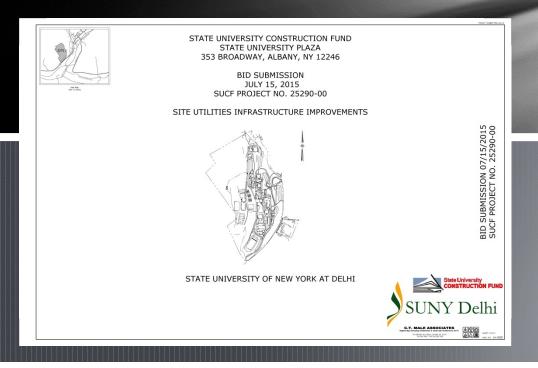
Site Utility Infrastructure Improvements – Phase 4 Electrical Upgrade

Summer 2016 – Summer 2017



Why? 4800kv transformer failure outside Thurston Hall





Overview

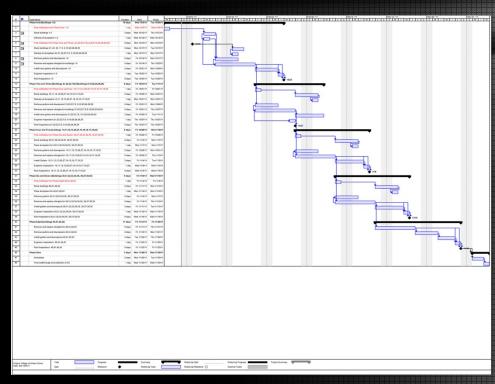
- This is the 4th and final phase of the large, complex multi year campus wide site utilities infrastructure upgrade (the stuff that no one cares about until it doesn't work).
 - Water main replacements
 - Various water main building connection replacements
 - Storm sewer replacement
 - Various catch basin replacements
 - Underground electrical duct bank replacement
 - Site restoration of various locations
- Phase 4 will specifically address the deteriorating underground campus electrical system
- Another objective of phase 4 is to have the entire campus on 12.5kw voltage as opposed to the current mix of 12.5kw and 4800kw voltage so that the campus will be able to have a reliable, redundant power system.

Project Schedule

- Phase 4 was in the very early stages of design and planning but was just pushed forward at a very accelerated pace by the State University of New York Construction Fund as a result of available funding.
- This project scope met all of the required qualifications and was selected.
- A project of this size and complexity would typically be in design and planning for approximately 6 months to 1 year. In order to secure the funding this phase needs to be designed by August of this year so that it can start construction in the summer of 2016.
- After the design and planning is complete the project will be bid for approximately 1 month (September)
- Bids are then received by the FUND and they will go through the award process to the lowest bidder. This process can take up to 4 5 months (February).
- Once the low bidder is successfully awarded a contract they can begin to submit the specifications for the material and items they will be using (March).
- Once they are approved by the design consultant the contractor can then order the required material, all of which can have lead times of months (June).

Project Schedule - continued

- As a result of the complex scheduling and to accommodate campus life and personnel this will be a two summer construction project; Summer of 2016 & Summer of 2017.
- The first phase of Phase 4 will run concurrently with the last part of phase 3 in the summer of 2016.



Project Scope

- Phase 4 will affect a large amount of campus buildings and as a result campus personnel.
- Thru-out the summer of 2016 and 2017 each building listed below will need to be without power for about 2 weeks while the new electrical service is installed, energized and tested.
 - Kunsela Hall
 - Catskill Hall
 - Russell Hall
 - O'Connor Hall
 - Murphy Hall
 - Gerry Hall
 - Dubois Hall
 - MacDonald Hall
 - Alumni Hall
 - Wall Service Complex

- Farrell Hall
- Foreman Hall
- Farnsworth Hall
- Evenden Tower
- Sanford Hall
- Smith Hall
- Bush Hall
- Thurston Hall
- South Hall
- North Hall

Project Scope - continued

- Some of the above mentioned buildings will also require disruptive exterior site work in order to install new exterior building transforms, new exterior building switches and new buried concrete electrical duct bank.
- As we mentioned these buildings will need to be without power for approximately 2 weeks while work is being performed. It is understood that all of the above buildings must maintain some level of power during the project.
- In order to accommodate buildings requiring various stages of power thruout the shut down the contract can call for separate standalone generators supplied and hooked up by the contractor.
- Even with standalone generators there will still be a small window, several hours, where the building will lose all power while the generator is disconnected and the new service is connected. This work can possibly be done on weekends.



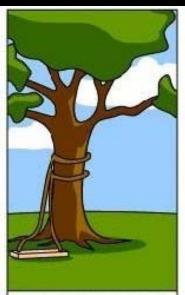
How the customer explained it



How the Project Leader understood it



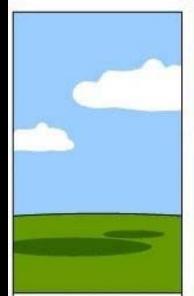
How the Analyst designed it



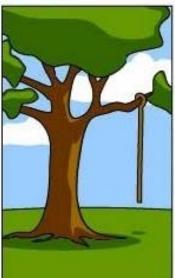
How the Programme wrote it



How the Business Consultant described it



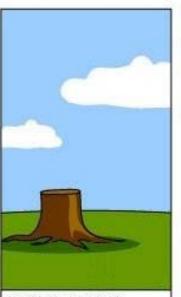
How the project was documented



What operations installed



How the customer was billed



How it was supported



What the customer really needed

This is where we need your HELP!



- We need your input to help us schedule what buildings can be taken offline in the summer of 2016 and the summer of 2017.
- In addition we need to know what buildings need minimal power and what that minimal power requirement is for.

Building Information

- We have spoke to a number of building stake holders to gather this information but we are still missing pieces. We also want to make sure that everyone is understanding and on the same page with the timing of the building work.
- The following slides are what we have gathered thus far and assembled. You will also see plans of the buildings that have the more extensive site work:
- There is also a spreadsheet for you to take that shows the overall campus plan.
- As we go through these slides and the spreadsheet please make suggestions as to dates, conflicts, etc. as you see them.

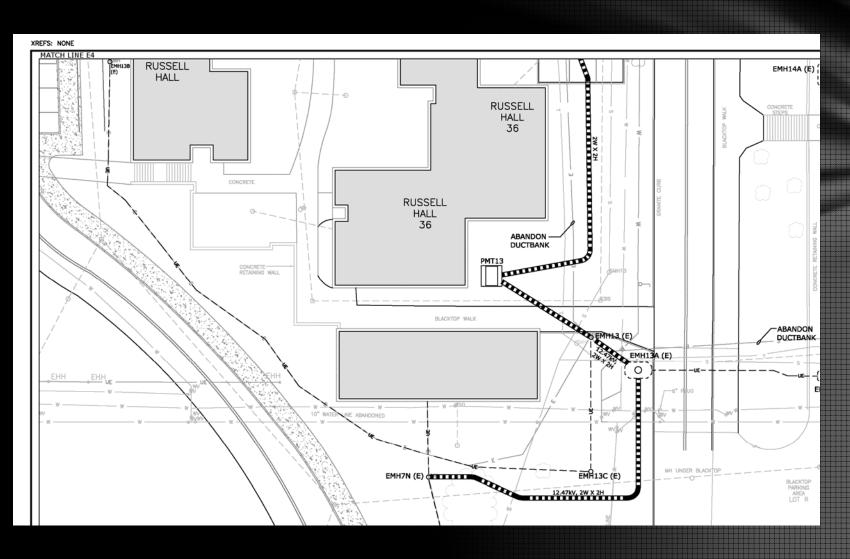
Kunsela Hall

- Window of opportunity to cut power is the month of June in the summer of 2016
- All life safety equipment will have to remain with power as well as the pool pump humidity control.
- Cutover from generator to new electrical service to happen on a weekend

Catskill Hall

- Window of opportunity to cut power is the July 10th July 24th
- All life safety equipment will have to remain with power as well as the Res. Life offices, custodial managers office, data rack.

Russell Hall



Russell Hall - continued

- Window of opportunity to cut power is the summer of 2016, July 18th August 1st
- All life safety equipment will have to remain with power as well as the 2 RD apartments and the data rack.

O'Connor Hall

- Window of opportunity to cut power is the summer of 2017
- All life safety equipment will have to remain with power as well as the RD apartment

Murphy Hall

- Window of opportunity to cut power is July 4th July 18th in the summer of 2016
- All life safety equipment will have to remain with power as well as the RD apartment.

Gerry Hall

- Window of opportunity to cut power is June 26th July 10th in the summer of 2017
- All life safety equipment will have to remain with power as well as the RD apartment and data rack (this data rack is critical as it is a campus hub)

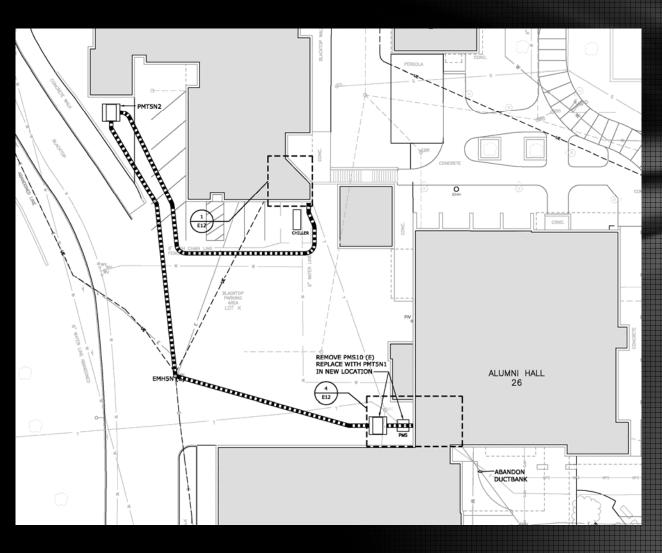
Dubois Hall

- Window of opportunity to cut power is June 20th July 4th in the summer of 2016
- All life safety equipment will have to remain with power as well as the feed to North Hall.

MacDonald Hall

- Window of opportunity to cut power is July 11th 25th in the summer of 2016
- All life safety equipment will have to remain with power.

Foreman Hall / Alumni Hall



Forman Hall

- Window of opportunity to cut power is the month of July in the summer of 2016 and the month of July in the summer if 2017
- All life safety equipment will have to remain with power.
- It would be scheduled that duct bank installation and HVAC work would be completed in July of 2016 and the power cut off would be during July of 2017

Alumni Hall

- Window of opportunity to cut power is July 10th July 17th in the summer of 2017
- All life safety equipment will have to remain with power.

Farrell Hall

- Window of opportunity to cut power is June 20th July 4th in the summer of 2016
- All life safety equipment will have to remain with power as well as the data center

Farnsworth Hall

- Window of opportunity to cut power is July 18th August 1st in the summer of 2016
- All life safety equipment will have to remain with power as well as the animal locations. Critical area being the monkeys.
- Cutover from generator to new electrical service to happen on a weekend

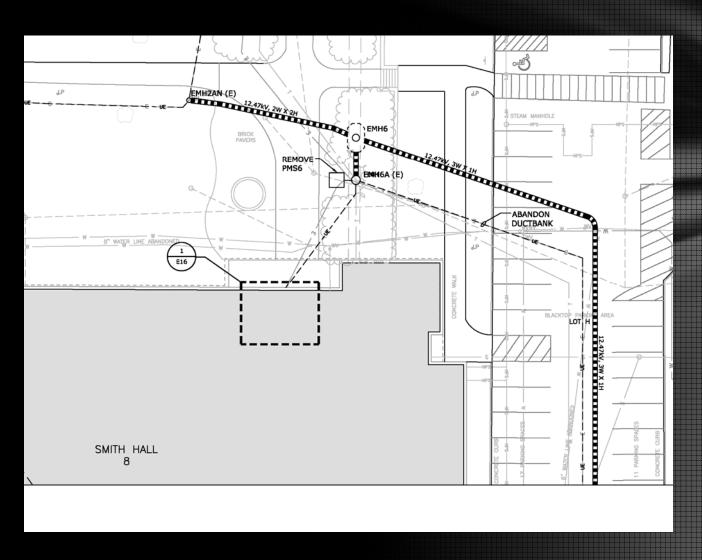
Evenden Tower

- Window of opportunity to cut power is July 17th July 24th in the summer of 2017
- All life safety equipment will have to remain with power.

Sanford Hall

- Window of opportunity to cut power is June 12th June 26th in the summer of 2017
- Data rack must remain with power as it feeds Thurston Hall & South Hall. The central heating plant must also remain with full power.

Smith Hall



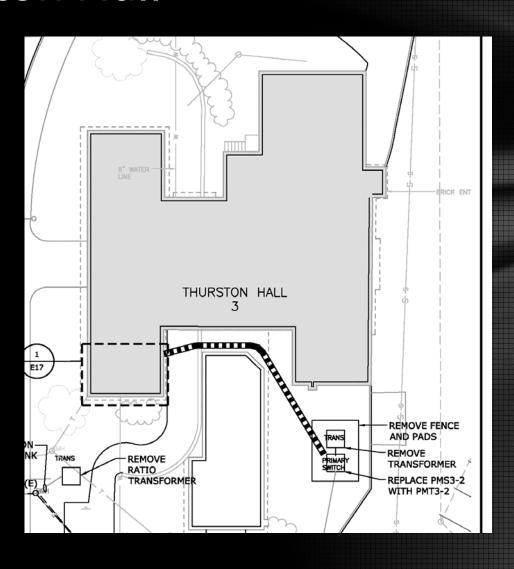
Smith Hall

- Window of opportunity to cut power is June 13th June 27th in the summer of 2016, May 29th June 5th in the summer of 2017 and June 12th July 3rd in the summer of 2017
- All life safety equipment will have to remain with power as well as the data center

Bush Hall

- Window of opportunity to cut power is June 12th July 24th in the summer of 2017
- Building will remain with full power

Thurston Hall



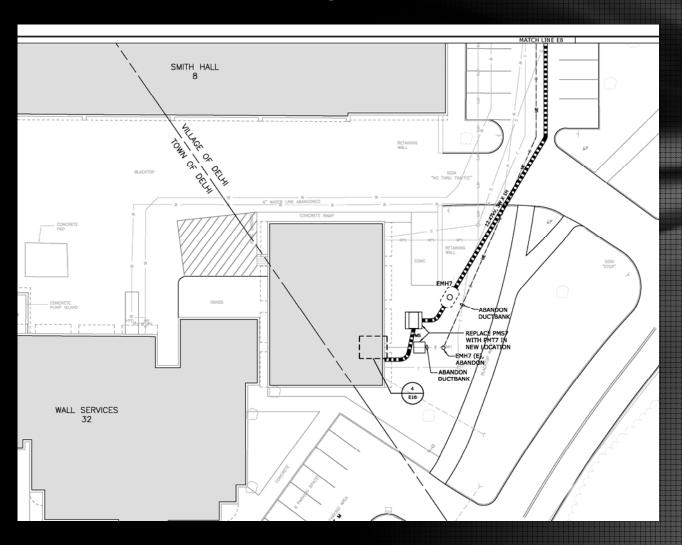
Thurston Hall

- Window of opportunity to cut power is June 6th July 25th in the summer of 2016
- All life safety equipment will have to remain with power as well as the grounds shop.
- Cutover from generator to new electrical service to happen on a weekend

South Hall

- Window of opportunity to cut power is June 6th August 15th in the summer of 2016 & May 29th August 14th in the summer of 2017
- All life safety equipment will have to remain with power.

Wall Service Complex



Wall Service Complex

- Window of opportunity to cut power is anytime during the summer of 2016 or summer of 2017.
- Building will remain with full power

Questions, comments, concerns.....



As with all construction jobs all of the information that you just saw may be changed, null and void or changed by the contractor and/or construction FUND at any given minute without your or our knowledge or approval

	Building power requirements	Summer	The week													Summer													
		2016	23-May	30-May	6-Jui	n 13-Jun	n 20-Jun	27-Jun	4-Jul	11-Jul	18-Ju	l 25-Jι	ıl 1-Aug	8-Aug	15-Aug	2017	22-May	/ 29-May	5-Jun	12-Jun	19-Jun	26-Jun	3-Jul	10-Ju	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug
Buildings																													
	Life Safety, Pool Pump Humidity																												
Kunsela Hall	control			Alumni	Appro	oved by Bob	Backus							ļ															
	Life Safety/ Power to Res Life																												
Catskill	offices,Custodal office Data Rack		Will need		•		nent/ Res Life	Offices																					
Russell	Life Safety, Data Rack		Will need		power to	RD appartn	nent			1																			
O'Connor	Life Safety		Will need	Rats									NYSACAC																
Murphy	Life Safety	ļ	Will need	-	power to	o RD appart	ment										Rats		LHB									NYSACAC	
	Life Safety Power to Data Rack is a	9																											
Gerry	campus hub		Will need		NYSACAC																								
	Life Safety, Power to North Hall																												
Dubois	UPD		Will need			ram @ Nort								ļ									NYSACAC						
MacDonald	Life Safety		Public Heal	th	LHB	Girl Golf ca	amp							ļ					LHB										
Alumni												<u> </u>						1											
						Wedding																							
	Back up Data Center, Need to				Ladies	June																							
Farrell	Power Data Arae & Life safety		Public Heal	th	H.B.	12,13,14	Tenitive worl	k dates					ly to Aug 6					1	LHB				NYSSSA			All of July	to Aug 6		
Foreman	Life Safety									Duct bank 8	k HVAC wo	rk														ı			
Farnsworth	Life Safety, HVAC Animal side	ļ	Rats 24-28														Rats 24-28												
Evenden			Human Ana	atomy and I	Physiology	Micro Bio			Human An	atomy and	Physiology	6 wks					Human Ar	natomy and	Physiology	Micro Bio			Human An	atomy and	Physiology (6 wks			
	Data rack feeds thurston south																			_									
Sanford	boiler room				LHB	Best Progr	ram		NYSSSA			All of Ju	ly to Aug 6						LHB	Be	est Program		NYSSSA			All of July	to Aug 6		
Smith	Life Safety	ļ			LHB		1												LHB										
Bush	Full Power	ļ		-	LHB		<u> </u>					1							LHB			T		T					
Thurston	Life Safety Power to Grounds shop	9		-																									
South	Life Safety										0.11																		
Wall Service	Full power							1	Excav	ation Work	& New Du	ct Bank	1	1						1		1		1	1	ı	1		
							 																						
							 																						
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