STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

September 29, 2017 - 9:07 a.m.    DAY 42
49 Donovan Street          MORNING Session ONLY
Concord, New Hampshire

{Electronically filed with SEC on 10-16-17}

IN RE:           SEC DOCKET NO. 2015-06
Joint Application of Northern
Pass Transmission, LLC, and
Public Service Company of
New Hampshire d/b/a Eversource
Energy for a Certificate
of Site and Facility.
(Hearing on the merits)

PRESENT FOR SUBCOMMITTEE/SITE EVALUATION COMMITTEE:
Chrmn. Martin P. Honigberg  Public Utilities Comm.
(Presiding as Presiding Officer)
Dir. Craig Wright, Designee  Dept. of Environ. Serv.
Christopher Way, Designee  Dept. of Resources &
Economic Development
William Oldenburg, Designee  Dept. of Transportation
Patricia Weathersby  Public Member
Rachel Dandeneau  Public Member

ALSO PRESENT FOR THE SEC:
Michael J. Iacopino, Esq., Counsel to the SEC
(Brennan, Caron, Lenehan & Iacopino)
Pamela G. Monroe, SEC Administrator
(No Appearances Taken)

COURT REPORTER:  Susan J. Robidas, NH LCR No. 44
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NORTHERN PASS CONSTRUCTION WITNESS PANEL:

Samuel Johnson
Kenneth Bowes
Nathan Scott
Lynn (Farrington) Frazier
John Kayser

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PROCEEDINGS

CHAIRMAN HONIGBERG: All right. Good morning, everyone. Welcome to Day 42. Welcome back to the Applicant's construction panel. You all are still under oath, so we won't go through that again.

Mr. Needleman, I understand you have a brief direct examination of the panel to get this cued up?

MR. NEEDLEMAN: I do. Thank you. I'll try to move through these topics as quickly as we can.

DIRECT EXAMINATION

BY MR. NEEDLEMAN:

Q. You all completed testimony on June 2nd, 2017, and you've been recalled pursuant to the Chair's September 19, 2017 order. The Committee wants you to focus on an assessment of whether sufficient information has been provided regarding the exception requests to DOT, with a particular focus on, quote, "progress of DOT's review process." In addition, you're being asked to focus on, quote, "new evidence related to potential
inaccuracies in the underground construction plans."

Mr. Johnson and Mr. Bowes, you both have primary responsibilities with respect to these issues. Are you prepared to speak to those topics?

A. (Bowes) Yes, I am.

A. (Johnson) Yes, I am.

Q. And have you both reviewed the Chair's September 19th order?

A. (Bowes) Yes, I have.

Q. Starting with Mr. Johnson, can you describe what role you have played in dealing with those issues since you last testified?

A. (Johnson) Sure. So my responsibility in regards to the DOT, really all aspects of the DOT, is I am managing the process of the design, the exception requests, and the survey that accompanies the design on behalf of the owner.

Q. And Mr. Bowes, same question to you.

A. (Bowes) I have an executive-level role to meet with the DOT. And we've had one such meeting since I last testified; it was to
introduce our construction contractor and
review the means and methods with the entire
DOT team, including the commissioner, and
establish a relationship and contact
information with the commissioner if any
issues are escalated to our level.

Q. I want to start with the, quote, "new
evidence related to potential inaccuracies in
the underground construction plans." What is
your understanding of the specific topics
that need to be addressed here to address the
Committee's concerns?

A. (Johnson) So there are two sort of focuses,
if you will, first being the background
survey itself. So that would be the
right-of-way boundaries and how those
boundaries were established. In the letter
that we received from the DOT, they discussed
the use of the word "approximate," and they
were looking for more foundational evidence
to move off of the approximate right-of-way
boundary lines.

The second focus is really the physical
types of survey. So there were some
instances where, for instance, a drainage feature was labeled as a corrugated metal pipe, and when we went out in the field, it was actually a concrete box culvert. There are certain instances where there were utilities that were given to us by third parties. We incorporated them into the drawings, but it turns out in the field that those utilities were on the other side of the street. So the as-builts weren't provided to us, or the incorrect information was put in.

There were other instances where monuments or other street signs or things of relative significance were missed in the survey which was not picked up because the surveyors didn't think that would have an impact on the actual design of the underground alignment. So we have -- okay.

Q. I want to bring up Applicant's Exhibit 220 is which is the DOT August 11, 2017 letter. Is this the letter, Mr. Johnson, where DOT identified some of those concerns?

A. (Johnson) Yes, it is.

Q. And this pertained to the survey report, but
it didn't pertain to some of those other issues; is that correct?

A. (Johnson) That is correct.

Q. And since the time that this letter was issued, have you had any conversations with DOT about it?

A. (Johnson) We have. We've had several conversations with the DOT about it. Effectively, we've worked with the Right-of-Way Bureau to establish a protocol that we would go out into the field that would, in their estimation and the group's estimation together, would meet Condition No. 4 of the original conditions that the DOT put forth.

We had a meeting specifically on September 5th with our surveyors meeting with the right-of-way bureau where they put this all forth. On our regular monthly meeting on September 19th, we presented this formally to the larger group, and we talked through the approval process. They accepted this verbally but are going to present it to their front office, I believe on Monday of next
Q. So what is the approach going forward now to deal with the issues that DOT has raised?
A. (Johnson) So, again, we're going to go back to the two tracks, if you will. The first track is the boundary right-of-way. So what we've done is gone back and re-looked at the archives and historical things to make sure we've got all of the appropriate documentation. We have worked with the DOT to get the commissioner's return of layouts which prescribe, you know, metes and bounds of a lot of the roads that we're on. And then thirdly, we've identified areas where there are just -- there isn't enough information either by the commissioner's return or historic layouts, where we're going to have to establish the right-of-way through prescriptive rights.

Q. Is it your --
A. (Johnson) Sorry. The second track of that is, again, on the physical side. We've sent out another set of crews that are looking to validate the utilities, edge of pavement,
street signs and all the other things picked up originally, as well as anything that they believe would be missing, so that they can add, if you will, or enhance the physical part of the survey.

Q. Is it your understanding, based on your interactions with DOT, that the path forward that you just described is an acceptable approach to them?

A. (Johnson) It is.

Q. And what’s the timetable for achieving that?

A. (Johnson) So the field crews are going to be out across the entire 16-1/2 miles over the next four to six weeks. After that, they will be creating the next revision of the survey report, which will include not only the maps, but a narrative accompanying it, basically tying in all the references that they’ve used in creating the right-of-way, or establishing what the Project believes to be the right-of-way. And that will all be available probably in the six- to eight-week time frame.

Q. Does this effort relate at all to the DOT
exception process?

A. (Johnson) Yes, it does. The two are intertwined. Basically for the exception process to really begin, you have to have established the boundaries of the right-of-way. And so what we'll do is take the information from that survey report, superimpose them onto the exception requests and then submit that to the DOT.

Q. The other topic that you were asked to address here is the, quote, "progress of DOT's review," close quote. And I wanted to -- my understanding is there are two components to that: One is the exception request process, and the other is the status of the underground design in relation to that process. So I want to start with the exception request process.

MR. NEEDLEMAN: And if we could put up Applicant's 136, Page 23.

BY MR. NEEDLEMAN:

Q. This is the Utility Accommodation Manual.

And these are the general highway standards.

Are you aware of those?
A. (Johnson) I am.

Q. I want to call your attention to Standard No. 2 and ask you to generally explain that standard to us.

A. (Johnson) So, basically what this says is when a installation is within the right-of-way -- or the DOT's right-of-way in a longitudinal way, it should be as near to the edge of the right-of-way as practicable to provide a safe environment and for traffic operations.

Q. And keep that one in mind for a moment, and I want to call up Pages 40 and 41. And in particular, I want you to look at Condition 5, Page 41. And if you could briefly explain your understanding of that requirement.

A. (Johnson) So, basically this lays out the exception request process. If you look at the last sentence, that says if you cannot be at the edge of the right-of-way, that the commissioner may grant, on a case-by-case basis, a design that moves you away from the edge of the right-of-way.
Q. And am I correct that both of the requirements we just looked at do contemplate that -- both of the requirements we just looked at, do you contemplate that exceptions can be sought?

A. (Johnson) That is correct, yes.

MR. NEEDLEMAN: And so can we call up Page 11 of the Utility Accommodation Manual?

BY MR. NEEDLEMAN:

Q. And can you just briefly explain what we see here?

A. (Johnson) Sure. So this basically defines what needs to be included in an exception request, sort of the outline. So, you know, it's design data, cost comparisons, traffic control measures, if there's anything that's pertinent, and any other information that may be required by the Department themselves.

Q. So it was pursuant to these sections that we just looked at that the Project filed the exception requests with DOT?

A. (Johnson) That is correct.

Q. And can you generally summarize the
1 substantive reasons why you sought particular
2 exception requests?
3 A. (Johnson) Sure. So, for all of the
4 directional drills, we will be underneath
5 bridge abutments or underneath the roadway as
6 the track of the directional drills goes.
7 Clearly, they'll be 30 to 65 feet below the
8 road, but it still "below the road" by
9 definition. There are places where there are
10 deep utilities, if you will, that are either
11 drainage in nature or some other sort. We've
12 sought to go over the top of those drainage
13 facilities, if there was enough room, of
14 course. There are certain ones where there
15 are steep inclines and declines across the
16 edges of the road or where there's guardrails
17 that prevent us from being at the edge of the
18 right-of-way, so we petitioned to be inside
19 or in the shoulder or on the roadway in
20 certain cases.
21 MR. NEEDLEMAN: I want to call
22 up Applicant's 221.
23 BY MR. NEEDLEMAN:
24 Q. And can you explain to the Committee what
this exhibit is?

A. (Johnson) Sure. So this is a summary by

region, if you will, that describes how many

exception requests we have filed and how many

have been approved. So there are two that

are general in nature, and those would be the

use of FTB, or flowable thermal backfill, and

the use of plating as a construction

technique to safely tie up the construction

zones overnight. Both of those have been

approved.

WBR3 is the region between Woodstock and

Bridgewater along Route 3. We filed 52

exception requests there, and the DOT has

approved 18 of them.

WMNF is the part of the Project that's

within the forest, and that's in Woodstock

and Easton.

The Rock is the part that's in Bethlehem

near the Rocks Estate.

SHEB is Sugar Hill and Easton, and that

includes Sugar Hill, Franconia and Easton.

Then North and Route 3 are the

Pittsburg, Clarksville and Stewartstown
areas.

You can note that the approval process has stopped after the WBR3 at this moment, and that's because we are updating all of the survey drawings, and those will be reissued or reapplied with the DOT.

Q. Has any of this initial round of exception requests been denied by DOT?

A. (Johnson) No, they've not been flat denied. All of the exception requests that have been sent back to us are seeking further information.

Q. And in the cases where they've sent them back to you and sought further information, do you have any sense of how that would work and whether it would lead to changes or improvements in the design?

A. (Johnson) Absolutely. So there are almost more than half of the ones that come back to us are basically the iterative process of design, where the DOT has asked us to move from one side of the road to the other for reasons for their convenience. Or, for instance, one of the examples was we had
designed around a catch basin, and they told us that we have the right to move the catch basin, which would keep us off of the roadway. So it's that type of iterative process that we're working through with the DOT.

Q. Can you provide a brief description of the meetings that you've had with DOT regarding the exception process?

A. (Johnson) Sure. So as the Committee knows, we meet monthly with the DOT, typically the third Tuesday of every month. And that has been ongoing for over a year and a half at this point, and will continue to go. Typically we will talk about the SEC process itself, updating them, and then we'll get into any details that either the Project wants to bring forth to the DOT or the DOT wants to bring forth to the Project, as far as specific exception requests.

Q. Who from DOT typically attends these meetings?

A. (Johnson) So, the Chief of Design Services, Melodie Esterberg, chairs the monthly
meetings; typically, Dave Rodrigue, Director of Operations, is there; Mike Servetas, who's the Assistant Director of Operations; Alan Hanscom, who's the District 3 Maintenance Engineer, and that's the portion from Bridgewater to Woodstock, is there; Philip Beaulieu, who's the District 1 maintenance engineer, and that's from Woodstock all the way north through Coos County; Chuck Schmidt, who's the Bureau of Right-of-Way Administrator, attends when there are items of interest regarding survey; Bob Talon, who is the chief surveyor for the Right-of-Way Bureau, attends when it's appropriate; and then Lennart Suther, who is the utilities engineer, and Matthew Powers, who is the utilities coordinator, both work for Melodie Esterberg. Those are typically the members. Occasionally Bill Cast, who is the Assistant Commissioner, attends. Again, depending on people's schedules, other folks may come in and out.

Q. Are notes kept of those meetings?
A. (Johnson) They are.
Q.  Are those publicly available?
A.  (Johnson) They are. The DOT publishes them typically two weeks after our meetings on their web site.

Q.  What's your understanding of who and how DOT actually makes the determinations about the exception requests?
A.  (Johnson) So the commissioner, as is noted in the Utilities Accommodation Manual, is responsible for ultimately authorizing the exception requests; the ones that have been approved to date have been signed by Melodie.

Q.  I want to move now to the next topic, which is the status of the underground design in relation to the DOT review process. Based on what you know today, is it true that you can provide clarity about actual, specific locations of the underground alignment in certain places?
A.  (Johnson) It is.

Q.  And is it also correct that you can provide clarity about the likely location of the alignment in the remainder of those places?
A.  (Johnson) That is correct.
MR. NEEDLEMAN: So I want to call up Applicant's Exhibit 222.

BY MR. NEEDLEMAN:

Q. And it will probably take a few minutes for folks to digest this, so we're going to leave it up there for a while. But as they do, I want to ask you some questions about it.

First of all, can you describe for the Committee how this exhibit was created?

A. (Johnson) Sure. So, basically we took all of the exception requests that have been created, and that basically equals Columns 1 and 2. So, Column 1 would be any of the exception requests where we're requesting to be in the pavement. Column 2 would be the directional drills where we expect to be under the pavement. And then what we did is we worked with our design engineers, and they've produced a preliminary design basically similar to the one submitted as part of the original application, but more in line with the preferences that DOT has, as far as our discussions over the last year and a half. And so we've been able to ascertain
that approximately 33 miles of the road -- of the alignment will be outside of the roads and have no impact to tree limits, and then 3.7 miles will be outside the road that potentially could have impacts to tree limits in scenic byways, and 0.6 miles that potentially could have impacts on non-scenic byways.

Q. Calling your attention to the second asterisk which relates to that first column, can you explain that in a little bit more detail?

A. (Johnson) Sure. So, of the 7.5 miles that we're noting are in the roadway, approximately 3 miles have been approved by the DOT, and that was the 18 that you saw earlier, the 18 approved. And the remaining 4.5 miles are requests that have been submitted. We are confident that those -- that we can state those will remain within the roadway because the exception request types are similar to ones already approved.

Q. So an important feature of this exhibit is that in the top descriptive column for all five of the columns you use the phrase "tree
line impact." Can you explain when you put this together, what you meant by "tree line impact" and how you determined whether there would be tree line impact?

A. (Johnson) Sure. So the design itself, when it's not in the roadway by definition, is in the shoulder or off of the shoulder, into the ditch line, so away from the pavement itself. So what we did is we factored in a distance off the shoulder that would be an offset where there would be the 3 feet, approximate 3-foot width of the trench itself, and then we put a 5-foot work zone on the far side of the trench. So that in all gave us approximately 10 feet of construction work zone. And then we compared that to the general layout that our design engineers put together and then cross-referenced that against information we had regarding where the tree line is in relation to the alignment.

We also looked at sort of the trees that were -- we then went to Google Earth or field-visited a lot of these places and
looked at places where there were sort of shrubs or low-value trees, if you will, 4 inches in diameter or less, and we used that as sort of a basis of saying we believe that we can cut those down or remove that vegetation without impacting the scenic quality of the roads.

Q. So let me focus your attention on the triple asterisks at the bottom. How did you make a determination about the amount of mileage along this 52-mile section that was in cultural and scenic byway?

A. (Johnson) So the DOT publishes a map that shows all the scenic byways, and we superimposed that onto our routes and noted that 43.8 miles of alignments between Bridgwater and Bethlehem are on designated cultural and scenic byways.

Q. So I want to focus on that for a minute in relation to Column 4 here, which says there's a potential of 3.7 miles of tree impacts in scenic byway. Doing the math, that 3.7 miles in relation to the 43.8 miles of scenic byway is about 8-1/2 percent; is that right?
A. (Johnson) That's correct.

Q. So, conversely, are you saying that you're confident that, with respect to 91-1/2 percent to the scenic byway, you would not have tree impacts?

A. (Johnson) That is correct.

Q. And focusing on those 3.7 miles, what is your level of confidence that you will be able to avoid or minimize impacts to those 3.7 miles?

A. (Johnson) So the DOT does have an exception process specific to scenic byways, and we believe that we can petition the DOT with exception requests similar to the other types of requests we put forward to avoid impacts to these areas as much as possible.

MR. NEEDLEMAN: So I want to go back to Applicant's Exhibit 136 and pull up Page 22 of the Utility Accommodation Manual.

BY MR. NEEDLEMAN:

Q. Was this the section that you were just referring to?

A. (Johnson) It is, yes.

Q. And in the top part, this section focuses in
the second line on scenic byways, but also on
recreation areas, historic sites, public
parks and landscaped areas; is that correct?
A. (Johnson) That is correct.
Q. And have you discussed this part of the
Utility Accommodation Manual with DOT in
relation to the specific concerns that we've
just talked about here?
A. (Johnson) We have.
Q. Can you describe those discussions?
A. (Johnson) Yeah. The DOT recognized that
scenic byways have a particular status, if
you will, and are understanding that because
of that status the impacts to the aesthetic
qualities can be a reason for exception
requests. They did note, also, that they
themselves have to request exception requests
when they're doing their own projects for
certain aspects specific to scenic byways.
Q. Is it your expectation that this section of
the Utility Accommodation Manual would be the
basis to help ensure that the design would
not have adverse impacts on the scenic byway?
A. (Johnson) It is. This is the site we would
Q. So what I want to do now is switch to the
ELMO. And the last piece here that I would
ask you to try to fill in is explaining how
it is that with these various sections where
you don't yet with certainty know the
alignment you still believe that you're
confident that you can avoid these impacts.

A. (Johnson) Sure. Can I come up?

MR. NEEDLEMAN: We're going to

use a chalk, Mr. Chair, to have Mr. Johnson
explain that particular aspect.

Dawn, can you switch over to

ELMO, please?

BY MR. NEEDLEMAN:

Q. I'll give you the microphone and let you

explain this.

A. (Johnson) So what we're trying to represent

with this exhibit here is basically typical
exception requests and how they would be
addressed as we go forward. I'm just going
to draw in some quick features here.

So, "B" is going to stand for bridge,
and that's a bridge crossing over a river.
"C" is going to stand for cliff, or areas where there are sharp embankments that would either be in a valley or be sharp on one side and dropping off the other side. "D" is going to be a hay field or an open area or pasture. "E" is going to be a barn, and we're going to sketch in a little barn that's close to the side of the road. "F" is going to be another hay field or open type of area. "G" is going to be a tree area where there are mature trees that are very close to the edge of the right-of-way. And then "H" would be back to a normal type of thing, similar to "A." So we've drawn these, and it looks like they're very close together. Any one of these sections could be several thousand feet long, depending. So this isn't to scale by any means whatsoever.

So, really what we want to focus on is sort of the areas that potentially present issues as far as the alignment. So, from A, if we're along the edge of the road -- so what I'm going to sketch now is the proposed alignment and how we can be assured, for the
most part, that we aren't going to impact
trees or other features.

So as we get to a bridge, this would be
an HDD. And this would be an exception
request that's already been filed, where we
would basically go, you know, deep down, but
again, underneath the roadway.

When we get to a cliff area, this is
another exception request that we filed and
the DOT has granted in certain areas where
they would allow us to be in the pavement
just because there's no room on either side
of the road.

When we get to a hay field or an open
area, again, the Project will move the
alignment off the roadway. And again, that's
that 10 foot work area I was just discussing.
So that's, again, not to scale.

When we get to a barn, there may be an
opportunity where, again, the DOT's approved
a couple of these already -- where we cross
the road from an alignment perspective to
avoid an obstruction and then cross back at
some certain distance. Again, that could be
several thousands of feet.

When we get again to an open area or a hay field, for example, and we go back off the right-of-way.

And then this is the tree, the mature tree area we just discussed. Where the potential is for adverse impacts on a scenic byway, we would petition the DOT to again go back into the roadway to avoid impacting those trees.

Q. So, before you go back, one question about this. On this exhibit, as things stand today, you can say that with respect to Area B, Area C, Area D and Area F, that you know that those are likely alignments; is that correct.

A. (Johnson) That is correct.

Q. And with respect --

CHAIRMAN HONIGBERG: The answer was "that is correct" for those in the room.

BY MR. NEEDLEMAN:

Q. And then with respect to areas like E and G, you're saying you don't know today that
that's what the alignment is. But based on these features and based on the Utility Accommodation Manual, and your interactions with DOT, you believe that that's going to be the alignment. Can you explain that further?

A. (Johnson) That is correct. Effectively, by doing these exception requests, and based on the ones that have been approved to date, we think we have, with a high probability, an ability to determine where the alignment is going to be.

Q. All right. So, Mr. Johnson, I'm going to ask you to go back up there.

MR. NEEDLEMAN: We will scan and circulate this as soon as we're done.

BY MR. NEEDLEMAN:

Q. So what is your sense then of --

MR. IACOPINO: Mr. Needleman, did you want to give that chalk a number?

MR. NEEDLEMAN: I do. I thought I said it was 223. But if not, that's what it will be.

BY MR. NEEDLEMAN:

Q. So, based on this iterative process that you
just described with DOT, can you give us any
sort of specifics about how this process has
already resulted in what you would consider
to be design improvements?

A. (Johnson) Yes. I guess from the iterative
process with the DOT, when they've asked us
to move things, not only is it for better
operations perspective from DOT, but also in
certain instances it's enabled us to, where
they've approved going over the top of deep
utilities, that's a much faster construction
process. So impacts to the general public
will be less, and we'll be able to get
through work zones or specific work areas
much quicker.

A. (Bowes) So I'd like to add that I think there
was, from our meeting with the commissioner
and staff in June, there were key items that
the DOT is now comfortable with that they had
concerns of prior to that meeting. And I
think there's several of those that have been
part of exception requests and several of
those have been part of how they'll evaluate
exception requests in the future, the first
being use of plating. We got the DOT comfortable with plating, which they typically do not allow, and that's to create a moving work zone 1500 feet in the more rural areas and a compressed work zone for the urban constrained areas of 300 feet. So we proposed to them to have special crews that would work in a very constrained footprint to go through downtown sections of the Project.

The second item was getting them comfortable with why we should be on top of other utilities, not below them. And as Mr. Johnson said, that is good for many reasons. First of all, it will create a faster construction process. Those also tend to be in areas where we may have a higher concentration to business customers. So we'll have less impact in those areas because we're going through the process faster, much less issues with the depth of trench there as well so that shoring will be avoided. So it will be a much faster construction process.

One of the other things we talked about,
actually came from our construction contractor, is why don't you use temporary chimneys on the splice pits. That will avoid, you know, removing the cover of the splice pit once that work has been done. We'll still pave over them for seasonal restrictions, and ultimately they would be removed. But in the interim process, using a chimney that would allow us to do the splicing, as well as the cable pulling, without impacting excavation in a large manner again. Again, this iterative process has provided, you know, some solutions that we weren't thinking of originally.

And the last item Mr. Johnson also touched on was the use of the fluidized thermal backfill. There are some restrictions on that that the DOT imposed. But we really were able to convince them that the thermal characteristics of the cable, as well as the construction speed and protection of the cable, would be enhanced by using that technique.

So those are four key areas; three of
them, in essence, were part of exception requests, or the general ones that Mr. Johnson talked about. But this will really lessen the impact on specific customers along the route because the construction will progress at a much faster rate.

MR. NEEDLEMAN: Dawn, can you bring back up Exhibit 222?

BY MR. NEEDLEMAN:

Q. So I want to focus on the fifth column here for a moment. These are off-pavement impacts to trees that are not in scenic byways. Well, can you speak to this in light of the DOT exception requests process, which I think also covered things like landscaped areas and so forth? What is your anticipation about how you'll deal with this column?

A. (Johnson) So we would work with the DOT in the exact same way we would with the scenic byway type of thing to assess the aesthetic impacts of any trees that we may be potentially impacting and seek an exception request as well for these areas.

Q. So when will the updated design drawings be
A. (Johnson) So as I mentioned earlier, the first step is to get the right-of-way boundary survey complete. The second step would then be to get the exception requests processed and approved by the DOT, and then the design process would begin in earnest. At that point we’re expecting to be providing the DOT with design drawings, most likely in the February time frame of 2018. And those would be issued for construction for their review.

Q. When you were describing the off-pavement construction process a few minutes ago, you were describing a zone 10 feet wide from the edge of pavement out where the trench would be. And you've explained how it is through the exception process that you hope to avoid impacts to trees.

My question is: Are there any construction methods that you think you might be able to employ that could also help to avoid the sorts of impacts that are described in Column 4 and 5?
A. (Johnson) Sure. I'd just like to clarify your question to begin with. The 10 feet is actually from the edge of the shoulder, not the edge of the pavement. So there is an additional piece of room there.

Q. Okay.

A. (Johnson) But yes, there are construction techniques as we go through the process. The typical trench construction will have an excavator straddling the actual trench with its tracks on either side, and that's why you need that extra 5 feet on the far side from a work zone perspective. There are cases where you can have the excavator located on the roadside and be digging sort of crossways where you wouldn't have to have any further impacts beyond, say, a foot more than where the trench is itself. So it's a way to narrow the work zone, if you will, from that 10 feet to somewhere in the 5- to 6-foot range.

Q. Focusing on Column 4 of Exhibit 222, where the total impacts were projected to be as much as 3.7, if you were to employ that
construction method that you just described
in those areas, have you done any
calculations to determine how much it would
reduce those impacts?

A. (Johnson) We have, yes.

Q. Can you describe that?

A. (Johnson) Yeah, we believe that we can get
the impact down to just less than a mile,
about 0.9 miles.

Q. And that's completely independent of the
exception process?

A. (Johnson) That's correct.

Q. Okay. Just a couple more questions.

Speaking generally about the iterative
nature of the design and efforts to
continually improve the design and minimize
impacts, one of the places that has come up
repeatedly during the course of this
proceeding is the Gale River crossing in
Franconia. Do you have any new information
for the Committee about the status of the
design there?

A. (Johnson) Sure. So the status as proposed
was a microtunnel that, if you recall, would
have two 20-foot diameter shafts on either side of the Gale River itself. The Project Team has done some conceptual thinking about this area and has determined that there may be a solution where we can use an HDD technology instead, much less invasive, as far as we don't need the two shafts.

What would happen is they'd drill from the south side towards underneath the river to the north side and actually extend the drill path up towards the on-ramps of I-93 on the far side of the intersection, if you recall. They would then pull back the conduit and casings from that side and then dig down where the north 20-foot diameter shaft would have been, dig down there and intercept the HDD as it comes up and cause it to turn to the left as you go from 116 down Route 18 -- or sorry -- down 18 towards Sugar Hill.

Q. If you could successfully move that design from the conceptual phase to actually being able to do it, how would that reduce impacts from the current proposal?
A. (Johnson) So, both from the amount of physical workspace that's required, as well as the speed at which we could get through the construction of the intersection, both of those would be positively affected.

Q. One final topic. A number of times with respect to the design, the issue has come up of the relationship of the underground drilling to bridge abutments and bridge locations. Have you had conversations with DOT about that issue?

A. (Johnson) We have. And we actually had input from the bridge design department and talked with them. We got all of the bridge abutment plans from them and are now including them in our drawings. Effectively, at a minimum, we must be 10 feet below those. But more importantly, I think that they've made it quite clear that in the future, if there are bridge abutments that need to be replaced with bigger or different types of foundations, then the Project is responsible for moving its facilities out of the way.

Q. If the Project could not move its facilities
out of the way, what would the alternative be?

A. (Johnson) There would have to be some sort of economic impact analysis done, and the Project would have to pay for the differential of a different type of design foundation.

Q. And have you made DOT aware that you would be willing to do that?

A. (Johnson) We have, yes.

Q. And Mr. Bowes, would the Project be willing to have that be a condition of the certificate if the Committee issued a certificate?

A. (Bowes) Yes, that is typically a condition we have for similar projects in other states.

Q. And just one last question, Mr. Johnson. Once a directional drill is complete under a bridge and an as-built plan is available, can you describe your level of confidence with respect to how the as-built plan would represent the location of the directional drill, the precision of the location?
A. (Johnson) Yes. So the drilling technology has advanced quite a bit over the last decade or so. And whether it's through GPS or another type of location, they will be able to tell you within, I think less than a foot, of where the actual directional drill will be.

MR. NEEDLEMAN: Okay. Thank you, Mr. Chair. I'm all set.

CHAIRMAN HONIGBERG: I understand that Mr. Pappas is next.

MR. PAPPAS: Thank you, Mr. Chairman.

CROSS-EXAMINATION

BY MR. PAPPAS:

Q. Good morning, gentlemen. And Mrs. Frazier, congratulations.

A. (Frazier) Thank you.

Q. Welcome back.

You were shown earlier the DOT Utility Accommodation Manual. And I assume all of you are familiar with that. If you're not, please say so. Hearing nothing, I assume you're all familiar with it.
You were shown Pages 40 and 41 regarding underground power lines and longitudinal installation of underground power lines. Would everybody agree with me that the UAM requires underground power lines to be off the road and as close to the edge of the right-of-way as possible? Does anyone on the panel disagree with that statement?

A. (Johnson) As close as practicable, yes.

Q. Okay. So, Mr. Scott, am I correct that you prepared the initial design of the underground sections?

A. (Scott) Yes.

Q. And that would include the .7 miles near the Connecticut River -- under the Connecticut River, the 7-1/2 miles in the far north, and the 52-mile section between Bethlehem and Bridgewater?

A. (Scott) Correct.

Q. Okay. And you were aware, I assume, of the UAM's requirements at the time that you designed the initial underground route; is that correct?

A. (Scott) Yes.
Q. So the Project's initial design of the underground route had the transmission line going down the road, for the most part; isn't that right?

A. (Scott) Yes.

Q. So when you designed it going down the road, for the most part, you knew that that was contrary to the UAM's requirements; correct?

A. (Scott) Correct.

Q. And at the time you initially designed the underground, you didn't know the location of the DOT's right-of-way along the underground section; is that right?

A. (Scott) I believe we knew for some portions, but not all of the --

Q. Would I be correct in saying that for most of the portions you did not know and therefore had to estimate?

A. (Johnson) That's a fair assessment, yes.

Q. All right. For instance, at the time that the initial underground design in the Application was submitted, the Project had not yet done a survey of the DOT's right-of-way; correct?
A. (Johnson) I don't know.

Q. You don't know?

A. (Bowes) I would say that typically the DOT's right-of-way is provided to the Applicant, or to the person that's wanting to locate in the highway. This is an unusual circumstance, I would say, where the Applicant has to actually define where the right-of-way is.

Q. Right. And at the time that the Application was filed in October of 2015, for the most part, the Project didn't know where the DOT right-of-way was; correct? You've had to since go out and try to locate it or find out where it is? Mr. Johnson?

A. (Johnson) We have since chosen to do that, yes.

Q. Right. But at the time you filed the Application, you didn't know where that right-of-way was; correct?

A. (Johnson) For the most part, that's correct, yes.

Q. Now, we all know that the design of the underground route has changed since the Application was submitted, and we heard some
more about that today. And I understand that until all the exceptions are ruled upon, the final design will not be settled until that occurs; correct?

A. (Johnson) That is correct.

Q. Mr. Johnson, this morning we were shown Applicant's Exhibit 221, which indicates that a total of 118 requests for exceptions have been filed with the DOT. Do you remember that exhibit that was put up this morning?

A. (Johnson) I do, yes.

Q. Yeah. Now, if you go on the DOT's web site, you can see the request for exceptions; correct?

A. (Johnson) That is correct.

Q. And if you go on the DOT's web site, it indicates that the Project has submitted more than 118 requests for exceptions; correct?

A. (Johnson) That's correct.

Q. In fact, I think the number goes up to 188; does it not?

A. (Johnson) I don't believe it's that high, but it could be.

Q. Mr. Johnson, what's on the screen now is
Counsel for the Public Exhibit 490. This is the first page of it. Do you recognize that document?

A. (Johnson) I do not recognize it, but I can see what this is.

Q. Okay. What's on the screen now is Counsel for the Public Exhibit 491. And what this shows is the prior document, but it separates the request for admissions into group numbers and then request numbers and then by town. Do you see that?

CHAIRMAN HONIGBERG: Just to be clear, Mr. Pappas, they're requests for exceptions not request for admissions; right?

MR. PAPPAS: Oh, correct. Old habits die hard.

CHAIRMAN HONIGBERG: Yeah, in litigator land.

MR. PAPPAS: This is true.

A. (Johnson) So I'm assuming this is more than one page and goes through the rest of them?

BY MR. PAPPAS:

Q. Yes. And just so that you understand the format and the Committee understands the
format, the Project submitted requests for
exceptions in 11 groupings; correct?

A. (Johnson) That is correct.

Q. And typically, each grouping would include
one town or perhaps a couple of small towns;
correct.

A. (Johnson) Correct. It was based on a region
or area, if you will.

Q. Okay. And, for instance, they are -- there
were 12 exception requests in the town of
Plymouth. Do you see that?

A. (Johnson) I do.

Q. Actually, there were 13 because there were
two number 11s; correct?

A. (Johnson) Correct.

Q. And then if you look at Campton, there were
29 exception requests. Do you see that?

A. (Johnson) 41 minus 13.

Q. And then moving on to Thornton, which is
Group 3, there were 29 exception requests in
Thornton; correct?

A. (Johnson) You have 28 written there.

Q. I'm sorry, 28. Thank you.

And then Woodstock was split into two
different group requests. Do you recall that?

A. (Johnson) I do.

Q. And this document speaks for itself, so we don't need to go through this whole thing. But if you go through this whole document and add them up -- in fact, if you go to the DOT web site and look at the last exception request, there are about 188 or 190 of them; is that right?

A. (Johnson) It's possible, yes.

Q. It's in fact the case, isn't it?

A. (Johnson) I haven't looked at the web site recently, so I can't tell you.

Q. Well, it's certainly many more than 118; isn't that right?

A. (Johnson) Correct. The Project has withdrawn approximately 60–something of those requests because of the evolution of working with the DOT, and some of the requests that we had prior are no longer valid or no longer need to be requested because we've resolved whatever that issue was.

Q. When were those requests withdrawn?
A. (Johnson) Throughout the process with the DOT.

Q. Can you give me maybe a start date and end date?

A. (Johnson) Several months ago. So if you noted when we put up our number of 118, the DOT has only looked at Woodstock down to Bridgewater. And effectively, we've suspended, if you will, the rest of the exception requests pending updating the survey drawings and any other lessons learned, if you will, from the exception requests that have been dealt with already. So the plan -- the Project will resubmit all of the remaining exception requests.

Q. And those remaining will be the remaining out of the 118?

A. (Johnson) That is correct.

Q. Do you have a list of the requests that have been withdrawn?

A. (Johnson) I do not have one here, but I'm certainly able to provide one for you.

Q. I'd request that you do so because it's not on the DOT web site, and we don't have one.
CHAIRMAN HONIGBERG: Mr. Needleman.

MR. NEEDLEMAN: We can do that.

MR. PAPPAS: Thank you.

BY MR. PAPPAS:

Q. Mr. Johnson or Mr. Bowes, do you anticipate filing any additional requests for exceptions?

A. (Johnson) Potentially, as we discussed earlier. We have not yet filed any exception requests in relation to scenic byways and potential impacts to trees. So, depending on where we end up as far as our design is concerned relating to that 3.7 miles that we discussed earlier, there could be exception requests filed for those.

A. (Bowes) I would also anticipate there may be a small number of additional requests based upon updated survey information.

A. (Johnson) Good point.

Q. Gentlemen and Mrs. Frazier, what's in front of you now is Applicant's Exhibit 183, which contains a number of the DOT's responses to
various requests for exceptions. And if you look at the first page, it indicates that Exception Request No. 1, Revision 2, was approved with conditions. Do you see that?

A. (Johnson) I do.

Q. And that would mean that the original exception request was rejected. Revision 1 to Request No. 1 was rejected, and eventually Revision 2 was accepted; correct?

A. (Johnson) It appears that way, yes.

Q. And so we see on this page two requests have been approved with conditions, and nine requests have been rejected and need to be resubmitted to address comments; is that correct?

A. (Johnson) That's correct.

Q. And this May 31 letter was the first response from DOT -- let me ask it another way. Was this May 31, 2017 letter the first response from DOT to exception requests?

A. (Johnson) The first formal response, yes. As you can see with the ones that have second revisions, there was some dialogue back and forth as to the merit of that particular
Q. Okay. So, on the screen now is DOT's July 7, 2017 listing of their decisions on several requests for exceptions. Do you see that?
A. (Johnson) I do.
Q. And there are a number of, or a few of them that were approved. Seven were approved, and the others were rejected; correct?
A. (Johnson) That's correct.
Q. There are a number of these letters that DOT issued that indicates whether an exception request was approved or rejected; correct?
A. (Johnson) That is correct.
Q. And would you agree with me that if I go through all the letters, it will show that 20 of them were approved, which is consistent with the Applicant's exhibit we saw a moment ago? Correct?
A. (Johnson) That is correct.
Q. It'll also show that 40 of the requests were rejected; isn't that right?
A. (Johnson) That's correct.
Q. So, to date, the DOT has reviewed and made a decision on 60 requests, 20 of which have
been approved, usually with conditions, and
40 of which have been rejected at this point;
correct?

A. (Johnson) With request to resubmit with
further information, yes.

Q. So, Mr. Johnson, I just want to review
generally the types of things that you make a
request for, and then I'm going to ask you
some specific questions about a few of them.
All right?

A. (Johnson) Okay.

Q. So, generally, one of the areas is that the
Project has determined that the line has to
be in the pavement, which is called
"alignment in pavement"; correct?

A. (Johnson) Correct.

Q. And that typically is where there is not
enough room or some obstacle that prevents
the Project from being completely off the
road and out of the pavement; correct?

A. (Johnson) That is correct.

Q. Okay. The second type of request is where
the Project requests that splice vaults be
placed underneath the road; correct?
A. (Johnson) Correct.

Q. And that is because in many places there just isn't enough room to put the splice vault off the pavement; correct?

A. (Johnson) Correct.

Q. In fact, that's the case for most of the splice vaults; isn't that right?

A. (Johnson) No, I believe that's not a correct statement.

Q. How many splice vaults are there in total?

Do you remember?

A. (Johnson) Top of my head, 154.

A. (Scott) It's in the ballpark of 150 or so. I think it was 152.

Q. Yeah. Okay. Do you recall how many of them you've requested to be under the pavement?

A. (Johnson) I think less than 20. We can get that number for you.

Q. Thank you.

The third type of request involves where there's some existing structure that you want to go underneath -- or you want to go over rather than underneath; correct?

A. (Johnson) Correct.
Q. For instance, where there's a drainage structure or a culvert, you're seeking to go over that structure, not underneath it.

A. (Johnson) In certain circumstances, yes.

Q. And in certain instances there are some utility structures, such as sewer or water, where you're seeking to go over them rather than under them; correct?

A. (Johnson) Correct.

Q. Now, earlier, Mr. Bowes, you indicated that that would speed up construction; correct?

A. (Bowes) Yes.

Q. To be able to go over these.

A. (Bowes) Yes.

Q. After the line is placed, if the line is built and placed in service, if the line is above, for instance, a utility, a water or sewer utility, that will have some impact on the ability to either repair or replace that utility, correct, because now they have to go under your transmission line to get to the utility?

A. (Bowes) So maybe you could be more precise in the type of utility because I think it does
Q. All right. Let's talk about a water utility. Let's say that they want to replace some water utilities. If your line were below the water utility, to dig from the ground surface to the water utility, they wouldn't have to deal with your line; correct?

A. (Bowes) So, again, depends on the type of water. If it was a large main, I would say you're probably accurate to transverse or go perpendicular. If it's a water service, they could probably go above.

Q. And so if it involved a water main, it would have an impact on the water district's replacing that water main; correct? It would slow their work down; would it not?

A. (Bowes) So I think they would have to deal with it in the design phase. The use of the fluidized thermal backfill and the concrete will provide a self-supporting structure. So I think it will usually have minimal impact on a perpendicular crossing underneath for a water main.

A. (Johnson) If I may add, as part of the
exception approval, there are the conditions
as you noted where the Project must have
reinforced concrete for a specific span
length that the DOT has prescribed
specifically to assist in future construction
or repair in the areas where we're crossing
over a particular facility.

Q. Okay. But nonetheless, both in design phase
and in construction phase, it would be easier
for the water utility if it didn't have to
deal with your transmission line above it;
correct?

A. (Bowes) Again, I'm not sure what "easier"
means.

Q. Well, they don't have to deal with it either
in designing around it or excavating around
it or simply having to worry about it if
they're digging, excavating to get to their
water line. Wouldn't you agree with me that
if you had a preference and you were the
water utility, you'd rather not have the
transmission line there than have it there?

A. (Bowes) I think that's generally an accurate
statement. However, easier, I mean, the
water companies, you know, telecommunication
companies, they are very professional in how
they design projects and how they construct
projects. This is an issue that they would
deal with during design phase, as well as
construction. But it's something they're
very used to dealing with just with their own
facilities and, you know, other utilities.

Q. Are you aware of any water utility in the
state of New Hampshire that has to deal with
a 345,000-volt transmission line that is in
the ground above their water lines?

A. (Bowes) So, just to be clear, we're not
proposing that. We don't have a 345-kV
underground transmission line.

Q. Three hundred and twenty? I stand corrected.

A. (Bowes) So, to the best of my knowledge,
there are no underground electric
transmission lines that are located within
the state of New Hampshire.

Q. Mr. Johnson, another type of request you make
is, as you testified earlier, if there are
highway crossings and bridge abutments, you
have to go in the road to get past the bridge
abutments in some places; correct?

A. (Johnson) That is correct.

Q. And then sort of a final category, if you will, is for HDD drilling. And virtually all of the HDD drillings, you're going to have the drilling equipment in the road rather than off the road; correct?

A. (Johnson) No. That's incorrect. There are a few places where we're requesting that the drill area be, or the pits, if you will, where the entry and exit points are, be in the road. Typically, one is always off the road. And because the second one has to be within a 10-foot area, they might push it into the road. But for the most part, we've tried very hard to put both the entry and exit points off of the roadway. It's because there's two bores, one for each, positive and negative portion of the cable.

Q. There are approximately 52 HDD/microtunnel locations along the underground route; correct?

A. (Johnson) That is correct.

Q. All right. Would you agree with me that the
Project has submitted 38 requests for exceptions dealing with HDD drilling?

A. (Johnson) I'll take your word for it. But it's quite possible, yes. Again, some of those could have been removed or withdrawn.

Q. And for each of those 38 requests, it requests some portion of the HDD drilling to be in the pavement; correct?

A. (Johnson) Yes.

Q. Okay.

A. (Johnson) Again, by definition, the HDD is going to be in the pavement at a depth of 30 to 65 feet, but still underneath the pavement. So every HDD will have a request ultimately because of that. The question of whether the Project's equipment will be in the roadway is dependent on each entry and exit point site.

Q. Let me come back to that.

   Each of these requests has a traffic control duration component; correct?

A. (Johnson) Correct.

Q. And for each of these requests there's an estimate for how long traffic control is
required to accomplish the task within the request; correct?

A. (Johnson) Correct.

MR. PAPPAS: Go to Counsel for the Public 496. No, it's going 497.

Q. Mr. Johnson, in front of you is Counsel for the Public 497, which is Exception Request No. 1, second revision. Do you see that?

A. (Johnson) I do.

Q. And the first part, this involves crossing -- or, rather, alignment in pavement and crossing over existing drainage structure. Do you see that?

A. (Johnson) I do.

Q. And if you look at the first paragraph, it talks about traffic control type, alternate one-way. Do you see that?

A. (Johnson) I do.

Q. And that means there's going to be a lane closed, so traffic's going to alternate going in that open lane; correct?

A. (Johnson) That is correct.

Q. And it says here, traffic control duration is estimated to be six days for the proposed
installation. Do you see that?

A. (Johnson) I do.

Q. So if this request is approved, it's anticipated that while this work is done, the lane will be closed for six days; correct?

A. (Johnson) That is correct.

Q. And it goes on to say, if the requested exception is not granted, NPT expects an additional two to three weeks of work requiring traffic control. Do you see that?

A. (Johnson) I do.

Q. So what that is saying is, if this exception request is not granted, for two to three weeks the lane will be closed, or one lane will be closed in that area; correct?

A. (Johnson) That's correct.

Q. What's on the screen in front of you now is Counsel for the Public Exhibit 500. And this is a copy of Exception Request No. 4, the third revision. Do you see that?

A. (Johnson) I do.

Q. And this also indicates traffic control alternate one-way, which would be one lane closed; correct?
A. (Johnson) That's correct.

Q. And this statement indicates that the traffic control duration is estimated to be 24 days for the proposed installation. Do you see that?

A. (Johnson) I do.

Q. So that would mean it's estimated that for 24 days there will be a lane closed at this location while this work is being done?

A. (Johnson) Yes.

Q. Okay. And so for each of these exception requests, there's an estimate of how long a lane will be closed, traffic control necessary if the work, if the exception request is approved; correct?

A. (Johnson) That is correct.

Q. And they vary anywhere from, we saw six days, and this one's 24 day days. Some of them are more or less than that; correct?

A. (Johnson) Correct.

Q. Okay. And they also indicate that if the exception request is not granted, then there's a different estimate for how long a lane will be closed at that location;
correct?

A. (Johnson) Correct. That's a requirement of the exception request process.

Q. Okay. And so if any of these exception requests are denied, it will slow construction down and will require a lane to be closed longer than if the request is granted; correct?

A. (Johnson) Correct. Typically you're going deeper or using an alternative type of construction method which would be longer in nature.

Q. Now, earlier you testified, back in May and June, that there would be -- along the underground route there would be lane closures as construction proceeded down the underground route; correct?

A. (Johnson) Correct.

Q. Now, these -- and whether it's now 118 or some larger number, whatever the ultimate number of requests for exceptions are submitted, the time estimates for each specific request is above and beyond the general time for a lane closure along the
underground route; is that correct?

A. (Johnson) No. I would say for certain specific locations that is true. But for instances where the alignment is in the pavement, it would be the same construction time as was contemplated with the main line construction methodology.

Q. So, for some places it's -- the additional lane closure is going to be beyond what was contemplated, and in some places it's going to be the same because the same amount of work -- or the same area is affected; correct?

A. (Johnson) From a duration perspective, yes.

Q. Right.

A. (Johnson) There are no additional lane closures other than the one that we're proposing, still maintaining alternate traffic.

Q. Right. You're proposing a lane closure all along the 52 miles, just going to be at different locations at different times; correct?

A. (Johnson) Exactly.
Q. And it's going to depend on how many crews are working and where they're working; correct?

A. (Johnson) Correct.

Q. But these exception requests indicate that in some instances the lane closure is going to have to be longer than otherwise anticipated based upon the work; correct?

A. (Johnson) That is correct.

Q. So, Mr. Johnson, in front of you is Counsel for the exhibit -- Counsel for the Public's Exhibit 555. Do you see that?

A. (Johnson) I do.

Q. And this is the exception request for the microtunnel in Franconia. Do you see that?

A. (Johnson) I do.

Q. Is this still pending?

A. (Johnson) I believe it is still pending until we've got a more definitive design, as we discussed earlier.

Q. So if you look at this, it indicates that if you're going to do the microtunneling in Franconia, the control duration is estimated to be approximately 8 to 12 weeks. Do you
see that?

A. (Johnson) I do.

Q. And it goes on to say that the duct bank connections to microtunneling will take an additional three to four weeks at each end; correct?

A. (Johnson) That's correct.

Q. And there are two ends.

A. (Johnson) That's correct.

Q. So the work in Franconia at this intersection, if you're going to do the microtunneling, is certainly going to consume essentially an entire summer.

A. (Johnson) That's correct, if the construction is done in the summer.

Q. It will take anywhere from 12 to 16 weeks.

A. (Johnson) Yes.

Q. Okay.

A. (Bowes) Yeah, I would say 14 to 20 weeks if you add both ends.

Q. Okay. So if you look at the very bottom, it has microtunnel shafts within pavement. Do you see that?

A. (Johnson) I do.
Q. Okay. And now it indicates that the entry shaft's about 25 feet in diameter. Do you see that?

A. (Johnson) I do.

Q. The receiving shaft's about 20 feet in diameter; is that right?

A. (Johnson) Correct.

Q. And the Project would need approximately 35 feet of level, stable, non-vegetated, clear space from the edge of the pavement to the edge of the right-of-way for the entry shaft; correct?

A. (Johnson) If that's what it says on Page 2. I can't see.

Q. Yeah, we can go to the next page. Look at the top. It indicates about 30 feet for the receiving shaft; correct?

A. (Johnson) Correct.

Q. And you need about 5 feet of clearance. Do you see that?

A. (Johnson) I do.

Q. Okay. So on the screen now is still part of this exception request, and it indicates the location of the entry and receiving shafts.
Do you see that?

A. (Johnson) I do.

Q. Now, if you look at this, it's got the shaft to the left of the picture in the intersection; is that right?

A. (Johnson) For all intents and purposes, yes, it's at the edge of the roadway.

Q. Yeah. And then on the right it has the other shaft just past Academy Drive; correct?

A. (Johnson) Correct.

Q. Academy Street. Do you see that?

A. (Johnson) Correct. Yes.

Q. Okay. Now on your screen is the next page of this exception request, and it is Page 14032. And it shows the work areas for the two shafts. Do you see that?

A. (Johnson) I do.

Q. Okay. Now, the work area -- which portion is the entry shaft?

A. (Johnson) I believe it's the area to the right.

Q. And so the receiving shaft is the area to the left, in the intersection?

A. (Johnson) Correct.
Q. Okay. So the area to the right needs 35 feet for the workspace; correct? That's the entry shaft?

A. (Johnson) Correct.

Q. Okay. And do you know, based on this drawing, how much of the travel lane remains outside the work area?

A. (Johnson) I believe a full lane.

Q. And do you know how many feet -- what's your estimate of how many feet that is?

A. (Johnson) Twelve, approximately.

Q. So you think that the travel area is 24 feet wide in that area?

A. (Johnson) I'd have to measure. It's an assumption, yes. I mean, there was a scaled part of that drawing, and it looks like it's close to 30 feet, but...

Q. Okay. So on the screen now is the next page of this exception request, which is Page 14033. And if you look in the left-hand corner, you can see the receiving shaft that's just off the intersection. Do you see that?

A. (Johnson) I do.
Q. And it shows where, in black, the original
open trench was going to come down one side
of the road and across the intersection into
the receiving pit, and now in green is the
proposed change; is that right?
A. (Johnson) That is correct.
Q. And then if you look at the right-hand side,
sort of the middle of the page, right where
it says NH116 Easton Road, it shows the entry
shaft; correct?
A. (Johnson) Yes.
Q. On this drawing, the entry shaft is shown on
the intersection side of Academy Street. And
we saw in the prior drawing that shaft was
shown on the other side of Academy Street.
Do you recall that?
A. (Johnson) I do.
Q. Do you know why one drawing has it on one
side and the other drawing has it on other
side of Academy Street?
A. (Johnson) It's an error.
Q. Do you know which side it's supposed to be
on?
A. (Johnson) South side.
Q. And which side is the south side? Closest to the intersection or away from the intersection?

A. (Johnson) More to the right. Not the one you're showing here.

Q. Away from the intersection.

A. (Johnson) Yes.

Q. Okay. So this is the drawing that's in error.

A. (Johnson) Correct. So I might add that the complexity of this, as you noted and continue to note, is one of the reasons why we're re-evaluating this construction technique in this area and hoping to come up with a less impactful methodology.

Q. What's on the screen now is the last page of this exception request, Page 14035. And this shows a picture of the proposed entry shaft area on the top. Do you see that?

A. (Johnson) I do.

Q. Okay. And that then also shows sort of the shoulder, the sidewalk and then the travel lane. Do you see that?

A. (Johnson) I do.
Q. And within that, that's the area where the Project needs 35 feet in order to keep one lane of traffic open?

A. (Johnson) Yes, that's what was stated in the request.

Q. Okay. Do you know, if you look at that yellow solid line in the middle of the travel lane and you go to the right of the picture, how far over 35 feet is?

A. (Johnson) So I believe the yellow line is --

Q. I'm looking at not the yellow line drawn in on the picture, but the actual yellow line on the road itself.

A. (Johnson) The road markings?

Q. Correct. Yes.

A. (Johnson) I don't know how far that is. I'd have to measure it. So I'm assuming it's 12 feet plus the shoulder plus the sidewalk. So, 12... I don't know.

Q. You don't know.

A. (Johnson) No.

Q. Okay. Do you know how far into the grass area it will go?

A. (Johnson) Not without measuring.
Q. Okay. If you look at the bottom picture, that shows the intersection; correct?

A. (Johnson) It does.

Q. Do you see that real estate office on the corner?

A. (Johnson) I do.

Q. And in that area the Project's going to need 30 feet, correct, for a work area?

A. (Johnson) That's what was stated, yes.

Q. And do you know, if you start at the center line, the road markings on the road, and go towards the real estate office, which is the work area, how far into the grass area the work area will go?

A. (Johnson) Not without measuring, no.

Q. But you agree with me the work area is going to go into that grass area; right?

A. (Johnson) Without measuring, I can't say. But it's highly probable.

Q. Yeah, there's not 30 feet of a travel lane, the shoulder and the sidewalk, is there?

A. (Johnson) Probably not, no.

Q. Okay. Now, the request for exception that we've gone through, that involves the
microtunneling operation; correct?

A. (Johnson) That is correct.

Q. That does not involve bringing the line
across the intersection in order to connect
with the microtunneling; correct?

A. (Johnson) So that was the additional three to
four weeks or two to four weeks that was
noted in the exception request.

Q. Okay. So it's anticipated that to bring the
line across is going to be the 3- to 4-week
time frame, and the 8- to 12-week is the
actual microtunneling?

A. (Johnson) That's correct.

Q. Okay.

CHAIRMAN HONIGBERG: If you're
going to a new topic, let's take a ten-minute
break.

(Recess was taken at 10:33 a.m.,
and the hearing resumed at 10:46 a.m.)

CHAIRMAN HONIGBERG: Mr. Pappas, you may proceed.

MR. PAPPAS: Thank you, Mr. Chairman.

BY MR. PAPPAS:
Q. Mr. Johnson and Panel Members, I want to now start asking you questions about the HDD work areas. On the screen in front of you is Counsel for the Public's Exhibit 496. I want to use Exception Request 39 as an example. And as you see, Exception Request 39 was rejected and resubmitted to address comments. Do you see that?

A. (Johnson) I do.

Q. Okay. On the screen now is Counsel for the Public's 521, which is Exception Request No. 39, first revision. Do you see that?

A. (Johnson) I do.

Q. Now, this involves HDD pits within the pavement, as well as alignment passing under the pavement; correct?

A. (Johnson) That is correct.

Q. And this is in the town of Campton, on Route 3?

A. (Johnson) Yes.

Q. All right. Now, if you look under the Technical Discussion of Justification of Exception -- do you see that?

A. (Johnson) The category? Yes.
Q. Yeah. I want to draw your attention to the bottom paragraph. And I don't need to read it into the record, but it indicates the area that is needed to do this HDD drilling construction. Do you see that?

A. (Johnson) It's a description of the work area, yes.

Q. Right. And for instance, there are four bores because there are two drills in each of the HDD areas; correct?

A. Four pits; two sending, two receiving, yes.

Q. And they need to be 10 feet apart up on the ground?

A. (Johnson) On center, yes.

Q. Yeah. And the HDD work area needs to be 30 feet, a minimum of 30 feet of a level, clear space; correct?

A. (Johnson) I believe it says "approximately 30 feet," but yup.

Q. And that would apply to all of the HDD drill sites; correct? This is a general description of all of the sites?

A. (Johnson) Yes.

Q. Okay. So, for this exception request, on the
screen now is Page 13757 of this request for
an exception. Do you see that?

A. (Johnson) I do.

Q. And the top picture indicates where the
proposed HDD entry pit and work area would
be. Do you see that?

A. (Johnson) I do.

Q. And the Project proposed putting the HDD work
area right in front of this building to the
right. Do you see that?

A. (Johnson) The building with the green roof?

Q. Correct.

A. (Johnson) Yeah, I would say that you have
to -- it looks like that building is much
farther away from where the entry would be,
just on optics, but --

Q. Do you know what that building is?

A. (Johnson) In this particular case, not off
the top of my head, no.

Q. I'll represent to you, if you look further in
this exception request, it's a restaurant.

A. (Johnson) Okay.

Q. And are you aware of whether or not there is
a mobile home park in this area as well?
A. (Johnson) I am not aware, no.

Q. Okay. Now, the DOT denied this exception request; is that right?

A. (Johnson) They asked for it to be resubmitted, yes.

Q. Right. And one of the reasons they rejected it is because the proposed entry work area would interfere with the business in that building with the green roof; correct?

A. (Johnson) I'm not -- I'd have to go back to the request itself or the request for resubmittal. But if that's what you're saying, then yes.

Q. Well, on the screen now is Exception Request 39 which indicates that the exception request was rejected because the proposed entry pits are located within the driveway to the restaurant. Do you see that?

A. (Johnson) I do.

Q. Okay. So on the screen now is the first page of Counsel for the Public Exhibit 496. And I want to ask you some questions about Request No. 40. And that also was rejected and requested to be resubmitted. Do you see
that?

A. (Johnson) I do.

Q. Okay. So on the screen now is Counsel for the Public Exhibit 522. Do you see that?

A. (Johnson) I do.

Q. And this is also a request dealing with an HDD pit within the pavement and under the pavement; correct?

A. (Johnson) Yes.

Q. And also in the town of Campton -- do you see that -- on Route 3?

A. (Johnson) Yes.

Q. All right. Now, if you look at the section Impacts on Page 13764, when the Project submitted this request for an exception, it stated, quote, "The design, as proposed, will not adversely affect the design, construction, stability, traffic, safety environmental commitments, maintenance or operation of US 3," close quote. Do you see that?

A. (Johnson) I do.

Q. Okay. On the screen now is Page 13765 of this exception request. On the top picture
it shows the proposed area for the HDD entry
pit. Do you see that?

A. (Johnson) I do.

Q. And the proposed HDD entry pit would be --
the Project proposed placing it in front of
the gas station to the right. Do you see
that?

A. (Johnson) At the edge of their property, yes.

Q. Yeah. Well, they -- an HDD pit needs 30 feet
of a work area; correct?

A. (Johnson) In width, and then backwards from
this. The driveway would remain open.

Q. So the width would be from the solid yellow
line on the pavement going 30 feet towards
the gas station; correct?

A. (Johnson) The center line of the road, yes.


In this area, are you aware of a mobile
home park near this gas station?

A. (Johnson) I am not, no.

Q. Mr. Johnson, on the screen in front of you
now is Page 13521 of Counsel for the Public's
Exhibit 496, which is a notice of the
decision for this Request No. 40 we're
talking about. And if you see, the DOT denied this request because the proposed entry pits are located within the Chelsea Road driveway to the gas station. Do you see that?

A. (Johnson) I do.

Q. And they also indicate that this is the only access to the mobile home park and the diesel pumps. Do you see that?

A. (Johnson) I do.

Q. So the Project proposed an entry pit in an area that would interfere with this gas station and interfere with the access to the mobile home park, correct, and for that reason the DOT rejected it?

A. (Johnson) It seems to be. But based on the photograph, I would say that the access to the diesel pumps would have remained throughout the entire construction effort.

Q. But that wasn't the opinion of DOT; correct?

A. (Johnson) According to their statement, yes.

Q. Okay. On the screen now is Page 13767 of Counsel for the Public's Exhibit 522. Do you see that?
A. (Johnson) I do.

Q. And if you look at this, this is the drawing for the entrance pit in front of the gas station that we're talking about; correct?

A. (Johnson) Correct.

Q. And you see Chelsea Road. Do you see that? It's a little hard to see. But if you look under the north --

A. (Johnson) Yes.

Q. Okay. And do you understand that Chelsea Road is the access to the mobile home park behind this gas station?

A. (Johnson) As you've identified it, yes.

Q. If you look for the entry pit area, that is pretty much right in front of Chelsea Road. Would you agree with me?

A. (Johnson) It's right in the middle of the intersection, yes.

Q. Now I want to show you a few other examples of HDD areas in some other towns.

A. (Johnson) Sure.

Q. On the screen now is Counsel for the Public 569, which is Exception Request No. 146 in the town of Easton/Woodstock. Do you see
that?

A. (Johnson) I do.

Q. And on the screen now is Page 14146 of Exception Request 146. That shows the proposed entry area and exit area of the HDD. Do you see that?

A. (Johnson) I do.

Q. And if you look at the proposed entry area, you'd agree with me there's simply not 30 feet off the pavement for this HDD site. Is that what the picture shows?

A. (Johnson) So I believe this exception request is to put the pits in the road?

Q. Correct. And that's because you just don't have the room off the road; correct?

A. (Johnson) That's correct.

Q. And if you look at the exit area, you're also requesting to put the pits in the road because there simply isn't enough room off the road; correct?

A. (Johnson) Correct.

Q. All right. On the screen now is Counsel for the Public Exhibit 570, which is another exception request, Exception Request No. 147,
in the town of Woodstock. Do you see that?

A. (Johnson) I do.

Q. And this also involves putting the HDD pits within the pavement; correct?

A. (Johnson) Yes.

Q. On the screen now is Page 14155 of Exception Request 147. Do you see that?

A. (Johnson) I do.

Q. And again this shows a picture of the area for the entry pits and the exit pits; correct?

A. (Johnson) That is correct.

Q. And these two pictures depict that the entry pits and the exit pits in this part of the route need to be in the road because there's simply not enough room off the road; correct?

A. (Johnson) That's correct.

Q. Okay. On the screen now is Counsel for the Public Exhibit 573, which is Exception Request 151 in the town of Woodstock. Do you see that?

A. (Johnson) I do.

Q. Again, this is an HDD-related request?

A. (Johnson) Correct.
Q. On the screen now is Page 14183 of this request, and it shows a picture of the proposed entry pit area and exit pit area. Do you see that?

A. (Johnson) I do.

Q. And in the entry pit area there's quite a bit of ledge that requires the entry pits to be in the road; correct?

A. (Johnson) Correct.

Q. And the exit pit area, the guardrail is the reason for the request to be in the road; correct?

A. (Johnson) And the slope that goes down, yes.

Q. And the slope that goes down. Thank you.

On the screen now is Counsel for the Public exhibit 574, which is Exception Request 153. Do you see that?

A. (Johnson) I do.

Q. Again dealing with an HDD?

A. (Johnson) Yes.

Q. And if you look at Page 14192 that is on the screen now, it shows the proposed entry area and exit area. Do you see that?

A. (Johnson) I do.
Q. Now, this is near Beaver Pond. Do you recall that?
A. (Johnson) Yes.
Q. And this entry area on the top picture is in order to have a HDD that goes under a brook in that area; correct?
A. (Johnson) Yes.
Q. And if you look at the bottom picture, it shows the parking lot to the left for Beaver Pond, one of the two parking lots; correct?
A. (Johnson) That is correct.
Q. And if you look at what's on the screen now, which is Page 14194 of this request, it shows the exit pit, the two exit pit areas. Do you see that?
A. (Johnson) I do.
Q. And those are just past the driveway to the parking lot; correct?
A. (Johnson) Yeah. Approximately, I don't know, 150 feet.
Q. Yeah. And then the work areas are right around where those pits are; correct?
A. (Johnson) And would extend off to the right, yes.
Q. Yeah. And then there is an additional area, like over a thousand feet where they need to pull back through the drill area; correct?

A. (Johnson) When they lay the conduit out, yes.

Q. And that runs along -- there's ledge along that area; correct?

A. (Johnson) Correct. The workspace needed for that is less than 5 feet.

Q. Yeah, it's very long, but narrow.

A. (Johnson) Correct.

Q. Okay. On the screen now is Counsel for the Public 580, another HDD work area; correct?

A. (Johnson) Correct.

Q. On the screen is Page 14250 of this Exception Request 171. On the top it shows the proposed entry pit and the bottom is the proposed exit pit. Do you see that?

A. (Johnson) I do.

Q. And if you look at the bottom, the exit pit needs to be in the road because there's a house there. Do you see that?

A. (Johnson) I do.

Q. Okay. Now, we've seen several examples of HDD pits. Would you agree with me that, in
most of the locations from Franconia through Easton, down into Woodstock and south, the HDD pits need to be in the road because either there's not enough room off the road or the slope is very steep off the road, or in some instances there might be a house or a barn or some other structure?

A. (Johnson) I can't comment on every single one in those three towns, but there certainly are some, as you've shown, that have obstructions.

Q. And because there are obstructions, you agree with me, for the vast majority of the HDD drilling sites, the Project has requested to have the work areas, the entry pits and the exit pits, in the pavement?

A. (Johnson) No, I don't believe that's true. I think partially, yes. But we've worked very diligently to be off the road. In this particular Photograph No. 1, you can see that there's a utility pole. So we know that the DOT right-of-way extends at a minimum out to the edge of that utility pole. So there potentially could be room to move the utility
pole -- towards the utility pole. I'd have

to see what the rejection was in this

particular area -- although, they haven't

rejected it at this point. They haven't

reviewed this one yet.

Q. True. But if -- go back to... on the screen

now is the first page of this request. And

if you look at it, it's requesting that one

entry pit and one exit pit must be in the

paved road, if you look at the first

paragraph, last line.

A. (Johnson) Correct. One of the two, not both,

yes.

Q. Well, it says one entry pit and one exit pit

must be in the paved road.

A. (Johnson) Correct. So, one hole bore will be

outside of the road and one will be in.

Q. Right. And as a result, there will be HDD

construction activity within the paved road;

correct?

A. (Johnson) Correct.

Q. Would you agree with me that for virtually

all of the HDD drillings, the Project has

submitted a request for exceptions?
A. (Johnson) I would say that every one has a
request for exceptions because they need to
be -- because of the alignment under the
roadway.

Q. I'm going to ask you some questions about
splice vaults.

A. (Johnson) Okay.

Q. So on the screen now is Applicant's
Exhibit 183, Page 65145. And what I'm
interested in is Request No. 13. Do you see
that?

A. (Johnson) I do.

Q. And Request No. 13 was rejected and a request
for resubmittal. Do you see that?

A. (Johnson) I do.

Q. So on the screen now is Counsel for the
Public's Exhibit 509, which is a copy of
Exception Request No. 13 in Campton. Do you
see that?

A. (Johnson) I do.

Q. Now, this is a request to put the splice
enclosure in the pavement. Do you see that?

A. (Johnson) That's correct.

Q. Okay. Now, if you look at this request for
an exception, would you agree with me that it provides that there's a need to have 5 feet of minimum space on all sides of a splice vault?

(Witness reviews document.)

A. (Johnson) It says a 5-foot offset from the guardrail, not necessarily on all sides.

Q. Okay. On the screen now is Page 13646 of this exception request. And if you look at Splice Enclosure in Pavement, do you see that? It says, to construct the splice enclosure, a minimum 5-foot work area is required on all sides. Do you see that?

A. (Johnson) I do.

Q. So the splice vault itself is 8 feet wide; is that correct?

A. (Johnson) That's correct.

Q. And so there's a minimum of 18 feet required -- the 8-foot width of the splice vault plus 5 feet on each side -- in order to install a splice vault?

A. (Johnson) Approximately, yes.

Q. And splice vaults themselves can't be more than 2100 feet apart from the next splice
vault?

A.  (Johnson) Approximately, again, yes.

Q.  Okay. On the screen now is Page 13649 of Exhibit 509, which is Exception Request 13. And this is a drawing of the proposed exception request; correct?

A.  (Johnson) Correct.

Q.  And it indicates the location of the splice vault. Do you see the square splice vault?

A.  (Johnson) I do.

Q.  And would you agree with me that that splice vault is proposed to be installed directly in front of the driveway to the home on the other side of the street?

A.  (Johnson) It appears that way, yes.

Q.  And because the Project proposed to install this splice vault in front of that driveway, the DOT rejected this request; correct?

A.  (Johnson) I'll take your word for it. But yes.

Q.  And would you let me represent to you, in addition, the DOT felt that there would be only 10 feet of travel lane if the splice vault were located in this location? Do you
recall that?

A. (Johnson) I do not. But if you represent it, I'll take that.

Q. And would you agree with me, and Mrs. Frazier, you can chime in if you'd like, that there needs to be, particularly on Route 3, more than 10-foot for travel, for a safe travel lane?

A. (Johnson) I'll defer to Ms. Frazier now. But I believe 10-foot is the minimum.

A. (Frazier) Ten-foot can be approved in some situations. Eleven-foot is the standard okay minimum.

Q. Thank you. On the screen now is Counsel for the Public Exhibit 509, the same Exception Request 13, the first page. Do you see that?

A. (Johnson) I do.

Q. And under Traffic Control Duration, it's estimated that 16 days will be required to install this splice vault; correct?

A. (Johnson) That's what it says, yes.

Q. So, during those 16 days, one lane would be closed to traffic in this area; correct?

A. (Johnson) Correct.
Q. Okay. Now, would you agree with me that that is typical for installation of splice vaults, what's required to install a splice vault, that the traffic duration is 16 days?
A. (Johnson) No, I believe most splice vaults are five or six days.
Q. So you believe that most splice vaults, you can excavate the -- well, let me back up. When you say "install," do you mean including excavation, placing the vault in and then backfilling?
A. (Johnson) That's correct.
Q. So you believe that most splice vaults you can excavate the hole -- and the hole needs to be shored; correct? The size of these holes --
A. (Johnson) Yes.
Q. So you can excavate, you can shore, you can bring in a splice vault, you can install it and then backfill and move on in five days?
A. (Johnson) Yes. So the shoring is a single piece of shoring that gets put into the trench. So there's no time really needed to assemble anything. The splice vaults
themselves are precast concrete. So they
will literally arrive on a truck, and the
crane will pick them up and put them in and
then backfill around.

Q. And so if you think most can be done in five
days, why would it take 16 days for this
location?

A. (Johnson) I would assume it's because of the
narrowness of the road and the fact there's
not a large work zone around. It may require
smaller equipment to excavate, to stay within
the one-lane restriction of the travel way.

Q. Okay. And this is along Route 3; correct?

A. (Johnson) That's correct.

Q. And would you agree with me that certainly
the roads in the 7-1/2-mile section -- Old
County Road, North Hill Road, Bear Rock
Road -- are narrower than Route 3 --

A. (Johnson) Correct.

Q. -- in this area?

A. (Johnson) In those particular roads we've
talked about having full road closures.

Q. Right. Would you agree with me that the road
through Easton is typically narrower than
Route 3?

A. (Johnson) I'd say in general. This particular area that you're showing happens to be a very constrained area.

Q. And so would you agree with me that the road from Franconia through Easton to get to Woodstock is typically the same width as shown on this drawing or that we saw in the drawing a moment ago?

A. (Johnson) Not necessarily. There are large areas of Route 112 that are much wider than that.

Q. Which areas of Route 12 [sic] are much wider than that?

A. (Johnson) Route 112, yeah.

Q. Route 112. Which areas?

A. I don't know specifically here, but I've driven it many times and...

Q. Okay. And would you agree with me that much of Route 3 is also constrained, as we saw in this picture a moment ago?

A. (Johnson) I would not say most of it, no. There are areas that are constrained, yes, but not necessarily most of it.
Q. There are many areas that are constrained; are there not?
A. (Johnson) Sure. It's 20-something miles long, so there are areas where it's going to be constrained.
Q. For splice vaults, these are prefabricated, concrete vaults; is that correct?
A. (Johnson) That's correct.
Q. And how many sections would one vault make up? How do you intend to install these splice vaults? In one section or more than one section?
A. (Johnson) So I'll defer to --
A. (Scott) Ideally it would be two sections, one the base and one the top.
Q. So there would be one base section that would be 8 feet wide, 34-foot long, and something less than 7-1/2 feet tall?
A. (Scott) Yeah.
Q. And then the top section, do you anticipate it being a similar size to the base section?
A. (Scott) Yes.
Q. Okay. Do you know how much either one base section or one top section weighs?
A. (Scott) Not off the top of my head.

Q. Do you have an approximate weight?

A. (Scott) Not off the top of my head.

Q. Do you know the size of the crane necessary to install these sections of the splice vault?

A. (Johnson) I do not know.

Q. Do you know, Mr. Scott?

A. (Scott) Not off the top of my head.

Q. Do you know, Mr. Kayser?

A. (Kayser) No, not exactly how big.

Q. I didn't want you falling asleep over there. Do you know, Mr. Scott, or anybody on the panel, how many axles the crane truck must be?

A. (Scott) Not off the top of my head, no.

Q. And either Mr. Johnson or Mrs. Frazier or Mr. Scott, would you agree with me that each time a splice vault is installed at that location, whether it's 5 days or 16 days or some other duration, you have to have a lane closure during that operation? Is that right?

A. (Johnson) Yes.
Q. Okay. Let me ask you some questions about fluidized thermal backfill. Easier to say "FTB."

Now, as I understand it, the Project requested two exceptions for FTB; is that right?

A. (Johnson) Yes.

Q. One was to use FTB to backfill the open trench instead of putting back soil; correct?

A. (Johnson) Correct.

Q. And that exception was approved by DOT; correct?

A. (Johnson) That's incorrect.

Q. Oh, it was not.

A. (Johnson) It was not approved.

Q. So that was rejected.

A. (Johnson) Yes. So let me -- the reason for rejection is that the DOT wanted to have the structural integrity -- or the structural box at the highway be the same integrity on the entire width once we replaced.

Q. Okay. That is for -- well, strike that.

What was approved by the DOT?

A. (Johnson) So the approval was the use of FTB
as a thermal fill that could go from wherever the actual ducts were to the bottom of the structural box. And then from the structural box up, it would be the 24 inches or 36 inches, depending on the tier of the road, basically replacing like with like, as far as the existing conditions of the road.

Q. Okay. So, above the duct will be gravel, whichever gravel the DOT requires?

A. (Johnson) Correct.

Q. Okay. And so it won’t be the FTB, in the sense that I asked earlier about, when, for instance, a water utility has to worry about doing work in or below the transmission line. You won’t have that layer of FTB above the duct; correct? You’ll have natural gravel.

A. (Johnson) No, there will always be a component of FTB above the ducts, the actual ducts themselves.

Q. As long as it’s below the 36 inches or 24 inches?

A. (Johnson) That is correct.

Q. Ah, and above that you need gravel.

A. (Johnson) Correct. Or whatever the road base
Q. Okay.

A. (Bowes) So, also as part of the exceptions that have been granted, we have to provide a structural, a self-supporting structure for any of the utilities we're going over. I believe we'll be the only utility in the state of New Hampshire that does that.

Q. Okay. Would you agree it's probably because you're the only utility in the state of New Hampshire that's putting up a 320-volt line above some of these other utilities?

A. (Bowes) I think it's just in advancement of the DOT's thinking in this area. If you're going to allow structures within the roadway, they should allow for future maintenance and operations of the other utilities. But I was more referring to you could have water, sewer, drainage in the roadway already, and none of those utilities have this requirement, nor do they have this built into their designs.

Q. And Mr. Johnson, am I correct that what the Project wanted to do was use FTB through the
entire part of the duct bank -- or above the
duct bank? Correct?

A. (Johnson) Our original request was to use FTB
all the way up basically to the asphalt
surface level, and that was what was denied.

Q. As a result, instead of having the concrete
trucks pour the FTB, now what you're going to
have is concrete trucks pouring some FTB and
then having to bring gravel back on top of
that to go up to the road surface, or right
below the road surface.

A. (Johnson) Correct.

Q. And would you agree with me that as a result,
that will slow construction?

A. (Johnson) It's a consideration, yes.

A. (Bowes) The use of plating would more than
offset that. And I'm not sure people
understood when I said the use of plating.
It means that the entire roadway will be open
once the construction period is done at
nighttime. So there will be no traffic
control on these highways once they're
plated.

Q. But it's going to take -- first of all, you
need to get the gravel and bring it to the site, remove the plates and backfill; correct?

A. (Bowes) Well, we would plate the areas that are not backfilled.

Q. Right. But eventually you're going to have to backfill.

A. (Bowes) That is clearly true. But the process would allow us to plate along this and reopen the highway without having to wait for the backfill.

Q. Understood. But in that instance, what you might have is a lane closure while the initial construction is going on. If you're allowed to plate, you could reopen that lane; correct?

A. (Bowes) Yes.

Q. And then when you have to backfill, you have to remove the plate and close the lane again in order to backfill; correct?

A. (Bowes) Yes. The process we're planning would be rolling right along. So there would be the plating would move each day, the backfill would take place each day, and the
paving would take place each day. So it would be a continuous process along the route.

Q. But because you now have to bring back gravel rather than using FTB throughout, that will slow construction down; will it not?

A. (Johnson) Compared to using just FTB, yes.

Q. Yeah. Okay. Have you sourced all this gravel yet?

A. (Johnson) That's up to the contractor.

Q. Do you know whether the contractor has sourced all this gravel?

A. (Johnson) To my knowledge, no.

Q. So now let me ask you some questions about the other topic, which is the accuracy of the plans.

On the screen now in front of you is Applicant's Exhibit 183, which is the first DOT letter listing approval and rejections of exception requests. Do you see that?

A. (Johnson) I can.

Q. Okay. So this is Page 65140 in this exhibit, and it is for the decision for Exception Request No. 7. Do you see that?
A. (Johnson) I do.

Q. And under the first item after it says, "This exception to the UAM is hereby rejected and must be resubmitted to address the following concerns," it states, "Existing utilities are missing in numerous locations; therefore, this request cannot be adequately reviewed." Do you see that?

A. (Johnson) I do.

Q. On the screen now is Page 65141 of Applicant's Exhibit 183. And this is for Exception Request No. 9. Do you see that?

A. (Johnson) I do.

Q. And this request was rejected, and the DOT indicated that, quote, "Existing NHDOT right-of-way is not correctly shown between Stations 2497 and 2505+50." Do you see that?

A. (Johnson) I do.

Q. What's on screen now is Page 65142 of Applicant's Exhibit 183. And this was also rejected because the profile shown does not correspond to the plan view; therefore, it's difficult to adequately review. Do you see that?
A. (Johnson) I do.

CHAIRMAN HONIGBERG: Mr. Pappas, is there a punchline to all these, "Do you see tharts"?

MR. PAPPAS: There's going to be.

CHAIRMAN HONIGBERG: Okay.

How many more "Do you see tharts?" do you have?

MR. PAPPAS: I'll skip to the punchline.

BY MR. PAPPAS:

Q. Mr. Johnson, since you manage this process, would you agree with me that I could go through several more of these, and the DOT rejected them and indicated that either things were missing or the plans were inaccurate in some respect, or otherwise they couldn't review them because there were problems with the plans? Do you agree with that?

A. (Johnson) There are some, yes.

Q. There were several of those; were there not?

A. (Johnson) I'd have to go through each
rejection. But I'll take your word if you
say "several."

Q. Okay. Now, in your meetings with the DOT,
they also expressed concerns in those
meetings about the inaccuracy of the plans;
did they not?

A. (Johnson) Yes, they did.

Q. At one point, didn't DOT wonder whether they
should continue to review the plans because
they were inaccurate; correct?

A. (Johnson) That is correct.

Q. Okay. So let me ask you some questions about
the survey work that you testified about
earlier this morning.

A. (Johnson) Sure.

Q. Now, we went over this area before, so I
don't need to go over it in detail.

Would you agree with me that the Project
hired BL Companies to do survey work, and BL
Companies did some of the work and they
subcontracted some of the work to Meridian?

Correct?

A. (Johnson) That is correct.

Q. And both BL Companies and Meridian used three
levels of accuracy or confidence for their survey work; correct?

Q. The first level, which was the level was determined, they didn't use that in any of their work; correct?

A. (Johnson) That is correct. Well, I take that back. They did in very small instances.

Q. Okay. And that's the most accurate and most confident level; correct?

A. (Johnson) Correct.

Q. The second level, which is an approximate location, they used in some areas; correct?

A. (Johnson) Correct.

Q. And then the third, level, which is the least accurate or least confidence level, is a dashed line for essentially an estimate; correct?

A. (Johnson) Correct.

Q. Okay. Now, DOT's conditional approval, Condition No. 4 that you saw earlier this morning, required the Project to submit a survey report; correct?

A. (Johnson) That's correct.
Q. And on the screen now is the second page of Counsel for the Public's Exhibit 493, which is the memo from DOT that was attached to the August 11, 2017 letter that you saw earlier today; correct?

A. (Johnson) Correct.

Q. Okay. And it shows that under Paragraph 4 of DOT's conditions of approval, it required a survey report; correct?

A. (Johnson) That's correct.

Q. And the DOT determined that the survey reports submitted by Meridian and BL Companies did not satisfy the DOT's requirement; correct?

A. (Johnson) That's correct.

Q. Now, this morning you indicated that more surveying is being done; correct?

A. (Johnson) That is correct.

Q. And you indicated that one of the things you're going to do is you're going to look -- re-look at historical documents; right?

A. (Johnson) Correct.

Q. And you're going to look at DOT returns of layout? Is that another item?
A. (Johnson) Commissioner's return of layout,
yes.

Q. And you indicated this morning that, if
looking at those two items did not
sufficiently identify an area in order to
satisfy the DOT's requirement, you were going
to look to a prescriptive rights process. Do
you remember that?

A. (Johnson) I do.

Q. Tell me what you meant by a "prescriptive
rights process."

A. (Johnson) So, prescriptive rights are
basically where there is no layout for a
particular route, historic layout, or there
is no commissioner's return, and basically
not a lot of information available in a
particular area. There could be individual
plans or private property deeds that are
available, but not necessarily a true layout
in the historic sense.

Q. So you can't determine the layout by looking
at documents. So when you say "prescriptive
rights," do you mean the Project's going to
seek to obtain rights prescriptively from the
abutting landowners?

A. (Johnson) Not at all, no. Basically what it means is that the Project will use its survey expertise to identify the areas of use and occupancy. So that would be typically, obviously, the lanes of the road itself; it would be shoulders; it would be drainage ditches; any kind of physical evidence that would describe the use and occupancy of the road. We would then set that as our boundary, whether or not the DOT had property outside of that, because we feel, as the Project, there's just not enough information to verify anything but that. And we would petition the DOT, if we couldn't be outside of the roadway, to be in the roadway in those areas specifically to avoid any potential conflicts.

Q. So when you say "use and occupancy," let me give you an example. We've seen pictures where there's a house or a barn 10 feet from the pavement. In that instance, would that tell you that the use and occupancy of that area is as private property rather than DOT
right-of-way because someone has their barn
or house in that area?

A. (Johnson) Just because somebody has a barn in
an area doesn't necessarily mean that it's
not inside the DOT area.

Q. Oh, I understand that. But when you --

A. (Johnson) But we as the Project recognize
that as private property use and would look
to avoid putting any facilities there.

Q. That's what I'm trying to get to. When you
say "use and occupancy," you're looking at
how the land is being used in areas where the
documents don't tell you where the
right-of-way boundary line is; correct?

A. (Johnson) That is correct.

Q. So, for instance, if a private property owner
along the underground is using the land in
some way, whether there's a structure on
there or there's a garden on there, it's some
other use that would lead you to believe that
the use and occupancy would be private use
and not the DOT right-of-way; correct?

A. (Johnson) In the areas where there's no other
information, that's correct.
Q. Right. So in those areas you would have to be in the paved road because you can't establish a right-of-way boundary far enough off the road; correct?

A. (Johnson) Depending where the obstruction was, yes.

Q. And that's what you meant by "prescriptive rights." You would petition the DOT to recognize in these various areas where the documents were not sufficient, and you had to go out and determine the actual use in those areas and petition the DOT to either recognize the use as a road right-of-way or the use as private property, not a road right-of-way; correct?

A. (Johnson) Correct. So it's the Project's interpretation of what that is. It's not the DOT's interpretation of what that is. Obviously, they have their own rights and their own ways of getting rights to do things. So this would be the Project's interpretation so that we would be able to stay within the DOT right-of-way as we describe it.
Q. And then the Project would petition the DOT to recognize the Project's determination of rights; correct?

A. (Johnson) If there was -- not specifically the determination of rights. Basically it's if we had to be in the roadway for the alignment, then we'd obviously have to submit an exception request that would discuss the aspects of the prescriptive nature of the establishment of the edge of right-of-way.

Q. And so you would have to then have the DOT agree with you in order to set that as the right-of-way boundary; correct?

A. (Johnson) Correct. So, the approval of the survey report, as well as the narrative that goes along with that which will explain why there are no records or what records are there, is the approval -- if and when they approve that, is the approval of that particular area of right-of-way.

Q. And if the DOT does not agree with your interpretation?

A. (Johnson) I've been watching it for a while.

Q. That bug was on my table a minute ago.
A. (Johnson) Can you repeat the question, please?

Q. If the DOT does not agree with your interpretation, what's the backup?

A. (Johnson) Then we'll work with the DOT to establish something that's reasonable for all.

Q. And you indicated you thought all this could be done in six to eight weeks?

A. (Johnson) For the -- yes. Preparing the survey report, yes.

Q. When did that six weeks to eight weeks start?

A. (Johnson) This past Monday.

Q. Okay. And am I correct in saying that until that is done, a new survey report is submitted and there's some petitions for prescriptive rights and there's some discussion about that, all of the requests for exceptions are essentially suspended until that process works its way through?

A. (Johnson) That's correct. The DOT will not approve or deny until we've firmly established the edges of the right-of-way.

Q. And would I be correct in saying that if the
Project can't satisfy the DOT about the
survey and the edge of the right-of-way, the
Project will not have satisfied that
Condition No. 4?

A. (Johnson) That is correct. The DOT must
approve the survey report to meet the
conditions of survey -- or Condition No. 4.

Q. Okay. So let me ask you a couple questions
about Applicant's Exhibit 222 which we saw
this morning. Do you have that in front of
you?

A. (Johnson) No, I do not.

Q. The Applicant will need to put that up
because --

MS. MERRIGAN: No, I have it.

MR. PAPPAS: Oh, you got it.

BY MR. PAPPAS:

Q. In front of you on the screen is Applicant's
Exhibit 222. Do you see it?

A. (Johnson) I do.

Q. All right. So let me just ask. In the first
column we have "Miles in Pavement, No Tree
Impact." Does that include anywhere that the
Project's going to be in the road?
A. (Johnson) Yes.
Q. So that would include all HDD sites.
A. (Johnson) No, that's the second column.
Q. Ah, okay. Other than HDD sites and microtunneling, does the first column include splice vaults?
A. (Johnson) Yes.
Q. So in order to determine where the Project is going to be totally in the road, you add the first two columns.
A. (Johnson) Correct.
Q. So it's going to be 15 miles in the road out of the 52-mile stretch.
A. (Johnson) That is correct.
Q. Then if you look at the third column where it says "Miles Outside Pavement, No Tree Impact," do you see that?
A. (Johnson) I do.
Q. Is that inside the right-of-way or outside the right-of-way?
A. (Johnson) Inside the DOT right-of-way.
Q. Okay. So that's only showing where there's no impact within the DOT right-of-way, I assume as you currently believe it to be.
A. (Johnson) That is correct.

Q. So if this new survey work changes the right-of-way boundaries, it's going to change the calculation on these 33 miles; correct?

A. (Johnson) Absolutely.

Q. Okay. And for any impact outside of where you currently think the right-of-way boundary is, that's not picked up in these 33 miles; correct?

A. (Johnson) Could you repeat that?

Q. Sure. If this 33 miles is inside the right-of-way, it does not include any impact to trees that are outside where you think the right-of-way boundary is today.

A. (Johnson) So if a tree is not in the DOT right-of-way?

Q. Correct.

A. (Johnson) Yes.

Q. Okay.

A. (Johnson) So the Project plans on an offset from the edge of right-of-way, obviously to be sure we're maintaining. But if you're asking if we're impacting a tree that's outside the right-of-way, no.
Q. And as I said, just as a follow-up to earlier, if that right-of-way boundary moves by your new survey plan, there could be more trees impacted; correct?

A. (Bowes) No, less trees impacted.

Q. Let's say the right-of-way boundary gets smaller.

A. (Johnson) If the right-of-way boundary gets smaller --

A. (Bowes) But then we'd apply for an exception request to be in the road.

Q. No, I understand. We're talking about trees right now, though, Mr. Bowes. And so --

A. (Bowes) Right. It would affect the first column.

Q. We're talking about the third column.

        And Mr. Johnson, let me -- and Mr. Bowes, you can correct me if wrong -- but if the right-of-way boundary shrinks, there could be more trees impacted; right?

A. (Johnson) If the right-of-way boundary shrinks, we'll petition the DOT to be in the roadway.

A. (Bowes) There'll be less trees impacted.
Q. Correct. I stand corrected. It's definitely time for lunch.

Conversely, if it goes the other way, there will be potentially more trees impacted.

A. (Bowes) If the right-of-way hypothetically was the 500 feet in the White Mountain National Forest, hypothetically, yes, you could locate out 400 feet. I don't think that's at all being considered, but... and then you would impact some trees out at 400 feet off the road. Again, that's very hypothetical and that's not at all what's planned.

Q. Right. And if it moves 10 feet, it could impact some trees within that 10-foot zone; right?

A. (Johnson) And again we'd petition that we would not be impacting those trees through Columns 4 and 5.

Q. Okay.

(Pause)

Q. What's on the screen now in front of you is Counsel for the Public Exhibit 494, which is
a copy of the conference report for the
April 12, 2017 conference between the Project
and DOT. And Mrs. Frazier and Mr. Johnson,
you attended this meeting; correct?
A. (Johnson) That is correct.
Q. And what's on the screen now is the
conference report for the July 18, 2017
conference. And again, Mr. Johnson and Mrs.
Frazier, you attended that conference;
correct?
A. (Johnson) Correct.
Q. On the screen now is the last page of that
conference report, 13513. And it indicates
that a draft of the Transportation Management
Plan was submitted. Do you see that?
A. (Johnson) I do.
Q. What plan was submitted?
A. (Frazier) So this statement is incorrect. It
was actually a copy of the form that goes to
the Traffic Control Committee to present
the -- to allow the TCC to determine the
impacts and whether or not a full
Transportation Management Plan is needed or
just a memorandum.
Q. Did the DOT accept your form?
A. (Frazier) No. We took it back because it was addressed to Mr. Oldenburg, and we had to re-address it to Mr. Cota.

Q. Eventually did DOT accept your form?
A. (Johnson) We have not submitted a revised form yet.

Q. You have not resubmitted a revised form.
A. (Johnson) That's correct.

Q. On the screen now is the conference report from the August 15, 2017 conference where, Mr. Johnson, you attended.
A. (Johnson) That's correct.

Q. This conference report at the bottom, and you can see it's highlighted, indicates that Ms. Esterberg has prepared a draft of the Traffic Control Committee Traffic Management Plan Determination Request Memo to present NPT's Traffic Management Plan to the Department's committee. Do you see that?
A. (Johnson) I do.

Q. And she anticipates being on the agenda the third Thursday in September. Do you see that?
A.  (Johnson) I do.

Q.  And they indicated someone from NPT should attend?

A.  (Johnson) Unfortunately, she was unable to get onto the September agenda. I believe that we are scheduled for the October agenda.

Q.  And do you anticipate submitting that form before the October meeting?

A.  (Johnson) We do.

Q.  And at the October meeting you'll find out whether or not they're going to require a full Traffic Management Plan or something different?

A.  (Johnson) That's correct.

Q.  If they require a full Traffic Management Plan, when do you anticipate submitting that?

A.  (Frazier) So we have begun work on it, and we anticipate submitting a draft in February or March of 2018. However, I don't know when the final will be, considering it's an iterative process and kind of what we're calling a "living document" as people change and circumstances change.

Q.  And would I be correct in saying that, in
order to finalize the Traffic Management
Plan, you need to have final, full
construction drawings in the underground
section so you know where the route's going
to go in the underground section?

A. (Frazier) Yes, that's correct.

Q. So you'll need some time after you receive
full construction drawings for the
underground route in order to complete the
Traffic Management Plan.

A. (Frazier) Correct.

Q. Do you have an estimate of how much time
you'll need?

A. (Frazier) I would say a month or two.

Q. Okay.

MR. PAPPAS: Thank you for
your patience. No other questions.

CHAIRMAN HONIGBERG: I think
we're either looking at Mr. Whitley or Ms.
Manzelli. But Mr. Whitley, are you ready to
go?

MR. WHITLEY: I have no
questions, Mr. Chair.

CHAIRMAN HONIGBERG: That's
easy enough.

Ms. Manzelli?

MS. MANZELLI: Sure. Give me one minute, please.

CHAIRMAN HONIGBERG: Sure.

(Pause in proceedings)

CROSS-EXAMINATION

BY MS. MANZELLI:

Q. All right. Good morning. My name is Amy Manzelli, and I'm representing the Society for the Protection of New Hampshire Forests. I want to ask for everybody's patience this morning. Many of my questions have been covered, and so it will just take me a little bit of time to weed through as we're going along of what has not been covered.

So I want to turn first... we've seen this document a couple times today. This is the letter from the Department of Transportation responding to the submission of the survey. I did note that there was two different versions that have come into the record: There's Applicant's Exhibit, I believe it's 220, and then it's also Counsel
for the Public 493. Counsel for the Public's version is the highlighted version.

Now, if you turn to the second page of this, you'll see the memo that is enclosed here. Again, we've looked at this today. But I just wanted to highlight the particular wording. You agree that the words used to describe what is required of Northern Pass is, quote, "accurate location defined by ground survey"; right?

A. (Johnson) Correct.

Q. Okay. And then what DOT reported back as its description of what was submitted to it, they said, "The majority of the right-of-way shown in the plans is approximate location only"; right?

A. (Johnson) That's what it says, yes.

Q. So where we're at here is we have this project going into the eighth year of development. And the DOT had what I thought was a pretty clear requirement for accurate locations defined by a ground survey. And as of today, Northern Pass either refuses or just hasn't been capable of providing, quote,
"accurate location defined by ground survey";
is that correct?

A. (Johnson) So I would say we have worked with
the DOT to establish what they believe
answers this determination. And let me just
read it. The approval requires "an accurate
location defined by ground survey."

We met back in February of this year
with the DOT Right-of-Way Bureau to establish
what they felt was the proper way to define
the right-of-way. Obviously, that led to the
survey report and then this particular
rejection stating that they want more
information. We have since worked with the
DOT to establish again what their proper
protocols are to develop those. And again,
those will now be executed in the field and
an additional survey report will be provided.

Q. Is DOT now asking for something additional or
something different than it asked for in its
letter issuing a conditional -- a
recommendation for approval of this project?

A. (Johnson) I believe it's the interpretation
of the wording. We did not provide enough
references to plan documents. We did not tie our survey back to known DOT projects and/or established rights-of-way by reference. So we've worked with them to establish those protocols and again to do additional historic research to see if there's additional documents, as well as locating physical monuments and iron pins in the field to help further establish the right-of-way, in essence, tightening up the survey report.

Q. So you're working on defining with DOT what it means to have accurate locations defined by a ground survey.

A. (Johnson) So that's been completed and will be submitted to the DOT front office on Monday by the Design Bureau on behalf of our project. So, basically the Design Group and Right-of-Way Bureau has agreed to an outline of how to perform the work and then minimum requirements to get there, and now the front office will be approving that or denying it, or asking for enhancements in a meeting next Monday.

Q. Correct me if I'm wrong. I thought from your
prior testimony this morning the "it" that you were just discussing is a process by which you're going to develop this accurate information. It's not a new survey that's going to be approved on Monday; right?

A. (Johnson) No, that's correct. It's a process, yeah.

Q. All right. And we've talked about that process. That's a six- to eight-week process for you to generate -- if your plan is approved on Monday, it's a six- to eight-week process, starting this past Monday, the 25th, for you to generate that information; right?

A. (Johnson) That's correct.

Q. Now, just to restate that, that's for Northern Pass to generate information for the DOT to then consider subsequent to receipt of the information from Northern Pass; right?

A. (Johnson) Correct.

Q. Do you have any expectation of when you would hear back from Northern Pass -- from DOT on that?

A. (Johnson) I do not.

Q. You have some --
A. (Johnson) I would assume it would be within a couple of weeks. They are aware that this product is going to be delivered to them, and obviously they have to review it and do their own due diligence. But I believe that with the information that we'll be providing this time, it won't be several months for them to review like it happened the last time.

Q. And just to make sure I understand what would be on DOT's plate at that time, so they would be reviewing their conditions of approval, including No. 4 regarding the survey, to see if those conditions have or have not been satisfied.

A. (Johnson) Correct.

Q. And they would be reviewing tens, possibly approaching a hundred exception requests.

A. (Johnson) So the exception request process has been suspended, as was noted earlier, until the results of this survey are complete and incorporated into all of the exception requests.

Q. Thank you. So, six to eight weeks for Northern Pass to submit, forgive me if I call
it a guesstimate. It's an educated guess.
And DOT would get back to you in about a
month. Following that, Northern Pass would
then adjust accordingly the exception
requests and resubmit those. How long do you
think that will take?

A. (Johnson) A fairly quick turnaround. The
design drawings are already being worked on.
But again, until the finite review of any
changes in the survey that may affect the
exception, the individual exception request.
But within another month.

Q. Okay. And then what's your expectation of
when DOT would respond to those exception
requests?

A. (Johnson) Again, I'm not going to speak for
them, but they've been fairly quick at
turning around requests to date that have
gone in. So I would guess another month, I
would suppose.

Q. I want to look now at the Utility
Accommodation Manual. This is Applicant's
Exhibit 136. I believe you testified, and
that everybody on the panel testified earlier
that they're familiar with this manual; correct?

A. (Bowes) Yes.

MS. MANZELLI: Let the record reflect that most of the witnesses are nodding up and down.

BY MS. MANZELLI:

Q. Now, do you agree that the Utility Accommodation Manual applies only to state or federal roads in New Hampshire?

A. (Johnson) Correct. Or state-maintained roads.

Q. So you agree, saying this another way, that the manual does not apply to municipally-maintained roads.

A. (Bowes) I would say that's correct, yes.

Q. Do you agree that the Subcommittee deciding this case can impose requirements upon Northern Pass that are above and beyond what is required in the Utility Accommodation Manual?

A. (Bowes) It's a legal question, but I believe that's correct.

Q. Are you able to read that text there? I'm
not great with the zoom on the ELMO. Can you
read the highlighted section, please?

A. (Bowes) "Where industry or government codes,
orders or laws require utilities to provide a
higher degree of protection than provided
herein, the higher degree of protection shall
prevail."

Q. Now, we talked a bit about the Scenic Areas
section of the Utility Accommodation Manual.
Let me turn to that. Now, having heard this
morning's testimony, I understand that
currently the Project is underway considering
scenic areas and impacts, potential impacts
to them, and possibly preparing additional
exception requests to avoid those impacts.
Did I generally capture what you testified to
earlier?

A. (Johnson) You did, yes.

Q. Okay.

A. (Bowes) I would also add that the initial SEC
Application also considered the impacts, and
specifically Appendix No. 9.

Q. Refresh my memory. What is Appendix No. 9?

A. (Bowes) It's the Petition for Aerial Road

Q. Thank you. And do you — the document that you're looking at there, does it have a Bates Stamp or an exhibit number on it for the record?

A. (Bowes) It's the SEC Application. So I don't know beyond that.

MR. IACOPINO: That would be Applicant No. 1. And then what appendix was it, 9?

WITNESS BOWES: Appendix No. 9, yes.

MS. MANZELLI: Thank you.

BY MS. MANZELLI:

Q. Just looking again at the words here in the UAM, you'd agree that it says that certain lands are acquired or set aside for scenic enhancement and natural beauty; right?

A. (Bowes) Yes.

Q. And then following that it contains a list which includes scenic strips, scenic byways, overlooks, welcome centers, rest areas, recreation areas, recreation trails, wildlife
and water fowl refuges, historic sites, public parks and landscaped areas; correct?

A. (Bowes) Yes.

Q. So am I correct, then, that the exception requests to date do not address anything except scenic byways from this list?

A. (Johnson) So, exception requests that have been filed to date don't address scenic areas at all. They are more pertinent to constraints or areas where the Project has to move into the roadway.

Q. And why is it that to date scenic areas have not been addressed in the exception requests?

A. (Johnson) Because the exception requests by definition are for putting a road -- or putting a facility into the roadway, which would not affect trees in any way whatsoever because you're under the road. It is as we developed the final design and the alignment in areas that are off of the road that we started to identify areas that may affect trees either in the scenic or non-scenic byways.

Q. And when you're talking about -- a lot of
your testimony this morning revolved around
scenic byways with respect to scenic areas;
correct?

A. (Johnson) Correct.

Q. So why are you excluding this rather long
list of other types of scenic areas?

A. (Johnson) So, again, we're not necessarily
excluding anything. I think what we've
identified in the chart that was shown
earlier is areas that as the alignment is
developed and is off the pavement and
shoulder, areas where there could be
potential impacts to trees. Not excluding
any of these categories.

Q. And just to clarify my understanding, I got
confused in your testimony earlier, and I
think I get it now. So with respect to
scenic areas, your intention is to request an
exception so that you can avoid impact to the
scenic area as opposed to -- I had thought
you were saying, but now I want to confirm
this is not what you were saying. You're not
contemplating requesting an exception so that
you can impair the scenic area.
A. (Johnson) Your former statement is correct, that we're looking to avoid any aesthetic impacts to scenic areas.

Q. And that would be all of the types of scenic areas listed in this Section 7 of the UAM?

A. (Johnson) If there were impacts, that's correct, or potential impacts.

Q. And when you were talking about tree impacts with respect to this type of analysis, you mentioned something about a 4-inch vegetative cutoff. Can you elaborate what you meant by that, please?

A. (Johnson) Sure. So a 4-inch tree in general is a non-mature tree or is still growing. It could be 4 inches or less. So that could be shrubbery on the side of the road. It could be, you know, smaller species of plants. And we would look at those sort of individually. If they were ornamental, obviously that has a different connotation than just sort of shrubs along the side of the road because somebody has clearly planted something or is manicuring something or maintaining it.

Effectively what it was is the Project then
looked at that and said if we could clear out whatever limits of the small trees versus mature, that's how we looked at it.

Q. So, looking at Applicant's Exhibit 222 from this morning, earlier this morning, where you have your fourth column, this column here, Miles Outside Pavement, Potential Tree Impact, were you counting only trees bigger than four inches?

A. (Johnson) Yes.

Q. Now, earlier you looked -- and if we want to look at the page, I'd be happy to do that. But let me try to speed things along here. Attorney Needleman showed you some of the sections of the UAM setting forth some of the requirements, siting requirements for longitudinal facilities. Do you recall that?

A. (Johnson) I do.

Q. Okay. Are you aware that longitudinal institutions -- installations for energy infrastructure, such as a project like Northern Pass, within the designated energy corridors designated by House Bill 626 will not be required to demonstrate extreme
hardship to be able to be located along, within and under major state-owned transportation routes, according to the revised UAM that's in the approval process?

MR. NEEDLEMAN: Objection. Relevance.

CHAIRMAN HONIGBERG: Ms. Manzelli.

MS. MANZELLI: We're talking about the UAM today and the special -- not the special exception request -- the exception requests and what the current requirements are. I'm talking about what future requirements might be to show an increased acceptability of burying within corridors.

CHAIRMAN HONIGBERG: These are not current requirements?

MS. MANZELLI: That is true. But it's based on current New Hampshire law.

CHAIRMAN HONIGBERG: How are not current requirements relevant to the decision we have to make today, not a decision we might make?
MS. MANZELLI: Because your decision should be based on current New Hampshire law.

CHAIRMAN HONIGBERG: And you're saying that current New Hampshire law -- that the UAM hasn't caught up with current New Hampshire law? Is that what you're saying?

MS. MANZELLI: That current New Hampshire law requires the UAM to be revised.

CHAIRMAN HONIGBERG: The answer to my question was "Yes." You're saying the UAM has not caught up with New Hampshire law.

MS. MANZELLI: Yes.

CHAIRMAN HONIGBERG: And what is it you want to know from this witness about current New Hampshire law with which the UAM has not caught up?

MS. MANZELLI: If he is aware of it.

CHAIRMAN HONIGBERG: You can answer.
A. (Bowes) So I am aware of the new law that has been passed. It was identified as House Bill, I think, 626. To the best of my knowledge, there are no new requirements in the Utility Accommodation Manual that cover this.

BY MS. MANZELLI:

Q. To the best of your knowledge, there are no new requirements with respect to installation of longitudinal facilities?

A. (Bowes) Specific to that law, yes.

Q. Okay. Have any exception requests been made with respect to any overhead portion of the Project?

A. (Johnson) No, there is not.

Q. Are there anticipated to be?

A. (Bowes) So I will say that we committed during the last testifying period to multiple changes to the overhead design. We followed that up with a letter in August. And I think almost all of those were accommodated. So there has been some changes. Some of those also pertain to scenic byways and cultural areas. My prefiled testimony from April
identified many of those areas where there are trails or other scenic issues. And I think we dispositioned each one of those that the Counsel for the Public had identified beyond our visual consultants.

Q. So I apologize. I'm not sure I heard the answer to, Do you anticipate filing any exception requests with respect to the overhead route? I think what you're saying is that you've made changes to the overhead route but that they don't require exceptions because they're, you know, otherwise in keeping with the UAM. Is that accurate?

A. (Bowes) That general statement is accurate, yes.

Q. Okay. I wanted to clarify another part of earlier testimony. And again we can look at the individual exception requests if you'd like. I'm going to try to move more quickly than that.

You discussed with Attorney Pappas the use of the word "additional" in terms of the construction -- or excuse me -- traffic control duration.
A. (Johnson) Okay.

Q. Do you recall that discussion?

A. (Johnson) Yeah.

Q. I'm trying to get a clear understanding when in an exception request you say, you know, an additional two weeks or an additional six weeks. What is that on top of?

A. (Johnson) I don't believe it's on top of anything. I believe it would take two weeks -- or in the statement it describes what it would be if the exception request was granted. It would take, for instance, 16 days in the last one we reviewed. And I believe it says if the exception is not granted, it'll take an additional number of days beyond that original request.

A. (Bowes) So that would mean traffic management or traffic controls would be in place for a longer period of time.

Q. Than if the exception requests were granted.

A. (Johnson) That's correct.

A. (Bowes) Yeah.

Q. And again, I'm happy to look at the individual exception requests if you prefer.
But let me ask you about the cost estimates. You testified earlier that providing cost comparisons between the exception requests and, you know, whatever would happen in the absence of an exception request is part of the required standard; right?

A. (Johnson) That's correct.

Q. Now, do you agree that some of the exception requests have no information whatsoever about cost?

A. (Johnson) Yes, they do. And for those it would be no increase in cost to the Applicant; it would just be a longer duration. So cost was not a consideration.

Q. Okay. And, for example, Request 41 estimates $2,069,100 increase for the -- you know, if the exception requests were not approved. And for the exception requests that have a cost estimate like that, there's typically a chart towards the end that breaks it down a little bit. How is that chart prepared?

A. (Johnson) The design engineer and constructor prepared those based on cost estimates that they have.
Q. Cost estimates from whom?

A. (Johnson) The constructor and then the design engineer.

Q. Let me -- this is not marked yet, but it will be SPNF 260. And this is just for the purpose of illustrating what these cost charts look like. You see here this is Exception Request No. 41?

A. (Johnson) I do.

Q. If you turn to the fifth page, this is an example of the cost estimate that you and I were just discussing; correct?

A. (Johnson) Correct.

Q. And you note here on Note 2 it says, "Costs based on contractual unit pricing for the Project." What does that mean?

A. (Johnson) So in the contract that the owner has with the constructor, Par Electric, there is an appendix that has unit prices for things that may be encountered in the field or new construction that gets added to the Project due to "scope creep." So the Project is -- the owner has identified specific costs and unit pricing for those costs as part of
the contract.

Q. So it's really just a "plug in jug" exercise at this point. There's no, you know, bidding or shopping around associated with the exception request.

A. (Johnson) No, there is not any bidding process. The contract was awarded based on a bidding process originally.

Q. Is it fair to say that Northern Pass is having trouble getting the exceptions approved?

A. (Johnson) No. I'd say that this is actually part of the iterative process of working with the DOT. I've worked with DOTs in other jurisdictions, and this is fairly typical of the give and take and working with the design bureau to ensure a quality product that meets both the owner's and the DOT's requirements are met.

Q. Just a question about notations. In the exception requests where it would say something, for example, Request 1, and in parentheses, REV 2, does that mean that that is the first time that that request has been
revised or that is the second time that
request has been revised?

A. (Johnson) Would be the second time.

Q. So then, do you agree that seven of the
exceptions have been rejected after the
second submittal?

A. (Johnson) I'd have to look, but I'll take
your word for it.

Q. Do you agree that --

A. (Johnson) It's possible.

Q. I'm sorry?

A. (Johnson) It's possible.

Q. Do you agree that seven have been rejected
after the third submittal?

A. (Johnson) Again, I don't know.

Q. Do you agree that there's even one that's
been rejected after the fourth submittal?

A. (Johnson) It's possible. So that kind of
rejection could be an iteration, where the
DOT has proposed something on their first,
we've counterproposed something, and we go
back and forth through the design iterations
until, again, we're all satisfied that
conditions have been met to benefit everyone.
Q. You agree -- I'm looking at the -- let me just put it up for you. Applicant's Exhibit 183. This is the May 31, 2017 letter from the DOT, which was the Department's first formal response to the exception requests as you testified earlier; correct?

A. (Johnson) Yup.

Q. You agree that if we flip through the pages there, you'll see comments from the Department of Transportation, such as there are so many existing utilities missing, they can't adequately review the exception request?

A. (Johnson) I believe we looked at that one earlier, yes.

Q. And that DOT noted for you that, quote, "Correct information should be shown on plans," end quote?

A. (Johnson) I'll take your word for it, sure.

Q. You testified earlier that, with respect to Exception Request 59, the use of fluidized aggregate-based coarse material was denied. This is the sort of top layer of the FTB; correct?
A. (Johnson) That's correct.

Q. So what will you do instead?

A. (Johnson) So we'll do like every other

construction process. You will lay back down

gravel and sand and whatever components are

required, compact them to the appropriate

level, put the next layer on, compact that to

the next level and build up a sub base until

ultimately we put asphalt on the road.

Q. And will that require any application

amendments or anything like that, or is that

what you had originally proposed in the first

instance?

A. (Johnson) That's the original proposal.

Q. Again, looking at the DOT -- I apologize.

MS. MANZELLI: I had

anticipated asking Attorney Needleman to

confirm this earlier, but I will ask now.

Could you please confirm that

the July 7th letter from DOT is also part of

Applicant's 183, just for the record? Okay.

Yes, it is.

BY MS. MANZELLI:

Q. So we're looking at a different part of
Applicant's 183, which is the July 7, 2017 letter from the Department of Transportation.
And you agree that if we were to leaf through that, we would find a statement with respect to Exception Request No. 18 that says the existing NHDOT right-of-way appears from the survey report to be the lowest level of accuracy; right?

A. (Johnson) Again, I'll take your word for it.

Q. Take a second to look at this page, APP 65159. Do you see the highlighted language there? Did I accurately describe that?

A. (Johnson) You did.

Q. Why would Northern Pass provide information with the lowest level of accuracy?

A. (Johnson) Would appear to be an error.

Q. Do you agree that if we leafed through some more of these DOT responses and rejections and requests for further information, that DOT had significant concerns about impact to abutters?

A. (Johnson) Yes.

Q. So is the adverse impact to abutters up and down New Hampshire not worth Northern Pass...
investing in the highest level of accuracy,
or something better than the lowest level of accuracy?

A. (Johnson) So that's exactly the process that we're working through today, that we started to do in the past, and we're doing it to a, in my opinion, a better quality product or a tighter product than was put in before. Clearly there were some errors in this survey report that was put in, and we're striving to correct those and ensure that we have an accurate depiction of what the Project believes is the right-of-way.

Q. So was the error a Project decision to try to get approval with the lowest level of accuracy?

A. (Johnson) No. In this case, I believe it was just mislabeled.

MS. MANZELLI: Mr. Chairman, I had asked Counsel for the Public for a favor, to print something for me. Let me just confer.

(Pause)

BY MS. MANZELLI:
Q. Just a couple follow-up questions from your testimony earlier today.

You testified earlier that, with respect to the survey, DOT was looking for more foundational evidence to move away from that "approximate" language. Was the survey submitted before field work was done?

A. (Johnson) No.

Q. Do you have the conference report from the 9/19 DOT meeting?

A. (Johnson) Not published yet.

Q. Do you have it?

A. (Johnson) I do not, no. The DOT prepares the conference reports.

Q. Does anyone on the panel have it?

A. (Bowes) I do not.

A. (Johnson) I don't believe it's available yet. They have not published it yet to us.

Q. When you were using your chalk exercise, which has now been marked as Applicant's Exhibit 223, you said something about Section A and, I believe, Section H that characterized those areas as "normal." You said -- I don't have your exact words, but
you said something like, and then, you know, when we get away from these obstructions in G and E and C, back to something that's normal, and then you continued your thought. I'm wondering what you meant by "normal" circumstances.

A. (Johnson) So that's where there is available space between the edge of the road and the edge of the right-of-way to install the alignment without impacting anything.

Q. And do I understand correctly that for the HDD that does not exist?

A. (Johnson) So, the HDD, by definition, has to go underneath the roadway as it goes under bridge abutments. So there will always be an exception request for that. The nuance that Mr. Pappas and I discussed earlier were cases where the entry and exit pits have to be in the roadway partially or fully due to right-of-way constraints.

Q. Mr. Scott, earlier you testified that you prepared the initial design of the underground design; correct?

A. (Scott) Correct.
Q. When was that?
A. (Scott) I'd have to check the date on the drawings. It's been a while.

Q. Can you approximate at all? Certainly it was before October of 2015, which is when the Application was filed; right?
A. (Scott) Yeah, I believe it was that summer.

Q. So, approximately mid-2015.

Is anybody on the panel aware of whether the UAM has changed at all, the approved version of the UAM has changed at all from the time of initial design in approximately 2015 through to the present?
A. (Johnson) I don't believe it has. The UAM is dated 2010, the one that were designing towards and have has put forth as part of the exhibits.

Q. Mr. Bowes, you testified earlier that typically the DOT provides the right-of-way on a project; correct?
A. (Bowes) That is correct. In my 30 years of doing projects, the state DOTs provide their rights-of-way.

Q. There's a statutory process for DOT to define
an unclear right-of-way. Would you like DOT
to do that for this project?

A. (Bowes) I think they have given us a
condition where we will have control of that
process and go forward and do that.

Q. Mr. Johnson, you testified earlier that, I
think your word was "several," but to me it
seems like 10s, approaching somewhere between
50 and 100 of the exception requests have
been withdrawn; right?

A. (Johnson) Correct.

Q. How would one have known that aside from your
testimony today?

A. (Johnson) Most likely you wouldn't. We have
informed the DOT of which ones that we have
withdrawn. The DOT chose to put all of the
exception requests onto their web site as, I
assume, clarity or as far as the request for
information. In effect, we have withdrawn
all of them at this point, except --

Q. Unless they've been approved.

A. -- for the ones that have been approved while
we update the information.

Q. Ms. Frazier, you testified earlier -- let's
see here -- that you had submitted -- I didn't catch the name of the form. But the meaning of the form was a form to help the DOT's determination as to whether a full-blown Traffic Management Plan would be needed, or something short of that; correct?

A. (Frazier) Correct. It's the Traffic Control Committee's determination.

Q. And you testified that you withdrew that request. And then I think it was Mr. Johnson that added that that request has not been resubmitted; is that correct?

A. (Frazier) Correct.

Q. And then you testified that Mrs. Esterberg is acting on that request, even though it hasn't been resubmitted; is that correct?

A. (Johnson) No. So, part of what Ms. Esterberg is doing is getting, if you will, a placeholder for the Project to present at the -- with the Traffic Control Committee, at which time the document that Ms. Frazier is referring to will be presented to them.

Q. Thank you. I have no further questions.

CHAIRMAN HONIGBERG: All
right. We'll take our lunch break and be
back about 1:30.

(Lunch recess taken at 12:33 p.m., and
this concludes the Day 42 Morning
Session ONLY. The hearing continues
under separate cover in the transcript
noted as Day 42 Afternoon Session
ONLY.)
CERTIFICATE

I, Susan J. Robidas, a Licensed Shorthand Court Reporter and Notary Public of the State of New Hampshire, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes of these proceedings taken at the place and on the date hereinbefore set forth, to the best of my skill and ability under the conditions present at the time.

I further certify that I am neither attorney or counsel for, nor related to or employed by any of the parties to the action; and further, that I am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in this action.

Susan J. Robidas, LCR/RPR
Licensed Shorthand Court Reporter Registered Professional Reporter
N.H. LCR No. 44 (RSA 310-A:173)
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SEC DOCKET NO. 2015-06 NORTHERN PASS TRANSMISSION, LLC
ADJUDICATORY HEARING
September 29, 2017

Min-U-Script®

SUSAN J. ROBIDAS, N.H. LCR
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(13) proper - request

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ADJUDICATORY HEARING

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