

# Summary of Comments on 2103-257-SUB1-PLANS\_review.pdf

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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/16/2021 9:26:15 AM  
Provide method to resolve chord reentrant corner forces.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:04:53 PM  
Appropriate connections will be added to the Framing Plans as needed.
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment #1 Date: 7/9/2021 1:56:58 PM  
Provide continuity for holdowns to foundation. If holdown is located in shearwall below and not continuous to foundation, please verify shearwall design includes additional capacity to resist holdown force.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 1:59:25 PM  
As shown in the calculations for Beam 7 the net uplift forces are offset by the dead loads acting on the beam. The connections already specified are adequate.
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/16/2021 1:34:38 PM  
Provide connections as required to provide interconnectedness and resolve chord and reentrant corner forces.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:04:01 PM  
Appropriate connections will be added to the Framing Plans
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/6/2021 2:42:14 PM  
Justify including the three offset walls in shearwall line D. Based on flexible diaphragm analogy, this wall will see significantly higher loads.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/6/2021 2:43:59 PM  
This wall and the other walls currently in Wall line DD will be redistributed in a more appropriate manner.
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/16/2021 1:34:49 PM  
Provide connections as required to provide interconnectedness and resolve chord and reentrant corner forces.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:05:38 PM  
Appropriate connections will be located on the Framing Plans.
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/16/2021 1:35:14 PM  
Please revise the wind design for shearwalls to include the 2bs/h factor that was applied to the seismic portion of the lateral design.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:02:24 PM  
We have revised the shearwall calculations to consider 2bs/h adjustments for both wind & seismic loads. Please note we have also reduced the wind loads for the reduced wind speed permitted by ASCE7-16 Figure 26.5-1B for Category II buildings
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment #1 Date: 7/9/2021 2:10:59 PM  
Provide appropriate uplift connections at the ends of all holdown transfer beams. Load trace all holdown forces to foundation, typical.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:12:30 PM  
Appropriate connections at load transfer beams are specified on the Framing Plans
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 2:07:49 PM  
Justify including this wall in shearwall line A. Based on flexible diaphragm analogy, this wall will see significantly higher loads.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:08:24 PM  
We have revised the lateral load distributions to eliminate this wall as a shearwall.
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/16/2021 9:09:15 AM  
Provide collector to provide interconnectedness and resolve chord and reentrant corner forces.
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- Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:10:15 PM  
Appropriate connections will be specified on the Framing Plans
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- Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment #1 Date: 7/9/2021 2:12:52 PM

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Provide calculations justifying design of force transfer around shearwall openings. The "drag strut" design method has been shown by testing to be significantly unconservative and will not. Alternatively, the "cantilevered" or the Diekmann "segmented" methods are appropriate. Note specific requirements on detail 1/S5.1, including nailing requirements at boundary elements.

Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:14:09 PM

As part of the revised lateral load calculations we have included clearer FTAO calculations and reduced the holdowns and straps specified on the plan accordingly.

Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/16/2021 9:07:48 AM

Provide collector to resolve load into remote shearwall(s) and to resolve chord and reentrant corner forces.

Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:08:55 PM

Appropriate connections will be shown on the Framing Plans.

Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 4:01:16 PM

The need for a collector at this location was eliminated when the shearwall was deleted from the plan.

Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/15/2021 4:16:36 PM

Provide collector element as required to distribute lateral load to remote shearwall(s), typical.

Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 4:01:41 PM

Appropriate connections are specified on the Framing Plans

Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 4:03:02 PM

Beam 6 already has an appropriate connections specified to transfer the loads.

Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 2:29:45 PM

Holdown forces are additive to the foundation. Please confirm holdowns that align with holdowns above include the additional load.

Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:30:38 PM

Yes, calculations for holdown forces on main floor walls do include the additional uplift loads from the wall above where appropriate.

Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 2:06:18 PM

This is a FTAO wall correct? Please provide calculations justifying design. Refer APA FTAO spreadsheet (<https://www.apawood.org/ftao>). If this is intended to be a perforated shearwall design provide appropriate calculations. Note, the shearwall aspect ratio is the full pier height and the least bs value shall be used for the full length of the perforated shearwall.

Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:07:41 PM

While revising our lateral design in response to other questions we have also included FTAO calculations to clarify conditions, and we have reduced the holdowns anchoring this wall to reflect those calculations.


Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 2:09:06 PM

Justify including this wall in shearwall line B. Based on flexible diaphragm analogy, this wall will see significantly higher loads. The APA portal frame design may need to be revisited.

Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:09:41 PM

We have revised our lateral loads to redistribute forces in a more appropriate manner.

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 Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 1:36:14 PM

Confirm additional height of cripple wall does not overstress holdown.

 Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 1:51:40 PM

Good catch, we will revise the foundation plan to limit the distance between the holdown and the top of concrete to 18" maximum as required by Simpson Strong-Tie for maximum allowable loads.

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 Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 1:32:03 PM

Standard PAB detail indicates a minimum footing depth of 12". Please coordinate with footing schedule.

 Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 1:51:28 PM

We have revised the foundation plan in response to other questions, and PAB anchors are no longer used at these locations.

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 Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 1:33:28 PM

Provide callout or detail holdown at crawl space conditions.

 Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 1:52:52 PM

A large note on S1 & S2 already directs framers and foundation contractors to the typical details for holdown straps and anchors located on S5. In response to one of your other questions, this condition has been revised to eliminate the PAB anchor and cripple walls at this location

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✓ Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/16/2021 9:44:57 AM  
Provide connection to resolve chord and reentrant corner forces.


↩ Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 4:48:41 PM  
We have reconfigured connections at reentrant corners


💬 Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 4:46:53 PM  
Indicate axial design force at all truss members acting as collectors / drag struts. Note minimum sheathing nailing requirements for all drag struts.

↩ Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 4:47:36 PM  
We will add design force labels to appropriate members.


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 Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment #1 Date: 7/9/2021 1:03:02 PM  
Note on drawings required full width and depth compression blocking (grain oriented vertically) at floor interstitial space (and cripple walls) under all columns, posts and holdown locations.

 Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 1:04:51 PM  
We have revised the detail to clarify the blocking requirements, and we will revise the existing framing notes specifying blocking at columns, posts, etc. to clarify the grain orientation.


 Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 2:38:39 PM  
Please Note that this detail has been deleted in response to other comments on S2.

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 Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 7/9/2021 1:05:14 PM  
Callout at least one location on the plans for all "typical" conditions.

 Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 1:08:59 PM  
There are already large Notes on S1 & S2 directing framers and foundation contractors to sheet S5 for typical details for holdown straps and foundation holdowns.

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 Author: Building Review (paul.skidmore@mercergov.org) Subject: Comment Date: 6/16/2021 1:37:18 PM

Confirm with truss manufacturer that notching the top chord is appropriate at structural gable end trusses. Note that vertical web member must be 24" oc or less.

 Author: Mark Myers, PE (myengineer@centurytel.net) Subject: Sticky Note Date: 7/9/2021 1:02:07 PM

We have revised the detail to specify that the truss manufacturer shall design the gable top chord to accommodate notches for the outlookers, and to clarify the spacing of the gable verticals.