In The Matter Of:

Department of Transportation Contract No.T 201307301

> Pre-Bid Meeting April 24, 2019

Wilcox & Fetzer, Ltd.
1330 King Street
Wilmington, DE 19801

email: depos@wilfet.com, web: www.wilfet.com phone: 302-655-0477, fax: 302-655-0497



Original File DelDOT Pre-Bid Meeting 04-24-2019.txt

Min-U-Script® with Word Index

| DELAWARE DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS |
|---|
| In re: |
| PRE-BID MEETING FOR CONTRACT) NO. T 201307301) |
| Department of Transportation Division of Highways Highway Administration Building Bidders' Room 800 Bay Road Dover, Delaware 19901 |
| Tuesday, April 24, 2019 10:00 a.m. |
| BEFORE: |
| JAMES H. HOAGLAND, Contract Services Administrator |
| JONATHAN KARAM, Project Engineer |
| NICHOLAS DEAN, Project Manager |
| JASON HASTINGS, Bridge Design Engineer |
| Pre-Bid Meeting |
| |
| WILCOX & FETZER 1330 King Street - Wilmington Delaware 19801 (302) 655-0477 |



www.wilfet.com

| 1 | MR. HOAGLAND: Good morning, |
|----|---|
| 2 | everyone. Today is the mandatory pre-bid |
| 3 | meeting for Contract T 201307301, which is |
| 4 | bridge 3-507 on U.S. 113 over Iron Branch. |
| 5 | This meeting has been requested |
| 6 | by the project engineers in attendance. For |
| 7 | the companies to bid is mandatory. I have a |
| 8 | sign-in sheet I'm going to pass around. |
| 9 | Make sure your company name is listed on |
| 10 | here along with the other information |
| 11 | requested. And there are a couple of normal |
| 12 | things to make sure to include on your bid, |
| 13 | which I'll go over at the end of their |
| 14 | presentation. |
| 15 | So for now, I'll turn it over to |
| 16 | Jason or Jon. |
| 17 | Also, if you have a question, |
| 18 | please identify the name and the company |
| 19 | you're with before each question or |
| 20 | statement, and only one person speak at a |
| 21 | time so we can have this transcribed |
| 22 | properly. The transcript will be posted on |
| 23 | the web probably in about a week or so. |
| 24 | With that, I'll turn it back to |



1 Jon. Like I said, my name 2 MR. KARAM: is Jonathan Karam, project engineer for the 3 4 project. Nicholas Dean is the project 5 manager, and Jason is also here, Jason 6 Hastings. 7 So I'll just start going through what we have so you know where this is at, 8 We're going to go over a few 9 US 113. 10 things, considerations for the project, 11 existing site conditions. There's a closure 12 pour connection, some staging areas there, and incentives, disincentives, and lastly, 13 the timeline. 14 15 So some things to consider. 16 This is from the proposal. In order to 17 minimize the disruption and cost to the 18 traveling public, the contractor shall give his or her full attention to this project. 19 I know that seems redundant. For this 20 21 project, we only have a nine-day closure, so we need your full attention. If it means 22 23 working weekends, nights, however it needs 24 to be done to get it done in nine days; at

1 least for the closure portion. Another thing is the weather. 2 We've kind of built into the contract to 3 4 allow you a little bit of leeway as to when So review the weather whether 5 to start. forecast, see if you can get a clear nine 6 7 days or clear week that's good to work in. 8 That way you don't have too many weather 9 issues. Because once that closure starts, 10 that's it. 11 Another thing to mention, the 12 detour must be paved prior to implementation of detour plan. So we are doing a milling 13 14 overlay of the detour portion of it; that is 15 detailed in the project documents as per 16 phase 1 of the detour paving notice. 17 So on to the existing site conditions. 18 There is R-7 rip rap in the entire channel and R-5 on the slopes. 19 it's a 2-foot-6 depth and will need to be 20 21 removed in order to place the proposed frame and footers of the frame. 22 We've allowed you

kind of up to you. I mean, we're paying as

guys to stockpile it and reuse it.

23

24

1 if you were to bring it back in as new, but you can stockpile, clean, and reuse what's 2 on site, because I know R-7 is a lot to deal 3 4 with. Going on to the existing abutments and wing walls. You'll see in the 6 7 next couple of slides of when this stuff was installed, the first piece with the concrete 8 and case beams was installed in 1913, and 9 10 it's really old concrete. We're not really 11 sure exactly what's all out there. And the location and size of those can vary. 12 And also with the removal of 13 14 existing wing walls, there's also a couple 15 more slides on that, that will be 16 highlighted in there. But they were 17 supposed to be removed per this contract that was done in 1965 when they dualized 18 113, but we're not sure if they just removed 19 it to, you know, the limits of excavation, 20 21 or if they went out further. There's also existing drainage 22 23 pipes, 15, 42, and a 48 inch that are 24 located pretty much right under the median,

1 very close to the closure, only about three 2 feet away. So they may need to be braced or, you know, supported in some way. 3 4 can't be disturbed, and they will need to be blocked off with sand bags to keep the work 5 6 area dry. We are going to allow you to 7 place sand bags inside the pipes and just let the water build up. There are two sumps 8 that are provided to keep the work area dry, 9 10 as well. And also for the existing site 11 conditions, there's an ITMS line that's in 12 the median right above the structure. are allowed to suspend that line if needed 13 14 during construction. 15 So here are some of the R-7 rip 16 rap shown on the existing abutments and 17 footers. So you can see there's 2-foot-6 18 depth that will have to be ended up pushed You don't have to remove all of it, 19 over. but just enough to get the footers in. 20 21 And here is a rip rap legend that we put together. So this shows the 22 23 limits of the R-7 that we want to remove. 24 It's pretty much only what is needed to

1 remove and replace the wing walls. whatever you have to do to get the new wing 2 walls in there, that's all you really want 3 4 to disturb. R-7 is a lot to move around, so we'd rather just focus on what's needed. 5 So there is a note that kind of 6 7 details what, you know, what the limits are as defined, so it will be five feet upstream 8 of the proposed frame and five feet 9 10 downstream of the closure pour; ten feet 11 from the limits of the existing or proposed wing walls, whichever is greater; and then 12 13 five feet from both sides of the proposed 14 footers, and that's also shown shaded on 15 sheet 10. So this is kind of what we have 16 17 It's a hodgepodge of everything there now. 18 they kind of put together. And as you can see, 1915, they put in these concrete 19 encased beams on an unknown pre-1915 20 21 foundation. So that will have to come out. Like I said, there's contingencies built in 22 23 for the size of that. And then they also came in and put in concrete frame in 1946 to 24

expand it, and then 1965, they came in and put the rest of the concrete frame in. That portion of the 1965 frame will stay. So that will remain. As you can see, limits of the removal and replacement are only the 1946 and 1915 structures.

And as you can see here, these are the wing walls that were supposed to be removed per the 1965 contract, but like I said, it may have, you know, there may be some portions in there, so just something to consider.

So here are the pipes that I was talking about. The 48-inch is right here and the 42-inch is right here, and there's roughly three feet in between the side of this pipe and, you know, the limit of that closure pour. So that's going to be a really tight area. You may have to brace the pipe. Whatever you do, you can't just disturb this pipe. It runs all the way down 113, I'm not sure how long, but it does carry a lot of water, pretty much everything on 113 comes to this. So like I said,

1 you'll put sand bags in there to block it off, but you can't disturb it. 2 And here is the ITMS line. So 3 4 it cannot be disturbed, as well, but we're 5 going to allow you to suspend it during construction. Here we have this note that 6 7 the ITMS line located in the median may be suspended during construction. 8 The contractor shall contact DelDOT and consult 9 10 with their engineer prior to suspending the 11 Any damage to the ITMS line will be 12 repaired or replaced by the contractor at their expense to the satisfaction of the 13 So if it does get damaged, you 14 engineer. 15 will be responsible. 16 Now on to the closure pour. So 17 it's a 2-foot-6 closure pour, and it's going 18 to be high early strength concrete. it to cure faster, because once you take off 19 the structure and put in a new one, you have 20 21 to get that done pretty quick in order to 22 open the roadway again. 23 Another thing to mention is 24 before you field drill into the existing



structure to dowel into it, we want you to 1 locate all the existing reinforcement with a 2 pachometer or similar device prior to 3 4 drilling so there is no interference with the existing bars in that structure. 5 Here's another view of the 6 7 This is the existing frame closure pour. section, so this one you'll end up having to 8 9 dowel in to get. We've provided the 10 locations of where the rebar is supposed to 11 be, but like I said, you still have to 12 locate it to verify. Here's another view. 13 This is 14 the proposed precast section, and this will 15 have threaded inserts on the side. 16 you'll dowel into one side and have threaded inserts in the other. 17 And another view, just the side 18 and the top view. You only need to do the 19 stem of the closure pour. Outside of that 20 21 can just be number 57 stone, so just for the bottom of the footer. You don't have to 22 23 cast up anything, you know, odd shaped in 24 that area, it will just be stone and the

| 1 | stem. |
|----|--|
| 2 | You also have a possible staging |
| 3 | area. So there is this parking lot. You |
| 4 | might be able to use it for parking or |
| 5 | staging if you get the shopping center on |
| 6 | board with that; that will be something that |
| 7 | you guys can discuss. We do have a good |
| 8 | amount of right-of-way out here, so up |
| 9 | until, you know, these parking spots, we do |
| 10 | own all of this area, and you will be |
| 11 | allowed to use that area. And you will |
| 12 | have, you know, a full closure of the |
| L3 | roadway for the nine-day period. So between |
| 14 | the roadway and this, that might be enough, |
| 15 | but if you need more space, it will be up to |
| 16 | you to work that out with the shopping |
| 17 | center. But that is, you know, very close |
| 18 | by. |
| 19 | MR. HASTINGS: Jon, just to go |
| 20 | back to that. In that DelDOT right-of-way |
| 21 | there, there are overhead utilities there, |
| 22 | so you'll have to be aware of those in that |
| 23 | area. |
| 24 | MR. KARAM: Yeah, there's |



overhead utilities and there's also right here a ditch which we are going to end up piping, so if you guys decide to pipe that first, you'll have a little bit more room in there to work in.

Now on to the incentives and disincentives. So we've included incentives and disincentives on this project to make sure it gets done. The closure only lasts nine days, because 113 is a very busy road, close to 40,000 cars a day, 50,000 cars a day, it's a lot.

So as detailed in the plans, all phase 3 work on bridge 3-507, which is the closure portion, must be completed in nine calendar days, which includes an allotment for two weather days. The contractor will be paid at the rate of \$12,000 per day as incentives for each full calendar work the phase 3 work is complete prior to the ninth calendar day. The maximum incentive payment will be for no more than five full calendar days to early completion of the work. No payment shall be made for partial calendar

days.

Should you fail to complete the phase 3 work and reopen the roadway within the nine days, a road user delay cost of \$12,000 per day starting on the 10th calendar day and until the work is complete through the 14th calendar day. And should you fail to complete it by the 14th calendar day, liquidated damages will be assessed, as well.

So as soon as the road starts -- as soon as the road is closed, incentives and disincentives start. So if you close the road at 8:00 p.m., one calendar day will be considered 8:00 p.m. the following day.

So here's a timeline of phases that need to be completed. So you do have 40 days for the entire project, but only nine days for the road closure. So try to get as much work as you can done before you begin the closure. Stream diversion and all that stuff will be done. MOT plan and repair the detour will be done in phase 1, then installation of stream diversion, phase

1 2, then like we said, phase 3 will be the And then finally, phase 4, 2 closure portion. you'll have a little bit of time to remove 3 4 your stream diversion and complete any 5 grading or paving once the road is open. 6 Does anyone have any questions? 7 No response. 8 MR. HOAGLAND: Any questions you have after this meeting certainly send in to 9 10 DOT-ask@delaware.gov or state.de.us, which 11 is our location for all questions and 12 And be aware that you get your answers. questions in at least six days prior to the 13 bid date to make sure you give us time to 14 15 get a response out to you. We'll try after 16 that, but, you know, it's kind of pushing it 17 if you wait too long. Normal things to include with 18 your bid are the affidavit for employee drug 19 testing, which is a normal accompaniment for 20 21 all bids; the certification page, make sure that's filled out properly; the DBE, this is 22 23 DBE goal on this, so make sure that's filled 24 out on your certification page. Make sure

1 the dates for any addendums are filled out, the date for final questions and answers is 2 to be filled out. 3 These are all on the 4 certification page. Of course the bond. And at the time the bids are opened, the 5 6 apparent low bidder has five days from that 7 time to get their DBE contract information in to us. All of this is detailed in the 8 9 proposal itself. 10 As I say, this transcript will 11 be online probably within a week or so. 12 Anything else, gentlemen, to mention for 13 this? 14 MR. HASTINGS: The only thing, 15 obviously the closure is really important. 16 We have some pretty tight windows in there. 17 We recognize that we're relying on weather 18 to some degree, so we'll work with you on the start date on that. Obviously, we're 19 not going to require you to start on a day 20 21 when the next five days are all rain. So we're going to have some flexibility. 22 23 And going into this, we're just 24 going to be working together. I just want



| 1 | to make sure we put that out there, because |
|----|--|
| 2 | that information obviously can scare some |
| 3 | folks away, and that's not our intent. We |
| 4 | have some rigid rules, but we're going to do |
| 5 | everything in our power to work with the |
| 6 | winning contractor to make sure that this is |
| 7 | successful, because we know the impact it's |
| 8 | going to have on the Town of Millsboro. |
| 9 | MR. HOAGLAND: Okay, again, |
| 10 | reminder, make sure your name and company is |
| 11 | on that sign-in sheet, and this meeting is |
| 12 | adjourned. Thank you. |
| 13 | (Meeting adjourned at 10:22 |
| 14 | a.m.) |
| 15 | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |
| 23 | |
| 24 | |

| 1 | CERTIFICATE OF REPORTER |
|----|--|
| 2 | |
| 3 | I, Jennifer M. Guy, RPR, do hereby |
| 4 | certify that the foregoing record, pages 1 |
| 5 | to 17 inclusive, is a true and accurate |
| 6 | transcript of my stenographic notes taken on |
| 7 | April 24, 2019, in the above-captioned |
| 8 | matter. |
| 9 | |
| 10 | General M. Sh |
| 11 | Jennifer M. Guy, RPR |
| 12 | Germine Fr. Guy, Krik |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |
| 23 | |
| 24 | |



| | 4:2,11 9:23 10:6,13, | begin (1) | |
|-------------------------|----------------------|-----------------|-----------------------|
| \$ | 18 | 13:21 | C |
| | answers (2) | between (2) | |
| \$12,000 (2) | 14:12 15:2 | 8:16 11:13 | calendar (9) |
| 12:18 13:5 | anyone (1) | bid (4) | 12:16,19,21,22,24 |
| ${f A}$ | 14:6 | 2:7,12 14:14,19 | 13:6,7,8,14 |
| 11 | anything (2) | bidder (1) | came (2) |
| able (1) | 10:23 15:12 | 15:6 | 7:24 8:1 |
| 11:4 | apparent (1) | bids (2) | cannot (1) |
| above (1) | 15:6 | 14:21 15:5 | 9:4 |
| 6:12 | area (8) | bit (3) | carry (1) |
| abutments (2) | 6:6,9 8:19 10:24 | 4:4 12:4 14:3 | 8:23 |
| 5:6 6:16 | 11:3,10,11,23 | block (1) | cars (2) |
| | areas (1) | 9:1 | 12:11,11 |
| accompaniment (1) 14:20 | 3:12 | blocked (1) | case (1) |
| | around (2) | 6:5 | 5:9 |
| addendums (1) | 2:8 7:4 | board (1) | cast (1) |
| 15:1 | assessed (1) | 11:6 | 10:23 |
| adjourned (2) | 13:9 | bond (1) | center (2) |
| 16:12,13 | attendance (1) | 15:4 | 11:5,17 |
| affidavit (1) | 2:6 | both (1) | certainly (1) |
| 14:19 | attention (2) | 7:13 | 14:9 |
| after (2) | 3:19,22 | bottom (1) | certification (3) |
| 14:9,15 | aware (2) | 10:22 | 14:21,24 15:4 |
| again (2) | 11:22 14:12 | brace (1) | channel (1) |
| 9:22 16:9 | away (2) | 8:19 | 4:19 |
| allotment (1) | 6:2 16:3 | braced (1) | clean (1) |
| 12:16 | 0.2 10.5 | 6:2 | 5:2 |
| allow (3) | В | | clear (2) |
| 4:4 6:6 9:5 | | 2:4 | 4:6,7 |
| allowed (3) | back (3) | | close (4) |
| 4:22 6:13 11:11 | 2:24 5:1 11:20 | bridge (2) | 6:1 11:17 12:11 |
| along (1) | bags (3) | 2:4 12:14 | 13:13 |
| 2:10 | 6:5,7 9:1 | bring (1) | closed (1) |
| Also (10) | bars (1) | 5:1 | 13:12 |
| 2:17 3:5 5:13,14,22 | 10:5 | build (1) | closure (18) |
| 6:10 7:14,23 11:2 12:1 | beams (2) | 6:8 | 3:11,21 4:1,9 6:1 |
| amount (1) | 5:9 7:20 | built (2) | 7:10 8:18 9:16,17 |
| 11:8 | before (3) | 4:3 7:22 | 10:7,20 11:12 12:9,15 |
| Another (6) | 2:19 9:24 13:20 | busy (1) | 13:19,21 14:2 15:15 |
| | 2.17 7.21 13.20 | 12:10 | 10.17,51 1 1.2 10.10 |

| | | | _ · · · · · · · · · · · · · · · · · · · |
|---------------------|------------------------|-------------------------|---|
| come (1) | 16:6 | 15:18 | downstream (1) |
| 7:21 | cost (2) | delay (1) | 7:10 |
| comes (1) | 3:17 13:4 | 13:4 | drainage (1) |
| 8:24 | couple (3) | DelDOT (2) | 5:22 |
| companies (1) | 2:11 5:7,14 | 9:9 11:20 | drill (1) |
| 2:7 | course (1) | depth (2) | 9:24 |
| company (3) | 15:4 | 4:20 6:18 | drilling (1) |
| 2:9,18 16:10 | cure (1) | detailed (3) | 10:4 |
| complete (5) | 9:19 | 4:15 12:13 15:8 | drug (1) |
| 12:20 13:2,6,8 14:4 | _ | details (1) | 14:19 |
| completed (2) | D | 7:7 | dry (2) |
| 12:15 13:17 | | detour (5) | 6:6,9 |
| completion (1) | damage (1) | 4:12,13,14,16 13:23 | dualized (1) |
| 12:23 | 9:11 | device (1) | 5:18 |
| concrete (6) | damaged (1) | 10:3 | during (3) |
| 5:8,10 7:19,24 8:2 | 9:14 | discuss (1) | 6:14 9:5,8 |
| 9:18 | damages (1) | 11:7 | |
| conditions (3) | 13:9 | disincentives (4) | E |
| 3:11 4:18 6:11 | date (3) | 3:13 12:7,8 13:13 | |
| connection (1) | 14:14 15:2,19 | disruption (1) | each (2) |
| 3:12 | dates (1) | 3:17 | 2:19 12:19 |
| consider (2) | 15:1 | disturb (3) | early (2) |
| 3:15 8:12 | day (11) | 7:4 8:21 9:2 | 9:18 12:23 |
| considerations (1) | 12:11,12,18,21 | disturbed (2) | else (1) |
| 3:10 | 13:5,6,7,9,14,15 15:20 | 6:4 9:4 | 15:12 |
| considered (1) | days (13) | ditch (1) | employee (1) |
| 13:15 | 3:24 4:7 12:10,16, | 12:2 | 14:19 |
| construction (3) | 17,23 13:1,4,18,19 | diversion (3) | encased (1) |
| 6:14 9:6,8 | 14:13 15:6,21 | 13:21,24 14:4 | 7:20 |
| consult (1) | DBE (3) | documents (1) | end (3) |
| 9:9 | 14:22,23 15:7 | 4:15 | 2:13 10:8 12:2 |
| contact (1) | deal (1) | done (8) | ended (1) |
| 9:9 | 5:3 | 3:24,24 5:18 9:21 | 6:18 |
| contingencies (1) | Dean (1) | 12:9 13:20,22,23 | engineer (3) |
| 7:22 | 3:4 | DOT-ask@delawaregov (1) | 3:3 9:10,14 |
| Contract (5) | decide (1) | 14:10 | engineers (1) |
| 2:3 4:3 5:17 8:9 | 12:3 | dowel (3) | 2:6 |
| 15:7 | defined (1) | 10:1,9,16 | enough (2) |
| contractor (5) | 7:8 | down (1) | 6:20 11:14 |
| 3:18 9:9,12 12:17 | degree (1) | 8:21 | entire (2) |
| 2.10 7.7,12 12.11 | | 5.22 | |

| Contract No.1 201507501 | | | April 24, 201 |
|-------------------------|-----------------------|--------------------|------------------|
| 4:19 13:18 | 21 | Good (3) | 13:12 |
| everyone (1) | flexibility (1) | 2:1 4:7 11:7 | inch (1) |
| 2:2 | 15:22 | grading (1) | 5:23 |
| everything (3) | focus (1) | 14:5 | include (2) |
| 7:17 8:23 16:5 | 7:5 | greater (1) | 2:12 14:18 |
| exactly (1) | folks (1) | 7:12 | included (1) |
| 5:11 | 16:3 | guys (3) | 12:7 |
| excavation (1) | following (1) | 4:23 11:7 12:3 | includes (1) |
| 5:20 | 13:15 | | 12:16 |
| existing (12) | footer (1) | Н | information (3) |
| 3:11 4:17 5:5,14,22 | 10:22 | | 2:10 15:7 16:2 |
| 6:10,16 7:11 9:24 | footers (4) | Hastings (3) | inserts (2) |
| 10:2,5,7 | 4:22 6:17,20 7:14 | 3:6 11:19 15:14 | 10:15,17 |
| expand (1) | forecast (1) | Here's (3) | inside (1) |
| 8:1 | 4:6 | 10:6,13 13:16 | 6:7 |
| expense (1) | foundation (1) | high (1) | installation (1) |
| 9:13 | 7:21 | 9:18 | 13:24 |
| | frame (7) | highlighted (1) | installed (2) |
| ${f F}$ | 4:21,22 7:9,24 8:2, | 5:16 | 5:8,9 |
| | 3 10:7 | HOAGLAND (3) | intent (1) |
| fail (2) | full (5) | 2:1 14:8 16:9 | 16:3 |
| 13:2,8 | 3:19,22 11:12 | hodgepodge (1) | interference (1) |
| faster (1) | 12:19,22 | 7:17 | 10:4 |
| 9:19 | further (1) | however (1) | Iron (1) |
| feet (6) | 5:21 | 3:23 | 2:4 |
| 6:2 7:8,9,10,13 8:16 | | | issues (1) |
| few (1) | G | I | 4:9 |
| 3:9 | | | ITMS (4) |
| field (1) | gentlemen (1) | identify (1) | 6:11 9:3,7,11 |
| 9:24 | 15:12 | 2:18 | itself (1) |
| filled (4) | gets (1) | impact (1) | 15:9 |
| 14:22,23 15:1,3 | 12:9 | 16:7 | 10.5 |
| final (1) | give (2) | implementation (1) | J |
| 15:2 | 3:18 14:14 | 4:12 | |
| finally (1) | goal (1) | important (1) | Jason (3) |
| 14:2 | 14:23 | 15:15 | 2:16 3:5,5 |
| first (2) | going (15) | incentive (1) | Jon (3) |
| 5:8 12:4 | 2:8 3:7,9 5:5 6:6 | 12:21 | 2:16 3:1 11:19 |
| five (6) | 8:18 9:5,17 12:2 | incentives (5) | Jonathan (1) |
| 7:8,9,13 12:22 15:6, | 15:20,22,23,24 16:4,8 | 3:13 12:6,7,19 | 3:3 |

| | 5:12 14:11 | milling (1) | 3:24 4:6 12:10,15 |
|----------------------|---------------------------------|--------------------|----------------------|
| K | locations (1) | 4:13 | 13:4,19 |
| | 10:10 | Millsboro (1) | nine-day (2) |
| KARAM (3) | long (2) | 16:8 | 3:21 11:13 |
| 3:2,3 11:24 | 8:22 14:17 | minimize (1) | ninth (1) |
| keep (2) | lot (5) | 3:17 | 12:20 |
| 6:5,9 | 5:3 7:4 8:23 11:3 | more (4) | normal (3) |
| kind (6) | 12:12 | 5:15 11:15 12:4,22 | 2:11 14:18,20 |
| 4:3,24 7:6,16,18 | low (1) | morning (1) | note (2) |
| 14:16 | 15:6 | 2:1 | 7:6 9:6 |
| | 13.0 | MOT (1) | notice (1) |
| L | M | 13:22 | 4:16 |
| <u>-</u> | | move (1) | 4:10 number (1) |
| lastly (1) | made (1) | 7:4 | 10:21 |
| 3:13 | 12:24 | | 10:21 |
| lasts (1) | Make (10) | much (4) | O |
| 12:9 | 2:9,12 12:8 14:14, | 5:24 6:24 8:23 | |
| least (2) | 21,23,24 16:1,6,10 | 13:20 | obviously (3) |
| 4:1 14:13 | manager (1) | must (2) | 15:15,19 16:2 |
| leeway (1) | 3:5 | 4:12 12:15 | odd (1) |
| 4:4 | mandatory (2) | N | 10:23 |
| legend (1) | 2:2,7 | | off (3) |
| 6:21 | many (1) | name (4) | 6:5 9:2,19 |
| limit (1) | 4:8 | 2:9,18 3:2 16:10 | old (1) |
| 8:17 | maximum (1) | need (7) | 5:10 |
| limits (5) | 12:21 | 3:22 4:20 6:2,4 | once (3) |
| 5:20 6:23 7:7,11 8:4 | may (5) | 10:19 11:15 13:17 | 4:9 9:19 14:5 |
| line (6) | 6:2 8:10,10,19 9:7 | needed (3) | one (5) |
| 6:11,13 9:3,7,11,11 | mean (1) | 6:13,24 7:5 | 2:20 9:20 10:8,16 |
| liquidated (1) | 4:24 | needs (1) | 13:14 |
| 13:9 | means (1) | 3:23 | online (1) |
| listed (1) | 3:22 | new (3) | 15:11 |
| 2:9 | median (3) | 5:1 7:2 9:20 | only (9) |
| little (3) | 5:24 6:12 9:7 | next (2) | 2:20 3:21 6:1,24 |
| 4:4 12:4 14:3 | meeting (5) | 5:7 15:21 | 8:5 10:19 12:9 13:18 |
| locate (2) | 2:3,5 14:9 16:11,13 | Nicholas (1) | 15:14 |
| 10:2,12 | 2.5,5 14:9 10:11,15 mention (3) | 3:4 | |
| located (2) | , , | | open (2) |
| 5:24 9:7 | 4:11 9:23 15:12 | nights (1) | 9:22 14:5 |
| location (2) | might (2) | 3:23 | opened (1) |
| • | 11:4,14 | nine (6) | 15:5 |

| 1 (2) | 10.01.04 | (7) | 6 22 7 10 10 21 2 2 |
|-----------------------|---------------------|----------------------|----------------------|
| order (3) | 12:21,24 | pour (7) | 6:22 7:18,19,24 8:2 |
| 3:16 4:21 9:21 | per (5) | 3:12 7:10 8:18 9:16, | 9:1,20 16:1 |
| other (2) | 4:15 5:17 8:9 12:18 | 17 10:7,20 | Q |
| 2:10 10:17 | 13:5 | power (1) | |
| out (11) | period (1) | 16:5 | question (2) |
| 5:11,21 7:21 11:8, | 11:13 | pre-1915 (1) | 2:17,19 |
| 16 14:15,22,24 15:1,3 | person (1) | 7:20 | questions (5) |
| 16:1 | 2:20 | pre-bid (1) | 14:6,8,11,13 15:2 |
| Outside (1) | phase (8) | 2:2 | quick (1) |
| 10:20 | 4:16 12:14,20 13:3, | precast (1) | 9:21 |
| over (5) | 23,24 14:1,2 | 10:14 | 9.21 |
| 2:4,13,15 3:9 6:19 | phases (1) | presentation (1) | R |
| overhead (2) | 13:16 | 2:14 | |
| 11:21 12:1 | piece (1) | pretty (5) | R-5 (1) |
| overlay (1) | 5:8 | 5:24 6:24 8:23 9:21 | 4:19 |
| 4:14 | pipe (4) | 15:16 | R-7 (5) |
| own (1) | 8:17,20,21 12:3 | prior (5) | 4:18 5:3 6:15,23 7:4 |
| 11:10 | pipes (3) | 4:12 9:10 10:3 | rain (1) |
| | 5:23 6:7 8:13 | 12:20 14:13 | 15:21 |
| P | piping (1) | probably (2) | rap (3) |
| | 12:3 | 2:23 15:11 | 4:18 6:16,21 |
| pachometer (1) | place (2) | project (10) | rate (1) |
| 10:3 | 4:21 6:7 | 2:6 3:3,4,4,10,19, | 12:18 |
| page (3) | plan (2) | 21 4:15 12:8 13:18 | rather (1) |
| 14:21,24 15:4 | 4:13 13:22 | properly (2) | 7:5 |
| paid (1) | plans (1) | 2:22 14:22 | |
| 12:18 | 12:13 | proposal (2) | really (5) |
| parking (3) | please (1) | 3:16 15:9 | 5:10,10 7:3 8:19 |
| 11:3,4,9 | 2:18 | proposed (5) | 15:15 |
| partial (1) | pm (2) | 4:21 7:9,11,13 | rebar (1) |
| 12:24 | 13:14,15 | 10:14 | 10:10 |
| pass (1) | portion (5) | provided (2) | recognize (1) |
| 2:8 | 4:1,14 8:3 12:15 | 6:9 10:9 | 15:17 |
| paved (1) | 14:2 | public (1) | redundant (1) |
| 4:12 | | _ , , | 3:20 |
| paving (2) | portions (1) | 3:18 | reinforcement (1) |
| 4:16 14:5 | 8:11 | pushed (1) | 10:2 |
| paying (1) | possible (1) | 6:18 | relying (1) |
| 4:24 | 11:2 | pushing (1) | 15:17 |
| payment (2) | posted (1) | 14:16 | remain (1) |
| pajment (2) | 2:22 | put (8) | |

| Contract No.1 201307301 | | | April 24, 2017 |
|-------------------------|--------------------|--------------------|----------------------|
| 8:4 | rigid (1) | 10:23 | 3:7 4:5 13:13 15:19, |
| reminder (1) | 16:4 | sheet (3) | 20 |
| 16:10 | rip (3) | 2:8 7:15 16:11 | starting (1) |
| removal (2) | 4:18 6:15,21 | shopping (2) | 13:5 |
| 5:13 8:5 | road (7) | 11:5,16 | starts (2) |
| remove (4) | 12:10 13:4,11,12, | shown (2) | 4:9 13:11 |
| 6:19,23 7:1 14:3 | 14,19 14:5 | 6:16 7:14 | statedeus (1) |
| removed (4) | roadway (4) | shows (1) | 14:10 |
| 4:21 5:17,19 8:9 | 9:22 11:13,14 13:3 | 6:22 | statement (1) |
| reopen (1) | room (1) | side (4) | 2:20 |
| 13:3 | 12:4 | 8:16 10:15,16,18 | stay (1) |
| repair (1) | roughly (1) | sides (1) | 8:3 |
| 13:23 | 8:16 | 7:13 | stem (2) |
| repaired (1) | rules (1) | sign-in (2) | 10:20 11:1 |
| 9:12 | 16:4 | 2:8 16:11 | still (1) |
| replace (1) | runs (1) | similar (1) | 10:11 |
| 7:1 | 8:21 | 10:3 | stockpile (2) |
| replaced (1) | | site (4) | 4:23 5:2 |
| 9:12 | S | 3:11 4:17 5:3 6:10 | stone (2) |
| replacement (1) | | six (1) | 10:21,24 |
| 8:5 | said (6) | 14:13 | Stream (3) |
| requested (2) | 3:2 7:22 8:10,24 | size (2) | 13:21,24 14:4 |
| 2:5,11 | 10:11 14:1 | 5:12 7:23 | strength (1) |
| require (1) | sand (3) | slides (2) | 9:18 |
| 15:20 | 6:5,7 9:1 | 5:7,15 | structure (4) |
| response (2) | satisfaction (1) | slopes (1) | 6:12 9:20 10:1,5 |
| 14:7,15 | 9:13 | 4:19 | structures (1) |
| responsible (1) | scare (1) | something (2) | 8:6 |
| 9:15 | 16:2 | 8:11 11:6 | stuff (2) |
| rest (1) | section (2) | soon (2) | 5:7 13:22 |
| 8:2 | 10:8,14 | 13:11,12 | successful (1) |
| reuse (2) | seems (1) | space (1) | 16:7 |
| 4:23 5:2 | 3:20 | 11:15 | sumps (1) |
| review (1) | send (1) | speak (1) | 6:8 |
| 4:5 | 14:9 | 2:20 | supported (1) |
| right (5) | shaded (1) | spots (1) | 6:3 |
| 5:24 6:12 8:14,15 | 7:14 | 11:9 | supposed (3) |
| 12:1 | shall (3) | staging (3) | 5:17 8:8 10:10 |
| right-of-way (2) | 3:18 9:9 12:24 | 3:12 11:2,5 | sure (13) |
| 11:8,20 | shaped (1) | start (5) | 2:9,12 5:11,19 8:22 |
| 11.0,20 | | Start (S) | 2.7,12 3.11,19 0.22 |

| 12:9 14:14,21,23,24 | 2:2 | | within (2) |
|---------------------------|---------------------|---------------------|------------------------|
| 16:1,6,10 | together (3) | V | 13:3 15:11 |
| suspend (2) | 6:22 7:18 15:24 | | work (14) |
| 6:13 9:5 | top (1) | vary (1) | 4:7 6:5,9 11:16 |
| suspended (1) | 10:19 | 5:12 | 12:5,14,19,20,23 13:3, |
| 9:8 | Town (1) | verify (1) | 6,20 15:18 16:5 |
| suspending (1) | 16:8 | 10:12 | working (2) |
| 9:10 | transcribed (1) | view (4) | 3:23 15:24 |
| | 2:21 | 10:6,13,18,19 | |
| T | transcript (2) | **/ | 1 |
| | 2:22 15:10 | W | |
| calking (1) | traveling (1) | 4. (4) | 1 (2) |
| 8:14 | 3:18 | wait (1) | 4:16 13:23 |
| ten (1) | try (2) | 14:17 | 10 (1) |
| 7:10 | 13:19 14:15 | walls (6) | 7:15 |
| testing (1) | turn (2) | 5:6,14 7:1,3,12 8:8 | 10:22 (1) |
| 14:20 | 2:15,24 | water (2) | 16:13 |
| their (4) | two (2) | 6:8 8:23 | 10th (1) |
| 2:13 9:10,13 15:7 | | way (3) | 13:5 |
| there (20) | 6:8 12:17 | 4:8 6:3 8:21 | 113 (6) |
| 2:11 3:12 4:18 5:11, | U | weather (5) | 2:4 3:9 5:19 8:22, |
| 16 6:8 7:3,6,17 8:10, | | 4:2,5,8 12:17 15:17 | 24 12:10 |
| 11 9:1 10:4 11:3,21, | under (1) | web (1) | 14th (2) |
| 21,21 12:5 15:16 16:1 | 5:24 | 2:23 | 13:7,8 |
| they (11) | unknown (1) | week (3) | 15 (1) |
| 5:16,18,19,21 6:2,3, | 7:20 | 2:23 4:7 15:11 | 5:23 |
| 4 7:18,19,23 8:1 | until (2) | weekends (1) | 1913 (1) |
| ching (4) | 11:9 13:6 | 3:23 | 5:9 |
| 4:2,11 9:23 15:14 | up (8) | whatever (2) | 1915 (2) |
| chings (4) | 4:24 6:8,18 10:8,23 | 7:2 8:20 | 7:19 8:6 |
| 2:12 3:10,15 14:18 | 11:8,15 12:2 | what's (3) | 1946 (2) |
| chreaded (2) | upstream (1) | 5:2,11 7:5 | 7:24 8:6 |
| 10:15,16 | 7:8 | whichever (1) | 1965 (4) |
| three (2) | use (2) | 7:12 | 5:18 8:1,3,9 |
| 6:1 8:16 | 11:4,11 | windows (1) | 3.10 0.1,3,7 |
| ight (2) | user (1) | 15:16 | 2 |
| 8:19 15:16 | 13:4 | wing (6) | |
| | | 5:6,14 7:1,2,12 8:8 | 2 (1) |
| imeline (2) 3:14 13:16 | utilities (2) | winning (1) | 14:1 |
| | 11:21 12:1 | = ' | 1 |

| Contract No.1 201307301 | T |
|-------------------------|---|
| 2:3 | |
| 2-foot-6 (3) | |
| 4:20 6:17 9:17 | |
| | |
| 3 | |
| | |
| 3 (4) | |
| 12:14,20 13:3 14:1 | |
| 3-507 (2) | |
| 2:4 12:14 | |
| | |
| 4 | |
| | |
| 4 (1) | |
| 14:2 | |
| 40 (1) | |
| 13:18 | |
| 40,000 (1) | |
| 12:11 | |
| 42 (1) | |
| | |
| 5:23 | |
| 42-inch (1) | |
| 8:15 | |
| 48 (1) | |
| 5:23 | |
| 48-inch (1) | |
| 8:14 | |
| 5 | |
| 3 | |
| 50,000 (1) | |
| 50,000 (1) | |
| 12:11 | |
| 57 (1) | |
| 10:21 | |
| 8 | |
| O | |
| 0.00.(2) | |
| 8:00 (2) | |
| 13:14,15 | |
| | |
| | |
| | |