

MUNICIPALITY OF ANCHORAGE

DEVELOPMENT SERVICES DEPARTMENT



Phone: 343-8301

December 18, 2018

Troy Davis Homes
1689 S. Knik Goose Bay Road #400
Wasilla, AK 99654

Dear Troy,

We received a request from (prospective home buyer) to inspect earthquake damage to the foundation of a home located at ### South River Circle, Eagle River (land use permit R18-1602) currently being constructed by Troy Davis Homes. On December 7th, municipal inspector Phillip Calhoun met with (prospective home buyer) at the building site. Jordan Agen with Flawless Inspections and two individuals who appeared to be framers for Troy Davis Homes were also present. It is noted Mr. Calhoun has worked as a Municipality of Anchorage structural inspector for 17 years and has performed over 16,000 inspections. While on site it was obvious to Mr. Calhoun that the home was substantially deficient regarding structural provisions of the building codes adopted by the Municipality of Anchorage. Observations made by inspector Calhoun include:

1. There was no structural design on the job site. The few sheets of plans on the job site consisted of basic architectural information and did not include structural detailing. It appears the framers were basically working from architectural drawings. An example of some basic information necessary to construct to code that was missing includes (this list is not inclusive):
 - a. Shear wall locations, required nailing pattern and fastener size/spec.
 - b. Locations and sizes of hold-down anchors and straps.
 - c. Diaphragm nailing and blocking requirements.
 - d. Locations/design of collectors and connectors necessary to complete lateral load paths.
2. Aspect ratio of garage shear walls do not meet code.
3. Each garage shear wall had a single hold down anchor where two would be required, one at each end of the shear wall.
4. Other than at the garage doors, there were no other hold-down anchors in the entire home. Since the home is being wired, framing is substantially complete. Consequently one would expect to see hold down anchors at the end of shear walls.
5. The large wall of windows is not adequately constructed to resist out of plane wind loads and in-plane wind/seismic loads.
6. The panel siding (LP SmartSide) is not nailed as required by the manufacturer/code to transfer lateral loads. Hot dipped galvanized nails were not used as required by the manufacturer.
7. Through conversation with Jordan (Flawless Inspections) it was evident he has little knowledge of construction practices used to resist lateral loads from wind and seismic.
8. Through conversation with the framers it was evident they too lacked basic knowledge in construction practices used to resist lateral loads from wind and seismic.

Please note this list does not represent a thorough structural inspection of the home. Additional noncompliance may exist.

Following the inspection, a representative of Troy Davis Homes contacted the administration apparently to voice concern over the presence of a municipal inspector on their job site. Chief of inspections Gary Hile called a Mr. Kourosh Partow with Troy Davis Homes to respond. According to Mr. Hile, Mr. Partow stated this home is not built to the same standard as homes constructed in Anchorage because homes in Eagle River do not have to be constructed to this standard.

Building codes adopted by the Municipality of Anchorage apply throughout the entire MOA and are not limited to the Anchorage Building Safety Service Area (ABSSA). The distinction is that building permits requiring plan review and inspections are not required outside the ABSSA. Anchorage Municipal Code Section 23.05.030 - Applicability to service areas. Reads as follows:

Except as otherwise expressly provided, all provisions of title 23 shall apply throughout the municipality, with the exception that the requirements to apply for and complete the building permit, plan review, and building inspection processes shall be optional in areas outside the Anchorage Building Safety Service Area (ABSSA). The ABSSA is defined in AMC 27.30.040. The boundaries of the ABSSA are outlined on a map located in AMC 27.30.700.

Mr. Partow also voiced concern that we are singling out Troy Davis Homes. Please note we responded to a request to inspect earthquake damage and subsequently discovered obvious noncompliant construction. Given the significance of the November 30 Magnitude 7 earthquake, we are responding to all damage assessment requests throughout the entire MOA at no cost to the individual.

Discovering one instance of noncompliant construction is concerning. Given our findings while at the job site followed by discussion with Mr. Partow, we suspect this observed lack of compliance is not an isolated instance. A query of permit records shows 134 land use permits issued to Troy Davis Homes since 2002.

The building official cannot require the municipal plan review and inspection process (used to verify building code compliance) outside the ABSSA. AMC 27.40.020 states:

*27.40.020 - Areawide powers exercised within service areas only.
Building safety areawide powers are exercised within individual service areas only.*

The Development Services Director however has the authority to revoke a land use permit under AMC 21.03.100 C.4 which states:

4. *Revocation of land use permit.* The issuing department may revoke and require the return of any land use permit by notifying the permit holder in writing, stating the reason for such revocation. The issuing department shall revoke land use permits for any of the following reasons:

b. Refusal or failure to comply with the requirements of this title or any other applicable state or local laws;

Pursuant to the authority in AMC 21.03.100 C.4, the Development Services Department is revoking land use permit R18-1602 for failing to comply with the structural provisions of AMC Title 23. In order to re-activate this permit we propose the following remedy:

1. A structural engineer or residential designer experienced in structural design produce a structural design delineating all gravity and lateral load paths, including all structural elements necessary to complete the load paths. As a minimum the design shall address:
 - a. shear walls, nailing patterns and fastener specs,
 - b. hold-down anchor and strap sizes/locations,
 - c. diaphragm nailing/blocking,
 - d. collectors, connectors, etc.
2. Modify house framing to include all changes required by the structural design.
3. A qualified independent third party structural inspector to inspect for compliance with the structural design.

This process should be adopted for all homes constructed by Troy Davis Homes regardless of where the homes are located. Since all of south central Alaska is subject to large earthquakes, there is an obvious moral/ethical standard to adhere to.

Please respond at your earliest convenience to discuss resolution of this matter.

Respectfully,



Ross Noffsinger, PE

Acting Building Official, Engineering Services Manager

Cc:

(prospective home buyer)

Gary Hile, Chief of Inspections

Jack Frost, Acting Development Services Director

Chris Schutte, Executive Director, Office of Economic and Community Development

Rebecca Windt Pearson, Municipal Attorney

Bill Falsey, Municipal Manager

Ethan Berkowitz, Mayor