

MINUTES  
Regular City Council Meeting  
November 21, 2016  
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MINUTES  
REGULAR COUNCIL MEETING  
OF  
November 21, 2016  
5:30 p.m.

THE DALLES CITY HALL  
313 COURT STREET  
THE DALLES, OREGON

**PRESIDING:** Mayor Stephen Lawrence

**COUNCIL PRESENT:** Russ Brown, Tim McGlothlin, Taner Elliott, Linda Miller, Dan Spatz

**COUNCIL ABSENT:** None

**STAFF PRESENT:** City Manager Julie Krueger, City Attorney Gene Parker, City Clerk Izetta Grossman, Public Works Director Dave Anderson, City Engineer Dale McCabe

**CALL TO ORDER**

The meeting was called to order by Mayor Lawrence at 5:30 p.m.

**ROLL CALL**

Roll call was conducted by City Clerk Grossman, all Councilors present.

**APPROVAL OF AGENDA**

It was moved by Elliott and seconded by Miller to approve the agenda as submitted. The motion carried unanimously.



## MINUTES

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### **DISCUSSION ITEMS**

#### Update on the Wastewater Treatment Plant Upgrade Project

Public Works Director Anderson reviewed the staff report and introduced Preston Van Meter from Kennedy Jenks and Tom Paul from Mortenson.

Van Meter and Paul reviewed the status of the project (see attached PowerPoint) saying they were continuing to look for cost savings and funding options. They reminded Council that Phase I and II were combined and further upgrades had been pushed out.

They said issues that have been encountered that have increased the cost of the project have been unanticipated needs such as the need to replace the existing IPS piping and the force main because they are too small, the need to provide ventilation in the IPS building, the need to build a separate building for the screening systems rather than doing expensive upgrades to the existing structure and electrical systems, and the need for more emergency back-up power capacity through the addition of an additional back-up emergency generator. As these challenges are addressed, systems will be constructed that will allow for easier upgrades later.

Anderson said the ODOE CHP Tax Credits would have to be sold, and there were entities that could be interested. He said they could sell for 80 cents on the dollar. He said the credits wouldn't be available until the project was complete, so the City would have capital outlay and then be reimbursed.

Anderson said the plant was currently out of compliance for being able to pump the amount of water that results during a 5-year storm event.

Anderson said a contract should be ready for Council consideration at the December 12 City Council meeting.

Councilor McGlothlin said he felt confident they were making a sound decision for the community.

Rick Wolf – Plant Manager said for him the bottom line was a safe efficient operation. He said he was excited about the upgrades and the process had been a positive one.

**Spatz retired from the meeting at 6:57 p.m.**

Mayor Lawrence asked about how information would be presented to the public and recommended a comic book type brochure explaining the how and why of the project.



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Paul said they would work with the City on disseminating the information.

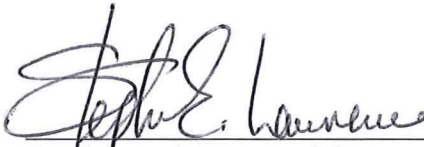
**ADJOURNMENT**

Being no further business, the meeting adjourned at 7:04 p.m.

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Submitted by/  
Izetta Grossman  
City Clerk

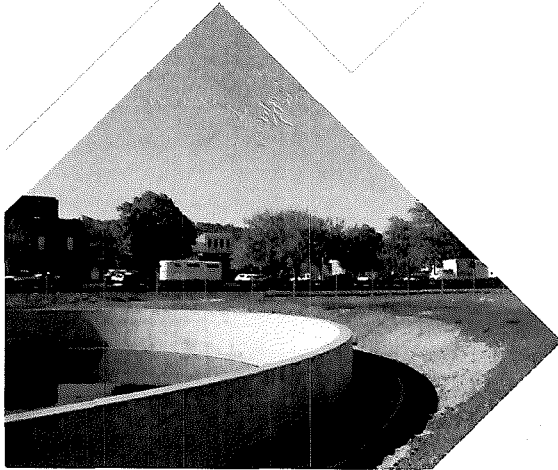
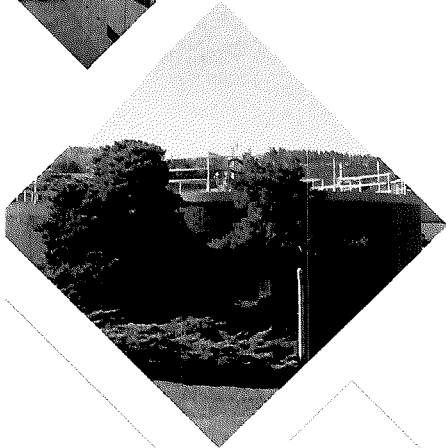
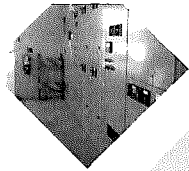
SIGNED:

  
\_\_\_\_\_  
Stephen E. Lawrence, Mayor

ATTEST:

  
\_\_\_\_\_  
Izetta Grossman, City Clerk





# City of The Dalles

## Wastewater Treatment Plant Upgrade

### City Council Work Session

November 21, 2016



Kennedy/Jenks Consultants

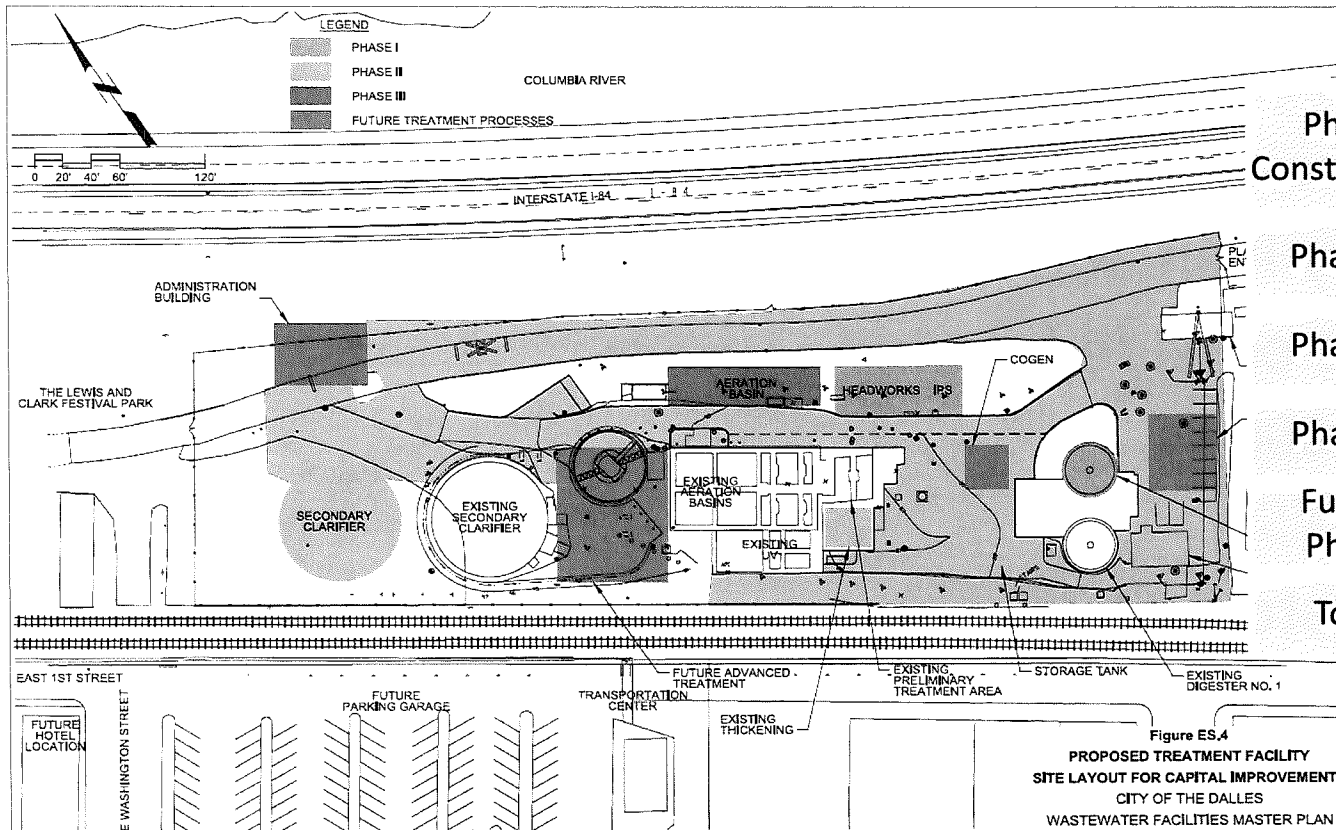


# Agenda

- Where we started – 2013 Facilities Plan
- Where we left off – Alternative 3D Carbon Diversion
- Current project status
- Review equipment selection and pricing
- Review challenges discovered during design
- Current GMP status
- Next Steps



# Where we started- 2013 Facility Plan

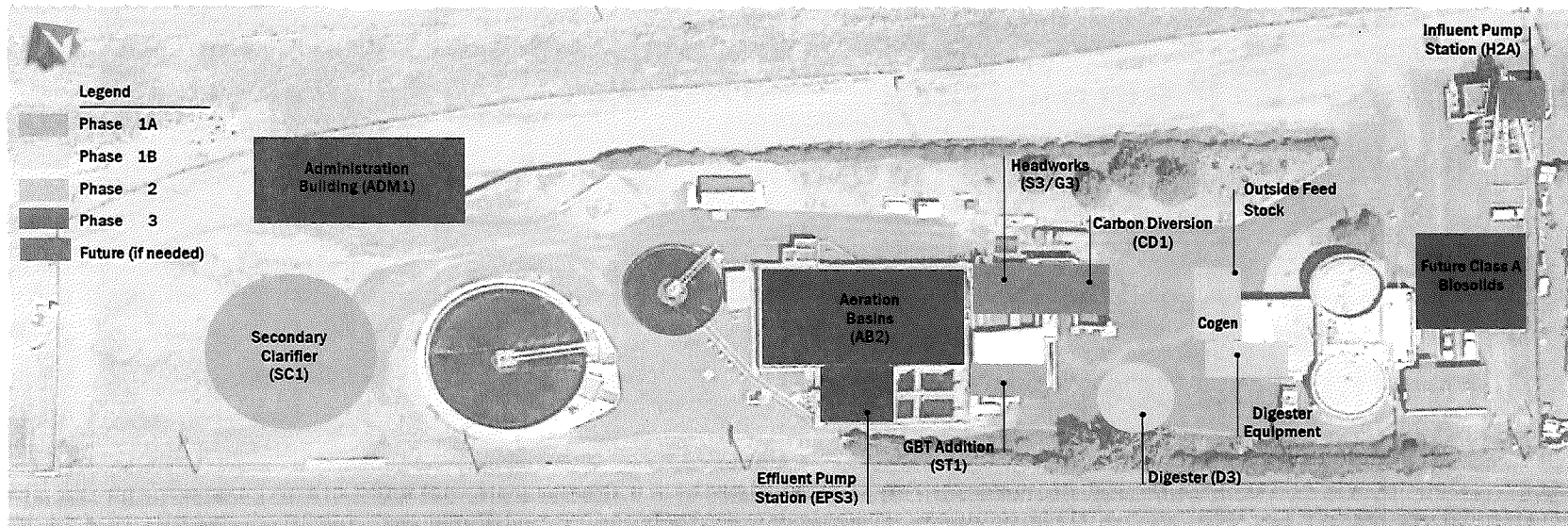


Phase Construction	2013 Facility Plan	Current Estimated Plan
Phase 1	\$4.88	\$7.80
Phase 2	\$3.38	\$4.73
Phase 3	\$4.73	\$5.17
Future Phase		
Total	\$12.99	\$17.70

## Where we left off – Alternate 3D

- Proceed with Alternative 3D including Carbon Diversion
  - Estimated project cost: \$8,732,000
- Update Facility Plan and Submit to DEQ – complete
- Further define outside funding sources
  - Target \$750,000
  - DEQ, ODOE, ESI
- Regional Feedstock Study near completion
  - Local feedstocks available
  - 6000 gallons/week FOG nearly doubles gas production

# Alternative 3D – Carbon Diversion



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
ADM1 Admin Building								\$741,000	\$741,000													
H2A Influent Pump Station	\$804,967														\$123,000							
S3/G3 Headworks (Screening/Grit)	\$1,916,281																					
CD2 Carbon Diversion	\$894,758																					
AB2 Aeration Basin																						
SC1 Secondary Clarifier				\$1,476,000	\$1,476,000										\$1,069,600	\$1,069,600						
ST1 GBT Addition				\$798,000																		
D3 New Digester - 250,000 gallon																						
CG Cogeneration																						
A1 Aesthetic Improvements	\$240,000																					
EPS3 Effluent PS Improvements															\$863,600	\$863,600						
P1A Phase 1A	\$132,274																					
P1B Phase 1B	\$361,501	\$311,409																				
FEED Outside Food Stock (Option)		\$500,000																				

Summary of Phases	
Phase 1A	\$4,349,781
Phase 1B	\$4,593,200
Phase 2	\$3,750,000
Phase 3	\$1,482,000
Future Phase	\$3,607,000
<b>Total</b>	<b>\$17,780,000</b>

Phase 1B cost excludes Optional Feed Stock

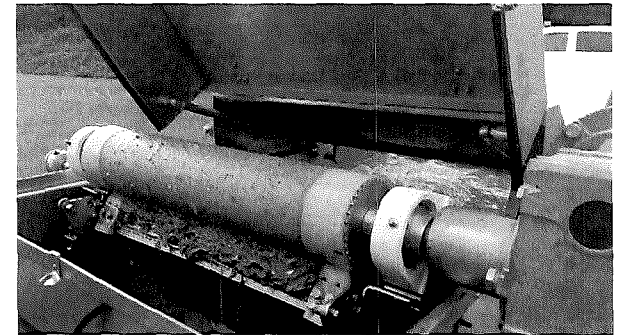
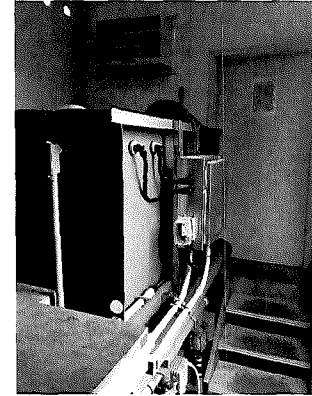
Site Improvements -  
Alternative 3D  
Carbon Diversion

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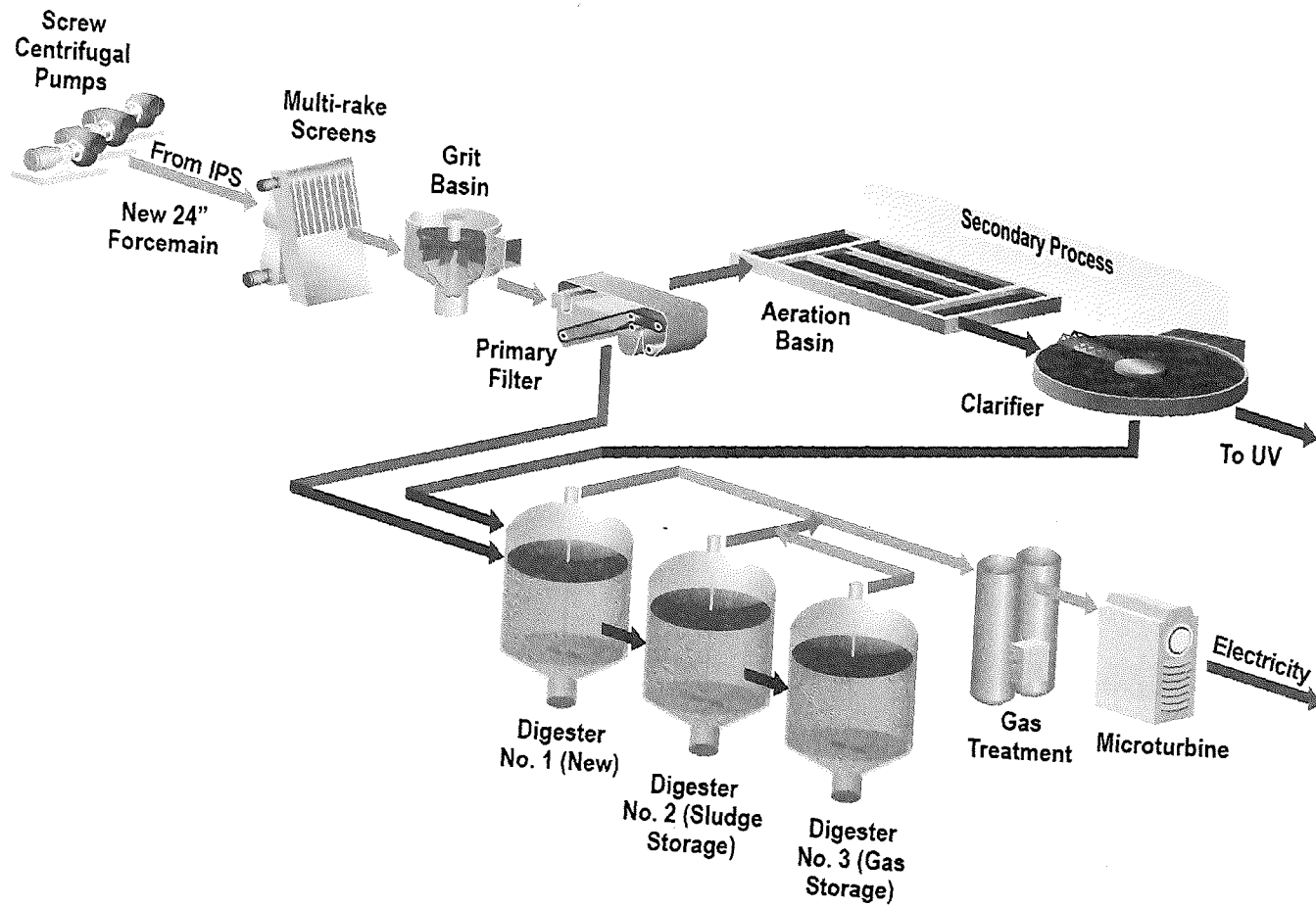


# Benefits of Carbon Diversion

- “Flip” WWTP Economics
  - Make Energy instead of use it
- Delays \$2.2M Aeration Basin Expansion to ~2030
- Potential to accept outside feedstocks
  - Revenue from Tipping Fees
  - 6000 gallons/weeks nearly doubles gas production
- Potential Outside Funding



# WWTP Process Flow



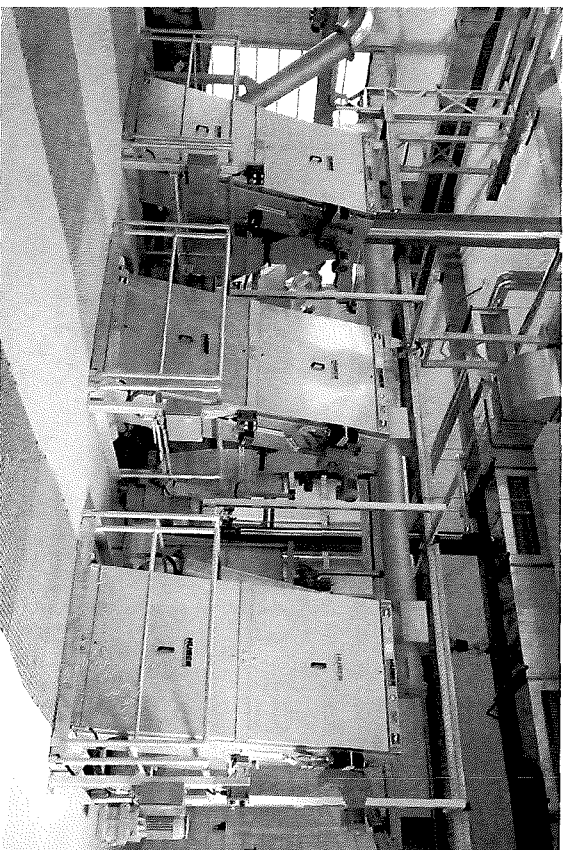
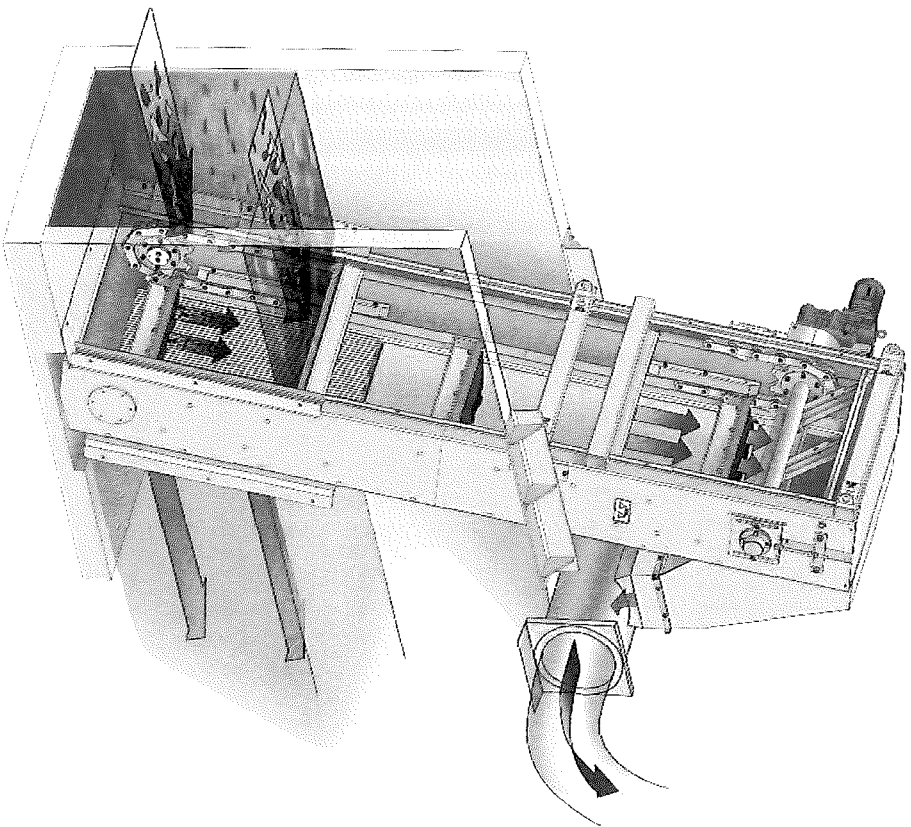
# Current Project Status

- Facility Plan and 80% Design are complete
- Finalizing GMP pricing
- Working on outside funding
  - Energy Smart Industrial: \$25,000 to \$50,000
  - DEQ SRF Loan Forgiveness: \$300,000 (NET)
  - ODOE CHP Tax Credits: ~\$500,000
- Awaiting Regional Feedstock Study
  - Near completion
  - Local feedstocks available
  - 6000 gallons/week FOG nearly doubles gas production
  - Add FOG Receiving Station ~\$500,000

# Equipment Pricing Review

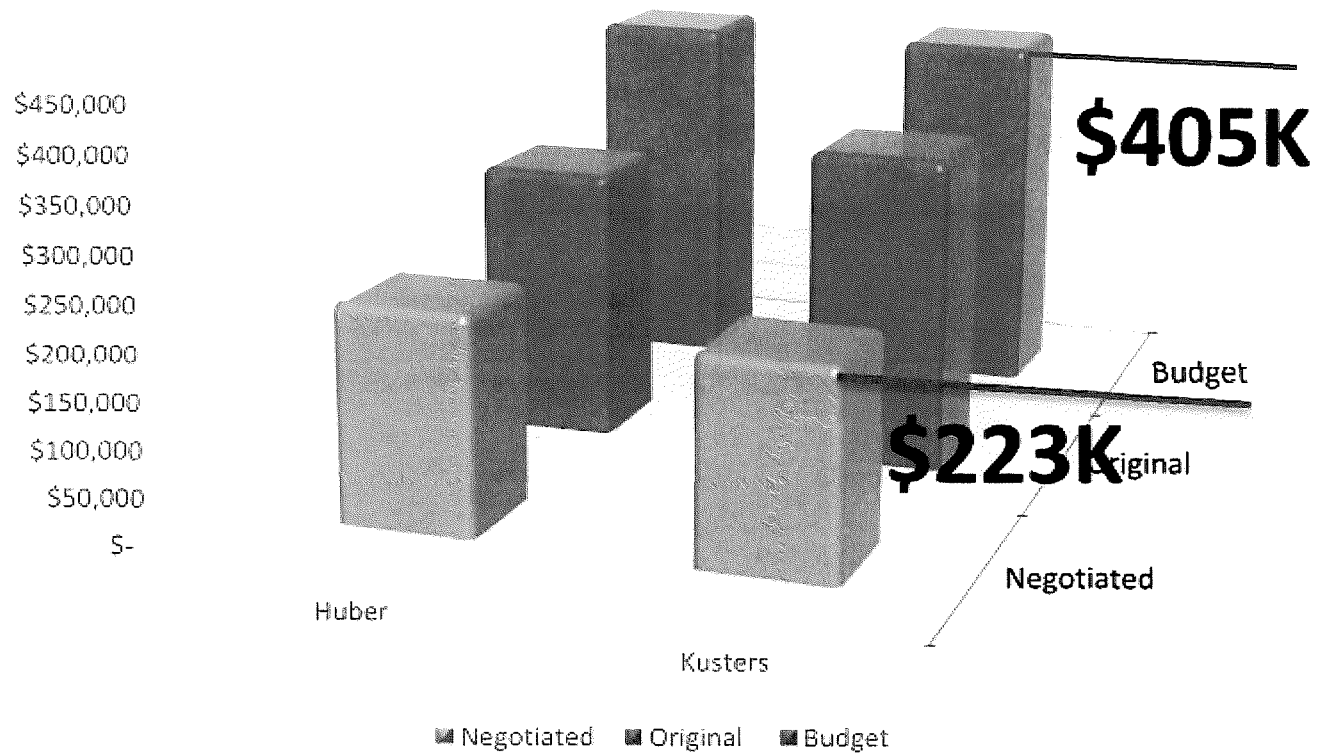
- Power of the Progress Design-Build process
  - Allows for negotiated equipment pricing
  - Best Value
- Two Examples
  - Headworks Screens
  - Primary Filters

# Multi-Rake



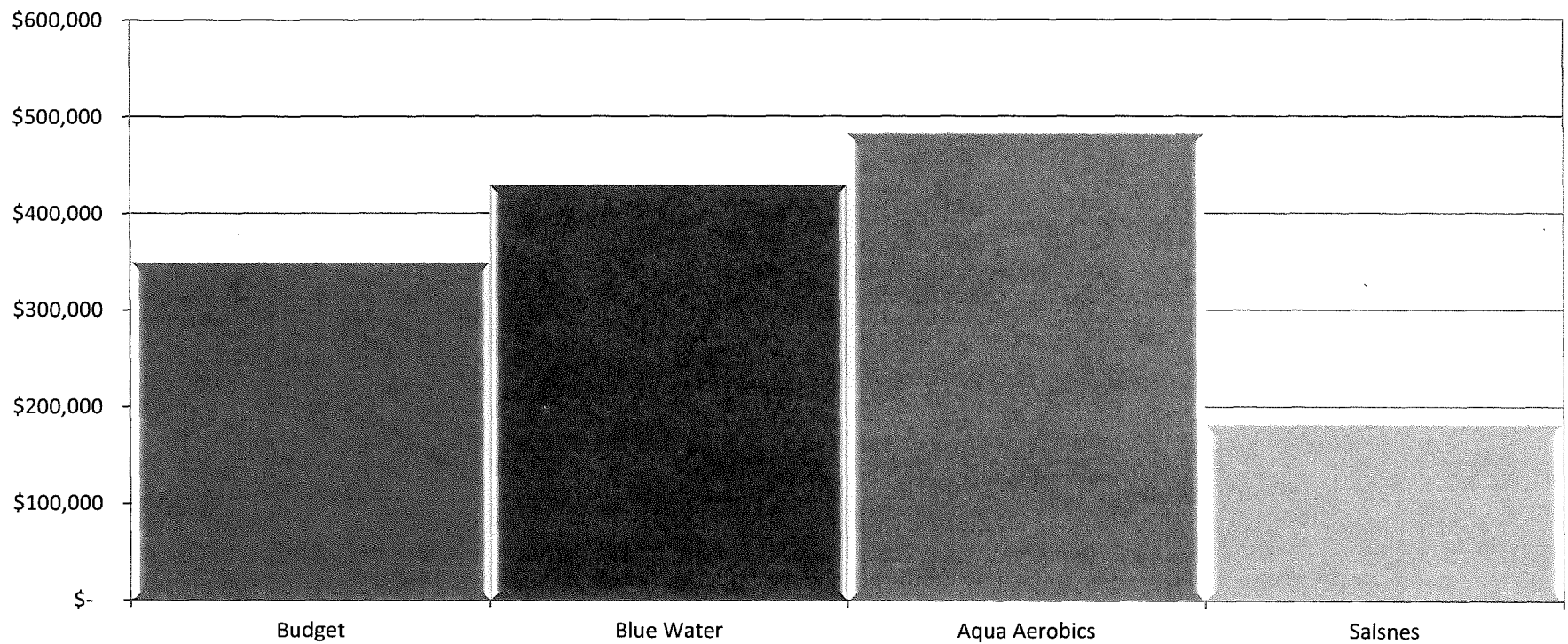


# Multi-Rake Screens Quote Reduction



# Primary Filter Quote Packages

## Primary Filters



# Equipment Pricing Summary

Equipment Item	Cost
Initial Equipment Budget	\$1,810,690
Negotiated Equipment Pricing	\$1,524,507
<b>Total Savings</b>	<b>\$286,183</b>

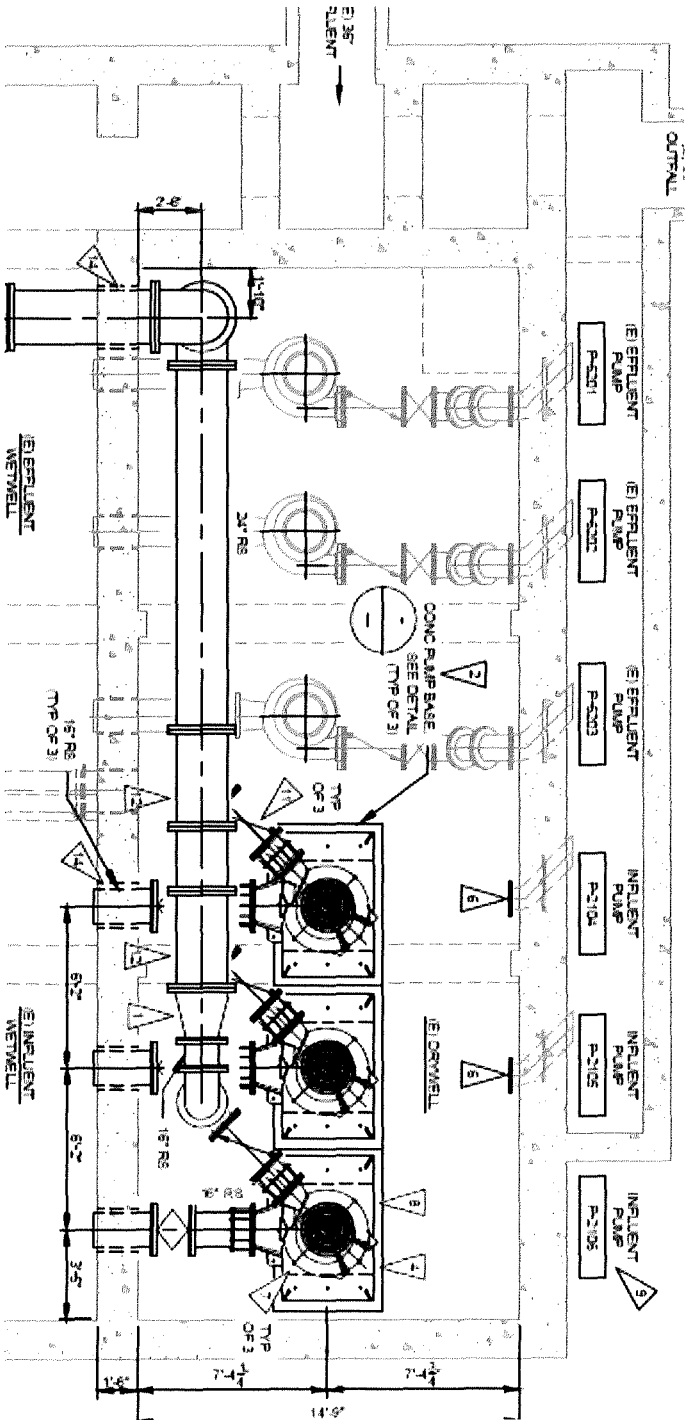
## Other Benefits of the PDB Process

- Reduces cost of overall program
- Utilized equipment vendors in design to save \$\$
- Other Cost Savings
  - Electrical Contractor Quotes
  - I&C Contractor Quotes
  - Concrete pricing
- Committed to using local Contractors
  - East Cascade Electric
  - Hood River Sand and Gravel
  - Crestline Construction

# Major Design Challenges

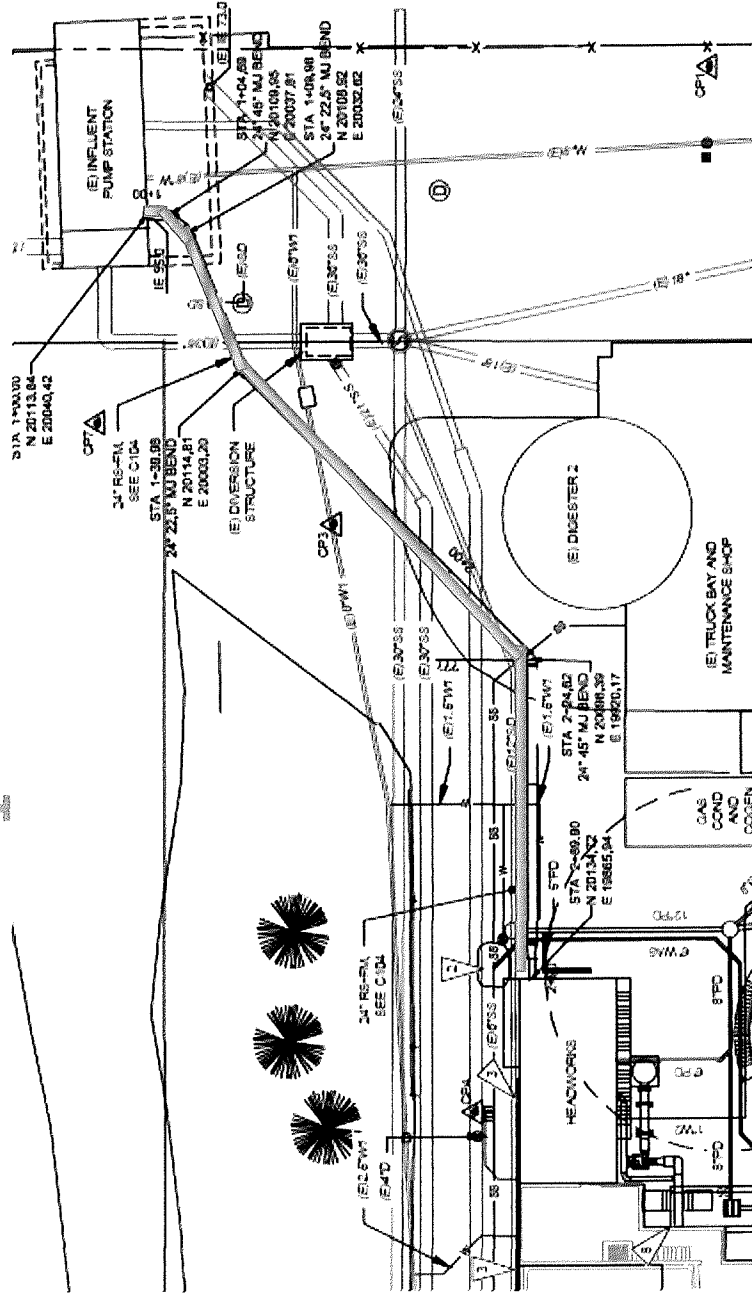
1. IPS Piping and HVAC
2. Existing force main from IPS to Headworks
3. Headworks and Primary Filter layout
4. Headworks Electrical Room
5. Existing Standby Generator sizing

# 1. IPS Piping and HVAC



**Additional Cost: \$332,000**

## 2. Force Main Replacement



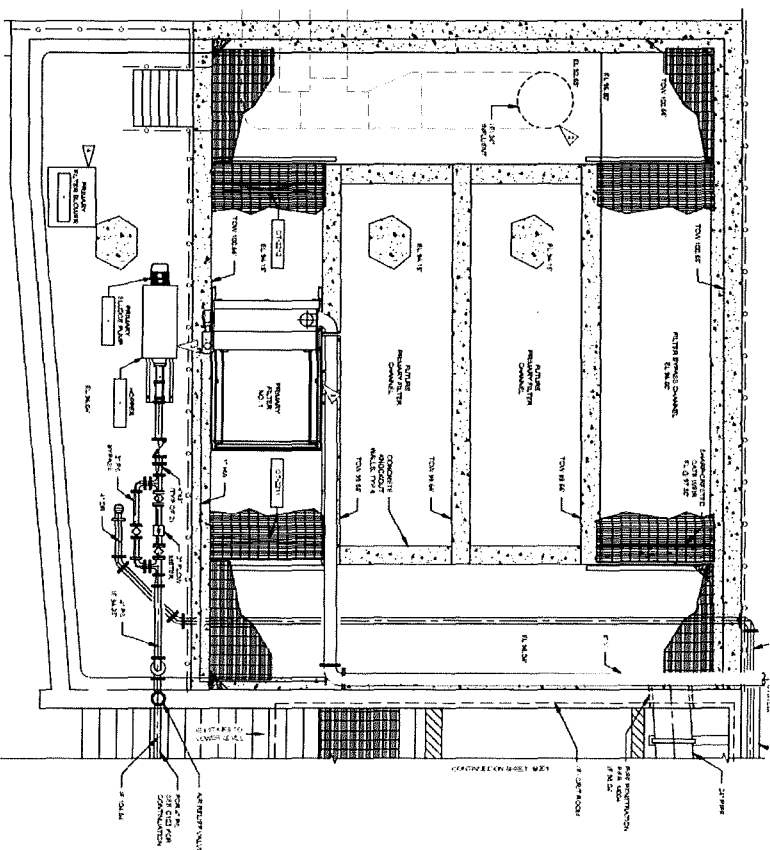
Additional Cost: \$197,000

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This architectural floor plan depicts the interior of the Atomic Energy Commission Building. The plan is oriented with North (N) at the top. Key features include:

- Entrance and Lobby:** Located at the bottom center, featuring a large circular area with a central column and a staircase.
- Corridors:** A network of corridors connects the various rooms, with elevators and stairs located along these paths.
- Rooms:**
  - Conference Rooms:** Several rooms labeled "CONFERENCE" are distributed throughout the plan.
  - Office Spaces:** Numerous smaller rooms, some labeled "OFFICE" or "WORKING BUILDING".
  - Specialized Rooms:** Rooms labeled "SUBMITTED OPENING", "SUBMITTED OPENING", "SUBMITTED OPENING", and "SUBMITTED OPENING" are located along the top edge.
- Structural Details:**
  - Columns:** Labeled "COLUMN" and "COLUMN".
  - Walls:** Labeled "WALL" and "WALL".
  - Floors:** Labeled "FLOOR" and "FLOOR".
  - Roofs:** Labeled "ROOF" and "ROOF".
- Orientation:** A compass rose indicates North (N) is towards the top of the page.

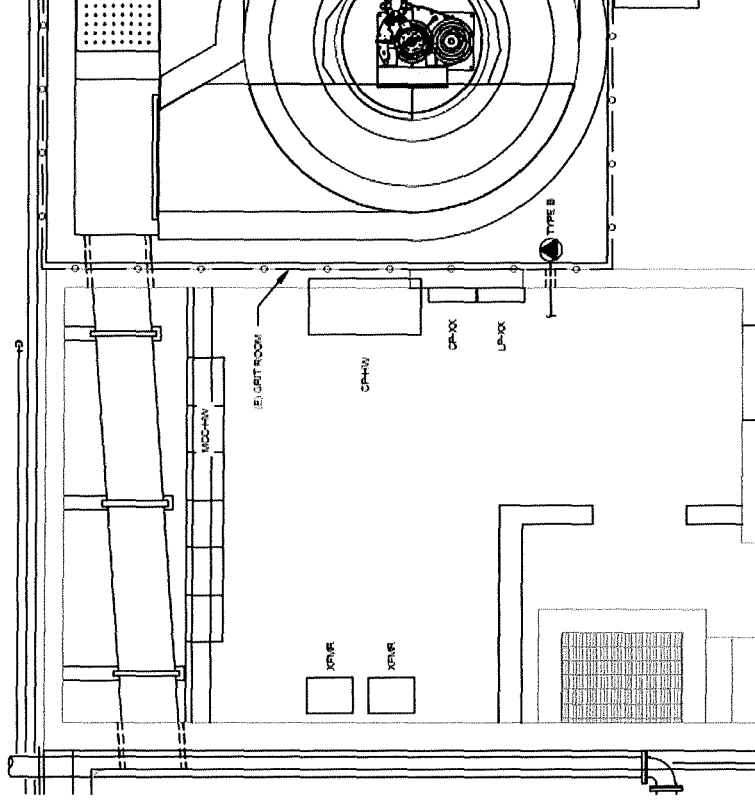
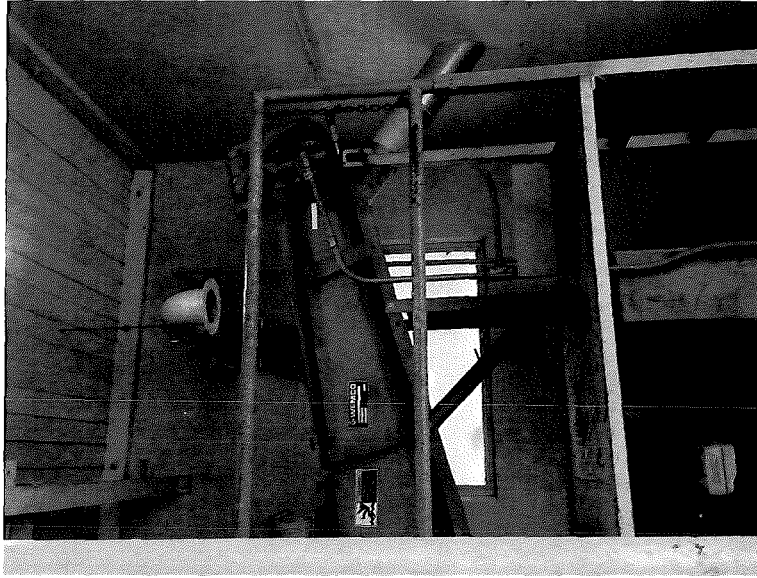


 **Mortenson**  
CONSTRUCTION

**Kennedy/Jonka Consultants**

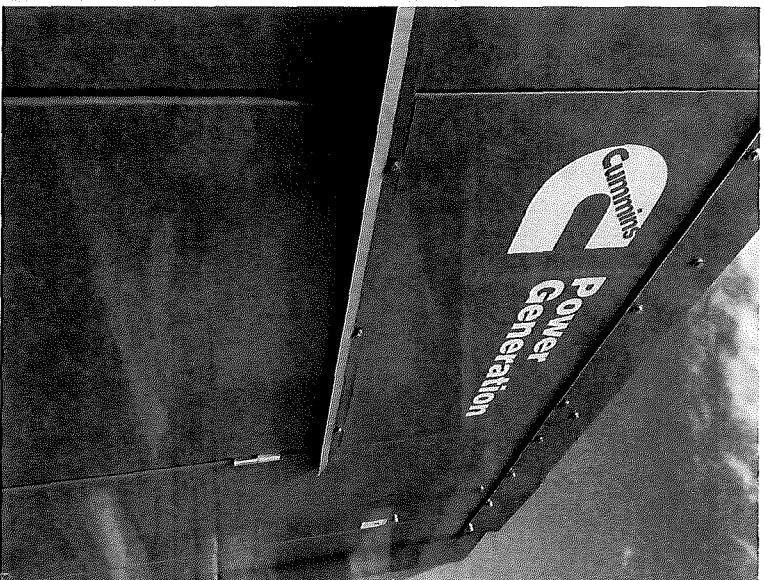


# 4. Headworks Electrical Room



Additional Cost:  
\$240,000

## 5. Existing Standby Generator Sizing



**Additional Cost:**  
**\$251,000**

# Major Additional Cost Items

Item	Cost
IPS Piping and HVAC Modifications	\$332,000
New Force Main from IPS to Headworks	\$197,000
Headworks and Primary Filter Design	\$620,000
Headworks Electrical Room	\$240,000
New IPS Standby Generator	\$251,000
<b>Total – Major Additional Cost Items</b>	<b>\$1,640,000</b>

# Guaranteed Maximum Price (GMP)

Item	Cost
Influent Pump Station and New Force Main	\$1,508,415
Headworks (Screens and Grit Removal)	\$2,951,071
Carbon Diversion (Prim. Filter/Cogen)	\$1,751,397
New Digester and Exist. Digester Mods	\$2,433,536
Site Work	\$990,081
Phase 1A/Phase 1B Preconstruction Services	\$1,022,274
<b>Sub-Total</b>	<b>\$10,656,776</b>
Design-Build Contingency	\$529,366
<b>Total Design-Build GMP</b>	<b>\$11,186,143</b>

*Note: GMP under final development*

# Outside Funding Opportunities

## 1. DEQ CWSRF Program

- Up to \$500,000 Loan Forgiveness for Cogen Projects
- Would need to “federalize” entire project
- \$200,000 in additional costs (SRF documentation)
- Potential challenges with schedule and permitting

## 2. Oregon Dept. of Energy CHP Tax Credits

- Could provide \$500,000 or more in outside funding
- Sell 35% tax credits at up to 90% of face value
- Requires Cogen completion by Dec. 2017

## 3. Energy Smart Industrial Incentives

- Estimate \$25,000 to \$50,000 in outside funding
- Working with ESI final incentive calculations

# Considerations

1. If choose to pursue DEQ loan forgiveness need to submit application by 12/9/2016.
  - Plan to submit application to preserve opportunity
2. If/when to build FOG Receiving Station?
  - Improves Cogen economics and increases potential for outside funding
  - Feedstocks available locally, but need further evaluation
  - Could be considered if Project has unused Contingency



# Next Steps

1. Prepare Final GMP
2. City Council presentation 12/12/2016
3. Finalize Phase 2 Contract in Dec. 2016
4. Groundbreaking in January 2017
5. Finalize design in Q1 2017
6. Substantial completion ~ Dec. 2017

# Questions/Discussion

