CITY OF CAMBRIDGE
POLE AND CONDUIT COMMISSION
IN RE: POLE AND CONDUIT COMMISSION MEETING
POLE AND CONDUIT BOARD MEMBERS:
WILLIAM DWYER, SUPERINTENDENT OF STREETS
STEPHEN LENKAUSKAS, DEPUTY CITY ELECTRICIAN
STAFF: EXECUTIVE DIRECTOR ELIZABETH LINT
AT: Michael J. Lombardi
Municipal Building
831 Massachusetts AvenueBasement Conference RoomCambridge, Massachusetts 02139
DATE: October 20, 2016
TIME: 10:06 a.m.
$\qquad$
CAPTURING THE OFFICIAL RECORD 617.786.7783/www.reportersinc.com

## INDEX OF AGENDA PROCEEDINGS

AGENDA MATTERSPAGE
CONTINUED PETITIONEVERSOURCE - COLUMBIA STREET
NEW PETITION
EVERSOURCE - ESSEX STREET ..... 7
CONTINUED PETITION
EVERSOURCE - THIRD STREET ..... 10
NEW PETITION
EVERSOURCE - HASTINGS AVENUE ..... 11
CONTINUED PETITION
LIGHTOWER - BROOKLINE STREET ..... 14
NEW PETITION
LIGHTOWER - CAMBRIDGE STREET ..... 17
NEW PETITION:
Lightower - blackstone street ..... 21
NEW PETITION
COMCAST - CAMBRIDGE STREET ..... 27
NEW PETITION
COMCAST - GERRY'S LANDING ..... 32

## INDEX OF AGENDA PROCEEDINGS

AGENDA MATTERSPAGENEW PETITION
COMCAST - MEMORIAL DRIVE ..... 34
NEW PETITION
COMCAST - THIRD STREET ..... 39
NEW PETITION
COMCAST - MAIN STREET at PORTLAND STREET ..... 46
NEW PETITION
COMCAST - ASH STREET ..... $48 / 51$
NEW PETITION
VERIZON - RINDGE STREET ..... 55
EW PETITION
VERIZON WIRELESS - SHERIDAN STREET ..... 57
CONTINUED PETITIONMOBILITIE - PALERMO STREETCONTINUED PETITION
MOBILITIE - YORK STREET
CONTINUED PETITION
MOBILITIE - LAMBERT STREET

$$
\begin{gathered}
\text { PROCEED I NGS } \\
\text { October } 20,2016 \\
\text { POLE AND CONDUIT COMMISSION MEETING }
\end{gathered}
$$

EXECUTIVE DIRECTOR ELIZABETH LINT: Good morning. We would like to get started.

This is a meeting of the Pole and Conduit

Commission, Thursday, October 20, 2016 at 10:06
a.m.

We are in the Michael J. Lombardi

Building, 831 Mass. Ave, Basement Conference

Room. Before you are Commissioners Steve Lenkauskas and Bill Dwyer.

The minutes?

## CITY ELECTRICIAN STEVE LENKAUSKAS:

Motion to approve the minutes from the September 15th hearing.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

Any residents that want to speak on any
particular item before us today, step forward?
(No response.)

I don't see any.

The first petition is Eversource.

CONTINUED PETITION

EVERSOURCE - COLUMBIA STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: Good
morning.

JACQUI DUFFY: How are you?

CITY ELECTRICIAN STEVE LENKAUSKAS: This
first petition is for Columbia Street, which was continued from the September hearing.

JACQUI DUFFY: This is the way the customer is going to go.

I guess it was continued because they
wasn't sure if the customer was going that way and they are.

CITY ELECTRICIAN STEVE LENKAUSKAS: Okay.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Public Works is fine with it.

CITY ELECTRICIAN STEVE LENKAUSKAS:

Motion to approve?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

NEW PETITION

EVERSOURCE - ESSEX STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: The second petition also Eversource.

Essex Street, southwesterly from manhole

1013, approximately 85 feet northeast of Mass.

Ave, a distance of 73 feet of conduit.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Excuse me a second. Can we back up a minute?

Typical condition on the past petition.

Does everyone understand what they consist of?

EXECUTIVE DIRECTOR ELIZABETH LINT: Yep.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Sorry.

JACQUI DUFFY: That's all right.

CITY ELECTRICIAN STEVE LENKAUSKAS: Is
that a new service?

JACQUI DUFFY: 579-605 Mass. Ave. And
that's to relocate the 1200 amps service.

CITY ELECTRICIAN STEVE LENKAUSKAS: Where
is it fed now? Out front?

JACQUI DUFFY: Yes. They are going to put it on Essex. I have a sketch if you need a sketch.

## CITY ELECTRICIAN STEVE LENKAUSKAS: I

have it here.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

This is for the HMart, that new development
there?

## EXECUTIVE DIRECTOR ELIZABETH LINT: Is

that what it is for?

JACQUI DUFFY: The what?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

The HMart store.

JACQUI DUFFY: I'm not sure.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

The parking lot next door? I am pretty sure it is.

City electrician steve Lenkauskas: it
looks like it is the corner property.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yeah.

CITY ELECTRICIAN STEVE LENKAUSKAS: A
motion to approve with all typical conditions? SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.
CITY ELECTRICIAN STEVE LENKAUSKAS: All
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

## CONTINUED PETITION

## EVERSOURCE - THIRD STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: The
third petition, also Eversource, First Street and westerly from manhole 1477, a distance of 33 feet of conduit. This is to remove the primary overhead wires and resupply from underground.

So that eliminates all the overhead primary and second?

JACQUI DUFFY: Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: Is
that part of all the expediting the pole and transfers on Second Street? Is that part of that?

JACQUI DUFFY: Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: Is
this -- this is all in the sidewalk?

JACQUI DUFFY: It is. From manhole 1477.

## SUPERINTENDENT OF STREETS WILLIAM DWYER:

Some of that sidewalk may be fairly new but that shouldn't be that big of a deal to replace that.

Public Works is good.

CITY ELECTRICIAN STEVE LENKAUSKAS:

Motion to approve with all typical conditions.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

NEW PETITION

EVERSOURCE - HASTINGS AVENUE

CITY ELECTRICIAN STEVE LENKAUSKAS: A1so

Eversource. Hastings Ave at Phillips Place and
southwesterly from pole No. 6 to manhole 7252
turning northerly. This is a distance of about 118 feet of conduit.

Also on Hastings Avenue, northerly side
of Phillips Place install one Eversource pole No.
6. This is for 99 Brattle Street, Lesley

University. Is this private property?

State your name for the record.

KEVIN MURPHY: Kevin Murphy with Lesley

University. K-E-V-I-N M-U-R-P-H-Y.

CITY ELECTRICIAN STEVE LENKAUSKAS: So I
believe this is all private property.
SUPERINTENDENT OF STREETS WILLIAM DWYER:

Uh-huh. You might be correct. I haven't had a chance to see this one. But I'm pretty sure, I think you are right on this.

City electrician steve Lenkauskas: It
is.

KEVIN MURPHY: It is 1 and owned by Lesley University and the Episcopal Kennedy School. SUPERINTENDENT OF STREETS WILLIAM DWYER:

My best recollection at this time, we own the

Phillips Place, the Hastings and John's Road
(phonetic) but we didn't dealt with anything in there other than rubbish and stuff.

CITY ELECTRICIAN STEVE LENKAUSKAS: And that pole is on private property.

JACQUI DUFFY: Okay, they put it on the street. That's why we petitioned it. We didn't know it was private.

CITY ELECTRICIAN STEVE LENKAUSKAS: Okay.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Move ahead with all typical conditions.

CITY ELECTRICIAN STEVE LENKAUSKAS:

Motion to approve with all typical conditions.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

## Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: Yes.

Thank you.

Lightower?

CONTINUED PETITION

LIGHTOWER - BROOKLINE STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: Good
morning.

BOB WALLS: Good morning.

CITY ELECTRICIAN STEVE LENKAUSKAS: State
your name for the record.

BOB WALLS: Bob Walls, B-0-B W-A-L-L-S.

CITY ELECTRICIAN STEVE LENKAUSKAS:

First petition for Lightower is a continuation, and $I$ believe you were looking for the entire route and if 1 icensing was obtained or to get licensing on the other poles.

BOB WALLS: And I did get a letter that
license is in progress and Eversource is allowing us to place a conduit on that pole while we're in the 1 icensing phase.

## CITY ELECTRICIAN STEVE LENKAUSKAS:

That's the extent of that route, just that one pole?

BOB WALLS: The full extent is the pole shown on the -- it's six poles. Pole 34 back to pole 18, at the intersection of Erie.

CITY ELECTRICIAN STEVE LENKAUSKAS: Back
to what pole?

BOB WALLS: At the intersection of Erie

Street and Brookiine Street. I believe it is

```
pole 18 on Erie Street. I have a copy right
here.
```

CITY ELECTRICIAN STEVE LENKAUSKAS: You
haven't received your 1 icensing for the other
poles.
BOB WALLS: Correct. It's still in
progress.
CITY ELECTRICIAN STEVE LENKAUSKAS: I
would 1 ike to continue this until your 1 icense is
a11 taken care of and your make-ready work is
established for that route.
I would 1 ike to make a motion to
continue.
SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

```
CITY ELECTRICIAN STEVE LENKAUSKAS: Al1
```

in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.
CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

## NEW PETITION

LIGHTOWER - CAMBRIDGE STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: Also
for Lightower. This is for Cambridge Street.

Install approximately 75 feet of four-inch PVC conduit and other supporting and protecting equipment from utility pole No. 10 on Cambridge Street southeasterly to the building located at 1575 Cambridge Street.

Do you have a list of abutters notified of this? There's no pole 10 on Cambridge Street.

That's why $I$ was questioning this.
BOB WALLS: I believe when I looked at this this morning, I think it is Hovey Street. CITY ELECTRICIAN STEVE LENKAUSKAS: Hovey

Ave. I don't think you made any notification on Hovey Ave that $I$ can see here. BOB WALLS: I can go back. CITY ELECTRICIAN STEVE LENKAUSKAS: Yeah. Because I think the petition seems to be incorrect as far as the location. It is marked as 10 on Cambridge Street but that's actually Hovey Ave and the notifications have not been made on Hovey. And just to go a little further on that,
where is that going to?

I understand it is a pole 10 on Hovey

Ave.

$$
\text { BOB WALLS: Going to } 1575 \text { Cambridge }
$$

Street.

CITY ELECTRICIAN STEVE LENKAUSKAS: From
where?

BOB WALLS: Our splice point is at pole

$$
\begin{aligned}
& \text { 5, Magnolia Ave. I have a pole line drawing. } \\
& \text { CITY ELECTRICIAN STEVE LENKAUSKAS: You }
\end{aligned}
$$

need licensing for all those poles also.
BOB WALLS: We are licensing poles 14,12 and 10 on Hovey Ave.

CITY ELECTRICIAN STEVE LENKAUSKAS: You
can move forward with the licensing but you still
need to make notifications to be reheard on this petition.

BOB WALLS: Okay.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

I don't know if you have already, you may want to check and see if there's existing conduit.

Hovey Ave was paved recently in the last
couple years, and that section of Cambridge

Street has -- you might want to look into existing conduit.

BOB WALLS: Okay.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

That may be the way to go.
CITY ELECTRICIAN STEVE LENKAUSKAS: Are
you in the Eversource system up there?
BOB WALLS: I believe so.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
would reiterate what Bill said.

There are manholes on the other side of the street.

There's also, they look to be an empty conduit on pole 10 , that may take you across the street.

BOB WALLS: If it is only one, they won't give it to us. It has to be two spaces.

CITY ELECTRICIAN STEVE LENKAUSKAS: It
may have been abandoned, though. It may be some help to you.

BOB WALLS: I'11 talk to him.

## CITY ELECTRICIAN STEVE LENKAUSKAS: A

motion to continue?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

NEW PETITION:

LIGHTOWER - BLACKSTONE STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: A1so
for Lightower on Blackstone Street. Install
approximately 86 feet of four-inch PVC conduit
and other supporting and protecting equipment
from electric manhole 1309 on Blackstone Street,
southeasterly at the building located at 19

Blackstone Street.

Have you looked for available conduit
there also?

BOB WALLS: We have none.

Eversource did the look-up.

There's nothing that can get us in the building. I tried to get in the manhole across the street and there's no conduit to get to that manhole in the sidewalk.

CITY ELECTRICIAN STEVE LENKAUSKAS: It is a newly-paved street also, $I$ believe.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yep.

I don't what to tell them.

Nothing from any other university in that
area maybe have anything?

BOB WALLS: Not that we could find.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

So you are telling me your alternative is to --
BOB WALLS: Trench. And then when I was
in the building, too, Verizon only had one pipe
and it was pretty full and they'll only license a pipe into the building if there's a spare. There wasn't a spare. It is only one, four inch.

CITY ELECTRICIAN STEVE LENKAUSKAS: Does
that property extend over to Putnam Avenue?

BOB WALLS: That's the same deal over
there.

One pipe and it is full, and Verizon, and
the electric still can't get us anywhere over there as well.

SUPERINTENDENT OF STREETS WILLIAM DWYER:
We definitely don't want you to dig the street up.
I don't know if you have to go a longer
route or a further route. I don't know -- I'm at
a loss here for what you need to do. Or what you can do, I guess.

You stil come down to the point that
there's no way to get into the building because
all the conduits are pretty full, right?

BOB WALLS: Correct.

Right. There's no spares to get me
across the street there, and there's even a manhole behind the building and $I$ can't get to that manhole either.

There's nothing out of that manhole C1309
that gets me anywhere across the street.

CITY ELECTRICIAN STEVE LENKAUSKAS: How about overhead? That side of the street is all poles.

BOB WALLS: There's like one pole over
there and $I$ would have to dig to that pole. But we don't have a path -- we are not currently on
any of those poles.

I would have to dig to one of those poles
just to get to the pole 1 ine.

CITY ELECTRICIAN STEVE LENKAUSKAS: And you are in that hole across the street, that's where you are splicing? BOB WALLS: Correct. SUPERINTENDENT OF STREETS WILLIAM DWYER:

Everything in those conduits are being used? BOB WALLS: Correct. SUPERINTENDENT OF STREETS WILLIAM DWYER:

The print is pretty small on this plan here.

What does the yellow indicate? Is that gas?

BOB WALLS: Do you want a larger size
print?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Thanks.

Why don't we continue this for a month
and see if there's something we can find.

BOB WALLS: Okay. I can see --

CITY ELECTRICIAN STEVE LENKAUSKAS: Have
you looked on the Putnam Avenue side extensively
to try come in off of Putnam, even if you had to
dig on that side?

BOB WALLS: They have like a ditch in
front of the building. It is a walkway. But I
can look again and see if we can find something better.

## CITY ELECTRICIAN STEVE LENKAUSKAS: And

if you can utilize the poles maybe down a few and access a manhole on the same side and just
utilize the sidewalk because that street was just paved.

So motion to continue?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

## CITY ELECTRICIAN STEVE LENKAUSKAS: A11

in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

BOB WALLS: Thank you.

CITY ELECTRICIAN STEVE LENKAUSKAS:

Thanks.

NEW PETITION

COMCAST - CAMBRIDGE STREET

ANTHONY VATALARO: Good morning.

Anthony, A-N-T-H-O-N-Y, Vatalaro,

V-A-T-A-L-A-R-0.

CITY ELECTRICIAN STEVE LENKAUSKAS: This
is for 1280 Cambridge Street from existing sidewalk vault in front of 1262 Cambridge Street, trench westerly 23 feet in the sidewalk ending at
the property 1 ine of 1280 Cambridge Street,
installing one, three-inch PVC conduit.

This will include the removal and
replacement of five sidewalk panels.

So you are going to feed that property
without a vault, right, just from the existing
vault?

ANTHONY VATALARO: Yeah, I'm going to
go from there and turn the pipe up at his building.

CITY ELECTRICIAN STEVE LENKAUSKAS: Up on
the outside of the building?

ANTHONY VATALARO: Yeah.

CITY ELECTRICIAN STEVE LENKAUSKAS: You
can't go directly into the building?

ANTHONY VATALARO: I'm not 100 percent on
that. But $I$ remember when $I$ looked at it, $I$ had
it come on the outside of the building.

CITY ELECTRICIAN STEVE LENKAUSKAS: I'd
rather not see it go on the outside of the building aesthetically. You put one, three-inch on the outside of the building?

ANTHONY VATALARO: Yeah.

CITY ELECTRICIAN STEVE LENKAUSKAS: You
have looked alternatively to come in the
basement? Or there is no basement?

ANTHONY VATALARO: I don't believe
there's a basement. It is on a slab.

CITY ELECTRICIAN STEVE LENKAUSKAS:

That's an existing vault?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yeah.

## CITY ELECTRICIAN STEVE LENKAUSKAS:

That's existing. The manhole is existing, correct?

ANTHONY VATALARO: Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: The
manhole is existing and the vault is existing.

And they are looking to have conduit going through --

SUPERINTENDENT OF STREETS WILLIAM DWYER:

We would be fine with that.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
would just, when you come -- if there's no alternative, no basement, then $I$ mean --

ANTHONY VATALARO: I can double check, and if $I$ can somehow, even if it is a slab, if I can somehow get -- I prefer to come below grade, too. I don't recall that being an option.

CITY ELECTRICIAN STEVE LENKAUSKAS: Okay.

I'd make a motion to approve this but
just to -- all typical conditions, but just
before it is done, give me a call and I'11
include in the electrical permit a final whether
you can come inside or maybe shrink down the three inch when it comes up. Something to make
it tighter to the sidewalk. Because there's --
it is a wide sidewalk but it has an, I think, a
two- or three-foot brick on the outside, which
cuts down the --

ANTHONY VATALARO: Okay.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Make that part of your permit.

CITY ELECTRICIAN STEVE LENKAUSKAS: Yeah.

Include in the electrical permit, the final --
the entry into that building.

So on the motion?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

## NEW PETITION

> COMCAST - GERRY'S LANDING

CITY ELECTRICIAN STEVE LENKAUSKAS: A1so
more Comcast. This is 30 Gerry's Landing from existing Comcast manhole on Coolidge Hill Road, trench easterly 35 feet in the public way ending at the property 1 ine of 30 Gerry's Landing
installing one, four-inch conduit. I could not find this.

ANTHONY VATALARO: Yeah.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
walked the whole area there. Where exactly?

ANTHONY VATALARO: You know where the two
schools are, the Shady Hill School? It is --
that's a dead-end street, and there's like three
houses off that dead end. It is not a
cul-de-sac, but there's three huge properties down there. We have a square vault.

CITY ELECTRICIAN STEVE LENKAUSKAS: You
are down that cul-de-sac between the rink and down the end.

ANTHONY VATALARO: Yes.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Public Works is okay with this.

CITY ELECTRICIAN STEVE LENKAUSKAS:

Motion to approve?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

## SUPERINTENDENT OF STREETS WILLIAM DWYER:

Typical conditions.

City electrician steve Lenkauskas: With
typical conditions.

NEW PETITION

COMCAST - MEMORIAL DRIVE

City electrician steve Lenkauskas: Also
for Comcast. This is for One Memorial Drive from existing Comcast manhole in front of 36 Memorial Drive on Broadway, trench easterly $9 r$ feet in the public way installing one, four-inch conduit ending at the Level 3 manhole also in front of 36 Memorial Drive.

You are adjoining one of your manholes with Level 3.

ANTHONY VATALARO: Yes. So we can get access from One Memorial Drive and minimize the
trench.

This is a renewal. This was approved a year ago and we never got to the work.

CITY ELECTRICIAN STEVE LENKAUSKAS: Okay.

Was there a city conduit included at that time?

Regardless. We would require one for this petition.

ANTHONY VATALARO: I think there was.

But the question was, does that get left outside of the Level 3 manhole or brought into it?

CITY ELECTRICIAN STEVE LENKAUSKAS:

Brought into the Level 3.

We have presence in that manhole.

Was this delay because of the
construction of the bridge? Or why was it delayed?

ANTHONY VATALARO: Yeah. I think
initially there was a lot of construction in that
area for the bridge and then they never got back around to it.

It is 60 or 90 days for this approval?

The work needs to be done within 60 or 90 days? CITY ELECTRICIAN STEVE LENKAUSKAS:

Started, I believe, within 60.

ANTHONY VATALARO: So I think by then the 60 days was up.

CITY ELECTRICIAN STEVE LENKAUSKAS: And
the bridge is going to be -- that bridge
construction is continuing through the next couple years.

ANTHONY VATALARO: I know. But I don't --

CITY ELECTRICIAN STEVE LENKAUSKAS: And
that's their trave1 1 ane.

Have you talked with them when you can
get in there?

ANTHONY VATALARO: I don't think anybody
talked to them.

I didn't think they were right at this
particular spot.

CITY ELECTRICIAN STEVE LENKAUSKAS: Al
the traffic goes on that side.

ANTHONY VATALARO: Oh, they switched the
lanes over there?

CITY ELECTRICIAN STEVE LENKAUSKAS: Well,
they always -- yes.

All the traffic always went on that side to get to Memorial Drive. And that has not changed. That's one lane of traffic on that, right where you are proposing to dig.

ANTHONY VATALARO: Wonderful.

CITY ELECTRICIAN STEVE LENKAUSKAS: I'm
saying you may be coming back again unless you can work something out with them, maybe off hours
or shifting.

ANTHONY VATALARO: Yeah, I'm sure after
hours.

CITY ELECTRICIAN STEVE LENKAUSKAS: We'd want to include a city conduit in there. SUPERINTENDENT OF STREETS WILLIAM DWYER:

There's a possibility because the Water

Department had to get in there for a repair of a main and they were able to do it off hours. So there's a possibility to do that.

ANTHONY VATALARO: Okay.

CITY ELECTRICIAN STEVE LENKAUSKAS:

Motion to approve? All typical conditions? SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.
CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

## NEW PETITION

COMCAST - THIRD STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: New
petition. Comcast, on Third Street, place a new

3-by-5 manhole over Level 3 conduit. Trench 22
feet in the public roadway to existing Comcast
manhole at Broad Canal Way and rebuild and enlarge that manhole.

We want you to add a city conduit here also.

ANTHONY VATALARO: Okay.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

You are not doing any vertical footage, you are not doing anything with that, you are making it wider? Or longer.

ANTHONY VATALARO: So there's a manhole down at the corner of Broadway and Third but it is packed.

There's no room in it whatsoever.

So the new manhole, it is just a lateral
to connect from the Level 3 to the Comcast
conduit system. It is just a little further up
the street.

Because originally they wanted to trench
from the manhole at Broadway and Third.

They wanted to trench that whole entire
thing. I asked them to find another way. And this is the solution.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yep.

ANTHONY VATALARO: Just do the lateral.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

You've got to install a - Comcast is going to
install a new manhole. And what conduit are you going to run out of there? I'm missing that part, I guess.

ANTHONY VATALARO: It is to connect to

Level 3.

It's a new Comcast manhole over to
connect to the Level 3.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

You have conduit and fiber going from that
manhole to the Level 3 manhole?

ANTHONY VATALARO: Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: How
many conduits?

ANTHONY VATALARO: I believe just the
one, four inch.

CITY ELECTRICIAN STEVE LENKAUSKAS: One,
four inch, plus the one for the city?

ANTHONY VATALARO: The city wants a four

> inch?

City electrician steve lenkauskas: Yes.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

You are going to be on Broad Canal Way, right,
with your manhole, am I right?

ANTHONY VATALARO: That's where the existing one is.

SUPERINTENDENT OF STREETS WILLIAM DWYER:
I'm still, I'm sorry, I'm still not getting where
the advantage -- and then conduit will come out of that Comcast manhole. Are they servicing anyone up Broad Canal Way or up and down Third Street?

ANTHONY VATALARO: Well, it is to get
into the Level 3. So there will be two Comcast manholes there. One side will be the Level 3 conduit. But the connection is going to be a Comcast conduit into the Level 3 manhole
system.
CITY ELECTRICIAN STEVE LENKAUSKAS: It
wil1 have the two systems?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

You will break into the wall of the Level 3 manhole?

ANTHONY VATALARO: No. This manhole will
go over their conduit.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Okay. In essence you are replacing a manhole on

Third Street?

ANTHONY VATALARO: We want to en 1 arge the one that's on Broad Canal existing.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

How many conduits are in there right now?

ANTHONY VATALARO: I think there's only
one.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

One?

ANTHONY VATALARO: Yes.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

You want to make that --

ANTHONY VATALARO: I want to enlarge that manhole to accommodate the new cable, the new fiber that will be in there. I want to do a
lateral from the newly enlarged Comcast manhole across Third Street and put a manhole over existing Level 3 duct bank so $I$ can connect the Comcast manhole system with the Level 3 manhole system.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Who will own the manhole that you put on the Level 3 duct bank system? You or Level 3? ANTHONY VATALARO: Comcast.

City electrician steve Lenkauskas: we
could use an inner duct if you want to give us an
inner duct rather than a full four inch. I know it is tight there.

ANTHONY VATALARO: If I have room, I'11
put in a four inch, but if not --

CITY ELECTRICIAN STEVE LENKAUSKAS: We'11
need it -- we'd be all right with an
inch-and-a-quarter inner duct if the space gets
tight in there. I know it is a tight area to work.

ANTHONY VATALARO: Yep.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

You may be doing curb-to-curb paving with the recently-paved Third Street.

ANTHONY VATALARO: So will that be 1aid out on a permit?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yes.

ANTHONY VATALARO: The limits of that?

## SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yes. Yeah. We'11 have a site meeting and that will be determined with you there, all righty?

City electrician steve Lenkauskas: On
the motion to approve?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS:
Typical conditions. All in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

NEW PETITION

COMCAST - MAIN STREET at PORTLAND STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: Also

Comcast. Main Street at Portland Street from a Level 3 manhole 2702, trench four feet westerly
to proposed 3-by-5 Comcast vault, continuing 325
feet westerly on Main Street to a proposed 3-by-5
Comcast vault, continuing 362 feet northerly on

Portland Street to a proposed 3-by-5 Comcast
vault over existing conduits.
We also ask for a city conduit for this
entire route including going into that Level 3.

ANTHONY VATALARO: All right.

City electrician steve Lenkauskas: This
is to service customers over there? What's the nature of this build?

ANTHONY VATALARO: To expand the fiber
network.

## CITY ELECTRICIAN STEVE LENKAUSKAS:

Include a common trench application for this. I would move to continue pending a common trench application.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

NEW PETITION

COMCAST - ASH STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: A1so

Comcast for 9 Ash Street, place one new vault over existing underground conduit from pole 2 on Acacia Street. Trench northerly 16 feet in the public way ending at the property 1 ine of 9 Ash Street instaliing one, two-inch PVC conduit.

This will include the removal and replacement of one sidewalk panel. Going overhead to underground?

ANTHONY VATALARO: It's a Harvard-owned
building and $I$ think there was complaints about the aerial attachment.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
know electric has gone underground or in the process of going underground.

ANTHONY VATALARO: They want to move the phone and cable. I think Verizon is on this too. They want to move the phone and cable both underground.

## CITY ELECTRICIAN STEVE LENKAUSKAS:

You're proposing only to dig from the property out?

ANTHONY VATALARO: Yeah.

CITY ELECTRICIAN STEVE LENKAUSKAS: And
straddling over your conduit to pick it up?

ANTHONY VATALARO: Yep. That's how I can get back to that pole.

## CITY ELECTRICIAN STEVE LENKAUSKAS:

Right.

## EXECUTIVE DIRECTOR ELIZABETH LINT:

Shouldn't that be the next one as well, which is the Verizon petition.

CITY ELECTRICIAN STEVE LENKAUSKAS: We can. I think they are the same but -- I think not. I think --

ANTHONY VATALARO: It is definitely not a common trench. I know it says common trench here but it is not.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
don't have any issues with that.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Go forward.

CITY ELECTRICIAN STEVE LENKAUSKAS:

Motion to approve with typical conditions?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: Al
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye. ANTHONY VATALARO: Thank you.

NEW PETITION

VERIZON - ASH STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: We
have Verizon.

This is a Verizon petition. This is also
for 9 Ash Street from the Verizon manhole

326/440, place approximately 97 feet of four-inch

PVC to the property 1 inc at 9 Ash Street.

Question being - why would you be digging
al of Acadia Street to get to the corner of

Ash Street when the property abuts Ash Street? EVERETTE BRYAN: The engineer tried to
come off the pole, but the pole coming off there has four risers on there currently, which is not a good practice. To add additional -- additional riser, it would de-botch the pole. And it's very difficult to replace the pole.

CITY ELECTRICIAN STEVE LENKAUSKAS: I understand that.

But the manhole is on Ash Street and the property is on Ash Street.

And I'm wondering why you wouldn't have come out of the corner of Ash and Acacia and that way, there, we wouldn't have to dig the street.

EVERETTE BRYAN: I think getting the conduit and placing it on private property --

SUPERINTENDENT OF STREETS WILLIAM DWYER:

You could also meet that from Ash Street if you
went over private property along the front of the -- I think it would be the front of the house or the side of the house.

On your plan, it refers to a flower bed or a grass strip.

Some method they could install the pipe on private property and minimize the disturbance to the public way?

EVERETTE BRYAN: On my plan it shows a hand hole on private property up through the driveway, up to the property 1 inc, and we are just meeting where they have their conduit in pl ace.

CITY ELECTRICIAN STEVE LENKAUSKAS: Right now the building is overhead and there's no hand hole seen at this point. I don't believe it has been installed, that I've seen when $I$ was out there. So the reason -- the point we are
bringing up is not to dig the public way when you can leave the property line right adjacent from that manhole on Ash Street for the Ash Street address, that corner property, minimizing the excavation in the street with everything else out there.

EVERETTE BRYAN: That's possible if the property owners are agreeable to it.

CITY ELECTRICIAN STEVE LENKAUSKAS: We'11
move to continue so you can talk to the property owners and see if we can't exit that property on

Ash Street, minimizing the disruption there on the public way.

> SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: All
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

NEW PETITION

VERIZON - RINDGE STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: The next petition is also for Verizon. This is for Rindge Avenue. Place approximately 65 feet of four-inch PVC conduit from existing Verizon manhole $26 / 475$ in an easterly direction to private property at 286-298 Rindge Avenue also known as Jefferson Park.

Is the contractor doing all this work
other than your penetration?

EVERETTE BRYAN: We just break out the
manhole and the customer is placing the conduit.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
believe we are also requesting a two-inch PVC to
be punched in that the contractor will pull over for fire alarm and city.

That's been discussed with the contractor already, so they are aware it.

We just want to be sure when you
penetrate that manhole that you also continue the two-inch PVC and also for the city.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: On
the motion to approve with al typical
conditions?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: Yes.

Thank you.

## NEW PETITION

VERIZON WIRELESS - SHERIDAN STREET

ATTY MICHAEL GIAIMO: Michael Giaimo for
the applicant.

This is a pole attachment on Sheridan

Street. It is a small cell installation
involving antenna, radio and an electrical
connection mounted to existing utility poles.

There's no underground connections. It
is all coming off the pole.

CITY ELECTRICIAN STEVE LENKAUSKAS: Just
one single site? Or are you or is Verizon
looking to expand beyond this?

ATTY MICHAEL GIAIMO: At this point,
there's only one set I'm aware of on rooftops and
other structures in town.

THE REPORTER: Counsel, can you speak up.

ATTY MICHAEL GIAIMO: I said at this
point $I$ 'm only aware of one site, which is this
site. We are on a lot of roof tops and
structures in town as part of the network. This is a fill-in at that location.

You know, it is possible that they will
have other ones but if they do, I'm not aware of it.

There are other places I'm working where they come in with a number of sites as part of an overal 1 plan.

This will fit into the existing network.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Is Verizon Wireless on private properties
throughout the city? Or just in this one
neighborhood in the city?

ATTY MICHAEL GIAIMO: We are on private
property rooftops in various parts of the city including on the Housing Authority --

SUPERINTENDENT OF STREETS WILLIAM DWYER:

My point being that you could actually need to expand in the future to other utility poles or other public ways.

ATTY MICHAEL GIAIMO: Yeah, it depends.
I mean, these small cell installations
are becoming more common because the network is getting more crowded with more people using data. One of the ways to address that is on the utility poles, there are other ways to address it with some places where they let a light pole to be used, and in other places we are filling in on roof tops.

This is the only one I've got, that we got in the pipeline now, as far as $I$ know.

CITY ELECTRICIAN STEVE LENKAUSKAS: Are
there any other installations nearby similar to this? Somerville? Boston? Somewhere nearby?

ATTY MICHAEL GIAIMO: That have been built already?

CITY ELECTRICIAN STEVE LENKAUSKAS: Yes.

Similar to this installation.

ATTY MICHAEL GIAIMO: Amesbury's got some
up. This is a new project. This year is when they first started building them.

Amesbury's got some. I think Winchester
has some. I understand that Woburn has some.

Haverhil1 has some.

CITY ELECTRICIAN STEVE LENKAUSKAS: It
seems 1 ike an awful lot of equipment to put on
the pole spanning top to bottom.

ATTY MICHAEL GIAIMO: If you want to
speak, come forward and state your name.

GOPAL REDDY: G-0-P-A-L, 1ast name

R-E-D-D-Y. I'm a resident 1 iving abutting

Sheridan Street.

I want to get a 1 ittle more information about the specific equipment installed as far as power levels and other locations that were vetted.

I want to know specifically why this
location was picked.

And as a resident on that street, because we are near low-income housing, and whether this
is just an easy, relatively low-objection neighborhood.

ATTY MICHAEL GIAIMO: No.

It had to do with technical reasons only.

I don't think we knew what kind of housing was on this street.

I have Keith Vellante, who is our radio
engineer and he could probably answer this gentleman's question.

KEITH VELLANTE: Keith Vellante,

K-E-I-T-H V-E-L-L-A-N-T-E. I'm with C Square

Systems on behalf of Verizon Wireless.

So this particular location was chosen based on their existing network. They have an existing rooftop site, 2067 Mass. Ave. That's
the Emerson Carriage Building. That's about 2,000 feet away approximately.

That particular site is getting
overloaded with data usage.

So this particular location was chosen to
offload and shut the usage in this immediate area
to kind of allow that site to perform better and
this site would be dedicated to serve the
immediate surrounding area.

Does that answer your question?

GOPAL REDDY: Are you saying -- any
information when it comes to power levels? You
said it is a small site, cell site, what are the specifics in terms of the power versus
traditional cell phone tower? There's just very

1ittle information $I$ was given to go by and the
residents about the specifics of the equipment installed.

KEITH VELLANTE: It's less than the traditional power.

The antenna itself is smaller, so that
the actual output you get from it, would be less than a traditional tower rooftop site.

There's less equipment on this particular
location, but the power levels itself, the radio heads put out approximately 180 watts into the antenna.

And then the antenna takes that RF power
and that's what is used. So it is relatively low power because the users have hand-held devices
that are limited in power, so you have to
communicate back and forth, so it has to be a balanced 1 ink. So it's relative low power.

ATTY MICHAEL GIAIMO: There's one antenna
compared to 12 on a traditional site.

CITY ELECTRICIAN STEVE LENKAUSKAS: The
installation of the meter and the power supply, have you discussed with the --

ATTY MICHAEL GIAIMO: Yes, and I've got a revised plan. I don't know how many copies of this you want.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

I need another one.

EXECUTIVE DIRECTOR ELIZABETH LINT: Has
that been filed with Dana?

ATTY MICHAEL GIAIMO: No. I just
received that this morning.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Is it fair to say that every time your company
would need to mount your equipment on the pole,
it would be the same set up of everything?

ATTY MICHAEL GIAIMO: It would be similar
to that. That's the design they've had for this
smal1 ce11 project, yes.

So it is a canister antenna on top of a
pole, so it is a round antenna that fits above
the pole and then the radio mounted on the side.

CITY ELECTRICIAN STEVE LENKAUSKAS: Is
there any way to shrink the equipment that you are proposing?

ATTY MICHAEL GIAIMO: No. I mean, it is
pretty shrunk already.

We've got one radio here.

Some of the installations in other places
they've used two radio heads in some locations.

This has one.

We go to the pole owner and we do - they
do a structural analysis of everything and make sure it fits and it is structurally sound.

CITY ELECTRICIAN STEVE LENKAUSKAS: They
have agreed to eliminate the meter socket? It's our requirement because we don't allow the meters on the poles.

ATTY MICHAEL GIAIMO: And I misspoke.

They are two radio heads. They are installed directly next to each other so $I$ missed them on the elevation plan, but if you look at the site plan, looking down, there are just two next to each other.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

I think $I$ need a ifttle more in-depth look at
this as far as what the future may hold.

I would think your parent company would have some idea of how -- some part of your company must have some projection of what the needs might be in this area for your company. ATTY MICHAEL GIAIMO: As the network grows, there will be a need for small cells whether they go on utility poles or not, $I$ don't know.

If they go on utility poles, they could be scattered around the city.

I know they don't put them next to each
other, obvious1y.

The City of Boston is seeing a build-out on the utility poles and on light poles as a matter of fact.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

We are trying to project if there's a number of companies 1 ike yourself that have the need or the
wish to build out, 1 ike you are speaking of, how many antennas is that gonna be on how many poles and how many areas throughout the city and where does it stop. How is it coordinated or
orchestrated or restricted, if necessary, or what are the conditions.

I think we're facing a bigger problem
when we look at companies like yours coming
forward to this committee.

CITY ELECTRICIAN STEVE LENKAUSKAS: Is
this proprietary? Is it only for your --

ATTY MICHAEL GIAIMO: This is a Verizon
network.

CITY ELECTRICIAN STEVE LENKAUSKAS: So if
another carrier came in and needed the same
coverage in that area they would need to
attach --

ATTY MICHAEL GIAIMO: Or they find a
different pole.
CITY ELECTRICIAN STEVE LENKAUSKAS: Okay,
so we could be looking at multiple antennas.
ATTY MICHAEL GIAIMO: That's the next
sort of evolution of wireless is gonna be -- it's already on your devices. There's data streaming,
people have disconnected from the buyer-line
network. So as the network needs more capacity,
this is one way they get this additional capacity.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

I think we understand that part of it. Again,
it's the big picture end of things.
CITY ELECTRICIAN STEVE LENKAUSKAS: I
believe we understand fully about the technology
and where it is going and the need for data to be
transmitted throughout the city and other cities.
Recently we've had many other companies
come in looking to do the same thing and $I$ think we, as a city, need to look at it and take a look at the whole picture.

ATTY MICHAEL GIAIMO: Under the pole
attachment statutes, wireless carriers have a right to attach to utility poles. Private utility pole.

It is within the public way but we are not breaking the public way. This is an
installation.

If you want us to talk with you about a
plan, $I ' m$ not aware of any $p 1 a n$ now, but $I$ think you should approve this one and we would be happy to have a conversation. We have been trying to have a conversation with Cambridge on wireless things for a long time, and we haven't found the right entry point.

Even on the traditional sites, it's been
a particularly difficult place to site wireless.

Strange with a city with so much technology and academic and young people in it, but for whatever reason, it has been tough in Cambridge and other places.

We need this to improve the network. I'm sure they are doing some network planning. I'm
sure they would be happy to either talk with this commission or others in the city about an overall plan just like I'm sure maybe other wireless companies have plans for the city.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

I appreciate your points, but $I$ think on our end, we need to get a handle on where these things are going to be placed and who plans them.

ATTY MICHAEL GIAIMO: What would the
standards be for determining whether it could be placed on a particular location?

## SUPERINTENDENT OF STREETS WILLIAM DWYER:

Oh, I think the standard -- you are pretty much discussing the standard, but again, I'm referring to the big picture throughout the city.

We ran into this -- a similar thing about
14 years ago with the common trench, roughly 25
companies coming into the city wanting to dig up
the street, put in their own conduits, and then
take care of their own customers, and we were
able to put together a common trench policy which
benefitted both the supplier and the end user.

We very possibly could be looking at
something on the same idea with this.

By what you're telling me, we could have four or five antennas on the same pole.

ATTY MICHAEL GIAIMO: That's the state
law. The state law does allow wireless
attachments to the utility poles.

The utility companies can regulate those based on their need for the space and for the structural support, but they can't prevent us from locating on a utility pole unless there's no space or no structural capacity.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

I'm sure at some point, yes, but I'm not sure we are ready to approve individual locations every single month because they get brought to us.

We need to put together a little bit of a plan, which we have been trying to work on, so

## CITY ELECTRICIAN STEVE LENKAUSKAS: I

mean, to continue this a month, and for us to get -- this is something we have been looking at. It is not something new to us recently.

As Bill mentioned, with the common trench and the digging, you are all looking for the same
coverage, maybe in the area, maybe on the same pole, and if something could be shared or a
particular pole, $I$ don't know what that means, as
far as what could be done, so that, you know, we
are not putting equipment on every pole, and the
another thing we have an issue with, and it
doesn't happen often, but when streets go
underground, what happens to your antennas when
the streets go underground? You would lose the antenna.

ATTY MICHAEL GIAIMO: Yeah, and we
haven't been through that cycle yet. This is a pretty new technology.

CITY ELECTRICIAN STEVE LENKAUSKAS: We
are experiencing that right now with another
carrier in the Kendall Square area where there's a couple devices on wooden poles that need to go somewhere. And has private property been looked
at on this?

ATTY MICHAEL GIAIMO: Not for the smal 1
cells. The small cell, there's a utility pole there, so it was identified.

CITY ELECTRICIAN STEVE LENKAUSKAS: What
is the urgency for this to be done today rather than a little bit later?

ATTY MICHAEL GIAIMO: They are trying to build out their small cell network and get things started up. As with everything, it --

## CITY ELECTRICIAN STEVE LENKAUSKAS:

Typically, the first step -- your application was in order, but typically the first step is to come in and ask the Commission to approach the utilities for attachments and then the process starts.

It seems as though you already have gone to them before coming here.

ATTY MICHAEL GIAIMO: Verizon Wireless
has arrangements with Verizon landine as well as with NSTAR or Eversource, with National Grid in their areas, and, you know, in other
jurisdictions with other utility companies that may be in those areas.

So they've got a standing arrangement with those companies.

They submitted requests for approvals for poles in certain locations to those companies.

Those companies will either approve the location based on their standards for use of the pole or they'11 disapprove it and Verizon Wireless will have to look at another pole nearby or another location.

So in this situation, that was the process followed. There was a discussion with both the utilities that they have a iicense,
which, I think, I provided.

CITY ELECTRICIAN STEVE LENKAUSKAS: You
have.

ATTY MICHAEL GIAIMO: George is the real
estate person on Verizon that identified the sites.

GEORGE EVSUK: George G-E-0-R-G-E. Evsuk
$\mathrm{E}-\mathrm{V}-\mathrm{S}-\mathrm{U}-\mathrm{K}$.

We did identify a couple private properties, but they were rooftops and they wouldn't really work and $I$ can't explain why.

Al 1 was submitted to Verizon radio frequency engineer together with a couple of private properties and it chose the pole for that specific reason and Keith can testify why.

ATTY MICHAEL GIAIMO: And some small
cells are on private property?

GEORGE EVSUK: Yep, yep, yep, yep.

ATTY MICHAEL GIAIMO: So height and
density were the reasons for that selection.

CITY ELECTRICIAN STEVE LENKAUSKAS:

There's no excavation? You won't be digging to these sites?

ATTY MICHAEL GIAIMO: No.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
would 1 ike to continue this until next month and our moratorium will not impact it. So I don't think a month, just for us to get a better look at -- an ongoing look at what we've been looking at as far as small cells on poles, and how to address that, that we can't continue it until next month.

ATTY MICHAEL GIAIMO: What would you be looking for in the meantime?

CITY ELECTRICIAN STEVE LENKAUSKAS: Just
a process internally for us to deal with, you
know, this call for all these antennas on all the poles that is going forward right now.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

And possibly a projection of what you folks think you might need within a five-year span or
seven-year span.

ATTY MICHAEL GIAIMO: I'm not sure they plan that far in advance. Seven years could be very different.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

True. What you have available. Something would be better than -- much more helpful than just this one location.

ATTY MICHAEL GIAIMO: I understand that.

And I understand that policy concern very well.

But $I$ don't understand what it has to do
with an individual approval, but that's the question $I$ had.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

We think we have addressed it and we'11 probably be able to address it further next month.

CITY ELECTRICIAN STEVE LENKAUSKAS: On
the motion to continue?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
those in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

CONTINUED PETITION

MOBILITIE - PALERMO STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: First
petition here is for Palermo Street and Willow Street.

This is a continuation. It goes back to

June actually. It was taken off the agenda, I
believe, for one or two months. We were looking
for pole numbers and 1 icensing and make-ready recommendations.

ATTY BRIAN GROSSMAN: Correct. So we --

I'm sorry. Brian Grossman, Anderson Kreiger,
counsel for Mobilities. With me is Rossana

Ferrante, who is the senior permitting manager for Mobilities.

You are correct. This was continued. We
first appeared in June with several applications.

These are the three that we have going forward at the moment that are on existing utility poles.

CITY ELECTRICIAN STEVE LENKAUSKAS:

Uh-huh.

ATTY BRIAN GROSSMAN: We do have revised plans that have the pole number for all-- for
this site as well as the other two.

For this one, we are awaiting the joint survey schedule. So Mobilitie has been in contact with Verizon and Eversource and we have site walks on some of them but not this particular one yet.

We do have -- Mobilitie does have a
general agreement with Verizon and Eversource now to be able to attach to poles that they own, not just in Cambridge, but in other locations as
well, so very similar to what you just heard from Attorney Giaimo from Verizon Wireless. They have now that internal process and agreement amongst the companies of how we are going to proceed, what we need to submit, and how to move forward with them.

> In terms of the specifics of the
location, $I$ know we have gone over the equipment
proposed to be installed and have some pictures for you, and we talked about a lot of those issues.

This particular location is really located between two buildings. It is not right adjacent to a building. I know that was on the prior install and that's no longer. That was a concern in terms of overall location.

Again, we have to take existing utility poles that top out at about 36 and a half feet and the antenna would be located on top of the utility pole and extend only to about 40 feet, 3 inches.

We don't expect underground works to be necessary for the site.

Pole No. 2 shown on the revised plan.

CITY ELECTRICIAN STEVE LENKAUSKAS: Have you also discussed with the utility about a meter
as far as distribution?

ATTY BRIAN GROSSMAN: Since it is an

Eversource-fed pole we have typically, in

Cambridge and other places, avoided the need for a meter.

With Eversource we figured out how to do
that and work that arrangement. If there were a

National Grid pole, it would be different because

National Grid is requiring meters in other
jurisdictions.

We are in Eversource jurisdiction so no
meter is required.

ROSSANA FERRANTE: We are trying to find the least intrusive solution to power.

So in one particular jurisdiction, we are
going to be buying the power from the
jurisdiction in order to save the additional
trenching, again minimizing the intrusiveness to
the community.

CITY ELECTRICIAN STEVE LENKAUSKAS: So
have you obtained 1 icenses for these poles yet?

ATTY BRIAN GROSSMAN: So we have a -Mobilitie has a master agreement.

This application has been submitted.

ROSSANA FERRANTE: This one in particular of the three, this one we had to amend and we need to refile them with them.

We have been in deep process with both

Verizon and Eversource. As Brian mentioned we have a master, but for the site license specific, we have actually some updates for each one as to our make-ready dates and everything that's happened. For one in particular, which is the

Lambert site, we do have the site license from Verizon executed.

So they don't -- unfortunately, they
don't move together in parallel at the same
timing, but we are very deep in them and we can
walk through the dates of various actions we have with them.

CITY ELECTRICIAN STEVE LENKAUSKAS: So
for the Palermo Street pole and address, you don't have a --

ROSSANA FERRANTE: That one they asked us
to amend our application, so we are still going
through the documentation process.

CITY ELECTRICIAN STEVE LENKAUSKAS: Okay.

ATTY BRIAN GROSSMAN: We are in process
of scheduling the joint survey with them.

CITY ELECTRICIAN STEVE LENKAUSKAS: That
still needs to be done.

ROSSANA FERRANTE: Yes.

CITY ELECTRICIAN STEVE LENKAUSKAS: And
al1 three of them need to be --

ROSSANA FERRANTE: No, no, that's the

1east --

CITY ELECTRICIAN STEVE LENKAUSKAS:

That's the least.

ATTY BRIAN GROSSMAN: Of the three. ROSSANA FERRANTE: Yeah.

CITY ELECTRICIAN STEVE LENKAUSKAS: We'11
move to continue that petition until that work is completed.

```
Motion to continue?
```

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

## CONTINUED PETITION

## MOBILITIE - YORK STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: The
second one, which was also continued, this was on

York Street and $I$ guess this is pretty much the same questions going forward.

ATTY BRIAN GROSSMAN: Sure.

So on this one, the 1 icense has not issued yet, but there's been -- the joint walk has been completed. The make-ready work by others is scheduled to be completed before November 21. And then the make-ready work by Verizon would be completed by December 21.

But the joint walk has been completed, pole visibility has been confirmed by the joint owners, subject to the completion of the
make-ready work and then the specific 1icense would issue once the make-ready work is done.

CITY ELECTRICIAN STEVE LENKAUSKAS: Is
the make-ready work -- does it involve replacing the pole?

ROSSANA FERRANTE: No, not that we're aware of.

## CITY ELECTRICIAN STEVE LENKAUSKAS:

There's still unknowns with that also as far as --

> ROSSANA FERRANTE: I can confirm that.

There isn't anything that indicates that we would be replacing this pole. I can 100 percent confirm that. But $I$ imagine it would have been brought up.

CITY ELECTRICIAN STEVE LENKAUSKAS: So, again, without the 1 icense, we would 1 ike to see that first and completed before we can move on that, in my opinion. So $I$ move to continue.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

ROSSANA FERRANTE: As a point of
information or a question?

CITY ELECTRICIAN STEVE LENKAUSKAS: Sure.

ROSSANA FERRANTE: Is there -- has it
been in the Board's history to ever approve
conditionally on the 1 icense being issued and so maybe at the hearing point we don't have to come back but we have to show the license before we pul1 anything, kind of a two-step process.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
would not count it out.

ROSSANA FERRANTE: In some jurisdictions
they do that. They say it is conditioned, you can't pull a permit.

CITY ELECTRICIAN STEVE LENKAUSKAS: This
being, as you heard at an earlier hearing, this
is something that has come up and we are trying to get something stream1ined here and get it nice and smooth so when people do come we have everything in place for these particular -- for these particular requests.

Has it been -- in the past, at times, I
would think for other types of installations they may be contingent upon the licensing, but typically when someone comes to us looking for an attachment, we then give approval to speak to the utilities to get those approvals, and then come back to us for a final granting of location. ROSSANA FERRANTE: Okay.

## CONTINUED PETITION

## MOBILITIE - LAMBERT STREET

CITY ELECTRICIAN STEVE LENKAUSKAS: So on
the last one here for Lambert Street, also
continued. I think a larger concern on that was, again, we didn't have any pole numbers, but that was a -- that was a riser pole there. The first pole and riser with a lot of primary and switching on that. Had that pole changed?

ROSSANA FERRANTE: Interestingly enough,

Verizon has issued us a site license on that pole, so --

## CITY ELECTRICIAN STEVE LENKAUSKAS: That

was the largest concern $I$ had when you first presented this and particularly --

ROSSANA FERRANTE: So the status we have
on that is make-ready by other to be completed before November 18. Eversource was checking with
design on power design and required make-ready.

And there's -- we have a pole specific license
issued September 19 from Verizon and installation
to be completed on or before March 18, 2017. So

I can go back and push again.

CITY ELECTRICIAN STEVE LENKAUSKAS: I
would because typically a riser pole has
switching on it. I don't know where you put your
equipment on that pole. You know, there's
primary and secondary risers coming up that pole.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Just to note, there was quite a bit of push back
from the residents in that area on this location.

CITY ELECTRICIAN STEVE LENKAUSKAS: Those
poles are three feet away from the residents on
that -- down further there are setbacks, but on
these, the first pole or second pole in
particular, but that was the initial concern we
had when you first brought this forward was
because of the riser and because of the equipment that's on there currently.

ATTY BRIAN GROSSMAN: Just one question. When you say there was push back from the
residents, you don't mean as to the Mobilitie application? Just in general when these poles were put in?

## SUPERINTENDENT OF STREETS WILLIAM DWYER:

Yeah, the proximity of the location of the pole to their residences.

CITY ELECTRICIAN STEVE LENKAUSKAS: The
neighborhood had a strong concern about the equipment. Not this particular location. Others
in the area, which were on city-owned poles, but
this particular one, it was the neighborhood that
was concerned, but our concern was the -- you
know, it being a riser pole for Eversource.

And they don't typically allow equipment on a riser pole, so $I$ would --

ROSSANA FERRANTE: That is odd and that's
the one we have the 1 icense on of all the three.

Okay, I will find out.

ATTY BRIAN GROSSMAN: You certain1y
raised it last time and we raised it with

Mobilitie and they have gone back and reissued the 1 icense and we'11 check.

CITY ELECTRICIAN STEVE LENKAUSKAS: We
would 1 ike to continue that one for clarification
on the motion to continue.

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

## CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.

Thank you. Motion to adjourn?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Seconded.

CITY ELECTRICIAN STEVE LENKAUSKAS: A11
in favor?

SUPERINTENDENT OF STREETS WILLIAM DWYER:

Aye.

CITY ELECTRICIAN STEVE LENKAUSKAS: Aye.
(Hearing concluded )

| $\underline{0}$ | $\begin{aligned} & \frac{\mathbf{3 - b y - 5}}{\mathbf{3 0}[2]-32: 7,32: 10} \\ & \underline{\mathbf{3 2 5}}[1]-47: 1 \\ & \mathbf{3 2 6 / 4 4 0}[1]-51: 15 \end{aligned}$ |
| :---: | :---: |
| $\underline{02139}[1]-1: 13$ |  |
| 1 |  |
| $\begin{aligned} & \frac{10}{19: 5, ~ 20: 11}-17: 10,17: 14,18: 7,18: 12, \\ & \frac{100}{1013}[2]-28: 16,89: 11 \\ & \underline{10: 06}[1]-7: 8 \\ & \hline \end{aligned}$ | $\begin{array}{\|l} \underline{33}[1]-10: 5 \\ \underline{34}[1]-15: 13 \\ \underline{35}[1]-32: 9 \\ \underline{\mathbf{3 6}}[3]-34: 10,34: 13, \\ \underline{\mathbf{3 6 2}}[1]-43: 10 \end{array}$ |
| $\frac{118}{12}[1]-12: 3$ | $\underline{4}$ |
| $\underline{1200}[1]-8: 3$ | $\underline{40}[1]-83: 12$ |
| $\underline{1262}[1]-27: 17$ | 5 |
| $1309[1]-21: 17$ | $\underline{5}[1]-19: 1$ |
| 14 [2] - 19:4, 72:6 | 579-605 [1] - 8:2 |
| $\underline{1477}[2]-10: 5,10: 18$ | $\underline{6}$ |
| 15th [1] - 4:17 | $\underline{6}$ [2] - 12:1, 12:6 |
| $\overline{16[1]}-48: 13$ | 60 [4] - $36: 3,36: 4,36: 6,36: 8$ |
| 프 [4] - 15:14, 16:1, 92:18, 93:4 | 617.786.7783/www.reportersinc.com |
| $\underline{\underline{180}}[1]-63: 16$ | $[1]-1: 17$ |
| $\underline{19}[2]-21: 18,93: 3$ | $\underline{65}[1]-55: 8$ |
| $\underline{2}$ | $\underline{7}$ |
| $\begin{aligned} & \frac{2}{2}[2]-48: 12,83: 16 \\ & \underline{2,000}[1]-62: 10 \\ & \underline{20}[3]-1: 14,4: 2,4: 8 \end{aligned}$ | $\begin{aligned} & \frac{7252}{\mathbf{7 3}}[1]-7: 9 \\ & \underline{\mathbf{7 5}}[1]-17: 8 \end{aligned}$ |
| $\frac{2016}{2017}[3]-1: 14,4: 2,4: 8$ | 8 |
| 2067 [1] - 62:8 | $\begin{aligned} & \frac{831}{\mathbf{8 5}}[2]-1: 12,4: 11 \\ & \underline{\mathbf{8 6}}[1]-7: 8 \\ & \hline \end{aligned}$ |
| 21 [2] - 88:12, 88:13 |  |
| $\underline{\underline{\mathbf{2 2}}[1]}$ - 39:8 |  |
| $\underline{\mathbf{2 3}}[1]-27: 18$ | $\underline{9}$ |
| $\underline{\mathbf{2 5}}[1]-72: 6$ |  |
| $\underline{\mathbf{2 6 / 4 7 5}}[1]-55: 10$ | $\begin{aligned} & \frac{\mathbf{9}}{\underline{90}[4]-48: 11, ~ 48: 14, ~ 51: 14, ~} 51: 16 \\ & \frac{\mathbf{9 7}}{\underline{99}}[1]-36: 3,36: 4 \\ & \underline{\underline{99}}[1]-12: 6 \\ & \underline{\underline{9 r}}[1]-34: 11 \end{aligned}$ |
| $\underline{\mathbf{2 7 0 2}}[1]$ - 46:18 |  |
| 286-298 [1] - 55:11 |  |
| 3 |  |
| $\begin{aligned} & 3[20]-34: 13,34: 16,35: 10,35: 12, \\ & 39: 8,40: 6,41: 5,41: 7,41: 10, \end{aligned}$ | A |
| $\begin{aligned} & 42: 15,42: 16,42: 18,43: 5,44: 10, \\ & 44: 11,44: 15,46: 18,47: 7,83: 12 \end{aligned}$ | ```a.m [2] - 1:15, 4:9 abandoned [1] - 20:16 able [4] - 38:9, 72:10, 80:3, 82:9``` |

```
abuts [1] - 52:1
abutters [1] - 17:13
abutting [1] - 61:2
Acacia [2] - 48:13, 52:13
academic [1] - 71:3
Acadia [1] - 51:18
access [2] - 26:13, 34:18
accommodate [1] - 44:6
actions [1] - 86:3
actual [1] - 63:12
add [2] - 39:12, 52:5
additional [4] - 52:5, 69:9, 84:17
address [6] - 54:4, 59:12, 59:13,
78:13, 80:3, 86:6
addressed [1] - 80:2
adjacent [2] - 54:2, 83:6
adjoining [1] - 34:15
adjourn [1] - 96:2
advance [1] - 79:8
advantage [1] - 42:10
aerial [1] - 49:3
aesthetically [1] - 29:3
AGENDA [4] - 2:1, 2:2, 3:1, 3:2
agenda [1] - 81:2
ago [2] - 35:3, 72:6
agreeable [1] - 54:8
agreed [1] - 66:7
agreement [3] - 82:8, 82:13, 85:5
ahead [1] - 13:15
alarm [1] - 56:2
allow [4] - 62:15, 66:8, 72:17, 95:1
allowing [1] - 15:6
alternative [2] - 23:1, 30:9
alternatively [1] - 29:7
amend [2] - 85:8, 86:9
Amesbury's [2] - 60:8, 60:11
amps [1] - 8:3
analysis [1] - 66:4
AND [4] - 1:2, 1:4, 1:6, 4:3
Anderson [1] - 81:7
answer [2] - 62:1, 62:18
antenna [9] - 57:10, 63:11, 63:17,
    63:18, 64:6, 65:9, 65:10, 74:10,
83:11
antennas [5] - 68:2, 69:3, 72:15,
```

$74: 8,79: 1$
ANTHONY [50] - 27:12, 27:13, 28:8, 28:13, 28:16, 29:5, 29:9, 29:18, $30: 10,31: 7,32: 13,32: 16,33: 7$, $34: 17,35: 8,35: 17,36: 7,36: 13$, $37: 1,37: 7,37: 15,38: 2,38: 11$, 39:14, 40:1, $40: 16,41: 4,41: 11$, $41: 14,41: 18,42: 6,42: 14,43: 7$, $43: 12,43: 16,44: 2,44: 5,44: 16$, 45:3, 45:10, 45:14, 45:18, 47:8, $47: 12,49: 1,49: 7,49: 14,49: 17$, 50:9, 51:7

Anthony [1] - 27:13
appeared [1] - 81:12
applicant [1] - 57:7
application [6] - 47:15, 47:17,
75:12, 85:6, 86:9, 94:7
applications [1] - 81:12
appreciate [1] - 71:13
approach [1] - 75:14
approval [3] - 36:3, 79:17, 91:14
approvals [2] - 76:9, 91:15
approve [15] - 4:16, 6:12, 9:10, 11:6, 13:17, 30:15, 33:11, 38:13, $46: 5,50: 17,56: 11,70: 13,73: 8$, 76:11, 90:11
approved [1] - 35:2
area [12] - 22:16, 32:15, 36:1,
45:8, 62:14, 62:17, 67:4, 68:16,
$74: 1,74: 16,93: 13,94: 15$
areas [3] - 68:3, 76:4, 76:6
arrangement [2] - 76:7, 84:7
arrangements [1] - 76:2
Ash [13] - 48:11, 48:14, 51:14,
51:16, 52:1, $52: 10,52: 11,52: 13$,
52:18, 54:3, 54:12
ASH [3] - 3:8, 48:9, 51:10
AT [1] - 1:11
attach [3] - 68:17, 70:6, 82:9
attachment [4] - 49:3, 57:8, 70:5,
91:14
attachments [2] - 72:18, 75:15
Attorney [1] - 82:12
АТTY [42] - 57:6, 57:17, 58:3, 59:1, 59:8, 60:4, 60:8, 60:17, 61:14, $64: 6,64: 11,64: 18,65: 6,65: 15$,

```
66:10, 67:5, 68:12, 68:18, 69:4,
70:4, 71:16, 72:16, 74:11, 75:2,
75:8, 76:1, 77:4, 77:16, 78:1,
78:6, 78:15, 79:7, 79:14, 81:6,
81:17, 84:2, 85:4, 86:12, 87:5,
88:7, 94:4, 95:6
Authority [1] - 59:3
available [2] - 22:2, 79:11
Ave [12] - 4:11, 7:9, 8:2, 11:18,
18:1, 18:2, 18:8, 18:13, 19:1,
19:5, 19:14, 62:8
Avenue [6] - 1:12, 12:4, 23:8, 26:4,
    55:8, 55:11
AVENUE [2] - 2:8, 11:16
avoided [1] - 84:4
awaiting [1] - 82:2
aware [6] - 56:4, 57:18, 58:4, 58:9,
    70:12, 89:5
awful [1] - 60:15
Aye [33] - 5:5, 7:1, 9:17, 17:1,
17:2, 21:8, 21:9, 27:4, 27:5, 32:1,
32:2, 33:17, 33:18, 39:1, 39:2,
46:11, 46:12, 48:5, 48:6, 51:5,
51:6, 55:1, 55:2, 80:11, 80:12,
87:16, 87:17, 90:5, 90:6, 95:18,
96:1, 96:8, 96:9
```

aye [2] - 5:6, 11:13

| B |
| :---: |
| balanced [1] - 64:5 |
| bank [2] - 44:10, 44:15 |
| based [3] - 62:7, 73:2, 76:12 |
| Basement [2] - 1:12, 4:11 |
| basement [4] - 29:8, 29:10, 30:9 |
| becoming [1] - 59:10 |
| bed [1] - 53:4 |
| behalf [1] - 62:5 |
| behind [1] - 24:9 |
| below [1] - 30:12 |
| benefitted [1] - 72:11 |
| best [1] - 13:4 |
| better [4] - 26:10, 62:15, 78:10, |
| 79:12 |
| between [2] - 33:5, 83:5 |
| beyond [1] - 57:16 |
| big [3] - 11:3, 69:13, 72:4 |

bigger [1] - 68:7
Bill [3] - 4:13, 20:7, 73:17
bit [3] - 73:10, 75:7, 93:12
Blackstone [3] - 21:14, 21:17, 22:1
BLACKSTONE [2] - 2:12, 21:12
BOARD [1] - 1:6
Board's [1] - 90:11
BOB [29] - 14:14, 14:17, 15:5,
15:12, 15:17, 16:6, 17:16, 18:3, 18:14, 18:18, 19:4, 19:10, 19:18, $20: 5,20: 13,20: 18,22: 4,22: 17$, 23:2, 23:9, 24:6, 24:16, 25:7,
$25: 10,25: 14,26: 2,26: 7,27: 6$
Bob [1] - 14:17
Boston [2] - 60:3, 67:13
botch [1] - 52:6
bottom [1] - 60:16
Brattle [1] - 12:6
break [2] - 43:5, 55:15
breaking [1] - 70:9
BRIAN [9] - 81:6, 81:17, 84:2, 85:4, 86:12, 87:5, 88:7, 94:4, 95:6
Brian [2] - 81:7, 85:11
brick [1] - 31:5
bridge [4] - 35:15, 36:1, 36:10
bringing [1] - 54:1
Broad [4] - 39:10, 42:4, 42:12,
43:13
Broadway [3] - $34: 11,40: 2,40: 10$
Brookline [1] - 15:18
BROOKLINE [2] - 2:9, 14:11
brought [5] - 35:10, 35:12, 73:9,
89:13, 94:1
BRYAN [5] - $52: 2,52: 15,53: 9,54: 7$,
55:15
build [4] - 47:11, 67:13, 68:1, 75:9
build-out [1] - 67:13
building [19] - 17:11, 21:18, 22:7, 23:3, 23:5, 24:4, 24:9, 26:8, 28:10, 28:12, 28:15, 28:18, 29:3, 29:4, 31:12, 49:2, 53:15, 60:10, 83: 6
Building [3] - 1:11, 4:11, 62:9
buildings [1] - 83:5
built [1] - 60:5


```
Commission [2] - 4:8, 75:14
Commissioners [1] - 4:12
committee [1] - 68:9
common [8] - 47:15, 47:16, 50:10,
    59:10, 72:6, 72:10, 73:17
communicate [1] - 64:4
community [1] - 85:1
companies [11] - 67:18, 68:8, 69:18,
    71:11, 72:7, 73:1, 76:5, 76:8,
    76:10, 76:11, 82:14
company [4] - 65:3, 67:1, 67:3, 67:4
compared [1] - 64:7
complaints [1] - 49:2
completed [8] - 87:9, 88:10, 88:11,
88:13, 88:14, 89:16, 92:17, 93:4
completion [1] - 88:16
concern [7] - 79:15, 83:8, 92:5,
    92:14, 93:18, 94:13, 94:17
concerned [1] - 94:17
concluded [1] - 96:10
condition [1] - 7:12
conditionally [1] - 90:12
conditioned [1] - 91:1
conditions [12] - 9:10, 11:6, 13:15,
    13:17, 30:16, 34:2, 34:4, 38:13,
    46:9, 50:17, 56:12, 68:6
CONDUIT [4] - 1:2, 1:4, 1:6, 4:3
conduit [34] - 7:9, 10:6, 12:3,
    15:7, 17:9, 19:13, 19:17, 20:11,
    21:15, 22:2, 22:8, 28:2, 30:3,
    32:11, 34:12, 35:5, 38:5, 39:8,
    39:12, 40:7, 41:1, 41:9, 42:10,
    42:17, 42:18, 43:8, 47:6, 48:12,
    48:15, 49:16, 52:16, 53:12, 55:9,
    55:16
Conduit [1] - 4:7
conduits [6] - 24:5, 25:9, 41:13,
    43:15, 47:5, 72:8
Conference [2] - 1:12, 4:11
confirm [2] - 89:9, 89:12
confirmed [1] - 88:15
connect [4] - 40:6, 41:4, 41:7,
    44:10
connection [2] - 42:17, 57:11
connections [1] - 57:12
consist [1] - 7:13
```

| days [3] - 36:3, 36:4, 36:8 | double [1] - $30: 10$ |
| :---: | :---: |
| de [3] - 33:2, 33:5, 52:6 | down [11] - 24:3, 26:12, 31:1, 31:6, |
| de-botch [1] - 52:6 | $33: 3,33: 5,33: 6,40: 2,42: 12$, |
| dead [2] - 32:18, 33:1 | 66:14, 93:16 |
| dead-end [1] - 32:18 | drawing [1] - 19:1 |
| deal [3] - 11:3, 23:9, 78:18 | Drive [5] - 34:9, 34:11, 34:14, |
| dealt [1] - 13:6 | 34:18, 37:12 |
| December [1] - 88:13 | DRIVE [2] - 3:3, 34:7 |
| dedicated [1] - 62:16 | driveway [1] - 53:11 |
| deep [2] - 85:10, 86:2 | duct [5] - $44: 10,44: 15,44: 18$, |
| definitely [2] - 23:15, 50:9 | 45:1, 45:7 |
| delay [1] - 35:14 | DUFFY [11] - $5: 17,6: 3,7: 17,8: 2$, |
| delayed [1] - 35:16 | $8: 6,8: 16,9: 1,10: 10,10: 15,$ |
| density [1] - 78:2 | $10: 18,13: 10$ |
| Department [1] - 38:8 | DWYER [101] - 1:7, 4:18, 5:4, 6:9, |
| depth [1] - 66:17 | $6: 13,6: 17,7: 10,7: 15,8: 11,8: 17$, |
| DEPUTY [1] - 1:8 | $11: 11,12: 13,13: 3,13: 14,13: 18,$ |
| design [3] - 65:7, 93:1 | $14: 4,16: 14,16: 18,19: 11,20: 1,$ |
| determined [1] - 46:3 | $21: 3,21: 7,22: 12,22: 18,23: 14,$ |
| determining [1] - 71:17 | 25:8, 25:11, $25: 16,26: 17,27: 3$, |
| development [1] - 8:12 | 29:13, 30:5, 31:8, 31:14, 31:18, |
| devices [3] - 64:2, 69:6, 74:17 | $33: 8,33: 12,33: 16,34: 1,38: 6$, |
| different [3] - 69:1, 79:9, 84:8 | $38: 14,38: 18,39: 15,40: 14,40: 17,$ |
| difficult [2] - 52:7, 71:1 | $41: 8,42: 3,42: 8,43: 4,43: 9$, |
| dig [9] - 23:15, 24:17, 25:2, 26:6, | $43: 14,43: 18,44: 3,44: 13,45: 11$, |
| $37: 14,49: 12,52: 14,54: 1,72: 7$ | $45: 16,46: 1,46: 6,46: 10,47: 18,$ |
| digging [3] - 51:17, 73:18, 78:4 | $48: 4,50: 14,50: 18,51: 4,52: 17$, |
| direction [1] - 55:10 | $54: 14,54: 18,56: 8,56: 13,56: 17$, |
| directly [2] - 28:15, 66:12 | $58: 15,59: 4,64: 14,65: 2,66: 16$, |
| DIRECTOR [6] - 1:9, 4:5, 7:14, 8:14, | $\begin{aligned} & 67: 16, \quad 69: 11, \quad 71: 12, \quad 72: 1, \quad 73: 6, \\ & 79: 3, \quad 79: 10, \quad 80: 1, \quad 80: 6, \quad 80: 10, \end{aligned}$ |
| 50:3, 64:16 <br> disapprove [1] - 76:13 | $87: 11,87: 15,89: 18,90: 4,93: 11,$ |
| disconnected [1] - 69:7 | $94: 9, \quad 95: 13,95: 17, \quad 96: 3,96: 7$ |
| discussed [3] - 56:3, 64:10, 83:18 | Dwyer [1] - 4:13 |
| discussing [1] - 72:3 | E |
| discussion [1] - 76:17 |  |
| disruption [1] - 54:12 | $\begin{aligned} & \frac{\text { E-V-S-U-K }}{\text { easterlv }[1]-77: 8}-32: 9.34: 11.55: 10 \end{aligned}$ |
| distance [3] - 7:9, 10:5, 12:2 | $\begin{aligned} & \text { easterly [3] - } 32: 9,34: 11,55: 10 \\ & \text { easy [1] - } 61: 12 \end{aligned}$ |
| distribution [1] - 84:1 | either [3] - 24:10, 71:8, 76:11 |
| disturbance [1] - 53:7 | either [3] - 24:10, 71:8, 76:11 |
| ditch [1] - 26:7 | electric [3] - 21:17, 23:12, 49:5 |
| documentation [1] - 86:10 | electrical [3] - 30:18, 31:11, 57:10 |
| $\begin{aligned} & \text { done }[6]-30: 17,36: 4,74: 4,75: 6, \\ & 86: 15,88: 18 \\ & \text { door }[1]-9: 3 \end{aligned}$ | ELECTRICIAN [185] - 1:8, 4:15, 5:2, $\begin{aligned} & 5: 6,5: 15,5: 18,6: 8,6: 11,6: 15, \\ & 7: 1,7: 5,7: 18,8: 4,8: 9,9: 5,9: 9, \end{aligned}$ |

$9: 13,9: 17,10: 3,10: 11,10: 16$, 11:5, 11:9, 11:13, 11:17, 12:11, $12: 17,13: 8,13: 13,13: 16,14: 2$, $14: 6,14: 12,14: 15,14: 18,15: 9$, $15: 15,16: 3,16: 8,16: 16,17: 2$, 17:6, 17:18, 18:4, 18:16, 19:2, $19: 6,20: 3,20: 6,20: 15,21: 1$, 21:5, 21:9, 21:13, 22:10, 23:7, 24:13, 25:4, 26:3, 26:11, 27:1, 27:5, 27:7, 27:15, 28:11, 28:14, $29: 1,29: 6,29: 11,29: 15,30: 1$, $30: 7,30: 14,31: 10,31: 16,32: 2$, $32: 6,32: 14,33: 4,33: 10,33: 14$, $33: 18,34: 3,34: 8,35: 4,35: 11$, $36: 5,36: 9,36: 15,37: 5,37: 9$, $37: 16,38: 4,38: 12,38: 16,39: 2$, $39: 6,41: 12,41: 16,42: 2,43: 2$, $44: 17,45: 5,46: 4,46: 8,46: 12$, $46: 16,47: 9,47: 14,48: 2,48: 6$, $48: 10,49: 4,49: 11,49: 15,50: 1$, $50: 6,50: 12,50: 16,51: 2,51: 6$, 51:11, 52:8, 53:14, 54:9, 54:16, $55: 2,55: 6,55: 17,56: 10,56: 15$, $57: 1,57: 14,60: 1,60: 6,60: 14$, $64: 8,65: 12,66: 6,68: 10,68: 14$, 69:2, 69:14, 73:13, 74:14, 75:5, 75:11, 77:2, 78:3, 78:7, 78:17, $80: 4,80: 8,80: 12,80: 16,81: 15$, 83:17, 85:2, 86:5, 86:11, 86:14, $86: 17,87: 3,87: 7,87: 13,87: 17$, $88: 3,89: 1,89: 6,89: 14, ~ 90: 2$, $90: 6, ~ 90: 9, ~ 90: 16, ~ 91: 3, ~ 92: 3$, $92: 13,93: 6, ~ 93: 14, ~ 94: 12, ~ 95: 10$, 95:15, 96:1, 96:5, 96:9
elevation [1] - 66:13
eliminate [1] - 66:7
eliminates [1] - 10:8
ELIZABETH [6] - 1:9, 4:5, 7:14,
$8: 14,50: 3,64: 16$
Emerson [1] - 62:9
empty [1] - 20:10
end $[6]-32: 18,33: 1,33: 6,69: 13$, 71:13, 72:11
ending $[4]-27: 18,32: 9,34: 13$, 48:14
engineer [3] - 52:2, 62:1, 77:13
enlarge [3] - 39:11, 43:12, 44:5
enlarged [1] - 44:8
entire [3] - 15:2, 40:11, 47:7
entry [2] - 31:12, 70:17
Episcopal [1] - 13:2
equipment [14] - 17:10, 21:16,
$60: 15,61: 5,63: 7,63: 14,65: 4$, 65:13, 74:5, 82:18, 93:9, 94:2, 94:14, 95:1

Erie [3] - 15:14, 15:17, 16:1
essence [1] - 43:10
Essex [2] - 7:7, 8:7
ESSEX [2] - 2:5, 7:4
established [1] - 16:11
estate [1] - 77:5
EVERETTE [5] - 52:2, 52:15, 53:9,
54:7, 55:15
EVERSOURCE [8] - 2:3, 2:5, 2:6, 2:8, $5: 14,7: 4,10: 2,11: 16$
Eversource [17] - 5:11, 7:6, 10:4, $11: 18,12: 5,15: 6,20: 4,22: 5$, $76: 3,82: 4, \quad 82: 8,84: 3,84: 6$, 84:11, 85:11, 92:18, 94:18
Eversource-fed [1] - 84:3
evolution [1] - 69:5
EVSUK [2] - 77:7, 77:18
evsuk [1] - 77:7
exactly [1] - 32:15
excavation [2] - 54:5, 78:4
excuse [1] - 7:11
executed [1] - 85:17
EXECUTIVE [6] - 1:9, 4:5, 7:14, 8:14, 50:3, 64:16
existing [24] - 19:13, 19:17, 27:16, $28: 6,29: 12,29: 16,30: 2,32: 8$, $34: 10,39: 9,42: 7,43: 13,44: 10$, $47: 5,48: 12,55: 9,57: 11,58: 14$, $62: 7,62: 8,81: 14,83: 9$
exit [1] - 54:11
expand [3] - 47:12, 57:16, 59:6
expect [1] - 83:14
expediting [1] - 10:12
experiencing [1] - 74:15
explain [1] - 77:11
extend [2] - 23:8, 83:12
extensively [1] - 26:4

| extent [2] - 15:10, 15:12 | $\underline{\text { folks }[1]-79: 4}$ |
| :---: | :---: |
|  | followed [1] - 76:17 |
| $\underline{F}$ | foot [1] - 31:5 |
| facing [1] - 68:7 | footage [1] - 39:16 |
| fact [1] - 67:15 | forth [1] - 64:4 |
| fair [1] - 65:3 | forward [10] - 5:8, 19:7, 50:15, |
| fairly [1] - 11:2 | 60:18, 68:9, 79:2, 81:13, 82:15, |
| far [9] - 18:6, 59:18, 61:5, 66:18, | $88: 6,94: 1$ |
| 74:4, 78:12, 79:8, 84:1, 89:7 | four [15] - 17:8, 21:15, 23:6, |
| favor [21] - 5:3, 6:16, 9:14, 11:10, | 32:11, 34:12, 41:15, 41:17, 41:18, |
| $14: 3,16: 17,21: 6,27: 2,31: 17,$ $33: 15,38: 17,46: 9,48: 3,51: 3,$ | $\begin{aligned} & 45: 1,45: 4,46: 18,51: 15,52: 4, \\ & 55: 9,72: 15 \end{aligned}$ |
| $\begin{array}{llll} 33: 15, & 38: 17, & 46: 9, & 48: 3, \\ 54: 17, & 56: 16, & 80: 9, & 87: 14, \\ 50: 3 \end{array}$ | four-inch [6] - 17:8, 21:15, 32: |
| 95:16, 96:6 | 34:12, 51:15, 55:9 |
| fed [2] - 8:5, 84:3 | frequency [1] - 77:12 |
| feed [1] - 28:5 | front [7] - 8:5, 26:8, 27:17, 34:10, |
| feet [20] - 7:8, 7:9, 10:5, 12:3, | 34:13, 53:1, 53:2 |
| 17:8, 21:15, 27:18, 32:9, 34:11, | full [5] - 15:12, 23:4, 23:11, 24:5, |
| 39:9, 46:18, 47:2, 47:3, 48:13, | 45:1 |
| $51: 15,55: 8,62: 10,83: 10,83: 12$, | $\text { fully }[1]-69: 15$ |
| 93:15 | future [2] - 59:6, 66:18 |
| Ferrante [1] - 81:9 |  |
| FERRANTE [15] - 84:13, 85:7, 86:8, | $\underline{\text { G }}$ |
| 86:16, 87:1, 87:6, 89:4, 89:9, | G-E-O-R-G-E [1] - 77:7 |
| 90:7, 90:10, 90:18, 91:17, 92:10, | gas [1] - 25:13 |
| 92:16, 95:3 | general [2] - 82:8, 94:7 |
| few [1] - 26:12 | gentleman's [1] - 62:2 |
| fiber [3] - 41:9, 44:7, 47:12 | George [2] - 77:4, 77:7 |
| figured [1] - 84:6 | GEORGE [2] - 77:7, 77:18 |
| filed [1] - 64:17 | Gerry's [2] - $32: 7,32: 10$ |
| fill [1] - 58:7 | GERRY'S [2] - 2:15, 32:5 |
| fill-in [1] - 58:7 | GIAIMO [33] - 57:6, 57:17, 58:3, |
| filling [1] - 59:15 | 59:1, 59:8, 60:4, 60:8, 60:17, |
| final [3] - 30:18, 31:11, 91:16 | $61: 14,64: 6,64: 11,64: 18,65: 6$, |
| fine [2] - 6:10, 30:6 | $65: 15,66: 10,67: 5,68: 12,68: 18$, |
| fire [1] - 56:2 | 69:4, 70:4, 71:16, 72:16, 74:11, |
| First [1] - 10:4 | $75: 2,75: 8,76: 1,77: 4,77: 16$, |
| first [13] - 5:11, 6:1, 15:1, 60:10, | 78:1, 78:6, 78:15, 79:7, 79:14 |
| $75: 12,75: 13,80: 16,81: 12,89: 16$, | Giaimo [2] - 57:6, 82:12 |
| 92:7, 92:14, 93:17, 94:1 | given [1] - 63:6 |
| fit [1] - 58:14 | gonna [2] - 68:2, 69:5 |
| fits [2] - 65:10, 66:5 | GOPAL [3] - 61:1, 63:1 |
| five [3] - 28:4, 72:15, 79:5 | grade [1] - 30:12 |
| five-year [1] - 79:5 | granting [1] - 91:16 |
| flower [1] - 53:4 | grass [1] - 53:5 |


| Grid [3] - 76:3, 84:8, 84:9 | immediate [2] - 62:14, 62:17 |
| :---: | :---: |
| GROSSMAN [9] - 81:6, | impact [1] - 7 |
| 85:4, 86:12, 87:5, 88:7, 94:4, 95:6 | improve [1] - 71: |
| Grossman [1] - 81:7 | IN [1] - 1 |
| grows [1] - 6 | in-depth [1] - 66:17 |
| guess [4] - 6:5, 24:2, 41:3, 88 | INC [1] - 1:16 |
| $\underline{\text { H }}$ | ```29:3, 31:2, 32:11, 34:12, 41:15, 41:17, 42:1, 45:1, 45:4, 45:7, 48:15, 51:15, 55:9, 55:18, 56:7 inch-and-a-quarter [1] - 45:7``` |
| half [1] - 83:10 |  |
| hand [3] - 53:10, 53:15, 64: |  |
| hand-held [1] - 6 |  |
| handle [1] - 71:14 | inches [1] - 83:13 |
| happy [2] - 70:13, 71:8 | $\begin{aligned} & \frac{\text { include }}{38: 5, ~} 47: 15,48: 28: 3,30: 18,31: 11, \end{aligned}$ |
| Harvard [1] - 49:1 |  |
| Harvard-owned [1] - 49:1 | included [1] - 35:5 |
| Hastings [3] - 11:18, 12:4, 13:5 | including [2] - 47:7, 59:3 |
| HASTINGS [2] - 2:8, 11:16 | income [1] - 61:11 |
| Haverhill [1] - 60:13 | incorrect [1] - 18:6 |
| heads [3] - 63:16, 66:1, 66:11 | $\text { INDEX [2] - 2:1, } 3: 1$ |
| heard [2] - 82:11, 91:4 | indicate [1] - 25:13 |
| Hearing [1] - 96:10 | indicates [1] - 89:10 |
| hearing [4] - 4:17, 6:2, 90:13, 91:4 | individual [2] - 73:8, 79:17 |
| height [1] - 78:1 | $\frac{\text { information }}{90: 8}[4]-61: 4,63: 2,63: 6,$ |
| held [1] - 64:2 |  |
| help [1] - 20:17 | initial [1] - 93:18 |
| helpful [1] - 79:12 | inner [3] - 44:18, 45:1, 45:7 |
| Hill [2] - 32:8, 32:17 | inside <br> [1] - 31:1 |
| history [1] - 90:11 | ```install [7] - 12:5, 17:8, 21:14, 40:18, 41:1, 53:6, 83:7 installation [5] - 57:9, 60:7, 64:9,``` |
| HMart [2] - 8:12, 8:18 |  |
| hold [1] - 66:18 |  |
| hole [3] - 25:5, 53:10, 53:16 | $70: 10, \quad 93: 3$ |
| hours [3] - $37: 18,38: 3,38: 9$ | installations [4] - 59:9, 60:2, |
| house [2] - 53:2, 53:3 | $\begin{aligned} & 65: 18,91: 11 \\ & \text { installed }[5]-53: 17,61: 5,63: 8, \end{aligned}$ |
| houses [1] - 33:1 | $\begin{aligned} & \text { 66:11, } 83: 1 \\ & \text { installing }[4]-28: 2,32: 11,34: 12, \end{aligned}$ |
| Housing [1] - 59:3 |  |
| housing [2] - 61:11, 61:16 | 48:15 |
| Hovey [8] - 17:17, 17:18, 18:2, <br> $18: 8,18: 9,18: 12,19: 5,19: 14$ |  |
| huge $[1]-33: 2$ | internal [1] - |
|  | internally [1] - 78:18 |
| I | intersection [2] - 15:14, 15:17 |
| idea [2] - 67:2, 72:13 | intrusive [1] - 84:14 |
| identified [2] - 75:4, 77:5 | involve [1] - 89:2 |
| $\text { identify }[1]-77: 9$ | involving [1] - 57:10 |
| imagine [1] - 89:12 |  |




```
meter [5] - 64:9, 66:7, 83:18, 84:5,
    84:12
meters [2] - 66:8, 84:9
method [1] - 53:6
MICHAEL [33] - 57:6, 57:17, 58:3,
    59:1, 59:8, 60:4, 60:8, 60:17,
    61:14, 64:6, 64:11, 64:18, 65:6,
    65:15, 66:10, 67:5, 68:12, 68:18,
    69:4, 70:4, 71:16, 72:16, 74:11,
    75:2, 75:8, 76:1, 77:4, 77:16,
    78:1, 78:6, 78:15, 79:7, 79:14
Michael [2] - 1:11, 4:10
michael [1] - 57:6
might [4] - 12:14, 19:16, 67:4, 79:5
minimize [2] - 34:18, 53:7
minimizing [3] - 54:4, 54:12, 84:18
minute [1] - 7:11
minutes [2] - 4:14, 4:16
missed [1] - 66:12
missing [1] - 41:2
misspoke [1] - 66:10
Mobilitie [7] - 81:8, 81:10, 82:3,
82:7, 85:5, 94:6, 95:8
MOBILITIE [6] - 3:11, 3:12, 3:14,
    80:15, 88:2, 92:2
moment [1] - 81:14
month [7] - 25:18, 73:9, 73:14,
    78:8, 78:10, 78:14, 80:3
months [1] - 81:3
moratorium [1] - 78:9
morning [7] - 4:6, 5:16, 14:13,
    14:14, 17:17, 27:12, 65:1
Motion [1] - 87:10
motion [18] - 4:16, 6:12, 9:10,
    11:6, 13:17, 16:12, 21:2, 26:16,
    30:15, 31:13, 33:11, 38:13, 46:5,
    50:17, 56:11, 80:5, 95:12, 96:2
mount [1] - 65:4
mounted [2] - 57:11, 65:11
move [11] - 13:15, 19:7, 47:16,
    49:7, 49:9, 54:10, 82:15, 86:1,
    87:8, 89:16, 89:17
multiple [1] - 69:3
Municipal [1] - 1:11
MURPHY [2] - 12:9, 13:1
Murphy [1] - 12:9
```



```
paving [1] - 45:12
pending [1] - 47:16
penetrate [1] - 56:6
penetration [1] - 55:14
people [4] - 59:11, 69:7, 71:3, 91:7
percent [2] - 28:16, 89:12
perform [1] - 62:15
permit [5] - 30:18, 31:9, 31:11,
    45:15, 91:2
permitting [1] - 81:9
person [1] - 77:5
PETITION [36] - 2:3, 2:4, 2:6, 2:7,
    2:9, 2:10, 2:12, 2:13, 2:15, 3:3,
    3:4, 3:6, 3:7, 3:9, 3:10, 3:12,
    3:13, 5:13, 7:3, 10:1, 11:15,
    14:10, 17:4, 21:11, 27:10, 32:4,
    34:6, 39:4, 46:14, 48:8, 51:9,
    55:4, 57:4, 80:14, 88:1, 92:1
petition [15] - 5:11, 6:1, 7:6,
    7:12, 10:4, 15:1, 18:5, 19:9, 35:7,
    39:7, 50:5, 51:13, 55:7, 80:17,
    87:8
petitioned [1] - 13:11
phase [1] - 15:8
Phillips [3] - 11:18, 12:5, 13:5
phone [3] - 49:8, 49:9, 63:5
phonetic [1] - 13:6
pick [1] - 49:16
picked [1] - 61:9
picture [3] - 69:13, 70:3, 72:4
pictures [1] - 83:1
pipe [5] - 23:3, 23:5, 23:11, 28:9,
    53:6
pipeline [1] - 59:18
Place [3] - 11:18, 12:5, 13:5
place [8] - 15:7, 39:7, 48:11,
    51:15, 53:13, 55:8, 71:1, 91:8
placed [2] - 71:15, 71:18
places [6] - 58:11, 59:14, 59:15,
    65:18, 71:5, 84:4
placing [2] - 52:16, 55:16
plan [13] - 25:12, 53:4, 53:9,
58:13, 64:12, 66:13, 66:14, 70:12,
71:10, 73:11, 79:8, 83:16
planning [1] - 71:7
plans [3] - 71:11, 71:15, 81:18
```

```
plus [1] - 41:17
```

plus [1] - 41:17
point [11] - 18:18, 24:3, 53:16,
point [11] - 18:18, 24:3, 53:16,
53:18, 57:17, 58:4, 59:5, 70:17,
53:18, 57:17, 58:4, 59:5, 70:17,
73:7, 90:7, 90:13
73:7, 90:7, 90:13
points [1] - 71:13
points [1] - 71:13
Pole [1] - 4:7
Pole [1] - 4:7
pole [70] - 10:12, 12:1, 12:5, 13:9,
pole [70] - 10:12, 12:1, 12:5, 13:9,
15:7, 15:11, 15:12, 15:13, 15:14,
15:7, 15:11, 15:12, 15:13, 15:14,
15:16, 16:1, 17:10, 17:14, 18:12,
15:16, 16:1, 17:10, 17:14, 18:12,
18:18, 19:1, 20:11, 24:16, 24:17,
18:18, 19:1, 20:11, 24:16, 24:17,
25:3, 48:12, 49:18, 52:3, 52:6,
25:3, 48:12, 49:18, 52:3, 52:6,
52:7, 57:8, 57:13, 59:14, 60:16,
52:7, 57:8, 57:13, 59:14, 60:16,
65:4, 65:10, 65:11, 66:3, 69:1,
65:4, 65:10, 65:11, 66:3, 69:1,
70:4, 70:7, 72:15, 73:4, 74:2,
70:4, 70:7, 72:15, 73:4, 74:2,
74:3, 74:5, 75:3, 76:13, 76:14,
74:3, 74:5, 75:3, 76:13, 76:14,
77:14, 81:4, 81:18, 83:12, 83:16,
77:14, 81:4, 81:18, 83:12, 83:16,
84:3, 84:8, 86:6, 88:15, 89:3,
84:3, 84:8, 86:6, 88:15, 89:3,
89:11, 92:6, 92:7, 92:8, 92:9,
89:11, 92:6, 92:7, 92:8, 92:9,
92:12, 93:2, 93:7, 93:9, 93:10,
92:12, 93:2, 93:7, 93:9, 93:10,
93:17, 94:10, 94:18, 95:2
93:17, 94:10, 94:18, 95:2
POLE [4] - 1:2, 1:4, 1:6, 4:3
POLE [4] - 1:2, 1:4, 1:6, 4:3
poles [31] - 15:4, 15:13, 16:5,
poles [31] - 15:4, 15:13, 16:5,
19:3, 19:4, 24:15, 25:1, 25:2,
19:3, 19:4, 24:15, 25:1, 25:2,
26:12, 57:11, 59:6, 59:13, 66:9,
26:12, 57:11, 59:6, 59:13, 66:9,
67:7, 67:9, 67:14, 68:2, 70:6,
67:7, 67:9, 67:14, 68:2, 70:6,
72:18, 74:17, 76:10, 78:12, 79:2,
72:18, 74:17, 76:10, 78:12, 79:2,
81:14, 82:9, 83:10, 85:3, 93:15,
81:14, 82:9, 83:10, 85:3, 93:15,
94:7, 94:15
94:7, 94:15
policy [2] - 72:10, 79:15
policy [2] - 72:10, 79:15
Portland [2] - 46:17, 47:4
Portland [2] - 46:17, 47:4
PORTLAND [2] - 3:6, 46:15
PORTLAND [2] - 3:6, 46:15
possibility [2] - 38:7, 38:10
possibility [2] - 38:7, 38:10
possible [2] - 54:7, 58:8
possible [2] - 54:7, 58:8
possibly [2] - 72:12, 79:4
possibly [2] - 72:12, 79:4
power [13] - 61:6, 63:2, 63:4,
power [13] - 61:6, 63:2, 63:4,
63:10, 63:15, 63:18, 64:2, 64:3,
63:10, 63:15, 63:18, 64:2, 64:3,
64:5, 64:9, 84:14, 84:16, 93:1
64:5, 64:9, 84:14, 84:16, 93:1
practice [1] - 52:5
practice [1] - 52:5
prefer [1] - 30:12
prefer [1] - 30:12
presence [1] - 35:13
presence [1] - 35:13
presented [1] - 92:15
presented [1] - 92:15
pretty [9] - 9:3, 12:15, 23:4, 24:5,
pretty [9] - 9:3, 12:15, 23:4, 24:5,
25:12, 65:16, 72:2, 74:13, 88:5
25:12, 65:16, 72:2, 74:13, 88:5
prevent [1] - 73:3
prevent [1] - 73:3
primary [4] - 10:6, 10:9, 92:8,
primary [4] - 10:6, 10:9, 92:8,
93:10

```
    93:10
```

| print [2] - 25:12, 25:15 | questioning [1] - 17:15 |
| :---: | :---: |
| private [16] - 12:7, 12:12, 13:9, | questions [1] - 88:6 |
| 13:12, 52:16, 53:1, 53:7, 53:10, | quite [1] - 93:12 |
| $\begin{aligned} & 55: 11, \quad 58: 16, \quad 59: 1, \quad 70: 6, \quad 74: 18, \\ & 77: 9, \quad 77: 13, \quad 77: 17 \end{aligned}$ | R |
| problem [1] - 68:7 | R-E-D-D-Y [1] - 61:2 |
| proceed [1] - 82:14 | radio [8] - 57:10, 61:18, 63:15, |
| PROCEEDINGS [2] - 2:1, 3:1 | 65:11, 65:17, 66:1, 66:11, 77:12 |
| process [9] - 49:6, 75:15, 76:17, | raised [2] - 95:7 |
| $\begin{aligned} & 78: 18,82: 13,85: 10,86: 10,86: 12, \\ & 90: 15 \end{aligned}$ | $\underline{\operatorname{ran}}[1]-72: 5$ |
| progress [2] - 15:6, 16:7 | $\operatorname{RE}[1]-1: 4$ |
| project [3] - 60:9, 65:8, 67:17 | [ready [11] - 16:10, 73:8, 81:4, |
| projection [2] - 67:3, 79:4 | $85: 14,88: 10,88: 12,88: 17,88: 18,$ |
| properties [4] - 33:2, 58:16, 77:10, | 89:2, 92:17, 93:1 |
| 77:14 | real [1] - 77:4 |
| property [27] - 9:6, 12:7, 12:12, | really [2] - 77:11, 83:4 |
| 13:9, 23:8, 28:1, 28:5, 32:10, | reason [3] - 53:18, 71:4, 77:15 |
| $48: 14,49: 12,51: 16,52: 1,52: 11$, | reasons [2] - 61:15, 78:2 |
| $52: 16,53: 1,53: 7,53: 10,53: 11$, | rebuild [1] - 39:10 |
| $\begin{aligned} & 54: 2, \quad 54: 4, \quad 54: 8, \quad 54: 10, \quad 54: 11, \\ & 55: 11, \quad 59: 2,74: 18,77: 17 \end{aligned}$ | received [2] - 16:4, 65:1 |
| proposed [4] - 47:1, 47:2, 47:4, | $\frac{\text { recently }}{73 \cdot 16}[4]-19: 14,45: 13,69: 18 \text {, }$ |
| 83:1 | recently-paved [1] - 45:13 |
| proposing [3] - 37:14, 49:12, 65:14 | recollection [1] - 13:4 |
| proprietary [1] - 68:11 | recommendations <br> [1] - 81:5 |
| protecting [2] - 17:9, 21:16 | RECORD [1] - 1:17 |
| provided [1] - 77:1 | record [2] - 12:8, 14:16 |
| proximity [1] - 94:10 | REDDY [2] - 61:1, 63:1 |
| public [10] - 32:9, 34:12, 39:9, | referring [1] - 72:3 |
| $\begin{aligned} & 48: 14, \quad 53: 8,54: 1, \quad 54: 13,59: 7, \\ & 70: 8,70: 9 \end{aligned}$ | refers [1] - 53:4 |
| Public [3] - 6:10, 11:4, 33:9 | refile [1] - 85:9 |
| pull [3] - 56:1, 90:15, 91:2 | regardless [1] - $35: 6$ |
| punched [1] - 56:1 | regulate [1] - 73:1 |
| push [3] - 93:5, 93:12, 94:5 | reheard [1] - 19:8 |
| put [14] - 8:7, 13:10, 29:3, 44:9, | reissued [1] - 95:8 |
| $44: 14, \quad 45: 4,60: 15,63: 16,67: 11,$ | reiterate [1] - 20:7 |
| $72: 8,72: 10,73: 10, ~ 93: 8,94: 8$ | relative [1] - 64:5 |
| Putnam [3] - 23:8, 26:4, 26:5 | relatively [2] - 61:12, 64:1 |
| putting [1] - 74:5 | relocate [1] - 8:3 |
| PVC [8] - 17:8, 21:15, 28:2, 48:15, | remember [1] - 28:17 |
| 51:16, 55:9, 55:18, 56:7 | removal [2] - 28:3, 48:16 |
|  | remove [1] - 10:6 |
| $\underline{\underline{2}}$ | renewal [1] - 35:2 |
| quarter [1] - 45:7 | repair [1] - 38:8 |

```
replace [2] - 11:3, 52:7
replacement [2] - 28:4, 48:16
replacing [3] - 43:10, 89:2, 89:11
REPORTER [1] - 58:2
REPORTERS [1] - 1:16
requesting [1] - 55:18
requests [2] - 76:9, 91:9
require [1] - 35:6
required [2] - 84:12, 93:1
requirement [1] - 66:8
requiring [1] - 84:9
residences [1] - 94:11
resident [2] - 61:2, 61:10
residents [5] - 5:7, 63:7, 93:13,
    93:15, 94:6
response [1] - 5:9
restricted [1] - 68:5
resupply [1] - 10:7
revised [3] - 64:12, 81:17, 83:16
RF [1] - 63:18
righty [1] - 46:3
RINDGE [2] - 3:9, 55:5
Rindge [2] - 55:8, 55:11
rink [1] - 33:5
riser [7] - 52:6, 92:7, 92:8, 93:7,
    94:2, 94:18, 95:2
risers [2] - 52:4, 93:10
Road [2] - 13:5, 32:8
roadway [1] - 39:9
roof [2] - 58:5, 59:16
rooftop [2] - 62:8, 63:13
rooftops [3] - 57:18, 59:2, 77:10
Room [2] - 1:12, 4:12
room [2] - 40:4, 45:3
ROSSANA [15] - 84:13, 85:7, 86:8,
    86:16, 87:1, 87:6, 89:4, 89:9,
    90:7, 90:10, 90:18, 91:17, 92:10,
    92:16, 95:3
Rossana [1] - 81:8
roughly [1] - 72:6
round [1] - 65:10
route [6] - 15:3, 15:10, 16:11,
23:18, 47:7
rubbish [1] - 13:7
run [1] - 41:2
```

```
side [11] - 12:4, 20:8, 24:14, 26:4,
    26:6, 26:13, 37:6, 37:11, 42:16,
    53:3, 65:11
sidewalk [10] - 10:17, 11:2, 22:9,
    26:14, 27:17, 27:18, 28:4, 31:3,
    31:4, 48:17
similar [5] - 60:2, 60:7, 65:6,
    72:5, 82:11
single [2] - 57:15, 73:9
site [21] - 46:2, 57:15, 58:4, 58:5,
    62:8, 62:11, 62:15, 62:16, 63:3,
    63:13, 64:7, 66:13, 71:1, 82:1,
    82:5, 83:15, 85:12, 85:16, 92:11
sites [4] - 58:12, 70:18, 77:6, 78:5
situation [1] - 76:16
six [1] - 15:13
size [1] - 25:14
sketch [2] - 8:7, 8:8
slab [2] - 29:10, 30:11
small [11] - 25:12, 57:9, 59:9,
    63:3, 65:8, 67:6, 75:2, 75:3, 75:9,
    77:16, 78:12
smaller [1] - 63:11
smooth [1] - 91:7
socket [1] - 66:7
solution [2] - 40:13, 84:14
someone [1] - 91:13
Somerville [1] - 60:3
somewhere [2] - 60:3, 74:18
sorry [3] - 7:16, 42:9, 81:7
sort [1] - 69:5
sound [1] - 66:5
southeasterly [2] - 17:11, 21:18
southwesterly [2] - 7:7, 12:1
space [3] - 45:7, 73:2, 73:5
spaces [1] - 20:14
span [2] - 79:5, 79:6
spanning [1] - 60:16
spare [2] - 23:5, 23:6
spares [1] - 24:7
speaking [1] - 68:1
specific [5] - 61:5, 77:15, 85:12,
    88:17, 93:2
specifically [1] - 61:8
specifics [3] - 63:4, 63:7, 82:17
```

splice [1] - 18:18
splicing [1] - 25:6
spot [1] - 37:4
Square [2] - 62:4, 74:16
square [1] - 33:3
STAFF [1] - 1:9
standard [2] - 72:2, 72:3
standards [2] - 71:17, 76:12
standing [1] - 76:7
started [4] - 4:6, 36:6, 60:10,
75:10
starts [1] - 75:16
state [5] - 12:8, 14:15, 60:18, 72:16, 72:17
status [1] - 92:16
statutes [1] - 70:5
step [4] - 5:8, 75:12, 75:13, 90:15
STEPHEN [1] - 1:8
Steve [1] - 4:12
STEVE [184] - 4:15, 5:2, 5:6, 5:15, $5: 18,6: 8,6: 11,6: 15,7: 1,7: 5$, $7: 18,8: 4,8: 9,9: 5,9: 9,9: 13$,
$9: 17,10: 3,10: 11,10: 16,11: 5$,
11:9, 11:13, 11:17, 12:11, 12:17, $13: 8,13: 13,13: 16,14: 2,14: 6$, $14: 12,14: 15,14: 18,15: 9,15: 15$, $16: 3,16: 8,16: 16,17: 2,17: 6$, $17: 18,18: 4,18: 16,19: 2,19: 6$, $20: 3,20: 6,20: 15,21: 1,21: 5$, 21:9, 21:13, 22:10, 23:7, 24:13, 25:4, 26:3, 26:11, 27:1, 27:5, 27:7, 27:15, 28:11, 28:14, 29:1, 29:6, 29:11, 29:15, $30: 1,30: 7$, $30: 14,31: 10,31: 16,32: 2,32: 6$, $32: 14,33: 4,33: 10,33: 14,33: 18$, $34: 3,34: 8,35: 4,35: 11,36: 5$, $36: 9,36: 15,37: 5,37: 9,37: 16$, $38: 4,38: 12,38: 16,39: 2,39: 6$, $41: 12,41: 16,42: 2,43: 2,44: 17$, $45: 5,46: 4,46: 8,46: 12,46: 16$, $47: 9,47: 14,48: 2,48: 6,48: 10$, $49: 4,49: 11,49: 15,50: 1,50: 6$, $50: 12,50: 16,51: 2,51: 6,51: 11$, $52: 8,53: 14,54: 9,54: 16,55: 2$, $55: 6,55: 17,56: 10,56: 15,57: 1$, $57: 14,60: 1,60: 6,60: 14,64: 8$,

```
65:12, 66:6, 68:10, 68:14, 69:2,
69:14, 73:13, 74:14, 75:5, 75:11,
77:2, 78:3, 78:7, 78:17, 80:4,
80:8, 80:12, 80:16, 81:15, 83:17,
85:2, 86:5, 86:11, 86:14, 86:17,
87:3, 87:7, 87:13, 87:17, 88:3,
89:1, 89:6, 89:14, 90:2, 90:6,
90:9, 90:16, 91:3, 92:3, 92:13,
93:6, 93:14, 94:12, 95:10, 95:15,
96:1, 96:5, 96:9
```

$\underline{\text { still }}[9]-16: 6,19: 7,23: 12,24: 3$,
42:9, 86:9, 86:15, 89:7
stop [1] - 68:4
store [1] - 8:18
straddling [1] - 49:16
strange [1] - 71:2
streaming [1] - 69:6
streamlined [1] - 91:6
Street [52] - 6:1, 7:7, 10:4, 10:13,
12:6, 15:18, 16:1, 17:7, 17:11,
17:12, 17:14, 17:17, 18:7, 18:15,
19:16, 21:14, 21:17, 22:1, 27:16,
$27: 17,28: 1,39: 7,42: 13,43: 11$,
$44: 9,45: 13,46: 17,47: 2,47: 4$,
$48: 11,48: 13,48: 15,51: 14,51: 16$,
$51: 18,52: 1,52: 10,52: 11,52: 18$,
$54: 3,54: 12,57: 9,61: 3,80: 17$,
$80: 18,86: 6,88: 5,92: 4$
STREET [32] - 2:3, 2:5, 2:6, 2:9,
$2: 11,2: 12,2: 14,3: 5,3: 6,3: 8$,
$3: 9,3: 11,3: 12,3: 14,5: 14,7: 4$,
10:2, 14:11, 17:5, 21:12, 27:11,
39:5, 46:15, 48:9, 51:10, 55:5,
57:5, 80:15, 88:2, 92:2
street [18] - 13:11, 20:9, 20:12,
$22: 8,22: 11,23: 15,24: 8,24: 12$,
$24: 14,25: 5,26: 14,32: 18,40: 8$,
$52: 14,54: 5,61: 10,61: 17,72: 8$
streets [2] - 74:7, 74:9
STREETS [101] - 1:7, 4:18, 5:4, 6:9,
$6: 13,6: 17,7: 10,7: 15,8: 11,8: 17$,
$9: 2,9: 7,9: 11,9: 15,11: 1,11: 7$,
11:11, 12:13, 13:3, 13:14, 13:18,
14:4, 16:14, 16:18, 19:11, 20:1,
$21: 3,21: 7,22: 12,22: 18,23: 14$,
25:8, 25:11, 25:16, 26:17, 27:3,
$29: 13,30: 5,31: 8,31: 14,31: 18$,
$33: 8,33: 12,33: 16,34: 1,38: 6$, $38: 14,38: 18,39: 15,40: 14,40: 17$, $41: 8,42: 3,42: 8,43: 4,43: 9$, $43: 14,43: 18,44: 3,44: 13,45: 11$, $45: 16,46: 1,46: 6,46: 10,47: 18$, $48: 4,50: 14,50: 18,51: 4,52: 17$, $54: 14,54: 18,56: 8,56: 13,56: 17$, $58: 15,59: 4,64: 14,65: 2,66: 16$, $67: 16,69: 11,71: 12,72: 1,73: 6$, $79: 3,79: 10,80: 1,80: 6,80: 10$, 87:11, 87:15, 89:18, 90:4, 93:11, $94: 9,95: 13,95: 17,96: 3,96: 7$
strip [1] - 53:5
strong [1] - 94:13
structural [3] - 66:4, 73:3, 73:5
structurally [1] - 66:5
structures [2] - 58:1, 58:6
stuff [1] - 13:7
subject [1] - 88:16
submit [1] - 82:15
submitted [3] - 76:9, 77:12, 85:6 SUPERINTENDENT [101] - 1:7, 4:18,
$5: 4,6: 9,6: 13,6: 17,7: 10,7: 15$, $8: 11,8: 17,9: 2,9: 7,9: 11,9: 15$, $11: 1,11: 7,11: 11,12: 13,13: 3$, $13: 14,13: 18,14: 4,16: 14,16: 18$, 19:11, 20:1, 21:3, 21:7, 22:12, $22: 18,23: 14,25: 8,25: 11,25: 16$, 26:17, 27:3, 29:13, 30:5, 31:8, $31: 14,31: 18,33: 8,33: 12,33: 16$, $34: 1,38: 6,38: 14,38: 18,39: 15$, $40: 14,40: 17,41: 8,42: 3,42: 8$, $43: 4,43: 9,43: 14,43: 18,44: 3$, $44: 13,45: 11,45: 16,46: 1,46: 6$, $46: 10,47: 18,48: 4,50: 14,50: 18$, $51: 4,52: 17,54: 14,54: 18,56: 8$, $56: 13,56: 17,58: 15,59: 4,64: 14$, $65: 2,66: 16,67: 16,69: 11,71: 12$, $72: 1,73: 6,79: 3,79: 10,80: 1$, $80: 6,80: 10,87: 11,87: 15,89: 18$, $90: 4, ~ 93: 11, ~ 94: 9, ~ 95: 13, ~ 95: 17$, 96:3, 96:7
supplier [1] - 72:11
supply [1] - 64:9
support [1] - 73:3
supporting [2] - 17:9, 21:16
surrounding [1] - 62:17

| survey [2] - 82:3, 86:13 | trench [17] - 23:2, 27:18, 32:9, |
| :---: | :---: |
| switched [1] - 37:7 | $34: 11,35: 1,39: 8,40: 9,40: 11$ |
| switching [2] - 92:9, 93:8 | $46: 18,47: 15,47: 16,48: 13,50: 10$, |
| system [6] - 20:4, 40:7, 43:1, | 72:6, 72:10, 73:17 |
| 44:11, 44:12, 44:15 | trenching [1] - 84:18 |
| systems [1] - 43:3 | tried [2] - 22:7, 52:2 |
| Systems [1] - 62:5 | true [1] - 79:11 |
|  | try [1] - 26:5 |
| T | trying [6] - 67:17, 70:14, 73:11, |
| technical [1] - 61:15 | 75:8, 84:13, 91:5 |
| technology [3] - 69:15, 71:2, 74:13 | turn [1] - 28:9 |
| terms [3] - 63:4, 82:17, 83:8 | turning [1] - 12:2 |
| testify [1] - 77:15 | two [16] - 3:8, 20:14, 31:5, 32:16, |
| THE [2] - 1:17, 58:2 | $\begin{aligned} & 42: 15, ~ 43: 3, ~ 48: 15, ~ 55: 18, ~ 56: 7, \\ & 66: 1, ~ 66: 11, ~ 66: 14, ~ 81: 3, ~ 82: 1, \\ & 83: 5, ~ 90: 15 \end{aligned}$ |
| THIRD [4] - 2:6, 3:5, 10:2, 39:5 | two-inch [3] - 48:15, 55:18, 56:7 |
| $\begin{aligned} & \text { Third }[7]-39: 7,40: 2,40: 10, \\ & 42: 12,43: 11,44: 9,45: 13 \end{aligned}$ | two-step <br> [1] - 90:15 |
| third [1] - 10:4 | types [1] - 91:11 |
| three [12] - 28:2, 29:3, 31:2, 31:5, | typical [12] - 7:12, 9:10, 11:6, |
| ```32:18, 33:2, 81:13, 85:8, 86:18, 87:5, 93:15, 95:4 three-foot [1] - 31:5``` | ```13:15, 13:17, 30:16, 34:2, 34:4, 38:13, 46:9, 50:17, 56:11 typically [6] - 75:12, 75:13, 84:3,``` |
| $\begin{aligned} & \text { three-inch }[2]-28: 2,29: 3 \\ & \text { throughout }[4]-58: 17,68: 3,69: 17, \end{aligned}$ | 91:13, 93:7, 95:1 |
|  | $\underline{\text { U }}$ |
| Thursday <br> [1] - 4:8 | under [1] - 70:4 |
| tight [3] - 45:2, 45:8 | underground [10] - 10:7, 48:12, |
| tighter [1] - 31:3 | $48: 18,49: 5,49: 6,49: 10,57: 12,$ |
| TIME [1] - 1:15 | $74: 8,74: 9, \quad 83: 14$ |
| timing [1] - 86:2 | unfortunately [1] - 85:18 |
| $\text { today }[2]-5: 8,75: 6$ | university [1] - 22:15 |
| $\frac{\text { together }}{86: 1}[4]-72: 10,73: 10,77: 13,$ | University [3] - 12:7, 12:10, 13:2 |
|  | unknowns [1] - 89:7 |
| top [4] - 60:16, 65:9, 83:10, 83:11 | unless [2] - 37:17, 73:4 |
| tops [2] - 58:5, 59:16 tough [1] - $71: 4$ | $28: 9,28: 11,31: 2,36: 8,40: 7,$ |
| tower [2] - 63:5, 63:13 | $42: 12,49: 16,53: 10,53: 11,54: 1$, |
|  | $58: 2,60: 9,65: 5,72: 7,75: 10,$ |
| town [2] - 58:1, 58:6 traditional [5] - 63:5 | 89:13, 91:5, 93:10 |
| $63: 13,64: 7,70: 18$ | updates [1] - 85:13 |
| traffic [3] - 37:6, 37:11, 37:13 | urgency [1] - 75:6 |
|  | usage $[2]-62: 12,62: 14$ |
| transfers [1] - | user [1] - 72:11 |
| transmitted [1] - 69:17 | users [1] - 64:2 |



```
Woburn [1] - 60:12
wonderful [1] - 37:15
wondering [1] - 52:12
wooden [1] - 74:17
works [1] - 83:14
Works [3] - 6:10, 11:4, 33:9
```

    \(\underline{Y}\)
    year [4] - 35:3, 60:9, 79:5, 79:6
years [4] - 19:15, 36:12, 72:6, 79:8
yellow [1] - 25:13
York [1] - 88:5
YORK [2] - $3: 12,88: 2$
young [1] - 71:3
yourself [1] - 67:18

