

DISTRICT 4 DESIGN

NEWSLETTER

December 2015

The Power Of A Site Visit By: District Utility Staff

It is true. Seeing is believing and it also helps you gain insights to your next successful project. I first want to thank our Broward Operation's construction folks for taking time out of their busy schedules so our designers and project managers can get a hands on horizontal directional drilling (HDD) lesson. While visiting the Ravenswood Bridge Project and experiencing the HDD first hand I was shocked to see the actual drilling rods were the same size regardless of the finished product. Yes...it is true. If you have a 30 inch pipe or just a 12 inch pipe being placed by the HDD method...the drilling rods are the same size.

The actual part that does the drilling is called the drilling head or better known as the reamer head. The reamer head is the part that will be changed in order to make the bore diameter larger. Please let me explain how it happens. The initial drilling operation is performed by a smaller reamer head. Once the initial bore has been completed and it comes out the other side an amazing thing happens. They replace the original reamer head with a larger one and then pull it back thru the original bore path. This process is called "back reaming".

The surprise for me was the fact that they attached the drilling pipe to that side, too. I asked the contractor why and he explained you never want to leave a bore path empty...very bad and costly mistake if something falls within the bore path. This back and forth process continues until the bore diameter is sufficient for the finished product. The contractor will pull the finished product once the bore diameter has been reached.

Okay...now the big lesson. If you have 500 feet of directional bore...then you will need 500 feet of the finished product for the final 'pull'. So this means the roadway and all intersections within that distance will have this long pipe just sitting there until it gets 'pulled' thru the finished bore. The maintenance of traffic sometimes misses this point. Yes it is a temporary situation, however it is a very important point for the overall success of the project. Always be aware of the need for a staging area that will be required to successfully complete the directional bore operations.

A bentonite slurry is always present, too. This slurry is pumped thru the drilling rods and into the reamer. It is used to help reduce the friction and build the internal walls of the bore path for stabilizing the overall bore hole. Please keep in mind...it is not a product you leave behind. It is very slippery and can create a bad situation if not properly managed. The HDD contractor actually has a special machine that filters out the sand and rocks in order to reuse this slippery bentonite slurry. So one field visit and the mysteries of HDD is exposed...I can't wait for the next field trip. We have many pictures and videos for those that want to see more...you can view them by following this link:

Horizontal Directional Drilling site pictures for 430192-1

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New/Relocated Employee Introductions



Jim Hughes - CM Section 4 Section Leader

I am very pleased to announce that Jim Hughes has been selected to lead Section Four in the District Four Consultant Management Office. Jim is a graduate of FIU and is a registered Professional Engineer. He has been with the Department for 19 years in varying capacities in the Design Office. He has designed or managed many projects of all kinds for the Department but lately has been instrumental in the next phases of 95 Express in Broward County. I look forward to continuing to work directly with Jim in producing successful projects and leading his highly successful group of Project Managers. Please join me in congratulating Jim in his new role in Consultant Management.



Jay Seeley - Survey Crew Chief

Surveying & Mapping is pleased to announce and welcome Jay Seeley as the new Survey Crew Chief. Jay started with FDOT in 1994 working in the office with the Surveying & Mapping unit. After a few years in the office, Jay decided he was better suited for the field and has worked on one of the in-house survey crews for the past 17 years. Jay's acquired FDOT knowledge and experience will aid him in his new role and responsibilities. Jay enjoys traveling, rooting for the Vikings, and going to the dog park with his new puppy, Matthew. Please join me in congratulating Jay!





Ron Kareiva - CM Section 5

I am pleased to announce the appointment of Mr. Ronald Kareiva as a new member of the Consultant Management team! Ron has a Bachelor's Degree in Civil Engineering from the University of North Florida, and moved to South Florida about 5 years ago to work for FDOT. He worked in In-House Design Section 3 under James Ford for about 3 years, and spent just over the last 2 years in various positions within the Concept Development Unit in the Planning Office. Outside of work, Ron enjoys spending time with family and friends, hiking, bicycling, cooking, watching sports (huge Cubs and Bears fan, being from Chicago), listening to music, and playing guitar (a true beginner). Ron will work in Section 5 Consultant Management in Ron Wallace's Section so try not to get confused with which Ron you are trying to contact. Please help me welcome Ron as a new Project Manager in design!

For the Value Engineering Newsletter please click on the following link: VE Newsletter V.2

Upcoming Events

 CM Business Plan Retreat - March 10th

Acknowledgement

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