

Central Middle School

Week of October 4, 2019

Dear Colleagues,

Our project had a major accomplishment about 5 pm today. Last week I talked about the jack and bore operation taking place under US 158 just east of Cotton Gin Road. I thought the hole was down to the depth it needed to be but was very wrong with that assumption.

I was out at the school Thursday for the progress meeting, which we will get to later, and heard the actual bore process would take place today with luck. They had encountered fiber and water lines all the way down to the final bottom of the hole at about eleven feet depth. The soil at that depth is not the hard packed clay found in the first seven or eight feet below the surface. That soil is more like muck. The contractors dug the hole below the depth they needed it and backfilled the bottom with stone to give a solid base for the boring machine.

A track for the boring machine was laid, the machine itself was set on the tracks and the whole system aligned with survey equipment, then a trench box was set around the actual work area to keep from soil shifts injuring workers. While the soil looks stable, that boring machine creates enough torque, bumping and slamming I could feel the machine working on the opposite side of the road which was forty feet from the machine. There was enough torque on the drill to cause the side of the machine to lift up occasionally.

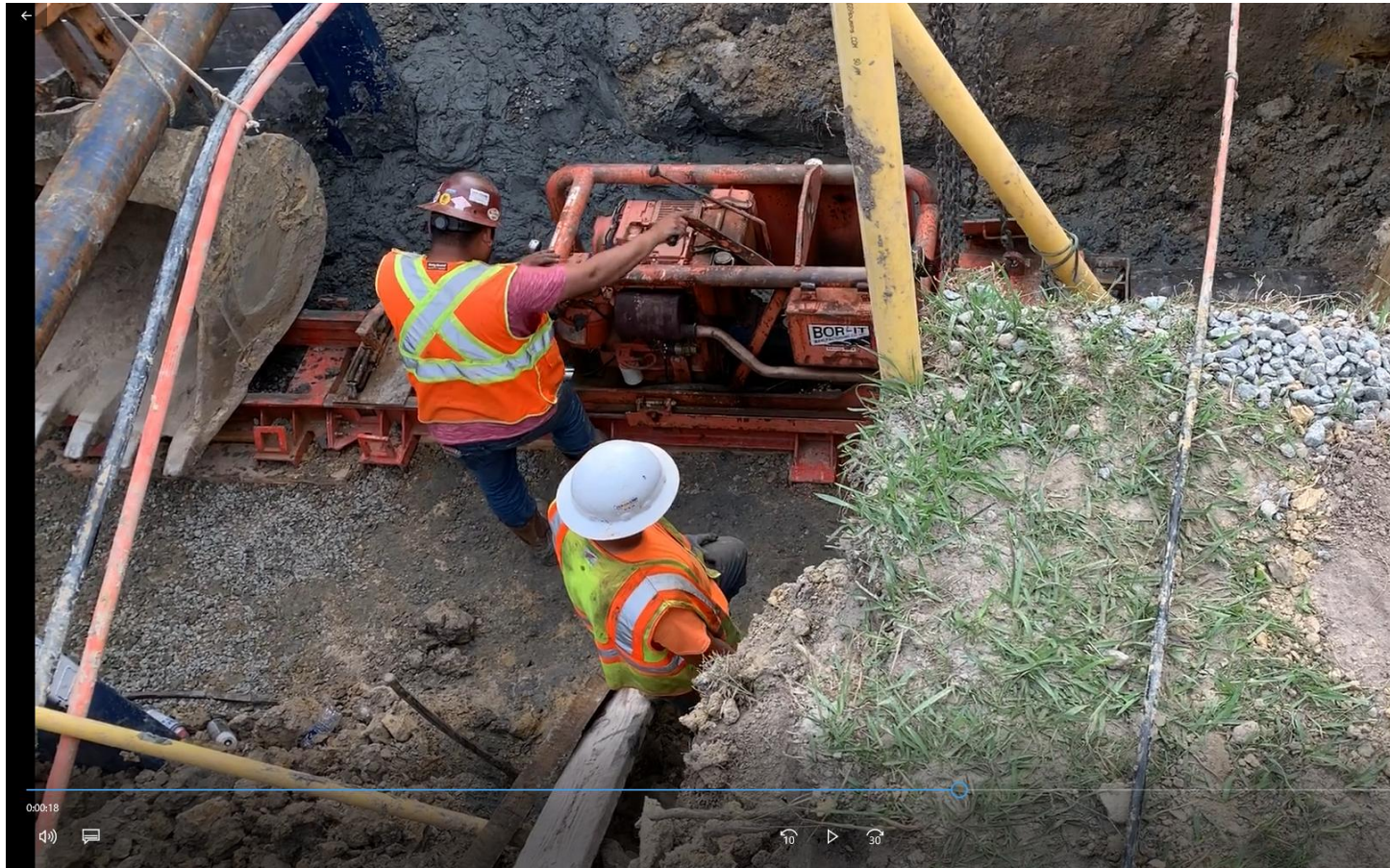
I arrived on the job around 4 pm. The twenty four inch steel casing had been jacked under the road and the drill to cut a hole through the concrete manhole on the north side of the roadway was in the casing and ready to start drilling through the approximately 5 inch thick wall of the concrete manhole. I asked an old man who appeared to have done this many times before how long the operation should take and he indicated thirty minutes.

Standing over the manhole on the north side of the highway, I could hear the drill working on the manhole and could feel the high torque areas with my feet in that same area.



I went from side to side of the road looking and learning. The next photo is looking down at the machine located at the end of the twenty-four inch casing. The drill point is turning at the other side of the road cutting an 8-inch hole through the concrete manhole. Notice to the left side of the picture an excavator bucket is resting on the track for the boring machine. The bucket is on the track to keep the pressure on the drill from simply pushing the track and machine backwards. If you look closely just in front of the operator's right you can see something shining. That shine is the chrome shaft on the hydraulic cylinder pushing the drill. That cylinder shaft looked to be about 4-inch diameter. A little calculating tells me that machine can put roughly 880,000 pounds of pressure on

the drill. No wonder I could feel the drill working on the other side of the road!



Finally, around 5 pm the drill made it through the manhole. The edge of the hole is visible to the right of the plastic pipe in the next picture.



The west entrance is almost complete. The worker on the manlift is installing the ceiling of the canopy.



I was there just in time to take a picture of the last piece going into place.



The front hallway is really standing tall. The window opening at the right of the picture is the concession stand window. The room at the far end of the hall is the computer lab on the northwest corner of the eighth grade wing. All the ceiling grid is installed in the administrative area as well as the light fixtures and duct vents.



All the major sheetrock is up in the gym. The box around the columns will probably continue up the wall to the bottom of the main girder. The spanner beam running horizontally across the wall will be covered with sheetrock as well as the columns up to the intersection with the girder. The holes in the end wall are openings for makeup air for the HVAC units to be located in front of those openings.



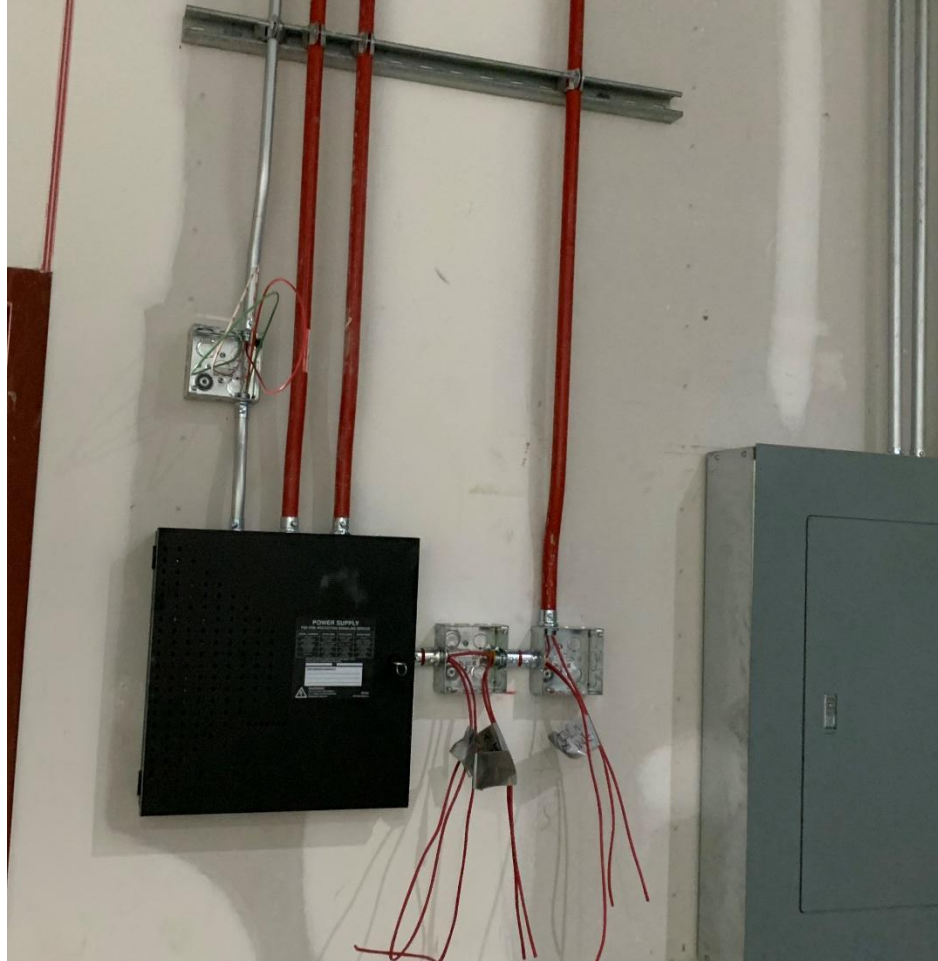
The east wall has a spanner beam similar to the north and south walls. Conduit is routed around the gym side of the beam. Randy Baker has suggested that contractors box the beam and conduit with sheetrock and we figure a way to keep the bracing from becoming a climbing attraction.



Progress is being made in the classrooms on the west hallway. This classroom is typical of the rest with lights and HVAC grills installed and connected to the duct.



I took a quick look in the electrical room and discovered the fire alarm system. The red conduit and red wiring designate fire system. The fire alarm lets the occupants know a fire is happening and it triggers the closing of dampers on the HVAC duct across the halls to help contain the fire. I am sure other functions happen at the same time but I have not investigated to be sure what those other functions are.



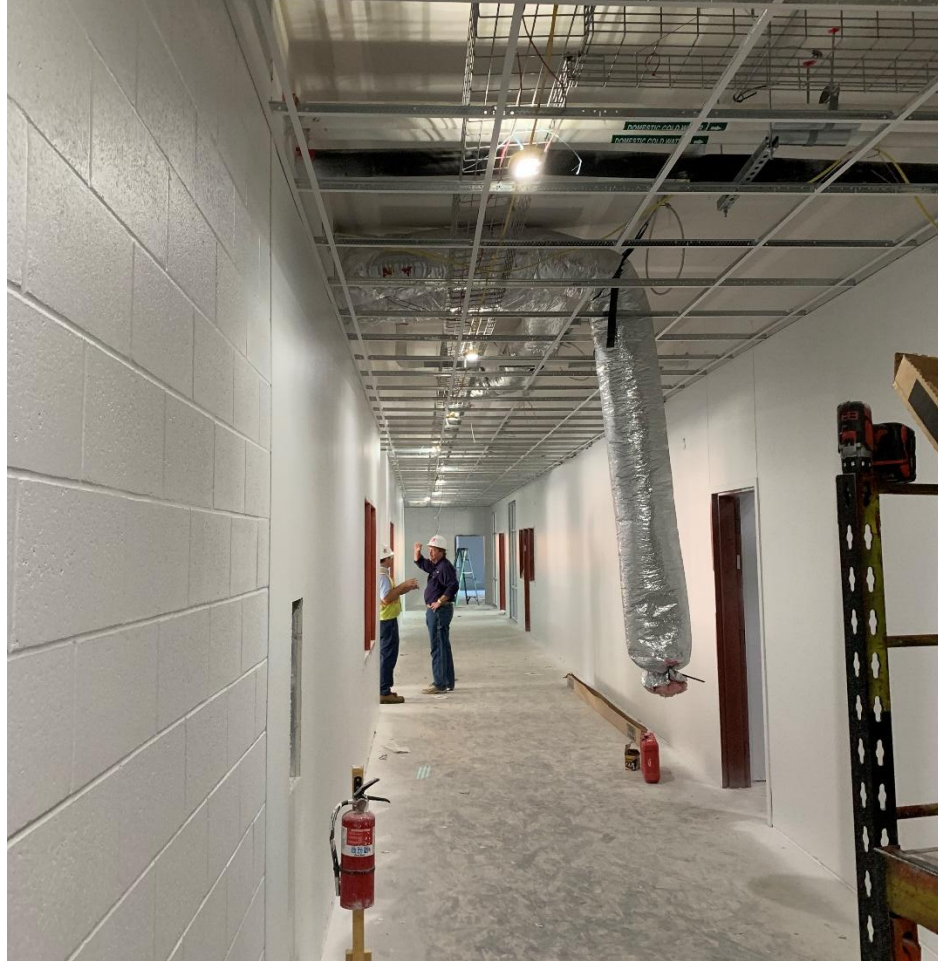
A worker is putting his touch on one of the windows in the computer lab at the northwest corner of the eighth grade wing. Notice the lights and duct grills are in place.



The media center continues to take shape with the ceiling grid we saw being installed last week now complete and lights and duct vents in place. The opening on the left is a window for the media coordinator's office. It is located higher than we might normally expect because there is a cross brace in the wall that determined the location and height of the bottom of the window.



Here Randy Baker, the architect, in dark blue is discussing an aspect of the project with Daniel Plyler, the A R Chesson project manager. Daniel's brother Brian is the Superintendent on this job and both brothers have done an exemplary job. The relationship with Randy Baker is improved from where it was at the start. We had quite a few change orders at the start of the job because Daniel did quite a bit of value engineering driving the cost down and giving us some wiggle room in the contingency fund with his cost savings. After we explained to Randy we do not see those change orders as a negative reflection on the job he did, I think he has been much more comfortable working with us.



Here workers are sanding the walls between coats of paint in the area between the art room and the band room. I continue to be very impressed with the workmanship of all the crafts.



This is the south wall in one of the classrooms. The classrooms have a finish one grade below the halls. That wall looks perfect to me and will look even better when we get the windows in, blinds up and the things teachers tend to put on walls.



The east hallway looking north looks very nice. As you can see, progress is evident throughout the school including the outside.



I will have a complete report on finances for the school board before our meeting on Monday. At this point, we have roughly \$100,000.00 left in contingency even with us allowing for the purchase of \$102,000.00 of Smart Boards not ordered yet. I am starting to breathe a little easier on having enough money to get this project completed but fully understand it is never too late for something we didn't plan on to come up and take that money in the blink of an eye. We will remain vigilant to the end.

I will close with the big news as far as I am concerned. We HOPE to have permanent power to the school in the next two weeks. This will allow the operation of the HVAC systems and get the air dried out and stable for the ceiling tiles and floor tile installation. We are making very good progress.

Thank you each for your continued interest, support and patience.

Ray