

***The Long Baseline Neutrino Facility (LBNF):  
Community Meeting  
LBNF FSCF Construction Status***

**October 21, 2019**



# KAJV Work

# KAJV Ross Field Office at Houston and Mill St. – “Wedge”



## Average Staff on Site

| KAJV Personnel On-Site |           |
|------------------------|-----------|
| KAJV Staff             | 32        |
| KAJV Craft             | 22        |
| Muth                   | 4         |
| UGG                    | 7         |
| Decker                 | 4         |
| Horsley                | 4         |
| ATC                    | 3         |
| RCS                    | 4         |
| Misc                   | 7         |
| Paramedics             | 3         |
| <b>Total</b>           | <b>90</b> |

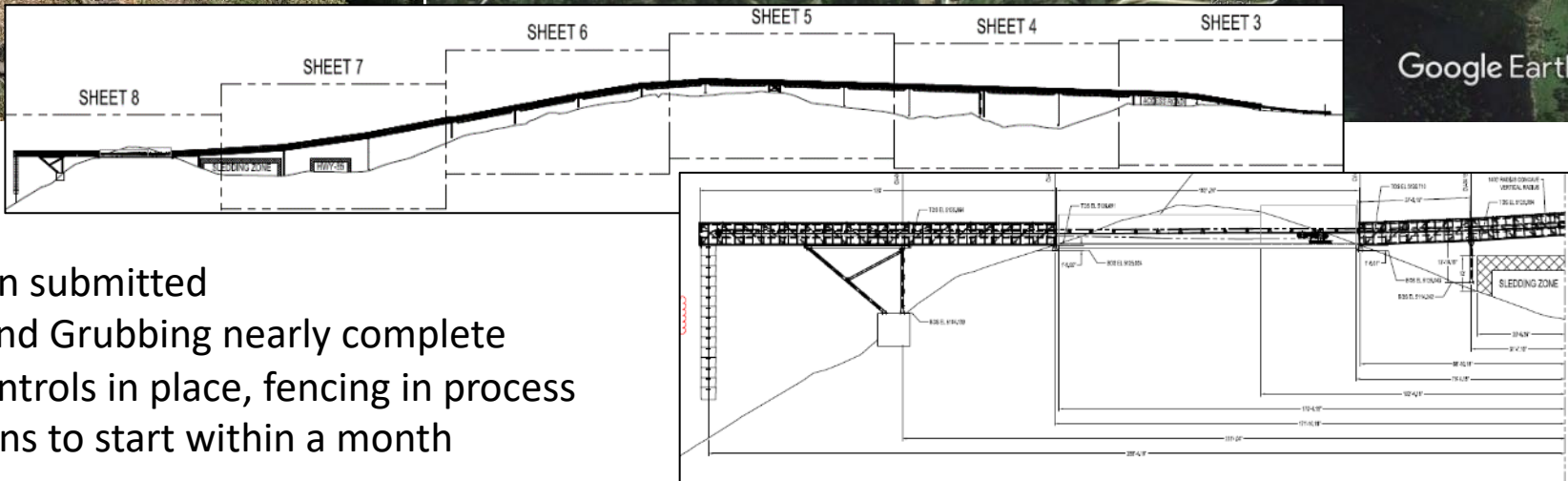
- LBNF dedicated on site team is at 12, planning to add one more construction coordinator
- Typically 1-3 Fermi based staff (project management, QC, ESH) on site any given week
- SDSD has 4 on site now
- Near term: Harrison-Western, Superior Crane, Robbins (conveyor)

# Tramway



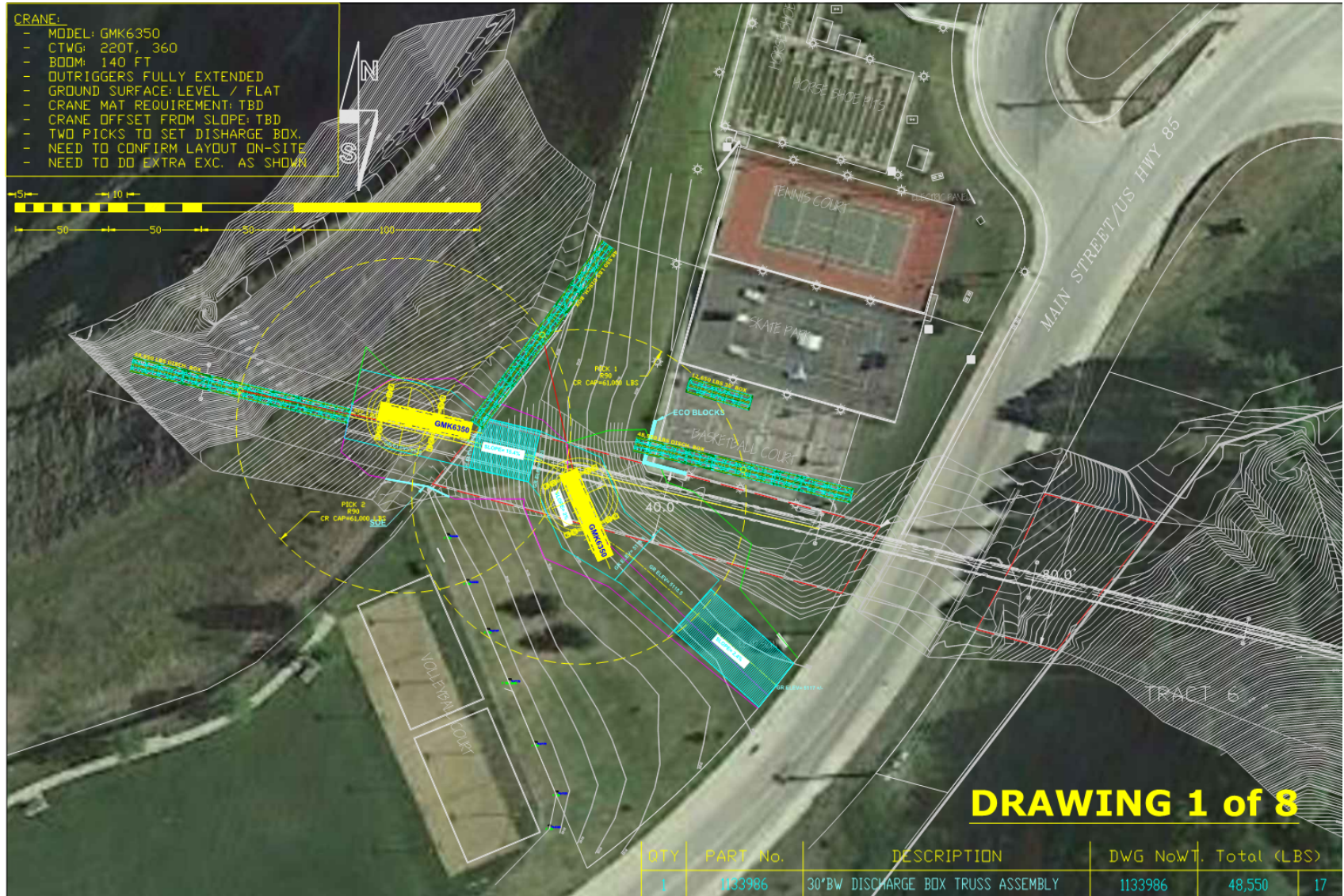
Ground support complete except at loading area  
~73% complete overall (portals and shed are substantial remaining effort)

# Conveyor



90% design submitted  
Clearing and Grubbing nearly complete  
SWPPP controls in place, fencing in process  
Foundations to start within a month

# Initial Truss Installation – Near Open Pit

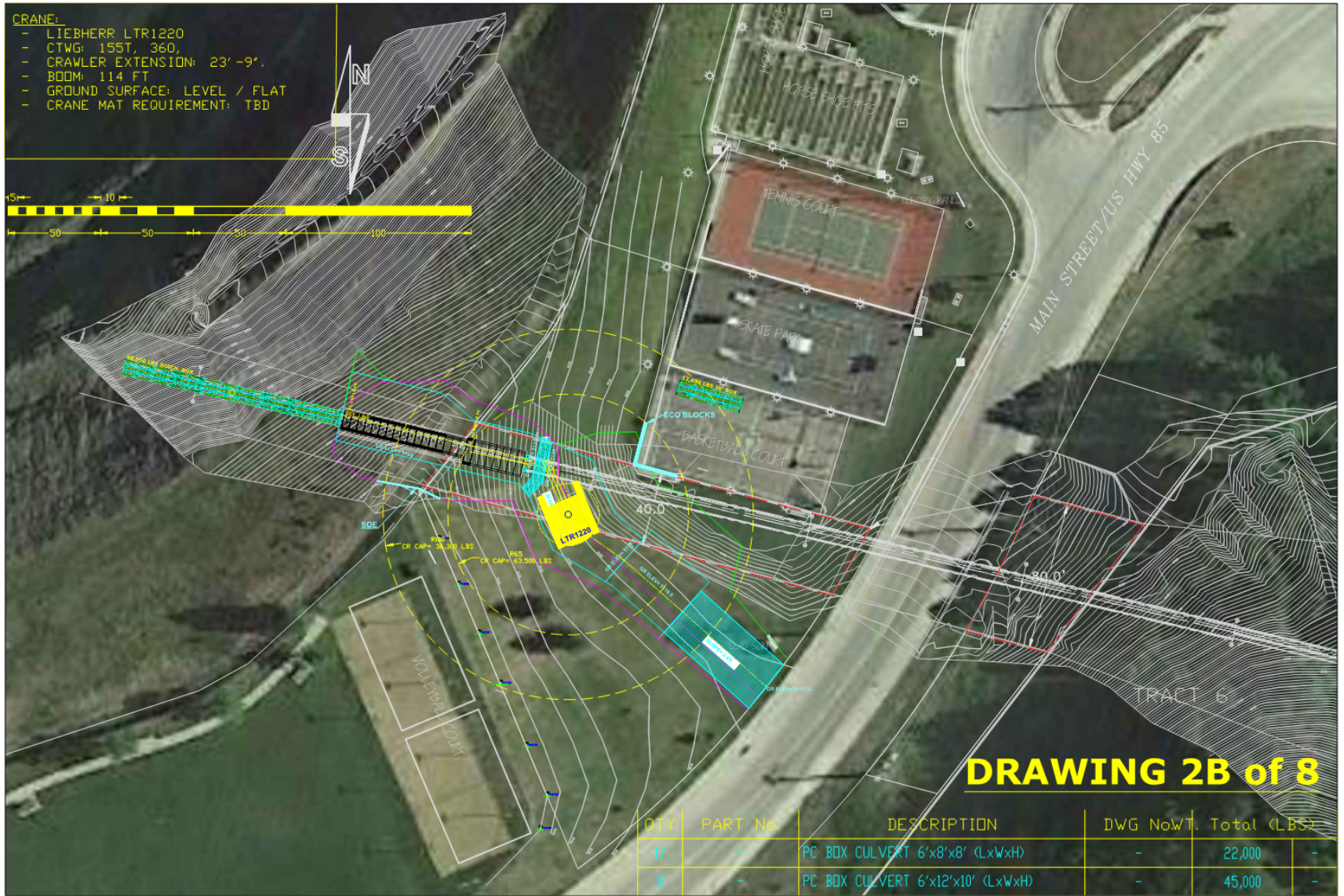


# Liebherr LTR 1220 Hydraulic Crane

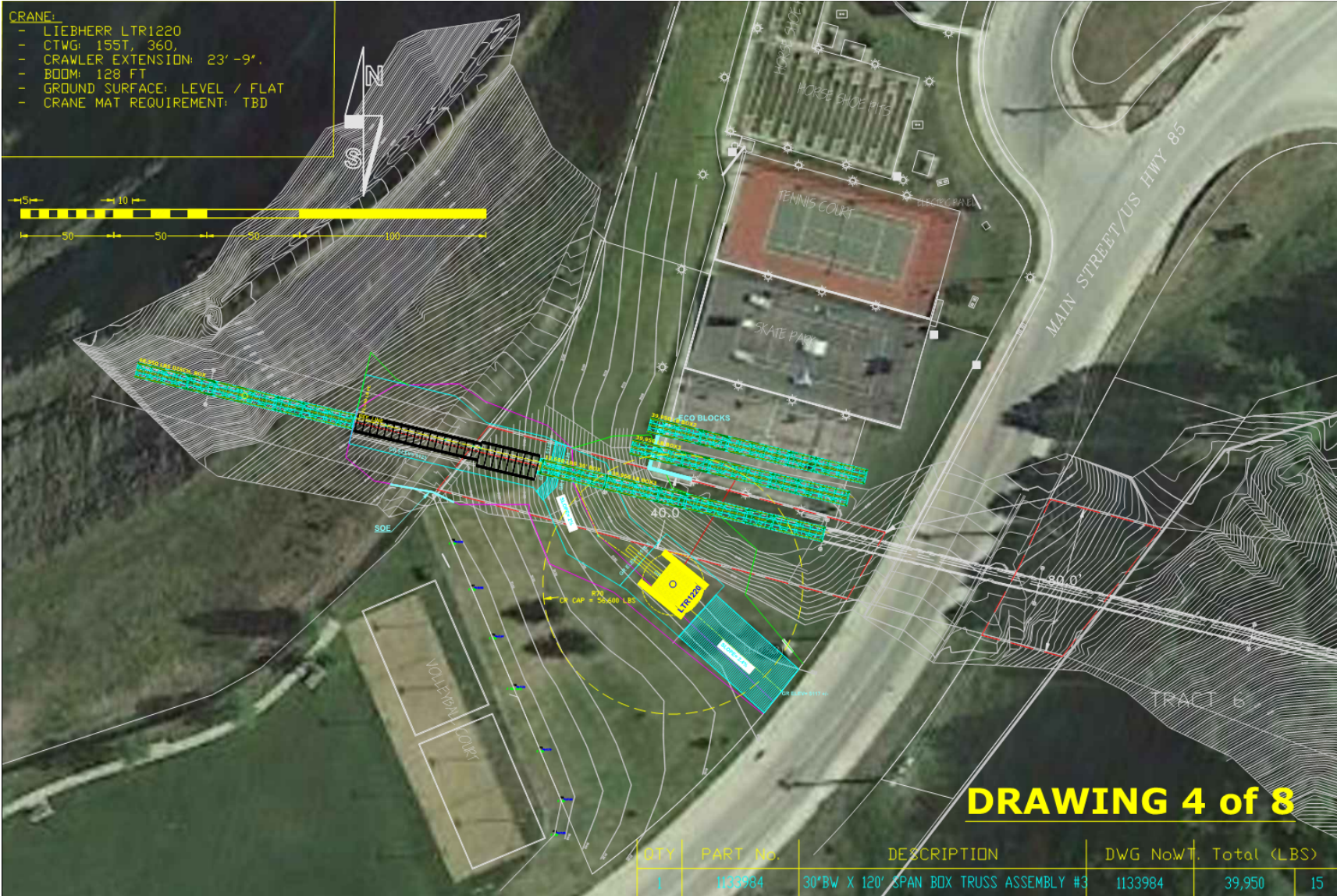




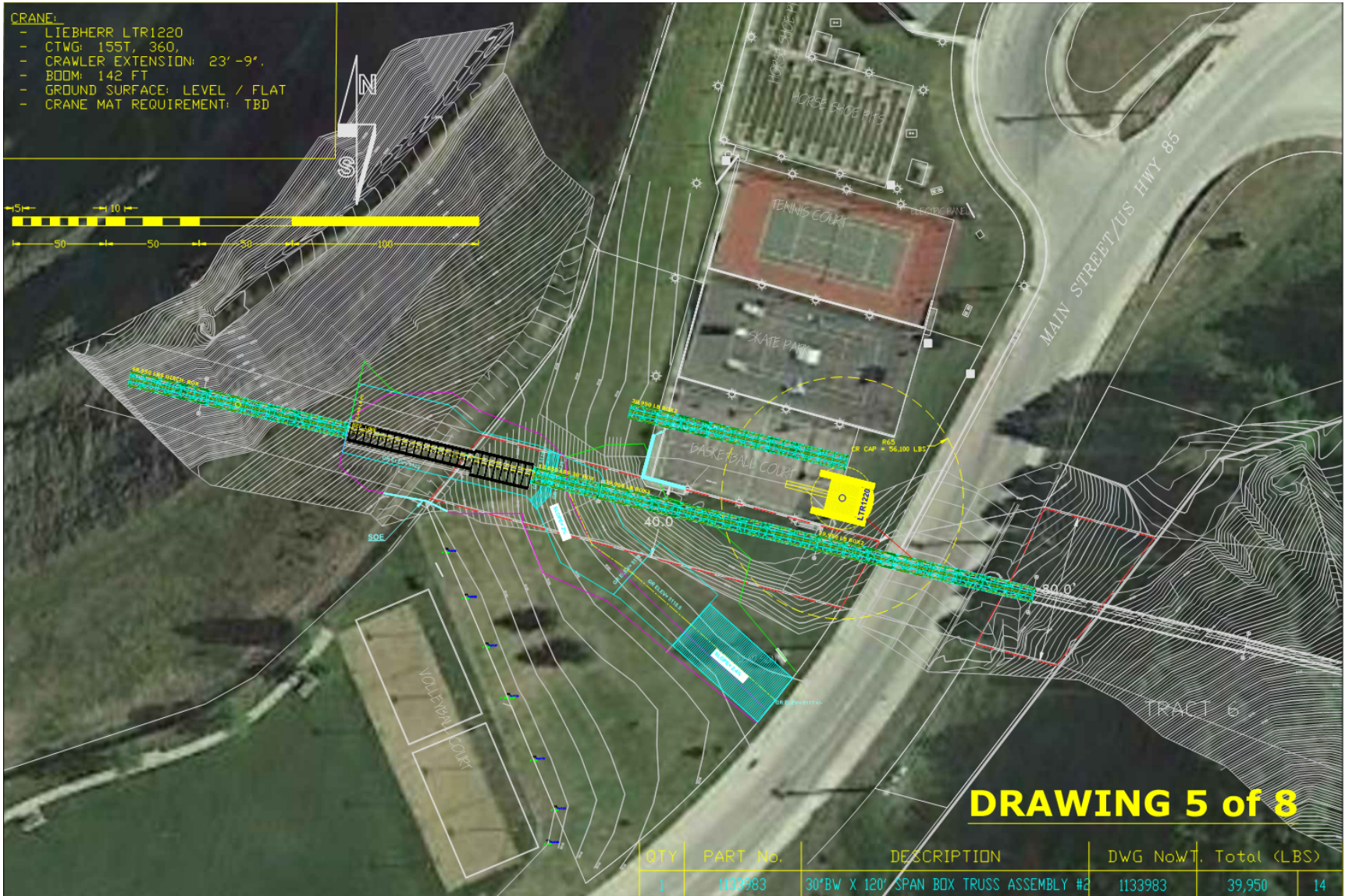
# Truss & Box Culvert Installation – Through Berm



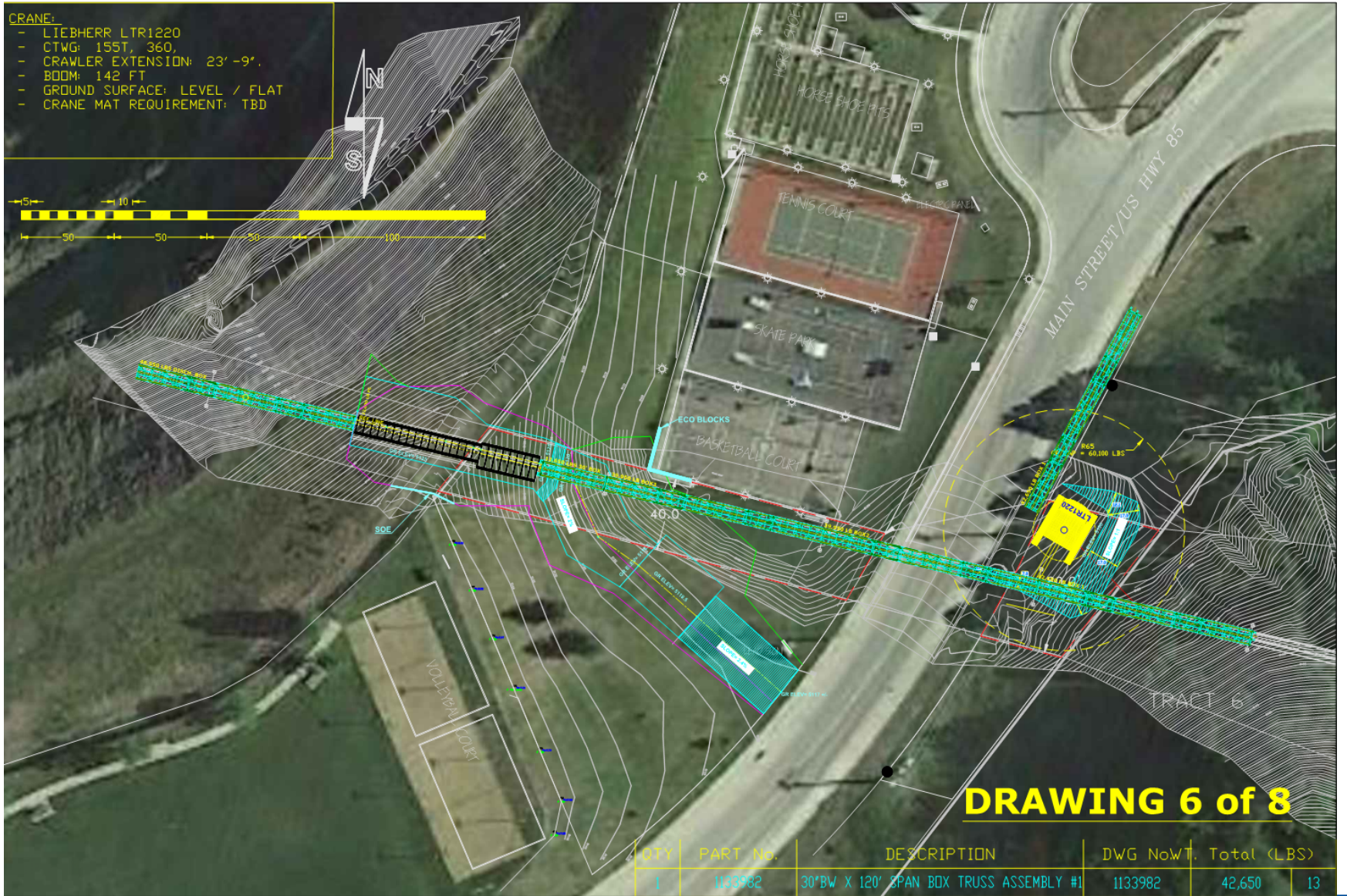
# Arial Truss Section Along Court



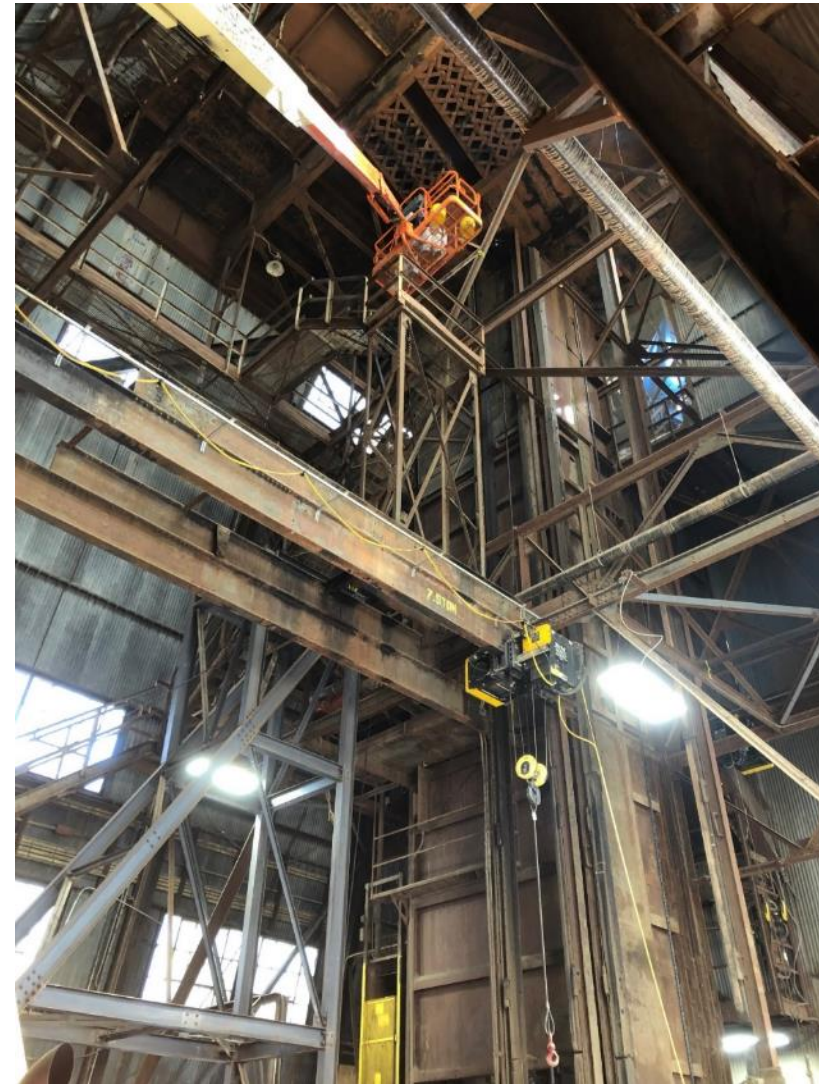
# Box Section Over Hwy 85



# Hwy 85 Crossing – South Side Moving Up Slope

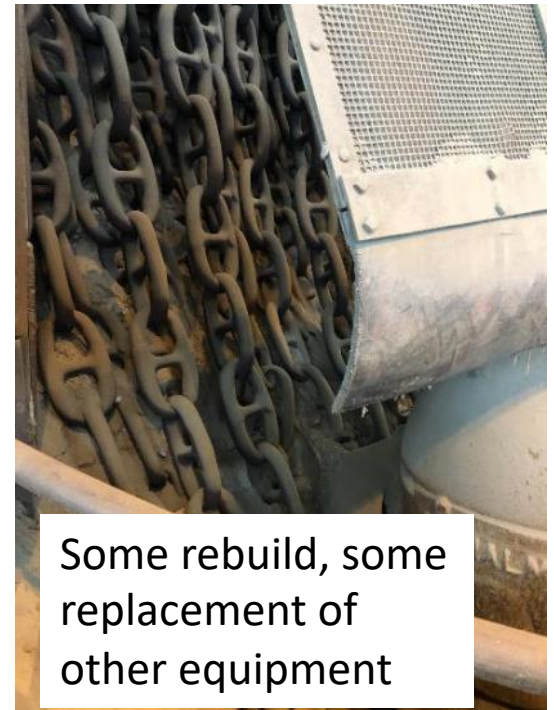


# Headframe Abatement and Reinforcement



Phase 1 complete, allowing access from the surface  
~60% complete overall, will be done except for T1 truss around Thanksgiving

# Crushers



Phase 1 Site investigation complete

Phase 2 (actual work) scheduled to begin in December

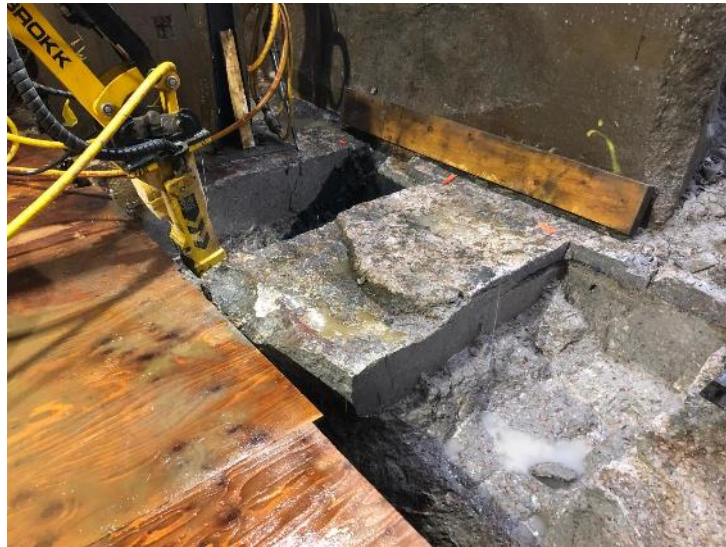
Crusher building roof structural reinforcement work started early Oct with lead paint abatement

# Surface Electrical



Duct Bank installed from substation to near headframe  
Keeping up with other work

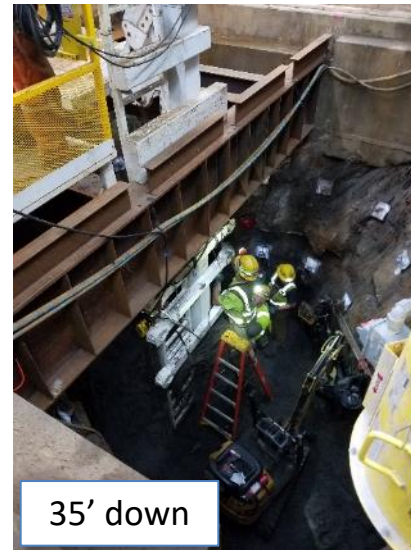
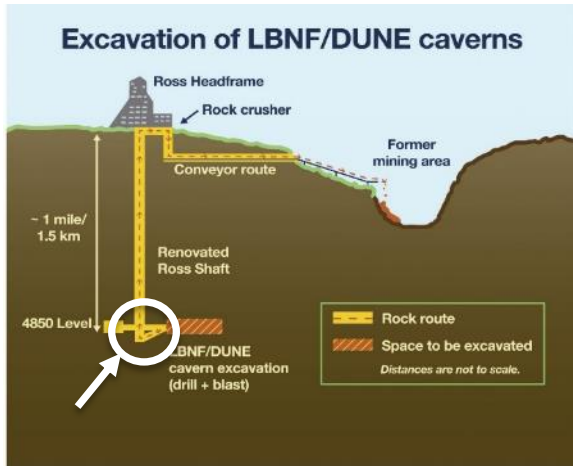
# Ross Shaft



Preparing to install final steel set (Set 305)



# Ore Pass



~53' (of ~120') muck removed below the 4850L in main raise  
~25' below 4850L in #6 winze side  
~70% complete overall

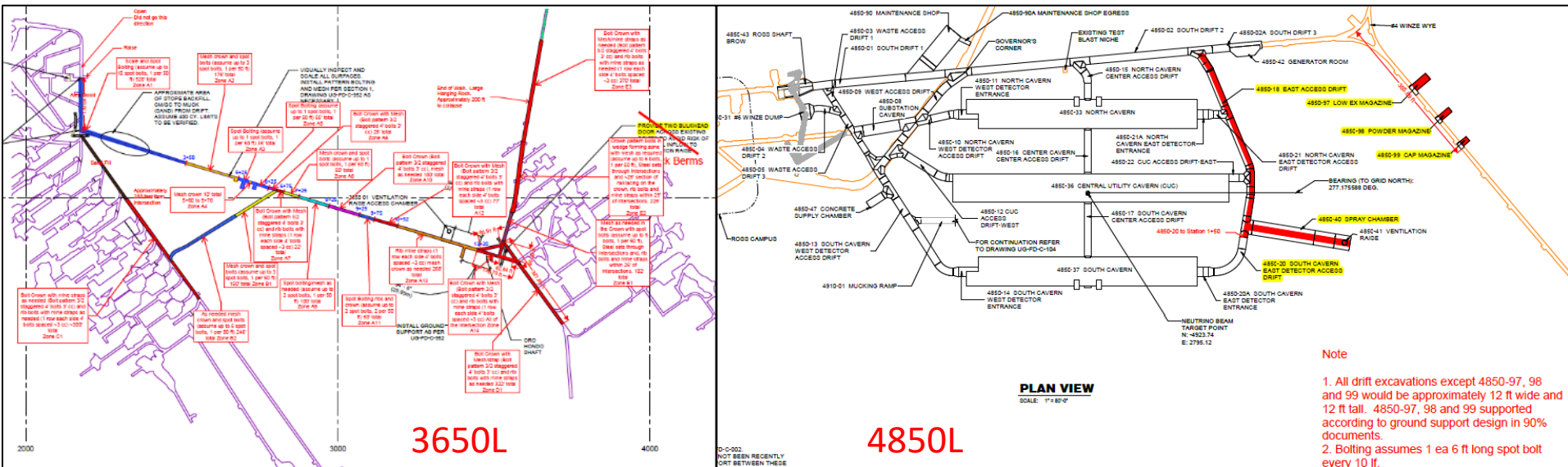
## Upcoming KAJV work (next 3-4 months)

- Skip loader rebuild will follow Set 305 and ore pass work, planned to begin in late November
- Crusher physical demo and rebuild work to begin in December
- Crusher roof starting now
- Conveyor foundation work planned to start in November
- Snow Removal.....

# Value Engineering Recently Negotiated

## Accelerate selected scope EXC (1B) to Pre-excitation (1A)

- Ventilation is driving start of EXC. By performing a subset of work during 1A, there is opportunity to reduce overall schedule several months
- Includes installation of blast doors, preparation of 3650L for raise bore machine, installation of a 350 Hp fan at the 4700L, and excavation of path to bottom of raise bore at 4850L



Note

1. All drift excavations except 4850-97, 98 and 99 would be approximately 12 ft wide and 12 ft tall. 4850-97, 98 and 99 supported according to ground support design in 90% documents.
2. Bolting assumes 1 ea 6 ft long spot bolt every 10 ft.

## Status of future work

- Pre-solicitation for excavation sub-subcontractor was advertised 8/20. An outreach meeting was held at the Sanford Lab Homestake Visitor Center 9/11
- Official RFP was advertised October 1.
- Pre-bid meeting planning for 11/13
- Proposals due in January
- Plan to award mid-year and mobilize in late 2020.
- Excavation takes a couple of years, so BSI work won't be solicited for a while.

# Questions?

