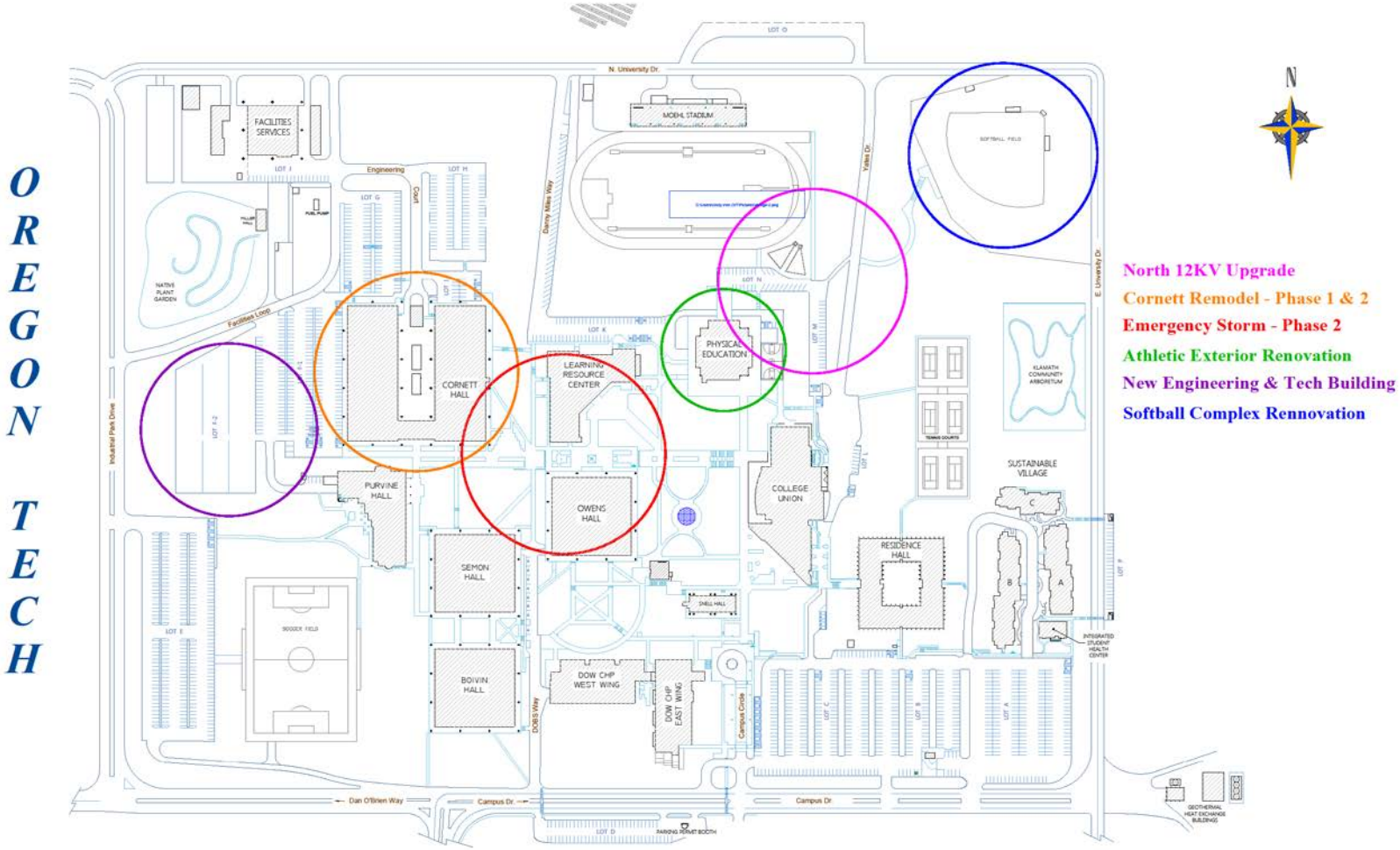
Capital Projects Update - 2018

Thom Darrah | Director of Facilities | Oregon Tech

Presentation Outline

- 2018 Capital Projects
  - North 12kV Upgrade
  - Cornett Renovation – Phase 1 / Phase 2
  - Emergency Storm – Phase 2a
  - Athletics Exterior Renovation
  - New CEET Building
  - Softball Complex Renovation
- Upcoming Projects
  - Storm – Phase 2b
  - Storm – Phase 2c
  - Storm – Phase 3
  - Student Rec Center
- Capital Repair & Renewal
  - Completed Projects
  - Upcoming Projects

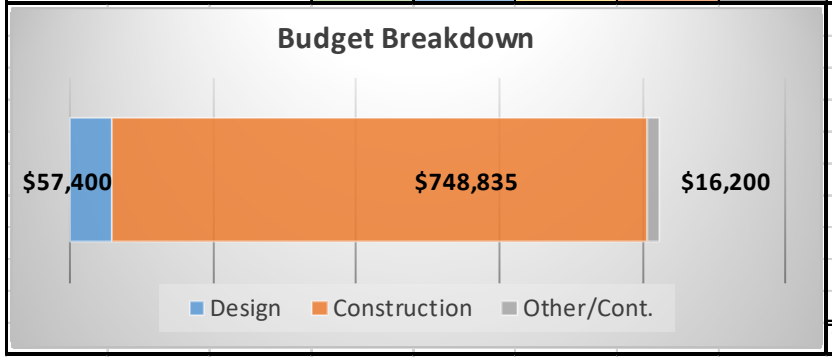
Oregon Tech – 2018 Projects



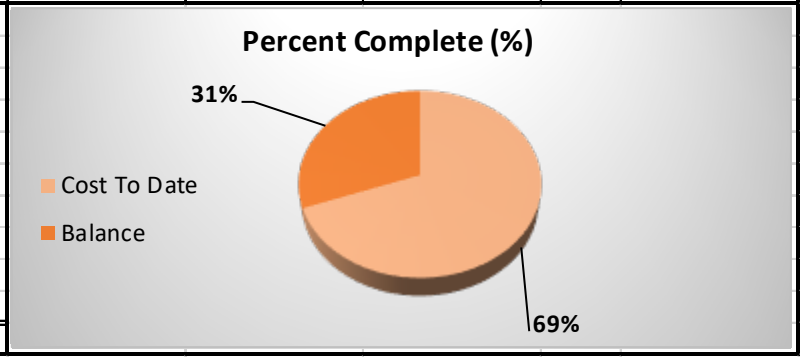
Oregon Tech - 2018 Capital Projects

North 12kV Upgrade

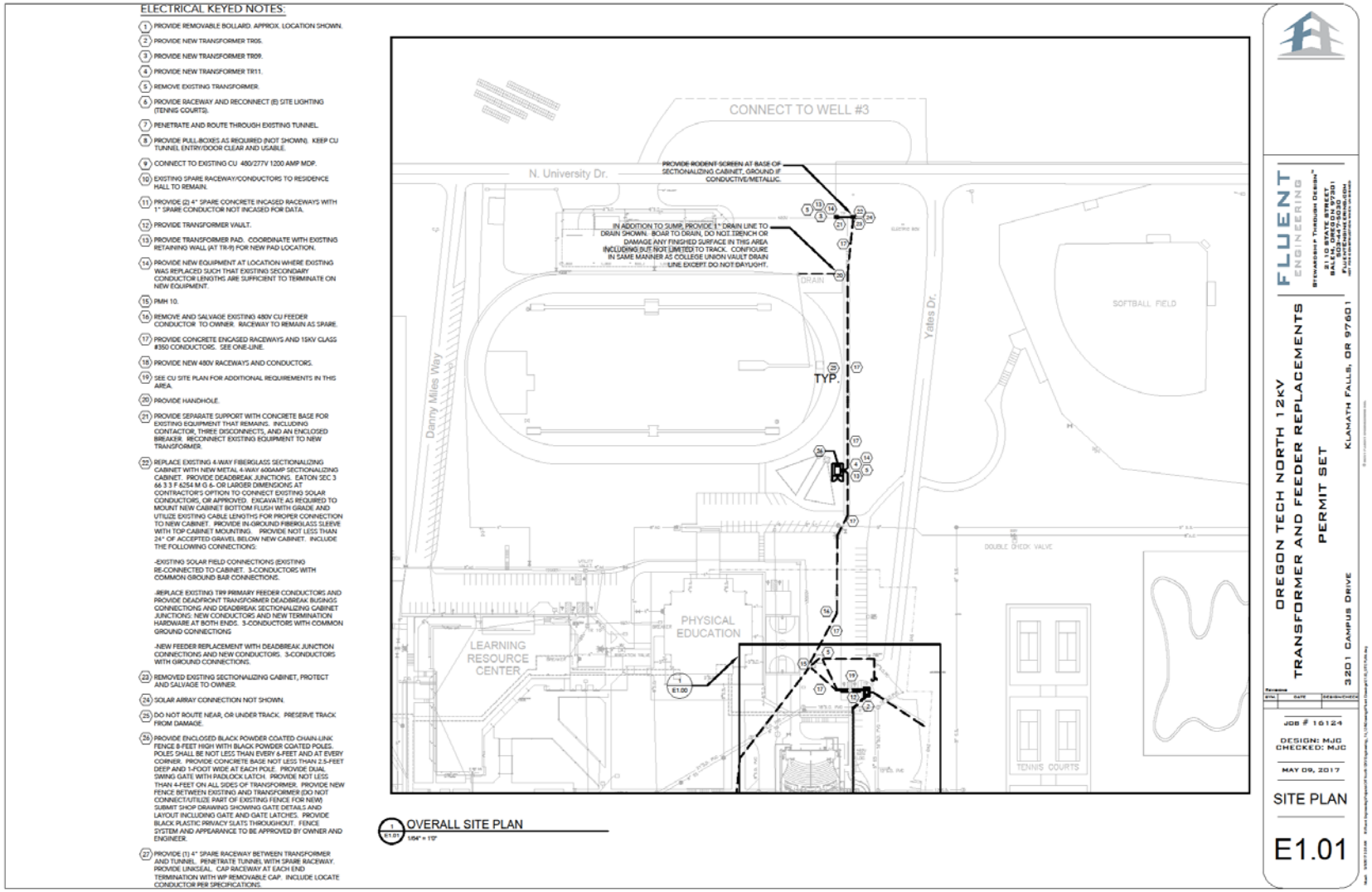
North 12kV Upgrade												
Project Start: 6.19.17						Project Completion: 6.30.18						
Project	**Progress Highlights**					**Cost Breakdown**	**Orig. Budget**	**Rev. Budget**	**Cost To Date**	**%**	**Balance**
UPE769 / FSCORR	* Substantial Completion: 6.23.2018										
Bond Type: XI-Q	* Final completion 6.30.2018										
						Design (7%):	$ 50,365	$ 57,400	$ 50,045	87%	$ 7,355
Design: Fluent Engin.						Construction (90%):	$ 714,400	$ 748,835	$ 511,375	68%	$ 237,460
Build: Bob's Excav.						Other (3%):	$ 20,235	$ 16,200	$ 9,090	56%	$ 7,110
	Plan	Design	Bid	**Build**	Close	Project Totals:	$ 785,000	$ 822,435	$ 570,510	69%	$ 251,925



CO's / Amendments		
CO 1:	$ 3,660	(AV)
CO 3:	$ (8,495)	(VE)
CO 4:	$ 5,430	(AV)
CO 5:	$ 33,840	(AV)
	$ -	
	$ -	
	$ -	
	$ -	
	$ -	
Total:	$ 34,435	4%



North 12kV Upgrade



ELECTRICAL KEYED NOTES:

1. PROVIDE REMOVABLE BOLLARD. APPROX. LOCATION SHOWN.
2. PROVIDE NEW TRANSFORMER TR05.
3. PROVIDE NEW TRANSFORMER TR09.
4. PROVIDE NEW TRANSFORMER TR11.
5. REMOVE EXISTING TRANSFORMER.
6. PROVIDE RACEWAY AND RECONNECT (E) SITE LIGHTING (TENNIS COURTS).
7. PENETRATE AND ROUTE THROUGH EXISTING TUNNEL.
8. PROVIDE PULL-BOXES AS REQUIRED (NOT SHOWN). KEEP CU TUNNEL ENTRY/DOOR CLEAR AND USABLE.
9. CONNECT TO EXISTING CU 480/277V 1200 AMP MDP.
10. EXISTING SPARE RACEWAY/CONDUCTORS TO RESIDENCE HALL TO REMAIN.
11. PROVIDE (2) 4" SPARE CONCRETE ENCASED RACEWAYS WITH 1" SPARE CONDUCTOR NOT ENCASED FOR DATA.
12. PROVIDE TRANSFORMER VAULT.
13. PROVIDE TRANSFORMER PAD. COORDINATE WITH EXISTING RETAINING WALL (AT TR-9) FOR NEW PAD LOCATION.
14. PROVIDE NEW EQUIPMENT AT LOCATION WHERE EXISTING WAS REPLACED SUCH THAT EXISTING SECONDARY CONDUCTOR LENGTHS ARE SUFFICIENT TO TERMINATE ON NEW EQUIPMENT.
15. PMH 10.
16. REMOVE AND SALVAGE EXISTING 480V CU FEEDER CONDUCTOR TO OWNER. RACEWAY TO REMAIN AS SPARE.
17. PROVIDE CONCRETE ENCASED RACEWAYS AND 15KV CLASS #350 CONDUCTORS. SEE ONE-LINE.
18. PROVIDE NEW 480V RACEWAYS AND CONDUCTORS.
19. SEE CU SITE PLAN FOR ADDITIONAL REQUIREMENTS IN THIS AREA.
20. PROVIDE HANDHOLE.
21. PROVIDE SEPARATE SUPPORT WITH CONCRETE BASE FOR EXISTING EQUIPMENT THAT REMAINS. INCLUDING CONTACTOR, THREE DISCONNECTS, AND AN ENCLOSED BREAKER. RECONNECT EXISTING EQUIPMENT TO NEW TRANSFORMER.
22. REPLACE EXISTING 4-WAY FIBERGLASS SECTIONALIZING CABINET WITH NEW METAL 4-WAY 600AMP SECTIONALIZING CABINET. PROVIDE DEADBREAK JUNCTIONS. EATON SEC 3 66 3 3 F 6254 M G 6- OR LARGER DIMENSIONS AT CONTRACTOR'S OPTION TO CONNECT EXISTING SOLAR CONDUCTORS, OR APPROVED. EXCAVATE AS REQUIRED TO MOUNT NEW CABINET BOTTOM FLUSH WITH GRADE AND UTILIZE EXISTING CABLE LENGTHS FOR PROPER CONNECTION TO NEW CABINET. PROVIDE IN-GROUND FIBERGLASS SLEEVE WITH TOP CABINET MOUNTING. PROVIDE NOT LESS THAN 24" OF ACCEPTED GRAVEL BELOW NEW CABINET. INCLUDE THE FOLLOWING CONNECTIONS:

   -EXISTING SOLAR FIELD CONNECTIONS (EXISTING RE-CONNECTED TO CABINET. 3-CONDUCTORS WITH COMMON GROUND BAR CONNECTIONS.

   -REPLACE EXISTING TR9 PRIMARY FEEDER CONDUCTORS AND PROVIDE DEADFRONT TRANSFORMER DEADBREAK BUSINGS CONNECTIONS AND DEADBREAK SECTIONALIZING CABINET JUNCTIONS. NEW CONDUCTORS AND NEW TERMINATION HARDWARE AT BOTH ENDS. 3-CONDUCTORS WITH COMMON GROUND CONNECTIONS

   -NEW FEEDER REPLACEMENT WITH DEADBREAK JUNCTION CONNECTIONS AND NEW CONDUCTORS. 3-CONDUCTORS WITH GROUND CONNECTIONS.
23. REMOVED EXISTING SECTIONALIZING CABINET, PROTECT AND SALVAGE TO OWNER.
24. SOLAR ARRAY CONNECTION NOT SHOWN.
25. DO NOT ROUTE NEAR, OR UNDER TRACK. PRESERVE TRACK FROM DAMAGE.
26. PROVIDE ENCLOSED BLACK POWDER COATED CHAIN-LINK FENCE 8-FEET HIGH WITH BLACK POWDER COATED POLES. POLES SHALL BE NOT LESS THAN EVERY 6-FEET AND AT EVERY CORNER. PROVIDE CONCRETE BASE NOT LESS THAN 2.5-FEET DEEP AND 1-FOOT WIDE AT EACH POLE. PROVIDE DUAL SWING GATE WITH PADLOCK LATCH. PROVIDE NOT LESS THAN 4-FEET ON ALL SIDES OF TRANSFORMER. PROVIDE NEW FENCE BETWEEN EXISTING AND TRANSFORMER (DO NOT CONNECT/UTILIZE PART OF EXISTING FENCE FOR NEW) SUBMIT SHOP DRAWING SHOWING GATE DETAILS AND LAYOUT INCLUDING GATE AND GATE LATCHES. PROVIDE BLACK PLASTIC PRIVACY SLATS THROUGHOUT. FENCE SYSTEM AND APPEARANCE TO BE APPROVED BY OWNER AND ENGINEER.
27. PROVIDE (1) 4" SPARE RACEWAY BETWEEN TRANSFORMER AND TUNNEL. PENETRATE TUNNEL WITH SPARE RACEWAY. PROVIDE LINKSEAL. CAP RACEWAY AT EACH END TERMINATION WITH WP REMOVABLE CAP. INCLUDE LOCATE CONDUCTOR PER SPECIFICATIONS.

1 E1.01 OVERALL SITE PLAN
1/64" = 1'0"

FLUENT ENGINEERING
STEWARDSHIP THROUGH DESIGN™
21 1/2 STATE STREET
SALEM, OREGON 97301
PHONE: (503) 551-2000
FLUENTENGINEERING.COM

OREGON TECH NORTH 12kV
TRANSFORMER AND FEEDER REPLACEMENTS
PERMIT SET
3201 CAMPUS DRIVE
KLAMATH FALLS, OR 97601

Revisions
| NO. | DATE | DESCRIPTION |

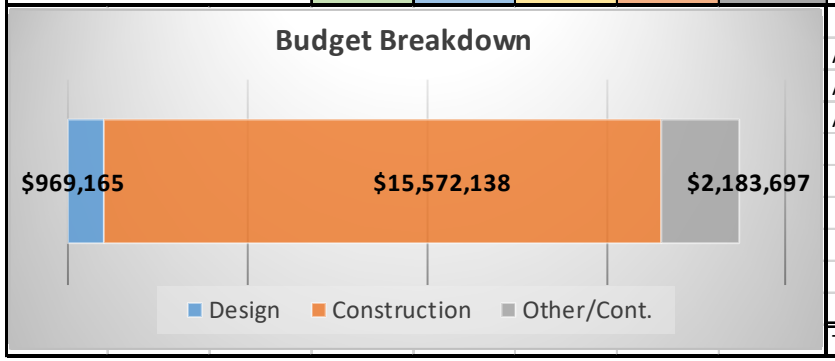
JOB # 16124
DESIGN: MJC
CHECKED: MJC
MAY 09, 2017
SITE PLAN
E1.01

North 12kV Upgrade

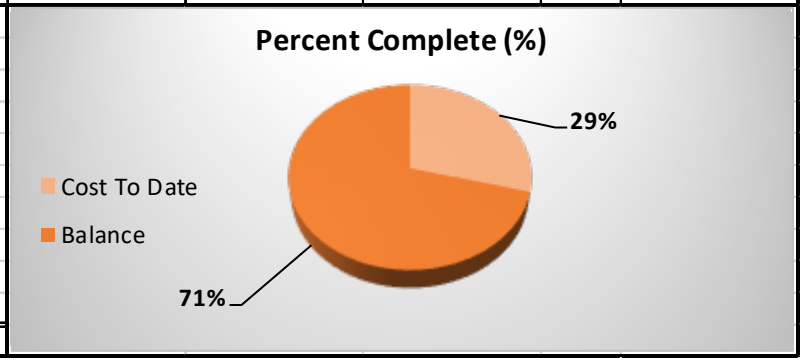
North 12kV Upgrade

Cornett Renovation – Phase 1 / Phase 2

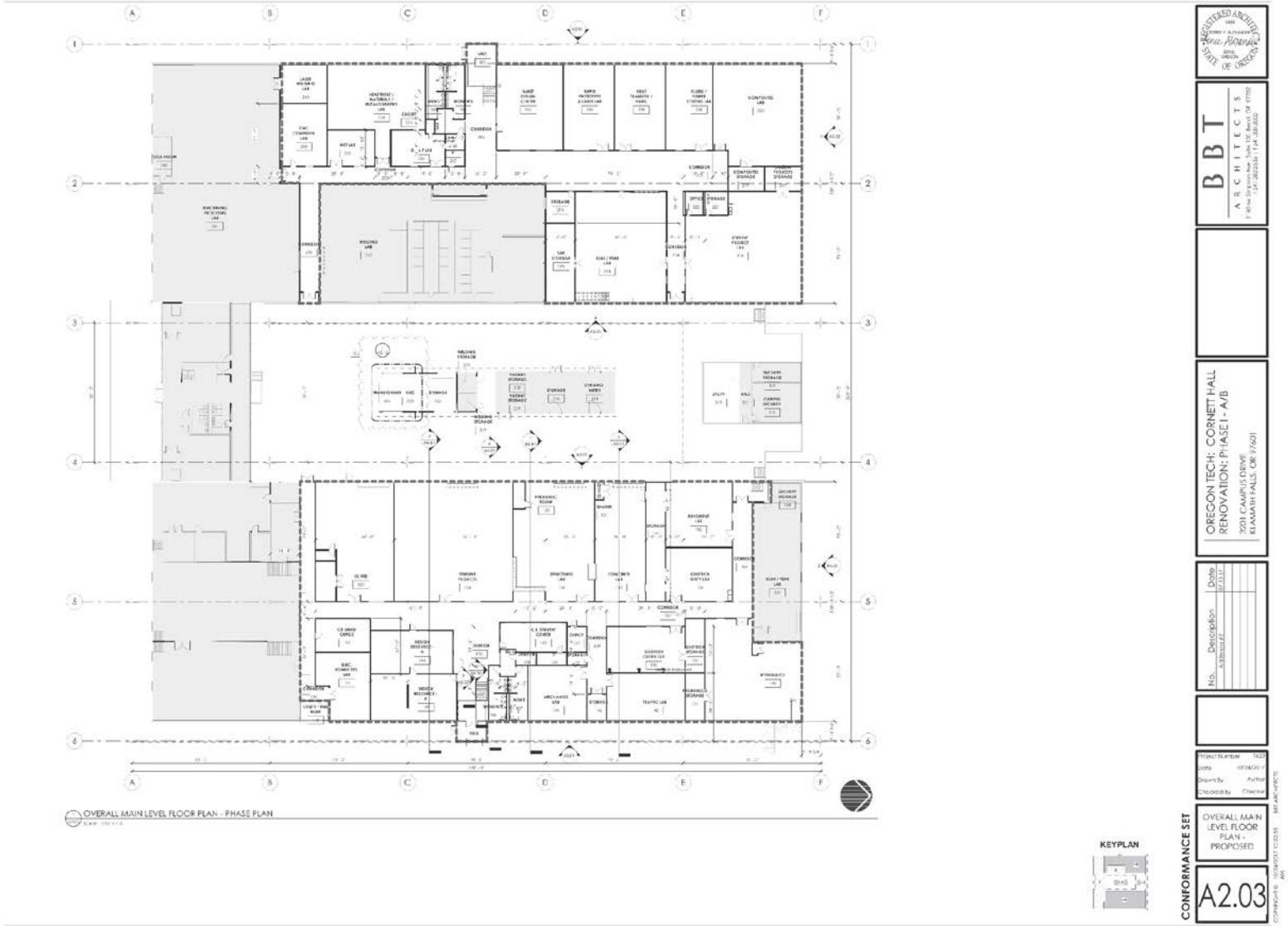
Cornett Renovation - Phase 1 / Phase 2											
Project Start: 9.18.17						Project Completion: 9.31.20					
Project	**Progress Highlights**					**Cost Breakdown**	**Orig. Budget**	**Rev. Budget**	**Cost To Date**	**%**	**Balance**
UPE777 / UPE785	* NTP: 9.18.2017										
Bond Type: XI-Q / XI-G	** Construction Phase 1a underway.										
						Design (5%):	$ 1,042,020	$ 969,165	$ 634,965	66%	$ 334,200
Design: BBT Architects						Construction (83%):	$ 9,090,000	$ 15,572,138	$ 4,557,780	29%	$ 11,014,358
CM/GC: Adroit Const.						Other (12%):	$ 1,537,980	$ 2,183,697	$ 244,170	11%	$ 1,939,527
	Plan	Design	Bid	**Build**	Close	Project Totals:	$ 11,670,000	$ 18,725,000	$ 5,436,915	29%	$ 13,288,085



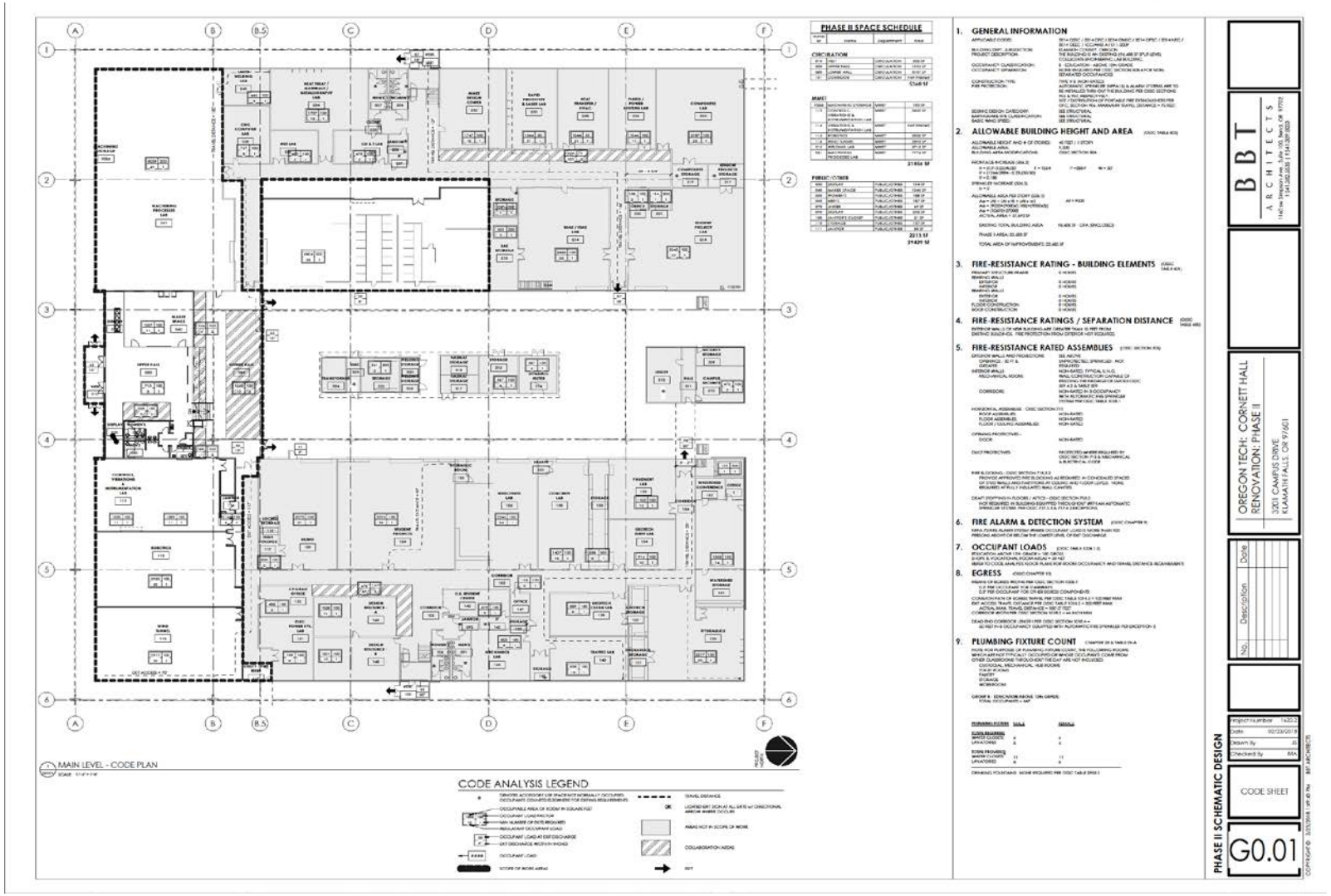
CO's / Amendments		
Amd. 1 - 9:	$ 413,155	(AV)
Amd. 13	$ 17,725	(AV)
Amd. 14	$ 51,258	(AV)
Total:	$ 482,138	3%



Cornett Renovation – Phase 1



Cornett Renovation – Phase 2



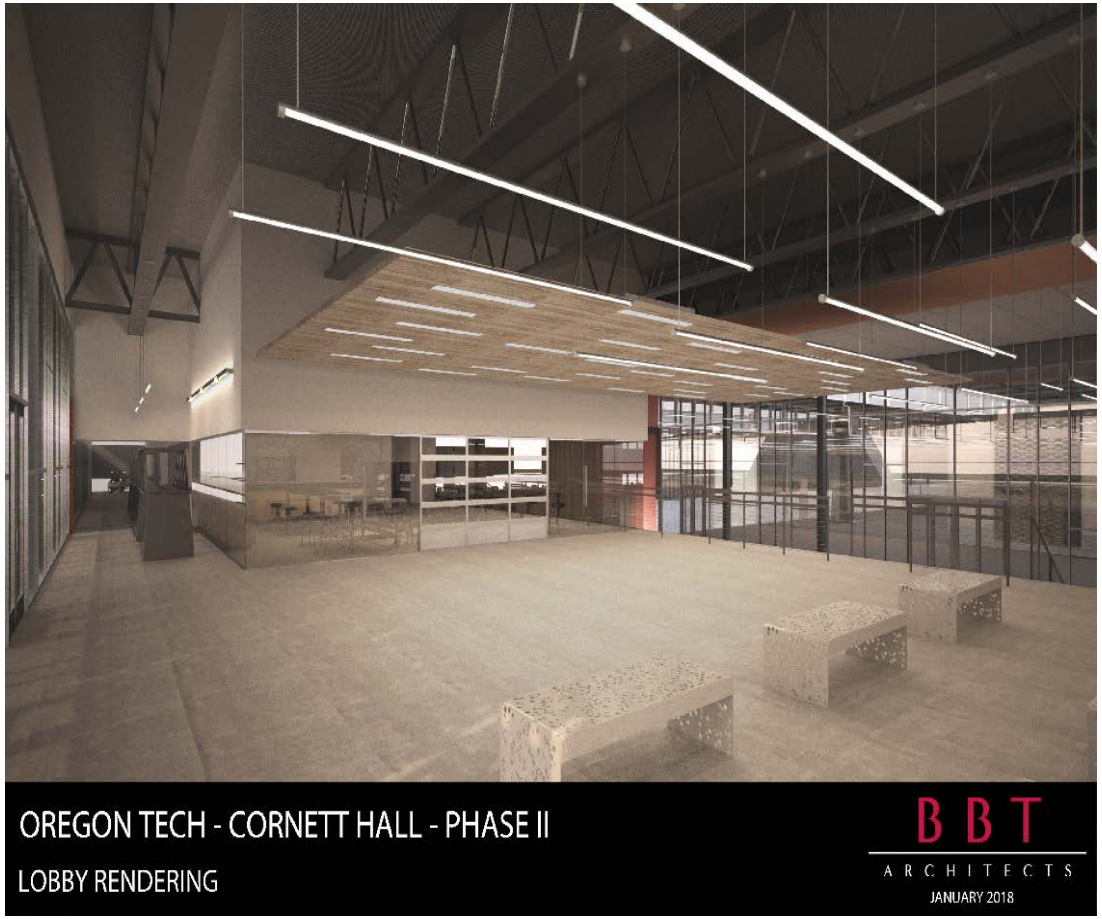
Cornett Renovation – Phase 1

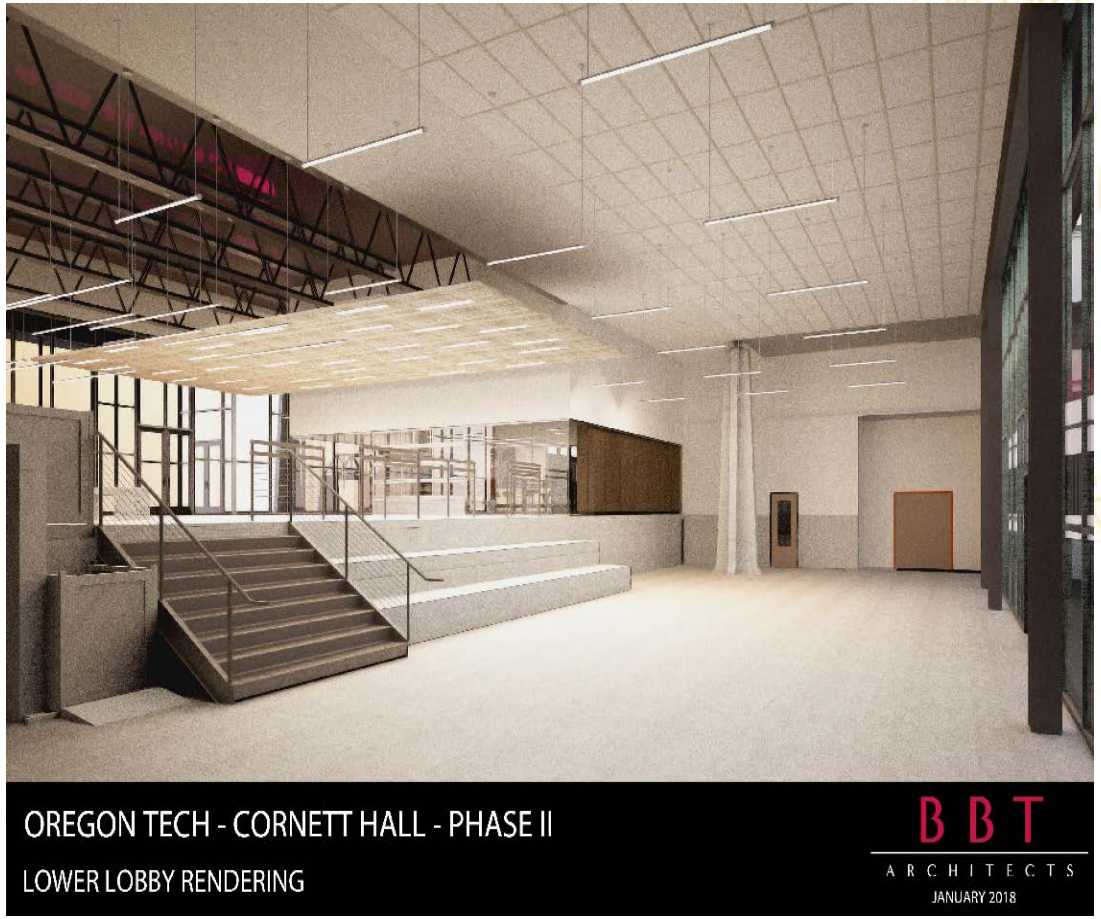
Cornett Renovation – Phase 1

Cornett Renovation – Phase 1

Cornett Renovation – Phase 2

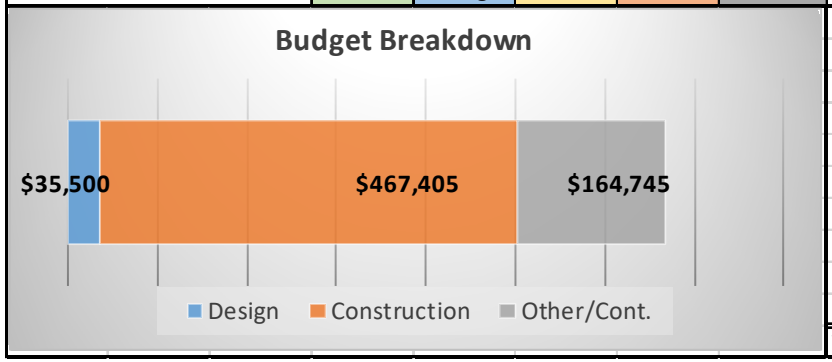
Cornett Renovation – Phase 2





Emergency Storm – Phase 2a

Emerg. Storm - Phase 2a									
Project Start: 6.18.18						Project Completion: 9.28.18			
Project	**Progress Highlights**					**Cost Breakdown**	**Orig. Budget**	**Rev. Budget**	**Cost To Date**	**%**	**Balance**
UPE769 / FSSTDR	Design: Completed November 2017										
Bond Type: XI-Q	Construction: April 2018 - September 2018										
						Design (5%):	$ 80,283	$ 35,500	$ 22,885	64%	$ 12,615
Design: Marquess						Construction (70%):	$ 1,107,346	$ 467,405	$ 36,545	8%	$ 430,860
Build: Bob's Excavating						Other (25%):	$ 189,356	$ 164,745	$ -	0%	$ 164,745
	Plan	Design	Bid	**Build**	Close	Project Totals:	$ 1,376,985	$ 667,650	$ 59,430	9%	$ 608,220



CO's / Amendments	
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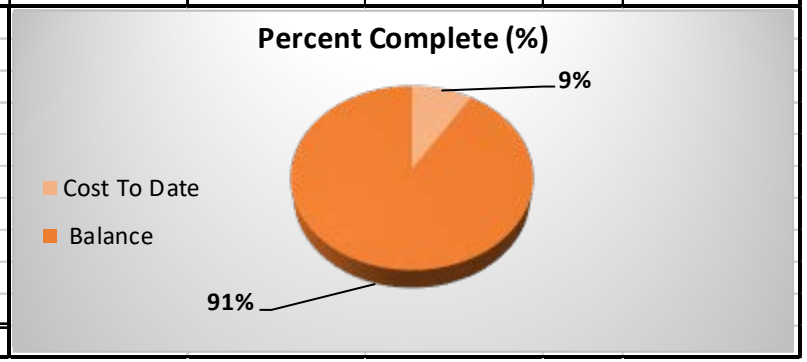
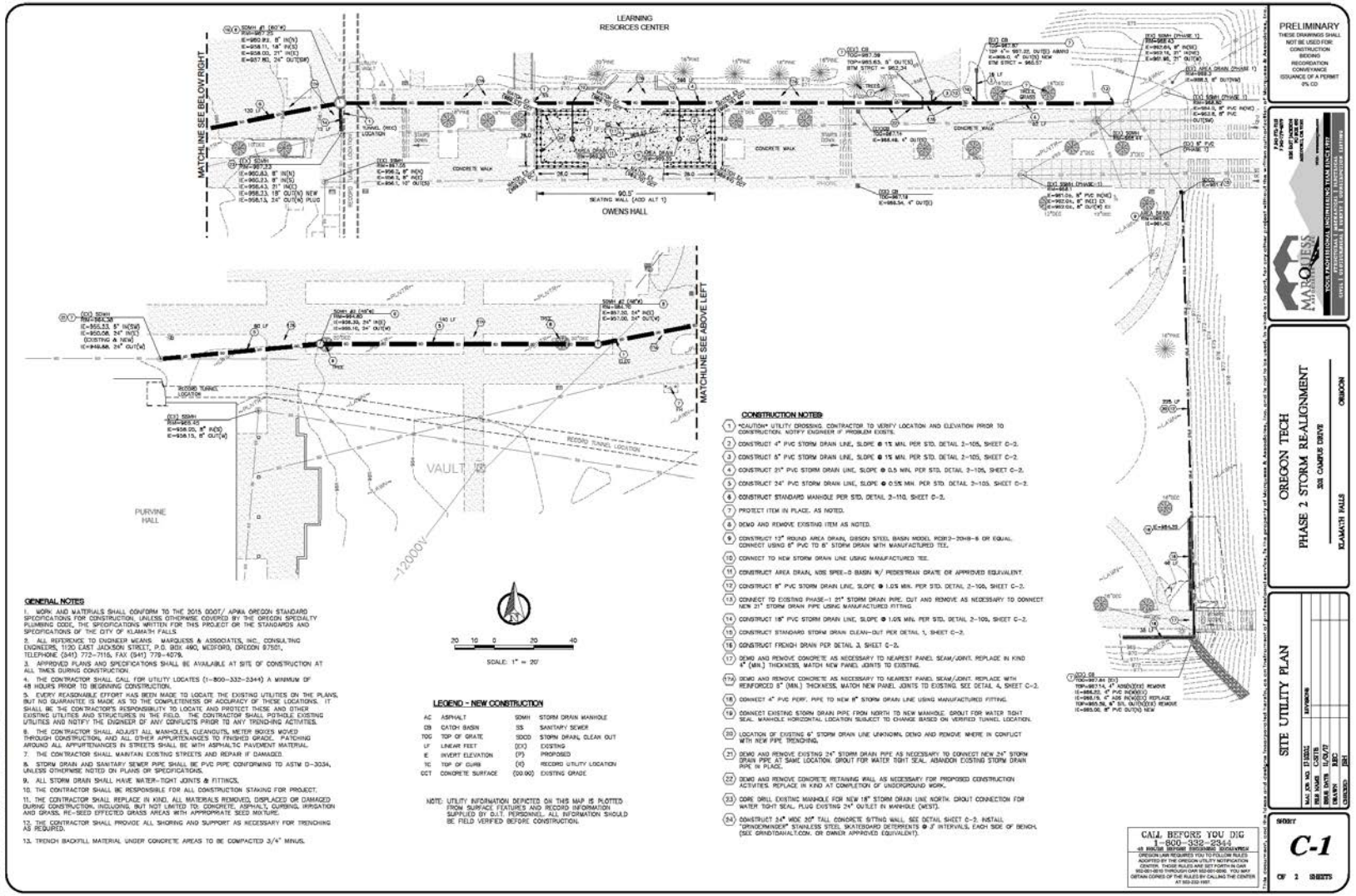


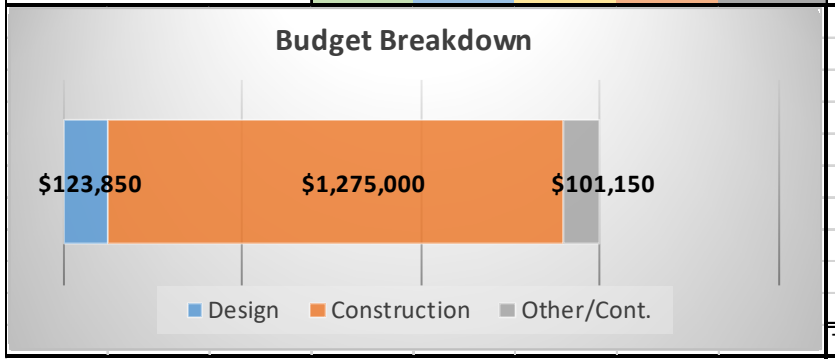
Emergency Storm – Phase 2a



Emergency Storm – Phase 2a

Athletics Exterior Renovation

Athletics Exterior Renovation							
Project Start: 6.04.2018		Project Completion: 11.30.2018					
Project	**Progress Highlights**	**Cost Breakdown**	**Orig. Budget**	**Rev. Budget**	**Cost To Date**	**%**	**Balance**
UPE773	Design: April 2018 - June 2018						
Bond Type: XI-F	Construction: July 2018 - November 2019						
		Design (10%):	$ 150,000	$ 123,850	$ -	0%	$ 123,850
Design: BBT Architects		Construction (85%):	$ 1,275,000	$ 1,275,000	$ -	0%	$ 1,275,000
Build: TBD		Other (5%):	$ 75,000	$ 101,150	$ -	0%	$ 101,150
	Plan | **Design** | Bid | Build | Close	Project Totals:	$ 1,500,000	$ 1,500,000	$ -	0%	$ 1,500,000



CO's / Amendments	
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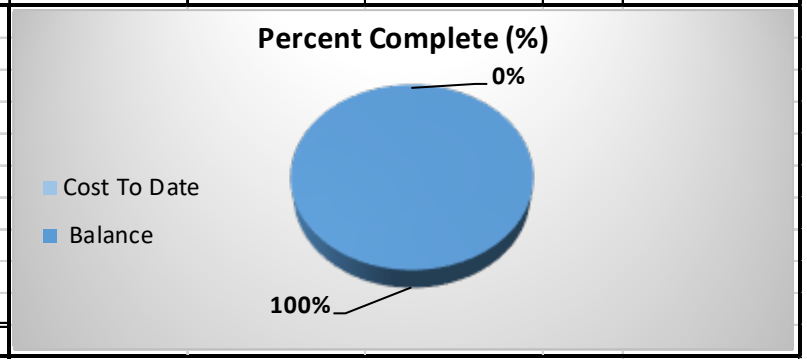


Athletics Exterior Renovation

Project Scope:

- New exterior metal siding.
- Painting of all exposed structural steel and plaster soffits.
- Add Alternates: New vestibule entry / brick veneer at lower elevations /

Project Budget: $1,500,000.00

Design Start: April 2018

Construction Start: July 2018

Completion: November 2018

Design: BBT Architects

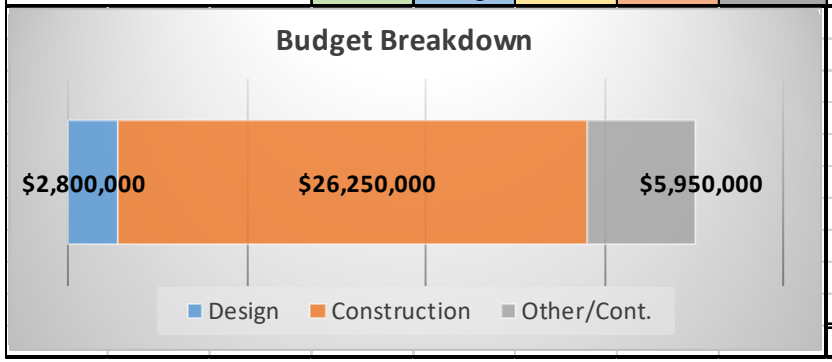
Construction: TBD

Athletics Exterior Renovation

Athletics Exterior Renovation

New CEET Building

New CEET Building							
Project Start: 6.03.2019		Project Completion: 12.31.2020					
Project	**Progress Highlights**	**Cost Breakdown**	**Orig. Budget**	**Rev. Budget**	**Cost To Date**	**%**	**Balance**
UPE785 / FCEET	Design: April 2018 - June 2019						
Bond Type: XI-Q / XI-G	Construction: July 2019 - December 2020						
	** TVA has been selected for the visioning phase.*	Design (8%):	$ 2,800,000	$ 2,800,000	$ -	0%	$ 2,800,000
Design: TVA Architects		Construction (75%):	$ 26,250,000	$ 26,250,000	$ -	0%	$ 26,250,000
Build: TBD		Other (17%):	$ 5,950,000	$ 5,950,000	$ -	0%	$ 5,950,000
	Plan / **Design** / Bid / Build / Close	Project Totals:	$ 35,000,000	$ 35,000,000	$ -	0%	$ 35,000,000



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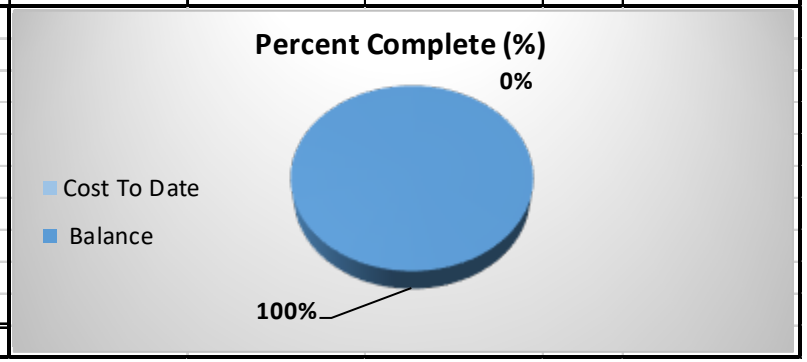


New CEET Building

Project Scope:

- 60,000 – 80,000 sq. ft.
- Maker Space / Collaboration Spaces / Flexible class & lab spaces

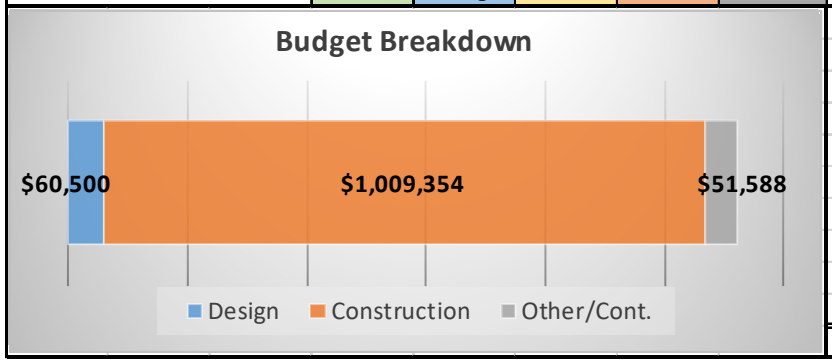
Project Budget: $35,000,000

Design Start: April 2018
Construction Start: July 2019
Completion: December 2020

Visioning: TVA Architects
Architect: tbd
Contractor: tbd

Softball Complex Renovation

Softball Complex Renovation											
Project Start: 11.01.2017						Project Completion: Fall 2018					
Project	**Progress Highlights**					**Cost Breakdown**	**Orig. Budget**	**Rev. Budget**	**Cost To Date**	**%**	**Balance**
UPE780 / FSBC	Design: Nov. 2017 - May 2018										
Bond Type:	Construction: May 2018 - Oct. 2018										
						Design (5.5%):	$ 60,500	$ 60,500	$ 26,260	43%	$ 34,240
Design: ZCS Engineering						Construction (90%):	$ 1,009,354	$ 1,009,354	$ -	0%	$ 1,009,354
Build: FieldTurf						Other (4.5%):	$ 51,588	$ 51,588	$ -	0%	$ 51,588
	Plan	Design	Bid	**Build**	Close	Project Totals:	$ 1,121,442	$ 1,121,442	$ 26,260	2%	$ 1,095,182



CO's / Amendments	
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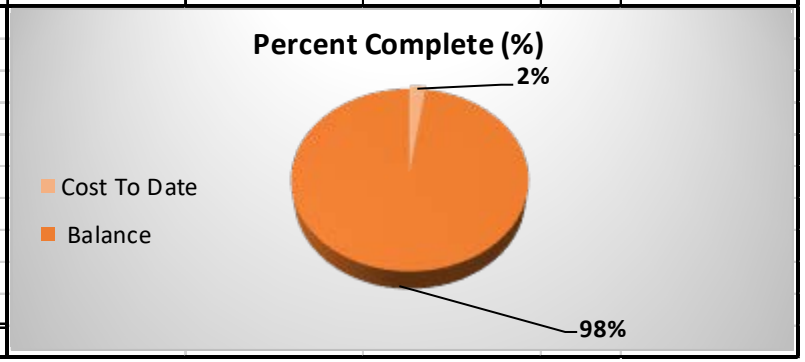
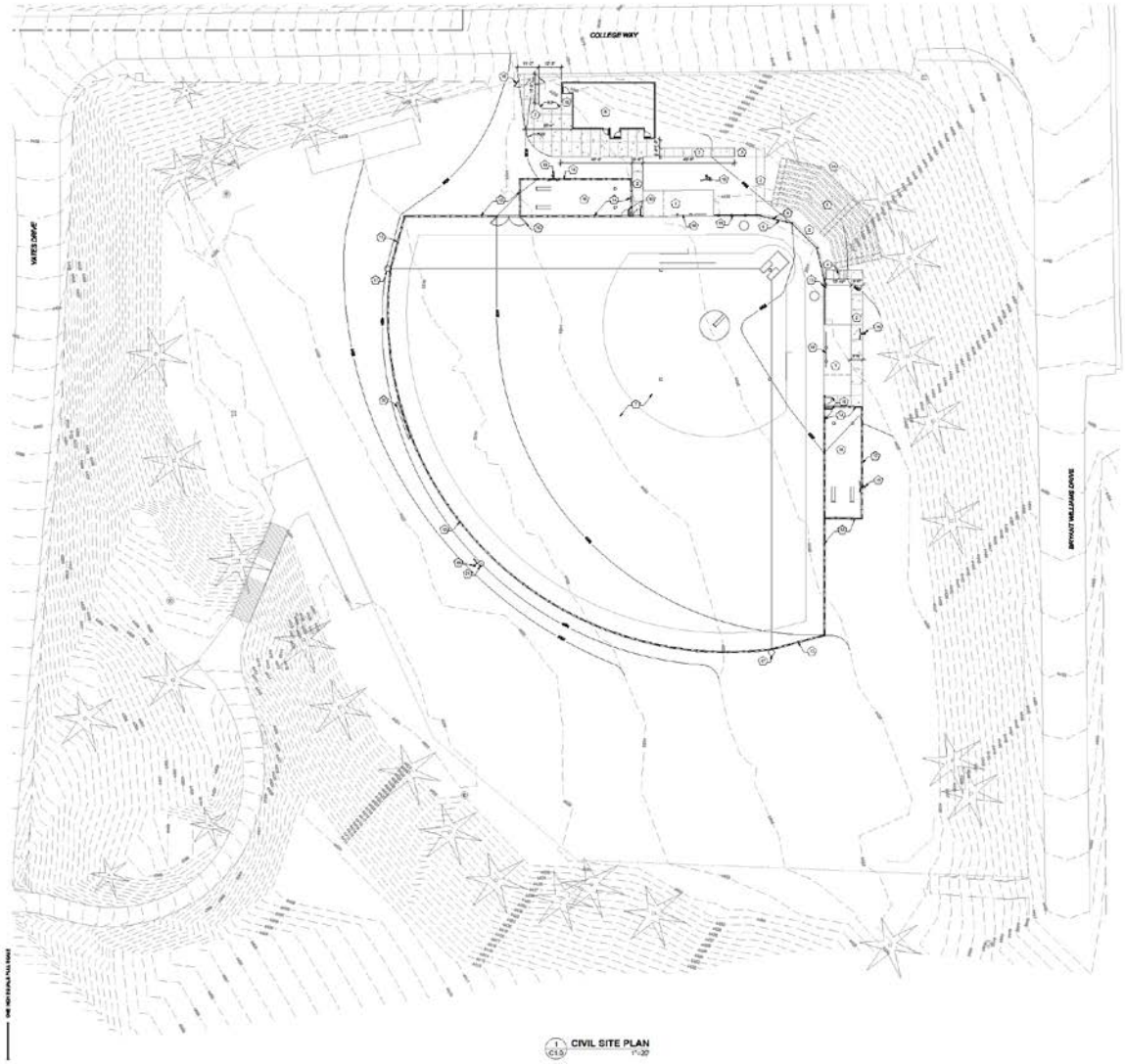
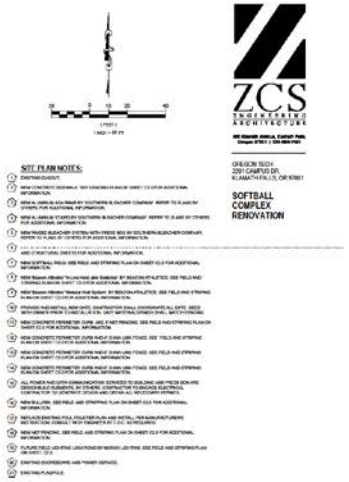
Total = $	-

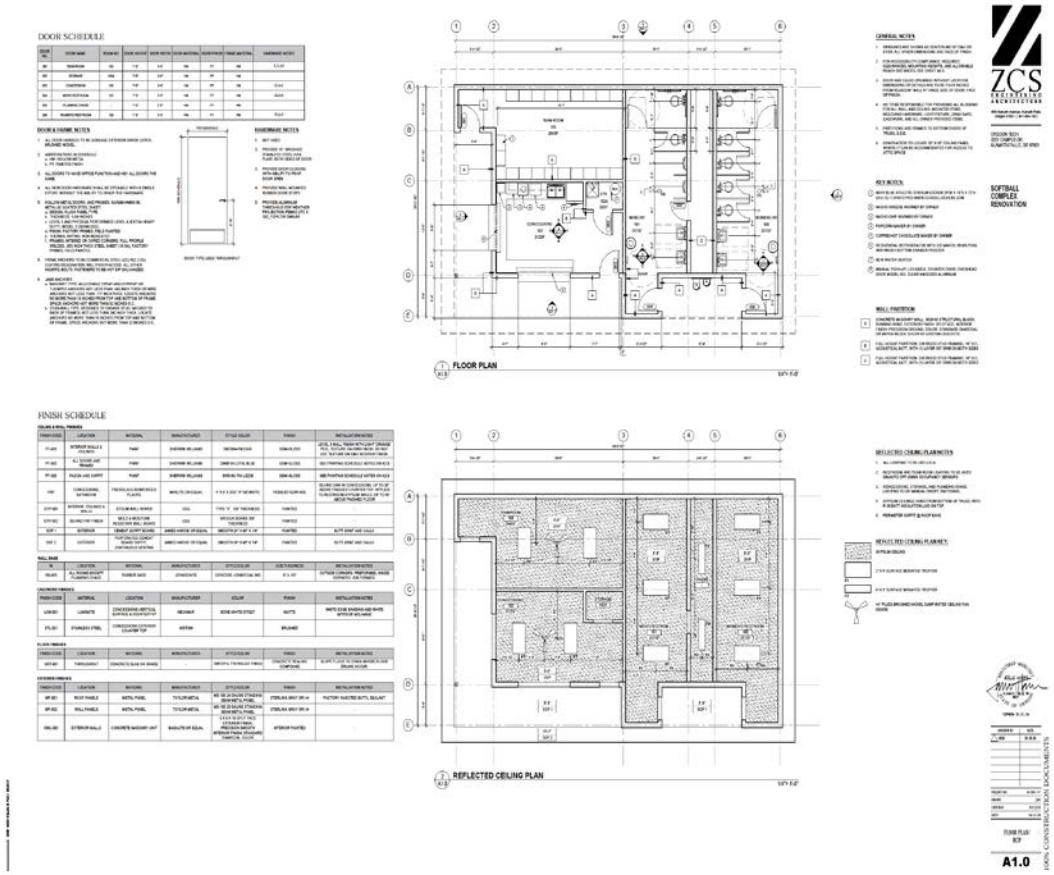


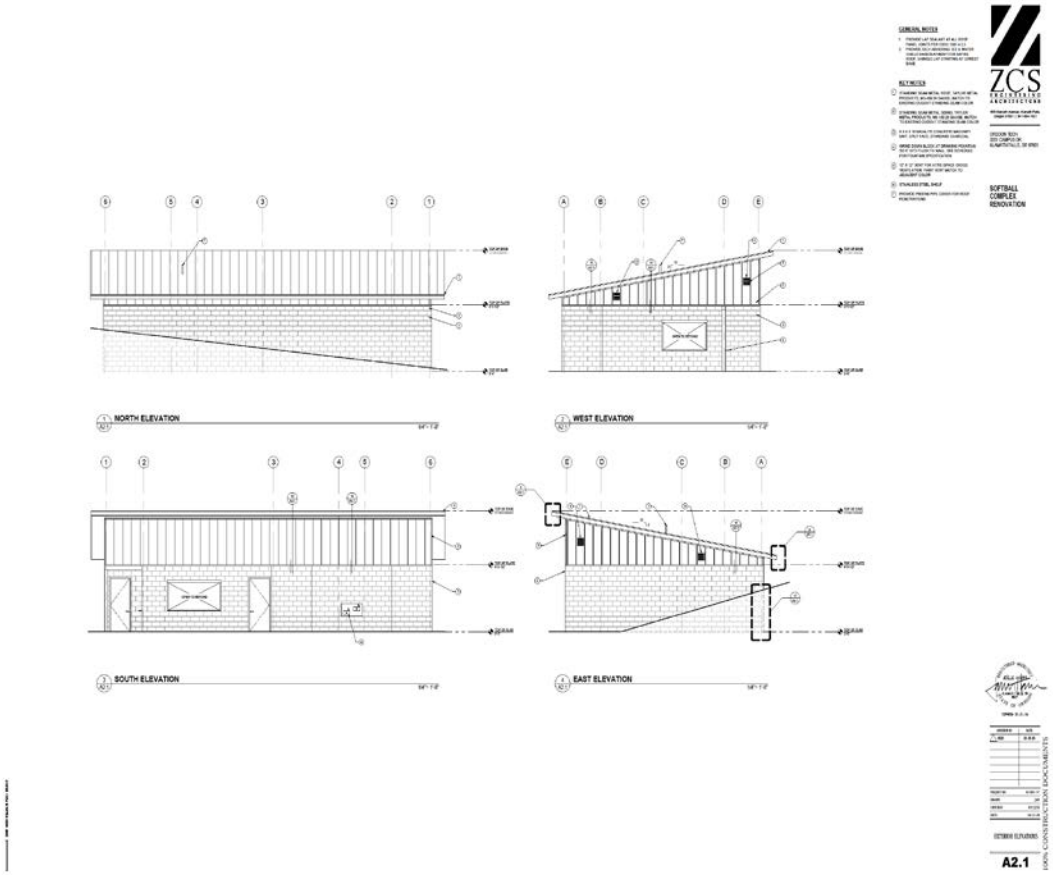
Softball Complex Renovation



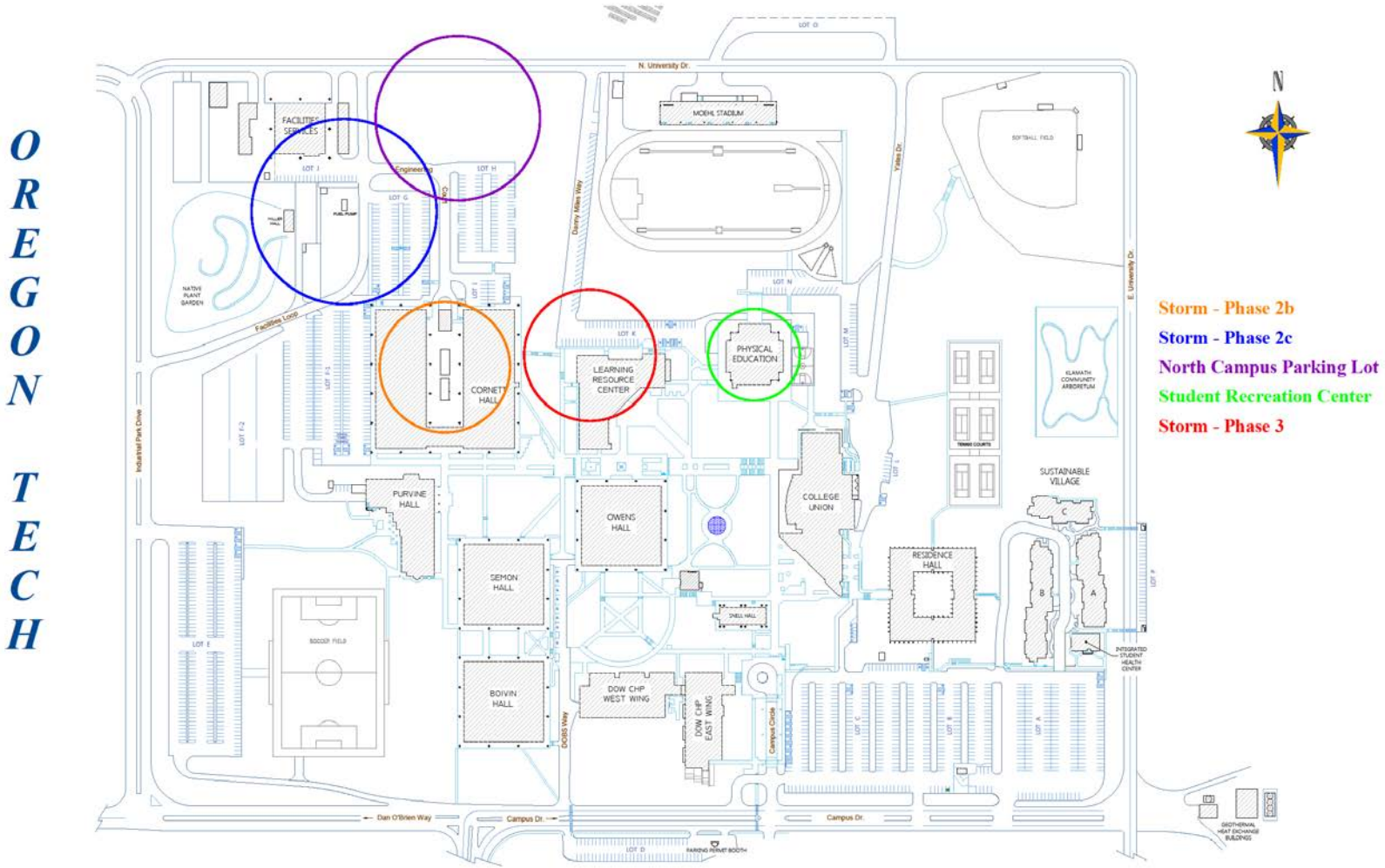


Softball Complex Renovation





Upcoming Projects



Upcoming Projects

- Storm - Phase 2b
  - Design: Underway – Marquess Engineering
  - Construction: June 2018 – September 2018
  - Est. Budget: $655,000.00
- Storm – Phase 2c
  - Design: Underway – Marquess Engineering
  - Construction: June 2018 – October 2018
  - Est. Budget $675,000.00
- New Northwest Parking Lot
  - Design: Underway
  - Construction: Fall 2018
  - Budget: TBD
- Storm – Phase 3
  - Design: Fall 2018
  - Construction: Summer 2019
  - Budget: $725,000.00
- Student Rec Center
  - Design: Fall 2018
  - Construction: Summer 2019
  - Budget: $3,500,000.00

Capital Repair & Renewal Projects

UPE 773 CR&R Projects

Capital Renewal Replacement UPE 773 , FY 15/17						
#	Project Description	Est. Cost	Final Cost	Bond Balance	Status	Date Complete
	UPE 773			$ 2,760,605		
1	FACP Upgrades-PE/SN (Balance)	$ 5,745	$ 5,745	$ 2,754,860	Completed	30-Aug-17
2	PE Waterline N Upgrade	$ 23,350	$ 23,350	$ 2,731,510	Completed	30-Aug-17
3	Chiller CH-1 and CH-2 Overhau	$ 125,480	$ 101,650	$ 2,629,860	Completed	30-Nov-17
4	LRC/Snell/PE Elev. Upgrades	$ 231,315	$ 231,315	$ 2,398,545	Underway	TBD
5	CU Sidewalk Replacement	$ 5,490	$ 5,490	$ 2,393,055	Completed	22-Sep-17
6	Well 1-4 Chlorine Syst. Upgrade	$ 40,000	$ 35,365	$ 2,357,690	Completed	14-Dec-17
7	Purvine Chiller Compressor	$ 25,000	$ -	$ 2,332,690	Underway	TBD
8	Facilities Rollup Door (#3)	$ 5,749	$ 5,550	$ 2,327,140	Completed	28-Mar-18
9	LRC Ventilator Heaters	$ 7,350	$ -	$ 2,319,790	Underway	TBD
10	Boivin Static Pressure	$ 6,000	$ -	$ 2,313,790	Completed	9-Apr-18
11	Academic Student Rec Center (A	$ 1,050,000	$ -	$ 1,263,790	Summer 2018	TBD
12	Purvine VFD's	$ 10,000	$ -	$ 1,253,790	Underway	TBD
13	Chiller Refrig. Monitor/Alarm	$ 5,968	$ -	$ 1,247,822	Underway	TBD
14	TBD	$ -	$ -	$ 1,247,822		
15	TBD	$ -	$ -	$ 1,247,822		
	Balance			$ 1,247,822		

Contact Information

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