

Oakleigh Co-housing PUD (PDT 13-1) Remand Open Record Materials

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JANISCH Amy C

From: Paul Conte <pconte@picante-soft.com>
Sent: Saturday, August 15, 2015 4:21 PM
To: Eugene Planning Commission
Cc: DAVIES Anne C; FLOCK Gabriel
Subject: Objection to Submission of New Evidence by Davies in PDT 13-1 Appeal.pdf
Attachments: Objection to Submission of New Evidence by Davies in PDT 13-1 Appeal.pdf

TO: Planning Commission

Please see attached letter.

Paul Conte

**Objection to Submission of New Evidence &
Request to Re-Open the Record
PDT 13-1 Oakleigh Meadows PUD Appeal**

August 15, 2015

Eugene Planning Commission
c/o Anne Davies, City Attorney
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Re: City File No. PDT 13-1; Oakleigh PUD

Dear Commissioners:

This letter serves as my formal objection to the submission of new evidence by Anne Davies, the Eugene City Attorney.

I hereby request that the Planning Commission re-open the record to allow me to submit additional evidence and argument in rebuttal to the new evidence submitted by Davies.

In her August 12, 2015 memo to you regarding the remand of your initial decision approving the Oakleigh Meadows Co-housing PUD, Davies showed an astounding level of unethical behavior in her attempt to manipulate the decision on remand by flouting the legal rules governing this appeal and providing you demonstrably untrue information.

Despite the fact that Davies herself had previously provided you a slanted and incomplete interpretation of the law in an attempt to exclude purported "new evidence" in the testimony by Simon Trautman, Davies herself proceeded to egregiously violate the local code and statutes by stating, as if it were *fact*:

"Second, any of the paved portion of Oakleigh Lane that lies outside the right of way that has existed for 10 years or more will be considered to have been acquired by the City as a prescriptive easement." (Emphasis added.)

First off, it is absolutely not true that, *as a matter of law*, any of the paved portion of Oakleigh Lane that lies outside the right of way that has existed for 10 years or more is *certain* to be considered to have been acquired by the City as a prescriptive easement. Check with any independent and competent attorney, such as Emily Jerome, to ascertain that Davies grossly misrepresented the law in this regard. While it is possible that the City *might* successfully acquire a prescriptive easement, it is by no means an established fact that commissioners should be misled to rely upon, either formally in your decision or informally in forming your personal opinions.

Eugene Planning Commission

August 15, 2015

Page Two

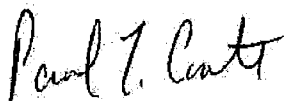
Furthermore, there is *no* evidence in the record that even suggests how long the Oakleigh Lane paving that lies on private property has been in place. So, *as Davies well knows*, the Planning Commission *could not lawfully use* this erroneous claim by Davies, even if it were true. This is clearly another case where Davies is improperly attempting to use misleading statements of the law and an insinuation about the facts on the ground to tilt the Planning Commission against considering the actual facts in the record.

The only relevant fact that the EPC can consider is that a substantial portion of Oakleigh Lane is outside the public right-of-way – a fact which the Hearings Official either ignored or overlooked in the decision that's being appealed.

Finally, even if Davies' purported fact were true, and it is not; as Davies has already explained to you, no one can introduce new facts into the record unless the EPC re-opens the record to all parties.

Davies's sleazy attempt to slip a false, unsubstantiated "fact" into the commissioners' deliberations prejudices my (and other opponents') substantial procedural rights and will ensure another remand unless the EPC now re-opens the record for rebuttal by me and other parties so that you can learn the truth.

Respectfully submitted,



Paul Conte
1461 W. 10th Ave.
Eugene, OR 97402

JANISCH Amy C

From: Bryn Thoms <brynthoms@msn.com>
Sent: Monday, August 17, 2015 9:44 AM
To: Eugene Planning Commission; DAVIES Anne C; FLOCK Gabriel
Subject: Objection to New Evidence - Oakleigh PDT
Attachments: Objection to Submission of New Evidence.pdf

Hi all -

I've attached a letter that objects to the submission of new evidence on the Oakleigh Meadows PDT. Please see attached letter.

Thanks

Bryn Thoms

**Objection to Submission of New Evidence &
Request to Re-Open the Record
PDT 13-1 Oakleigh Meadows PUD Appeal**

August 16, 2015

Eugene Planning Commission
c/o Anne Davies, City Attorney
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Re: City File No. PDT 13-1; Oakleigh PUD

Dear Commissioners:

This letter serves as my formal objection to the submission of new evidence by Anne Davies, the Eugene City Attorney.

I hereby request that the Planning Commission re-open the record to allow me to submit additional evidence and argument in rebuttal to the new evidence submitted by Davies.

In her August 12, 2015 memo to you regarding the remand of your initial decision approving the Oakleigh Meadows Co-housing PUD, Davies showed an astounding level of unethical behavior in her attempt to manipulate the decision on remand by flouting the legal rules governing this appeal and providing you demonstrably untrue information.

Despite the fact that Davies herself had previously provided you a slanted and incomplete interpretation of the law in an attempt to exclude purported "new evidence" in the testimony by Simon Trautman, Davies herself proceeded to egregiously violate the local code and statutes by stating, as if it were *fact*:

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Eugene Planning Commission

August 16, 2015

Furthermore, there is *no* evidence in the record that even suggests how long the Oakleigh Lane paving that lies on private property has been in place. Nor has there been any mention of a prescribe easement on Oakleigh Lane. So, *as Davies well knows*, the Planning Commission *could not lawfully use* this erroneous claim by Davies, even if it were true. This is clearly another case where Davies is improperly attempting to use misleading statements of the law and an insinuation about the facts on the ground to tilt the Planning Commission against considering the actual facts in the record.

The only relevant fact that the EPC can consider is that a substantial portion of Oakleigh Lane is outside the public right-of-way – a fact which the Hearings Official either ignored or overlooked in the decision that's being appealed.

Finally, even if Davies' purported fact were true, and it is not; as Davies has already explained to you, no one can introduce new facts into the record unless the EPC re-opens the record to all parties.

Davies' poor attempt to slip a false, unsubstantiated "fact" into the commissioners' deliberations prejudices my (and other opponents') substantial procedural rights and will ensure another remand unless the EPC now re-opens the record for rebuttal by me and other parties so that you can learn the truth.

Respectfully submitted,



Bryn Thoms
135 Oakleigh Lane
Eugene OR, 97404

From: John B. Fenn III (via Google Docs) <johnfenn3@gmail.com>
Sent: Monday, August 17, 2015 10:38 AM
To: Eugene Planning Commission
Cc: DAVIES Anne C; FLOCK Gabriel
Subject: Objection to Submission of New Evidence: Oakleigh Meadows PUD
Attachments: Objection to Submission of New Evidence Form Letter.pdf

John B. Fenn III has attached the following document:



Objection to Submission of New Evidence Form Letter



Hello- Attached please find a letter I would like to submit to the Eugene Planning Commission regarding the Oakleigh Meadows PUD.

Sincerely,
John Fenn

Google Docs: Create and edit documents online.



**Objection to Submission of New Evidence &
Request to Re-Open the Record
PDT 13-1 Oakleigh Meadows PUD Appeal**

August 16, 2015

Eugene Planning Commission

c/o Anne Davies, City Attorney
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Re: City File No. PDT 13-1; Oakleigh PUD

Dear Commissioners:

This letter serves as my formal objection to the submission of new evidence by Anne Davies, the Eugene City Attorney.

I hereby request that the Planning Commission re-open the record to allow me to submit additional evidence and argument in rebuttal to the new evidence submitted by Davies.

In her August 12, 2015 memo to you regarding the remand of your initial decision approving the Oakleigh Meadows Co-housing PUD, Davies showed an astounding level of unethical behavior in her attempt to manipulate the decision on remand by flouting the legal rules governing this appeal and providing you demonstrably untrue information.

Despite the fact that Davies herself had previously provided you a slanted and incomplete interpretation of the law in an attempt to exclude purported "new evidence" in the testimony by Simon Trautman, Davies herself proceeded to egregiously violate the local code and statutes by stating, as if it were *fact*:

"Second, any of the paved portion of Oakleigh Lane that lies outside the right of way that has existed for 10 years or more will be considered to have been acquired by the City as a prescriptive easement." (Emphasis added.)

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Furthermore, there is *no* evidence in the record that even suggests how long the Oakleigh Lane paving that lies on private property has been in place. Nor has there been any mention of a prescribe easement on Oakleigh Lane. So, *as Davies well knows*, the Planning Commission *could not lawfully use* this

Page 1 of 2

Eugene Planning Commission

August 16, 2015

erroneous claim by Davies, even if it were true. This is clearly another case where Davies is improperly attempting to use misleading statements of the law and an insinuation about the facts on the ground to tilt the Planning Commission against considering the actual facts in the record.

The only relevant fact that the EPC can consider is that a substantial portion of Oakleigh Lane is outside the public right-of-way – a fact which the Hearings Official either ignored or overlooked in the decision that's being appealed.

Finally, even if Davies' purported fact were true, and it is not; as Davies has already explained to you, no one can introduce new facts into the record unless the EPC re-opens the record to all parties.

Davies's poor attempt to slip a false, unsubstantiated "fact" into the commissioners' deliberations prejudices my (and other opponents') substantial procedural rights and will ensure another remand unless the EPC now re-opens the record for rebuttal by me and other parties so that you can learn the truth.

Respectfully submitted,

John Fenn
111 Oakleigh Lane
Eugene OR, 97404

JANISCH Amy C

From: Sandy Thoms <sandythoms@msn.com>
Sent: Monday, August 17, 2015 10:10 AM
To: Eugene Planning Commission; DAVIES Anne C; FLOCK Gabriel
Subject: Objection to New Evidence
Attachments: Objection to Submission of New Evidence.pdf

Please see the attached letter as my official objection to new evidence.

Sandy Thoms

**Objection to Submission of New Evidence &
Request to Re-Open the Record
PDT 13-1 Oakleigh Meadows PUD Appeal**

August 16, 2015

Eugene Planning Commission
c/o Anne Davies, City Attorney
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Re: City File No. PDT 13-1; Oakleigh PUD

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Eugene Planning Commission

August 16, 2015

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Respectfully submitted,

Sandy Thoms
135 Oakleigh Lane
Eugene OR, 97404

JANISCH Amy C

From: Wild Star <dazzle_shine@yahoo.com>
Sent: Monday, August 17, 2015 11:12 AM
To: Eugene Planning Commission; DAVIES Anne C; FLOCK Gabriel
Cc: Rachel Stedman
Subject: Objection of New Evidence Letter
Attachments: Objection to Submission of New Evidence Form Letter.docx

Attached is letter for Planning Commission for the Oakleigh Meadows PUD.
Thank you. Rachel Stedman

visit our neighborhood
www.saveoakleighlane.com

**Objection to Submission of New Evidence &
Request to Re-Open the Record
PDT 13-1 Oakleigh Meadows PUD Appeal**

August 17, 2015

Eugene Planning Commission
c/o Anne Davies, City Attorney
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Re: City File No. PDT 13-1; Oakleigh PUD

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Eugene Planning Commission

August 16, 2015

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Respectfully submitted,

Rachel Stedman
131 Oakleigh Lane
Eugene OR, 97404

JANISCH Amy C

From: scott stedman <scottbstedman@live.com>
Sent: Monday, August 17, 2015 11:53 AM
To: Eugene Planning Commission; DAVIES Anne C; FLOCK Gabriel
Subject: Objection of New Evidence
Attachments: Objection to Submission of New Evidence Form Letter.docx

Attached is a letter to the Eugene Planning Commission for the Oakleigh Meadow P.U.D.

Thank You,

Scott Stedman
131 Okaleigh Ln
Eugene, OR 97404

**Objection to Submission of New Evidence &
Request to Re-Open the Record
PDT 13-1 Oakleigh Meadows PUD Appeal**

August 17, 2015

Eugene Planning Commission
c/o Anne Davies, City Attorney
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Re: City File No. PDT 13-1; Oakleigh PUD

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Eugene Planning Commission

August 16, 2015

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Respectfully submitted,

Scott Stedman
131 Oakleigh Lane
Eugene OR, 97404

JANISCH Amy C

From: Sandy Thoms <sandythoms@msn.com>
Sent: Tuesday, August 18, 2015 11:18 PM
To: Eugene Planning Commission; DAVIES Anne C; FLOCK Gabriel
Subject: Burden of Proof

I would like to ask why the burden of proof has been put on the appellant to show that the paved surface of Oakleigh Lane lies partly on private property and not entirely in the right of way?

There is enough evidence currently in the record, outside of the one aerial photograph in question, to show that at least part of the paved surface is on private property, whether it be 6 feet or slightly less.

Oakleigh Meadow's North property line lies clearly about 6 feet into the paved road (as stated by the Hearings official and clearly shown on the OMC site plan, undisputed.) I live there and can walk out and measure the engineering pin to be about 5.25 feet actually, but in the record, the HO says 6, so I must say 6 feet. It is also clear that the North property line of the 3 tax lots to the west are a continuous straight line extending west from OMC's property line- there are no jogs as clearly show in the city plat maps. It is simple to see then, that those 3 tax lots also extend 6 feet into the pavement.

Shouldn't the burden now be on the public works department to clarify how much of the paved surface is on private property and how much is in the ROW? Doesn't the City have the means to show exactly where those property lines lie? Why is that burden being put on the appellant? We pointed out an error and the City's job should be to clarify it, truthfully.

I also find it unfair that the record is now open but not to the actual appellants. If the City or the applicant submits new evidence, then the appellants should be able to submit new evidence too. I believe there is an ORS that states that, as you should know.

Thank you for your time in explaining why the burden is not on the City now to try and prove that all 19 feet are IN the public ROW.

Extremely concerned about the safety and functionality of my street,

Sandy Thoms
541-543-1495
135 Oakleigh Lane

From: Paul Conte <pconte@picante-soft.com>
Sent: Thursday, August 20, 2015 10:21 AM
To: Eugene Planning Commission; FLOCK Gabriel; DAVIES Anne C
Subject: Request to Submit Testimony in re-opened record re PDT 13-1.pdf
Attachments: Request to Submit Testimony in re-opened record re PDT 13-1.pdf

August 20, 2015 10:20 a.m.

Please acknowledge receipt and read the attached letter:
Request to Submit Testimony in re-opened record re PDT 13-1.pdf

Paul Conte

**Request to Submit Testimony re PDT 13-1
and Precautionary Objections**

August 20, 2015

Eugene Planning Commission
c/o Gabe Flock, Planner
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Submitted by: Paul Conte
1461 W. 10th Ave.
Eugene, OR 97402

Re: City File No. PDT 13-1; Oakleigh PUD
Testimony for re-opened record

Dear Commissioners:

I am requesting to be allowed to submit testimony, including evidence and argument, into the record for the above mentioned case.

On August 17, 2015, the Eugene Planning Commission (EPC) voted to re-open the record. However, the EPC limited who could submit testimony to the applicant, Simon Trautman, and their respective representatives.

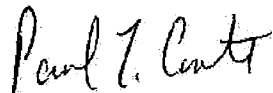
ORS 197.763(7) requires:

When a local governing body, planning commission, hearings body or hearings officer reopens a record to admit new evidence, arguments or testimony, any person may raise new issues which relate to the new evidence, arguments, testimony or criteria for decision-making which apply to the matter at issue. (Emphasis added.)

Allowing the applicant and Mr. Trautman to submit additional evidence and argument without also allowing me and other participants in this matter to submit testimony would be unfair and prejudice my substantial rights.

As a precautionary measure, I am objecting to the EPC rejecting my forthcoming testimony, including new evidence submitted by August 31, 2015 and arguments submitted by the deadline set by the EPC.

Respectfully submitted,



Paul Conte

JANISCH Amy C

From: Sandy Thoms <sandythoms@msn.com>
Sent: Friday, August 21, 2015 11:56 AM
To: Eugene Planning Commission; DAVIES Anne C; FLOCK Gabriel
Subject: Request to submit new evidence
Attachments: Request to Submit Testimony in re-opened record re PDT 13-1.pdf

Please submit this into the public record.

Sandy Thoms

**Request to Submit Testimony re PDT 13-1
and Precautionary Objections**

August 21, 2015

Eugene Planning Commission
c/o Gabe Flock, Planner
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Submitted by: Sandy Thoms
135 Oakleigh Lane
Eugene, OR 97404

Re: City File No. PDT 13-1; Oakleigh PUD
Testimony for re-opened record

Dear Commissioners:

I am requesting to be allowed to submit testimony on behalf of our neighborhood appeals group, including evidence and argument, into the record for the above mentioned case.

On August 17, 2015, the Eugene Planning Commission (EPC) voted to re-open the record. However, the EPC limited who could submit testimony to the applicant, Simon Trautman, and their respective representatives. The original appellants should also be allowed to submit testimony.

ORS 197.763(7) requires:

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As a precautionary measure, I am objecting to the EPC rejecting my forthcoming testimony, including new evidence submitted by August 31, 2015 and arguments submitted by the deadline set by the EPC.

Respectfully submitted,

Sandy Thoms

From: Bryn Thoms <brynthoms@msn.com>
Sent: Tuesday, August 25, 2015 10:16 AM
To: Eugene Planning Commission; DAVIES Anne C; FLOCK Gabriel
Subject: Request to submit new evidence
Attachments: Request to Submit Testimony in Re-opened Record PDT 13-1.pdf

Please submit the attached into the record.

BTW - I apologize for getting frustrated with the process at the deliberations meeting on Monday the 17th. Its just really hard watching City staff try so hard to keep Trautman's testimony out of the record. Annotations such as highlighting and arrows are the same as some one standing up in a Hearing and pointing at something on a map that is already in the record. We don't ignore that in the quasi-judicial process, why should the highlighting and an arrow be ignored, or even a black spot from copying?

In addition, seeing City staff blatantly ignore the fact that the issue of 13 ft of pavement in the Oakleigh ROW west of OMC's property was already in the record. Becky Taylor's RLID/ORMAP figure, along with Poage's ROW presentation, along with Dixons' north prop line detail, along with the HO's information in the HO Decision Document that explicitly states that there is only 13 ft of pavement in the ROW north of OMC's property,...all support the issue. Based on information already in the record it is essentially impossible for the current pavement width within the ROW to be more than 13 ft. west of OMC property. I find it very hard to believe that City staff didn't know this before the deliberations meeting on the 17th.

On a separate note, the applicant knew this even before submitting the application 2 years ago. Like they really want to support the neighborhood's safety. They're just high and mighty narcissistic developers.

Thanks

**Request to Submit Testimony re PDT 13-1
and Precautionary Objections**

August 25, 2015

Eugene Planning Commission
c/o Gabe Flock, Planner
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Submitted by: Bryn Thoms
135 Oakleigh Lane
Eugene, OR 97404

Re: City File No. PDT 13-1; Oakleigh PUD
Testimony for re-opened record

Dear Commissioners:

I am requesting to be allowed to submit testimony, including evidence and argument, into the record for the above mentioned case.

On August 17, 2015, the Eugene Planning Commission (EPC) voted to re-open the record. However, the EPC limited who could submit testimony to the applicant, Simon Trautman, and their respective representatives.

ORS 197.763(7) requires:

When a local governing body, planning commission, hearings body or hearings officer reopens a record to admit new evidence, arguments or testimony, any person may raise new issues which relate to the new evidence, arguments, testimony or criteria for decision-making which apply to the matter at issue. (Emphasis added.)

Allowing the applicant and Mr. Trautman to submit additional evidence and argument without also allowing me and other participants in this matter to submit testimony would be unfair and prejudice my substantial rights.

As a precautionary measure, I am objecting to the EPC rejecting my forthcoming testimony, including new evidence submitted by August 31, 2015 and arguments submitted by the deadline set by the EPC.

Sincerely,



Bryn Thoms

Appeal Testimony re PDT 13-1

August 31, 2015

Eugene Planning Commission
c/o Gabe Flock, Planner
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Submitted by: Simon Trautman

Send notices to: 2303 C Street, Bellingham, WA 98225

Re: City File No. PDT 13-1; Oakleigh PUD
Opposition to Hearings Official Decision

Dear Commissioners:

On August 17, 2015, the Planning Commission voted to re-open the record for new evidence and arguments. (Attachment A provides a transcript of the relevant comments made by commissioners and staff during this meeting, and is incorporated herein.)

The motion adopted by the Planning Commission set the following time limits:

- New evidence allowed through close-of-business on August 31st.
- Rebuttal arguments through close-of-business September 4th.
- Final applicant rebuttal through close-of-business September 11th.

The motion adopted by the Planning Commission allowed only the applicant and myself and our legal representatives to contribute new, written testimony.

The motion adopted by the Planning Commission limited the scope to right-of-way, pavement widths and parking, in relation to the safety of Oakleigh Lane.

Notwithstanding the adopted motion, ORS 197.763(7) requires:

“When a local governing body, planning commission, hearings body or hearings officer reopens a record to admit new evidence, arguments or testimony, any person may raise new issues which relate to the new evidence, arguments, testimony or criteria for decision-making which apply to the matter at issue.”

This letter provides further testimony to supplement the testimony I submitted on July 27, 2015.

RECEIVED

AUG 31 2015

CITY OF EUGENE
BUILDING & PERMIT SVCS

RECEIVED AFTER PUBLIC HEARING
BUT PRIOR TO CLOSE OF RECORD

In addition, following the discussion of traffic-related issues, I document how the proposed PUD fails to comply with approval criteria EC 9.8320(7) and EC 9.8320(11)(k) with respect to adequate public facilities required for fire protection.

To counter any attempt to exclude portions of my prior testimony, I have resubmitted it during the period when the record has been re-opened to evidence, as well as argument.

I want to express my respect and appreciation to Commissioners Barofsky, Mills and Baker for respecting the public process and allowing me to provide full testimony.

PRELIMINARIES

Before reading further, please look at Attachment B, which provides an updated diagram and table summarizing the dedicated Oakleigh Lane right-of-way. Although the information on this attachment is not (and never was) "new evidence,"¹ your re-opening the record to new evidence removes any doubt about of your legal ability to refer to this information in your findings.

I am also submitting a survey by a licensed surveyor that confirms the specific dimensions and locations of Oakleigh Lane right-of-way and pavement along the easternmost segment of Oakleigh Lane. See Attachment C, incorporated herein. This recent survey is augmented by a survey conducted in June 2011 and provided as Attachment D, incorporated herein.²

I would also suggest that you view the videos and photographs of Oakleigh Lane that accompany this testimony, and which are incorporated herein by reference. The video files provided include:

- **17August2015videoOfOakleighLane.mp4** – A visual examination of the pavement at the northwest corner of the proposed development (as marked by a "Poage Eng & Survey Inc.) survey marker.
- **2015August30PedestriansBicyclistAndVehicleSharingTheOakleighLanePavement.mp4** – A visual demonstration of the shared use of Oakleigh Lane by pedestrians, bicyclists, moving vehicles and parked cars.
- **2015August30TruckLeavingOakleighLaneResidence.mp4** – A visual demonstration of the clearance for vehicles traversing Oakleigh Lane between legally-parked cars.

With that context in mind, you will see that there is clear and compelling evidence that Oakleigh Lane does not meet Eugene Code (EC) mandatory approval criteria and adopted standards. Further, Oakleigh Lane falls far short of reasonable right-of-way, pavement and clearance for a safe and adequate street for emergency vehicles according to both Oregon Department of Transportation (ODOT) neighborhood street design guidelines (which are referenced in Eugene Fire Code) and the federal Occupational Safety and Health Administration (OSHA) recommendations.

¹ See the August 11, 2015 Letter from William Kabeiseman to Anne Davies clarifying the applicable statutes. Attachment E, incorporated herein.

² Attachment N provides supporting records of the Oakleigh Plat and deed descriptions for Tax Lots 5800, 5900 and 10100. The boundaries on Oakleigh Lane form a continuous straight line and meet the northern boundary of the proposed development site.

LEGAL BURDEN OF PROOF REMAINS ON THE APPLICANT

It would behoove the commissioners, particularly those commissioners who have demonstrated a tendency to require the *appellants* to prove that Oakleigh Lane *will* be unsafe, to spend at least a few minutes discussing and understanding the statutory burden of proof that falls *only upon the applicant*, even during an appeal. If, after you have considered all relevant evidence and arguments, there remains any uncertainty regarding whether or not the evidence would *convince* a reasonable person that Oakleigh Lane *would be safe*, a commissioner is legally required to find that the applicant has failed to satisfy their burden to prove the application complies with the mandatory approval criteria. You cannot rely on findings that the appellants have not “proved” their case, but instead must require that the *applicant* has *proven* that the application complies.

In this case, there is no clear and convincing evidence in the record to be certain that Oakleigh Lane will have (at least) an unobstructed, 20-foot right-of-way and 19 feet of pavement available for public use for its entire length. And that was the *assumed* condition of Oakleigh Lane that the Hearings Official (and Planning Commission) previously relied upon.

With evidence now proving that Oakleigh Lane can be obstructed by legally-parked cars and that at least 250 feet of Oakleigh Lane has less than 16 feet of pavement width within the public right-of-way, the Planning Commission must reject the analysis and findings of the Hearings Official (and the prior Planning Commission) decision.

Reemphasizing: It is not in any way the appellants’ burden to prove the right-of-way *will* be obstructed or that the pavement *won’t* be available for public use. If the Planning Commission were to transfer the burden of proof to the appellants, there are a long line of LUBA and court decisions that make it fairly certain an approval would be remanded.

Furthermore, the additional evidence submitted in this testimony will indeed demonstrate that, even if there were an unobstructed 20-foot right-of-way and 19 feet of pavement available for public use (and there is not), that condition would not meet adopted City Code and street standards and would not come anywhere close to providing a safe street for emergency vehicles.

My testimony of July 27, 2015 provides a thorough analysis of the legal requirements of the mandatory approval criteria in EC 9.8320(5), (6) and (11)(b); and these arguments are not repeated in this testimony. The following testimony focuses on the facts regarding the current condition of Oakleigh Lane and the appropriate code, standards and guidelines for evaluating whether or not:

- Oakleigh Lane in its current condition would provide a safe and adequate street (as required by EC 9.8320(5));
- The additional traffic impacts arising from the proposed PUD would not be a significant risk to public safety (as required by EC 9.8320(6));
- The additional traffic would not be an impediment to emergency response (as also required by EC 9.8320(6)); and
- Oakleigh Lane satisfies applicable standards for right-of-way and pavement widths (as required by EC 9.8320(11)(b)).

YES, THERE IS AN ELEPHANT IN THE ROOM

There is now a survey by a licensed surveyor that establishes reliably that a substantial portion Oakleigh Lane pavement lies on private property, outside the public right-of-way. (See Attachment C, as well as Attachment D.) Along the 250-foot segment of Oakleigh Lane immediately west of the development site, the pavement on public right-of-way narrows to as little as 13.7 feet. For perspective, this is less than the City's minimum requirement for pavement of a one-way alley. Neighborhood residents regularly *and legally* park their cars on the areas of private property that have pavement. Thus, it's not a mere technicality that the pavement isn't 19 feet wide in the right-of-way – the cars parked on the pavement reduce the “clear passage” width of the pavement to approximately 14 to 16 feet along this stretch of Oakleigh Lane.

The situation along this same stretch is exacerbated because the right-of-way on the north side is obstructed by cars that regularly park on gravel in the right-of-way. (See accompanying video file 2015August30TruckLeavingOakleighLaneResidence.mp4.) According to Eugene Parking Enforcement staff, this is legal. (See Attachment F, incorporated herein.) Thus, the unobstructed right-of-way itself is narrowed by several feet to approximately 16 to 17 feet. (See accompanying video file 17August2015videoOfOakleighLane.mp4.)

These facts are now reliably established and cannot be ignored by the Planning Commission.

- § These facts require the Planning Commission to find that Oakleigh Lane does not in its current condition provide a “safe and adequate transportation system, as required by EC 9.8320(5).
- § These facts require the Planning Commission to find that the additional traffic that would be generated by residents of the proposed PUD would present a risk to public safety, specifically by impeding emergency vehicles on Oakleigh Lane in its current condition, thus conflicting with EC 9.8320(6). In addition, these facts establish that the narrow clear passage width presents a risk to pedestrians and bicyclists who must ride in same pathway as vehicles, as demonstrated in the video file 2015August30PedestriansBicyclistAndVehicleSharingTheOakleighLanePavement.mp4.
- § These facts require the Planning Commission to find that Oakleigh Lane in its current condition lacks adequate pavement in the public right-of-way, as well as improvements such as sidewalks, to meet City Standards, as required by EC 9.8320(11)(b).

These findings would be sufficient to deny the PUD application outright, and that is the right course of action to take.

However, if the commissioners are determined to approve the application despite these serious deficiencies, to be reasonable and legally-defensible such a decision would require that:

- a. The Planning Commission must adopt findings that, as a matter of law, it is feasible to widen and improve Oakleigh Lane so that it meets the three approval criteria, above; and
- b. The Planning Commission must adopt condition(s) of approval that, before the Final PUD is approved, Oakleigh Lane be widened and improved to the specific width and improvements that would satisfy all of the three approval criteria, above.

My argument is not that it is infeasible, as a matter of law, for Oakleigh Lane to be widened and improved, as required. That is not the issue here.

And, as explained in my prior testimony, my argument is not that the City must require the applicant to actually provide the right-of-way and improvements beyond their *proportional* obligation.

My argument is that the required right-of-way and pavement width must be feasible and the conditions of approval must be adequate to ensure they will be put in place

However, it should be clear that, even if the Planning Commission were to rely on the same statements in the Public Works report and the same findings of compliance, based on a 20-foot unobstructed right-of-way and 19-foot-wide pavement on public property, there was not reliable evidence in the record approved by the Hearings Official that addressed the *true* conditions of Oakleigh Lane.

AN ALTERNATIVE SAFETY ANALYSIS REQUIRES A COMPLETE "REDO"

It was the applicant's responsibility to present an application that included the true facts regarding Oakleigh Lane and an analysis of compliance with EC 9.8320(5), (6) and (11) based on an accurate description of Oakleigh Lane. The applicant did not do that, whether by intent or lack of due-diligence, and the applicant cannot at this late hour change the fundamental elements of their application with respect to the physical environment and do a wholly new analysis, based on facts that are substantially different than were presented in the application.

Accordingly, the Planning Commission should take care not to rely on any new traffic safety analysis submitted by a consultant representing the applicant's interests, and which the public would have no opportunity to review or address with contrary evidence or raise additional appeal issues. An entirely new analysis would only be permissible through submittal of a new Tentative PUD application that would be subjected to the full public process for approval.

Pursuant to ORS 197.763(6)(c), ORS 197.763(7) and other applicable statutory requirements, I am hereby requesting, in writing, that I (and others) be allowed to submit evidence in response to any new traffic safety analysis submitted by the applicant or city staff.

THE "RED HERRING" IN THE ROOM

The Deputy City Attorney has thrown a "red herring" into the metaphorical room.

In her August 12, 2015 memo to the Planning Commission, Davies advised commissioners that: "[A]ny of the paved portion of Oakleigh Lane that lies outside the right of way that has existed for 10 years or more will be considered to have been acquired by the City as a prescriptive easement." (Emphasis added.)

Ironically, the law firm engaged by OMC published a 2007 document "Law of Easements: Legal Issues and Practical Considerations" that contradicts Davies' statement:

"A prescriptive easement requires that the claimant establish by clear and convincing evidence that his use was: 1) for the prescriptive period (10 years under ORS 12.050); 2) open, notorious, and adverse to the rights of the servient owner; and 3) continuous and uninterrupted according to the nature of the use." (See attachment G, incorporated herein.)

Planning commissioners must base approval of development applications on verifiable facts; and the City's right to a prescriptive easement is uncertain at best.

Any such claim that the paving that currently lies on private property is ensured to remain available for public use cannot be relied upon because there is no basis for concluding that this would be certain as a matter of law.

The only lawful way that the Planning Commission may take hypothetical future actions, such as a "prescriptive easement," into account is in determining feasibility. In this case, it is just as "feasible," as a matter of law, that the property owners on which the pavement lies may legally remove the pavement and prohibit trespass by vehicles.³

The eventual outcome regarding the status of the pavement that now lies on private property is uncertain, period. (See the August 13, 2015 e-mail from William Kabeiseman to Anne Davies, in Attachment H, incorporated herein. See also the August 25, 2015 letter from Lauren Regan to the City Manager, Attachment I, incorporated herein.)

OBSTRUCTION OF EMERGENCY VEHICLES, IF NOT JUSTICE

Further, there is no evidence in the record that the essential condition in the Public Works report that "Oakleigh Lane remain unobstructed by parked vehicles" can be met, and both the City and County have declined to even provide assurance that they would attempt to prohibit parking in the right-of-way. Note that the only evidence in the record addressing the legality of such parking reliably establishes that such parking is considered legal by the Eugene City Parking Enforcement staff person. (See page 1 of e-mail thread in Attachment F.)

There are two defensible alternatives available to the Planning Commission:

³ It bears noting that the survey in Attachment B notes that "The public may have a prescriptive easement for the continued use of that area." The only easements that actually exist are those depicted in the wider portions of the right-of-way. If the City actually had any prescriptive easements, those would have been reflected on the survey. The City does not have any prescriptive easements in this area.

- a. Deny the application. This would allow the applicant to resubmit an application with additional analysis and argument addressing the true conditions on Oakleigh Lane. The applicant might even be successful in purchasing additional easements that would remove some or all of the concerns.
- b. Alternately, the Planning Commission could require that Oakleigh Lane at the very minimum meet conditions of unobstructed right-of-way and pavement width that the Planning Commission believed were adequate.

The commissioners should realize that anything less than this would be legally indefensible and almost certainly result in another remand.

(Commissioners should also not overlook the Hearings Official's error in not requiring a 45-foot right-of-way *adjacent* to the subject property as I covered beginning on page 12 of my July 27, 2015 testimony.)

APPLICABLE ADOPTED STREET STANDARDS

My July 27, 2015 testimony thoroughly addressed the direct legal requirements stated in EC 9.8320(5) and (6) that Oakleigh Lane must meet the adopted City street standards for right-of-way and pavement width. There is no dispute that Oakleigh Lane would fall within the category of Low Volume Residential street if the proposed PUD were built. For this category of street, EC Table 9.6870 requires a minimum of 45 feet of right-of-way and a 20 foot paving width.

The City's "Arterial and Collector Street Plan" provides additional detail, showing that the 20-foot minimum width is appropriate only for a Low Volume Residential street *with no parking*. (Rec 864) Wider pavement is necessary for streets, such as Oakleigh Lane, on which there is parking.

It is incontestable that Oakleigh Lane does not have the required right-of-way or pavement width for its entire length.

Oakleigh Lane has more than 250 feet that has only a 20 foot right-of-way, which can be, has been, and likely will be, legally obstructed by cars parked on the north side, outside the pavement.

Oakleigh Lane has many numerous places where the pavement is less than 20 feet, and has at least 250 feet on which the paving within the public right-of-way is only 13.7 feet to 15.7 feet wide. Cars can legally park on the pavement that's on private property, thus obstructing its use.

It's worth noting that this 250-foot segment of Oakleigh Lane doesn't even meet the adopted city standards for a two-way *alley*.

The applicant's attorney and the Deputy City Attorney have tried to circumvent the standards adopted by City Council using two primary tactics:

- Contorting the meaning of EC 9.8320(5) and (6) in such a way that would allow the 800 feet of Oakleigh Lane that is not adjacent to the development property to essentially have no particular requirements for right-of-way or pavement. In their legal view,

Oakleigh Lane could be an eight-foot-wide, four-wheel drive, dirt track, and the proposed PUD would satisfy the requirements of EC 9.8320(5) and (6).

Look at the accompanying videos of the Oakleigh Lane families and kids who live on Oakleigh Lane, and who must walk and bicycle in the roadway, and ask yourselves whether this twisting of the law serves the Eugene Code's overarching purpose "to protect and promote the health, safety, and general welfare of the public."

- Relying on a conclusory statement in the Public Works report— regarding *only* the requirements in EC 9.8320(11) for paving – that "Oakleigh Street will continue to adequately provide for motorized and foot traffic, as well as for emergency vehicles and delivery services, provided the paved surface is not blocked by parked vehicles."

And yet, as has been clearly demonstrated, even before my testimony – Oakleigh Lane is and will be obstructed by parked vehicles, including ones parked legally.

The applicant's attorney and the Deputy City Attorney want commissioners to ignore this explicit condition stated in the Public Works report. But you cannot do that lawfully.

THE "THIRD ELEPHANT" – APPLICABLE EMERGENCY RESPONSE STANDARDS

Here is the third elephant in the room that the applicant and city staff chose to ignore – adopted Eugene Fire Code.

As I will walk you through presently, Eugene Fire Code requires several things for the public safety, which are directly applicable to the failure of the application to meet the requirements of EC 9.8320(5) and (6):

1. The new buildings in the proposed PUD must be served by fire apparatus access road – "[a] road that provides fire apparatus access from a fire station to a facility, building or portion thereof. (Emphasis added.)

In this case, the entirety of Oakleigh Lane must be part of that fire apparatus access road.

2. "Facilities, buildings or portions of buildings hereinafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 80,000 pounds."
3. "The number of *dwelling units* on a single fire apparatus access road shall not be increased unless fire access roads will connect with future development" (Italics in original.)
4. The fire apparatus road "shall be in accordance with this appendix [defining standards] and all ... regulations and standards adopted by the City of Eugene."
5. "Fire apparatus roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders"
6. "Dead-end fire apparatus access roads in excess of 150 feet shall be provided with width [as follows] 501-750 Length – 26 feet width; over 750 feet needs special approval."

7. "Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet, exclusive of shoulders."
8. "Fire apparatus roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in [referenced standards] shall be maintained at all times."
9. "Fire lane signs ... shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide."

I anticipate that the applicant's attorney, and potentially even the Deputy City Attorney, will try and lead you to believe that none of the adopted Eugene Fire Code regulations apply. That is not true; and if the Planning Commission were to ignore these legal requirements, this application would land right back in your lap.

But even if the PUD somehow didn't have to meet these regulations in this land use decision, they are adopted Eugene Code that tell you clearly what is required for a new development at the end of an exceptionally long and narrow dead-end road to provide a "safe and adequate" road on which the resulting increase in traffic would not be an impediment to emergency response.

And, this is not a matter of inches. Oakleigh Lane is grossly lacking in an unobstructed clear-way and sufficient pavement width and strength to allow safe passage and deployment of fire trucks and other emergency vehicles to the PUD.

There's one more legal sleight-of-hand that you may be subjected to. Eugene's Fire Code (as I explain in more detail below) is based on adopting the Oregon Fire Code (OFC) with specific, local amendments. Oregon Fire Code is similarly based on adopting the International Fire Code (IFC) with amendments. Most of the specific requirements for road widths are found in the IFC and adopted into the OFC and Eugene Fire Code.

There is a special provision, however, in the Oregon Revised Statutes that specifically states that local jurisdictions may adopt street standards, e.g., for street widths and paving, that supersede the IFC, OFC or local fire code standards. Here are the relevant parts of the statute:

ORS 368.039 Road standards adopted by local government supersede standards in fire codes ... consultation with fire agencies

- (1) When the governing body of a county or city adopts specifications and standards, including standards for width, for roads and streets under the jurisdiction of the governing body, such specifications and standards shall supersede and prevail over any specifications and standards for roads and streets that are set forth in a uniform fire code adopted by the State Fire Marshal, a municipal fire department or a county firefighting agency.
...
- (3) Before adopting or amending any comprehensive plan, land use regulation or ordinance that establishes specifications and standards for roads and streets, a governing body of a county or city shall consult with the municipal fire department or other local firefighting agency concerning the proposed

specifications and standards. The county or city governing body shall consider the needs of the fire department or firefighting agency when adopting the final specifications and standards.

The first thing to note is that Eugene City Council has adopted standards for roads and streets in EC 9.6800 through EC 9.6875, and the standards applicable to Oakleigh Lane are found in Table 9.6870 Right-of-Way and Paving Widths. So, if ORS 368.039(1) were interpreted to mean that the City's adopted street standards completely mooted the street standards found in the Eugene Fire Code, then this case is closed because the City street standards require Oakleigh Lane to have a 45-foot right of way, and pavement width of 20 feet, which Oakleigh Lane does not have.

Note that ORS 368.039 is very specific in that only street standards adopted by the governing body, i.e., the Eugene City Council, can supersede the standards in the EFC. The Planning Commission has no authority to ignore or supersede the EFC requirements, except where the adopted street standards in Table 9.6870 conflict, and then the Table 9.6870 must actually be applied.

Put another way, even if the Planning Commission were to accept the ridiculous argument that EC 9.8320(5)(a) doesn't require the entirety of Oakleigh Lane to meet adopted street standards; wherever the adopted street standards do not apply, then the EFC standards are not superseded and do apply.

There is even more to consider, however. The Administrative Order No. 15-14-02-F, which adopted the Eugene Fire Code explicitly states:

"Section 8010 of the Eugene Code 1971 authorizes the City Manager to administratively adopt a fire code for the City of Eugene."

...

EUGENE FIRE CODE
ADMINISTRATIVE RULE R-8.010FC

R-8.010FC-A ADOPTION

The 2012 International Fire Code (IFC) as promulgated by the International Code Council as adopted and amended by the State of Oregon as the 2014 Oregon Fire Code (OFC) is hereby adopted, subject to the additions, deletions, and modifications set forth in this rule, which together constitute the Eugene Fire Code (EFC) This rule is in addition to, and is not exclusive of Administrative Rule R-8.005. References in this rule to "this code" are references to the OFC adopted herein

R-8.010FC-B AMENDMENTS

[Section] 55. Appendix D Section D101.1 of the OFC is amended to provide:

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the Oregon Fire Code and regulations and standards adopted by the City of Eugene. The fire code official

may be guided by the Oregon Department of Land Conservation and Development's Neighborhood Street Design Guidelines, June 2001.

[Section] 56. Appendix D Section D102.2 of the OFC is amended to provide:

D102.1 Access and Loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 80,000 pounds.

Thus, although the statutes allow Eugene to adopt standards for a Low Volume Residential street, such as Oakleigh Lane, that are narrower than the standards in the IFC code, Eugene did not do that.

Instead, section 55, adopted through code provisions adopted by City Council, requires that a fire apparatus access road meet both the OFC requirements and the street standards adopted by the City. Thus, a Low Volume Residential street, such as Oakleigh Lane, that provides the only fire apparatus access road to a new development must have at a minimum a 45-foot right-of-way, and an unobstructed, 20-foot wide pavement of adequate bearing strength.

Further, the Eugene Code doesn't adopt any "clear width" standards to supersede the EFC standards for "clear width," presumably because the right-of-way minimums in EC Table 9.6870 for all categories of street (except alleys) are 40 feet or greater, which is plenty to allow for the EFC requirement of 20 to 26 foot clear width.

Commissioners must reject any attempt by the applicant or Deputy City Attorney to claim that ORS 368.039 somehow allows the Planning Commission to interpret EC 9.8320(5) and (6) to entirely ignore the long stretch of Oakleigh Lane from River Road to the proposed development or to not require that Oakleigh Lane meet adopted street standards and/or Eugene Fire Code fire apparatus access road standards.

EUGENE FIRE CODE REQUIREMENTS PROTECT PUBLIC SAFETY

This section walks you through the 2014 Oregon Fire Code provisions that are adopted into the Eugene Fire Code and found in Attachment J, incorporated herein. Page numbers refer to the numbers at the bottom of the 2014 OFC pages.

"Fire Apparatus Access Road" is defined on page 26 as "A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms, such as *fire lane*, public street, private street, parking lot lane and access roadway."

Oakleigh Lane is the only road that can serve as a fire apparatus access road to the proposed OMC development; and, obviously, the entirety of Oakleigh Lane is necessary to satisfy the definition.

Section 503.1 (page 67) specifies where a fire apparatus access road is required.

503.1 Where required. Fire apparatus roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3. See Appendix D.

503.1.1 Buildings and facilities. *Approved* fire apparatus access roads shall be provided for every facility, building or portion of building hereinafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the first story of the buildings as measured by an *approved* route around the exterior of the building or facility.

(Section 503.1.1 provides exceptions, but none of those apply to the proposed development.)

This section requires the obvious: There has to be a safe way to get fire apparatus to new developments, such as the OMC's proposed 29 condominiums. This can't be accomplished unless all of Oakleigh Lane meets the OMC standards, or, in the alternative, the adopted city street standards.⁴

Section 503.2.1 (page 68) specifies 20 feet as the minimum unobstructed width of a fire apparatus access road. Because ORS 368.039(3) requires that "a governing body of a ... city shall consult with the municipal fire department ... concerning the proposed specifications and standards. The ... city governing body shall consider the needs of the fire department ... when adopting the final specifications and standards," it should come as no surprise that the OFC minimum width corresponds exactly to the minimum pavement width adopted by City Council for two-way alleys, as well as Low Volume Residential streets.

Dead-end roads over 500 feet long, however, fall into a special category (as specified in Section D103.4 and Table D103.4 on page 462) requiring a 26-foot width. And, if a dead-end road is over 750 feet long, as is Oakleigh Lane, even 26 feet isn't enough and the road requires "special approval" before it can be considered as a fire apparatus access road.

This provision recognizes another obvious safety concern – dead-end roads provide only one way in and out, unlike connected roads, for which there are two or more routes to a development. The longer a dead-end road is, the greater the risk of obstruction. A wider road provides some margin of safety with respect to potential obstructions, but there is a practical limit, which is why OFC doesn't provide a specific width that would make a road such as Oakleigh Lane safe.

As the survey in Attachment B shows, there's a fire hydrant within the 20-foot right of way (at the property line between Tax Lots 13 and 14). This placement not only creates another obstruction within the right-of-way, but also effective deployment of hoses requires that fire trucks stand a bit off from the hydrant to allow room for firefighters to maneuver. Accordingly,

⁴ The second note under Section D107.1 also seems to cover Oakleigh Lane:

2. The number of *dwelling units* on a single fire apparatus access road shall not be increased unless fire access roads will connect with future development, as determined by the *fire code official*.

OFC Section D103.1 (page 461) requires: "Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1 [found on the same page])." Needless to say, Oakleigh Lane is far narrower; and what makes matters even less safe is that the fire hydrant could be obstructed by a car parked off the pavement, as shown below. While this might (or might not) be illegal, there is no signage or markings to establish an adequate "no parking" zone around, or across from, the hydrant.



OFC Section 503.4 (page 68) demands that "[f]ire access apparatus roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times." An unobstructed pavement is what the Public Works conclusions were entirely dependent upon, and which this time around the Planning Commission must not ignore.

A simple and obvious way to help maintain an unobstructed roadway is to prohibit parking, place signage to that effect and patrol and enforce the restriction.

OFC Section D103.6.1 (page 462) requires that "[f]ire lane signs as specified in Section D103.6 [which includes Figure D103.6] shall be posted on both sides of fire access apparatus roads that are 20 to 26 feet wide."

This is a problem for the applicant, however, because both the city and county (Rec 884) have stated for the record that they have no intention of maintaining Oakleigh Lane, including placing "No Parking" signs. (A phone conversation on August 31, 2015 with Dan Ingram of Lane County Public works confirmed the county would not install "No Parking" signs without an order by the Board of Commissioners.)

There is also no evidence that, even if signage were installed, Oakleigh Lane would be patrolled adequately to ensure the road remains unobstructed at all times. In addition, it is also not

settled that, as a matter of law, the city or county could prohibit people from parking on the pavement that's on private property.

Section D102.1 (page 461) requires that fire access apparatus roads be able to bear a load of at least 60,000 pounds, but the Eugene Fire Code has increased this to 80,000 pounds. According to the Access Engineering Letter, August 6, 2013 submitted by the applicant (LUBA Rec 1439), Oakleigh Lane has an "oil mat" surface, rather than a full "asphalt cement" pavement, and there is no evidence as to its load-bearing capacity.

A road's load-bearing capacity is a result of both the subsurface (e.g., rock or native soil, etc.) and the pavement. As Commissioner Randall should be able to explain, even when an oil mat surface can provide an effective armor against water and wear, if the subsurface hasn't been adequately built-up and compacted, a vehicle as heavy as a fire truck can crush the pavement surface into the subsurface and cause serious impediment to the rapid movement of the fire truck.

Oakleigh Lane's oil mat surface cannot be assumed outright to be able to support 80,000 pounds, and no tests or analysis are in the record upon which the City can conclude that the pavement bearing capacity is sufficient to meet this requirement.

EXPERT OPINIONS

As my previous testimony pointed out, the first and largest elephant in the room was the contradiction between the two conclusions about Oakleigh Lane safety presented in the Public Works report.

Perhaps an easy way to decide which of these a reasonable person should rely on is to see what actual experts have to say.

As noted above, Section 55 of the Administrative Order adopting the Eugene Fire Code states: "The fire code official may be guided by the Oregon Department of Land Conservation and Development's Neighborhood Street Design Guidelines, June 2001." That's a clear indication that the City places some confidence in these guidelines, which were produced as part of the state's Transportation and Growth Management (TGM) program through a collaborative effort among DLCD, ODOT and many other "heavy lifters" in the field of land use and transportation. The City of Eugene was represented by planner Allen Lowe, now retired. Attachment K provides the full 2001 version, incorporated herein.

Rather than repeat all the salient points in this publication, I suggest that you flip through the introduction and note the highlighted text on pages 2, 3, 5, 9-12, most especially the statement on page 16 that:

"Two-way streets under 20 feet are NOT recommended. If, in a special circumstance, a community allows a street **less than 20 feet**, safety measures such as residential sprinklers, one-way street designation, and block lengths less than 300 feet may be needed." (All emphasis in original.)

Read their lips -- Two-way streets under 20 feet are NOT recommended.

Obviously, none of the three possible mitigations are feasible on Oakleigh Lane, which is a 1,000-foot long dead-end with twenty existing single-family homes almost certainly without sprinkler systems.

But even that isn't the full "take-away." Look at the "20 ft. Streets" diagrams and notes on pages 19 and 20. They state "No on-street parking allowed" and depict a 42- to 48-foot right-of-way.

This is not a scenario that would fit Oakleigh Lane in its current configuration, with narrower pavement and parking on both sides.

And, if this isn't enough to convince you that Oakleigh Lane is grossly unsuitable for more than doubling the traffic, look at what the OSHA has to say in their publication "Fire Service Features of Buildings and Fire Protection Systems. (See Attachment L, incorporated herein.) In particular read pages 11 to 15 and the summary sidebar on page 16. Here are a few excerpts:

"The basic clear width requirement for [fire] apparatus in the IFC and [National Fire Protection Association] NFPA 1 [the Uniform Fire Code] is 20 feet NFPA 1141 calls for one-way fire lanes that are 16 feet wide ..." (page 13)

"NFPA 1141 contains a 24-foot clear width requirement for two-way fire lanes. Appendix D of the IBC [International Building Code] calls for a 26-foot clear width for fire hydrant locations, extending for a distance of 20 feet in both directions" (page 13)

"The IFC Appendix D has a load design requirement of 75,000 pounds." (page 14)

"Fire lane signage is important, both for the public and enforcement officials. Examples include signs, curb painting, or curb stenciling. A jurisdiction's requirements must be followed exactly to ensure that no-parking provisions are legally enforceable. (page 15, emphasis added)

The standard in NFPA 1141 is particularly relevant because it's for "planned building groups," such as a PUD. (NFPA 1141 defines "planned building group" as: "Multiple structures constructed on a parcel of land, excluding farmland, under the ownership, control, or development by an individual, a corporation, or a firm." This is exactly what OMC proposes.)

Oakleigh Lane doesn't even meet OSHA's recommended standard for a safe one-way street. So, Oakley Lane in its current condition would pose greater risks to our community's fire fighters, as well as current residents and future PUD residents, if 29 additional dwellings were to be added at the end of this 1,000-foot dead-end.

Enough, already!

Every standard that can be consulted from Eugene's adopted street standards, Eugene's Fire Code, Oregon Fire Code, the International Fire Code, DLCD and ODOT street guidelines, the National Fire Protection Association, OSHA and the International Building Code requires that Oakleigh Lane have at the very minimum an adequately paved, unobstructed clear width of at least 20 feet, with 26 feet of clear width around the fire hydrant.

Adopted City street standards require a 45-foot right-of-way and sidewalks (at least) to separate pedestrians from traffic and maintain pedestrian's safety. That's what the Public Works staff put in their report, saying correctly that

"Without the additional right-of-way, Oakleigh Lane cannot be improved to the City's minimum street design standards, and the 168 new vehicle trips per day generated by the proposed development, along with the additional pedestrian and bicycle traffic generated by the proposed development; will not be assured of safe access via Oakleigh Lane."

That statement by the PWD staff is the simple truth, and the Planning Commission should not abide attempts to circumvent the law and put people's safety at risk.

But there is one final expert opinion to which I hope commissioners will give particular weight. Please read the letter from Maj Hutchinson (Attachment M, incorporated herein). After you read Maj's letter, have a look at Maj and her young daughter walking down Oakleigh Lane in the 2015 August 30 Pedestrians Bicyclist And Vehicle Sharing The Oakleigh Lane Pavement.mp4 video.

These are the citizens whose safety and well-being the Eugene Code is intended to protect and promote, and you are responsible to ensure that your decisions are consistent with that purpose.

CONCLUSION REGARDING THE SAFETY OF OAKLEIGH LANE

This isn't really that complicated a decision – it has been made so only by the facts and code provisions that were kept hidden, the cursory Public Works staff conclusions presented as if it were thorough "analysis," and the transparent legal maneuvers to circumvent the plain meaning of PUD approval criteria that require the only road into and out of the 29-unit development to be safe, adequate and not increase risks to the public.

Every shred of code and evidence demands that the Planning Commission find that Oakleigh Lane would not be safe for current residents, future PUD residents and emergency personnel.

The proposed PUD does not come even close to meeting the requirements of EC 9.8320(5), (6) and (11).

For these reasons, this application must be denied.

EPILOGUE – THE APPLICATION DOESN'T MEET OTHER CRITERIA

EC 9.8320(7) states:

Adequate public facilities and services are available to the site, or if public services and facilities are not presently available, the applicant demonstrates that the services and facilities will be available prior to need. Demonstration of future availability requires evidence of at least one of the following:

- (a) Prior written commitment of public funds by the appropriate public agencies.

- (b) Prior acceptance by the appropriate public agency of a written commitment by the applicant or other party to provide private services and facilities.
- (c) A written commitment by the applicant or other party to provide for offsetting all added public costs or early commitment of public funds made necessary by development, submitted on a form acceptable to the city manager.

As explained above, adequate public fire and emergency services are not available to the site because there is no approved fire apparatus access road.

The portions of testimony above related to the Eugene Fire Code requirements for fire apparatus access roads are incorporated herein by reference.

The Hearings Official erred by failing to correctly assess the lack of adequate fire and emergency services.

EC 9.8320(11)(k) states:

(11) The PUD complies with all of the following:

- (k) All other applicable development standards for features explicitly included in the application except where the applicant has shown that a proposed noncompliance is consistent with the purposes set out in EC 9.8300 Purpose of Planned Unit Development.

The application explicitly includes a hammerhead turnaround for use by emergency vehicles. This turnaround must meet the standards in the Eugene Fire Code, including being connected to a fire station by a fire apparatus access road. It fails to meet this requirement, as described above.

The application also includes a corner where the driveway meets Oakleigh Lane. This corner has a radius that fails to meet the minimum turning radius for a fire apparatus, as required by Eugene Fire Code.

The application does not provide complete dimensions for all buildings, particularly the "Common" building and no analysis was provided as to whether or not the height of any portion of a building would be greater than 30 feet, this requiring additional measures to provide for fire apparatus and hose access. The application cannot be approved until this required information is provided and there are findings of compliance with the applicable Eugene Fire Code provisions.

The Hearings Official erred by failing to correctly assess the fire apparatus access road standards applicable to features explicitly included in the application.

For these reasons, this application must be denied.

Respectfully,


Simon Trautman

Attachments

All attachments are included herein by reference

Printed

- A. Partial transcript of August 17, 2015, Planning Commission meeting
- B. Updated diagram and table summarizing the dedicated Oakleigh Lane right-of-way
- C. August 26, 2015 Survey of Oakleigh Lane
- D. June 1, 2011 Survey of Oakleigh Lane
- E. August 11, 2015 Letter from William Kabeiseman to Anne Davies
- F. E-mail exchange with Eugene Parking Enforcement staff
- G. Excerpts from "Law of Easements: Legal Issues and Practical Considerations"
- H. August 13, 2015 e-mail from William Kabeiseman to Anne Davie
- I. August 25, 2015 letter from Lauren Regan to the City Manager
- J. Excerpts from Eugene Fire Code and 2014 Oregon Fire Code
- K. ODOT and DLCD publication: "Neighborhood Street Design Guidelines, June 2001"
- L. OSHA publication "Fire Service Features if Buildings and Fire Protection Systems"
- M. August 29, 2015 letter from Maj Hutchinson
- N. Oakleigh Plat and title descriptions for Tax Lots 5800, 5900 and 10100

On digital media

Video files:

17August2015videoOfOakleighLane.mp4 – A visual examination of the pavement at the northwest corner of the proposed development (as marked by a "Poage Eng & Survey Inc.) survey marker.

2015August30PedestriansBicyclistAndVehicleSharingTheOakleighLanePavement.mp4 – A visual demonstration of the shared use of Oakleigh Lane by pedestrians, bicyclists, moving vehicles and parked cars.

2015August30TruckLeavingOakleighLaneResidence.mp4 – A visual demonstration of the clearance for vehicles traversing Oakleigh Lane between legally-parked cars.

Photos:

OakleighLaneDimensions1.jpg

OakleighLaneDimensions2.jpg

Transcript of Eugene Planning Commission meeting – August 17, 2015

Commissioners Baker, Barofsky, Mills, Randall and Taylor Present

1:28:17

Barofsky: In regards to the new evidence or whether the width of the pavement is new evidence or not, the aerial photos give me enough pause to want to consider that. And, whether or not ... and that's why I'm asking that possibly the record be re-opened to give more clarity to that. And that's what I would be requesting is to substantiate Mr. ... I would like to open it to Mr. Trautman and for the other person to have rebuttal to it.

And the aerial photo gives me enough pause that I think there may be a question of whether or not there is substantial pavement available for safety.

At this point though, however, if that is ... if the commission deems that this aerial photo isn't enough to bring that in and we don't open the record for more clarity on that issue, I'm leaning with Commissioner Taylor and Commissioner Randall. It gives me pause, but it doesn't sway me enough to allow it in as new evidence.

That's why, in order for me to try and get it right, the course to go is to re-open the record.

1:30:05

[Discussion and vote on Commissioner Randall's motion, which failed.]

1:33:15

Baker: So we're voting on whether this is new evidence and we would exclude it?

Randall: That was my motion.

Mills: And exclude?

Taylor: Yes.

Randall: Exclude this.

Taylor: Just the six feet.

Vote: Randall and Taylor in favor, and Mills and Baker opposed. (Barofsky abstained). Motion fails 2-2.

Randall: So the motion fails.

[Chatter]

1:34:17

Baker: I move that we re-open the record as suggested by Commissioner Barofsky to Mr. Trautman and to the applicant for a limited period of time related to traffic safety issues.

Barofsky: Second.

Randall: I guess I have a question how broad traffic safety issues ... is that all-inclusive ...

Baker: If you would allow me to amend it, I would say: "Traffic safety issues that would include related to right-of-way, paving width by the various jurisdictions.

Davies: Is the limited to, or is that including? I mean if you're saying "that includes," you're still pretty broad.

Baker: Including, not limited to, but including, so it doesn't exclude those.

Nystrom leans across the table and whispers privately to Davies: "Brand new issues raised, too."

Davies whispers back: "I know."

Nystrom whispers to Davies: "You might want to say that."

Davies (to Planning Commissioners): I'm having some concern about the breadth of that motion, not just safety but it brings everything all up. And it sounds like the issue that we've been talking about is the right-of-way issue. [*sic* Baker's motion was explicitly about the pavement width, as well as right-of-way.]

I'd like you to at least have some discussion about how broad that motion should be.

1:36:00

Barofsky: Well, two things now that you mention that. Yes, I believe that I would like the record to be open for clarity on the right-of-way, pavement widths and whether or not the pavement is available for safe passage on Oakleigh Lane.

And the second part of why I originally had my hand up was because I was wondering what is an appropriate timeframe. I mean I know that normally we say a week. For me, I would like to make it as short as possible, but yet give both parties a chance to do well-reasoned and thought out and perhaps even survey things. So I would ask staff for some ...

Davies comments and then says: I think we need both sides submitting new evidence ... and then response to that evidence and final rebuttal by applicant. I think the last two should be short. The first probably longer.

Mills: I'm going to suggest another area where there might be a need or benefit from additional information, and that's related to parking on Oakleigh. It's been an issue that's been raised. The street's been partially blocked. Staff conditioned their decree that it's a safe street provided it is not blocked. We have no information on that.

I don't know how you get that; whether somebody has to go out there during the time period and doing some surveying whether blockage is occurring or not. It's a question that I have. I mean, because to me it affects directly to staff's declaration that the street is safe, if that is the case. If that's not the case then ... it's a question. So I'm just suggesting that.

1:39:19

Baker: That was really my concern that by talking about traffic safety more general, is I wanted to be concerned about parking because it was noted in several places both in the testimony and also by the public agencies that it was a concern.

1:39:37

Taylor: So Commissioner Baker, you brought up an initial motion ...

Baker: I want to defer it and let Commissioner Barofsky ...

Taylor talking over Baker: Let's restate ...

Davies interjecting: Can I restate?

Taylor: Yeah, restate. That'd be great ... restate the motion.

1:39:55

Davies: What I heard Commissioner Barofsky say was that “we would be opening the record for clarity on the right-of-way, pavement widths and whether pavement is available for safe passage on Oakleigh Lane.”

Barofsky: And I could add Commissioner Mills’ concerns about parking.

Baker: That goes back to safe passage again.

Barofsky: Yes.

Taylor: So, maybe for clarity: right-of-way, permit [*sic* “pavement” intended] widths and parking ...

Barofsky: In regards to safety of Oakleigh Lane.

Baker: I’ll second since John made that motion.

1:40:39

Vote: Barofsky, Mills and Baker in favor. Randall and Taylor opposed. Motion passes 3-2.

Discussion continues ...

Baker suggests all of the submission be written. Gabe Flock says “that was assumed.”

1:43:32

Taylor: I’ll make a motion to clarify this thing, tighten it up. I make a motion that essentially the remaining open record, there’s two weeks for both to submit rebuttal, one week ... er, excuse me, I’m going to have you ...

Barofsky: To the 31st of August for ...

Flock interjects: End of business day.

Taylor: End of business day.

Barofsky: For new evidence. Rebuttals ‘til Friday the 4th and ...

Taylor: And one week for applicant ...

Barofsky: ... applicant rebuttal ‘til the 11th of September.

Taylor: And it’s just in written format.

Voice: Yes

Taylor: And the only two is [*sic*] the applicant and Trautman can contribute.

Barofsky: Or Trautman’s representative.

Taylor: Or Trautman’s legal representative.

Flock: End of business day.

Taylor: End of business day for all of those. ... Anyone want to second that?

Baker raises hand to second.

1:44:40

Vote: Barofsky, Mills, Baker, Randall and Taylor in favor. Motion passes 5-0.

[Discussion on screening ensues]

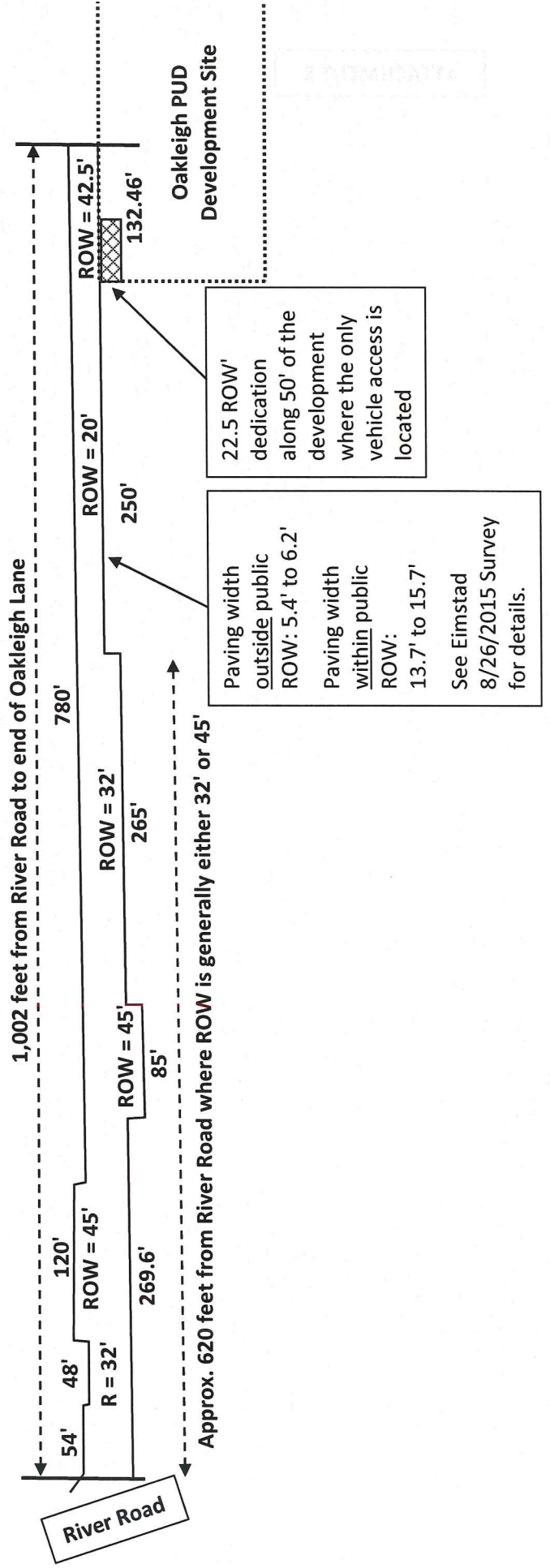
PDT 13-1 Remand Testimony – Oakleigh Lane Right-Of-Way Widths

PT-R.4 (LUBA Rec at 460-573) Deeds and property records for properties on Oakleigh Lane establish ROW boundaries. Plat Map at Rec 572.

PH-53 (LUBA Rec at 1314) City Notice of Land Use Change Being Proposed map of notice signs shows the outline of the ROW.

PH-1.B (LUBA Rec at 1197 and LUBA #2 at 4) – ROW dedications

Right-Of-Way Width	Total Length	Comment
20 feet	250.00'	Frontage on ROW west of OMC development site (250' total); TL 10100 = 102.73' (Rec 469); TL 5800 = 22.27' (Rec 469); TL 5900 = 125' (Rec 480)
32 feet	360.54'	
37 feet	54.00'	
42.5 feet	50.00'	After dedication of 22.5' ROW from PUD
45 feet	205.00'	
East of PUD entry	82.46'	
TOTAL	1,002.00'	



Please reply to WILLIAM K. KABEISEMAN
billkab@gsblaw.com
Direct Dial 503 553 3231

August 11, 2015

VIA EMAIL - anne.c.davies@ci.eugene.or.us

Eugene Planning Commission
c/o Anne Davies
Eugene City Attorney's Office
125 E. 8th Ave., 2nd Fl.
Eugene, OR 97401

Re: Eugene File No. PDT 13-1; Oakleigh Meadows Remand

Chair Randall and Commissioners:

This firm represented Simon Trautman on appeal to the Court of Appeals and continues to represent him on the remand to the City. I was not able to attend the hearing on July 28, 2015, but it appears that several concerns were raised about the submission by my client. This letter is intended to assist the commissioners in properly addressing those procedural concerns so that the City can avoid another remand.

Prior to addressing those concerns, it is worth remembering the process that led us to this point. As noted by the Court of Appeals, Mr. Trautman participated in the initial hearing before the hearings official and then waited to hear what happened next. However, the City failed to provide Mr. Trautman notice of the hearings official's decision, the appeal filed to this body, or this body's decision, until after a LUBA appeal had been filed. Mr. Trautman intervened at LUBA, but his participation was rejected. His first chance to participate in the review of the hearings official's decision was granted by the Court of Appeals, which decided that the City erred in how it handled the decision and remanded the decision.

At that point, the City decided that the best course was to place Mr. Trautman in the same position as if this were the first appeal hearing before the Planning Commission. Accordingly, for purposes of this process, the Planning Commission should treat the issues as if the only thing that has occurred is the hearings official's initial decision.

With that background, I will now turn to the concerns that were raised at the last hearing.

The first concern to address is whether the evidence presented to the hearings official included the fact that a substantial portion of the paved surface of Oakleigh Lane is on private property. As the City



Attorney has told the Commission, you are operating under EC 9.7655(2) which states that “no new evidence pertaining to appeal issues shall be accepted.” Mr. Trautman’s letter dated July 27, 2015, pointed specifically to multiple places in the record where the fact of pavement on private property was documented, including in documents D-3, PT-4, PT.R-4, PH-1.B, and PG-53. In fact, the hearings official’s own decision, on page 18, specifically notes that a portion of the pavement is “outside the public right-of-way.”

It is thus indisputable that the “fact” that a substantial portion of the pavement was outside the right-of-way was already in the record and the Planning Commission does not need to accept any new evidence for that fact to be established. To the contrary, the Planning Commission cannot now ignore this important fact that was presented to the hearings official but which the hearings official either overlooked or ignored in his findings.

The second concern moves beyond the question of the facts and involves what issues are before the Commission. The Oregon courts have long drawn a distinction between raising “issues” and making particular “arguments.” *State v. Hitz*, 307 Or 183766 P2d 373 (1988), *ZRZ Realty Co. v. Beneficial Fire and Cas. Ins. Co.*, 255 Or App 524, 300 P3d 1224 (2013). In particular, the courts require the raising of a particular issue, but specifically note that a particular argument can and will evolve. The courts have said that the question of whether a particular issue was raised is a “practical one”; whether an issue was identified “with enough particularity” to assure that the error was understood and could have been corrected.” *State v. Carlon*, 265 Or App 390, 335 P3d 343 (2014).

The three appeal issues before the Planning Commission at this time are whether Oakleigh Lane provides a “safe and adequate transportation system” (as required by EC 9.8320(5)); whether there would not be any risk to public safety on Oakleigh Lane from additional traffic arising from the PUD (as required by EC 9.8320(6)); and whether Oakleigh Lane meets the adopted street standards for the anticipated traffic volume (as required by EC 9.8320(11)(b)).

There is no question that these issues were amply raised in testimony before the hearings official and in the Appeal Statement. The Planning Commission must properly interpret these three approval criteria and make its decision based on all relevant facts in the record. Mr. Trautman has presented *arguments*, based on evidence *in the record*, to address these three appeal issues. His testimony has neither introduced new evidence nor raised issues not in the Appeal Statement. Instead, Mr. Trautman has now exercised precisely what he was denied before – the right to bring to the attention of the Planning Commission an important fact overlooked or ignored by the hearings official. If the City had not mishandled the original process, the Planning Commission could have benefited from Mr. Trautman’s testimony at the time and properly resolved the issues related to Oakleigh Lane. The Planning Commission cannot repeat the City’s mistake by denying Mr. Trautman his say.

The heart of the Appeal Statement turns on the inadequacies of Oakleigh Lane and the remedies that would be required to meet the three criteria, including the acquisition of sufficient right-of-way and



paving to bring Oakleigh Lane up to standard. The Appeal Statement identified these issues in numerous places and specifically called out the need for adequate improvements, including paving:

- “The Decision failed to impose adequate condition(s) to ensure there would be sufficient right-of-way, sidewalks and other improvements required [to provide for an adequate pedestrian environment].” Appeal Statement, p 3.
- “Evidence in the record clearly shows that Oakleigh Lane would have to be widened and improved to accommodate the significant increase in vehicular, bicycle and pedestrian traffic that the PUD would generate and still provide a safer and efficient road. . . . Approval of this PUD without such conditions would thereby cause the other property owners along Oakleigh lane to face potential condemnation.” Appeal Statement, p 3.
- “The Decision . . . erroneously limited the scope of EC 9.6800 to “dedications” and neglected to evaluate, and impose conditions, as necessary to ensure the safety of vehicles, bicyclists and pedestrians using Oakleigh Lane would be protected and promoted.” Appeal Statement, p 6.
- “As noted elsewhere in the Hearings Official decision, a 45 foot right of way was required and, “the public interest in safe vehicular, pedestrian and bicycle travel and emergency response will be at risk” if that minimum right of way is not dedicated.” Appeal Statement, p 7-8.
- “The Hearings Official provided no evaluation of PWD’s own analysis that “emergency response and access will be at risk” unless Oakleigh Lane’s right-of-way was widened and the road improved.” Appeal Statement, p 9.
- “In addition, the errors cited [elsewhere in the Appeal Statement], as they relate to the safety of drivers, bicyclists and pedestrians, demonstrate that the PUD would pose significant risk to public safety unless Oakleigh Lane is widened and improved.” Appeal Statement, p 9.
- “The Hearings Official provided no evaluation of PWD’s own analysis that Oakleigh Lane would be an impediment to emergency response unless the right-of-way was widened and the road improved. Instead he relied entirely on staff findings.” Appeal Statement, p 10.
- “The Decision erroneously found that Oakleigh Lane, which is not only adjacent to, but also serves as the only vehicular access to and from the development site, would be paved to the specifications in EC 9.6870.” Appeal Statement, p 10.
- “The Decision erroneously found that Oakleigh Lane, which is not only adjacent to, but also is and will be used by pedestrians to and from River Road and to and from the public bike/ped path along the river, would provide sufficient sidewalks that are located, designed and constructed according to the specifications in Eugene Code and referenced standards.” Appeal Statement, p 11.



Finally, even if the Planning Commission were to decide to reject a portion of Mr. Trautman's testimony related to these three issues, the Planning Commission still has the authority and responsibility to consider the fact that a substantial portion of Oakleigh Lane's pavement is on private property when it evaluates the application's compliance with EC 9.8320(5), (6) and (11)(b). Specifically, EC 9.7650 provides this Commission with authority to consider all facts in the record in their review:

The appeal of an initial hearings official or historic review board decision provides for a review of a quasi-judicial decision by a higher review authority specified in this land use code. In general, the appeal procedures allow for a review of the original application, the hearings official or historic review board decision, the appeal application, and any facts or testimony relating to issues and materials that were submitted before or during the initial quasi-judicial public hearing process. The hearings official or historic review board decision may be affirmed, reversed, modified, or remanded by the planning commission. (Emphasis added.)

Under that provision, the Planning Commission can consider "any facts or testimony relating to issues and materials" that were submitted during the process before the hearings official. In other words, the Planning Commission is not prohibited from correcting an egregious error made by the hearings official regarding the application's compliance with the approval criteria in EC 9.8320(5), (6) and (11)(b), even if the Appeal Statement itself didn't call out a particular piece of evidence that was presented to the hearings official.

This principle may be more clearly understood by considering that the Planning Commission could, and would have to, consider the fact that a substantial portion of paving is on private property if one of the commissioners had been the person who brought that fact to the attention of the other commissioners during your deliberations. Now that Mr. Trautman's arguments have ensured that the deficiency in the width of the pavement that's in the public right-of-way is no longer overlooked, the Planning Commission would err if it ignored that critical fact in its findings.

I look forward to the Commission's decision on this matter.

Very truly yours,

William K. Kabeiseman

WKK:dw

cc: Simon Trautman

GSB:7249198.1 [38321.01200]



Paul Conte <paul.t.conte@gmail.com>

Question re parking in unpaved ROW

Paul Conte <paul.t.conte@gmail.com>
To: HARGITT Travis L <Travis.L.Hargitt@ci.eugene.or.us>

Thu, Aug 27, 2015 at 3:24 PM

In this case, the property owners on the south, at the end of Oakleigh Lane have not granted right-of-way easements, so the image from the database is accurate, I believe.

Thank you,

Paul

On Aug 27, 2015 3:20 PM, "HARGITT Travis L" <Travis.L.Hargitt@ci.eugene.or.us> wrote:
Reviewing other property lines the power lines are part or ROW or easement. I can be wrong

Sent from a mobile device.

> On Aug 27, 2015, at 15:14, Paul Conte <paul.t.conte@gmail.com> wrote:

>

> Travis,

>

> Thank you.

>

> If I understand correctly ... if the car were parked headed the opposite way, it would be legally parked.

>

> Nevertheless, even a legally parked car must leave its spot within 72 hours. It may return, after a drive away and back.

>

> Now I don't believe the south right of way is under the powerlines. The right of way at this location is only 20' wide and several feet of pavement lies outside the south right of way according to a recent licensed survey I have of that part of Oakleigh Lane.

>

> What is the reason you believe the right of way is under the power lines?

>

> Thank you again.

>

> -- Paul

>

> On Aug 27, 2015 2:33 PM, "HARGITT Travis L" <Travis.L.Hargitt@ci.eugene.or.us<mailto:Travis.L.Hargitt@ci.eugene.or.us>> wrote:

> Sir,

>

> Thank you for the info. This helps to answer your question.

>

> The picture here is a snap shot from the city Geo data base and it shows tax lots/ROW. Now this system is a guide and not set in stone. As you can see from the yellow I have placed, the white car is parked in the ROW. This car can remain parked in the ROW for up to 72 hours and then it must be moved per city code. If can simply drive around the block and come back but it must leave the block every 72 hours. One other issue is that the car is parked against the flow of traffic. This is a dead-end road but a car must still park with the flow or how the traffic would travel on the road.

>

> As for the property lines, looking at the overall line to the north and comparing it to the rest of the street

and other lines in the city I believe the north line to be very accurate. The south line should shift to just under the power lines that are present.

>

> Please let me know if you would like any other info and I hope this helps

>

> [cid:image001.png@01D0E0D5.589C7990]

>

> From: Eugene Parking

> Sent: Wednesday, August 26, 2015 5:50 PM

> To: HARGITT Travis L

> Subject: FW: Question re parking in unpaved ROW

>

>

>

> From: Paul Conte [mailto:paul.t.conte@gmail.com]

> Sent: Wednesday, August 26, 2015 12:01 PM

> To: Eugene Parking

> Cc: HARGITT Travis L

> Subject: Re: Question re parking in unpaved ROW

>

> Jeff & Travis,

>

> Sorry to be slow responding ... I've been consumed with a new house my wife and I are building.

>

> This Google Maps view depicts the situation:

> <https://www.google.com/maps/@44.077991,-123.1171915,3a,75y,49.62h,90t/data=!3m6!1e1!3m4!1sDDVfSZR3RNkr1Ht8rFuXQw!2e0!7i13312!8i6656>

>

> This near the end of Oakleigh Lane. Note the white car parked on the gravel, off the pavement. That gravel is partially in the dedicated right-of-way. There are no curbs, signage or other markings.

>

> Is this legal or illegal?

>

> Thanks!

>

> -- Paul

>

>

> [\[https://docs.google.com/uc?export=download&id=0B4XCQsdk6-
iuWDRWVdkbWFrNVE&revid=0B4XCQsdk6-iuSEt2cHovU3ZEN3Y0dU9ZMzYzKzBibEVmZUpFPQ\]](https://docs.google.com/uc?export=download&id=0B4XCQsdk6-
iuWDRWVdkbWFrNVE&revid=0B4XCQsdk6-iuSEt2cHovU3ZEN3Y0dU9ZMzYzKzBibEVmZUpFPQ)

>

>

> On Tue, Aug 18, 2015 at 1:39 PM, Eugene Parking
<Parking@ci.eugene.or.us<mailto:Parking@ci.eugene.or.us>> wrote:

> Hi Paul,

>

> I am trying to visualize the situation. Can you provide an address? I have cc-ed Travis Hargitt, our Parking Operations Supervisor, who oversees the parking enforcement team.

>

> Jeff

>

> From: Paul Conte [mailto:paul.t.conte@gmail.com<mailto:paul.t.conte@gmail.com>]

> Sent: Monday, August 17, 2015 5:12 PM

> To: Eugene Parking

> Subject: Question re parking in unpaved ROW

>

> Jeff,

>

> What are the rules regarding parking on unpaved, unmarked, unsigned ROW?

>

> The situation I'm interested in has a paved surface, but no other improvements -- gutters, curbs or sidewalks. There are no markings or signage. There is a graveled area about six feet wide outside the pavement, but still in the right-of-way. Beside that is private property, onto which the gravel continues for several feet.

>

> Can the owner of the private property legally park his vehicle on the gravel (partially on the right-of-way and partially on his own property), as long as the vehicle remains completely off the pavement?

>

> Thanks!

>

> -- Paul

>

> [\[https://docs.google.com/uc?export=download&id=0B4XCQsdk6-
iuWDNRWVdkbWFrNVE&revid=0B4XCQsdk6-iuSEt2cHovU3ZEN3Y0dU9ZMzYzKzBlbEVmZUpFPQ\]](https://docs.google.com/uc?export=download&id=0B4XCQsdk6-
iuWDNRWVdkbWFrNVE&revid=0B4XCQsdk6-iuSEt2cHovU3ZEN3Y0dU9ZMzYzKzBlbEVmZUpFPQ)

>

>

> <image001.png>



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Law of Easements: Legal Issues and Practical Considerations

Prepared and Presented by:

Frank C. Gibson
Hutchinson, Cox, Coons, DuPriest, Orr & Sherlock, P.C.

is necessary for its beneficial use and enjoyment and to retain whatever is necessary for the use and enjoyment of the land retained. An implied intent may be rebutted by evidence of an agreement or understanding, at or prior to the conveyance, that the easement was not to pass. In Oregon, implied easements are disfavored, *Cheney v. Mueller*, 259 Or 108, 118-119, 485 P2d 1218 (1971), and are established only in accordance with a seven-factor test.

5. Easement by necessity – ORS 376.150-376.200 govern easements by necessity. The statutory scheme may be used only if the claimant is unable to gain access to the property. ORS 376.180(9). The process requires a petition listing certain information (ORS 376.155), service of the petition on the landowners and a report to the county (ORS 376.160), the right of the landowner to answer (ORS 376.170), an order granting or denying the petition and the landowner's right to appeal (ORS 376.175), and certain conditions that any established way of necessity shall meet (ORS 376.180). Note that ORS 376.175(2)(e) requires the court to “[d]irect the petitioner to pay costs and reasonable attorney fees incurred by each owner of land whose land was subject to the petitioner’s action for a way of necessity under ORS 376.150 to 376.200.”
6. Easement by prescription -- A prescriptive easement requires that the claimant establish by clear and convincing evidence that his use was: 1) for the prescriptive period (10 years under ORS 12.050); 2) open, notorious, and adverse to the rights of the servient owner; and 3) continuous and uninterrupted according to the nature of the use. *Thompson v. Scott*, 270 Or 542, 546, 528 P2d 509 (1974). By showing open, continuous and uninterrupted use, a claimant may give rise to a presumption that the use was adverse to the servient owner, who may then disprove the adversity by showing the use to be permissive. *Doyle Miling v. Georgia Pacific*, 256 Or 271, 278, 473 P2d 135 (1970). As to the elements of open and notorious use, see *Beers v. Brown*, 204 Or App 395, 129 P3d 756 (2006). There, defendants tried to assert prescriptive easement as a defense against nuisance, trespass, and negligence claims arising from golf balls hit from their driving range landing on plaintiff’s real property. Because golf balls only occasionally landed on plaintiff’s property, the court held that defendants failed to meet the open or notorious requirements over the statutory period.

Oakleigh Co-Housing PUD (PDT 13-1) Remand Hearing

William Kabeiseman <billkab@gsblaw.com>
To: DAVIES Anne C <Anne.C.Davies@ci.eugene.or.us>

Thu, Aug 13, 2015 at 3:02 PM

Anne,

As you know, I represent Simon Trautman in this remand hearing on the Oakleigh Meadows matter. Please accept this e-mail into the record as a procedural objection to your memo dated August 12, 2015, concerning two matters. I hereby request that the Planning Commission accept the various attachments submitted with the July 27, 2015, letter and that the hearing be re-opened to allow my client to respond to the new evidence and argument submitted with the City's staff memorandum.

My first concern is directed at the characterization of several of the attachments to Mr. Trautman as "new evidence" in your August 12, 2015, memorandum. As noted in the memorandum, EC 9.7655 prohibits the introduction of "new evidence." The attachments did not provide any new "evidence;" they took evidence that had previously been provided to the Hearings Official and put it into a different form. This is not a situation like LUBA where the review is limited to a particular "record" that requires the actual document to have been submitted previously for it to be considered. EC 9.7655 simply says that "No new evidence pertaining to appeal issues shall be accepted." There is nothing in the Eugene Code that prevents a party from using evidence that was already presented to the hearings official and creating demonstrative exhibits using that evidence. The material submitted to the Planning Commission on July 27, 2015, contained no new evidence and should be accepted by the Planning Commission.

The second, and perhaps more troubling, concern involves the statement at the bottom of third page of that same memorandum addressing the paved area outside of the Oakleigh Lane right-of-way. In particular, for the first time in this proceeding, the memorandum addresses the concept of a "prescriptive easement." This concept of a prescriptive easement is new "evidence"

in that it is information “offered to demonstrate compliance” with the standards contained in the Eugene Code. ORS 197.793(9)(b).

Moreover, whether there is a prescriptive easement is an entirely new issue that neither Mr. Trautman nor anyone else ever had a chance to address. As I assume you also know, there are several elements to a claim of prescriptive easement beyond a 10 year period and the blunt assertion that the area “will be considered to have been acquired by the City as a prescriptive easement” is unsupported by the evidence currently before the Planning Commission.

The inclusion of the discussion of a prescriptive easement goes far beyond the evidence before the Hearings Official or previously before the Planning Commission, introduces new evidence and an entirely new issue into this already complicated matter.

I would reiterate our requests:

1. the Planning Commission should accept the various attachments submitted with the July 27, 2015, letter because, although the documents are new, those documents do not contain any new evidence and are the equivalent of demonstrative exhibits; and
2. The Planning Commission must re-open the hearing to allow my client to respond to the new evidence and argument submitted with the City’s staff memorandum.

Thank you for your consideration on this matter.

Bill



BILL KABEISEMAN
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GARVEY SCHUBERT BARER
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August 25, 2015

Jon Ruiz
Eugene City Manager
125 E. 8th Avenue, 2nd Floor
Eugene, OR 97401

Dear Mr. Ruiz,

Anne Davies, the Deputy City Attorney, recently stated to the Eugene Planning Commission that the City would be able to claim an easement on my property at 160 Oakleigh Lane without my permission or consent by exercising a "prescriptive easement."

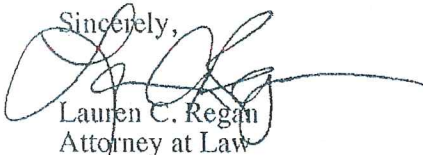
This is to advise you that the City has no legal basis for a prescriptive easement, and I will vigorously contest any attempt at such a taking.

Prescriptive easements requires that the City prove with clear and convincing evidence that the City's use of my property was: 1) for the prescriptive period (10 years under ORS 12.050); 2) open, notorious, and adverse to the rights of the servient owner; and 3) continuous and uninterrupted according to the nature of the use. *Thompson v. Scott*, 270 Or 542, 546, 528 P2d 509 (1974).

Within the area in question, I have continued for six years to grow food and flowers, as well as park my cars and permit others to park their cars, thus preventing the public for extended periods of time from using this area for transit along Oakleigh Lane. The prior homeowner used the property at issue in the same manner as well. In addition, very few cars frequent this end of the dead-end street (only 3 other neighbors). Thus, neither the public nor the City has had continuous and uninterrupted use of my property. This fact is by no means the only legal impediment to any attempt by the City to forcefully exact an easement on my property.

The statement made by the deputy city attorney is factually and legally incorrect, and I would appreciate correcting the record immediately, as indicated above. Thank you

Sincerely,



Lauren C. Regan
Attorney at Law

CC: Eugene Mayor and City Council via email

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BY CITY MANAGER



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ATTACHMENT J

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Complaints

Fire Protection Systems

Greek Housing Information

Mandated Inspections

Request for Inspections



Contact Information

Fire Marshal
1320 Willamette St
Eugene, OR 97401

Ph: 541-682-5411
Fx: 541-682-6882

Code Enforcement

Fire Code Enforcement

The Eugene Fire Code provides minimum fire and life safety standards for buildings, process, and fire protection equipment in the City of Eugene. The Eugene Fire Code is based on the current [Oregon Fire Code](#).

The Eugene Fire Marshal's Office strives to work cooperatively with our community to promote and maintain a safe environment through the following programs:

- [Greek Housing Program](#)
- [Inspections by request](#)
- [Mandated Inspection](#)
- [Complaint Investigation](#)

ADMINISTRATIVE ORDER NO. 52-14-02-F
of the
City Manager of the City of Eugene

**ADOPTION OF AMENDED EUGENE FIRE CODE ADMINISTRATIVE
RULE R-8.010FC AND REPEAL OF ADMINISTRATIVE ORDER NO. 52-
10-02-F.**

The City Manager of the City of Eugene finds that:

A. Section 8.010 of the Eugene Code, 1971, authorizes the City Manager to administratively adopt a fire code for the City of Eugene. Pursuant to that authority, and in accordance with the procedures set forth in Section 2.019 of the Eugene Code, 1971, on September 30, 2010, Administrative Order No. 52-10-02-F was issued adopting Eugene Fire Code Administrative Rule R-8.010FC. That Rule amended the Oregon 2010 Fire Code Amendments to the 2009 International Fire Code.

B. The State Oregon adopted and amended the 2012 International Fire Code, effective July 1, 2014, which is referred to as the 2014 Oregon Fire Code.

C. On November 12, 2014, I issued Administrative Order No. 52-14-02 proposing the adoption of a new Fire Code so that the City of Eugene's Fire Code would be consistent with the 2014 Oregon Fire Code, and to maintain a reasonable degree of fire and life safety for the community at large.

D. Notice of the proposed rule adoption was published in the Register-Guard Newspaper on November 27, 28, 29, 30, and December 1, 2014. The Notice was also provided to the Mayor and City Councilors, made available for inspection at the office of the Fire Marshal, 1320 Willamette Street, Eugene, Oregon 97401, during normal business hours, and to persons who had requested such notice. The Notice provided that written comments would be received for a period of 15 days from the first date of publication. No written comments were received within the time or in the manner provided in the Notice.

Based on the above findings, and the authority of Sections 2.019 and 8.010 of the Eugene Code, 1971, Administrative Order No. 52-10-02-F is repealed as of the effective date of this Order, and the Eugene Fire Code Administrative Rule R-8.8010FC is adopted to provide as follows:

EUGENE FIRE CODE
ADMINISTRATIVE RULE R-8.010FC

R-8.010FC-A ADOPTION.

The 2012 International Fire Code (IFC) as promulgated by the International Code Council as adopted and amended by the State of Oregon as the 2014 Oregon Fire Code (OFC) is

hereby adopted, subject to the additions, deletions, and modifications set forth in this rule, which together constitute the Eugene Fire Code (EFC). This rule is in addition to, and is not exclusive of, Administrative Rule R-8.005. References in this rule to "this code" are references to the OFC adopted herein.

R-8.010FC-B AMENDMENTS.

1. Section 101.2.1 of the OFC is amended to provide:

101.2.1 Appendices specifically adopted. Provisions in the appendices shall not apply unless specifically adopted. The provisions of the following appendices are adopted as part of this code: B, C, D, K, L, M and N.

2. Section 104.2 of the OFC is amended to provide:

104.2 Applications and permits. The *fire code official* is authorized to receive applications, review construction documents and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code. Authority to review construction documents, and to charge a fee for such review, includes, but is not limited to, residential plan checks consisting of one and two-family dwelling review for water and access, commercial plan checks consisting of fire code plan review associated with Building and Mechanical Permits, and site development review not related to a specific structure (i.e., grading, fill, excavation, PEPI, etc.).

3. Section 105.6 of the OFC is amended to provide:

105.6 Required operational permits. An operational permit as authorized by law or regulation shall be obtained from the State Fire Marshal for the operations set forth in Sections 105.6A through 105.6E. An operational permit shall be obtained from the Eugene Springfield Fire Marshal's Office for the operations set forth in Sections 105.6A, 105.6B, 105.6C, 105.6D, 105.6E, 105.6.3, 105.6.4, 105.6.8, 105.6.9, 105.6.10, 105.6.12, 105.6.16, 105.6.18, 105.6.19, 105.6.20, 105.6.21, 105.6.24, 105.6.26, 105.6.33, 105.6.36, 105.6.38, 105.6.40, 105.6.41, and 105.6.43.

4. Section 105.6.1 of the OFC is amended to provide:

105.6.1 Aerosol Products. An operational permit issued by the Eugene Springfield Fire Marshal's Office is required to manufacture, store, handle or use an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds (227 kg) net weight throughout an occupancy.

5. Section 105.6.2 of the OFC is amended to provide:

105.6.2 Amusement Buildings. An operational permit issued by the Eugene Springfield Fire Marshal's Office is required to operate special amusement buildings, such as haunted houses and similar temporary installations. *See Appendix K.*

6. Section 105.6.13 of the OFC is amended to provide:

105.6.13 Exhibits and Trade Shows. An operational permit issued by the Eugene Springfield Fire Marshal's Office is required to operate exhibit and trade shows when there will be more than 10 tables or booths, cooking is involved or when the display area exceeds 500 square feet. For purposes of this operational permit requirement, an exhibit or trade show is an event in which the display of products or services is organized to bring together the provider and users of the products and services.

7. Section 105.6.14 of the OFC is amended to provide:

105.6.14 Explosives. An operational permit issued by the Eugene Springfield Fire Marshal's Office is required for the manufacture, storage, handling, sale or use of any quantity of explosives, explosive materials, fireworks, pyrotechnic special effects, or the operation of blasting within the scope of Chapter 56.

Exception: Storage in Group R-3 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with Section 5606.

8. Section 105.6.27 of the OFC is amended to provide:

105.6.27 LP-gas.

1. An operational permit issued by the Eugene Springfield Fire Marshal's Office is required for storage and use of LP-gas in individual container(s) exceeding 125 water gallons or more in the aggregate.

Exception: An operational permit is not required for individual containers serving occupancies in Group R-3 as defined in Chapter 2 of the Fire Code.

9. Section 105.6.34 of the OFC is amended to provide:

105.6.34 Places of temporary assembly. An operational permit issued by the Eugene Springfield Fire Marshal's Office is required to operate a temporary place of assembly when the occupant load will be 50 or more persons and the building is not approved for assembly use. A place of assembly is temporary when it will be operated for any amount of time less than 180 days.

10. Section 105.6.39 of the OFC is amended to provide:

105.6.39. Repair garages and motor fuel-dispensing facilities. An operational permit from the Eugene Springfield Fire Marshal's Office is required for operations of repair garages, and automotive, marine and fleet motor fuel-dispensing facilities for systems utilizing fuel that is gaseous at NTP such as CNG, LNG, Hydrogen, and LPG.

11. Section 105.6.43 of the OFC is amended to provide:

105.6.43 Temporary membrane structures and tents. An operational permit issued by the Eugene Springfield Fire Marshal's Office is required to operate an air-supported temporary membrane structure, a tent having an area in excess of 1500 square feet or an occupant load of 50 or more, or multiple tents with an aggregate area in excess of 1500 square feet.

12. Section 105.6.47 of the OFC is amended to provide:

105.6.47 Performances with fire. An operational permit issued by the Eugene Springfield Fire Marshal's Office is required to conduct a performance that utilizes fire for entertainment purposes, outside of a protective housing or in ways in which it travels through the air (by one person or between multiple persons) in a public or private location.

13. Section 105.7 of the OFC is amended to provide:

105.7 Required construction permits. Prior to construction, installation, alteration, or augmentation, a Fire Code Construction Permit shall be obtained and plans submitted through the City of Eugene Building and Permit Services Division for the work set forth in Sections 105.7.4, 105.7.8, through 105.7.13.

14. Section 105.7.9 of the OFC is amended to provide:

105.7.9 Hazardous materials. A Fire Code Construction Permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter 50 when the hazardous materials in use or storage exceed the amounts listed in Table 105.6.20. Hazardous materials include highly toxic and toxic chemical supply and drainage systems, HPM tools and systems, and cryogenic systems.

Exceptions:

1. Routine maintenance.
2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

15. Section 105.7.11 of the OFC is amended to provide:

105.7.11 LP-gas. A Fire Code Construction Permit is required for installation of or modification to an LP-gas system exceeding 125 water gallons.

16. Section 105.7.12 of the OFC is amended to provide:

105.7.12 Private water mains and hydrant systems. A Fire Code Construction Permit is required for the installation or modification of private water mains and hydrant systems.

17. Section 107.1 of the OFC is amended by adding subsection 107.1.1 to the OFC to provide:

107.1.1 Access to safeguards. Fire protection and/or notification system equipment shall be accessible, unobstructed and visible.

18. Section 108.1 of the OFC is amended to provide:

108.1 Appeal procedures. Any person aggrieved by an action taken pursuant to this code may appeal the action within the time and in the manner provided in section 2.021 of the Eugene Code.

19. Section 108.2 and 108.3 of the OFC are deleted.

20. Section 109.2 of the OFC is amended by adding subsection 109.2.1 to the OFC, to provide:

109.2.1 Responsible person. In addition to, and not in lieu of, the responsibility of the owner and occupant to correct and abate violations of this code, the responsible person must abate violations of this code.

21. Section 109.3 of the OFC is amended to provide:

109.3 Notice of Violation. When the fire code official finds a building, premises, vehicle, storage facility or outdoor area that is in violation of this code, the first code official is authorized to prepare a written notice of violation describing the conditions deemed unsafe and, when compliance is no immediate, specify a time for reinspection. Orders and notices shall be in accordance with section 2.018 of the Eugene Code, 1971 and administrative rules adopted thereunder.

22. Section 109.3.2 of the OFC is amended to provide:

109.3.2 Compliance with orders and notices. Notice of violation issued or served as provided by this code shall be complied with by the owner, operator, occupant, or other responsible person. Notices shall be in accordance with section 2.018 of the Eugene Code, 1971 and administrative rules adopted thereunder.

23. Section 109.4.1 of the OFC is amended to provide:

109.4.1 Violation penalties. Any owner or occupant of any building or premises who fails to comply with an order to correct any safety deficiency or violation of this code not appealed from, shall be punished by a fine as provided by section 2.018 of the Eugene Code, 1971.

24. Section 109.4 of the OFC is amended by adding subsection 109.4.3 to the OFC, to provide:

109.4.3 Reinspection fee. Persons who fail to abate or correct an identified violation or hazard by the reinspection date will be subject to a reinspection fee. The fee for reinspecting an uncorrected or unabated violation or hazard shall be the hourly inspection fee established by the City Manager pursuant to Section 2.020 of the Eugene Code, 1971.

25. Section 113.2 of the OFC is amended to provide:

113.2 Schedule of permit fees. A fee for each permit or reinspection shall be paid as required, in accordance with the schedule established by the City Manager pursuant to Section 2.020 of the Eugene Code, 1971.

26. Section 202 of the OFC is amended by adding the following definitions in alphabetical order therein:

202 GENERAL DEFINITIONS

CARNIVAL. A mobile enterprise principally devoted to offering amusement or entertainment to the public in, upon or by means of portable amusement rides or devices or temporary structures in any number or combination, whether or not associated with other structures or forms of public attraction.

FAIR. An enterprise principally devoted to the exhibition of agriculture or industry in connection with the operation of amusement rides or devices, or concession booths.

FIRE CHIEF, FIRE CODE OFFICIAL, CHIEF OFFICER, OR CHIEF OF THE DEPARTMENT. The City Manager or his or her designee.

INERTING. Reduction of the concentration of oxygen to a level insufficient to support combustion. For the purposes of flammable liquid tanks and containers, oxygen concentration below 10% is considered inert when using an oxygen meter to measure oxygen concentrations or, if a combustible gas indicator is used to measure the reduction in the concentration of flammable vapors, less than 20% of the Lower Flammable Limit of the product will be considered adequate.

PERFORMANCES WITH FIRE. Any act (fire juggling, fire eating, etc.), in a public or private place other than inside a private residence, that utilizes fire for entertainment purposes, outside of a protective housing or in ways in which it travels through the air (by one person or between multiple persons). These acts do not include pyrotechnics.

PERSON RESPONSIBLE/RESPONSIBLE PERSON. An agent, occupant, lessee, tenant, contract purchaser, owner, permit holder, facility owner, person in charge of the building or property, the violator, where the violator works for a contractor (as an employee, subcontractor or independent contractor) the contractor and/or employer, or other person in possession or control of the facility, or hazardous materials or of a facility at which hazardous materials are located.

QUALIFIED PERSON OR COMPANY. A competent and capable person or company that has met the requirements of the Fire Code Official, which may include written tests, field testing or acceptable formal training for a given field, such as but not limited to water based fire protection systems, commercial kitchen hood suppression systems, fire alarm and detection systems and hazardous materials protection and detection systems.

RED FLAG WARNING. Also known as a Fire Weather Warning, a forecast warning issued by the United States National Weather Service to inform area firefighting and land management agencies that conditions are ideal for wildland fire ignition, and rapid propagation. After drought conditions, and when humidity is very low, and especially when high or erratic winds which may include lightning are a factor.

27. The definition for "Open Burning" in Section 202 of the OFC is amended to provide:

OPEN BURNING. The burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber or as regulated by Lane Regional Pollution Authority and Section 6.200 of the Eugene Code, 1971. Open burning does not include road flares, smudgepots and similar devices associated with safety or occupational uses typically considered open flames or recreational fires. For the purpose of this definition, a chamber shall be regarded as enclosed when, during the time combustion occurs, only apertures, ducts, stacks, flues or chimneys necessary to provide combustion air and permit the escape of exhaust gas are open.

28. The definition for "Recreational Fire" in section 202 of the OFC is amended to provide:

RECREATIONAL FIRE. A small outdoor fire (no larger than 3 feet in diameter and 2 feet in height) used for cooking only, or a fire used for cooking in a fireplace or a barbecue set, or a fire in an approved campsite in fire pits provided at the campsite. Fuel can consist of charcoal, natural gas, propane, manufactured firelogs, or clean dry natural firewood. Fires are not for the disposal of waste materials, including woody yard trimmings, leaves, and grass clippings.

29. Section 302.1 of the OFC is amended to add the terms **PERFORMANCES WITH FIRE** and **RED FLAG WARNING** to the list of defined terms.

30. Section 305.4 of the OFC is amended by adding subsection 305.4.1, to provide:

305.4.1 Extreme conditions. Use of open flames or other sources of ignition that could ignite vegetation or combustible material during a red flag warning period declared by the National Weather Service is prohibited and considered an emergency requiring immediate abatement.

31. Section 308.1 of the OFC is amended to provide:

308.1 General. Open burning is not allowed.

EXCEPTIONS:

1. Fires set and maintained for fire fighting training or training fire protection personnel.
2. Fires set and maintained for abating, alleviating or removing a fire hazard if authorized by written permit of the fire marshal.
3. Outdoor recreation fires used for cooking with the fire in a fireplace, barbecue set, or an outdoor fire used for cooking only
4. Recreation fires in an approved campsite in fire pits provided for the campsite.
5. As permitted by Lane Regional Pollution Authority and Section 6.200 of the Eugene Code, 1971.

32. Section 308.2 of the OFC is amended to provide:

308.2 Permits required. Permits shall be obtained from the fire code official in accordance with Section 105.6 prior to engaging in the following activities involving open flame, fire and burning.

1. Use of a torch or flame-producing device to remove paint from a structure.
2. Use of open flame, fire or burning in connection with Group A or E occupancies.
3. Use or operation of torches or other devices, machines or processes liable to start or cause fire in or upon wildfire risk areas.
4. Performances with fire for entertainment purposes, outside of a protective housing or in ways in which it travels through the air (by one person or between multiple persons) in a public or private location.
- 5.

33. Section 315.3.1 of the OFC is amended to provide:

315.3.1 Ceiling clearance. Storage shall be maintained 2 feet (610 mm) or more below the ceiling in non-sprinklered areas of buildings or a minimum of 18 inches (457 mm) below sprinkler head deflectors in sprinklered areas of buildings.

Exception: A different clearance distance will be required if, in the opinion of the Fire Code Official, the provisions of the installation standard of the sprinkler system or the listing of the device justifies a reduction or increase in the distance necessary for the proper operation of a sprinkler head.

34. Section 408.2 of the OFC is amended by adding #17 and #18, to provide:

404.2 Where required. An *approved* fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings:

17. Any building with an active or passive smoke control system.
18. Any occupied structure required to have explosion (deflagration) venting or explosion (deflagration) prevention systems.

35. Section 404 of the OFC is amended by addition subsection 404.5, to provide:

404.5 Pre-incident planning documents. Unless determined by the Fire Marshal that the plans are not necessary for the Eugene Springfield Fire Department's pre-incident planning, prior to issuance of an occupancy permit, all occupancies and buildings listed in Section 404.2 of this code must submit to the Eugene Springfield Fire Marshal's Office an electronic file of the constructed building, structure, facility and occupancy (*i.e.*, as-built plans). Failure to submit the as-built plans could result in the Fire Department recommending that the Building Official withhold the final occupancy permit.

36. Section 407.5 of the OFC is amended to provide:

407.5 Hazardous Materials Inventory Statement (HMIS). Where required by the fire code official, an application for a permit shall include an HMIS, such as SARA (Superfund Amendments and Reauthorization Act of 1986) Title III, Tier II Report, or other approved statement. The HMIS shall include the following information:

1. Product name.
2. Component.
3. Chemical Abstract Service (CAS) identification number.
4. Location where stored or used.
5. Container size.
6. Hazard classification.
7. Amount in storage.
8. Amount in use – closed systems.
9. Amount in use – open systems.
10. NFPA 704 classification

37. Section 408.1 of the OFC is amended by adding subsection 408.1.1, to provide:

408.1.1 Change of occupant, tenant or use. Whenever any tenant, occupant or use of a commercial occupancy changes, within 30 days of the change, a notification of the change shall

be forwarded to the Eugene Springfield Fire Marshal's Office in order to update fire department records.

Exception: Group R, SR and U occupancies.

38. Section 604.3.2 of the OFC is amended to provide:

604.3.2 Written Record. Written records of the inspection, testing and maintenance of emergency and standby power systems shall include the date of service, name of the servicing technician, a summary of conditions noted and a detailed description of any conditions requiring correction and what corrective action was taken. Such records shall be kept on the premises served by the emergency or standby power system and be available for inspection by the fire code official. Within 30 days of performing the annual maintenance inspection and testing a report shall be forwarded to the Eugene Springfield Fire Department Fire Marshal's Office.

39. Section 901.5 of the OFC is amended to provide:

901.5 Installation Acceptance Testing. Fire detection and alarm systems, fire-extinguishing systems, private fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains, smoke and heat ventilators, smoke-removal systems, hazardous materials protection and detection systems, and all other fire protection systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing.

40. Section 901.5 of the OFC is amended by adding subsection 901.5.2 to provide:

901.5.2 System Plans and Specifications. Fire detection and alarm systems, fire extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other fire protection system plans and specifications shall be readily available on the premises. Notation of the precise location of the plans and specifications shall be affixed to the device control panel or major component. Plans and specifications shall consist of the complete construction submittal that was approved by the code official of the jurisdiction of the installation except that any drawings will be as-built drawings delineating actual installation details that are present at system acceptance.

41. Section 901.6 of the OFC is amended to provide:

Section 901.6 Inspection, testing and maintenance. Fire detection, alarm and extinguishing systems shall be maintained in an operative condition at all time, and shall be replaced or repaired where defective. Nonrequired *fire protection systems* and equipment shall be inspected, tested and maintained or removed. The burden of proof concerning whether an installed system is required shall be borne by the responsible person. All inspections, testing and maintenance shall be completed by a qualified person or company.

42. Section 901.6.2 of the OFC is amended to provide:

Section 901.6.2 Records. Records of all system inspections, tests, and maintenance required by the referenced standards shall be maintained on the premises for a minimum of 3 years and service contractors shall submit, in the manner specified by the Fire Marshal, reports of inspections and tests to the Eugene Springfield Fire Marshal's Office within 30 days of performing the inspection and test.

43. Section 903.3.3 of the OFC is amended by adding subsection 903.3.3.1, to provide:

903.3.3.1 Ceiling Penetrations That May Delay Sprinkler Activation. Ceiling penetrations that, in the opinion of the fire code official, may lead to a significant delay in the activation of sprinklers shall be sealed in an approved manner.

Exception. Where fire sprinklers are installed above and below the ceiling assembly.

44. Section 3103.2 of the OFC is amended to provide:

3103.2 Approval required and compliance. Tents and membrane structures having an area in excess of 1500 square feet or an occupant load of 50 or more, or multiple tents with an aggregate area in excess of 1500 square feet shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from *the fire code official* and must comply with the provisions of this chapter. Tents and membrane structures having an area of 400 square feet to 1499 square feet do not require a permit prior to erection, operation or maintenance, but must comply with the provisions of this chapter.

45. Section 3204 of the OFC is amended by adding subsection 3204.3, to provide:

3204.3 Identification of high-piled storage areas. The owner or occupant of a structure that qualifies for high-piled storage use due to interior design height that does not desire to have it designed, constructed or used for high-pile storage shall comply with the following:

1. Provide a letter to the fire code official stating they will not allow it to be used for high-piled storage. The responsible party agrees to upgrade the building to meet high-pile storage requirements when they choose to allow high-pile storage or when the fire department discovers any occupant using the storage area for high-pile storage.
2. As determined by the fire code official an approved permanent marking system limiting and indicating the maximum allowable storage height is required in the storage area.

46. Section 5001.5.2 of the OFC is amended to provide:

5001.5.2 Hazardous Materials Inventory Statement (HMIS). Where required by the fire code official, an application for a permit shall include an HMIS, such as SARA (Superfund Amendments and Reauthorization Act of 1986) Title III, Tier II Report, or other approved statement. The HMIS shall include the following information:

1. Product name.
2. Component.
3. Chemical Abstract Service (CAS) identification number.
4. Location where stored or used.
5. Container size.
6. Hazard classification.
7. Amount in storage.
8. Amount in use – closed systems.
9. Amount in use – open systems.
10. NFPA 704 classification

47. Section 5003.2.6 of the OFC is amended to provide:

5003.2.6 Maintenance. In addition to the requirements of Section 5003.2.3, equipment, machinery and required detection and alarm systems associated with hazardous materials shall be maintained in an operable condition. All safety control systems at a facility shall be maintained in good working condition and tested not less frequently than annually. Maintenance and testing shall be performed by persons qualified to perform the maintenance and tests. Maintenance records and certifications shall comply with 901.5 and 901.6.2. Defective containers, cylinders and tanks shall be removed from service, repaired or disposed of in an *approved* manner. Defective equipment or machinery shall be removed from service and repaired or replaced. Required detection and alarm systems shall be replaced or repaired where defective.

48. Chapter 50 of the OFC is amended by adding Section 5006, to provide:

Section 5006, Transport Vehicles

5006.1 Vehicle placards. Vehicles that require a hazardous materials placard by Department of Transportation (DOT) regulations shall display the required placard for the regulated cargo at all times.

5006.1.1 Unattended parking. Vehicles requiring placards in accordance with Section 5006.1 shall comply with the requirements of 5706.6.1 through 5706.6.4.

49. Section 5601.1 of the OFC is amended to provide:

5601.1 Scope.

....

Where the City Manager determines that a significant risk to public health, safety and welfare exists, the City Manager may, by administrative action, restrict the storage, sales, use and handling of fireworks.

50. Section 5601.2 of the OFC is amended to provide:

5601.2 Permit required. Permits are required as set forth in Section 105.6 of this code and regulated in accordance with this chapter.

51. Section 5702.1 of the OFC is amended to add the term **INERTING** to the list of definitions.

52. Section 5704.2.14.1 of the OFC is amended to provide:

5704.2.14.1 Removal. Removal of above-ground and underground tanks shall be in accordance with all of the following:

1. Flammable and combustible liquids shall be removed from the tank and connected piping.
2. Piping at tank openings that is not to be used further shall be disconnected.
3. Piping shall be removed from the ground.

Exception: Piping is allowed to be abandoned in place where the fire code official determines that removal is not practical. Abandoned piping shall be capped and safeguarded as required by the fire code official.

4. Tank openings shall be capped or plugged, leaving a 1/8-inch to 1/4-inch-diameter (3.2 mm to 6.4 mm) opening for pressure equalization.
5. Tanks shall be purged of vapor and inerted prior to removal. The inerted tank environment shall be monitored by an explosive meter during the removal of the tank.
6. All exterior above-grade fill and vent piping shall be permanently removed.

Exception: Piping associated with bulk plants, terminal facilities and refineries.

53. Section 6004 of the OFC is amended by adding subsection 6004.2.2.11 Seismic shut-off valve to provide:

6004.2.2.11 Seismic shut-off valve. Highly toxic or toxic compressed gases in amounts exceeding the maximum allowable quantity per control area set forth in Table 5003.1.1(2) shall be provided with an automatic valve which is of a failsafe-to-close design to shut off the supply of highly toxic or toxic gases upon significant seismic activity.

54. Appendix C, Footnote b to Table C105.1 of the OFC is amended to provide:

Table C105.1, Number and Distribution of Fire Hydrants:

b. Where streets are provided with median dividers which cannot be crossed by firefighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 20,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.

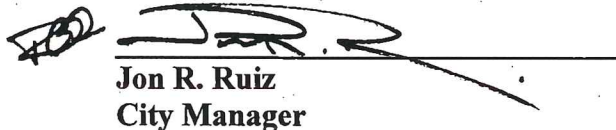
55. Appendix D Section D101.1 of the OFC is amended to provide:

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the Oregon Fire Code and regulations and standards adopted by the City of Eugene. The fire code official may be guided by the Oregon Department of Land Conservation and Development's Neighborhood Street Design Guidelines, June 2001.

56. Appendix D Section D102 .2 of the OFC is amended to provide:

D102.1 Access and Loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 80,000 pounds.

Dated and effective this 22 day of December, 2014.


Jon R. Ruiz
City Manager



2014 OREGON FIRE CODE

Based on the 2012 International
Fire Code®

DEFINITIONS

The control unit may be capable of providing a transfer of power to the notification appliances and transfer of condition to relays or devices.

FIRE ALARM SIGNAL. A signal initiated by a fire alarm-initiating device such as a manual fire alarm box, automatic fire detector, waterflow switch or other device whose activation is indicative of the presence of a fire or fire signature.

FIRE ALARM SYSTEM. A system or portion of a combination system consisting of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal-initiating devices and to initiate the appropriate response to those signals.

FIRE APPARATUS ACCESS ROAD. A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as *fire lane*, public street, private street, parking lot lane and access roadway.

Note: Specifications and standards for public streets are regulated by county or city governing bodies in accordance with ORS 368.039 wherein input from the fire service is required during planning for community development projects.

FIRE APPLIANCE. The apparatus or equipment provided or installed for use in the event of an emergency.

[B] **FIRE AREA.** The aggregate floor area enclosed and bounded by *fire walls, fire barriers, exterior walls or horizontal assemblies* of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

[B] **FIRE BARRIER.** A fire-resistance-rated wall assembly of materials designed to restrict the spread of fire in which continuity is maintained.

FIRE CHIEF. The State Fire Marshal, Deputy State Fire Marshal, the chief officer of the fire department serving the jurisdiction, or a duly authorized representative.

FIRE CODE OFFICIAL. The fire chief or other designated authority charged with the administration and enforcement of the code, or a duly authorized representative.

FIRE COMMAND CENTER. The principal attended or unattended location where the status of detection, alarm communications and control systems is displayed, and from which the system(s) can be manually controlled.

[B] **FIRE DAMPER.** A *listed* device installed in ducts and air transfer openings designed to close automatically upon detection of heat and resist the passage of flame. Fire dampers are classified for use in either static systems that will automatically shut down in the event of a fire, or in dynamic systems that continue to operate during a fire. A dynamic fire damper is tested and rated for closure under elevated temperature airflow.

FIRE DEPARTMENT MASTER KEY. A limited issue key of special or controlled design to be carried by fire department officials in command which will open key boxes on specified properties.

FIRE DETECTOR, AUTOMATIC. A device designed to detect the presence of a fire signature and to initiate action.

[B] **FIRE DOOR.** The door component of a fire door assembly.

[B] **FIRE DOOR ASSEMBLY.** Any combination of a fire door, frame, hardware and other accessories that together provide a specific degree of fire protection to the opening.

[B] **FIRE EXIT HARDWARE.** Panic hardware that is *listed* for use on *fire door assemblies*.

FIRE HAZARD. Is any thing or act that increases or could cause an increase of the hazard or menace of fire to a greater degree than that customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing or extinguishing fire or anything or act that could obstruct, delay, hinder or interfere with the operation of the fire department or the egress of occupants in the event of fire.

FIRE LANE. A road or other passageway developed to allow the passage of fire apparatus. A fire lane is not necessarily intended for vehicular traffic other than fire apparatus.

[B] **FIRE PARTITION.** A vertical assembly of materials designed to restrict the spread of fire in which openings are protected.

FIRE POINT. The lowest temperature at which a liquid will ignite and achieve sustained burning when exposed to a test flame in accordance with ASTM D 92.

[B] **FIRE PROTECTION RATING.** The period of time that an opening protective assembly will maintain the ability to confine a fire as determined by tests prescribed in Section 716 of the *International Building Code*. Ratings are stated in hours or minutes.

FIRE PROTECTION SYSTEM. *Approved* devices, equipment and systems or combinations of systems used to detect a fire, activate an alarm, extinguish or control a fire, control or manage smoke and products of a fire or any combination thereof.

[B] **FIRE RESISTANCE.** That property of materials or their assemblies that prevents or retards the passage of excessive heat, hot gases or flames under conditions of use.

[B] **FIRE-RESISTANCE RATING.** The period of time a building element, component or assembly maintains the ability to confine a fire, continues to perform a given structural function, or both, as determined by the tests, or the methods based on tests, prescribed in Section 703 of the *International Building Code*.

[B] **FIRE-RESISTANT JOINT SYSTEM.** An assemblage of specific materials or products that are designed, tested and fire-resistance rated in accordance with either ASTM E 1966 or UL 2079 to resist for a prescribed period of time the passage of fire through joints made in or between fire-resistance-rated assemblies.

FIRE SAFETY FUNCTIONS. Building and fire control functions that are intended to increase the level of life safety for occupants or to control the spread of the harmful effects of fire.

MATERIAL SAFETY DATA SHEET (MSDS). Information concerning a hazardous material which is prepared in accordance with the provisions of DOL 29 CFR Part 1910.1200 or in accordance with the provisions of a federally approved state OSHA plan.

MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA. The maximum amount of a hazardous material allowed to be stored or used within a *control area* inside a building or an outdoor *control area*. The maximum allowable quantity per control area is based on the material state (solid, liquid or gas) and the material storage or use conditions.

[B] MEANS OF EGRESS. A continuous and unobstructed path of vertical and horizontal egress travel from any occupied portion of a building or structure to a *public way*. A means of egress consists of three separate and distinct parts: the *exit access*, the *exit* and the *exit discharge*.

MECHANICAL STOCKING METHODS. Stocking methods utilizing motorized vehicles or hydraulic jacks to move stock.

[B] MEDICAL CARE. Care involving medical or surgical procedures, nursing or for psychiatric purposes.

[M] MEDIUM-DUTY COOKING APPLIANCE. Medium-duty cooking appliances include electric discrete element ranges (with or without oven), electric and gas hot-top ranges, electric and gas griddles, electric and gas double-sided griddles, electric and gas fryers (including open deep fat fryers, donut fryers, kettle fryers and pressure fryers), electric and gas conveyor pizza ovens, electric and gas tilting skillets (braising pans) and electric and gas rotisseries.

MEMBRANE STRUCTURE. An air-inflated, air-supported, cable or frame-covered structure as defined by the *International Building Code* and not otherwise defined as a tent. See Chapter 31 of the *International Building Code*.

[B] MERCHANDISE PAD. A merchandise pad is an area for display of merchandise surrounded by *aisles*, permanent fixtures or walls. Merchandise pads contain elements such as nonfixed and moveable fixtures, cases, racks, counters and partitions as indicated in Section 105.2 of the *International Building Code* from which customers browse or shop.

METAL HYDRIDE. A generic name for compounds composed of metallic element(s) and hydrogen.

METAL HYDRIDE STORAGE SYSTEM. A *closed system* consisting of a group of components assembled as a package to contain metal-hydrogen compounds for which there exists an equilibrium condition where the hydrogen-absorbing metal alloy(s), hydrogen gas and the metal-hydrogen compound(s) coexist and where only hydrogen gas is released from the system in normal use.

[B] MEZZANINE. An intermediate level or levels between the floor and ceiling of any story and in accordance with Section 505 of the *International Building Code*.

MOBILE FUELING. The operation of dispensing liquid fuels from tank vehicles into the fuel tanks of motor vehicles. Mobile fueling may also be known by the terms "Mobile fleet fueling," "Wet fueling" and "Wet hosing."

[M] MORTAR. See OAR 837-012-0720(55).

MULTIPLE-STATION ALARM DEVICE. Two or more single-station alarm devices that can be interconnected such that actuation of one causes all integral or separate audible alarms to operate. It also can consist of one single-station alarm device having connections to other detectors or to a manual fire alarm box.

MULTIPLE-STATION SMOKE ALARM. Two or more single-station alarm devices that are capable of interconnection such that actuation of one causes the appropriate alarm signal to operate in all interconnected alarms.

NEPA 70. For the purpose of the *Oregon Fire Code*, shall mean the *Oregon Electrical Specialty Code (OESC)* as adopted by OAR 918-305-0100.

NESTING. A method of securing flat-bottomed *compressed gas* cylinders upright in a tight mass using a contiguous three-point contact system whereby all cylinders within a group have a minimum of three points of contact with other cylinders, walls or bracing.

NET EXPLOSIVE WEIGHT (net weight). The weight of *explosive material* expressed in pounds. The net explosive weight is the aggregate amount of *explosive material* contained within buildings, magazines, structures or portions thereof, used to establish quantity-distance relationships.

NONCOMBUSTIBLE. A material that, in the form in which it is used and under the conditions anticipated, does not ignite, burn, support combustion, or release flammable vapors, when subject to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test for Behavior of Materials in a vertical Tube Furnace at 750°C, are considered noncombustible materials. For the purposes of this code any material that does not meet this definition of noncombustible shall be deemed as combustible.

NORMAL TEMPERATURE AND PRESSURE (NTP). A temperature of 70°F (21°C) and a pressure of 1 atmosphere [14.7 psia (101 kPa)].

[B] NOSING. The leading edge of treads of *stairs* and of landings at the top of *stairway flights*.

NOTIFICATION ZONE. See "Zone, notification."

NUISANCE ALARM. An alarm caused by mechanical failure, malfunction, improper installation or lack of proper maintenance, or an alarm activated by a cause that cannot be determined.

[B] NURSING HOMES. Facilities that provide care, including both intermediate care facilities and skilled nursing facilities, where any of the persons are incapable of self-preservation.

OCCUPANCY CLASSIFICATION. For the purposes of this code, certain occupancies are defined as follows:

[B] Assembly Group A. Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption; or awaiting transportation.

Small buildings and tenant spaces. A building or tenant space used for assembly purposes with an *occupant*

Markets
 Motor fuel-dispensing facilities
 Retail or wholesale stores
 Sales rooms

[B] **Residential Group R.** Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* in accordance with Section 101.2 of the *International Building Code*.

Residential Group R-1. Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

- Boarding houses* (transient) with more than 10 occupants
- Congregate living facilities (transient) with more than 10 occupants
- Hotels (transient)
- Motels (transient)

Residential Group R-2. Residential occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

- Apartment houses
- Boarding houses* (nontransient) with more than 16 occupants
- Congregate living facilities (nontransient) with more than 16 occupants
- Convents
- Dormitories
- Fraternities and sororities
- Hotels (nontransient)
- Live/work units
- Monasteries
- Motels (nontransient)
- Vacation timeshare properties

Group R-2 occupancies providing 21 or more housing units for low income elderly, which are financed in whole or part by the federal or state fund, shall contain a multi-service room adequate in size to seat all the tenants (ORS 455.425). The multiservice room shall include adjacent toilet facilities for both sexes; a service area with a kitchen sink, counter top and upper and lower cabinets; and a storage room sized to store tables, chairs or benches and janitorial supplies and tools. The multiservice room and accessory room shall be accessible to disabled persons. (See Chapter 11 of the *Oregon Structural Specialty Code*.)

Residential Group R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Boarding houses* (nontransient) with 16 or fewer occupants
- Buildings that do not contain more than two *dwelling units*
- Congregate living facilities (nontransient) with 16 or fewer occupants

Adult foster homes as defined in ORS Chapter 443, or family child care homes (located in a private residence) as defined in Section 310.2 of the *Oregon Structural Specialty Code*.

Adult foster homes and family child care homes that are within a single-family dwelling are permitted to comply with the *Oregon Residential Specialty Code* in accordance with Section 101.2 of the *Oregon Structural Specialty Code*.

Lodging houses as defined in Chapter 2 are permitted to comply with the *Oregon Residential Specialty Code* in accordance with Section 101.2 of the *Oregon Structural Specialty Code*.

Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the *Oregon Residential Specialty Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Appendix T of the *Oregon Residential Specialty Code*.

Residential Group R-4. This occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. Buildings of Group R-4 shall be classified as one of the occupancy conditions indicated in Condition 1 or Condition 2.

Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care, who without any assistance, are capable of responding to an emergency situation to complete building evacuation. This group shall include, but not be limited to, the following:

- Congregate living facilities
- Halfway houses
- Social rehabilitation facilities

Condition 2. This occupancy condition shall include buildings, subject to licensure by the Oregon Department of Human Services, in which there are any persons receiving custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities with or without a Memory Care Endorsement
- Residential care facilities with or without a Memory Care Endorsement
- Residential treatment facilities
- Group homes and facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in the *Building Code*.

[B] **Storage Group S.** Storage Group S occupancy includes, among others, the use of a building or structure, or a portion thereof, for storage that is not classified as a hazardous occupancy.

DEFINITIONS

Moderate-hazard storage, Group S-1. Buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

- Aerosols, Levels 2 and 3
- Aircraft hangar (storage and repair)
- Bags: cloth, burlap and paper
- Bamboos and rattan
- Baskets
- Belting: canvas and leather
- Books and paper in rolls or packs
- Boots and shoes
- Buttons, including cloth covered, pearl or bone
- Cardboard and cardboard boxes
- Clothing, woolen wearing apparel
- Cordage
- Dry boat storage (indoor)
- Furniture
- Furs
- Glues, mucilage, pastes and size
- Grains
- Horns and combs, other than celluloid
- Leather
- Linoleum
- Lumber
- Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 5003.1.1(1) (see Section 406.3 of the *International Building Code*)
- Photo engravings
- Resilient flooring
- Silks
- Soaps
- Sugar
- Tires, bulk storage of
- Tobacco, cigars, cigarettes and snuff
- Upholstery and mattresses
- Wax candles

Low-hazard storage, Group S-2. Includes, among others, buildings used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products are permitted to have a negligible amount of plastic trim, such as knobs, handles or film wrapping. Storage uses shall include, but not be limited to, storage of the following:

- Asbestos
- Beverages up to and including 16-percent alcohol in wooden barrels, metal, glass or ceramic containers
- Cement in bags
- Chalk and crayons
- Dairy products in nonwaxed coated paper containers
- Dry cell batteries
- Electrical coils
- Electrical motors
- Empty cans
- Food products
- Foods in noncombustible containers
- Fresh fruits and vegetables in nonplastic trays or containers

- Frozen foods
- Glass
- Glass bottles, empty or filled with noncombustible liquids
- Gypsum board
- Inert pigments
- Ivory
- Meats
- Metal cabinets
- Metal desks with plastic tops and trim
- Metal parts
- Metals
- Mirrors
- Oil-filled and other types of distribution transformers
- Parking garages, open or enclosed
- Porcelain and pottery
- Stoves
- Tale and soapstones
- Washers and dryers

[B] Mausoleums and Columbariums, Group S-3. The design life of structures in this occupancy are longer than other occupancies in the *Oregon Structural Specialty Code*. Except where specific provisions are made in Chapter 4 of the *Oregon Structural Specialty Code*, other requirements of that code shall apply.

[B] Miscellaneous Group U. Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of the *International Building Code* commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

- Nonexempt agricultural buildings (See ORS 455.315)
- Aircraft hangar, accessory to a one- or two-family residence (see Section 412.5 of the *International Building Code*)
- Barns
- Carports
- Fences more than 6 feet (1829 mm) high
- Grain silos, accessory to a residential occupancy
- Greenhouses
- Livestock shelters
- Private garages
- Retaining walls
- Sheds
- Stables
- Tanks
- Towers

[B] OCCUPANT LOAD. The number of persons for which the *means of egress* of a building or portion thereof is designed.

OPEN BURNING. The burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. Open burning does not include road flares, smudgepots and similar devices associated with safety or occupational uses typically considered open flames, *recreational fires* or use of portable outdoor fireplaces. For the purpose of this definition, a chamber shall be regarded as enclosed when,

Part III—Building and Equipment Design Features

CHAPTER 5

FIRE SERVICE FEATURES

SECTION 501 GENERAL

501.1 Scope. Fire service features for buildings, structures and premises shall comply with this chapter. See also Oregon Revised Statutes (ORS) 92.044, 203, 221, 195.065, 368.039, 478.920 and Oregon Administrative Rule (OAR) 918-480-0100.

ORS Chapter 92.044, 203, 221, 368.039, 195.065, 478.920 and OAR Chapter 918 are not a part of this code but are reproduced or paraphrased here for the reader's convenience.

ORS 92.044 is the adoption of standards and procedures governing approval of plats and plans; delegation to planning commission; fees.

ORS 203 is the county bodies; county home rule.

ORS 221 is the organization and government of cities.

ORS 368.039 allows road standards adopted by local government to supersede standards in the fire codes and requires consultation with local fire agency.

ORS 195.065 requires local governments and special districts that provide urban service to enter into urban service agreements. For the purpose of this statute, "urban service" means: sanitary sewers, water, fire protection, parks, open space, recreation and streets, roads and mass transit.

ORS 478.920 describes elements that may be included in the scope of a fire prevention code adopted by a rural fire protection district, including but not limited to: mobile fire apparatus means of approach to buildings and structures, and providing fire-fighting water supplies and fire detection and suppression apparatus adequate for the protection of buildings and structures.

OAR 918-480-0100 describes the procedure for approving the installation of automatic fire sprinklers where fire apparatus access or fire-fighting water supply do not meet local standards.

501.2 Permits. A permit shall be required as set forth in Sections 105.6 and 105.7.

501.3 Construction documents. *Construction documents* for proposed fire apparatus access, location of *fire lanes*, security gates across fire apparatus access roads and *construction documents* and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

501.4 Timing of installation. When fire apparatus access roads or a water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when *approved* alternative methods of protection are provided.

Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2.

SECTION 502 DEFINITIONS

502.1 Definitions. The following terms are defined in Chapter 2:

AGENCY.

FIRE APPARATUS ACCESS ROAD.

FIRE COMMAND CENTER.

FIRE DEPARTMENT MASTER KEY.

FIRE LANE.

KEY BOX.

TRAFFIC CALMING DEVICES.

SECTION 503 FIRE APPARATUS ACCESS ROADS

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3. See Appendix D.

503.1.1 Buildings and facilities. *Approved* fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an *approved* route around the exterior of the building or facility.

Exception: The *fire code official* is authorized to modify Sections 503.1 and 503.2 where any of the following applies:

1. The building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.
3. There are not more than two Group R-3 or Group U occupancies.

FIRE SERVICE FEATURES

503.1.2 Additional access. The *fire code official* is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

503.1.3 High-piled storage. Fire department vehicle access to buildings used for *high-piled combustible storage* shall comply with the applicable provisions of Chapter 32.

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8.

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

503.2.2 Authority. The *fire code official* shall have the authority to modify the dimensions specified in Section 503.2.1.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the *fire code official*.

503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an *approved* area for turning around fire apparatus.

503.2.6 Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the *fire code official*. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, *approved* barriers, *approved* signs or both shall be installed and maintained when required by the *fire code official*.

503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the *fire code official* based on the fire department's apparatus.

503.2.8 Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall be within the limits established by the *fire code official* based on the fire department's apparatus.

503.3 Marking. Where required by the *fire code official*, *approved* signs or other *approved* notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which *fire*

lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.

503.4.1 Traffic calming devices. Traffic calming devices shall be prohibited unless *approved* by the *fire code official*.

503.5 Required gates or barricades. The *fire code official* is authorized to require the installation and maintenance of gates or other *approved* barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

503.5.1 Secured gates and barricades. When required, gates and barricades shall be secured in an *approved* manner. Roads, trails and other accessways that have been closed and obstructed in the manner prescribed by Section 503.5 shall not be trespassed on or used unless authorized by the *owner* and the *fire code official*.

Exception: The restriction on use shall not apply to public officers acting within the scope of duty.

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be *approved* by the fire chief. Where security gates are installed, they shall have an *approved* means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

SECTION 504 ACCESS TO BUILDING OPENINGS AND ROOFS

504.1 Required access. Exterior doors and openings required by this code or the *International Building Code* shall be maintained readily accessible for emergency access by the fire department. An *approved* access walkway leading from fire apparatus access roads to exterior openings shall be provided when required by the *fire code official*.

504.2 Maintenance of exterior doors and openings. Exterior doors and their function shall not be eliminated without prior approval. Exterior doors that have been rendered non-functional and that retain a functional door exterior appearance shall have a sign affixed to the exterior side of the door with the words THIS DOOR BLOCKED. The sign shall consist of letters having a principal stroke of not less than $\frac{3}{4}$ inch (19.1 mm) wide and at least 6 inches (152 mm) high on a contrasting background. Required fire department access doors shall not be obstructed or eliminated. *Exit* and *exit access*

APPENDIX D

FIRE APPARATUS ACCESS ROADS

The provisions contained in this appendix are adopted by the State of Oregon.

SECTION D101 GENERAL

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *International Fire Code*. The *fire code official* may be guided by the Oregon Department of Land and Conservation and Development's Neighborhood Street Design Guidelines, June 2001.

SECTION D102 REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an *approved* fire apparatus access road with an asphalt, concrete or other *approved* driving surface capable of supporting the imposed load of fire apparatus weighing at least 60,000 pounds (27 240 kg).

Exception: The minimum weight specified in Section D102.1 may be increased by the *fire code official* based upon the actual weight of fire apparatus vehicles serving the jurisdiction that provides structural fire protection services to the location, including fire apparatus vehicles that respond under automatic and mutual aid agreements.

D102.1.1 Access in wildland-urban interface areas. For egress and access concerns in wildland-urban interface locations, the *fire code official* may be guided by the *International Wildland-Urban Interface Code*.

SECTION D103 MINIMUM SPECIFICATIONS

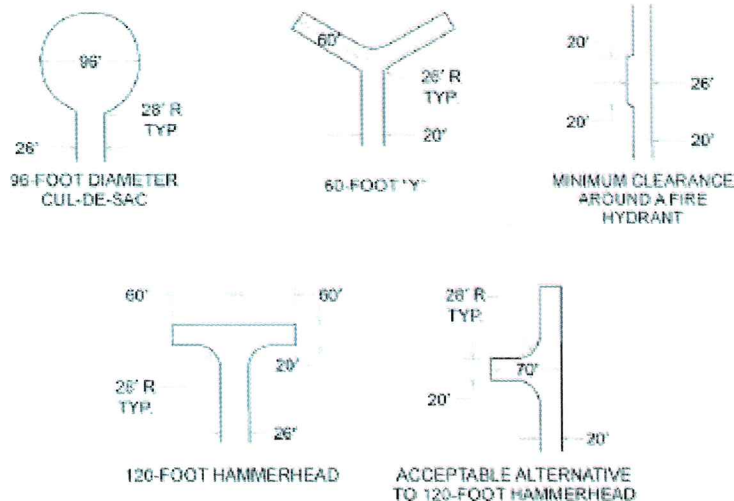
D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

Exception: The *fire code official* is authorized to modify the provisions of Section D103.1 when:

1. In accordance with Oregon Administrative Rule (OAR) 918-480-0100, all buildings are completely protected with an approved automatic fire sprinkler system;
2. Provisions are made for the emergency use of sidewalks by such means as rolled or mountable curbs capable of supporting the fire department's apparatus;
3. Streets or roadways are identified for one-way circulating flow of traffic or pullouts are provided every 150 feet (45 720 mm) on streets or roadways identified for two-way traffic; or
4. A grid system for traffic flow is provided and streets or roadways in the grid do not exceed 300 feet (91 400 mm) in length but are accessible at each end from approved access roadways or streets.

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent as *approved* by the fire chief.



For SI: 1 foot = 304.8 mm.

**FIGURE D103.1
DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND**

D103.3 Turning radius. The minimum turning radius shall be determined by the *fire code official*.

D103.3.1 Drainage. When subject to run-off damage, the *fire code official* is authorized to require approved drainage.

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

**TABLE D103.4
REQUIREMENTS FOR DEAD-END
FIRE APPARATUS ACCESS ROADS**

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501-750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750		Special approval required

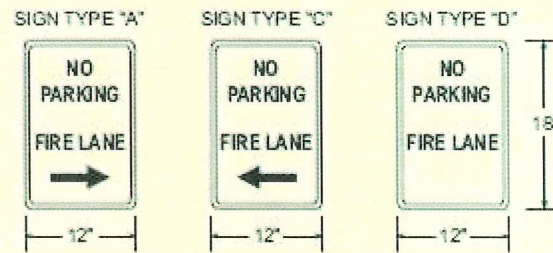
For SI: 1 foot = 304.8 mm.

D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. The minimum gate width shall be 20 feet (6096 mm).
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be *approved by the fire code official*.
6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.
7. Locking device specifications shall be submitted for approval by the *fire code official*.
8. Electric gate operators, where provided, shall be *listed* in accordance with UL 325.
9. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

D103.6 Signs. Where required by the *fire code official*, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted

on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.



**FIGURE D103.6
FIRE LANE SIGNS**

D103.6.1 Roads 20 to 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).

D103.6.2 Roads more than 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7925 mm) and less than 32 feet wide (9754 mm).

**SECTION D104
COMMERCIAL AND INDUSTRIAL DEVELOPMENTS**

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9144 mm) or three stories in height shall have at least two means of fire apparatus access for each structure.

D104.2 Buildings exceeding 62,000 square feet in area. Buildings or facilities having a *gross building area* of more than 62,000 square feet (5760 m²) shall be provided with two separate and *approved* fire apparatus access roads.

Exception: Projects having a *gross building area* of up to 124,000 square feet (11 520 m²) that have a single *approved* fire apparatus access road when all buildings are equipped throughout with *approved automatic sprinkler systems*.

D104.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

**SECTION D105
AERIAL FIRE APPARATUS ACCESS ROADS**

D105.1 Where required. Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

D105.3 Proximity to building. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the *fire code official*.

D105.4 Obstructions. Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building. Other obstructions shall be permitted to be placed with the approval of the *fire code official*.

2. The number of *dwelling units* on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the *fire code official*.

**D108
REFERENCED STANDARDS**

ASTM	F 2200—05	Standard Specification for Automated Vehicular Gate Construction	D103.5
ICC	IFC—12	International Fire Code	D101.5, D107.1
UL	325—02	Door, Drapery, Gate, Louver, and Window Operators and Systems, with Revisions through February 2006	D103.5

SECTION D106

MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 *dwelling units* shall be equipped throughout with two separate and *approved* fire apparatus access roads.

Exception: Projects having up to 200 *dwelling units* may have a single *approved* fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with *approved automatic sprinkler systems* installed in accordance with Section 903.3.1.1 or 903.3.1.2.

D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 *dwelling units* shall be provided with two separate and *approved* fire apparatus access roads regardless of whether they are equipped with an *approved automatic sprinkler system*.

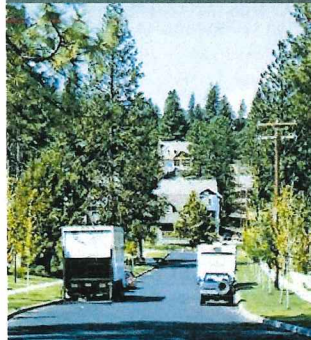
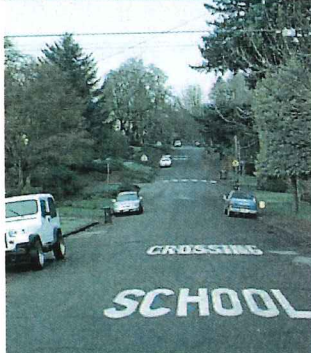
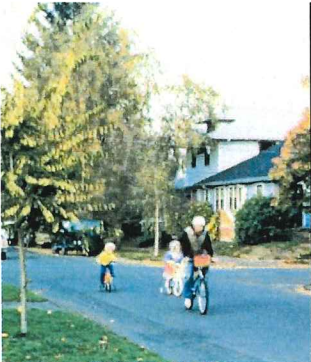
SECTION D107

**ONE- OR TWO-FAMILY
RESIDENTIAL DEVELOPMENTS**

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family *dwelling units* where the number of *dwelling units* exceeds 30 shall be provided with two separate and *approved* fire apparatus access roads, and shall meet the requirements of Section D104.3.

Exceptions:

1. Where there are more than 30 *dwelling units* on a single public or private fire apparatus access road and all *dwelling units* are equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the *International Fire Code*, access from two directions shall not be required.



NEIGHBORHOOD STREET DESIGN GUIDELINES

*An Oregon Guide
for Reducing Street Widths*

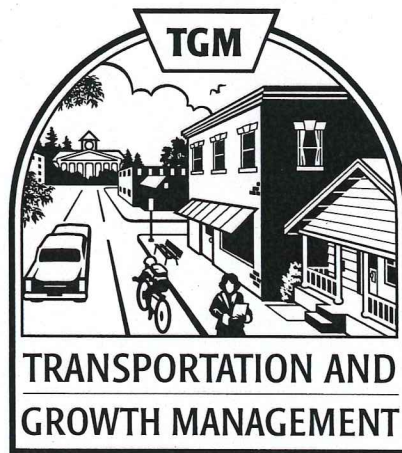
**A Consensus Agreement
by the Stakeholder Design Team**

**November
2000**

**Prepared by the
Neighborhood Streets
Project Stakeholders**

*This guidebook is dedicated to the memory of
Joy Schetter
who passed away before she could see the
remarkable success of this project.*

*Joy's leadership, hard work, calm manner, and
ability to work with all of the stakeholders
were key factors in that success.*



*Funding for this project was provided from
two State of Oregon programs:*

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and
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2nd Printing - June 2001

Includes minor clarifications to the sections on residential fire sprinklers (pages 9 and 16.)

JOHN A. KITZHABER, M.D.
GOVERNOR



February 16, 2001

To the Citizens of Oregon:

I am pleased to present to Oregon's communities a new publication called *Neighborhood Street Design Guidelines*. This handbook is a valuable tool for local governments. In workbook style, it recommends a process for development of street standards, provides important information to help communities consider and decide on the standards, and includes model designs as a starting point.

Street design, in particular street width, has been an important issue in Oregon for the past decade. Oregon's award-winning Transportation Planning Rule, adopted in 1991, requires local governments to minimize street width considering the operational needs of the streets. Also, citizens and planners in many Oregon communities, as well as towns across the country, have advocated for narrower streets as part of a larger movement to build more livable neighborhoods.

The desire to reduce the standards for street widths raises concerns about large vehicle access, especially emergency service providers who need to reach their destinations fast. The issue has resulted in heated debate in some communities and among state agencies and statewide organizations.

This document is the result of hard work and commitment of individuals who joined in a collaborative process to reconcile the multiple uses of our neighborhood streets. Many thanks to the Neighborhood Streets Project Stakeholders, Design Team members, and reviewers for the time and expertise they contributed to this effort.

John A. Kitzhaber, M.D.
Governor

PROJECT STAKEHOLDERS

These Guidelines have been endorsed by...

- Office of the State Fire Marshal
- Oregon Fire Chiefs Assoc.
- Oregon Fire Marshal's Assoc.
- Oregon Chiefs of Police Assoc.
- Oregon Refuse and Recycling Assoc.
- Oregon Building Industry Assoc.
- Oregon Chapter of the American Planning Assoc.
- Oregon Chapter of the American Public Works Assoc.
- Assoc. of Oregon City Planning Directors
- Livable Oregon, Inc.
- 1000 Friends of Oregon
- Oregon Department of Land Conservation & Development
- Oregon Department of Transportation

- Metro also supports the guidelines and has adopted a specific set of guidelines for the Portland metropolitan region.

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The Design Team was responsible for the overall collaborative process with assistance from a facilitator and DLCD staff. The Design Team vested themselves with responsibility for negotiating the issues and guiding the development of this agreement.

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Cameron Gloss (City of Klamath Falls)
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*Many thanks to the
Neighborhood Streets Project Stakeholders,
Design Team Members, and the
Community of Reviewers
for the time and expertise
they contributed to this effort.*

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I. Introduction

The standards for the design of local streets, in particular the width of streets, has been one of the most contentious issues in local jurisdictions in Oregon for the past decade. The disagreements have also been fought at the state level among state agencies and advisory, advocacy, and professional groups that have sought to influence decisions made at the local level. Previous efforts of these groups to provide guidance have failed because of lack of consensus.

This document is the result of the hard work of a group of diverse stakeholders that finally developed that consensus. *Neighborhood Street Design Guidelines* was developed to help local governments consider and select neighborhood street standards appropriate for their communities. As the title attests, the handbook provides guidelines and is not prescriptive. The authors hope that the consideration of the guidelines and examples will stimulate creative ideas for street designs in local communities.

This guidebook explains the issues surrounding the width of neighborhood streets with respect to livability and access for emergency and other large vehicles. It recommends a community process for developing neighborhood street width standards, a checklist of factors that should be addressed in that process, street cross-sections, and a list of resources that provide additional information. The guidelines are intended for *local* jurisdiction streets that carry limited traffic, not collectors or arterials. They are not intended, nor are they to be used on state highways.

II. The Issues

Why Narrow Streets?

Streets are key determinants of neighborhood livability. They provide access to homes and neighborhood destinations for pedestrians and a variety of vehicle types, from bicycles and passenger cars to moving vans and fire apparatus. They provide a place for human interaction: a place where children play, neighbors meet, and residents go for walks and bicycle rides. The design of residential streets, together with the amount and speed of traffic they carry, contributes significantly to a sense of community, neighborhood feeling, and perceptions of safety and comfort. The fact that these may be intangible values makes them no less real, and this is often reflected in property values.

The width of streets also affects other aspects of livability. Narrow streets are less costly to develop and maintain and they present less impervious surface, reducing runoff and water quality problems.

The topic of automobile speeds on neighborhood streets probably tops the list of issues. Where streets are wide and traffic moves fast, cities often get requests from citizens to install traffic calming devices, such as speed humps. However, these can slow response times of emergency service vehicles creating the same, or worse, emergency response concerns than narrow streets.

Oregon's Land Conservation and Development Commission recognized the values associated with narrow street widths when it adopted the Transportation Planning Rule. The rule requires local governments to establish standards for local streets and accessways that minimize pavement width and right-of-way. The rule requires that the standards provide for the operational needs of streets, including pedestrian and bicycle circulation and emergency vehicle access.

Why Are Emergency Service Providers Concerned?

Street width affects the ability of emergency service vehicles to quickly reach a fire or medical emergency. Emergency service providers and residents alike have an expectation that neighborhood streets provide adequate space for emergency vehicles to promptly reach their destination and for firefighters to efficiently set up and use their equipment.

Fire equipment is large and local fire departments do not have full discretion to simply "downsize" their vehicles. Efforts by some departments to do this have generally not been successful, since these smaller vehicles did not carry adequate supplies for many typical emergency events.

The size of fire apparatus is driven, in part, by federal Occupational Health and Safety Administration (OSHA) requirements and local service needs. The regulations require that fire trucks carry considerable equipment and that firefighters ride completely enclosed in the vehicle. In addition, to save money, fire departments buy multi-purpose vehicles that can respond to an emergency like a heart attack or a traffic accident, as well as a fire. These vehicles typically provide the

first response to an emergency. An ambulance will then provide transport to a hospital, if needed. To accommodate the need to move the vehicles and access equipment on them quickly, the Uniform Fire Code calls for a 20-foot wide clear passage.

The risk of liability also raises concerns about response time and the amount of equipment carried on trucks. A successful lawsuit in West Linn, Oregon found that a response time of eight minutes was inadequate. The National Fire Protection Association, which is the national standard-setting body for the fire service, is proposing new rules that would require a maximum four-minute response time for initial crews and eight-minute response for full crews and equipment for 90% of calls. Fire departments have also been sued for not having the proper equipment at the scene of an accident. This puts pressure on departments to load all possible equipment onto a vehicle and increases the need to use large vehicles.

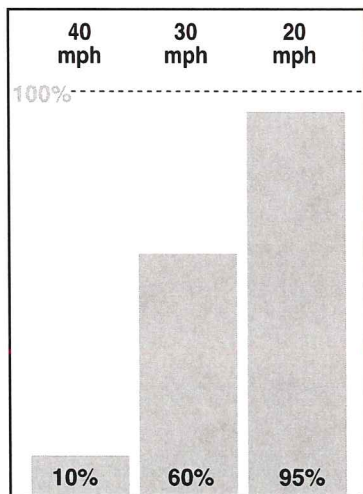
III. Background

Residential streets are complex places that serve multiple and, at times, competing needs. Residents expect a place that is relatively quiet, that connects rather than divides their neighborhood, where they can walk along and cross the street relatively easily and safely, and where vehicles move slowly. Other street users, including emergency service providers, solid waste collectors, and delivery trucks, expect a place that they can safely and efficiently access and maneuver to perform their jobs. Clearly, balancing the needs of these different users is not an easy task.

Oregon's cities reflect a variety of residential street types. In many older and historic neighborhoods built between 1900 and 1940, residential streets typically vary in width in relation to the length and function of the street. In many cases, a typical residential street may be 24 feet to 28 feet in width with parking on both sides. However, it is not uncommon to find streets ranging from 20 feet to 32 feet in width within the same neighborhood. Newer subdivisions and neighborhood streets built since 1950 tend to reflect a more uniform design, with residential streets typically 32 feet to 36 feet in width with parking on both sides and little or no variation within a neighborhood.

Designs For Livability. Over the last decade, citizens, planners, and public officials throughout the United States have expressed increased interest in development of compact, pedestrian-friendly neighborhoods. The design of neighborhood streets is a key component in this effort. Nationally, the appropriate width and design of neighborhood streets has been the subject of numerous books and articles targeted not just to the planning and development community, but also the general population. In May 1995, *Newsweek* magazine featured an article on neotraditional planning that listed reducing the width of neighborhood streets as one of the “top 15 ways to fix the suburbs.” In addition, developments such as Kentlands in Maryland and Celebration in Florida have gained fame by incorporating many of the features of traditional, walkable neighborhoods and towns, including narrow neighborhood streets.

Chances of a Pedestrian Surviving a Traffic Collision



Survival Rates

Graphic adapted from “Best Management Practices,” Reid Ewing, 1996; data from “Traffic Management and Road Safety,” Durkin & Pheby, 1992.

Safe and Livable. There is growing appreciation for the relationship between street width, vehicle speed, the number of crashes, and resulting fatalities. Deaths and injuries to pedestrians increase significantly as the speed of motor vehicles goes up. In 1999, planner Peter Swift studied approximately 20,000 police accident reports in Longmont, Colorado to determine which of 13 physical characteristics at each accident location (e.g., width, curvature, sidewalk type, etc.) accounts for the crash. The results are not entirely surprising: the highest correlation was between collisions and the width of the street. A typical 36-foot wide residential street has 1.21 collisions/mile/year as opposed to 0.32 for a 24 foot wide street. The safest streets were narrow, slow, 24-foot wide streets.

Award-Winning Neighborhoods. In Oregon, citizens, non-profit organizations, transportation advocates, and state agencies interested in the livability of our communities have advocated reducing the width of neighborhood streets. Several new developments that include narrow neighborhood streets such as Fairview Village in Fairview, West Bend Village in Bend, and Orenco Station in Hillsboro have received *Governor’s Livability Awards* (See Appendix A for contact

information). Although cited as models of livable communities, the narrow street widths included in these developments are not allowed in many of Oregon's cities, often because of concerns about emergency service access.

Emergency Response. The movement to reduce street standard widths raised concerns with emergency service providers. Thus, the most controversial issue facing Oregon's fire departments in the past decade has been street width. Fire departments must move large trucks, on average, 10 feet wide mirror-to-mirror.

Response times can be slowed depending upon the amount of on-street parking and traffic encountered. Narrow streets lined with parked cars may not provide adequate space for firefighters to access and use their equipment once they have reached the scene of an emergency. In addition, emergency vehicle access can be completely blocked on streets that provide less than 10 feet of clear travel width.

Authority to Establish Standards. Prior to 1997, there had been some confusion over who had the authority to establish street standards. Oregon's land use laws grant local governments the authority to establish local subdivision standards, which include street widths (ORS 92.044). However, the *Uniform Fire Code*, which was adopted by the State Fire Marshal and is used by many local governments to establish standards for the prevention of and protection from fires, includes standards which affect the width and design of streets. The *Uniform Fire Code* is published by the Western Fire Chiefs and the International Congress of Building Officials as partners.

This question of authority was clarified in 1997 when ORS 92.044 was amended to state that standards for the width of streets established by local governments shall "supersede and prevail over any specifications and standards for roads and streets set forth in a uniform fire code adopted by the State Fire Marshal, a municipal fire department or a county fire-fighting agency." ORS 92.044 was also amended to establish a consultation requirement for the local governments to "consider the needs of the fire department or fire-fighting agency when adopting the final specifications and standards."

IV. Collaborative Process

This project was undertaken to:

“Develop consensus and endorsement by stakeholders on a set of flexible guidelines for neighborhood street designs for new developments that result in reduced street widths.”

The collaborative process relied on two groups of stakeholders. A larger group was comprised of a broad cross-section of interest groups and numbered about thirty people from around the state. A core team of nine members, a subset of the larger group, was convened to guide the collaborative problem-solving process, working in conjunction with the consultant and staff. This “Design Team” consisted of representatives from these groups: special districts, fire service, state fire marshal, non-profit advocacy, traffic engineering, builder/developer, city planner, public works, and a representative from the Department of Land Conservation and Development.

The Design Team’s responsibilities were to recommend participants for the larger collaborative working group, determine the priority interests, recommend a statewide endorsement and implementation process, and provide input on technical presentations required. At the Design Team’s first meeting, they decided to assign themselves the task of creating the draft street design guidelines. They would take their products to the larger group for input, recommendations, and eventual endorsement. Consensus would be sought within the Design Team before going to the large group. Likewise, consensus at the large group would be fundamental to achieving the project’s goals.

The large group was instrumental in providing actual scenarios of community experiences to the Design Team. They also helped enlarge the scope of affected parties and corresponding issues by including other service providers that use large vehicles, such as school busses and solid waste haulers. Members of the large group provided valuable reference materials to the Design Team. They provided substance that had been over-looked on more than one occasion. Large group members were pleased to know that a core team of well-respected stakeholders was representing their interests. The Design Team engaged the large group at significant junctures in its work.

V. A Community Process for Adopting Standards

Unique issues will arise in each community, whether related to hills, higher density neighborhoods, or existing street patterns. Close collaboration with fire and emergency service providers, public works agencies, refuse haulers, and other neighborhood street users must be maintained throughout the process. This will ensure that the standards developed to meet the general goals of the community will also meet the specific needs of different stakeholder groups.

Through broad-based involvement, educational efforts, and sensitive interaction with stakeholders, a community can adopt new street standards that will meet the transportation needs of the citizens, while providing and encouraging a very livable residential environment.

The following steps reflect a realistic process development and local government adoption of standards for narrow neighborhood streets.

Steps for Local Government Consideration and Adoption of Neighborhood Street Standards

1. Determine stakeholders
2. Inform/Educate: What is the value of narrow residential street standards?
3. Ensure dialogue among stakeholders
4. Identify specific issues, such as seasonal needs and natural features
5. Prepare draft standards
6. Review draft with stakeholders/officials /public
7. Revise, conduct public review, and adopt standards
8. Implement and ensure periodic evaluation

Determine stakeholders. There are many benefits to a community adopting narrow street standards. Many stakeholders share an interest in residential transportation issues. These stakeholders must be included from the outset of any new street standard adoption process.

Inform and Educate. A community or jurisdiction considering the adoption of narrow residential street standards must conduct an open and information-intensive process. Narrow streets have many advantages for a community, including slower traffic speeds and increased neighborhood livability. But there are some access trade-offs. A strong educational component involving city council members, planning commissioners, community groups, developers and emergency service providers must be conducted at the beginning of the process. Agreement about the value of narrow streets, i.e., slow speeds, safer pedestrian environments, and more livable neighborhoods must be understood and agreed to prior to beginning to develop specific standards. There are many educational resources available including printed materials, videos, and professional speakers willing to share their experience.

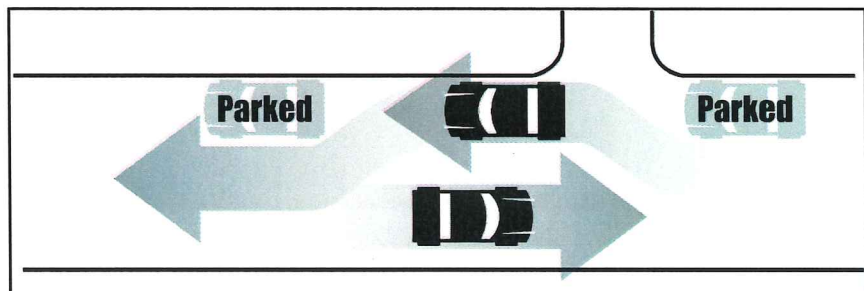
Develop standards that reflect local concerns. Once a jurisdiction has determined that more narrow street standards will be beneficial, the development of specific standards, unique to the community where they will be implemented, is the next step. Many cities and counties have adopted narrow street standards, and their efforts can provide a model for the initial drafts. Review and input from stakeholders, the public, and community officials will help identify local issues and provide the opportunity to tailor standards to local needs.

VI. Checklist for Neighborhood Streets

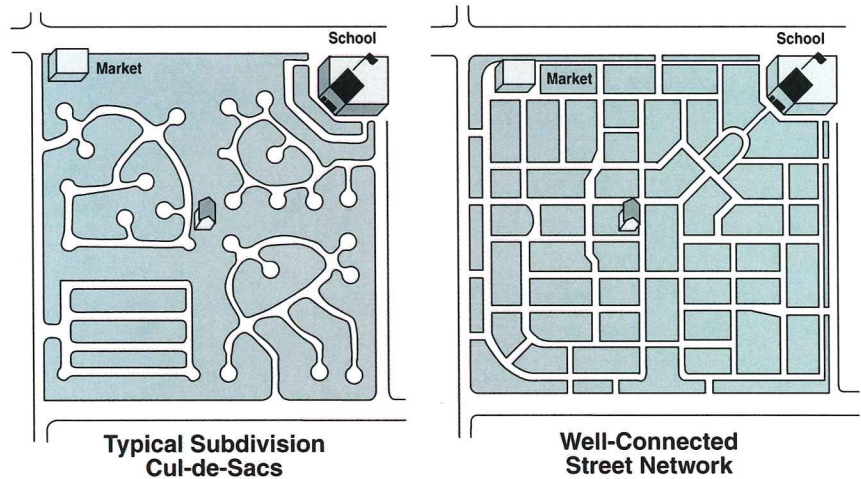
Key Factors

The checklist is based on five key factors listed below:

- ✓ **Queuing.** Designing streets so that moving cars must occasionally yield between parked cars before moving forward, as shown below, permits development of narrow streets, encourages vehicles to move slower, and allows for periodic areas where a 20-foot wide clear area is available for parking of fire apparatus.



- ✓ **Connected Street Networks.** Connected street networks provide multiple ways for emergency response vehicles to access a particular location and multiple evacuation routes. In addition, a connected street system encourages slow, cautious driving since drivers encounter cross traffic at frequent intervals.



- ✓ **Adequate Parking.** When parking opportunities are inadequate, people are more likely to park illegally in locations that may block access by emergency service vehicles. Communities need to review their parking standards when they consider adopting narrow street standards to make sure that adequate on-street and off-street parking opportunities will be available.

- ✓ **Parking Enforcement.** The guidelines are dependent on strict enforcement of parking restrictions. Communities must assure an on-going commitment to timely and effective parking enforcement by an appropriate agency. In the absence of such a commitment, these narrow street standards should not be adopted.

- ✓ **Sprinklers Not Required.** The checklist and model cross-sections provided in this guidebook do not depend upon having fire sprinklers installed in residences. More flexibility in street design may be possible when sprinklers are provided. However, narrow streets still need to accommodate fire apparatus that respond to non-fire, medical emergencies. Other types of vehicles (such as moving vans, public works machinery, and garbage/recycling trucks) also need to be able to serve the neighborhood.

The Checklist



Community stakeholder groups should systematically proceed through the checklist below as part of their decision making process. Also, your community may wish to add to this checklist. The format of the checklist includes room for comments: encourage stakeholders to make notes regarding their concerns and record decisions about how the items in the checklist have been addressed.

The factors are interrelated and are best considered together. The items are grouped by category in a logical order, but are not weighted.

Community Process/Decision-Making		<i>Notes</i>
<input type="checkbox"/>	<p>Good City Department Working Relations</p> <p>Develop good, close working relationships between the fire/emergency response professionals, public works, building officials, land use and transportation planners, engineers, and other large vehicle operators. The goal is to achieve trusting working relationships that lead to effective accommodation of each other's needs related to agreements about neighborhood street standards.</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<input type="checkbox"/>	<p>Consistency of Ordinances</p> <p>Review all applicable codes and ordinances and make them consistent with the narrow neighborhood street standards you are adopting. Consider performance-based codes and ordinances to address the larger development issues, of which street design is just one part. Amend ordinances only when you have the concurrence of emergency and large service vehicle providers.</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<input type="checkbox"/>	<p>Uniformly Allowed</p> <p>Uniformly allow narrow neighborhood streets by code and ordinance rather than requiring a special process, such as a variance or planned unit development. Or consider a modification process similar to the City of Beaverton's that uses a multi-disciplinary committee review and approval process during the development review process. See Appendix A for more info.</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<input type="checkbox"/>	<p>Community Process</p> <p>Determine what your community process will be for developing and adopting neighborhood street standards including following legal requirements, gaining political support, and encouraging public education and involvement. Teamwork and involvement of all large vehicle service providers is a critical component for success. Consider the potential benefits of narrow streets, such as slower traffic, less stormwater runoff, and lower costs. Look for ways to minimize the risk that fire apparatus will not be able to quickly access an emergency and minimize possible inconvenience for other large vehicles. For more information see Chapter V, "A Community Process for Adopting Standards."</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Users of the Street

Notes

Use of Street

Recognize the needs of all of the “everyday” users of the street, including autos, pedestrians, and bicycles. Street standards typically provide for easy maneuverability by autos. It is very important that neighborhood streets also provide a comfortable and safe environment for pedestrians. Consideration should be given to pedestrians both moving along and crossing the street.

Fire/Emergency Response and Large Service Vehicle Access

Provide access to the street for Fire/Emergency Response and large service vehicles to meet their main objectives. Consider the maneuvering needs of all large vehicles such as fire/emergency response, refuse/recycling trucks, school buses, city buses, delivery vehicles, and moving trucks. Fire trucks are generally 10-feet wide from mirror to mirror and room adjacent to a truck is necessary to access equipment from the truck. Recognize that for some service providers, the federal government has requirements that affect vehicle size such as fire trucks, school buses, and ambulances.

Utility Access

Provide utility access locations regardless of whether utilities are in the street, the right-of-way adjacent to the street, utility easements, or some combination thereof. Consider utility maintenance requirements.

Street Design

Traffic Volume and Type

Relate street design to the traffic that will actually use the street and the expected demand for on-street parking. Generally, on streets that carry less than 1,000 vehicles per day, a clear lane width of 12 to 14 feet is adequate for two-way traffic, if there are frequent pull-outs to allow vehicles to pass. Where there is on-street parking, driveways typically provide gaps in parking adequate to serve as pull-outs. If there is a high percentage of trucks or buses, wider streets or longer pull-outs may be needed. For street design, consider both the current traffic volume and the projected long-term traffic volume.

Provision for Parking

Make sure that adequate parking is provided so that on-street parking is not the typical primary source of parking. The objective is to have space between parked cars so that there are queuing opportunities. Also, parking near intersections on narrow streets should not be permitted because it can interfere with the turning movements of large vehicles (*see illustration at the end of the checklist*). This can be accomplished by a lack of demand for on-street parking or by design. The design option requires place-

ment of no-parking locations (i.e., driveways, fire hydrants, mailboxes) at appropriate intervals to provide the needed gaps.

Notes

Parking (con't)

When determining the number of parking spaces required, consider adjoining land uses and the availability of off-street parking. Parking demand is likely to be less where an adjoining land use is one that will create little or no parking demand (e.g., wetlands, parks, floodplains) or if adjoining development will provide off-street parking adequate for residents and guests. On-street parking demand may be affected by recreational vehicle/equipment if parking of such equipment is allowed. Parking availability will be affected by whether a neighborhood has alleys, if parking is allowed in the alley, or if visitor parking bays are provided in the area.

Self-Enforcing Design....perceptions count!

The design of the street should encourage the desired speed, traffic flow, parking, and use of the street. When this is the case, a design is said to be self-enforcing. This means that a driver would discern an implied prohibition against parking by the visual appearance of the street. A self-enforcing design intended to reduce speed might, for example, use trees in parkrows or strategically placed curb extensions.

- Unless traffic volumes are very low, 21 to 22-foot streets with parking on one side can be problematic for large vehicles.
- 21 to 24-foot streets with no on-street parking should not be considered because they invite parking violations.
- 26 and 27-foot streets where parking is permitted on one side can result in chronic violations because the street will look wide enough for parking on both sides.

Parking Enforcement

With adequate parking and proper street design, enforcement should not be a problem. Where parking is prohibited, provide signs that clearly indicate this, even on streets with a self-enforcing design. Enforcement is essential and can be done in a variety of ways. Consider tow zones or using volunteers to write parking tickets. (The City of Hillsboro allows both police and fire personnel to write traffic tickets.)

Public and Private Streets

Build public and private streets to the same standard. The need for access by emergency and other large vehicles is the same on private streets as for public. (In addition, private streets not built to the same construction standards may end up being a maintenance problem later if the local jurisdiction is forced to assume maintenance because homeowners do not fulfill their responsibilities.)

Block Length

Design block length to enhance street connectivity. Block lengths should generally not exceed 600 feet. As block lengths increase from 300 feet, attention to street width and other design features becomes more important. This is because fire apparatus preconnected hoses are 150 feet in length. With a connected street system and 300-foot block lengths, the fire apparatus can be parked at the end of the block where a fire is located and the hose can reach the fire.

Coordinate block length requirements with spacing requirements for connection to arterial streets. Preserve integrity, capacity, and function of the neighborhood's surrounding arterials and collectors by adhering to access management standards.

Notes

Local Issues**Evacuation Routes for Wildfire Hazard and Tsunami Zones**

Designated wildfire hazard or tsunami zones may need wider streets to provide for designated evacuation routes, including 20 feet of clear and unobstructed width. Different communities may have different street standards depending on whether a neighborhood is located in one of these zones or is in a designated evacuation route.

Agricultural Equipment

If your community is a regional agricultural center, consider adequate passage for agricultural equipment. Discourage passage on residential streets.

Preserving Natural Features

If your community has sensitive natural features, such as steep slopes, waterways, or wetlands, locate streets in a manner that preserves them to the greatest extent feasible. Care should be taken to preserve the natural drainage features on the landscape. Street alignments should follow natural contours and features, whenever possible, so that visual and physical access to the natural feature is provided as appropriate.

Snow

If snow removal and storage is an issue in your community, consider snow storage locations, and whether temporary parking restrictions for snow plowing or storage will be required. Some communities may consider providing auxiliary winter parking inside neighborhoods (though not on residential collectors). Work with your public works and engineering departments to see if any adjustments may be made in terms of operations or street design that would make narrow neighborhood streets work better for your community (wider parkrows to store snow, for instance).

Ice

If maneuvering on icy roads is an issue in your community, consider parking restrictions near street corners, auxiliary winter parking at the base of hills, wider street cross-sections on hills, or seasonal parking restrictions on hills.

Notes

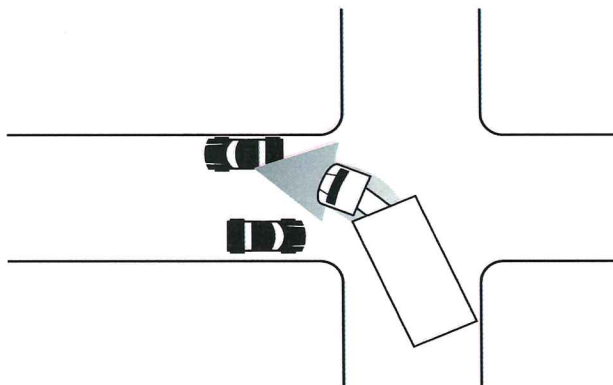
Sloping or Hilly Terrain

If your community has steep slopes, make special design provisions. This can be done through utility placement, connected streets, sidewalk placement, provision of one-way streets, property access, and minimizing cut and fill slopes.

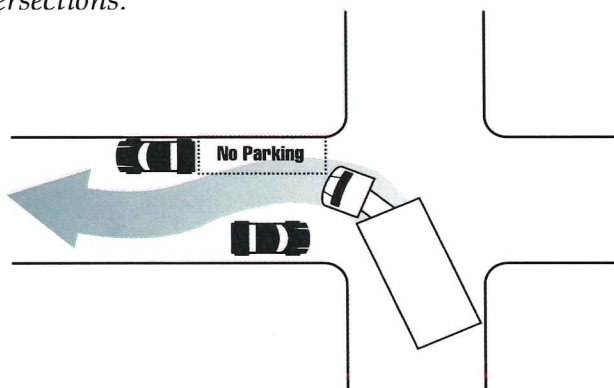
Other Community Concerns?

No Parking At Intersections

On narrow streets, parked cars near the intersection can interfere with the turning movements of large vehicles.



The solution is to prohibit on-street parking within 20 - 50 feet of intersections.



VII. Model Cross-Sections

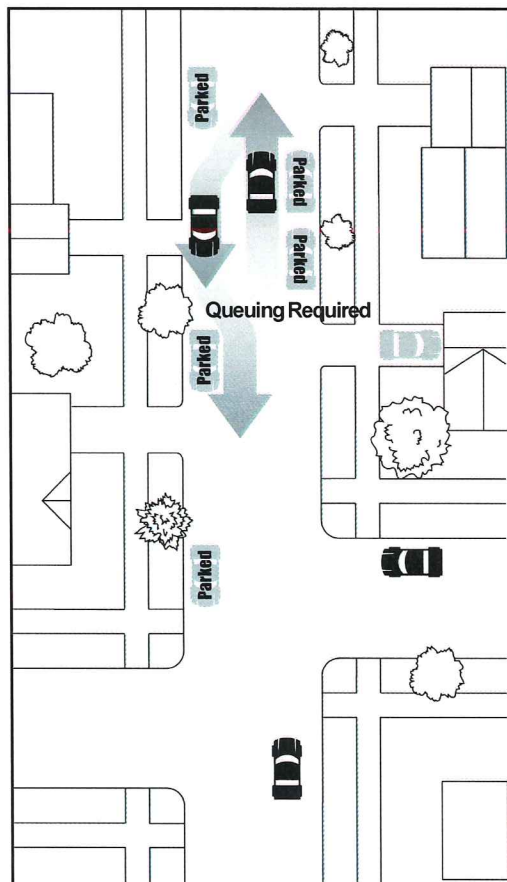
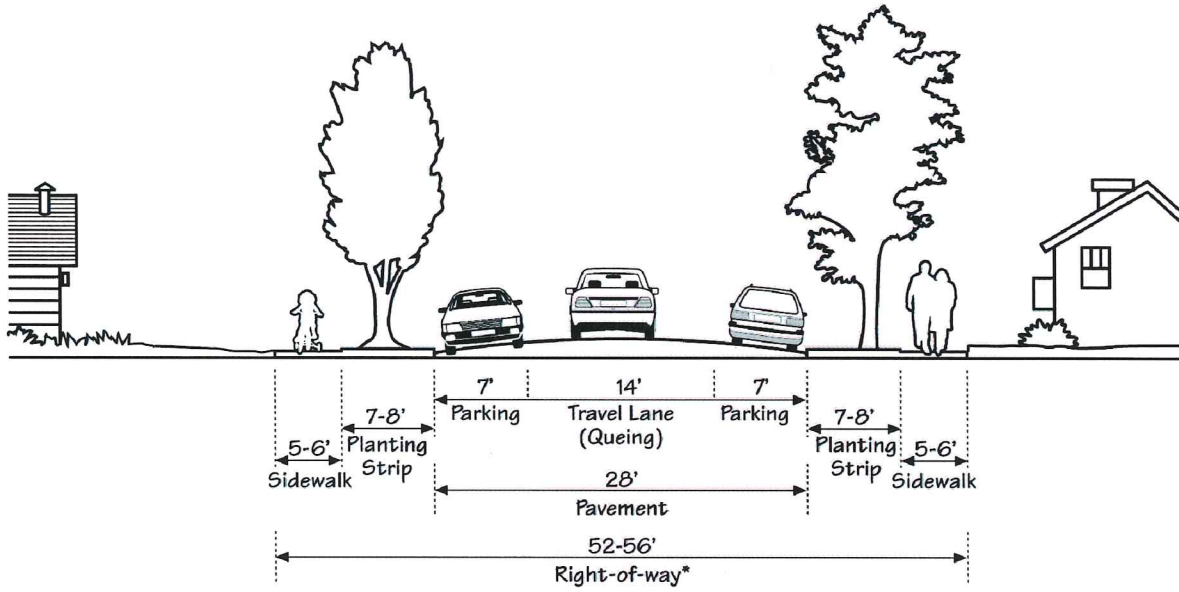
The following three scenarios are presented as “model standards.” However, *they do not represent the full range of possible solutions.* Communities are encouraged to use these as a starting point; innovative solutions can be designed for local situations. Here are a few key points to keep in mind:

- ✓ Streets **wider than 28 feet** are NOT, by definition, a “narrow street.”
- ✓ **Two-way streets under 20 feet** are NOT recommended. If, in a special circumstance, a community allows a street **less than 20 feet**, safety measures such as residential sprinklers*, one-way street designations, and block lengths less than 300 feet may be needed.

* Fire sprinklers in one and two family structures must be approved by the local building department in accordance with standards adopted by the Building Codes Division under ORS 455.610.

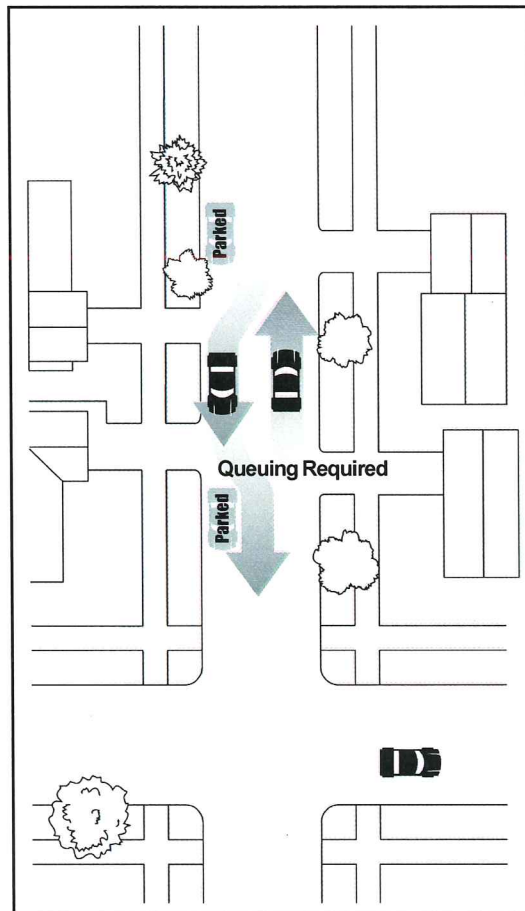
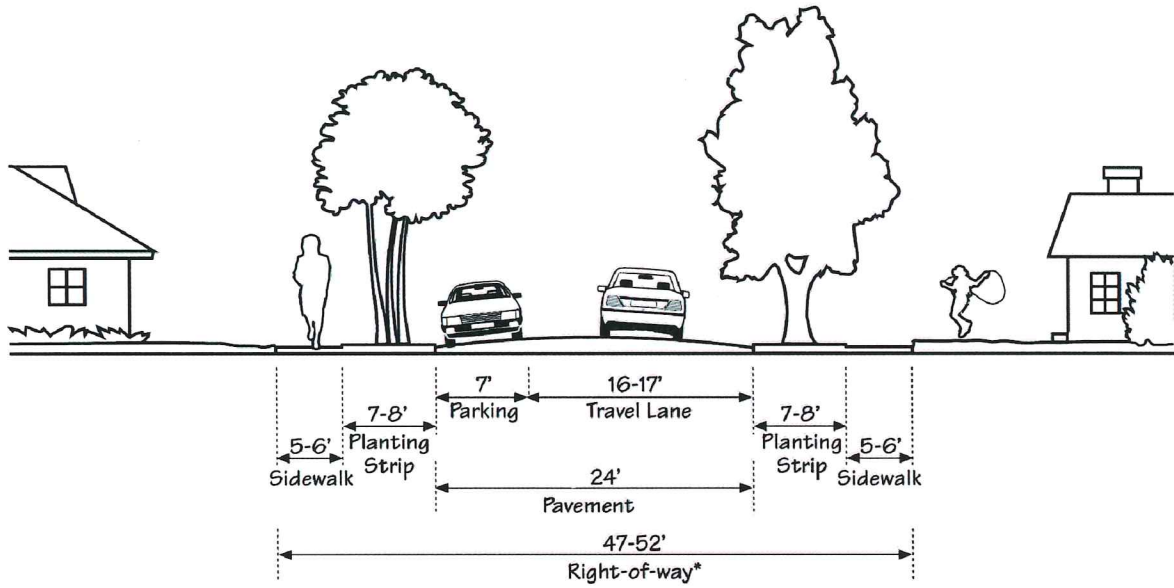
Scenario 1

28 Ft. Streets Parking on both sides



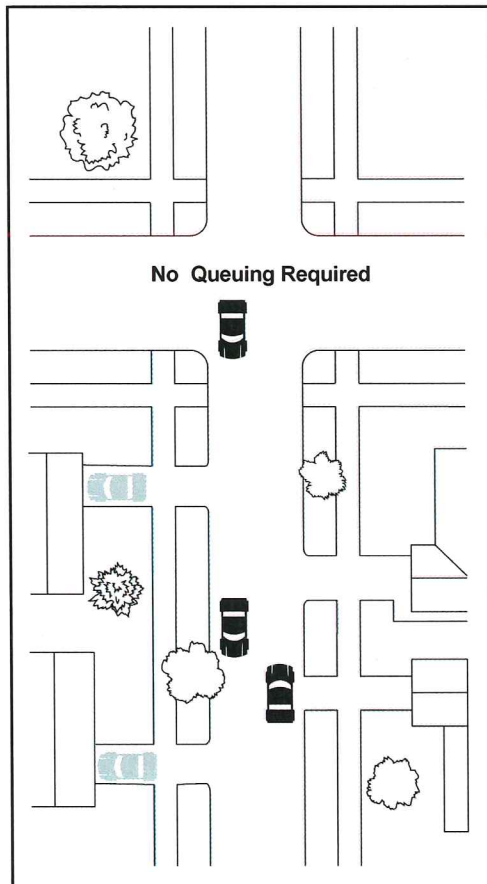
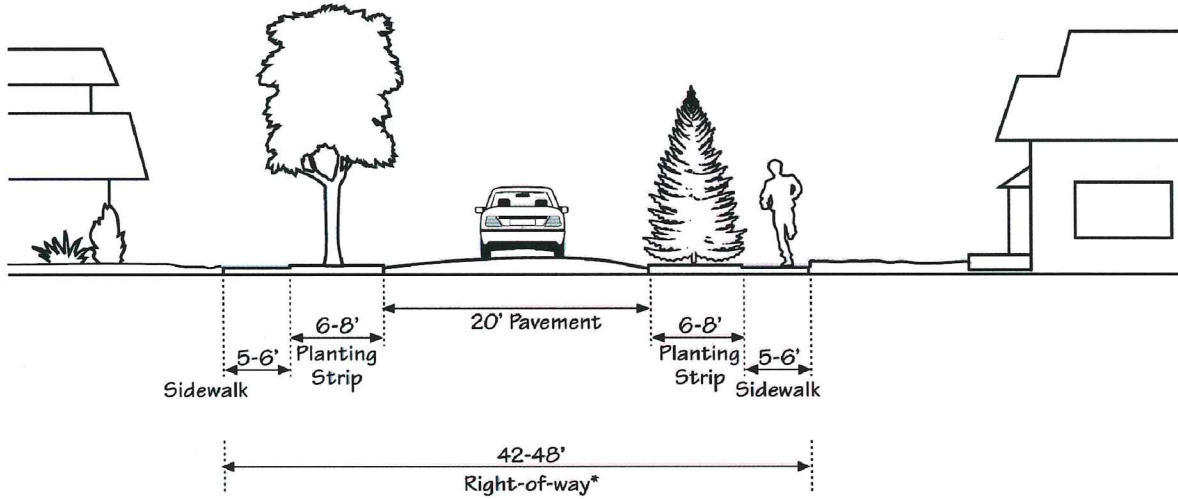
Scenario 2

24 Ft. Streets Parking on one side only



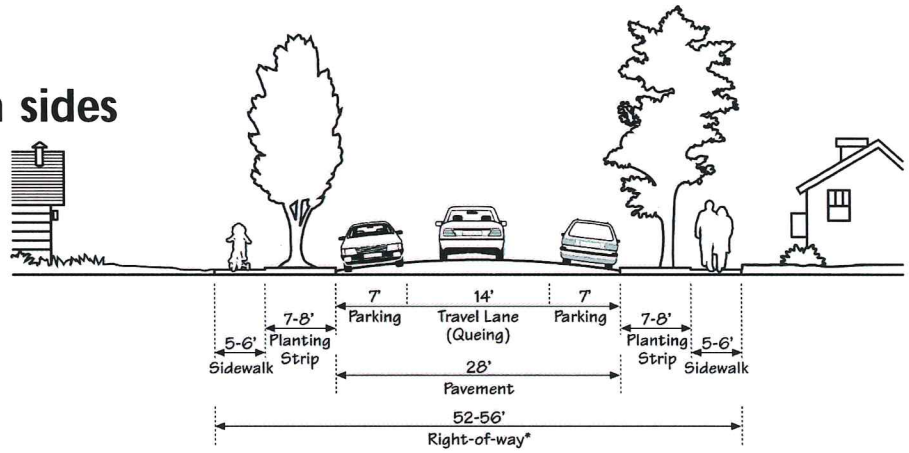
Scenario 3

20 Ft. Streets
No parking allowed

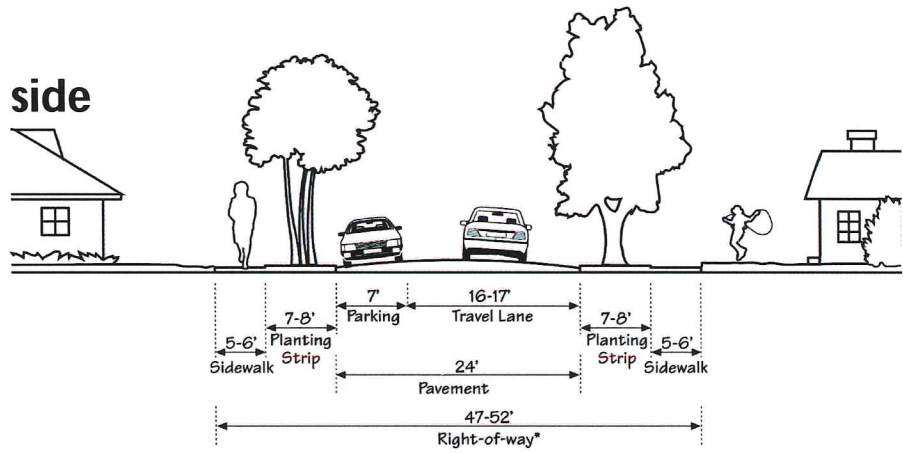


Summary of Three Potential Scenarios

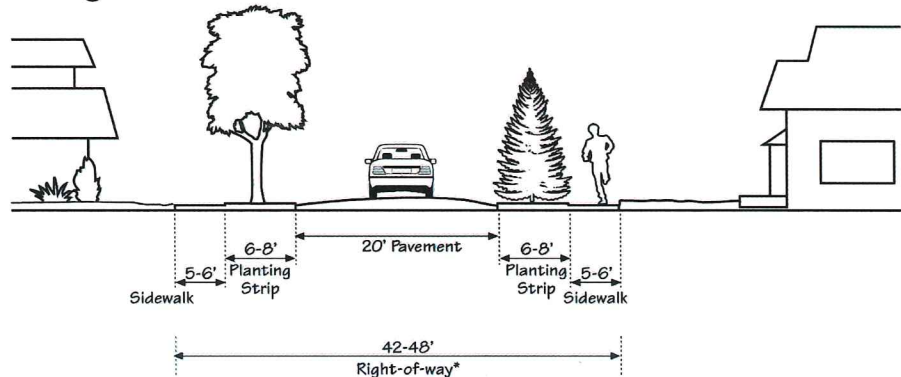
28 Ft Street Parking on both sides



24 Ft Street Parking on one side



20 Ft Street No on-street parking allowed



**Appendix A -
References and
Resources**

Annotated References

AASHTO - The Policy on Geometric Design of Highways and Streets, also known as the “*Green Book*,” is published by the American Association of State Highway and Transportation Officials (AASHTO) and is considered to be the principle authority on street geometrics. Narrow streets are sometimes cited as being contrary to traffic engineering practices because they may hinder the free-flowing movement of vehicular traffic. However, the *Green Book* supports the notion of using narrow residential streets. For example, the *Green Book* states: “On residential streets in areas where the primary function is to provide land service and foster a safe and pleasant environment, at least one unobstructed moving lane must be ensured even where parking occurs on both sides. The level of user inconvenience occasioned by the lack of two moving lanes is remarkably low in areas where single-family units prevail...In many residential areas a 26-ft.-wide roadway is typical. This curb-face-to-curb-face width provides for a 12-ft. center travel lane and two 7-ft. parking lanes. Opposing conflicting traffic will yield and pause on the parking lane area until there is sufficient width to pass.”

Residential Streets – Residential Streets is published jointly by the American Society of Civil Engineers, the National Association of Homebuilders, and the Urban Land Institute. This book was published to encourage a flexible approach to designing residential streets to respond to the street’s function in the transportation system as well as part of the community’s living environment. *Residential Streets* is a hierarchy of residential streets, including 22’-24’ access streets with parking on both sides, 26’ subcollector street with parking on both sides, and a 28’ subcollector with parking on both sides where “on-street parking lines both sides of the street continuously.”

ITE – The Institute of Transportation Engineers (ITE) has published several documents that refer to the recommended width of neighborhood streets. The 1993 publication *Guidelines for Residential Subdivision Street Design* states that a 28-foot curbed street with parking on both sides is an acceptable standard “based upon the assumption that the community has required adequate off-street parking at each dwelling unit.” In addition, the 1994 publication *Traffic Engineering for Neo-Traditional Neighborhood Design, (NTND)*, states that the recommended width of a basic NTND residential street “may be as narrow as 28 to 30 feet.”

Street Design Guidelines for Healthy Neighborhoods – Published by the Local Government Commission’s Center for Livable Communities, Street Design Guidelines for Healthy Neighborhoods was developed by a multi-disciplinary team based upon field visits to over 80 traditional and 16 neo-traditional neighborhoods. When combined with other features of traditional neighborhoods, the guidelines recommend neighborhood streets ranging from 16-26 feet in width. The team found 26-foot-wide roadways to be the most desirable, but also “measured numerous 24-foot and even 22-foot wide roadways, which had parking on both sides of the street and allowed delivery, sanitation and fire trucks to pass through unobstructed.”

Oregon Resources

Fairview Village. Holt & Haugh, Inc., phone: 503-222-5522, fax: 503-222-6649, www.fairviewvillage.com

West Bend Village. Tennant Developments, 516 SW 13th St., Suite A, Bend, Oregon 97702, phone: 541-388-0086

Orenco Station. Mike Mehaffy, Pac Trust, 15350 SW Sequoia Pkwy, Suite 300, Portland, Oregon 97224, 503-624-6300, www.orencostation.com

Street Standard Modification Process. The City of Beaverton has a modification process similar to an administrative variance procedure. If you would like information on this process contact: Margaret Middleton, City of Beaverton, Engineering Department, P.O. Box 4755, Beaverton, Oregon 97076-4755, 503-526-2424, mmiddleton@ci.beaverton.or.us

Additional References

Street Design Guidelines for Healthy Neighborhoods. Dan Burden with Michael Wallwork, P.E., Ken Sides, P.E., and Harrison Bright Rue for Local Government Commission Center for Livable Communities, 1999.

A Policy on Geometric Design of Highways and Streets. American Association of State Highway and Transportation Officials (AASHTO), 1994.

Guidelines for Residential Subdivision Street Design. Institute of Transportation Engineers (ITE), 1993.

Traffic Engineering for Neo-Traditional Neighborhood Design. Institute of Transportation Engineers (ITE), 1994.

Residential Streets. American Society of Civil Engineers (ASCE), National Association of Home Builders (NAHB), Urban Land Institute (ULI), 1990.

A Handbook for Planning and Designing Streets. City of Ashland, 1999.

Eugene Local Street Plan. City of Eugene, 1996.

Skinny Streets, Better Streets for Livable Communities. Livable Oregon, Inc. and the Transportation and Growth Management Program, 1996.

The Technique of Town Planning, Operating System of the New Urbanism. Duany Plater-Zyberk & Company, 1997.

Narrow Streets Database. A Congress for the New Urbanism. Alan B. Cohen AIA, CNU, Updated 1998.

Washington County Local Street Standards. Revision Project No. 2455. McKeever/Morris, Inc., Kittleson & Associates, Inc. and Kurahashi & Associates, Inc., 1995.

Washington County Uniform Road Improvement Design Standards. Washington County Department of Land Use and Transportation, 1998.

Livable Neighborhoods Community Design Code. A Western Australian Government Sustainable Cities Initiative. Ministry for Planning.

Woonerf. Royal Dutch Touring Club, 1980.

Creating Livable Streets: Street Design Guidelines for 2040. Prepared by Fehr & Peers Associates, Inc. Calthorpe Associates, Kurahashi & Associates, Julia Lundy & Associates for Metro, 1997.

Model Development Code & User's Guide for Small Cities. Transportation and Growth Management Program by Otak, 1999.

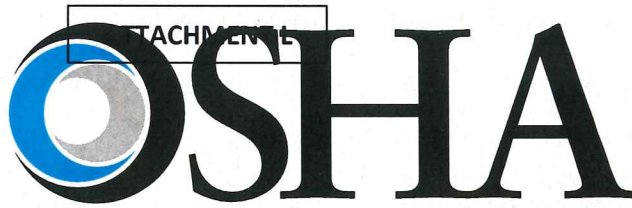
APA Recommendations for Pedestrians, Bicycle and Transit Friendly Development Ordinances. TPR Working Group Oregon Chapter APA, 1993.

Residential Street Typology and Injury Accident Frequency. Swift & Associates, Longmont, CO, Peter Swift, Swift and Associates, Longmont, CO., 1998.

Appendix B
Oregon Community Street Widths

City/County	No Parking	Parking One Side	Parking Both Sides	Contact Information
Ashland		22'	25'-28'	Maria Harris, Associate Planner, 541-552-2045
Albany		28'		Rich Catlin, Senior Planner, Albany Community Development, 541-917-7564
Beaverton	20'	25.5' "infill option," with rolled curb on other	28'	Margaret Middleton, Engineering Department, 503-526-2424
Brookings			30'	John Bischoff, Planning Director, 541-469-2163,x237
Clackamas County			28'	Joe Marek, County Engineer, 503-650-3452
Coburg			28'	Harriet Wagner, City Planner, 541-682-7858
Corvallis			28'	Kelly Schlesener, Planning Manager - Community Development, 541-766-6908
Eugene		24'	28'	Allen Lowe, Eugene Planning, 541-682-5113
Forest Grove			26'	Jon Holan, Community Dev. Director, 503-992-3224
Gresham			26'	Brian Shetterly, Long Range Planner, 503-618-2529; Ronald Papsdorf, Lead Transportation Planner, 503-618-2806
Happy Valley			26'	Jim Crumley, Planning Director, 503-760-3325
Lincoln City			28'	Richard Townsend, Planning Director 541-996-2153
McMinnville			26'	Doug Montgomery, Planning Director, 503-434-7311
Milton-Freewater		28'		Gina Hartzheim, City Planner, 503-938-5531
Portland		20'	26'	Steve Dotterer, Portland Department of Transportation, 503-823-7731
Redmond			28'	Bob Quitmeier, Community Development Director, 541-923-7716
Seaside		20'	26'	Kevin Cupples, Planning Director, 503-738-7100
Sherwood			28'	John Morgan, City Manager, 503-625-5522
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Wilsonville		28'		Stephan Lashbrook, Planning Director, 503-682-1011.

Source: February 2000, Livable Oregon, Inc.



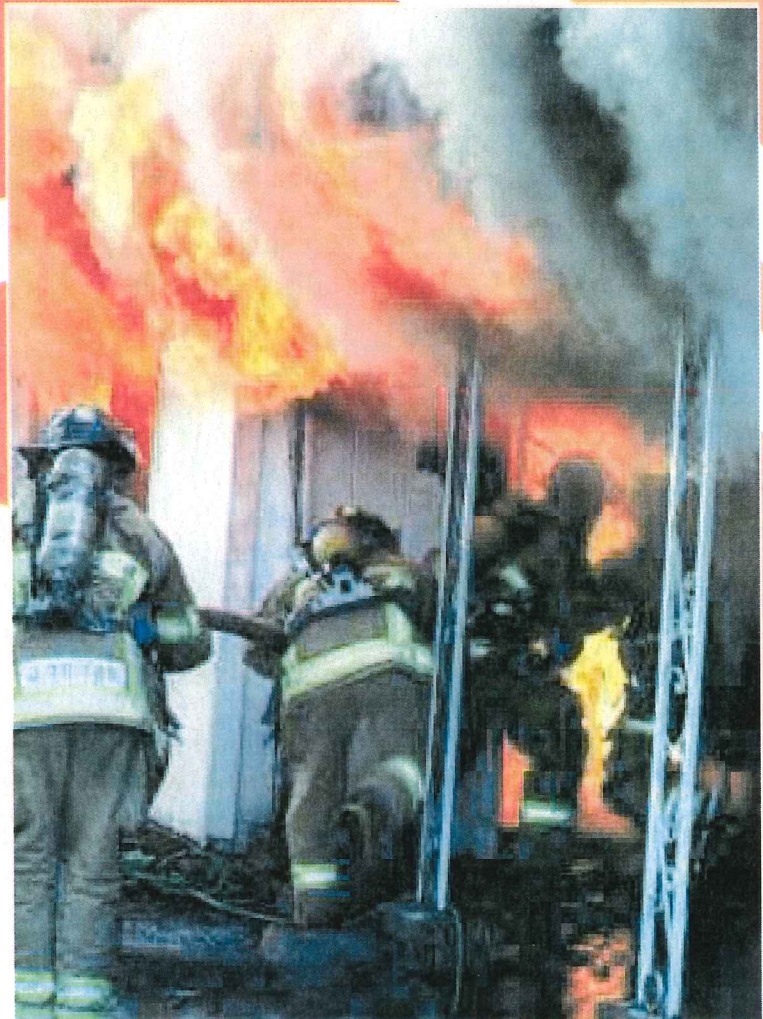
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Administration**

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See pages 11-15
for Fire Apparatus Access

Fire Service Features

of Buildings and Fire Protection Systems





Employers are responsible for providing a safe and healthful workplace for their employees. OSHA's role is to assure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health.

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Fire Service Features

of Buildings and Fire Protection Systems

Occupational Safety and Health Administration
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Appendix

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OSHA Regional Offices

This manual provides a general overview of a particular topic related to OSHA standards concerning fire and emergency protection. The manual is advisory in nature and informational in content. It is not a standard or a regulation, and it neither creates new legal obligations nor alters existing obligations created by OSHA standards or the Occupational Safety and Health Act.

Employers are required to comply with hazard-specific safety and health standards as issued and enforced either by the Occupational Safety and Health Administration (OSHA) or by an OSHA-approved State Plan. In addition, Section 5(a)(1) of the Occupational Safety and Health Act, the General Duty Clause, requires employers to provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm. Employers can be cited for violating the General Duty Clause if there is such a recognized hazard, and they do not take reasonable steps to prevent or abate the hazard. However, the failure to implement any of the recommendations in this manual is not, in itself, a violation of the General Duty Clause. Citations can only be based on standards, regulations, and the General Duty Clause.

This manual does not supersede or substitute for any local or state laws, codes, ordinances, regulations, or amendments thereto. This manual shall only be used as a nonbinding supplement to a jurisdiction's requirements.

Chapter 1 Introduction

PURPOSE

The purpose of this manual is to increase the safety of building occupants and emergency responders by streamlining fire service interaction with building features and fire protection systems. The information in this manual will assist designers of buildings and fire protection systems to better understand the needs of the fire service when they are called upon to operate in or near the built environment (figure 1.1). To put this another way, architects and engineers create workplaces for firefighters. Designs can be tailored to better meet operational needs, thereby reducing the time it takes to mitigate an incident.

The guidance in this manual is expected to decrease the injuries to responding and operating fire service personnel. When an incident can be mitigated faster, there is less time for the hazardous situation to grow in proportion. With less potential exposure, employees occupying buildings will be afforded greater protection from fire incidents. Employee occupants as well as fire service employees will realize the benefits of this manual in terms of safe working conditions as intended by the *Occupational Safety and Health Act of 1970*.

The codes and standards governing buildings and fire protection systems are well understood by designers. However, many portions of these codes and standards allow design variations or contain only general performance language. The resulting flexibility permits the selection of different design options. Some of these options may facilitate fire service operations better than others.

The particular needs and requirements of the fire service are typically not known thoroughly by persons not associated with these operations. This manual discusses how the fire service interacts with different building features and it suggests methods for streamlining such interaction. To provide the most effective protection, fire service personnel should be considered as users of building features and fire protection systems. While far less frequent than mechanical events or other failures, fire can cause greater destruction in terms of property loss, disruption of operations, injury, and death.

Designers routinely consider the needs and comfort of building occupants when arranging a building's layout and systems. Within the framework of codes and standards, design options may



(Fig. 1.1) Commercial building fire at night with multiple exposures.

be exercised to benefit a particular owner, tenant, or user. For example, a building code would typically dictate the minimum number of lavatories and water fountains. However, the location, distribution, and types of such facilities are left to the designer in consultation with the client.

The application of fire protection features in buildings is similar. For instance, a fire code may require the installation of a fire department connection for a sprinkler system or an annunciator for a fire alarm system. However, there may be little or no guidance as to the location, position, features, or marking of such devices. This manual provides this type of guidance to designers. However, specific local requirements or preferences may differ. Input should always be obtained from local code officials and the fire service organization, the "client" in this case.

SCOPE

This manual is to be used voluntarily, as a companion to mandatory and advisory provisions in building codes, life safety codes, fire codes, safety regulations, and installation standards for fire protection systems. The material contained in this document focuses on ways that building and fire protection system designers can contribute to the efficiency of fire suppression operations.

This material is applicable to all fire service organizations, including fire brigades and fire departments. Many of the considerations in the following chapters will also help during responses for other emergencies, such as hazardous materials releases, emergency medical care, non-fire rescues, and terrorist events.

Users of this manual must understand its limitations. It is directed to designers of buildings and fire protection systems to help them build on existing codes and standards to assist the fire service. For example, the topic of emergency radio communications can be extensive; however, its treatment here is limited to the equipment in buildings that can support radio communications. Likewise, there are entire standards and books written about sprinkler, standpipe, and fire alarm design. However, this manual covers only portions of those systems with which the fire service interacts and suggests design details that will help streamline or support fire service operations.

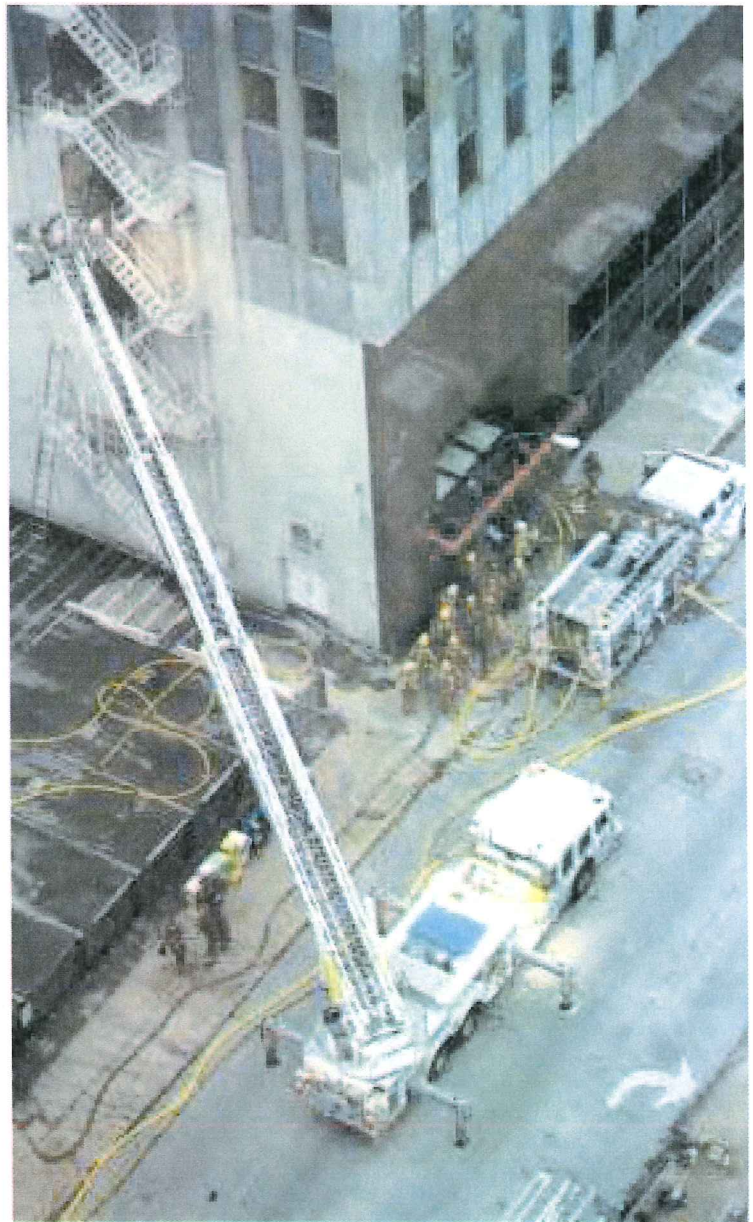
A FIRE SERVICE PRIMER

This section will give those outside the fire service a basic understanding of how the fire service operates during an emergency. It will also familiarize them with the varying capabilities and organizations involved in fire fighting.

Fire service organizations can be classified as career, volunteer, or a combination of both. Career staff members are paid for their work, while volunteer members are unpaid. Combination organizations have both career and volunteer staff. Career organizations typically serve the larger, more urban or industrial settings, although many smaller cities or towns will have a full or partial career staff. Volunteer organizations are usually found in more suburban or rural settings, although some serve densely populated areas and have very high emergency response rates.

Another way to categorize fire departments is by whether fire stations are staffed with personnel ready to respond. Most career organizations have personnel who remain in the station while on duty. However, "call firefighters" are paid on a per-response or hourly basis and do not remain in their station awaiting emergency calls. Most volunteers respond from home or work when they are alerted to an emergency. On the other hand, there are organizations that have volunteer personnel staffing their stations on shifts or even living in the stations.

Another fire service organization is the industrial fire brigade. This is an organized group of employees specifically trained to provide fire suppression, and perhaps related emergency activities, for a specific employer. Members may be dedicated full time to emergency operations, or emergency response may be a part-time, collateral duty.



(Fig. 1.2) A view from above of both a pumper (top) and an aerial apparatus (bottom), in this case a platform type of aerial.

A typical emergency begins with the discovery and reporting of an incident. The time span of this phase can vary greatly, and the fire service has no control over this. After the report is received, the information is processed and the appropriate units are alerted. Those firefighters not staffing the station (whether volunteer, paid on-call, or collateral duty fire brigade members) must travel to the station. Firefighters then don their protective equipment, board the vehicles, and the response phase begins. In some organizations or scenarios, members not staffing the station may go directly to the incident scene.



(Fig. 1.3) During initial operation at this structure, the first arriving engine crew is already using a fire lane, a fire hydrant, the fire department connection, and the key box. Interior operation will soon involve the alarm system, stairways, standpipe system, and other building features.

The fire service response to a structure fire would normally involve a number of different units. Fire department vehicles are called apparatus; one is sometimes referred to as a "piece" of apparatus. They come in a wide variety of forms for specialized uses; however, the basic types are pumper and aerial apparatus (Figure 1.2).

A pumper apparatus normally carries hose, a pump, and a small water tank. Together with its personnel, this is called an engine company. Their main responsibility is to deliver water to the fire. Initially, the engine company may operate using the water available in their tank; however, any incidents other than small exterior fires will typically require that a continuous water supply be established. This is done via hose lines carrying water from a source of supply (fire hydrant, lake, pond, temporary basin) to the on-board pump, which then boosts the pressure to hose lines or other devices attacking the fire.

An aerial apparatus is typically equipped with a long aerial ladder or elevating platform on top, an assortment of ground ladders, and many power and hand tools. Together with its personnel, this is often called a truck (or ladder) company. They are responsible for all support functions, including forcible entry, search, rescue, laddering, and ventilation. If aerial apparatus is not available, these truck company functions must be performed by another unit.

There is also an apparatus called a "quint." Each of these vehicles is equipped as both a

pumper and an aerial apparatus to perform either function. If provided with adequate staffing, and positioned properly at an incident, quints can perform both functions.

Upon arrival at an incident, firefighters must handle many tasks. Standard operating procedures should enable firefighters to quickly assess the situation, and initially arriving units to go into operation (Figure 1.3). Rescuing of occupants is the first priority, followed by confining and extinguishing the fire. In some cases, firefighters must stop the fire before proceeding with rescues.

Incident command begins with the rapid gathering of information by the first arriving officer. This is called "size-up." Incident command expands as additional units and chief officers arrive. Commanders must base strategies on the limited information available at any given time regarding the fire, the building, and the occupants. As they receive additional information, commanders should revise their strategies. As needed, they can call for additional resources. Units from another jurisdiction or district that respond are referred to as "mutual aid" units.

As the fire incident is brought under control, salvage, overhaul, and investigation activities take place. These activities, although dangerous and important, are less time-sensitive. As a result, they are less of a consideration for building and fire protection system designers.

FIRE SERVICE CHALLENGES

Fire service operations take place in stressful, time-sensitive environments (Figure 1.4). Delaying operations, even slightly, especially during the critical initial phase when the first arriving resources are committed, can adversely affect subsequent operations and the outcome. Delays caused by poorly located fire hydrants, confusing alarm information, ineffective communication systems, or inaccessible valves will have a ripple effect on the other portions of the operation. During these delays, the fire will be growing exponentially.

Members of the fire service perform their functions during all times of the day or night, in any weather conditions, and frequently in unfamiliar environments. Their work environment is dangerous, mentally stressful, and physically exhausting. Decisions must often be made without an ideal amount of information, due to the many unknowns on the fireground (such as what is on fire, how much is burning, where the fire is spreading, and where the occupants are located).

These factors stack the deck against the safety of firefighters. Even simplifying the firefighters' job in small ways will increase the level of safety for them, and thereby for building occupants. Design features that save time or personnel can make a great difference. Any feature that provides additional information regarding the fire, the building, or the occupants, as well as any method to speed the delivery of this information also helps.

Pre-incident plans (often called "preplans") are documents prepared by fire departments to assist in emergency operations in specific facilities. They should contain the location of, and information about, the fire protection features discussed in this manual. Preplans are usually prepared and maintained by the unit that normally responds first, or is "first due," to a particular facility. One could argue that some of the considerations in this manual are not necessary if the fire department prepares thorough preplans. However, the best pre-incident planning cannot overcome situations where the first due unit is committed on another response, out of position, or out of service. Nor can it foresee changes in personnel. It is simply unrealistic to count on all responding personnel to be aware of the pre-incident plan.

Pre-incident planning makes sense but it will always have limitations. Fire departments and firefighters that are more familiar with features of



(Fig. 1.4) Firefighters arriving at a high-rise fire. During this operation, firefighters will interact with most of the features discussed in this manual. To successfully mitigate an incident of this nature, firefighters must make many decisions rapidly, and carry out various operations simultaneously. Time saved due to design with the fire service in mind will translate into increased firefighter and occupant safety.

buildings in their response area are better prepared to deal with fires and other emergencies. Designers can assist in pre-incident planning by providing copies of building and system plans (paper or electronic) to the fire service after first seeking permission from the building owner.

National Fire Protection Association (NFPA) statistics show a steady decline of fire-related deaths in the U.S. during the 1990s. During that same decade, however, the number of firefighter fatalities has remained relatively steady. The National Fallen Firefighters Foundation has developed a list of safety initiatives to reduce firefighter line-of-duty deaths and is playing a lead role in their implementation.

MANUAL ORGANIZATION AND USE

Each chapter of this manual includes a narrative describing the specific building feature and how the fire department interacts with it. Boxes, entitled "Considerations," highlight specific items that a designer should consider for each topic. Photos and diagrams illustrate both good and bad examples of concepts and recommendations.

Although this manual contains generic considerations, designers should seek and follow the advice of the fire service organization serving each project they work on. In some cases, the fire department will have statutory authority to take part in the plan review, permit process, and inspections of these facilities or to approve some features of the building or site. In any case, it is wise to also include the fire service at an early stage in the design process, when changes are easier and less costly.

There are many ways for the fire protection community to disseminate or incorporate the information in this manual. Simply handing it out to designers is a great start. Developing a handout based on this document that is specific to a particular jurisdiction is another good strategy. The recommendations can also serve as a basis for local code amendments which carry the force of law.

Many of the recommendations in this manual cost nothing to implement. They simply provide direction in cases where the model codes or consensus standards allow options. Designers can implement these recommendations directly, in consultation with the fire department. Other recommendations in this manual may carry costs, depending on the particular codes adopted in a given jurisdiction. In such cases, those who would be affected by these costs should be consulted.

Codes and standards typically include a clause that permits the code official to allow alternatives to strict compliance, as long as the prescribed level of safety is not diminished. In some cases, a higher level of safety for firefighters can be achieved through this process. For example, a voluntary radio repeater system may provide more protection (and may also be less costly to install) than a code-required firefighter communication system. Equivalent alternatives should be documented along with justification.

This manual may also serve as a resource for those interested in improving codes and standards for building or fire protection system design. While current codes in the U.S. provide for firefighter safety, much more remains to be accomplished. For instance, building codes in the U.K. have specific fire service provisions, such as dedicated, protected fire stairs and elevators. Streamlining and simplifying fire service operations should be considered an integral part of the overall fire safety framework for the built environment.

TERMINOLOGY

The terminology used in this manual is as generic as possible, just as it is in the standards of the National Fire Protection Association and the International Code Council. Many variations in terms will be encountered in different areas of the U.S. or in other countries. For example, this manual uses the term "aerial apparatus" to describe a fire service vehicle with a long, aerial ladder. Yet, in this country alone, other terms used to describe the same vehicle include: "truck," "ladder," "aerial," "ladder truck," "tower," or "tower ladder." Or, in some cases, the same terms could be used to describe a particular aerial fire apparatus. Similarly, in some areas the term "truck" refers only to aerial apparatus, while in other areas this term could also include pumper apparatus.

In another example of potentially confusing terminology, fire apparatus drivers in some areas of the country are referred to as "engineers." Consider the situation of an architect speaking to a fire officer in an area where this terminology is used. You can easily see how the fire officer could use the term "engineer" to mean a driver, while the architect interprets the term as a building design engineer.

The editions of the codes and standards referenced in this manual are not included. The information and requirements referenced in this manual are from the latest editions available during the manual's development in 2004. Subsequent revisions to these codes and standards may change the sections or the requirements referenced. The editions adopted by local or state laws in a given jurisdiction may vary.

GLOSSARY OF ACRONYMS AND TERMS

AHJ (Authority Having Jurisdiction): the entity legally designated to enforce a code or standard.

Apparatus: fire service vehicle.

Apparatus, aerial: apparatus that carries ladders and tools.

Apparatus, pumper: apparatus that carries hose, a pump, and a water tank.

Apparatus, quint: apparatus that contains aerial and pumper equipment.

Code Official: a fire code official, building code official, or authority having jurisdiction.

Code Official, Building: person legally designated to enforce a building code.

Code Official, Fire: person legally designated to enforce a fire code.

Engine company: pumper apparatus and personnel.

First due unit: engine company or truck company designated to respond first to an incident at a given location.

Hose lay, straight (or forward): an engine company evolution (task) to lay hose from a water source to an incident scene or another unit.

Hose lay, reverse: an engine company evolution (task) to lay hose from an incident scene or another unit to a water source.

Hose line, preconnected: a hose of fixed length with a nozzle attached and connected to a discharge outlet on a pumper.

IBC: International Building Code.

IFC: International Fire Code.

Ladder company: aerial apparatus and personnel.

NFPA: National Fire Protection Association.

NFPA 1: Uniform Fire Code.

NFPA 101: Life Safety Code.

NFPA 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations.

NFPA 1141: Standard for Fire Protection in Planned Building Groups.

NFPA 5000: Building Construction and Safety Code.

Pre-incident plan: document containing information on a specific facility to facilitate emergency operations.

Truck company: aerial apparatus and personnel.

Chapter 2 Building and Site Design

GENERAL

The faster the fire service can respond, enter, locate the incident, and safely operate in a building, the sooner they can mitigate an incident in a safe manner for themselves as well as occupants. This chapter contains guidance on this topic for both building site layout and interior design features. Those preparing design documents such as site plans, civil plans, foundation plans, and architectural layouts would typically use this information. Building designers desiring to locate fire protection systems features should consult the appropriate chapters of this manual for further guidance.

FIRE APPARATUS ACCESS

Properly positioning fire apparatus can be critical at a fire scene. In particular, placing aerial apparatus is critical for positioning of the aerial ladder or elevating platform, which is mounted on top of these vehicles (Figure 2.1). Pumper apparatus also need to get close enough to the building to facilitate hose line use. The location of other specialized apparatus, or small vehicles, such as chief's cars or ambulances, should only be of particular concern to the designer of unusual facilities. For instance, a sports arena may need to be designed for entry of ambulances but not fire apparatus.

Many structures are situated on public streets that provide fire fighting access. Others, which are set back from public streets, have private fire apparatus access lanes or "fire lanes," for short. These enable fire apparatus to approach the building and operate effectively (Figure 2.2). Fire lanes can be dedicated to fire service use, or can serve ordinary vehicular traffic as well.

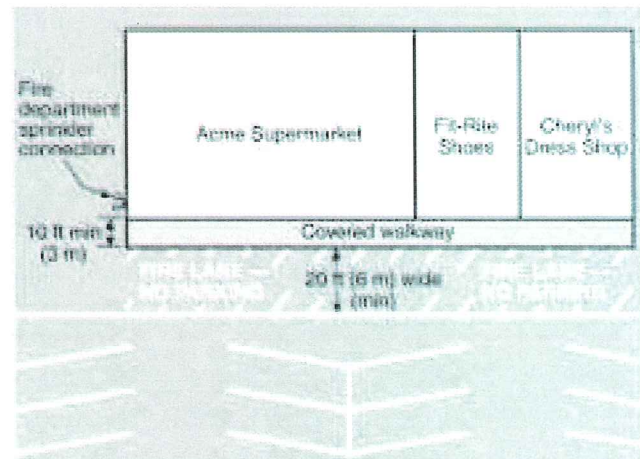
There are many considerations for both public roads and fire lanes: clear width, clear height, length, turn radius, arrangement, distance from the building, and paving materials. In all cases, the most stringent practicable dimensions should be considered for design, since future apparatus purchases or mutual aid apparatus from other jurisdictions may exceed the specifications required in a given jurisdiction at any given time.

Extent of Access

Minimum building access for fire apparatus is a function of the access road reaching to within a certain distance of all portions of the building's first



(Fig. 2.1) Good aerial apparatus access at an apartment fire. This fire lane is wide enough to allow passing even when aerial outriggers are extended, and it is located a proper distance from the building to facilitate aerial operations.



(Fig. 2.2) Fire lane dimensions, reprinted with permission from NFPA 2003 Uniform Fire Code Handbook, © 2003, National Fire Protection Association, Quincy, MA.

floor exterior walls. This limit in NFPA 1 and the IFC is 150 feet for buildings without a complete sprinkler system. For fully sprinklered buildings, NFPA 1 permits this distance to be increased to 450 feet; the IFC leaves this decision up to the discretion of the code official. Further, NFPA 1 requires that the road extend to within 50 feet of an exterior door providing interior access.

The distance from the building to a road or fire lane is sometimes referred to as "setback distance." NFPA 1141 has additional guidelines for access locations versus building location, with variations depending upon building size, height, sprinkler protection, and separation from other buildings.

Perimeter Access

The options available for attacking a fire increase as more of a building's perimeter becomes accessible to fire apparatus (Figure 2.3). A concept, known as "frontage increase," appears in the IBC and NFPA 5000. If a structure has more than a certain percentage of its perimeter accessible to fire apparatus, these codes allow the maximum size of the building to be increased. Ideally, the full perimeter would be accessible.

During renovations, designers should use particular caution to ensure that the perimeter access continues to meet the NFPA requirements of fire

and building codes. The original building site may have been based on a frontage increase. Changing the amount of perimeter access can result in non-compliant building size.

Number of Fire Lanes

A single access route is a basic requirement in both NFPA 1 and the IFC. However, both codes allow the code official or AHJ to require additional access routes due to various factors that could inhibit access (such as terrain, climate, or vehicle congestion). NFPA 1141 requires two access routes for buildings over two stories or 30 feet in height. Multiple fire lanes should be as far removed from one another as practicable.

Turnarounds

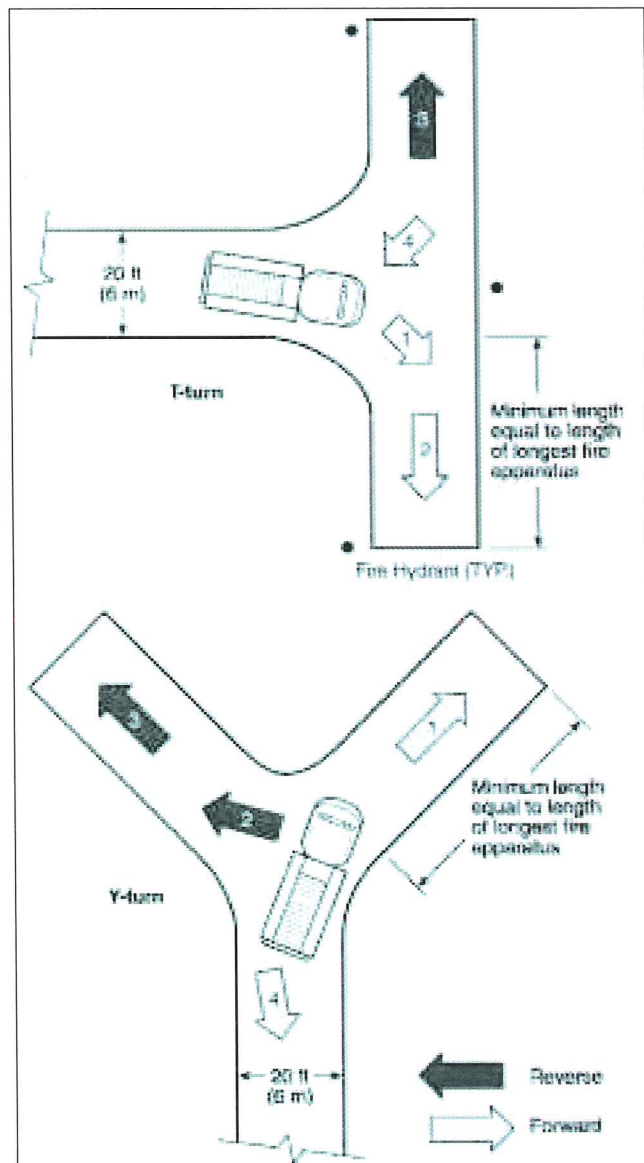
Long, dead-end fire lanes or roads should provide a means for fire apparatus to turn around. Both NFPA 1 and the IFC require turnaround space for dead-ends that are more than 150 feet long. There are a number of configurations that facilitate turning maneuvers. These include, "T-turn," "Y-turn," and round cul-de-sac style arrangements (Figures 2.4 and 2.5 for NFPA diagrams). NFPA 1141 requires a 120-foot turnaround at the end of dead-ends more than 300 feet long. Turnaround diagrams also can be found in Appendix D of the IFC.

(Fig. 2.3) A combination of two public roads and two private fire lanes provides full perimeter access to this building.



Clear Width

The basic clear width requirement for apparatus access in the IFC and NFPA 1 is 20 feet. NFPA 1141 calls for one-way fire lanes that are 16 feet wide; however, this applies to roads that do not abut buildings. A clear width of 20 feet will allow most aerial apparatus to extend the outriggers necessary to support the aerial ladder or elevating platform while in operation (Figures 1.2 and 2.1). However, some recently manufactured aerial apparatus require 24 feet of clear width for outrigger extension.



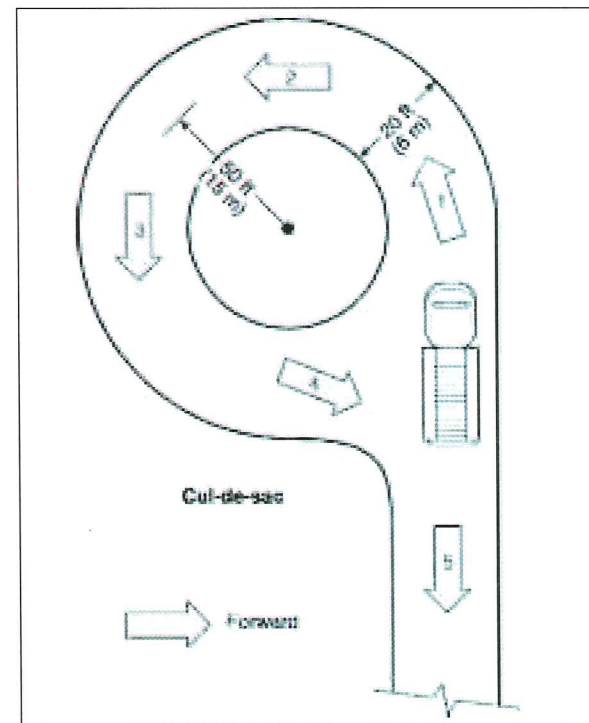
(Fig. 2.4) Fire apparatus "Y-" and "T"-turnarounds." Reprinted with permission from NFPA 2003 Uniform Fire Code Handbook, © 2003, National Fire Protection Association, Quincy, MA.

Lanes wide enough for apparatus to pass one another will facilitate developing and expanding operations. NFPA 1141 contains a 24-foot clear width requirement for two-way fire lanes. Appendix D of the IBC calls for a 26-foot clear width at fire hydrant locations, extending for a distance of 20 feet in both directions, as well as a 26-foot width in the vicinity of buildings that are 30 feet or more in height (for aerial operations). NFPA 1141 also contains guidance on access in parking lots.

Rolled or rounded curbs adjacent to properly designed sidewalks can effectively increase access width. These allow apparatus to easily negotiate curbs.

Height

The basic requirement for clear height of fire lanes in the IFC, NFPA 1 and NFPA 1141 is 13 feet 6 inches. Some modern aerial apparatus may require 14 feet of clearance. Potential for accumulation of snow and ice should be factored into height requirements. The NFPA 1 handbook recommends at least 14 feet in colder climates. Newer aerial apparatus may also require additional height. Finally, avoid overhead wires or other obstructions when determining fire lane locations.



(Fig. 2.5) Fire apparatus cul-de-sac turnaround. Reprinted with permission from NFPA 2003 Uniform Fire Code Handbook, © 2003, National Fire Protection Association, Quincy, MA.

Building Proximity

In areas with aerial apparatus that may respond to an emergency, the road or fire lane should be positioned at a distance from the building that will accommodate aerial ladder operation. Access too close or too far from the building will limit aerial ladder use. Where a fire lane is parallel to a building that is more than 30 feet high, Appendix D of the IFC calls for the near edge of the lane to be between 15 and 30 feet away from the building.

Turn Radius

The IFC and NFPA 1 leave turn radius requirements to the code official and AHJ. However, NFPA 1141 requires a minimum inside turn radius of 25 feet and a minimum outside radius for turns of 50 feet. The cul-de-sac depicted in Figure 2.5 shows an effective inside turn radius of 40 feet. Further, NFPA 1141 requires 2-foot curb cuts on either side of a fire lane where it connects to a road.

Grade

NFPA 1 sets a maximum grade (slope) of 5 percent for fire lanes. NFPA 1141 specifies a 10 percent maximum, as well as a 0.5 percent minimum to prevent pooling of water. However, some manufacturers have lower limits for specific apparatus. When aerial apparatus is set up for operation, the vehicle body must be leveled with the outriggers. The least grade possible would allow for the most rapid setup.

Loads

All access roads or lanes should be built to withstand the loads presented by modern, heavy fire apparatus as well as potential weather conditions. Paved surfaces, bridges, and other elevated surfaces (such as piers or boardwalks) should be designed to handle the weight of all apparatus that may use them. The IFC Appendix D has a load design requirement of 75,000 pounds. U.S. Department of Transportation standards dictate requirements for both load and frequency. The IFC references the Standard Specification for Highway Bridges from the American Association of State Highway Transportation Officials (AASHTO).



(Fig. 2.6) Paver blocks were chosen instead of paving for this access road. The aesthetic benefits are minimal, and the road cannot be plowed effectively.



(Fig. 2.7) The same paver block access lane as shown in Figure 2.6, but covered with snow. Access is blocked by a mound of snow plowed from the adjacent parking lot.

Materials

All-weather paved access is the best surface. Some jurisdictions permit the use of paver blocks or subsurface construction for fire lanes (Figure 2.6). These permit an area to be partially or fully landscaped, while being strong enough to allow fire apparatus to negotiate the area. However, these materials do have inherent limitations. Unless their perimeter is clearly marked, it is easy to drive off the edge. Also, in regions subject to snow accumulation, areas with paver blocks and subsurface construction cannot be plowed effectively (Figure 2.7).



(Fig. 2.8) Manual gates cause inherent delays because personnel must dismount to unlock them or cut through chains. However, they can also help keep the fire access lane clear by preventing vehicle parking.



(Fig. 2.9) The delays caused by electronic gates can be minimized by providing the fire department with access cards or remote access controls.

Gates, Barricades and Security Measures

Security concerns may impact fire service access. Gates (manual, electric, or radio controlled), bollards, pop-up barricades, and other perimeter controls can delay fire service operations. On the other hand, these access control measures can assist in keeping vehicular traffic away from fire lanes (Figures 2.8 through 2.10). During the design phase of a project, careful coordination between those responsible for security and fire protection can help resolve both concerns. In addition, proper gate size, location, and swing can facilitate fire service access. Wooden bollards are designed with cuts

near their bases to allow access when apparatus bump them and break them. However, this results in delays while they are broken and cleared from the path of the apparatus, and may also cause damage.

Speed Control Measures

Speed bumps or humps can impact fire apparatus access. Due to their suspension, these vehicles must come to a nearly complete stop to pass over these bumps, delaying arrival to a fire scene. Some special speed bump designs allow for fire apparatus to straddle bumps, while passenger vehicles cannot do so. Dips should also be avoided so that long wheel-base vehicles do not hit bottom and damage undercarriage components and overhanging equipment.

Marking

Fire lane signage is important, both for the public and enforcement officials (Figure 2.8). Examples include signs, curb painting, or curb stenciling. A jurisdiction's requirements must be followed exactly to ensure that no-parking provisions are legally enforceable. Speed bumps should be conspicuously painted, and signs indicating their location should be posted in climates subject to accumulation of snow and ice. Load limits should be posted conspicuously on both ends of bridges or elevated surfaces.



(Fig. 2.10) Pop-up barricades such as these are appearing more frequently due to security concerns. Unless security forces are constantly present to operate them, however, the fire department should be provided with a means to do so.

Considerations – Fire Apparatus Access

- **Extent of Access:** Within 150 feet of the farthest exterior point; can be farther in sprinklered buildings.
- **Perimeter Access:** As many sides of the building and as much of the perimeter as possible; take advantage of frontage increases.
- **Number of Fire Lanes:** More than one when dictated by code official or AHJ.
- **Turnarounds:** Provided for on all dead-ends more than 150 feet long.
- **Clear Width (excluding parking):** Minimum 20 feet; preferably, 24 feet to allow passing and 26 feet in the vicinity of fire hydrants or points of aerial access.
- **Clear Height:** Minimum 13 feet 6 inches; higher where subject to accumulations of snow and ice.
- **Obstructions:** Avoid overhead wires and other obstructions.
- **Proximity to Buildings for Aerial Operations:** If parallel to buildings more than 30 feet high, locate near edge 15–30 feet away.
- **Turn Radius:** Minimum 25 feet inside and 50 feet outside.
- **Curb Cut:** If provided, extend 2 feet beyond on each side of intersecting fire lane.
- **Grade (slope):** Maximum 5 percent; least grade possible for aerial operation areas.
- **Load:** Access routes, both on grade and elevated, designed for the largest possible apparatus load.
- **Materials:** Design access routes for all-weather use.
- **Security Measures:** To minimize delays, specify that keys, electronic access cards, or remote access controls are provided to the fire department.
- **Barricades:** Use non-destructive gates or posts rather than breakaway bollards.
- **Gate Size:** At least 2 feet wider than fire lanes.
- **Gate Location:** At least 30 feet from public right-of-way.
- **Gate Swing:** Away from direction of fire apparatus travel.
- **Speed Bumps:** Avoid them, or design them for fire apparatus.
- **Signage:** Provide for no-parking areas, and for load limits.
- **Special Apparatus:** May require more stringent criteria than above.

PREMISES IDENTIFICATION

The fire service must be able to rapidly identify and locate a specific building. Address numbers should be placed on the building facing the street or road on which the building is addressed. If the building entry faces a different street, both the street name and the number should be on the address sign.

Numbers should be large enough to read from the street or road. If this is not possible due to the location of the building or due to obstructions, additional signs should be provided (Figure 2.11). The IFC specifies that address numbers be a minimum of 4 inches high. Some jurisdictions have a higher minimum height requirement, especially for commercial properties. The number should be in Arabic numerals rather than spelled out (for example, "120" instead of "One Hundred Twenty").

Buildings set back in groups that share common entrances can make quickly locating a specific building and the shortest route to it difficult. On such sites, additional signs with directional arrows and/or diagrams of the buildings and access layout should be posted (Figures 2.12 and 2.13).

Whenever possible, signs should be illuminated. In areas subject to snow accumulation, signs should be positioned above anticipated accumulations.

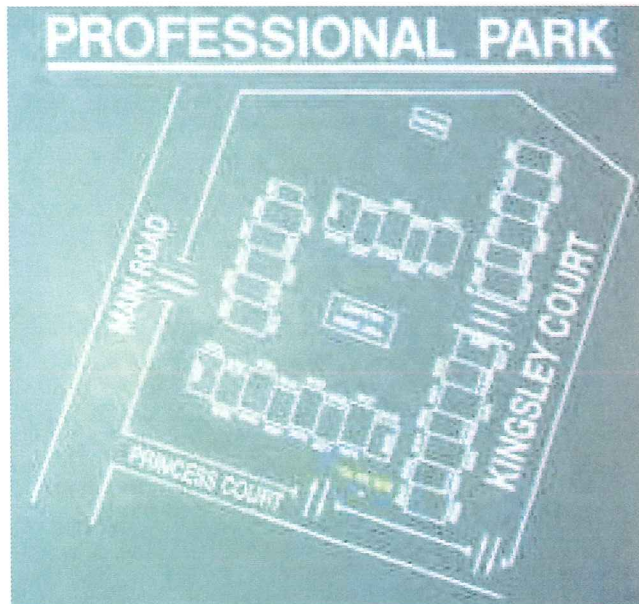
See the section Firefighter Access on page 21 for signage to assist the fire service in identifying portions of a building, or interior layouts.



(Fig. 2.11) Supplemental address sign at the entrance serving this building set far back from the road.



(Fig. 2.12) Directional address sign at the entrance of a property.



(Fig. 2.13) Diagrammatic sign showing an entire complex of buildings and their address(es). The addition of fire hydrant locations (and any other fire protection features) would assist responding firefighters.

Considerations – Premises Identification

- Location: Addresses should be on each building.
- Numeral size: At least 4 inches high for single family homes, and preferably 6 inches high for all other properties; larger if necessary to be visible from the street.
- Numerals: Addresses (numbers) should be in Arabic numerals.
- Color: Addresses should be in a color that contrasts with the background.
- Provide street name with the address number for entrances facing other streets.
- Provide additional address signs at entrances to the property when the building address is not legible from the public street.
- Common entrances: Provide directional or diagrammatic signs for groups of buildings sharing common entrances; include locations of fire hydrants, fire department connections, and fire alarm annunciator panels.

FIRE HYDRANTS

Optimal positioning, spacing, location, and marking of fire hydrants can aid the fire service during emergency operations. Public fire hydrants are often under the purview of a local water authority, many of whom use American Water Works Association (AWWA) standards for fire flow and other criteria. The building design team is often responsible for hydrants and water supply systems on privately owned property sites. Both the IFC and NFPA 1 include appendices that give criteria for fire flow, and fire hydrant location and distribution. Other criteria can be found in NFPA 24, Standard for the Installation of Private Fire Service Mains and their Appurtenances.



(Fig. 2.14) This hydrant should not have been located where it is likely to be blocked. Loading docks, by nature, will likely have vehicles parked. This is an example of building a potential deficiency into a facility. The truck could prevent use of the large pumper connection or cause the base to be kinked when used. Note the yellow bollards which protect the hydrant from vehicle collision.

Features

Typically, hydrants have a large suction hose connection (4½ inches is a common size) called a “pumper outlet” or a “steamer” connection. Plus, they normally have two, 2½ inch hose connections. Both wet-barrel type hydrants and the dry-barrel types used in areas subject to freezing have these features. Dry hydrants (those connected to a static source such as a tank, well, or pond) often have only a large connection or pumper outlet. Criteria for dry hydrants can be found in NFPA 1142, Standard for Water Supplies for Suburban and Rural Firefighting.

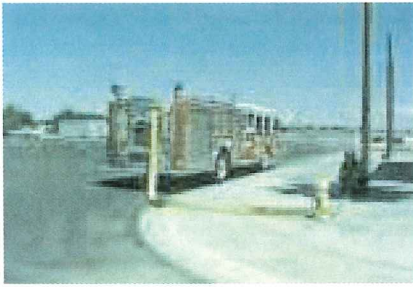
Hose can be connected directly to a fire hydrant only if the connections match those needed by the area fire service. This includes type (threaded or quick-connect), thread style and size of connection. If the connections do not match, adapters (if available) will slow response.

Position

Optimal location and positioning of hydrants facilitates rapid connection of hose lines and devices. Considerations for designers include height, orientation, distance from the curb, and distance from surrounding obstructions (Figure 2.14). A clear distance is essential around the hydrant to enable a hydrant wrench to be swung 360 degrees (see Figure 2.16b) on any operating nut or cap nut. If the nearby obstruction is a plant or bush, consider its potential growth when planning for hydrant placement.



(Fig. 2.15) Here is a pumper connected to a hydrant by its front-mounted suction hose. The pumper has a swivel to facilitate reaching hydrants on either side.



(Fig. 2.16a) Pumper stopping to initiate a forward hose lay from a hydrant.



(Fig. 2.16b) The same pumper completing the straight lay towards the fire scene, and a firefighter preparing to operate the hydrant after the hose is safely laid out.



(Fig. 2.16c) Pumper performing a reverse hose lay from a fire scene (to feed the monitor nozzle shown) towards a hydrant.

Spacing

Maximum distance between hydrants differs greatly, depending on various local standards. IFC and NFPA 1 both include tables within appendices that enable a designer to find the required fire flow for any given building, and then select the corresponding hydrant spacing. Where apparatus may approach from different directions, hydrants should be placed primarily at intersections. If additional hydrants are needed to comply with local spacing requirements, they should be spaced along blocks at regular intervals.

Location

Pumpers may utilize hydrants in different ways. If the fire is close enough, a pumper can be positioned at a hydrant and use a large-diameter suction hose (Figure 2.15). Pumpers in urban and suburban areas with hydrants are generally equipped with large-diameter suction hoses connected to an intake on the pumper's front bumper, rear step, or side. This suction hose may be as short as 15 feet. In many urban areas, however, pumpers carry longer suction hoses in order to reach hydrants on the opposite side of a single line of parallel parked cars.

If a fire is not close to a particular hydrant, a pumper may have to lay one or more hose lines between the hydrant and the fire. If a pumper lays a supply hose line from a hydrant towards the building with the fire emergency, this is called a "straight" or "forward" hose lay (Figures 2.16a and 2.16b). The opposite (laying supply hose from a building on fire to a hydrant farther down the

street) is called a "reverse lay" (Figure 2.16c). Many fire departments use one or the other of these options as their standard procedure. Designers should take this into account when locating hydrants. For instance, hydrants at the end of dead-end streets will not facilitate straight hose lays.

Hydrants that are too close to a particular building are less likely to be used due to potential fire exposure or collapse. Locating hydrants at least 40 feet away from protected buildings is recommended. If this is not possible, consider locations with blank walls, no windows or doors, and where structural collapse is unlikely (such as building corners). A rule of thumb for collapse zone size is twice the distance of the building's height. This is not a consideration in urban areas, where a multitude of hydrants are available for any given location.

Marking

A number of methods are used to enable firefighters to rapidly identify hydrant locations. The color used for hydrants should contrast as much as possible with the predominating surroundings. Some localities place reflective tape around the hydrant body. Other jurisdictions mount reflectors (usually blue) in the roadway in front of each hydrant; however, in cold weather climates these reflectors are often obstructed by snow.

The best way to identify hydrants in areas subject to snowy weather is a locator pole which is visible above the highest expected snowfall. These are



(Fig. 2.17) One example of a hydrant locator pole with a reflective flag.

reflective or contrasting in color, and some have a flag, sign, or reflector mounted on top (Figure 2.17). These poles should be flexible enough to return to their upright position if someone tampers with them, or rigid enough to prevent this type of tampering. Some jurisdictions or sites go so far as mounting a light (usually red or blue) above the hydrants.

A color coding system may indicate flow capability of hydrants. One such system is contained in NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants.

During construction or demolition, fire hydrants may be out of service. Designers should specify that inoperative hydrants be covered or marked during their projects, so that firefighters will not waste time attempting to use them.

Considerations – Fire Hydrants

- Position: Orient the pumper outlet toward the access lane or street.
- Height: Center of lowest outlet should be 18 inches above grade.
- Location: Within 5 feet of an access lane or street; preferably with no intervening parking.
- Protection: Provide bollards if there is no curb between the road surface and the hydrant; locate at least 3 feet from the hydrant.
- Obstructions: Locate 3 feet from any surrounding obstructions.
- Consider fire department approach directions and hose-laying procedures when locating hydrants.
- Avoid locations likely to be blocked, such as loading docks.
- Position hydrants at least 40 feet from buildings they serve.
- Specify a hydrant marking system; in cold climates, use distinctive poles.
- Where possible, color code hydrants to indicate flow.
- Specify that inoperative hydrants be covered or marked.

FIREFIGHTER ACCESS

Once firefighters have arrived and positioned their apparatus, they must go to work. Some factors affecting their efficiency include: the distance and terrain between the apparatus access and the building; how easily they can enter the building; the building's interior layout and vertical access (stairs/elevators/roof access); and, how quickly firefighters can locate fire protection features and utilities. The designer can make a positive impact in all of these areas.

Site access

Firefighters must hand carry all equipment beyond the point where apparatus access ends. Increased distance translates into additional time and effort to set up ladders, hose lines, and other equipment. If the area is easy to negotiate by foot, firefighters can move more quickly. The IFC and NFPA 1 contain requirements for access to building openings, such as approved walkways that lead from the apparatus access points to the entry doors.

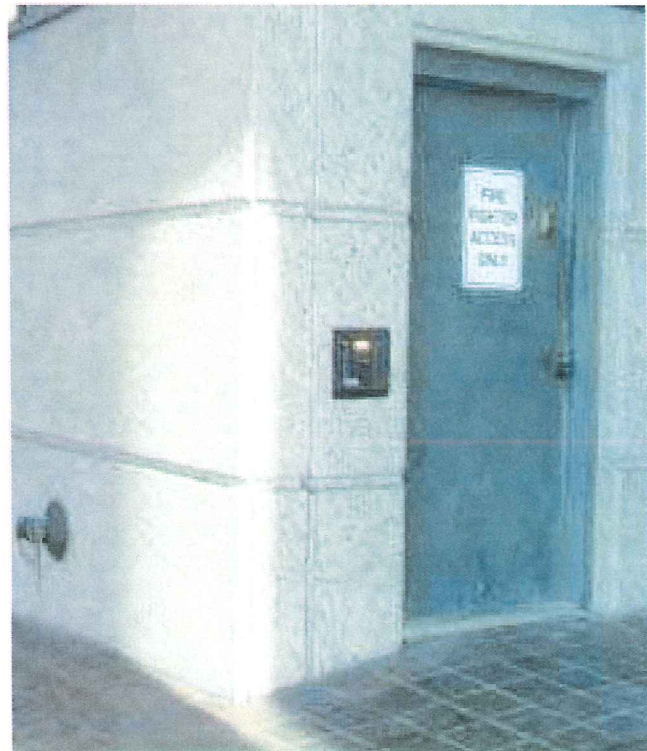
Fire department pumpers carry hose lines for attacking fires. These are usually smaller in diameter than the hose lines used to supply water to the pumper from a water source. Many pumpers have one or more hose loads of a fixed length connected into a pump discharge. These are "pre-connected" hose lines, often called simply "preconnects." Firefighters deploy them rapidly for quick fire attack. However, their useful range is limited by their length, which is generally between 100 and 400 feet. Designers planning unusual designs for their buildings or working with unusual sites should coordinate with the local fire department regarding hose line access unless a standpipe system is provided in the building.

Buildings under construction or renovation pose their own particular concerns to the fire service. Code provisions can be found in the IFC Chapter 14, IBC Chapter 33, NFPA 5000 Chapter 14, and NFPA 241. Designers should consider the accessibility of fire department connections, fire hydrants, and entry points. Some locations may be more likely to be obstructed by construction storage, truck unloading, cranes, phasing of the construction, and security fences. Designers should consider specifying these locations and the location of temporary and permanent fire protection equipment to avoid conflicts (Figures 5.14 and 5.15).

Key Boxes and Entry Doors

If firefighters need to conduct interior fire suppression operations, they must enter the building at one or more points. The fire service has an array of tools to force entry into buildings. However, forcing entry takes extra time and usually damages the building.

Key boxes (also called "access boxes" or "lock boxes") are small lockable vaults mounted outside building entrances (Figure 2.18). They are opened with a master key held by the fire department. Inside the box are the building's keys. Some jurisdictions require key boxes; others give building owners the option of installing them, or risking the need for firefighters to force entry into their buildings along with any resulting damage. Code officials enforcing the IFC and NFPA 1 may require key boxes. When key boxes are optional, designers may want to educate owners on their benefits.



(Fig. 2.18) Key box adjacent to fire command center. These boxes are often provided at main building entry doors. Note the fire department connection on the left.



(Fig. 2.19) Apartment locator. This door does not access apartments whose windows flank it.

First arriving firefighters will often base their point of entry on which windows have fire or smoke venting from them. In most cases, entrances that serve any particular window will be readily apparent from the outside. If it is not obvious which door to enter to reach which area, signs or diagrams should be provided outside each entrance door indicating portions of the building accessible from the corresponding door (Figure 2.19).

In multi-tenant buildings, such as shopping centers and malls, tenants usually have rear exit doors that firefighters may access. Often these doors look alike, making it hard to correlate a given door with a particular tenant. Labeling rear doors on the outside with the tenant's name, address number and/or suite number, using lettering at least six inches high with a 1/2 inch stroke (thickness of lines in each letter) prevents this problem (Figure 2.20).

Any door that appears to be functional from the outside, but is unusable for any reason, should have a sign reading "THIS DOOR BLOCKED." The lettering should be at least six inches high with a 1/2 inch stroke. If these doors are properly marked, firefighters will not waste time trying to gain entry through them.



(Fig. 2.20) Rear doors of a shopping center labeled for rapid access: utility room, fire protection equipment room, and individual tenant space.

Interior Access

Large, unusual, or complex buildings present a challenge to maneuvering and locating specific areas. Directional signs with room/tenant numbers, and graphic directories of tenant/agency layout can assist the public (Figure 2.21). The same diagrams may assist firefighters if they include: stairway and elevator identifiers, fire hose valve locations, fire alarm control panel location, fire alarm annunciator location, fire pump location and other fire protection features. Diagrams should also contain features to assist unfamiliar users with orientation, such as road names or a compass point.

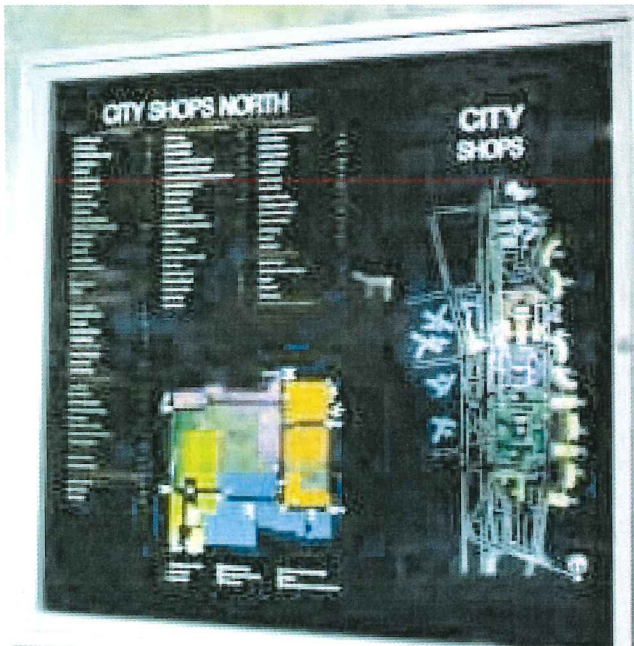
Detailed floor plans showing building layout and fire protection systems can assist the fire service. In buildings with fire command centers, a good location for these plans is in this command center. In other buildings, these plans may be locked inside the fire alarm annunciator panel.

Equipment and Utility Identification

A routine function in any advanced fire suppression operation is to control (usually shut down) utilities. Making it easy to locate and identify utilities will speed firefighters' progress. Electric, gas, and other fuel controls should be located either in dedicated rooms with exterior marked entrances, or at exterior locations away from openings such as windows or doors (Figure 2.20).

NFPA 170, Standard for Symbols for Use by the Fire Service, contains symbols for marking gas and electric shut-offs. Air handling equipment should also be prominently marked, especially if located out of sight. The fire service may need to quickly access rooms containing the following equipment: water service, control valves, fire pumps, electric service, switchgear, generators, fans and other mechanical equipment. Lettering for this signage should be at least six inches high with a 1/2 inch stroke (thickness of lines in each letter), unless the standard symbols are used.

Marking of fire protection system devices within buildings is discussed further in the chapters on fire alarm systems, sprinkler systems, standpipe systems, and fire department connections.



(2.21) Shopping complex diagram with views of the overall complex as well as the interior tenant diagram of the building in which the diagram is located.

Elevators

The use of elevators during fire incidents is very controversial. Elevators are not usually used for occupant evacuation. One exception is trained operators evacuating occupants with special needs. They should, however, be designed for fire service use. The elevator standard widely referenced in building and fire codes is ANSI A17.1, Safety Code for Elevators and Escalators. It details the two phases of emergency operation.

Phase 1 of elevator emergency operation consists of a recall system that automatically sends elevators to a "designated" primary level. This occurs upon activation of a manual recall switch at the designated level or upon activation of smoke detectors in the elevator lobbies, hoistways, or machine rooms. If a detector is activated on the designated primary level, the elevator cars go to an alternate floor level. In either case, the elevators are rendered unavailable to building occupants. They remain at the recall level with doors open, so the fire service can quickly determine that they are clear of occupants and then use them in a manual control mode.

The designated recall level usually is the ground or entry level. This will facilitate rapid fire department access. For buildings with entrances on multiple levels, designers should consult the fire department about the entrance firefighters intend to use initially. The fire department may also prefer to coordinate the designated recall level with the location of the fire alarm annunciator, fire control room, and/or the fire department connection.

Phase 2 emergency operation permits the fire service to use the elevators under their manual control. Phase 2 operation overrides all automatic controls, including the Phase 1 recall.

Solid-state elevator control equipment operates correctly only if maintained within a certain temperature range. NFPA 101, NFPA 5000, and the IBC require independent ventilation in machine rooms containing solid-state equipment that controls elevators traveling over certain distances. Whenever such elevators receive emergency power, their corresponding machine room ventilation would also receive emergency power. These features help maintain at least one elevator operational throughout fire suppression operations.

Currently, ANSI A17.1 requires an automatic power shutdown feature for elevators that have fire sprinklers located in their machine rooms and, under certain conditions, in hoistways. Shutdown

occurs upon or prior to the discharge of water, usually when heat detectors mounted next to each sprinkler head are activated. These heat detectors have both a lower temperature rating and a higher sensitivity (a lower response time index) than the sprinkler. However, to minimize the chance that firefighters will be trapped by a power shutdown, the temperature rating of the heat detector should be as high as feasible. Another shutdown method involves water flow detectors; however, these detectors cannot employ a time delay, so designers seldom choose this method. Note that in many cases NFPA 13, Standard for the Installation of Sprinkler Systems, permits sprinklers to be omitted from these areas.

The National Fire Alarm Code, NFPA 72, requires that smoke detectors in either the elevator hoistway or the elevator machine rooms trigger separate and distinct visible annunciation at both the fire alarm control unit and the fire alarm annunciator. This alarm notifies firefighters that the elevators are no longer safe to use, and it also provides some warning time prior to the shutdown feature that is required with sprinkler protection. In addition, ANSI A17.1 requires a warning light in elevator cabs to flash when an elevator problem is imminent.

Stairs

NFPA 1, NFPA 101, NFPA 5000, the IBC, and the IFC all require that identification signage be provided inside stairwells at every level (Figure 2.22). These standards all require stairwell signs in buildings over a certain height, but the height thresholds vary. Signage should show the stair identifier, floor level, terminus of the top and bottom, roof accessi-

bility, discharge level, and direction to exit discharge. On floors that require upward travel to reach the exit, a directional indicator should also be provided. It is important that these signs be located 5 feet above the floor and be visible with the stair door open or closed. In hotels or other buildings with room or suite numbers, the signs should also include the room or suite numbers most directly accessed by each stair on every level, (i.e., second floor of stairway 3 has direct access to rooms 202 through 256). The latter signage would be extremely important where certain stairways provide no access to some sections of the building.

Buildings more than 3 stories in height above grade should have roof access. The IBC and IFC require this, except for buildings with steeply-pitched roofs (with a more than 4:12 slope).

As stated above, the IFC, the IBC, NFPA 5000, and NFPA 241 contain special construction/demolition requirements. One stairway should be completed as construction advances. Conversely, as demolition progresses, one stairway should be maintained. These standards also address lighting and fire rating of the enclosure.

Stair Capacity

Building and fire codes typically require that stairs accommodate exiting occupants. Fire service personnel who may use the stairs are not factored into exit capacity calculations. In situations where occupants are still exiting and firefighters are using the same stairs to enter the building ("counter-flow"), the evacuation may take longer.

Furthermore, in most cases, stairway capacity is designed based on the floor with the highest occupant load. Typically, stairs are not widened as one travels in the direction of egress unless the stairs converge from both above and below. This approach assumes that people will evacuate in a phased manner, beginning with the floor(s) closest to the fire origin. In an immediate general evacuation, or when people from other areas self-evacuate, the increased load will slow evacuation.

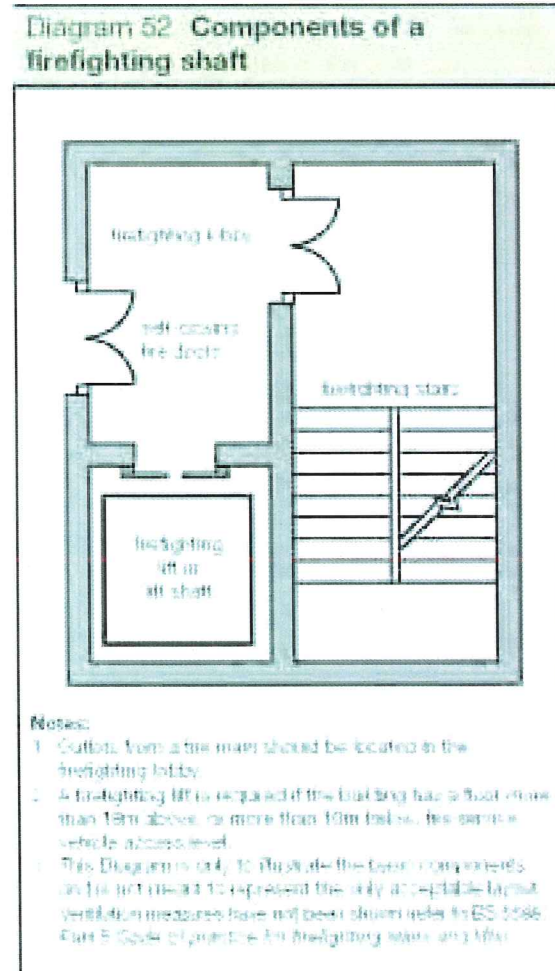
Both of these bottlenecks will be made worse as the height of the building increases. Furthermore, total evacuation is becoming more commonplace due to concerns about terrorism.



(Fig. 2.22) Stairway ID sign.

An effective solution to the counter-flow issue is a dedicated firefighting stairway. Codes in the United Kingdom contain specifications for such firefighting stairs, elevators, and intervening lobbies in buildings of a certain height (Figure 2.23). Current U.S. codes do not require dedicated stairways or elevators. The disadvantages of dedicated firefighting stairways include: cost, space, and the effort needed to keep them clear and in operating order.

A solution to egress delays caused by either counter-flow or total evacuation is to provide additional exit capacity by means of additional stairs or widened stairs. Cost and space are also disadvantages of this solution.



(Fig. 2.23) Dedicated firefighting stairway/elevator tower. © Crown Copyright 2000 Queen's Printer of Acts of Parliament.

These issues currently remain unresolved in the code community; however, a designer may encounter these issues on projects for large, high-security, or high-profile facilities. Further guidance on the movement of people in buildings can be found in the Society of Fire Protection Engineers' publication, Human Behavior in Fire.

Considerations - Firefighter Access

- Consider firefighter foot access in site design.
- Avoid using areas that are likely to be obstructed (i.e., shipping and receiving areas).
- Label blocked doors with exterior signage.
- Coordinate temporary construction storage and loading areas with access points and fire protection features.
- Provide key boxes when required; recommend their use in other areas.
- Locate key boxes as recommended by the particular fire department.
- Include fire protection features on building directories.
- Provide signs or diagrams at limited access entrances.
- Identify rooms containing utility shutoffs and fire protection equipment.
- Coordinate elevator recall level with fire service operating procedures.
- Design elevator shutdown feature to minimize the chance of trapping firefighters.
- Provide identification signs at each level of every stairway.
- Extend stairs up or down with construction or demolition; consider the need for lighting and rated enclosure.
- Where total evacuation of a large building is likely, consider additional egress capacity.
- Where firefighter counter-flow is expected, consider additional egress capacity or dedicated firefighting stairs.



(Fig. 2.24) Building with wood truss construction. The adjacent finished building shows no indication from the exterior that wood trusses were used in its construction.

HAZARDS TO THE FIRE SERVICE

During a fire, any building may become inherently unsafe for occupants and fire service personnel. However, some building construction features present unique or unexpected hazards. This section discusses these hazards.

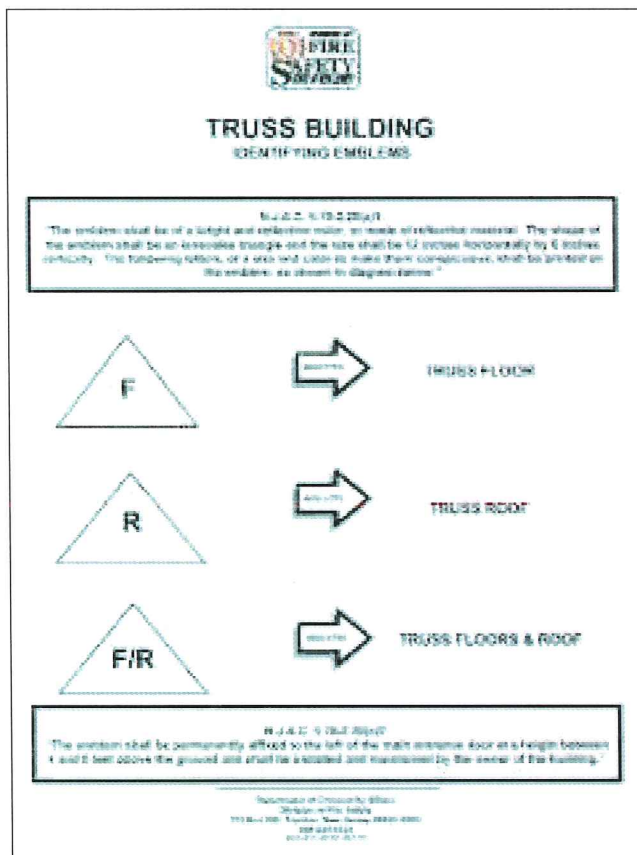
Lightweight Construction

Trusses are widely used in construction to span wide areas without the need for vertical supports, reducing both material and construction costs (Figure 2.24). Under ordinary conditions, trusses work well and building codes have permitted this type of construction for many years. However, trusses often fail suddenly and totally during fires. Both wood and metal trusses are made of interdependent members which all fail if one member fails. Adjacent trusses, in their weakened state, are then unable to carry the additional load and these also fail in quick succession. It is impossible for crews operating at a fire to predict the time or extent of a collapse since they cannot see how many trusses are affected, which components, and to what extent.

Wood trusses have less mass than solid lumber, which greatly reduces the “extra” wood compared to solid joists that burn through more slowly and provide indications to firefighters of an impending collapse. The higher surface area-to-volume ratio of trusses compared to joists allows trusses to burn more quickly. In addition, the metal gusset plates that hold wood truss components together may fail quickly as fire consumes the wood in which the gusset teeth are shallowly embedded.

Many firefighters have been killed in collapses attributed to trusses, particularly wooden ones, since the 1970s. Incident commanders and/or safety officers typically consider the presence of trusses in their fireground risk analysis. Marking these buildings that include trusses makes this information immediately available to firefighters. The State of New Jersey requires this as a direct result of five firefighters losing their lives in Hackensack in 1988 (Figure 2.25).

Another component used to maximize construction efficiency is the wooden I-beam. Similar to trusses, I-beams eliminate extra wood, thereby providing less warning prior to failure under fire conditions. However, they lack the metal gusset connection plates that appear to be at the root of many wood truss failures.



(Fig. 2.25) New Jersey truss building identification emblems.

Wherever these lightweight construction techniques are used, serious consideration should be given to providing sprinkler protection throughout the building, if not already required. Sprinkler protection of combustibles concealed spaces is an important feature for firefighter safety.

Further discussion about lightweight construction can be found in "Building Construction for the Fire Service," published by the NFPA.

Shaftways

Vertical shafts within buildings sometimes have exterior openings accessible to firefighters. Any such doors or windows should be marked "SHAFTWAY" on the exterior with at least 6 inch high lettering (Figure 2.26) as required by the IFC and NFPA 1. This warns firefighters that this would be an unsafe entry point. If properly marked, time will not be wasted attempting entry at these points.

Normally, interior openings to shafts are readily discernable. Ordinary elevator doors are not likely to be mistaken for anything else. However, other interior shaft openings that could be mistaken for ordinary doors or windows should also have shaftway marking.

Skylights

Without special precautions, roof-mounted skylights obscured by heavy smoke or snow may collapse under the weight of a firefighter. Skylights should be designed to bear the same weight load as the roof. The same applies to coverings over unused skylights. If this is not practical, mount barriers around skylights to prevent firefighters from inadvertently stepping on them.

Considerations - Hazards to the Fire Service

- Provide prominent exterior signs on all buildings with truss construction.
- Mark all exterior shaftway openings.
- Mark all interior shaftway openings that are not readily discernable.
- Never design traps or pitfalls into buildings.
- Use design precautions to prevent falls through skylights.



(Fig. 2.26) Exterior shaftway marking.

Chapter 3 Sprinkler Systems

GENERAL

Sprinkler systems provide early fire control or extinguishment, helping to mitigate the hazards for occupants and firefighters alike. Building codes, fire codes, and life safety codes specify when to provide sprinkler systems. These may be either locally written codes or adopted model codes such as the IBC, the IFC, NFPA 1, NFPA 101, or NFPA 5000. In addition, various sections of the OSHA standards require the installation of sprinkler systems.

A widely accepted installation standard for commercial system design is NFPA 13, Standard for the Installation of Sprinkler Systems. Other standards include: NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes; and NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height. Designers may also refer to NFPA 13E, Recommended Practice for Fire Department Operations in Properties Protected by Sprinkler and Standpipe Systems, although any given fire service organization may follow different standard operating procedures.

There is some flexibility in portions of the system that may impact the fire service. This chapter provides guidance to designers so they may exercise this flexibility to benefit fire department operations. Fire department connections for sprinkler systems are covered in Chapter 5. Standpipe systems (which are often integrated with sprinkler systems) are covered in Chapter 4. Sprinkler designers should also see Chapter 6 for additional guidance on fire alarm annunciation, and Chapter 7 for special coordination considerations about smoke control systems.

ZONING

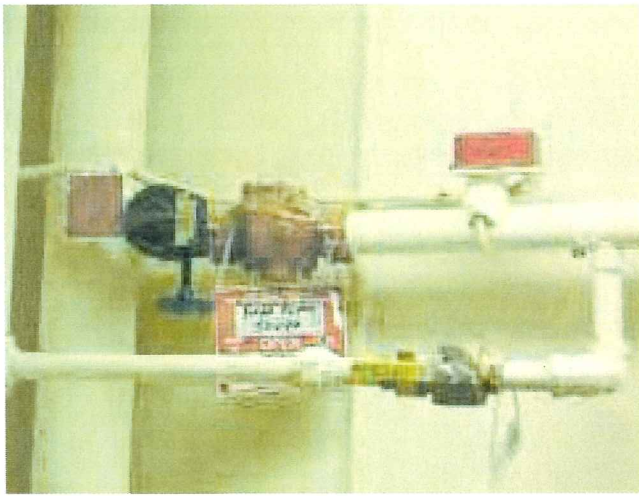
It is important for sprinkler designers and fire alarm designers to work together, especially in unusual buildings. The fire alarm system will often have an annunciator to indicate the location of the alarm to the fire department. Sprinkler piping arrangement will limit options for fire alarm annunciation of water flow signals. Coordination is essential to furnish the fire service with clear information on the fire or its location.

Sprinkler designers often think in terms of ceiling levels, since sprinkler piping and sprinkler heads usually are at ceilings or roof decks. However, alarm signals are reported in terms of their floor level to enable the fire department to respond to the correct floor during an emergency. Consider the situation of a building with two levels adjacent to a single level "high-bay" area. The first floor sprinkler zone should include both the high bay area and the lower level of the two-level section because each of these areas shares the same floor. Meanwhile, the upper level of the two-story section should have its own zone, even if the piping it contains is on the same level as the high bay area.

In buildings with standpipe systems, sprinkler systems are usually combined with them and fed by a single water supply. Sprinkler systems are fed from the bulk feed mains or from vertical standpipe risers. NFPA 13 requires that sprinkler controls remain independent of standpipe systems. Typically, all sprinklers would be located downstream from a control valve that will not shut off any fire hose connections (Figure 3.1). This enables the fire department to shut off the sprinklers during the rare occasions when a sprinkler pipe fails, or the sprinklers are not controlling the fire. In this manner, hose connections remain available for manual fire suppression without losing pressure from the broken pipe, or the excessive number of activated sprinklers.

In some situations, when a building does not include a standpipe system, NFPA 13 allows fire hose connections to be fed from sprinkler systems. In these cases, closing the sprinkler system valve would shut off the fire hose connections.

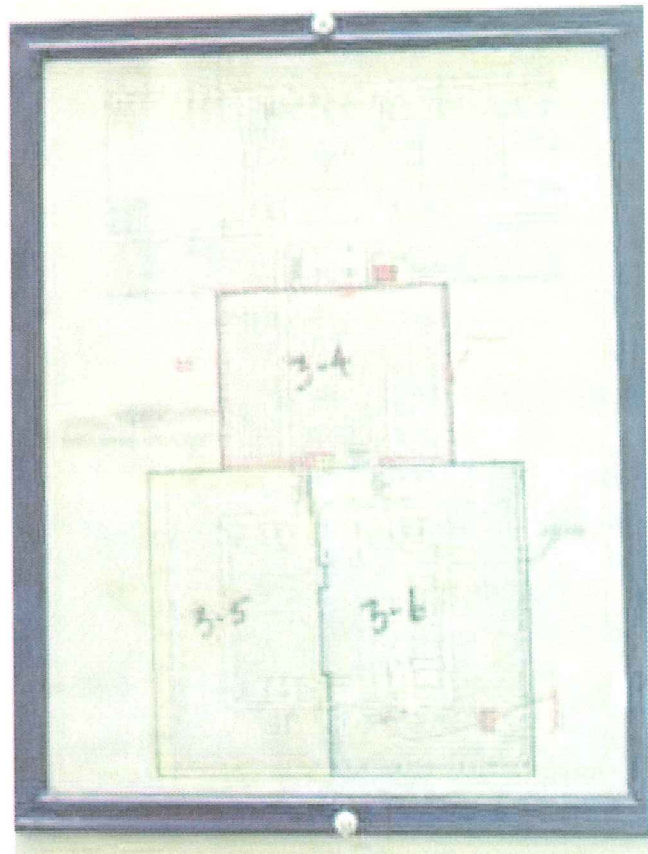
In some cases, sprinkler systems are fed from two different standpipes or feed mains, in a "dual-feed" arrangement. Although this provides a hydraulic design advantage, NFPA 13 recommends against it to avoid confusion. If a designer chooses this arrangement (and the code official permits it), cross-reference signs should be provided at each valve. Each of these signs would indicate the location of the companion valve that feeds the same system. No single sprinkler system should be fed from three or more points, since the flow from a single sprinkler may not activate any of the flow switches.



(Fig. 3.1) Sprinkler zone control station and zone indicator sign.

Considerations – Sprinkler Zoning

- Coordinate pipe arrangement with fire alarm zoning.
- Keep sprinkler controls independent of standpipe systems.
- Avoid dual feed systems, or provide cross-reference signs.



(Fig. 3.2) Sprinkler zone diagram.

WATER SUPPLY CONTROL VALVES

Fire service personnel often need rapid access to valves. If a valve is closed during an incident, it may need to be opened to permit flow of water. If a sprinkler valve is open, it may need to be closed to assist in manual suppression efforts.

NFPA 13 requires marking for all water supply control valves including main valves, pump valves, sectional valves, and zone valves. The wording "control valve" by itself does not tell a user the specific use of the valve or what portion of the system is downstream of a particular valve. Using more descriptive labels such as "12th floor" or "pump bypass" will avoid confusion (Figure 3.1).

If a valve identification is not obvious, an additional diagram should be provided. For instance, if a floor has multiple zones, each control valve sign should identify the corresponding zone, such as "12th floor east" or "zone 7-2." A diagram of zones and the boundaries between them should be

mounted adjacent to each valve (Figure 3.2). This will enable firefighters to quickly determine which valve controls each specific area.

NFPA 13 requires valves to be accessible for operation. If valves are located in stairs, they will be protected and easily accessible during a fire event.

When a water supply control valve must be located in a room or in a concealed space, a sign outside the door or access panel helps firefighters to quickly locate it (Figure 2.20). If the concealed space is above a suspended ceiling, the appropriate place for the sign is on the fixed ceiling grid, rather than on a removable ceiling tile. In addition, some jurisdictions require exterior signs that indicate the locations of interior valves (Figure 3.3).

Valve handles are often located high enough to be out of vandals' easy reach. However, such placement requires a ladder to reach them when

necessary. Although some jurisdictions may require that valves be low enough to reach without a ladder, all minimum height requirements for obstructions must be followed.

Valves for testing and draining purposes should also be labeled. This will prevent any potential confusion.

Exterior valves should be placed in locations accessible even during a fire incident. Wall-mounted valves should be positioned no higher than 5 feet above grade (ground level) and located at least 40 feet from openings such as windows, doors, or

vents (Figure 3.4). Post indicator valves should be at least 40 feet from the buildings they serve. The 40 foot distance is called for in NFPA 24.

Designers should require proper notification when their designs require systems, or portions of systems, to be temporarily shut off. This would typically occur during system alterations, or phased installations. In these instances, the design documents should require notification of any system impairments to the responsible fire service organization and coordination with the fire service about any requirements that these impairments may entail.



(Fig. 3.3) Exterior sign showing valve location (in this case for a standpipe system).



(Fig. 3.4) Wall control valve next to window. Fire issuing from this window could prevent access to the valve.

Considerations – Water Supply Control Valves

- Label all valves for specific use or area covered.
- Provide diagrams to show boundaries between zones.
- Locate interior valves in enclosed stairs wherever possible.
- Provide signage for valves that are outside stairs or in concealed spaces.
- Provide exterior signs showing the location of interior valves.
- Locate exterior post indicator valves 40 feet from the building.
- Locate exterior wall-mounted valves 40 feet from openings and within 5 feet of grade.

FIRE PUMPS

Fire pumps are used to boost the water pressure in sprinkler and standpipe systems and to deliver the required amount of water (Figure 3.5). This is necessary when the system is fed by a non-pressurized water tank, or when the water supply feeding the system has inadequate pressure. A fire pump may be driven by an electric motor, diesel engine, or steam turbine.



(Fig. 3.5) Fire pump.

NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, contains design and installation details for fire pump installations. NFPA 20 requires electrical monitoring of pump controllers for pump running, power failure, or controller trouble. These remote alarm signals are often incorporated into fire alarm annunciators, so that fire departments may identify the status of a given fire pump.

A fire pump controller is the enclosure that contains controls and status indicators for a fire pump. NFPA 20 requires these devices to be within sight of the fire pump motor or engine. The automatic transfer switch, which is often in a separate enclosure, transfers power to a secondary power source (when provided). Fire service personnel may need access to this equipment during the course of a fire.

NFPA 20 contains reliability requirements for the power supply to an electrically driven fire pump. For example, power supply lines must be protected and the circuit must be independent of a building's electric service. The latter feature allows the fire service to shut down building power while the fire pump continues to run. 29 CFR Subpart S must also be followed.

The most desirable location for a fire pump is in a separate building. This affords the most protection from fire, and gives firefighters easy access to the pump and its controllers. If locating the pump in a separate building is not possible, a fire-rated room with an outside entrance is the next best option. NFPA 20 requires pump rooms to be separated from the rest of the building by 2-hour fire-rated construction in buildings without full sprinkler protection, and 1-hour construction in fully sprinklered buildings.

Inside and outside entrances to fire pump rooms should be labeled with signage. Minimum lettering size should be six inches high with a $\frac{1}{2}$ inch stroke (thickness of lines in each letter).

Considerations – Fire Pumps

- Remote alarms for pumps should be at the fire alarm annunciator, if provided.
- Locate pumps in separate buildings if possible.
- If pumps are in the same building, locate in fire-rated room, preferably with an exterior entrance.
- Mark the entrances to pump rooms.
- Observe special electric power supply requirements.

PARTIAL SPRINKLER SYSTEMS

NFPA 13 requires installation of sprinklers throughout the building. However, in some situations the code or standard requiring sprinklers calls for protecting only a portion of the building. In these cases, exterior signage should indicate the portion of the building covered. A good location for this sign would be at the fire department connection (see the section Marking, page 47).

Residential sprinkler systems installed under NFPA 13D and 13R primarily protect lives rather than property. Since property protection is secondary, large and significant areas may not have sprinkler protection (unsprinklered). One- and two-family houses protected by NFPA 13D systems are readily recognized as having this partial, life-safety type of protection.

Apartments and condominiums with NFPA 13R systems may not be easy to identify. These systems are allowed in buildings four stories or less in height. However, some buildings that are considered four stories in height by building codes may still contain additional levels such as lofts, and basements which may be partially below grade. Several sides of these buildings may have six occupied levels above grade and still be considered four stories in height (Figure 3.6). The large unsprinklered areas can adversely impact firefighter safety and consequently the tactics employed. Fire department ground ladders may not reach the top occupied stories, and some apartment units may not be reached by the available access for aerial ladders. Exterior signage near the fire department connection can alert the fire department to this.



(Fig. 3.6) This building has six occupied levels from this view. However, it is classified as a four-story building by the code that was in effect during its construction. As such, an NFPA 13R residential sprinkler system (with no sprinklers in the combustible attic or in the floor/ceiling assemblies) protects it.

Considerations – Partial Sprinkler Systems

- NFPA 13 systems: Provide sign near fire department connection showing portion protected.
- NFPA 13R systems: Provide sign near fire department connection indicating the system only covers life hazard areas.

Chapter 4 Standpipe Systems

GENERAL

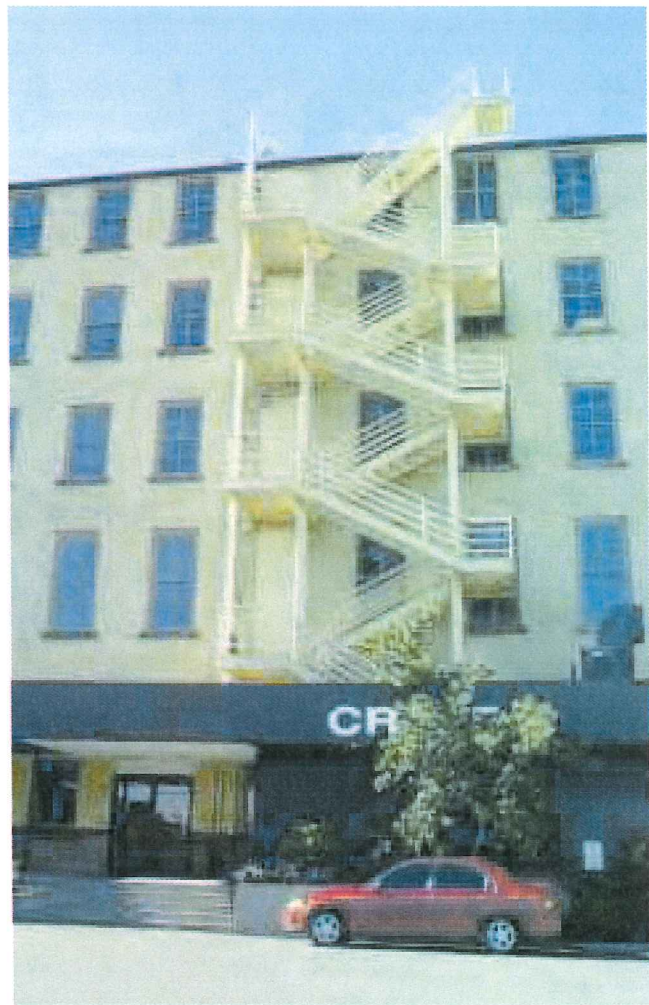
Standpipe systems consist of a fixed piping system and hose valve connections to preclude the need for long hose lays within tall or large buildings. Water is fed into these systems either through an automatic water supply or manually through a fire department connection. The system delivers water to hose connections throughout the building, usually in enclosed or exterior stairs (Figure 4.1). Firefighters then extend hose lines from these hose connections to conduct interior fire suppression operations. Standpipes are, in effect, a critical component in the supply of water to interior firefighting crews. Deficiencies can have disastrous consequences, such as the loss of three firefighters in the 1991 Meridian Plaza fire in Philadelphia.

Systems are classified according to usage: fire department use (Class I), occupant use (Class II), or combined fire department and occupant use (Class III). The use of Class II and III systems has declined over the years due to the training and equipment requirements associated with them. The majority of systems installed today are Class I. Consequently, this chapter will focus on Class I systems.

Building and fire codes specify when designers should incorporate standpipe systems. This can be a locally written code or an adopted model code such as the IBC, the IFC, NFPA 5000, or NFPA 101. Standpipe systems requirements are based on building height or interior travel distances. In addition, standards such as those issued by OSHA require standpipe systems in certain situations.

The IBC and IFC include water supply requirements and some design details. The complete installation standard for standpipe systems is NFPA 14, Standard for the Installation of Standpipe and Hose Systems. This standard allows options for hose connections, valving, and other design features. This chapter illustrates ways that designers can implement various options in different situations to assist the fire service.

The considerations in the section, Water Supply Control Valves, on page 29, regarding valves also apply to standpipe systems. Fire department connections are covered in Chapter 5 on page 41.



(Fig. 4.1) A dry standpipe in an exterior stair. The FDC inlet is to the right of the building entrance, the riser pipe extends through the left side stair landings, and hose connections are at each level, including the roof.



(Fig. 4.2) Hose connection on intermediate landing as viewed from the main landing where the stair entry door is located.



(Fig. 4.3) Training session showing a firefighter chocking open a stair door to initiate a fire attack from a stairway hose connection.

FIRE HOSE CONNECTIONS

Hose connections in Class I systems are typically 2½ inch threaded outlets. As discussed in the Fire Hydrant section, it is essential that hose connection type and size match that used by the fire department in the jurisdiction where the building is located.

The primary location for hose connections is within enclosed, fire-resistance rated stairs. Firefighters set up and begin their attack from within the protected stair enclosure. Then the attack may proceed towards the fire location. If a quick evacuation becomes necessary, the hose then functions as a lifeline, leading the firefighters back to the protection of the stairs.

The current preferred location for stairway hose connections is at the intermediate stair landings between floors (Figure 4.2). This is because firefighters usually stretch hose from below the fire floor for their protection. If the connections are at intermediate landings, the hose line reaches farther than it would if the connection were at the main landing, a full story below the fire floor. However, both NFPA 14 and the IBC permit connections to be located at main floor landings, if so desired by a given jurisdiction.

If hose valves are located on main landings, consider the position of hose connections in relation to the door. The connections should not be behind the door when it is open. Designers should position the outlet to permit the hose line to run out the door without kinking and without obstructing travel on the stair.

Fire attack using hose lines from stairway hose connections requires stair doors to be propped open (Figure 4.3). This prevents the hose from becoming kinked and restricting water flow; however, it can also allow smoke and heat to enter the stairway. At this point, occupants should either have exited the building, be below the level of the fire, use another stairway, or be sheltered in place until after the incident. But, there is now some concern within the fire protection community that occupants may be exposed to fire or smoke conditions during these firefighting operations. Some reasons for this include: conflicting evacuation instructions, occupants not following evacuation instructions, the need for the fire department to operate from all stairways, or the need for total building evacuation (especially in response to terrorist incidents).

One resolution to the dilemma of charged hose lines keeping stair doors open is to place hose connections just outside the stair door instead of inside the stair enclosure (Figure 4.4). However, this is not recommended because such a design forces the fire attack to begin without the protection of the stair enclosure and eliminates the lifeline concept. A better solution is to place additional hose valves just outside the stair door to give firefighters the option of connecting hose lines to these or to the connections within the stair enclosure. The connection outside the stair can be 1½ inches in size to facilitate initial fire attack with smaller size hose lines during occupant evacuation. This should suffice for most fire situations in buildings with a complete operable sprinkler system. However, some fire departments do not use small sized hose lines for standpipe operations. In those cases, any additional hose connections would also need to be 2½ inches in size.

Another approach to maintaining the integrity of stair enclosures during fire suppression operations is to place hose connections in a fire-rated vestibule between the stairs and the building interior. Although such vestibules require a little more room, they can double as refuge areas for individuals with mobility impairments. If the vestibules are open to the exterior, any smoke that does migrate into them will dissipate easily (Figure 4.5).

If the location of stairs precludes hose lines from reaching the farthest points of a particular floor, the designer should include remote (or supplemental) hose connections. NFPA 14 limits travel distance to 150 feet in buildings that do not have complete sprinkler protection, and to 200 feet in fully sprinklered buildings. In buildings with a corridor system feeding multiple rooms, tenants, or agencies, designers should locate remote hose stations within the corridor. Often a corridor's walls, ceilings, doors, and other openings will be rated for fire or smoke resistance. If so, they provide some degree of protection for firefighters, although it is usually less than that provided by a stairway enclosure. In any case, the least desirable place for remote hose connections is within suites or tenant spaces.



(Fig. 4.4) Hose connection on the corridor side of the stair door.



(Fig. 4.5) Exterior view of open air vestibules between the stair and the interior of a building.

Remote hose connections outside of stairwells can often be hard to locate. They should be placed as uniformly as possible on all floors to make them easier to find. Highly visible signs or other markings can assist firefighters in locating them quickly (Figures 4.6 and 4.9). Often these may be tailored to décor or occupancy to satisfy architects or interior designers (Figures 4.7 and 4.8). NFPA 170, Standard for Symbols for Use by the Fire Service, contains symbols for marking standpipe outlets (hose connections).

Placement of remote hose connections can also affect their accessibility. For instance, in parking garages designers should try to locate hose connections adjacent to drive aisles. Where they are intermingled with parking spaces, an access path at least three feet wide delineated with bollards or a raised, curbed area should be provided to preclude cars from obstructing the connection (Figure 4.9).



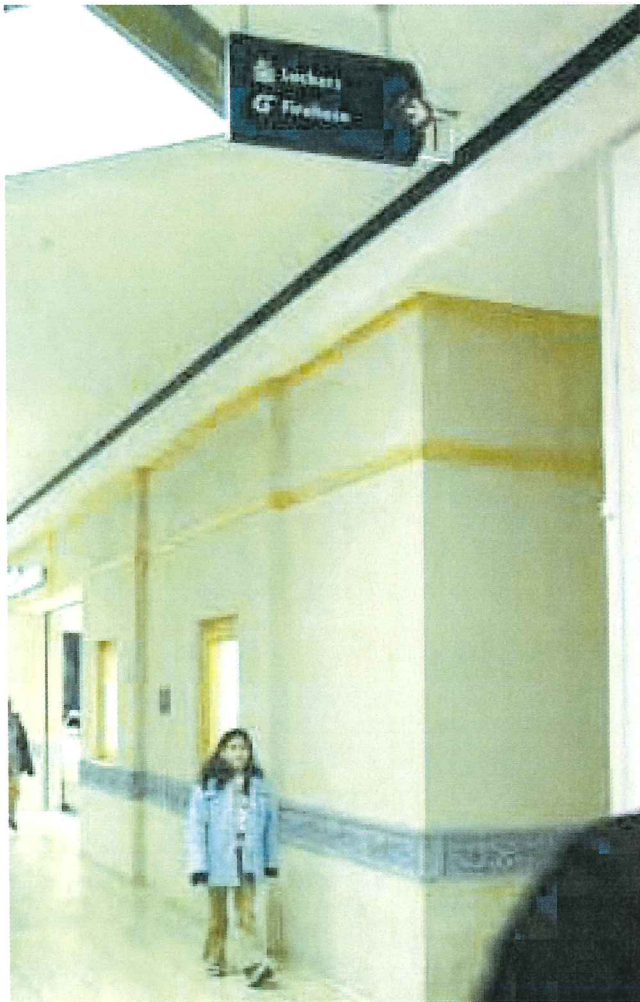
(Fig. 4.6) Stripe on column to identify hose connection location in a parking garage.

Considerations - Fire Hose Connections

- Determine if connections are to be on intermediate or main stair landings.
- Investigate feasibility of additional connections just outside stair doors or locating connections in vestibules.
- Locate supplemental hose connections uniformly in corridors.
- Use curbed raised access path to connections in parking garages.
- Mark supplemental connections clearly.
- Make sure hose threads are compatible.



(Fig. 4.7) Sign to identify hose connection location in an exhibit hall.



(Fig. 4.8) Sign to identify hose connection location in a shopping mall.



(Fig. 4.9) Bollards and striping to create an access path in a parking garage. Bright signs at the top of column help to locate the valve.

DESIGN PRESSURE

Most new standpipe systems are designed by hydraulic calculations. This ensures that the water supply, pipe sizes used, and pumps (if needed) will provide a certain flow and pressure at a specified number of hose connections in the system. The current NFPA 14 specifies a minimum design pressure for Class I systems of 100 pounds per square inch (psi) at a specific flow rate, which depends on the number of hose connections per floor. However, it includes an exception that allows design pressures as low as 65 psi, if this will accommodate the fire suppression tactics.

These minimum pressures are based on certain assumptions about the fire department equipment and tactics, as well as the fixed fire pump feeding the standpipe system. The designer should compensate if the equipment or tactics vary from these assumptions in a particular building or jurisdiction. This will ensure the adequacy of fire streams to assure the safety of firefighters conducting interior operations.

A straight stream nozzle requires at least 50 psi to operate. With the friction loss in fire hose added, 65 psi at the hose connection will provide 50 psi to a straight stream nozzle with 250 gallons per minute (gpm) flowing through 100 feet of 2½ inch fire hose. The same pressures can deliver 95 gpm through 100 feet of 1¾ inch hose.

In 1993, NFPA 14 changed the minimum required design pressure from 65 psi to 100 psi at the hose connections. At the same time, this standard was revised to permit longer distances between hose connections and remote areas of a building. Currently, this distance can be up to 150 feet for buildings without complete sprinkler protection, and up to 200 feet for fully sprinklered buildings. The 100 psi design pressure will permit greater flows or longer hose lines, but only with the same straight stream nozzles.

Many fire service organizations begin their attacks with fog or combination nozzles that generally require at least 100 psi to operate. This dramatically increases the pressure requirements at the hose connection. If 100 psi is actually available at the connection, every combination of hose size and length will result in inadequate nozzle pressure. It is assumed that firefighters will use fog or combination nozzles early in a fire situation, when only one or two hose lines are in operation. It is further

assumed that the total flow will be less than the rated flow of the pump. At these lower flows, output pressures will be higher. Finally, it is assumed that if the fire grows, either straight stream nozzles will be utilized or the pumpers supplying the fire department connections will provide greater pressures.

Designers must be aware of this information for a number of reasons. First, designers should only use 65 psi minimum design pressure when a particular fire department so specifies, based on their equipment and tactics. An example would be if a department used only 2½ inch hose and straight stream nozzles for standpipe operations. Other design conditions such as additional fire hose connections to enable shorter hose lines may also factor into the decision.

In all cases where lower pressure is not specifically approved by the fire department, 100 psi basic pressure should be considered the minimum. However, if any of the above assumptions about the fire pump or the fire department equipment and tactics are invalid in a particular building or jurisdiction, designers should consider providing pressures greater than the basic 100 psi at the hose connections to facilitate adequate fire streams.

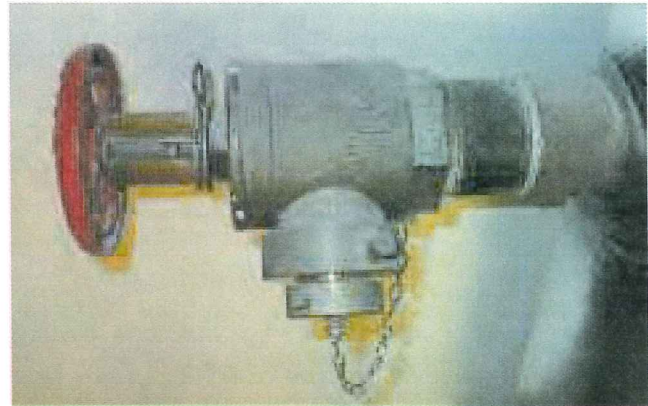
NFPA 14 imposes a maximum pressure limit of 175 psi on standpipe systems for fire department use. Pressures in excess of 175 psi will invoke requirements for pressure reducing devices, which are covered in the next section, Pressure Regulating Devices.

Considerations – Design Pressure

- Use minimum 100 psi outlet pressure unless specifically exempted by the fire department, with justification based on tactics.
- If fog or combination nozzles are used for standpipe operations, investigate fire department procedures and tactics to check the need for pressures over 100 psi (but not exceeding 175 psi).

PRESSURE REGULATING DEVICES

Pressure regulating devices (PRDs) restrict system pressures, usually below 175 psi for Class I systems (Figure 4.10). This is considered the maximum safe operating pressure as well as the maximum working pressure limit of most fire protection components. Proper design of PRDs is imperative so that firefighters have adequate pressure for hose streams. As a stark example, failure to coordinate settings on these devices with fire department tactics emerged as a key issue in the 1991 Meridian Plaza high-rise fire in Philadelphia, which resulted in the death of three firefighters.



(Fig. 4.10) Hose connection equipped with a pressure regulating device.

PRDs fall into three categories: pressure reducing valves (PRVs), pressure control valves, and pressure restricting devices. Pressure restricting devices do not limit pressure during static (non-flowing) conditions, nor do they maintain a constant discharge pressure. These devices incorporate orifice plates, mechanical pressure restrictors, or valve limiting stops. Pressure restricting devices are not used for new Class I standpipe systems. However, designers may encounter these when redesigning existing systems, which would provide the opportunity to implement some or all of the considerations below.

PRVs and pressure control valves limit both static and residual (flowing) pressures. However, many of these valves are factory preset to attain specific outlet pressures with specific inlet pressures. It is important for designers to specify the inlet pressure range for valves as well as the desired outlet pressure, so that they may be designed properly and then installed on the correct floors. Careful attention during design, installation, acceptance testing, and maintenance ensures that systems with PRDs will function properly.

PRVs and pressure control valves have other disadvantages. Their failure rate has been high, resulting in the addition of testing requirements to NFPA 14. Secondly, many cannot be adjusted by firefighters during a fire, or they require special tools and knowledge. Finally, hose connections with these devices cannot be used as backup fire department inlet connections, since water can only flow through a PRD in one direction.

The most reliable means of limiting pressures in standpipe systems is to design them to preclude the need for pressure regulating devices. In shorter buildings, careful attention to the design of pumps and the maximum pressure supplied by incoming water mains can accomplish this. In taller buildings, the same concept can be applied to each separate vertical standpipe zone. Pressure fluctuations in the water supply as well as the full range of fire pump capacity are essential considerations in any building.

If the use of PRDs cannot be avoided, certain design features will balance their disadvantages. The easier the valves are to adjust in the field, the faster the fire service can overcome any unforeseen situation. Designers should select valves which can be easily adjusted and specify that identification signs and adjustment instructions be posted at each valve. The tools required to perform field adjustments should be kept in a secure yet accessible location such as the fire command center or a locked cabinet near the fire alarm annunciator. Finally, a supplemental system inlet should be provided at the level of fire department entry. This can be simply an extra hose connection without a PRD on a riser. NFPA 14 recommends a supplemental inlet, and it is especially important for systems with a single fire department connection.

Considerations - Pressure Regulating Devices

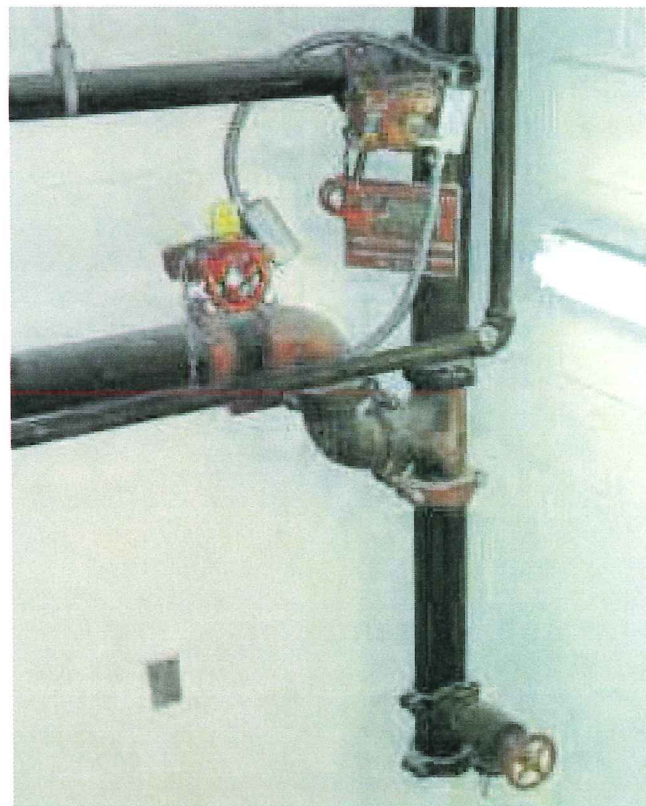
- Design to preclude the need for PRDs.
- Specify the highest and lowest possible inlet pressures at each PRD location.
- Select devices capable of simple emergency adjustment.
- Post identification signs and adjustment instructions.
- Provide adjustment tools in a secure, accessible location.
- Provide backup inlet connection at fire department entry level.

STANDPIPE ISOLATION VALVES

The considerations in the section, Water Supply Control Valves, on page 29, apply to standpipe systems as well. This section gives additional guidance on valves specific to standpipe systems.

The vertical pipes that feed hose connections are called standpipes or risers. If there are multiple risers, NFPA 14 requires interconnections with supply piping to form a single system, with valves at the point where each riser is fed by the main bulk piping coming from the water supply point. Designers should also put valves on the feed lines to remote or supplemental hose connections (see Fire Hose Connections, page 34).

These valves are all called "standpipe isolation valves." The ones on vertical risers are called "riser isolation valves." They allow the fire department to shut off, or isolate, any given riser or feed that breaks or otherwise fails. Firefighters may then use the remaining standpipes.



(Fig. 4.11) Isolation valve between the feed main (entering from the lower left) and the vertical riser (on the right). It is located within the stair enclosure for protection. The valve at the top of the photo is a sprinkler zone control valve.

NFPA 14 requires that riser isolation valves separately control the feed to each standpipe (Figure 4.11). Sequential valves are not acceptable where a single valve in the bulk main can shut off more than one downstream riser. For risers in stairways, the riser isolation valves should be within the fire-rated stair enclosure to protect firefighters who may need to operate them.

Previous editions of NFPA 14 required designers to place the riser isolation valves at the bottom of the risers to make them quickly accessible to firefighters. Fire departments may still prefer that these valves be located on the level that they use for their primary entry. If the bulk feed main is located on a different level it could be piped up or down to the fire department entry level, where the isolation valve would be placed for that particular riser (Figure 4.12).

Considerations - Standpipe Isolation Valves

- Provide a separate valve on each riser for independent control.
- Locate valves for risers in stairs within the stair enclosure.
- Locate valves on fire department entry level.



(Fig. 4.12) The feed for this standpipe was on a level above the fire department entry. The supply pipe was fed down (on the left) to the entry level, where the isolation valve was located. Then, the pipe was routed back upwards (on the right) to feed the standpipe riser.

OTHER DESIGN ISSUES

Standpipes should be installed as the construction of a building progresses. These can be temporary or permanent. Both the IFC and NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations, contain requirements for standpipes during construction. Design documents should indicate the applicable requirements. A marked, accessible fire department connection (see the section, Marking, page 47) can suffice as a water supply until building construction progresses to the point at which the water supply system and fire department pumpers can no longer provide adequate pressure to the system. At this point, a temporary or permanent fire pump also becomes necessary.

In climates subject to freezing temperatures, it is vital that standpipes in unheated areas be dry type systems. Heat tracing and insulation are ineffective protection for dry fire protection systems because water is not normally flowing through the piping.

Large dry systems deserve special considerations. As the size of a dry system increases, the time required to deliver water to the remote hose connection increases. This is due to the increased pipe volume that must be filled. This can be mitigated by subdividing the system into smaller independent systems, or zones. The disadvantage is that fire department inlet connections to dry systems cannot be interconnected (Figure 4.13). See the section, Marking, page 47, for specific recommendations regarding zone indicator signs or diagrams.

Considerations - Other Design Issues

- Specify temporary standpipes during construction.
- Specify installation of the pump when height exceeds fire department capability.
- Design to mitigate long fill times for dry standpipe systems.



(Fig. 4.13) FDCs for separate manual dry standpipe systems in a large parking garage.

Chapter 5 Fire Department Connections

GENERAL

A fire department connection (FDC) includes one or more fire hose inlet connections on a sprinkler system, standpipe system, or other water-based suppression system. The hose inlet connections enable the fire department or fire brigade to hook up hose lines from one or more pumpers and feed water into the system to supplement the connected automatic water supply (Figure 5.1). In manual dry standpipe systems, FDCs are the only water supply.

Requirements for FDCs appear in the following standards:

- NFPA 13, Standard for the Installation of Sprinkler Systems;
- NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height;
- NFPA 14, Standard for the Installation of Standpipe and Hose Systems;
- NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection;
- NFPA 16, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems; and
- NFPA 750, Standard on Water Mist Fire Protection Systems.

These standards set minimum criteria for FDCs, such as which systems require them, their arrangement, and the pipe sizes they feed. The IBC and IFC also contain requirements for FDC location and signage. This chapter will expand upon those criteria and provide guidance on FDC location, quantity, numbers of inlets, positioning, and marking. Also included are particular considerations that need to be taken into account during the building construction phase.

In some cases, FDCs are not required because they would be of little or no value. Examples include remote buildings that are inaccessible to the fire service, large open-sprinkler deluge systems that exceed the pumping capability of the fire department, and very small buildings.

Designers should always seek out and follow fire department requirements, recommendations, and advice for special circumstances. The sole users of FDCs are the fire departments that must connect to them. Any deficiency related to the FDC can cause delays in fire suppression, and therefore a decrease in the safety of both fire-fighters and building occupants.



(Fig. 5.1) Charged hose lines connected to a wall-mounted FDC. The proximity of an FDC relative to building exits is discussed in the Location section at page 44.

QUANTITY

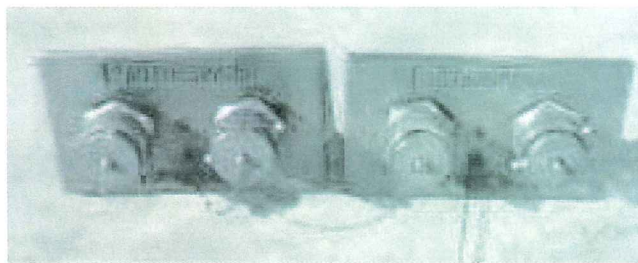
The above standards generally require a single FDC such as the one in Figure 5.1. In some cases, an additional interconnected FDC will be required. For example, NFPA 14 requires multiple FDCs in remote locations on high-rise buildings. This code provision was added after experience with high-rise fires showed that broken glass and debris falling from a fire area can damage hose lines. A second remote FDC increases the dependability of the water supply.

The following section discusses the number of inlets provided for each FDC. However, this decision can be related to the quantity of FDCs. If the water quantity demand of the system is high enough to justify more than two inlets, then the designer should specify separate FDCs. This configuration would facilitate different pumpers feeding different FDCs.

When a building has multiple FDCs, most fire departments would prefer that they be interconnected. This enables the fire department to feed any system from any FDC (Figure 5.2). However, sometimes this is not possible. For example, a manual dry standpipe system (with no connected water supply) cannot be interconnected with an automatic sprinkler system. Sometimes, FDC interconnection is not preferable, as discussed in the section, Other Design Issues, page 40, regarding large dry standpipe systems. When FDCs are not interconnected, the designer should consider special signage as discussed in the section, Marking, on page 47.

Considerations – FDC Quantity

- Provide the required or appropriate number of FDCs.
- When more than two inlets are provided, consider separate FDCs.
- Separate FDCs should be located remotely from one another.
- Interconnect separate FDCs to feed all systems where possible.



(Fig. 5.2) Separate sprinkler and standpipe connections (threaded types). To feed both systems, at least one hose line must be connected to each of the two FDCs.



(Fig. 5.3) A 4-inlet FDC. It would probably be more efficient, and give the fire department more options, to have placed two, 2-inlet FDCs in different locations on this building.



(Fig. 5.4) A quick-connect type of FDC.

INLETS

Most standards do not specify the number of inlets required on each FDC. NFPA 13 does say that a single inlet is acceptable for FDCs feeding pipe that is 3 inches or smaller. However, no requirements are identified beyond that. Many FDCs have dual inlets; these are often referred to as “siamese” connections. One rule of thumb is to provide one inlet for each 250 gallons per minute (gpm) of system demand, rounded up to the next highest increment of 250 gpm. For example, if the system demand is 700 gpm, the designer would specify three inlets. Likewise, a system with a demand of 800 gpm would need four inlets (Figure 5.3).

To permit the connection of hoses, the inlet size and type (threaded or quick-connect) must match the type used by the particular fire department. In jurisdictions where the fire service uses threaded hose couplings, FDCs include one or more 2½ inch-size hose inlets (Figure 5.2). The thread type will usually be NH Type (American National Fire Hose Connection Screw Thread). To facilitate the connection of the externally threaded (male) end of fire hose lines, threaded inlets should be the swiveling, internally threaded (female) type. The non-threaded connections will usually be 4 or 5 inches in size (Figure 5.4).

NFPA 1963, the Standard for Fire Hose Connections, sets out specific detailed requirements for both threaded and non-threaded (quick-connect) hose connections.

The inlets are ordinarily required to be provided with threaded plugs or breakaway-style caps. It is important for the designer to specify these to minimize the chance of an inlet being obstructed by trash or debris. If a firefighter notices an inlet

blocked by debris, connection of hose lines will be delayed while he or she attempts to clear it. If the debris cannot be removed, that particular inlet or the entire FDC may be rendered unusable. Unnoticed debris could block most of the flow to a fire hose connection or a significant section of a sprinkler system. Even worse, a firefighter could be operating a hose line inside and suddenly have the blockage clog the nozzle.

Designers may specify lockable inlet caps for security. Designers should obtain permission from the fire department to use these caps, unless the department requires their use. In addition, designers should specify that building owners provide tools or keys for unlocking these caps to the fire department.

Considerations – FDC Inlets

- Match type of connection and thread type to the fire department’s hose.
- Provide caps or plugs for each inlet.
- Security caps: Obtain permission if optional and specify that building owners give keys to the fire department.
- Large capacity systems should have one 2½ inch inlet for each 250 gpm of system demand, unless a large capacity, quick-connect FDC is used.

LOCATION

NFPA standards contain performance language regarding the accessibility of FDCs and the ease with which hose lines can be connected. How the designer meets these requirements can streamline fire department operations.

The IBC and IFC specifically require that fire departments approve FDC locations. It is important for designers to seek and obtain this approval.

Both NFPA 13 and 14 require that FDCs be on the "street side" of buildings. The intent is to make them immediately accessible to approaching fire apparatus. The street side is obvious in urban settings where buildings front directly onto the streets. However, for buildings set back from the street, the street side may be subject to interpretation. In these cases, the designer should consult fire department officials about apparatus approach direction and operational procedures.

Another consideration is the location of FDCs in relation to nearby fire hydrants or other water supply sources, (such as tanks, ponds, or lakes). Some jurisdictions require FDCs to be within a certain dis-



(Fig. 5.5) FDC on street side of building. A firefighter is stretching a hose line to an FDC after the pumper has been spotted at a nearby hydrant. Also, close at hand are the main entrance and the key box which the officer is unlocking.



(Fig. 5.6) This FDC is mounted too close to a wall. Other obstructions could be fences, pipes, downspouts, vegetation, etc.

tance of the closest fire hydrant. This allows a pumper to hook up directly to a hydrant with its suction hose and then use a pre-connected hose line to quickly feed the FDC (Figure 5.5). For example, if pumpers in a jurisdiction each carry a 150-foot pre-connected 2½ inch hose line, a maximum distance of 100 feet will enable firefighters to manually stretch this hose to the FDC, regardless of the position of the pumper at the hydrant. If there are multiple FDCs, each should meet this distance requirement from separate hydrants to allow for completely redundant operations.

An adequate amount of working room surrounding the FDC will enable a firefighter to approach and connect hose lines. If the inlets are straight-type (perpendicular to the wall), a clear path approximately four feet wide would accommodate the firefighter and the hose lines. If the inlets are angled-type, a clear distance of approximately three feet on each side of the FDC will prevent hose lines from kinking (and restricting flow) when they are charged (Figure 5.6).

The designer should consider site conditions leading to the FDC to make it easier for firefighters to stretch hose lines to it. Sidewalks, steps, grassy areas, or low ground cover will not slow down this process. However, if a firefighter needs to negotiate walls, climb a ladder, maneuver

around a fence or hedgerow, or cut away a bush, the operation will be delayed. Designers should consider the potential growth of nearby bushes or plants.

Locations that are likely to be blocked should be avoided. Loading docks, by their nature, are subject to temporary storage and vehicular traffic. Another example of a poor location would be in front of a supermarket or department store where stock or carts may block the FDC at any time (Figure 5.7). This may be a good reason to deviate from the "street front" requirement, or to locate the FDC in a column abutting the road (Figure 2.2). Designers should always keep in mind how the building will be used, not just how a particular item will look on the construction plans (devoid of people and equipment).

Designers should pay special attention to hazardous materials. They should locate FDCs away from fuel tanks, gas meters, or other highly flammable or explosive substances or processes (Figures 5.7 and 5.8).

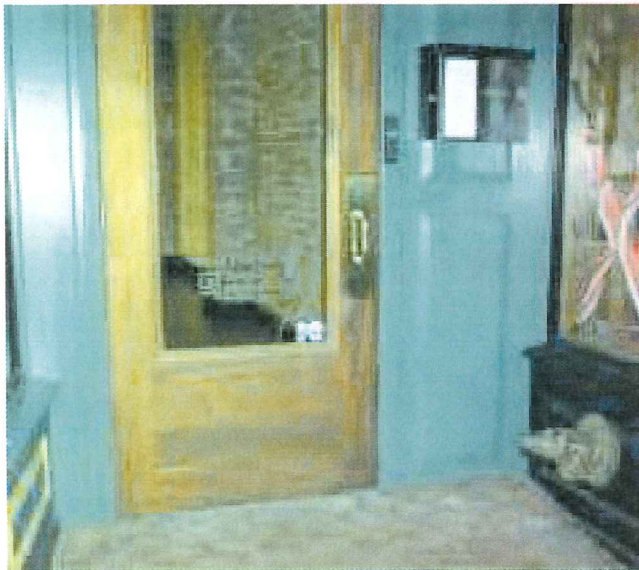
The designer should also consider the locations of entrances and exits when locating FDCs. A charged hose line is very rigid and will block an outward-swinging door, or provide a trip hazard for exiting occupants and entering firefighters (Figure 5.1). Avoid locating FDCs with their inlets pointed in



(Fig. 5.8) This FDC is located too close to the gas service and meter. The breakaway caps make it necessary for a firefighter to swing an axe or other tool to remove these caps. This is an accident waiting to happen that could be avoided through careful design coordination.



(Fig. 5.7) FDC in the cart area of a supermarket entryway. The FDC is located where merchandise or shopping carts could easily block it, or a fire in the adjacent propane storage area could restrict its use.



(Fig. 5.9) An FDC pointed directly across the main entrance of a restaurant. A connected and charged hose line would impede both egress and entry.

the direction of doors, so that firefighter access and occupant egress is not impeded (Figure 5.9).

A freestanding FDC (such as the one shown in Figure 5.11), is an option as long as it is acceptable to the local fire department. Designers may position these anywhere on the property. If an FDC is located far from the building it feeds, consider the special signage discussed in the section, Marking, page 47.

FDCs subject to vehicle damage should be protected by barricades such as the bollards often used near fire hydrants (Figure 2.14). An alternative to protect wall-mounted FDCs is a wall-mounted guard (Figure 5.3).

Considerations – FDC Location

- Locate on street side of buildings, or on line of approach, if building is set back.
- Locate within an easy hose line stretch of a hydrant.
- Locate where it may be easily reached by a firefighter with a hose line.
- Provide at least a 4-foot clear path to the FDC.
- FDCs with angled inlets should have 3 feet of clearance on either side.
- Avoid locations where the FDC may be blocked by area use, e.g., merchandise, storage, equipment, vehicles, etc.
- Avoid areas adjacent to hazardous materials.

POSITION

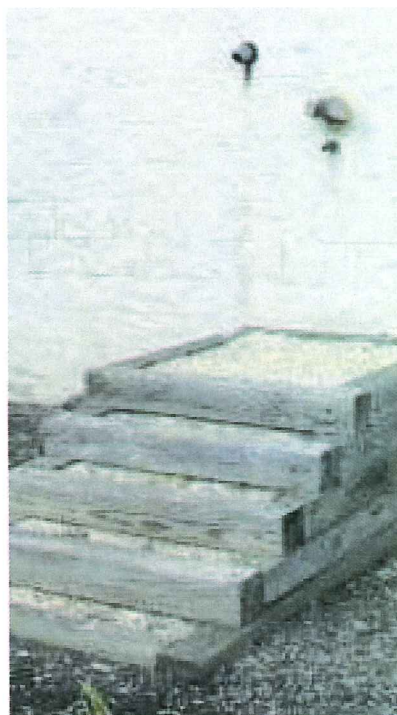
The Appendix of NFPA 13 recommends that FDCs be installed so that the centerlines of the inlets are between 18 and 48 inches above the adjacent ground. This height will make hose line connection straightforward. Some jurisdictions may prefer a maximum height of 42 inches, or even 36 inches.

Designers should position FDCs based on the final grade, rather than the reverse. If the grade is built up in one area with a mound of soil or mulch to achieve the correct height, this can easily be inadvertently changed later by a landscaper. Or, if a platform is built to achieve the correct height, a fall hazard is created for firefighters who may be working in the dark and/or in smoky conditions (Figure 5.10).

Wall-mounted FDCs should be positioned at least 40 feet away from windows, doors, or vents. This will minimize the chance that fire, heat, or smoke will make it difficult to connect hose lines.

Considerations – FDC Position

- Meet all requirements or recommendations for height above grade.
- Do not use platforms or other artificial means to achieve the correct height.
- Position at least 40 feet from openings when possible.



(Fig. 5.10) A platform built up to reach an FDC creates a hazardous condition. This should not be considered as equivalent to positioning the FDC at a proper height above grade level.

MARKING

NFPA 13 and NFPA 14 require that a small sign with one-inch raised letters be provided on each FDC to identify the type of system (such as sprinkler, standpipe, or combined). These are frequently cast into the plate surrounding the inlets with raised lettering.

Some jurisdictions require or prefer more prominent marking. Larger signs can be visible to firefighters and pumper drivers from farther away. Icons may be provided to indicate whether the connection feeds sprinklers, standpipes, or both. One example of standard signage for this type of use can be found in NFPA 170, Standard for Fire Safety Symbols (Figure 5.11). Prominent signs can help greatly where the FDC is on a building set back from the street. Some jurisdictions require a light to help identify the FDC's location in the dark.

Pump operators are normally trained to supply a certain amount of water pressure to the FDC to augment the system. For example, standard procedure could be to pump sprinkler systems at 125 pounds per square inch (psi), and standpipe systems at 150 psi. Firefighters may adjust this to provide additional pressure to a higher elevation in a given building, or to account for different hose line



(Fig. 5.11) FDC sign with an NFPA 170 symbol for both sprinkler and standpipe systems.

configurations on standpipe systems. When a sprinkler system requires 150 psi or more to function properly, NFPA 13 requires that a sign indicate the required pressure. Such a sign alerts the pump operator to this unusual condition.

A designer should consider specifying additional FDC signage for underground buildings or transit system facilities. This is because the visual cues that a pump operator typically has on aboveground buildings (such as size or height), are absent. Also, smoke or fire venting provides no indication about the subsurface level where the fire is located. In these cases, a sign indicating the maximum depth and longest horizontal run of pipe gives a pump operator an idea of the pressure he or she must provide to reach the most remote areas of the system (Figure 5.12).



(Fig. 5.12) A nameplate on an underground transit system facility, showing the depth and maximum horizontal run of standpipe feed piping.



(Fig. 5.13) Address indicator sign to show which building this FDC feeds.

In some circumstances, an FDC will feed a system covering only a portion of the building. Signage at the FDC indicating such partial protection alerts responding firefighters to this, so they may factor it into their risk analysis. Signage should provide enough detail so that firefighters connecting the hose lines can identify the proper connection.

There are also situations (discussed in the sections, Other Design Issues, page 40 and, Quantity, page 42) where multiple FDCs on a building are not interconnected. In these cases, designers should consider the signage to assist the fire department in supplying the correct FDC. Diagrammatic signs are visually the most helpful.

FDCs that are far from the buildings they feed also need special signs. If multiple buildings and the FDC locations make it unclear which FDC goes to which building, designers should provide appropriate identification (Figure 5.13).

Considerations – FDC Marking

- Mark FDCs prominently when remote from fire apparatus access.
- Add signage for systems with a demand pressure over 150 psi.
- Add signage for underground buildings and facilities.
- Mark partial systems (preferably with a diagrammatic sign).
- Mark sections of non-interconnected systems (preferably with a diagrammatic sign).
- Add signage if the corresponding building is not clearly obvious.

TEMPORARY CONNECTIONS

Designers should consider the location and marking of temporary FDCs for temporary standpipes to assist the fire service. The section, Other Design Issues, on page 40, discusses temporary standpipes during construction or demolition.

When specifying the location of a temporary FDC, the designer should consider using areas around the construction site perimeter. If the FDC is located well away from areas likely to be used for storage, unloading, and heavy equipment such as cranes, it is more likely to be accessible to the fire service (Figure 5.14).

The designer should also coordinate the temporary FDC location with any planned construction barricades. Fire service operations will be delayed if walls or fences need to be breached to supply the FDC.

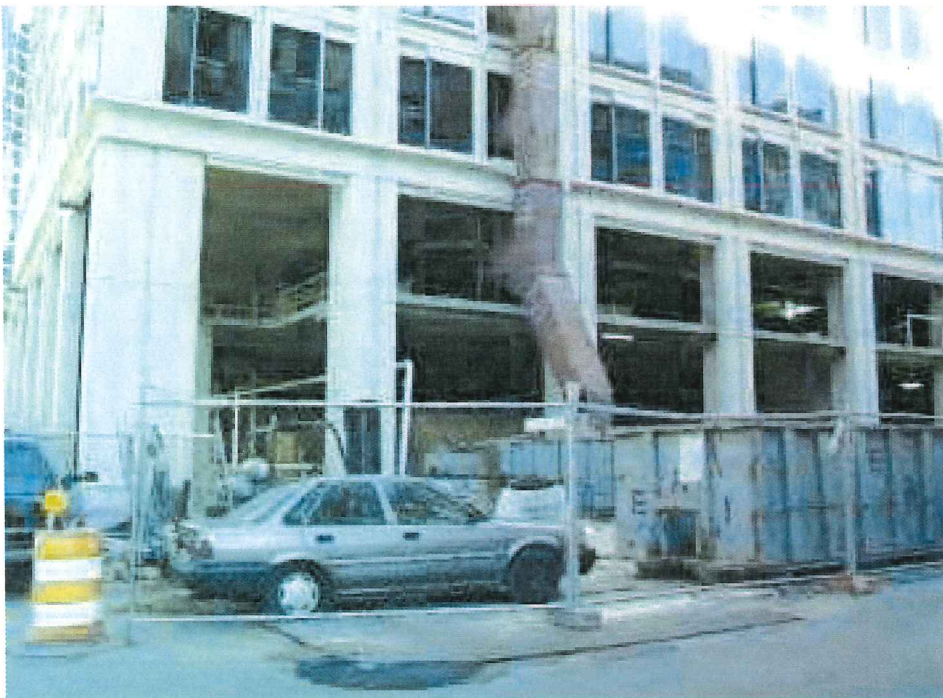
Very prominent signs should mark the locations of temporary FDCs. During construction, aesthetics are not of great importance. A large, brightly colored sign with "FDC" painted in a contrasting color will help the fire service locate the FDC rapidly amid the clutter of a construction site (Figure 5.15). Designers should also specify the removal of the sign when the temporary FDC is removed.



(Fig. 5.15) A temporary FDC labeled with a large colorful sign, as well as large letters "FDC" spray-painted on the building.

Considerations – Temporary FDCs

- Coordinate FDC locations with areas likely to be blocked during construction.
- Mark FDC location with very large, brightly colored signs.



(Fig. 5.14) This is a building under construction as viewed from a piece of fire apparatus turning the corner onto the block. Can you see the FDC? It is not labeled, and it is blocked by a vehicle, a trash container, a fence, and construction materials. It is directly above the car's front bumper.

Chapter 6 Fire Alarm and Communication Systems

GENERAL

A fire alarm system consists of interconnected devices and controls to alert building occupants to fire or dangerous conditions and provide emergency responders with information on those conditions. Clear and concise information will enable responders to operate efficiently and safely.

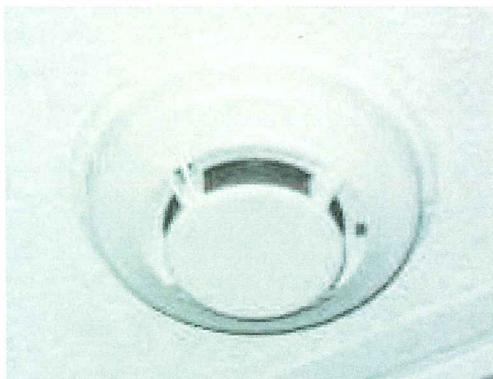
Fire alarm systems monitor alarm-initiating devices such as manual pull stations, automatic detectors, or water flow indicators (Figure 6.1a). If a signal is received, the control components process it via software programs or relays (Figure 6.1b). The system then activates audible and visual evacuation notification devices (Figure 6.1c); sends a remote signal to the fire service or other authorities; displays the location of the alarm; recalls elevators; and controls ventilation systems.

Systems can vary widely in complexity. A basic, fundamental system consists of a control panel, initiating devices, and notification devices. On the

other end of the spectrum are complex selective voice evacuation systems with integrated fire department phone communications systems. Detection systems have devices that automatically sense fire or its byproducts. Detection systems are often integrated into fire alarm systems, and this chapter covers both.

Building and fire codes often specify requirements for fire alarms systems. Commonly used codes include the IBC, NFPA 5000, and NFPA 101. The National Fire Alarm Code, NFPA 72, is a comprehensive installation standard. This code, along with the fire alarm wiring portion of the National Electric Code, NFPA 70, sets the requirements for design, installation, and maintenance. In addition, OSHA standards create obligations with respect to employee alarm systems.

This chapter covers fire service personnel interaction with fire alarm systems and provides guidance for designers to facilitate operational efficiency. Elevator control, often interconnected with the fire alarm system, is discussed in the section, Firefighter Access, on page 21. The section, Smoke Control Systems, on page 63, covers these systems.



(Fig. 6.1a) Initiating device (smoke detector).



(Fig. 6.1b) Control panel.



(Fig. 6.1c) Notification device (horn/strobe).

ZONING AND ANNUNCIATION

An annunciator panel displays information about the location and type of alarm. This assists the fire service with their initial response and may help track the spread of smoke or heat. A building may have multiple annunciators to serve multiple entrances. Or, there may be different annunciators for different users, such as the fire department, the security force, and building management staff. This manual focuses on annunciator features applicable to fire service use. Designers should always consult the fire department on the design and location of these devices.

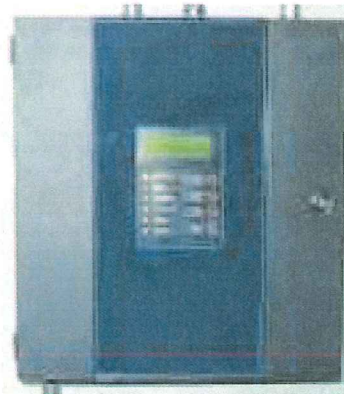
The location of an annunciator is critical to its usefulness. Typically, the best location is at the main entrance where the fire department plans to initially respond. In some large buildings, it may be beneficial to have duplicate annunciators at different locations. For buildings, such as high-rises with fire control rooms, the annunciator is usually located within these rooms. However, depending on the room's accessibility, designers may choose to place an additional annunciator at the main entrance.



(Fig. 6.2) Simple fire alarm control panel with lamps and zone labels for annunciation.

Each building should have its own annunciator, even if a single fire alarm control system serves multiple buildings. Fire service operations would be delayed if it were necessary for one unit to report to a given building to check the annunciator, then relocate (or direct another unit) to investigate origination of the alarm. In large complexes, an additional master annunciator could assist the fire service in locating the building where an alarm originates.

Annunciators display alarm information in different ways. Some have lights or LEDs that are labeled (Figure 6.2). Alphanumeric annunciators have a readout-type display that may be programmed to show very specific information describing the alarm signal (Figure 6.3). A printer is yet another means of annunciation. It is usually used in conjunction with other devices. In very simple systems, the control panel serves as the annunciator. In such cases, its location and features should meet all annunciator requirements.



(Fig. 6.3) Control panel with alphanumeric annunciation display.

The annunciator panel may also store building plans and diagrams. These are then quickly accessible to firefighters. A note outside the panel can indicate that it contains building plans or diagrams.

All annunciators include:

- Floor: the level where the signal originated;
- Zone: the area where the signal originated; and
- Device: the type of alarm or supervisory initiating device.

Local fire or building codes may dictate zone size. The annex of NFPA 72 specifies a maximum zone size of 20,000 square feet and 300 linear feet. The zone limitations in both the IBC and NFPA 5000 are 22,500 square feet and 300 linear feet. Zone boundaries should coincide with fire ratings, smoke ratings, or building-use boundaries.

Zone descriptors, whether labels next to lamps or alphanumeric displays, should provide pertinent information to fire service personnel. Designers should assume that users will not be familiar with the building. Descriptors should be intuitive and rapidly decipherable. As the building, layout, tenants, or room names change, building owners should update descriptions.

Flow switches or pressure switches indicate water flow. To direct the fire department to the appropriate area, it is important that the zone indication show the area covered by the sprinkler system. The location of the switch itself is not important for fire department response operations.

Alarm devices indicate a situation requiring emergency action and normally activate evacuation signals.

Examples of Alarm Devices:

- Manual pull station
- Sprinkler flow
- Smoke detector
- Heat detector
- Kitchen cooking equipment extinguishing system
- Clean agent system
- Carbon dioxide system
- Halon system

Smoke and heat detectors should be further identified on the annunciator by mounting location:

- Area (ceiling)
- Underfloor
- Duct
- Air plenum
- Elevator lobby
- Elevator machine room
- Elevator hoistway
- Stair shaft

Supervisory devices indicate abnormal conditions. They signal a need for non-emergency action, such as repair, and they should not cause an evacuation alarm or notify the fire department.

Examples of Supervisory Devices:

- Valve tamper switch (closed or partially closed water supply control valve)
- Dry sprinkler high or low air pressure switch
- Pre-action sprinkler low air pressure switch
- Water tank low temperature or low water level indicator
- Valve room low air temperature indicator

Some devices control certain building features, such as fans, doors, or dampers. They may be shown as "alarm" or "supervisory," depending on the preference of the code official.

Examples of Alarm or Supervisory Devices:

- Duct smoke detectors
- Air plenum smoke detectors
- Underfloor detectors
- Door closure smoke detectors
- Elevator hoistway smoke detectors
- Elevator machine room smoke detectors
- Heat detectors for elevator shutdown
- Stair smoke detectors

Note: Some jurisdictions require devices that are subject to unwanted alarms (primarily duct or air plenum smoke detectors) be supervisory.

Status indicators give information about whether the main fire alarm power is on, or they report on the condition of devices external to the alarm system.

Examples of Status Indicators:

- Main system power on
- Main system trouble
- Fire pump running
- Fire pump fault,
- Fire pump phase reversal
- Generator run
- Generator fault
- Stair doors unlocked
- Smoke control system in operation

Controls are switches that control features external to the fire alarm system.

Examples of Control Switches:

- Remote fire pump start
- Remote generator start
- Smoke control manual switches
- Stair unlocking switches

Considerations – Zoning and Annunciation

- Provide separate panel for each building served.
- Locate for rapid fire department access near the primary entrance or in the fire command center.
- Include basic information: Floor, zone, device type (alarm or supervisory).
- Meet zone size limitations.
- Arrange devices subject to unwanted alarms as supervisory.
- Indicate area covered by sprinkler systems, not location of switches.
- Include status indicators for power and external devices.
- Include control switches for other fire protection features.

GRAPHIC DISPLAYS

If an annunciator shows any location-related information that is not obvious, a graphic diagram should be provided. Examples are zone boundaries, room names, or room numbers. Diagrams enable firefighters to determine where to investigate alarms originating in locations with designations such as "Zone 2 East," "Suite 121," or "Main Electric Room."

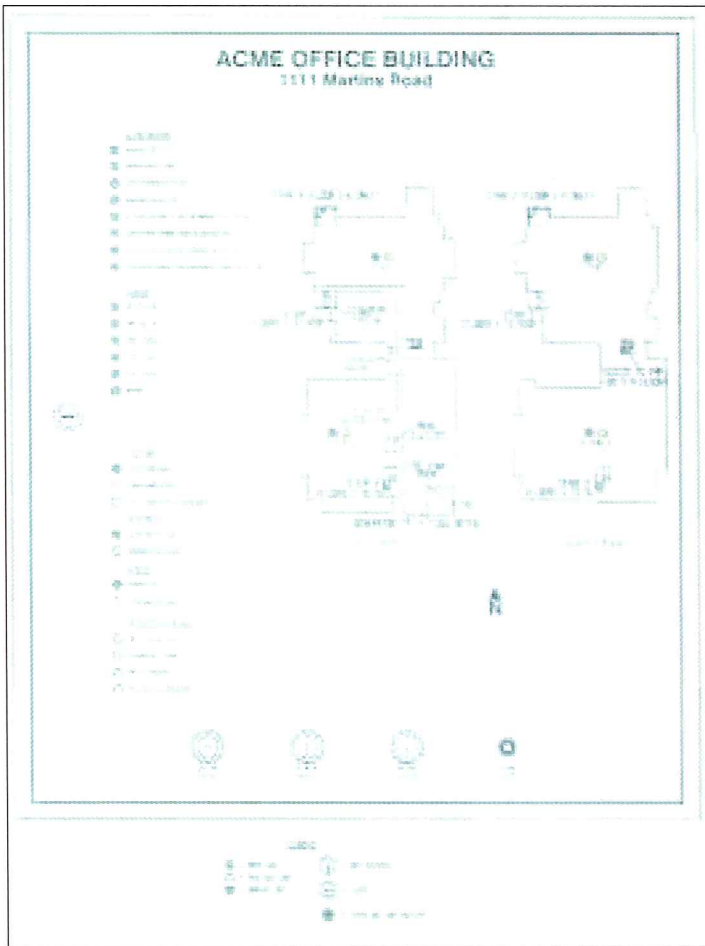
The graphic display may be a separate, printed diagram mounted on the wall adjacent to the annunciator. Or, it may be integrated with the annunciator, in which case it is called a "graphic annunciator." Some jurisdictions may require graphic annunciators.

The design of the diagram is very important in enabling firefighters to rapidly obtain needed information. Fire departments may have regulations or policies outlining their requirements or preferences. Some code officials require annunciators throughout their jurisdiction to have standardized features.

Orientation of the diagram will be important in aiding firefighters to visually process the information it contains. The farthest point of the building beyond the annunciator's location should be at the top of the diagram.

Designers should begin with the building's outline in creating diagrams. Zones would be identified by the boundary lines between them. Likewise, for alarms designated by room, suite, or tenant, these locations should be shown. A "You Are Here" indicator shows the viewers where they are in the building.

NFPA 13 permits most sprinkler zones to cover as much as 52,000 square feet. Therefore, multiple alarm zones may cover one sprinkler zone. If there is one sprinkler zone on a floor and multiple alarm zones, lamp or LED annunciators should report only the floor and device type. An alarm from another device type will light the appropriate zone lamp. If there are multiple sprinkler zones per floor, and sprinkler and alarm zone boundaries are not coordinated, separate diagrams can show each.



(Fig. 6.4) Good diagram, with clearly organized and labeled lamps, as well as building features to assist the fire service.

Consistent designations for any floor indications used in the building will avoid confusion. For example, it is imperative that floor designations on the signs mounted in stairways, elevator cars, and elevator lobbies, be consistent with the annunciator so the firefighters report to the correct floor.

In addition to information about floors, zones, and devices, many features of the building could be shown on the diagram. These include fire protection systems and building components that the fire department needs to be aware of (Figure 6.4).

Designers should remember that modifications to the building or its layout may require changes to the diagram. An annunciator with inaccurate information could be worse than no annunciator at all.

Considerations – Graphic Displays

- Include graphics to show location-related information.
- Include standard features required for the jurisdiction.
- Coordinate the orientation of the diagram with its location in the building.
- Provide separate sprinkler diagrams if zone boundaries do not coincide with other alarm devices.
- Coordinate floor level designations with elevators and stairways.
- Include the following building features:
 - o Building address;
 - o North direction arrow;
 - o Stairs, their identification, and the floors they serve;
 - o Elevators, their identification, and the floors they serve;
 - o Elevator machine rooms;
 - o Exterior entrances;
 - o Standpipe locations;
 - o Location of utility controls (electric, gas, fuel);
 - o Fire alarm control panel;
 - o Fire pump(s);
 - o Fire department connection(s).

FIRE DEPARTMENT NOTIFICATION

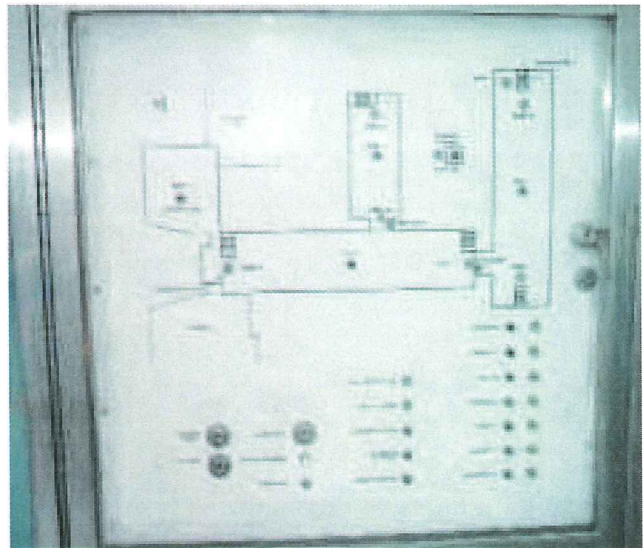
Building or fire codes often require fire alarm systems to automatically alert the responsible fire brigade, fire department, or other emergency response forces. The important consideration for fire department response is reporting the correct location. Often an alarm service or off-site location will receive the alarm signal and then retransmit it to the fire department and/or fire brigade.

It is crucial that the address reported to the fire department match the address where the alarm originated. If a building has multiple addresses, the one with the fire alarm annunciator or fire command center, should be reported. If a building includes separate, independent annunciators, coordinate the remote signal with the correct annunciator location (Figure 6.5).

Larger buildings with multiple sections or multiple entrances can be confusing. If possible, remote fire department notification should include information on the section, wing, or entrance where units should report, so firefighters may investigate an alarm originating from the corresponding area. In addition, strobe lights at entrances corresponding to the alarm location for on-site notification can greatly assist the fire department (Figure 6.6).

Considerations - Fire Department Notification

- Report the correct location/address.
- Report the entrance with the alarm annunciator or fire command center.
- Report the section or wing of the building, if available.
- Report device type, if possible.



(Fig. 6.5) One of two annunciators in a building with four wings, which fronts on three different streets.



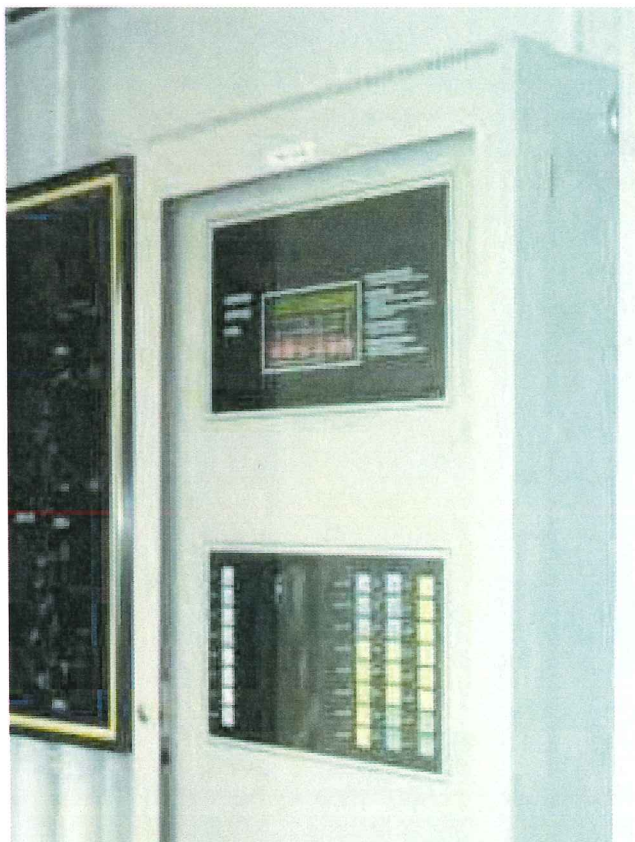
(Fig. 6.6) Strobes above each tenant entry door indicate the tenant where an alarm originates in this building, which has multiple tenants with different addresses fronting on two streets.

VOICE ALARM SYSTEMS

Voice alarms automatically send a voice evacuation message to speakers in selected areas of high-rises or expansive buildings, hospitals, and other buildings where total evacuation is impractical. A typical high-rise arrangement would provide for the following areas to automatically receive a pre-recorded evacuation signal: the floor where the alarm originates and the floors above and below it. Arriving firefighters can evacuate additional areas by manually activating one, multiple, or all floors with the manual select switches in the command center. They also can override the pre-recorded message and broadcast live voice announcements to any or all evacuation zones with a microphone at the command center. Adjacent to each manual select switch, visual indicators show which evacuation zones are activated at any given time (Figure 6.7).

Arrangement of evacuation zones depends upon the design of the building and any evacuation plan in place. Each floor is typically one evacuation zone. Areas that are not separated by fire or smoke barriers should not be divided into multiple evacuation zones. However, if a floor is divided by fire or smoke barriers to enable occupants to take refuge on either side, multiple evacuation zones should be provided. Operators at the command center will only be able to give different instructions to those on either side of the barriers if the zone boundaries coincide with the rated barriers.

In addition to normally occupied spaces, most building and fire codes require speakers in stairways and elevator cabs. Each stairway and each bank of elevators should comprise a single evacuation zone. In a building with selective evacuation, it is undesirable to automatically activate the speakers in these areas. Also, there are typically no detectors to warn of fire or smoke within the stairways or elevator cabs. Each of these zones typically has "manual-only" selection capability for the operators in the fire command center. If a stairway has detectors, the speakers in that particular stairway could be configured into a separate, automatically activated evacuation zone. Designers should ensure that evacuation signals are not heard in areas that are not to be evacuated.



(Fig. 6.7) The grey panel is a voice alarm panel. The lower window shows the microphone and the manual select switches for the different evacuation zones.

Floors that are physically open to one another should be arranged as a single evacuation zone. This avoids the confusion possible when occupants in portions of the space hear an evacuation signal, but cannot clearly decipher it. A common example of this situation is a series of parking garage levels connected by open ramps. The group of interconnected levels should be designed as a single evacuation zone on the "floor, floor above, and floor below" automatic evacuation scenario.

Atriums and other large open spaces spanning multiple floors also deserve special attention in buildings with selective evacuation. The arrangement depends upon the egress arrangement and the building's evacuation plan. The entire atrium should comprise one evacuation zone. It may be desirable to activate only the atrium zone upon receipt of an alarm signal from within the atrium, and not from alarm signals in other areas. Designers should consider the legibility of signals in areas adjacent to the atrium, so as not to cause occupant confusion.

Considerations - Voice Alarm Systems

- Arrange evacuation zone boundaries along fire or smoke separations.
- Coordinate the evacuation zones with the building evacuation plan.
- Place areas or floors open to one another in a single zone.
- Arrange each bank of elevators into a manual-select zone.
- Arrange each stairway into a separate zone (manual-select type if no initiating devices within stairway).
- Arrange each atrium on a separate zone, and consider message legibility when arranging activation of adjacent areas.

FIRE DEPARTMENT COMMUNICATIONS SYSTEMS

Fire department communications systems are two-way telephone systems typically required in high-rise buildings. The command center contains the control unit with the main handset for use by the fire department commanders (Figure 6.8a). Either handsets or jacks for handsets are then placed in areas of the building for firefighters to communicate with the command center (Figure 6.8b). If the system uses jacks, a number of portable handsets with plugs are provided in the command center for distribution to firefighters.



(Fig. 6.8a) Fire officer speaking into the handset at the control panel for a fire department communication system. This panel also houses the handsets used by firefighters at remote jacks.



(Fig. 6.8b) A firefighter using a handset in a remote jack located inside a stairway.

Designers should plan for handsets or jacks in locations where firefighters are likely to be operating. NFPA 72 requires only one handset or jack per floor, one per exit stairway, and one in each fire pump room. NFPA 101 requires them on every level in each enclosed stairway, each elevator car, and each elevator lobby. The IBC currently requires handsets or jacks in the same locations as NFPA 101 and also in standby power rooms, fire pump rooms, and areas of refuge. These additional jacks or handsets can provide more rapid communications from these critical areas.

Both the IBC and NFPA 101 contain exceptions that allow fire departments to approve their radio systems as a substitute for two-way telephone systems. For a radio system to be equivalent, the radio signals should be operable in the same areas (the command center and each remote jack or handset location). To exercise this option, designers or building owners should test radio signals and document of successful results. Signal retransmission devices may be necessary; this is discussed further in the section, Firefighter Radio Signal Retransmission Systems, on page 61.

Considerations - Fire Department Communications Systems

- Locate control panel in fire command center.
- Locate jacks or handsets in stairs, elevator cars, elevator lobbies, standby power rooms, fire pump rooms, and areas of refuge.
- When a fire department is willing to allow its radio system to substitute, specify a signal transmission analysis and retransmission devices, if required.



(Fig. 6.9) Fire command center next to main entrance. The sign on the room should be visible to responding firefighters.

FIRE COMMAND CENTERS

Building or fire codes typically require high-rise buildings to have a dedicated room or other location containing fire alarm and related fire protection control equipment. These are called "Fire Command Centers" in NFPA 72 and in the IBC. The term "Central Control Station" is used in NFPA 101 and NFPA 5000. Yet another term, "Emergency Command Center," is used in NFPA 1. Industry also uses the expression "Fire Control Room."

Both the IBC and NFPA 72 require the room containing the fire command center to be one-hour fire-rated. These rooms often have exterior entrances which should be prominently marked (Figure 6.9). NFPA 72 and NFPA 101 permit lobbies or other approved locations instead of a dedicated, fire-rated room. The IBC requires the room to be at least 96 square feet, with a minimum dimension of 8 feet. NFPA 72 requires at least a three-foot clearance in front of all control equipment.

The IBC contains a comprehensive list of equipment required in a fire command center. The lists in NFPA 1, NFPA 101 and NFPA 5000 are about half as long, and all of these items are on the list in the IBC as well. The additional items in the IBC may greatly assist firefighters in their operations. These include: a work table, building plans, fire protection system plans, and controls for air handling equipment, smoke control systems, and the generator (Figure 6.10).

If a building has multiple fire command centers, visual indicators should show, at a glance, which fire command center is in control at any given time.



(Fig. 6.10) Fire command center with fire alarm and communications equipment, a work table, and adequate work space for the incident command staff.

Considerations - Fire Command Centers

- Use a dedicated room unless the local fire department permits and sanctions another location.
- Include all fire protection control panels and supporting equipment.
- Provide visual cross-reference indicators for multiple command centers.

Chapter 7 Other Systems

FIREFIGHTER EMERGENCY POWER SYSTEMS

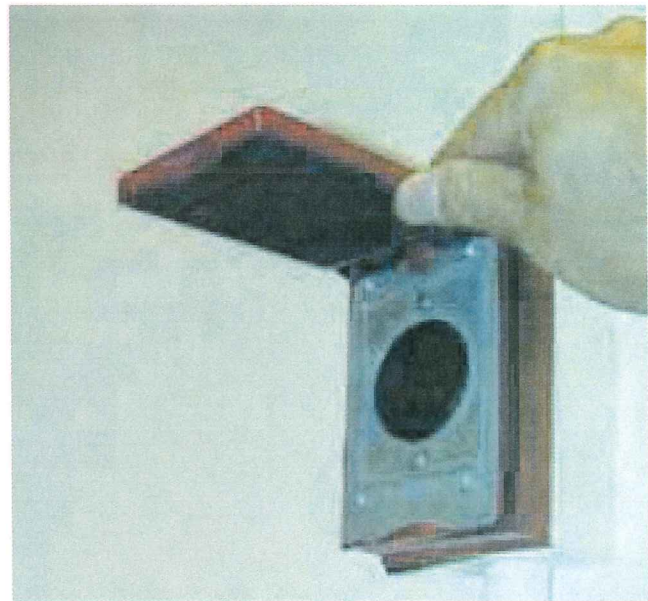
Firefighters regularly use electric power for lights, ventilation fans, or other tools. In large or tall buildings they must run extensive lengths of electric cable to feed equipment in remote areas of the building. A fixed, emergency power system built into the building can substitute for these long cable runs, and save time and effort. This is analogous to standpipe systems substituting for long hose lays. In fact, one approach is to require an emergency power system whenever standpipes are required.

Emergency power systems include one or more dedicated electric circuits feeding a series of electrical receptacles (Figure 7.1). They are wired on an emergency circuit in the building and connected to any backup power sources in the building. In this manner, the outlets are continuously available for fire department use, even after the main power is shut down.

The designer should find out first if a jurisdiction requires a firefighter emergency power system and what specific criteria must be met. The plug type the fire department uses for its electrical equipment (Figure 7.2) determines the receptacle type. The



(Fig. 7.1) Firefighter emergency power receptacle next to a standpipe fire hose connection inside of a stair enclosure.



(Fig. 7.2) A weather-resistant receptacle cover opened, showing the twist-lock receptacle.

wiring methods and over-current protection must meet 29 CFR Subpart S and any other local or state codes.

Receptacles may be located on every level inside each enclosed stairway. Some jurisdictions may require, or prefer, them to be located outside the stairwell. Additional receptacles may be placed to accommodate a maximum length of cable. Or, simply locating one receptacle next to each standpipe fire hose connection (Figure 7.1) may provide good distribution.

Mark receptacles so that firefighters can spot them easily. For example, the designer could specify that each be painted red and labeled "For Fire Department Use Only."

Considerations - Firefighter Emergency Power Systems

- Specify installation when required or desired.
- Specify the appropriate circuitry and receptacle type.
- Specify connection to any standby power sources in the building.
- Provide receptacles in convenient, accessible locations.
- Mark receptacles appropriately.

FIREFIGHTER BREATHING AIR SYSTEMS

Firefighters use self-contained breathing apparatus (SCBA) for interior fire fighting. SCBA air is supplied by cylinders (often referred to as “bottles”) that have a limited amount of air. When depleted, these air cylinders need to be refilled or replaced with full ones. Some fire service organizations have specialized vehicles that contain systems known as “cascade systems” that refill breathing air cylinders at fire scenes.

A firefighter breathing air system is a system of piping within a tall building or a sprawling structure that enables firefighters to refill their breathing apparatus cylinders at remote interior locations. These systems are essentially air standpipe systems. A few jurisdictions in the U.S. require such systems for high-rise buildings, or for long (i.e., over 300 feet) underground tunnels (both pedestrian and transportation).

Without such systems, firefighters must carry additional breathing air cylinders to a staging area, and others must transport cylinders back and forth from a supply point outside. Permanently installed breathing air systems make emergency operations safer and more efficient by eliminating the need to carry extra cylinders, reducing the time and personnel needed for logistical support. However, proper function is dependent upon careful, thorough design, as well as regular maintenance.

A firefighter breathing air system consists of a piping distribution system that runs from a supply point to interior “fill stations” or “fill panels.” Fill panels contain short sections of hose with connections that fit firefighter’s air cylinders. Fill stations are larger enclosures in which cylinders are replenished within a blast fragmentation container using rigid fill connections. Both alternatives have the necessary valves, gauges, regulators, and locks to prevent tampering. Their mounting height should facilitate easy connection of cylinders.

A good location for fill points (panels or stations) is just outside enclosed, fire-rated stairs. Placement at every second or third level provides reasonable coverage. This distribution enables firefighters to locate fill points quickly and set up a replenishment operation in safe proximity to the fire. With fill points just outside the stairs, refill operations will not impede stairway traffic (whether firefighters or occupants). A sign within the stair

enclosure, at each level with fill points, can indicate the location of fill points (for example: “Breathing Air Fill Panel, Out Door and 10 Feet to the Right.”). Fill points should only be located inside the stair enclosure after careful consideration by the fire department and if additional space is allocated for refilling operations. For tunnels, designers should locate fill points a reasonable spacing apart, perhaps 200 feet.

The supply to the distribution system will vary according to fire department capabilities and preferences. One approach is to provide one or more exterior fire department connection panels through which the fire department supplies air from a mobile air supply unit. Another is to provide fixed air storage cylinders within the building, and an exterior backup fill connection. The fixed storage components would be in a lockable, air conditioned, fire-rated room with emergency lighting and a pressure relief vent.

All fire department fill connection panels should be in weather-resistant, locked enclosures marked to indicate their use. Many of the design considerations for these connections are similar to those in Chapter 5 for sprinkler/standpipe connections. They should be located to make it possible for the fill lines on the air fill unit to reach the connection panel.

The designer should provide a fire lane or a road for the mobile air fill unit to access each fill connection. Some of the design considerations in the section, Fire Apparatus Access, on page 11, also apply, in particular the paragraphs on material, gates, barricades, security measures, and marking. The clear height and width would need to accommodate only the fill unit, unless it also serves as access for larger fire apparatus.

Reliability features are highly desirable on breathing air systems. The piping should stay pressurized and the system should include a low air pressure monitoring device. Air quality may be supervised with carbon monoxide and moisture monitors. The designer should specify an air quality analysis for the initial system acceptance as well as ongoing periodic testing. The designer should call for good installation practices, including keeping the piping free of oils, dirt, construction materials, or other contaminants.

For adequate protection throughout an incident, all components of the system should be separated from other portions of the building or tunnel by fire-rated construction. A rating equivalent to that required for stair enclosures is reasonable.

The performance of the entire system should be specified in terms of the number of air cylinders to be filled simultaneously at remote locations, the fill pressure, and the fill time. This will dictate the size of the distribution piping and any air storage cylinders. All components should be specified for use with breathing air, and marked to indicate their use.

Considerations - Firefighter Breathing Air Systems

- Obtain and follow all applicable laws and regulations.
- Specify lockable fill stations or fill panels.
- Specify proper mounting height for fill panels or fill stations.
- Locate fill stations or fill panels just outside stairways.
- Provide signage in stairs at levels of fill panels/fill stations.
- Specify on-site air storage when required.
- Specify weatherproof lockable fire department connection panel(s).
- Locate exterior fire department connection panel(s) near access for the mobile air unit.
- Locate multiple exterior fire department connection panels remote from each other.
- Specify piping and other components suitable for high pressure breathing air.
- Specify that all components be marked for their use.
- Specify CO monitor and low air pressure alarm.
- Specify system performance as follows:
 - o Minimum number of cylinders to be simultaneously filled;
 - o Maximum cylinder pressure;
 - o Maximum fill time.
- Specify air quality analysis at acceptance, and periodic testing.

FIREFIGHTER RADIO SIGNAL RETRANSMISSION SYSTEMS

Fire department portable radios are frequently unreliable inside buildings and other structures such as tunnels. Construction materials, earth, and changes in the radio frequency environment can greatly reduce the strength of radio signals. If a firefighter inside is unable to transmit or receive, he or she must relocate closer to an exterior opening, move to a different floor, use an alternate means of communication, or resort to runners or direct voice communications. Cell phone signals are affected by the same factors as radio signals. Land line phones will allow firefighters to communicate with dispatchers, but not other units; they may also be affected by the incident occurring in the building. All of these factors may delay operations, and create greater challenges in maintaining crew integrity (Figure 7.3).

New technology can improve signal transmission within buildings and structures through fixed communications infrastructures. Passive approaches simply provide a conduit to assist in the transmission of signals. However, active methods involve powered devices to amplify and retransmit signals.

For example, the "passive antenna system" includes both an internal and an external antenna, connected with a short coaxial cable. A "radiating cable," also known as a "leaky coax" is a network of coaxial cables with slots in the outer conductor that create a continuous antenna effect.

Increasing in popularity is an active signal transmission method involving a signal booster also known as a "Bi-Directional Amplifier," or simply BDA. These powered devices amplify signals between an external antenna and one or more internal antennae. Both reception and transmission are amplified messages on portable radios within the building. A network of antennae placed at strategic locations or a leaky coaxial cable distribute signals throughout the coverage area.

Some installations combine passive and active approaches. Passive antennae generally work well in small, well-defined areas. BDAs function well in larger, diverse areas that need a coverage solution.

Some jurisdictions have adopted laws or ordinances concerning public safety radio communications. In others, designers should consider specify-

ing a study to determine the possible need for retransmission devices. Installing stationary communications infrastructures in high-rise buildings and tunnels is one way to resolve communication problems like those encountered by the Fire Department of New York on September 11, 2001.

Without laws requiring this equipment, cost considerations may discourage owners from voluntary installations. However, owners of high-rises or other target hazards may be swayed by increases in property value or improved safety for tenants. Alternatively, in high-rise buildings where firefighter communication systems are required, a code official may permit the substitution of fixed communications infrastructures as discussed in the section, Fire Department Communications Systems, on page 57. Perhaps, in the future, insurance companies will offer lower premiums for buildings containing such installations.

Many local communications ordinances currently in effect in the U.S. contain specific requirements for system performance. These include signal strength, area coverage, reliability, secondary power supply, interference filters, acceptance testing upon completion, and ongoing periodic testing.

Considerations - Firefighter Radio Communications

- Follow any local laws or ordinances for fixed communications infrastructures.
- Investigate the feasibility of voluntary compliance in other jurisdictions.
- Specify minimum signal strength.
- Specify percentage of the building to meet the signal strength.
- Specify the percentage of time that signal strength is to be available.
- Specify secondary power for at least 12 hours of continuous, full-load operation.
- Specify filters needed to block interference from nearby channels.
- Specify a suitable acceptance test of all system functions and features.



(Fig. 7.3) Chief Officer on portable radio.

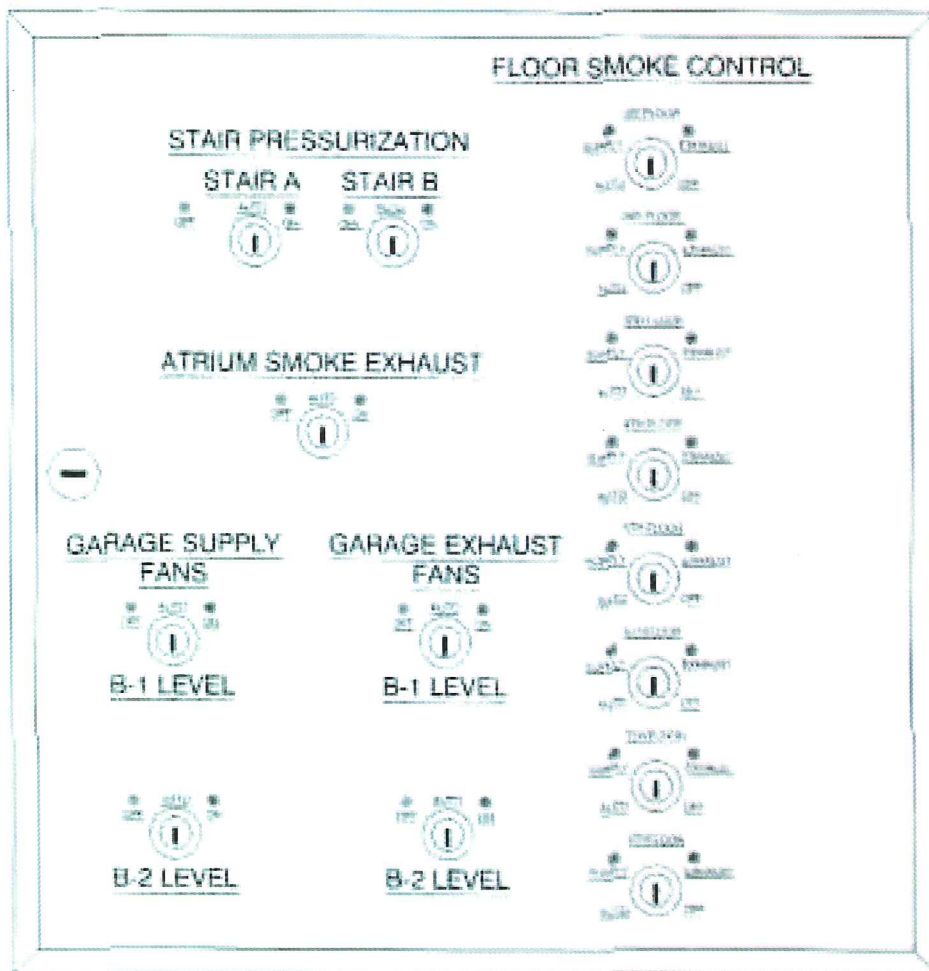
SMOKE CONTROL SYSTEMS

Smoke control systems (or smoke management systems) are mechanical systems that control the movement of smoke during a fire. Most are intended to protect occupants while they are evacuating or being sheltered in place. The most common systems referenced in current codes are atrium smoke exhaust systems and stair-pressurization systems. In some specialized cases, zoned smoke control systems may be provided. These feature zones or floors that are either pressurized or exhausted to keep smoke from spreading.

The IBC contains mandatory provisions for smoke control systems. Designers can find NFPA's detailed provisions in two non-mandatory documents, the Recommended Practice for Smoke Control Systems (NFPA 92A) and the Guide for Smoke Management Systems in Malls, Atria, and Large Areas (NFPA 92B).

The manual controls required or provided for smoke control systems are a primary consideration for the fire service. These manual controls can override automatic controls that activate these systems. When fire department personnel arrive, they can assess whether the automatic modes are functioning as intended. Incident commanders may then use the manual controls to select a different mode or turn any given zone off. It is imperative that these controls override any other manual or automatic controls at any other location.

A simple, straightforward control panel with manual switches for the smoke control system(s) will assist a firefighter who may be trying to decipher how the controls work just after awakening in the middle of the night. Also, similar to annunciators, the fire department may have specific requirements or recommendations, and may prefer uniformity of panels within their jurisdiction.



(Fig. 7.4) A well-designed, easy-to-understand diagram of a smoke control panel. Each system has a single, clearly labeled switch to select each mode.

Both the IBC and NFPA 92A call for status indicators for each fan, damper, and other device. The ICC requires individual controls for each of these devices, but permits them to be combined for complex systems. A system need not be very large to be considered complex.

A good, simple panel layout might feature a single switch for each system or zone (Figure 7.4). Each different position of the switch places the system in a given mode, and the corresponding activation or setting of the individual devices would be configured "behind the scenes." For example, a stair pressurization system might contain a three-position switch for each of three modes: "automatic," "pressurize," and "off."

Zoned smoke control systems are often arranged with each floor as a separate zone. In other cases, a floor may be split into multiple zones. These should be indicated on a graphic display, either on or adjacent to the smoke control panel. See the section, Graphic Displays, on page 53, for additional guidance on graphic displays.

Designers should not confuse smoke control systems with smoke or heat venting systems. The latter are mechanical systems for the removal of smoke. They are often arranged to activate only manually. In some cases, they only remove smoke after an incident.

Considerations – Smoke Control Systems

- Settings for atrium smoke exhaust switches: "auto," "exhaust," "off."
- Settings for stair pressurization switches: "auto," "pressurize," "off."
- Settings for zoned smoke control switches: "auto," "exhaust," "pressurize," "off."
- If there is more than one zone per floor, provide a graphic diagram.
- Settings for manual smoke venting system switches: "exhaust," "off."

Appendix

Sources of Referenced Standards and Information

American Association of State Highway and Transportation Officials

444 North Capitol Street, NW, Suite 249
Washington, DC 20001
Phone: (202) 624-5800
Fax: (202) 624-5806
<http://www.transportation.org/aashto/home.nsf/FrontPage>

American National Standards Institute (ANSI)

1819 L Street, NW, 6th floor
Washington, DC 20036
Phone: (202) 293-8020
Fax: (202) 293-9287
<http://www.ansi.org>

American Water Works Association

6666 W. Quincy Ave.
Denver, CO 80235
Phone: (303) 794-7711 or (800) 926-7337
Fax: (303) 347-0804
<http://www.awwa.org>

International Code Council

5203 Leesburg Pike, Suite 600
Falls Church, VA 22041
Phone: (888) 422-7233
Fax: (703) 379-1546
<http://www.iccsafe.org>

National Fire Protection Association

1 Batterymarch Park
Quincy, MA 02169-7471
Phone: (800) 344-3555
Fax: (800) 593-6372
<http://www.nfpa.org>

OSHA Assistance

OSHA can provide extensive help through a variety of programs, including technical assistance about effective safety and health programs, state plans, workplace consultations, voluntary protection programs, strategic partnerships, training and education, and more. An overall commitment to workplace safety and health can add value to your business, to your workplace and to your life.

Safety and Health Program Management Guidelines

Effective management of worker safety and health protection is a decisive factor in reducing the extent and severity of work-related injuries and illnesses and their related costs. In fact, an effective safety and health program forms the basis of good worker protection and can save time and money (about \$4 for every dollar spent) and increase productivity and reduce worker injuries, illnesses and related workers' compensation costs.

To assist employers and employees in developing effective safety and health programs, OSHA published recommended *Safety and Health Program Management Guidelines* (54 *Federal Register* (16): 3904-3916, January 26, 1989). These voluntary guidelines apply to all places of employment covered by OSHA.

The guidelines identify four general elements critical to the development of a successful safety and health management program:

- Management leadership and employee involvement.
- Work analysis.
- Hazard prevention and control.
- Safety and health training.

The guidelines recommend specific actions, under each of these general elements, to achieve an effective safety and health program. The *Federal Register* notice is available online at www.osha.gov

State Programs

The *Occupational Safety and Health Act of 1970* (*OSH Act*) encourages states to develop and operate their own job safety and health plans. OSHA approves and monitors these plans. Twenty-four states, Puerto Rico and the Virgin Islands currently operate approved state plans: 22 cover both private and public (state and local government) employment; the Connecticut, New Jersey, New York and Virgin Islands plans cover

the public sector only. States and territories with their own OSHA-approved occupational safety and health plans must adopt standards identical to, or at least as effective as, the Federal standards.

Consultation Services

Consultation assistance is available on request to employers who want help in establishing and maintaining a safe and healthful workplace. Largely funded by OSHA, the service is provided at no cost to the employer. Primarily developed for smaller employers with more hazardous operations, the consultation service is delivered by state governments employing professional safety and health consultants. Comprehensive assistance includes an appraisal of all mechanical systems, work practices and occupational safety and health hazards of the workplace and all aspects of the employer's present job safety and health program. In addition, the service offers assistance to employers in developing and implementing an effective safety and health program. No penalties are proposed or citations issued for hazards identified by the consultant. OSHA provides consultation assistance to the employer with the assurance that his or her name and firm and any information about the workplace will not be routinely reported to OSHA enforcement staff.

Under the consultation program, certain exemplary employers may request participation in OSHA's Safety and Health Achievement Recognition Program (SHARP). Eligibility for participation in SHARP includes receiving a comprehensive consultation visit, demonstrating exemplary achievements in workplace safety and health by abating all identified hazards and developing an excellent safety and health program.

Employers accepted into SHARP may receive an exemption from programmed inspections (not complaint or accident investigation inspections) for a period of one year. For more information concerning consultation assistance, see the OSHA website at www.osha.gov

Voluntary Protection Programs (VPP)

Voluntary Protection Programs and on-site consultation services, when coupled with an effective enforcement program, expand worker protection to help meet the goals of the *OSH Act*. The three levels of VPP are Star, Merit, and Demonstration designed to recognize outstanding achievements by companies that have successfully incorporated comprehensive safety and health programs into their total manage-

ment system. The VPPs motivate others to achieve excellent safety and health results in the same outstanding way as they establish a cooperative relationship between employers, employees and OSHA.

For additional information on VPP and how to apply, contact the OSHA regional offices listed at the end of this publication.

Strategic Partnership Program

OSHA's Strategic Partnership Program, the newest member of OSHA's cooperative programs, helps encourage, assist and recognize the efforts of partners to eliminate serious workplace hazards and achieve a high level of worker safety and health. Whereas OSHA's Consultation Program and VPP entail one-on-one relationships between OSHA and individual work-sites, most strategic partnerships seek to have a broader impact by building cooperative relationships with groups of employers and employees. These partnerships are voluntary, cooperative relationships between OSHA, employers, employee representatives and others (e.g., trade unions, trade and professional associations, universities and other government agencies).

For more information on this and other cooperative programs, contact your nearest OSHA office, or visit OSHA's website at www.osha.gov

Alliance Programs

The Alliances Program enables organizations committed to workplace safety and health to collaborate with OSHA to prevent injuries and illnesses in the workplace. OSHA and the Alliance participants work together to reach out to, educate and lead the nation's employers and their employees in improving and advancing workplace safety and health.

Groups that can form an Alliance with OSHA include employers, labor unions, trade or professional groups, educational institutions and government agencies. In some cases, organizations may be building on existing relationships with OSHA that were developed through other cooperative programs.

There are few formal program requirements for Alliances and the agreements do not include an enforcement component. However, OSHA and the participating organizations must define, implement and meet a set of short- and long-term goals that fall into three categories: training and education; outreach and communication; and promoting the national dialogue on workplace safety and health.

OSHA Training and Education

OSHA area offices offer a variety of information services, such as compliance assistance, technical advice, publications, audiovisual aids and speakers for special engagements. OSHA's Training Institute in Arlington Heights, IL, provides basic and advanced courses in safety and health for Federal and state compliance officers, state consultants, Federal agency personnel, and private sector employers, employees and their representatives.

The OSHA Training Institute also has established OSHA Training Institute Education Centers to address the increased demand for its courses from the private sector and from other Federal agencies. These centers are nonprofit colleges, universities and other organizations that have been selected after a competition for participation in the program.

OSHA also provides funds to nonprofit organizations, through grants, to conduct workplace training and education in subjects where OSHA believes there is a lack of workplace training. Grants are awarded annually. Grant recipients are expected to contribute 20 percent of the total grant cost.

For more information on grants, training and education, contact the OSHA Training Institute, Office of Training and Education, 2020 South Arlington Heights Road, Arlington Heights, IL 60005, (847) 297-4810 or see "Outreach" on OSHA's website at www.osha.gov. For further information on any OSHA program, contact your nearest OSHA area or regional office listed at the end of this publication.

Information Available Electronically

OSHA has a variety of materials and tools available on its website at www.osha.gov. These include *e-Tools* such as *Expert Advisors*, *Electronic Compliance Assistance Tools (e-cats)*, *Technical Links*; regulations, directives and publications; videos and other information for employers and employees. OSHA's software programs and compliance assistance tools walk you through challenging safety and health issues and common problems to find the best solutions for your workplace.

A wide variety of OSHA materials, including standards, interpretations, directives, and more, can be purchased on CD-ROM from the U.S. Government Printing Office, Superintendent of Documents, phone toll-free (866) 512-1800.

OSHA Regional Offices

Region I

(CT,* ME, MA, NH, RI, VT*)
JFK Federal Building, Room E340
Boston, MA 02203
(617) 565-9860

Region II

(NJ,* NY,* PR,* VI*)
201 Varick Street, Room 670
New York, NY 10014
(212) 337-2378

Region III

(DE, DC, MD,* PA, VA,* WV)
The Curtis Center
170 S. Independence Mall West
Suite 740 West
Philadelphia, PA 19106-3309
(215) 861-4900

Region IV

(AL, FL, GA, KY,* MS, NC,* SC,* TN*)
61 Forsyth Street, SW
Atlanta, GA 30303
(404) 562-2300

Region V

(IL, IN,* MI,* MN,* OH, WI)
230 South Dearborn Street
Room 3244
Chicago, IL 60604
(312) 353-2220

Region VI

(AR, LA, NM,* OK, TX)
525 Griffin Street, Room 602
Dallas, TX 75202
(214) 767-4731 or 4736 x224

Region VII

(IA,* KS, MO, NE)
City Center Square
1100 Main Street, Suite 800
Kansas City, MO 64105
(816) 426-5861

Region VIII

(CO, MT, ND, SD, UT,* WY*)
1999 Broadway, Suite 1690
PO Box 46550
Denver, CO 80202-5716
(720) 264-6550

Region IX

(American Samoa, AZ,* CA,* HI,* NV,*
Northern Mariana Islands)
71 Stevenson Street, Room 420
San Francisco, CA 94105
(415) 975-4310

Region X

(AK,* ID, OR,* WA*)
1111 Third Avenue, Suite 715
Seattle, WA 98101-3212
(206) 553-5930

* These states and territories operate their own OSHA-approved job safety and health programs and cover state and local government workers as well as private sector workers. The Connecticut, New Jersey, New York and Virgin Islands plans cover public employees only. States with approved programs must have standards that are identical to, or at least as effective as, the Federal standards.

Note: To get contact information for OSHA Area Offices, OSHA-approved State Plans and OSHA Consultation Projects, please visit us online at www.osha.gov or call us at 1-800-321-OSHA.





**Occupational Safety
and Health Administration**

U.S. Department of Labor

www.osha.gov

ATTACHMENT M

August 29, 2015

To whom it may concern,

My family owns and lives at 114 Oakleigh Lane.

This letter is to provide further evidence that Oakleigh Lane in its current condition does not provide a safe roadway for pedestrian use, in particular since there are no sidewalks, and pedestrians must share the roadway with vehicles, including emergency vehicles.

My qualifications to provide expert assessment of this situation are that I am a licensed Special Education teacher with a Master's in Special Education. I've worked with children with disabilities for more than 15 years.

In addition to the impact on all the families on Oakleigh Lane, my husband and I are gravely concerned about our seven year old child's safety because of her documented disability (ADHD and sensory processing disorder).

Because of her disability, our daughter (like other children with this disability) has significant impairment with judgment and impulse control. Consequently, she must be very closely watched around the street with traffic. Unless she is under direct supervision at all times, she is not safe with the traffic on the street.

My daughter, like other children who live on Oakleigh Lane, plays and bikes in the street. Many of the children also walk to our neighborhood school, River Road Elementary. There are no sidewalks or shoulders for children to walk on, so they must walk on the pavement, within the travel lane on which there is two-way traffic.

Doubling the traffic on this road, without providing safe walking access, presents a very high potential for risk to her and the other children on the street, especially those who attend River Road Elementary.

Speaking for myself, my husband and my child, we urge you to recognize the real risk that this poses to our family and other families and require that Oakleigh Lane be brought to safe standards, including separation of pedestrians and vehicles before approving the addition of twenty-nine more homes at the end of the street.

Thank you.

Sincerely,



Maj (and Ethan) Hutchinson
114 Oakleigh Lane
(541) 844-9487

PROPERTY LINE ADJUSTMENT DESCRIPTIONS

EXHIBIT A

DAVID ZARZYCKI PROPERTY
TAX LOT 17-04-24-24-10100

9831612

BEFORE ADJUSTMENT per Reel 1191, Inst. No. 8213424, Lane County Official Records.

Beginning at an iron pipe found marking the Initial Point of the plat of Oakleigh, as platted and recorded at Page 32 of Volume 9, Lane County Oregon Plat Records; thence East 769.0 feet along the South line of said plat to the true point of beginning; thence East 125.0 feet along the South line of said plat to a point; thence South 12.0 feet to an iron pipe; thence South 60.3 feet to an iron pipe; thence West 125.0 feet along a line parallel to the South line of said plat to an iron pipe; thence North 60.3 feet to an iron pipe; thence North 12.0 feet to the true point of beginning, in Lane County, Oregon.

EXHIBIT B

JOSEPH MINOR AND CAROL POUND PROPERTY
TAX LOT 17-04-24-24-5800

BEFORE ADJUSTMENT per Reel 1250, Inst. No. 8321351, Lane County Official Records

Beginning at a point on the North line of a 24.0 foot reserved roadway, said beginning point being 575.1 feet East of a point 365.94 feet North 17°00' West of a point 4843.4 feet East of the Southwest corner of the Benjamin Davis Donation Land Claim No. 45, and running thence North 435.5 feet; thence East 60.0 feet; thence South 435.5 feet; thence West 60.0 feet to the place of beginning, in Section 24, Township 17 South, Range 4 West of the Willamette Meridian, in Lane County, Oregon.

Also: That portion of the North 12.0 feet of the roadway on the South adjacent to the above described property, in Lane County, Oregon.

EXHIBIT C

DAVID ZARZYCKI PROPERTY
TAX LOT 17-04-24-24-10100

AFTER ADJUSTMENT

Beginning at the Initial Point of the plat of Oakleigh, as platted and recorded at Page 32 of Volume 9, Lane County Oregon Plat Records; thence South 88°11'00" East 790.91 feet along the South line of said plat to the true point of beginning; thence South 88°11'00" East 102.73 feet along the South line of said plat to a point; thence South 01°49'00" West 72.26 feet; thence North 88°11'00" West 102.73 feet along a line parallel to the South line of said plat to an iron pipe; thence North 01°49'00" East 72.26 feet to the true point of beginning, in Lane County, Oregon.

EXHIBIT D

JOSEPH MINOR AND CAROL POUND PROPERTY
TAX LOT 17-04-24-24-5800

AFTER ADJUSTMENT

Beginning at a point on the North line of a 24.0 foot reserved roadway, said beginning point being 575.1 feet South 88°08'26" East of a point 365.17 feet North 15°06'48" West of a point 4825.96 feet South 88°08'26" East of the Southwest corner of the Benjamin Davis Donation Land Claim No. 45, and running thence North 01°15'34" East 438.71 feet; thence South 88°11'00" East 37.73 feet; thence North 01°49'00" East 72.26 feet; thence South 88°11'00" East 22.27 feet; thence South 01°49'00" West 72.26 feet; thence South 01°51'34" West 438.75 feet; thence North 88°08'26" West 60.00 feet to the place of beginning, in Section 24, Township 17 South, Range 4 West of the Willamette Meridian, in Lane County, Oregon.

Also: That portion of the North 12.0 feet of the roadway on the South adjacent to the above described property, in Lane County, Oregon.

9831612

State of Oregon
County of Lane — ss.
I, the County Clerk, in and for the said
County, do hereby certify that the within
instrument was received for record at

'98 APR 28 AM 3:30

Reel **2412R**

Lane County OFFICIAL Records
Lane County Clerk

By: *David S. Luchak*
County Clerk

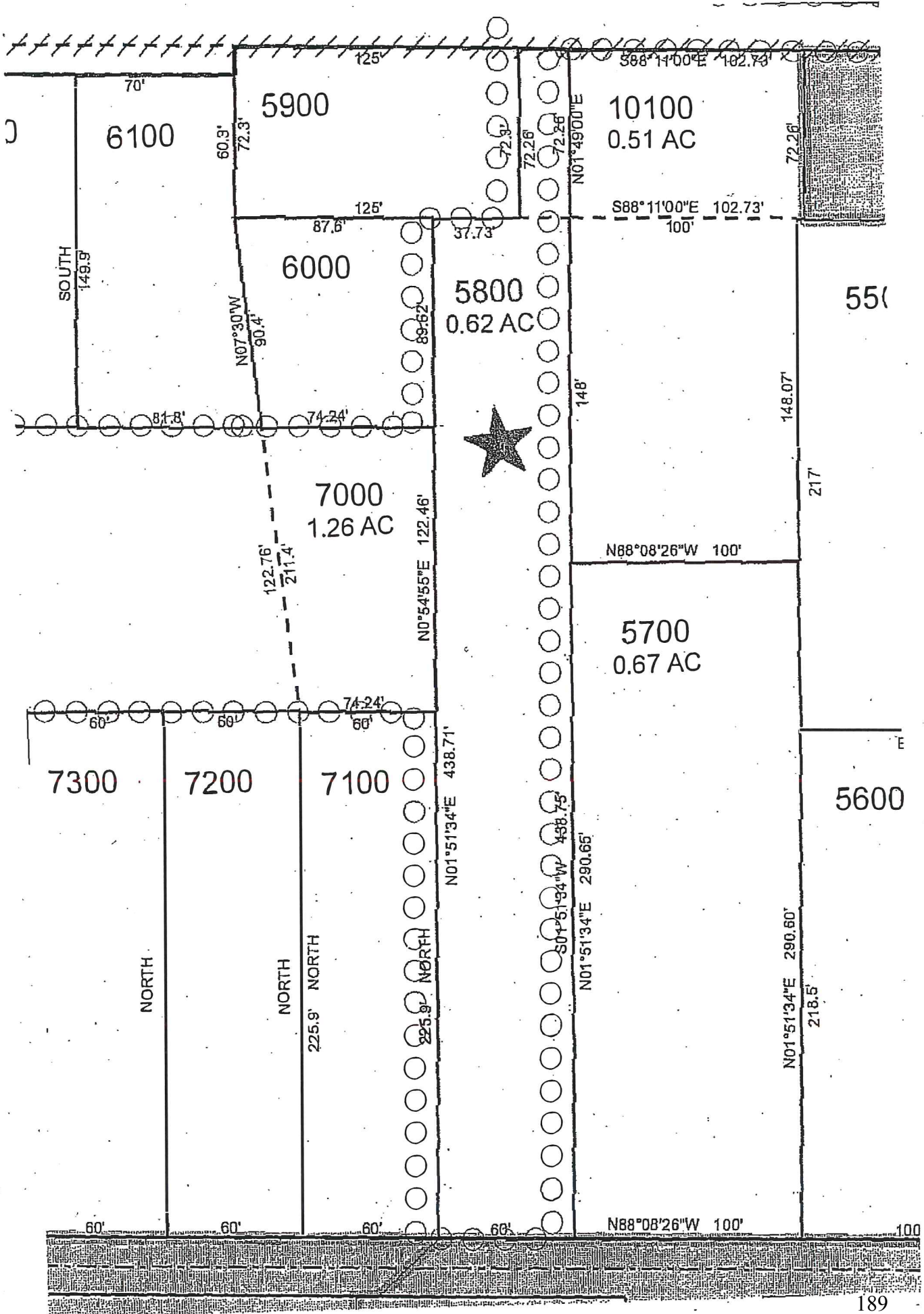
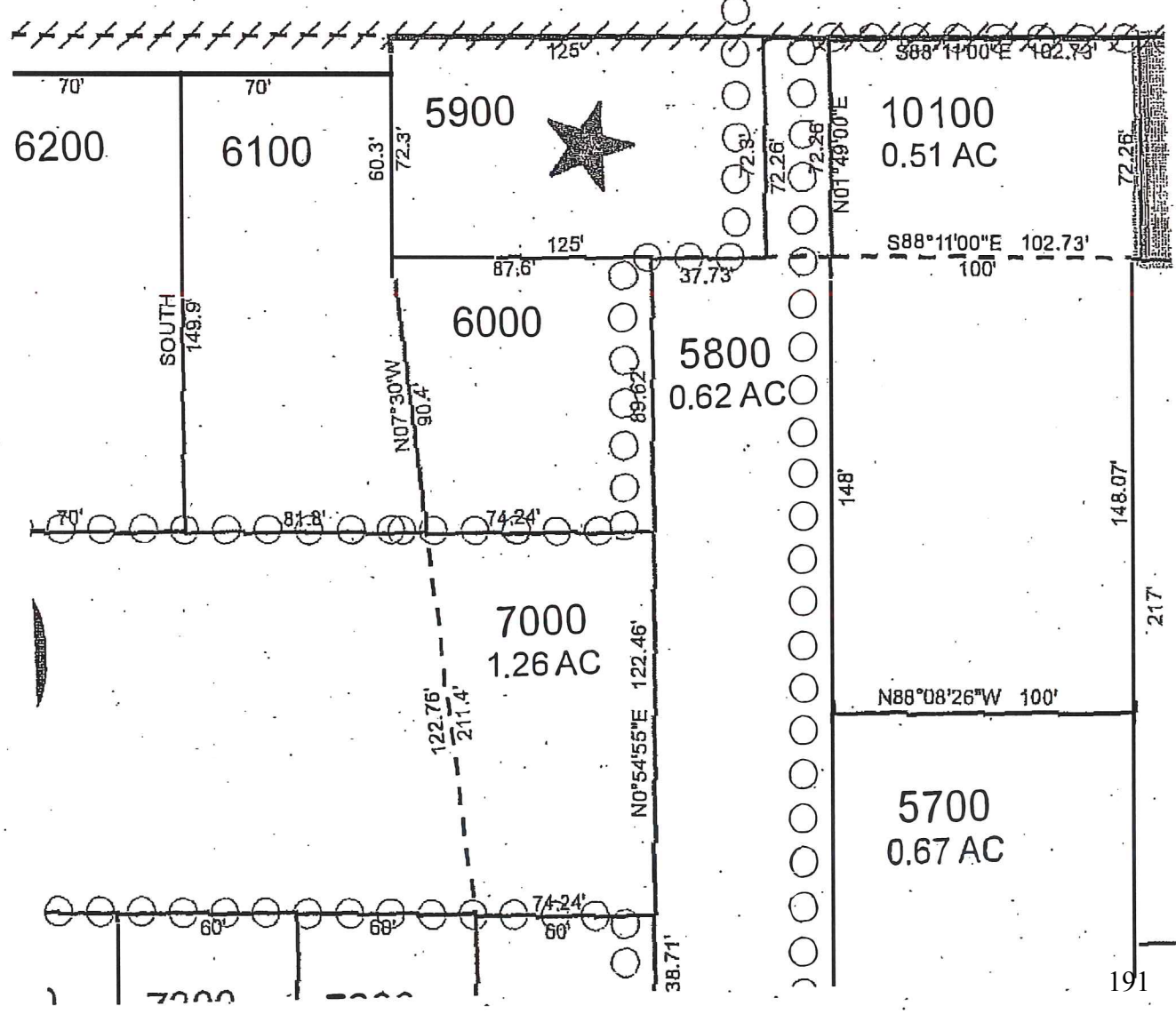
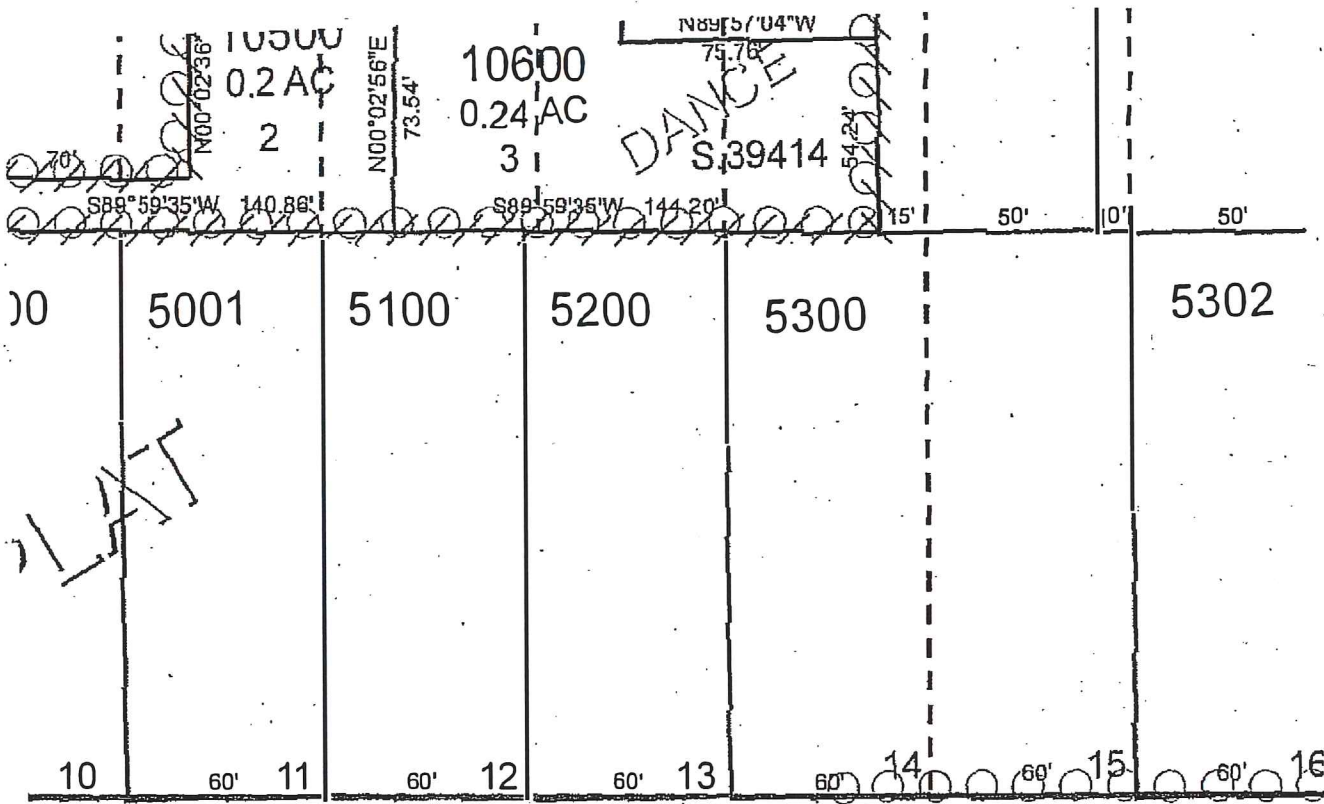


EXHIBIT "A"

Beginning at an iron pipe found marking the initial point of the PLAT OF OAKLEIGH, as platted and recorded at Page 32, Volume 9, Lane County Oregon Plat Records; thence East 644.0 feet along the South line of said plat to the true point of beginning; thence East 125.0 feet along the South line of said plat to a point; thence South 72.3 feet to a point; thence West 125.0 feet along a line parallel to the South line of said plat to a point; thence North 60.3 feet to a point marked by an iron pin; thence North 12.0 feet to the true point of beginning, in Lane County, Oregon.

ALSO: Beginning at an iron pipe marking the initial point of PLAT OF OAKLEIGH, as platted and recorded at Page 32, Volume 9, Lane County Oregon Plat Records; thence East 644.0 feet along the South line of said plat; thence South 72.3 feet to the true point of beginning; running thence East 87.6 feet; thence South 89.62 feet; thence West 74.24 feet; thence North 7° 30' West 90.4 feet to the true point of beginning, in Lane County, Oregon.



SURVEY MAP OF PROPERTY LINE ADJUSTMENT

FOR

JAMES & SHARON BRANDT
NE & SE 1/4'S, SEC. 24, T.17S., R.4W., W.M.
EUGENE, LANE COUNTY, OREGON

JUNE 1, 2011
SCALE 1" = 60'

LANE COUNTY SURVEYORS OFFICE
 C.S. FILE NO. 42125
 FILING DATE 10 June 11

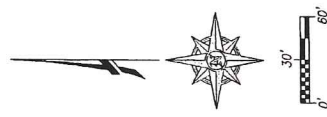
NARRATIVE:

THE PURPOSE OF THIS SURVEY IS TO MONUMENT THE ADJUSTED LINE AND PERIMETER BOUNDARIES OF TAX LOTS 10100 AND 5700 OF TAX MAP 17-04-24-24 AS SAID LINE AND BOUNDARIES ARE DESCRIBED IN THE PROPERTY LINE ADJUSTMENT DEED THAT IS IDENTIFIED AS REFERENCE NUMBER 8 HEREIN. THE POINTS AND LINES SHOWN HEREIN WERE CALCULATED AS FOLLOWS:

THE 1/2" IRON PIPE MONUMENT (MON A) FOUND ON THE NORTH MARGIN OF OAKLEIGH LANE AT THE SOUTHWEST CORNER OF LOT 5, BLOCK 1 OF THE PLAT OF OAKLEIGH PARK (REF. 4) WAS HELD AS OCCUPYING SAID LOCATION AS SHOWN ON CSF 36024 (REF. 1), THE RAILROAD SPIKE (MON B) FOUND AT THE SOUTHWEST CORNER OF LOT A OF SAID PLAT (REF. 4) WAS ACCEPTED AT OCCUPYING SAID CORNER AND AS BEING A POINT ON THE SOUTH PLAT BOUNDARY OF SAID PLAT (REF. 4). SAID SOUTH PLAT BOUNDARY WAS THEN CALCULATED BY RUNNING A LINE WESTERLY FROM AFORESAID RAILROAD SPIKE (MON B) THAT PASSES THROUGH A POINT THAT LIES SOUTHERLY 20.00 FEET, BY PERPENDICULAR MEASUREMENT, FROM AFORESAID 1/2" IRON PIPE (MON A) AS SAID POINTS AND LINE ARE SHOWN ON AFORESAID CSF 36024 (REF. 1). THE BEARING OF "NORTH 88°11'00" WEST OF SAID SOUTH PLAT BOUNDARY AS SHOWN ON SAID CSF 36024 (REF. 1) WAS THEN HELD AS THE BASIS OF SAID BEARINGS SHOWN HEREON. THE 5/8" REBAR WITH YELLOW PLASTIC CAP MARKED "LANE COUNTY P/W" (MON C) THAT WAS FOUND ON THE NORTH MARGIN OF MCCLURE LANE AND WESTERLY OF THE SOUTHWEST CORNER OF THE LANDS SURVEYED HEREON WAS ACCEPTED AS BEING ON SAID NORTH MARGIN AS SAID MONUMENT AND MARGINS ARE SHOWN ON CSF 30309 (REF. 5). THE 5/8" REBAR WITH YELLOW PLASTIC CAP MARKED "CASHWELL PLS 494" (MON D) FOUND ON THE CENTERLINE OF MCCLURE LANE AND EASTERLY OF THE LANDS SURVEYED HEREON WAS ACCEPTED AS BEING ON SAID CENTERLINE AS SHOWN ON AFORESAID CSF 36024 (REF. 1). SAID CENTERLINE WAS THEN CALCULATED BY RUNNING A LINE WESTERLY FROM AFORESAID 5/8" REBAR WITH YELLOW PLASTIC CAP MARKED "CASHWELL PLS 494" (MON D) THAT PASSES THROUGH A POINT THAT LIES SOUTHERLY 12.00 FEET, BY PERPENDICULAR MEASUREMENT, FROM AFORESAID 5/8" REBAR WITH YELLOW PLASTIC CAP MARKED "LANE COUNTY P/W" (MON C) AS SAID POINTS AND LINES ARE SHOWN ON AFORESAID CSF 36024 (REF. 1) AND CSF 30309 (REF. 5). THE NORTH MARGIN OF OAKLEIGH LANE AND PERIMETER LINES OF TAX LOT 10100 BEFORE (REF. 1) THE FOUR CORNERS (PTS EFG AND H) AND PERIMETER LINES OF TAX LOT 10100 AFTER PROPERTY LINE ADJUSTMENT AS COMPLETED IN THE WARRANTY DEED TO JAMES P. BRANDT AND SHARON I. BRANDT THAT WAS RECORDED IN REEL 2422R AT RECEPTION NUMBER 9839830 (REF. 6) WERE CALCULATED BY HOLDING RECORD BEARINGS AND DISTANCES AS MEASURED FROM THE RAILROAD SPIKE (MON B) THAT WAS FOUND AT THE SOUTHWEST CORNER OF LOT A OF THE PLAT OF OAKLEIGH PARK AS SAID MONUMENT, CORNERS AND LINES ARE SHOWN ON AFORESAID CSF 36024 (REF. 1), THE BRANDT AND RUBY A. BAUER IN THE WARRANTY DEED THAT WAS RECORDED IN REEL 2539R AT RECEPTION NUMBER 9803427 (REF. 7) WAS ACCEPTED AS BEING COMMON WITH THE SOUTHWEST CORNER (PT G) OF AFORESAID TAX LOT 10100 (REF. 6) AS SAID COMMON CORNERS ARE SHOWN ON CSF 35149 (REF. 2), THE WEST LINE AND SOUTHWEST CORNER (PT I) OF TAX LOT 5700 (REF. 7) WERE CALCULATED BY RUNNING A LINE SOUTHERLY FROM AFORESAID NORTHWEST CORNER OF THE BEARING OF SOUTH 01°17'34" WEST TO ITS POINT OF INTERSECTION WITH THE AFORESAID-CALCULATED NORTH MARGIN OF MCCLURE LANE. THE NORTHEAST CORNER (PT J), EAST LINE AND SOUTHEAST CORNER (PT K) OF SAID TAX LOT 5700 WERE THEN CALCULATED BY OFFSETTING THE WEST LINE OF SAID TAX LOT 5700 EASTERLY BY 100.00 FEET AS CALLED IN AFORESAID DEED FOR TAX LOT 5700 (REF. 7) AND AS SHOWN ON CSF 5867 (REF. 3). THE EAST AND WEST SIDES OF SAID TAX LOT 5700 LOCATION OF THE PROPERTY LINE BETWEEN TAX LOTS 10100 AND 5700 WERE ESTABLISHED AS CALLED IN THE PROPERTY LINE ADJUSTMENT DEED THAT IS NOTED AS REFERENCE NUMBER 8 HEREIN.

REFERENCES:

1. CSF 36024 FILED JUNE 16, 1999 BY DANIEL W. BAKER.
2. CSF 35149 FILED MAY 16, 1998 BY DANIEL W. BAKER.
3. CSF 5867, MCCLURE ACRES, FILED JUNE 1940 BY F.E. WAGGONER.
4. PLAT OF OAKLEIGH RECORDED DECEMBER 1, 1927 IN BOOK 9, PAGE 32 IN LANE COUNTY OREGON PLAT RECORDS.
5. CSF 30309 FILED JANUARY 3, 1992 BY LANE COUNTY PUBLIC WORKS.
6. WARRANTY DEED TO JAMES P. BRANDT & SHARON I. BRANDT RECORDED MAY 22, 1999 IN REEL 2422R AT RECEPTION NUMBER 9839830, LOOOR. (TAX LOT 10100 BEFORE ADJUSTMENT).
7. WARRANTY DEED TO RUBY A. BAUER, JAMES P. BRANDT AND RUBY A. BAUER RECORDED APRIL 18, 1999 IN REEL 2539R AT RECEPTION NUMBER 9803427, LOOOR. (TAX LOT 5700 BEFORE ADJUSTMENT).
8. PROPERTY LINE ADJUSTMENT DEED RECORDED JUNE 8, 2011 AT RECORDE'S NUMBER 2011-02261.E.1., LOOOR. (TAX LOTS 10100 & 5700 AFTER ADJUSTMENT).



- LEGEND:**
- FOUND MONUMENT AS NOTED.
 - SET 5/8" x 30" REBAR WITH YELLOW PLASTIC CAP MARKED "BRANCH ENG INC."
 - CALCULATED POINT - NOTHING FOUND NOR SET.
 - SET 5/8" x 30" REBAR WITH YELLOW PLASTIC CAP MARKED "REF. MON BRANCH ENG."
 - DEVOTES REFERENCE DESIGNATION AS NOTED IN NARRATIVE.
 - DEVOTES LINE NOT TO SCALE.
 - DEVOTES IRON PIPE.
 - DEVOTES TAX LOT NUMBER.
 - DEVOTES RIGHT-OF-WAY.
 - DEVOTES NOT TO SCALE.
 - DEVOTES DOWNTOWN LAND CLAM NUMBER.
 - DEVOTES YELLOW PLASTIC CAP.
 - DEVOTES UNKNOWN ORIGIN.
 - DEVOTES COUNTY SURVEY FILE.
 - DEVOTES LANE COUNTY OFFICIAL RECORDS.
 - DEVOTES LANE COUNTY OREGON PLAT RECORDS.
 - DEVOTES MONUMENT USED TO ESTABLISH BASIS OF BEARINGS.
 - DEVOTES DATA OF RECORD.
 - ALL DISTANCES SHOWN ARE IN FEET.

Branch Engineering, Inc.
 Registered Professional Land Surveyor
 OREGON
 JULY 20, 1993
 REX A. BETZ
 #2668
 EXPIRES: December 31, 2011

Headquarters
 310 Fifth Street
 Springfield, Oregon 97477
 (541) 746-0637

Salem/Keizer Office
 4312 Cherry Avenue N.E.
 Salem, Oregon 97303
 (503) 779-2677

www.BranchEngineering.com
 Civil • Structures • Transportation • Geotechnical • Surveying

TAX MAP 17-04-24-24, TAX LOTS 10100 & 5700 CITY OF EUGENE PLANNING ACTION LA II-2

PROJECT No. II-014

PAGE 1 OF 1

PLOTTER: XEROGRAPHIC KIP5000
 INK: XEROGRAPHIC TONER
 MYLARI: BULLFROG ENTERPRISES 3 MIL DOUBLE MATTE XEROGRAPHIC BF8042K-4

**Resubmitted
August 31, 2015**

Appeal Testimony re PDT 13-1

July 27, 2015

Eugene Planning Commission
c/o Gabe Flock, Planner
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

RECEIVED

AUG 31 2015

CITY OF EUGENE
BUILDING & PERMIT SVCS

Submitted by: Simon Trautman

Send notices to: 2303 C Street, Bellingham, WA 98225

**RECEIVED AFTER PUBLIC HEARING
BUT PRIOR TO CLOSE OF RECORD**

Re: City File No. PDT 13-1; Oakleigh PUD
Opposition to Hearings Official Decision

Dear Commissioners:

The November 22, 2013 Appeal Statement ("Appeal Statement") for PDT 13-1 identified ten assignments of error. This letter provides further explanation of several errors that are enumerated in the Appeal Statement. Several of the Hearings Official's errors concerned the right-of-way and improvements (such as paving) for Oakleigh Lane.

To begin with, the Hearings Official erroneously claimed that the record contained no evidence of associated traffic problems. HO Decision, marked "D-3", at 55. Contrary to that misleading assertion, the truth is that I submitted concrete evidence into the record on September 1, 2013, including a photograph, of the accident in which I was injured at the intersection of Oakleigh Lane and River Road. PH-49.

My testimony provided an explanation of how that accident was directly related to existing street conditions that would leave drivers, pedestrians and cyclists at risk on Oakleigh Lane if twenty-nine new dwellings were added at the far end. My testimony here is based on a *first-hand* understanding of how critical it is that my neighbors and our kids not be endangered by more than doubling the traffic on Oakleigh Lane in its current condition.

I know it may be tempting for some commissioners to consider that these appeal issues were fully and properly addressed by the Eugene Planning Commission (EPC) in your appeal decision of December 16, 2013 (EPC Decision), and that you can breeze over my testimony without paying close attention.

That would be both unwise and a shirking of your responsibilities in this quasi-judicial proceeding.

If you will *carefully* follow what I present below, you should recognize that your original decision was based on incorrect facts and multiple misunderstandings of the issues and the law.

And, while LUBA affirmed the City's decisions on these issues, if you read the sections of LUBA's order that are related to the issues I discuss below, you'll find that the author of LUBA's decision did little more than quickly skim over the issues and parrot the City's flawed explanations.

It would be prudent for commissioners to take into account that LUBA's initial decision regarding the City's inadequate public process failed muster with the Court of Appeals, and so you shouldn't take for granted that you and LUBA got it right on the street-related issues, either. The Court of Appeals has demonstrated that they'll take the time to dig into the details more thoroughly than LUBA, and I'm confident a future Court of Appeals review would correctly find that the Hearings Official erred, regardless of what LUBA might decide on another appeal.

Summary of Testimony

- The Public Works report contains three statements that the Hearings Official and Planning Commission relied upon for findings regarding whether Oakleigh Lane in its current condition would be safe and adequate and meet the approval criteria in EC 9.8320(5), (6) and (11). These statements are inconsistent, and the Hearings Official neglected to adequately and properly explain how these inconsistencies were resolved, as required by the Oregon Supreme Court and the Oregon Court of Appeals.
- Approximately 6 feet of the paving on the 250-foot segment of Oakleigh Lane immediately to the west of the subject property lies outside the 20-foot public right-of-way and on private property. The Public Works Report, on which the Hearings Official relied, assumed a 19-foot wide, unobstructed pavement as the basis for the report's conclusion that Oakleigh Lane's existing pavement was adequate and safe.

The Hearings Official's findings did not explain how the decision would ensure that the entire 19-foot pavement width would remain available for public use and that cars wouldn't be legally parked on the pavement on private property and thus obstruct the pavement. Accordingly, all conclusions regarding the safety and adequacy of Oakleigh Lane that are based on a "19-foot pavement width" are not valid and cannot be relied upon.

- The only technical analysis in the record that actually dealt with the right-of-way width adjacent to the subject property concluded that a 45-foot right-of-way was necessary for the public safety and compliance with the approval criterion EC 9.8320(5)(a). The decision, however, ensures only a 42.5-foot wide right-of-way. The *Nolan/Dolan* limitations apply to exactions, but not to an approval criteria that requires an adequate right-of-way for the public safety. A condition that ensures a 45-foot right-of-way adjacent to the subject property must be added in order to approve the application.
- The Hearings Official misinterpreted and misapplied the approval criterion at EC 9.8320(5). This criterion must be interpreted in a way that ensures the PUD provides safe and adequate transportation systems for its residents, and the "traffic system" must

at least include safe and adequate facilities for vehicular connectivity from the PUD to the City's street network.

The subsections of EC 9.8320(5) cannot be interpreted in isolation from that overarching requirement, as the Hearings Official did. *Essential* components of an "adequate transportation system," such as Oakleigh Lane from the development site to River Road, must comply with the requirements of subsection EC 9.8320(5)(a), including compliance with the right-of-way and pavement width standards in EC 9.6870. To interpret EC 9.8320(5) otherwise would impermissibly omit what is included in the code and would lead to unreasonable results.

The analogy of a requirement to provide a safe and adequate wastewater system is used to illustrate the correct interpretation and application of EC 9.8320(5).

- Similarly, the Hearings Official misinterpreted and misapplied the requirements of EC 9.8320(11)(b) with respect to paving both the section of Oakleigh Lane adjacent to the subject property and for the rest of Oakleigh Lane. Both sections of Oakleigh Lane must have an unobstructed pavement, within the public right-of-way, as set forth in EC 9.6870.
- The Hearings Official misinterpreted and misapplied EC 9.8320(6) by basing his conclusions on the deficient Public Works analysis of paving width (see the second bullet, above) and by not evaluating whether the traffic arising from the PUD would present an "impediment" to emergency response. His interpretation that the land and structures of the PUD were the only things that could create an "impediment" was incorrect and would lead to absurd results if applied to other requirements of EC 9.8320(6), such as adverse health effects arising from air pollutants generated by the PUD.

The Hearings Official further neglected to evaluate whether the traffic arising from the PUD would create a risk to public safety on Oakleigh Lane, in other ways than as an impediment to emergency response.

- The Planning Commission must correct the findings to be in accord with the evidence and the law and either deny the application or add conditions of approval that are sufficient to ensure the application complies with EC 9.8320(5), EC 9.8320(6) and EC 9.8320(11).
- To preserve my appeal rights on a potential procedural error, should the Eugene Planning Commission allow the introduction of new evidence into the record by the applicant, City, a commissioner or any other party, I am requesting that the Planning Commission re-open the hearing to me and all other persons who testified in the original proceedings. Should new evidence be allowed and my request is denied, I am objecting to this as a procedural error that prejudices my substantial rights to participate in this appeal.

Further, I am objecting to the Eugene Planning Commission allowing the applicant to introduce any testimony into the record, other than argument in direct response to my

testimony, without re-opening the hearing to me and all other persons who testified in the original proceedings.

The elephant in the room – Conflicting Statements in the Public Works Report

Regardless of how the applicant or city staff wish to wriggle around the fundamental code requirements in EC 9.8320(5) and EC 9.8320(6) that PUD residents are provided a transportation system that is safe and adequate, the inescapable question that the Planning Commission has an obligation to answer is this:

Will Oakleigh Lane be safe and adequate once the PUD is developed?

You must base your answer on the correct interpretation of the law and reliable evidence that's in the record.

As most commissioners no doubt recall, the Hearings Official relied entirely on the Public Works Report for his findings regarding the safety and adequacy of Oakleigh Lane in its present condition.^{1,2}

¹ For example, the Hearings Official's findings for EC 9.6505(3) Streets and Alleys and (4) Sidewalks at D-3 37-38, include the statement:

"... the 19-foot wide pavement width provides safe passage for two-way traffic." This was copied from the Planning Division Staff Report dated September 25, 2014 at 23. The Planning Commission relied on this statement, as well, by incorporating it by reference into the appeal decision. EPC Decision at 5.

² Under EC 9.8320(5)(b), the Hearings Official also references a city standard, which is wholly irrelevant:

"The Hearings Official also concurs with the applicant's October 23, 2013 final argument that the queuing effect of having a single travel lane along Oakleigh Lane is likely to result in lower speeds and acceptably safe conditions for pedestrians. The applicant provided evidence in support of this position from the city's Arterial and Collector Street Plan. The neighbors submitted this very same information in Exhibit PT-1."

The referenced city standard is completely inapplicable to the conditions on Oakleigh Lane and provides no probative evidence regarding EC 9.8320(5)(b). The Hearings Official apparently did not realize that the cited standard makes clear that the street must be designed and striped for a single traffic lane and at least one parking lane:

"The single traffic lane is intended to create a 'queuing street', such that when opposing vehicles meet, one of the vehicles must yield by pulling into a vacant portion of the adjacent parking lane." PT-4, Attachment B "Design Standards for and Guidelines for Eugene Streets, Sidewalks, Bikeways and Accessways," page 36.

The cited standard also says nothing about a "queuing street" that does not have sidewalks and therefore forces pedestrians to walk in the street. Oakleigh Lane clearly does not meet the standards for a "queuing street," and thus the "queuing effect" cannot be relevant to this case unless the Planning Commission imposes adequate conditions of approval for the entirety of Oakleigh Lane to have the necessary right-of-way, striped lanes, and sidewalks to meet the standards necessary for a safe and adequate "queuing street."

The applicant's attorney also claimed in his LUBA brief (provided on the attached CD, and incorporated herein) that "licensed professional traffic engineer Mike Weishar, with Access Engineering, concurred that the development would not "reduce safety or service levels in the area." However, the entire content related to traffic safety that's found in the September 27, 2013 letter from Access Engineering (Exhibit PT-17) states: "I concur with staff findings that this development will not require further traffic analysis or reduce safety or service levels in the area."

This is nothing more than a conclusory statement, with no supporting evidence or analysis, which cannot be relied upon for findings. The letter doesn't even reference anything in the record in support of the conclusion that the development will not reduce safety or service levels in the area. The letter also does not address the critical fact that at least six feet of the 19-foot-wide paving is on private property.

Specifically, the report contains statements under three different sections:

Under subsection (a) of EC 9.8320(5), the report provided its most extensive analysis and found that the EC 9.8320(5) requirement that the PUD provide a “safe and adequate transportation system” could not be met unless Oakleigh Lane had a 45-foot right-of-way:

“Without the additional right-of-way, Oakleigh Lane cannot be improved to the City’s minimum street design standards³ and the 168 new vehicle trips per day generated by the proposed development, along with the additional pedestrian and bicycle traffic generated by the proposed development; will not be assured of safe access via Oakleigh Lane.” PH-30 at 3. (Emphasis added.)

Under subsection (c) of EC 9.8320(5), the report presented an inconsistent, conclusory statement, without any supporting analysis, as the basis for not requiring a Traffic Impact Analysis:

“Further, staff has no concerns related to traffic safety issues or poor service levels which will result from this development.” PH-30 at 11.

And finally, under subsection (b) of EC 9.8320(11), the report stated a conditional finding that a 19-foot wide paving width would be safe – but only if it were ensured that the paving wasn’t obstructed by parked vehicles:

“Oakleigh Lane has an approximate 19 foot wide paved surface, but has not been improved to city standards, lacking curbs and gutters, storm drainage, sidewalks, and street trees. As is typical for unimproved local streets in the River Road area, i.e., those streets which do not have paving, curb & gutter and sidewalks or which have not been striped to identify dedicated travel lanes; the expectation is that pedestrians and bicyclists will share the paved surface with vehicles. Additionally, there is a tendency on dead end streets such as Oakleigh for motorists to travel at slower, more cautious speeds, because of the perceived narrowness of the street. Until such time that property owners elect to improve Oakleigh Lane to full City standards, including sidewalks, the existing paved surface in Oakleigh Street will continue to adequately provide for motorized and foot traffic, as well as for emergency vehicles and delivery services, provided the paved surface is not blocked by parked vehicles. Since the existing paved surface provides safe passage for two-way vehicular traffic, bicycles, pedestrians and emergency vehicles, and since there is nothing to suggest that the impacts of the proposed development will result in unsafe conditions in

The Hearings Official cannot rely on mere conclusory statements, even by experts, when opponents have offered a detailed explanation, consistent with City traffic engineering staff’s specific analysis, for why Oakleigh Lane would not be able to safely and efficiently accommodate the increased traffic under its current configuration and conditions.

“While the hearing official is entitled to rely on the expert opinion of the county sanitarian, where opponents have offered a detailed explanation for why the subject property may not be able to accommodate the required expansion and replacement drainfield, we agree that more than an unexplained expression of belief that it will be possible is required. *Bartels v. City of Portland*, 20 Or LUBA 303, 308 (1990).” See also *Phillips v. Lane County*, 62 Or LUBA 92 (2010).

³ The City’s minimum street standards require at least a 45-foot right-of-way.

Oakleigh Lane, it is appropriate to defer public improvements via an irrevocable petition.” PH-30 at 14. (Emphasis added)

As discussed at more length below, the Hearings Official’s decision (and the Planning Commission’s prior decision) never addressed the obvious inconsistency between the conclusory expression of “no concerns related to traffic safety” under the TIA subsection and the conflicting findings that were based on the extensive analysis of what would be required for a “safe” transportation system, i.e., that unless Oakleigh Lane could “be improved to the City’s minimum street design standards,” PUD residents “will not be assured of safe access via Oakleigh Lane.”

Similarly, the Hearings Official’s decision (and the Planning Commission’s prior decision) never addressed the inconsistency between the report’s findings under the “safe transportation system” requirement of EC 9.8320(5) and those under the paving requirements of EC 9.8320(11)(b).

Instead, both the Hearings Official and the Planning Commission tried to put a wall around the EC 9.8320(5) findings and dismiss those findings as having no relevance to the overall safety and adequacy of the only street serving the PUD. In both decisions it almost appears as if the findings regarding the segment at the end of Oakleigh Lane, adjacent to the subject site, apply to an entirely different street than the 870 feet of Oakleigh Lane between the subject site and River Road.

There are two ways in which the decisions attempt to avoid dealing with the city engineering staff’s findings that PUD residents would be “at risk” unless Oakleigh Lane had a 45-foot right-of-way and adequate paving.

First, without ever directly claiming that the *Dolan* constraints on exactions actually prevented the City from requiring that Oakleigh Lane have a 45-foot right-of-way, the two decisions repeatedly cite the *Dolan* limitations within the same text where the decisions claim that the Public Works analysis under EC 9.8320(5) doesn’t apply to most of Oakleigh Lane. The short answer on this issue is: *Dolan* does not prevent the City from requiring that some or all of Oakleigh Lane have a 45-foot right-of-way.

LUBA has made clear that *Dolan* does *not* apply to conditions of approval that aren’t exactions:

“Aside from the requirement under *Dolan v. City of Tigard* for an ‘individualized determination’ justifying a condition of approval imposing an exaction, there is no generally applicable requirement that conditions of land use approval be supported by findings that justify imposing the condition.” *Davis v. City of Bandon*, 28 Or LUBA 38 (1994).

The second way the two decisions attempt to dismiss the analysis under EC 9.8320(5) is to regurgitate the staff’s demonstrably false statement that the Public Works analysis under EC 9.8320(5) concerns only “future needs” and isn’t at all related to impacts arising from the PUD:

“... [the] right-of-way dedication and an Irrevocable Petition are being required to enable future public improvements.” Staff findings in D-3 at 50, incorporated by the Hearings Official at 51.

“The PC finds that the constitutional findings in the Public Works referral comments are limited to justification for a proportional right-of-way exaction along the frontage of the subject property that would accommodate future public street improvements. The constitutional findings address a future need for street improvements abutting the property, rather than any immediate need, based on safety issues or otherwise, associated with the proposed PUD.” EPC Decision at 4.

The applicant’s attorney and City Attorney have repeated this specious claim that the Public Works analysis under EC 9.8320(5) wasn’t really specific to the impacts of the proposed development, but rather was just a standard practice in order to acquire right-of-way whenever new development occurred on a substandard street.

The applicant’s attorney stated:

“As the City found, the half-street dedication was required to meet future transportation needs, and not to address immediate safety concerns.” *Oakleigh Meadows Cohousing Answering Brief*, dated, October 22, 2014 at 27. (Provided in attached CD.)

“... the City did not determine that that [sic] a 45-foot right-of-way was necessary for safety.” *Ibid* at 29.

The City Attorney stated:

“We need this dedication for future. And the safety issues that came up regarding that dedication were for future, um, not safety issues now. The City Public Works Department never said that we think Oakleigh is unsafe unless you improve it at this time.” LUBA oral arguments audio recording at 31:36. (The audio recording that is provided on the accompanying CD is incorporated herein.)

Such claims are easily exposed as untrue by simply re-reading what the Public Works Report actually states:

“Without the additional right-of-way, Oakleigh Lane cannot be improved to the City’s minimum street design standards⁴ and the 168 new vehicle trips per day generated by the proposed development, along with the additional pedestrian and bicycle traffic generated by the proposed development; will not be assured of safe access via Oakleigh Lane. PH-30 at 3. (Emphasis added)

The analysis *specifically* refers to the “new vehicle trips ... generated by the proposed development ... [which] will not be assured of safe access.” The applicant’s attorney and City Attorney should not attempt any further to disassociate the city’s own technical staff’s analysis from the potential traffic impacts of the proposed PUD.

This time around, the Planning Commission must not avoid resolving the inconsistencies in the Public Works Report. The sections below will make clear that the findings under EC 9.8320(5) reflect the only reliable analysis and the conclusions under EC 9.8320(5) must be applied to the entire length of Oakleigh Lane.

⁴ The City’s minimum street standards require at least a 45-foot right-of-way.

The City cannot continue to clap its hands over its eyes and attempt to pick-and-choose where it will apply the evidence provided by its own traffic engineering staff's technical analysis. Accordingly, the Planning Commission must *explain* how its decision resolves the three statements above and how its decision is based on reliable evidence in the record.

As the Supreme Court noted some time ago:

"We wish to make it clear that by insisting on adequate findings of fact we are not simply imposing legalistic notions of proper form, or setting an empty exercise for local governments to follow. No particular form is required, and no magic words need be employed. What is needed for adequate judicial review is a clear statement of what, specifically, the decision making body believes, after hearing and considering all the evidence, to be the relevant and important facts upon which its decision is based. Conclusions are not sufficient." *Sunnyside Neighborhood v. Clackamas Co. Comm.*, 280 Or 3, 21, 569 P2d 1063 (1977); see also *Martin v. Board of Parole*, 327 Or 147, 157, 957 P2d 1210 (1998). (Emphasis added)

The Oregon Court of Appeals has also made clear that local governments must *specifically* articulate their findings and explain how the evidence factored into their decisions. *1000 Fiends of Oregon v. Metro*, 174 Or App 406, 410, 26 Pad 151 (2001). Neither the Hearings Official nor the Planning Commission provided the required explanations in their previous decisions, choosing instead to accept staff's false claim that the analysis under EC 9.8320(5) had no relationship to the PUD's projected traffic impacts.

The Second Elephant in the Room – Oakleigh Lane Does Not Have a Public 19-Foot Wide Pavement.

The Hearings Official and Planning Commission decisions relied most heavily on the Public Works Report's findings under EC 9.8320(11)(b), which stated a conditional finding that a 19-foot wide paving width would be safe – but only if were ensured that Oakleigh Lane wasn't obstructed by parked vehicles.

As it turns out, an extensive segment of the Oakleigh Lane right-of-way doesn't actually contain a 19-foot wide pavement, and the Public Works Report conclusion that Oakleigh Lane would be safe in its current configuration didn't take that deficiency into account.⁵

The complete excerpt from the Public Works Report is provided above, but the salient text is:

"Oakleigh Lane has an approximate 19 foot wide paved surface, ... the existing paved surface in Oakleigh Street will continue to adequately provide for motorized and foot traffic, as well as for emergency vehicles and delivery services, provided the paved surface is not blocked by parked vehicles. Since the existing paved surface provides safe passage for two-way vehicular traffic, bicycles, pedestrians and emergency vehicles, and since there is nothing to suggest that the impacts of the proposed development will

⁵ The inadequate paving width and the erroneous finding that Oakleigh Lane was safe and adequate, based on a 19-foot paving width, were raised under the Appeal Statement's Second, Third, Fourth and Tenth Assignments of Error.

result in unsafe conditions in Oakleigh Lane, it is appropriate to defer public improvements via an irrevocable petition.” PH-30 at 14. (Emphasis added)

Note well that this conclusion depends entirely on the assertion that a 19-foot wide, “existing” paved surface – *that is unobstructed* – will “provide[] safe passage for two-way vehicular traffic, bicycles, pedestrians and emergency vehicles.”

The Public Works report provides no analysis at all of a paved surface that is less than 19-feet wide or that is sometimes obstructed by parked vehicles.

As I discuss later, there are multiple problems with the Hearings Official’s reliance on this statement, but the most glaring is that the evidence makes clear that a 250-foot long segment of the Oakleigh Lane public right-of-way does not contain anywhere near a 19-foot wide paved surface.

The Oregon Map aerial view provided in the October 9, 2013 testimony by Paul Conte (PT-4 Attachment C, and provided as Attachment A to this testimony.⁶) clearly shows that almost half the width of the paved surface at the end of Oakleigh Lane lies *outside* the public right-of-way and on the private property of the development site and the three lots immediately to the west (lots 10100, 5800 and 5900)⁷. Here is an excerpt from that map:



Figure 1. Color excerpt from PT-4 Attachment C

⁶ Also see PH-53, City posted notice with outline of rights-of-way. Also see PH-1.B, City provided Oregon Map with requested right-of-way dedications.

⁷ These three lots have the following frontages, as documented in the attachments to the October 15, 2013 letter from Poage Engineering and Surveying, Inc. PT.R-4. Lot 5800 22.27 feet, Lot 5900 125 feet, Lot 10100 102.73 feet. The total is also documented in this letter:

“The result of these cumulative road dedications is to establish a right of way width of 32 feet for Oakleigh Lane beginning at the east margin of River Road and extending easterly approximately 630 feet to a point approximately 250 feet westerly of your western boundary. From this point easterly, and along the entire frontage of your property abutting Oakleigh Lane, the right of way remains 20 feet in width.”

The Hearings Official himself documented this fact with respect to the development site:

“Oakleigh Lane abuts the west half of the north boundary of the subject property. The applicant’s survey shows that the portion of Oakleigh Lane abutting the subject property has 20 feet of right-of-way width, with approximately 19 feet of pavement width that partially overlaps the north boundary of the subject property, outside the public right-of-way.” D-3 at 18.

“These dimensions assume that the turnaround would be 21 feet wide and that the north edge of the turnaround would match the existing edge-of-pavement in Oakleigh Lane, which is shown on the tentative plans as being six feet south of the existing right-of-way.” D-3 at 19. (Emphasis added)

As can be seen on the Oregon Map, the edge of the paving continues in nearly a straight line across the subject property and continues straight across the three properties on the west. It’s therefore incontestable that at least six feet, more-or-less, of the paved surface is outside the public right-of-way. There is no evidence in the record to the contrary.

As a consequence, the paving on the public right-of-way along this long stretch can only be assumed to be, at best, about thirteen feet wide – *not the 19 feet assumed by the Public Works analysis*.

There is no evidence in the record that the unpaved portion of the 20-foot right-of-way will be paved to provide a paving width of 19’ or greater wholly within the public right-of-way. There is no evidence in the record that, as a matter of law, vehicles can and will be ensured permanent, unobstructed use of the paving that’s on private property and not in the right-of-way. And there is no evidence in the record that the City can, and will, prevent cars from parking on the paving that’s on private property and not in the right-of-way, and thereby obstruct the pavement.

The Hearings Official neglected to include in any finding the critical fact that along this 250-foot long segment of Oakleigh Lane, there is only a 13-foot wide strip of pavement that is in the public right-of-way and of which the public’s use can be ensured.

The Public Works Report didn’t document this deficiency. The report didn’t analyze the adequacy and safety of a 13-foot wide pavement (or any width less than 19 feet); and the report does not include any finding that a *13-foot wide* “paved surface [would] provide[] safe passage for two-way vehicular traffic, bicycles, pedestrians and emergency vehicles.” The report also didn’t address at all any remedies that would ensure at least a 19-foot wide, unobstructed pavement within the right-of-way for the entirety of Oakleigh Lane.

With the true condition of the pavement on Oakleigh Lane now brought to the commissioners’ attention, the Planning Commission has no choice but to adopt a finding documenting the 250-foot segment of Oakleigh Lane that has no more than an approximately 13-foot wide paved strip within the public right-of-way.

Based on that finding, the Planning Commission must also find that the Public Works Report’s conclusions regarding the safety of Oakleigh Lane are based on the erroneous assumption of a legal and unobstructed 19-foot paving width. Consequently, all of the Hearings

Official's findings that relied directly or implicitly on this analysis must be rejected because the analysis didn't consider the consequences of six feet of the paving being on private property outside the public right-of-way.

The Gnat in the Room – The Conclusory Statement under EC 9.8320(5)(c) Isn't Adequate Evidence

The only other finding in the Public Works Report that the Hearings Official and Planning Commission decisions relied on for their findings that Oakleigh Lane would be safe and adequate in its current condition was the following under EC 9.8320(5)(c):

“Further, staff has no concerns related to traffic safety issues or poor service levels which will result from this development.” PH-30 at 11.

There is no accompanying analysis, and as the Oregon Supreme Court made clear – “Conclusions are not sufficient.” LUBA has also emphasized in *Phillips v. Lane County* that conclusory statements, even by experts, are not sufficient for findings.

Even if one allows (and I don't) that this conclusion is based on the report's analysis under EC 9.8320(11)(b), that analysis is a) based on a flawed assumption regarding Oakleigh Lane's paving width, and b) is conditional on Oakleigh Lane not being obstructed by parked vehicles. A conclusion by staff that they “have no concerns” is glaringly inconsistent with the concern expressed about parked cars obstructing Oakleigh Lane.

In sum, the Public Works Report statement under EC 9.8320(5)(c) has no evidentiary value at all, and to rely on this statement would invite another remand.

Reality-Check – Findings That Are Based on Reliable Evidence in the Record.

The only reliable evidence in the record regarding the safety and adequacy of Oakleigh Lane is the thorough analysis that the city's own experts did regarding compliance with EC 9.8320(5).

The Planning Commission should keep in mind that when the evidence in the record is conflicting and the contrary evidence so undermines the evidence relied upon by the local decision maker that it is unreasonable for the decision maker to rely upon it, LUBA will reverse or remand the decision. Consequently, the Planning Commission should expect another remand if it relies on the Public Works Report flawed conclusions under EC 9.8320(11)(b) and EC 9.8320(5)(c) over the thorough analysis under EC 9.8320(5)(a).

With the above review of the evidence, I'll discuss what is the simplest error and one that requires no difficult interpretation to understand and resolve.

The Hearings Official erred in concluding that a condition requiring dedication of a 22.5 foot right-of-way on a portion of the north side of the subject property would satisfy the requirements of Eugene Code 9.8320(5)(a) with respect to that segment of Oakleigh Lane adjacent to the subject property.⁸

The question here is very simple and narrow in scope:

Does Condition #3 of the Hearings Official's Decision ensure there will be adequate Oakleigh Lane right-of-way along the frontage of the development property?

The City Attorney has confirmed that, with respect to EC 9.8320(5)(a) and EC 9.6870 Street Width:

"For purposes of EC 9.8320(5), the criteria for approval of a tentative PUD application, the standards in EC 9.6870 that apply in this instance are those that regulate the required width of dedicated right-of-ways." (City's LUBA brief at 13, provided in attached CD)

The City also does not contest, and the record contains no dispute with, the simple and direct conclusion in the Eugene Public Works Department Report submitted September 13, 2013, under their findings for EC 9.8320(5)(a), that Oakleigh Lane requires a 45-foot right-of-way along the frontage of the proposed PUD in order to ensure safe vehicular, pedestrian and bicycle travel, as well as adequate emergency response and access:

"Because 45 feet of right-of-way is the minimum amount of right-of-way necessary to construct Oakleigh Lane in this manner as a low-volume street, and because 33 feet of right-of-way is the minimum amount of right-of-way necessary to construct the turnaround at this location, the public interest in safe vehicular, pedestrian and bicycle travel and emergency response and access will be at risk if the 22.5 foot and 13 foot strips of right-of-way are not dedicated.

...

Without the additional right-of-way, Oakleigh Lane cannot be improved to the City's minimum street design standards⁹ and the 168 new vehicle trips per day generated by the proposed development, along with the additional pedestrian and bicycle traffic generated by the proposed development; will not be assured of safe access via Oakleigh Lane." PH-30 at 3. (Emphasis added.)

Condition #3 in the Hearings Official's decision, however, clearly does *not* ensure that Oakleigh Lane will have the 45-foot right-of-way necessary to ensure the public's safety, *at the time of development or any time in the future*. Condition #3 ensures *only* a 42.5-foot right-of-way:

⁸ This error was raised under the Appeal Statement's Second Assignment of Error.

⁹ The City's minimum street standards require at least a 45-foot right-of-way.

"[Condition] 3. Prior to final PUD approval, the applicant shall revise the final site plan to show the dedication of 22.5 feet of right-of-way along the northerly boundary of the development, between the westerly boundary of the proposed development and a line that is 50 feet east of the westerly boundary, and also to show the dedication of 13 feet of right-of-way extending from the aforementioned line (the east end of the required 22.5 feet of right-of-way dedication) to a line that is 117 feet beyond (east of) the existing the existing [sic] right-of-way (for a total length of 199 feet). Additionally, the revised site plan shall show the dedication of a 13-foot wide Public Accessway along the northerly boundary, which extends from the east end of the aforementioned right-of-way to the easterly property boundary (for a total distance of 24 lineal feet)." D-3 at 63.

Added to Oakleigh Lane's existing 20-foot right-of-way, the required 22.5 right-of-way dedication would result in a 42.5 right-of-way.

Neither the applicant nor the City have provided any specific evidence or analysis that the missing 2.5 feet is unnecessary or that an additional 2.5 feet of right-of-way can be, or ever will be, obtained. Of course, it *may* be possible to obtain this additional right-of-way, either by a wider dedication from the applicant¹⁰, a future private or public purchase or condemnation by the City; and I don't argue that a 45-foot right-of-way isn't *feasible*.

But the law requires that conditions of approval must *guarantee* that a mandatory approval criteria will be met before the development occurs or at the time of development. Condition #3 does not ensure that Oakleigh Lane will ever have the 45-foot right-of-way necessary – by the City's own analysis – to be consistent with the mandatory approval criteria set forth in EC 9.8320(5) and EC 9.8320(5)(a).

"A local government may find compliance with approval criteria by finding that the proposed means to achieve compliance is feasible, and imposing conditions of approval to ensure that the criteria are met." *Stockwell v. Benton County*, 38 Or LUBA 621 (2000). (Emphasis added)

With respect to the Oakleigh Lane right-of-way along the 50-foot frontage of the subject property, there's a simple and necessary way that the Planning Commission must address the application's compliance with EC 9.8320(5). As a prerequisite to approving the application, the Planning Commission must include the following in their decision:

- a. A finding that it is feasible (e.g., by purchase or condemnation) to create a 45-foot right away along the 50-foot frontage of the subject property; and
- b. A condition that, prior to final PUD approval, the applicant must show on final plat documents a 45-foot wide right-of-way along the 50-foot segment of Oakleigh Lane adjacent to the subject property, dedicated to the City of Eugene or Lane County.¹¹

¹⁰ From the applicant's plans, it would seem quite feasible for them to dedicate a 25-foot right-of-way, but that would be entirely up to the applicant and is not something I'm seeking or that the City can require.

¹¹ On page 3 of *Butte Conservancy v. City of Gresham*, in Attachment C, you can read the virtually identical condition of approval that LUBA approved when the City of Gresham dealt with a similar right-of-way situation. Note that this condition does *not* require the applicant to dedicate anything.

The circumstances regarding the Oakleigh Lane right-of-way in this case present the same questions that LUBA resolved in *Butte Conservancy v. City of Gresham*, 52 Or LUBA 550 (2006). LUBA stated:

“In our view, it is sufficient for the local government in such circumstances to

- (1) adopt findings that establish that fulfillment of the condition of approval is not precluded as a matter of law, and
- (2) ensure, in imposing the condition of approval, that the condition will be fulfilled prior to final development approvals or actual development.”

(Found on page 6 of the *Butte Conservancy* LUBA decision, provided as Attachment C; emphasis added)

Neither the Hearings Official’s decision (nor the Planning Commission’s prior decision) satisfied either of these requirements.¹²

Instead, the Hearings Official (and Planning Commission) appear to have mistakenly assumed that the constitutional limitations that apply to *exactions* also constrain what requirements a City can impose regarding physical conditions and/or infrastructure to ensure the public’s safety.

Commissioners should note the following point well, because it has been misunderstood throughout all the decision-makers’ findings:

Requiring a minimum width for the right-of-way of the only public street adjacent to and serving the development is not the same as exaction of a portion of right-of-way from an applicant’s development property.

To understand this point better, consider a hypothetical case where the City determined that adequate wastewater conveyance could be provided only through the use of a larger pipe than the existing pipe adjacent to, and serving, a PUD site. The City could clearly require that a sufficient wastewater system be in place. And while the City could not impose on the developer a burden of installing a new pipe that exceeded the proportionality limitations of *Dolan v. City of Tigard*, 512 US 374 (1994), the City also could not approve a PUD development that would be served by an inadequate wastewater system that could potentially create unsafe conditions on either the applicant’s property or the neighbors’. The City’s reasonable and necessary action would be to require a sufficiently large pipe to be in place as a requirement for final approval.

¹² In its Final Opinion and Order, LUBA merely regurgitated the City’s response to this issue claiming that constitutional limitations placed on the City by the Fifth Amendment to the U.S. Constitution allow the city to require dedication of at most one-half of Oakleigh Lane and, therefore, Conte had not demonstrated that EC 9.6870 or any other authority allows the city to require Oakleigh Meadows to dedicate more than one-half of Oakleigh Lane. (LUBA Decision at 35-36.) LUBA misunderstood Mr. Conte’s argument and erred by accepting the City’s framing of the issue.

Conte never asserted any argument that the City had to require the applicant to dedicate more property. Instead, Conte noted that, the only evidence in the record indicated that the full 45-foot right-of-way was required in order to provide safe access.

Conte’s argument was not that the applicant had to dedicate all of the 25 feet necessary to provide the required 45-foot right-of-way. Conte argued simply that the City had to adopt a condition of approval that would ensure Oakleigh Lane would have the required 45 feet of right-of-way.

The City would not have to address who would provide the pipe, just that it was feasible in some manner.

While transportation systems are different than wastewater systems, facilities for both must be adequate and safe, and the proper interpretation of the City's code in EC 9.8320(5) serves exactly that purpose for transportation systems. While constitutional limitations constrain how much of the burden an applicant can be required to assume, they do not in any way negate or diminish the standards that must be met to ensure the public safety.

In this case, the City has unequivocally determined that Oakleigh Lane must have a 45-foot right-of-way adjacent to the PUD to be sufficient for safe and adequate use that would arise from the increased traffic generated by the PUD. The City cannot neglect to ensure that happens.

If this point isn't clear by now, let me emphasize again that the following justification, whether repeated in this remand proceeding, or as found in the Planning Commission's prior appeal decision, doesn't provide any analysis at all of the actual issue:

"The constitutional findings in the Public Works referral comments are limited to justification for a proportional right-of-way exaction along the frontage of the subject property that would accommodate future public street improvements." Planning Commission Final Order dated December 13, 2013 at 4.

Whether or not the only way that Public Works used their own analysis of Oakleigh Lane was to justify the exaction of a 22.5-foot right-of-way, their findings regarding the public's safety were unambiguous -- Oakleigh Lane must have a 45-foot right-of-way to ensure the public will be assured of safe access. Here it is again in black-and-white:

"Without the additional right-of-way, Oakleigh Lane cannot be improved to the City's minimum street design standards¹³ and the 168 new vehicle trips per day generated by the proposed development, along with the additional pedestrian and bicycle traffic generated by the proposed development; will not be assured of safe access via Oakleigh Lane." PH-30 at 3.

Note that *nowhere* at all in the Hearings Official's decision (or in the Planning Commission's prior decision or the City's LUBA brief) is there any claim that *Dolan* actually prevents the City from requiring that Oakleigh Lane have a minimum 45-foot right-of-way along the development frontage. Instead, the valid claim that *Dolan* limits the right-of-way exaction has simply been repeated in findings regarding the required Oakleigh Lane right-of-way, *as if Dolan applied*. But, as LUBA made clear in *Stockwell v. Benton County*, *Dolan* does not apply to a requirement that Oakleigh Lane have an adequate right-of-way because that requirement would not be a "taking."

The applicant's attorney also claimed that "the City Public Works staff [has] answered" "the question of how the City intends to get to a 45-foot right-of-way from the applicant's 22.5-foot street dedication, and the 20-foot existing right-of-way for Oakleigh Lane." OMC

¹³ The City's minimum street standards require at least a 45-foot right-of-way.

Answering Brief at 29, provided in the accompanying CD. The applicant's attorney cited the following from the Public Works Report:

"This [22.5-foot] dedication would satisfy the right-of-way requirements for the properties south of the centerline, with **the remainder of the 45' right-of-way being required from the properties on the north side of the property centerline.**" PH-30 at 10 (Emphasis added by applicant's attorney.)

These Public Works staff's comments state nothing more than the way the report's author *assumes* the required 45-foot right-of-way *might* feasibly be obtained. However, nothing in the this statement or elsewhere in the Public Works Report, or in the Hearings Official's decision or the Planning Commission's decision provides a finding and/or condition of approval that explains how the necessary 45-foot right-of-way *will be ensured*. A means to ensure the necessary 45-foot wide right-of-way is what's legally required, but that's altogether missing in the Hearings Official and Planning Commission decisions. The applicant's attorney just hopes to elide over in this legal requirement by foisting off an unsupported assumption about the future of the Oakleigh Lane right-of-way as if it were a guarantee of compliance.

The applicant's attorney has also attempted to finesse the 45-foot right-of-way error by claiming that the Public Works Report had found that until the additional 2.5 feet of right-of-way was dedicated, Oakleigh Lane would continue to provide "safe passage for two-way vehicular traffic, bicycles, pedestrians and emergency vehicles" – citing page 14 of the Public Works Report. This claim is a brazen misrepresentation of what the Public Works staff actually wrote, which was:

"Until such time that property owners elect to improve Oakleigh Lane to full City standards; including sidewalks, the existing paved surface in Oakleigh Street will continue to adequately provide for motorized and foot traffic, as well as for emergency vehicles and delivery services, provided the paved surface is not blocked by parked vehicles. Since the existing paved surface provides safe passage for two-way vehicular traffic, bicycles, pedestrians and emergency vehicles, and since there is nothing to suggest that the impacts of the proposed development will result in unsafe conditions in Oakleigh Lane, it is appropriate to defer public improvements via an irrevocable petition." PH-30 at 14.

As explained above, this quote is not related to the right-of-way requirements of EC 9.8320(5), but is instead addressing only paving width under the EC 9.8320(11) approval criterion. Further, this section of the report doesn't in the slightest explain how to square the staff's comments under EC 9.8320(5) that asserted that a 45-foot right-of-way was required or the public's safety would "be at risk." The applicant's attorney clearly hopes the Planning Commission won't get on to the "shell game" he's playing with the evidence. (And, as discussed above and below, even this part of the report was based on an inaccurate assumption about the width of Oakleigh Lane's existing pavement, and is therefore not reliable evidence.)

The Planning Commission, on this remand, should not accommodate the way the applicant's attorney has played fast-and-loose with the facts and the law. The Planning Commission's decision should, and must, be based on honest facts and reasonable

interpretations of the law – not the contortions that have been attempted in order to win approval of this flawed application by any means possible.

In conclusion on this error, the Hearings Official (and Planning Commission) simply allowed, with no germane or legally-sufficient findings, a portion of the Oakleigh Lane right-of-way to remain two-and-a-half feet narrower than the minimum width the City's own findings said was essential for safe usage by the PUD's residents.

That error must be corrected by adding a sufficient condition of approval, keeping in mind that the Court of Appeals has made clear they will reverse a decision "when there is no evidence to support the finding or if the evidence in the case 'so at odds with LUBA's evaluation that a reviewing court could infer that LUBA had misapplied or misunderstood its scope of review.' *Younger v. City of Portland*, 305 Or 346, 359, 752 P2d 262 (1988)." *Citizens for responsibility v. Lane County*, 218 Or App 339, 345, 180 P3d 35 (2008). In this case, the City's technical staff's analysis concluded that a 45-foot right-of-way was required along the front of the subject property for compliance with EC 9.8320(5) and there is no reliable evidence that addresses the right-of-way on that segment and concludes that a 42.5-foot right-of-way would be sufficient. Consequently, the decision requires at least a condition of approval that will ensure a 45-foot right-of-way.

The Hearings Official erred in failing to require a sufficient right-of-way for Oakleigh Lane from River Road to the subject property in order to comply with EC 9.8320(5) and EC 9.8320(5)(a).¹⁴

Before I get to the legal issues, let me revisit the wastewater system analogy. Consider the hypothetical case in which the Public Works Department were to determine that conveyance of the wastewater volume that would be generated by a proposed PUD would require a wastewater pipe that's twenty inches in diameter to be transported safely and adequately to the PUD property line where it would connect with an existing wastewater pipe. If that existing pipe were only ten inches in diameter, and it already served twenty households, would it be reasonable to approve the PUD with no condition other than to provide the twenty-inch pipe on the development site? Obviously not, because the health and safety of the PUD and nearby residents would be put at risk by the inadequacy of the downstream pipe.

As discussed above, the City couldn't require the PUD applicant to shoulder a disproportionate burden of the cost to replace the existing pipe with a larger one that could handle the projected volume of wastewater. However, the City also couldn't legally approve the PUD unless an adequate and safe wastewater conveyance facility *downstream* was in some way ensured, such as through an adequate condition of approval.

Many transportation systems have street configurations that are more complex than this simple wastewater pipe analogy, but that's not the case with Oakleigh Lane. The transportation system that must adequately and safely serve the proposed PUD residents is a single street with no intersections for its entire length (other than at the end where it meets River Road). This one

¹⁴ This error was raised under the Appeal Statement's Second and Third Assignments of Error.

street must convey all the traffic volume, as well as a large number of pedestrians and bicyclists, from the proposed PUD, just as one pipe in our hypothetical example must carry all the wastewater volume.

The PUD's proposed 29 dwellings would be at the very end of Oakleigh Lane, and every one of the cars, trucks, service and emergency vehicles travelling between the site and the only intersection (at River Road) would have to flow along the entire length of Oakleigh Lane, which is already serving about twenty households.

Thus, on the face of it, it would be unreasonable to conclude – as the Hearings Official (and Planning Commission) did -- that Oakleigh Lane requires a 45-foot right-of-way for the fifty feet that's *adjacent to the proposed PUD* in order to be safe and adequate, and yet the entire 870 feet of the rest of Oakleigh Lane, into which all of the PUD traffic volume would be dumped, is certain to be safe and adequate when it comprises a 250-foot long segment of right-of-way that's only 20 feet wide and an additional 400 feet that has less than a 40-foot right of way. This is like a twenty-inch wastewater pipe on the development site dumping its entire volume into a ten-inch pipe downstream.

But, didn't the Public Works Report nevertheless provide expert analysis as evidence that the longer section of Oakleigh Lane would be safe and adequate with its current narrow, substandard right-of-way?

Actually *there is no such finding about Oakleigh Lane's public right-of-way in the Public Works Report.*

Nor is there any analysis at all of whether the 20-foot and other narrow rights-of-way between the subject site boundary and the intersection at River Road are consistent with the approval criteria in EC 9.8320(5) and EC 9.8320(5)(a).

Instead, a careful look at the record reveals that the Hearings Official relied upon portions of the Public Works Department Report that actually analyzed *only* the application's compliance with the approval criterion EC 9.8320(11)(b) Public Improvement Standards and the referenced standards in EC 9.6505(3)(b) for paving widths and other improvements:

"Until such time that property owners elect to improve Oakleigh Lane to full City standards; including sidewalks, the existing paved surface in Oakleigh Street will continue to adequately provide for motorized and foot traffic, as well as for emergency vehicles and delivery services, provided the paved surface is not blocked by parked vehicles." PH-30 at 14. (Emphasis added.)

The Public Works Department Report findings in this section do not even mention right-of-way, and they do not in any way speak to the application's compliance with the right-of-way requirements of EC 9.6870, which are referenced by the EC 9.8320(5)(a) approval criterion that is at issue in this appeal. Nowhere else in the Public Works Department Report is there any mention of Oakleigh Lane's grossly substandard right-of-way being sufficient for compliance with the EC 9.8320(5) approval criterion. *In other words, there is no Public Works analysis in the record that concludes that a right-of-way width less than 45 feet would provide a safe and adequate transportation system.*

Furthermore, the Public Works Report's analysis of compliance with paving width standards does *not* contain an unqualified conclusion that Oakleigh Lane would adequately provide for motorized and foot traffic, as well as emergency vehicles and delivery services as the Hearings Official claimed. The Public Works Report makes clear that providing an adequate transportation system that relies solely on Oakleigh Lane is wholly dependent on ensuring that parked vehicles do not block Oakleigh Lane's narrow paved surface. The Hearings Official and Planning Commission ignored this qualification, and neither of them provided a finding that the necessary condition for an *unobstructed* Oakleigh Lane would, or could, be met in order to satisfy the EC 9.8320(11)(b) Public Improvement Standards approval criteria. Therefore, this particular part of the Public Works Report analysis is not adequate or probative evidence sufficient to support the Hearings Official's finding that the application satisfied the requirements of EC 9.8320(5).

Of course, the applicant or staff may argue that if the pavement is wide enough to be safe, then obviously that's all that's necessary. But there are three fatal problems with that conclusory leap:

1. As shown above, significant portions of the pavement are outside the right-of-way and on private land. At any time, the respective property owners could forbid vehicles from crossing their property, thus significantly narrowing the useful pavement width. The record contains no analysis of this possibility.
2. As explained above, there would have to be a finding that *ensured* the entire 19-foot width of the pavement would remain unobstructed. In fact, property owners can *legally* park on the paving that's on their own property, thus obstructing the pavement.
3. It is precisely the City street standards' requirement for a right-of-way on a Low Volume Street that is *wider* than the paving that allows for sidewalk(s) to separate pedestrians from traffic, and thereby ensure the pedestrians' safety. The Public Works Report is clear on this point:

"Staff notes that while the applicant's proposal is sufficient to accommodate the turnaround, the proposal does not include a sidewalk along the south side of the turnaround which would be necessary to separate pedestrians from vehicles and provide a safe public walking surface for the residents of the proposed development. The amount of right-of-way necessary to allow for the construction of the proposed turnaround and adjacent sidewalk would be 33' or 13' on the south side of the existing centerline, which as previously noted is co-incident with the property line. These dimensions assume a 21' wide paved surface that is shown on the tentative plan as being located 6' south of the existing northerly right-of-way line, a 6" curb, a 5' sidewalk and a 6" area adjacent to the sidewalk for construction and maintenance purposes." PH-30 at 10.

In sum, the record contains unchallenged evidence from the Public Works Report's analysis of EC 9.8320(5)(a) from which a reasonable person could only conclude that Oakleigh Lane must have at least a 45-foot right of way for its entire length to be consistent with EC 9.8320(5). And

the record contains no contrary evidence supporting a finding that a lesser right-of-way width would be consistent with EC 9.8320(5).

In retrospect, it's clear that, lacking any genuine analysis of the right-of-way requirements for the greater part of Oakleigh Lane, the Hearings Official merely attempted to put a wall around the Public Works findings under EC 9.8320(5) and rely instead on a misrepresentation of the findings under EC 9.8320(11)(b). As explained above, however, no matter in what respect the Public Works staff themselves may have intended to use their own analysis, the analysis results cannot be quarantined. And, as explained, the flawed analysis and conclusions regarding paving width under EC 9.8320(11)(b) do not support the Hearings Official's finding that Oakleigh Lane in its current condition is safe or meets the right-of-way requirements of EC 9.8320(5).

What's left after clearing up the Hearings Official's misrepresentations of what's in the record and his misapplication of *Dolan* is a completely different picture of what the evidence in the record supports, and that picture is consistent with common sense, as well. Oakleigh Lane must have a much wider right-of-way, at least 45 feet by City standards, to adequately and safely handle the additional volume of traffic that will arise from the proposed PUD.

The Planning Commission must now revisit and revise its findings so the findings are in accord with the law and the evidence. In doing so, the Planning Commission is required to *explain* how it reaches its findings and the evidence upon which it relied; and that evidence must be reliable and probative. With a clearer picture of the Hearings Officials' errors, the Planning Commission cannot simply recycle their prior decision.

Finally, I want to dispense with one other argument by the Hearings Official – that the specific right-of-way standards for EC 9.8320(5) (set forth under EC 9.8320(5)(a) and found in EC 9.6800 through EC 9.6875) apply only to land “dedicated” by the applicant. The Planning Commission rejected this ridiculous argument, as it would rob EC 9.8320(5) of any way to ensure PUD residents were provided safe and adequate transportation systems.

However, the Planning Commission's prior finding that “neither EC 9.8320(5)(a) nor EC 9.6800 through 9.6875 require that an existing street must meet certain standards in order to serve a proposed development”¹⁵ is just as unreasonable with respect to the minimum width of Oakleigh Lane's right-of-way that's necessary to provide an adequate and safe transportation system for the PUD. Notably, the Planning Commission decision offered no alternative to the standards in EC 9.6870, nor did the Planning Commission point to any analysis to justify accepting Oakleigh Lane's grossly substandard right-of-way widths as adequate.

It should be obvious that to ensure that PUD residents would be provided safe and adequate transportation systems, the street standards in EC 9.6800 through EC 9.6875 have to be applied to Oakleigh Lane because it's the *only* street that provides PUD residents, delivery and service vehicles, and emergency vehicles with vehicular access. An “adequate transportation system” for a PUD cannot reasonably be limited to just vehicle use areas on the PUD site itself or just to the immediately adjacent street segment; and Oakleigh Lane must have an adequate

¹⁵ Planning Commission Final Order at 3.

right-of-way because, as the only means of vehicular access to and from the PUD, Oakleigh Lane is an essential element of the transportation system that connects the PUD to the larger street network.

As a matter of law, the Planning Commission's prior interpretation of EC 9.8320(5) and EC 9.8320(5)(a) ignores the text's explicit requirement for a "safe and adequate transportation system" and would allow absurd results. According to this interpretation, Oakleigh Lane could be practically impassable, except by 4-wheel drive vehicles, and that condition would still be considered consistent within the Planning Commission's interpretation of the extremely limited scope to which EC 9.8320(5)(a) applies.

Even the City Attorney stated otherwise with regard to Oakleigh Lane's right-of-way.

"For purposes of EC 9.8320(5), the criteria for approval of a tentative PUD application, the standards in EC 9.6870 that apply in this instance are those that regulate the required width of dedicated right-of-ways." Page 13 of the City's LUBA brief.

All that's required to see the absurdity of the Planning Commission's prior interpretation is to recall the wastewater system analogy and imagine the disastrous results that would occur if the Planning Commission's principle were applied consistently. This interpretation would approve a PUD that has a 20-inch wastewater pipe dump its contents into an open ditch that was not adjacent to the PUD property.

The proper way to understand and interpret EC 9.8320(5)

My attorney, William Kabeiseman, provided the Court of Appeals with a more sensible and legally defensible interpretation of EC 9.8320(5) than the contorted versions in the Hearings Official and Planning Division's decisions. The following discussion is based on my attorney's testimony and provides a broader foundation for other issues that arise regarding whether or not the application meets the requirements of EC 9.8320(5) and EC 9.8320(6).

The Tentative PUD approval criteria related to a safe and adequate transportation system is found in the following section¹⁶:

EC 9.8320(5) The PUD provides safe and adequate transportation systems through compliance with the following:

- (a) EC 9.6800 through EC 9.6875 Standards for Streets, Alleys, and Other Public Ways (not subject to modifications set forth in subsection (11) below).
- (b) Pedestrian, bicycle and transit circulation, including related facilities, as needed among buildings and related uses on the development site, as well as to adjacent and nearby residential areas, transit stops, neighborhood activity centers, office parks, and industrial parks, provided the city makes findings to

¹⁶ Another section, discussed below, also addresses the safety of the transportation system serving the PUD:

EC 9.8320(6) The PUD will not be a significant risk to public health and safety, including but not limited to soil erosion, slope failure, stormwater or flood hazard, or an impediment to emergency response.

demonstrate consistency with constitutional requirements. “Nearby” means uses within 1/4 mile that can reasonably be expected to be used by pedestrians, and uses within 2 miles that can reasonably be expected to be used by bicyclists.

(c) The provisions of the Traffic Impact Analysis Review of EC 9.8650 through 9.8680 where applicable.

The opening portion of EC 9.8320(5) is a simple, straightforward *and explicit* requirement that a proposed PUD must provide safe and adequate transportation systems. This text is the overarching statement of the criterion that a PUD must meet, not mere boilerplate as the Hearings Official decision would have it.

The Hearings Official claimed that EC 9.8320(5) can be properly applied solely by evaluating the three subsections, *independently of the opening statement or one-another*¹⁷; and, if proposed PUD satisfies each provision in turn, then the proposed PUD must be deemed to meet the requirement that it will provide safe and adequate transportation systems. The Hearings Official’s interpretation implies that the approval criterion would be virtually the same if the opening portion simply said: “The PUD must comply with the following, wholly independent requirements.”

It inevitably follows, according to the Hearings Official’s interpretation, that the opening portion might even go so far as to state: “The PUD must comply with the following, wholly independent requirements – even if the result would demonstrably not ensure a safe and adequate transportation system.” (Ridiculous, I know, but exactly the line in the sand that the Hearings Official attempted to draw in the Oakleigh Meadows PUD decision.)

The Hearings Official’s decision eviscerates the EC 9.8320(5)(a) requirements for adequate right-of-way and paving widths, as specified in EC 9.6870, with the result that the City’s adopted street design standards are effectively eliminated from any role at all in ensuring a PUD provides a “safe and adequate transportation system.” This interpretation omits what is explicit in the code and impermissibly leads to absurd results.

Such an interpretation would leave out several critical aspects of this approval criterion.

First, nowhere in any of the three subsections is there a specific requirement that the PUD actually provide a “transportation system” – which is the heart of this criterion. Ignoring the actual text of EC 9.8320(5) impermissibly omits what is in the code.

And, knowing that the PUD must provide a “transportation system,” the immediate question is: For whom? Obviously, for the PUD residents, at the very least.

The next step in a reasonable interpretation is: What is required to provide the PUD residents a transportation *system*? Certainly a transportation system might include some

¹⁷ “The very structure of EC9.8320(5) does not require an applicant to prove that a proposed development will be safe from any and all asserted and or imagined traffic safety threats.” HO Decision at 24. Having no legitimate legal theory for his interpretation of EC 9.8320(s), the Hearings Official resorted to erecting a ridiculous straw man that has no basis in appellants’ arguments or the code. Simply put, the code requires what it says: That the PUD must provide a safe and effective transportation system. And it is the City’s own analysis and adopted standards that appellants rely on, not some arbitrary protection from “imagined” safety threats.

driveways and private streets, but the requirement is for a “system,” not just on-site circulation. Thus, an “adequate transportation system” must reasonably include at least some *vehicular connection* to the City street network.

And because the *system* must be “safe and adequate,” all of the private and at least some of the public streets that are *essential components* of that system must themselves be safe and adequate – both for the proposed PUD residents and for other members of the public who use these streets.¹⁸

The present case is as simple as it gets – there’s only a single, dead-end public street that provides the PUD with its essential connection to the City street network – Oakleigh Lane.

The three subsections then provide the scope and standards by which to determine what is safe and adequate. The first subsection provides standards for the minimum rights-of-way, paving widths and other improvements. It’s that simple. To say that compliance with the standards under EC 9.8320(5)(a), such as minimum right-of-way widths, can be ignored for most of the one public street that is essential to the “transportation system” for PUD residents would be contrary to what EC 9.8320(5) explicitly requires, and an impermissible omission of what’s in the code. Similarly, to say that compliance with required paving widths and other improvements for this essential public street can be deferred to some indefinite date would also negate the explicit intent and language of EC 9.8320(5).¹⁹

A correct interpretation of EC 9.8320(5) also requires that all of its subsections be read in concert with each other and harmonized. Each of the subsections has the same grammatical construction – the subsections contain no verb or subject; instead they consist solely of a predicate that contains a portion of the entire requirement.

As already observed, subsection (a) identifies the standards that apply to the essential components of a safe and adequate transportation system. However, that subsection alone doesn’t identify exactly *what* must meet the standards in EC 9.6800 – 9.6875, so the subsection cannot sensibly be applied in isolation. Instead, these standards obviously apply to the object identified in the opening portion, i.e., the transportation system that would serve the PUD residents.

Subsection (b) uses the same grammatical structure as subsection (a) and identifies three additional modes of transportation system facilities – those that enable circulation of pedestrians, bicyclists and transit around the site and to and from nearby areas. EC 9.8320(5) obviously assumes that an “adequate” transportation system would include facilities for vehicular circulation, and the purpose of subsection (b) is to ensure that these additional modes are also supported by the transportation system. Section (b) also requires that the explicit scope of connectivity for the three modes must extend beyond the development site; in this case, even

¹⁸ This doesn’t mean, as the Hearings Official tried to imply that “all nearby streets had to meet City standards.” The Hearings Official set up a ridiculous straw man that avoided the more limited, but essential requirement in this case.

¹⁹ Of course, specific provisions of the standards found in EC 9.6800 through EC 9.6875 may allow exceptions or deferrals, but allowing an applicant to exercise such provisions isn’t the same as allowing noncompliance with EC 9.6800 through EC 9.6875. Similarly, possible modifications to the standards, as set forth in subsection EC 9.8320(11), are explicitly allowed; but these were not the basis of the Hearings Official’s findings.

as far out as River Road. Again, EC 9.8320(5) assumes an “adequate” transportation *system* would also include off-site facilities to allow PUD residents to safely connect by car or other vehicle with the City’s street system, which is found at the intersection with River Road. It would be inconsistent and unreasonable to interpret EC 9.8320(5) as requiring an “adequate transportation” system to provide connectivity beyond the site for pedestrians and bicyclists and yet not require adequate and safe connectivity for vehicle use.

Consistent with the broad opening portion of EC 9.8320(5), subsection (b) relies on compliance with the standards referenced in subsection (a). More specifically, standards for pedestrian and bicycle facilities are found in EC 9.6835 Public Accessways, and transit facilities are covered in several of the sections referenced by EC 9.8320(5)(a). There is no need to repeat the reference to these code sections when the three subsections are interpreted as working together to ensure the requirement in the opening portion of EC 9.8320(5).

Finally, subsection (c) adds the additional requirement for a detailed Traffic Impact Analysis (TIA) where traffic volume or special conditions justify a more extensive analysis and potential mitigations to ensure the transportation system is safe and adequate. Importantly, when a TIA is triggered, subsection (b) ensures that the TIA addresses pedestrian, bicycle and transit levels of service (LOS) and safety, as well as vehicular LOS and safety. Again, it would be unreasonable to interpret subsection (c) as allowing a TIA that didn’t fully evaluate pedestrian, bicycle and transit levels of service and safety – but that is exactly what the Hearings Official’s interpretation would do by treating the subsections of EC 9.8320(5) in isolation.

The only way to read EC 9.8320(5) and give effect to all portions of this approval criterion is to find that, overall, this criterion requires safe and adequate transportation systems. Subsection (a) states the specific applicable standards, subsection (b) enumerates several transportation modes in addition to vehicular use where those standards apply, and subsection (c) applies an additional level of analysis to all four modes (vehicular, pedestrian, bicycle and transit).

There’s explicit context in Eugene Code that supports the plain language interpretation of EC 9.8320(5), subsection EC 9.8320(5)(a) and the referenced street standards in EC 9.6870. The purpose of EC 9.6870 is set forth in EC 9.6800 and states:

“[s]ections 9.6800 through 9.6875 establish standards for the dedication, design and location of public ways to address the purpose of this land use code contained in EC 9.0020 Purpose.”

The referenced code at EC 9.0020 Purpose states:

“The purpose of the land use code is to protect and promote the health, safety, and general welfare of the public * * *” (Emphasis added)

By the reference to EC 9.0020 Purpose, EC 9.6800 establishes that the purpose of EC 9.6800 through EC 9.6875 is to “establish standards for the dedication, design and location of public ways to” “protect and promote the health, safety, and general welfare of the public.”

The language of EC 9.8320(5) echoes this purpose and is precisely why EC 9.8320(5) relies on the standards in EC 9.6800 through 9.6875 being applied to, in this case, the only street that provides access to the PUD. All of these sections work together harmoniously to ensure a safe and adequate, multi-modal transportation system for PUD residents.

In the present case, the only way to correctly apply EC 9.8320(5) is to require Oakleigh Lane to meet the standards in EC 9.6800 through 9.6875, which the Hearings Official failed to do. Any other interpretation fails to meet statutory requirements for construction.

The Hearings Official erred in failing to require a sufficient paving width for Oakleigh Lane from River Road to the subject property in order to comply with EC 9.8320(5) and EC 9.8320(5)(a) and EC 9.8320(11)(b).²⁰

The previous section dealt with the proper application of the standards under EC 9.8320(5) with respect to right-of-way. By the same rationale, Oakleigh Lane is also required to meet the standards for paving, as set forth in EC Table 9.6870 Right-of-Way and Paving Widths. (The arguments in the previous section are included in this section by reference.)

In the present case, Oakleigh Lane would require a paving width of at least 20 feet, which is feasible on Oakleigh Lane because it has a right-of-way of at least 20 feet for its entire length. As noted above, however, the Hearings Official's findings are that Oakleigh Lane has 19-foot wide paving, which is inadequate to comply. In addition, the paving that's within the right-of-way is approximately 13 feet wide for 250 feet, and the Hearings Official's findings did not address this deficiency at all.

Because the Hearings Official relies on the inaccurate analysis of paving width by the Public Works Report, as described above, the finding of compliance with EC 9.8320(11)(b) was not supported by correct and reliable evidence and must be rejected by the Planning Commission.

With respect to compliance with EC 9.8320(5), EC 9.8320(5)(a) and EC 9.8320(11)(b), in order to approve the application, the Planning Commission must add a condition of approval that Oakleigh Lane be paved to at least 20 feet wide, within the right-of-way for its entire length before final approval of the proposed PUD.

The Hearings Official erred in finding that the application complied with EC 9.8320(6).²¹

EC 9.8320(6) requires that:

The PUD will not be a significant risk to public health and safety, including but not limited to soil erosion, slope failure, stormwater or flood hazard, or an impediment to emergency response.

²⁰ These errors were raised under the Appeal Statement's Second and Fourth Assignments of Error.

²¹ This error was raised under the Appeal Statement's Third Assignment of Error.

The Hearings Official relied upon his findings for EC 9.8320(5) and EC 9.8320(11)(b) without any further explanation. The Hearings Official also relied upon his erroneous statement that the city street standards didn't apply. Netted out then, the Hearings Official relied on the Public Works Report findings regarding a 19-foot paving width that "the existing paved surface in Oakleigh Street will continue to adequately provide for motorized and foot traffic, as well as for emergency vehicles."

As demonstrated above, Oakleigh Lane doesn't have a 19-foot paving width within the right-of-way and cannot be ensured to be free of obstruction by parked vehicles.

Consequently, the Hearings Official's conclusion was not supported by reliable evidence and must be rejected. There is no evidence in the record that thirteen feet of paving is wide enough for an emergency vehicle and oncoming car or truck to pass by safely. The city's own street width standards in Eugene Code Table 8.6870 require even an alley to have paving at least twelve feet for restricted, *one-way* travel and twenty feet wide for *two-way* travel. There is no reasonable basis for a finding that 13-foot wide paving for 250 feet would not be an impediment to emergency response.

LUBA agreed with the applicant's argument that EC 9.8320(6) required only that the PUD itself, i.e., the land, structures, on-site improvements, etc., not create the impediment to emergency response. This is an unreasonably narrow interpretation and is inconsistent with the definition of "impediment":

"something that makes it difficult to do or complete something ... something that interferes with movement or progress." – Merriam-Webster on-line

If the resulting off-site impacts that arise solely from activities by PUD residents or other sources on the PUD may potentially interfere with the movement of emergency response vehicles, the City is required to analyze the potential impediment and explain their findings. In this case, if the additional traffic on Oakleigh Lane that arises from the PUD would potentially impede emergency vehicles rushing to or from the PUD or other residences on Oakleigh Lane, particularly in the 250-foot segment of Oakleigh Lane that has only 13-foot wide paving in the public right-of-way. The Public Works report was clear on the potential conflicts when it stated:

"Oakleigh Street will continue to adequately provide for ... emergency vehicles ..., provided the paved surface is not blocked by parked vehicles." PH-30 at 14 (Emphasis added)

As discussed above, the Hearings Official decision provides no analysis or findings that ensure the public is allowed to drive on the six feet of pavement that's on private property and that Oakleigh Lane will not be blocked by parked vehicles.

Furthermore, the overarching requirement is that "[t]he PUD will not be a significant risk to public health and safety." What follows in the text are clearly just some examples: "including but not limited to ..." As explained above, the potential impacts of "[t]he PUD" cannot be limited to just its physical properties, but must also include its operational impacts, including the additional traffic that's generated and that traffic's potential impact on the safety

of the public using the same street. This includes the safety of normal use by vehicles, pedestrians and bicyclists, in addition to impeding emergency vehicles.

As demonstrated above, there was no valid analysis of the PUD's impacts on the safety of the public using Oakleigh Lane, other than the deficient analysis of the Public Works Report under EC 9.8320(11)(b).

With a proper interpretation of EC 9.8320(5), as explained above, a finding that the PUD provided a safe and adequate transportation system would be a reasonable basis in most cases for a finding that the PUD would not be a significant risk to public safety from its traffic impacts. However, under the Hearings Official and LUBA's restrictive interpretation of EC 9.8320(5), this would not be the case because there would be no requirement to comply with the city's street standards for right-of-way and paving, and there would be no requirement to evaluate whether the PUD actually provided a "safe and adequate transportation system" for the PUD residents and emergency vehicles using Oakleigh Lane.

Thus, the Planning Commission cannot justifiably ignore the EC 9.8320(6) (as well as EC 9.8320(5)) requirements to evaluate and ensure the public's safety. Lacking valid evidence upon which to find that the PUD's traffic impacts won't jeopardize the safety of the public using Oakleigh Lane, the Planning Commission must find that the applicant has not demonstrated that the PUD meets the approval criterion in EC 9.8320(6).

Precautionary procedural objections

In order to preserve my appeal rights on a potential procedural error, I am objecting to the Eugene Planning Commission allowing the introduction of new evidence into the record by the applicant, City, a commissioner or any other party without re-opening the hearing to me and all other persons who testified in the original proceedings.

Further, I am objecting to the Eugene Planning Commission allowing the applicant to introduce any testimony into the record, other than argument in direct response to my testimony, without re-opening the hearing to me and all other persons who testified in the original proceedings.

Conclusion

Based on the noncompliance with EC 9.8320(6), the Planning Commission must deny this application.

Notwithstanding that the application must also be denied for failure to comply with EC 9.8320(5) and EC 9.8320(11)(b), any approval of the application must include at least the following conditions:

- 1) A condition that, prior to final PUD approval, the applicant must show on final plat documents a 45-foot wide right-of-way along the 50-foot segment of Oakleigh Lane adjacent to the subject property, dedicated to the City of Eugene or Lane County.²²
- 2) A condition that, prior to final PUD approval, the applicant must provide:

²² On page 3 of *Butte Conservancy v. City of Gresham*, in Attachment C, you can read the virtually identical condition of approval that LUBA approved when the City of Gresham dealt with a similar right-of-way situation.

- a) Construction plans for road improvements to meet the required standards of the City of Eugene's adopted Arterial and Collector Street Plan , and
- b) The necessary street construction permits to implement the construction plans."

Respectfully,



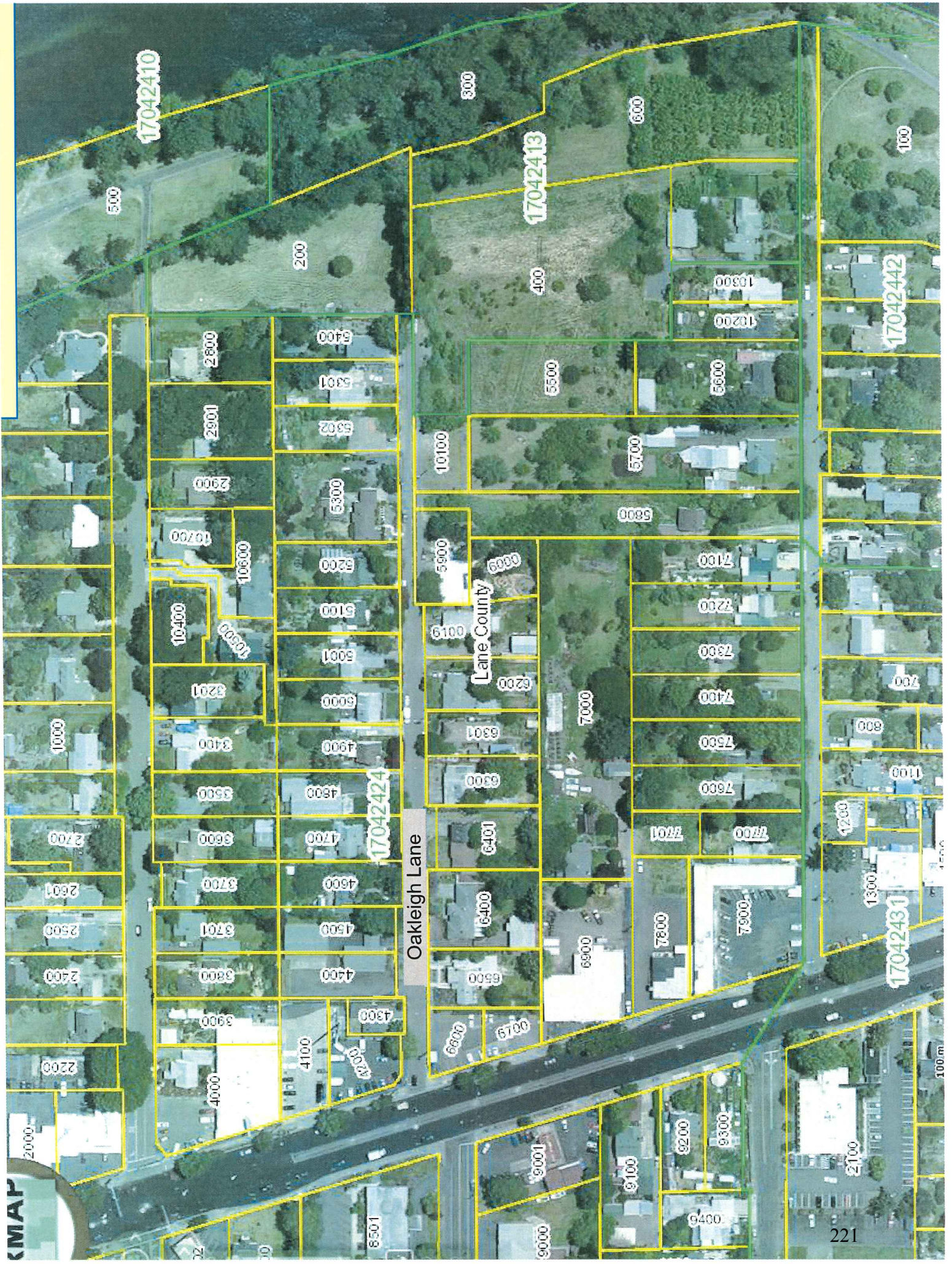
Simon Trautman

Attachments

All attachments are included herein by reference

- A. Oregon Maps
- B. Drawing of Oakleigh Lane ROW
- C. *Butte v Gresham* LUBA decision
- D. CD containing:
 - a. LUBA record and supplemental record
 - b. LUBA oral arguments audio recording
 - c. LUBA briefs
 - d. Court of Appeal briefs

Name	Date modified	Type	Size
Files Currently on the Disc (12)			
PDT13-1CityOfEugeneCoAbrief.pdf	7/26/2015 7:09 AM	Adobe Acrobat Document	3,053 KB
PDT13-1CityOfEugeneLUBAbrief.pdf	7/26/2015 6:54 AM	Adobe Acrobat Document	4,335 KB
PDT13-1ConteLUBAbrief.pdf	7/26/2015 7:06 AM	Adobe Acrobat Document	451 KB
PDT13-1LUBAAppeal2014-001Vol1.pdf	6/9/2014 10:54 AM	Adobe Acrobat Document	9,533 KB
PDT13-1LUBAAppeal2014-001Vol2.pdf	6/15/2014 8:23 AM	Adobe Acrobat Document	32,604 KB
PDT13-1LUBAAppeal2014-001Vol3.pdf	7/21/2014 7:35 AM	Adobe Acrobat Document	15,454 KB
PDT13-1LUBAoralArgumentsAudioRecording.wma	8/8/2014 11:14 AM	Windows Media Audio file	271,923 KB
PDT13-1LUBASupplementalRecord1.pdf	3/25/2014 3:32 PM	Adobe Acrobat Document	9,278 KB
PDT13-1LUBASupplementalRecord2.pdf	5/18/2014 10:10 AM	Adobe Acrobat Document	85,712 KB
PDT13-1OAppellantsCoAbrief.pdf	7/26/2015 7:18 AM	Adobe Acrobat Document	5,840 KB
PDT13-1OMCCoAbrief.pdf	7/26/2015 7:12 AM	Adobe Acrobat Document	1,836 KB
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Oakleigh Lane

Lane County

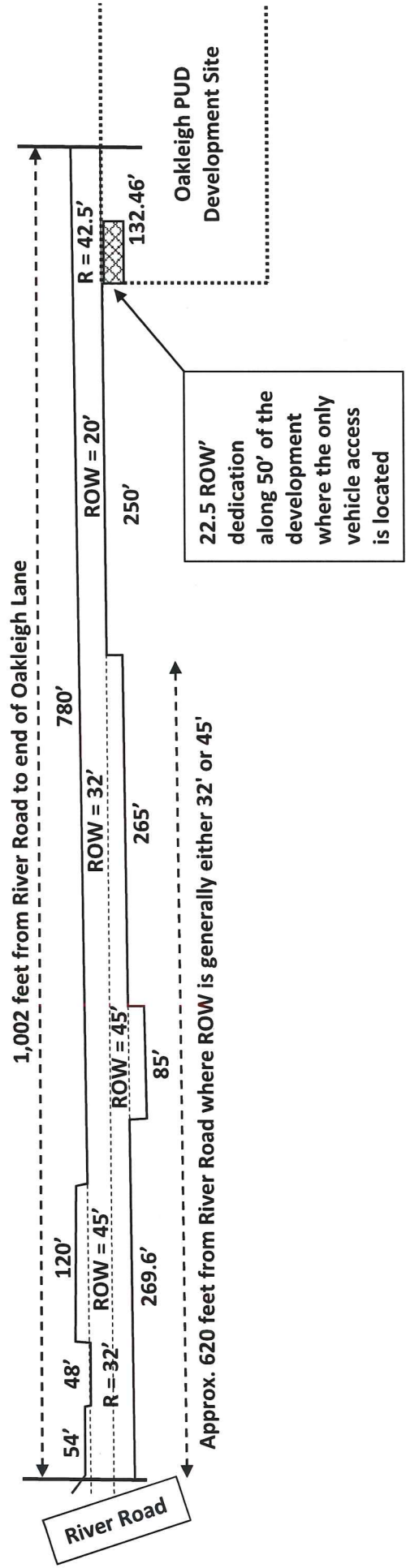
PDT 13-1 Remand Testimony: Attachment B.

PT-R.4 (LUBA Rec at 460-573) Deeds and property records for properties on Oakleigh Lane

PH-53 (LUBA Rec at 1314) City Notice of Land Use Change Being Proposed map of notice signs shows the outline of the ROW.

PH-1.B (LUBA Rec at 1197 and LUBA #2 at 4) – ROW dedications

Right-Of-Way Width	Total Length	Comment
20 feet	227.73'	
32 feet	360.60'	
37 feet	54.00'	
42.5 feet	50.00'	After dedication of 22.5' ROW from PUD
45 feet	205.00'	
Beyond PUD entry	104.67'	
TOTAL	1002.00'	



BEFORE THE LAND USE BOARD OF APPEALS
OF THE STATE OF OREGON

BUTTE CONSERVANCY and ERIK NIELSEN,
Petitioners,

vs.

CITY OF GRESHAM,
Respondent,

and

PERSIMMON DEVELOPMENT,
Intervenor-Respondent.

LUBA No. 2006-084

FINAL OPINION
AND ORDER

Appeal from City of Gresham.

Gary P. Shepherd, Portland, filed the petition for review and argued on behalf of petitioners.

David R. Ris, Senior Assistant City Attorney, Gresham, filed a response brief and argued on behalf of respondent.

John M. Junkin, Portland, filed a response brief and argued on behalf of intervenor-respondent. With him on the brief were Krista N. Hardwick and Bullivant Houser Bailey, PC.

BASSHAM, Board Chair; HOLSTUN, Board Member, participated in the decision.

AFFIRMED

09/15/2006

You are entitled to judicial review of this Order. Judicial review is governed by the provisions of ORS 197.850.

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NATURE OF THE DECISION

Petitioners appeal a city council decision on remand from LUBA approving an 86-lot planned unit development (PUD)

MOTION TO INTERVENE

Persimmon Development (intervenor), the applicant below, moves to intervene on the side of respondent. There is no opposition to the motion, and it is allowed.

FACTS

The challenged decision approves an 86-lot PUD on a 69.5-acre parcel in the City of Gresham near unincorporated areas of Clackamas County. The subject property is steeply sloped and wooded, and within the city’s Hillside Physical Constraint Overlay District (HPCD). The proposed development required a variance to allow two cul-de-sacs over 200 feet in length, a tree removal permit to log approximately 1800 trees in areas where streets and utilities are proposed, and construction of a secondary road access for emergency vehicles through an existing residential lot in an adjoining subdivision within unincorporated Clackamas County.

The city’s initial approval was appealed to this Board, which sustained three assignments of error, and remanded the decision to the city to address, among other things, whether (1) providing the emergency vehicle access is feasible, and (2) removing 1800 trees constitutes “clear cutting” that is prohibited under city code.

On remand, the city conducted a public hearing and adopted additional findings concluding in relevant part that it is feasible to obtain the required emergency access and that the proposed tree removal did not constitute “clear-cutting” that is prohibited under city code. This appeal followed.

1 **FIRST ASSIGNMENT OF ERROR**

2 In order to gain approval of the requested variance for culs-de-sac longer than 200
3 feet, intervenor proposed and the city approved a secondary access point that would extend
4 south of the PUD through a residential lot in the adjoining Kingswood Heights subdivision,
5 which is within unincorporated Clackamas County, and connect to SE Yellowhammer Road.
6 Accordingly, the city imposed Condition of Approval 7 requiring that the applicant submit as
7 part of final plat documents: (1) a 20-foot wide right of way or easement across the
8 residential lot within the Kingswood Heights subdivision, dedicated to the county, (2)
9 construction plans for the access, and (3) a county street construction permit.

10 Before LUBA, petitioners argued that there was no evidence in the record that it was
11 “feasible” to construct the proposed secondary access, given that Covenants, Conditions, and
12 Restrictions (CC&Rs) governing the Kingswood Heights subdivision restrict all use of
13 residential lots to single-family dwellings and accessory buildings.¹ According to
14 petitioners, it is clear under the Kingswood Heights CC&Rs that use of a residential lot to
15 construct a street or other access for a neighboring subdivision is prohibited. We remanded
16 the city’s initial decision to address this issue.

17 On remand, the city adopted findings concluding in relevant part that it is “feasible”
18 to construct the access road either because (1) the CC&Rs can be reasonably interpreted to
19 allow roads that provide access to residential uses and (2) in any case, the city has the legal
20 authority to condemn the right-of-way to provide secondary access notwithstanding the
21 CC&Rs. Petitioners challenge those conclusions, arguing that the CC&Rs are unambiguous

¹ The Kingswood Heights subdivision restrictions include the following:

“No building or structure or land shall be used and no building or structure shall hereafter be erected, altered or enlarged in the subdivision except for single-family dwellings and accessory buildings consisting of garages, carports, private green houses, swimming pools or other type of home recreational facilities and temporary structures for uses incidental to construction work which shall be removed upon completion or abandonment of the construction.” Petition for Review App. 30.

1 and clearly would prohibit the proposed access road, and that the city lacks the legal
2 authority to condemn the right-of-way necessary to construct the road.

3 **A. Feasibility**

4 As an initial matter, the city argues that the legal requirement that local governments
5 address the feasibility of compliance with approval criteria should be applied differently
6 where, as here, the issue raised regarding the feasibility of compliance largely involves a
7 legal question and the courts, not the city, have jurisdiction in the final analysis to resolve
8 that question. The city recognizes that, in a line of cases based on *Meyer v. City of Portland*,
9 67 Or App 274, 678 P2d 741 (1984) and *Rhyne v. Multnomah County*, 23 Or LUBA 442
10 (1992), the Court and LUBA have held that, in a two-stage approval process such as
11 subdivision approval, where a problem is identified that raises concerns whether proposed
12 development can comply with applicable approval criteria, the local government may, among
13 other options, adopt findings demonstrating that solutions to the identified problem are
14 “feasible,” *i.e.*, “possible, likely and reasonably certain to succeed.” *Meyer*, 67 Or App at
15 280, n 5. In *Rhyne*, we explained that:

16 “Assuming a local government finds compliance, or feasibility of compliance,
17 with all approval criteria during a first stage (where statutory notice and
18 public hearing requirements are observed), it is entirely appropriate to impose
19 conditions of approval to assure those criteria are met and defer responsibility
20 for assuring compliance with those conditions to planning and engineering
21 staff as part of a second stage. * * *

22 “Where the evidence presented during the first stage approval proceedings
23 raises questions concerning whether a particular approval criterion is satisfied,
24 a local government essentially has three options potentially available. First, it
25 may find that although the evidence is conflicting, the evidence nevertheless
26 is sufficient to support a finding that the standard is satisfied or that feasible
27 solutions to identified problems exist, and impose conditions if necessary.
28 Second, if the local government determines there is insufficient evidence to
29 determine the feasibility of compliance with the standard, it could on that
30 basis deny the application. Third, * * * instead of finding that the standard is
31 not met, it may defer a determination concerning compliance with the
32 standard to the second stage. In selecting this third option, the local
33 government is not finding all applicable approval standards are complied

1 with, or that it is feasible to do so, as part of the first stage approval (as it does
2 under the first option described above). Therefore, the local government must
3 assure that the second stage approval process to which the decision making is
4 deferred provides the statutorily required notice and hearing * * *” 23 Or
5 LUBA at 447-48 (footnotes omitted).

6 Where the local government takes the first approach—finding that the approval
7 criterion is met or that feasible solutions to identified problems exist, and imposing necessary
8 conditions—those findings and conditions may be challenged as inadequate or not supported
9 by substantial evidence. *Salo v. City of Oregon City*, 36 Or LUBA 415, 428-29 (1999).

10 The city argues that the above framework is typically applied when the identified
11 “problem” involves a fact-specific technical or physical issue posed by the development,
12 such as the ability to construct public facilities or avoid hazardous conditions. According to
13 the city, that framework is more problematic when the identified “problem” involves an
14 alleged *legal* impediment that is beyond the local government’s jurisdiction or authority to
15 resolve. The city argues that the meaning of the Kingswood Heights CC&Rs, specifically
16 whether the CC&Rs prohibit the proposed secondary access, is a question of law or a mixed
17 question of law and fact that is within the jurisdiction of the circuit court, and will be
18 definitively resolved only if residents of the Kingswood subdivision invoke the circuit
19 court’s jurisdiction seeking to stop the proposed secondary access.² The city argues that its
20 interpretation of the CC&Rs will have no binding legal effect in any circuit court action, and
21 that it makes little sense to require the city to interpret the CC&Rs in the first instance.

22 Rather than require the local government to engage in a non-binding legal analysis to
23 resolve a question of law that the city has no authority to determine, the city recommends
24 that the obligation to evaluate “feasibility” should proceed differently than when the city is
25 evaluating technical or physical feasibility. According to the city, the local government

² The city notes that petitioners are not residents of Kingswood Heights subdivision, and do not have the ability to enforce the terms of the CC&Rs.

1 should only be required to “determine that the legal position is warranted by existing law or
2 is a nonfrivolous argument based on existing law.” City of Gresham’s Response Brief 10-11.
3 The city argues that such a test would be similar to the test that LUBA has applied when
4 local land use standards expressly require compliance with state agency requirements or that
5 the applicant secure a state agency permit. In those cases, the city argues, LUBA has held
6 that the local government is not required to establish that the state agency requirements can
7 in fact be satisfied. Instead, the local government need only determine that the necessary
8 agency permit is “available” and that the applicant is not precluded from obtaining such
9 agency permits as a matter of law. *Wetherell v. Douglas County*, 44 Or LUBA 745, 755-56
10 (2003); *Sam Miller v. City of Joseph*, 31 Or LUBA 472, 478 (1996); *Bouman v. Jackson*
11 *County*, 23 Or LUBA 628, 646-47 (1992).

12 We generally agree with the city that the *Meyer* and *Rhyne* feasibility analysis must
13 be applied somewhat differently when the “problem” identified at the first stage of a two-step
14 approval process is an alleged legal impediment to fulfilling a condition of approval
15 requiring facilities necessary for the proposed development, rather than a technical,
16 engineering or similar issue. In such circumstances, where neither the local government nor
17 LUBA have jurisdiction to resolve the legal question, and that legal question must be
18 resolved in a particular way to allow the condition to be fulfilled so that an applicable
19 approval standard will be satisfied, neither the local government nor LUBA need engage in a
20 detailed or definitive legal analysis. In our view, it is sufficient for the local government in
21 such circumstances to (1) adopt findings that establish that fulfillment of the condition of
22 approval is not precluded as a matter of law, and (2) ensure, in imposing the condition of
23 approval, that the condition will be fulfilled prior to final development approvals or actual
24 development.

25 Although we did not couch it in those terms, we applied a similar approach in a
26 recent case with very similar facts. In *Stoloff v. City of Portland*, 51 Or LUBA 560 (2006),

1 the city approved a residential subdivision based in relevant part on a finding that sanitary
2 sewer facilities were “available.” The petitioner argued that the proposed sewer facilities
3 required access to a sewer line on his property, and that the service provider did not own an
4 easement over petitioner’s property for that purpose. The hearings officer disagreed, finding
5 that the service provider’s easement over petitioner’s property allowed service to the
6 proposed development. In the alternative, the hearings officer found that the service provider
7 had the legal authority and ability to condemn easements necessary to serve the subject
8 property. On appeal to LUBA, the petitioner disputed both findings, arguing in relevant part
9 that the outcome of any condemnation proceeding was doubtful, because the petitioner
10 intended to challenge any such proceeding. We declined to review the merits of the parties’
11 dispute over the meaning and extent of the existing easement, because we affirmed the
12 hearings officer’s alternative disposition that even if the existing easement did not authorize
13 service, the service provider had the authority to condemn an easement:

14 “The parties argue at great length whether the existing easements and
15 applicable property law establish that the district has an easement over
16 petitioner’s property; however, that is not the issue before us. The issue is
17 whether PZC [Portland Zoning Code] 33.652.020A.1 is satisfied. It is well
18 established that, where there is conflicting evidence over whether an approval
19 criterion is satisfied or can be satisfied, a local government may either (1) find
20 that the approval criterion is satisfied, or (2) find that it is feasible to satisfy
21 the approval criterion and impose conditions necessary to ensure that the
22 criterion will be satisfied. *Rhyme v. Multnomah County*, 23 Or LUBA 442,
23 447 (1992). In this case, the hearings officer apparently did both—he found
24 that the district had an easement over petitioner’s property and also imposed a
25 condition that the district obtain an easement to provide sanitary service to the
26 subdivision. Thus, even if petitioner is correct that the existing easements do
27 not grant the district the ability to connect the proposed subdivision to the
28 existing line on petitioner’s property, the finding that the district will condemn
29 the easement if necessary is sufficient to demonstrate that it is feasible to
30 satisfy PZC 33.652.020A.1. If intervenors ultimately cannot satisfy the
31 condition of approval then they will not be able to develop the subdivision.”
32 50 Or LUBA at 565-66

33 We then distinguished our initial decision in the present appeal:

1 “It is true that, in [*Butte Conservancy*], we held that a condition of approval to
2 construct necessary access through an adjoining subdivision lot in itself did
3 not establish that such access was feasible when the legal right to construct
4 such access was disputed. However, unlike *Butte Conservancy*, the hearings
5 officer in the present case adopted findings and conditions of approval
6 sufficient to demonstrate that sanitary sewer service is feasible. Although
7 petitioner argues that he will challenge any condemnation proceeding, *Rhyne*
8 does not require absolute certainty, only a finding that compliance with
9 applicable criteria is feasible, and imposition of conditions necessary to
10 ensure compliance. The decision properly finds that PZC 33.652.020A.1 is
11 satisfied or can feasibly be satisfied through the imposition of conditions.” *Id.*
12 at 566.

13 Turning back to the present case, the city on remand took essentially the same
14 approach as the hearings officer in *Stoloff*. As in that case, we see no point in addressing the
15 parties’ arguments regarding the meaning of the Kingswood Heights CC&Rs, because for the
16 reasons set out below the city’s findings adequately demonstrate that it is feasible for the city
17 to condemn the disputed right-of-way, even if it is ultimately determined that the CC&Rs
18 prohibit use of the residential lot for that purpose.³ In other words, couched in the analysis
19 set out above, the city’s findings adequately establish that fulfillment of the condition of
20 approval is not precluded as a matter of law, and the city adequately ensured that the
21 condition will be fulfilled prior to final development approval.

³ Petitioners do not dispute the city’s finding that following a lawful condemnation the use of the property for an access road would not be subject to the CC&R restrictions. At oral argument, petitioners questioned whether condemnation is even theoretically possible, since intervenor owns the lot and presumably would dedicate (in fact is required to dedicate) the right-of-way to the local government with jurisdiction, in this case the county. We understand petitioners to suggest that condemnation is a last resort that is reached only if voluntary dedication or conveyance is not possible, and here, it is clear that intervenor is willing and indeed is required to dedicate or convey the right-of-way. We further understand petitioners to argue that if the right-of-way is dedicated or conveyed in some manner rather than via eminent domain, then the CC&R restrictions would continue to apply to dedicated property. Because condemnation will likely never occur, we understand petitioners to argue, the theoretical possibility of employing eminent domain to avoid the CC&R restriction fails to establish that it is “feasible” to fulfill the condition of approval.

Petitioners are probably correct that the city’s exercise of eminent domain is unlikely. However, the city has adequately demonstrated that it has the legal authority to condemn the disputed right-of-way and thus avoid the legal impediment identified by petitioners. That demonstration is sufficient to satisfy the feasibility requirement of *Meyer* and *Rhyne*, as construed here, even if the city is unlikely in fact to ever exercise that condemnation authority.

1 **B. Condemnation Authority**

2 Petitioners concede that ORS 223.930 grants the city the authority to condemn
3 property outside city limits to acquire a street right-of-way.⁴ However, petitioners argue that
4 the city’s authority under ORS 223.930 is subject to two express limitations. First,
5 petitioners argue that ORS 223.930(1) requires that the city, and not the land use applicant,
6 must construct the street. The city cannot rely on ORS 223.930 in the present case,
7 petitioners contend, because it is clear that intervenor and not the city will construct the
8 “roadway.”

9 Second, petitioners argue, that ORS 223.930(1) limits the city’s right to condemn
10 under that statute to “roadways” as defined by the Oregon Vehicle Code. According to
11 petitioners, the Oregon Vehicle Code definition of “roadway” and related definitions specify
12 that the right-of-way must be used or intended for use by the “general public.” See
13 ORS 801.450 (defining “roadway” as the “portion of a highway that is improved, designed or
14 ordinarily used for vehicular traffic”; and ORS 801.305 (defining “highway” in turn as a
15 public way, road, street, etc. that is “used or intended for use of the general public for
16 vehicles or vehicular traffic”). Because the emergency vehicle access can be accessed only
17 by emergency vehicles, petitioners argue, it is not open for “use of the general public” and
18 thus not a “highway” or “roadway.”

19 The city responds that it is common to require developers to construct public roads
20 necessary to serve the proposed development, and that ORS 223.930(1) does not limit the
21 city’s condemnation powers to public streets that the city directly constructs, improves,

⁴ ORS 223.930(1) provides, in relevant part:

“Any city may construct, improve, maintain and repair any street the roadway of which, as defined in the Oregon Vehicle Code, is along or along and partly without, or partly within and partly without the boundaries of the city and may acquire, within and without the boundaries of such city, such rights of way as may be required for such street by donation or purchase or by condemnation in the same manner as provided in ORS 223.005 to 223.105 * * *.”

1 maintains or repairs. We agree. ORS 223.930(1) does not explicitly require that the city
2 itself construct, improve, maintain or repair the roadway, in order to exercise the
3 condemnation authority.

4 With respect to public use of the proposed access road, the city explains that the
5 city's Future Street Plan contemplates a public local street between the subject property and
6 SE Yellowhammer, constructed to local street standards. The city chose not to require that
7 the access street be constructed to local street standards in this decision and opened to
8 general traffic, because it determined that streets within the Kingswood Heights subdivision
9 cannot handle the additional traffic from development on the subject property, and the
10 number of trips generated from the subject development could not justify requiring
11 intervenor to upgrade the Kingswood Heights streets. Consequently, the city argues, the city
12 required dedication of right-of-way necessary to construct code-required access for
13 emergency vehicles, with a condition requiring dedication of additional right-of-way upon
14 improvement to the streets within the Kingswood Heights subdivision.

15 According to the city, requiring such limited access does not mean that the access
16 street is not a "roadway" or "highway" as those terms are defined in the Oregon Vehicle
17 Code. The city contends that nothing in the relevant statutes or the Oregon Vehicle Code
18 requires unrestricted public access in order for the street to constitute a "roadway" as that
19 term is used in ORS 223.930(1). Once a right-of-way is acquired by a public entity with
20 road jurisdiction, the city argues, that entity has the broad authority to impose restrictions on
21 its use to protect the interests and safety of general public, including closing a public street to
22 travel except as needed for emergency access. The city argues that such a restricted public
23 street is as much a "roadway" for purposes of the relevant statutes as are unrestricted public
24 streets.

25 Finally, the city argues that even if ORS 223.930(1) does not authorize condemnation
26 in the present case, other statutes may. The city first cites to ORS 225.320 and 225.330,

1 which authorize condemnation of property within or without the city for “fire protection”
2 facilities. According to the city, the access road is intended to provide access for fire trucks
3 and alternative public evacuation routes in case of wildland fires, and thus would qualify as a
4 “fire protection” facility. Finally, the city cites to ORS 223.005, which grants the city broad
5 authority to appropriate any private real estate within or without city limits for “any public or
6 municipal use or for the general benefit and use of the people of the city[.]”

7 We agree with the city that under one statute or another the city likely has the
8 authority to condemn the disputed right-of-way, if that becomes necessary. Certainly,
9 petitioners have not demonstrated that any uncertainty with respect to the city’s
10 condemnation authority is such that it can be said that fulfillment of the condition of
11 approval requiring dedication and construction of the access road is precluded as a matter of
12 law. The city appropriately drafted that condition in a manner that is sufficient to ensure that
13 fulfillment of the condition will occur prior to final development approval. If for one reason
14 or another the condition is unsatisfied, intervenor will not be able to obtain final subdivision
15 approval. We do not understand *Meyer, Rhyne* or *Stoloff* to require more, under the present
16 circumstances.

17 The first assignment of error is denied.

18 **SECOND ASSIGNMENT OF ERROR**

19 City of Gresham Community Development Code (CDC) 5.0232 provides that “[a]ny
20 removal of trees which would result in clear cutting is prohibited on land within the
21 [HPCD].”⁵ Similarly, CDC 9.1010(F) provides that “[a]ll tree removal that would result in
22 clear cutting on slopes in excess of 15% is prohibited.” CDC 3.0010 defines “clear cutting”
23 as:

24 “Any tree removal which leaves fewer than an average of one tree per 1,000 square
25 feet of lot area, well-distributed throughout the entirety of the site. * * *”

⁵ CDC 5.0232 has since been amended or deleted.

1 CDC 9.1011 requires the applicant for tree removal to submit a tree survey of regulated
2 and/or significant trees on site. Further, the code defines “tree survey” as a “drawing that
3 provides the location of all trees” of a prescribed diameter. Intervenor initially presented a
4 tree survey based on a one-acre sample of the subject property, and the city accepted that
5 survey. We remanded the city’s initial decision, however, concluding that under the above
6 code definitions and provisions the county erred in determining that proposed development
7 did not involve “clear-cutting” based on a one-acre sample rather than a survey of all trees on
8 the property.

9 On remand, intervenor submitted a survey depicting all trees on the subject property,
10 and an analysis indicating that removal of the proposed 1800 trees for roads and utilities
11 would leave approximately 1.07 trees per 1,000 square feet of gross site area. The city
12 accepted that survey and analysis. Petitioners argued below, and argue on appeal, that
13 intervenor’s analysis erroneously considers only trees removed for roads and utilities, and
14 fails to consider trees that will be removed in the buildable area of individual lots for
15 dwellings. The city adopted findings responding that (1) petitioners could have but failed to
16 raise this issue in the previous appeal, and therefore the issue is waived, and (2), in any case,
17 the CDC requires consideration only of trees that must be removed for the development
18 proposed, not subsequent development authorized under individual building permits, which
19 are separately governed by CDC 9.1010(B).⁶ Petitioners challenge both findings.

⁶ The city’s findings state, in relevant part:

“* * * The removal of any trees for purposes of building specific homes within the proposed subdivision is not to be included in determining whether the Applicant’s development will result in a ‘clear cutting.’ The removal of any trees for a home is not authorized by approval of this Application and is subject to CDC 9.1010(B) when a building permit is sought. * * *

“* * * The Appellants did not raise the issue of including tree removal from individual homes sites at LUBA. The LUBA remand required a tree survey of the entire site. The tree survey of the entire site establishes that more trees will remain after the tree removal than was estimated by the original sample tree survey. The tree survey of the entire site supports the original decision that approval of this Application does not result in clear cutting. Not having

1 We need not resolve the issue of waiver, because we agree with the city and
2 intervenor that the CDC does not require intervenor to consider trees that will not be
3 removed under the proposed development—the PUD—but may be removed under
4 subsequent individual building permits for lots created by that PUD.

5 As the city and intervenor point out, nothing in the CDC requires a PUD applicant to
6 identify specific building pads or envelopes for lots created by the PUD approval. Under
7 petitioners’ reading of the code, the PUD applicant and city would be required to guess
8 where building pads and envelopes would be proposed on individual lots, in order to
9 determine which and how many trees are likely to be removed pursuant to future, individual
10 building permits. Instead, CDC 9.1010(B)(2) appears to contemplate that such tree removals
11 are evaluated at or following the time when individual building permits are applied for.⁷

12 Petitioners argue that the city misconstrues CDC 9.1010(B)(2) to allow tree removal
13 for individual building sites to be evaluated at the time a building permit is sought. While
14 that construction of CDC 9.1010(B)(2) may be the rule outside the HPCD, petitioners argue
15 that CDC 9.1010(E) clarifies that where the HPCD applies, removal of regulated trees
16 requires a Type II development permit, and cannot be approved as part of a mere building

raised the issue of tree removal from individual home sites at LUBA, Appellants have waived any opportunity to raise the issue now.” Record 15 (underline in original; footnote omitted).

⁷ CDC 9.1010(B) provides, in relevant part:

“Removal of Regulated Trees: Removal of Regulated Trees as defined in Section 3.0010 shall be reviewed under Type II procedures for compliance with the standards of Sections 9.1010-9.1012,

“* * * * *

“(2) Regulated trees located within 10 feet of the outer edge of the outline of a proposed single family residence or related site improvements may be removed without a separate or additional development permit after issuance of the building permit for the proposed residence. When additional trees are to be protected on the site outside the building envelope, a tree protection plan as approved by the City shall accompany the building plans and shall be enforced during all construction activities on the site. Mitigation in accordance with an approved mitigation plan for lost perimeter trees shall be completed or guaranteed prior to Final Inspection.”

1 permit.⁸ Thus, petitioners argue, outside HPCD zones tree removal may be authorized under
2 CDC 9.1010(B)(2) at the time of building permit approval, without obtaining a Type II
3 development permit, but within HPCD zones such tree removal requires a Type II
4 development permit.⁹

5 Petitioners may be correct that CDC 9.1010(E) would require a Type II development
6 permit for tree removal to site dwellings on individual lots within the HPCD zone, but
7 petitioners do not explain why CDC 9.1010(E) or any other code provision compels that such
8 future tree removals be evaluated as part of a PUD application seeking a tree removal permit
9 that does not propose removing any trees to site dwellings on individual lots. Petitioners
10 may also be correct that the city's interpretation of CDC 9.1010 to effectively allow
11 piecemeal cutting of regulated trees over a series of applications may undercut the
12 prohibition on "clear cutting."¹⁰ However, that there may be loopholes that undercut the
13 "clear-cutting" prohibition does not mean that the city's interpretation is subject to reversal

⁸ CDC 9.1010(E) provides:

"Tree Removal in Overlay Districts: Except as provided below, no removal of regulated trees shall be permitted within a Hillside Physical Constraint, Flood Plain, or Natural Resource Overlay District without a Type II Development Permit."

⁹ The city points out that CDC 9.1010(E) has since been amended to provide an exception for removal of regulated trees within 10 feet of the outer edge of the outline of a proposed single family residence or related site improvements, so that such tree removals no longer require a Type II Development Permit. The city argues that any building permit/tree removal applications for individual lots within the subdivision will be governed by the amended CDC 9.1010(E), and therefore petitioners' arguments under former CDC 9.1010(E) are essentially moot. It seems unlikely to us that if the CDC in effect at the time of the challenged PUD/tree removal permit required evaluation of trees to be removed for dwellings, subsequent amendments to the CDC would moot a challenge that the city failed to conduct that required evaluation. However, we need not address that argument, because we agree with the city that nothing in CDC 9.1010 or elsewhere cited to us requires that the city determine *in this decision* which and how many trees will be removed for dwellings.

¹⁰ The city also points out that Condition of Approval 6(c), a condition imposed in the city's initial decision and not challenged by petitioners, requires that the CC&Rs for the subdivision include a restriction against removing regulated trees on individual lots where the result would leave fewer than one tree per 1,000 square foot of lot area. We understand the city to argue that that condition effectively ensures that development of individual lots will not run afoul the prohibition on "clear-cutting," as that prohibition is applied to applications to develop individual residential lots in the PUD.

1 under the deferential scope of review we must apply to a governing body's code
2 interpretation under ORS 197.829(1).¹¹

3 The fact remains that nothing in CDC 9.1010 compels the applicant for a tree removal
4 permit necessary to site roads and utilities for a proposed PUD or subdivision to take into
5 account trees that may have to be removed in subsequent development applications to site
6 and build houses on individual lots on that same property. Because it is difficult if not
7 impossible in the context of PUD approval to determine which trees and how many trees will
8 be removed when individual PUD lots are developed, such a requirement would be
9 unworkable, even if there were a basis in the code for an implicit requirement to that effect.
10 The city's code interpretation declining to infer such a code requirement is well within the
11 city's interpretative discretion under ORS 197.829(1).

12 The second assignment of error is denied.

13 The city's decision is affirmed.

¹¹ ORS 197.829(1) provides, in relevant part:

“[LUBA] shall affirm a local government's interpretation of its comprehensive plan and land use regulations, unless the board determines that the local government's interpretation:

- “(a) Is inconsistent with the express language of the comprehensive plan or land use regulation;
- “(b) Is inconsistent with the purpose for the comprehensive plan or land use regulation;
- “(c) Is inconsistent with the underlying policy that provides the basis for the comprehensive plan or land use regulation[.]”

Appeal Testimony re PDT 13-1

August 31, 2015

Eugene Planning Commission
c/o Gabe Flock, Planner
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

RECEIVED

AUG 31 2015

CITY OF EUGENE
BUILDING & PERMIT SVCS

Submitted by: Paul Conte
1461 W. 10th Ave., Eugene, OR 97402

RECEIVED AFTER PUBLIC HEARING
BUT PRIOR TO CLOSE OF RECORD

Re: City File No. PDT 13-1; Oakleigh PUD
Opposition to Hearings Official Decision

Dear Commissioners:

On August 17, 2015, the Planning Commission voted to re-open the record for new evidence and arguments.

Notwithstanding the adopted motion, ORS 197.763(7) requires:

“When a local governing body, planning commission, hearings body or hearings officer reopens a record to admit new evidence, arguments or testimony, any person may raise new issues which relate to the new evidence, arguments, testimony or criteria for decision-making which apply to the matter at issue.”

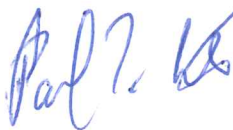
I have attached a copy of the request I submitted on August 20, 2015.

This letter provides my testimony.

Attached you will find the specs for older fire apparatus. Note that even these older trucks are 9 to 10 feet wide. Accordingly, two of these trucks cannot safely pass one another on Oakleigh Road, thereby putting at risk residents and fire fighters.

Therefore the OMC PUD application fails to meet EC 9.8320(5) and (6), and this application must be denied.

Respectfully,



Paul T. Conte

**Request to Submit Testimony re PDT 13-1
and Precautionary Objections**

August 20, 2015

Eugene Planning Commission
c/o Gabe Flock, Planner
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

Submitted by: Paul Conte
1461 W. 10th Ave.
Eugene, OR 97402

Re: City File No. PDT 13-1; Oakleigh PUD
Testimony for re-opened record

Dear Commissioners:

I am requesting to be allowed to submit testimony, including evidence and argument, into the record for the above mentioned case.

On August 17, 2015, the Eugene Planning Commission (EPC) voted to re-open the record. However, the EPC limited who could submit testimony to the applicant, Simon Trautman, and their respective representatives.

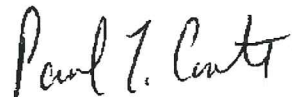
ORS 197.763(7) requires:

When a local governing body, planning commission, hearings body or hearings officer reopens a record to admit new evidence, arguments or testimony, any person may raise new issues which relate to the new evidence, arguments, testimony or criteria for decision-making which apply to the matter at issue. (Emphasis added.)

Allowing the applicant and Mr. Trautman to submit additional evidence and argument without also allowing me and other participants in this matter to submit testimony would be unfair and prejudice my substantial rights.

As a precautionary measure, I am objecting to the EPC rejecting my forthcoming testimony, including new evidence submitted by August 31, 2015 and arguments submitted by the deadline set by the EPC.

Respectfully submitted,






Paul Conte

Apparatus Dimensions

The following table lists the dimensions for fire apparatus by class. The Department has four pumpers, one pumper/ladder truck, an aerial platform and five ambulances. The dimensions in the table represent the largest dimension of the trucks.

The pumpers and the aerial have bumpers that extend at least 18" beyond the front of the truck and require additional clearance in a turn. Steep grades require special consideration. The angle of departure is reduced by the length of the overhang (distance from the axle to the front and rear bumpers).

	Pumper	Aerial Platform	Ambulance
			
Overall Length	32'	48'	24' 6"
Overall Width	9' 9"	10' 0"	9'
Height	9' 6"	12' 0"	9' 4"
Wheelbase	16'9"= 201"	21'4"= 256"	14'2"= 170"
GVW	41,000	69,100	20,000
Front Axle	16,500	21,500	8,000
Rear Axle	24,000	47,600 (tandem axle)	13,500
Cramp Angle	33°	34°	50°
S.A.E. Turning Radius	35' 10"	49' 9"	24' 8"
Bumper Swing Clearance	40' 6"	51' 9"	25' 7"
Minimum Inside Turning Radius	24' 6"	44' 9"	
Rear Wheel Base	8.1'	8.2'	7.85'
Rear Tire Width	2'	2.1'	1.5'
Interior Rear Wheel Width	4.1	4	4.85
Front Wheel Base	8.1'	8.1'	7.6'
Front Tire Width	1.2'	1.3'	0.9'
Interior Front Wheel Width	5.7'	5.5'	5.8'
Ground clearance	11"		5"
AASHTO Equivalent Design Vehicle	Single Unit Truck (SU)	Intercity Bus (BUS-14[BUS-45])	Single Unit Truck (SU)



**Hutchinson
Cox** Attorneys

Received

AUG 31 2015

City of Eugene
Planning Division

Attorney
ZACK P. MITTGE
zmittge@eugenelaw.com

Legal Assistant
GAIL C. CROSS
gcross@eugenelaw.com

August 31, 2015

VIA HAND DELIVERY and EMAIL

Eugene Planning Commission
c/o Senior Planner Gabriel Flock
99 West 10th Avenue
Eugene, Oregon 97401
Gabriel.flock@ci.eugene.or.us

RECEIVED AFTER PUBLIC HEARING
BUT PRIOR TO CLOSE OF RECORD

Re: Oakleigh Meadow Co-Housing/Traffic Safety (PDT 13-001)
Our Client: Oakleigh Meadow Co-Housing
Our File no: C1343D

Dear Commissioners:

In accordance with the open record sequence specified at the Planning Commission meeting on August 17, 2015, please find enclosed the following materials related to the issue of traffic safety on Oakleigh Lane:

1. An August 27, 2015 letter from Access Engineering to the Planning Commission.
2. An August 27, 2015 letter from Willard Dixon to the Planning Commission.
3. A May 15, 1998 Individual Warranty Deed from David M. Zarzycki to James P. Brandt and Sharon I. Brandt.
4. An April 23, 1998 Property Line Adjustment Deed from David Zarzycki to Joseph Minor and Carol Pound.
5. A July 14, 2009 Special Warranty Deed (Statutory Form) from Deutsche Bank National Trust Company to Lauren Regan.
6. Ten Photographs of Oakleigh Lane taken on Monday, August 17, 2015.

Please include these materials in the record of these proceedings.

Very truly yours,

HUTCHINSON COX

Zack P. Mittge

ZPM/gcc
Enclosures



Willard C. Dixon | Architect

August 27th, 2015

My name is Will Dixon and I've written this letter in response to some of the concerns that have been raised by Mr. Trautman concerning the blocking or obstruction of the paved street west of the Oakleigh Meadow Cohousing (OMC) project.

I am the Project Manager for OMC, as well as an OMC family member with my wife and two boys. We are residents of the River Road area of town, and have lived just a block away from the cohousing site for the past fifteen years.

My family and I have walked, driven, and ridden bikes up-and-down Oakleigh Lane countless times over the last fifteen years. The paved surface of the street has always been open to the public, and while people occasionally park on the shoulders of the road, I have never seen or encountered parking which blocked the road surface for vehicles.

Sincerely,

300 Blair Blvd., Eugene, OR 97402 • 541-689-3548 • www.willardcdixon.com



Access Engineering LLC

August 27, 2015

Planning Commissioners
c/o Gabe Flock, Planner
125 E. 8th Avenue, 2nd Floor
Eugene, OR 97401

RE: Oakleigh Meadow P.U.D. Co-housing Development

I am writing this letter in response to the traffic issues raised by Mr. Simon Trautman concerning the safety of Oakleigh Lane and in accordance with the open-record sequence specified at the Eugene Planning Commission meeting on Monday, August 17, 2015. This letter is a supplement to my Street Connectivity Study dated August 6, 2013, and my comments from September 27, 2013, and October 15, 2013. Please accept this letter and include the same in the record of these proceedings.

Oakleigh Lane is a dead-end local street that runs approximately 1000 feet east from the centerline of River Road. It is one of four consecutive streets that terminate at City parkland on the west bank of the Willamette River. The street has an oil-mat surface of approximately 20-feet in width, with no curbs and with intermittent gravel shoulders along both sides of the street that permits parking in some areas. As is common with other low-volume residential streets in Eugene, Oakleigh Lane allows unsegregated vehicular, pedestrian and bicycle access.

1. Impacts are Not Hazards

Comments submitted to the Planning Commission confuse traffic impacts with traffic hazards. No one disputes that the Oakleigh Meadow Co-Housing development will have traffic impacts. The development will generate some additional trips on Oakleigh Lane. However, additional trips do not mean an increased hazard. The Oakleigh Meadow development includes 28 dwelling units. The Ninth Edition of the Institute of Transportation Trip Generation Manual classifies this type of development as a "residential condominium/townhouse." The traffic impacts from the proposal would be just 168 average daily trips.

As a low-volume residential street, Oakleigh Lane can safely accommodate between 250 and 750 average daily trips. Combining traffic from Oakleigh Meadow with the 21 existing single-family homes on Oakleigh Lane, which are equivalent to 210 daily trips, the total would be 378 daily trips, well within the range for a low-volume residential street.

City Public Works comments do not identify any traffic hazard on Oakleigh Lane. Staff references to traffic impacts under its dedication findings for the halfstreet dedication and 13' foot wide public accessway on the OMC property frontage are common constitutional findings in support of the dedication. Since the PUD is the last opportunity for the City to obtain right-of-way from the OMC property, public works staff looked to the projected traffic impacts from the PUD to establish the rough proportionality of the property taken and the traffic impacts.

134 E. 13th Ave. Suite 2
Eugene, Oregon 97401
Phone & Fax
541-485-3215
info@accesseng.com

Transportation Engineering
Traffic Design
Trip Generation
Access Management
Traffic Counts
Street Lighting

2. Oakleigh Lane does not need to be improved to City standards to safely function.

Comments to the Planning Commission also confuse the issue of safety with the issue of street improvements. Oakleigh Lane is adequate to safely accommodate all existing and future trips. It has more than adequate capacity to handle the low traffic volume from the PUD. In addition, there is no crash history on Oakleigh Lane or at its intersection with River Road that would indicate any existing safety issue. I have reviewed crash records in the Oregon Department of Transportation (ODOT) Crash Reporting & Analysis Unit and City records as well, and find no reported crashes on Oakleigh Lane, McClure Lane, or at their intersections with River Road.¹

Oakleigh Lane's lack of improvement should not be confused with an inherently unsafe condition. Many streets in the City of Eugene, particularly in the River Road area, are similar to Oakleigh Lane, lacking sidewalks, curbs, or striping, and permitting unsegregated parking and travel by vehicles, pedestrians, or cyclists. These streets encourage slower and more cautious travel by drivers who are cognizant of the fact that they must share the road with other users. In fact, the City of Eugene uses a similar design mechanism of using a single travel lane on some low volume City streets – called a “queuing street” design² – and has found the same to be a safe and effective method to reduce travel speeds and pass-through trips for non-local travel. Oakleigh Lane is a dead-end street, with no pass-through trips to contend with, but the on-street parking and unsegregated travel can reasonably be expected to reduce travel speeds.

A concern has been raised regarding on street parking on Oakleigh Lane obstructing some portion of the improved street. Oakleigh Lane is not improved with curbs, allowing on-street parking on the shoulders of the paved portion of the street along most of its length. In addition, all of the homes on Oakleigh Lane have private driveways that would permit the parking or garages that will permit the parking of vehicles on the adjoining property. The PUD will likewise provide on-site parking for all of its members and their guests in excess of the City's minimum standards. Parking on the shoulder which incidentally obstructs a portion of the improved surface would not pose a safety issue as drivers would simply drive around the obstruction.

In addition, there is some speculation that neighbors could intentionally obstruct potentially as much as six feet of the improved street surface, leaving an improved travel surface of 13 feet along a 250-foot portion of the street. However, even assuming that only 13 feet of the street were available for travel by the public for 250 feet, this would be adequate to accommodate emergency vehicles, and two-way vehicle travel in the same fashion as a queuing street.

¹ In light of Mr. Trautman's testimony concerning his own accident at Marion Lane, I also had Public Works contact the City of Eugene Police Department to review the police report of that accident and to evaluate the factors (speed, driver error, etc) that may have played into the collision. Public Works staff reported that there is no record of an auto accident or collision at Marion Lane on the morning of May 19, 2011, or during the month of May, 2011.

² “On local residential streets with traffic volumes less than 750 vehicles per day, a single 14' traffic lane may be permitted for both directions of vehicular travel. The single lane is intended to create a 'queuing street', such that when opposing vehicles meet, one of the vehicles must yield by pulling into a vacant portion of the adjacent parking lane. This queuing effect has been found to be an effective and safe method to reduce speeds and non-local traffic.” Arterial and Collector Street Plan, Appendix H, p. 36

The problem with excessive parking on both sides of the Oakleigh Lane pavement is that it could require a fire truck to have to back down the street upon leaving the site. Fortunately the Oakleigh Meadow development will dedicate right of way to allow an emergency vehicle turnaround to be constructed in the future when the street is improved and will provide a wide driveway access and turnaround in the site parking area until the street is improved.

In closing, crash records show that there is no history of safety problems on Oakleigh Lane. Parking along Oakleigh Lane can act as a traffic calming feature. Parking on both sides creates a "queuing street" where opposing vehicles take turns passing between the parked vehicles. It is my professional opinion that the proposed Oakleigh Meadow development will not create unsafe conditions on Oakleigh Lane.

Yours very truly,



RENEWS 6/30/16

Michael Weishar, PE
Access Engineering LLC

INDIVIDUAL WARRANTY DEED

WPT 144585
10-47346

10-
10-
20-

TAX ACCT. NO. 983898
MAP NO. 17 04 24 24 10100

9839830

DAVID M. ZARZYCKI, an individual, Grantor,
conveys and warrants to
JAMES P. BRANDT and SHARON I. BRANDT, husband and wife, as tenants by the
entirety, Grantees,
the following described real property situated in LANE County, OR, free of
encumbrances except as specifically set forth herein, to-wit:

SEE EXHIBIT A WHICH IS MADE A PART HEREOF BY THIS REFERENCE
This conveyance is subject to and excepts:
RIGHTS OF THE PUBLIC IN STREETS, ROADS AND HIGHWAYS, COVENANTS, CONDITIONS,
RESTRICTIONS, RESERVATIONS, EASEMENTS OF RECORD.

The true consideration for this conveyance is \$20,000.00.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT
IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR
ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY
SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY
APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST
PRACTICES AS DEFINED IN ORS 30.930.

DATED: 05/13/1998

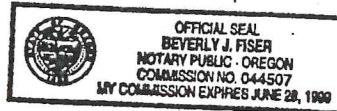
David M. Zarzycki
DAVID M. ZARZYCKI

6601MAY.22'98#08REC 10.00
6601MAY.22'98#08PFUND 10.00
6601MAY.22'98#08A&T FUND 20.00

STATE OF OREGON)
) ss.
County of LANE)

This instrument was acknowledged before me on May 15th, 1998 by DAVID
M. ZARZYCKI

Beverly J. Fiser
Notary Public of Oregon
My commission expires: 06-28-99



Until a change is requested, all tax statements shall be sent to the following
address: 248 S.W. Chandler Drive, Roseburg OR 97470

After recording return to:
Western Pioneer Title Co., P. O. Box 10146, Eugene, OR 97440

Our No. 144585-MR

EXHIBIT "A"

Beginning at the initial Point of the Plat of Oakleigh, as platted and recorded at Page 32 of Volume 9, Lane County Oregon Plat Records; thence South 88° 11' 00" East 790.91 feet along the South line of said plat to the true point of beginning; thence South 88° 11' 00" East 102.73 feet along the South line of said plat to a point; thence South 01° 49' 00" West 72.26 feet; thence North 88° 11' 00" West 102.73 feet along a line parallel to the South line of said plat to an iron pipe; thence North 01° 49' 00" East 72.26 feet to the true point of beginning, in Lane County, Oregon.

State of Oregon
County of Lane — ss.

I, the County Clerk, in and for the said
County, do hereby certify that the within
instrument was received for record at

'98 MAY 22 PM 4:06

Reel **2422R**

Lane County OFFICIAL Records
Lane County Clerk

By: David S. Surhan
County Clerk

Send tax statements to:
David Zarzycki
131 McClure Lane
Eugene, OR 97404

9831612

After recording return to:
David Zarzycki
131 McClure Lane
Eugene, OR 97404

PROPERTY LINE ADJUSTMENT DEED

3834APR.28°98#07REC 15.00
3834APR.28°98#07PFUND 10.00
3834APR.28°98#07A&T FUND 20.00

15
10
20

The parties to this transfer are: David Zarzycki (Tract 1) and Joseph Minor and Carol Pound (Tract 2).

Recitals:

A. The purpose of this agreement is to adjust the common property line between the adjoining tracts of land.

B. Tract 1 (David Zarzycki property) is described in a Warranty Deed recorded May 7, 1982, Reel 1191R, Instrument No. 8213424 Official Records of Lane County, Oregon and Tract 2 (Joseph Minor and Carol Pound property) is described in a Warranty Deed recorded June 23, 1983, Reel 1250R, Instrument No. 8321351, Official Records of Lane County, Oregon.

C. In adjusting the property line common to both tracts of land, it is intended that a portion of Tract 1 (David Zarzycki property), as described in Exhibit A, be conveyed and added to Tract 2 (Joseph Minor and Carol Pound property), described in Exhibit B. It is also intended that the new description for Tract 2 (as found in Exhibit D) contain this portion of property.

Agreements: A. For the purpose of accomplishing this Property Line Adjustment, both parties have agreed as follows:

1. The foregoing recitals are by this reference incorporated herein.
2. To effectuate the relocation of the common property line, it is agreed that the tract of property described in Exhibit C contains the new description for Tract 1 (David Zarzycki property) and the tract of property described in Exhibit D contains the new description for Tract 2 (Joseph Minor and Carol Pound property). David Zarzycki, does hereby grant and convey to Joseph Minor and Carol Pound such portions of his property that results in Joseph Minor and Carol Pound owning in fee the newly described Tract 2.
3. This instrument is being recorded to establish a new property line by the owners in fee and the consideration for this conveyance is \$ 0.00.
4. The adjusted portion of the Zarzycki property to be added to the Minor and Pound property is underlined in the attached Exhibits C and D.
5. In event that any deed, instrument, or other act is necessary to complete the intent of the parties as described in this document, each party hereby irrevocably appoints and designates the other(s), or the successors in interest, as their attorney(s) in fact, to convey, execute, or transfer any deed or other document necessary or helpful to fulfill this agreement and the intent of the parties.

This instrument will not allow use of the property described in this instrument in violation of applicable land use laws and regulations. Before signing or accepting this instrument, the person or persons acquiring fee title to the property should check with the appropriate city or county planning department to verify approved uses and to determine any limits on lawsuits against farming or forest practices as defined in ORS 30.930.

PROPERTY LINE ADJUSTMENT DESCRIPTIONS

EXHIBIT A

DAVID ZARZYCKI PROPERTY
TAX LOT 17-04-24-24-10100

9831612

BEFORE ADJUSTMENT per Reel 1191, Inst. No. 8213424, Lane County Official Records

Beginning at an iron pipe found marking the Initial Point of the plat of Oakleigh, as platted and recorded at Page 32 of Volume 9, Lane County Oregon Plat Records; thence East 769.0 feet along the South line of said plat to the true point of beginning; thence East 125.0 feet along the South line of said plat to a point; thence South 12.0 feet to an iron pipe; thence South 60.3 feet to an iron pipe; thence West 125.0 feet along a line parallel to the South line of said plat to an iron pipe; thence North 60.3 feet to an iron pipe; thence North 12.0 feet to the true point of beginning, in Lane County, Oregon.

EXHIBIT B

JOSEPH MINOR AND CAROL POUND PROPERTY
TAX LOT 17-04-24-24-5800

BEFORE ADJUSTMENT per Reel 1250, Inst. No. 8321351, Lane County Official Records

Beginning at a point on the North line of a 24.0 foot reserved roadway, said beginning point being 575.1 feet East of a point 365.94 feet North 17°00' West of a point 4843.4 feet East of the Southwest corner of the Benjamin Davis Donation Land Claim No. 45, and running thence North 435.5 feet; thence East 60.0 feet; thence South 435.5 feet; thence West 60.0 feet to the place of beginning, in Section 24, Township 17 South, Range 4 West of the Willamette Meridian, in Lane County, Oregon.

Also: That portion of the North 12.0 feet of the roadway on the South adjacent to the above described property, in Lane County, Oregon.

EXHIBIT C

DAVID ZARZYCKI PROPERTY
TAX LOT 17-04-24-24-10100

AFTER ADJUSTMENT

Beginning at the Initial Point of the plat of Oakleigh, as platted and recorded at Page 32 of Volume 9, Lane County Oregon Plat Records; thence South 88°11'00" East 790.91 feet along the South line of said plat to the true point of beginning; thence South 88°11'00" East 102.73 feet along the South line of said plat to a point; thence South 01°49'00" West 72.26 feet; thence North 88°11'00" West 102.73 feet along a line parallel to the South line of said plat to an iron pipe; thence North 01°49'00" East 72.26 feet to the true point of beginning, in Lane County, Oregon.

EXHIBIT D

JOSEPH MINOR AND CAROL POUND PROPERTY
TAX LOT 17-04-24-24-5800

AFTER ADJUSTMENT

Beginning at a point on the North line of a 24.0 foot reserved roadway, said beginning point being 575.1 feet South 88°08'26" East of a point 366.17 feet North 15°06'48" West of a point 4825.96 feet South 88°08'26" East of the Southwest corner of the Benjamin Davis Donation Land Claim No. 45, and running thence North 01°15'34" East 438.71 feet; thence South 88°11'00" East 37.73 feet; thence North 01°49'00" East 72.26 feet; thence South 88°11'00" East 22.27 feet; thence South 01°49'00" West 72.26 feet; thence South 01°51'34" West 438.75 feet; thence North 88°08'26" West 60.00 feet to the place of beginning, in Section 24, Township 17 South, Range 4 West of the Willamette Meridian, in Lane County, Oregon.

Also: That portion of the North 12.0 feet of the roadway on the South adjacent to the above described property, in Lane County, Oregon.

9831612

State of Oregon
County of Lane — ss.
I, the County Clerk, in and for the said
County, do hereby certify that the within
instrument was received for record at

'98 APR 28 PM 3:30

Reel **2412R**

Lane County OFFICIAL Records
Lane County Clerk

By: *Donal S. Suchan*
County Clerk

AFTER RECORDING RETURN TO
FIDELITY NATIONAL TITLE INSURANCE
COMPANY OF OREGON
800 WILLAMETTE ST., #500
EUGENE, OR 97401

Division of Chief Deputy Clerk
Lane County Deeds and Records

2009-040451



\$51.00

01088429200900404510020022

07/14/2009 11:39:17 AM

RPR-DEED Cnt=1 Stn=6 CASHIER 07
\$10.00 \$20.00 \$11.00 \$10.00

RECORDING REQUESTED BY:
Fidelity National Title Company of Oregon
GRANTOR'S NAME:
Deutsche Bank National Trust Company, as
Trustee for Long Beach Mortgage Loan Trust
2004-1, Asset Backed Certificates, Series 2004-1
GRANTEE'S NAME:
Lauren C. Regan
SEND TAX STATEMENTS TO:
Lauren C. Regan
160 Oakleigh Ln.
Eugene, OR 97404
AFTER RECORDING RETURN TO:
Lauren C. Regan
160 Oakleigh Lane
Eugene, OR 97404 Escrow No.
20090012229-FTPOR03

SPACE ABOVE THIS LINE FOR RECORDER'S USE

SPECIAL WARRANTY DEED - STATUTORY FORM
(INDIVIDUAL or CORPORATION)

Deutsche Bank National Trust Company, as Trustee for Long Beach Mortgage Loan Trust 2004-1, Asset Backed Certificates, Series 2004-1, Grantor, conveys and specially warrants to Lauren C. Regan,

Grantee, the following described real property free and clear of encumbrances created or suffered by the grantor except as specifically set forth below:

SEE LEGAL DESCRIPTION ATTACHED HERETO

ENCUMBRANCES:

Rights of the public and governmental agencies in and to any portion of said land lying within the boundaries of streets, roads, and highways.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007.

The true consideration for this conveyance is \$156,000.00

Dated 07/15/09, if a corporate grantor, it has caused its name to be signed by order of its board of directors.

Deutsche Bank National Trust Company, as
Trustee for Long Beach Mortgage Loan Trust
2004-1, Asset Backed Certificates, Series 2004-1

BY: J. Lynn Burrow
J. LYNN BURROW
ASSISTANT VICE PRESIDENT

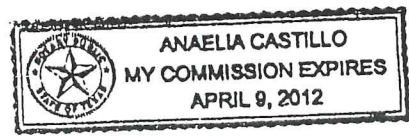
LITTON LOAN SERVICING, LP
ATTORNEY-IN-FACT

State of Tx
County of TARRANT

This instrument was acknowledged before me on 4/15/09 by
J. LYNN BURROW Attorney in fact
as Authorized Signatory of _____

[Signature]

, Notary Public - State of Oregon
My commission expires: Tx



09-9909 2/3

EXHIBIT "A"

Beginning at an iron pipe found marking the initial point of the PLAT OF OAKLEIGH, as platted and recorded at Page 32, Volume 9, Lane County Oregon Plat Records; thence East 644.0 feet along the South line of said plat to the true point of beginning; thence East 125.0 feet along the South line of said plat to a point; thence South 72.3 feet to a point; thence West 125.0 feet along a line parallel to the South line of said plat to a point; thence North 60.3 feet to a point marked by an iron pin; thence North 12.0 feet to the true point of beginning, in Lane County, Oregon.

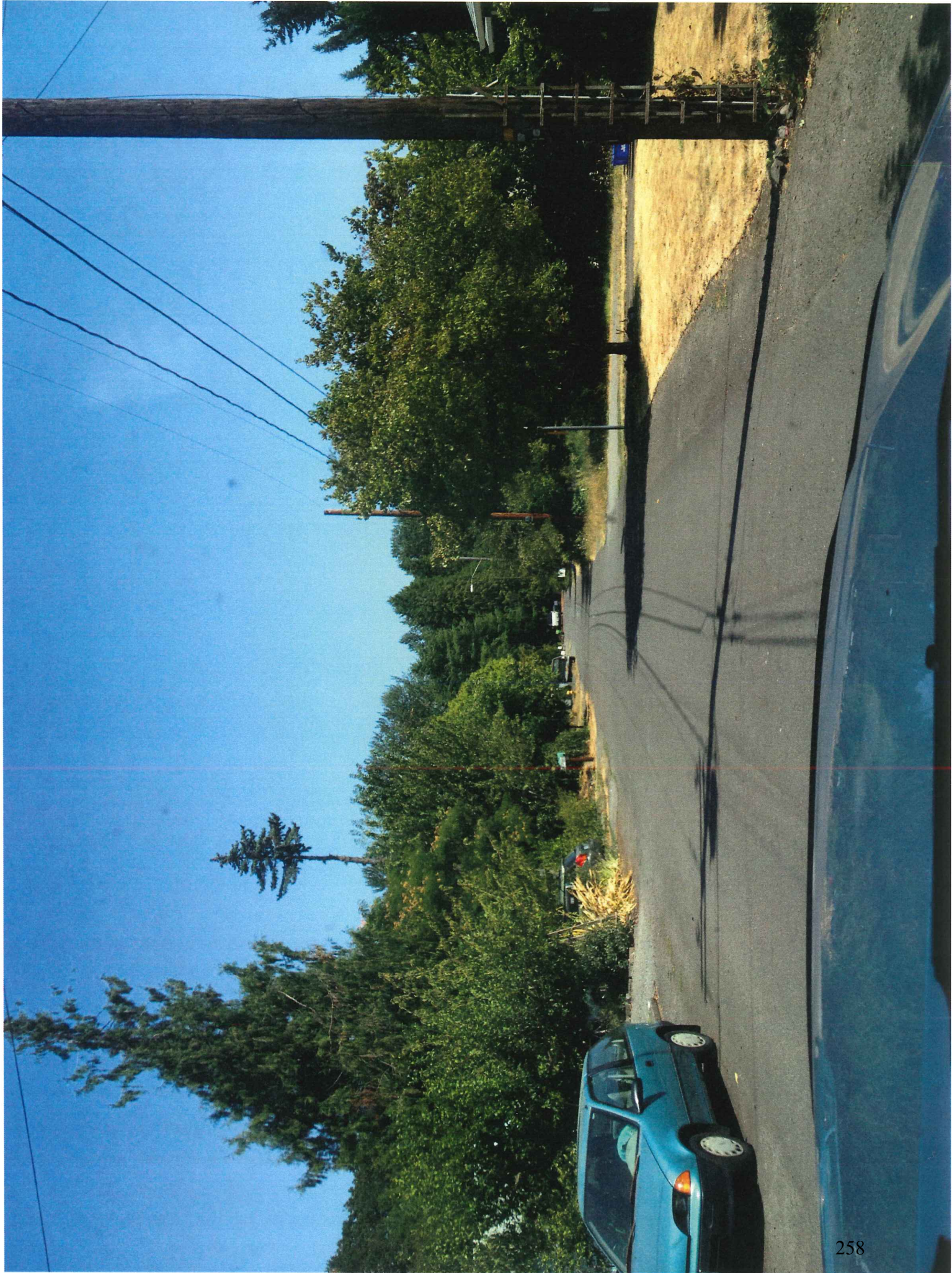
ALSO: Beginning at an iron pipe marking the initial point of PLAT OF OAKLEIGH, as platted and recorded at Page 32, Volume 9, Lane County Oregon Plat Records; thence East 644.0 feet along the South line of said plat; thence South 72.3 feet to the true point of beginning; running thence East 87.6 feet; thence South 89.62 feet; thence West 74.24 feet; thence North 7° 30' West 90.4 feet to the true point of beginning, in Lane County, Oregon.

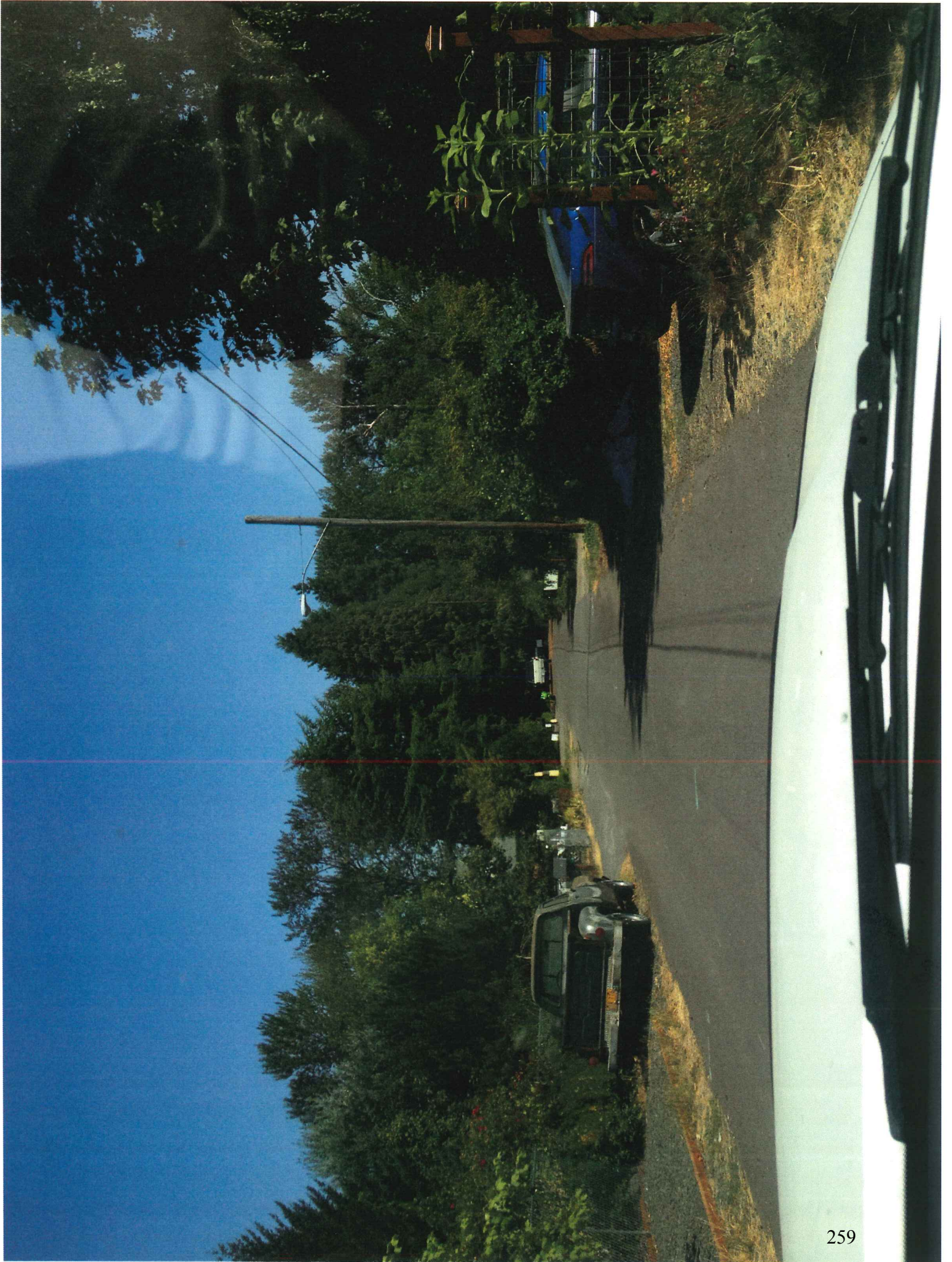




















Appeal Testimony re PDT 13-1

RECEIVED

SEP 04 2015

CITY OF EUGENE
BUILDING & PERMITS SVCS

September 4, 2015

Eugene Planning Commission
c/o Gabe Flock, Planner
City of Eugene
99 West 10th Avenue,
Eugene, OR 97401

RECEIVED AFTER PUBLIC HEARING
BUT PRIOR TO CLOSE OF RECORD

Submitted by: Simon Trautman

Send notices to: 2303 C Street, Bellingham, WA 98225

Re: City File No. PDT 13-1; Oakleigh PUD
Opposition to Hearings Official Decision

Dear Commissioners:

On August 17, 2015, the Planning Commission voted to re-open the record for new evidence and arguments.

The motion adopted by the Planning Commission set the following time limits:

- New evidence allowed through close-of-business on August 31st.
- Rebuttal arguments through close-of-business September 4th.
- Final applicant rebuttal through close-of-business September 11th.

The motion adopted by the Planning Commission allowed only the applicant and myself and our legal representatives to contribute new, written testimony.

The motion adopted by the Planning Commission limited the scope to right-of-way, pavement widths and parking, in relation to the safety of Oakleigh Lane.

Notwithstanding the adopted motion, ORS 197.763(7) requires:

“When a local governing body, planning commission, hearings body or hearings officer reopens a record to admit new evidence, arguments or testimony, any person may raise new issues which relate to the new evidence, arguments, testimony or criteria for decision-making which apply to the matter at issue.”

On August 31, 2015 I submitted written testimony accompanied by a CD and a resubmittal of my July 27, 2015 written testimony.

This letter provides further argument in response to the testimony submitted by the applicant’s representative during the re-opened period of the record through August 31, 2015.

ORS 197.763(6)(c) limits testimony during this response period through September 4, 2015 to “an opportunity to respond to new evidence submitted during the period the record was left open.” Testimony submitted after August 31, 2015 cannot contain new evidence. Testimony submitted after August 31, 2015 also cannot contain any argument that is not in response to the new evidence that was submitted on August 31, 2015.

To preserve my substantial procedural rights, I am stating a precautionary objection if the applicant, city staff person or any other party submits new evidence or argument that is not compliant with ORS 197.763(6) and (7).

AN ESSENTIAL TEST

Before the Planning Commission can lawfully and in good conscience approve this application, you must – at the very least – be able to answer affirmatively the following question:

Does our decision ensure that a fire truck will be able to make it to the proposed development site without requiring that the fire truck or an oncoming vehicle has to back up to a point that allows the fire truck to advance to and onto the site?

This question, of course, is not the only question the Planning Commission must answer. However, it offers a good litmus test for whether Oakleigh Lane is safe and adequate.

UNRELIABLE TRAFFIC “ANALYSIS”

As covered in full detail below, the August 27, 2015 letter from Michael Weishar of Access Engineering contains so many errors, omissions and false and misleading information that the letter’s conclusions are wholly unreliable.

The conclusions in this letter are also inconsistent with Eugene Fire Code and the locally adopted street standards in the Eugene Land Use Code

The conclusions in this letter are also inconsistent with the analysis and recommendations of major organizations concerned with traffic safety, including Oregon Department of Transportation (ODOT), the National Fire Protection Association (NFPA) and the federal Occupational Safety & Health Administration (OSHA).

DIXON’S ANECDOTAL LETTER CHANGES NOTHING

The August 27, 2015 letter from Willard Dixon simply claims that he and his family have used some portions of Oakleigh Lane, which I believe is true, but which in and of itself has no immediate relevance to the findings in this case.

He anecdotally reports that he hasn’t observed that the road surface was “blocked” by parked cars. That wouldn’t be surprising if what he means is that he never saw cars blocking the street so completely that no other *car* could pass. However, my argument is in no way based on cars completely blocking the street.

Dixon’s letter does not appear to dispute that cars do park on the Oakleigh Lane pavement and on the gravel on the north side of the right of way. Examples of both of these cases appear in

photos at LUBA Rec 682 and 683. A couple cases even appear to be captured in the photographs submitted by the applicant on August 31, 2015.

The three video files included in my August 31, 2015 testimony also show substantial presence of legally-parked cars.

Further, as the August 25, 2015 letter from Lauren Regan attests, residents do park (legally) on the pavement that's located on their own private property. (See Attachment I included with my August 31, 2015 testimony.)

Thus, Mr. Dixon's anecdotal testimony doesn't change the fact that parked cars do obstruct two-way traffic on Oakleigh Lane at different places and times, and there is nothing in the record that ensures this practice won't continue in the future.

ONE-TIME SNAPSHOTS AREN'T EVIDENCE OAKLEIGH LANE WOULD REMAIN UNOBSTRUCTED

My argument is not based on a claim that at every moment of every day parked cars obstruct Oakleigh Lane. The applicant's ten snapshots depict a common scenario during the middle of a weekday when the working families along Oakleigh Lane have driven their cars to their jobs.

This "evidence" might be germane to safety issues if residents could time house fires and heart attacks on the right days of the week and at the right time. The real world doesn't work that way, and the Eugene-Springfield Fire Department certainly doesn't base their safety standards and practices for emergency access on just responding during certain hours of the day or when conditions on the street are ideal.

The applicant's snapshots capture a few minutes of a single day – just one moment in time, and they're no more a basis for findings about Oakleigh Lane than Mr. Dixon's anecdotal observations.

The record already contains snapshots that show a different scenario with cars parked on the roadway. For example, see the four pictures at LUBA Rec 682 and 683. In addition, the two videos that I submitted on August 31, 2015, show Oakleigh Lane around noon on Sunday, August 30, 2015, when one of the residents on Oakleigh Lane was hosting a "fantasy football" party. See the following video files:

- 2015August30PedestriansBicyclistAndVehicleSharingTheOakleighLanePavement.mp4
- 2015August30TruckLeavingOakleighLaneResidence.mp4

My argument concerns events, such as a weekend party, that are not at all unlikely. What would happen, for example, if an Oakleigh Meadows Co-housing (OMC) resident had a heart attack at 7:30 a.m. on a weekday morning at a time when a number of cars remained parked along the 250-foot long choke point¹ and some of the other OMC residents were leaving the compound to drive down Oakleigh Lane and off to their jobs? When the emergency vehicle –

¹ The "choke point" is the 250-foot segment of Oakleigh Lane that has a 20-foot right of way and only approximately 14' to 16' feet of pavement in the public right-of-way. Note that only the third, fourth, fifth and sixth submitted photos submitted by the applicant appear to show the "choke point." The other photographs show stretches of Oakleigh Lane closer to River Road that have wider right-of-way.

which might be a large fire truck – came rushing up Oakleigh Lane towards the OMC and encountered the oncoming cars in the choke point – Who would back up, and how long would that emergency vehicle be delayed?

TWO DEAD HORSES AND A SKUNK IN THE ROOM

There were already three elephants, a gnat and a red-herring in the metaphorical room in which this process is unfolding.

In his letter of August 27, 2015, Michael Weishar throws two dead horses and a skunk into the mix.

The skunk in this case is Mr. Weishar's insinuation (in his Footnote 1) that I may have not been involved in an accident at the intersection of River Road and Oakleigh Lane. This suggestion is simply false; is another attack on my character; and echoes similar tactics used by the applicant in my first appeal.

As I'm sure commissioners understand, and as the Court of Appeals decision made clear, my character is not the issue before you. Continued attempts to undermine my credibility are not clever in the slightest, but instead are both irrelevant and insulting. Furthermore, I would gladly provide police call logs, accident photos, and insurance correspondence related to the accident if any commissioner would like proof of my statements.

Mr. Weishar's **first "dead horse"** is his attempt to portray Oakleigh Lane as a "queuing street."

Oakleigh Lane is not in any way configured as a "queuing street," according to city and ODOT descriptions. Oakleigh Lane lacks a reserved and designated parking/pull-in lane and sidewalks, as well as striping, curb markings and signage that are essential for a genuine "queuing street."

Therefore, Oakleigh Lane would not, in its current configuration, perform at all the way a properly configured "queuing street" would perform.

The only way that "queuing" will have an effect on Oakleigh Lane related to this decision is that emergency vehicles may be forced to wait in a "queue" when they encounter an oncoming vehicle. Yes, as the Hearings Official noted in his decision: "the queuing effect of having a single travel lane along Oakleigh Lane is likely to result in lower speeds." And that would include slowing down, and therefore delaying, emergency response. LUBA Rec 373.

By the way – Be sure to note that the Hearings Official himself seemed to acknowledge that there is "a single travel lane along Oakleigh Lane." Unfortunately, he drew the wrong conclusions from this fact.

It seems a shame that a professional traffic engineer would use his credentials to try to slip the ruse that Oakleigh Lane is a "queuing street" by the Planning Commissioners again, especially since this meritless argument had already been debunked in testimony before the Hearings Official. (See LUBA Rec 268.)

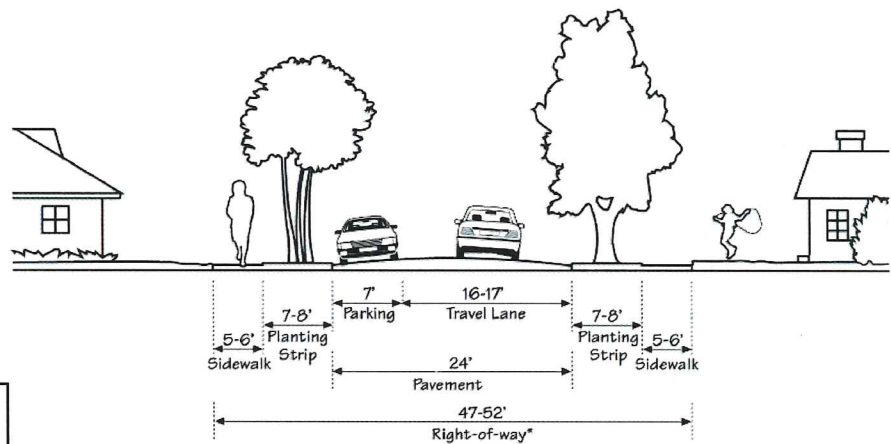
One more time, here is the accurate description of a "queuing street" from the *Eugene Arterial & Collector Street Plan* (LUBA Rec 886-894, excerpt from Rec 894):

2) On local residential streets with traffic volumes less than 750 vehicles per day, a single 14' traffic lane may be permitted for both directions of vehicular travel. The single traffic lane is intended to create a "queuing street", such that when opposing vehicles meet, one of the vehicles must yield by pulling into a vacant portion of the adjacent parking lane. This queuing effect has been found to be an effective and safe method to reduce speeds and non-local traffic.

Note in particular, that a "queuing street" must have a clearly-defined, separate parking lane to function safely.

The ODOT/DLCD
Neighborhood Street
Design Guidelines
(provided as Attachment
K with my August 31,
2015 testimony, see page
18) shows how a
minimal queuing street
would be configured.

24 Ft. Streets Parking on one side only



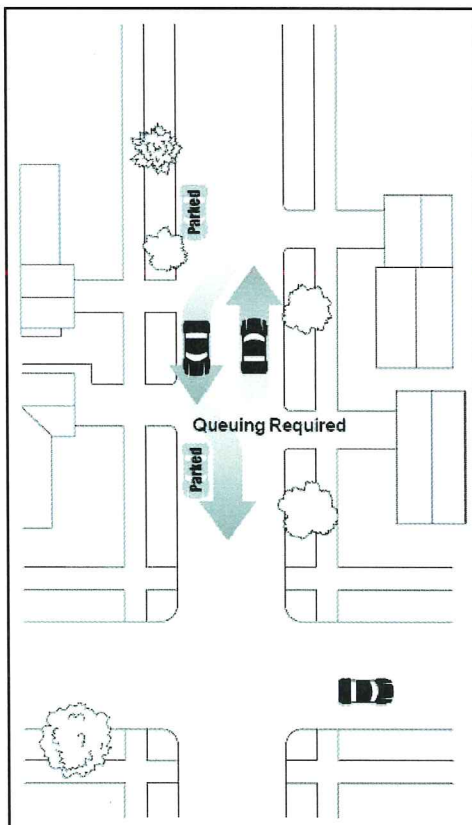
Note the 16'-17' Travel lane, with an additional 7' parking/pull-in area of pavement on one side. The required pavement for a queuing street is thus 23'-24' wide, much greater than Oakleigh Lane's pavement, particularly along the 250-foot "choke point."

A "queuing street" also does not force pedestrians to share the pavement with vehicular traffic; and, as the diagram above shows, the 47'-52' right-of-way provides room for separating pedestrian sidewalks from the roadway.

On the left is how a genuine queuing street would be configured and function (again, from page 18).

The reference cited by Mr. Weishar makes no explicit or implied claim whatsoever that a "queuing street" doesn't require sidewalks and can safely *force* pedestrians to walk in the street, as Oakleigh Lane does.

Oakleigh Lane clearly does not meet the standards for a safe "queuing street," and thus the "queuing effect" is wholly irrelevant to this case unless the Planning Commission would choose to impose adequate conditions of approval for the



18

entirety of Oakleigh Lane to have the necessary right-of-way, striped lanes and sidewalks to meet the standards for a safe and adequate “queuing street.”

Furthermore, a “queuing street” would not meet the Eugene Fire Code (EFC) standards for a fire apparatus access road, as described in my prior testimony. Thus, the proposed development would have to be served by an alternative fire apparatus access road (which is not currently the case) before Oakleigh Lane would be acceptable when configured as a “queuing street.”²

The second dead horse that Mr. Weishar has thrown in with the elephants and red herring is the patently false claim that the Public Works Department (PWD) report didn’t recognize any hazards or risks that would arise on Oakleigh Lane in its current condition when 29 new dwelling units were added at the end of the road.

Mr. Weishar presented no rebuttal to my argument in my July 27, 2015 testimony that debunked this claim by citing the explicit statements in the following section of the PWD report:

“The proposed development will result in a 29 new residential units. These residential units will be accessible only from Oakleigh Lane. Currently, 25 lots, consisting of a mix of residential, general office and commercial zoning have structures that take access onto Oakleigh Lane; thus, the additional 29 residential units will increase the number of structures that access this Oakleigh Lane by over 100 percent. The construction of the new structures will result in an increase of vehicular traffic onto Oakleigh Lane by approximately 168 new vehicular trips per day. See Trip Generation Manual from the Institute of Transportation Engineers (ITE) for Residential Condo / Townhouses (Category 230). Without the additional right-of-way, Oakleigh Lane cannot be improved to the City’s minimum street design standards and the 168 new vehicle trips per day generated by the proposed development, along with the additional pedestrian and bicycle traffic generated by the proposed development; will not be assured of safe access via Oakleigh Lane. (LUBA Rec 1257. Emphasis added)

This analysis is undeniably all about the impacts that will arise from the new development. It starts by describing the development’s dwelling count and emphasizes that “[t]hese residential units will be accessible only from Oakleigh Lane.” The report is talking here about safe access for the OMC residents, not some future development.

The analysis then identifies the effect on daily trips by “the new structures,” i.e., the PUD structures.

Finally, the PWD analysis conclude that not only the “168 new vehicle trips per day, generated by the proposed development” but also “pedestrian and bicycle traffic generated by the proposed development” on Oakleigh Lane “will not be assured of safe access.”

² Discussions about queuing streets generally recommend that they be configured so they *could* allow use by emergency vehicles *in some cases*, for example as secondary access when multiple fire trucks are deployed. (See for example, page 8 of the *Neighborhood Street Design Guidelines*.) However, not one of these suggestions implies that a queuing street would be adequate as the only access for fire apparatus.

How many times will OMC and their paid “experts” repeat the lie that the PWD analysis was only about *future* needs beyond the proposed development?

Hopefully, this is the last time that dead horse has to be flogged.

THE NUMBERS GAME

Mr. Weishar has a certain way with numbers. However, his math doesn’t withstand elementary examination.

Mr. Weishar uses the ITE manual to derive that “the total would be 378 daily trips” on Oakleigh Lane after the 29 new dwelling units were built. Then he concludes that this volume is “well within the range for a low-volume residential street.”

What OMC’s paid consultant failed to account for in his conclusion is that ITE “trips” are roundtrips (*two-way*) whereas the City uses *one-way* trips to determine the category of a street’s projected traffic load. LUBA Rec 872, Footnote 8. So, using Mr. Weishar’s own numbers, the projected daily one-way trips would be 756 (378×2), which would put Oakleigh Lane’s projected traffic load in the *Medium* Volume Residential category. Streets with that amount of daily trips would require a 50 to 60 foot right-of-way, according to the city’s adopted street standards at EC Table 9.6870.

However, as explained at LUBA Rec 872, the correct projection is actually somewhere around 700 daily trips³, which means the projected trip volume on Oakleigh Lane places it at the top of the range for a Low Volume Residential street.

(Even the Hearings Official’s findings stated: “with the addition of 29 dwelling units proposed by the subject development, the Average Daily Traffic (ADT) would be greater than 500 trips per day” – stated at LUBA Rec 39, adopted at LUBA Rec 44.)

Mr. Weishar’s figures were wildly incorrect.

In any case, there is no dispute that the trip volume after the PUD is implemented would fall within the range requiring the minimum right-of-way and pavement width that has been adopted for a Low Volume Residential street.

The takeaway from this section of Mr. Weishar’s letter is that his calculations are unreliable.

A FINE TAUTOLOGY

The next error in Mr. Weishar’s letter is not so harmless.

Read this passage slowly:

“As a low-volume residential street, Oakleigh Lane can safely accommodate between 250 and 750 average daily trips.”

³ Mr. Weishar also apparently over-counted the number of existing residences on Oakleigh Lane.

What that statement *appears* to assert is this:

“The City has determined that Oakleigh Lane is (in its current condition) a Low-Volume Residential street. That means the City has determined that Oakleigh Lane can safely handle up to 750 daily trips, which is the range of daily trips associated with a Low Volume Residential street.”

But Mr. Weishar has engaged in another slight-of-hand. Here is the *true* story:

- “Oakleigh Lane is projected to have approximately 700 daily (one-way) trips.
- Accordingly, the projected number of daily trips falls in the city’s range for a Low Volume Residential street.
- According to the city’s adopted street standards at EC Table 9.6870, a street with the projected number of trips in the Low Volume Residential street category must have at least a 45-foot right-of-way and pavement that is 20 feet wide.
- Oakleigh Lane doesn’t meet the adopted street standards to safely and adequately handle the projected number of daily trips.”⁴

Mr. Weishar has turned the proper use of projected ADT, street categories, and adopted street standards on their heads, making it seem as if Oakleigh Lane has been deemed adequate for the projected traffic load. That is, however, not at all the case.

Again, even if Mr. Weishar’s mistake is unintentional, this very obvious analytic error demonstrates that his analysis is unreliable.

AN “OIL-MAT” SURFACE IS SUBSTANDARD

It’s helpful that Mr. Weishar confirms that Oakleigh Lane has an “oil mat” surface and not an “asphalt concrete” surface, which means Oakleigh Lane’s pavement is unlikely to be adequate to support 80,000 pound fire apparatus, as the Eugene Fire Code requires.

It’s unhelpful that the bearing capacity of Oakleigh Lane has never been assessed by OMC consultants or the city staff, and therefore no assumptions can be relied upon as to its bearing capacity. The Planning Commission cannot ignore this uncertainty or make assumptions that are not supported by reliable evidence.

Mr. Weishar letter didn’t evaluate the capacity and adequacy of Oakleigh Lane’s pavement, an omission that further undermines the reliability of his conclusions.

IS THE ELEPHANT THAT HARD TO SEE?

Mr. Weishar’s conclusions regarding the safety of pedestrians, bicyclists and motorists sharing the constricted pavement of Oakleigh Lane ignores the fact that the only reasonable interpretation of EC 9.8320(5) explicitly requires that, when there’s only a single, dead-end

⁴ Alice in Wonderland might have preferred Mr. Weishar’s version based on Alice’s comment that: “If I had a world of my own, everything would be nonsense. Nothing would be what it is, because everything would be what it isn’t. And contrary wise, what is, it wouldn’t be. And what it wouldn’t be, it would. You see?”

street that provides access to a proposed PUD, that street must provide a safe and adequate transportation system by conforming to adopted city street standards. This is fully explained on pages 21-25 of my July 27, 2015 testimony.

But even if that were not the case, there is no question that from both a legal and a practical perspective, the one and only access road to the proposed new development must meet the Eugene Fire Code (EFC) criteria for a fire apparatus access road.

If for some reason, the EFC standards were trumped by the city street standards adopted by the local government, then we're right back to Oakleigh Lane having to meet the adopted city standards at EC Table 9.6870.

From a practical perspective, Oakleigh Lane must allow the unobstructed passage of a fire truck from River Road to the development site. As the evidence submitted in the August 31, 2015 testimony by Paul Conte shows, this requires at a minimum, clear passage for a 10-foot wide fire truck. That reference point of 10 feet is confirmed in the ODOT/DLCD *Neighborhood Street Design Guidelines*, included in my August 31, 2015 testimony:

“Emergency Response. The movement to reduce street standard widths raised concerns with emergency service providers. Thus, the most controversial issue facing Oregon’s fire departments in the past decade has been street width. Fire departments must move large trucks, on average, 10 feet wide mirror-to-mirror.” (page 5, emphasis added)

“The size of fire apparatus is driven, in part, by federal Occupational Health and Safety Administration (OSHA) requirements and local service needs. The regulations require that fire trucks carry considerable equipment and that firefighters ride completely enclosed in the vehicle. In addition, to save money, fire departments buy multi-purpose vehicles that can respond to an emergency like a heart attack or a traffic accident, as well as a fire. These vehicles typically provide the first response to an emergency. An ambulance will then provide transport to a hospital, if needed. To accommodate the need to move the vehicles and access equipment on them quickly, the Uniform Fire Code calls for a 20-foot wide clear passage.” (pages 2-3, emphasis added)

When a 10-foot wide fire truck meets an oncoming car, at least six feet wide, there has to be a clear passage way of at least 16 feet plus allowance for space between the two vehicles and obstacles (such as parked cars) one either side. The very bare minimum would be about 18 feet of clear width. If the oncoming vehicle were a truck or larger car, even greater clear width would be required.

The 2015August30TruckLeavingOakleighLaneResidence.mp4 video file, included in my August 31, 2015 testimony, provides additional, visual evidence that a fire truck would be impeded by parked cars and moving vehicles encountered in the roadway.

Nothing in Mr. Weishar’s letter, or any other evidence in the record, supports a conclusion that Oakleigh Lane in its current condition can be ensured to have an 18-foot clear width along the entirety of the 250-foot segment where the right-of-way is only 20 feet; the pavement in the right-of-way is no more than 16 feet wide and legally-parked cars on both sides of the road may obstruct both the right-of-way and the pavement.

After making another thinly-veiled attempt to smear Oakleigh Lane residents by claiming “there is some speculation that neighbors could intentionally obstruct as much as six feet of the improved street surface,”⁵ Mr. Weishar makes the untenable claim that “even assuming that only 13 feet of the street were available for travel by the public for 250 feet, this would be adequate to accommodate emergency vehicles, and two-way vehicle travel in the same fashion as a queuing street.

Mr. Weishar seems to have overlooked that a “queue” is defined as “a waiting line, especially of persons or vehicles.”⁶

Based on this comment, it appears Mr. Weishar’s solution to a major fire engulfing PUD townhouses would be for the fire fighters to await their turn to move forward on this supposed 13-foot wide “queuing street.”

Obviously, this “solution” bears further dissection. No matter how long the fire fighters wait on a 13-foot wide section of Oakleigh Lane, they aren’t going to get past a 6-foot wide car in front of them. As explained above, a queuing street needs to have – at a minimum – a pavement width that can accommodate at least two lanes – one reserved for travel and the other with parking and sections reserved for pullovers. Thirteen feet won’t accommodate that configuration, not to mention that all this talk about a “queuing street” should have no bearing on the Planning Commission’s decision because Oakleigh Lane is simply not configured as a queuing street of any sort.

HEADED IN THE WRONG DIRECTION

Mr. Weishar caps off his analysis by pointing out that “excessive parking” – without explaining what “excessive” would mean, when the parking is legally permitted – could require a fire truck to have to back down the street upon leaving the site. Mr. Weishar left out of his analysis any consideration of a much more serious condition – a fire truck might have to back down the street as it was attempting to reach the site in order to let oncoming cars get by.

In addition, Mr. Weishar omitted any analysis of the possible scenario in which an emergency vehicle has arrived at the site and is leaving with a person suffering burns or a heart attack. If this outbound emergency vehicle were to meet a fire truck coming to the fire scene to assist in putting the fire out – how far back towards River Road is the fire truck going to have to back up so that the emergency vehicle can pass?

In summary, Mr. Weishar has presented the Planning Commission with a “professional opinion” that cannot withstand the most cursory scrutiny and which is contrary to what fire safety organizations, ODOT and OSHA recommend, as well as not hewing to Eugene Code.

There is no accurate, reliable or probative testimony in Mr. Weishar’s letter. Mr. Weishar’s letter is so inaccurate, incomplete and slanted only to the applicant’s interests, that no independent,

⁵ If there is any speculation at all, it is coming from individuals whose intent is to tar opponents of the PUD as maliciously-minded individuals.

⁶ Merriam-Webster on-line.

reasonable person could consider it reliable. Accordingly, the Planning Commission cannot rely on Mr. Weishar opinion for a finding that Oakleigh Lane in its current condition would be safe.

TITLE REPORTS CONFIRM SURVEY

The eight pages of title reports included in the applicant's testimony are just copies of documents already in the record at LUBA Rec 467-470, 479-480 and 568-569; and which I had previously referenced in at the top of Attachment B in my July 27, 2015 testimony and Attachment B of my August 31, 2015. The metes-and-bounds property descriptions contained in these reports confirm the areas shown on the surveys that I submitted on August 31, 2015.

CONCLUSION

By any reasonable assessment the proposed site at the end of Oakleigh Lane is not suitable for 29 new dwelling units because Oakleigh Lane isn't adequate for emergency access and the narrow pavement, constrained by legally-parked cars, forces an unsafe sharing of the roadway by vehicles, bicyclists and pedestrians (some of whom may be in wheelchairs).

There are several alternative ways the Planning Commission can address the facts in the record.

The most sensible, and defensible, approach is to deny the application for failing to comply with EC 9.8320(5), (6) and (11)(b), as well as EC 9.8320(7) and (11)(k). Denying this application would allow the applicant to potentially address the street safety issues and/or reduce the number of dwelling units. This decision would allow full public review and comment on the application and the true facts regarding Oakleigh Lane and applicable Eugene Fire Code requirements.

A second alternative would be to approve the application with sufficient conditions that would ensure adequate Oakleigh Lane right-of-way, pavement and improvements to meet code requirements and to provide a safe and adequate street for drivers, bicyclists, pedestrians, fire fighters and other emergency personnel.

Finally, the Planning Commission could approve this development without any additional conditions on the right-of-way, pavement and improvements of Oakleigh Lane and without even requiring that the city and/or county maintain the roadway and post and enforce "no parking" signs. That approach would be an unconscionable failure on your part to protect and promote the public's safety. It would also likely lead to another remand.

Respectfully,



Sinton Trautman



**Hutchinson
Cox** Attorneys

Attorney
ZACK P. MITTGE
zmittge@eugenelaw.com

Legal Assistant
GAIL C. CROSS
gcross@eugenelaw.com

RECEIVED

September 4, 2015

SEP 04 2015

VIA HAND DELIVERY and EMAIL

CITY OF EUGENE
BUILDING & PERMIT SVCS

Eugene Planning Commission
c/o Senior Planner Gabriel Flock
99 West 10th Avenue
Eugene, Oregon 97401
Gabriel.flock@ci.eugene.or.us

RECEIVED AFTER PUBLIC HEARING
BUT PRIOR TO CLOSE OF RECORD

Re: Oakleigh Meadow Co-Housing/Traffic Safety (PDT 13-001)
Our Client: Oakleigh Meadow Co-Housing
Our File no: C1343D

Dear Commissioners:

In accordance with the open record sequence specified at the Planning Commission meeting on August 17, 2015, please find enclosed the following responsive materials:

1. Sheet A.1.1, Site Plan with Conditions of Approval.
2. Figure 01. Portion of Typical North Elevation of Buildings 1 & 2 on lot 400.
3. Sheet A3.3, Exterior Elevations Buildings 1, 2, 5 (Units C-A-E).
4. Sheet A3.4, Exterior Elevations Buildings 4, 7 (Units D-B-B-D).
5. Sheet A3.5, Exterior Elevations Building 3 (Units E-B-E).
6. Sheet A3.6, Exterior Elevations Building 6 (Units D-D).
7. Sheet A6.9, Outbuildings.
8. Sheet AC3.1, Club House, Exterior Elevations.
9. Sheet A.1.1, Site Plan with Conditions of Approval, incorporating Fire Sprinkler Narrative.
10. Alternative Material(s) & Methods Approval Application dated June 19, 2014.
11. E-mail exchange between Assistant Building Official Mark Whitmill and Will Dixon, AIA, June 25, 2014.
12. September 4, 2015 letter from Will Dixon to Planning Commission.
13. Resolution No. 4608 "A Resolution Adopting Revised Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Access Ways, and Repealing Resolution No. 4500."
14. Excerpt of Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Accessways.

15. Excerpts of Eugene Local Street Plan.
16. Excerpt of Best Practices for Complete Streets.
17. Videos of Oakleigh Lane from August 17, 2015.

Please include these materials in the record of these proceedings.

Very truly yours,

HUTCHINSON COX

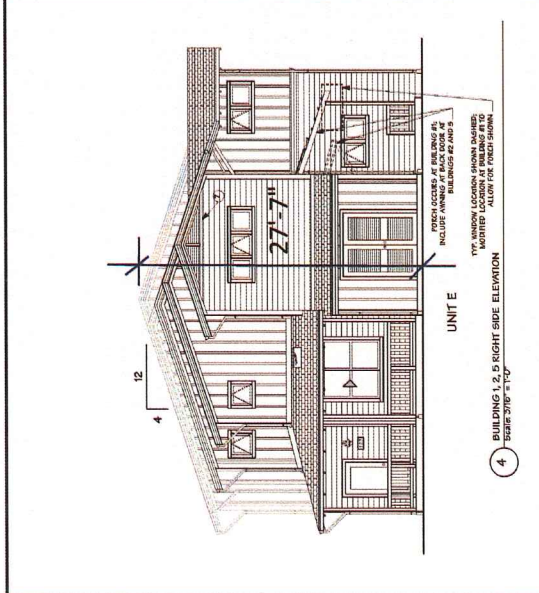
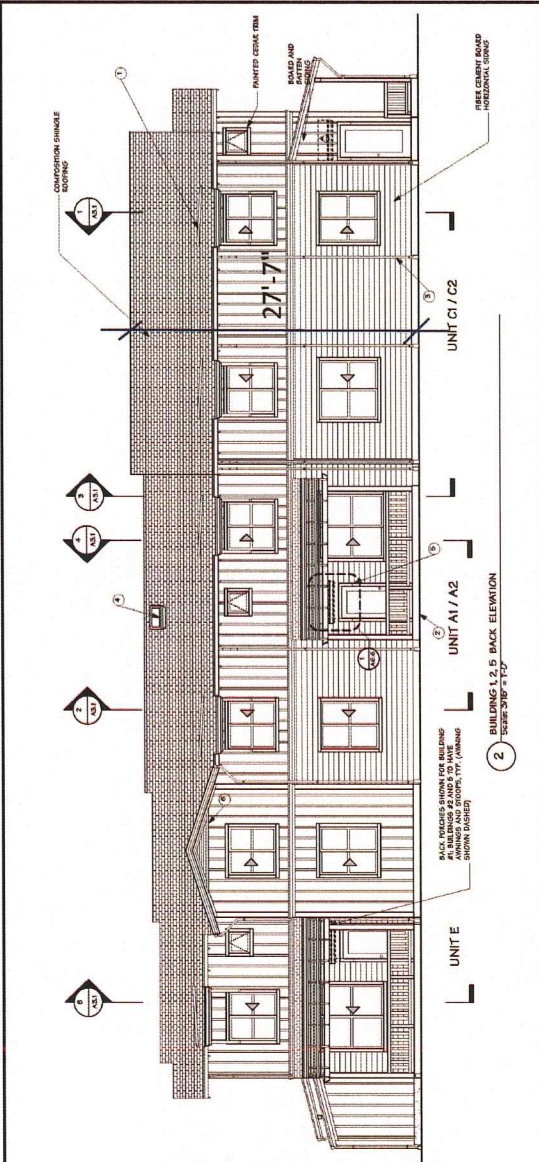


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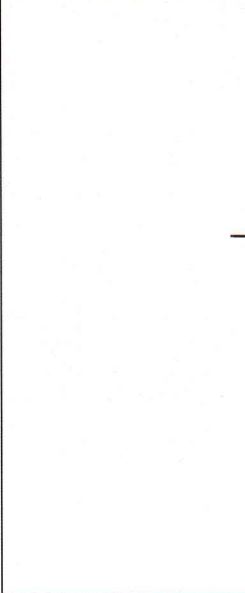
ZPM/gcc
Enclosures



FIGURE 01. Portion of Typical North Elevation of Buildings 1 & 2 on lot #400 with proposed heights for the Oakleigh Meadow Cohousing project.



- GENERAL NOTES:**
1. ALL HORIZONTAL LAF SIDING TO BE 6\"/>
- KEY NOTES:**
1. 6\"/>



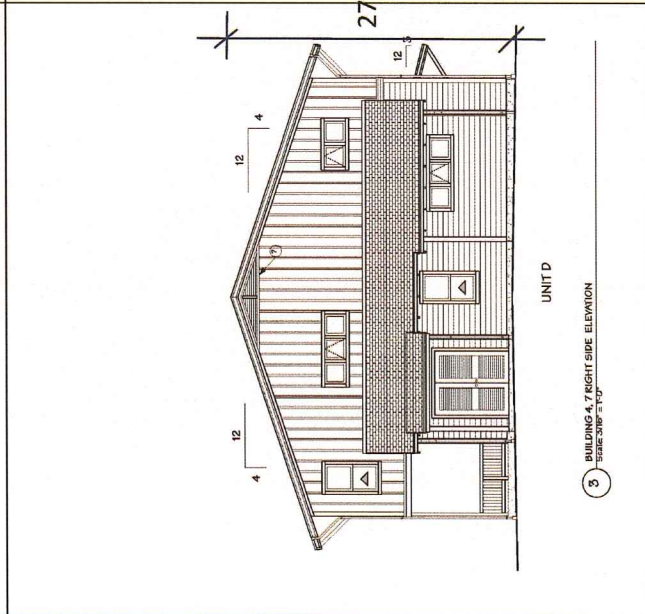
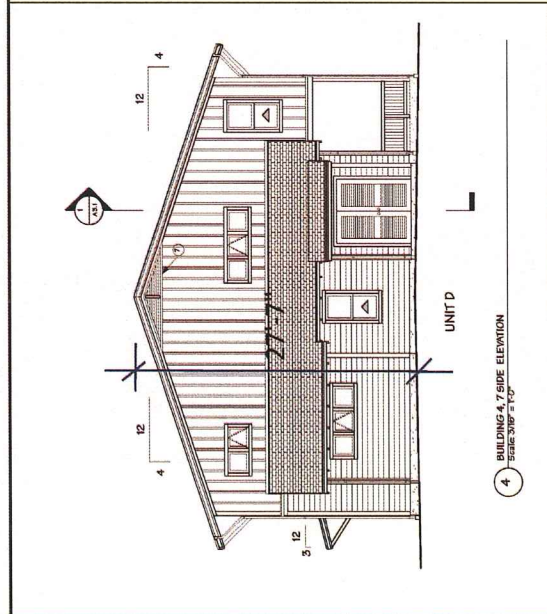
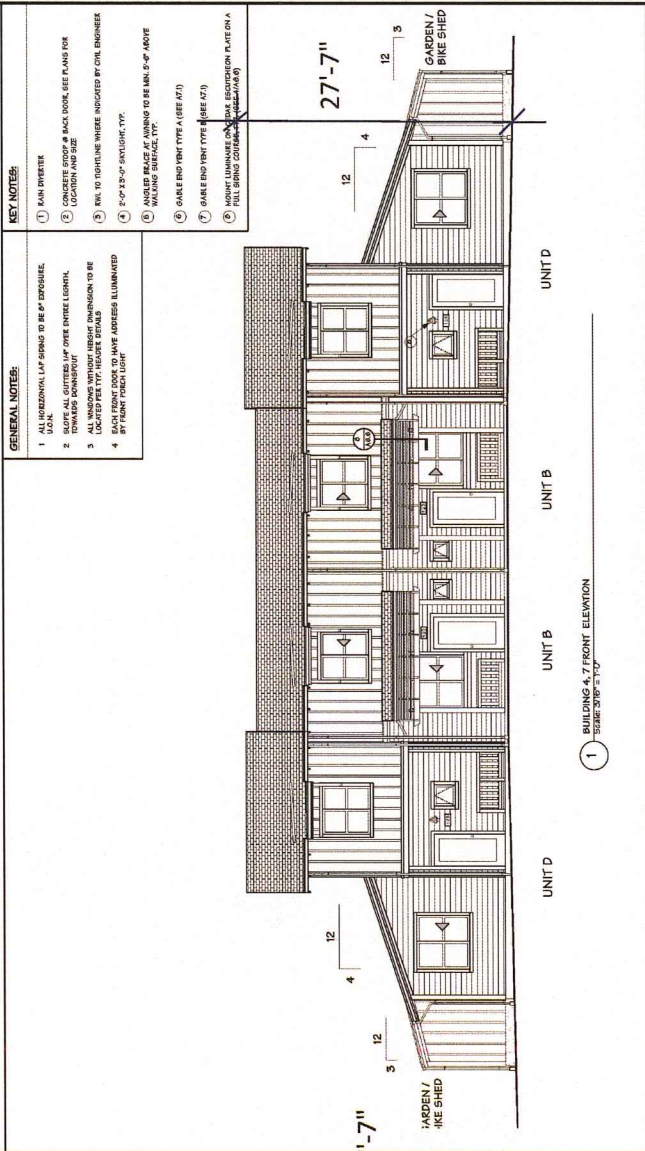
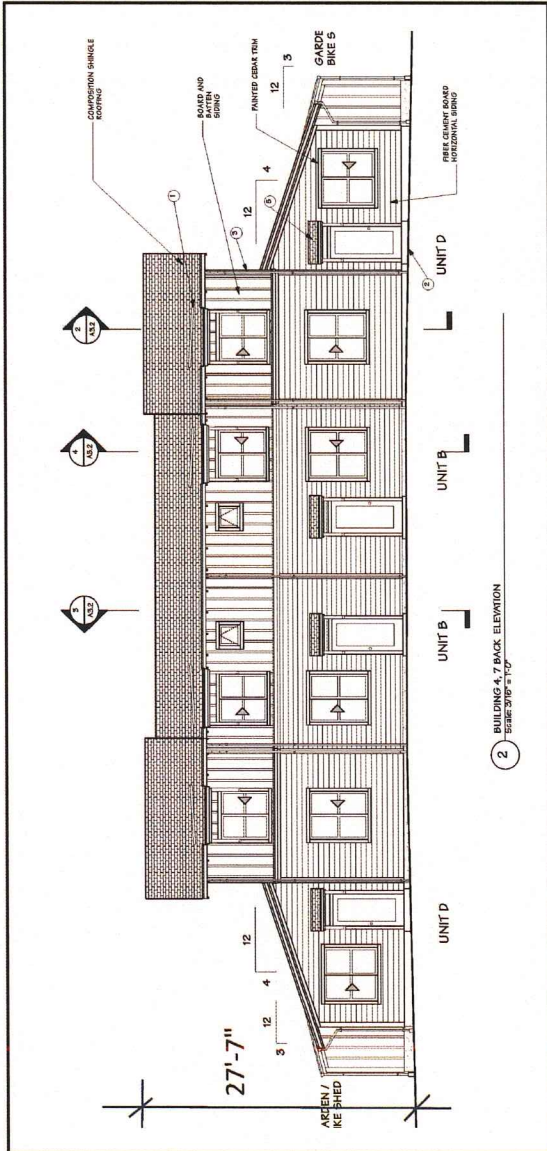
1. BUILDING 1, 2, 5 BACK ELEVATION
 SCALE 3/8\"/>

2. BUILDING 1, 2, 5 FRONT ELEVATION
 SCALE 3/8\"/>

3. BUILDING 1, 2, 5 LEFT SIDE ELEVATION
 SCALE 3/8\"/>

4. BUILDING 1, 2, 5 RIGHT SIDE ELEVATION
 SCALE 3/8\"/>

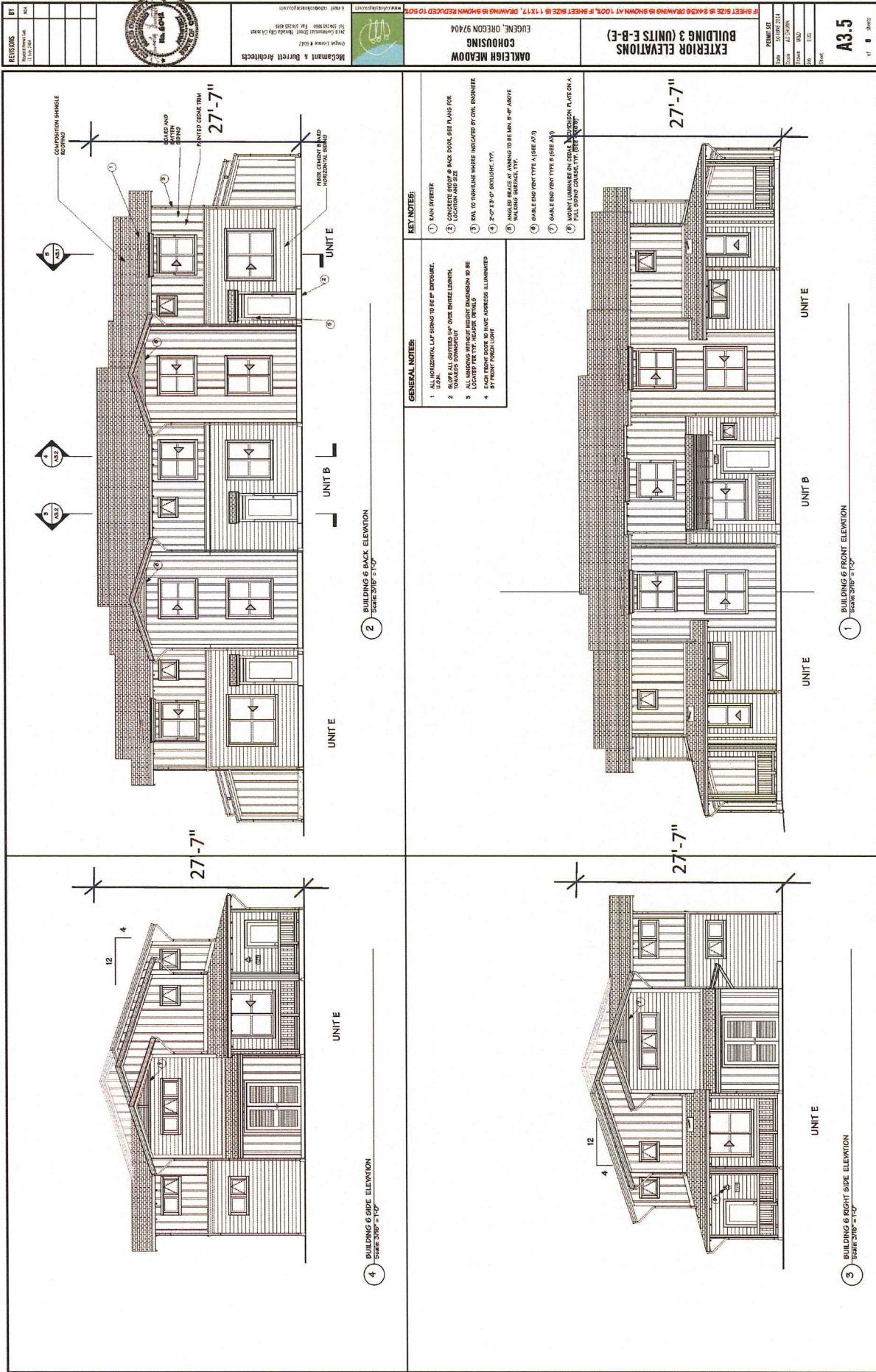
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GENERAL NOTES:
 1. ALL EXTERIOR WALLS SHALL BE FINISHED WITH 1/2" TYPE X GYPSUM BOARD AND 1/4" ACrylic Latex Emulsion Paint.
 2. ALL EXTERIOR WALLS SHALL BE FINISHED WITH 1/2" TYPE X GYPSUM BOARD AND 1/4" ACrylic Latex Emulsion Paint.
 3. ALL EXTERIOR WALLS SHALL BE FINISHED WITH 1/2" TYPE X GYPSUM BOARD AND 1/4" ACrylic Latex Emulsion Paint.
 4. ALL EXTERIOR WALLS SHALL BE FINISHED WITH 1/2" TYPE X GYPSUM BOARD AND 1/4" ACrylic Latex Emulsion Paint.

KEY NOTES:
 1. FINISH TYPE
 2. CONCRETE FOOTING
 3. FINISH TYPE
 4. FINISH TYPE
 5. FINISH TYPE
 6. FINISH TYPE
 7. FINISH TYPE
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 9. FINISH TYPE
 10. FINISH TYPE

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REVISIONS 1. 11/15/2018 2. 11/15/2018 3. 11/15/2018 4. 11/15/2018 5. 11/15/2018 6. 11/15/2018 7. 11/15/2018 8. 11/15/2018 9. 11/15/2018 10. 11/15/2018		Eugene Oregon 97404 Eugene Oregon 97404 Eugene Oregon 97404 Eugene Oregon 97404 Eugene Oregon 97404 Eugene Oregon 97404 Eugene Oregon 97404 Eugene Oregon 97404 Eugene Oregon 97404 Eugene Oregon 97404	PROJECT EXTERIOR ELEVATIONS BUILDING 3 (UNITS E-B-E) OAKLEIGH MEADOW COHOUSING EUGENE, OREGON 97404	SHEET SIZE IS 24X36 DRAWING IS SHOWN AT 1/8" SCALE. SHEET SIZE IS 11X17. DRAWING IS SHOWN REDUCED TO 50%	PERMIT SET DATE: 11/15/2018 DRAWN: JACOBSON CHECKED: JACOBSON SCALE: 1/8" = 1'-0" SHEET NO. 10 OF 10 SHEETS A3.5
<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> 1. ALL HORIZONTAL LINES TO BE 6" EXPOSURE, U.S.M. 2. BRICKWORK TO BE OVER ENGINEERED, TYPICAL COMMERCIAL. 3. ALL WINDOWS WITHOUT HEIGHT DIMENSIONS TO BE LOCATED PER ITC. HEIGHT DETAILS. 4. FINISH FLOOR FINISH TO BE AS SHOWN ON ARCHITECTURAL PLAN ON A 1/8" SCALE. 		<p>KEY NOTES:</p> <ol style="list-style-type: none"> 1. RAIN DIVERTER 2. CONDENSED AIR & BACK SMOKE SET PLANS PER LOCATION AND SIZE 3. PER TO VERTICAL WHERE INDICATED BY CIVIL ENGINEER 4. 2'-0" X 3'-0" BRICKLIGHT, TYP. 5. MAKE END VENT TYPE 1 (SEE A3.1) 6. MAKE END VENT TYPE 8 (SEE A3.1) 7. MOUNT CHIMNEY ON CORNER WITH BRICKWORK PLATE ON A 1/8" SCALE. 8. MAKE END VENT TYPE 1 (SEE A3.1) 9. MAKE END VENT TYPE 8 (SEE A3.1) 			
<p>4 BUILDING 6 SIDE ELEVATION SCALE 3/8" = 1'-0"</p>		<p>2 BUILDING 6 BACK ELEVATION SCALE 3/8" = 1'-0"</p>			
<p>3 BUILDING 6 RIGHT SIDE ELEVATION SCALE 3/8" = 1'-0"</p>		<p>1 BUILDING 6 FRONT ELEVATION SCALE 3/8" = 1'-0"</p>			

REVISIONS	BY	DATE

DATE	30 JUNE 2018
SCALE	AS SHOWN
PROJECT	CLUB HOUSE
NO.	AC3.1

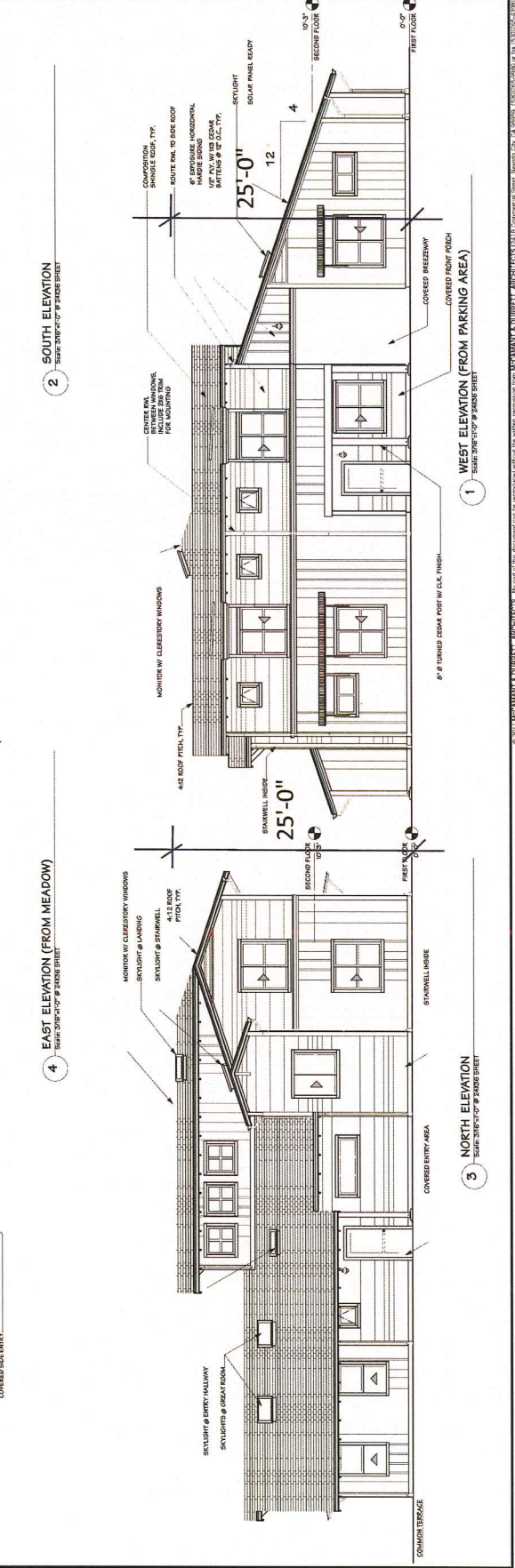
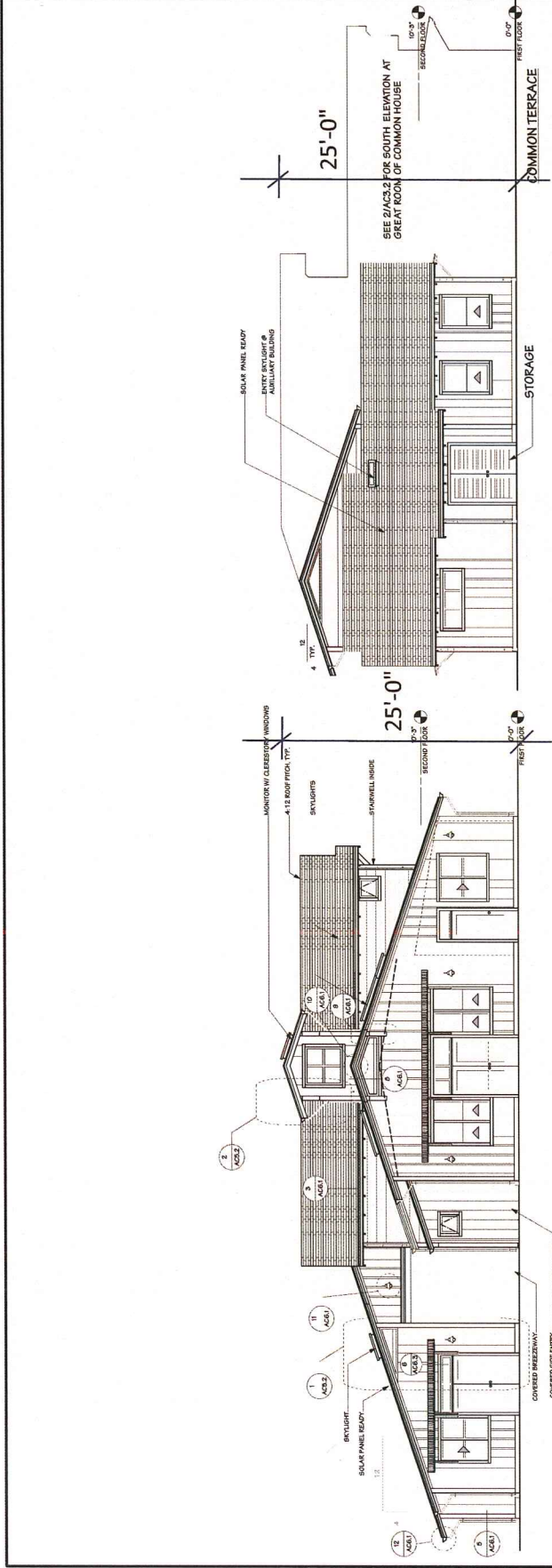
AC3.1
of 0 sheets



McCamant & Durrett Architects
218 Commercial Street, Suite 200, San Francisco, CA 94102
www.mccamant.com

DAKLEIGH MEADOW COUSING
EUGENE, OREGON 97404

CLUB HOUSE EXTERIOR ELEVATIONS
SHEET SIZE IS 24X36 DRAWING IS SHOWN AT 1/8" = 1'-0". # SHEET SIZE IS 11X17". DRAWING IS SHOWN REDUCED TO 1/4" = 1'-0".



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Permit # _____

Applicable code(s): Structural (building) Mechanical Plumbing Electrical Fire
 Other _____

To the applicant:

This is a request for an approval to use alternate material(s) and/or method(s) from that required by the State of Oregon/City of Eugene construction specialty codes. This form is not a request form for appealing an enforcement officer's interpretation, nor is it a request for relief or variance from construction code requirements (i.e. variances not allowed).

This request must show the proposed alternate is equivalent to and meets the intent of the codes, as to strength, effectiveness, fire resistance, durability, health, and safety as required by code, and must be supported by satisfactory evidence.

<p><i>Please fill out this form completely. Please type or print.</i></p> <p>Street Address <u>No street address currently assigned</u></p> <p>Map/Tax lot number <u>17-04-24-24#05500 & 17-04-24-13#00400</u></p> <p>Owner <u>Oakleigh Meadow, LLC</u></p> <p>Mailing address <u>300 Blair Blvd. c/o Will Dixon, AIA</u></p> <p>City <u>Eugene</u> State <u>OR</u> Zip Code <u>97402</u></p> <p>Occupant <u>None - Vacant Land</u></p> <p>Mailing address <u>n/a</u></p> <p>City <u>n/a</u> State <u>n/a</u> Zip Code <u>n/a</u></p> <p>Applicant (if other than owner) <u>Will Dixon, AIA</u></p> <p>Mailing address <u>300 Blair Blvd.</u></p> <p>City <u>Eugene</u> State <u>OR</u> Zip Code <u>97402</u></p> <p>Relationship to owner: <u>Project Manager</u></p> <p>This request involves (check one)</p> <p><input checked="" type="checkbox"/> Erection of a new structure <input type="checkbox"/> New use in an existing building (change of occupancy review) <input type="checkbox"/> Alteration of an existing structure <input type="checkbox"/> Addition to an existing structure <input type="checkbox"/> Other (specify) _____</p> <p>This structure to be used as: <u>Dwelling Units</u></p> <p>Specialty Code: <u>ORSC</u> Edition (year): <u>2011</u></p> <p>Applicable code section(s): <u>Chapter 3: Building Planning</u></p>	<p>Proposed alternate involves: (check applicable items)</p> <p>Structural Design</p> <p><input type="checkbox"/> Location on site <input type="checkbox"/> Internal layout <input type="checkbox"/> Structural <input checked="" type="checkbox"/> Fire resistance <input checked="" type="checkbox"/> Other (specify) _____</p> <p>Fire Separation</p> <p>Systems</p> <p><input type="checkbox"/> Frame <input type="checkbox"/> Electrical <input type="checkbox"/> Plumbing <input type="checkbox"/> Mechanical/Heating <input type="checkbox"/> Finish Work <input type="checkbox"/> Exit/Egress <input checked="" type="checkbox"/> Other (specify) _____</p> <p>Building Planning</p> <p>Material(s) Specify: _____</p> <p><u>2-Hr Party Wall Assembly System</u> <u>NFPA 13-D Fire Sprinkler System</u></p> <p>Equipment/Hardware</p> <p><input type="checkbox"/> Life safety <input checked="" type="checkbox"/> Fire/smoke detection <input checked="" type="checkbox"/> Fire sprinklers <input type="checkbox"/> Mechanical safety <input type="checkbox"/> Access/Service <input type="checkbox"/> Other (specify) _____</p>
--	--

Describe the nature and scope of the proposed alternative: Meet and exceed the intent of the Oregon Residential Specialty Code (ORSC).

Separate 1- and 2-Family dwellings by means of 2-Hr fire-resistance-rated party wall assemblies and also by installing a 13D sprinkler system.

**Please refer to enclosed letter to Mark Whitmill dated June 19th, 2014.

Describe why, how, etc., the proposed alternative is equivalent and meets the intent of the code in terms of "strength, effectiveness, fire resistance, durability, health, and safety":

ORSC Section R302 requires 1-Hr Fire Walls and 30-Minute Floor Assemblies for our dwelling types when sprinklered to NFPA 13D. This project proposes 2-Hr Fire Wall and Floor Assembly systems and also NFPA 13D fire sprinkler systems throughout each individual dwelling unit.

List substantiating evidence (research reports, test results, scientific studies, etc.) that prove claims of, or supports the proposed alternative. Attach copies of documentation.

Title of documents	Name of Author/Agency	Address	Phone
<u>Wall Sections (Typ.)</u>	<u>McCamant & Durrett</u>	<u>241 B Commercial St.</u>	<u>(503)</u>
<u>Party Wall Assembly</u>	<u>OR License #6042</u>	<u>Nevada City, CA</u>	<u>265-9980</u>
<u>Design No. L538</u>	<u>UL Certifications</u>	<u>n/a</u>	<u>n/a</u>

Reason for proposed alternate: Desire to separate each 1- and 2-Family dwelling with a 2-Hr party wall to provide townhomes and two-family dwelling units that are considered separate buildings and will be permitted and constructed in compliance with 2011 ORSC. **Please refer to enclosed letter to Mark Whitmill.

In accordance with the provisions of the Eugene Code, I hereby request approval to use an alternate material(s), and/or method(s) from that required as described above. Note: If this request is denied you may appeal the denial of alternate material(s) and/or method(s) determination to the Construction Codes Board of Appeals.

Signed: *Will C. Duff* Date: 06-19-14 Phone: 541-868-5960

OFFICE USE ONLY

Reference Permit #: _____ Reviewed by: _____ Zoning: _____ Occupancy Group: _____ Construction Type: _____ Number of Stories: _____	Administrative Decision <input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved with Conditions (see attached letter) <input type="checkbox"/> Denied based on: <input type="checkbox"/> Not a request to use an alternate, variance, not allowed <input type="checkbox"/> Not equivalent to intent of code <input type="checkbox"/> Lacks documentation <input type="checkbox"/> Other, specify _____ Approved by: _____ Date: _____
--	--

Willard C. Dixon Architect, LLC

300 Blair Blvd.
Eugene, OR. 97402-4150
(541) 689-3548 office
1 (541) 982-2273 fax (all #'s)
(541) 868-5960 cell
www.willardcdixon.com

19 June, 2014

City of Eugene
Attn: **Mark Whitmill**, Assistant Building Official
99 W. 10th Avenue
Eugene, OR 97401

RE: PROJECT: Oakleigh Meadow Cohousing
TAX MAP #: 17 04 24 13 Lot 400 / 17 04 24 24 Lot 5500
FILE #: PC 14-33 (A permit number has not yet been assigned)

Dear Mark:

This is a supplemental narrative to our AM&M application for submittal of Construction Documents pertaining to the 'Oakleigh Cohousing' Planned Unit Development.

Alternate Material(s) & Method(s)
Approval Application, Cont.

We are proposing that the Oakleigh Meadow Cohousing project meet the intent of the Oregon Residential Specialty Code (ORSC) in regards to "separate buildings" and fire/life safety, and exceed the minimum requirements found therein. As per R302.2, each townhouse shall be considered a **separate building** and shall be separated by a 2-hour fire-resistance-rated wall assembly. By providing the same 2-hour fire separations at the two-family (stacked unit) dwellings, we propose that we meet the intent of the Residential Code while also being consistent with the OSSC in regards to separate buildings. We are asking the City to consider the stacked flats as a two-family dwelling "separate building," separated from adjacent townhouses and/or other two-family dwellings with the same 2-hour party wall construction required to separate individual townhouses, and with fire separations in excess of the minimum requirements for two-family dwellings as per R302.3, where it states that two-family dwellings shall be separated from each

other by wall and/or floor assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E 119 or UL263.

We are proposing that the floor-ceiling assemblies between stacked flats be 2-hour assemblies to **exceed** the 1-hour minimum requirement; and, as per R302.3.1, the supporting construction of the floor assemblies to also **exceed** the 30-minute assembly minimum (of not less than 1/2-inch gypsum board) also by providing 2-hour construction at structural framing supporting the floor-ceiling assemblies. Note: it's important to point out that the proposed stacked flats as standalone buildings also meet all the other requirements for two-family dwellings as defined in the ORSC.

To supplement the proposed 2-hour walls and the 2-hour floor-ceiling assemblies between the single and two-family dwellings, we are also proposing a NFPA 13D sprinkler system throughout the single and two-family dwellings. With the introduction of the 13D system at the dwellings, we're proposing to exceed the minimum code requirement of having to provide only 1-hour partition walls and 30-minute floor-ceiling assemblies. By doing this, our proposal offers 2-hour fire areas WITH sprinklers throughout the dwelling units to enhance the safety of the occupants. This is consistent with table R302.1, that requires walls to be 1-hour rated if the fire separation is less than 3 feet.

We believe that by doing all this, we are consistent with and meet the intent of R302 / Fire-Resistant Construction, and the Oregon Residential Specialty Code. Through the use of **2-hour** fire separations between all residential buildings and all dwelling units, **combined** with NFPA 13D fire sprinklers, we believe we are proposing an **increased** level of fire protection and occupant safety than would have been otherwise provided by meeting the minimum fire assembly requirements of the ORSC **or** the OSSC for this building configuration.

Sincerely,



Willard C. Dixon, AIA
Project Manager
Oakleigh Meadow Cohousing
wcd@willardcdixon.com

From: WHITMILL Mark D [<mailto:Mark.D.Whitmill@ci.eugene.or.us>]
Sent: Wednesday, June 25, 2014 2:05 PM **To:** 'Will Dixon, AIA'
<wcd@willardcdixon.com> **Cc:** MCKERROW Mike J
<Mike.J.McKerrow@ci.eugene.or.us>; HOSTETLER Kandra S
<Kandra.S.Hostetler@ci.eugene.or.us> **Subject:** RE: Oakleigh Meadow
Cohousing

Will,

Yes, I had a chance to go over your proposal with Keith, and the AM&M is approved as submitted. I will get a signed copy ready so that you can pick it up when you come in Monday.

Mark

Mark Whitmill

Assistant Building Official | City of Eugene
99 West 10th Avenue | Eugene OR 97401
Phone 541.682.5128 | Fax 541.682.5593
mark.d.whitmill@ci.eugene.or.us

From: Will Dixon, AIA [<mailto:wcd@willardcdixon.com>] **Sent:**
Wednesday, June 25, 2014 11:55 AM **To:** WHITMILL Mark D **Cc:**
MCKERROW Mike J **Subject:** RE: Oakleigh Meadow Cohousing

Hi Mark,

Thanks to you and Mike for meeting with us yesterday to discuss OMC and the proposed AM&M. We're pushing forward as hard as we can to be ready for plans submittal on Monday, and things are coming together fairly well.

Have you a had chance to meet with Keith since our meeting? I've gone ahead and attached our current details for the party walls and floor/ceiling for your reference. We're planning on adding another layer of 5/8" Type X at the ceiling (as per UL 263 design L538),

and adding more blocking to the 2-hour party walls as per our discussion yesterday (see attached detail with notes).

Will
OMC PM



Willard C. Dixon | Architect

September 4th, 2015

My name is Will Dixon and I provide this testimony to the Planning Commission with regard to the e-mail correspondence between Assistant Building Official Mark Whitmill and me in June of 2014 which is submitted herewith, and to respond briefly to two videos submitted into the record on August 31, 2015.

The e-mail confirms the City's approval of an Alternate Material(s) & Method(s) Application to permit automatic sprinklers in the dwelling units. Mr. Whitmill states in this e-mail that the sprinklers were approved after review by Deputy Fire Chief Keith Haggas.

With regard to the two videos submitted into the record and titled "2015August30PedestriansBicyclistsAndVehiclesSharingtheOakleighLanePavement" and "2015August30TruckLeavingOakleighLaneResidence," these two videos appear to be staged. I have lived a block away from Oakleigh Lane for the past fifteen years, and have frequently walked, ridden bikes and driven up-and-down Oakleigh Lane. In that time, I have never encountered this much on-street parking, or bicycle and pedestrian activity on the street. In my experience, while some vehicles park on the shoulders of the road, most vehicles are usually parked in the adjoining driveways of homes. While pedestrian and bicycles use the street as well, it is infrequent, and I have never seen adults or children walking down the center of the road.

I believe that my own videos of Oakleigh Lane taken on the afternoon on the same day as the Planning Commission's August 17th meeting more accurately reflect the levels of on-street parking and the infrequent use of the street by bicycles and pedestrians which actually occurs.

Sincerely,

300 Blair Blvd., Eugene, OR 97402 • 541-689-3548 • www.willardcdixon.com

RESOLUTION NO. 4608

A RESOLUTION ADOPTING REVISED DESIGN STANDARDS AND GUIDELINES FOR EUGENE STREETS, SIDEWALKS, BIKEWAYS AND ACCESS WAYS, AND REPEALING RESOLUTION NO. 4500.

The City Council of the City of Eugene finds that:

A. On July 29, 1996, the City Council adopted Resolution No. 4500 amending and readopting the June, 1993 Design Standards for Eugene Streets, Sidewalks, Bikeways and Access Ways.

B. As part of the Eugene Arterial and Collector Street Plan, the Eugene Planning Commission has recommended new design standards for arterial and collector streets. The entire design standards document has been reformatted and a street lighting design standard has also been added for both local streets and arterial and collector streets. Those standards are set forth in Exhibit A hereto and are also contained within the Eugene Arterial and Collector Street Plan.

C. The revised Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Access Ways attached as Exhibit A hereto as approved and recommended by the Eugene Planning Commission, should be adopted, Resolution No. 4500 and the Design Standards adopted therein should be repealed, and the design standards for local streets amended, all as set forth in the attached Exhibit A.

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EUGENE, a Municipal Corporation of the State of Oregon, as follows:

Section 1. Resolution No. 4500, and the June, 1993 Design Standards for Eugene Streets, Sidewalks, Bikeways, and Access Ways adopted therein is hereby repealed, as of the effective date of this Resolution.

Section 2. The revised Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Access Ways attached as Exhibit A hereto are hereby adopted, as of the effective date of this Resolution, as the City's mandatory design standards and its advisory guidelines for arterial, collector and local streets. The guidelines in Exhibit A for implementation of those design standards are advisory only, and have no legal or binding effect. These Design Standards and Guidelines are also set forth in the Eugene Arterial and Collector Street Plan, and portions are reflected in the Eugene Local Street Plan. In the event any conflict exists with the Standards and Guidelines in Exhibit A and the Standards and Guidelines in the Eugene Arterial and Collector Street Plan or the

Eugene Local Street Plan, the Standards and Guidelines in Exhibit A hereto control. Subsequent amendments to Exhibit A may be made as authorized in Section 7.085 of the Eugene Code, 1971, following the rule making procedures of Section 2.019 of the Eugene Code, 1971, with notification to the City Council at the same time that public notice is given.

Section 3. This Resolution, and the Design Standards and Guidelines adopted herein shall become effective upon the effective date of Ordinance No. 20181.

Section 4. In addition to the findings set forth above, the Eugene Arterial and Collector Street Plan adopted as findings in support of Ordinance No. 20181 is incorporated by reference as additional findings in support hereof.

The foregoing Resolution is adopted the 22nd day of November, 1999.



City Recorder

Exhibit A

Design Standards and Guidelines For Eugene Streets, Sidewalks, Bikeways and Accessways

November 1999

Local Street Sub-Classifications

Local streets are divided into several sub-classifications:

- Alleys
- Access Lanes
- Low Volume Residential Streets
- Medium-Volume Residential Streets
- Commercial-Industrial Streets

Alleys: Alleys are streets that provide secondary access to residential properties where street frontages are narrow, where the street is designed with a narrow width to provide limited on-street parking, or where alley access development is desired to increase residential densities.

Access Lanes: These streets are designed for primary access to a limited number of properties. On this street type, the residential environment is dominant and traffic is subservient. Access Lanes can be constructed as cul-de-sacs, loop streets, or short streets connecting two other streets. Access lanes generally serve 25 or fewer homes and traffic volumes are less than 250 Average Daily Traffic (ADT).

Low-Volume Residential Streets: These streets are designed for primary access to individual residential property as well as access to adjacent streets. As with the Access Lane, the residential environment is dominant. Traffic volumes are relatively low (250-750 ADT).

Medium-Volume Residential Streets: These streets are designed for primary access to individual residential property and to connect streets of lower and higher function and access the major street network. These streets are designed to accommodate higher traffic volumes (750-1,500 ADT).

Commercial/Industrial Streets: These streets are designed for primary access to commercial and industrial properties and to connect to the major street network. They are designed to accommodate higher traffic volumes and freight.

Local Street Design Standards

The typical design elements found in a local street right-of-way are: sidewalk and planting strip areas, parking lanes, vehicle traffic lanes, parking lanes, drainage and curbs, planting strips, sidewalks, utilities, street lighting, and occasionally a center median. The standards in paragraphs A-M below apply to both new and existing unimproved local streets, unless otherwise stated.

A. Vehicle Lanes

1) Two 10' vehicle traffic lanes are required on local residential streets when traffic volumes are expected to exceed 750 vehicles per day.

2) On local residential streets with traffic volumes less than 750 vehicles per day, a single 14' traffic lane may be permitted for both directions of vehicular travel. The single traffic lane is intended to create a "queuing street", such that when opposing vehicles meet, one of the vehicles must yield by pulling into a vacant portion of the adjacent parking lane. This queuing effect has been found to be an effective and safe method to reduce speeds and non-local traffic.

3) Two 12' wide vehicle traffic lanes are required on local commercial and industrial streets.

4) In special circumstances, such as where a local street intersects with a collector or arterial street, additional width may be required for safe turning movements.

B. Medians

1) Center medians are a design option for Low-Volume and Medium-Volume Residential Streets, but the street design must ensure the minimum 14' clear lane needed for fire apparatus.

2) Medians shall be landscaped with groundcover, trees, and shrubs less than 3' in height.

SECTION IV.
**LOCAL RESIDENTIAL STREET
CLASSIFICATIONS & DESIGN STANDARDS**

Applicable Planning Principles:

- *Local streets help determine the form and character of neighborhoods; street design should be considered a part of neighborhood design.*
- *Local streets should be designed to carry low traffic volumes at low speeds and to function safely while minimizing the need for extensive traffic regulations, control devices, and enforcement. A successful design will result in traffic calming and reduce the need for future installation of traffic calming measures.*
- *The function of the local street should be readily apparent to the user through its appearance and design in order to reduce non-local through traffic on local residential streets.*
- *Local streets should be interconnected to reduce travel distance, promote the use of alternative modes, provide for efficient provision of utilities and emergency services, and provide for more even dispersal of traffic.*
- *Local circulation systems and land development patterns should not detract from the efficiency of adjacent collector or arterial street which are designed to accommodate heavy traffic.*
- *New streets should be designed to meet the needs of pedestrians and cyclists and encourage walking and cycling as transportation modes.*
- *Local street design should be responsive to topography and should avoid or minimize impacts to natural features, water-related resources, and wildlife corridors.*
- *The pavement area of local streets should be minimized, consistent with efforts to reduce street construction and maintenance costs, stormwater runoff, and environmental impacts of street construction. Narrower streets also distinguish local residential streets from collector and arterial streets and enhance neighborhood character.*
- *Where appropriate, the street system and its infrastructure should be utilized as an opportunity to convey and treat stormwater runoff.*
- *The range of local street types should be broad enough to allow flexibility for residential developers, resulting in lower site development and street construction costs and discouraging the construction of private streets.*
- *Local street layout should permit and encourage efficient lot layout and attainment of planned densities.*

called a “queueing street,” this street type is intended for two-way traffic. When two vehicles meet on a queueing street, one of the vehicles must yield by pulling over into a vacant portion of the adjacent parking lane. The Access Lane is the only local street type to allow both curbside and setback sidewalks. As part of its review of the September 1995 Draft Eugene Local Street Plan, the Planning Commission asked that consideration be given to alternatives to location of street trees within a planting strip for Access Lanes in order to minimize public right-of-way requirements for this street type.

LOW-VOLUME RESIDENTIAL STREET: This street is designed for primary access to individual residential property as well as access to adjacent streets. As for the Access Lane, the residential environment is dominant. Traffic volumes are relatively low (250-750 ADT) with a design speed of 20 mph.

This street type can be designed with one or two travel lanes. A low 20' paving width is allowed with two 10' travel lanes and no on-street parking; 21' and 28' paving widths are allowed in the “queueing” designs providing a single 14' travel lane with one or two 7' parking lanes. Setback sidewalks are required on both sides of Low-Volume Residential Streets. A center median is also allowed as a design option for the Low-Volume Residential Street, but the street must be designed to provide the minimum 14' clear lane needed for fire apparatus.

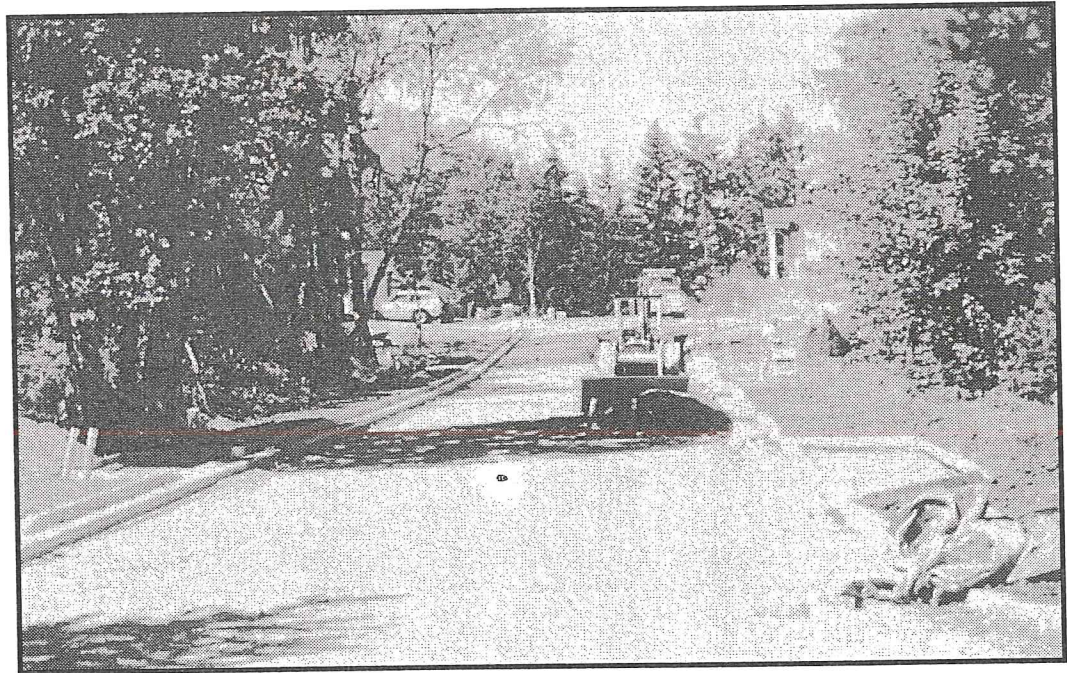


FIGURE 18. Road construction on Lambert Street South in West Eugene.

MEDIUM-VOLUME RESIDENTIAL STREETS: This street is designed for primary access to individual residential property, to connect streets of lower and higher function, and to access the major street network. These streets are designed to accommodate higher traffic volumes (750-1,500 ADT) with a design speed of 25 mph.

SECTION V.
**PROPOSED LOCAL
RESIDENTIAL STREET STANDARDS**

The Eugene Local Street Plan proposes a broader range of local residential street types and include narrower street cross sections than are currently allowed. Local residential streets which are as narrow as possible have several benefits to the community.

- **Narrow streets costs less to build and maintain.** Less road base is needed and less surface area is paved. This results in lower materials and labor costs. City of Eugene staff estimates that an 8' reduction in local street width results in at least a 10% reduction in paving, sidewalk, and finishing costs.
- **Narrow streets reduce the negative impacts of stormwater runoff.** Paved streets are impervious surfaces which prevent the filtration of stormwater into the ground. Therefore, streets increase the volume of stormwater runoff, which can cause flooding, erosion, and habitat destruction, as well as reducing the groundwater supply. Excess paving also causes increased pollution of surface waters as a result of contaminants from the roadway surface entering the stormwater system. The City of Eugene Stormwater Management Program recognizes reduced street widths as a means of reducing the volume of runoff in the Technical Memorandum #1: Residential Street Standards, published in March, 1995.
- **Narrow streets reduce the negative environmental impacts of street construction.** A narrow street cross section will help minimize environmental impacts by requiring less land than a wider street. For improvements on existing unimproved streets, narrow widths will reduce the need to remove existing plants and trees.
- **Narrow streets encourage more efficient land use.** The land saved by using narrow street designs can be used for other purposes including housing, landscaping and open spaces.
- **Narrow streets increase traffic safety.** Narrow street designs will discourage the use of local streets by through traffic and help reduce traffic volumes and speeds. This will help to create quiet, safe residential streets with low traffic volumes and speeds. According to Residential Streets, published in 1990 by the American Society of Civil Engineers, the National Association of Homebuilders, and the Urban Land Institute, "Excessive widths...encourage greater vehicle speeds." Lower vehicle speeds will also reduce the severity of pedestrian automobile accidents. According to the Center for Urban Transportation Research, approximately 55% of accidents are fatal to the pedestrian when vehicle speeds are 30 mph and over, while only 5% are fatal to the pedestrian when vehicle speeds are 20 mph or lower.
- **Narrow streets improve neighborhood character.** The positive environmental, land use, and traffic safety impacts of narrow streets all work to improve the character and livability of residential neighborhoods. The 1980 Bucks County, Pennsylvania publication, Performance Streets, recognized that the purpose of local streets should be "not solely to move traffic safely and efficiently, but to ensure that the needs of people for a residential neighborhood that is quiet, safe, pleasant, convenient, and sociable are met as well.

Best Practices for Complete Streets

October 2005



I. Street Design Concepts

Complete streets are those that adequately provide for all roadway users, including bicyclists, pedestrians, transit riders, and motorists, to the extent appropriate to the function and context of the street. American streets were once quite successful in this regard. However, for several decades there was a drift towards a focus on the automobile. More recently there has been a growing recognition that minimizing driving delay should not be the only goal of a roadway and may even be undesirable depending on the context. Street design is now recognized as an important determinant of neighborhood character and quality of life. This has resulted in growing public pressure to:

- Improve the functionality and appearance of new streets
- Facilitate pedestrian and bicycle travel
- Reduce the potential for speeding and other safety problems without resorting to speed bumps
- Introduce desirable design elements, such as landscaped strips and detached sidewalks that are commonly found in older residential neighborhoods
- Use shorter blocks in certain environments, such as along residential, commercial, and downtown corridors, to slow traffic and shorten walking distances.

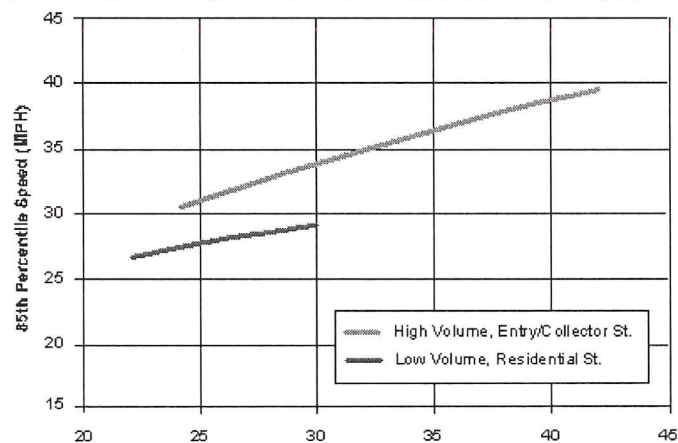
II. Street Width

Research shows that narrower streets result in slower travel speeds. For example, a recent study conducted in the City of Longmont, Colorado (population 72,000) looked at 20,000 police collision reports to determine the effect of street design in contributing to accidents. The most significant relationship between injury accidents and street design was found to be with street width and curvature. As street widths widen, accidents per mile increase exponentially.²

Figure 1: Relationship Between Pavement Width and Speed

Additional research has found that³:

- Wider streets experience higher average and 85th percentile speeds than narrow streets. Residents' perception of the impact of traffic on quality of life correlates strongly and negatively with speeds. Where speeds are high, residents are more likely to perceive a degraded quality of life



Source: City of San Antonio, Texas

² Peter Swift, "Residential Street Typology and Injury Accident Frequency", 2003

³ James Daisa and John Peers, Fehr & Peers, "Narrow Residential Streets: Do They Really Slow Down Speeds", 1997; and Matthew Ridgway, Fehr & Peers, "Residential Streets – Quality of Life Assessment", 1997

- On-street parking significantly affects speeds. On-street parking on both sides of the street visually narrows the street for those traveling along it. High parking densities on narrow streets can dramatically reduce travel speeds. Narrow streets with low parking density have an effective width similar to wide streets with high parking density. Narrow streets with high parking density have the highest “traffic calming” effect. On-street parking also provides a buffer between pedestrians and traffic.

Because street standards are determined locally and practices have evolved over time, there are great variations in residential street widths. Figure 2 depicts the range of neighborhood street widths found in the street standards of thirty-four communities. Much of the variation has to do with whether on-street parking is permitted. Nevertheless, the fact that widths vary by a factor of three in cities with the same sized automobiles, fire trucks, etc. indicates that there is more freedom to match street widths to the local context than most people realize.



Effect of Width: Wide, straight, long streets are an invitation to speed. Frequent speed humps are needed to counteract the tendency to speed on this overly wide (40ft curb-to-curb) street.



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September 11, 2015

VIA HAND DELIVERY and EMAIL

Eugene Planning Commission
c/o Senior Planner Gabriel Flock
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RECEIVED

SEP 11 2015

CITY OF EUGENE
BUILDING & PERMIT SVCS

Re: Oakleigh Meadow Co-Housing / Final Rebuttal (PDT 13-001)
Our Client: Oakleigh Meadow Co-Housing
Our File no: C1343D

Dear Commissioners:

In accordance with the open record sequence specified at the Planning Commission meeting on August 17, 2015, please find enclosed the applicant's final rebuttal. Please include this letter in the record of the City's proceedings on this matter, and provide us with notice of any further actions with regard to this Tentative Planned Unit Development.

Introduction

The applicant is proposing a unique and beautiful development on Oakleigh Lane. Once approved, the Oakleigh Meadow Co-Housing development will provide an unprecedented development within the City of Eugene, an "intergenerational residential community" developed by the private householder/members.

The Co-Housing Development will provide a shared community of skills and resources amongst its members while reducing environmental impacts through efficient resource implementation and economic use of building space. The proposal before you is literally award-winning, and will preserve over 50% as open space (including 20% of the property adjoining the undeveloped parkland to the east), and utilizes a unique "green wall" design of espaliered trees on an 8 foot wall along the western property boundary to eliminate impacts on properties to the west.

Significantly, on remand the opponents do not challenge the OMC PUD itself. Instead, they urge that the existing road – Oakleigh Lane – is unsafe, or does not conform to current City standards, and that the PUD should be denied as a result. There are several problems with this position. In particular, the opponents misrepresent the content of Public Works findings, misunderstand the legal requirements applicable to existing streets, and fail to establish the existence of safety

problems with regard to either the street or the PUD. In any case, the opponents have failed to establish any defect in the proposed PUD approval, and the Planning Commission should deny this appeal and affirm the approval of the Oakleigh Meadow Co-Housing project.

1. Eugene Public Works Findings Support the Exaction of A Portion of the Subject Property; They Do Not Reflect That Oakleigh Lane is Unsafe.

The opponents point to findings from the City of Eugene Public Works department to argue that Oakleigh Lane is unsafe if either: (a) it is not developed to City standards along its entire length; or (b) OMC does not dedicate the full right-of-way required by City street standards. In fact, the applicant goes so far as to urge that: "The only reliable evidence in the record regarding the safety and adequacy of Oakleigh Lane is the thorough analysis that the City's own experts did regarding compliance with EC 9.8320(5)." *July 27, 2015 Testimony*, p. 11 (underlining original). However, as the City Hearings Official, the Planning Commission, and the Oregon Land Use Board of Appeals, have each explained previously the Public Works findings exist solely to provide the required constitutional findings under EC 9.6805, to justify an exaction of a portion of the OMC's private property for a public right-of-way, and did not identify any traffic hazard on Oakleigh Lane or associated with the proposed development.

In fact, as will be addressed below, notwithstanding these exaction findings, Public Works staff independently evaluated Oakleigh Lane and repeatedly confirmed that Oakleigh Lane itself is adequate to accommodate all current traffic and proposed trips until such time as the street is improved to City standards. This is reliable evidence that clearly supports the approval of the application.

Where opponents get sidetracked is in confusing Public Works exaction findings - that highlight the value of acquiring property for future street improvements, and provide a correlation between traffic impacts and the right-of-way being exacted - with a conclusion that the present street is unsafe. Staff made no such finding.

Instead, staff made extensive findings in support of the half-street dedication in order to address "constitutional requirements" as specified in EC 9.6805. As the City Attorney has previously explained, these findings require a determination: (1) "that there is a legitimate state interest justifying the imposition of an exaction;" (2) "that there is a nexus between the permit condition and a legitimate state interest;" and (3) "[t]he local government must demonstrate that the exaction and the anticipated impact are 'roughly proportionate.'" *December 11, 2013 Memorandum from Anne Davies to Eugene Planning Commission*, p. 2. LUBA Rec. 19. The Public Works staff findings address each of these three elements:

(1) Legitimate State Interest

“It is in the **public’s interest** to have Oakleigh Lane consist of a 45 feet of right-of-way through the development site’s drive aisle and to consist of 33 feet beyond the drive aisle to the terminus of the street in order to ensure the safety of pedestrians, bicyclists and motorists traveling on Oakleigh Lane (a low-volume street), to ensure the efficient provision of emergency services and to guarantee that the proposed development and adjacent properties are accessible via Oakleigh Lane.” *September 17, 2013 Memorandum from Ed Haney, Public Works to Becky Taylor*, p. 2 (Emphasis added). LUBA Rec. 1256.

(2) Nexus Between Permit Condition and State Interest

“There is a **nexus between the requirement to dedicate 22.5 feet of right-of-way through the drive aisle and to dedicate 13 feet of right-of-way east of the drive aisle to end of the proposed turnaround and the public interest at issue.** The 22.5 feet of right-of-way will result in one-half of the 45 feet of right-of-way which is necessary to construct Oakleigh Lane to the City’s minimum street design standards which have been established for a low-volume street. The 13 feet of right-of-way will provide sufficient right-of-way on the south side of the centerline to construct an emergency vehicle turnaround with adjacent sidewalks to City standards. Improving Oakleigh Lane to these standards will allow for two-way vehicular and bicycle traffic, will provide separation between vehicular traffic and pedestrians and will also provide for emergency response and access to adjacent lots. Because 45 feet of right-of-way is the minimum amount of right-of-way necessary to construct Oakleigh Lane in this manner as a low volume residential street, and because 33 feet of right-of-way is the minimum amount of right-of-way necessary to construct the turnaround at this location, the public interest in safe vehicular, pedestrian and bicycle travel and emergency vehicle response and access will be at risk if the 22.5 foot and 13 foot strips of right-of-way are not dedicated.” *Id.* at 3 (Emphasis added). LUBA Rec. 1257.

(3) Rough Proportionality of Exaction and Impact

“The requirement to dedicate 22.5 feet of right-of-way from the westerly boundary of the proposed development through the primary drive aisle and 13 feet from the drive aisle to a line that is 117 feet east of the existing terminus of the right-of-way is roughly proportional to the impact that the proposed development will have on the City’s transportation facilities. The proposed development will result in 29 new residential units. These residential units will be accessible only from Oakleigh Lane. Currently, 25 lots, consisting of a mix of residential, general office and commercial zoning have structures that take access onto Oakleigh Lane; thus, the additional 29 residential units will increase the number of structures that access Oakleigh Lane by over 100 percent. The

construction of the new structures will result in an increase of vehicular traffic onto Oakleigh Lane by approximately 168 new vehicular trips per day. See Trip Generation Manual from the Institute of Transportation Engineers (ITE) for Residential Condo/Townhouses (Category 230). Without the additional right-of-way, Oakleigh Lane cannot be improved to the City's minimum street design standards and the 168 new vehicle trips per day generated by the proposed development, will not be assured of safe access via Oakleigh Lane. This is the last opportunity that the City will have to require the dedication of the right-of-way prior to the City needing the right-of-way for street construction." *Id* (Emphasis added).

The opponents urge that where City staff balances the proportionality of the traffic impacts against the required half-street dedication, what it actually means is that Oakleigh Lane is unsafe. *July 27, 2015 Appeal Testimony*, p. 5. However, public works made no determination that Oakleigh Lane would be unsafe without the 45-foot right-of-way, or being developed to City. Rather, staff determined that the public interest would be served by acquiring the 22.5 feet and 13 feet of right-of-way south of the centerline now, so that the City would have this right-of-way when the street was ultimately improved to City standards. See *September 17, 2013 Memorandum from Ed Haney to Becky Taylor*, p. 10; LUBA Rec. 1264.¹ Public Works staff went on to conclude that the existing street was safe, and to recommend deferring improvements of the street to City standards via an irrevocable petition for public improvements. *Id.* at 11 & 14-15. LUBA Rec. 1265, 1268-9. Hence, the findings to which the opponents point as "[t]he only reliable evidence" of traffic safety issues on Oakleigh Lane, identify no traffic safety issue.

¹ "Oakleigh Lane, which is described by the applicant on page 30 & 40 as 'having a county lane feeling' included a number of structures that were constructed close to the existing pavement and right-of-way, may result in the need for creative street design when **the street is improved through a future LID process.**

Per Table 9.6870 the minimum right-of-way width for low-volume streets is 45'. The existing right-of-way in Oakleigh Lane is 20', which was dedicated by the properties to the north per the Plat of Oakleigh in 1927. Staff notes that the southerly margin of this 1927 dedication forms the centerline of Oakleigh Lane and that any additional dedications would be necessarily based on this centerline.

Based on the right right-of-way requirement of 45' and the existing right-of-way width (which, as noted, is located entirely north of the centerline), an additional 22.5' south of the centerline is required. This dedication would satisfy the right-of-way requirement for properties south of centerline, with the remainder of the 45' right-of-way being required from the properties on the north side of the centerline." (Emphasis added).

The Hearings Official previously provided a detailed and reasoned explanation of why the staff's findings concerning the dedication did not demonstrate the existence of a traffic safety issue on Oakleigh Lane:

"EC 9.8320(5)(a) requires an applicant to demonstrate that it is possible, when necessary, for the applicant to 'dedicate' sufficient land to accommodate public ways, including right-of-way for streets under EC 9.6800-8675. The purpose of those sections of the code are set forth in EC 9.6800 and states: "[s]ections 9.6800 through 9.6875 establish standards for the dedication, design and location of public ways to address the purpose of this land use code contained in EC 9.0020 Purpose." The pertinent sections of EC 9.6800 are EC 9.6805 and 9.6870. Importantly, EC 9.6805 allows the city to 'require dedication of public ways for bicycle and/or pedestrian use as well as for streets and alleys * * *.' EC 9.6870 sets forth the 'width' of the right-of-way and paved service to be 'dedicated' in order to conform to the standards set forth in Table 9.6870.

The opponents' arguments fundamentally misconstrue the requirement in EC 9.8320(5) which is to ensure that a proposed development is capable of dedicating sufficient land along the property frontage to meet the right-of-way width requirements for that street designation. A 'dedication' is a form of legal 'taking' of property for public use that is intended to provide for public safety and offset impacts imposed by development. Because EC 9.8320(5)(a) is concerned with the dedication of land for a street, neither that provision nor EC 9.6800-9.6875 set forth standards that an existing street must meet in order to serve a proposed development. * * * *

Based on the above interpretation of EC 9.8320(5)(a), the opponents' arguments as set forth above are not relevant to whether the applicant has met the requirement to dedicate sufficient land to create a 45 foot right-of-way along Oakleigh Lane. Although eloquently argued, Mr. Conte's substantial analysis of the Staff findings are well outside the scope of EC 9.8320(5)(a), EC 9.6805 and EC 9.6870. Oakleigh Lane need not have a dedicated 45-foot right-of-way and associated paved surface from River Road to the subject property in order to meet EC 9.8320(5)(a) because that provision is a standard for 'dedication' of land, not a 'service' standard akin to level of service – LOS. Neither does EC 9.8320(5)(a) require neighbors to now dedicate a portion of their property to the widening of the right-of-way or paved surface of Oakleigh Lane." *Hearings Official's Decision*, p. 24-5; LUBA Rec. 44-5.

The Hearings Official went on to specifically reject opponents' arguments that the exaction findings demonstrated a present safety issue:

"As to Mr. Conte's assertion that the Staff's own findings concede that pedestrian and bicycle traffic will not be assured safe use of Oakleigh Lane, the Hearings Official disagrees. PT-4. The statement Mr. Conte alights on is a

finding related to explaining the justification for the dedication required under EC 9.8320(5)(a). Staff's conclusions are properly understood to require the proposed PUD to dedicate sufficient right-of-way along the subject property's frontage to allow Oakleigh Lane to be brought up to the low volume residential street standard along that frontage. That is consistent with requiring the proposed PUD to meet current street design standards rather than allowing the development to access Oakleigh Lane in its current form. The Hearings Official agrees with the applicant's conclusion that there is no inconsistency in the Staff's findings." *Hearings Official's Decision*, p. 27 (Underlining original); LUBA Rec. 47.

The Planning Commission affirmed the Hearings Official's decision with regard to each of these findings.

While noting that EC 9.6800 through 9.6875 apply to "design and location" of public ways as well as to "dedication," the Planning Commission affirmed the Hearings Official's determination that these standards did not apply to the existing Oakleigh Lane. The Commission found:

"[T]he PC agrees that neither EC 9.8320(5)(a) nor EC 9.6800 through 9.6875 require that an existing street must meet certain standards in order to serve a proposed development. EC 9.6870 only provides the required paving widths for certain types of streets when and if those streets are ever fully improved to City standards." *Final Order*, p. 3; LUBA Rec. 8.

Furthermore, with regard to the self-same Public Works findings that the opponents are again relying on in this appeal, the Commission found:

"The PC finds that the constitutional findings in the Public Works referral comments are limited to justification for a proportional right-of-way exaction along the frontage of the subject property that would accommodate future public street improvements. The constitutional findings address a future need for street improvements abutting the property, rather than any immediate need based on safety issues or otherwise, associated with the proposed PUD. The PC concludes that no additional right-of-way dedication or street improvements are necessary to meet the approval criteria. Based on these findings, the pedestrian, bicycle and transit circulation requirements of EC 9.8320(5)(b) are met." *Id.* at 4. LUBA Rec. 9.

The Oregon State Land Use Board of Appeals went on to affirm these findings as correct and supported by substantial evidence in the record. LUBA found:

"In a portion of his first assignment of error, we also understand Conte to argue that the planning commission's conclusion that Oakleigh Lane is presently safe and will be safe after the PUD is built is not supported by substantial evidence in the record.

ORS197.835(9)(a)(C).” The hearings officer and planning commission relied on the evidence in the record, including evidence from Meadows and from the city’s public works staff, that Oakleigh Lane will provide safe and adequate transportation with the additional trips generated by the PUD. Record 9, 372, 1255-76. * * *

Conte reads the evidence supplied by the city’s public works staff differently than the planning commission did. Conte argues that the city’s public works staff took the position that the entirety of Oakleigh Lane must have a 45-foot wide right of way in order to be safe. Conte Petition for Review 29, 37-39. Respondents respond that the public works comments that Conte relies on in support of his argument do not say what he argues they say.¹¹

We have reviewed the public works staff comments on the proposed PUD at Record 1255-76 and 1268-69 and we think that the planning commission and respondents’ description and understanding of the comments and the evidence provided in them regarding whether the PUD satisfies the applicable criteria is the accurate one. It is also evidence that a reasonable person would rely on in reaching a decision. *City of Portland v. Bureau of Labor and Industries*, 298 Or 104, 119, 690 P2d 475 (1984).

¹¹ Conte concedes “[a]lthough the [public works staff] findings do not state explicitly that Oakleigh Lane would be unsafe after the PUD is developed unless all or most of Oakleigh Lane is also widened from the development site to River Road, such a statement is unnecessary for Conte’s argument since no other reasonable conclusion can be drawn from the [public works staff findings. * * *” Conte Petition for Review 39.” *LUBA Opinion*, p. 33-35.

While the opponents advance, again, the same arguments before the Planning Commission, they fail to explain what error the Hearings Official, the Planning Commission, and the Oregon Land Use Board of Appeals made in reviewing Public Works findings. The Eugene Public Works findings concerning the exaction are limited to providing justification for a half-street dedication on the property frontage, and provide no evidence of a traffic safety issue.

2. The Eugene Code Does Not Require that Oakleigh Lane Meet Current Standards For A City Street.

The opponents misconstrue applicable law when they argue that EC 9.6870 requires Oakleigh Lane’s right-of-way to be expanded along its entire length to 45 feet, and that the street be paved to 20-feet to meet City standards for a local street. *July 27, 2015 Appeal Testimony*, p. 12, 25. In fact, opponents goes so far as to argue that the City

was required to adopt conditions of approval in this PUD decision that requires the purchase or condemnation of property that OMC does not own to provide this 45-foot right-of-way, and paving of additional portions of the right-of-way. *Id.* at 13, 25. The City Code does not require that all existing streets meet current City standards, or that Oakleigh Lane be expanded along its entire length.

EC 9.6870 provides the yardstick for new streets and dedication areas. The City used the yardstick in Table 9.6870 to determine the appropriate width of the dedication area for the half-street right-of-way south of the centerline. It did not, however, and was not required to immediately require that the entire length of Oakleigh Lane be immediately upgrade to meet current City standards. As the Planning Commission found, these standards do not apply to “existing streets” – like Oakleigh Lane - until such time as they are brought up to City standards. This is only reasonable in view of the fact that most of Oakleigh Lane was dedicated by plat in 1927, well before the current City standards existed.

The PUD meets the current street standards under EC 9.6870. Its dedication area will provide half of the future 45-foot right-of-way south of the centerline of Oakleigh Lane when the street is developed to City standards. In addition, by executing the Irrevocable Petition for Public Improvements required by Condition of Approval 7, OMC has obligated itself to pay its “proportionate share of the street construction costs” when a majority of the benefitted property owner agree to the improvement of the street. *See September 17, 2013 Memorandum from Ed Haney to Becky Taylor*, p. 15. LUBA Rec. 1269. This is the kind of proportional dedication and improvement that EC 9.8320(5)(a) and EC 9.6870 requires for new development, and OMC has clearly met its obligations under the Code.

3. OMC Provides a Safe and Adequate Transportation System In Accordance with the City's Code.

EC 9.8320(5) looks to three factors to demonstrate that a Planned Unit Development will provide “safe and adequate transportation systems.” It states:

“The PUD provides safe and adequate transportation systems through compliance with the following:

- (a) EC 9.6800 through EC 9.6875 Standards for Streets, Alleys, and Other Public Ways (not subject to modifications set forth in subsection (11) below).
- (b) Pedestrian, bicycle and transit circulation, including related facilities, as needed among buildings and related uses on the development site, as well as adjacent and nearby residential areas, transit stops, neighborhood activity centers, office parks, and industrial parks, provided the city makes findings to demonstrate consistency with constitutional requirements. “Nearby” means uses within ¼ mile that can reasonably be expected to be used by pedestrians, and uses within 2 miles that can reasonably be expected to be used by bicyclists.

(c) The provisions of the Traffic Impact Analysis Review of EC 9.8650 through 9.8680 where applicable.”

As the Hearings Official explained:

“The opponents have raised numerous ‘safety’ concerns and arguments that go well beyond the fundamental requirement of EC 9.8320(5). The very structure of EC 9.8320(5) does not require an applicant to prove that a proposed development will be safe from any and all asserted or imagined traffic safety threats. The language of EC 9.8320(5) states: “[t]he PUD provides safe and adequate transportation systems through compliance with the with the following:” The underlined section demonstrates that the provision is limited by its own words to a requirement showing three things: a) that EC 9.6800 through 9.6875 can be met, b) that pedestrian, bicycle and transit circulation can be achieved, and c) that if necessary a Traffic Impact Analysis has been done and mitigation provided. In other words, these adopted provisions of EC 9.8320(5) assume that if those three criteria can be met, a ‘safe and adequate transportation system’ will result.” *Hearings Official Decision*, p. 24; LUBA Rec. 44.

The Planning Commission affirmed the Hearings Official’s Decision stating:

“The PC finds that the HO was correct in his application of EC 9.8320(5), as being limited in scope to compliance with the following: a) that EC 9.6800 through 9.6875 can be met, b) that pedestrian, bicycle and transit circulation can be achieved, and c) that if necessary a Traffic Impact Analysis (TIA) has been done and mitigation provided.” *Final Order*, p. 3; LUBA Rec. 8.

LUBA affirmed the Planning Commission:

“The planning commission found that compliance with EC 9.8320(5) is demonstrated by compliance with subsections (a), (b), and (c), and that EC 9.8320(5) does not contain an independent requirement to determine whether a PUD provides a “safe and adequate transportation system” beyond determining compliance with (a), (b), and (c). The planning commission also rejected Conte’s interpretation of EC 9.8320(5)(a) as requiring the entirety of Oakleigh Lane to meet existing right-of-way standards and be improved to city standards:

* * * *

Respondents respond that the planning commission’s interpretation of EC 9.8320(5) is correct, and that nothing in the EC requires that entirety of Oakleigh Lane to meet the standards in EC 9.8320(5) in order for the PUD to be approved. We agree with respondents. The plain language of EC 9.8320(5) requires the city to determine that “the PUD” meets the standards in (a). It does not require “all streets serving the PUD” to meet the standards if those streets are not located within the PUD. In addition, the EC 9.6870 requirements for right of

way widths apply to “dedicated” streets. It does not require Meadows to dedicate right of way on land that it does not own or to improve land it does not own.” *LUBA Opinion*, p. 31.

On remand, the opponents continue to allege “asserted or imagined transportation threats” which do not bear on these factors. Most of these center around the faulty assertion that Oakleigh Lane is unsafe because it is not improved along its entire length to City standards under EC 9.8320(5)(a) and EC 9.6870. As has been addressed in detail above, there is not requirement in EC 9.8320(5)(a) or EC 9.6870 that “existing streets” be improved to current City standards.

With regard to EC 9.8320(5)(b), neighbors have often asserted that the modest levels of traffic associated with the development will result in decreased traffic safety for pedestrians and cyclists that use Oakleigh Lane. However, as explained by Licensed Professional Traffic Engineer Michael Weishar, “additional trips do not mean an increased hazard” on Oakleigh Lane. As Traffic Engineer Weishar observed:

“The traffic impacts from this proposal would be just 168 average daily trips.

As a low-volume residential street, Oakleigh Lane can safely accommodate between 250 and 750 average daily trips. Combining traffic from Oakleigh Meadow with the 21 existing single-family homes on Oakleigh Lane, which are equivalent to 210 daily trips, the total would be 378 daily trips, well within the range for a low-volume residential street.”² *August 27, 2015 Letter from Michael Weishar to Planning Commission*, p. 1.

Moreover, Traffic Engineer Weishar goes on to explain that Oakleigh is not unsafe because its not improved as a City street:

“Comments to the Planning Commission also confuse the issue of safety with the issue if street improvements. Oakleigh Lane is adequate to safely accommodate all existing and future trips. It has more than adequate capacity to handle the low traffic volume from the PUD. In addition, there is no crash history on Oakleigh Lane or at its intersection with River Road that would indicated any existing safety issue. I have reviewed crash records in the Oregon Department of Transportation (ODOT) Crash Reporting & Analysis Unit and City records as well, and find no reported crashes on Oakleigh Lane, McClure Lane, or at their intersections with River Road.

² The opponents urge that the City uses a different measures of ADT to project “average daily trips” on Oakleigh Lane than the ITE standard used by Mr. Weishar. *September 4, 2015 Appeal Testimony*, p. 7. However, this assertion is baseless. Both the City of Eugene Public Works and Mr. Weishar rely on the same ITE standard to calculate “average daily trips.” *See September 17, 2013 Memorandum from Ed Haney to Becky Taylor*, p. 3 & 4 (relying on ITE trips generation to project “average daily trips” from the proposed development on Oakleigh Lane).

Oakleigh Lane's lack of improvement should not be confused with an inherently unsafe condition. Many streets in the City of Eugene, particularly in the River Road area, are similar to Oakleigh Lane, lacking sidewalks, curbs, or striping, and permitting unsegregated parking and travel by vehicles, pedestrians, or cyclists. These streets encourage slower and more cautious travel by drivers who are cognizant of the fact that they must share the road with other users. In fact, the City of Eugene uses a similar design mechanism of a single travel lane on some low volume City streets – called a “queuing street” design – and has found the same to be a safe and effective method to reduce travel speeds and pass-through trips for non-local travel. Oakleigh Lane is a dead-end street, with no pass-through trips to contend with, but the on-street parking and unsegregated travel can reasonably be expected to reduce travel speeds.” *Id.* at 2.

This expert testimony is substantial evidence that the proposed PUD provides pedestrian, bicycle and transit circulation.

In fact, the City Hearings Official previously determined that:

“The Hearings Official also concurs with the applicant’s October 23, 2013 final argument that the queuing effect of having a single travel lane along Oakleigh Lane is likely to result in lower speeds and acceptably safe conditions for pedestrians. The applicant provided evidence in support of his position from the city’s Arterial and Collector Street Plan. The neighbors submitted this very same information in Exhibit PT-1. The queuing effect is deemed effective for streets that have less than 750 ADT. Even with the added trips attributable to the co-housing proposal, the ADT for Oakleigh will be closer to 400 ADT at most. It is reasonable to expect that the queuing effect identified in the ACSP will work to calm speeds and provide reasonably safe passage [for] pedestrians if the co-housing is approved. Once again, the Hearings Official has not been directed to evidence that shows that pedestrian safety will necessarily be decreased to unacceptable levels simply because 16[8] ADT are added to Oakleigh Lane.” *Hearings Official’s Decision*, p. 27; LUBA Rec. 47.

The Planning Commission affirmed this finding, and LUBA affirmed its decision. *Final Order*, p. 4; LUBA Rec. 9. *LUBA Opinion*, p. 32-33

On remand, although the applicant challenges Mr. Weishar’s expert opinion, it provides no countervailing expert testimony demonstrating that the Oakleigh Lane will not safely provide bicycle and pedestrian circulation for residents of the PUD. In fact, apart from grossly overstating the traffic impacts on Oakleigh Lane, the opponents fall right back into the trap of assuming that since Oakleigh Lane is not designed to current City standards it cannot function safely as a queuing street. *September 4, 2015 Appeal Testimony*, p. 4.

However, as highlighted in Mr. Weishar's testimony above, Oakleigh Lane need not be improved to be safe. It is like many streets in the River Road area that lack curbs, gutters and sidewalks and provide for unsegregated parking, and travel by cyclists, vehicles and pedestrians, but which encourage safe driving due to these factors. In fact, while the opponents urge that queuing streets must have sidewalks to conform to City standards, the "Neighborhood Street Design Guidelines" they submitted reflects that "narrow streets" – "provide a place for human interaction: a place where children play, neighbors meet, and residents go for walks and bicycle rides." These kinds of narrower residential streets are well-known to result in slower traffic and increased safety. The Eugene Local Street Plan states:

"Narrow streets increase traffic safety. Narrow street designs will discourage the use of local streets by through traffic and help reduce volumes and speeds. This will help to create quiet, safe residential streets with low traffic volumes and speeds. According to Residential Streets, published in 1990 by the American Society of Civil Engineers, the National Association of Homebuilders, and the Urban Land Institute, "Excessive widths...encourage greater vehicle speeds." Lower vehicle speeds will also reduce the severity of pedestrian automobile accidents. According to the Center for Urban Transportation Research, approximately 55% of accidents are fatal to the pedestrian when vehicle speeds are 30 mph and over, while only 5% are fatal to the pedestrian when vehicle speeds are 20 mph or lower." *Local Street Plan*, p. 47.

Moreover, a 2005 evaluation of street design concepts by the Sacramento Transportation & Air Quality Collaborative indicated that both narrower streets and streets with on-street parking were safer:

"Research shows that narrower streets result in slower travel speeds. For example, a recent study conducted in the City of Longmont, Colorado (population 72,000) looked at 20,000 police collision reports to determine the effect of street design in contributing to accidents. The most significant relationship between injury accidents and street design was found to be with street width and curvatures. As streets widen, accidents per mile increase exponentially.

Additional research has found that:

- Wider streets experience higher average and 85th percentile speeds than narrow streets. Residents' perception of the impact of traffic on quality of life correlates strongly and negatively with speeds. Where speeds are high, residents are more likely to perceive a degraded quality of life.
- On-street parking significantly affects speeds. On-street parking on both sides if the street visually narrows the street for those traveling along it. High parking densities on narrow streets can dramatically reduce travel speeds. Narrow streets with low parking density have an effective width similar to wide streets with high parking density. Narrow streets with high

- parking density have the highest ‘traffic calming’ effect. On-street parking also provides a buffer between pedestrians and traffic.” *Best Practices for Complete Streets*, p. 2-3.

While the City street standards may include particular standards for striping, curb markings or signage for accepted City streets, substantial evidence in the record establishes that Oakleigh Lane will provide safe pedestrian and bicycle circulation and that EC 9.8320(5)(b) is met.

Finally, OMC did not and does not require a Traffic Impact Analysis Review under EC 9.8320(5)(c) because it does not trigger any of the requirements for review much less mitigation. As the Hearings Official found:

“EC 9.8320(5)(c) invokes EC 9.8670 on the question of when a TIA may be required to support a PUD application. There are three primary circumstances in which a TIA may be required: 1) when the development will generate more than 100 peak hour vehicle trips, 2) when ‘the increased traffic resulting from the development will contribute to traffic problems in the area based on current accident rates, traffic volumes or speeds that warrant action, and 3) where approval of the development will result in level-of-service failures of the roadway system in the vicinity. If none of these conditions will result from the approval of the PUD, then the code does not require a TIA and the City cannot force an applicant to provide one.

* * * * *

This record contains uncontroverted evidence that the proposed development will come nowhere close to producing the 100 peak hour trips necessary to trigger a TIA...The Hearings Official has not been directed to evidence in the record that shows that accident rates for Oakleigh Lane or at the intersection with River Road are a problem. Nor have other documented ‘problems’ with traffic volumes or speeds been submitted by any party...Finally, LOS at the intersection of Oakleigh Lane and River Road appears to be adequate and there is no evidence in the record showing that the proposal will reduce LOS to an unacceptable or failing level. Therefore, there is no evidentiary basis for requiring a TIA or assuming that the increase in ADT will necessarily lead to unsafe conditions along the lane.” *Hearings Official Decision*, p. 28-9; LUBA Rec. 48-9.

The Planning Commission affirmed this finding stating: “the PC finds that the HO did not err in his conclusion that none of the TIA applicability provisions required a TIA.” Rec. 4; LUBA Rec. 9. LUBA affirmed the Planning Commission’s decision on appeal. *LUBA Opinion*, p. 40-1.

On remand, the opponents urge that the City could not rely on Public Works referral comments to the effect that Public Works staff had no concerns regarding traffic safety or levels of service resulting from the development. However, the Public

Works comments are substantial evidence of the lack of any documented transportation issue, or LOS concern. Moreover, Traffic Engineer Michael Weishar independently evaluated crash records from the Oregon Department of Transportation and the City of Eugene and found no reported crashes on Oakleigh Lane or its intersection with River Road. To the extent further support is needed, his uncontroverted expert opinion clearly establishes that the Oakleigh Lane has adequate capacity to accommodate trips from the development. Accordingly, this issue should be affirmed on remand.

As is set forth in detail above, OMC has clearly established that its proposed PUD will provide "safe and adequate transportation systems" through compliance with the provisions of EC 9.8320(5), and the Planning Commission should affirm its prior decision on this issue.

4. OMC Will Not Be An Impediment to Emergency Response Under EC 9.8320(6).

The opponents also urge that off-site traffic will cause impediments to emergency response in violation of EC 9.8320(6). However, as has been previously determined by the City and by LUBA, the PUD will not be an impediment to emergency response under EC 9.8320(6).

The City Hearings Official adopted the following findings:

"With regard to the provision of emergency vehicle response, the applicant states the proposed access on Oakleigh Lane and the hammerhead turnaround within the development site is sufficient for the proposed development. Referral comments from Public Works staff indicate that this on-site turnaround must provide for emergency vehicle access by being within a temporary emergency access easement. The proposed turnaround area meets the dimension requirements for a hammerhead. Referral comments from the Fire Marshal state no concern with the turnaround. The permanent turnaround is anticipated at the end of Oakleigh Lane, when properties to the north further develop. As recommended previously at EC 9.8320(5)(a), the applicant is required to dedicate right-of-way for the portion of the future turnaround that would overlap the subject property. Based on these findings, the following condition of approval is necessary:

- Prior to final PUD approval, the applicant shall dedicate a temporary emergency vehicle access easement over the on-site hammerhead and the access drive from Oakleigh Lane, and show this easement of the final PUD plans." *Hearings Official Decision*, p. 30; LUBA Rec. 50.

The Planning Commission affirmed the Hearings Official and incorporated these findings stating:

"The PC also concludes that the HO's conditions for a temporary turnaround easement within the development site adequately address the emergency response provision of EC 9.8320(6). The HO findings on page 29-31 are hereby incorporated by reference as further evidence of compliance with the applicable criteria appealed under this assignment of error." *Final Order*, p. 5; LUBA Rec. 10.

LUBA affirmed the Planning Commission's decision stating:

"We also understand Conte to argue that the city improperly construed EC 9.8320(6) because it failed to consider whether the 'configuration of Oakleigh lane' will be a 'significant risk to public health and safety or * * * be an impediment to emergency response.' Conte Petition for Review 34. Meadows responds that Conte's argument misconstrues the plain language of EC 9.8320(6) and impermissibly adds language to it. Meadows points out that EC 9.8320(6) requires the city to determine whether 'the PUD' is an impediment to emergency response, not whether 'the configuration of Oakleigh Lane' or all off-site streets would be an impediment. Meadows also points to the city's findings that the PUD will not be a 'significant risk to * * * public * * * safety or an impediment to emergency response' based on the future possible hammerhead turnaround and the condition of approval requiring a temporary emergency access easement on the temporary emergency turnaround on the property until the permanent hammerhead is developed. Record 375-76.

We agree with Meadows that the city properly understood the inquiry under EC 9.8320(6) to be limited to a determination of whether the PUD is an impediment to emergency response, and there is no basis in the express language of the provision to support Conte's argument that the city was required to consider whether 'the configuration of Oakleigh Lane' off-site will be an impediment. We also agree with the Meadows that the city's findings are adequate to explain why the city concluded that 'the PUD is not a significant risk to public health and safety * * * or an impediment to emergency response' based on the portion of Oakleigh Lane that is located on the subject property." *LUBA Opinion*, p. 35.

On remand, the opponents once again misconstrue the applicable standard in order to urge the Planning Commission the balance of the existing street, and specifically the issues of on-street parking by neighbors on Oakleigh Lane, and the opponents new allegation that Oakleigh Lane does not have "a 19-foot paving width." *July 27, 2015 Appeal Testimony*, p. 26. However, neither on-street parking by neighbors or the unsubstantiated claim that Oakleigh Lane has a narrower paved width demonstrate that "[t]he PUD" would be an "impediment to emergency response."

As the Planning Commission previously determined and LUBA affirmed, the PUD provides no impediment to emergency response. As reflected in OMC's site

plans, the PUD provides a 22' 6" emergency vehicle access throughout the PUD. Moreover, in accordance with the Planning Commission's condition of approval, OMC is providing an on-site hammerhead "Fire Turnaround" for emergency vehicles to turnaround on-site. Accordingly, the PUD will not be an impediment to emergency response, and the Planning Commission should affirm its prior decision.

The opponents point to a few videos of Oakleigh Lane, to urge that their own on-street parking is such a severe impediment to emergency response that the PUD must be denied. However, there are significant problems with this position.

First, the intentional impediment of the street by neighbors is not evidence that "the PUD" is an impediment to emergency response. OMC has provided adequate off-street parking for the PUD, in excess of the City's standards, which ensures that parking by members or visitors will not impede emergency response.

Second, the videos at issue are very clearly staged by the opponents to overstate the parking impacts on the street. As noted by Professional Traffic Engineer Michael Weishar all the homes along Oakleigh Lane have private driveways or garages that allow off-street parking on the adjoining property. This is borne out by photographs and videos taken on Oakleigh Lane on the afternoon of August 17, 2015, which clearly depict parking of most vehicles in driveways, with a few vehicles parked on the shoulders of Oakleigh Lane. In fact, Will Dixon reviewed the videos and confirmed that most vehicles park in driveways on the street and that in his 15 years in the neighborhood "I have never encountered this much on-street parking."

Finally, there is no evidence that parking on the shoulders of the road is an impediment to emergency response on Oakleigh Lane. As Mr. Weishar observes: "Parking on the shoulder which incidentally obstructs a portion of the improved surface would not pose a safety risk as drivers would simply drive around the obstruction." The opponents, again, point to inapplicable City street standards to urge that the existing street width must be increased to accommodate both parking and emergency vehicles. However, their own survey reflects that there is more than adequate paved width and parking area even at their purported "choke point."

As the opponents acknowledge, fire trucks need about 10-feet of travel space mirror-to-mirror. *September 4, 2015 Appeal Testimony*, p. 9. The paved width of Oakleigh Lane varies from about 21 to 19.8 feet, and residents have provided parking areas along the uncurbed shoulders of the street. *See Map of Oakleigh Lane for Bryn Thoms*. While these parking areas vary in width, the opponents survey reflects a continuous "Gravel Parking Area" of approximately 6 to 8 feet located to the north of the improved surface. In fact, as depicted in photographs in the record, these gravel parking areas can accommodate vehicles entirely off of the paved surface of the street. The opponents' speculation notwithstanding, there is simply no evidence that the existing parking would obstruct or impede emergency response.

Since the opponents cannot establish that improved street is unsafe, on remand the applicant raises a new issue, by arguing that improved surface of Oakleigh Lane is narrower than 19 feet, because portions of the street are located outside of the public right-of-way. This is an issue that could have been, but was not, raised before the City in the prior appeal, and, therefore, is not properly before the City on remand. *Beck v. City of Tillamook*, 313 Or 148, 831 P2d 678 (1992); *McCulloch v. City of Jacksonville*, 49 Or LUBA 345, 360 (2005). While the question of “safety” may have been raised in the prior appeal, the location of Oakleigh Lane – which has not changed since 2013 – could have been, but was not raised. Accordingly, this issue is not properly before Commission. See *McCulloch v. City of Jacksonville, supra*, 49 Or LUBA at 360 (raising the issue of “safety” of the street is not sufficient to raise the issue of location of the street on remand).

In the alternative, to the extent that the Planning Commission considers this issue on remand, the evidence in the record establishes that the Oakleigh Lane is approximately 20 feet. The opponents own survey measures the improved surface of the street at five points, from west to east:

1. “20.5 FT AC PAVING NO CURBS”
2. “21.3 FT OF AC PAVING NO CURBS”
3. “21.2 FT OF AC PAVING NO CURBS”
4. “19.8 FT OF AC PAVING NO CURBS”
5. “19.9 FT OF AC PAVING NO CURBS”

This survey clearly establishes that Oakleigh Lane has an improved width of approximately 20 feet.

The opponents urge, nevertheless, that “doesn’t actually contain a 19-foot pavement” because “there is only a 13-foot wide strip of pavement that is in the public right-of-way and of which the public’s use can be ensured.” *July 27, 2015 Appeal Testimony*, p. 8 & 10. However, the opponents are wrong both on the facts and the law.

With regard to the issue of width, the opponents’ survey establishes that more than 14 feet of improved surface is located within the public right-of-way even within the purported choke point. Fourteen feet is more that adequate to safely accommodate fire apparatus and emergency vehicles. In fact, the City allows a single 14-foot travel lane for “local residential streets with traffic volumes less than 750 vehicles per day.” *Design Standards and Guidelines for Eugene Street, Sidewalks, Bikeways and Accessways*, p. 36. The City’s adopted 14-foot road standard establishes that 14 feet is an adequate paved width for emergency vehicles. See ORS 368.039. The opponents urge that such a width is, nevertheless, unsafe because parking could block access for emergency vehicles. However, as noted above, ample off-street parking is included along Oakleigh Lane in driveways and garages and in the gravel parking areas located within the public right-of-way.

The applicants also urge that a 14-foot width on Oakleigh Lane would conflict with the Oregon Fire Code with regard to “[f]ire apparatus access roads.” However, these standards govern the installation or arrangement of a fire access road and not to existing streets. See OFC 503.2. As is set forth above, OMC already provides compliant fire apparatus access roads within the PUD, as well as the required hammerhead turnaround. Furthermore, even if these standards applied to Oakleigh Lane, as is set forth above, the improved street is 20-foot wide. Even if it were not, the standards allow narrower streets where “The building is equipped with an approved automatic sprinkler system installed in accordance with Section 903.31.1, 903.3.1.2 or 903.1.1.3.” OFC 503.1.1(1). As is reflected in the June 19, 2014 Alternative Material(s) and Method(s) application and subsequent June 25, 2014 approval by Mark Whitmill and Deputy Fire Chief Keith Haggas, OMC is already providing an approved automatic sprinkler system within the PUD. Hence, even a 14-foot width would not conflict with the Oregon Fire Code.

Furthermore, the opponents have failed to establish that public use is limited to the use of the 14-foot width. The owners of tax lot 10100, the Brandts, acquired their property in 1998, and with the stated exception of the “RIGHTS OF THE PUBLIC IN STREETS.” Likewise, when Ms. Regan acquired her lots 5900 in 2009 it was subject to an encumbrance described as “Rights of the public...in and to any portion of said land lying within the boundaries of streets.” Since these property owners took their property subject to the rights of the public in the street on their property, they cannot now attempt to bar public access to the improved street.

Moreover, as is set forth in the opponents’ survey:

“BECAUSE OF LONGSTANDING USE BY THE PUBLIC OF THE PAVED PORTION OF OAKLEIGH LANE OUTSIDE THE DEDICATED RIGHT-OF-WAY, THE PUBLIC MAY HAVE A PRESCRIPTIVE EASEMENT FOR THE CONTINUED USE OF THAT AREA.”

In fact, the evidence in record establishes that the public has acquired a prescriptive easement over-and-across those portions of the improved road that are located outside of the public right-of-way. Will Dixon’s August 27, 2015 letter clearly provides that the paved surface of the road has been continuously “open to the public” and that use has not been blocked or obstructed for more than 10 years. Nothing more is required for the public easement to vest. *Feldman v. Knapp*, 196 Or 453, 250 P2d 92 (1952)(upon showing of open, continuous and uninterrupted use for the prescriptive period the burden shifts to the landowner to disprove that the use was adverse).

Lauren Regan contends in her letter of August 25, 2015, that she would oppose a prescriptive easement based on her use of “the area in question.” However, she is clearly mistaken concerning the portion of the improved roadway at issue. She contends that she has “grown food and flowers” in the area for six years, but there is no gardening occurring on the improved street. Likewise, while she contends that public use has been interrupted by parking on the property, this is contradicted by

Will Dixon's testimony that cars have not "blocked the road surface for vehicles" in 15 years. While Ms. Regan may engage in intermittent parking on the easement, the same does not destroy the prescriptive rights of the public as daily usage is not required to establish prescriptive rights. *See Hay v. Stevens*, 262 Or 193, 497 P2d 362 (1972). Rather, where, as here, the public has established its prescriptive rights, the burden falls on Ms. Regan to establish that the use was permissive. Ms. Regan's continued acquiescence to the use of the improved street is not sufficient to defeat prescription. *Feldman v. Knapp*, *supra*. In any case, as noted above, Ms. Regan took her property subject to the rights of the public in the street, and cannot now contest this issue.


Accordingly, the opponents provide no basis to conclude that the PUD would be an impediment to emergency response.

Conclusion

The arguments advanced by the opponents fundamentally misconstrue the facts and applicable legal standards that govern the PUD development in an effort to find some basis to block this proposal. However, OMC has demonstrated time-and-again, that its proposal conforms to all applicable standards. Accordingly, we hereby formally request that the Planning Commission affirm its prior approval on remand, and once again approve this development.

Very truly yours,

HUTCHINSON COX



Zack P. Mittge

ZPM/gcc

DAVIES Anne C

From: William Kabeiseman <billkab@gsblaw.com>
Sent: Friday, August 21, 2015 11:03 AM
To: DAVIES Anne C
Subject: RE: Oakleigh Meadows

Thanks for the summary.

Bill

From: DAVIES Anne C [<mailto:Anne.C.Davies@ci.eugene.or.us>]
Sent: Friday, August 21, 2015 10:52 AM
To: William Kabeiseman <billkab@gsblaw.com>
Subject: RE: Oakleigh Meadows

Bill—This is just a summary; you will want to watch the webcast to be certain of the scope and deadlines for the re-opening of the record. <http://ceapps.eugene-or.gov/PCWEBCAST/WEBCAST/Play.aspx?mid=669>. The record is opened only to Trautman, Trautman's legal representative, the Applicant and the applicant's legal representative. The scope of evidence and argument to be submitted is limited to information that provides "clarity on right of way pavement widths and whether pavement is available for safe passage on Oakleigh Lane." The record is open initially until close of business on August 31st for new evidence on that issue; evidence in response to those submittals are due by close of business on September 4th; final rebuttal by applicant is due by September 11.

Anne

From: William Kabeiseman [<mailto:billkab@gsblaw.com>]
Sent: Friday, August 21, 2015 10:36 AM
To: DAVIES Anne C
Subject: Oakleigh Meadows

Anne,

I understand that the Planning Commission re-opened the record in some limited fashion on the Oakleigh Meadows matter and I want to make sure I understand the limitations that apply – will the City be issuing a notice or some other indication of the scope of the re-opening, who may submit testimony and the date and time of deadlines for submitting evidence, rebuttal and applicant's final response?

Thanks,

Bill

FLOCK Gabriel

From: William Kabeiseman <billkab@gsblaw.com>
Sent: Wednesday, September 09, 2015 10:28 PM
To: DAVIES Anne C
Cc: FLOCK Gabriel
Subject: RE: Oakleigh Meadows
Attachments: August 17 2015 EPC Transcript (7288313 v 1).pdf

Anne,

Thanks for the response; I note that in the summary that you sent me on August 21, 2015, you specifically indicated that it was “just a summary” and directed me to “watch the webcast to be certain of the scope and deadlines for the re-opening of the record.” Based on your e-mail, that was the direction that we took. Attached is the transcript from that meeting and the motion that was adopted talks only about rebuttal – I don’t see any indication that new evidence would be coming in on the 2nd submittal period. Based on that discussion, I believe that the applicant was limited only to rebuttal, as stated in the motion.

Again, I’m happy to discuss if you would like.

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Sent: Wednesday, September 9, 2015 2:01 PM
To: William Kabeiseman <billkab@gsblaw.com>
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Thanks,

Bill

Transcript of Eugene Planning Commission meeting – August 17, 2015

Commissioners Baker, Barofsky, Mills, Randall and Taylor Present

1:28:17

Barofsky: In regards to the new evidence or whether the width of the pavement is new evidence or not, the aerial photos give me enough pause to want to consider that. And, whether or not ... and that's why I'm asking that possibly the record be re-opened to give more clarity to that. And that's what I would be requesting is to substantiate Mr. ... I would like to open it to Mr. Trautman and for the other person to have rebuttal to it.

And the aerial photo gives me enough pause that I think there may be a question of whether or not there is substantial pavement available for safety.

At this point though, however, if that is ... if the commission deems that this aerial photo isn't enough to bring that in and we don't open the record for more clarity on that issue, I'm leaning with Commissioner Taylor and Commissioner Randall. It gives me pause, but it doesn't sway me enough to allow it in as new evidence.

That's why, in order for me to try and get it right, the course to go is to re-open the record.

1:30:05

[Discussion and vote on Commissioner Randall's motion, which failed.]

1:33:15

Baker: So we're voting on whether this is new evidence and we would exclude it?

Randall: That was my motion.

Mills: And exclude?

Taylor: Yes.

Randall: Exclude this.

Taylor: Just the six feet.

**Vote: Randall and Taylor in favor, and Mills and Baker opposed. (Barofsky abstained).
Motion fails 2-2.**

Randall: So the motion fails.

[Chatter]

1:34:17

Baker: I move that we re-open the record as suggested by Commissioner Barofsky to Mr. Trautman and to the applicant for a limited period of time related to traffic safety issues.

Barofsky: Second.

Randall: I guess I have a question how broad traffic safety issues ... is that all-inclusive ...

Baker: If you would allow me to amend it, I would say: "Traffic safety issues that would include related to right-of-way, paving width by the various jurisdictions.

Davies: Is the limited to, or is that including? I mean if you're saying "that includes," you're still pretty broad.

Baker: Including, not limited to, but including, so it doesn't exclude those.

Nystrom leans across the table and whispers privately to Davies: "Brand new issues raised, too."

Davies whispers back: "I know."

Nystrom whispers to Davies: "You might want to say that."

Davies (to Planning Commissioners): I'm having some concern about the breadth of that motion, not just safety but it brings everything all up. And it sounds like the issue that we've been talking about is the right-of-way issue. [*sic* Baker's motion was explicitly about the pavement width, as well as right-of-way.]

I'd like you to at least have some discussion about how broad that motion should be.

1:36:00

Barofsky: Well, two things now that you mention that. Yes, I believe that I would like the record to be open for clarity on the right-of-way, pavement widths and whether or not the pavement is available for safe passage on Oakleigh Lane.

And the second part of why I originally had my hand up was because I was wondering what is an appropriate timeframe. I mean I know that normally we say a week. For me, I would like to make it as short as possible, but yet give both parties a chance to do well-reasoned and thought out and perhaps even survey things. So I would ask staff for some ...

Davies comments and then says: I think we need both sides submitting new evidence ... and then response to that evidence and final rebuttal by applicant. I think the last two should be short. The first probably longer.

Mills: I'm going to suggest another area where there might be a need or benefit from additional information, and that's related to parking on Oakleigh. It's been an issue that's been raised. The street's been partially blocked. Staff conditioned their decree that it's a safe street provided it is not blocked. We have no information on that.

I don't know how you get that; whether somebody has to go out there during the time period and doing some surveying whether blockage is occurring or not. It's a question that I have. I mean, because to me it affects directly to staff's declaration that the street is safe, if that is the case. If that's not the case then ... it's a question. So I'm just suggesting that.

1:39:19

Baker: That was really my concern that by talking about traffic safety more general, is I wanted to be concerned about parking because it was noted in several places both in the testimony and also by the public agencies that it was a concern.

1:39:37

Taylor: So Commissioner Baker, you brought up an initial motion ...

Baker: I want to defer it and let Commissioner Barofsky ...

Taylor talking over Baker: Let's restate ...

Davies interjecting: Can I restate?

Taylor: Yeah, restate. That'd be great ... restate the motion.

1:39:55

Davies: What I heard Commissioner Barofsky say was that "we would be opening the record for clarity on the right-of-way, pavement widths and whether pavement is available for safe passage on Oakleigh Lane."

Barofsky: And I could add Commissioner Mills' concerns about parking.

Baker: That goes back to safe passage again.

Barofsky: Yes.

Taylor: So, maybe for clarity: right-of-way, permit [*sic* "pavement" intended] widths and parking ...

Barofsky: In regards to safety of Oakleigh Lane.

Baker: I'll second since John made that motion.

1:40:39

Vote: Barofsky, Mills and Baker in favor. Randall and Taylor opposed. Motion passes 3-2.

Discussion continues ...

Baker suggests all of the submission be written. Gabe Flock says "that was assumed."

1:43:32

Taylor: I'll make a motion to clarify this thing, tighten it up. I make a motion that essentially the remaining open record, there's two weeks for both to submit rebuttal, one week ... er, excuse me, I'm going to have you ...

Barofsky: To the 31st of August for ...

Flock interjects: End of business day.

Taylor: End of business day.

Barofsky: For new evidence. Rebuttals 'til Friday the 4th and ...

Taylor: And one week for applicant ...

Barofsky: ... applicant rebuttal 'til the 11th of September.

Taylor: And it's just in written format.

Voice: Yes

Taylor: And the only two is [*sic*] the applicant and Trautman can contribute.

Barofsky: Or Trautman's representative.

Taylor: Or Trautman's legal representative.

Flock: End of business day.

Taylor: End of business day for all of those. ... Anyone want to second that?

Baker raises hand to second.

1:44:40

Vote: Barofsky, Mills, Baker, Randall and Taylor in favor. Motion passes 5-0.

[Discussion on screening ensues]

GSB:7288313.1

DAVIES Anne C

From: William Kabeiseman <billkab@gsblaw.com>
Sent: Wednesday, September 09, 2015 1:17 PM
To: DAVIES Anne C
Subject: FW: E-mail to Anne

Anne,

Please accept this e-mail as a procedural objection to the material submitted by the applicant on September 4, 2015, and a request that these materials be stricken from the record. I've reviewed a transcript of the August 17, 2015, meeting and, as I understand the motion that was ultimately made at that time, it allowed for "new evidence" regarding the limited issues to be submitted to the Eugene Planning Commission until the end of business on August 31, 2015. It then allowed for the submission of "rebuttals" until Friday September 4, 2015, and then the "applicant's rebuttal" until than Friday September 11.

My client understood that, when the Planning Commission used the term "rebuttals" in the limitations on both the September 4 and September 11 requirements, that rebuttal was limited to written argument and not new evidence. Accordingly, the swath of new evidence submitted by the applicant on September 4, 2015, must be struck from the city's record and may not be considered by the Planning Commission in making its determination on remand.

I have a meeting and will be out of the office from 3:00 on this afternoon, and have an oral argument in Salem tomorrow morning, but should have time Thursday afternoon if you would like to discuss this procedural issue further.

Thank you,

Bill

DAVIES Anne C

From: DAVIES Anne C
Sent: Thursday, September 10, 2015 2:59 PM
To: 'William Kabeiseman'
Cc: FLOCK Gabriel
Subject: RE: Oakleigh Meadows

Bill, if you and your clients misunderstood my e-mail, then you will probably want to submit another letter as soon as possible requesting that the record be re-opened and including rebuttal evidence responding only to the evidence applicant submitted on August 31st.

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Bill

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Sent: Friday, August 21, 2015 10:52 AM
To: William Kabeiseman <billkab@gsblaw.com>
Subject: RE: Oakleigh Meadows

Bill—This is just a summary; you will want to watch the webcast to be certain of the scope and deadlines for the re-opening of the record. <http://ceapps.eugene-or.gov/PCWEBCAST/WEBCAST/Play.aspx?mid=669>. The record is opened only to Trautman, Trautman's legal representative, the Applicant and the applicant's legal representative. The scope of evidence and argument to be submitted is limited to information that provides "clarity on right of way pavement widths and whether pavement is available for safe passage on Oakleigh Lane." The record is open initially until close of business on August 31st for new evidence on that issue; evidence in response to those submittals are due by close of business on September 4th; final rebuttal by applicant is due by September 11.

Anne

From: William Kabeiseman [mailto:billkab@gsblaw.com]
Sent: Friday, August 21, 2015 10:36 AM
To: DAVIES Anne C
Subject: Oakleigh Meadows

Anne,

I understand that the Planning Commission re-opened the record in some limited fashion on the Oakleigh Meadows matter and I want to make sure I understand the limitations that apply – will the City be issuing a notice or some other indication of the scope of the re-opening, who may submit testimony and the date and time of deadlines for submitting evidence, rebuttal and applicant's final response?

Thanks,

Bill

FLOCK Gabriel

From: William Kabeiseman <billkab@gsblaw.com>
Sent: Monday, September 14, 2015 2:16 PM
To: DAVIES Anne C
Cc: FLOCK Gabriel
Subject: RE: Oakleigh Meadows
Attachments: STAQC_Best Practices for Complete Streets.pdf

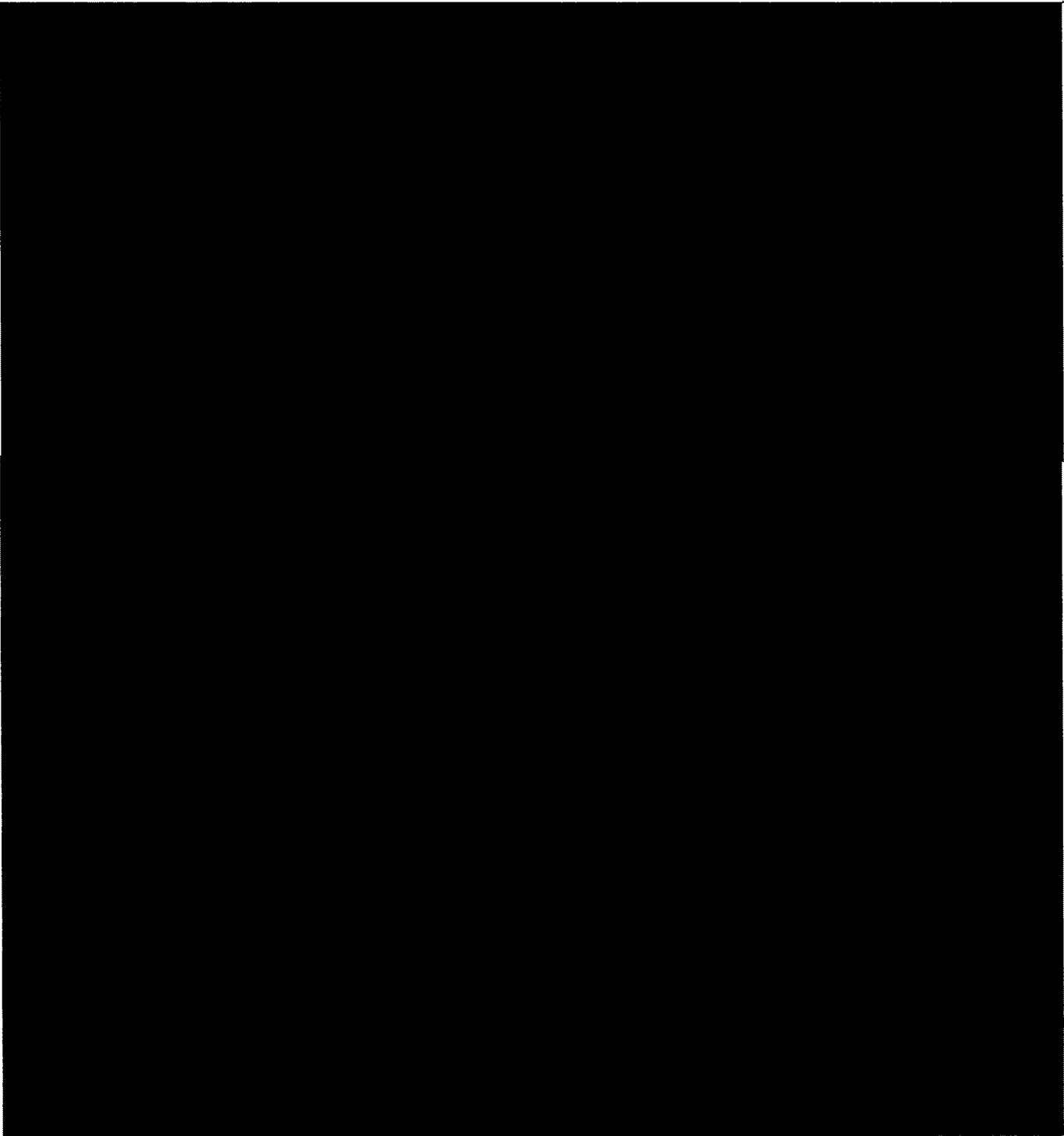
Anne,

In response to your request, I am conditionally submitting the following responsive evidence as suggested by your e-mail. In particular, we are concerned that the 90 day deadline in ORS 22.7181 not be violated and continue to believe that striking the applicant's evidence is the best option. By my calculation, 90 days after July 13, 2015 is Sunday, October 11, 2015.

To the extent the city decided to move forward with the evidence offered by the applicant, my client offers the following responsive evidence.

First, in response to the new evidence submitted by Zack Mittge as attachments numbered 13, 14 and 15 in his letter dated September 4, 2015, regarding Eugene's "Design Standards and Guidelines For Eugene Streets, Sidewalks, Bikeways and Accessways," that document includes the following language,





Thank you,

Bill

From: DAVIES Anne C [mailto:Anne.C.Davies@ci.eugene.or.us]
Sent: Monday, September 14, 2015 12:54 PM
To: William Kabeiseman <billkab@gsblaw.com>
Cc: FLOCK Gabriel <Gabriel.Flock@ci.eugene.or.us>
Subject: RE: Oakleigh Meadows

Bill-- It is entirely up to you and your client how you wish to proceed. I cannot guarantee that I will be advising the planning commission to reject the applicant's rebuttal evidence that was submitted on September 4th, as the applicant apparently did not understand the planning commission's direction in the same way your client did. Given the clarification that I provided to you via e-mail on August 21st, it would seem a risky approach not to attempt to put in rebuttal evidence of your own, just in case. I would anticipate that the applicant would then provide a supplemental closing argument, and the planning commission would not be required to open the record for any further submittals. I'm anticipating preparing a fun flow chart on this for the planning commission.

Best,

Anne

From: William Kabeiseman [mailto:billkab@gsblaw.com]
Sent: Monday, September 14, 2015 12:22 PM
To: DAVIES Anne C
Cc: FLOCK Gabriel
Subject: RE: Oakleigh Meadows

Anne,

Thank you and, while I understand that asking for a re-opened record is possible; my client, and I would guess your Planning Commission, would prefer not to see another cycle of evidence, response, etc . . . I continue to think the better course is to strike the new evidence submitted by the applicant during the period when the Planning Commission allowed "rebuttal," but gave no indication that additional evidence would be allowed from the applicant with no opportunity for my client to respond in any way.

Striking the new evidence would be consistent with what the Planning Commissioners actually said in their meeting, would avoid prejudicing my client's substantial rights and would let the Planning Commission make its decision on September 28th or October 5th, according to their current meeting schedule.

If the Planning Commission would rather re-open the record so that my client's substantial rights are ensured, I will discuss that alternative with my client. However, I would advise him to consider that alternative only if the City can assure us that the Planning Commission would still be able to meet the remand decision deadline under ORS 227.181. According to

statements made by City staff during the August 17, 2015 meeting, the deadline is Monday, October 12, 2015.

Would you please provide me a copy of the applicant's written request to initiate the remand proceedings so that I can confirm the deadline.

Thank you,

Bill

From: DAVIES Anne C [<mailto:Anne.C.Davies@ci.eugene.or.us>]
Sent: Monday, September 14, 2015 12:02 PM
To: William Kabeiseman <billkab@gsblaw.com>
Cc: FLOCK Gabriel <Gabriel.Flock@ci.eugene.or.us>
Subject: RE: Oakleigh Meadows

This will confirm the follow-up voice mail I left last week in which I urged you to submit any request to re-open with responsive evidence by today, Monday, September 14th, as today 4 days from my e-mail, the same period of time the applicant had to respond to your clients' evidence.

Anne

From: DAVIES Anne C
Sent: Thursday, September 10, 2015 2:59 PM
To: 'William Kabeiseman'
Cc: FLOCK Gabriel
Subject: RE: Oakleigh Meadows

Bill, if you and your clients misunderstood my e-mail, then you will probably want to submit another letter as soon as possible requesting that the record be re-opened and including rebuttal evidence responding only to the evidence applicant submitted on August 31st.

Anne

From: William Kabeiseman [<mailto:billkab@gsblaw.com>]
Sent: Wednesday, September 09, 2015 10:28 PM
To: DAVIES Anne C
Cc: FLOCK Gabriel
Subject: RE: Oakleigh Meadows

Anne,

Thanks for the response; I note that in the summary that you sent me on August 21, 2015, you specifically indicated that it was "just a summary" and directed me to "watch the webcast to be

certain of the scope and deadlines for the re-opening of the record." Based on your e-mail, that was the direction that we took. Attached is the transcript from that meeting and the motion that was adopted talks only about rebuttal – I don't see any indication that new evidence would be coming in on the 2nd submittal period. Based on that discussion, I believe that the applicant was limited only to rebuttal, as stated in the motion.

Again, I'm happy to discuss if you would like.

Bill

From: DAVIES Anne C [<mailto:Anne.C.Davies@ci.eugene.or.us>]
Sent: Wednesday, September 9, 2015 2:01 PM
To: William Kabeiseman <billkab@gsblaw.com>
Cc: FLOCK Gabriel <Gabriel.Flock@ci.eugene.or.us>
Subject: RE: Oakleigh Meadows

Bill—here is my summary to you, in which I stated that the second open record period was open for "evidence in response" to the evidence submitted on August 31st.

Anne

From: William Kabeiseman [<mailto:billkab@gsblaw.com>]
Sent: Friday, August 21, 2015 11:03 AM
To: DAVIES Anne C
Subject: RE: Oakleigh Meadows

Thanks for the summary.

Bill

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Sent: Friday, August 21, 2015 10:52 AM
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FLOCK Gabriel

From: DAVIES Anne C
Sent: Monday, September 14, 2015 3:15 PM
To: William Kabeiseman
Cc: FLOCK Gabriel
Subject: RE: Oakleigh Meadows

FYI

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To: 'William Kabeiseman'
Cc: FLOCK Gabriel
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Bill



**Hutchinson
Cox** Attorneys

Attorney
ZACK P. MITTGE
zmittge@eugenelaw.com

Legal Assistant
GAIL C. CROSS
gcross@eugenelaw.com

September 18, 2015

VIA HAND DELIVERY and EMAIL

Eugene Planning Commission
c/o City Attorney Anne Davies
99 West 10th Avenue
Eugene, Oregon 97401
Anne.C.Davies@ci.eugene.or.us

Re: Kabeiseman Submission
Our Client: Oakleigh Meadow Co-Housing
City File No: PDT 13-001
Our File No: C1343D

Dear Planning Commission:

On Monday, August 17, 2015, as part of its deliberations on the Oakleigh Meadow Co-Housing PUD remand, the Planning Commission re-opened the evidentiary record.

At that time, and on advice of staff, the Planning Commission determined that the record would be held open for new evidence, for response to that evidence and for final written argument. The Commission decided to rely on the standard "7-7-7" open-record sequence under ORS 197.763, but extended the initial open-record period for approximately two weeks to August 31, 2015, then allowed parties to respond to the new evidence until September 4, 2015 and provided for the applicant's final written argument on September 11, 2015.

On Friday, August 21, 2015, City Attorney Anne Davies confirmed this timeline with a summary provided to attorney Kabeiseman stating:

"The record is open initially until close of business on August 31st for new evidence on that issue; evidence in response to those submittals are due by close of business on September 4th; final rebuttal by applicant is due by September 11."

Oakleigh Meadow Co-Housing conformed to the Planning Commission's timeline, providing materials in advance of the August 31st deadline, materials responsive to the opponents' evidence and argument before the close of business on September 4, 2015, and provided a final written argument on September 11th.

The opponents are now seeking to both: (1) strike Oakleigh Meadow Co-Housing's submission of September 4, 2015; and (2) submit additional evidence and argument in response to those materials. This is nothing more than an attempt by the opponents to remove materials from the record that support approval of the application, and to interject evidence and argument after the close of the record. It is in direct violation of the Planning Commission's open-record sequence and state law, and must be rejected.

1. Motion to Strike

Attorney Kabeiseman's September 9, 2015, motion to strike "the material submitted by the applicant on September 4, 2015" based on his client's alleged "understanding" that "rebuttal was limited to argument and not new evidence" is not credible. The Planning Commission did not impose any such limitation.

In fact, Mr. Kabeiseman was directed to the Planning Commission's deliberations on-line, wherein both the Commission and staff indicated that all parties would be provided with an opportunity to respond to the new evidence submitted on August 31, 2015 that would extend through September 4, 2015 as part of a standard "7-7-7" open-record sequence. This was the open-record sequence described by Planner Gabe Flock, and adopted by Commissioner Barofsky in making his motion. Moreover, to the extent that there was any question on this matter, the City attorney's office plainly specified that "evidence in response to those submittals are due by close of business on September 4th." There was no lack of clarity here.¹

Moreover, to the extent that the appellant elected not to submit responsive evidence, that does not alter the Planning Commission's open-record sequence or require the rejection of materials submitted according to it. Oakleigh Meadows Co-Housing properly provided materials on September 4, 2015 that responded to the evidence and argument advanced by the opponents on August 31, 2015. These materials are properly included in the record, the appellant's confusion notwithstanding.

¹ Mr. Kabeiseman makes much of the Planning Commission's choice of the word "rebuttal" in referring to the response period, and urges that the same is equivalent to the applicant's "final written argument" under ORS 197.763(6)(e). However, it does not have this meaning. See ORS 197.763(6)(a)(allowing parties to "present and rebut new evidence" at a continued hearing). The reference to "rebuttal" clearly limited the parties to "rebuttal" evidence and argument that was responsive to the materials submitted during the first open-record period. However, nowhere did it expressly or implicitly limit the parties to argument only.

2. Attempt to Introduce New Evidence and Argument.

On Monday, September 14, 2015, ten days after the close of the evidentiary record, and three days after Oakleigh Meadow Co-Housing's final written argument, attorney Kabeiseman attempted to introduce new evidence and argument to respond to OMC's responsive materials.² The City has properly stricken this evidence.

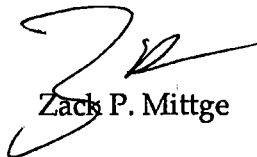
As is set forth above, the Planning Commission established an open-record period that afforded the parties the opportunity to provide additional evidence, and responsive evidence. Neither the applicant nor the appellant was afforded an additional opportunity to provide responsive evidence to the responsive evidence, nor is it appropriate to expand or alter the open-record sequence to provide it now.

While state law requires local governments to allow parties to provide evidence that is responsive to "new evidence" in the record, it does not allow for serial re-opening of the record to respond to responsive testimony and evidence. *Wetherell v. Douglas County*, 56 Or LUBA 120, 127 (2008) ("there is no unlimited right to rebut rebuttal evidence, and *Fasano* does not require endless opportunities to rebut rebuttal evidence.") (quoting *Rice v. City of Monmouth*, 53 Or LUBA 55, 60 (2006) *aff'd* 211 Or App 250, 154 P3d 786 (2007)). Where, as here, the appellant has clearly been afforded the opportunity to submit both evidence and responsive evidence and argument, it is not entitled to another opportunity after Oakleigh Meadow Co-Housing's final written argument to expand its prior presentations.

Conclusion

As Mr. Kabeiseman has failed to provide any basis for either: (1) striking Oakleigh Meadow Co-Housing's materials; or (2) expanding the open-record sequence to introduce argument and evidence which is responsive to Oakleigh Meadow Co-Housing's responsive materials, his motions should be denied.

Very truly yours,
HUTCHINSON COX



Zack P. Mittge

ZPM/gc
cc: Clients

² Significantly, while Mr. Kabeiseman complains that his client could not respond to the evidence submitted on August 31, 2015, he does not try to respond to the evidence introduced on that date. Instead, he seeks to introduce evidence and argument to respond to the responsive evidence on September 4, 2015.