## CITY OF CAMBRIDGE

 OFFICE OF THE POLE AND CONDUIT COMMISSIONAgenda of the Pole and Conduit Commission held on Thursday, February 19, 2015 at 10:00 a.m. Michael J. Lombardi Building, 831 Massachusetts Ave. Basement Conference Room

APPEARANCES:

William Dwyer, Superintendent of Streets

Stephen Lenkauskas, City Electrician

Ellen Watson

## SPEAKERS:

Herb Bentona, Lightower
William Conway, Lightower
Siad Abu Zahra, Resident
Michael Prusak, Resident
Kosta Jovanovic, Crown Castle
Jake McAdoo, Verizon Business
Rick Gallagher, Harvard University
Jackie Duffy, NStar
Susan Barroso, NStar

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    P R O C E E D I N G S
    MS. WATSON: This is meeting of the
Pole and Conduit Commission. It's ten o'clock on
Thursday, February 19, 2015. We're in the Michael
J. Lombardi Building at 831 Massachusetts Avenue in
the basement conference room. Sitting with me is
Steve Lenkauskas, the City electrician, and Bill
Dwyer, superintendent of streets.
    MR. LENKAUSKAS: First make a motion
to approve the minutes from both the December and
January hearings?
                    MR. DWYER: Seconded.
    MR. LENKAUSKAS: All those in favor?
    MR. DWYER: Yes.
    MR. LENKAUSKAS: Yes. Crown Castle.
I believe -- are they here yet? Any of you
residents that want to speak on any particular item,
resident or building owner -- would you like to
speak on any --
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MR. LENKAUSKAS: In regards to the

Lightower petition?

DOCTOR SIAD ABU ZAHRA: What?

MR. LENKAUSKAS: The Lightower
petition.

DOCTOR SIAD ABU ZAHRA: Yes.

MR. LENKAUSKAS: Okay. Why don't we
move ahead in the agenda and we'll pull the Lightower for --

DOCTOR SIAD ABU ZAHRA: I want to
know where the location is.

MS. WATSON: The one that was held
from September and October?

MR. LENKAUSKAS: We'll move ahead and
call Lightower in regards to 675 Massachusetts

Avenue.

MR. BERTONA: Good morning.

MR. DWYER: Pull a couple of chairs
up there.

MR. BERTONA: Yes.

MR. DWYER: The question is, Do you
know what the location -- what we're -- they are going to do there?

DOCTOR SIAD ABU ZAHRA: I want
to know the location compared to the 139 Bishop

Allen Drive property.

MR. LENKAUSKAS: I believe that's -MR. BERTONA: The building location?

It's on the corner of Bishop Allen and Prospect.

MR. DWYER: Gentlemen -- do you have
their names?

MR. BERTONA: Herb Bertona.
$\mathrm{B}-\mathrm{E}-\mathrm{R}-\mathrm{T}-\mathrm{O}-\mathrm{N}-\mathrm{A}$.

DOCTOR SIAD ABU ZAHRA: S-I-A-D,
$A-B-U, \quad Z-A-H-R-A$.

MR. PRUSAK: Michael Prusak.
$\mathrm{P}-\mathrm{R}-\mathrm{U}-\mathrm{S}-\mathrm{A}-\mathrm{K}$.

MR. DWYER: You folks are residents on Bishop Allen?

MR. PRUSAK: I live on a dead end
street -- park --

MR. DWYER: Your question is the same as the other gentleman?

MR. PRUSAK: I know where the
location is. I was just wondering if they had drawings to show how big it is, et cetera.

MR. DWYER: They do, Doctor. Will
you -- first of all, you want to know if they have any -- Prusak? You want to know if they have any drawings? They can supply a set of drawings for you.

MR. BERTONA: Bended round four-inch
conduit.

MR. DWYER: The question is, I guess,

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what type of work are you petitioning for?
    MR. BERTONA: Underground conduit,
replace fiber optic --
    DOCTOR SAID ABU ZAHRA: What is --
    MR. BERTONA: One-quarter inch.
    MR. LENKAUSKAS: This petition was
for 675 Mass. Ave. At Prospect, and Lightower is
proposing to dig starting at Verizon manhole 26/403
to place approximately 58 feet of four-inch conduit
to the building at 130 Bishop Allen Drive. The
question was, sir?
    DOCTOR SIAD ABU ZAHRA: You have it
going from this side to this side here. We have the
parking lot.
    MR. LENKAUSKAS: Correct.
    DOCTOR SIAD ABU ZAHRA: Here you're
not going to put anything here?
    MR. BERTONA: No.
    MR. LENKAUSKAS: There is a manhole
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at that location where the parking lot is. They're
proposing to dig from that manhole in the sidewalk
across the street into 130 Bishop Allen Drive to
service 675 Mass. Ave. So once the digging is
complete. There is no above-ground structures.
It's a continuation of their network to feed 675.
And to complete that path and installation they are
asking or proposing to dig for that last mile, that
last leg.
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    MR. BERTONA: Yes.
    MR. PRUSAK: I saw Lightower.
    MR. LENKAUSKAS: I got you. This was
    underground.

DOCTOR SIAD ABU ZAHRA: You have only

Prospect Street.

MR. BERTONA: Yes.

DOCTOR SIAD ABU ZAHRA: And put
four-inch diameter conduit in this area?

MR. BERTONA: Correct.

DOCTOR SIAD ABU ZAHRA: I have no
objection to that. I thought it would go on this side as well. I have no objection. MR. LENKAUSKAS: Okay. Thank you.

On that petition do you have any -MR. DWYER: Excuse me. I had to put
my -- have my packet put together by somebody else and $I$ can't find the plan. MR. BERTONA: You want to pick a plan?

MR. DWYER: So you want -- you're
going to cross the intersection? Your plan is to cross the intersection?

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    MR. BERTONA: Correct.
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    MR. DWYER: Is that a -- what kind of
    manhole?

MR. BERTONA: Telephone. Verizon
manhole.

MR. DWYER: What is the most direct
way? Nothing coming off a manhole on the same side of the street?

MR. BERTONA: No.

DOCTOR SIAD ABU ZAHRA: You have --
you would have a manhole here where it comes from? MR. BERTONA: No. It would just come
out of that manhole directly through the basement. DOCTOR SIAD ABU ZAHRA: Through the basement?

MR. BERTONA: Yes.

MR. DWYER: Herb, I notice coming out
of that manhole going directly across Prospect

Street onto Bishop Allen there is a couple conduits.

It's kind of a light color. It's heading directly
east -- I'm sorry -- directly west from that
manhole, the same manhole you're coming out of,
there is no conduits -- empty conduits going in that
direction where you use and walk up the sidewalk
into a building.

MR. BERTONA: According to Verizon,
no, based on their licensing.

MR. DWYER: That's something they
came out and physically checked? You have them do that?

MR. BERTONA: Exactly. Yes.

MR. DWYER: Okay. So there is no other way of getting in there?

MR. BERTONA: I wish there was.

MR. DWYER: When are you looking to
get this done? Yesterday, right?

MR. BERTONA: When the snow melts.

MR. DWYER: For that cafe there?

There -- that's for that cafe?

MR. BERTONA: 675?

MR. DWYER: Yes. The one on Bishop

Allen. Well --

MR. LENKAUSKAS: That's several
blocks.

MR. DWYER: Okay. So you've gone to Verizon, and they did their survey and due diligence and everything else. Okay. I'll -- I guess I'll put it in a form of -- propose that -- without given restrictions with that, it seems to be a necessary evil, but given the restrictions, we typically have -- they go along with the petition.

You'll have to obtain all city
permits that are necessary from all of the departments, being electrical and DPW. You'll have to -- spot regulations need to be followed and there will definitely be a site meeting required with the Public Works prior to any ongoing work.

I do recognize with all your packets
you have a traffic management plan. That's a huge help. Work on the safety plan. You are going to need those three things, those steps to be taken prior to any work taking place. The moratorium is still in place?

MR. BERTONA: Yes.

MR. DWYER: This may not be happening
until who knows.

MR. BERTONA: Yes.

MR. DWYER: It may be well before the snow melts. Motion we move ahead on that petition with all those restrictions. In fact, the two residents that are present, do you have questions?

DOCTOR SIAD ABU ZAHRA: Could I have a copy of this?

MR. DWYER: I'm sure Lightower can
arrange to have that taken care of, to have that for you.

MR. BERTONA: (Complies.)

MR. DWYER: And to move ahead with
approving the petition, given those restrictions mentioned.

MR. LENKAUSKAS: On the motion to
approve pending all the typical restrictions of DPW,

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site visits, spot regulations. On a motion?
    MR. DWYER: Seconded.
    MR. LENKAUSKAS: All those in favor?
    MR. DWYER: Yes.
    MR. LENKAUSKAS: Yes.
    MR. BERTONA: Thank you.
    MR. PRUSAK: Thank you.
    DOCTOR SIAD ABU ZAHRA: Thank you.
    MR. LENKAUSKAS: We'll move back to
the beginning of the agenda. Just Crown Castle.
    MR. JOVANOVIC: Good morning.
    MR. LENKAUSKAS: This first petition
was continued from the January 15 hearing, and we'll
take the first one, which is Market Street, which is
an extension of the existing aerial fiber optic
network branching off Pole 488/1 on the corner of
Elm Street and Market Street proceeding
southeasterly along Market Street terminating at
Pole 466/13 and attachment of equipment on Pole
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466/13 (Node VZ-NO60.)

I think that was continued pending
licensing and inspection and from electrical -- this doesn't involve any excavation?

MR. JOVANOVIC: I think what we would
hope to get is a conditional approval pending
issuance of city permits.

MR. DWYER: This is just to put --
survey to put a node on top of a pole or actually
put a node on top of the pole?

MR. JOVANOVIC: Just a segment of
aerial fiber.

MR. LENKAUSKAS: You're asking the
attachment approval would be your final?

MR. JOVANOVIC: Yes.

MR. LENKAUSKAS: Would this be a node
in the com zone? Is this -- when the antenna -- is
that on the street side or is that parallel to the
street or is that house side?

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        MR. JOVANOVIC: Typically, we put the
equipment enclosure away from the traffic on the
side away from the traffic, and that occupies one
quadrant of the pole. If it's available, we would
go 90 degrees off, but otherwise we'd stay in the
same. In fact, if I could just find it, it should
be indicated on the drawing.
                                    MR. LENKAUSKAS: Does this one
involve any pole replacement?
                    MR. JOVANOVIC: No.
                MR. LENKAUSKAS: This is all existing
poles?
                MR. JOVANOVIC: Correct, this one is.
                MR. DWYER: Market Street?
                MR. LENKAUSKAS: Just in from
Columbia on Market.
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                                    MR. DWYER: You're going -- the crew
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                                    MR. DWYER: You're going -- the crew
    is going to consist of several trucks and men and
cable and all of those things? Spool? Trailer?

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Things like that?

MR. JOVANOVIC: Not all at once.

Typically, what we would do is mount the equipment and antenna and go back and string the fiber.

MR. DWYER: Are you looking to do
this during the course of a regular workday?

MR. JOVANOVIC: Regular workday,
yes.

MR. DWYER: DPW is good with this as
long as we follow the typical conditions that go along with every petition.

MR. LENKAUSKAS: The only other thing
with this one is -- this one is in a lot of trees.

Do you have an arborist working with your crews?

MR. JOVANOVIC: We could work with
the city arborist.

MR. LENKAUSKAS: You need to make
contact with the city arborist when any trees or branches need to be removed. In this case, this
pole is buried and may need some extensive pruning.

MR. DWYER: His name is Dave Luncort
from the DPW. You want his phone number, right? MR. JOVANOVIC: Yes. MR. DWYER: 349-4800, and ask for

Dave Luncort. I can't think of his number off the top of my head. The restrictions, in this case, would be city permits from necessary departments, and we would need a site meeting prior to any work commencing.
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MR. JOVANOVIC: Site meeting with?
MR. DWYER: DPW staff. Work set-up

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and talk to the permits and the whole deal there.
Just to move ahead a second, you have several of
these get approved today, these petitions you have
on the book. I don't know if we can schedule all of them.

MR. JOVANOVIC: If they're all on one
petition?

MR. DWYER: They'll all need to be inspected and discussed prior to work commencing. MR. LENKAUSKAS: You would attempt
each one of these locations would be a separate work
zone? These one at a time?

MR. JOVANOVIC: Yes.

MR. LENKAUSKAS: Do you expect more
than one crew out there or are you going to move
from one to the next?

MR. JOVANOVIC: We need to get these
done by the end of July, so I think that's going to govern what resources we have to martial.

MR. LENKAUSKAS: There would be a
coordination?

MR. DWYER: It's important we look at
the big picture here, how you're going to affect a neighborhood with two or three crews, how we schedule and sequence this whole thing. That's what
needs to be discussed.

MR. LENKAUSKAS: In coordination with
construction in other areas, there's a lot going on. Keep everybody moving and not obstructing too much. So a motion to approve, pending all the typical meetings for work zones, traffic, and any pruning of trees or anything, you need to contact the city arborist. MR. DWYER: Second the motion. MR. LENKAUSKAS: All those in favor? MR. DWYER: Yes. MR. LENKAUSKAS: Yes. Second petition is also Crown Castle for Columbia Street, an extension of the existing aerial fiber optic network branching off Pole 61 on the corner of Lincoln Street and Columbia Street proceeding southerly along Columbia Street terminating at Pole 24 with attachment of equipment on Pole 24 (Node VZ-NO62). I believe this one there is no excavation
involved with this one either?

MR. JOVANOVIC: It's a clean pole.

Just a telephone terminal box on it.

MR. DWYER: Columbia Street.

MR. LENKAUSKAS: Only that I would
mention the typical conditions going forward that the arborist be notified of any tree obstructions.

Just make a typical condition on all these.

MR. JOVANOVIC: Okay.

MR. LENKAUSKAS: Other than typical
conditions, I don't have any --

MR. DWYER: DPW. Okay. With this
moving forward, just, again, the typical reason,
slash, restriction would be in place. We can move forward with this petition.

MR. LENKAUSKAS: On the motion?

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.
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    MR. LENKAUSKAS: Yes. Webster
    Avenue, an extension of the existing aerial fiber
optic network branching off Pole 717/14 on the
corner of Plymouth Street and Webster Avenue
proceeding southeasterly along Webster Avenue on
Bristol Street turning southwest and terminating at
Pole 15 on Bristol Street with attachment of
equipment on Pole 15 (Node VZ-N027).
MR. DWYER: Any excavation on this
petition, Kosta?

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MR. JOVANOVIC: No.
            MR. DWYER: You want to run the whole
length of Bristol?
    MR. LENKAUSKAS: I believe we do a
dig on that, do we not, across Hampshire from -- on
Bristol across Hampshire?
    MR. JOVANOVIC: I don't have that map
in this packet.

MR. LENKAUSKAS: Does it note in your
letter to abutters?

MR. JOVANOVIC: The Pole 15 is the
equipment location and then that dig across

Hampshire Street. It's covered in the next petition
for N21.

MR. LENKAUSKAS: The next petition?

MR. JOVANOVIC: Yes.

MR. LENKAUSKAS: All right. So
that's on the next petition. So it's an extension, this aerial here. I would move to approve pending
all typical conditions, as mentioned prior, as far as traffic and everything else.

MR. DWYER: It would be the arborist,
would be the permits. It would be a city meeting
prior to any work commencing.

MR. LENKAUSKAS: On a motion?

MR. DWYER: Second the motion.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. On Bristol

Street, an extension of the fiber optic network from Pole 15 crossing Hampshire Street in new underground conduit, then rising on Pole 16 on Bristol Street proceeding southwesterly along Bristol Street to Market Street turning southeast terminating at Pole 3 on Market Street with attachment of equipment at Pole 3 (Node VZ-N021). This is the one with the excavation?

MR. DWYER: Yes. MR. JOVANOVIC: The length of conduit
is 192 feet on the plan.

MR. DWYER: Do you have an engineer
drawing on this? I don't want to hold everything up.

MR. JOVANOVIC: I do not have a
larger version of that with me.

MR. DWYER: Not eight and a half by eleven.
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    MR. JOVANOVIC: Well --
    MR. DWYER: Can I take a look at it,
    please?
MR. JOVANOVIC: (Complies.)
MR. DWYER: One conduit or --
MR. JOVANOVIC: One four-inch
conduit.
MR. DWYER: With the city shadow?
MR. JOVANOVIC: Yes.
MR. DWYER: So the existing conduit
that runs looks like it runs from one pole --
existing conduit that runs from a pole to a Verizon
manhole?

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MR. JOVANOVIC: No. This would be from where the aerial left off on the previous one.
    MR. LENKAUSKAS: Pole to pole.
    MR. DWYER: P75 and Pole 76.
    MR. JOVANOVIC: Runs from Pole 15 on
Bristol.
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    MR. DWYER: 15 to 16?
    MR. JOVANOVIC: Yes.
    MR. DWYER: Okay.
    MR. LENKAUSKAS: It's just a pole to
    pole, underground pole to pole.
MR. DWYER: My question would be
there is another conduit running adjacent to that.
There is no existing conduit that --
MR. JOVANOVIC: Our engineer
contacted everyone to see if there was and we only
dig as a last resort. We're not opposed to leasing
conduit from others.
MR. DWYER: Like the manholes. Tough
trench. Okay. Move forward with typical
conditions.
MR. LENKAUSKAS: That's fine. As far
as the shadow duct goes on this particular, we would
not require city shadow on this, so it would be the
one four-inch.

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MR. JOVANOVIC: Yes. Thank you.

MR. LENKAUSKAS: On the motion to
approve with all typical conditions? MR. DWYER: Seconded. MR. LENKAUSKAS: All those in favor? MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. Vandine

Street, an extension of the aerial fiber optic network branching off Pole 605/9 proceeding southeasterly along Vandine Street terminating at Pole 2 with attachment of equipment on Pole 2 (Node \(2 e-26 a)\).

MR. JOVANOVIC: This is just a
lateral off Berkshire Street.

MR. DWYER: Any information necessary
on this one? I don't think so, right?

MR. LENKAUSKAS: I don't believe so.

Make a motion to approve pending all typical
conditions. On a motion?

MR. DWYER: Emphasis on the city
arborist.

MR. LENKAUSKAS: City arborist. And
the motion?

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. Next one. New
equipment attachments on existing fiber optic
pathways at Poles 230/7.5 on Elm Street known as

Verizon Node VZ-N057 and at Pole 23 on Berkshire

Street known as VZ-N020.

MR. DWYER: Do these meet? They
don't meet. Do they run along --

MR. JOVANOVIC: I think there's
something off with the wording on that.

MR. LENKAUSKAS: Let me check the
original.

MR. JOVANOVIC: Because --

MR. LENKAUSKAS: 57, it looks like. Are you adding a node on 57 on all existing fiber? MR. JOVANOVIC: It's existing fiber on Berkshire Street, and Pole VZ20 should be at Pole 23, so I don't know how that -- I don't believe 57 is in there. There is a --

MR. LENKAUSKAS: It's also marked in on your application.

MR. DWYER: Continue that on -- based on --

MR. LENKAUSKAS: I think we need a
little clarification on that one. We'll continue. Motion to continue pending clarification?

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes.

MR. DWYER: If everybody's parking
meters are paid up?

MR. JOVANOVIC: Parking holiday
today.

MR. LENKAUSKAS: Prentiss Street.

Extension of aerial fiber from the

Cambridge/Somerville City Line westerly to Pole 654/19 and attachment of equipment on Pole 654/19 or Node N072.

MR. DWYER: The attachment would be the node only? Do you know what it would be?

MR. LENKAUSKAS: Typical. It's an
aerial.

MR. JOVANOVIC: Aerial feed coming
from the Somerville side.

MR. DWYER: Do any of these poles
have to be replaced? Maybe that was asked already.

MR. JOVANOVIC: These poles, no.

MR. DWYER: That's what we're
discussing here. No.

MR. LENKAUSKAS: The license has been
obtained for all these poles?

MR. JOVANOVIC: We have the node
licenses but not yet the fiber license. Two
separate batches.

MR. DWYER: That typically comes
separate?

MR. JOVANOVIC: Yes. We apply for
them separately so that one is not dependant on the other. We wouldn't start until we have both. MR. LENKAUSKAS: But all make-ready work has been done or been not -- has been surveyed? MR. JOVANOVIC: Surveyed. MR. LENKAUSKAS: On both attachment poles and at fiber poles to be connected? MR. JOVANOVIC: Yes. MR. LENKAUSKAS: Are there any
foreseen additional poles or replacements? MR. JOVANOVIC: The surveys have been
done on this batch. When we get to the --

MR. LENKAUSKAS: On all these
continued petitions the surveys have been completed?

There is no additional poles being changed out, but you're still pursuing licenses for attachment of fiber, but you have received licensing for the node attachments?

MR. JOVANOVIC: Yes. There will be
some poles replaced from the aerial portion of some of these runs. There would be pole replacements but the node poles are good.

MR. DWYER: When do you expect the
wiring approval to come about, the licensing to come about?
MR. JOVANOVIC: Everything is in.

All the measurements have been taken. Joint walks have been held. It's just a process of getting the administrative approvals done with Verizon and NStar --
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    MR. LENKAUSKAS: Once you received
    all those, you'll forward those all to licensing.
MR. JOVANOVIC: Yes.
MR. LENKAUSKAS: Prior to any start
of any work.
MR. JOVANOVIC: Can be done, yes.
MR. DWYER: Other than that, DPW is
fine with giving that typical condition. We're fine
with this petition.
MR. LENKAUSKAS: And also part of
typical, have all necessary licenses in place before
any work is commenced. You could also forward any
pole replacement -- any pole changes or
replacements, if you could forward them off to the
electrical department.
MR. DWYER: I agree with the
motion.
MR. LENKAUSKAS: Motion to approve?
MR. DWYER: Seconded.

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    MR. LENKAUSKAS: All those in favor?
    MR. DWYER: Yes.
    MR. LENKAUSKAS: Yes. Hammond
    Street, extension of aerial fiber beginning at the
intersection of Hammond and Gorham Streets
northwesterly to Pole 322/11 and attachment on Pole
322/11 known as Node NO73.
MR. JOVANOVIC: This is a typical
aerial feed scenario.
MR. LENKAUSKAS: It's all aerial
feed. I make a motion to approve with all typical
conditions including all licensing be forwarded to
the License Commission.
MR. DWYER: Seconded.
MR. LENKAUSKAS: All those in favor?
MR. DWYER: Yes.
MR. LENKAUSKAS: Yes. On Hammond
Street, extension of aerial fiber beginning at the
intersection of Hammond and Gorham Streets westerly

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to Pole \(322 / 10\) then continuing in new conduit to Oxford Street, then southerly along Oxford Street in new conduit to a metal guy pole at the southwest corner of the intersection of Oxford and Everett Streets. Also, installation of equipment on a new metal guy pole replacement known as Node NO69. So this is excavating. MR. DWYER: I'm not seeing a plan. I have'nt come across a plan on this one. Thank you. MR. JOVANOVIC: I have a larger one.

MR. DWYER: Thank you. One
four-inch, is that what this is?

MR. JOVANOVIC: Plus city shadow
brings it up to the pole.

MR. LENKAUSKAS: We will not require
a shadow going from the manhole to your guy pole.

We will not require a shadow. Only between the manhole and the pole on Hammond.
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    MR. DWYER: This one, I think, we're
    going to have to need to take a look at this one
first. I think -- I think it looks like you're
going to have to excavate from the Point A to Point
B. I would like to take a look at this and see if
there was an option on the street as opposed to
running down a driving lane on the street.
MR. LENKAUSKAS: This actually
differs from what we were sent. Also, this shows a
manhole and shows it on the opposite side of the
street.

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    MR. JOVANOVIC: That was -- this set
is older.
    MR. LENKAUSKAS: This is older than
this?
MR. JOVANOVIC: Yes. So...
MR. LENKAUSKAS: This isn't?
MR. JOVANOVIC: I didn't realize
there is a new one.

MR. DWYER: We'll set up a site
meeting. We have -- DPW has to look at this, not -that's theirs.

MR. LENKAUSKAS: Move to continue?

MR. DWYER: Yes.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Seconded. Yes.

MR. LENKAUSKAS: Yes. Magnolia

Avenue, extension of aerial fiber from Pole 211/5 on Line Street westerly crossing Roberts Road to Pole 19-3 on Emmons Place and attachments of equipment on Pole 19-3 (Node N067).

MR. JOVANOVIC: This is where we have
a revision, to avoid a situation at the corner of Magnolia and Line Streets at Pole 11. At the last session we had a resident speak to the conditions of the pole there.

MR. LENKAUSKAS: Correct.

MR. JOVANOVIC: So our conclusion is
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to bypass that and go to the street to the next
pole. I have an updated drawing.
MR. LENKAUSKAS: So the original was
to go to Pole 11?
MR. JOVANOVIC: It originally was to
come aerially to Pole 11 from Somerville.
MR. LENKAUSKAS: I got you. Is this
paved? That's Line Street down -- this is Magnolia
and over here to Hovey. How far did that go down?
MR. DWYER: Yeah, it wasn't down that
area. It went Myrtle and then took a left -- to the
right.

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    MR. JOVANOVIC: There is a slight
variation here. It shows one quad duct.
    MR. LENKAUSKAS: Why is there a
variation from four-inch and now you're going into
four-inch and a quarter?
    MR. JOVANOVIC: That's a
specification for Somerville. So we're continuing
from Somerville.

MR. DWYER: Is this the same plan
that was proposed originally or not?

MR. JOVANOVIC: Originally we are
going to come in aerially.

MR. LENKAUSKAS: Resident at 41 at
the last hearing, if you remember the woman who was -- this was a revision because of the complaint or the concern from a resident at 41 Magnolia Avenue in regards to the amount of wires passing by her windows. We had asked them to look at it subsequently. They brought this back to Pole 9. MR. DWYER: Have you gone to

Somerville yet with this? MR. JOVANOVIC: We came before the alderman, and we were directed to the committee on licenses. And that meeting is going to be on March 3, but the plan was approved by their DPW. It's the alderman that needs to have some questions
answered.

MR. DWYER: I haven't had a chance to
look at it. I think we should have a site meeting, a site visit with DPW first. So let's continue this one.

MR. LENKAUSKAS: Okay. A motion to
continue?

MR. DWYER: For DPW to review the
site prior to.

MR. LENKAUSKAS: On the motion to
continue pending review from DPW?

MR. DWYER: Yes, seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. Roberts Road, an extension of aerial fiber from Pole 13 on Roberts Road southerly to Pole \(762 / 1\) on Roberts Road and attachment of equipment on Pole \(762 / 1\) known as Node N068.
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    MR. JOVANOVIC: This one would be
    contingent on approval of the previous one.
MR. LENKAUSKAS: Make a motion to
continue this. Also, it may impact from the
previous petition. On a motion?
MR. DWYER: Seconded.
MR. LENKAUSKAS: All those in favor?
MR. DWYER: Yes.
MR. LENKAUSKAS: Yes. Keeping with
the agenda, we'll move to next petition which is
Phoenix Communications.
MR. MCADOO: Jake McAdoo.
MR. LENKAUSKAS: This is for Phoenix
Communications on Third Street to install one
four-inch PVC conduit for 75 feet on Third Street
from Level 3 manhole known as 0515-1200 to Verizon
manhole, manhole 26/534. You are a representative
of whom?

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MR. LENKAUSKAS: Verizon Business?

MR. MCADOO: Yes. The purpose of this is actually to roll the cable that's on the Longfellow Bridge in the MBTA section so that construction can move forward.

MR. LENKAUSKAS: Any reason why

Verizon isn't in making a petition?

MR. MCADOO: They hired us as a
representative. They were unable to be here. We did the entire design. I verified with the Longfellow Bridge construction that if we do this after, it won't hold them up at all. MR. LENKAUSKAS: What was the time
frame that you -MR. MCADOO: For the dig? MR. LENKAUSKAS: Yes. MR. MCADOO: It should take three or
four days at the most.

MR. LENKAUSKAS: As far as time?

MR. MCADOO: Probably if we have it
done by the end of April, early May, we'll be fine.

MR. LENKAUSKAS: I think I'll make a motion to continue.

MR. DWYER: Yes.

MR. LENKAUSKAS: Both the reason you
need to get -- you have a license to bust out of the Level 3 manhole?

MR. MCADOO: Yes. Verizon is
actually taking care of that.

MR. LENKAUSKAS: We'll continue to
next month to take a better look at this.

MR. MCADOO: All right.

MR. DWYER: My part, I see a cable
line going into a manhole on the west side of the street, on Third Street coming into Broadway, that Level 3 manhole.

MR. MCADOO: We're connected to the
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Level 3 manhole there. I'm not sure what the
junction is that has a little "C."
MR. DWYER: What I'm missing, if
memory serves me right, back 12 or 15 years ago
there were 40 cables swept through that intersection
coming from the Longfellow Bridge. I don't see it
here. I don't see it shown on this plan at all.
There were all an inch-and-a-half, two-inch conduit,
large -- a combination of ducts that ran from Boston
all the way down to -- what's that street? If I'm
not mistaken, I think only a few of us were around
at that point. Ran all the way down Third Street,
all the way down to Cambridge and Cambridge went to
forever.

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    Anyway, I'm not seeing all the
conduit that is shown -- Level 3 is put into the
ground on this plan.
    MR. MCADOO: We're tying into that
system. That's the hole on the left side here.

MR. DWYER: If you don't show the as-built of what's in the ground, how do we know how you're affecting the other people's conduit? How do we know there is no room if something else comes next to the manhole to eliminate some excavation? MR. MCADOO: You want us to call how many conduits are in that trench?

MR. DWYER: I want to be sure whoever is doing their work here that they know what is available and bring it to us so there may be a possibility of using existing empty conduit, therefore, not needing to excavate that
intersection, which is a -- not as much vehicle
traffic, but it's a very busy intersection, both
cyclists, pedestrians, and all that type of things.
If we can limit eliminate congestion, we like to
eliminate that. So there's not enough information
in the plan.

Level 3?
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MR. DWYER: I think we need to know
what is going -- the manhole coming out of this.
MR. LENKAUSKAS: There is to flop
cable over, so the bridge --
MR. MCADOO: Yes.
MR. LENKAUSKAS: So this is to
alleviate what's there and move it over to the other
side?
MR. MCADOO: Yes.
MR. DWYER: What engineer or
department are you working with with Verizon? Who
are your folks answering to?
MR. MCADOO: Steve Perretti.
MR. DWYER: Spell the last name.
MR. MCADOO: P-E-R-R-E-T-T-I.
Verizon Business or MCI Metro.
MR. LENKAUSKAS: Also, have a look at
the scope right to the bridge where there may be a

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closer pass through before you get to the bridge,
unless this is closest, but we need to see what that
Level 3 work extends to towards the bridge, along
with Verizon also.
MR. MCADOO: All right.
MR. LENKAUSKAS: Motion to continue?
MR. DWYER: Seconded.
MR. LENKAUSKAS: All those in favor?
MR. DWYER: Yes.
MR. LENKAUSKAS: Yes.
MR. MCADOO: Would you like us to
resubmit those, the Verizon path and the Level 3
path at that time?
MR. LENKAUSKAS: Yes, please.
Lightower in regards to Chestnut Street and
Magazine. Lightower in regards to Chestnut Street
and Magazine Street starting at Utility Pole 34 to
place 190 feet one-fourth inch Communication Conduit
to Utility Pole 146/33. This petition has also been

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continued from September?
MR. CONWAY: Correct.
MR. LENKAUSKAS: I think the
conditions we were looking for was total routes and
licensing.

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    MR. CONWAY: Correct, and we're just
waiting for the make-ready right now. We thought we
would have licensing right now but the weather put
us back. Hoping that we have it now, but it hasn't
been received.
    MR. LENKAUSKAS: You haven't got it
yet?
    MR. CONWAY: No.
    MR. LENKAUSKAS: If the conditions
are still not being met, I would move to continue.
    MR. CONWAY: Yes, a better bet.
Yes.
    MR. LENKAUSKAS: On the motion?
    MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor? MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. Next petition,
also Lightower, 640 Memorial Drive starting at

Utility Pole 102/85 place approximately 117 feet of
four-inch Schedule 40 PVC Communications Conduit to the rear of the building at 640 Memorial Drive.

This is continued from the October hearing. I think
we're looking for the same conditions. We're in the same boat.

MR. CONWAY: If we continue that as
well, as to the next month.

MR. LENKAUSKAS: Motion to
continue.

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. Move on in the
agenda. Take Harvard University next. Sorry.

MR. GALLAGHER: My name is Rick

Gallagher with Harvard University.

MR. LENKAUSKAS: This petition is Harvard University from Mount Auburn Street, build a new conduit system from 114 Mount Auburn Street to 8 Story Street via Mount Auburn Street and to the Taubman Building on Bennett Street via Mount Auburn Street. The conduit system will consist of two four-inch conduits encased in concrete.

MR. GALLAGHER: I have a full-size
drawing, if it helps to have it for your files. MR. LENKAUSKAS: It's just a larger
version of what you sent us on the eight and a half? MR. GALLAGHER: Yes. MR. LENKAUSKAS: Sure, I'll take one of those.

MR. GALLAGHER: You have one? MR. DWYER: Sure.

MR. GALLAGHER: Right now there is a
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building under construction at 14 Mount Auburn
Street, and that is primarily the reason for this
petition. There used to be a Chili's Restaurant
there. They demoed that building, and they are in
the process of building a new -- I think it's an
eight-story structure there that's going to be 100
percent occupied by Harvard.
Right now there is no path to get
into there. Comcast had a conduit that was cut and
capped as part of the demolition. I have another
plan which is a building plan of the actual
facility, if you're interested in that.
MR. DWYER: We have that.
MR. GALLAGHER: This is a
construction document, but what is happening is
Harvard has fiber at 8 and 12 Story Street. Harvard
occupies those buildings as well. Harvard has fiber
in 124 Mount Auburn via Verizon conduit.
Unfortunately, there is no more room for us to

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extend the fiber into 114, so we approached Comcast
because Comcast needs to get into the building and
doesn't have a path.
If you notice, Comcast's conduits are
currently capped in Mount Auburn Street directly in
front of the building; however, they have no access
to the building because there is a disconnect there.
So we're proposing to install a new
manhole where the Comcast conduit is currently
capped and bring it to the property line where there
is four four-inch ridged steel conduits that are
currently capped at the edge of the building. Two
of these steel conduits go into a Verizon manhole.
Separate from our petition we're
proposing to bring two of them, bring them down the
gutter line or the sidewalk into a proposed Harvard
manhole.

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    We also have a petition to MBTA to
see if we can go down -- that's a bus way between
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the building and the conductors way, but regardless
of what we get with the MBTA, the most important leg
for the City of Cambridge that we'd like to seek
approval for is it get from Story Street to the
building.
If we can get from the building to
Taubman down through Bennett Street, that's a plus
because it will give us redundancy and give us SONET
ring and access to the Charles Square Hotel, which
Harvard also occupies. So -- and obviously the same
typical stipulations. Harvard has been pulling
conduit a number of times, traffic management and
city permits.

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We usually try to coordinate such
that traffic is never interrupted. Bagging meters
when necessary to keep good traffic flow.
Everything that's opened up is always paved the same
day so it keeps the disruption to a minimum.
We notified all the abutters on this
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petition. I did speak to one abutter on Story
Street, explained the process, and after heard back
from that gentleman yesterday. He was asking what
he could do to support it. I said we don't need
support. We want to keep things to a minimum.
That's the scope. You know, we only
need one conduit but we propose two, so that via
shadow -- so if there are any other reasons to come
back to the same area again, it kind of gives
connection to the Verizon system, the Comcast
system, and the Harvard private network, which the
university has all over campus.
MR. LENKAUSKAS: Have you -- I didn't
notice in the packet. Did you complete the joint
trench policy on this and approach Verizon and
Comcast and everyone else about this whole route?
MR. GALLAGHER: We approach them to
see if they had any capacity to avoid doing this.
Verizon is doing a separate grant to get from their

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manhole to the building and that's where those two
other conduits -- Comcast hasn't done a grant yet.
I believe they need to. Where their conduit is
capped, if we place a manhole at this capped
conduit, I'm not sure if we still need a grant.
MR. LENKAUSKAS: I think what I'm
trying to get to is that all these runs all the way
around there needs to be a joint trench application.
If Verizon wants to come down here, you need -- I
think you need to approach them to see if they want
to jump into this trench with you no matter where it
is.
MR. GALLAGHER: Verizon has conduit
in there but they don't have capacity for us.
MR. LENKAUSKAS: If they don't have
capacity, they need capacity. If Harvard goes --
puts this trench in and Verizon comes back a month
later and says, We need to get from this manhole, it
could have been in the same trench.

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    MR. GALLAGHER: We do have a
    provision for spare conduit if anyone needs to come
in.
MR. LENKAUSKAS: What is the time
frame you are looking to have this completed by?
MR. GALLAGHER: The building is
supposed to be ready for occupancy in July. So, if
possible, we'd like to get started after the
moratorium expires and the snow melts.
MR. DWYER: What division or what
entity with Harvard are you working with?
MR. GALLAGHER: It's Harvard, Hewett,
Mark O'Brien, would probably the first thing you
have typically seen in previous Pole and Conduit
meetings.

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                                MR. DWYER: I know Mark has done a
lot of work down there. Harvard occupies the
building on the other side of Story Street on the
odd side of Story Street.
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    MR. GALLAGHER: Yes.
    MR. DWYER: I want to know what other
    entities that Harvard would want or need access to
this building so if Harvard needs two or three
excavations in the next five years.
MR. GALLAGHER: No. The other
utility would typically be E\&U. They provide the
steam, also provide power to a lot of the Harvard
buildings. This is going to be powered by NStar,
the building. It's a little bit unusual. The
building is not owned by Harvard. It's owned by the
same folks who own the Charles Hotel, which is going
to be 100 percent occupied by Harvard, so -- and at
the end of the day, it's a long-term lease. So we
definitely need to be able to service this building
because -- and keep on the network.
So what we've done is provided for
long-term planning. If for some reason that
building is no longer there, we still have a path

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from Story Street down to the other section at
Taubman where there is a new building going to be
built. I think it's actually -- I don't know if
it's in progress or not but right next to the JFK
Park.

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MR. LENKAUSKAS: Even though I think
you still need to complete the joint trench policy,
you need to get a list of all the carriers and have
them sign off that they don't want to be in your
trench. So I think either -- probably look at this
a little closer. I think a continuation of a month,
just to get the rest of the stuff in line.
    MR. DWYER: Yes.
    MR. LENKAUSKAS: It's going to make a
big difference.
    MR. GALLAGHER: Does the City have a
list?

MR. LENKAUSKAS: Get it from the
License Commission, and there's a form that needs to
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be filled out with all the -- whoever you may
contact, whether it would be everyone from Verizon
to Comcast to Lightower, or anybody else that might
be sitting in this room that has -- that's a member
of any carrier in the city. And it is not just
because of this building. It's because you're
proposing to dig from Nipmuck Place down to Mount
Auburn all the way down to Story. Where they are
already congested there, they may want to add
conduit in this trench, within this trench to a
manhole.

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MR. GALLAGHER: No, I understand.
Actually, we did the project on Bennett. There's 37
conduits there.

MR. LENKAUSKAS: All right. We just
need to follow through with that. I move that we continue.

MR. DWYER: Okay.

MR. LENKAUSKAS: On the motion?

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes.

MR. GALLAGHER: The actual
construction of 114, that plan shows the actual
building.

MR. DWYER: I know we have that,

DPW.

MR. LENKAUSKAS: In talking about

Verizon -- I mean, if they're proposing -- if the building owner is proposing to have Verizon service and they need to, that's all part of this.

MR. GALLAGHER: Verizon, I'm not sure
what they're doing, and the building developer. I
assume -- there's a Verizon manhole on the sidewalk
right near the property line, but they do need to
bring conduit from the --

MR. LENKAUSKAS: It may just be a
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sign-off for them saying they don't need anything in
the entire run, not just for this building.
MR. GALLAGHER: Great. There is
nobody upstairs to be able to get that list from
right now?
MS. WATSON: There is not right
now.
MR. GALLAGHER: We don't need to
reply, just continue?
MR. LENKAUSKAS: No, continued. It
will come up automatically next month, right?
MS. WATSON: It should, yes.
MR. LENKAUSKAS: Unless it's
tabled.

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    MR. GALLAGHER: Thank you very
much.
    MR. LENKAUSKAS: Crown Castle.
Kosta?
    MR. JOVANOVIC: I don't mind going
out of order.

MR. LENKAUSKAS: At Kosta's request to go out of order, I move forward on the petition to NStar. First petition with NStar is for Norfolk Street, northeasterly from Manhole C2998 approximately 150 feet northeast of Hampshire Street a distance of about 33 feet-conduit. The reason for work it to upgrade existing service to 288 Norfolk Street.

MR. DWYER: We have a plan that I think we can take a peek at. MR. LENKAUSKAS: Yes.

MR. DWYER: Thanks. MR. LENKAUSKAS: All on the sidewalk? MS. BARROSO: Yes. MR. LENKAUSKAS: Existing conduits primarily going on?

MS. BARROSO: Yes.

MR. LENKAUSKAS: This is right in
your yard.

MR. DWYER: I think you're brave.

DPW.

MS. BARROSO: 147.

MR. LENKAUSKAS: Is that the
driveway, or is that the actual building where you're terminating? Okay.

MS. DUFFY: 283 is up at the top.

You see that one? I thought you guys were 127. MR. LENKAUSKAS: 147 Hampshire. MR. DWYER: Other way around. MS. DUFFY: Okay. I see.

MR. LENKAUSKAS: Must be in the
loading dock area of that building.

MS. BARROSO: It is outside.

MR. DWYER: This shows a little bit
different picture, if you look.

MS. BARROSO: We're feeding across
the street and we're picking up -- that's for the
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cable. That's a primary cable, the picture you're
looking at.
MS. DUFFY: Go on the first page. It
is the conduit.
MS. BARROSO: We're looping through
an existing transformer that we have.
MR. DWYER: What is this line
representing?

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    MS. BARROSO: That's existing.
    MR. DWYER: That's existing?
    MS. BARROSO: Yes.
    MR. DWYER: You got to put in a
larger cable?
    MS. BARROSO: No.
    MR. LENKAUSKAS: Primary.
    MR. DWYER: Just showing us?
    MS. BARROSO: Yeah.
    MR. DWYER: Is the owner planning to
put it in himself, or is he going to hire you folks
to do that?

MS. BARROSO: It is our public way.

They put in private.

MR. DWYER: It should be harmless,
right?

MR. LENKAUSKAS: Yeah. I move to approve.

MR. DWYER: DPW moves ahead with
typically conditions, I would be fine with all
that.

MR. LENKAUSKAS: On the motion to
approve pending all typical conditions, and if it's done before the moratorium, you need to give a letter from the Commissioner of Public Works asking for permission to do so if that's going to be done before, which is sometime in April, right?

MR. DWYER: Yes.

MR. LENKAUSKAS: On a motion?

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. Bellis Circle, that's southwesterly from Pole 62/6 approximately 280 feet west of Sherman Street a distance of about five feet -- conduit. The reason for this work is to provide service to 18 Bellis Circle. This is just a sidewalk again?

MS. BARROSO: Yes.

MR. LENKAUSKAS: I have no problem
with that.

MR. DWYER: That's -- was that --

MR. LENKAUSKAS: No, that's the
distance from five feet of conduit. It's a pole-in-the-ground service.

MR. DWYER: There's a few properties out there? A new, little two-family house they put out there?

MS. BARROSO: Yes.

MR. DWYER: Move to approve with
typical conditions.

MS. DUFFY: There's only five feet of
conduit.

MR. LENKAUSKAS: Pending typical
conditions.

MR. DWYER: Electrician already done
that?

MS. BARROSO: Yes, we think so. It's
frozen now.

MR. DWYER: MacArthur Construction.

They never...

MR. LENKAUSKAS: On the motion to
approve all -- pending all typical conditions?

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. For Mellen

Street, northeasterly from Manhole C2785
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approximately 488 feet east of Massachusetts Avenue
a distance of about 28 feet of conduit. Installing
one new 4x6x6 foot manhole to be named MH29996.
This work is necessary to provide system upgrades
and improvements.

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    MS. BARROSO: So what we have on
Mellen Street is -- there is a pole there with two
oil switches on the pole and we drop-grade those,
but we can't put two on the same pole now with the
new specs, so we have to put one in the manhole and
leave one in the --
    MR. LENKAUSKAS: So this is just a
manhole for switching purposes?
    MS. BARROSO: Yes. BFI switch.
    MR. DWYER: You said "oil switch,"
right?
    MS. BARROSO: There is an oil switch
right now that what we have on the pole that
Cambridge Electric used to use, but now we're doing
low-break switches or BFIs. We're upgrading those. They cannot be operated.

MR. LENKAUSKAS: So the switches are on the pole?

MS. BARROSO: One will be, yes, and one will be replaced with low-break.

MR. DWYER: You are placing that
structure in there, the structure going over and around some conduit?

MR. LENKAUSKAS: No, this is a new
four-or five-inch conduit extended from this manhole to a new manhole. The equipment is going to be installed --

MS. BARROSO: In the manhole.

MR. LENKAUSKAS: Switching?

MS. BARROSO: Yes.

MR. LENKAUSKAS: Make a motion to
approve?

MR. DWYER: Yes.
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MR. LENKAUSKAS: Pending all typical

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conditions.

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. Next will be
on Massachusetts Avenue at and northerly from
Manhole C547 at Washburn Avenue a distance of about
29 feet-conduit. Installing one new \(4 \times 6 \times 6\) foot
manhole to be named MH29998. This work is necessary
to provide system upgrades and improvements. This
is the same?
    MS. BARROSO: It's the same thing.
We only have two of these setups, and we upgraded
them both exactly the same as the other one.
MR. LENKAUSKAS: It's tight.
MR. DWYER: It is tight. And you're
putting the structure right in that location of the
street because there is nothing else in the way?
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    MS. BARROSO: Correct. If it doesn't
    fit, it can be shifted. It doesn't really matter.
MR. DWYER: I think there is a bus
stop there.
MR. LENKAUSKAS: That's a daycare.
MS. WATSON: They moved the bus
stop.
MR. LENKAUSKAS: They moved that bus
stop?
MS. WATSON: Yes.
MR. DWYER: Yes.
MR. LENKAUSKAS: So it's the same
condition. We're leaving this manhole and bringing
it here for equipment.
MR. DWYER: Bring it off this way on
the sidewalk. Does that make a big difference?
MR. LENKAUSKAS: Is there an option
to put it in the sidewalk right adjacent to that?
MS. BARROSO: We could. Whatever

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fits we can put it anywhere. They have to survey it.

MR. DWYER: Can we do the approval
and have an as-built in a different location?

MS. DUFFY: We can bring it to you
the next month if you want to have them see if it can go to the sidewalk. MR. DWYER: Sure. MR. LENKAUSKAS: Make a motion to
continue pending a survey to possibly put it in the sidewalk right adjacent to that manhole. MR. DWYER: I would like to see -MR. LENKAUSKAS: 547. MS. BARROSO: On Mass. Ave.? MR. LENKAUSKAS: On Mass Ave., if it
could go.

MR. DWYER: See if it could go in the
sidewalk area. I would like to get that structure out of the street if I can help it.

MS. DUFFY: Put it in so we can get
it in the right place.

MR. DWYER: (Complies.)

MR. LENKAUSKAS: It's fine with me or
back a little bit.

MR. DWYER: In that sidewalk area. MR. LENKAUSKAS: Move to continue?

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. Whittemore

Street, at and easterly at the intersection Magoun

Street from Pole 728/2 a distance of about 31
feet-conduit. The reason for this work is to
provide service to 33 Cottage Park Avenue.

MS. DUFFY: There are 60 apartments
going in there.

MR. LENKAUSKAS: Yes. A new
development just coming out of the ground there.

MR. DWYER: Actually, we don't have any residents, huh?

MS. DUFFY: Out shoveling.

MR. LENKAUSKAS: That's for primary
also?

MS. BARROSO: Yes. To the
transformer on their property.

MR. DWYER: That's Whittemore. We may have that street. I think it's been recently paved, so...

MR. LENKAUSKAS: Can you go on the
sidewalk?

MS. BARROSO: It is on the
sidewalk.

MR. DWYER: Okay.

MR. LENKAUSKAS: This is the curb
line, it looks like -- this shows it being --

MS. DUFFY: Go up a little.

MR. DWYER: We're going to have a
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site meeting. That picture that you have is fairly
accurate, so I think we're fine with everything.
MR. LENKAUSKAS: Move to approve
pending a meeting with DPW to try to get that on the
sidewalk if possible?

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    MR. DWYER: Yes.
    MR. LENKAUSKAS: To the final
location. On a motion?
    MR. DWYER: Seconded.
        MR. LENKAUSKAS: All those in favor?
        MR. DWYER: Yes.
        MR. LENKAUSKAS: Yes.
        MS. DUFFY: Can we approve that with
the stipulation?
    MR. LENKAUSKAS: That was -- that was
approved, correct, or just --
    MS. BARROSO: Yes, we approved it.
    MS. DUFFY: Pending the DPW meeting,
correct?

MR. LENKAUSKAS: Yes.

MS. DUFFY: All right.

MR. DWYER: Thank you very much.

MR. LENKAUSKAS: Lightower?

Lightower, 790 Memorial Drive starting at utility pole to the tag -MR. CONWAY: Not tagged. MR. LENKAUSKAS: Place ten feet of four-inch Communications Conduit to Telecommunications Manhole located at 790 Memorial Drive/Pleasant Street Extension.

MR. DWYER: You're actually on

Memorial Drive?

MR. CONWAY: Yes. Part of the petition that we tabled until next month pending the license, but this is going to be from that pole to a private property manhole.

MR. DWYER: Sitting here in the same
boat, right?

MR. CONWAY: Correct.

MR. DWYER: Are you also waiting for
a DCF permit on this? I think you're going to need a permit for this one.

MR. LENKAUSKAS: I think this is all
on Pleasant Street.

MR. CONWAY: This on the Pleasant

Street Extension?

MR. DWYER: I'm sorry about that.

Let me back up on that one.

MR. CONWAY: It shows the pole and
the actual manhole.

MR. LENKAUSKAS: This conduit that
you're proposing is to put in -- is to go from the pole to a private communications manhole on their property?

MR. CONWAY: Correct. That will feed this.

MR. LENKAUSKAS: To -- you're not on
that pole now. This is all part -MR. CONWAY: Part of the additional, correct.

MR. LENKAUSKAS: One connected to the
other.

MR. DWYER: Pleasant Street is right
in front of this pole?

MR. CONWAY: Correct.

MR. LENKAUSKAS: That's the back
entrance to 790.

MR. CONWAY: You can keep that. MR. DWYER: I'm fine.

MR. LENKAUSKAS: I think we'll move
to continue with the other petition and get all the package, set the whole thing at once. On a motion to continue?

MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes. 1035 Cambridge

Street, starting at Level 3 Manhole 0202, place approximately 251 feet of four-inch Communication Conduit to proposed hand hole to be placed on private property on 1035 Cambridge Street.

MR. DWYER: You're tying into a Level

3 manhole?

MR. BERTONA: Correct.

MR. LENKAUSKAS: What you are
servicing on this is the service property on Windsor Street?

MR. BERTONA: Yes.

MR. LENKAUSKAS: That's the same
property as the Cambridge Housing Authority,

Cambridge Health Alliance.

MR. BERTONA: The one that we pulled
in through the city, yes. So this was presented a couple years ago originally for this Cambridge Health Alliance.

MR. LENKAUSKAS: Why is it coming up
again?

MR. BERTONA: Because we have a

Lightower service that we need to put into the building.

MR. LENKAUSKAS: Other than --

MR. BERTONA: Connecting directly
back to our backbone rather than the city backbone.

MR. DWYER: The question \(I\) have is you come out of the property where you want to tie into Windsor Street. You're traveling southbound on Windsor Street up to Cambridge. Is it possible to
maybe look at the fact you can tie in Level 3
conduit at the intersection of Cambridge and
Windsor, put some kind of structure in there and
then you could just run your feed from a new manhole
or structure back to where you need to -- into that
larger L3 manhole?
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MR. BERTONA: Do one before the
interception?
MR. DWYER: Something instead of
excavation on Cambridge Street.
MR. BERTONA: I'm not sure what's
under this roadway. It shows old trolley tracks.
MR. DWYER: They tore up that -- most
of that up when they ran -- this is the line that
comes all the way from Third Street and Broadway all
the way down Cambridge Street to --
MR. LENKAUSKAS: Is this a redundant
feed for the Health Alliance, same customer?
MR. BERTONA: It's a different
customer.
MR. DWYER: I think it cuts down on
your excavation and disturbance to the city quite a
bit.
MR. BERTONA: We can do that, yes.
MR. DWYER: I'm not sure what the

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electric department accepts as far as a tie-in a
wire, small structure or a split structure,
something.

MR. BERTONA: We'll do it on the
ground as we did for the hospital.

MR. DWYER: With --

MR. BERTONA: Line Street, we
intercepted the conduits and then brought them right in with no manhole there. MR. DWYER: Show me that, minimizing your disturbance on Cambridge Street. MR. LENKAUSKAS: You'll be looking to tie it into a duct bank?

MR. BERTONA: Right. MR. LENKAUSKAS: Break it out? MR. DWYER: I think there's plenty of
conduit in there.

MR. LENKAUSKAS: They're an inch and
a quarter?

MR. BERTONA: Yes, they are. What we
would do is we probably break out a quarter, an inch and a quarter, put in four-inch concrete encased down the street.

MR. LENKAUSKAS: Down Windsor Street?

MR. BERTONA: Correct, to a hand hole
on the property.

MR. DWYER: Give them permits to do
that whole stuff.

MR. BERTONA: It shouldn't be an
issue at all to get permission to break out of the manhole.
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                                MR. DWYER: You know all about that
    ```
stuff.

MR. BERTONA: We've done it.

MR. DWYER: Why don't you work on
that.

MR. LENKAUSKAS: We'll make a motion
to continue.
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    MR. DWYER: You have to give us a
    chance to look at it. If we have any preferences to
being in the street or the sidewalk, we'll let you
know at that time and work on that.
MR. LENKAUSKAS: Move to continue,
further meeting with DPW, typical. On the motion?
MR. DWYER: Seconded.
MR. LENKAUSKAS: All those in favor?
MR. DWYER: Yes.
MR. LENKAUSKAS: Yes.
MR. BERTONA: Thank you.
MR. CONWAY: Thank you.
MR. DWYER: Thank you.
MR. LENKAUSKAS: Crown Castle. Back
with Crown Castle. These are the following
petitions, all new petitions for Crown Castle.
Haven't had a chance to review all of them. I think
what we've been doing is continuing them. Seeing no
opposition from residents or abutters, can we move

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to continue the group of them as we've done in the
past?
MR. DWYER: Are these for --
MR. JOVANOVIC: Similar to the
last.
MR. LENKAUSKAS: It would be the next
section that they're looking to.
MR. DWYER: We have to grant you
permission to go talk to the utility company and
that sort of thing.
MR. JOVANOVIC: I think we've done
all that. That's all taken care of.
MR. DWYER: Just clear my head again,
continuing these, what needs to get -- because it
gives us a chance to take a look at everything and
review everything.
MR. LENKAUSKAS: We haven't had a
chance to review it.
MR. DWYER: If we can do it as a

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group and maybe go through each one separately.

Continue all of them.

MR. LENKAUSKAS: I think the last
time around we went as a --

MR. JOVANOVIC: If I could ask that
the minutes reflect that no abutters came forward?

There is no opposition. At least get that done
with --

MR. LENKAUSKAS: Yes. Have you
gotten the licenses in for the node locations on all these?

MR. JOVANOVIC: These are in
progress.

MR. LENKAUSKAS: All in progress.

Okay.

MR. JOVANOVIC: We're pretty
confident they are moving along.

MR. LENKAUSKAS: So then seeing all
that's been done or in process but not done, I think

I would like to move to continue the whole group of them as we did prior, and seeing no opposition from abutters or residents, and take it up next month to finalize all your licensing and requirements. MR. DWYER: Do some structures in the street, I think.

MR. JOVANOVIC: I think the best way
to look at it is -- are these maps. These are
segment maps, and the green circles will show the locations of the new poles.

MR. DWYER: Green holes?

MR. JOVANOVIC: New poles, equipment
poles. The green dotted lines are aerial feed. The red dot is conduit feed.

MR. DWYER: New conduit needs to be excavated?

MR. JOVANOVIC: Yes.

MR. DWYER: The blue is?

MR. JOVANOVIC: Actually fiber that
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we're going to lease from Last Mile Solutions, so
we're going to need some break-outs on Cambridge
Street.
MR. DWYER: Why don't we do that.
Sounds like a logical way to go.
MR. LENKAUSKAS: To continue?
MR. DWYER: Yes.
MR. LENKAUSKAS: Continue all of them
without going through each one?
MR. DWYER: I think so, yeah. Yes.
MR. LENKAUSKAS: On a motion to
continue the remaining petitions, the remaining new
petitions from Crown Castle. On a motion?
MR. DWYER: Seconded.
MR. LENKAUSKAS: All those in favor?
MR. DWYER: Yes.
MR. LENKAUSKAS: Yes. Motion to
adjourn?

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    MR. DWYER: Seconded.

MR. LENKAUSKAS: All those in favor?

MR. DWYER: Yes.

MR. LENKAUSKAS: Yes.
(Whereupon, the hearing was adjourned
at 11:39 a.m.)
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COMMONWEALTH OF MASSACHUSETTS
Worcester, ss.
I, Jennifer A. Doherty, Certified
Shorthand Reporter and Notary in and for the
Commonwealth of Massachusetts, do hereby certify
that the foregoing to be a true, complete and
accurate transcript of the testimony of the
aforementioned hearing held at the time and place
hereinbefore set forth, to the best of my knowledge,
skill and ability.

```
    IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY
HAND AND SEAL THIS 22ND DAY OF FEBRUARY, 2015.
Certified Shorthand Reporter
    CSR No. 1398F95
My Commission Expires: November 4, 2016

\begin{tabular}{|c|c|c|c|c|}
\hline \(\frac{62 / 6}{66: 4]-}\) & \[
\underline{90} \text { [1] - }
\] & [1] - 82:1 & 15:12, & - 33:16 \\
\hline 66:4 & & access [3] & 20:14, & ahead [6] \\
\hline \(\frac{640}{49}\) [ 42\(]\) - & A & \(-52: 6\),
\(53: 9,57\) & 22:2, & \[
-4: 11,
\] \\
\hline \(49: 4, ~ 49: 7\)
\(654 / 19\) &  & 53:9, 57:
According & 5:15, & \[
13: 6 \text {, }
\] \\
\hline \[
\frac{654 / 19}{-30: 6} \text { [2] }
\] & \multirow[t]{5}{*}{\begin{tabular}{l} 
a.m \([2]-\) \\
\(1: 6,89: 5\) \\
ability \\
{\([1]-\)} \\
\(90: 11\) \\
able [2] -
\end{tabular}.} & \multirow[t]{2}{*}{\begin{tabular}{l}
According \\
[1] - 11:1 accurate
\end{tabular}} & \(25: 15\),
\(27: 8\), & 13:15, \\
\hline 675 [5] - & & & 30:4, & 8:15, \\
\hline 4:18, 7:7 & & accurate & 30:11 & 65:8 \\
\hline \[
8: 4,8: 6,
\] & & \[
\begin{aligned}
& {[2]-} \\
& 75: 2,90: 8
\end{aligned}
\] & 32:9, & alderman \\
\hline \multirow[t]{2}{*}{11:15} & & actual [5] & 34:4, & [2] - \\
\hline & & & 34:9, & 39:16 \\
\hline 7 & \[
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\] & \[
60: 5
\] & 34:10, & 39:19 \\
\hline 717/14 & \multirow[t]{2}{*}{above-} & 60:6 & 34:18, & Allen [8] \\
\hline \(\frac{-22: 3}{}\) & & 63: 6 & 7:9, & - 4:2, \\
\hline 728/2 [1] & ground [1] & 77:12 & :1 & :10, \\
\hline & \[
-8: 5
\] & add [1] - & 87:13 & 5:13, 6:4, \\
\hline  & ABU [17] - & \multirow[t]{2}{*}{\[
\begin{aligned}
& 59: 9 \\
& \text { adding [1] }
\end{aligned}
\]} & \[
\frac{\text { Aerial }}{-30: 12}
\] & 7:10, 8:3, \\
\hline 41:15 & \[
4: 1,4: 6,
\] & & - 30:12 & 10:13, \\
\hline 76 [1] - & \[
5: 8,5: 18,
\] & \multirow[t]{2}{*}{\[
\begin{aligned}
& -29: 2 \\
& \text { additional }
\end{aligned}
\]} & aerially & 11:17 \\
\hline \(5: 17\) & \multirow[t]{2}{*}{5:19, 7:4,} & & [2] -
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38: 6, \quad 39: 5
\] & lleviate \\
\hline \(\underline{762 / 1}\) [2] & & \[
\begin{aligned}
& {[3]-} \\
& 31: 18,
\end{aligned}
\] & affect [1] & Alliance \\
\hline - 40:17, & \[
\begin{aligned}
& 7: 16 \\
& 8: 14
\end{aligned}
\] & \[
32: 4,78: 2
\] & \multirow[t]{2}{*}{\[
\begin{gathered}
-19: 17 \\
\text { affecting }
\end{gathered}
\]} & [3] - \\
\hline 40:18 & \multirow[t]{2}{*}{\[
8: 17,9: 1,
\]} & adjacent & & 79:15, \\
\hline 790 [3] & & & [1] - 45:3 & 79:19, \\
\hline 76:10, & & 26:7, & aforementi & 81:12 \\
\hline 76:10, & \(10: 8\),
\(13: 9,14: 8\) & \multirow[t]{2}{*}{71:18,} & oned [1] - & amount [1] \\
\hline 78:10 & \(13: 9,14: 8\)
Abu [1] - & & 90: & - 39:10 \\
\hline \multirow[t]{2}{*}{8} & \multirow[t]{2}{*}{\begin{tabular}{l}
\[
\overline{2: 9}
\] \\
abutter
\end{tabular}} & adjourn & Agenda [1] & \multirow[t]{2}{*}{\[
\frac{\text { AND }}{1: 3, ~} \quad 90: 13
\]} \\
\hline & & & \multirow[t]{2}{*}{agenda} & \\
\hline 8 & \multirow[t]{2}{*}{[1] - 54:1 abutters} & \[
88: 18
\] & & answered \\
\hline 50:5, & & adjourned & - 4:11, & \[
[1]-40: 1
\] \\
\hline 51. & \multirow[t]{7}{*}{\begin{tabular}{l}
\[
\begin{aligned}
& {[5]-} \\
& 23: 1, \\
& 53: 19, \\
& 84: 19, \\
& 86: 6,87: 3
\end{aligned}
\] \\
accepts
\end{tabular}} & \multirow[t]{2}{*}{[1] - 89:4 administra} & 14:10, & answering \\
\hline 831 [2] - & & & 41:10 & [1] - \\
\hline 1:7, 3:5 & & & \multirow[t]{2}{*}{\(49: 19\)
ago [2] -} & \[
46: 13
\] \\
\hline & & \[
\frac{\text { tive }}{32: 18}
\] & & antenna \\
\hline & & ae & \[
44: 4
\] & [2] - \\
\hline 9 [1] - & & [17] - & 79:18 & 15:17, \\
\hline 39:12 & & 14:15, & agree [1] & 17:4 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Anyway [1] & 34:11, & [1] - & automatica & bank [1] \\
\hline - 44:15 & 65:7, & 13:12 & lly [1] - & 82:13 \\
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\hline 73:16 & 67:14, & 45:2, 72:4 & [2] - & 62:15, \\
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\hline S [1] - & 75:3, & - 60:16 & 45:10 & 63: 4, \\
\hline 2:1 & 75:13 & attachment & Ave [5] - & 63:15, \\
\hline applicatio & approved & [12] - & 1:7, 7:7, & 63:18, \\
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\hline [3] - & approving & 27:11, & 3:5, 4:19, & 65:2, \\
\hline \[
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\] & [1] - & \(30: 6\), & 22:2, & 66:9, \\
\hline \[
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\] & 13:16 & 30:8, & 22: 4, & 66:19, \\
\hline \[
55: 10
\] & April [2] & 31:14, & 22:5, & 67: 9, \\
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\hline \(\frac{\text { approached }}{[1]-52: 1}\) & 65:16 & 34: 6, & 39:9, & 68:14, \\
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\hline [6] - & [8] - & attachment & 70:7, & 69:5, \\
\hline \[
15: 6
\] & 17:14, & s [3] - & 70:8, & 69:14, \\
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\hline \[
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\] & 17:18, & \(32: 7\), & avoid [2] & \(70: 13\), \\
\hline \[
41: 2,
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\hline approvals & \[
\begin{aligned}
& 23: 13, \\
& 28: 2,28: 3
\end{aligned}
\] & [1] - 19:4 & B & \(72: 14\)
\(74: 6\), \\
\hline [1] - & \begin{tabular}{l}
area \\
[6] -
\end{tabular} & \(\frac{\text { Auburn }}{-50.4}\) & & 74:13, \\
\hline \begin{tabular}{l}
\[
32: 18
\] \\
approve
\end{tabular} & 8:18, & \[
\begin{aligned}
& -50: \\
& 50: 5,
\end{aligned}
\] & \(\frac{\mathrm{B}-\mathrm{E}-\mathrm{R}-\mathrm{T}-\mathrm{O}-}{\mathrm{N}-\mathrm{A}[1]-}\) & 75:17 \\
\hline [15] - & \(38: 11\),
54,9, & 50:6, & \(\frac{\mathrm{N}-\mathrm{A}}{5: 17}\) & \(\frac{\text { Barroso }}{[1]-2: 12}\) \\
\hline \[
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\] & 54:9, & 50:7, & backbone & based [2] \\
\hline 13:19, & \[
\begin{aligned}
& 63: 14, \\
& 72: 18,
\end{aligned}
\] & \(51: 1\),
\(51: 18\), & [2] - & \(\frac{\text { based }}{-11: 2,}\) \\
\hline 20:5, & \[
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\hline 23:10, & areas [1] & Authority & Bagging & Basement \\
\hline \[
\begin{aligned}
& 27: 3, \\
& 27: 18,
\end{aligned}
\] & - 20:3 & [1] - & [1] - & [1] - 1:8 \\
\hline \[
33: 18 \text {, }
\] & arrange & 79:14 & 53:15 & basement \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline [3] - 3:6, & 9:17, & 48:16 & box [1] - & [1] - \\
\hline 10:7, 10:9 & 10:3, & between & 21:3 & 71:13 \\
\hline batch [1] & 10: 6, & [2] - & branches & brings [1] \\
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\hline Berkshire & \[
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\] & bit [4] - & - 42:4, & - 50:4 \\
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\hline 5:12, & best [2] _ & 87:18 & - 71:15 & 7:10, \\
\hline 5:16, & \[
\frac{\mathrm{be}}{8}
\] & boat [2] - & bring [6] & 10:19, \\
\hline 6:17, 7:2, & \[
\begin{aligned}
& 87: 7, \\
& 90: 10
\end{aligned}
\] & 49:10, & - 45:10, & 49:7, \\
\hline \(7: 5,7: 18\), & 90:10 & 76:19 & 52:10, & 51:1, \\
\hline 8:10, & 48.16 & book [1] - & 52:15, & 51: 4 , \\
\hline 8:16, & 48:16 & 18:17 & 60:18, & 51:5, \\
\hline 8:19, 9:9, & better [2] & Boston [1] & 72:5 & 51:11, \\
\hline 9:14, & - 43:13, & -44:9 & bringing & 52:2, \\
\hline
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\begin{tabular}{|c|c|c|c|c|}
\hline 52: 6, & 41:19, & 80:13, & Castle [9] & Chestnut \\
\hline 52:7, & 42:1, & \(80: 15\), & - 2:10, & [2] - \\
\hline 52:12, & 46:17 & 81: 4 , & 3:15, & 47:15, \\
\hline 53:1, & bust [1] - & 81:10, & 14:10, & 47:16 \\
\hline 53:5, & 43:8 & 82:11 & 20:13, & Chili's \\
\hline 53: 6, & busy [1] - & 88:2 & 61:17, & [1] - 51:3 \\
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\hline 56:6, & bypass [1] & [1] - 1:2 & 84:15, & - 66:3, \\
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\] & circles \\
\hline 57:10, & C & [1]-30:5 & Certified & [1] - 87:9 \\
\hline 57:11, & C2785 [1] & campus [1] & [2] - & CITY [1] - \\
\hline 57:15, & - 67:19 & - 54:12 & 90:4, & 1:2 \\
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\hline 58:2, & - 62:5 & - 69:2 & certify & - 12:8, \\
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\(60: 7\), & C547 [1] - & capacity & [1] - 90:6 & 15:7, \\
\hline \(60: 7\),
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\hline \[
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\hline \[
80: 5
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\hline 51:17, & cables [1] & 52:12, & 85:15, & 35:14, \\
\hline \[
57: 9
\] & - 44:5 & 55:4 & 85:18 & 53:13, \\
\hline built [3] & cafe [2] - & \(\frac{\text { CAPTURING }}{[1]-1: 18}\) & \(\frac{\text { changed }}{[1]-32}\) & \[
\begin{aligned}
& 59: 5, \\
& 79: 17,
\end{aligned}
\] \\
\hline -45:2, & \[
11: 13
\] & [1] - 1:18
care [3] - & changes & \[
80: 8 \text {, }
\] \\
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11: 14
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\begin{aligned}
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& 79: 14 .
\end{aligned}
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\hline [4] - & \[
79: 15
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\hline 2:11, & \[
79: 18 \text {, }
\] & 18:8 & [1] - 11:4 & 29:12, \\
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\hline 20:17, & [5] - 1:5, & 58:7, 90:7 & 65:12, & 56:2, \\
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73: 14,
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77: 13
\] \\
\hline 54:10, & 90:2 & concrete & 24:4, & \[
80: 15 \text {, }
\] \\
\hline 54:16, & Commonweal & [2] - & \[
\begin{aligned}
& 24: 11, \\
& 25: 5,
\end{aligned}
\] & \[
82: 17 \text {, }
\] \\
\hline 55:2, 59:3 & th [1] - & 50:9, 83:3 & \[
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\] & \[
87: 14 \text {, }
\] \\
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\hline coming [9] & ion [2] - & \[
21: 8 \text {, }
\] & \[
26: 7
\] & [7] - 1:5, \\
\hline - 10:1, & 47:18, & \[
33: 8 \text {, }
\] & \[
26: 8,
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\frac{\text { direct }}{-9: 19}
\]} & [1] - & 85:1, \\
\hline cyclists & \multirow[t]{4}{*}{\[
\begin{aligned}
& \mathbf{s} \quad[2]- \\
& 12: 10, \\
& 18: 9 \\
& \text { dependant }
\end{aligned}
\]} & & \[
56: 10
\] & 85:11, \\
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\hline 45:15 & & 1] - & 63:14 & 86:19 \\
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\hline & \multirow[t]{2}{*}{\begin{tabular}{l}
[1] - 31:9 \\
design
\end{tabular}} & direction & [16] & \multirow[t]{2}{*}{\[
\begin{aligned}
& 87: 14 \\
& \text { dotted }
\end{aligned}
\]} \\
\hline \multirow[t]{2}{*}{\[
\frac{\text { Dave }}{18: 3, ~}{ }^{[2]}-
\]} & & [1] - & 4:1, 4:6, & \\
\hline & \[
-42: 10
\] & \[
10: 18
\] & \[
4: 9,4: 13,
\] & \begin{tabular}{l}
\[
-87: 13
\] \\
down [18]
\end{tabular} \\
\hline \[
\underline{\text { DAY [1] - }}
\] & developer & \(\qquad\) & \[
5: 8,5: 18,
\] & down [18] \\
\hline - & [1] - & \multirow[t]{2}{*}{\[
10: 7,
\]} & 7:4, 7:12, & \[
-36: 7,
\] \\
\hline daycare & \[
60: 15
\] & & \[
7: 16 \text {, }
\] & 38:9, \\
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10: 12
\] & 8:17, 9:1, & 38:10, \\
\hline & \[
\underline{t}[1] \text { - }
\] & \[
10: 14,
\] & \(8: 17,901\),
\(10: 4\), & 44:10, \\
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\hline \[
77: 3
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Doctor \\
[1]
\end{tabular}} & \[
52: 15
\] \\
\hline dead [1] - & difference & [1] - 52:7 & & \[
52: 19 \text {, }
\] \\
\hline \multirow[t]{2}{*}{} & & scussed & document & 53:7, \\
\hline & \[
58: 15,
\] & \multirow[t]{3}{*}{\begin{tabular}{l}
\[
\begin{aligned}
& {[2]-} \\
& 19: 3,20: 1
\end{aligned}
\] \\
discussing
\end{tabular}} & documen & \[
\begin{aligned}
& 53: 7, \\
& 55: 9,
\end{aligned}
\] \\
\hline deal [1] - & \[
71: 16
\] & & [1] - & \(55: 9\),
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\hline December & different & & 51:15 & 58:1, \\
\hline [1] - 3:10 & [3] - & [1] - & hert & 59:7, \\
\hline definitely & 63:17, & \multirow[t]{2}{*}{\begin{tabular}{l}
\[
30: 19
\] \\
disruption
\end{tabular}} & \multirow[t]{2}{*}{\[
\begin{aligned}
& {[2]-} \\
& 1: 16,90: 4
\end{aligned}
\]} & 59:8, \\
\hline [2] - & 72: 4 , & & & 81:10, \\
\hline
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\hline 83:4 & Drive/ & DWYER & 22:9, & 35:12, \\
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\hline 13:19, & [1] - 63:6 & \(6: 3,6: 7\), & 24:10, & 38:10, \\
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\hline 65:8, &  & 13:2, & \[
27: 6
\] & 45:8, \\
\hline \[
75: 4,
\] & \(\frac{\text { due }}{12.2}\) [1] - & 13:5, & 27:15, & 46:2, \\
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28: 5 \text {, }
\] & 46:15, \\
\hline drawing & \[
\begin{aligned}
& -63: 8, \\
& 63: 12,
\end{aligned}
\] & 14:2, & \[
28: 7,
\] & 47:7, \\
\hline \[
[4]-
\] & \[
\begin{aligned}
& 63: 12, \\
& 64: 3,
\end{aligned}
\] & \[
14: 4
\] & \[
\begin{aligned}
& 28: 13 \\
& 29: 9
\end{aligned}
\] & \[
\begin{aligned}
& 47: 9 \\
& 48: 19
\end{aligned}
\] \\
\hline \[
16: 7,
\] & \[
67: 3,
\] & 15:8, & 29:9, & \[
48: 19
\] \\
\hline \(24: 14\),
38.2 & 72:5, & \(16: 14\),
\(16: 17\), & 29:14,
29:16, & \[
\begin{aligned}
& 49: 2 \\
& 49: 15
\end{aligned}
\] \\
\hline \(38: 2\),
\(50: 11\) & \[
73: 1,
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\(49: 17\), \\
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\begin{aligned}
& 74: 3, \\
& 74: 18,
\end{aligned}
\] & 18:3, & 30:14, & 51:13, \\
\hline \[
6: 11,6: 15
\] & \[
74: 18 \text {, }
\] & \[
18: 6 \text {, }
\] & \[
30: 18 \text {, }
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\hline Drive [8] & \[
75: 13,
\] & 18:13, & \[
31: 6,
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\hline \[
-4: 2
\] & \[
\begin{aligned}
& 75: 18 \\
& 76: 2
\end{aligned}
\] & \[
19: 2,
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\[
76: 2
\] \\
Duffy [1]
\end{tabular} & \[
19: 16
\] & \(33: 7\),
\(33: 16\), & 58:13, \\
\hline 7:10, 8:3, & \(\frac{\text { Duffy }}{-2: 12}\) & \[
20: 9,
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\hline \[
49: 4,
\] & \begin{tabular}{l}
during \\
[1]
\end{tabular} & 20:11, & \[
\begin{aligned}
& 33: 19, \\
& 34: 2,
\end{aligned}
\] & \[
\begin{aligned}
& 60: 1, \\
& 60: 3,
\end{aligned}
\] \\
\hline 49:7, & \[
-17: 6
\] & 21:4, & \[
\begin{aligned}
& 34: 2, \\
& 34: 14
\end{aligned}
\] & \[
60: 8 \text {, }
\] \\
\hline 76:5, & \begin{tabular}{l}
Dwyer \\
[2]
\end{tabular} & \[
\begin{aligned}
& 21: 12, \\
& 21: 17,
\end{aligned}
\] & \[
\begin{aligned}
& 34: 14, \\
& 34: 16,
\end{aligned}
\] & \[
\begin{aligned}
& 60: 8, \\
& 62: 10,
\end{aligned}
\] \\
\hline
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\hline 65:8, & 78:6, & -43:2 & [3] - & [1] - \\
\hline 65:17, & 78:12, & east [2] - & 45:5, & 78:10 \\
\hline 65:19, & 78:17, & \(\frac{10: 15,}{}\) & 45:16, & equipment \\
\hline 66:2, & 78:19, & 68:1 & 45:17 & [16] - \\
\hline 66:12, & 79:6, & easterly & Ellen [1] & 14:19, \\
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\begin{aligned}
& 40: 18, \\
& 69: 12,
\end{aligned}
\] \\
\hline 71:11, & 84:9, & - 21:1, & [2] - & 71:14, \\
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87: 12
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\hline 72:12, & 85:13, & 68:19 & end [4] - & \\
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\] \\
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\frac{\text { exactly }}{[1]-}
\] \\
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15: 3,
\] & [3] - & [1] -
\[
70: 15
\] \\
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\hline - 59:1 & 46:4 & 33:12, & [1] - & 60:5, \\
\hline final [2] & flow [1] - & 33:14, & 69:11 & 60:14, \\
\hline - 15:14, & 53:16 & 42:5, & fourth [1] & 61:3, \\
\hline 75:7 & folks [4] & 62:3, 86:6 & - 47:18 & 61:8, \\
\hline finalize & - 6:3, & forwarded & frame [2] & 61:15 \\
\hline [1] - 87:4 & 46:13, & [1] - & - 42:14, & gentleman \\
\hline fine [8] - & 57:12, & 34:12 & 56:5 & [2] - 6:8, \\
\hline 26:16, & 64:19 & four [18] & front [2] & 54:3 \\
\hline 33:8, & follow [2] & - 6:17, & - 52:6, & Gentlemen \\
\hline 43:3, & - 17:10, & 7:9, 8:18, & 78:7 & [1] - 5:14 \\
\hline 65:9, & 59:16 & 25:6, & frozen [1] & given [3] \\
\hline 73: 4, & followed & 26:19, & - 67:10 & - 12:4, \\
\hline 75:2, & [1] - & 35:13, & full [1] - & 12: 6, \\
\hline 78:12 & 12:11 & 38:16, & 50:10 & 13:16 \\
\hline First [2] & following & 38:17, & full-size & Gorham [2] \\
\hline - 3:9, & [1] - & 41:15, & [1] - & - 34:5, \\
\hline 62:4 & 84:15 & 42:18, & 50:10 & 34:19 \\
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\hline - 6:13, & 68:3, 70:9 & \[
50: 9,
\] & G & \[
-19: 13
\] \\
\hline 14:12, & foregoing & \[
\begin{aligned}
& 52: 11, \\
& 69: 11,
\end{aligned}
\] & Gallagher & grade [1] \\
\hline 14:14, & [1] - 90:7 & \[
76: 9,
\] & [2] - & - 68:8 \\
\hline \[
36: 3,
\] & foreseen & \[
79: 3,83: 3
\] & \[
2: 11,50: 2
\] & \(\frac{\text { grant [ }}{\text { - }}\) ] \\
\hline \[
40: 4,
\] & [1] - & four-inch & GALLAGHER & - 54:19, \\
\hline \[
\begin{aligned}
& 56: 13 \\
& 64: 3
\end{aligned}
\] & 31:18 & [15] - & [20] - & \[
\begin{aligned}
& 55: 2, \\
& 55: 5, \quad 85: 8
\end{aligned}
\] \\
\hline \begin{tabular}{l}
fit \\
[1] -
\end{tabular} & \(\frac{\text { forever }}{\text { [1] - }}\) & 6:17, 7:9, & \(50: 1\), & \begin{tabular}{l}
55:5, 85:8 \\
Great [1]
\end{tabular} \\
\hline 71:2 & \[
\begin{aligned}
& \text { [1] - } \\
& 44: 14
\end{aligned}
\] & 8:18, & 50:10, & \(\frac{\text { Great }}{-61: 3}\) \\
\hline fits [1] - & form [2] & 25:6, & 50:14, & green [2] \\
\hline 72:1 & & 26:19, & :17, & - 87:9, \\
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51: 14
\] & 87:13 \\
\hline 57:5, & forth [1] & 38:16, & 54:17, & Green [1] \\
\hline 66:6, & - 90:10 & 41:15 & 55:13, & - 87:11 \\
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41: 15 \text {, }
\]
\[
49: 6,
\] & 56:1, & ground [6] \\
\hline 67:3, & [10] - & \[
50: 9,
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\hline group [3] & harmless & - 54:2 & 24:14, & 68:5, \\
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\hline 86:1, 87:1 & Harvard & [5] - & hole [3] - & IN [1] - \\
\hline guess [2] & [21] - & 14:13, & 44:19, & 90:12 \\
\hline - 6:19, & 2:11, & 39:7 & 79:4, 83:6 & INC [1] - \\
\hline 12:3 & 49:19, & 49:8, & holes [1] & 1:17 \\
\hline gutter [1] & 50:2, & 89:4, 90:9 & - 87:11 & inch [22] \\
\hline - 52:16 & 50:4, & hearings & holiday & - 6:17, \\
\hline guy [3] - & 51:7, & [1] - 3:11 & [1] - 30:1 & 7:5, 7:9, \\
\hline 35:3, & 51:16, & held [4] - & hope [1] - & 8:18, \\
\hline 35: 6, & 51:17, & 1:5, 4:15, & 15:6 & 25:6, \\
\hline 35:17 & 52:16, & 32:17, & Hoping [1] & 26:19, \\
\hline guys [1] - & 53:10, & 90:9 & - 48:9 & 35:13, \\
\hline 63:9 & 53:11, & help [2] - & hospital & 38:16, \\
\hline & 54:11, & 12:16, & [1]-82:5 & 38:17, \\
\hline H & 55:16, & 72:19 & Hotel [2] & 41: 15, \\
\hline half [3] - & 56:11, & helps [1] & - 53:9, & 44:8, \\
\hline 24:18, & 56:12, & - 50:11 & 57:12 & 47:18, \\
\hline \[
44: 8,
\] & 56:17, & Herb [3] - & house [2] & 49:6, \\
\hline \[
50: 13
\] & 57:3, & 2:8, 5:16, & - 15:19, & 50:9, \\
\hline Hammond & 57: 4 , & 10:11 & 66:17 & 52:11, \\
\hline \[
[5]-
\] & 57: 8, & hereby [1] & Housing & 69:11, \\
\hline \[
34: 3
\] & 57:11, & - 90:6 & Housing & 76:9, \\
\hline 34:5, & 57:13 & hereinbefo & 79:14 & 79:3, \\
\hline 34:17, & HAVE [1] - & re [1] - & Hovey [1] & 82:18, \\
\hline 34:19, & \[
90: 12
\] & 90:10 & - 38:9 & 83:2, 83:3 \\
\hline 35:19 & have'nt & HEREUNTO & huge [1] - & inch-and-a \\
\hline Hampshire & [1] - 35:9 & [1] - & 12:15 & -half [1] \\
\hline [6] - & head [2] & 90:12 & & - 44:8 \\
\hline \[
22: 15,
\] & \[
\begin{aligned}
& 18: 8, \\
& 85: 13
\end{aligned}
\] & Hewett [1] & I & \(\frac{\text { including }}{\text { [1] - }}\) \\
\hline \[
22: 16,
\] & heading & \[
-56: 12
\] & impact [1] & \[
34: 12
\] \\
\hline 23: 4, & \(\frac{\text { heading }}{[1] ~-~}\) & himself & - 41:4 & indicated \\
\hline \[
\begin{aligned}
& 24: 3, \\
& 62: 6
\end{aligned}
\] & 10:14 & [1] -
\[
64: 19
\] & important & \(\frac{\text { [1] - 16:7 }}{}\) \\
\hline 63:10 & Health [3] & hire [1] - & [2] - & informatio \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline \(\underline{\mathrm{n}}\) [2] - & 34:5, & - 54:14, & \(30: 1\), & 19:12, \\
\hline 27:15, & 34:19, & 55:8, 58:7 & 30:12, & 56:7 \\
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\hline [1] - 19:3 & 45:13, & 14:11, & \(31: 8\), & junction \\
\hline inspection & 45:14, & 15:5, & \(31: 13\), & [1] - 44:2 \\
\hline [1] - 15:3 & 73:12, & 15:11, & \[
31: 16
\] & \\
\hline install & \[
80: 15
\] & 15:15, & \[
31: 19,
\] & K \\
\hline [2] - & involve & 16:1, & \(32: 8\), & keep [4] \\
\hline 41:14, & [2] - & 16:10, & 32:15, & 53:16, \\
\hline 52:8 & 15:4, 16:9 & 16:13, & 33:3, & \[
54: 5,
\] \\
\hline installati & involved & 17:2, & 33: 6, & \[
57: 16
\] \\
\hline on [2] - & [1] - 21:1 & 17:7, & 34:8, & 78:11 \\
\hline 8:7, 35:5 & issuance & 17:15, & \(35: 10\), & Keep \\
\hline installed & [1] - 15:7 & 18:5, & 35:14, & \(\frac{\text { Keep }}{20: 4}\) \\
\hline [1] - & issue [1] & 18:12, & \[
36: 12
\] & Keeping \\
\hline 69:13 & \[
-83: 11
\] & 18:19, & \[
\begin{aligned}
& 36: 16, \\
& 36: 18,
\end{aligned}
\] & \(\frac{\text { Keeping }}{[1]-41: 9}\) \\
\hline Installing & item [1] - & \(19: 7\),
\(19: 11\), & \(36: 18\),
\(37: 13\), & keeps [1] \\
\hline [2] - & 3:17 & 19:11, & 37:19, & - 53:18 \\
\hline 68:2, 70:9 & J & 21:9, & 38:5, & kind [4] \\
\hline instead & J & 22:11, & 38:13, & 9:15, \\
\hline [1] - 81:3 & Jackie [1] & 22:17, & 38:18, & 10:14, \\
\hline intercepte & - 2:12 & 23:2, & 39:4, & 54: 9, \\
\hline d [1] - & Jake [2] - & 23:7, & 39:15, & 80:16 \\
\hline 82:8 & 2:11, & 24:11, & 41:1, & knowledge \\
\hline intercepti & 41:12 & 24:16, & 61:19, & [1] - \\
\hline on [1] & January & 25:1, & 85:4, & 90:10 \\
\hline 81:2 & [2] - & 25:4, & 85:11, & known [6] \\
\hline interested & 3:11, & 25:6, & 86:5, & - 28:10, \\
\hline [1] - & 14:13 & 25:9, & 86:12, & 28:12, \\
\hline 51:12 & Jennifer & 25:14, & 86:16, & 34:7, \\
\hline interrupte & [2] - & 25:18, & 87:7, & 35: 6, \\
\hline d [1] - & 1:16, 90:4 & 26:2, & 87:12, & 40:18, \\
\hline \(53: 15\) & JFK [1] - & 26:9, & 87:17, & 41:16 \\
\hline intersecti & 58:4 & 27:1, & 87:19 & knows [1] \\
\hline on [10] - & Joint [1] & 27:13, & Jovanovic & - 13:3 \\
\hline \[
\overline{9:} 12,
\] & - 32:16 & 28:15, & [1] - 2:10 & Kosta [3] \\
\hline 9:13, & joint [3] & \[
\begin{aligned}
& 28: 19 \\
& 29: 3
\end{aligned}
\] & July [2] - & - 2:10, \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline 22:10, & leave [1] & 17:17, & 31:17, & 46:7, \\
\hline 61:18 & - 68:11 & 19:4, & 32:2, & 46:18, \\
\hline Kosta's & leaving & 19:8, & \(33: 1\), & 47:6, \\
\hline [1] - 62:2 & [1] - & 19:14, & 33: 4 , & 47:8, \\
\hline & 71:13 & 20:2, & 33:10, & 47:10, \\
\hline \(\underline{L}\) & left [3] & \multirow[t]{2}{*}{\[
\begin{aligned}
& 20: 10 \\
& 20: 12
\end{aligned}
\]} & \[
33: 18 \text {, }
\] & \multirow[t]{2}{*}{\[
\begin{aligned}
& 47: 14, \\
& 48: 3,
\end{aligned}
\]} \\
\hline \multirow[t]{4}{*}{\[
\begin{aligned}
& \frac{\text { L3 }}{80: 19}[1]- \\
& \text { lane [1] - }
\end{aligned}
\]} & 25:15, & & \multirow[t]{2}{*}{\[
\begin{aligned}
& 34: 1, \\
& 34: 3
\end{aligned}
\]} & \\
\hline & \multirow[t]{2}{*}{\[
\begin{aligned}
& 38: 11, \\
& 44: 19
\end{aligned}
\]} & 21:5, & & \[
48: 11
\] \\
\hline & & 21:10, & 34:10, & \[
48: 14
\] \\
\hline & \[
\begin{gathered}
44: 19 \\
\text { leg [2] - }
\end{gathered}
\] & \multirow[t]{2}{*}{\[
\begin{aligned}
& 21: 16, \\
& 21: 18,
\end{aligned}
\]} & 34:15, & 48:18, \\
\hline 36:7 & 8:9, 53:2 & & 34:17, & 49:1, \\
\hline \(\frac{\text { large }}{-44: 9}\) & length [2] & \[
\begin{aligned}
& 21: 18, \\
& 22: 1,
\end{aligned}
\] & 35:16, & 49:3, \\
\hline - 44:9 & - 22:13, & \[
22: 14,
\] & 36:8, & 49:13, \\
\hline \(\frac{\text { larger }}{-24: 17}\) & \[
24: 11
\] & \multirow[t]{2}{*}{\[
\begin{aligned}
& 22: 19, \\
& 23: 6,
\end{aligned}
\]} & 36:14, & 49:16, \\
\hline \[
-24: 17
\] & 24:11
Lenkauskas & & 36:17, & 49:18, \\
\hline \[
35: 10 \text {, }
\] & \multirow[t]{4}{*}{\[
\begin{aligned}
& {[2]-2: 3,} \\
& 3: 7 \\
& \text { LENKAUSKAS }
\end{aligned}
\]} & \[
\begin{aligned}
& 23: 6, \\
& 23: 8,
\end{aligned}
\] & \multirow[t]{2}{*}{\[
37: 4,
\]} & 50:3, \\
\hline 50:12, & & \[
23: 16 \text {, }
\] & & \[
50: 12 \text {, }
\] \\
\hline \[
64: 13 \text {, }
\] & & 23:18, & 37:8, & \multirow[t]{2}{*}{\[
\begin{aligned}
& 50: 15, \\
& 54: 13,
\end{aligned}
\]} \\
\hline 80:19 & & 24:1, & 37:18, & \\
\hline Last [1] - & \multirow[t]{2}{*}{} & 25:16, & 38:3, & \[
55: 6,
\] \\
\hline 88:1 & & 26:4, & 38:7, & \[
55: 15,
\] \\
\hline last [8] - & \[
3: 15,4: 4,
\] & 26:16, & 38:15, & 56:4, \\
\hline 8:8, 8:9, & \[
4: 7,4: 10,
\] & 27:2, & 39:6, & 58: 6, \\
\hline \[
26: 11,
\] & \[
\begin{aligned}
& 4: 17, \\
& 5: 11, \quad 7: 6,
\end{aligned}
\] & 27:5, & 40: 6, & 58:14, \\
\hline 37:15, & & 27:7, & 40:10, & \multirow[t]{2}{*}{\[
\begin{aligned}
& 58: 18, \\
& 59: 15,
\end{aligned}
\]} \\
\hline \[
39: 7,
\] & \multirow[t]{3}{*}{\[
\begin{aligned}
& 7: 19, \\
& 8: 12,9: 4,
\end{aligned}
\]} & 27:17, & \[
40: 13,
\] & \\
\hline \[
46: 15,
\] & & \multirow[t]{2}{*}{\[
\begin{aligned}
& 28: 3, \\
& 28: 6,
\end{aligned}
\]} & \multirow[t]{2}{*}{\[
40: 15
\]} & \[
\begin{aligned}
& 59: 15, \\
& 59: 19,
\end{aligned}
\] \\
\hline 85:5, 86:3 & & & & \[
\begin{aligned}
& 59: 19, \\
& 60: 2,
\end{aligned}
\] \\
\hline lateral & 11:18, & \[
\begin{aligned}
& 28: 6, \\
& 28: 8,
\end{aligned}
\] & \[
41: 7,
\] & 60: 4, \\
\hline \[
[1]-
\] & 13:18, & \[
\begin{aligned}
& 28: 8, \\
& 28: 17,
\end{aligned}
\] & \[
\begin{aligned}
& 41: 7, \\
& 41: 9,
\end{aligned}
\] & \multirow[t]{2}{*}{\[
\begin{aligned}
& 60: 10, \\
& 60: 19,
\end{aligned}
\]} \\
\hline 27:14 & 14:3, & 29:1, & \[
41: 13,
\] & \\
\hline lease [2] & \[
14: 5,
\] & 29:7, & 42:1, & \[
\begin{aligned}
& 60: 19, \\
& 61: 10,
\end{aligned}
\] \\
\hline - 57:14, & \multirow[t]{2}{*}{\[
14: 12,
\]} & 29:11, & 42: 6, & \[
\begin{aligned}
& 61: 10, \\
& 61: 13,
\end{aligned}
\] \\
\hline 88:1 & & \multirow[t]{2}{*}{\[
\begin{aligned}
& 29: 15, \\
& 29: 17,
\end{aligned}
\]} & \multirow[t]{2}{*}{\[
\begin{aligned}
& 42: 13 \\
& 42: 16
\end{aligned}
\]} & \[
61: 17
\] \\
\hline leasing & 15:13, & & & \[
62: 2,
\] \\
\hline [1] - & 15:16, & \[
30: 3
\] & \[
\begin{aligned}
& 42: 16, \\
& 42: 19,
\end{aligned}
\] & \multirow[t]{2}{*}{\[
\begin{aligned}
& 62: 12 \\
& 62: 14
\end{aligned}
\]} \\
\hline 26:11 & 16:8, & 30:10, & 43:4, & \\
\hline least [1] & \multirow[t]{3}{*}{\[
\begin{aligned}
& 16: 11, \\
& 16: 15, \\
& 17: 12,
\end{aligned}
\]} & \multirow[t]{3}{*}{\[
\begin{aligned}
& 31: 1, \\
& 31: 11, \\
& 31: 14,
\end{aligned}
\]} & \multirow[t]{3}{*}{\[
\begin{aligned}
& 43: 7, \\
& 43: 12, \\
& 46: 4,
\end{aligned}
\]} & \multirow[t]{3}{*}{\[
\begin{aligned}
& 62: 16, \\
& 62: 19, \\
& 63: 5,
\end{aligned}
\]} \\
\hline - 86:7 & & & & \\
\hline & & & & \\
\hline
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\hline 63:13, & 75:12, & - 23:1, & 48:5, & list [3] \\
\hline 64:15, & 75:15, & 65:14 & 48:8, 87:4 & 58:8, \\
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\hline 65:18, & 76:8, & 43:9, & Lightower & live [1] - \\
\hline 66:1, & 77:5, & 43:18, & [16] - & 6:5 \\
\hline 66:3, & 77:13, & \(44: 1\), & 2:8, 2:9, & loading \\
\hline 66:10, & 77:19, & 44:16, & 4:5, 4:7, & [1] - \\
\hline 66:13, & 78: 4, & 46:1, & 4:12, & 63:14 \\
\hline 67:5, & 78: 9, & 47:3, & 4:18, 7:7, & located \\
\hline 67:13, & 78:13, & 47:12, & 8:11, & [1] - \\
\hline 67:16, & 78:18, & 79:2, & 13:11, & 76:10 \\
\hline 67:18, & 79:1, & 79:6, & 47:15, & location \\
\hline 68:12, & 79:9, & 80:14 & 47:16, & [10] \\
\hline 69:3, & 79:13, & License & 49:4, & 4:14, 5:6, \\
\hline 69:10, & 80:1, & [2] - & 59:3, & 5:9, 5:12, \\
\hline 69:15, & 80: 6, & 34:13, & 76:4, & 6:10, 8:1, \\
\hline 69:17, & 81:11, & 58:19 & 76:5, 80:4 & 23: \\
\hline 70:1, & 82:12, & license & limit [1] & 70:18, \\
\hline 70: 4 , & 82:15, & [4] - & - 45:16 & 72:4, 75:8 \\
\hline 70:6, & 82:18, & 31:1, & Lincoln & locations \\
\hline 70:16, & 83:5, & 31: 4 , & [1] - & [3] - \\
\hline 71:5, & 83:18, & 43:8, & 20:16 & 19:5, \\
\hline 71:8, & 84:5, & 76:16 & Line [5] - & 86:10, \\
\hline 71:12, & 84:8, & licenses & 30:5, & 87:10 \\
\hline 71:17, & 84:10, & [5] - & 37:10, & logical \\
\hline 72:9, & 84:14, & 31: 4, & 37:15, & [1] - 88:5 \\
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\hline 72:15, & 85:17, & \(33: 11\), & line [8] - & \(\frac{\text { Lombardi }}{[2]-1: 7,}\) \\
\hline 73:4, & 86:3, & 39:17, & 43:16, & \([2]-1: 7\),
\(3: 5\) \\
\hline 73:7, & 86:9, & 86:10 & 52:10, & 3.5 \\
\hline 73:9, & 86:14, & licensing & 52:16, & 1ong-term \\
\hline 73:11, & 86:18, & [9] - & \(52: 16\),
\(58: 12\), & [2] - \\
\hline 73:18, & 88: 6, & [9] - & 58:12, & 57:14, \\
\hline 74:4, & 88:8, & 11:2, & 60:17, & 57:18 \\
\hline 74:11, & 88:11, & 15:3, & 64:7, & Longfellow \\
\hline 74:16, & 88:15, & 32: 6, & 74:17, & [3] - \\
\hline 75:3, & 88:17, & 32:13, & 81:8 & 42: 4, \\
\hline 75:7, & 89:1, 89:3 & 33:2, & lines [1] & 42:11, \\
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\hline look [15] & [2] - & 10:5, & 83:12 & - 55:11, \\
\hline - 19:16, & 18:3, 18:7 & 10:7, & manholes & 71:2 \\
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\hline 36:2, & M & 10:16, & 26:13 & 42:4, \\
\hline 36:5, & MacArthur & 25:13, & map [1] - & 52:18, \\
\hline 37:2, & [1] - & 35:17, & 22:17 & 53:2 \\
\hline 39:11, & \[
67: 11
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\hline \[
40: 3
\] & Magazine & 36:10, & 87:8, 87:9 & - 2:11, \\
\hline 43:13, & Magazine & 41:16, & March [1] & 41:12 \\
\hline \[
46: 18,
\] & \[
47: 16,
\] & 41:17, & - 39:17 & MCADOO \\
\hline \[
58: 10,
\] & \[
47: 17
\] & \[
43: 9,
\] & Mark [2] - & [19] - \\
\hline 63:17, & Magnolia & \[
43: 16
\] & 56:13, & 41:12, \\
\hline \[
80: 14,
\] & \(\frac{\text { Magnolia }}{[4]-}\) & \[
43: 18 \text {, }
\] & 56:16 & 41:19, \\
\hline \[
84: 2
\] & \[
37: 8 \text {, }
\] & \[
44: 1,
\] & marked [1] & 42:2, \\
\hline \[
85: 15
\] & \[
37: 15
\] & \[
45: 5
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28: 14 \\
\text { meeting }
\end{gathered}
\] & \(\frac{\text { mention }}{[1]-21: 6}\)
mentioned & \[
\begin{gathered}
54: 5 \\
\frac{\text { minutes }}{[2]-}
\end{gathered}
\] & \[
\begin{aligned}
& 23: 17, \\
& 27: 2, \\
& 27: 18,
\end{aligned}
\] & \[
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& 51: 1, \\
& 51: 18, \\
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notice [3] & obtained & once [3] - & 50:15, \\
\hline 30:7, & \(\frac{\text { notice }}{-10: 11}\) & [1] - 31:2 & 8:4, 17:2, & 50:17, \\
\hline 34:7, & - 10:11, & obviously & 78:15 & 54:1, \\
\hline 35: 6, & 54:1 & [1] - & Once [1] - & 54:7, \\
\hline 37:12, & 54:14 & \(53: 10\) & 33:1 & 63:9, \\
\hline 40:18 & notified & occupancy & one [51] - & \(68: 3\), \\
\hline node [9] - & & [1] - 56:7 & 4:15, & 68:10, \\
\hline 15:9, & 21:7, & occupied & 4:15,
\(11: 16\), & 68:11, \\
\hline 15:10, & November & [2] - & 14:14, & \[
\begin{aligned}
& 69: 6, \\
& 70: 9,
\end{aligned}
\] \\
\hline 15:16, & [1] - & 51:7, & 16:3, & \[
70:
\] \\
\hline 29:2, & 90:19 & 57:13 & 16:8, & \\
\hline 30: 9, & NStar [6] & occupies & 16:13, & \[
\begin{aligned}
& 77: 4, \\
& 77: 10,
\end{aligned}
\] \\
\hline \(31: 3\), & - 2:12, & [4] - & 17:13, & \[
79: 16,
\] \\
\hline 32: 6, & 2:12, & 16:3, & 18:19, & 81:1 \\
\hline 32:11, & 32:19, & 51:17, & 19:5, & 86:1, 88:9 \\
\hline 86:10 & 57:9, 62:4 & 53:10, & 19:6, & One [6] \\
\hline Norfolk & number [3] & 56:17 & 19:9, & 7:5, 25:5 \\
\hline [2] - & - 18:4, & October & 19:10, & 25:6, \\
\hline 62:4, 62:8 & 18:7, & [2] - & 20:19, & \[
35: 12,
\] \\
\hline northeast & 53:12 & 4:16, 49:8 & 21:1, & \[
69: 5, \quad 78: 4
\] \\
\hline [1] - 62:6 & & odd [1] - & 24:8, & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline one-fourth & 28:18, & [1] - & [2] - & 20:5, \\
\hline [1] & 38:3 & 78:15 & 3:17, & 23:10, \\
\hline 47:18 & originally & packet [3] & 26:17 & 27:18, \\
\hline One- & [3] - & - 9:7 & pass [1] - & 29:13, \\
\hline quarter & 38:5, & 22:18 & 47:1 & \(40: 11\), \\
\hline [1] - 7:5 & 39:3, & 54:14 & passing & 65:12, \\
\hline ongoing & 79:18 & packets & [1] - & 67:14, \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
\[
\begin{aligned}
& {[1]-} \\
& 12: 13
\end{aligned}
\] \\
opened
\end{tabular}} & Originally & [1] - & 39:10 & 72:10, \\
\hline & [1] - 39:4 & 12:14 & past [1] - & 75:4, \\
\hline & otherwise & page [1] - & 85:2 & 76:15 \\
\hline \begin{tabular}{l}
\[
-53: 17
\] \\
operated
\end{tabular} & \[
\begin{array}{cc}
{[1]} & -16: 5 \\
\text { outs [1] - }
\end{array}
\] & \(64: 3\)
PAGES [1] & \(\underline{\text { path [6] - }}\) & \(\frac{\text { people's }}{\text { [1] - 45:3 }}\) \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
operated \\
[1] - 69:2 opposed
\end{tabular}} & 8:2 & - 1: & 47:12, & percent \\
\hline & outside & paid [1] - & 47:13, & [2] - \\
\hline [2] - & 1] - & 29:19 & 51:8, & 51:7, \\
\hline 26:11, & 63:15 & parallel & 52:3, & 57:13 \\
\hline 36:6 & own [1] - & [1] - & 57:19 & permission \\
\hline opposite & 57:12 & 15:18 & pathways & [3] - \\
\hline [1] - & owned [2] & Park [2] - & [1] - & 65:15, \\
\hline 36:10 & - 57:11 & 8:5 & 28:10 & 83:11, \\
\hline opposition & owner [3] & 73:15 & paved [3] & 85:9 \\
\hline [3] - & - & park [1] - & \[
-38: 8,
\] & permit [2] \\
\hline 84:19, & 60:12 & 6:6 & \[
53: 17,
\] & \[
\begin{aligned}
& -77: 3, \\
& 77: 4
\end{aligned}
\] \\
\hline 86:7, 87:2 & \[
64: 18
\] & Parking & \[
74: 10
\] & 77:4 \\
\hline optic [7] & Oxford [3] & [1] - 30:1 & pedestrian & permits \\
\hline - 7:3, & \[
-35: 2,
\] & parking & \[
\frac{\mathbf{s}}{45 \cdot 1]} \text { - }
\] & \[
\begin{aligned}
& {[7]} \\
& 12: 9,
\end{aligned}
\] \\
\hline 14:15, & 35: 4 & \[
[3]-
\] & \[
45: 15
\] & \[
\begin{aligned}
& 12: 9, \\
& 15: 7,
\end{aligned}
\] \\
\hline 20:14, & P & \[
29: 18
\] & \[
62: 11
\] & 18:9, \\
\hline 24:2, & & part [5] - & Pending & 8:14, \\
\hline \multirow[t]{2}{*}{\[
\begin{gathered}
27: 8, \quad 28: 9 \\
\text { option [2] }
\end{gathered}
\]} & \(\frac{\mathrm{P}-\mathrm{E}-\mathrm{R}-\mathrm{R}-\mathrm{E}-}{\text { T-T-I }}\) &  & [3] - & 23:14, \\
\hline & T-I [1] & \[
43: 15 \text {, }
\] & 67:5, & 53:13, \\
\hline -36:6, & & 51:10, & \(70: 1\) & 83:8 \\
\hline 71:17 & \(\frac{\mathrm{P}-\mathrm{R}-\mathrm{U}-\mathrm{S}-\mathrm{A}-}{\mathrm{K}}\) & \[
0: 13
\] & 75:18 & Perretti \\
\hline order [2] & K [1] - & 78:1 & pendin & [1] - \\
\hline - 62:1, & 6:2 & Part [2] - & [13] - & 46:14 \\
\hline : & P75 [1] - & & \[
13: 19 \text {, }
\] & petition \\
\hline original & 25:17 & 78:2 & 15:2, & [31] - \\
\hline [2] - & package & particular & 15: 6, & 4:5, 4:8, \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline 7:6, 9:5, & [2] - & 12:15, & 16:9, & 24:3, \\
\hline 12:7, & 41:11, & 12:16, & 18:1, & 24:4, \\
\hline 13: 6, & 41:13 & 24:12, & 21:2, & 24: 6, \\
\hline 13:16, & phone [1] & 35:8, & 25:11, & 24:8, \\
\hline 14:12, & - 18:4 & 35: 9, & 25:12, & 25:16, \\
\hline 17:11, & physically & 39:2, & 25:16, & 25:17, \\
\hline 19:1, & [1] - 11:4 & 39:18, & 26:4, & 25:18, \\
\hline 20:13, & pick [1] - & 44:7, & 26:5, & 27:9, \\
\hline 21:15, & 9:9 & 44:17, & 32:10, & 27:11, \\
\hline 22:10, & picking & 45:18, & \(33: 13\), & 28:11, \\
\hline 23: 4 , & [1] - & \(51: 11\), & \(35: 3\), & 29:4, \\
\hline 23:6, & 63:19 & 60: 6, & 35: 6, & 30:5, \\
\hline 23: 9, & picture & 62:10 & 35:15, & 30: 6, \\
\hline 33: 9, & [4] - & planning & 35:17, & 34: 6, \\
\hline 41:5, & 19:17, & [2] - & 35:19, & 35:1, \\
\hline 41:10, & 63:17, & 57:18, & \(37: 17\), & 37:9, \\
\hline 42:7, & 64:1, 75:1 & 64:18 & 38:2, & 37:10, \\
\hline 47:19, & Place [3] & Pleasant & 66:15, & 37:12, \\
\hline 49:3, & - 37:11, & [3] - & 68:7, & 37:15, \\
\hline 50:3, & 59:7, 76:8 & 77: 6, & 68:8, & 38:4, \\
\hline 51:3, & place [11] & 77:7, 78:6 & 68:9, & 38:6, \\
\hline 52:14, & - 7:9, & plenty [1] & 68:18, & 39:12, \\
\hline \[
52: 18,
\] & 12:18, & - 82:16 & 69:4, & \[
40: 16,
\] \\
\hline \[
54: 1,
\] & \[
12: 19,
\] & plus [1] - & \[
76: 6 \text {, }
\] & \[
40: 17,
\] \\
\hline 62:3, & 21:14, & 53:7 & 76:16, & 40:18, \\
\hline \[
62: 4,
\] & \[
33: 11 \text {, }
\] & Plus [1] - & \(77: 11\), & \[
47: 17,
\] \\
\hline \[
76: 15 \text {, }
\] & \[
47: 18 \text {, }
\] & 35:14 & 77:15, & \[
47: 19 \text {, }
\] \\
\hline 78:14 & \[
49: 5,
\] & Plymouth & 78:1, 78:7 & 49:5, \\
\hline petitionin & 55:4, & [1]-22:4 & Pole [46] & 56:14, \\
\hline \[
\underline{\mathbf{g}}[1]-
\] & \[
73: 2,
\] & point [1] & \[
\begin{aligned}
& -1: 5, \\
& 3: 3,
\end{aligned}
\] & \[
\begin{aligned}
& 66: 4, \\
& 73: 13
\end{aligned}
\] \\
\hline \[
\begin{aligned}
& 7: 1 \\
& \text { petitions }
\end{aligned}
\] & 79:2, 90:9 & - 44:12 & \[
\begin{aligned}
& 3: 3 \\
& 14: 16
\end{aligned}
\] & \[
\begin{gathered}
73: 13 \\
\text { pole-in- }
\end{gathered}
\] \\
\hline [6] - & placed [1] & Point [2] & 14:19, & the-ground \\
\hline 18:16, & placin & OLE [1] - & 20:15, & [1] - \\
\hline 32:3, & [1] & , & 20:17, & 66:15 \\
\hline 84:16, & plan & pole [35] & 20:18, & poles [13] \\
\hline 88:12, & - 9:8, & - 15:9, & 22:3, & - 16:12, \\
\hline 88:13 & \[
9: 10
\] & \[
15: 10
\] & 22:7, & 30:14, \\
\hline Phoenix & \[
9: 12,
\] & \[
16: 4,
\] & \[
\begin{aligned}
& 22: 8, \\
& 23: 2,
\end{aligned}
\] & 30:17, \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline 31:2, & [1] - & 51:5, & 52:15, & 4:11 \\
\hline \(31: 15\), & 79:17 & 54:2, & 59:7, & Pull [1] - \\
\hline 31:18, & pretty [1] & 86:19 & \(60: 11\), & 5:2 \\
\hline 32: 4 , & - 86:16 & progress & 60:12, & pulled [1] \\
\hline 32:9, & previous & [3] - & 77:14 & - 79:16 \\
\hline 32:11, & [4] - & 58:4, & Prospect & pulling \\
\hline 87:10, & 25:15, & 86:13, & [4] - & [1] - \\
\hline 87:12, & 41:2, & 86:14 & 5:13, 7:7, & 53:11 \\
\hline 87:13 & 41:5, & project & 8:15, & purpose \\
\hline Poles [1] & 56:14 & [1] - & 10:12 & [1] - 42:2 \\
\hline 28:10 & primarily & 59:13 & provide & purposes \\
\hline policy [2] & [2] - & properties & [6] - & [1] - \\
\hline - 54:15, & 51:2, & [1] - & 57:7, & 68:13 \\
\hline 58:7 & 62:17 & 66:16 & 57: 8, & pursuing \\
\hline portion & primary & property & 66:7, & [1] - 32:5 \\
\hline [1] - \(32: 9\) & [2] - & [11] - & 68:4, & put [24] - \\
\hline possibilit & 64:1, 74:4 & 5:10, & 70:11, & 7:17, \\
\hline \(\underline{\underline{\mathbf{y}}}\) [1] - & Primary & 52:10, & 73:15 & 8:17, 9:6, \\
\hline 45:11 & [1] - & 60:17, & provided & 9:7, 12:4, \\
\hline possible & 64:15 & 74:7, & [1] - & 15:8, \\
\hline [3] - & private & 76:17, & 57:17 & 15:9, \\
\hline 56:8, & [5] - & 77:16, & provision & 15:10, \\
\hline 75:5 & 54:11, & 79:5, & [1] - 56:2 & 16:1, \\
\hline 80:13 & 65:3, & 79:10, & pruning & 44:16, \\
\hline possibly & 76:17, & 79:14, & [2] - & 48:8, \\
\hline [1] - & 77:15, & 80:11, & 18:2, 20:7 & 64:12, \\
\hline 72:10 & 79:5 & 83:7 & Prusak [3] & 64:19, \\
\hline power [1] & problem & propose & - 2:10, & 65:3, \\
\hline - 57:8 & [1] - & [2] - & 6:1, 6:14 & 66:17, \\
\hline powered & 66:10 & 12:4, 54:7 & PRUSAK [5] & 68:9, \\
\hline [1] - 57:9 & proceeding & proposed & - 6:1, & 68:10, \\
\hline preference & [5] - & [3] - & 6:5, 6:9, & 71:18, \\
\hline s [1] - & 14:17, & 39:3, & 8:11, 14:7 & \(72: 1\), \\
\hline 84:2 & 20:16, & 52:16, & Public [2] & 72:10, \\
\hline Prentiss & 22:5, & 79:4 & - 12:13, & \(77: 14\), \\
\hline [1] - 30:3 & 24:5, 27:9 & proposing & 65:14 & 80: 4 , \\
\hline present & process & [9] - 7:8, & public [1] & 80:16, \\
\hline [1] - 13:8 & [4] - & 8:2, 8:8, & - 65:2 & 83:3 \\
\hline presented & 32:17, & 52:8, & pull [1] - & Put [1] - \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline \begin{tabular}{l}
\[
73: 1
\] \\
puts [1] -
\end{tabular} & \[
\begin{aligned}
& {[1]-} \\
& 36: 18
\end{aligned}
\] & \[
\begin{aligned}
& {[1]-53: 1} \\
& \text { regards }
\end{aligned}
\] & \(\frac{\text { reply }}{-61: 9}\) & \[
\begin{aligned}
& 13: 8, \\
& 74: 2,
\end{aligned}
\] \\
\hline 55:17 & really [1] & [5] - 4:4, & Reporter & 84:19, \\
\hline putting & 71 & 4:18 & 2] & 87:3 \\
\hline [1] - & rear [1] & 39:10 & 90:5, & resort [1] \\
\hline 70:18 & 49:7 & 47:15 & 90:16 & 26:1 \\
\hline PVC [2] - & \multirow[t]{2}{*}{\[
\frac{\text { reason }}{-21: 13}
\]} & 47:16 & REPORTERS & resource \\
\hline 41:15, & & regular & [1] - 1:17 & 1] - \\
\hline \multirow[t]{2}{*}{49:6} & \multirow[t]{2}{*}{\(42: 6\),
\(43: 7\),} & \multirow[t]{2}{*}{\[
\begin{aligned}
& {[1]-17: 6} \\
& \text { Regular }
\end{aligned}
\]} & representa & 19:13 \\
\hline & & & \multirow[t]{2}{*}{\[
\frac{\text { tive }}{41: 17,}
\]} & rest [1] \\
\hline Q & 51:2, & \multirow[t]{2}{*}{[1] - 17:7 regulation} & & 58:12 \\
\hline quad [1] - & 57:18, & & 42:9 & Restaurant \\
\hline 38:14 & 62:7, & \[
\frac{\text { regulation }}{\underline{\mathbf{s}}[2]-}
\] & representi & [1] - 51:3 \\
\hline quadrant & \multirow[t]{2}{*}{\[
\begin{aligned}
& 66: 6, \\
& 73: 14
\end{aligned}
\]} & s \({ }^{\text {12: }} 11\), & \(\underline{\mathrm{ng}}\) [1] - & restrictio \\
\hline [1] - 16:4 & & 14:1 & 64:8 & n [1] - \\
\hline quarter & \multirow[t]{2}{*}{reasons
\[
[1]-54: 8
\]} & remaining & request & 21:14 \\
\hline \[
[5]-7: 5,
\] & & \[
[2]-
\] & [1] - 62:2 & restrictio \\
\hline \[
38: 17,
\] & \[
\frac{\text { received }}{[3] \text { - }}
\] & \[
88: 12
\] & require & ns [6] - \\
\hline \[
82: 19 \text {, }
\] & [3] - & remember & [3] - & 12:5, \\
\hline \(83: 2,83: 3\) & \[
\begin{aligned}
& 32: 6, \\
& 3 \cdot 1
\end{aligned}
\] & [1] - \(39: 7\) & 26:18, & 12:6, \\
\hline questions & 33:1, & removed & 35:16, & 13:7, \\
\hline [2] - & 48:10 & [1] - & 35:18 & 13:16, \\
\hline \[
13: 8,
\] & recently & 17:19 & required & 13:19, \\
\hline 39:19 & [1] - 74:9 & replace & 1] - & 18:8 \\
\hline quite [1] & \multirow[t]{2}{*}{\[
\frac{\text { recognize }}{[1]-}
\]} & [1] - 7:3 & 12:12 & resubmit \\
\hline \multirow[t]{2}{*}{- 81:16} & & & requiremen & [1] - \\
\hline & \[
12: 14
\] & [3] - & ts [1] - & 47:12 \\
\hline R & RECORD & & 87: 4 & review [5] \\
\hline \(\underline{\text { ran }}\) [2] - & - 1:18 & \[
32: 9,69: 6
\] & resident & - 40:8, \\
\hline \[
44: 9,81: 8
\] & & replacemen & [3] - & 40:11, \\
\hline Ran [1] & \multirow[t]{2}{*}{\begin{tabular}{l}
87:14 \\
redundancy
\end{tabular}} & [3] & 3:18, & 4:17, \\
\hline 44:12 & & 16:9 & 37:16, & 85:16, \\
\hline \multirow[t]{2}{*}{rather [1]} & [1] - 53: 8
redundant & 33:13, & 39:9 & 85:18 \\
\hline & \multirow[b]{2}{*}{} & 35:6 & Resident & revision \\
\hline ready [3] & & replacemen & [3] - 2:9, & [2] - \\
\hline ready [3] & 81:11 & ts [3] - & 2:10, 39:6 & 37:14, \\
\hline \[
48: 7, \quad 56: 7
\] & reflect & 31:18, & residents & 39:8 \\
\hline realize & [1] - 86:6 & 32:10, & [6] - & Rick [2] - \\
\hline realize & regardless & \(33: 14\) & 3:17, 6:3, & 2:11, 50:1 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline ridged [1] & \(26: 7,36: 7\) & 14:2, & 54:18, & 19:19 \\
\hline - 52:11 & runs [5] - & 21:17, & 55:10, & serves [1] \\
\hline ring [1] - & 25:11, & 27: 4, & 63:9, & - 44:4 \\
\hline 53:9 & 25:12, & 28:5, & 63:12, & service \\
\hline rising [1] & 32:10, & 29:14, & 72: 6, & [9] - 8:4, \\
\hline - \(24: 4\) & 55:7 & 33:19, & \(72: 12\) & 57:15, \\
\hline Road [4] & Runs [1] - & 34:14, & seeing [4] & 60:12, \\
\hline 37:10, & 25:18 & 37:7, & - 35:8, & 62:8, \\
\hline \[
40: 15
\] & & 41: 6, & 44:15, & 66:7, \\
\hline \[
40: 17
\] & S & 47:7, & 86:18, & 66:15, \\
\hline \multirow[t]{2}{*}{roadway
\[
[1]-81: 6
\]} & safety [1] & 48:19, & 87:2 & 73:15, \\
\hline & - 12:16 & 49:15, & Seeing [1] & 79:10, \\
\hline Roberts & SAID [1 & 60:1, & - 84:18 & 80:4 \\
\hline [4] & \(\frac{7: 4}{}\) & 65:19, & seek [1] - & servicing \\
\hline 37:10, & & 67:15, & 53:3 & [1] - \\
\hline 40:15, & 8:11 & 70:3, & segment & 79:10 \\
\hline 40:16, & scenario & 73:8, & [2] - & session \\
\hline 40:17 & \(\frac{\text { [1] - } 34: 9}{}\) & \[
\begin{aligned}
& 75: 9, \\
& 78: 17,
\end{aligned}
\] & 15:11, & [1] - \\
\hline roll [1] & schedule & 78:17,
\(84: 7\), & 87:9 & 37:16 \\
\hline 42:3 & [2] - & \(84: 71\)
\(88: 14\), & sent [2] - & set [6] \\
\hline \multirow[t]{2}{*}{\(\frac{\text { Room }}{1: 8}\) [1] -} & :17, & \[
88: 19
\] & 36:9, & 6:15, \\
\hline & \[
19: 19
\] & second & 50:13 & 18:13, \\
\hline \multirow[t]{2}{*}{room [4] -} & Schedul & seconded & separate & 36:12, \\
\hline & \(\frac{\text { Schedule }}{[1]-49: 6}\) & \[
\begin{aligned}
& {[1]} \\
& 40: 12
\end{aligned}
\] & [4] - & \(37: 1\), \\
\hline \multirow[t]{2}{*}{\[
\begin{align*}
& 51: 19,  \tag{2}\\
& 59: 4
\end{align*}
\]} & scope & & 19:5, & 78:15, \\
\hline & scope [2] & section & 31:5, & 90:10 \\
\hline round [1] & \[
54: 6
\] & [3] - & \(31: 7\), & SET [1] - \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
route \\
[1]
\end{tabular}} & SEAL [1] - & \[
58: 1, \quad 85: 7
\] & 54:19 & 90:12 \\
\hline & 90:13 & & Separate & set-up [1] \\
\hline routes & \begin{tabular}{l}
second \\
[1]
\end{tabular} & \[
\frac{\text { See }}{72: 17}
\] & \[
\begin{aligned}
& {[1]-} \\
& 52.14
\end{aligned}
\] & \begin{tabular}{l}
\[
-18: 13
\] \\
setups [1]
\end{tabular} \\
\hline \[
\frac{\text { routes }}{-48: 4}
\] & \[
-18: 15
\] & see [13] - & \(52: 14\)
separately & \(\frac{\text { setups }}{-70: 14}\) \\
\hline \[
-48: 4
\] & Second [3] & 26:10, & \[
[2]-
\] & several \\
\hline run [ 4 ] & - 20:9, & 36:5, & 31:9, 86:1 & [3] - \\
\hline \(22: 12\),
28.14 & 20:12, & 43:15, & & \[
1: 18 \text {, }
\] \\
\hline \multirow[t]{2}{*}{\(28: 14\),
\(61: 2\),} & 23:17 & 44: 6, & \(\frac{\text { September }}{[2] ~-~}\) &  \\
\hline & Seconded & 44:7, & [2] - &  \\
\hline 80:17 & [23] - & 47:2, & 4:16, 48:1 sequence & \begin{tabular}{l}
18:15 \\
shadow \\
[7]
\end{tabular} \\
\hline running & 3:12, & 52:19, & \(\frac{\text { sequence }}{[1]-}\) & \[
-25: 8
\] \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline 26:17, & - 4:1, & 74:14, & so.. [1] - & 20:17, \\
\hline 26:18, & 4:6, 4:9, & \(75: 5,84: 3\) & 74:10 & 35:2, \\
\hline 35:14, & 4:13, 5:8, & sign [2] - & So.. [1] - & 40:17 \\
\hline 35:17, & 5:18, & 58:9, 61:1 & 36:16 & southwest \\
\hline 35:18, & 7:12, & sign-off & Solutions & [2] - \\
\hline 54:8 & 7:16, & [1] - 61:1 & [1] - 88:1 & 22:6, 35:3 \\
\hline Sherman & 8:14, & Similar & Somerville & southweste \\
\hline [1] - 66:5 & 8:17, 9:1, & [1] - 85:4 & [5] - & \(\underline{r l y}\) [2] - \\
\hline shifted & 10:4, & site [8] - & 30:13, & 24:5, 66:4 \\
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\hline 90:5, & - 7:13, & 37:1, & 39:14 & [1] - 2:7 \\
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\hline [1] - 74:3 & 15:19, & 40:9, 75:1 & 65:16 & 38:19 \\
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\hline \[
\overline{6: 11},
\] & \(30: 13\), & 18:12 & - 53:8 & - 68:10 \\
\hline 45:1, 87:9 & \[
36: 10 \text {, }
\] & Sitting & sorry [2] & Spell [1] \\
\hline Show [1] - & 43:16, & \[
[2]-3: 6,
\] & \[
-10: 15
\] & -46:15 \\
\hline \[
82: 10
\] & \[
44: 19 \text {, }
\] & \[
76: 18
\] & \[
77: 9
\] & split [1] \\
\hline showing & \[
\begin{aligned}
& 46: 9, \\
& 56: 18,
\end{aligned}
\] & sitting & Sorry [1] & - 82:2 \\
\hline [1] - & \[
\begin{aligned}
& 56: 18, \\
& 56: 19
\end{aligned}
\] & [1] - 59:4 & - 49:19 & Spool [1] \\
\hline 64:16 & 56:19
sidewalk & situation & sort [1] - & - 16:19 \\
\hline \[
\frac{\text { shown }}{-44: 7,}
\] &  & \[
\begin{aligned}
& {[1]-} \\
& 37: 14
\end{aligned}
\] & \[
85: 10
\] & spot [2] \\
\hline \[
\begin{aligned}
& -44: 7, \\
& 44: 16
\end{aligned}
\] & \[
8: 2
\] & \(37: 14\)
size [1] & \(\frac{\text { Sounds }}{-88: 5}\) & \[
\begin{aligned}
& 12: 11, \\
& 14: 1
\end{aligned}
\] \\
\hline shows [8] & \[
\begin{aligned}
& 10: 18, \\
& 52 \cdot 16
\end{aligned}
\] & \[
50: 10
\] & southbound & Square \\
\hline - 36:9, & \[
60: 16,
\] & skill [1] & [1] - & -53:9 \\
\hline 36:10, & \[
62: 14,
\] & - 90:11 & 80:12 & ss [1] - \\
\hline 38:14, & \[
66: 8 \text {, }
\] & slash [1] & southeast & 90:3 \\
\hline 60: 6, & 71:16, & - 21:14 & [1] - 24:6 & staff [1] \\
\hline 63:16, & 71:18, & slight [1] & southeaste & - 18:13 \\
\hline \[
74: 17,
\] & 72:7, & - 38:13 & rly [3] - & start [2] \\
\hline \[
\begin{aligned}
& 77: 11, \\
& 81: 6
\end{aligned}
\] & 72:11, & small [1] & 14:18, & - 31:10, \\
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Siad [1]
\end{tabular} & 72:18, & - 82:2 & 22:5, & 33:4 \\
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\hline SIAD & 74:12, & 11:12, & southerly & [1] - 56:8 \\
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\hline
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\hline [5] - 7:8, & 56:18, & 41:14, & 81:10, & 80:18, \\
\hline 47:17, & 56:19, & 41:15, & 82:7, & 82:2 \\
\hline 49:4, & 58:1, 59:8 & 43:17, & 82:11, & structures \\
\hline 76:5, 79:2 & story [1] & 44:12, & 83:5, 88:3 & [2] - 8:5, \\
\hline stay [1] - & - 51:6 & 47:15, & street & 87:5 \\
\hline 16:5 & Street & 47:16, & [18] - & stuff [3] \\
\hline steam [1] & [81] - & 47:17, & \(6: 6,8: 3\), & - 58:12, \\
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\hline Stephen & 14:18, & 50: 8, & 36:7, & 39:12 \\
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\hline steps [1] & 20:13, & 51:16, & 38:1, & dent [1] - \\
\hline - 12:17 & 20:16, & \[
52: 5
\] & \[
43: 17 \text {, }
\] & 3:8 \\
\hline Steve [2] & 20:17, & \[
\begin{aligned}
& 53: 4, \\
& 52.7
\end{aligned}
\] & \[
44: 10 \text {, }
\] & Superinten \\
\hline -3:7, & 21: 4 , & \[
\begin{aligned}
& 53: 7, \\
& 54: 2,
\end{aligned}
\] & \[
63: 19 \text {, }
\] & dent [1] - \\
\hline \[
46: 14
\] & 22:4, & \[
\begin{aligned}
& 54: 2, \\
& 56: 18,
\end{aligned}
\] & \[
\begin{aligned}
& 70: 19, \\
& 72: 19 .
\end{aligned}
\] & 2:2 \\
\hline still [6] & 22: 6, & \[
56: 19,
\] & \[
\begin{aligned}
& 72: 19, \\
& 74: 9,
\end{aligned}
\] & supply [1] \\
\hline - 12:19, & \(22: 7\),
\(23: 4\), & \[
58: 1,
\] & \[
83: 4,
\] & - 6:15 \\
\hline 32:5, & \(23: 4\),
\(24: 2\), & \[
62: 5,
\] & \[
84: 3, \quad 87: 6
\] & support \\
\hline 48:15, & \[
24: 3,
\] & \[
62: 6,
\] & Streets & [2] - \\
\hline 55:5, & \[
\begin{aligned}
& 24: 3, \\
& 24: 4,
\end{aligned}
\] & \[
62: 9,
\] & \(\frac{\text { Streets }}{[5]-2: 2,}\) & 54:4, 54:5 \\
\hline 57:19, & \[
\begin{aligned}
& 24: 4, \\
& 24: 5,
\end{aligned}
\] & \[
66: 5,
\] & \[
34: 5,
\] & supposed \\
\hline 58:7 & \[
24: 6,
\] & \[
67: 19 \text {, }
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\hline 71:4, & 30:3, & 79:2, & [9] - & [1] - \\
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\hline Story [8] & 34:18, & 79:11, & \[
69: 8,
\] & Surveyed \\
\hline - 50:6, & 35:2, & 80:12, & 70:18, & [1] - \\
\hline 51:16, & 37:10, & 80:13, & \[
72: 18
\] & 31:13 \\
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\hline \(31: 19\), & [3] - & 44:12, & towards & 55:17, \\
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\hline - 2:12 & Telecommun & 90:13 & - 81:6 & 58:10, \\
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\hline switches & [1] - 9:17 & [2] - 1:6, & 23:12, & 90:7 \\
\hline [3] - & ten [2] - & 3:4 & 45:14, & try [2] - \\
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\] & tight [2] & [1] - 90:8 & Two [2] - \\
\hline system [7] & \[
14: 18,
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\hline tabled [2] & theirs [1] & 15:9, & 17:18, & \[
57: 4,
\] \\
\hline - 61:14, & - 37:3 & 15:10, & 20:7 & \[
\begin{aligned}
& 66: 17, \\
& 68: 7,
\end{aligned}
\] \\
\hline 76:15 & therefore & 18:8, 63:8 & trench & \[
68: 7,
\] \\
\hline tag [1] - & [1] & tore [1] & [11] - & \[
\begin{aligned}
& 68: 9, \\
& 70 \cdot 14
\end{aligned}
\] \\
\hline \[
76: 6
\] & \[
45: 12
\] & \[
81: 7
\] & \[
26: 14
\] & \[
\begin{aligned}
& 70: 14 \\
& \text { two-family }
\end{aligned}
\] \\
\hline tagged & Third [5] & total [1] & \[
45: 7
\] & two-family \\
\hline - 76:7 & - 41:14, & \[
-48: 4
\] & \[
\begin{aligned}
& 54: 15, \\
& 55.8
\end{aligned}
\] & \[
\begin{aligned}
& {[1]} \\
& 66: 17
\end{aligned}
\] \\
\hline & 41:15, & Tough [1] & 55:8, & 66:17 \\
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\hline \[
17: 10 \text {, }
\] & 24:3, 26:5 & 80:13, & 45:13 & via [4] - \\
\hline \[
20: 6 \text {, }
\] & 24:3, 26:5
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\hline 23:11, & \[
\frac{e l y}{51 \cdot 19}[1]-
\] & [1] - 62:8 & \[
2: 11,7: 8,
\] & - 40:4 \\
\hline 26:14, & & upgraded & \[
9: 17,
\] & visits [1] \\
\hline 27:3, & University & [1] - & 11:1, & - 14:1 \\
\hline 27:18, & [4] - & 70:14 & 12:2, & VZ [6] - \\
\hline 33:8, & 2:11, & upgrades & 12:2, & 15:1, \\
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\hline 34:8, & 50:2, 50:4 & 68: 4, & 28:11, & 22:8, \\
\hline 34:11, & university & 70:11 & 31:18, & 24:8, \\
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\hline 67:2, & Unless [1] & upstairs & \[
42: 7,
\] & VZ-N020 \\
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\hline 12: 6, & 10:18, & 57:7, & 54:15, & 28:11 \\
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