



Planning & Transportation Commission

Staff Report (ID # 8773)

Report Type:	Study Session	Meeting Date: 1/10/2018
Summary Title:	Update on Accessory Dwelling Unit Ordinance Implementation	
Title:	Study Session to Review the Accessory Dwelling Unit Ordinance Implementation and Discuss Potential Future Amendments	
From:	Hillary Gitelman	

Recommendation

Staff recommends that the Planning and Transportation Commission (PTC) conduct a Study Session to review the implementation of the Accessory Dwelling Unit Ordinance and provide comments on potential amendments that may be incorporated into a revised ordinance.

Report Summary

At its December 13, 2017 meeting the PTC began a discussion on the city's accessory dwelling unit ordinance. That discussion was continued to the next meeting.

The purpose of this study session is to:

1. Present information regarding the city's implementation of the ADU program since the beginning of the year when new state regulations took effect.
2. Identify some implementation challenges that apply to property specific conditions that are not addressed in the code and receive PTC feedback on discrete legislative changes to fine tune the ordinance
3. Present two additional topics that the Council requested additional information on how to address related to permitting illegally established ADUs and incentivizing income restricted rental of ADUs.

Staff anticipates returning to the commission with an updated ordinance that addresses the discrete issues in the Spring.

Attached is the December 13, 2017 staff report with additional information.

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Attachments:

- Attachment A: December 13, 2017 PTC ADU Staff Report with Attachments (PDF)

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Planning & Transportation Commission

Staff Report (ID # 8607)

Report Type:	Study Session	Meeting Date: 12/13/2017
Summary Title:	Update on Accessory Dwelling Unit Ordinance Implementation	
Title:	Study Session to Review the Accessory Dwelling Unit Ordinance Implementation and Discuss Potential Future Amendments	
From:	Hillary Gitelman	

Recommendation

Staff recommends that the Planning and Transportation Commission (PTC) conduct a Study Session to review the implementation of the Accessory Dwelling Unit Ordinance and provide comments on potential amendments that may be incorporated into a revised ordinance.

Report Summary

On May 8, 2017, City Council adopted [Ordinance No. 5412](#) amending Title 18 (Zoning) of the Palo Alto Municipal Code to implement the new state requirements related to Accessory Dwelling Units (ADU). These new regulations have eased the development requirements for ADUs for property owners and support the creation of additional, more affordable, housing units. This report provides a summary of the ADU development activity; identifies implementation challenges and recommended changes; considers Council direction to make ADUs available to low and moderate households and addressing illegally established ADUs; and, reviews updated state law taking effect in 2018. The purpose of this item is to get PTC feedback on changes or refinements needed for an updated ADU ordinance.

Background

In October 2015, the City Council approved a Colleagues Memo that directed the PTC to review the Palo Alto Municipal Code (PAMC) related to ADUs and recommend strategies to increase production of these units. Following this, the PTC conducted two Study Sessions in January and July 2017 (reports [#6462](#) & [#6944](#)), just prior to the State of California adopting ADU and Junior

ADU¹ (JADU) legislation in September 2016. In response to the new state ADU regulations, the City prepared a draft ordinance to incorporate the mandatory state requirements and some optional provisions with the existing local regulations. The PTC reviewed the ordinance on November 30, 2016 (report [#7368](#)) and made recommendations. In March 2017, the City Council held its first public hearing on ADUs (report [#7517](#)) and discussed in-depth the ordinance, making substantial revisions. On April 17, 2017, the Council adopted the ADU ordinance (Attachment A) with further refinements (report [#7921](#) & [#8048](#)), which became effective on June 8, 2017. The City Council also directed staff to provide a [quarterly report](#) on ADU permits and to conduct a Study Session with the PTC to analyze the results of the ordinance.

Prior to the implementation of the City's ADU ordinance, the state regulations that became effective on January 1, 2017 governed all ADU permit applications submitted for review in the City. Once the City's ordinance became effective on June 8, 2017, all ADU permit applications not already approved were subject to the new local regulations.

Key Standards Incorporated into City's Ordinance

The City's ADU ordinance consolidated all development requirements for these types of units into one section of the Zoning Code, PAMC Section [18.42.030](#). The standards listed below represent the key provisions of the current ordinance:

- Minimum lot size requirement of 5,000 square feet
- No parking requirements (for ADUs & JADUs)
- Detached ADUs allowed in rear yard
- Garage conversions allowed with required displaced parking allowed to be uncovered
- Attached ADUs may be 600 square feet; detached ADUs 900 square feet
- Additional lot coverage and floor area provided under certain circumstances
- JADUs allowed

ADU Permit Activity

On average, prior to the 2017 changes in the ADU regulations, the City approved four ADU units a year.² Since the beginning of this year, the City has approved nine ADU permits; there are 14 other permits still under review. No JADU permit applications have been submitted yet. The average ADU unit size is 565 sq. ft. and the majority of units (80%) are detached from the primary home.

Discussion

Since the adoption of the state and local ADU regulations, there has been interest expressed by the community regarding these changes, including the implications for possible negative

¹ The establishment of Junior Accessory Dwelling Units (JADU) as a permitted use was not required by state law and was left to the discretion of the local jurisdiction. With the local adoption of the ADU regulations in April 2017, the City Council allowed for these smaller JADU units in Palo Alto.

² Development data based on 2015-2023 Housing Element.

impacts, as well as potential development possibilities. The City has received increased requests for information on ADUs at the public information counter and via email and phone calls. Staff has set up a webpage (http://cityofpaloalto.org/gov/depts/pln/advance/accessory_dwelling_units_regulations_update.asp) and an email address dedicated to ADU questions (ADUOrd@CityofPaloAlto.org). City staff also participated in a couple of events hosted by others in the community.

From the various interactions mentioned above, and in reviewing ADU building permits, staff has identified some implementation challenges not anticipated when drafting the ordinance. It should be noted that the local ADU regulations have been in place for a short time, barely six months. As more time passes and more projects are reviewed, staff will be able to provide additional feedback and analysis of the ADU provisions.

A. Refine the Definition for ADUs

There has been confusion on the part of some staff and applicants as to which ADU regulations apply to certain ADU units. The term “conversion,” in particular, has been a source of misunderstandings when applying the code. Staff recommends updating the definition to better describe the different unit types to reduce this confusion, and update the code section accordingly with these terms. The unit type definitions being considered are as follows:

- “Attached ADU” means an ADU that is constructed as a new addition to a single-family dwelling which may include a remodeled portion of the existing home.
- “Detached ADU” means an ADU that is constructed as a physically independent structure separate from the primary single-family dwelling unit and may be a new structure, an addition to an existing accessory structure, or include both new construction together with the remodeled area of the existing structure.
- “Interior ADU” means an ADU that is located entirely within the existing building envelope of the primary single-family dwelling unit or accessory structure. For the purposes of this definition, existing structures are those legally constructed and completed on or before January 1, 2017. [These units are currently referred to as Conversions, as described in Section 18.42.040(a)(5)]

For consistency and clarity, the staff report discussion that follows utilizes the above listed terminology when referring to specific ADU unit types.

B. Bonus Lot Coverage and Floor Area for Attached and Detached ADUs

The general intent of providing bonus lot coverage and floor area is to give some development flexibility for existing developed sites that may be at or near the related maximums allowed. With these bonus provisions, the additional lot coverage needed for an attached or detached ADU would be 100% exempt, and up to an additional 175 sq. ft. of floor area would be allowed. Below is the specific language from the code:

18.42.040(a)(4) Lot Coverage/FAR

A. An accessory dwelling unit shall be included in the lot coverage and FAR requirements applicable to the parcel.

B. Exceptions:

i. Lot Coverage. When the development of an accessory dwelling unit on a parcel with an existing single family residence would result in the parcel exceeding the lot coverage requirement, the accessory dwelling unit shall not be included in the calculation of lot coverage applicable to the property, so long as the parcel meets the underlying zoning district's minimum lot size requirement or is substandard by no more than ten percent (10%) of the underlying zoning district's minimum lot size requirement.

ii. Basement FAR. In the R-1 district and all R-1 subdistricts, basement space used as an accessory dwelling unit, or portion thereof, shall not be included in the calculation of floor area for the entire site, providing the measurement from first finished floor to grade around the perimeter of the building is no more than three (3) feet.

iii. FAR. When the development of a new one-story accessory dwelling unit on a parcel with an existing single family residence would result in the parcel exceeding the maximum floor area, an additional 175 square feet of floor area above the maximum amount of floor area otherwise permitted by the underlying zoning district shall be allowed. This additional area shall be permitted only to accommodate the development of the accessory dwelling unit.

The code specifically states that these bonuses are given when development of an ADU is on a site "with an existing single-family residence." The scenario that staff has encountered is that property owners who are building completely new homes also want to take advantage of these bonuses. As the code is currently written, these bonuses do not apply to newly proposed homes. Staff is looking for input from the PTC as to whether this should be changed in the code. Some options to consider:

1. Leave code as is to apply to existing homes. Applicants can obtain the bonus/es by phasing the development on the site by building the home first and then coming back after for the permits for the ADU.
2. Modify the code to specifically allow the bonuses for any ADU development, whether in conjunction with the new or existing home.
3. Restrict bonuses only to existing homes that are existing as of a specific date, i.e., the effective date of the ordinance.

C. Basements in ADUs

For single-family development in the R-1 zone, basements are permitted and are generally not counted towards the site's allowable floor area. The current ADU code is clear that an ADU may be located in the basement level of the primary home, but it is less clear about allowing a basement as part of a ground floor ADU unit. Staff believes it was the intent of the ordinance to

permit ADU basements in attached or detached structures and recommends clarifying the code to reflect this provision. Since detached ADUs can be six feet from the side and rear property lines, this provision would introduce basements in sideyards, which is not something that is allowed for primary single family residences. For both situations, basements may not extend beyond the building footprint.

D. Replacement of Noncomplying Structures

Staff have encountered ADU proposals that included the conversion of existing non-habitable space (e.g. garage, accessory building, etc.) that had a legal noncomplying element, such as a setback encroachment; and these types of conversions are permitted with the ADU regulations.

The issue that has emerged is that during the permit review process, it comes to light that the legal noncomplying structure is not structurally sound and cannot be converted to an ADU, as is. To be code compliant, the noncomplying structure must be demolished and rebuilt. The general rule is that once a legal noncomplying structure is removed, all new construction must be code compliant (Section [18.70.100](#)(b) Noncomplying facility – Replacement).

The intent of the ADU code was to allow the conversion of existing structures to create living units, including the conversion of legal noncomplying structures. But, the circumstance of requiring existing non-complying structures to be rebuilt (retaining the non-compliance) to accommodate the new units was not fully considered. The following options are raised for discussion:

1. If a non-complying structure is required to be rebuilt to accommodate an ADU, the replacement structure must be code compliant.
2. Establish an exemption to allow the reconstruction of non-complying structures when it is required by Building code when 100% of the space exclusively used for the ADU living area.

E. Owner-Occupancy Requirements

State legislation does not mandate or preclude owner-occupancy requirements related to ADUs, but does for most circumstances require owner-occupancy for JADUs. The owner may occupy the JADU or principal residence.

The City requires owner-occupancy of the accessory unit or the principal living unit for both ADUs and JADUs. This provision and others are memorialized in a deed restriction that is recorded against the property to advise future owners of applicable provisions related to ADUs/JADUs.

The owner-occupancy requirement was envisioned to help address neighborhood concerns about absent land owners and increased rental activity in residential neighborhoods. Moreover,

having the owner on-site creates a self-regulating condition with the tenant and land owner relationship, and provides a point of contact for any nearby residents that may have a concern or problem with the tenant.

One property owner has approached staff seeking this provision on ADUs be repealed because this owner does not currently, and would ultimately reside on the property with the proposed ADU. (See Attachment B.) Additionally, staff notes that based on the 2011-2015 American Community Survey 5-Year Estimates, there are 16,386 single family housing units in Palo Alto. Approximately 23% (3,803 housing units) of those housing units are renter-occupied. If the owner-occupancy requirement was removed for ADUs, it would provide a pathway to increase more ADU development on those parcels.

Ultimately, this is a policy question that can be revisited and staff requests PTC comments on how to approach this issue.

F. Opt-Out Provision

The Municipal Code does not include provisions for when a property owner wants to remove the ADU/JADU from the site. Staff recommends adding a process to decommission an ADU/JADU but seeks PTC guidance on how far this effort should extend. It is unclear how often the City would receive a request to remove an ADU/JADU, but the question has come up at the planning counter. As noted earlier, ADUs/JADUs can benefit from increased lot coverage and floor area, and removal of the covered parking requirement for single family residences; benefits not enjoyed by other R1 zoned properties without an ADU/JADU. Staff requests Commission feedback on the extent to which site development benefits gained with the establishment of an ADU/JADU, if any, should be restored to its prior condition when the ADU/JADU is abandoned.

G. Siting ADUs on the Front of a Home

The ADU provisions include requirements for the exterior entry of an attached unit to be located on a separate building façade from the main residences' entrance.³ With this provision, there was recognition that the ADU should be visually subordinate to the primary house.

A recent detached ADU proposal highlighted another aspect of development that the ordinance does not adequately address and that is building an ADU in front of an existing home, whether attached or detached. Because this scenario is not captured in the ADU regulations, it should be discussed for inclusion. For clarification, the state regulations allow for local jurisdictions to impose standards such as setbacks, landscape, and design review, for ADU development. If the

³ Except on corner lots, the accessory dwelling unit shall not have an entranceway facing the same lot line (property line) as the entranceway to the main dwelling unit unless the second entranceway is located in the rear half of the lot. Exterior staircases to second floor units shall be located toward the interior side or rear yard of the property. [PAMC 18.42.040(a)(7)(F)]

City was to incorporate additional ADU development standards as it relates to placement, it would be consistent with the state provisions.

There are some options identified below to initiate the discussion:

1. Leave the code as is and allow ADU placement as permitted by the existing development standards, regardless of whether it is located in the front of the home. In this case, the ADU would be located within the buildable area of the lot, but could be placed in front of the existing primary home.
2. Require the placement of detached ADUs when located in a side yard setback to be in the rear portion of the lot. Currently, for detached accessory structures, when located in an interior side setback, they must be located at least 75 feet back from the front property line. Detached ADUs could follow these same or similar requirements.

Requiring a rear ADU placement would likely facilitate compliance with sites that may have received a planning entitlement (i.e. IR, HIE, Variance), including ones for exceptions to the Municipal Code. For the planning entitlements referenced, the approval findings include neighborhood compatibility and other similar standards. One could argue that placing an ADU on one of these sites, especially on the street facing sides, could negate the intentions of a previously granted entitlement.

H. Miscellaneous

- a. 50% Rear Yard Coverage: The R-1 development standards require that no more than 50% of a required interior rear yard be covered by accessory structures [[PAMC 18.12.080\(b\)\(6\)](#)]. Staff would like feedback on whether this coverage restriction should also be applied to ADUs. The strict reading of the code would suggest that this provision would not apply to an ADU, whether constructed as new or done through a conversion of an existing accessory structure, because it is not an “accessory structure” by definition, and the 50% limitation applies to accessory structures.
 - "Accessory building or structure" means a building or structure which is incidental to and customarily associated with a specific principal use or facility, and which meets the applicable conditions set forth in Section [18.12.080](#).
 - “Accessory dwelling unit” means an attached or a detached residential dwelling unit which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family dwelling is situated. ...”
- b. Replacement Parking in the Streetside Setback: State law specifies that required replacement parking (i.e. for the primary home) may be “located in any configuration” on the subject property. The City code has identified that

replacement parking may be located in the front yard setback on an existing driveway (uncovered only). In the case of corner lots, the code is silent on allowing parking in the streetside setback. Staff suggests that replacement uncovered parking be allowed in the streetside setback similar to what has been permitted for the front yard setback and that the Director be given the discretion to approve parking stall dimensions less than required by code based on certain findings.

- c. Implications for Existing ADUs: The current ADU regulations are focused on developing new units and do not provide direction for applicability to existing units. Staff suggests that this clarification is needed in the code and should be analyzed for the appropriate clarifications. A few scenarios to consider would be:
 - i. Allow the expansion of existing units, within the allowable size limits, to take advantage of bonuses (lot coverage/floor area).
 - ii. Allow the elimination of required covered parking to support expansion of existing units.
 - iii. Consider exempting the deed restriction requirement for improvements to existing units, providing no bonus lot coverage or floor area is granted.

City Council Follow-up Discussion Items

At the March 7, 2017 Council meeting regarding the ADU regulations, Council directed staff to return in 2018 with additional information regarding the two issues below.

Options to Make ADUs Available to Moderate or Low Income Residents

City Council directed staff to explore further the possible options to make ADUs accessible to moderate and low income residents. This type of program reflects the larger concern regarding the lack of affordable housing in Palo Alto and the greater Bay Area., Staff still needs to do more research on this issue, but preliminarily believes that a regulatory requirement to make ADUs available on an income-restricted basis could create a barrier to ADU production that may run afoul of state law provisions to encourage construction of ADUs. An incentive-focused approach would likely be necessary.

One approach that could be feasible is to partner with an organization that has programs that reflect the City's intention and goals; the City could contribute funding under specific conditions to help facilitate implementation in Palo Alto. As an example for this, [Housing Trust Silicon Valley](#), a local non-profit organization based in San Jose, is currently developing a pilot program that would provide low-cost flexible loans to homeowners for the purpose of constructing an ADU in exchange for their agreement to rent the units at affordable costs to low- and middle-income earners. The Housing Trust's funding "will be used to make capital loans to homeowners — who can easily spend \$100,000 or \$200,000 on ground-up construction of an ADU. But the Housing Trust also intends to create an educational outreach program — involving classes, workshops and technical assistance — to help homeowners navigate the ADU

process.”⁴ The partnership option ideally would place responsibility of the program management on the agreeable non-profit organization.

If the City were to develop its own program, it could include the strategies listed below. It should be noted that many of these ideas can be used to encourage and support ADU development in general, without the specific focus on moderate/low income residents.

Financial Assistance

1. Provide financial aid/loans or subsidies:
 - a. Use City of Palo Alto’s Housing funds to finance affordable loans at low interest rates or subsidies for ADU construction.
 - b. Provision of interest free or forgivable loans.
 - c. Provide salary assistance (wage subsidy) for builders to lower construction cost.
2. Reduce or eliminate building permit fees and development impact fees.

Technical and Educational Assistance

3. Develop prototype designs for ADUs that can be readily utilized for the permit process and can be approved more expeditiously.
4. Providing technical assistance grant where the City can pay a specified amount towards one hour of a professional’s time to help solve particular design problems or to adjust ADU Prototype.
5. Provide resources or training for what’s involved in becoming a landlord; develop a “kit.”
6. Providing other resources, such as an online information library on ADU resources.

Strategies for Legalizing Illegally Constructed ADUs

As with the item above, on March 7, 2017 Council directed staff to return in 2018 with discussion on approaches to bring existing illegal ADUs into compliance. Staff has researched what other jurisdictions⁵ have done to address this concern and compiled the discussion below.

There are a few cities in the bay area that have implemented protocols to legalize illegal ADUs. These cities include San Francisco, Santa Cruz, and Oakland. A reoccurring fundamental condition was the required documentation that the living unit was in existence by a specific

⁴ *The Mercury News* “Bank funds ‘granny’ units project in affordable housing experiment for San Jose, L.A.” October 9, 2017: <http://www.mercurynews.com/2017/10/09/an-affordable-housing-experiment-for-san-jose-and-los-angeles-bank-funds-pilot-project-to-help-build-granny-units/>

⁵ Staff contacted the following cities for information: Berkeley, Los Altos, Menlo Park, Mountain View, Oakland, Redwood City, San Francisco, and Santa Cruz

date, and only those units would then be considered for the unique legalization process. Generally, the units had to be made building code compliant for all health and safety concerns, and then special consideration was given to other non-complying development standards (e.g. setbacks, height, lot coverage, etc.). Staff is still exploring options to balance city interests in possibly legalizing such ADUs while addressing life and safety concerns. Staff welcomes the Commission's feedback on an approach to address this issue. The more common approach to incentivize property owners to legalize their units is associated with cost savings. Some strategies used by one or more of the cities with legalization programs include:

- Waiving permitting and or development impact fees
- Reducing permitting and or development fees
- Fee waivers/reductions can be associated with a specific timeframe to motivate property owners to participate.

State Regulations Taking Effect January 2018

Earlier this year, the City adopted comprehensive regulations related to ADUs to conform to state law that became effective on January 1, 2017. Subsequently, the state Legislature passed two additional bills AB 494 and SB 229, signed by the Governor in September 2017, clarifying the previously adopted ADU legislation. The City's existing ordinance only requires minor modifications to remain consistent with state law. The proposed amendments include those conforming changes as well as other very minor clarifications. These amendments were included with the Planning Code Amendments agenda item at the November 29, 2017 PTC meeting (report [#8041](#)), but was not discussed due to a continuance; it is now on the December 13, 2017 meeting agenda. The changes are summarized below:

- State law has been revised to clarify that an ADU may be constructed on sites with either an existing *or proposed* single-family dwelling. This revision is consistent with the City's implementation of the ADU ordinance, and the proposed ordinance would make conforming changes to reference proposed single-family homes.
- The proposed ordinance would also add to the list of zoning districts where ADUs are allowed (R-1, R-2, RE, RMD and OS districts) and those sites that are zoned Planned Community where single-family dwelling is an allowed use. The PC zoned sites would require a minimum lot size of 5,000 square feet like the conventional zoning districts (other than the OS district) where ADUs are allowed.
- With respect to ADUs established through conversions of space within an existing single-family home or an existing accessory structure, the new state legislation requires that such conversions be allowed in any zoning district where single-family residential is an allowed use. The proposed amendment would allow interior ADUs in the R-2, RMD, RM, and OS and PC districts where single-family residential is an allowed use.

These state driven code amendments are anticipated to be reviewed by Council in February 2018.

Environmental Review

The Study Session review does not require action and therefore does not constitute a “project” requiring environmental review and is not subject to the California Environmental Quality Act (CEQA). However, any resulting ordinance will be reviewed in compliance with CEQA.

Public Notification, Outreach & Comments

The Palo Alto Municipal Code does not require notice of this public hearing be published in a local paper because it is a Study Session. As a courtesy, a notice of a public hearing for this discussion was published in the Palo Alto Weekly on December 1, 2017.

For the discussion in this report, staff did not perform any specific public outreach; the meeting was noted on the City’s ADU project webpage. Staff did receive one comment letter that was focused on the owner-occupancy requirements and the interest in having them be removed (Attachment B).

Next Steps

It is anticipated that staff will return in Spring 2018 to the PTC with a draft ordinance for review and recommendation, which would be forwarded to the City Council soon thereafter.

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Attachments:

- Attachment A: ADU/JADU Ordinance #5412 (PDF)
- Attachment B: Lundy Comment Letter (PDF)

⁶ Emails may be sent directly to the PTC using the following address: planning.commission@cityofpaloalto.org

Ordinance No. 5412

Ordinance of the Council of the City of Palo Alto Amending Chapter 18 (Zoning) of the Palo Alto Municipal Code to Implement New State Law Requirements Relating to Accessory Dwelling Units and Junior Accessory Dwelling Units and to Reorganize and Update City's Existing Regulations

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Findings and Declarations. The City Council finds and declares as follows:

A. Housing in California is becoming increasingly unaffordable. The average California home currently costs about 2.5 times the national average home price and the monthly rent is 50% higher than the rest of the nation. Rent in San Francisco, San Jose, Oakland, and Los Angeles are among the top 10 most unaffordable in the nation. With rising population growth, California must not only provide housing but also ensure affordability.

B. Despite a high median income in Palo Alto, nearly 30 percent of all households overpaid for their housing (more than 30 percent of their income) in 2010.

C. It is estimated that 63 percent of extremely low income renter households and 75 percent of extremely low income owner households overpaid for housing in 2010. Of the estimated 1,520 low income households, 75 percent of renter households and 44 percent of homeowner households paid more than 30 percent of their income for housing.

D. The Palo Alto City Council, recognizing the severity of the regional housing crisis, requested that the Planning and Transportation Commission review constraints affecting the production of second (accessory) dwelling units and recommend modifications to the City's development standards.

E. While existing law enables accessory dwellings as a source of housing, recent studies show that local standards like Palo Alto's, perhaps unintentionally, prevent homeowners from building ADUs with standards like lot coverage, large set-backs, off-street parking, or costly construction requirements.

F. In September 2016, Governor Brown signed into law Senate Bill 1069, Assembly Bill 2299 and Assembly Bill 2406 relating to the creation of accessory dwelling units (ADUs) and junior accessory dwelling units.

G. These new bills were intended to address the housing crisis by easing regulatory barriers for homeowners who choose to build affordable housing in their own backyards.

H. This ordinance is adopted to comply with these new State mandates regarding ADUs and junior accessory dwelling units, and to reduce regulatory constraints affecting their production.

SECTION 2. Section 18.04.030 (Definitions) of Chapter 18.04 (Definitions) of Title 18 (Zoning) is amended to read as follows:

18.04.030 Definitions

...

(4) “Accessory dwelling unit” means an attached or a detached residential dwelling unit which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family dwelling is situated. An accessory dwelling unit also includes the following:

- a. An efficiency unit, as defined in Section 17958.1 of the Health and Safety Code.
- b. A manufactured home, as defined in Section 18007 of the Health and Safety Code.

In some instances this Code uses the term second dwelling unit interchangeably with accessory dwelling unit.

~~(46.5) “Dwelling unit, second” means a separate and complete dwelling unit, other than and subordinate to the main dwelling unit, whether a part of the same structure or detached, on the same residential lot.~~

(74.5) “Junior accessory dwelling unit” means a unit that is no more than 500 square feet in size and contained entirely within an existing single-family structure. A junior accessory dwelling unit may include separate sanitation facilities, or may share sanitation facilities with the existing structure.

(132) “Single-family use” means the use of a site for only one dwelling unit and, where permitted, an accessory ~~second~~ dwelling unit or a junior accessory dwelling unit.

...

SECTION 3. In Section 18.10.010 (a) substitute the term “accessory dwelling unit(s)” for “second dwelling unit(s)”.

SECTION 4. Section 18.10.030 Table 1 and Footnote (2) are amended as follows:

**TABLE 1
PERMITTED AND CONDITIONALLY PERMITTED LOW-DENSITY RESIDENTIAL USES
[P = Permitted Use -- CUP = Conditional Use Permit Required]**

	R-E	R-2	RMD	Subject to Regulations in:
ACCESSORY AND SUPPORT USES				
Accessory facilities and uses customarily incidental to permitted uses (no limit on number of plumbing fixtures)	P	P	P	18.10.080
Home Occupations, when accessory to permitted residential uses.	P	P	P	18.42.060
Horticulture, gardening, and growing of food products for consumption by occupants of the site.	P	P	P	
Sale of agricultural products produced on the premises (1)	P			18.10.110
Second <u>Accessory Dwelling Units</u>	P	p ⁽²⁾	p ⁽²⁾	18.4210.0470 <u>18.4210.0470</u>

<u>Junior Accessory Dwelling Units</u>	<u>P</u>	<u>p⁽²⁾</u>	<u>p⁽²⁾</u>	<u>18.42.040</u>
AGRICULTURE AND OPEN SPACE USES				
Agriculture	P			18.10.110
EDUCATIONAL, RELIGIOUS, AND ASSEMBLY USES				
Private Educational Facilities	CUP	CUP	CUP	
Religious Congregations and Institutions	CUP	CUP	CUP	
PUBLIC/QUASI-PUBLIC USES				
Community Centers	CUP	CUP	CUP	
Utility Facilities essential to provision of utility services to the neighborhood, but excluding business offices, construction or storage yards, maintenance facilities, or corporation yards.	CUP	CUP	CUP	
RECREATION USES				
Neighborhood Recreational Centers			CUP	
Outdoor Recreation Services	CUP	CUP		
RESIDENTIAL USES				
Single-Family	P	P	P	
Two-Family use, under one ownership		P	P	
Mobile Homes	P	P	P	18.42.100
Residential Care Homes	P	P	P	
RETAIL USES				
Cemeteries	CUP			
Commercial Plant Nurseries	CUP			
SERVICE USES				
Convalescent Facilities	CUP			
Day Care Centers	CUP	CUP	CUP	
Small Adult Day Care Homes	P	P	P	
Large Adult Day Care Homes	CUP	CUP	CUP	
Small Family Day Care Homes	P	P	P	
Large Family Day Care Homes	P	P	P	
Bed & Breakfast Inns			p ⁽³⁾	
P = Permitted Use		CUP = Conditional Use Permit Required		

...

(2) ~~Second Accessory Dwelling~~ Units in R-2 and RMD Zones: An accessory second dwelling unit or a Junior Accessory Dwelling Unit associated with a single-family residence on a lot in the R-2 or RMD zones is permitted, subject to the provisions of Section ~~18.10.070~~18.42.040, and such that no more than two units result on the lot.

...

SECTION 5. Section 18.10.040 (Development Standards) of Chapter 18.10 (Low-Density Residential (RE, R-2 and RMD) Districts) of Title 18 (Zoning) is amended to read as follows:

18.10.040 Development Standards

(a) Site Specifications, Building Size, Height and Bulk, and Residential Density

...

18.10.040(a) Table 2, Footnote

...

(5) Maximum House Size: The gross floor area of attached garages and attached ~~second accessory dwelling units and junior accessory dwelling units~~ are included in the calculation of maximum house size. If there is no garage attached to the house, then the square footage of one detached covered parking space shall be included in the calculation. This provision applies only to single-family residences, not to duplexes allowed in the R-2 and RMD districts.

...

(i) Individual Review

The Individual Review provisions of Section 18.12.110 of the Zoning Ordinance shall be applied to any single-family or two-family residence in the R-2 or RMD districts to those sides of a site that share an interior side lot line with the interior side or rear lot line of a property zoned for or used for single-family or two-family dwellings, ~~except where architectural review board review is required for an accessory second dwelling on an RMD-zoned site.~~ The individual review criteria shall be applied only to the project's effects on adjacent single-family and two-family uses.

SECTION 6. Section 18.10.060 Table 3 is amended as follows:

**TABLE 3
PARKING REQUIREMENTS FOR R-E, R-2 AND RMD USES**

Use	Minimum Off-Street Parking Requirement
Single-family residential use (excluding second <u>accessory</u> dwelling units)	2 spaces per unit, of which one must be covered
Two family (R2 & RMD districts)	3 spaces total, of which at least two must be covered
Second Accessory dwelling unit, attached or detached: >450-sf in size +450-sf in size	2 spaces per unit, of which one must be covered 1 space per unit, which may be covered or uncovered <u>No parking required</u>
<u>Junior accessory dwelling unit</u>	<u>No parking required</u>
Other Uses	See Chapter 18.40

...

SECTION 7. Section 18.10.070 (Second Dwelling Units) of Chapter 18.10 (Low-Density Residential (RE, R-2 and RMD) Districts) of Title 18 (Zoning) is repealed in its entirety and a new 18.10.070 is added to read as follows:

18.10.070 Accessory and Junior Accessory Dwelling Units

Accessory Dwelling Units and Junior Accessory Dwelling Units are subject to the regulations set forth in Section 18.42.040.

SECTION 8. Section 18.10.120 (Architectural Review) of Chapter 18.10 (Low-Density Residential (RE, R-2 and RMD) Districts) of Title 18 (Zoning) is amended to read as follows:

18.10.120 Architectural Review

Architectural review, as required in Section 18.76.020, is required in the R-E, R-2, and RMD districts whenever three or more adjacent residential units are intended to be developed concurrently, whether through subdivision or individual applications. ~~Architectural review is also required for **second dwelling units** of more than 900 square feet, when located in the Neighborhood Preservation Combining District (NP).~~

SECTION 9. Section 18.10.140 (Neighborhood Preservation Combining District (NP) Standards) of Chapter 18.10 (Low-Density Residential (RE, R-2 and RMD) Districts) of Title 18 (Zoning)

is amended to read as follows:

18.10.140 Neighborhood Preservation Combining District (NP) Standards

...

(b)(2) Design Review Required

For properties on which two or more residential units are developed or modified, design review and approval shall be required by the architectural review board in compliance with procedures established in Section 18.76.020 for any new development or modification to any structure on the property and for site amenities. No design review is required for construction of or modifications to single-family structures that constitute the only principal structure on a parcel of land or for accessory dwelling units or junior accessory units.

~~No design review is required for construction of second dwelling units on a parcel except when the second unit exceeds 900 square feet in size.~~

...

SECTION 10. Section 18.10.150(e) (Existing Second Dwelling Units on Substandard Size Lots) is deleted in its entirety and reserved for future use.

...

SECTION 11. Section 18.12.010(a) is amended as follows:

(a) Single Family Residential District [R-1]

The R-1 single family residential district is intended to create, preserve, and enhance areas suitable for detached dwellings with a strong presence of nature and with open area affording maximum privacy and opportunities for outdoor living and children's play. Minimum site area requirements are established to create and preserve variety among neighborhoods, to provide adequate open area, and to encourage quality design. Second Accessory dwelling units, junior accessory dwelling units and accessory structures or buildings are appropriate. ~~where consistent with the site and neighborhood character.~~ Community uses and facilities, such as churches and schools, should be limited unless no net loss of housing would result.

...

SECTION 12. Section 18.12.030 Table 1, is amended as follows:

**Table 1
PERMITTED AND CONDITIONAL R-1 RESIDENTIAL USES**

	R-1 and all R-1 Subdistricts	Subject to Regulations for:
ACCESSORY AND SUPPORT USES		
Accessory facilities and uses customarily incidental to permitted uses with no more than two plumbing fixtures and no kitchen facility, or of a size less than or equal to 200 square feet	P	18.04.030(a)(3) 18.12.080
Accessory facilities and uses customarily incidental to permitted uses with more than two plumbing fixtures (but with no kitchen), and in excess of 200 square feet in size, but excluding second accessory dwelling units	CUP	18.12.080
Home occupations, when accessory to permitted residential	P	18.42.060
Horticulture, gardening, and growing of food products for consumption by occupants of the site	P	
Second <u>Accessory Dwelling Units</u>	p ⁽¹⁾	18.42.040 <u>18.42.070</u>
<u>Junior Accessory Dwelling Unit</u>	p ⁽¹⁾	<u>18.42.040</u>
EDUCATIONAL, RELIGIOUS AND ASSEMBLY USES		
Private Educational Facilities	CUP	
Churches and Religious Institutions	CUP	
PUBLIC/QUASI PUBLIC USES		
Community Centers	CUP	
Utility Facilities essential to provision of utility services to the neighborhood, but excluding business offices, construction or storage yards, maintenance facilities, or corporation yards	CUP	
RECREATION USES		
Outdoor Recreation Services	CUP	
RESIDENTIAL USES		
Single-Family	P	
Mobile Homes	P	18.42.100
Residential Care Homes	P	
SERVICE USES		
Day Care Centers	CUP	
Small Adult Day Care Homes	P	

Large Adult Day Care Homes	CUP	
Small Family Day Care Homes	P	
Large Family Day Care Homes	P	
P = Permitted Use		CUP = Conditional Use Permit Required

(1) An Accessory Dwelling Unit or a Junior Accessory Dwelling Unit associated with a single-family residence on a lot is permitted, subject to the provisions of Section 18.42.040, and such that no more than two total units result on the lot.

SECTION 13. Section 18.12.040 Table 2, footnote (8) is amended as follows:

(8) **Maximum House Size:** The gross floor area of attached garages and attached accessory second dwelling units and junior accessory dwelling units are included in the calculation of maximum house size. If there is no garage attached to the house, then the square footage of one detached covered parking space shall be included in the calculation.

SECTION 14. Section 18.12.060 Table 4 is amended as follows:

Table 4 shows the minimum off-street automobile parking requirements for specific uses in the R-1 district.

Parking Requirements for Specific R-1 Uses	
Use	Minimum Off-Street Parking Requirement
Single-family residential use (excluding second - <u>accessory</u> dwelling units)	2 spaces per unit, of which one must be covered.
Second - <u>Accessory</u> dwelling unit , attached or detached	2 spaces per unit, of which one must be covered <u>No parking required</u>
<u>Junior Accessory Dwelling Unit</u>	<u>No parking required</u>
Other Uses	See Chs. 18.52 and 18.54

...

SECTION 15. Section 18.12.070 (Second Dwelling Units) of Chapter 18.12 (R-1 Single-Family Residential District) of Title 18 (Zoning) is repealed in its entirety and a new 18.12.070 is added to read as follows:

18.12.070 Accessory and Junior Accessory Dwelling Units

Accessory Dwelling Units and Junior Accessory Dwelling Units are subject to the regulations set forth in Section 18.42.040.

SECTION 16. Section 18.12.090(b)(2) is amended to read as follows:

...

(2) basement area is deemed to be habitable space but the finished level of the first floor is no more than three feet above the grade around the perimeter of the building foundation.

~~Basement space used as a second dwelling unit or portion thereof shall be counted as floor area for the purpose of calculating the maximum size of the unit (but may be excluded from calculations of floor area for the total site). This provision is intended to assure that second units are subordinate in size to the main dwelling and to preclude the development of duplex zoning on the site.~~

...

SECTION 17. Section 18.12.150(d) (Existing Second Dwelling Units on Substandard Size Lots) is deleted in its entirety and reserved for future use.

...

SECTION 18. Section 18.28.040, Table 1, is amended as follows:

**Table 1
Land Uses**

	PF	OS	AC	Subject to Regulations in Chapter:
ACCESSORY AND SUPPORT USES				
Accessory facilities and accessory uses		P		Chs. 18.40 and 18.42
Eating and drinking services in conjunction with a permitted use	CUP ⁽¹⁾			
Retail services as an accessory use to the administrative offices of a non-profit organization, provided that such retail services do not exceed 25% of the gross floor area of the combined administrative office services and retail service uses	CUP ⁽¹⁾			
Retail services in conjunction with a permitted use	CUP ⁽¹⁾			

Sale of agricultural products produced on the premises; provided, that no permanent commercial structure for the sale or processing of agricultural products shall be permitted.			P	
Second <u>Accessory</u> dwelling units, subject to regulations in Section 18.28.070 <u>18.42.040</u>		p ⁽²⁾		18.28.070 <u>18.42.040</u>
<u>Junior Accessory Dwelling Unit</u>		p ⁽²⁾		<u>18.42.040</u>
AGRICULTURAL AND OPEN SPACE USES				
Agricultural Uses, including animal husbandry, crops, dairying, horticulture, nurseries, livestock farming, tree farming, viticulture, and similar uses not inconsistent with the intent and purpose of this chapter		P	P	
Botanical conservatories, outdoor nature laboratories, and similar facilities		P		
Native wildlife sanctuaries		P		
Park uses and uses incidental to park operation	P			
EDUCATIONAL, RELIGIOUS, AND ASSEMBLY USES				
Business or trade schools	CUP ⁽¹⁾			
Churches and religious institutions	CUP ⁽¹⁾			
Educational, charitable, research, and philanthropic institutions		CUP		
Private educational facilities	CUP ⁽¹⁾			
Public or private colleges and universities and facilities appurtenant thereto	CUP			
Special education classes	CUP ⁽¹⁾			
OFFICE USES				
Administrative office services for non-profit organizations	CUP ⁽¹⁾			
OTHER USES				
Other uses which, in the opinion of the director, are similar to those listed as permitted or conditionally permitted uses	CUP ⁽¹⁾			
PUBLIC/QUASI-PUBLIC FACILITY USES				
All facilities owned or leased, and operated or used, by the City of Palo Alto, the County of Santa Clara, the State of California, the government of the United States, the Palo Alto Unified School District, or any other governmental agency	P			
Communication Facilities		CUP		
Community Centers	CUP ⁽¹⁾			
Utility Facilities	CUP	CUP	CUP	
RECREATIONAL USES				
Neighborhood recreation centers	CUP ⁽¹⁾			

Outdoor recreation services	CUP (1)		CUP	
Recreational uses including riding academies, clubs, stables, country clubs, and golf courses		CUP		
Youth clubs	CUP (1)			
RESIDENTIAL USES				
Single-family dwellings		P		
Manufactured housing (including mobile homes on permanent foundations)		P		18.40.
Guest ranches		CUP		
Residential care facilities, when utilizing existing structures on the site	CUP (1)			
Residential Care Homes		P		
Residential use, and accessory buildings and uses customarily incidental to permitted dwellings; provided, however, that such permitted dwellings shall be for the exclusive use of the owner or owners, or lessee or lessor of land upon which the permitted agricultural use is conducted, and the residence of other members of the same family and bona fide employees of the aforementioned			P	
SERVICE USES				
Animal care, including boarding and kennels		CUP	CUP	
Cemeteries			CUP	
Cemeteries, not including mausolea, crematoria, or columbaria		CUP		
Small day care homes		P		
Large day care homes		CUP		
Day care centers	CUP (1)			
Art, dance, gymnastic, exercise or music studios or	CUP (1)			
Medical Services:				
Hospitals	CUP			
Outpatient medical facilities with associated medical research	CUP			
TEMPORARY USES				
Temporary parking facilities, provided that such facilities	CUP (1)			
TRANSPORTATION USES				
Airports and airport-related uses	CUP (1)			

...

(2) An accessory dwelling unit or a Junior Accessory Dwelling Unit associated with a single-family residence on a lot in the OS District is permitted, subject to the provisions of Section 18.42.040, and such that no more than two total units result on the lot.

SECTION 19. Section 18.28.070(a) (Second Dwelling Units) is amended as follows:

18.28.070 Additional OS District Regulations

The following additional regulations shall apply in the OS district:

(a) ~~Second Accessory Dwelling Units and Junior Accessory Dwelling Units~~

Accessory Dwelling Units and Junior Accessory Dwelling Units are subject to the regulations set forth in Section 18.42.040.

~~Not more than one attached or detached second dwelling units shall be allowed on a lot in the OS district, and shall be subject to the following regulations:~~

~~———— (1) Second dwelling shall only be permitted on sites with a minimum site area of 10 acres;~~

~~———— (2) Attached second dwelling units shall comply with the OS district height limitation of 25 feet;~~

~~and~~

~~———— (3) Second dwelling units shall follow the standards set forth in the Residential Estate (R-E) District for second dwelling units (18.10.070(b)), with the exceptions outlined in subsections 1 and 2 above.~~

...

SECTION 20. Section 18.42.040 (Accessory and Junior Accessory Dwelling Units) is added as follows:

18.42.040 Accessory and Junior Accessory Dwelling Units

The following regulations apply to zoning districts where accessory dwelling units and junior accessory dwelling units are permitted.

(a) Accessory Dwelling Units

1. Purpose

The intent of this section is to provide regulations to accommodate accessory dwelling units, in order to provide for variety to the city's housing stock and additional affordable housing opportunities. Accessory Dwelling Units shall be separate, self-contained living units, with separate entrances from the main residence, whether attached or detached. The standards below are provided to minimize the impacts of accessory dwelling units on nearby residents and throughout the city, and to assure that the size and location of such dwellings is compatible with the existing residence on the site and with other structures in the area.

2. Minimum Lot Sizes

(i) In the R-1 district and all R-1 subdistricts, RE district, R-2 district, and RMD district, the minimum lot size for the development of an accessory dwelling unit is 5,000 square feet.

(ii) In the OS District, the minimum lot size for the development of an accessory dwelling unit is 10 acres.

3. Setbacks and Daylight Plane

(i) Except as otherwise provided in this section, accessory dwelling units shall

comply with the underlying zoning district's setbacks, including daylight plane requirements.

(ii) Notwithstanding section (i) above, no setback shall be required for an existing garage that is converted to an accessory dwelling unit, except as provided in subsection (a)(5) below.

(iii) In districts permitting second story accessory dwelling units, a setback of no more than five feet from the side and rear lot lines shall be required for an accessory dwelling unit constructed above a garage.

4. Lot Coverage/FAR

(i) An accessory dwelling unit shall be included in the lot coverage and FAR requirements applicable to the parcel.

(ii) Exceptions:

a. Lot Coverage. When the development of an accessory dwelling unit on a parcel with an existing single family residence would result in the parcel exceeding the lot coverage requirement, the accessory dwelling unit shall not be included in the calculation of lot coverage applicable to the property, so long as the parcel meets the underlying zoning district's minimum lot size requirement or is substandard by no more than ten percent (10%) of the underlying zoning district's minimum lot size requirement.

b. Basement FAR. In the R-1 district and all R-1 subdistricts, basement space used as an accessory dwelling unit, or portion thereof, shall not be included in the calculation of floor area for the entire site, providing the measurement from first finished floor to grade around the perimeter of the building is no more than three (3) feet.

c. FAR. When the development of a new one-story accessory dwelling unit on a parcel with an existing single family residence would result in the parcel exceeding the maximum floor area, an additional 175 square feet of floor area above the maximum amount of floor area otherwise permitted by the underlying zoning district shall be allowed. This additional area shall be permitted only to accommodate the development of the accessory dwelling unit.

5. Conversion of Space in Existing Single Family Residence or Existing Accessory Structure

Notwithstanding the provisions of subsections (a)(2), (a)(3), (a)(4), (a)(7) and (a)(8), in the R-1 district and all R-1 subdistricts and RE district only, an Accessory Dwelling Unit shall be permitted if the unit is contained within the existing space of a single-family residence or an existing accessory structure, has independent exterior access from the existing residence, and the side and rear setbacks are sufficient for fire safety, and if the accessory dwelling unit conforms with the following:

a. For the purposes of this section, the portion of the single-family residence or accessory structure subject to the conversion shall be legally permitted and existing as of January 1,

2017.

b. Notwithstanding the allowance in this section, only one accessory dwelling unit or junior accessory dwelling unit may be located on any lot subject to this section.

c. No new or separate utility connection shall be required between the accessory dwelling unit and utility service, such as water, sewer, and power.

d. The accessory dwelling unit shall comply with the provisions of subsections (a)(6), (a)(9), and (a)(10).

6. Privacy

Any window, door or deck of a second story accessory dwelling unit shall utilize techniques to lessen views onto adjacent properties to preserve the privacy of residents. These techniques may include placement of doors, windows and decks to minimize overview of neighboring dwelling units, use of obscured glazing, window placement above eye level, and screening between the properties.

7. Additional Development Standards for Attached Accessory Dwelling Units

(i) Attached accessory dwelling units are those attached to the main dwelling. All attached accessory dwelling units shall be subject to the additional development requirements specified below.

(ii) Attached unit size counts toward the calculation of maximum house size.

(iii) Unit Size: The maximum size of an attached accessory dwelling unit living area shall not exceed 600 square feet and shall not exceed 50% of the existing living area of the primary existing dwelling unit. The accessory dwelling unit and any covered parking provided for the accessory dwelling unit shall be included in the total floor area for the site, but the covered parking area is not included in the maximum 600 square feet for attached unit. Any basement space used as an accessory dwelling unit or portion thereof shall be counted as floor area for the purpose of calculating the maximum size of the accessory unit.

(iv) Maximum height (including property in a special flood hazard zone): One story and 17 feet. However, in the RE District attached Accessory Dwelling Units may be two stories and 30 feet. In the OS zone, attached Accessory Dwelling Units may be two stories and 25 feet.

(v) Separate Entry Required for Attached Units: A separate exterior entry shall be provided to serve an accessory dwelling unit.

(vi) Except on corner lots, the accessory dwelling unit shall not have an entranceway facing the same lot line (property line) as the entranceway to the main dwelling unit unless the second entranceway is located in the rear half of the lot. Exterior staircases to second floor units shall be located toward the interior side or rear yard of the property.

(vii) If covered parking for an accessory dwelling unit is provided in the RE zone, the maximum size of the covered parking area for the accessory dwelling unit is 200 square feet.

8. Additional Development Standards for Detached Accessory Dwelling Units

(i) Detached accessory dwelling units are those detached from the main dwelling. All detached accessory dwelling units shall be subject to the additional development standards specified below.

(ii) The maximum size of the detached accessory dwelling unit living area shall be 900 square feet.

a. The accessory dwelling unit and any covered parking shall be included in the total floor area for the site, but the covered parking area is not included within the maximum 900 square feet for detached unit.

b. Any basement space used as an accessory dwelling unit or portion thereof shall be counted as floor area for the purpose of calculating the maximum size of the accessory unit.

(iii) Maximum height (including property in a special flood hazard zone): one story and 17 feet.

(iv) Setbacks: notwithstanding section (a)(3)(i), a detached accessory dwelling unit may be located in a rear yard, but must maintain a minimum setback of six feet (6') from the interior side and rear property lines and sixteen feet (16') from a street side yard. No portion of a building may encroach into a daylight plane beginning at a height of eight feet (8') at the property line and increasing at a slope of one foot (1') for every one foot (1') of distance from the property line.

(v) If covered parking is provided for an accessory dwelling unit in the RE District, the maximum size of covered parking area for the detached accessory dwelling unit is 200 square feet.

(vi) There shall be no windows, doors, mechanical equipment, or venting or exhaust systems located within six feet of a property line.

9. Additional Requirements for All Accessory Dwelling Units

(i) Sale of Units: The Accessory dwelling unit shall not be sold separately from the primary residence.

(ii) Short term rentals. The accessory dwelling unit shall not be rented for periods of less than 30 days.

(iii) Number of Units Allowed: Only one accessory dwelling unit or junior accessory dwelling unit may be located on any residentially zoned lot.

(iv) Existing Development: A single-family dwelling shall exist on the lot or shall be constructed on the lot in conjunction with the construction of the accessory dwelling unit.

(v) Occupancy: The owner of a parcel proposed for accessory dwelling use shall occupy as a principal residence either the primary dwelling or the accessory dwelling, unless both the primary dwelling and the accessory dwelling are rented to the same tenant and such tenant is prohibited from sub-leasing the primary dwelling or the accessory dwelling.

(vi) Prior to issuance of a building permit for the accessory dwelling unit, the owner shall record a deed restriction in a form approved by the city that: includes a prohibition on the sale of the accessory dwelling unit separate from the sale of the single-family residence; requires owner-occupancy consistent with subsection (a)(9)(v) above; does not permit short-term rentals; and restricts the size and attributes of the accessory dwelling unit to those that conform with this section.

(vii) Accessory dwelling units shall not be required to provide fire sprinklers if they are not required for the primary residence.

(viii) Street Address Required: Street addresses shall be assigned to all accessory dwellings to assist in emergency response.

(ix) Street Access: When parking is provided, the accessory dwelling unit shall have street access from a driveway in common with the main residence in order to prevent new curb cuts, excessive paving, and elimination of street trees, unless separate driveway access is permitted by the director upon a determination that separate access will result in fewer environmental impacts such as excessive paving, unnecessary grading or unnecessary tree removal, and that such separate access will not create the appearance, from the street, of a lot division or two-family use.

(x) For properties listed in the Palo Alto Historic Inventory, the California Register of Historical Resources, the National Register of Historic Places, or considered a historic resource after completion of a historic resource evaluation, compliance with the appropriate Secretary of Interior's Standards for the Treatment of Historic Properties shall be required, as determined by the Planning Director.

(xi) No protected tree shall be removed for the purpose of establishing an accessory dwelling unit unless the tree is dead, dangerous or constitutes a nuisance under Section 8.04.050. Any protected tree removed pursuant to this subsection shall be replaced in accordance with the standards in the Tree Technical Manual.

(xii) Except as modified by this Section 18.42.040, the accessory dwelling unit shall conform to all requirements of the underlying zoning district, any applicable combining district, and all other applicable provisions of this Title 18.

10. Parking

(i) No additional parking shall be required for accessory dwelling units.

(ii) If an accessory dwelling unit replaces existing required covered parking, replacement spaces shall be provided. When a garage, carport, or covered parking structure is demolished in conjunction with the construction of an accessory dwelling unit, any required replacement spaces may be located in any configuration on the same lot as the accessory dwelling unit, including, but not limited to, within the front setback if on an existing driveway, as covered spaces, uncovered spaces, or tandem spaces, or by the use of mechanical automobile parking lifts. All new parking structures shall comply with development standards of the underlying zoning.

(b) Junior Accessory Dwelling Units

1. Purposes: This Section provides standards for the establishment of junior accessory dwelling units, an alternative to the standard accessory dwelling unit. Junior accessory dwelling units will typically be smaller than an accessory dwelling unit, will be constructed within the walls of an existing single family structure and requires owner occupancy in the single family residence where the unit is located.

2. Development Standards. Junior accessory dwelling units shall comply with the following standards:

(i) Number of Units Allowed: Either one accessory dwelling unit or one junior accessory dwelling unit, may be located on any residentially zoned lot that permits a single-family dwelling except as otherwise regulated or restricted by an adopted Coordinated Area Plan or Specific Plan. A junior accessory dwelling unit shall only be located on a lot which already contains one legal single-family dwelling.

(ii) Size: A junior accessory dwelling unit shall not exceed 500 square feet in size.

(iii) Lot Coverage/FAR:

a. A junior accessory dwelling unit shall be included in the calculation of lot coverage and FAR applicable to the property.

b. A lot with a junior accessory dwelling unit shall be permitted to develop an additional 50 square feet of floor area above the maximum amount of floor area otherwise permitted by the underlying zoning district. This additional area shall be permitted to accommodate the junior accessory dwelling unit.

(iv) Owner Occupancy: The owner of a parcel proposed for a junior accessory dwelling unit shall occupy as a principal residence either the primary dwelling or the junior accessory dwelling. Owner-occupancy is not required if the owner is a governmental agency, land trust, or housing organization.

(v) Sale Prohibited: A junior accessory dwelling unit shall not be sold independently of the primary dwelling on the parcel.

(vi) Short term rentals: The junior accessory dwelling unit shall not be rented for periods of less than 30 days.

(vii) Location of Junior Accessory Dwelling Unit: A junior accessory dwelling unit shall be created within the existing walls of an existing primary dwelling, and shall include conversion of an existing bedroom.

(viii) Separate Entry Required: A separate exterior entry shall be provided to serve a junior accessory dwelling unit, with an interior entry to the main living area. A junior accessory dwelling may include a second interior doorway for sound attenuation.

(ix) Kitchen Requirements: The junior accessory dwelling unit shall include an efficiency kitchen, requiring and limited to the following components:

a. A sink with a maximum waste line diameter of one-and-a-half (1.5) inches,

b. A cooking facility or appliance which does not require electrical service greater than one hundred and twenty (120) volts, or natural or propane gas, and

c. A food preparation counter and storage cabinets that are of reasonable size in relation to the size of the junior accessory dwelling unit.

(x) Parking. No additional parking is required beyond that required at the time the existing primary dwelling was constructed.

(xi) Fire Protection; Utility Service. For the purposes of any fire or life protection ordinance or regulation or for the purposes of providing service for water, sewer, or power, a junior accessory dwelling unit shall not be considered a separate or new unit.

(xii) Deed Restriction. Prior to the issuance of a building permit for a junior accessory dwelling unit, the owner shall record a deed restriction in a form approved by the city that includes a prohibition on the sale of the junior accessory dwelling unit separate from the sale of the single-family residence, requires owner-occupancy consistent with subsection (b)(2)(iv) above, does not permit short-term rentals, and restricts the size and attributes of the junior dwelling unit to those that conform with this section.

SECTION 21. Section 18.52.040 (6)(c) Table 1, is amended as follows:

**Table 1
Minimum Off-Street Parking Requirements**

Use	Vehicle Parking Requirement (# of spaces)	Bicycle Parking Requirement	
		Spaces	Class ¹ Long Term (LT) and Short Term (ST)
RESIDENTIAL USES			
Single -Family Residential (Primary Unit)	Tandem Parking Allowed		
(a) In the OS district	4 spaces, of which at least one space must be covered	None	
(b) In all other districts	2 spaces, of which at least one space must be covered		

<p>(c) Underground parking for single family uses is prohibited, except pursuant to a variance granted in accordance with the provisions of Chapter 18.76 (Permits and Approvals) of this title, in which case the area of the underground garage shall be counted toward the gross floor area.</p>			
<p><u>Second Accessory Dwelling Unit</u> (In addition to main dwelling unit requirements) _____ >450 sf in size _____ <450 sf in size</p>	<p>2 spaces, of which at least one must be covered</p> <p>1 space, covered or uncovered</p> <p><u>No parking required</u></p>	None	
<p><u>Junior Accessory Dwelling Units</u></p>	<p><u>No parking required</u></p>	<p><u>None</u></p>	
<p>Two-Family Residential (R-2 & RMD Districts)</p>	<p>1.5 spaces per unit, of which at least one space per unit must be covered</p> <p>Tandem Parking Allowed, with one tandem space per unit, associated directly with another parking space for the same unit</p>	1 space per Unit	100% – LT
<p>Multiple -Family Residential</p>	<p>1.25 per studio unit 1.5 per 1-bedroom unit 2 per 2-bedroom or larger unit At least one space per unit must be covered</p> <p>Tandem parking allowed for any unit requiring two spaces (one tandem space per unit, associated directly with another parking space for the same unit, up to a maximum of 25% of total required spaces for any project with more than four (4) units)</p>	1 per unit	100% – LT

(a) Guest Parking	For projects exceeding 3 units; 1 space plus 10% of total number of units, provided that if more than one space per unit is assigned or secured parking, then guest spaces equal to 33% of all units is required.	1 space for each 10 units	100% – ST
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SECTION 22. In Section 18.76.020 (D), substitute the term “accessory dwelling unit(s)” for “second dwelling unit(s)”.

SECTION 23. Any provision of the Palo Alto Municipal Code or appendices thereto inconsistent with the provisions of this Ordinance, to the extent of such inconsistencies and no further, is hereby repealed or modified to that extent necessary to effect the provisions of this Ordinance.

SECTION 24. If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

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SECTION 25. The Council finds that the adoption of this ordinance is exempt from the provisions of the California Environmental Quality Act pursuant to Public Resources Code section 21080.17 (Application of Division to Ordinances Implementing Law Relating to Construction of Dwelling Units and Second Units) and CEQA Guideline sections 15061(b) and 15301, 15303 and 15305 because it simply provides a comprehensive permitting scheme for accessory dwelling units whose construction is exempt from CEQA.

SECTION 26. This ordinance shall be effective on the thirty-first date after the date of its adoption.

INTRODUCED: April 17, 2017

PASSED: May 8, 2017

AYES: DUBOIS, FILSETH, FINE, KNISS, SCHARFF, TANAKA, WOLBACH

NOES: HOLMAN, KOU

ABSENT:

NOT PARTICIPATING:

ATTEST:

DocuSigned by:
Beth Minor
45F95502DB71492...

City Clerk

DocuSigned by:
H. Gregory Seeborg
6FB3765F09D34EA...

Mayor

APPROVED AS TO FORM:

DocuSigned by:
Sandra Lee
36C6B9D557AF4E3...

Senior Assistant City Attorney

DocuSigned by:
Jack Forgo
39E7298FB2064DB...

City Manager

DocuSigned by:
Hillary Gitelman
F07E6601F21E441...

Director of Planning & Community Environment

Certificate Of Completion

Envelope Id: 20EF0765CD134174890DEA9623AAA80D	Status: Completed
Subject: Please DocuSign this document: ORD 5412 ADU Ordinance.pdf	
Source Envelope:	
Document Pages: 21	Signatures: 5
Supplemental Document Pages: 0	Initials: 0
Certificate Pages: 5	
AutoNav: Enabled	Payments: 0
Envelope Stamping: Enabled	Envelope Originator:
Time Zone: (UTC-08:00) Pacific Time (US & Canada)	Kim Lunt
	250 Hamilton Ave
	Palo Alto , CA 94301
	kimberly.lunt@cityofpaloalto.org
	IP Address: 12.220.157.20

Record Tracking

Status: Original 5/17/2017 9:54:28 AM	Holder: Kim Lunt kimberly.lunt@cityofpaloalto.org	Location: DocuSign
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Signer Events

Sandra Lee
Sandra.Lee@CityofPaloAlto.org
Assistant City Attorney
Security Level: Email, Account Authentication (None)

Signature

DocuSigned by:

36C6B9D557AF4E3...
Using IP Address: 12.220.157.20

Timestamp

Sent: 5/17/2017 10:02:56 AM
Viewed: 5/17/2017 10:14:07 AM
Signed: 5/17/2017 10:15:03 AM

Electronic Record and Signature Disclosure:
Not Offered via DocuSign
ID:

Hillary Gitelman
Hillary.Gitelman@CityofPaloAlto.org
Security Level: Email, Account Authentication (None)

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Using IP Address: 12.220.157.20

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Signed: 5/17/2017 11:12:07 AM

Electronic Record and Signature Disclosure:
Not Offered via DocuSign
ID:

James Keene
james.keene@cityofpaloalto.org
City Manager
City of Palo Alto
Security Level: Email, Account Authentication (None)

DocuSigned by:

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Signed using mobile

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Viewed: 5/22/2017 7:06:37 AM
Signed: 5/22/2017 7:07:13 AM

Electronic Record and Signature Disclosure:
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ID: 44fe333a-6a81-4cb7-b7d4-925473ac82e3

H. Gregory Scharff
greg.scharff@cityofpaloalto.org
Mayor
City of Palo Alto
Security Level: Email, Account Authentication (None)

DocuSigned by:

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Signed using mobile

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Signed: 5/22/2017 7:26:07 AM

Electronic Record and Signature Disclosure:
Not Offered via DocuSign
ID:

Signer Events	Signature	Timestamp
Beth Minor Beth.Minor@CityofPaloAlto.org City Clerk City of Palo Alto Security Level: Email, Account Authentication (None) Electronic Record and Signature Disclosure: Not Offered via DocuSign ID:	 Using IP Address: 12.220.157.20	Sent: 5/22/2017 7:26:10 AM Viewed: 5/22/2017 8:03:50 AM Signed: 5/22/2017 8:04:20 AM

In Person Signer Events	Signature	Timestamp
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Editor Delivery Events	Status	Timestamp
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Agent Delivery Events	Status	Timestamp
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Intermediary Delivery Events	Status	Timestamp
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Certified Delivery Events	Status	Timestamp
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Carbon Copy Events	Status	Timestamp
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Notary Events	Timestamp
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Envelope Summary Events	Status	Timestamps
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Certified Delivered	Security Checked	5/22/2017 8:03:50 AM
Signing Complete	Security Checked	5/22/2017 8:04:20 AM
Completed	Security Checked	5/22/2017 8:04:20 AM

Payment Events	Status	Timestamps
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Electronic Record and Signature Disclosure
--

Tom and Nola Lundy
4809 Comfrey Place, Santa Rosa CA 95405
(707) 538-1305

Jackelyn Lundy
34245 Corcoran Hill Lane Davis, CA 95616
(530) 848-7247

November 20, 2017

City of Palo Alto
Planning Commission
c/o Clare Campbell

Re: Proposed ADU Cottage at 592 Loma Verde Avenue

Dear Ms.Campbell,

At the suggestion of Elena Lee we are forwarding this letter to you in the hope that our matter can be considered at the upcoming meeting on November 29.

We are requesting consideration of a very minor amendment to the ADU ordinance which would correct an unfair consequence of that ordinance and, at the same time, produce a positive result for the City of Palo Alto.

The planning a 900 square foot ADU cottage began in early 2016. (See attached email from architect David Mokhber.) As Mr. Mokhber's email shows, the design, architectural work and engineering of the project was all completed in late March, 2017, the building permit application was submitted in early May, and by early June we were on schedule to begin construction in July.

On June 7, 2017, however, we learned **for the first time** about the new ADU ordinance which would required us to execute a deed restriction precluding rental of the main house and ADU to separate tenants. (See Item 9 of attached letter from

Garrett Sauls.) This deed restriction made the project financially infeasible for us.¹ Therefore, we asked the Planning Commission to allow us to proceed under the prior ordinance since we had unwittingly planned and developed our project prior to enactment of the new ordinance.

But, the Planning Commission's hands were tied because the new ordinance did not specifically address our situation -- an applicant who planned and developed their project under the old ordinance but did not formally obtain a final building permit before the effective date of the new ordinance, June 7, 2017. Because this question was not addressed in the ordinance, the Commission had no discretion to allow us to proceed under the old ordinance.

As a result, the only apparent option for rectifying this unfairness -- and for avoiding the loss to the City of a needed small rental unit -- would be amendment of the ordinance to allow applicants in our situation to proceed under the old ordinance.

Such an amendment seems like a reasonable solution. It would both prevent the unfair forfeiture of our time and money and enable the City to add a rental unit -- which otherwise will not be built -- to the City's housing inventory.

Thank you in advance for your consideration of this request.

Sincerely,



Tom Lundy for
Tom and Nola Lundy
Jackie Lundy

¹Our business model is based on reaching Palo Alto's smaller rental unit market which, in our experience, is strong. The deed restriction would prevent us from targeted that market because, instead of having a 1700 sq. ft. house and a 900 sq. ft. cottage which could be rented to different tenants, we would end up with 2600 sq. ft. of rental space that could only be rented to one tenant.

Ps. Attached are the following supporting documents which I am hoping can be printed and submitted with the letter if you think they would be helpful:

1. Building plans, engineering, drainage plan – all completed prior to enactment of the new ordinance.
2. Email from architect documenting contacts with the City, including unsuccessful attempt to submit permit application in late March 2017 and successful application in early May.
3. Copy of receipt for permit filed May 8, 2017 at 12:53 PM.
4. Garrett Sauls letter of June 7, 2017.

Cc. Elena Lee



CITY OF PALO ALTO PLANNING DIVISION- CORRECTION LIST

Date: June 7, 2017
Address: 592 Loma Verde Avenue
Permit # 17000-00992
Reviewed by: Garrett Sauls

IMPORTANT NOTICE: Please return both this correction list and any marked drawings or calculations along with your revised drawings when submitting corrections to the Building Department. Please reference on the correction list where on the plans the corrections have been made to assist in providing a more timely review.

1. Please adjust the scope of work for the project to include the construction of the new garage.
2. No AC units were shown on the plans; if AC units will be included in this scope please update the site plan to show the AC unit location. Also new AC units must be shown to comply with Palo Alto Municipal Code Section 9.10 (PAMC 9.10 "Noise") and cannot be located within interior yard setbacks per PAMC Section 18.12.040(1) location of noise-producing equipment. Within this area of Palo Alto noise producing equipment are allowed to produce no more than 66db measured at the property line. Please provide specifications (spec sheets) for the AC units indicating their db range and update the plans to include model numbers and code compliant location.
3. Per the Building Permit Submittal Requirements, the Site Plan must be drawn to a scale of 1/8" = 1'. Please submit a revised site plan measured to this scale.
4. Please include the following information on the site plan: all trees located on the property along with their species, the public right of way, street tree location (see attached parcel report).
5. There is a public utility easement that runs along the northern and eastern side of the property that is not indicated on the site plan. Our records indicate that both are about 10 feet from the property line. Please show the utility easement on the site plan. (see attached parcel report)
6. On site plans from 2013 there appears to be a deck located in the rear yard of the property that is not indicated on the site plan. Please include and indicate all structures and paving for the property on the site plan.
7. On page A-2 the proposed garage has dimensions of 10'x20' from exterior wall to exterior wall. Per PAMC 18.54.20(b)(2), interior dimensions for covered/garage parking must be 10'x20'. Please revise the plan and FAR/Lot Coverage calculations to reflect these dimensions.



PLANNING & COMMUNITY ENVIRONMENT

CITY OF
**PALO
ALTO**

250 Hamilton Avenue, 5th Floor
Palo Alto, CA 94301
650.329.2441

8. Please submit a completed T-1 sheet (signed) and update the site plan to include the Tree Protection Zone for any protected trees such as heritage trees (oak/redwood) or protected trees in the public right of way as instructed by the T-1 Tree Protection sheet. If the proposed work is within the TPZ then an arborist report would need to be submitted and modification to the project based on the assessment by the arborist may also be required. You may find copies of the T-1 Tree Protection Sheet here; <http://www.cityofpaloalto.org/civicax/filebank/documents/6460>.
9. Prior to approval for a building permit, a deed restriction will be required for the new cottage on the property. Information about what needs to be in the deed restriction can be found in section 18.42.040(a)(9)(vi) of the new ADU ordinance. Here is the link to the new ADU ordinance: <http://www.cityofpaloalto.org/civicax/filebank/documents/57945>.
10. Due to the increase in net dwelling units on the property, new development impact fees will be assessed for the property. The impact fee is estimated to be \$9,371. You can find information about development impact fees here; <http://www.cityofpaloalto.org/civicax/filebank/documents/27226>.

If you have any questions, please contact me by e-mail garrett.sauls@cityofpaloalto.org or by phone at 650-329-2471 to discuss the above comments prior to resubmitting.

Sincerely,

Garrett Sauls

Planning Technician



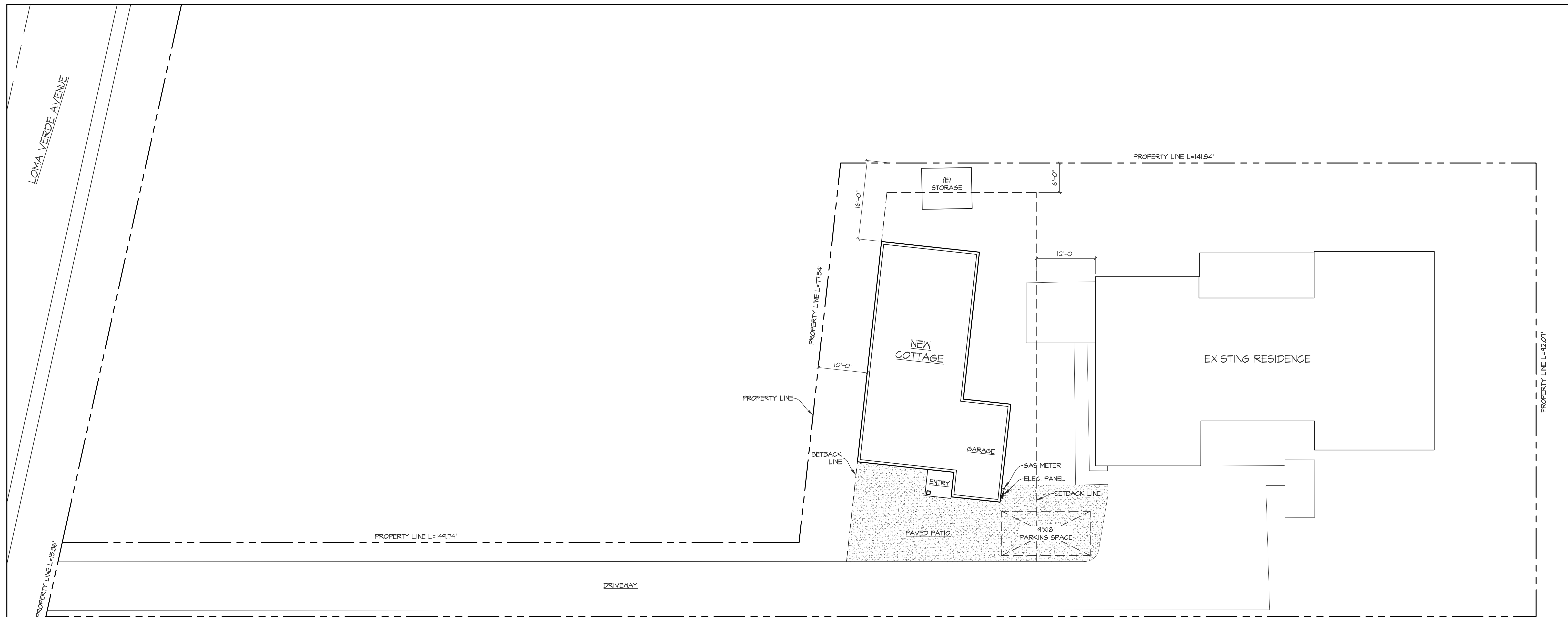
CITY OF PALO ALTO
DEVELOPMENT CENTER
285 HAMILTON AVENUE
PALO ALTO, CA 94301
(650) 329-2496

OWNER: LUNDY TOM TRUSTEE & ET AL
CONTRACTOR: LINK CORPORATION
PROPERTY ADDRESS: 592 LOMA VERDE AV
RECEIPT NUMBER: 326956
RECEIPT DATE: 5/8/2017 12:53:07PM
PERMIT NUMBER: 17000-00992

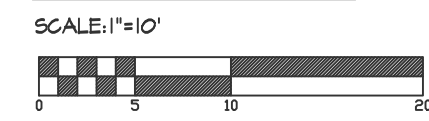
Print Date: 05/08/2017
Type: Project
Sub-Type: Building Permit
Category: Building Permit

<u>FEE DESCRIPTION</u>	<u>SUBFUND-ACTIVITY</u>	<u>UNITS</u>	<u>FEE AMOUNT</u>
Building Plan Check Fee	65030001 1337	1	\$2,434.27
Fire Plan Check - Residential	65050001 1337	1	\$100.00
Zoning Plan Check Fee	65020001 1323	1	\$912.85
		Amount Due:	\$3,447.12
	Check	Amount Paid:	\$3,447.12

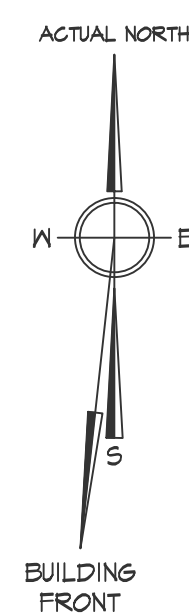
Comment:
CHECK #50427



SITE PLAN



SEE TOPOGRAPHIC MAP
SEE GRADING AND DRAINAGE PLANS, C-1, C-2, C-3



ABBREVIATIONS

ADJ.	ADJACENT	F.A.U.	FORCED AIR UNIT	MAX.	MAXIMUM	S.C.	SOLID CORE
ALUM.	ALUMINUM	FND.	FOUNDATION	MECH.	MECHANICAL	SIM.	SIMILAR
		F.J.	FLOOR JOIST	MEMB.	MEMBRANE	SLD.	SLIDER
		FLR. JST.	FLOOR JOIST	MFR.	MANUFACTURER	SPEC.	SPECIFICATION
BD.	BOARD	FLUOR.	FLUORESCENT	MIN.	MINIMUM	SQ.	SQUARE
BDRM.	BEDROOM	F.O.C.	FACE OF CONCRETE	MIR.	MIRROR	SKL.	SKYLIGHT
BLKG.	BLOCKING	F.O.S.	FACE OF STUD	MSTR. BDRM.	MASTER BEDROOM	T.C.	TRASH COMPACTOR
BLK.	BLOCK	F.O.W.	FACE OF WALL	MTL.	METAL	TEL.	TELEPHONE
BM.	BEAM	F.O.F.	FACE OF FRAMING	(N)	NEW	TEMP.	TEMPERED
		FT.	FOOT / FEET	N.T.S.	NOT TO SCALE	T&G.	TONGUE & GROOVE
C.B.	CATCH BASIN			O/	OVER	T.O.C.	TOP OF CONCRETE
C.J.	CEILING JOIST	GAL.	GALVANIZED	OBS	OBSURE	TV.	TELEVISION
CONC.	CONCRETE	GFI.	GROUND FAULT	O.C.	ON CENTER	TYF.	TYPICAL
CONT.	CONTINUOUS	GYP.	GYPSUM	O.V.	ON CENTER	UBC.	UNIFORM BUILDING CODE
						U.N.O.	UNLESS NOTED OTHERWISE
D.	DRYER	H.B.	HOSE BIB	PL.	PLATE	VER.	VERTICAL
DBL.	DOUBLE	HDR.	HEADER	PLYND.	PLYWOOD	VOL.	VOLUME
DN.	DOWN	HR.	HOSE	PLY.	PLYWOOD	V.I.F.	VOLUME IN FIELD
DR.	DOOR	INT.	INTERIOR	PNL.	PANEL	W/	WITH
D.S.	DOWNSPOUT	JST.	JOIST	P.T.	PRESSURE TREATED	W.	WASHER
DW.	DISHWASHER	KIT.	KITCHEN	R.A.	RETURN AIR	W.C.	WATER CLOSET
DWS.	DRAWING	LAM.	LAMINATE	REF.	REFRIGERATOR	WD.	WOOD
		LT.	LIGHT	REQD.	REQUIRED	WH.	WATER HEATER
(E)	EXISTING	R.O.	ROUGH OPENING	R.O.	ROUGH OPENING	W/O	WITHOUT
EA.	EACH	RDND.	REDWOOD	R.O.VD.	REDWOOD	W.W.M.	WELDED WIRE MESH
ELEC.	ELECTRICAL						
EXT.	EXTERIOR						

GENERAL NOTES

- ALL WORK PERFORMED SHALL COMPLY WITH THESE GENERAL NOTES (UNLESS OTHERWISE NOTED ON PLANS OR SPECIFICATIONS).
ALL WORK SHALL CONFORM TO THE CURRENT EDITIONS OF THE CODES ADOPTED BY THE CITY OF PALO ALTO, ALONG WITH ANY OTHER LOCAL AND STATE LAWS AND REGULATIONS.
CODES:
2016 CALIFORNIA BUILDING CODE;
2016 CALIFORNIA RESIDENTIAL CODE;
2016 CALIFORNIA PLUMBING CODE;
2016 CALIFORNIA MECHANICAL CODE;
2016 CALIFORNIA ELECTRICAL CODE;
2016 CALIFORNIA ENERGY CODE;
2016 CALIFORNIA GREEN BUILDING CODE;
2016 CALIFORNIA FIRE CODE;
ALL OTHER STATE AND LOCAL ORDINANCES AND REGULATIONS.
- THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO START OF JOB AND/OR ORDERING MATERIALS. ANY DISCREPANCIES FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL IMMEDIATELY.
- GIVEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALED MEASUREMENTS AND DETAILS OVER GENERAL DRAWINGS.
- GENERAL CONTRACTOR AND SUB CONTRACTORS TO SUBMIT TO THE OWNER ALL FINISH MATERIALS FOR APPROVAL PRIOR TO INSTALLATION IF MATERIALS VARY FROM THOSE SPECIFIED.

LIST OF DRAWING

- A-1 SITE PLAN - VICINITY MAP - NOTES
- A-2 FLOOR PLAN - EXTERIOR ELEVATIONS
- A-3 ELECTRICAL PLAN - ROOF PLAN - NOTES
- A-4 CROSS SECTION A-A - DETAILS
- TOPO TOPOGRAPHIC MAP
- GB-1 CALGREEN
- GB-2 CALGREEN
- GB-3 CALGREEN
- GB-4 CALGREEN
- S-1 FOUNDATION / FLOOR FRAMING PLAN
- ROOF FRAMING PLAN
- SD-1 STRUCTURAL NOTES
- SD-2 STRUCTURAL DETAILS
- SD-3 STRUCTURAL DETAILS
- SD-4 STRUCTURAL DETAILS
- SD-5 STRUCTURAL DETAILS
- T-24 -01 TITLE 24 CALCULATIONS
- T-24 -02 TITLE 24 CALCULATIONS
- C-1 GRADING AND DRAINAGE PLAN
- C-2 GRADING AND DRAINAGE PLAN
- C-3 GRADING AND DRAINAGE PLAN

PROJECT INFORMATION

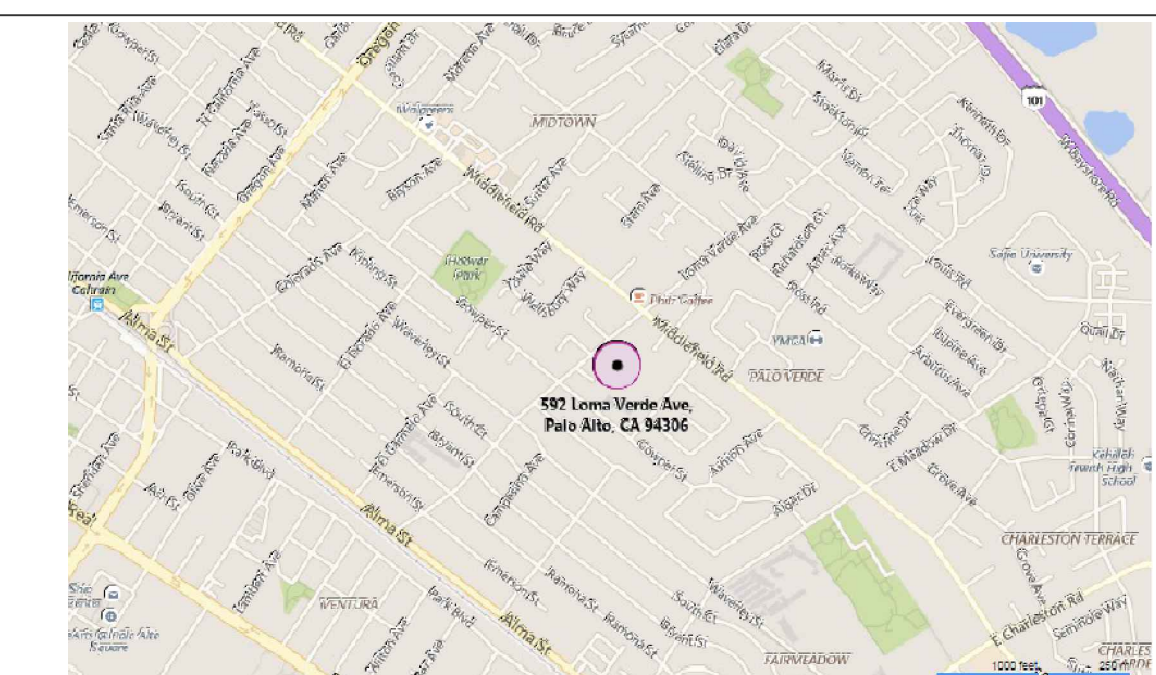
PROPERTY MAILING ADDRESS: 592 LOMA VERDE AVE.
PALO ALTO, CALIFORNIA

SCOPE OF WORK: NEW COTTAGE

A.P.N.: _____ 132-10-198
ZONE: _____ R-1
FLAG LOT SIZE: _____ ±15,736 SQ. FT.
POLE SIZE: _____ ±2,250 SQ. FT.
LOT FOR FLOOR AREA CALCULATIONS _____ ±13,479 SQ. FT.

FLOOR AREA:
MAX FLOOR AREA _____ ±4,710± SQ. FT.
EXISTING RESIDENCE (INCLUDING GARAGE): _____ ±2,381± SQ. FT.
NEW COTTAGE: _____ ±900 SQ. FT.
NEW GARAGE: _____ ±196 SQ. FT.
TOTAL EXISTING + NEW: _____ ±3,477± SQ. FT.

VICINITY MAP



DAVID MOKHEER
BUILDING DESIGN
SPACE PLANNING

1022 LOS AVE.
SUNNYVALE, CA 94087
PHONE: (408)750-8752
CELL: (408)960-8712
www.davidmokeer.com

LINK
LINK CORPORATION
Remodeling Plumbing Additions
New Construction

PO Box 480286
San Jose, CA 95148
Phone: 408.951.9934
www.linkincorporation.com

LUNDY RESIDENCE
592 LOMA VERDE AVENUE
PALO ALTO, CALIFORNIA

REVISIONS

DATE: MAY, 2017

SCALE: AS SHOWN

DRAWN: D.M.

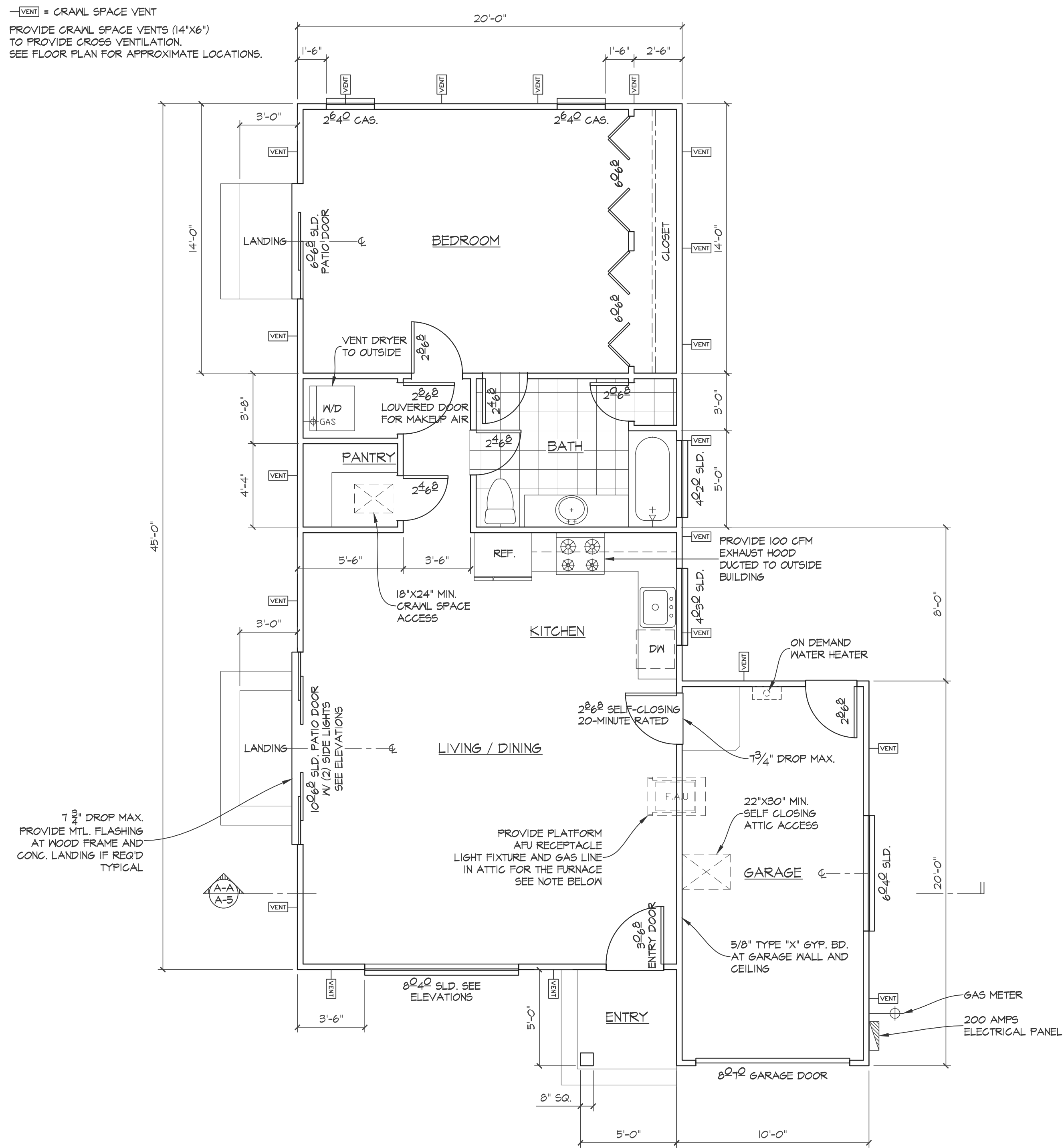
JOB: .

SHEET

A-1

OF 4 SHEETS

—[VENT] = CRAWL SPACE VENT
 PROVIDE CRAWL SPACE VENTS (14"x6")
 TO PROVIDE CROSS VENTILATION.
 SEE FLOOR PLAN FOR APPROXIMATE LOCATIONS.

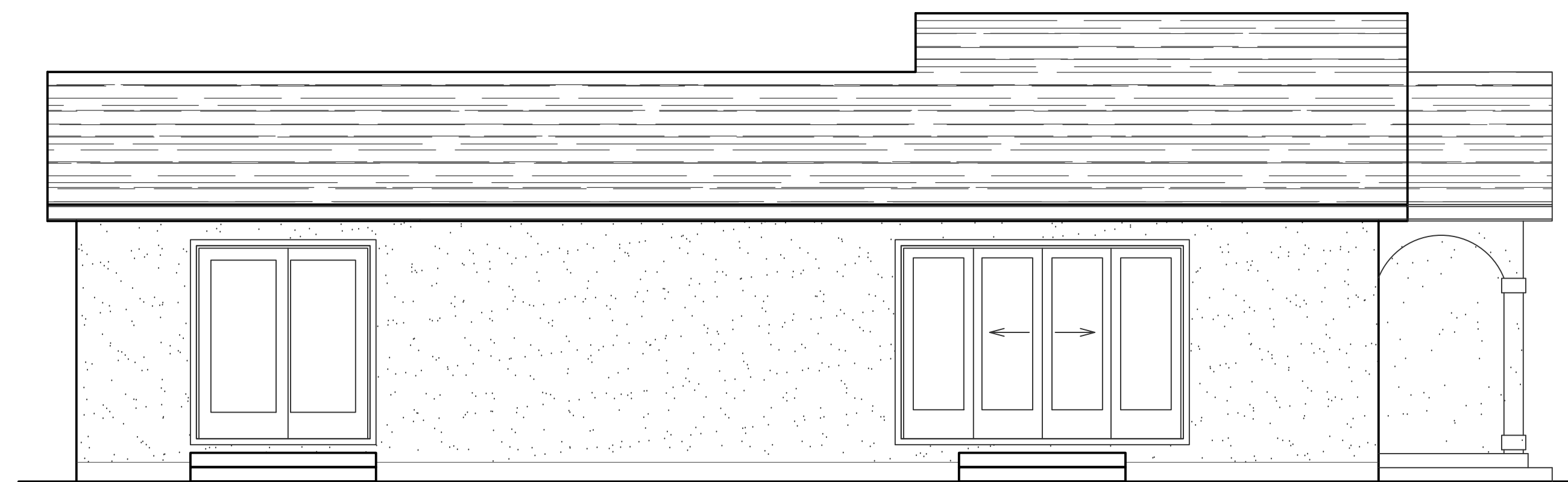


FLOOR PLAN
 SCALE: 1/4"=1'-0"

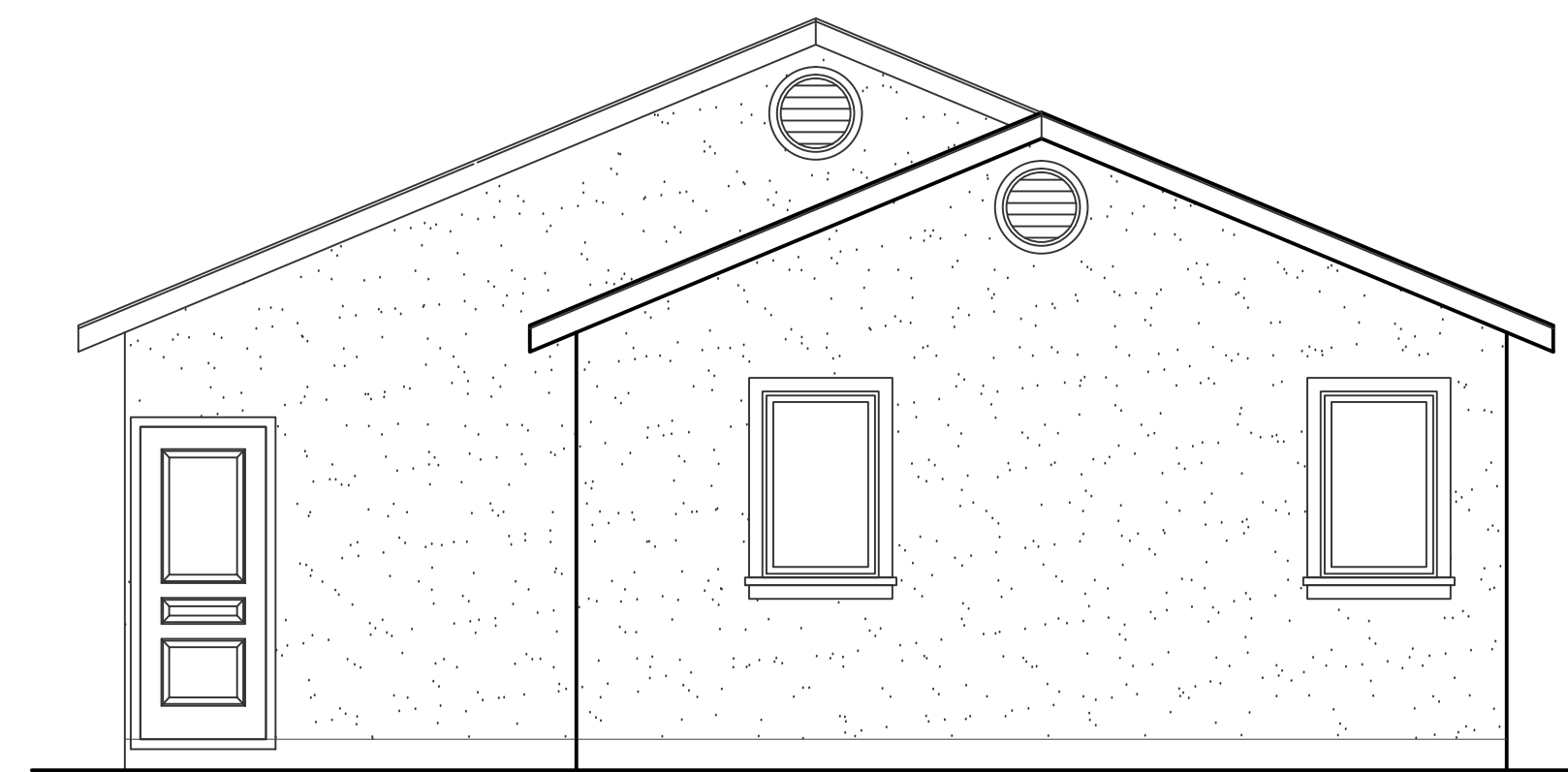
FURNACE NOTE:
 PROVIDE 30-INCH X 30-INCH MINIMUM LEVEL
 WORKING PLATFORM IN FRONT OF THE SERVICE SIDE
 OF FURNACE IN ATTIC.
 PROVIDE A SOLID, 24-INCH WIDE PLATFORM PATH
 WITH A MAXIMUM OF 20 FEET FROM ACCESS OPENING
 TO FAU. AN UPRIGHT FURNACE MAY BE INSTALLED IN AN ATTIC,
 FURRED OR UNDERFLOOR SPACE MORE THAN 5 FT IN HEIGHT
 PROVIDED THE REQUIRED LISTINGS AND FURNACE AND DUCT
 CLEARANCES ARE OBSERVED.



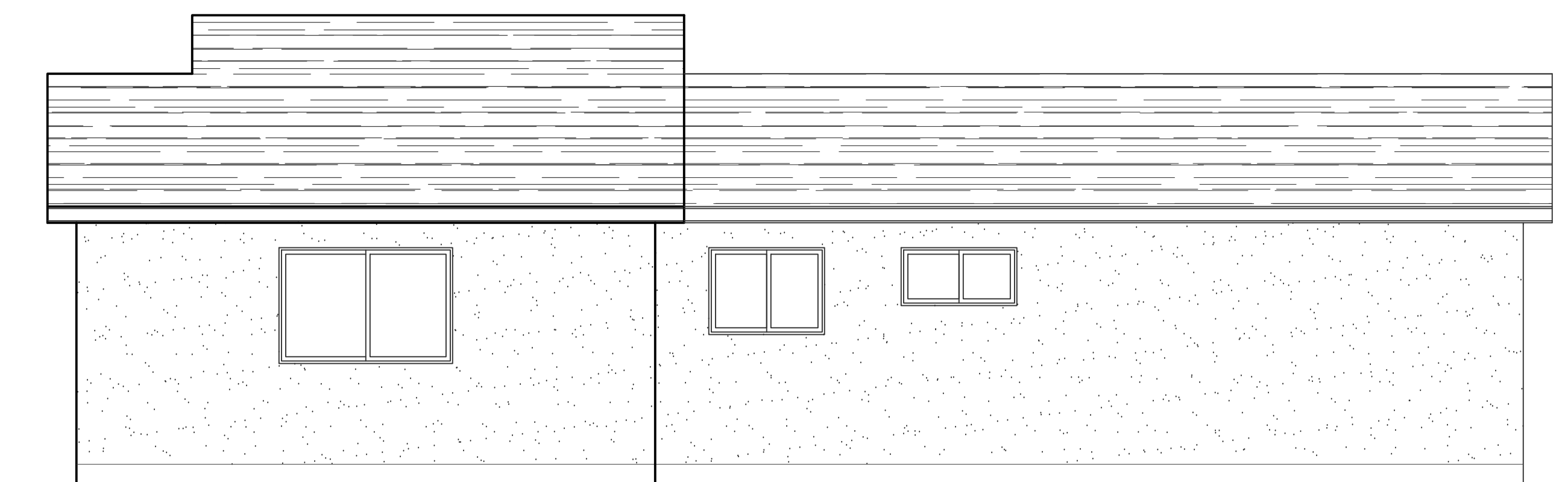
SOUTH ELEVATION (FRONT)
 SCALE: 1/4"=1'-0"



WEST ELEVATION (LEFT SIDE)
 SCALE: 1/4"=1'-0"



NORTH ELEVATION (REAR)
 SCALE: 1/4"=1'-0"



EAST ELEVATION (RIGHT SIDE)
 SCALE: 1/4"=1'-0"

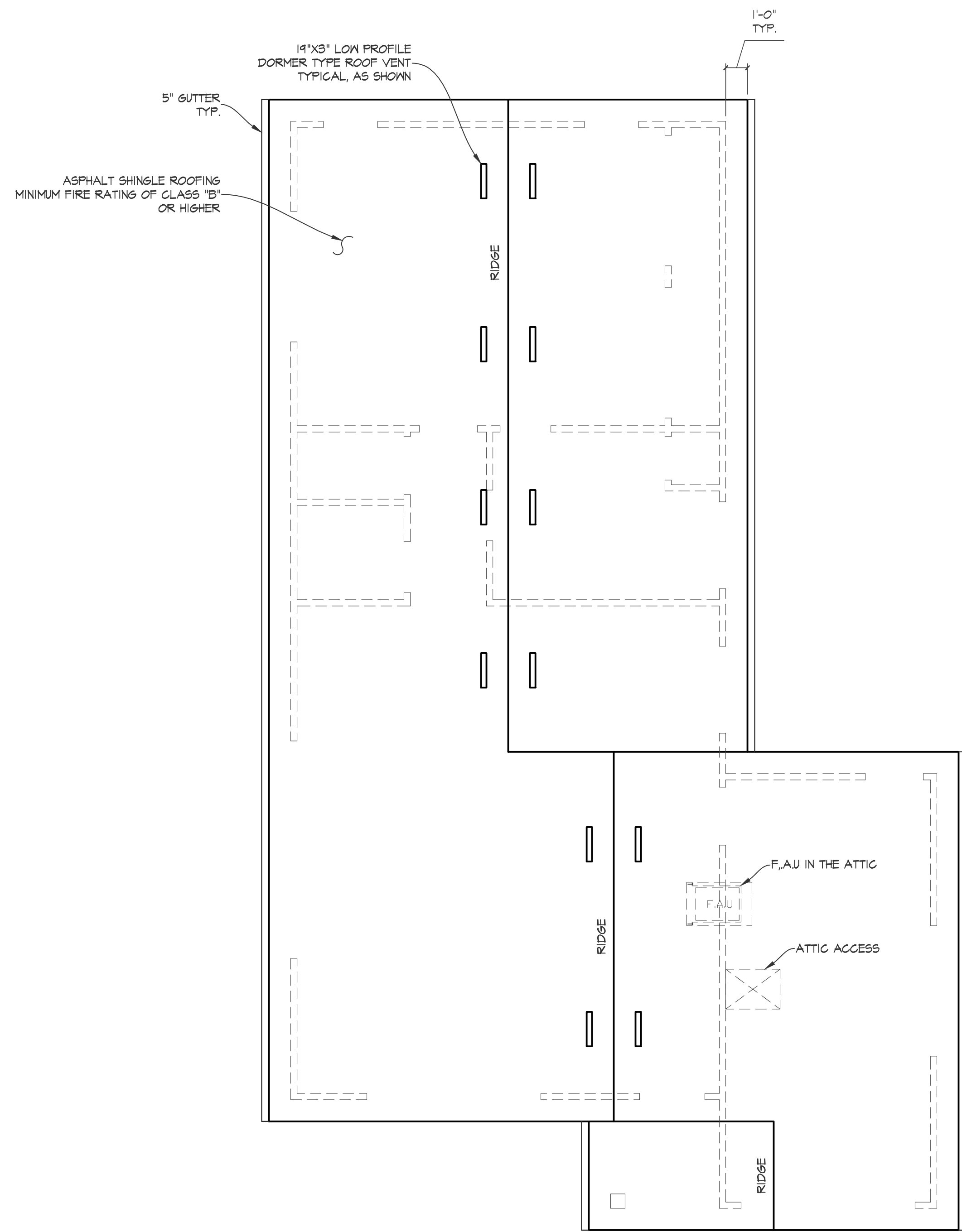
DAVID MOKHEER
 BUILDING DESIGN
 SPACE PLANNING
 1022 LOIS AVE.
 SUNNYVALE, CA 94087
 PHONE: (408) 950-8752
 CELL: (408) 950-8712
 dmokheer@gsd.com

LINK
 COMMERCIAL ENGINEERING
 REMODELING PLUMBING ADDITIONS
 NEW CONSTRUCTION
 PHONE: (925) 391-9934
 FAX: (925) 391-9934
 11800 S. HAYWARD AVE.
 SUITE 100
 HAYWARD, CA 94542
 WWW.LINKCORPORATION.COM

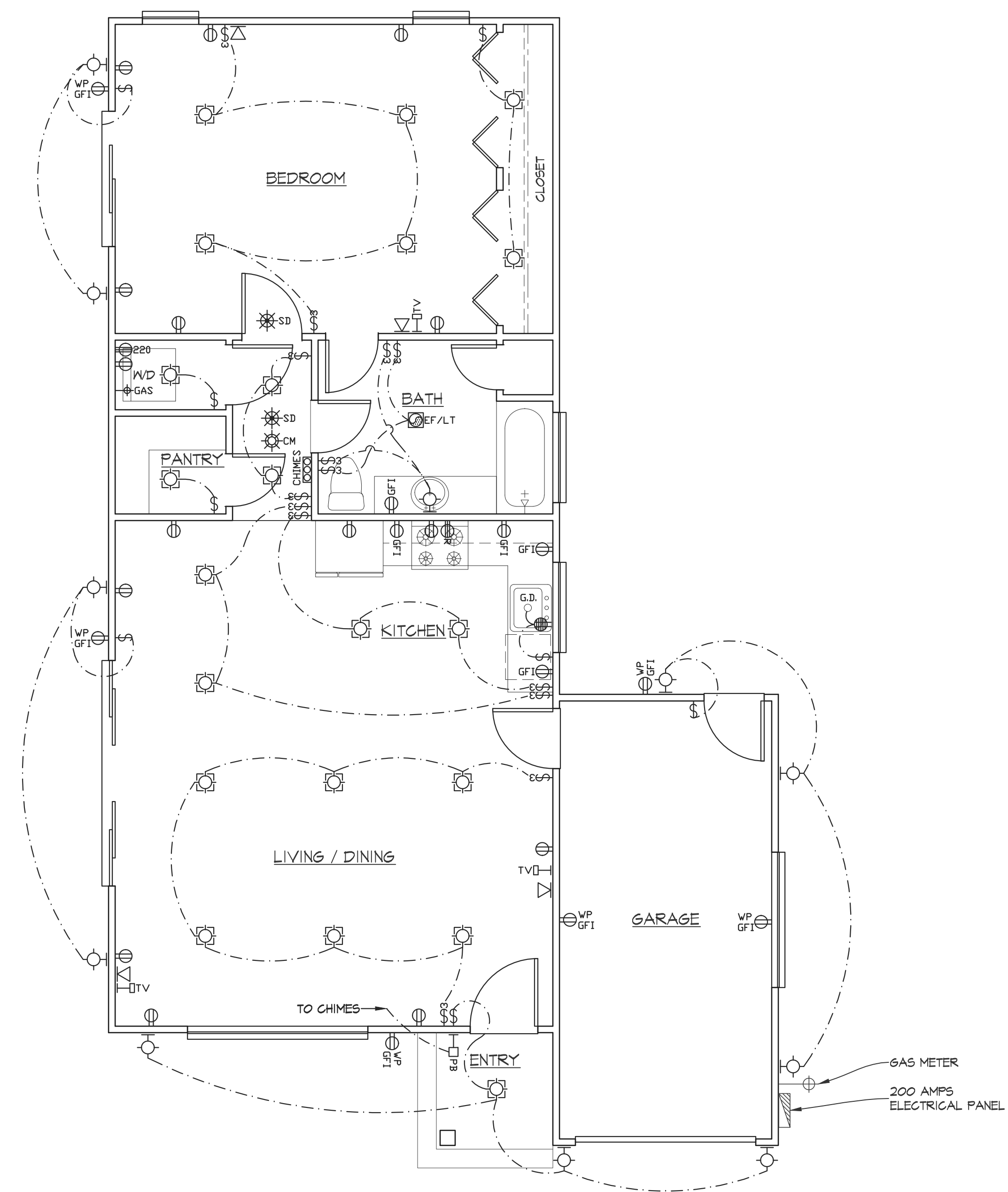
LUNDY RESIDENCE
 592 LOMA VERDE AVENUE
 PALO ALTO, CALIFORNIA

REVISIONS	

DATE:	MAY, 2017
SCALE:	AS SHOWN
DRAWN:	D.M.
JOB:	
SHEET	
	A-2
OF	4 SHEETS



ROOF PLAN
SCALE: 1/4"=1'-0"



ELECTRICAL PLAN
SCALE: 1/4"=1'-0"

ELECTRICAL SYMBOL LEGEND

	DUPLEX RECEPTACLE OUTLET
	QUADRUPLER RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET UNDER COUNTER
	220 V RECEPTACLE OUTLET
	RANGE RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET GROUND FAULT CIRCUIT INTERRUPTER
	DUPLEX RECEPTACLE OUTLET WEATHERPROOF
	CEILING FIXTURE
	RECESSED CEILING FIXTURE
	WALL MOUNTED FIXTURE
	EXHAUST FAN WITH LIGHT
	SINGLE POLE SWITCH
	THREE-WAY SWITCH
	FOUR-WAY SWITCH
	INTERCONNECTING TELEPHONE
	COMPUTER DATA OUTLET
	TELEVISION ANTENNA
	SMOKE DETECTOR
	CARBON MONOXIDE ALARM
	CHIMES
	PUSH BUTTON

ELECTRICAL NOTES:

- * TWO OR MORE 20-AMPERE SMALL APPLIANCE BRANCH CIRCUITS ARE REQUIRED FOR THE KITCHEN AND ARE LIMITED TO SUPPLYING WALL AND COUNTER SPACE RECEPTACLES OUTLETS FOR THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREAS.
- NOTE: THESE CIRCUITS CANNOT SERVE OUTSIDE PLUGS, RANGE HOOD, DISPOSALS, DISHWASHERS OR MICROWAVES - ONLY THE REQUIRED COUNTERTOP/WALL OUTLETS INCLUDING THE REFRIGERATOR.
- * A DEDICATED 20-AMP CIRCUIT IS REQUIRED TO SERVE THE REQUIRED BATHROOM OUTLETS. IT SHALL BE INSTALLED ON A WALL/PARTITION WITHIN 3 FEET OF THE OUTSIDE EDGE OF EACH BASIN OR INSTALLED ON THE SIDE/FACE 12" MAX BELOW THE COUNTERTOP. THIS CIRCUIT CANNOT SUPPLY ANY OTHER RECEPTACLES, LIGHTS, FANS, ETC. (EXCEPTION-WHERE THE CIRCUIT SUPPLIES A SINGLE BATHROOM, OUTLETS FOR OTHER EQUIPMENT WITHIN THE SAME BATHROOM SHALL BE PERMITTED TO BE SUPPLIED.
- * ALL 120-VOLT, SINGLE PHASE, 15 AND 20 AMPERE BRANCH CIRCUITS THAT SUPPLY OUTLETS INSTALLED IN DINING ROOM, BEDROOM, SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER.
- * ALL 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
- * AN EXTERIOR RECEPTACLES MUST BE WITHIN 6 FEET 6 INCHES OF GRADE AND WATERPROOF

LIGHTING NOTES:

- A. KITCHENS AT LEAST HALF THE INSTALLED MATTAGE OF LUMINAIRES IN KITCHENS SHALL BE HIGH EFFICACY. HOWEVER, LIGHTING INSTALLED INSIDE CABINETS MAY NOT BE REQUIRED TO BE INCLUDED IN THE MATTAGE CALCULATION THAT DETERMINES WHETHER HALF OF THE INSTALLED MATTAGE IS HIGH EFFICACY.
- B. BATHROOMS AT LEAST ONE LUMINAIRE IN EACH BATHROOM MUST BE HIGH EFFICACY. ALL OTHER LUMINAIRES IN A BATHROOM MUST BE EITHER HIGH EFFICACY, OR CONTROLLED BY VACANCY SENSORS.
- C. OTHER ROOMS ALL INSTALLED LUMINAIRES SHALL EITHER BE HIGH EFFICACY OR SHALL BE CONTROLLED BY A VACANCY SENSOR OR DIMMER. CLOSETS THAT ARE LESS THAN 10 FT² ARE EXEMPT FROM THIS REQUIREMENT.
- D. OUTDOOR LIGHTING IN SINGLE-FAMILY RESIDENCES, ALL LUMINAIRES MOUNTED TO THE BUILDING (OR TO OTHER BUILDINGS ON THE SAME LOT) SHALL BE HIGH EFFICACY LUMINAIRES, OR SHALL BE CONTROLLED BY A MOTION SENSOR AND ALSO BY A PHOTOCONTROL, ASTRONOMICAL TIME CLOCK, OR ENERGY MANAGEMENT CONTROL SYSTEM (EMCS).

NOTE:

ALL BRANCH CIRCUITS THAT SUPPLY 125-VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLE OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, DEN, BEDROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREA SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTERS.

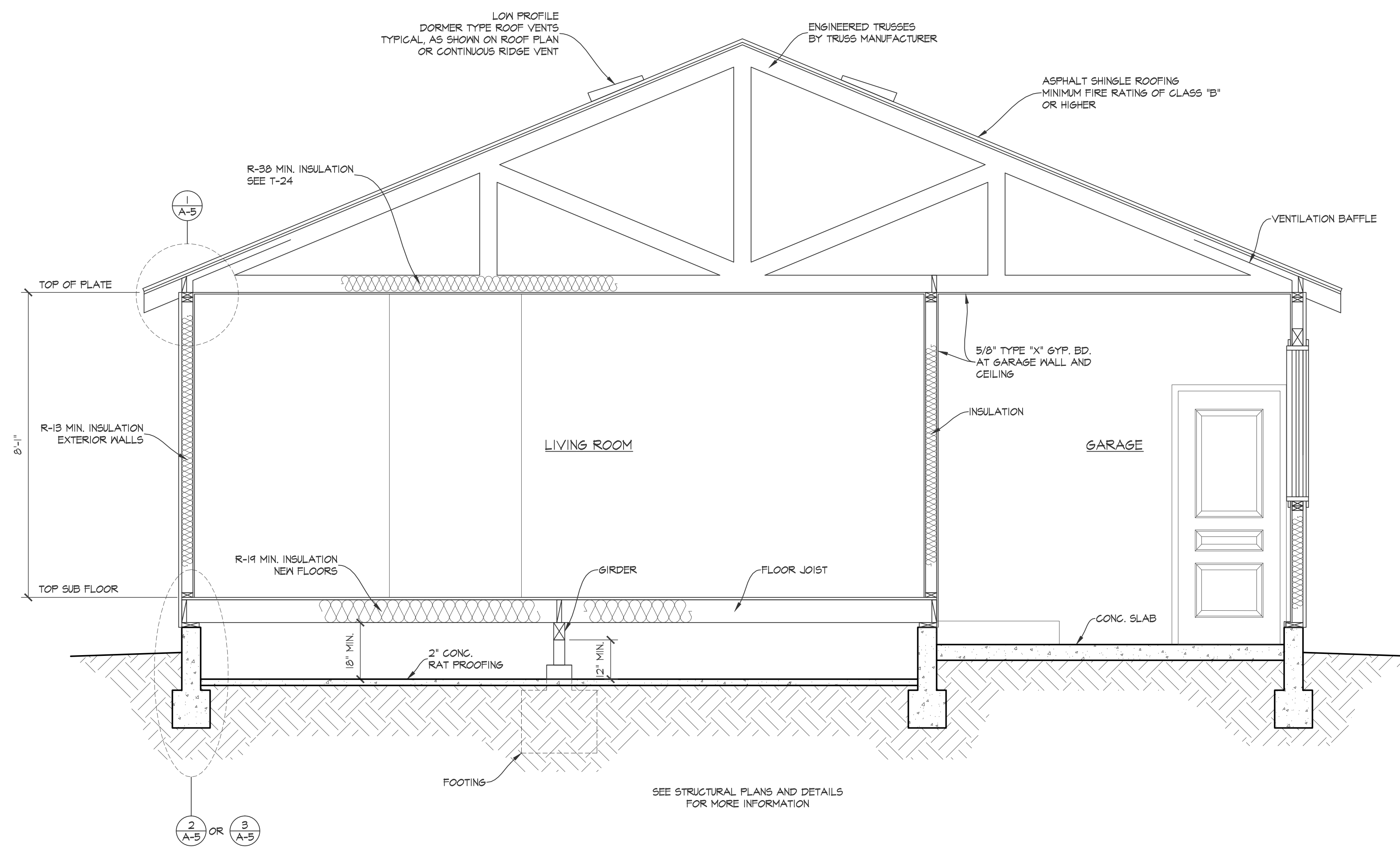
DAVID MOKHEER
BUILDING DESIGN
SPACE PLANNING
1022 LOIS AVE.
SUNNYVALE, CA 94087
PHONE: (408)750-8752
CELL: (408)966-0712
dmo@dmokheer.com

LINK
COMMERCIAL ENGINEERING
Remodeling Plumbing Additions
New Construction
Phone: 650.391.9934
Fax: 650.391.9932
Mobile: 650.391.3832
www.linkcorp.com

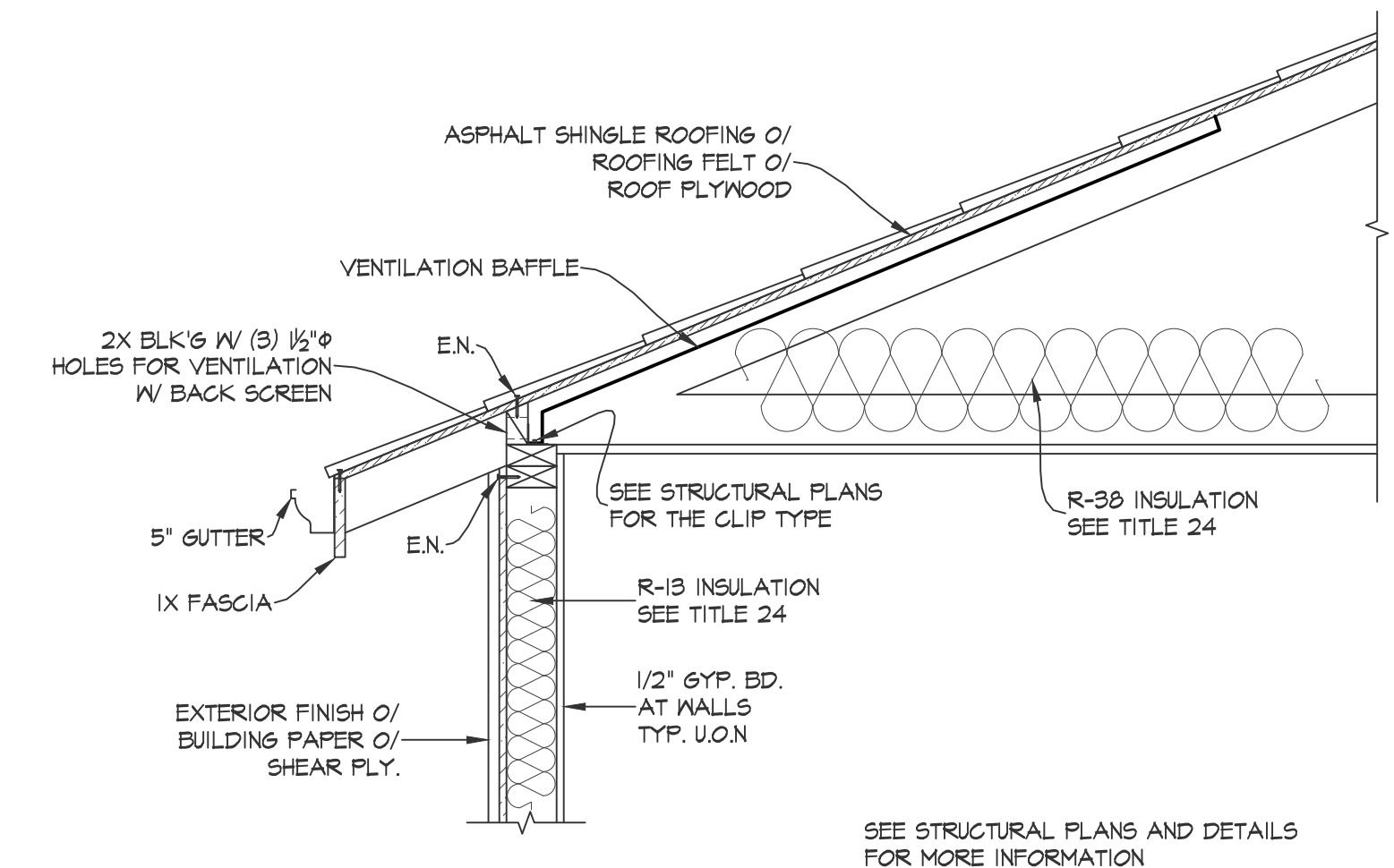
LUNDY RESIDENCE
592 LOMA VERDE AVENUE
PALO ALTO, CALIFORNIA

REVISIONS

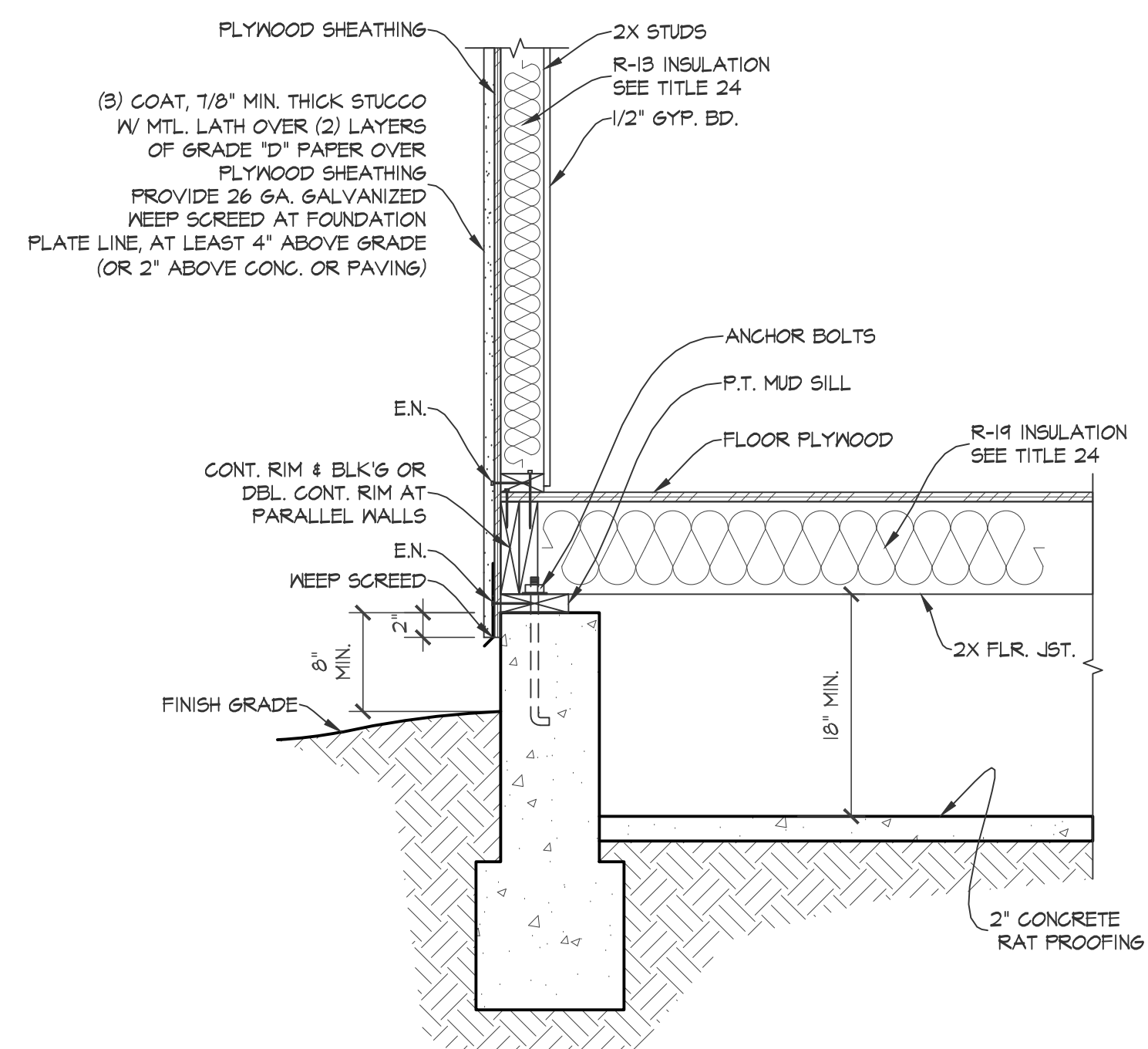
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SCALE:	AS SHOWN
DRAWN:	D.M.
JOB:	
SHEET	
A-3	
OF 4 SHEETS	



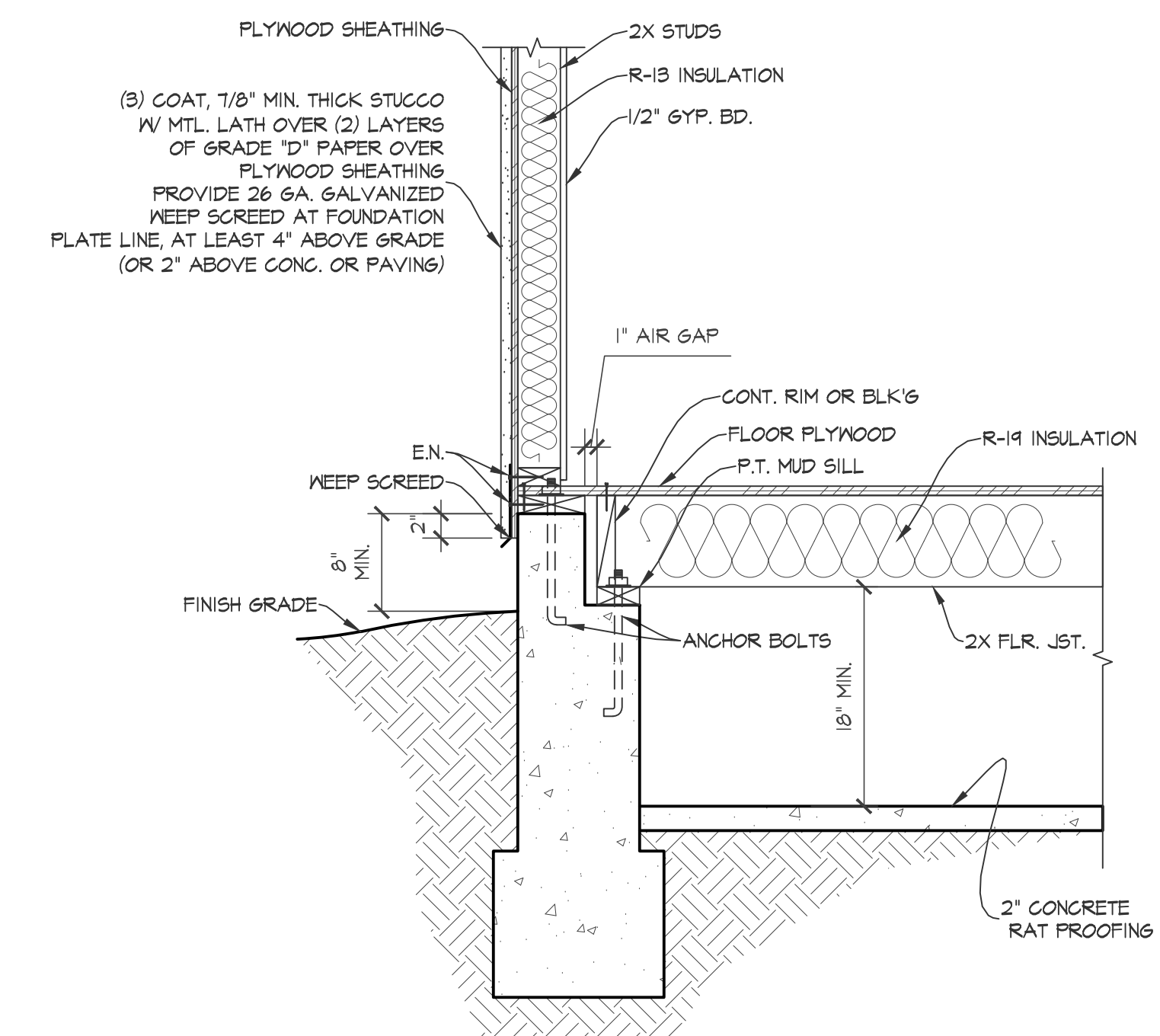
CROSS SECTION A-A
SCALE: 1/2"=1'-0"



EAVE DETAIL ①
N.T.S.



EXTERIOR WALL DETAIL ②
N.T.S.



HIGH STEM WALL DETAIL ③
N.T.S.

DAVID MOKHEER
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SPACE PLANNING

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LINK
COMMERCIAL ENGINEERING

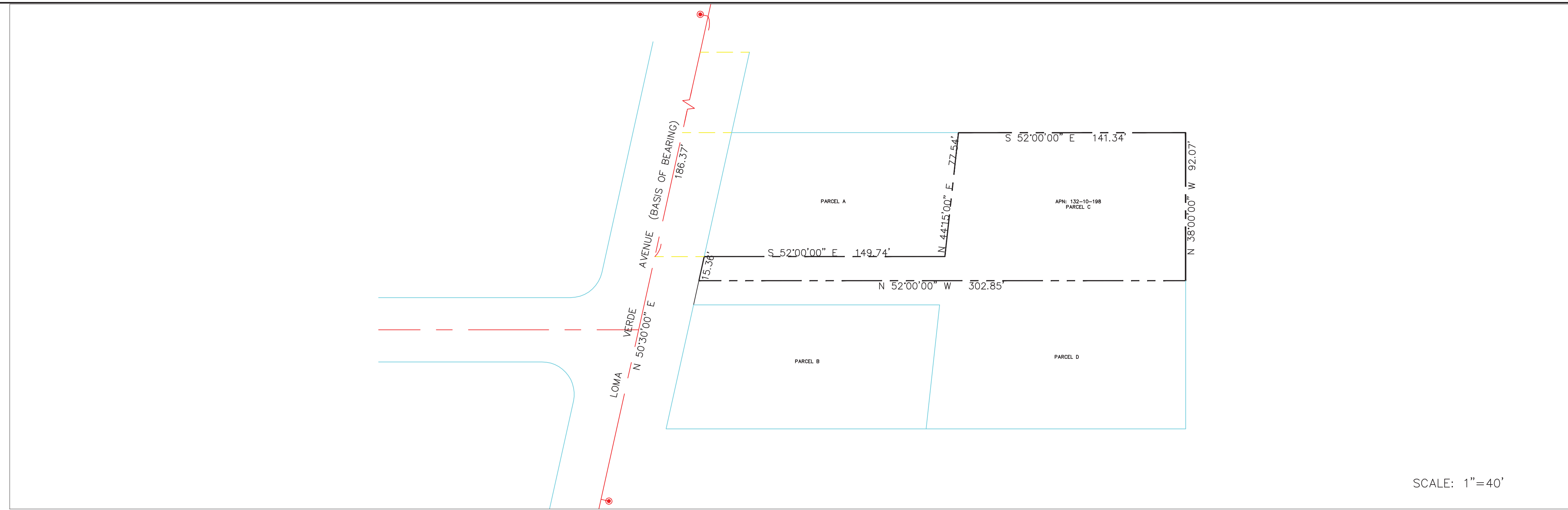
Remodeling/Plumbing/Adoptions
New Construction

Phone: 650.391.9934
Fax: 650.391.9932
Mobile: 650.391.9932
www.linkincorporation.biz

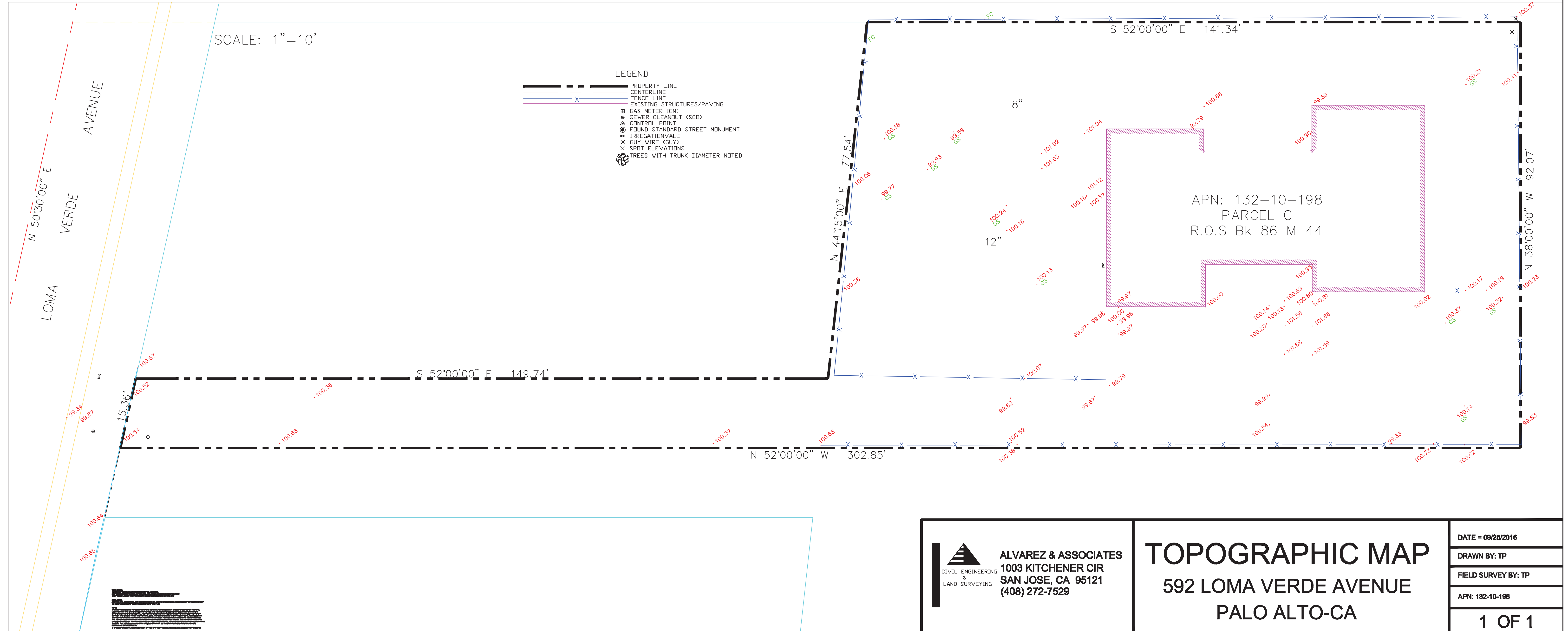
LUNDY RESIDENCE
592 LOMA VERDE AVENUE
PALO ALTO, CALIFORNIA

REVISIONS	

DATE: MAY, 2017
SCALE: AS SHOWN
DRAWN: D.M.
JOB: .
SHEET
A-4
OF 4 SHEETS



SCALE: 1" = 40'



LEGEND

- PROPERTY LINE
- - - CENTERLINE
- - - FENCE LINE
- - - EXISTING STRUCTURES/PAVING
- ⊠ GAS METER (GM)
- ⊗ SEWER CLEANOUT (SCD)
- ⊙ CONTROL POINT
- ⊕ FOUND STANDARD STREET MONUMENT
- ⊗ IRRIGATION VALE
- ⊗ GUY WIRE (GW)
- ⊗ SPOT ELEVATIONS
- ⊗ TREES WITH TRUNK DIAMETER NOTED

 <p>ALVAREZ & ASSOCIATES CIVIL ENGINEERING & LAND SURVEYING 1003 KITCHENER CIR SAN JOSE, CA 95121 (408) 272-7529</p>	<h2>TOPOGRAPHIC MAP</h2> <p>592 LOMA VERDE AVENUE PALO ALTO-CA</p>	<p>DATE = 09/25/2016 DRAWN BY: TP FIELD SURVEY BY: TP APN: 132-10-198</p>	
			<p>1 OF 1</p>

Code Section	Y	Plan Sheet, Spec or Attachment Reference	Compliance Path Verification								
			Plan Check		Rough GB Inspection IVR # 112		Final Inspection IVR # 974				
			CORR	INITIAL	CORR	INITIAL	Part 1	Part 1	Part 2	Part 2	
4.1 Planning and Design											
Mandatory		Deconstruction survey (locally amended)									
Mandatory		Storm water drainage and retention during construction (less than one acre)									
Mandatory		Grading and paving									
Mandatory		Electric Vehicle (EV) Charging for new residential construction (locally amended)									
Mandatory		EV Charging: New single family residences (locally amended)									
Mandatory		EV Charging: Multifamily residential structures (locally amended)									
Mandatory		Bicycle Parking (locally amended) (Multi-family only)									
4.3 Water Efficiency and Conservation											
Mandatory		Indoor Water Use: Water closets (1.28 gpf)									
Mandatory		Indoor Water Use: Urinals (Wall Mounted 0.125 gpf, all others 0.5 gpf)									
Mandatory		Indoor Water Use: Single showerhead (2.0 gpm at 80 psi)									
Mandatory		Indoor Water Use: Multiple showerheads serving one shower (2.0 gpm at 80 psi)									
Mandatory		Indoor Water Use: Residential lavatory faucets (1.2 gpm at 60 psi)									
Mandatory		Indoor Water Use: (Multi-family Only) Lavatory faucets in common and public use areas									
Mandatory		Indoor Water Use: Metering faucets (0.25 gallons per cycle)									
Mandatory		Indoor Water Use: Kitchen faucets (1.8 gpm at 60 psi)									
Mandatory		Indoor Water Use: Standards for plumbing fixtures and fittings (Meet 2016 Plumbing Code)									
Mandatory		Outdoor potable water use in landscape area									
4.4 Material Conservation and Resource Efficiency											
Mandatory		Roofing									
Mandatory		Enhanced construction waste reduction- 75% Diversion (Locally amended if project valuation conditions are met)									
Mandatory		Construction waste management plan in Green Halo									
Mandatory		Waste management company									
Mandatory		Operation and maintenance manual									
Mandatory		Recycling by occupants									
4.5 Environmental Quality											
Mandatory		Fireplaces									
Mandatory		Covering of duct openings and protection of mechanical equipment during construction									
Mandatory		Adhesives, sealants and caulks - Table 4.504.1 and 4.504.2									
Mandatory		Paints and coatings - Table 4.504.3									
Mandatory		Aerosol paints and coatings									
Mandatory		Carpet systems									
Mandatory		Carpet systems: Carpet cushion									
Mandatory		Carpet systems: Carpet adhesive									
Mandatory		Resilient flooring systems for 80%									
Mandatory		Composite wood products									
Mandatory		Concrete slab foundations									
Mandatory		Capillary break									
Mandatory		Moisture content of building materials									
Mandatory		Bathroom exhaust fans									
Mandatory		Heating and air conditioning system design									

Legend:
Y - Yes; the measure is in the scope of work
N - No; the measure is not in the scope of work

The [Green Building Survey](#) is a required project submittal. The survey can be found at the following [link](#). The survey shall be completed on Survey Monkey and a screenshot shall be included on a separate page in this plan set. Please indicate the reference page here _____.

1. Contact Information of Individual Completing the Survey
Name:
Company:
Email Address:

2. Permit Number:
Leave blank if permit has not been issued.

3. Street Number:

4. Street Name:

5. Valuation (\$):

6. Project Square Feet (Gross):

7. Energy Use Savings Baseline Case
Entry must match the Title 24 Energy Calculations shown on the permit plans. Leave blank if the project is not subject to the California Energy Code.
a. Energy Use: Standard Design (MWh) Compliance Total:
b. Energy Use: Standard Design (kBtu/ft²-yr) Compliance Total:
c. Energy Use: Standard Design TDV (kBtu/ft²-yr) Compliance Total:

8. Energy Use Savings Design Case
Entry must match the Title 24 Energy Calculations shown on the permit plans. Leave blank if the project is not subject to the California Energy Code.
a. Energy Use: Proposed Design (MWh) Compliance Total:
b. Energy Use: Proposed Design (kBtu/ft²-yr) Compliance Total:
c. Energy Use: Proposed Design TDV (kBtu/ft²-yr) Compliance Total:

9. Energy Use: Compliance TDV Margin (kBtu/ft²-yr) Compliance Total:
Entry must match the Title 24 Energy Calculations shown on the permit plans. Leave blank if the project is not subject to the California Energy Code.

10. Outdoor Water Use - Baseline Case (gall/yr)
Entry must match the Outdoor Water Use Calculations shown on the permit plans. Leave blank if you do not have a landscaping scope.

11. Outdoor Water Use - Design Case (gall/yr)
Entry must match the Outdoor Water Use Calculations shown on the permit plans. Leave blank if you do not have a landscaping scope.

12. Indoor Water Use - Baseline Case (gall/yr) - Non-Residential Only
Entry must match Indoor Water Use Calculations shown on the permit plans. Leave blank if the project does not include interior flow or flush fixtures.

13. Indoor Water Use - Design Case (gall/yr) - Non-Residential Only
Entry must match indoor water calculations on the GB-2 plan sheet. Leave blank if the project does not include interior flow or flush fixtures.

Acknowledgement

This project is required to comply with the State California Green Building Code (T24 Part 11) and the City of Palo Alto's local amendments (PAMC 16.14). I, the property owner / legal representative, acknowledge and understand the requirements and penalties for noncompliance (\$50 per ton of waste not diverted from the landfill with a minimum of \$1000, and \$500 a day for noncompliance with the remaining green building measures). I am responsible for all activities performed by design team members, contractors and subcontractors in meeting the requirements.
Note: In lieu of a signature, an attachment letter is acceptable if the owner is not local and cannot sign this GB-1 sheet.

com.apple.idms.apple.com
id.prd.7833544c4f76
414777286854f426
730477756a317333

X d 4/2/2017 X
Signature _____ Date _____

Arash Firoozjani
Print Full Name
408-823-7660 / arash@calgreen24.com
Phone or Email

The [Green Building Survey](#) is a required project submittal. The survey can be found at the following [link](#). The survey shall be completed on Survey Monkey and a screenshot shall be included on a separate page in this plan set. Please indicate the reference page here _____.

2016 RESIDENTIAL GREEN BUILDING APPLICATION CALGREEN MANDATORY

Version 1/17

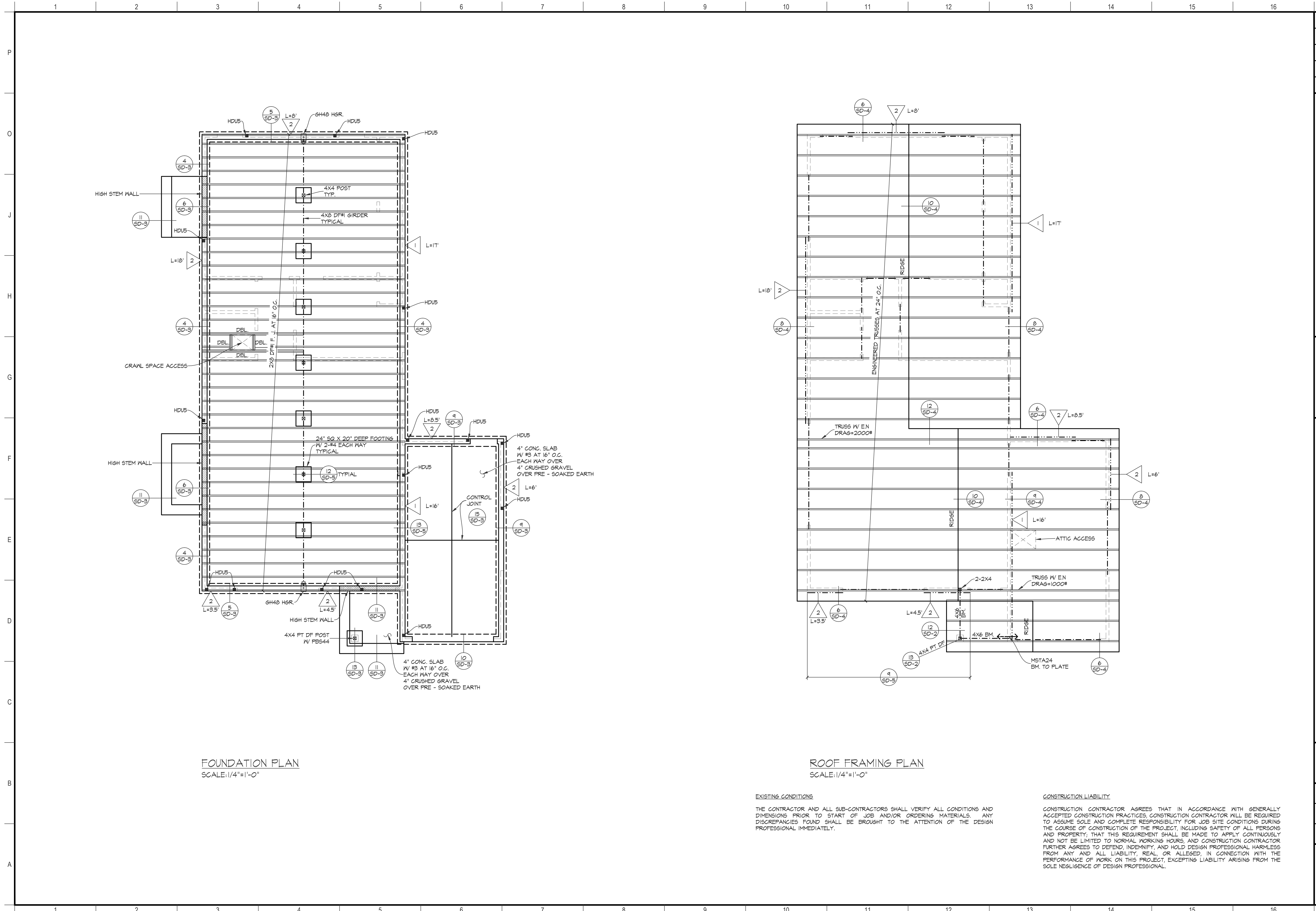
Application: This plan sheet is for multi-family and single-family new construction less than 1,000 SF, or addition or alterations less than 1,000 SF that increase the buildings conditioned area, volume, or size.



Title 24, Part 11, California Green Building Code (CALGreen) <http://www.bsc.ca.gov/home/CALGreen.aspx>
City of Palo Alto Green Building Program and Resources http://www.cityofpaloalto.org/gov/depts/ds/green_building/compliance.asp
City of Palo Alto Green Building Ordinance 5393 (PAMC 16.14 Amendments) <https://www.cityofpaloalto.org/civicax/filebank/documents/54976>

Project Address:
592 Loma Verde Ave., Palo Alto, CA
2016 RESIDENTIAL CHECKLIST- CALGREEN MANDATORY

GB-1
MANDATORY



FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

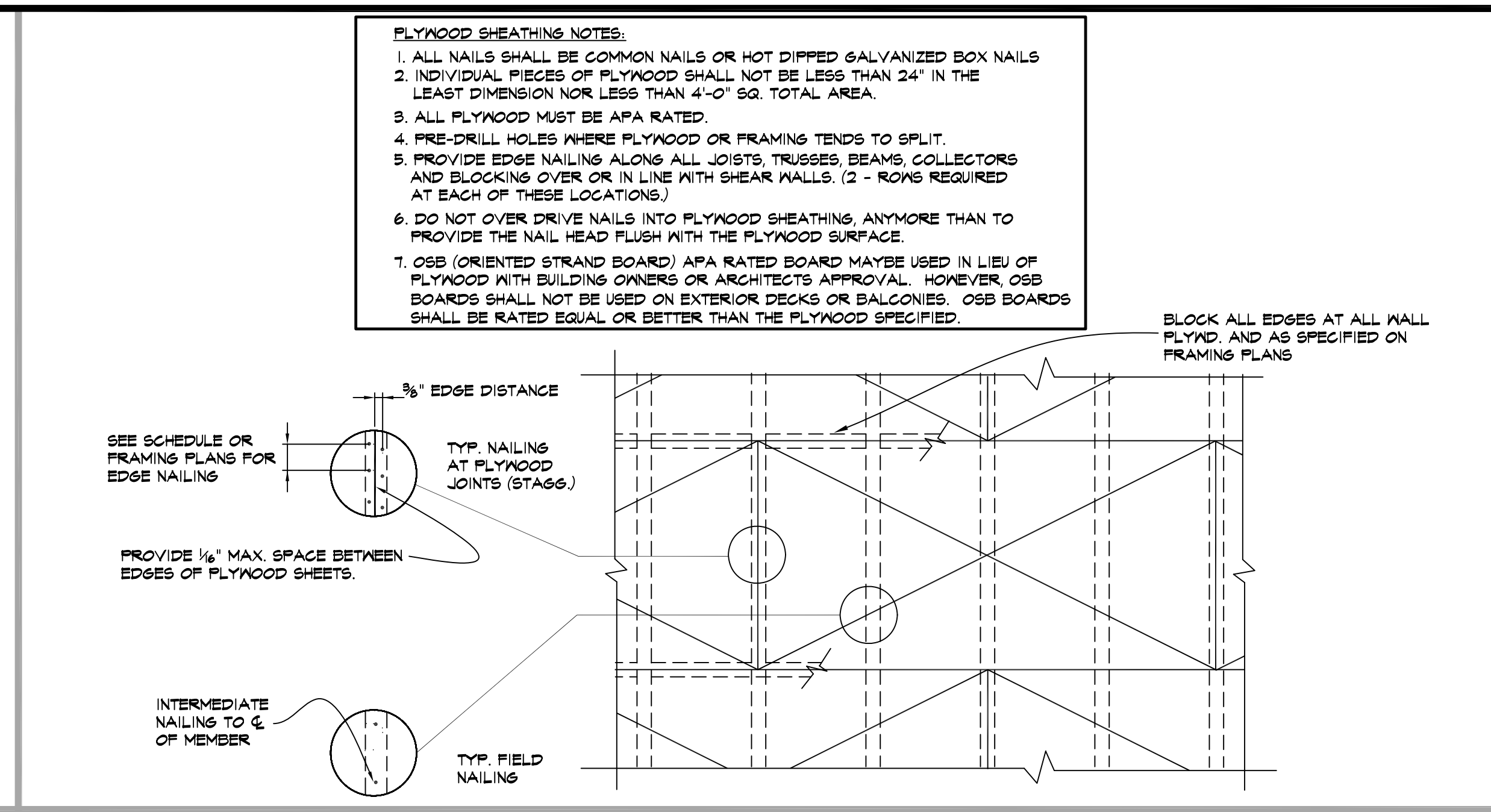
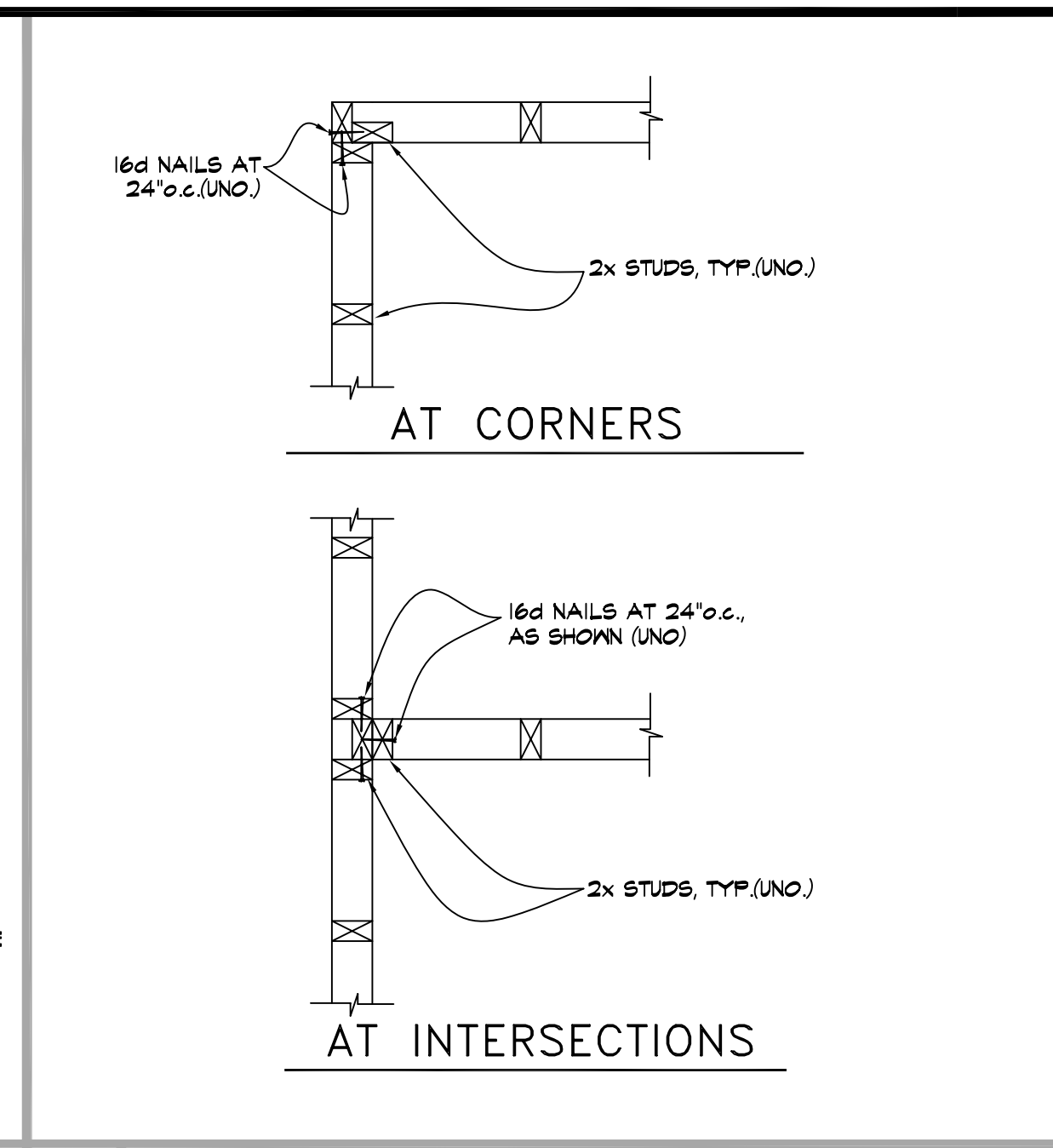
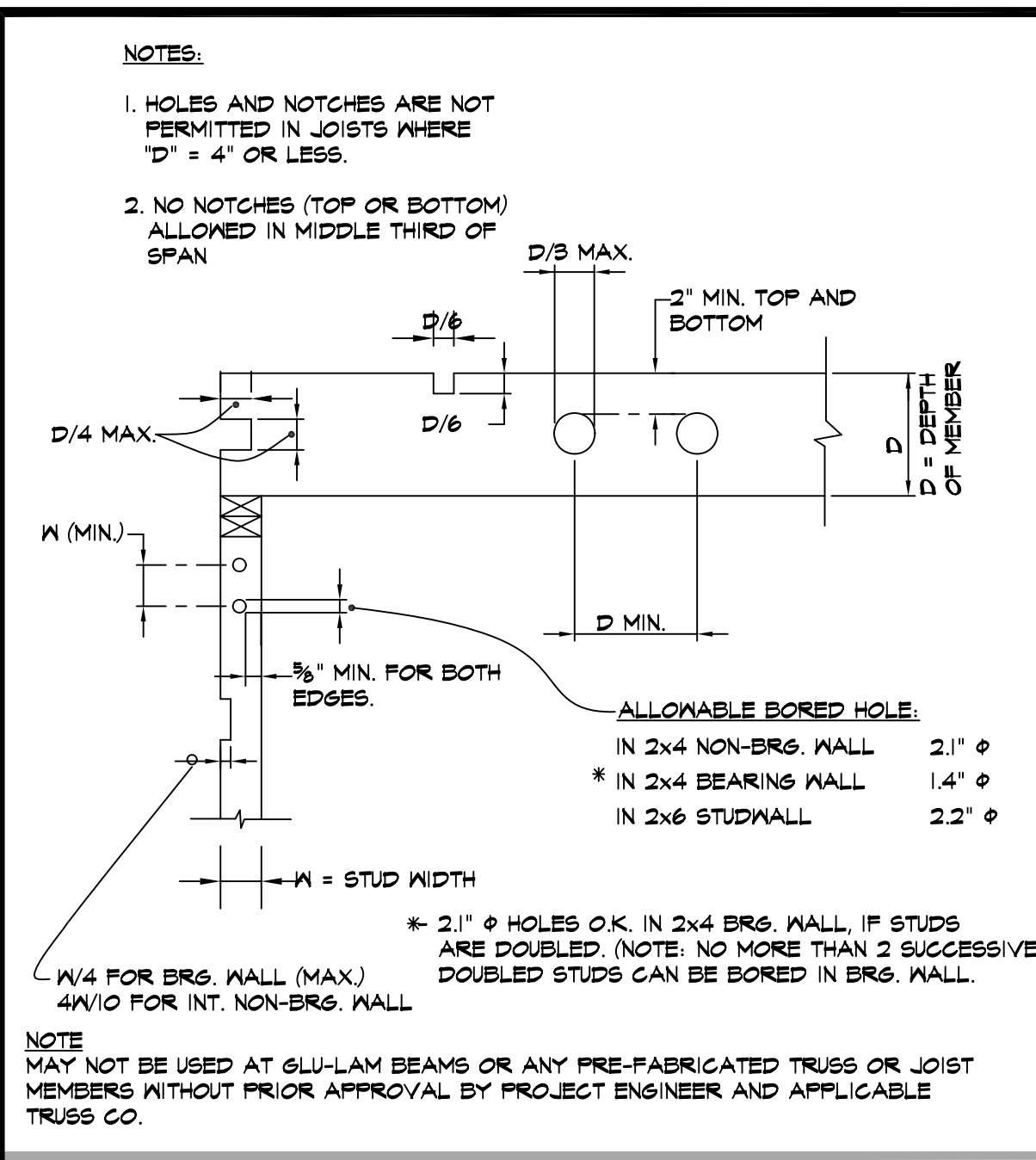
EXISTING CONDITIONS

THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO START OF JOB AND/OR ORDERING MATERIALS. ANY DISCREPANCIES FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL IMMEDIATELY.

CONSTRUCTION LIABILITY

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

NO.	REVISIONS
Ali Fatapour, P.E. Structural & Civil Engineering Consultant 1088 Barnes Court San Jose, CA, 95120 (408) 268-5937	
LUNDY RESIDENCE 592 LOMA VERDE AVENUE PALO ALTO, CALIFORNIA	
DRAWING TITLE	
DRAWN DM	CHECKED AF
PROJ. NO.	DATE MAY 2017
CAD FILE NO.	
DRAWING NO.	
S-1	
OF	SHEETS



NO.	REVISIONS

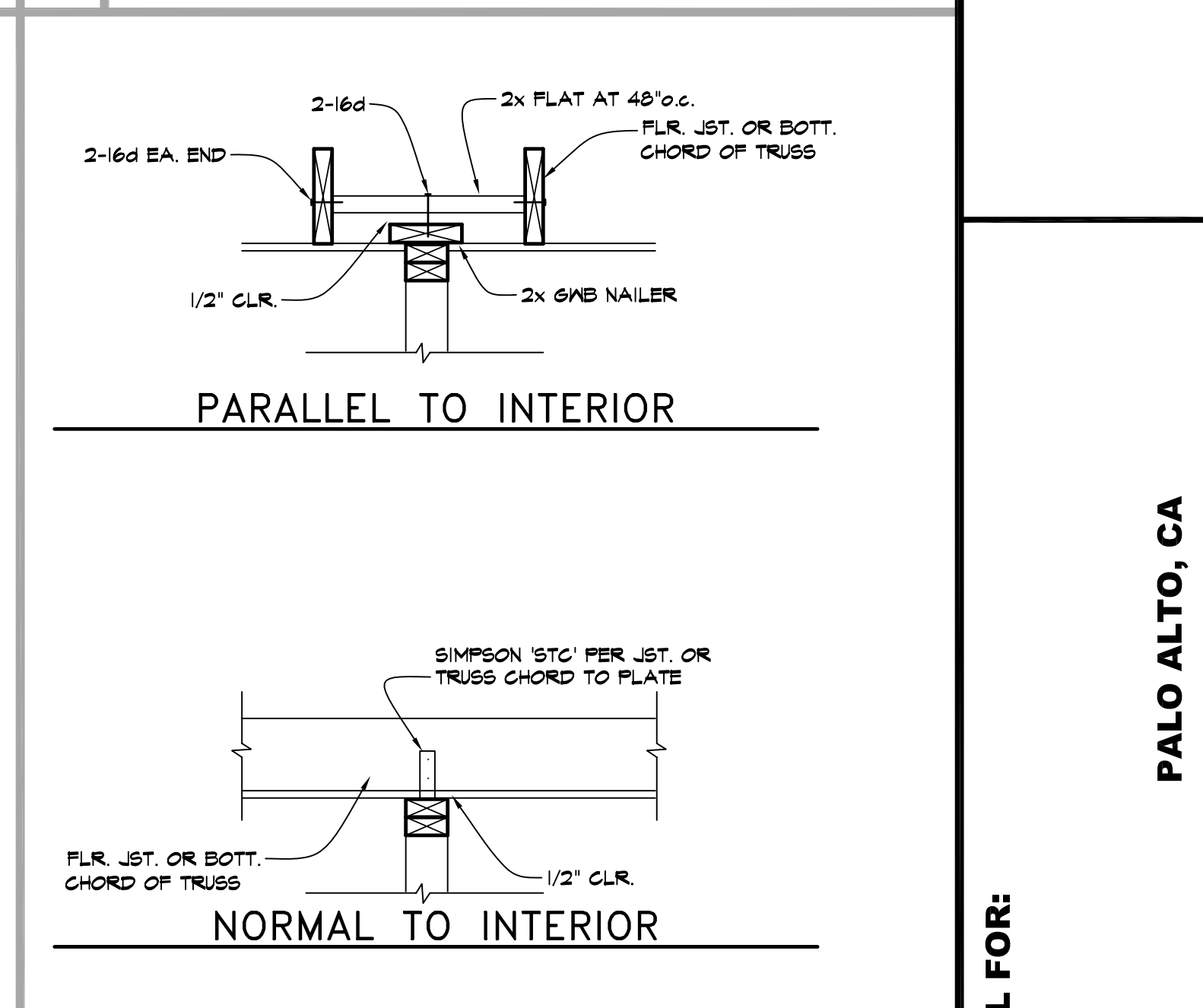
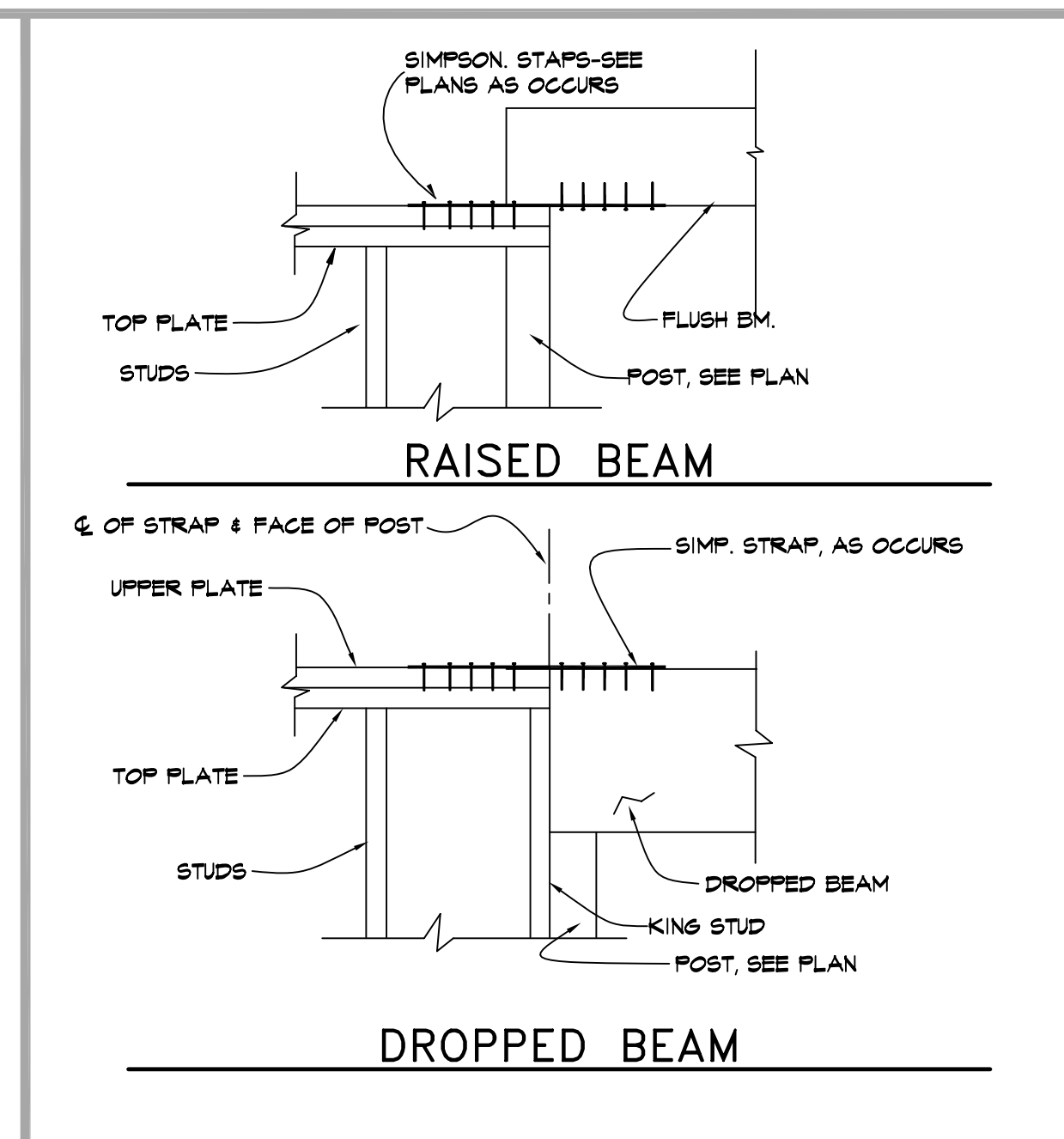
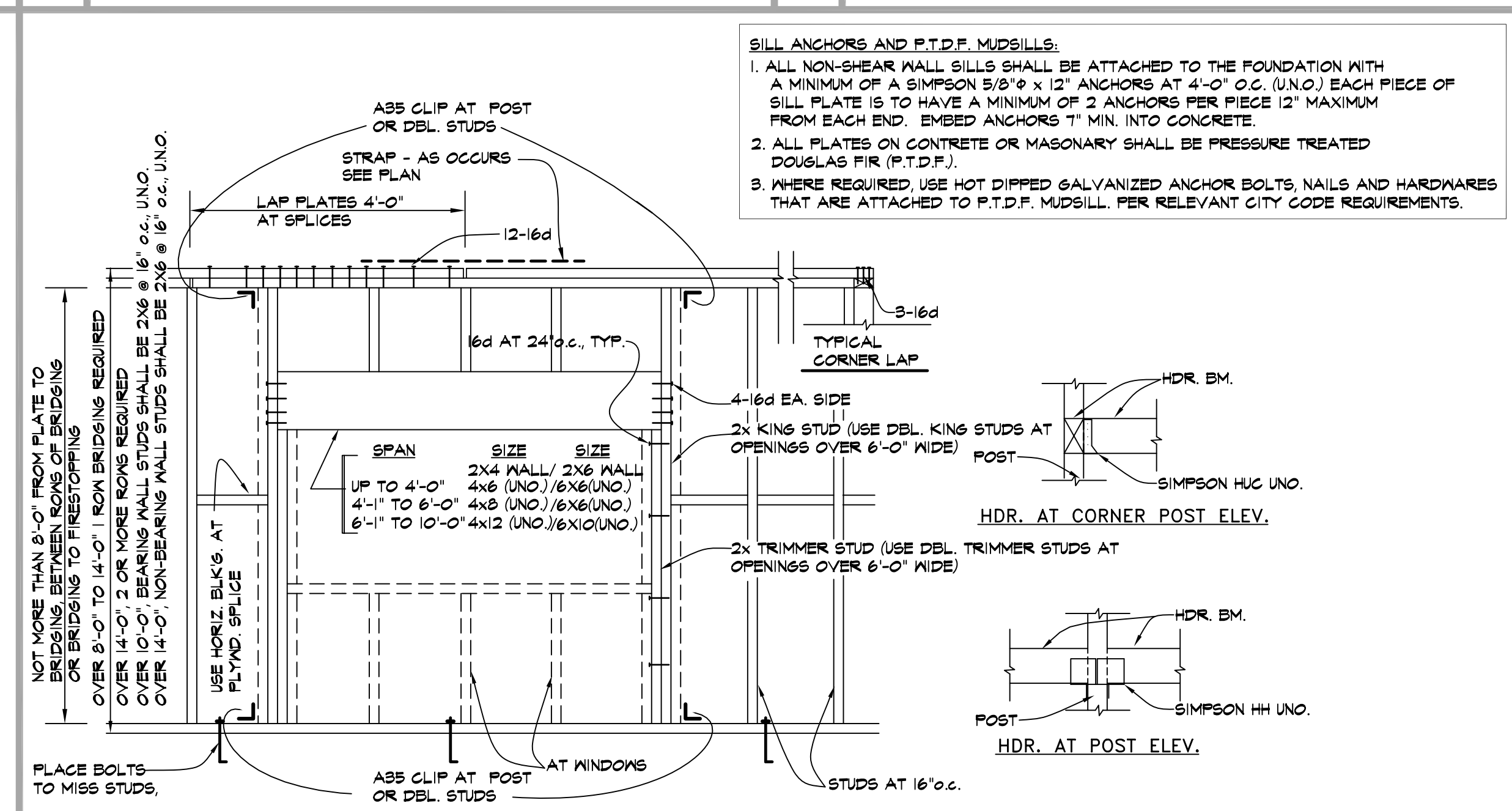
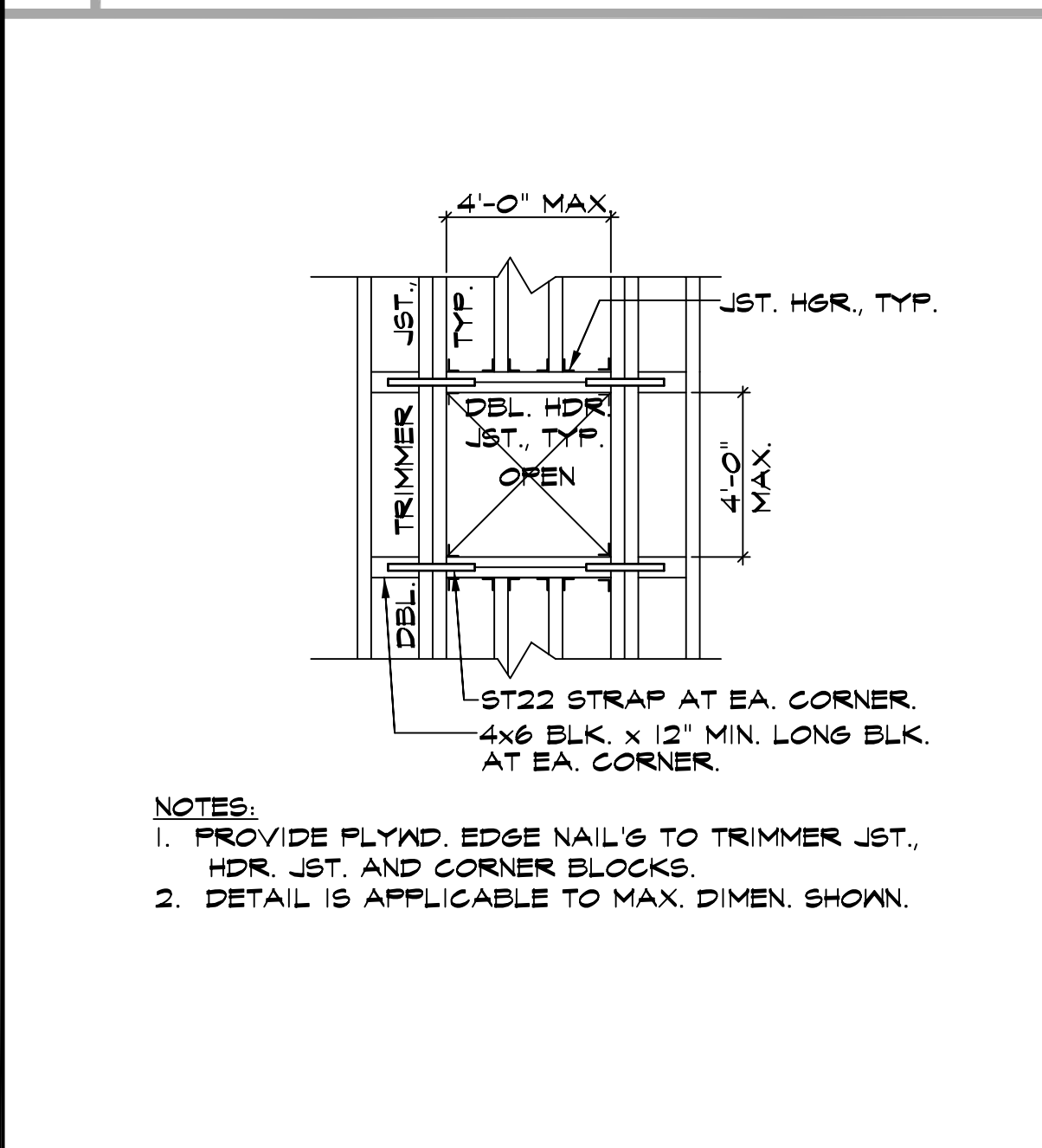
Ali Fatapour, M.S., P.E.
 Structural & Civil Engineering Consultant
 1088 Barnes Court
 San Jose, CA 95120
 Tel: (408)268-5937
 Fax: (408)268-0288

1 JOIST AND STUD CUTOUT DET.

2 TYPICAL STUD LOCATIONS (U.N.O.)

3 PLYWOOD SHEATHING DETAIL

5

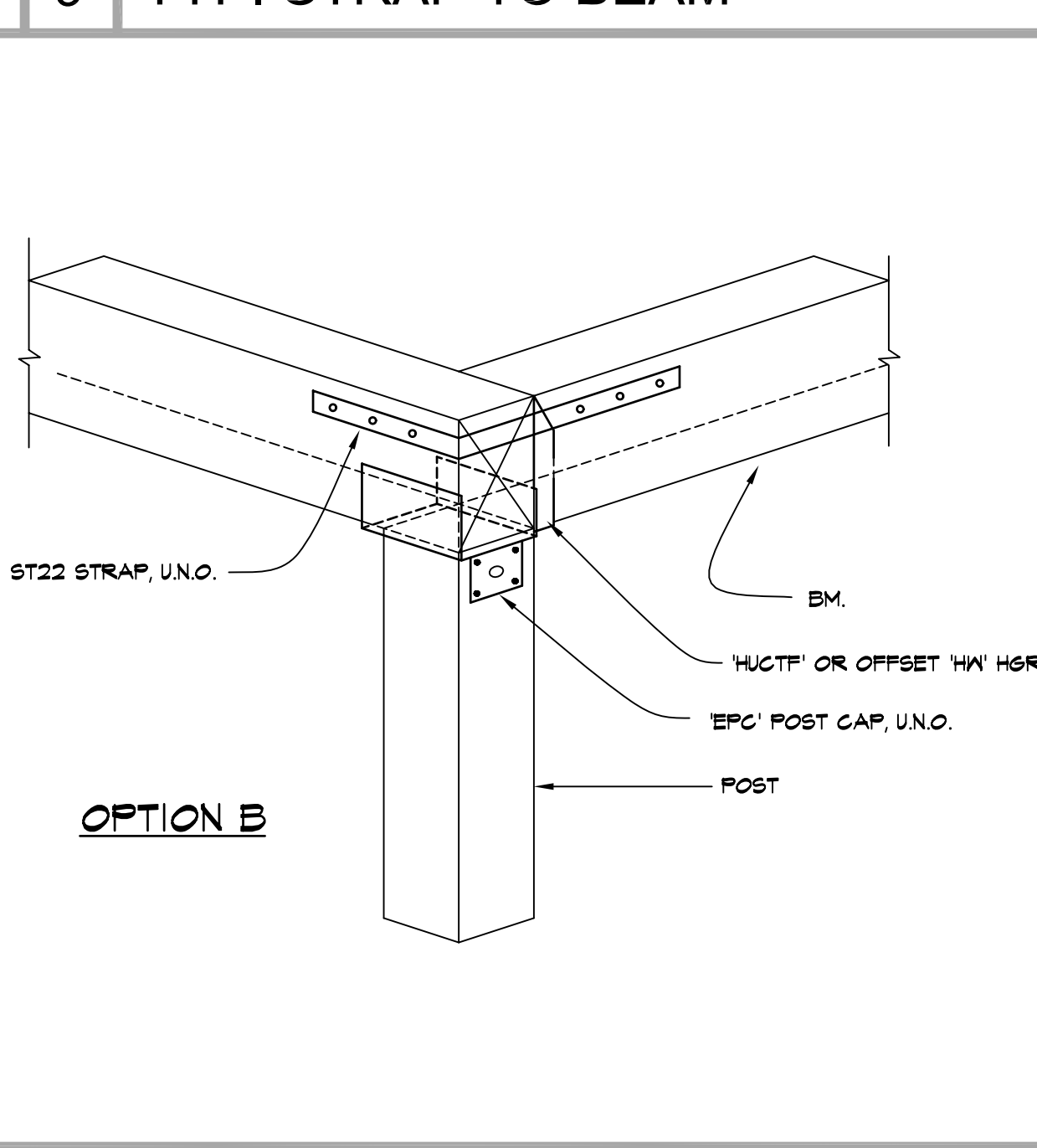
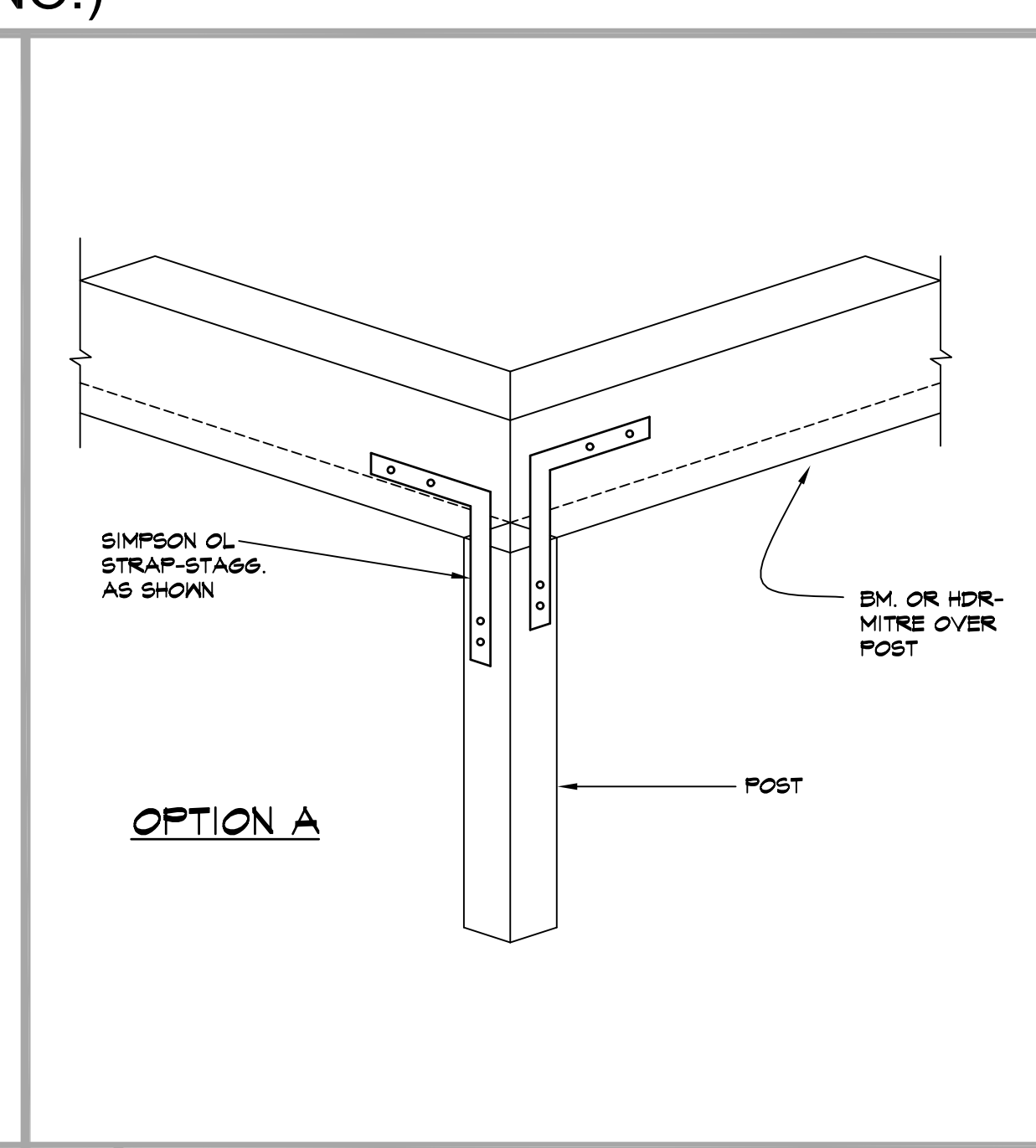
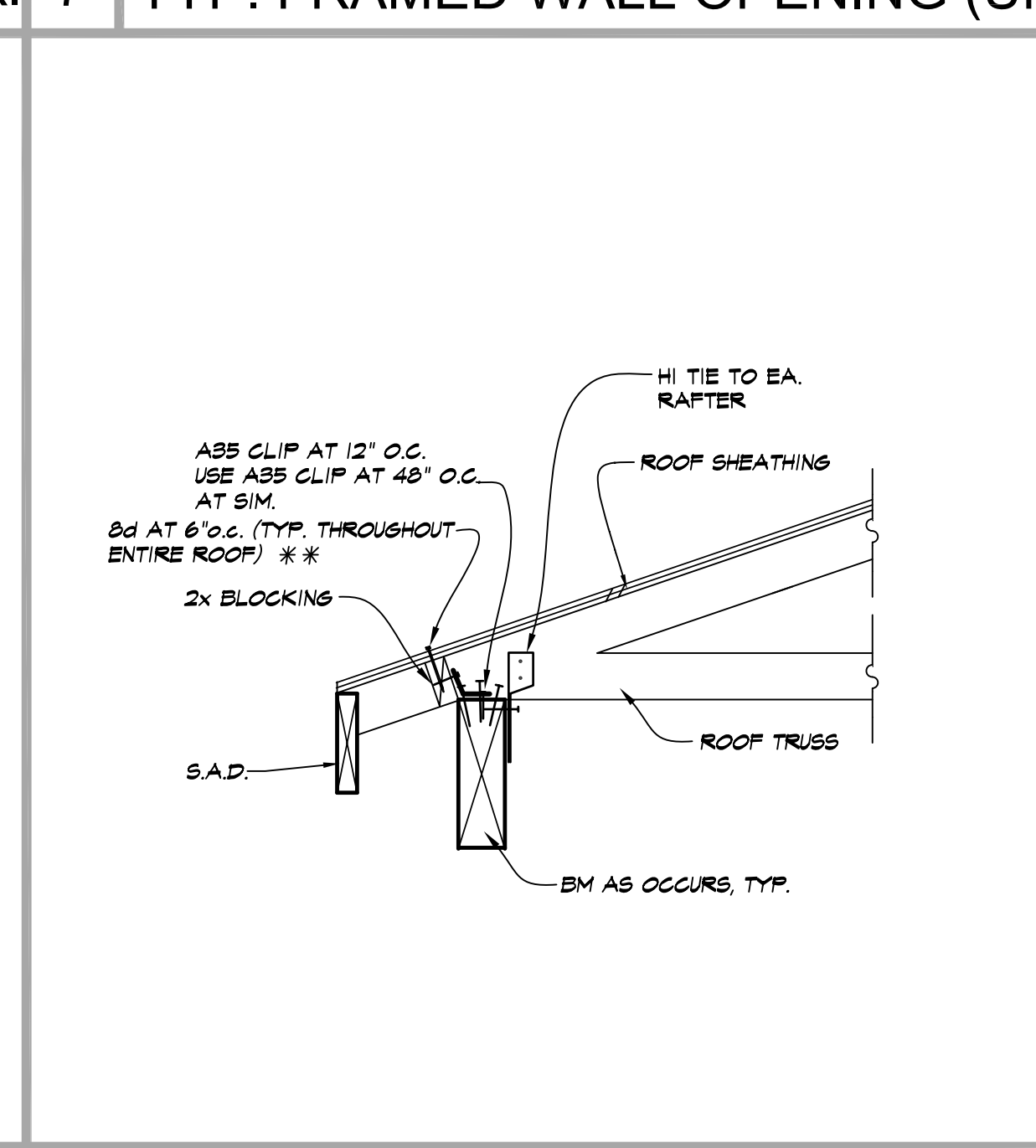
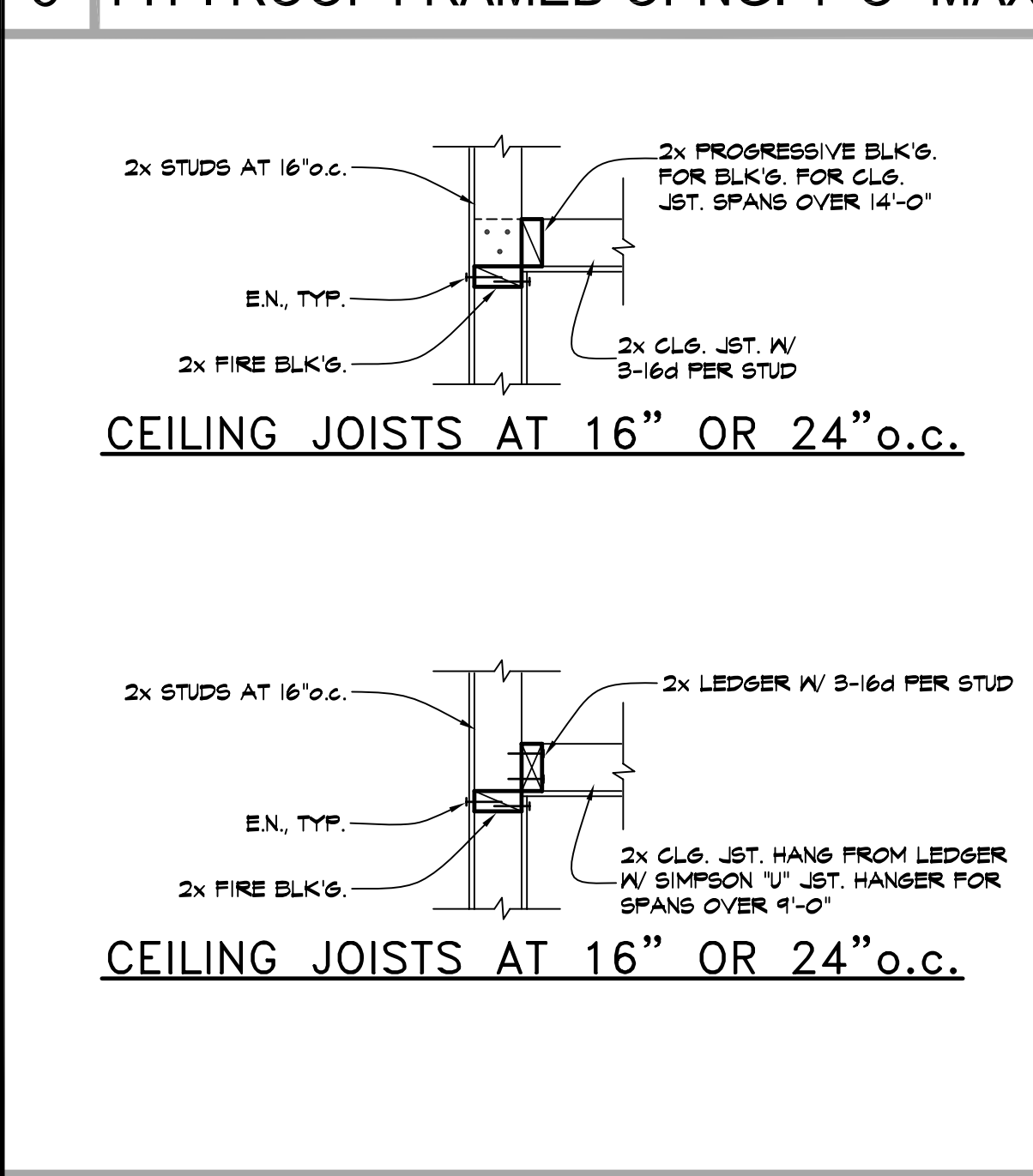


6 TYP. ROOF FRAMED OPNG. 4'-0" MAX.

7 TYP. FRAMED WALL OPENING (U.N.O.)

9 TYP. STRAP TO BEAM

10 NON-BRG. WALL DET.



11 CEILING JOIST TO BALLOON FRAME WALL

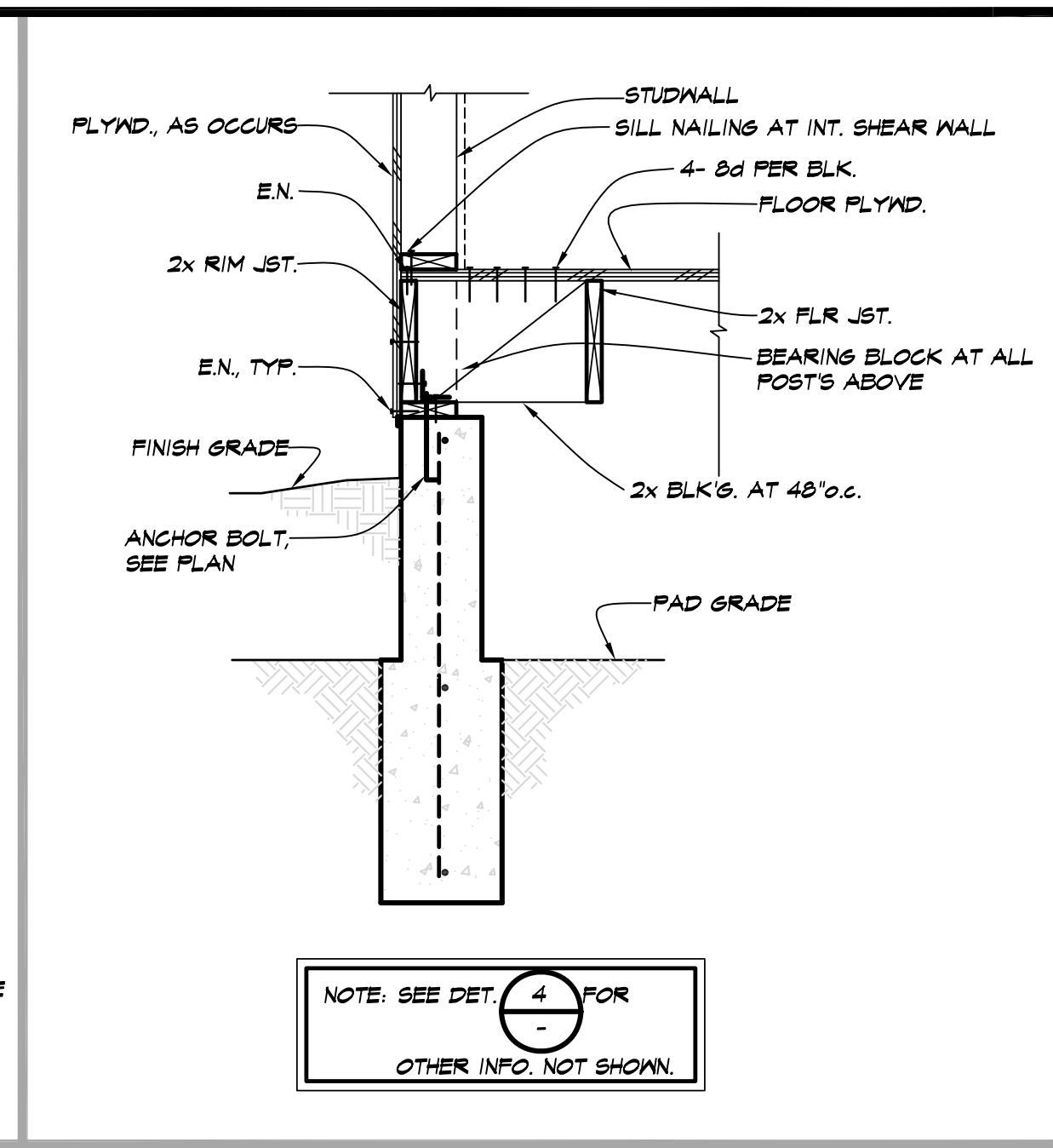
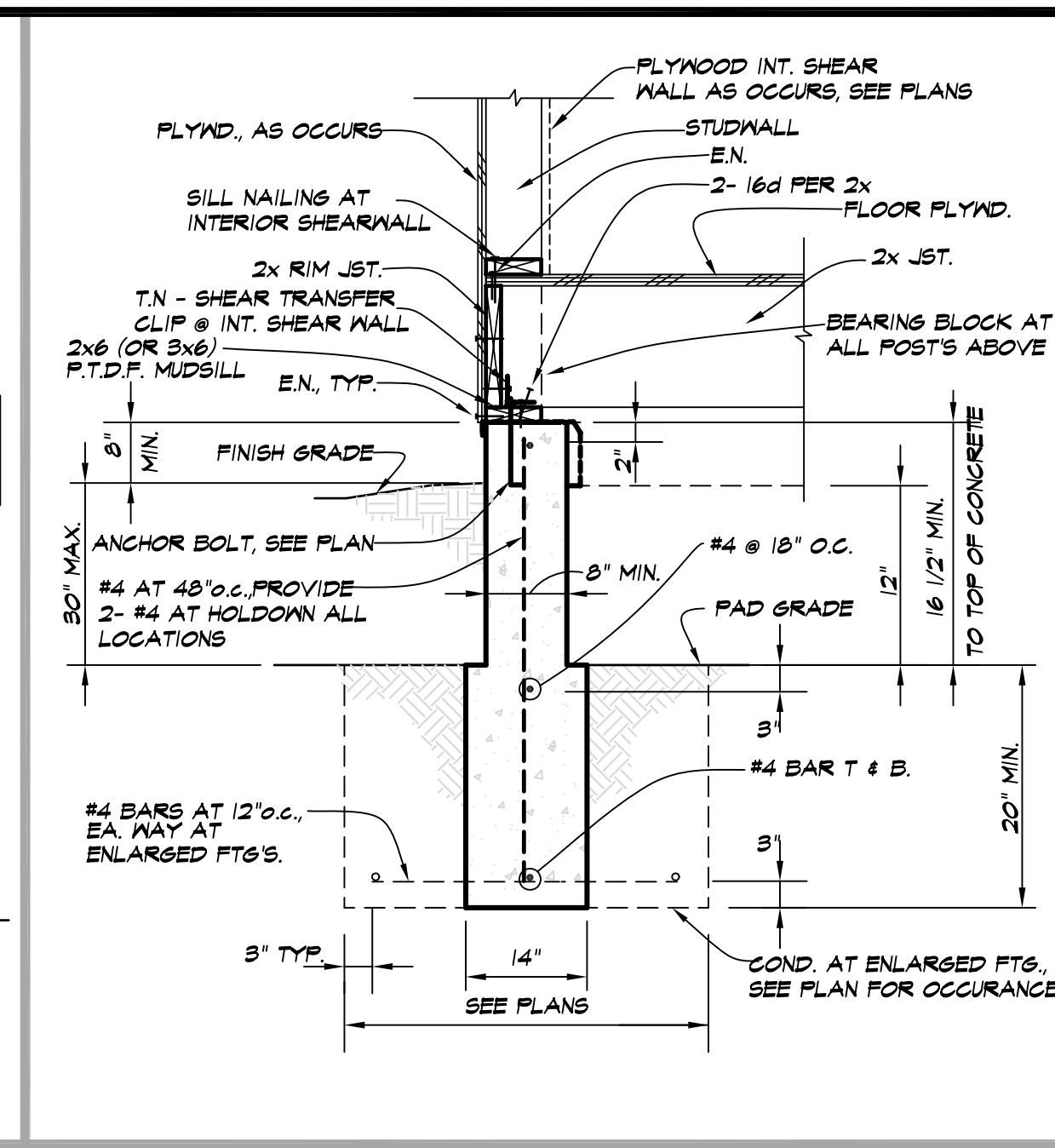
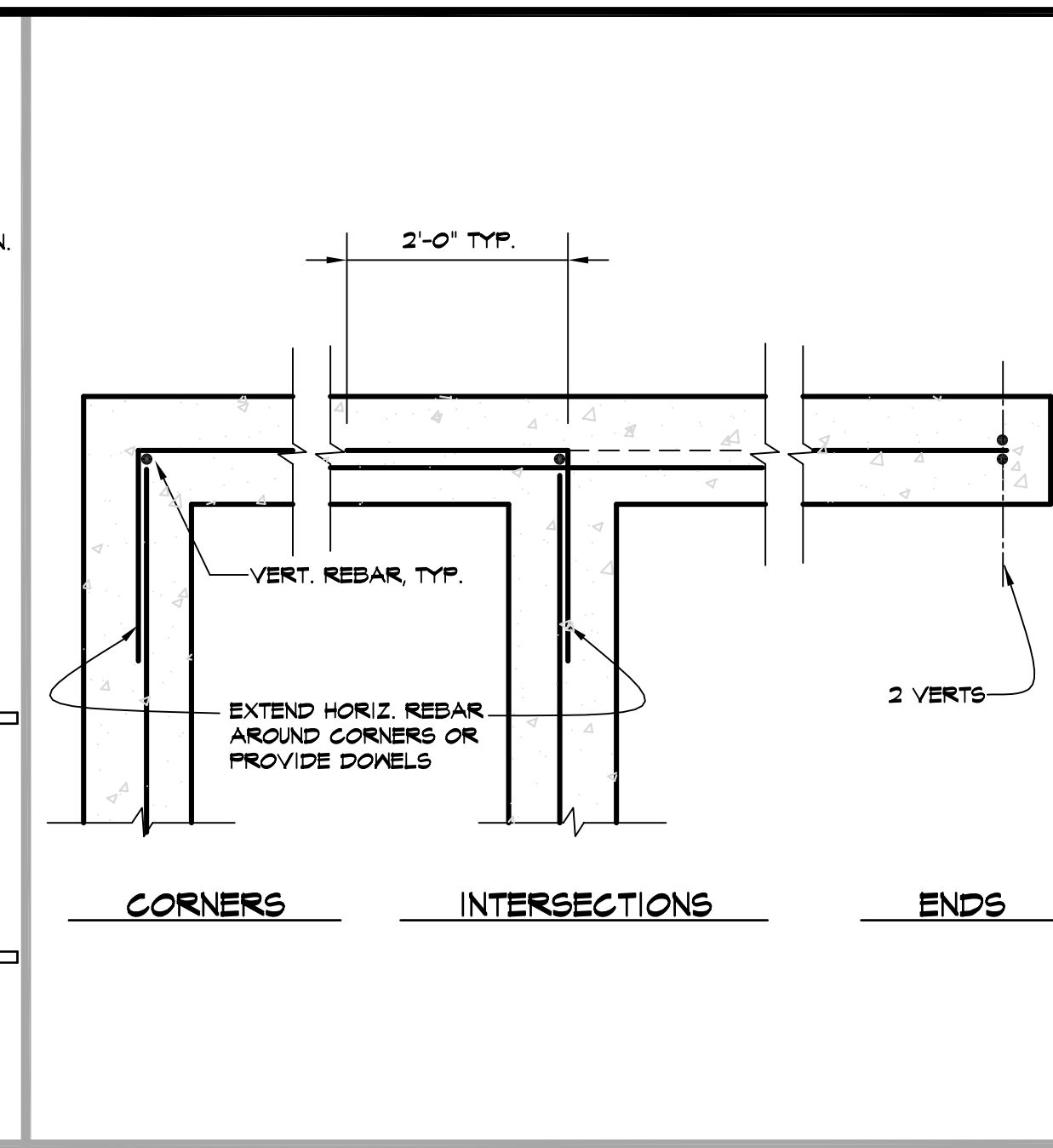
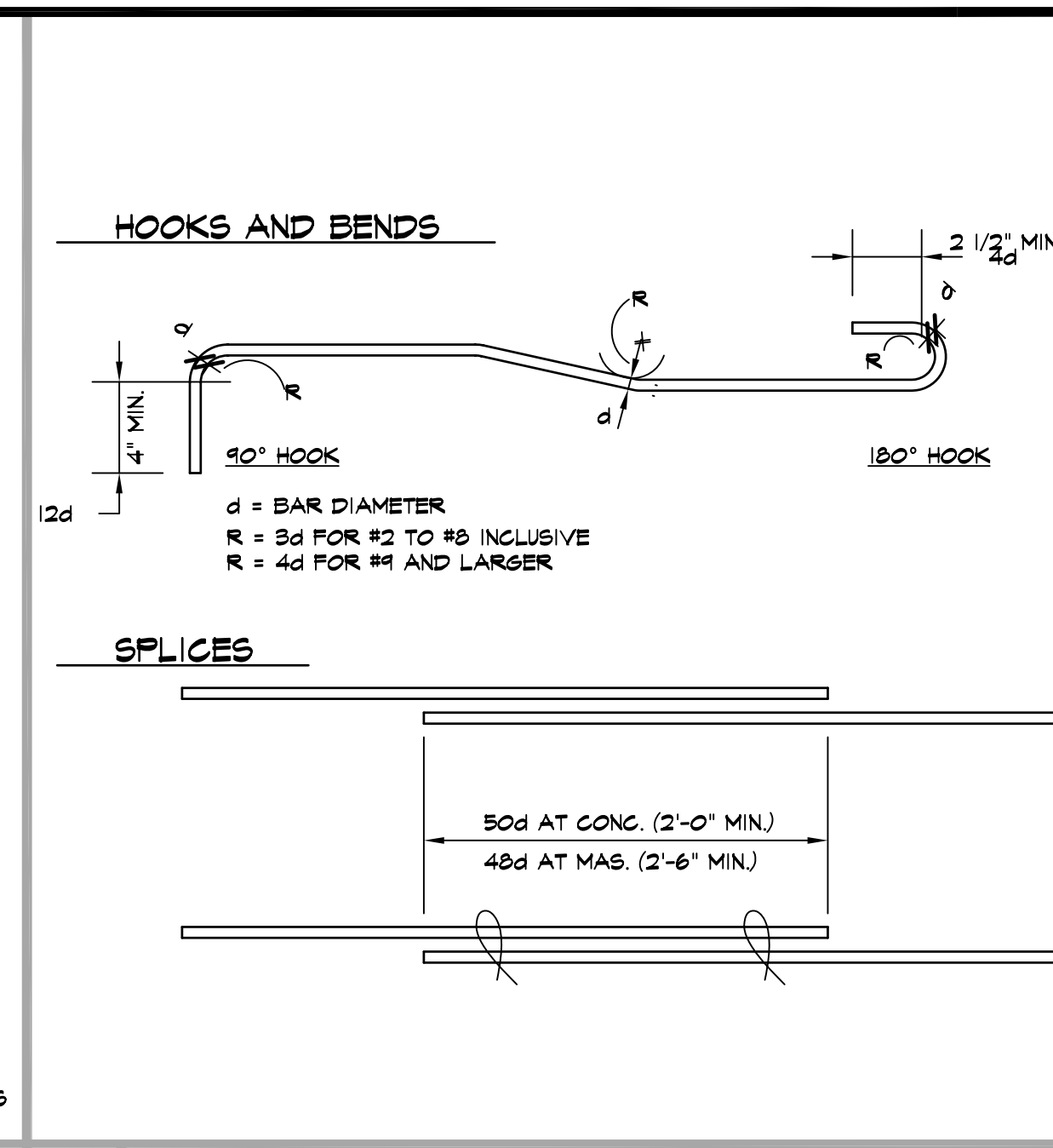
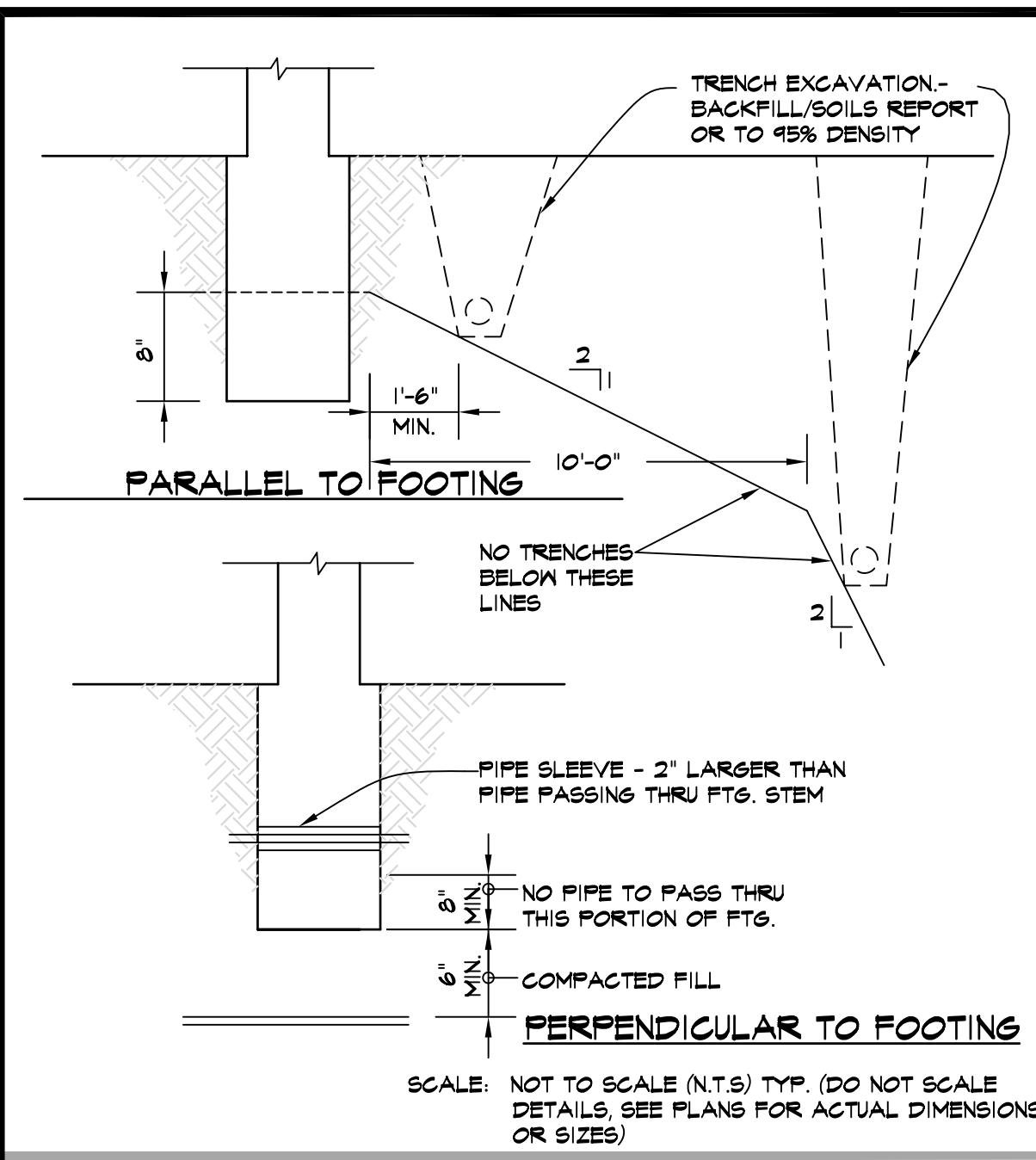
12 TYP. PERPENDICULAR FRMG.

13 POST/BM DETAIL

15 TYP. BM. CONN.

15 TYP. BM. CONN.

A PROPOSED ADDITION / REMODEL FOR:
LUNDY RESIDENCE
 592 LOMA VERDE AVE.
 PALO ALTO, CA



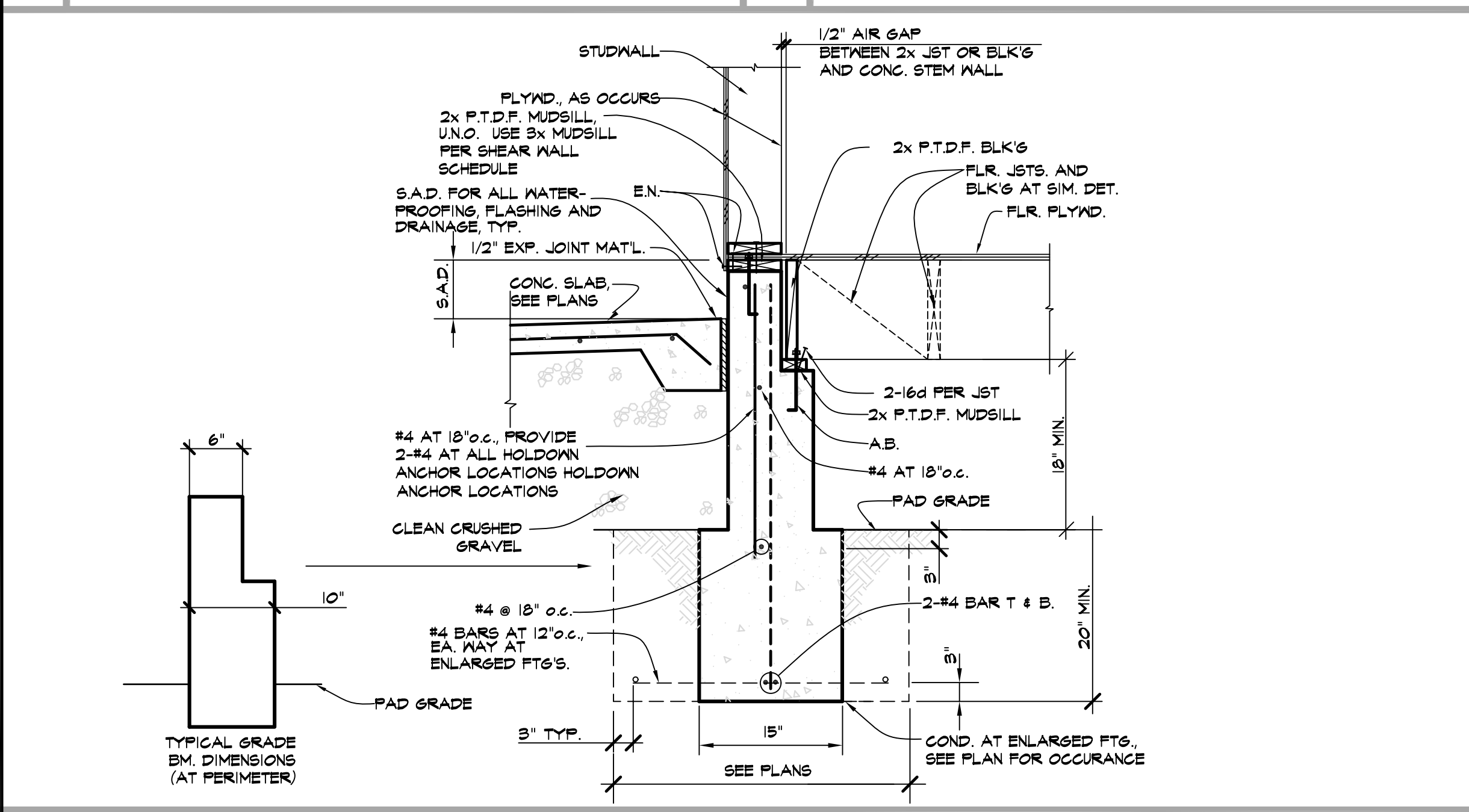
1 TRENCH DETAIL

2 TYP. REINF. BAR DET.

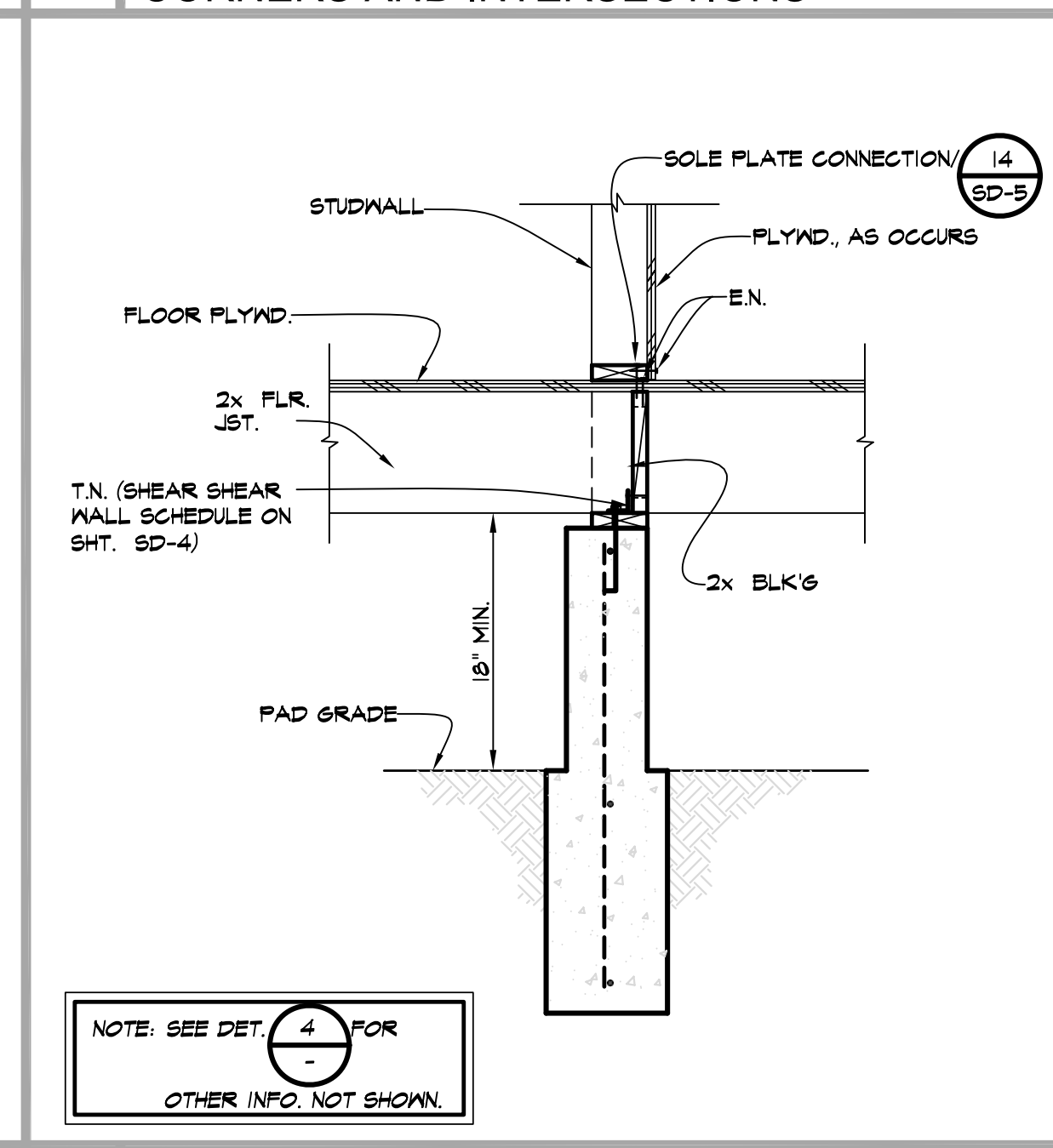
3 TYP. REINF. AT FTG. AND WALL CORNERS AND INTERSECTIONS

4 TYP. FOOTING DET.

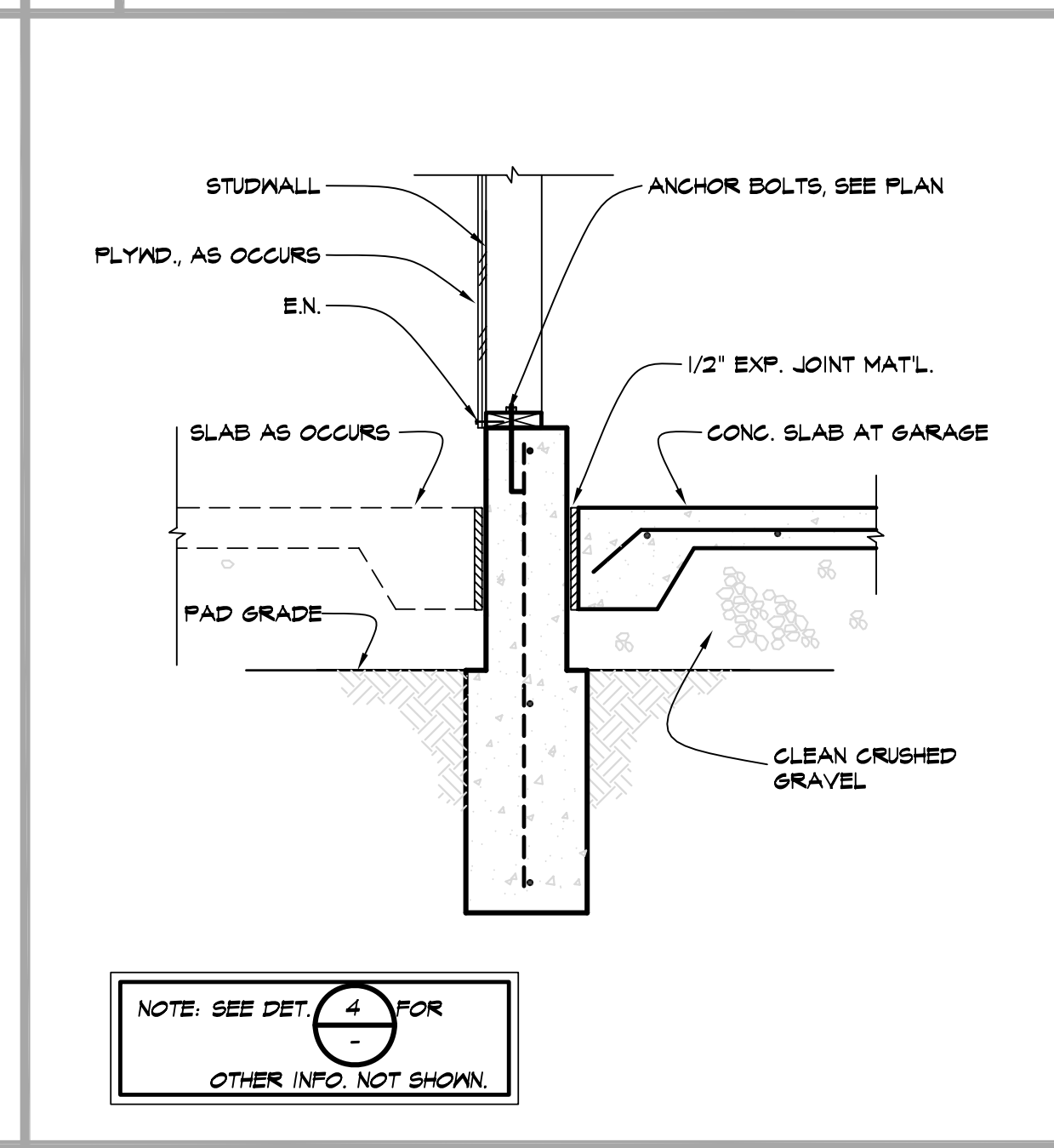
5 TYP. FOOTING DET.



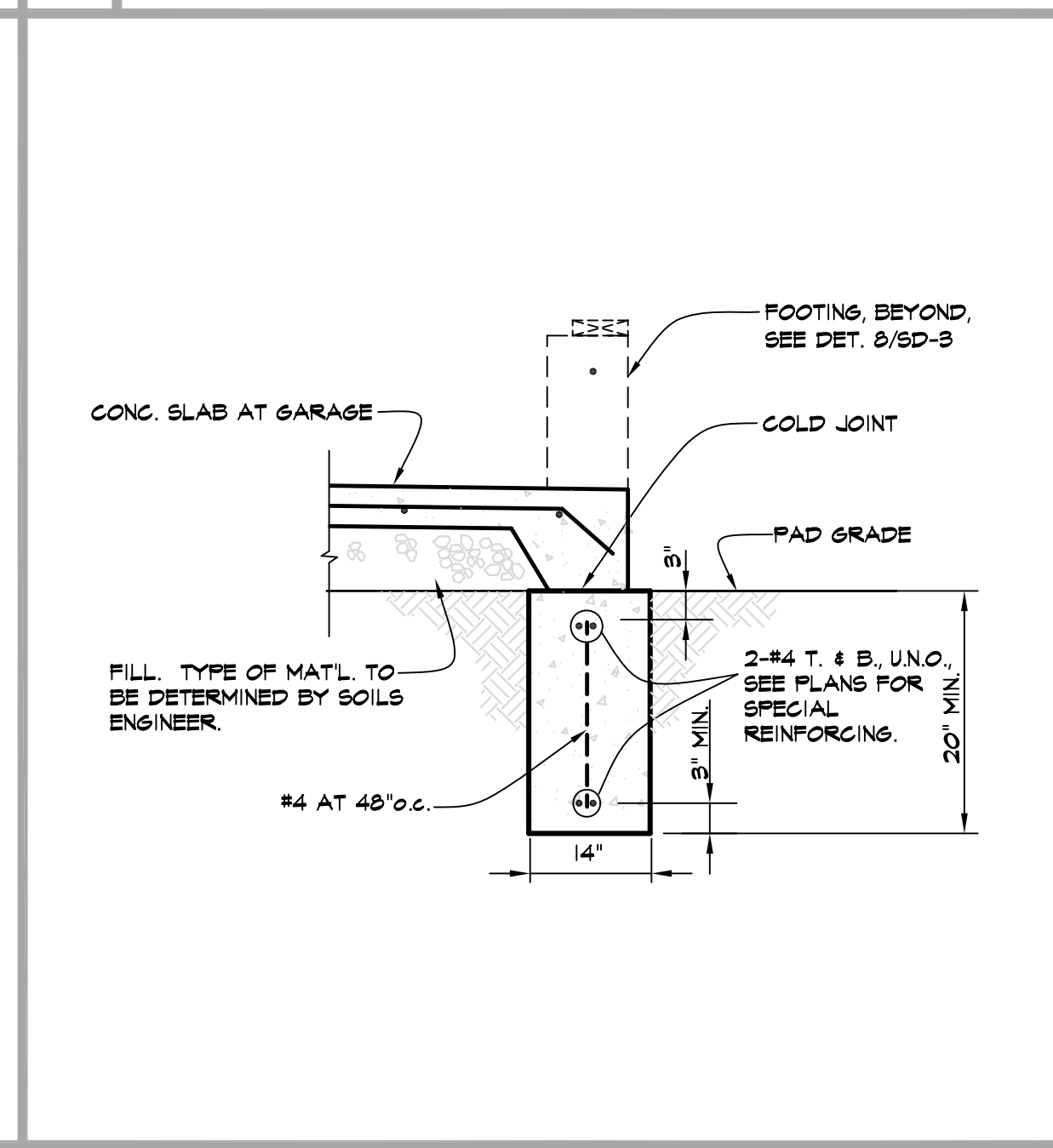
6 HIGH STEMWALL DETAIL



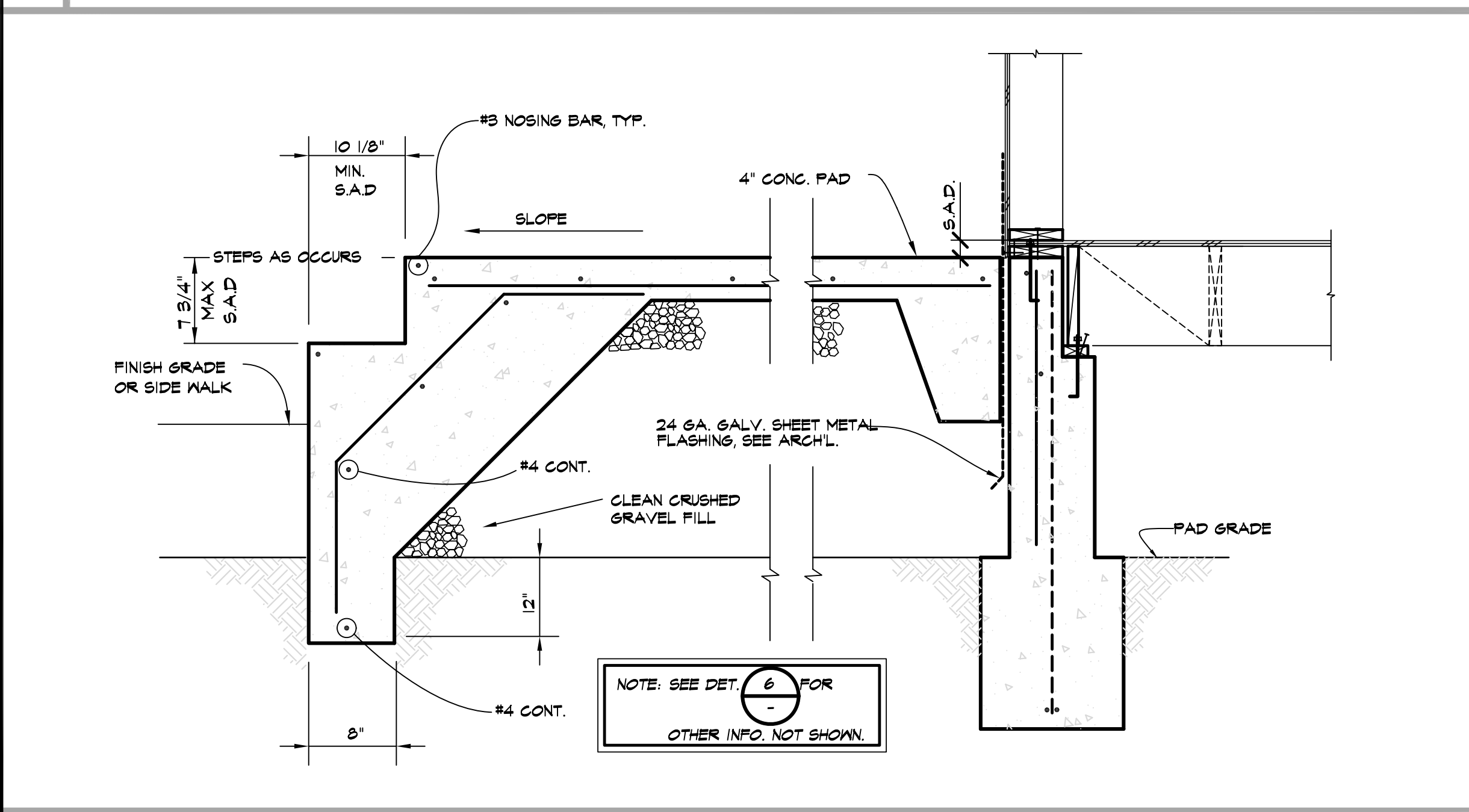
8 TYP. INT. FOOTING DET.



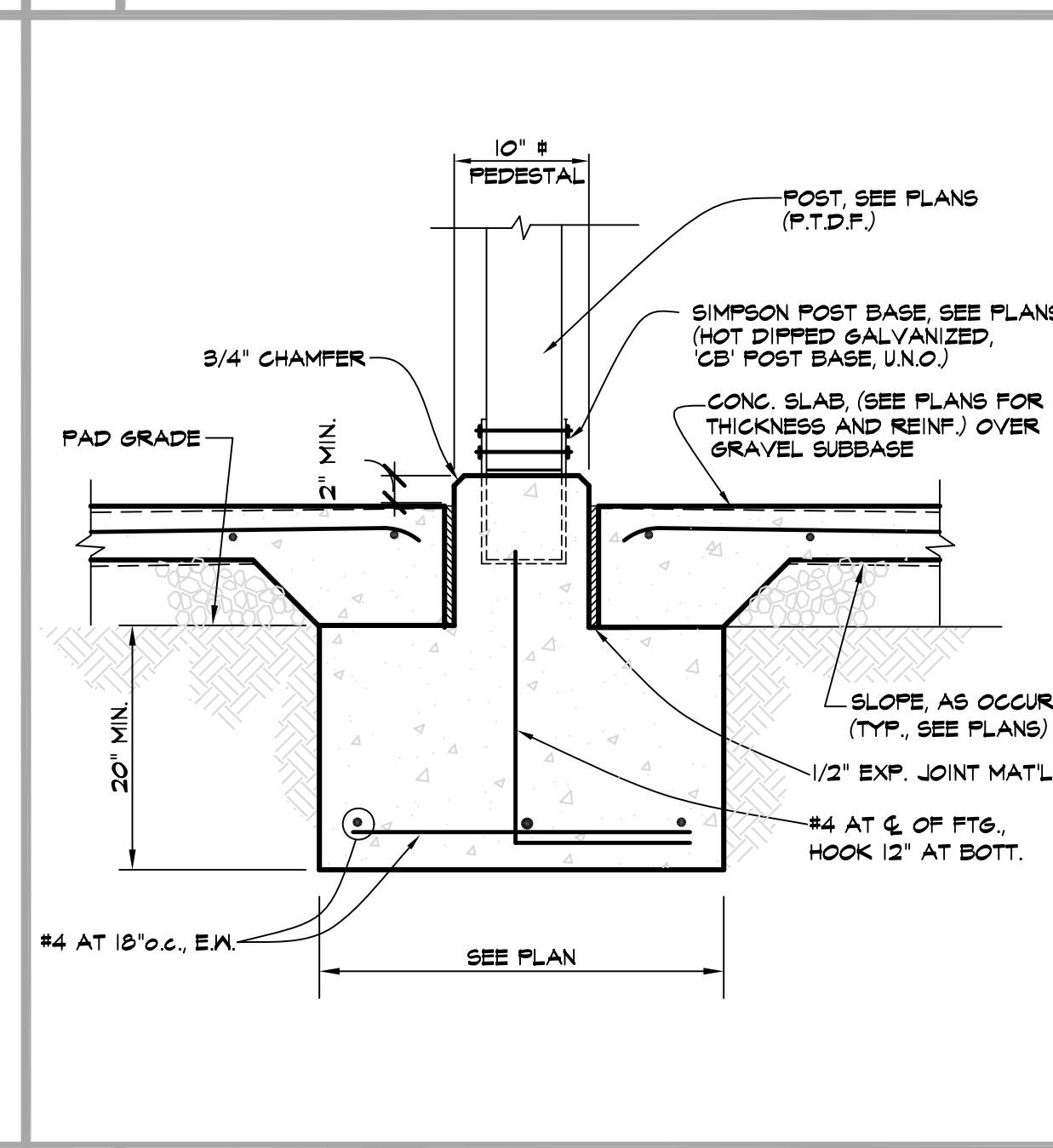
9 FOOTING AT GARAGE



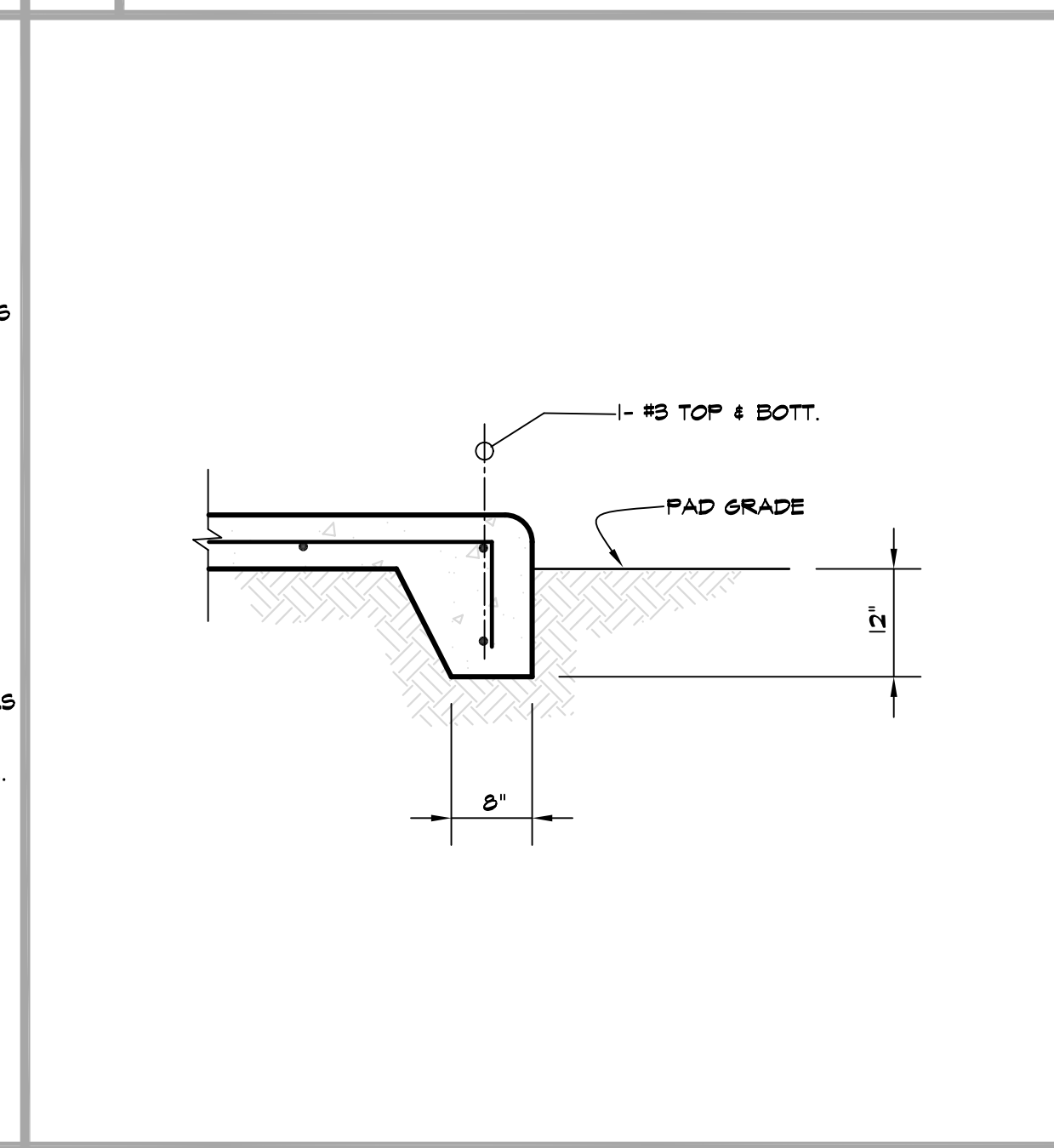
10 FTG. AT GARAGE DRIVE



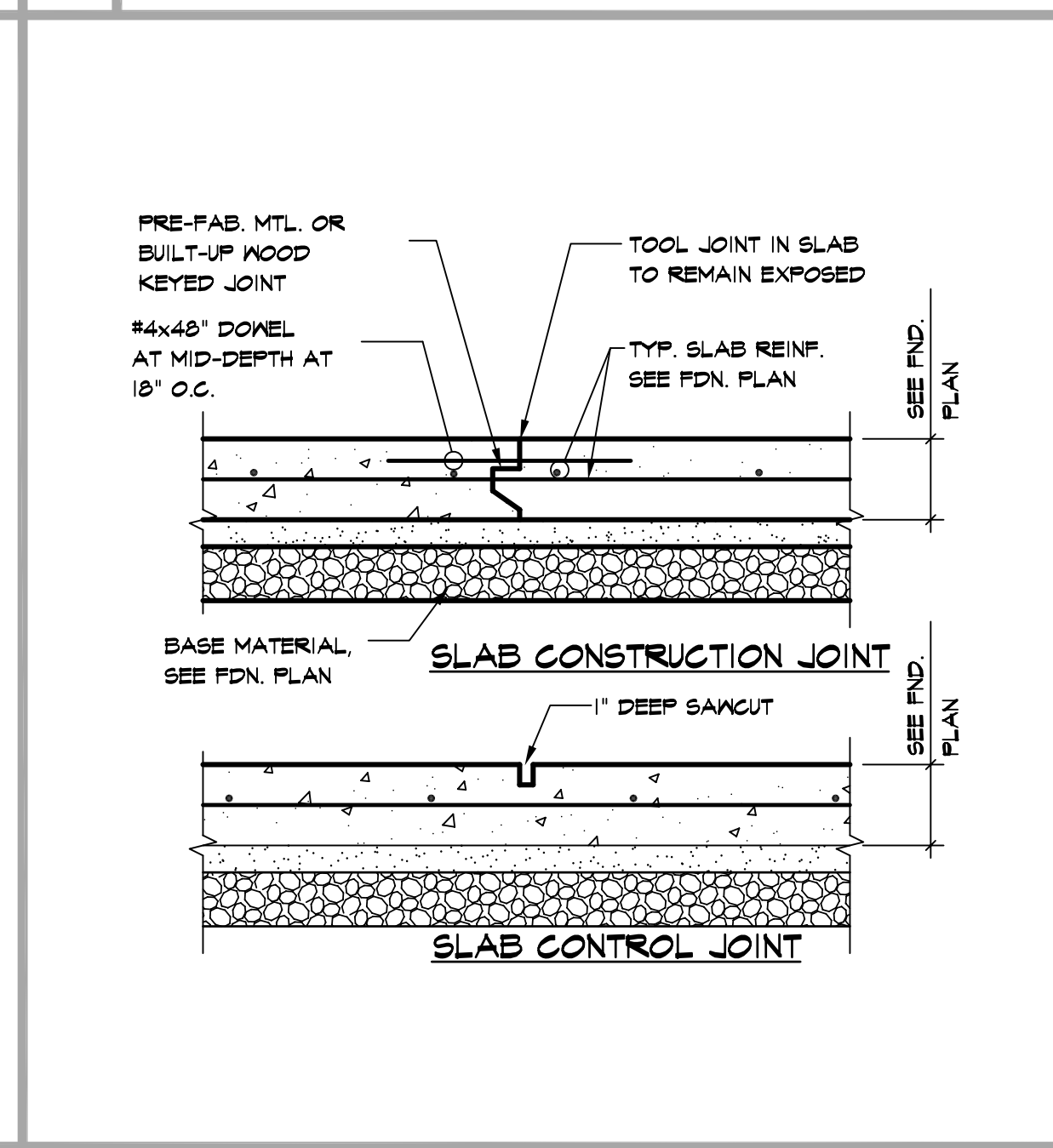
11 TYP. PORCH FOOTING DET.



13 PORCH COL. FTG. DET.



14 TURNDOWN EDGE



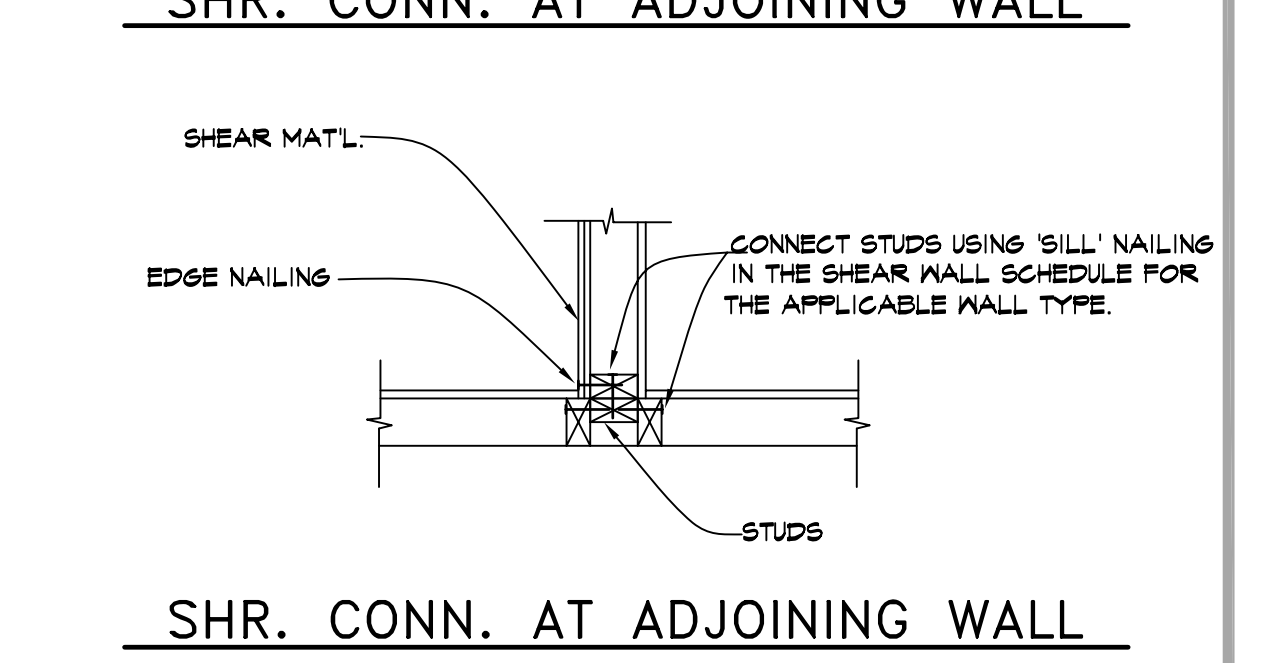
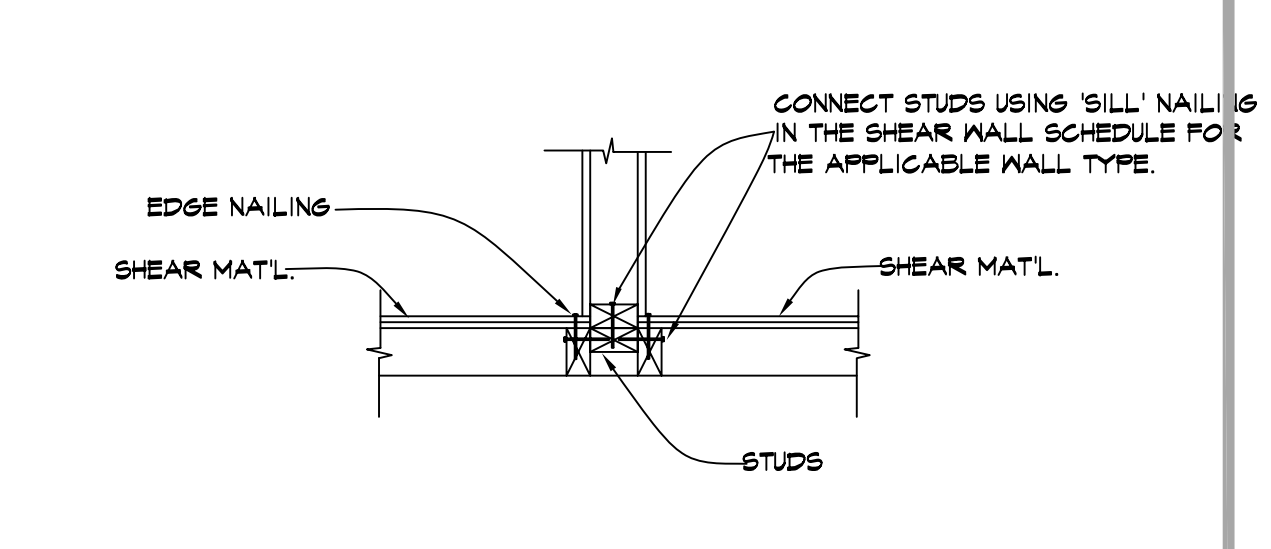
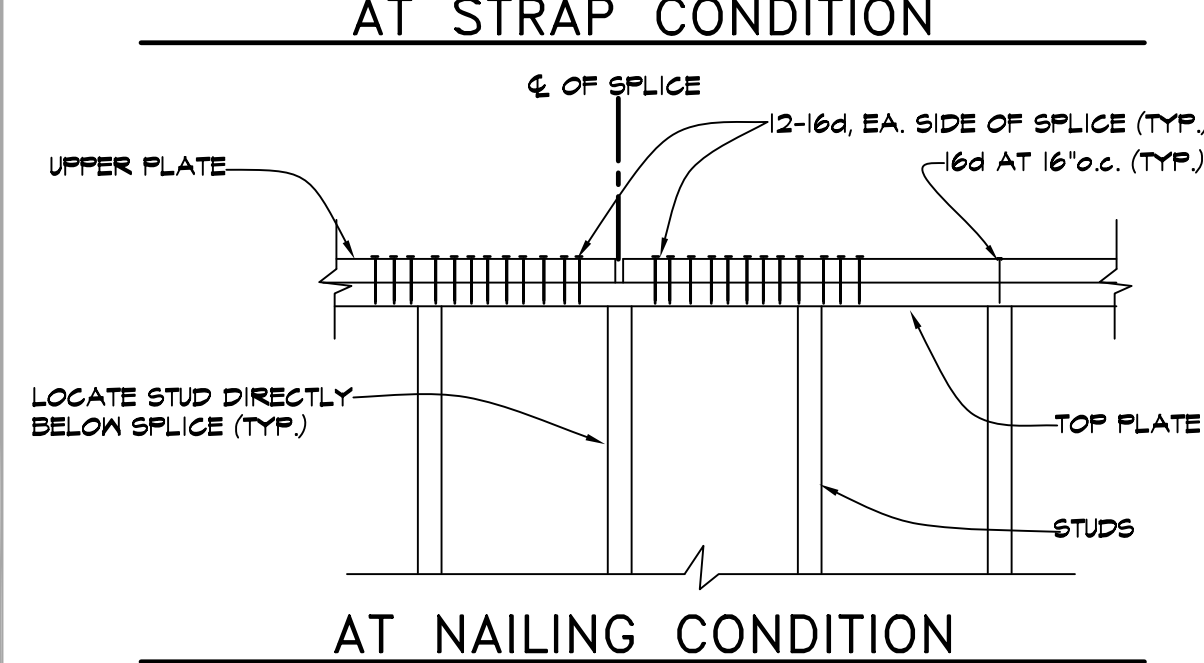
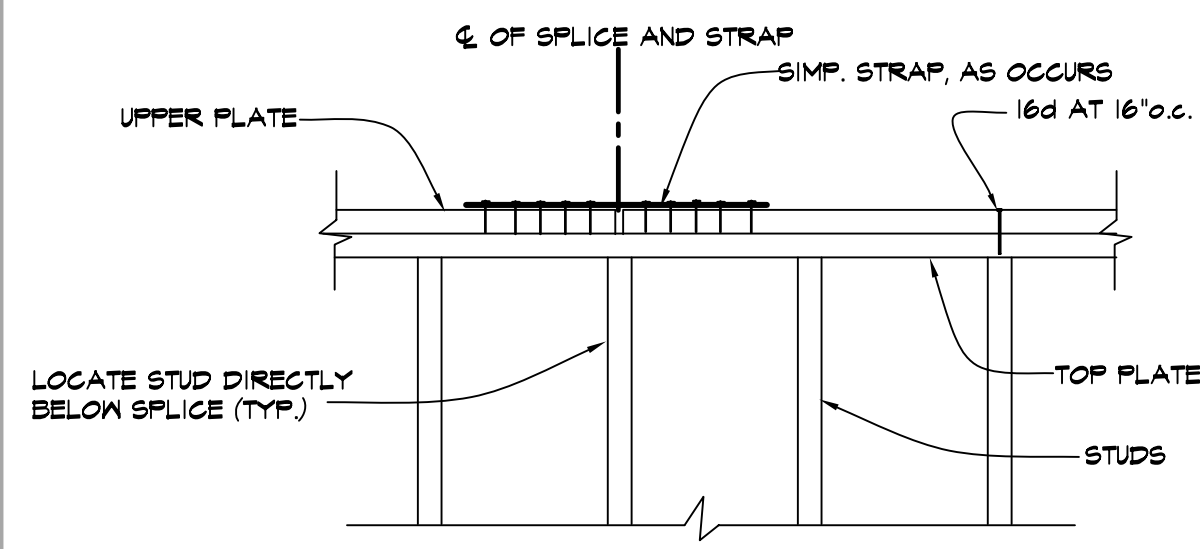
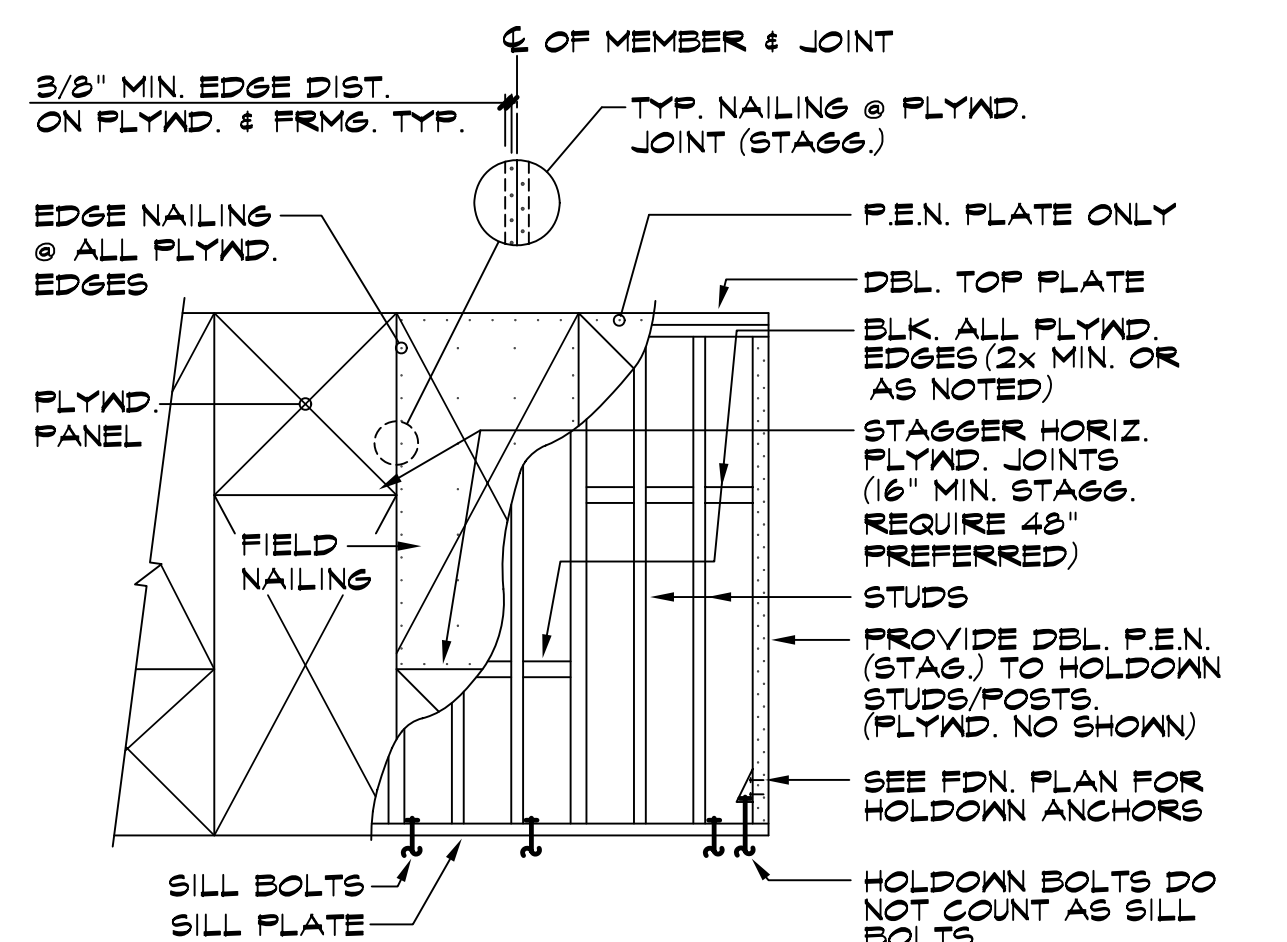
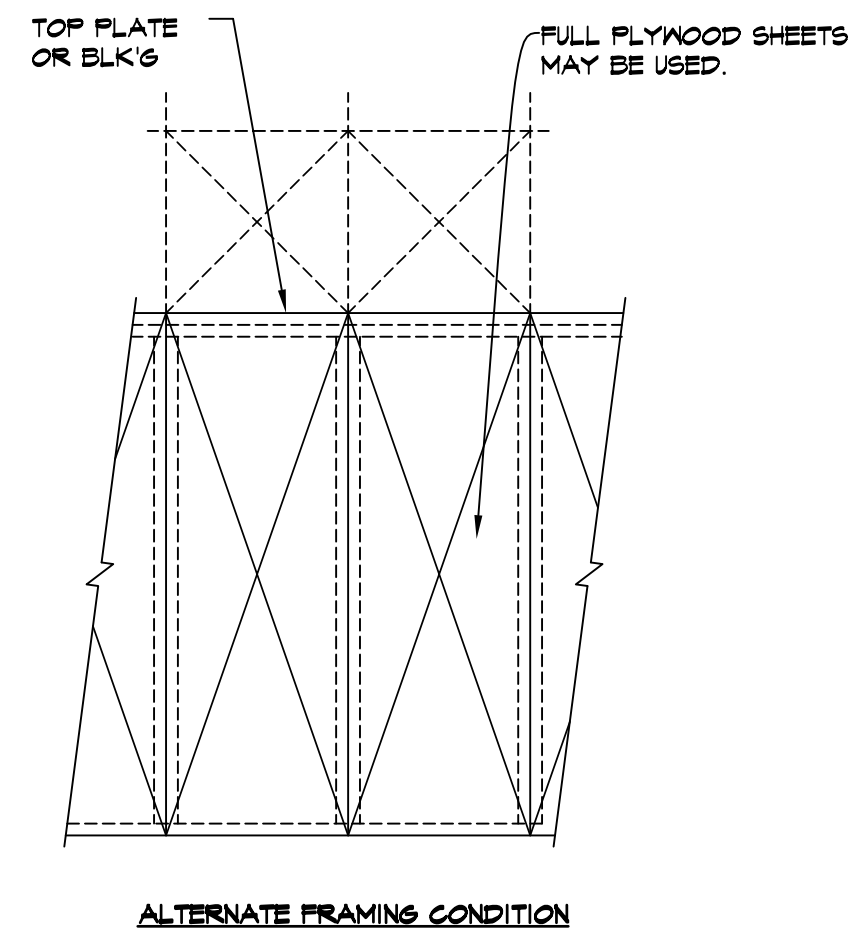
15 SLAB JOINTS

NO. REVISIONS

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 1088 Barnes Court
 San Jose, CA 95120
 tel (408)268-5937
 fax (408)268-0288

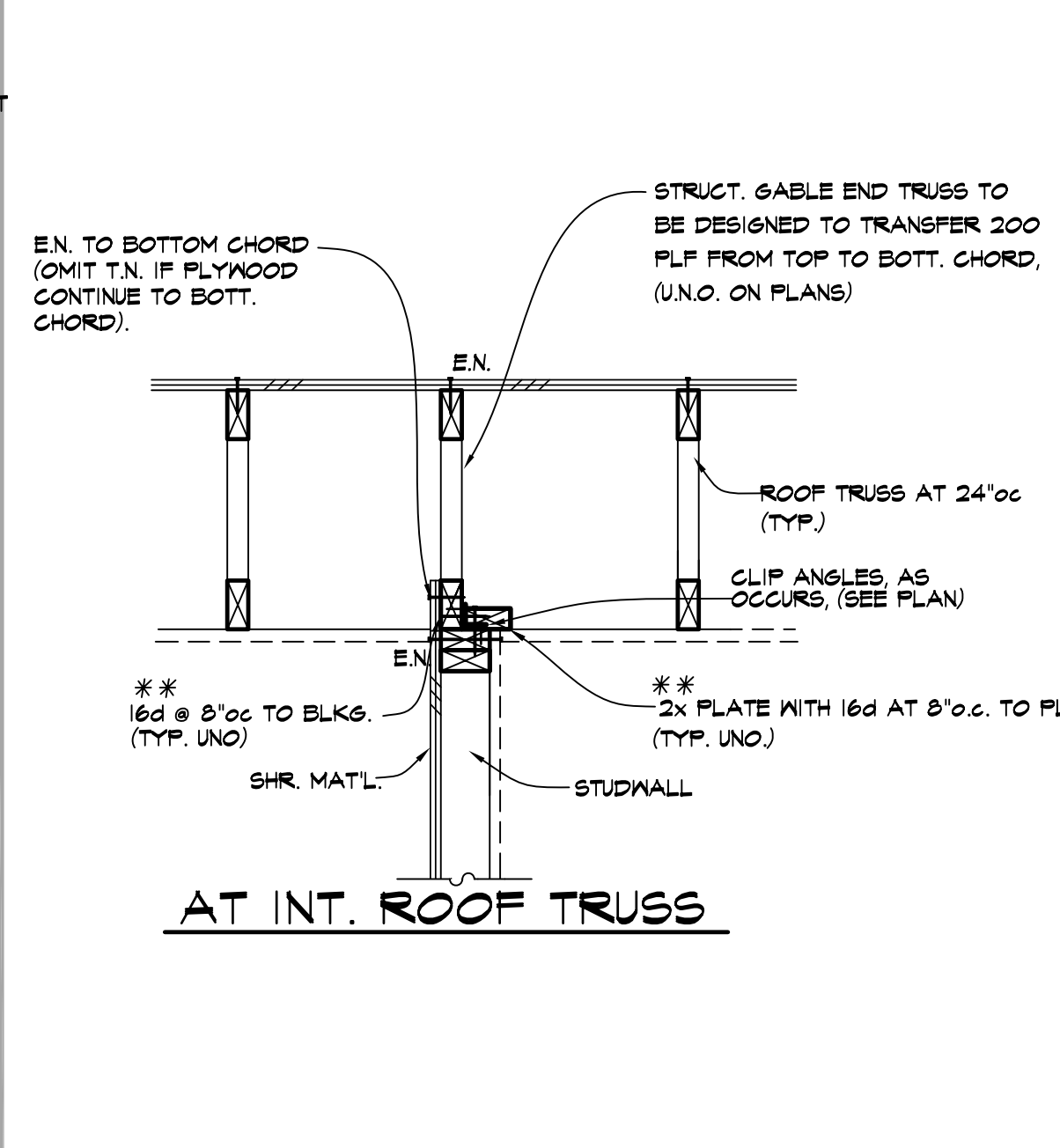
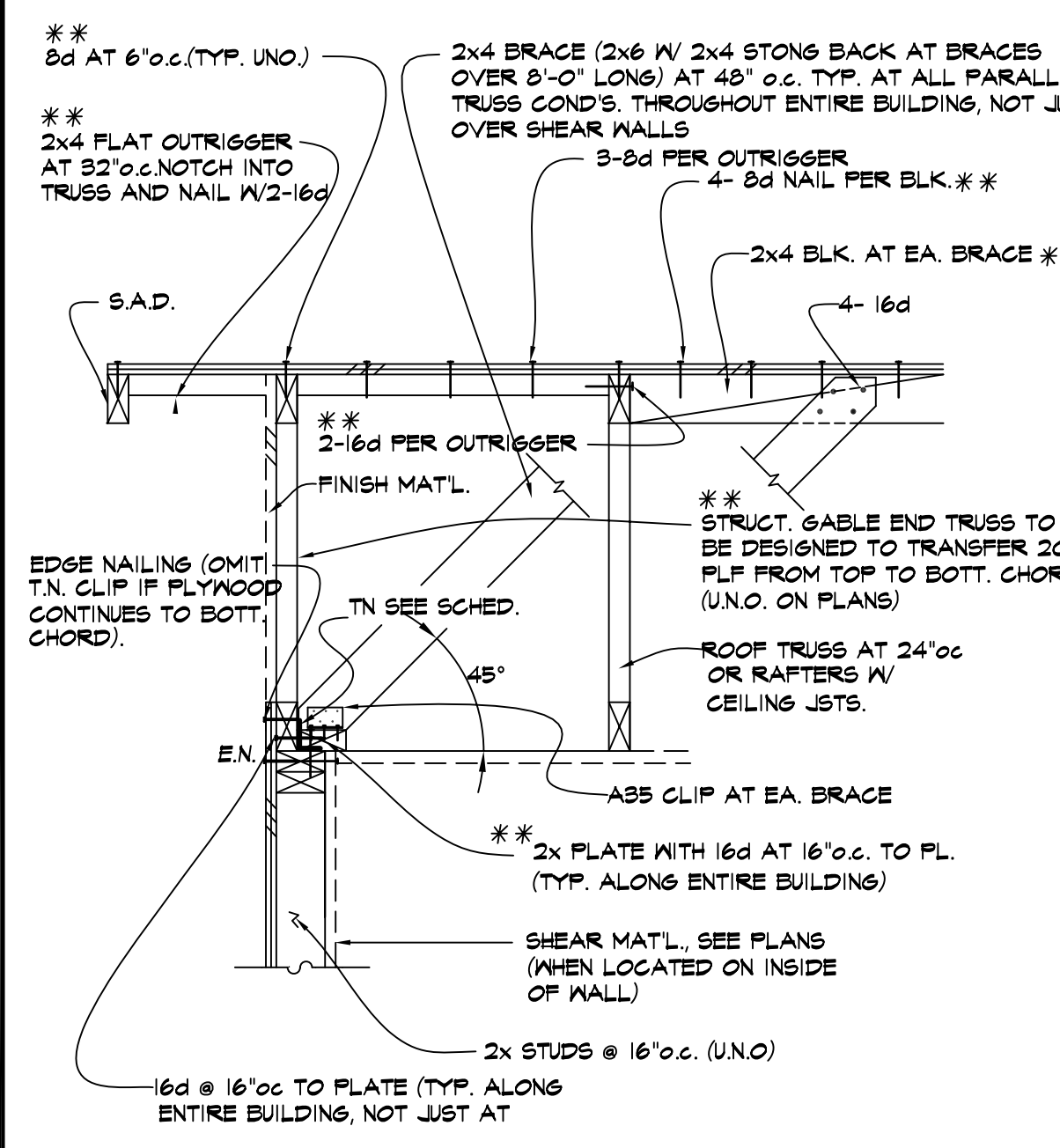
PALO ALTO, CA

A PROPOSED ADDITION / REMODEL FOR:
LUNDY RESIDENCE
 592 LOMA VERDE AVE.

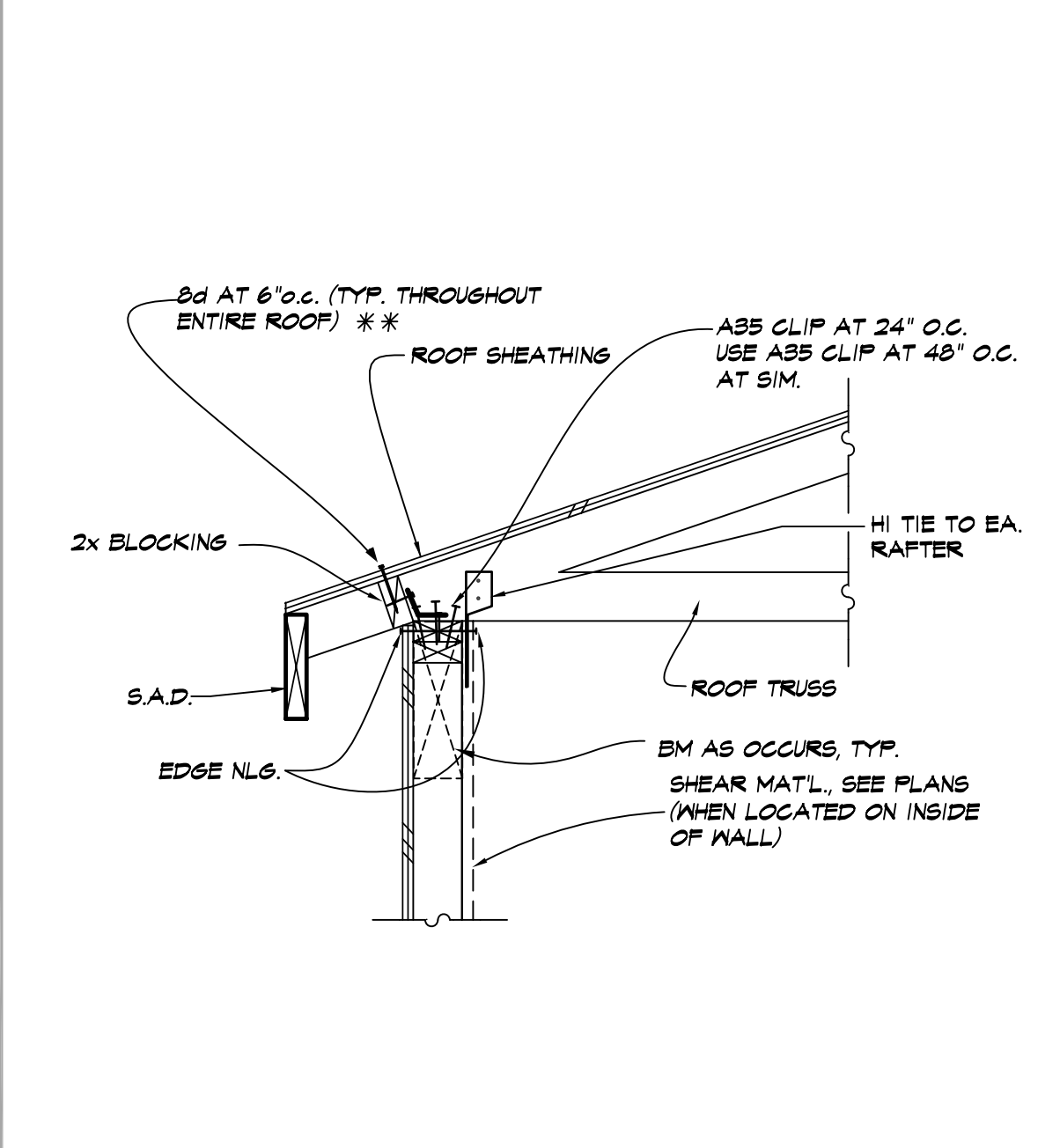


- SHEAR WALL NOTES:**
1. "-----" SYMBOL INDICATES LOCATION OF SHEAR MATERIAL.
 2. "▲" SYMBOL IS A SHEAR WALL IDENTIFIER, AND INDICATES SIDE ON WHICH SHEAR MATERIAL IS TO BE PLACED. SEE SHEAR WALL SCHEDULE FOR MORE INFORMATION.
 3. BLOCK AND NAIL ALL JOINTS WITH NAILING SPECIFIED IN SHEAR WALL SCHEDULE.
 4. 8d AND 10d NAILS SHALL BE COMMON NAILS OR HOT DIPPED GALVANIZED BOX NAILS.
 5. 5/8" ANCHORS SHALL BE CAST INTO CONCRETE AT 4'-0" O.C. MAXIMUM, EXCEPT WHERE SHOWN OTHERWISE (SEE "SHEAR WALL SCHEDULE"). POWER DRIVEN FASTENERS WILL NOT BE PERMITTED ON EXTERIOR WALLS, OR SHEAR WALLS.
 6. NAIL ROOF SHEATHING WITH 8d NAILS AT 6' O.C. @ EDGES AND 12' O.C. INTERIOR (U.N.O.).
 7. ALL HOLDOWNS, STRAPS AND ANCHLES CALLED OUT ON THESE PLANS ARE TO BE MANUFACTURED BY SIMPSON CO. OR EQUAL.
 8. NAIL SHEAR MATERIAL TO ALL POSTS ATTACHED TO HOLDOWN OR STRAPS WITH 2-ROWS EDGE NAILING.
 9. ALL SIMPSON PRODUCTS ARE TO BE INSTALLED PER SIMPSON CO. SPECIFICATIONS.
 10. ALL 'PA' TYPE ANCHORS TO BE INSTALLED OVER PLYWOOD SHEAR MATERIAL.
 11. DO NOT OVERDRIVE NAILS INTO PLYWOOD. IF NAIL GUN IS USED, GUN SHOULD BE ADJUSTED TO UNDERDRIVE NAIL, THEN NAILS ARE TO BE HAND DRIVEN SO THAT THE HEAD OF THE NAIL IS FLUSH WITH THE FACE OF THE PLYWOOD.

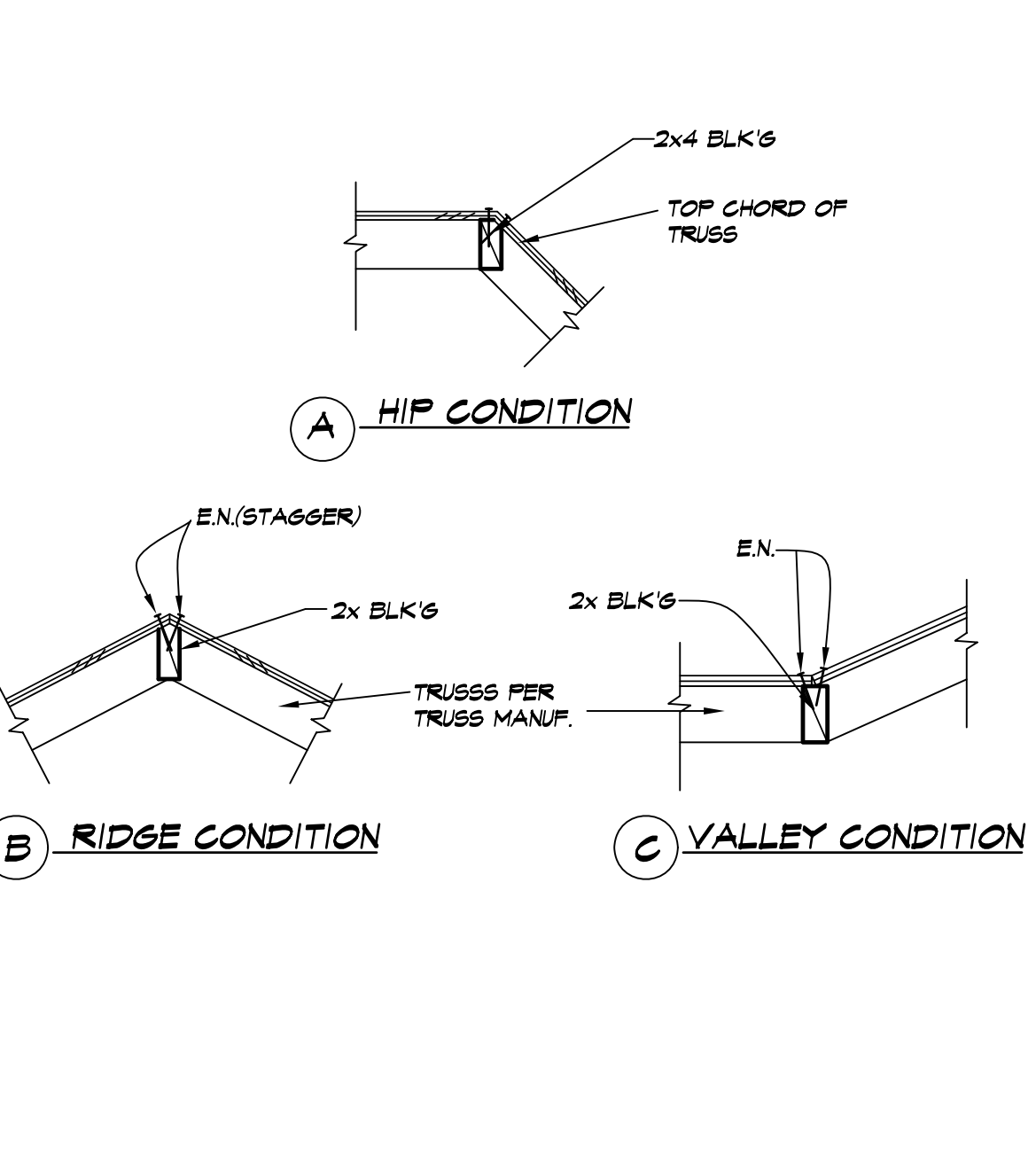
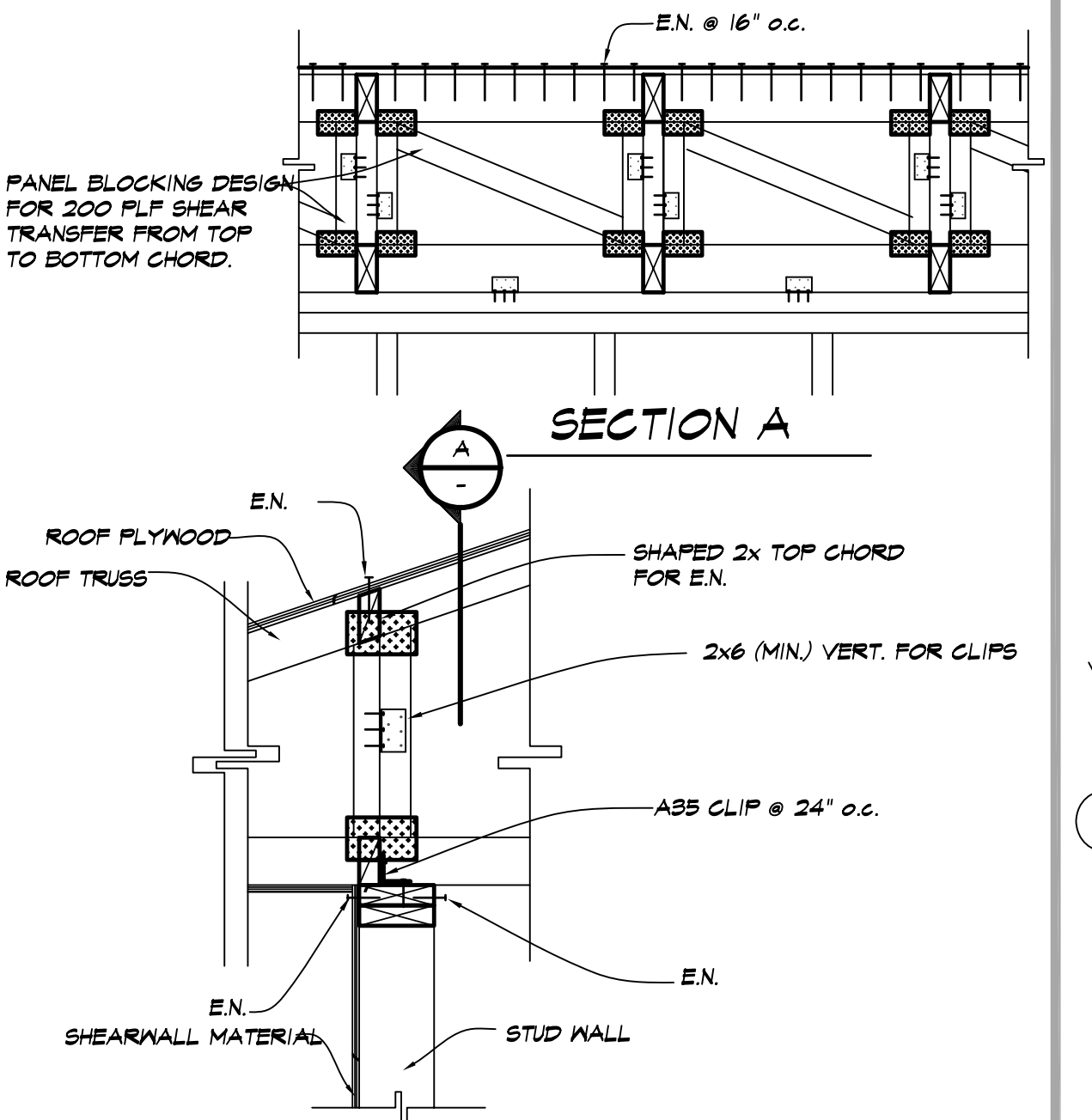
1 PLYWOOD SHEAR WALLS



3 TOP PL. SPLICE DET.



4 SHEAR TRANSFER DET.



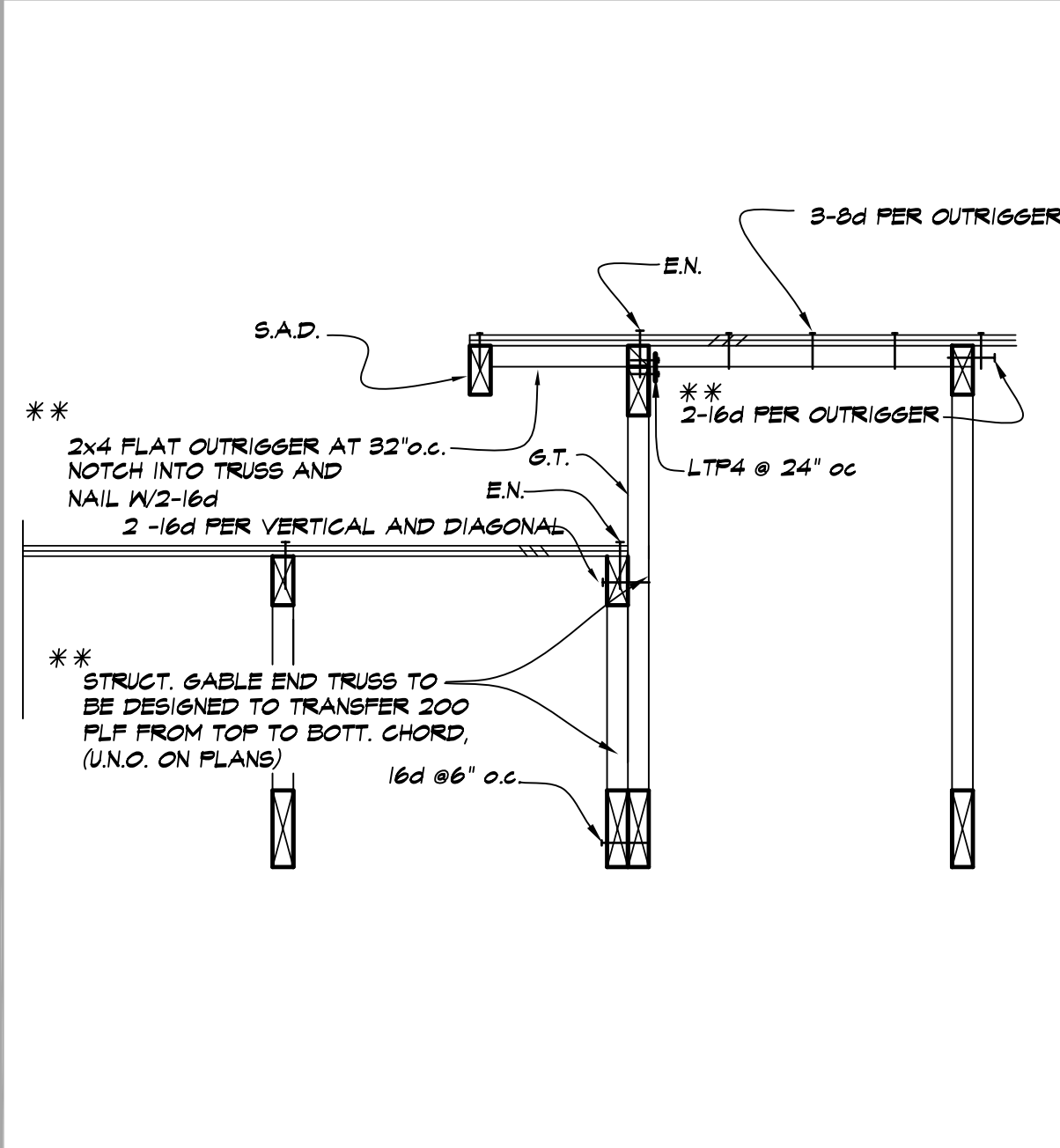
6 TYP. PARALLEL FRMG.

7 SHEAR TRANSFER DET.

8 TYP. PERPENDICULAR FRMG.

9 TRUSS CONNECTION

10 TRUSS BLOCKING DET.



NOTES: (U.N.O. ON PLANS)

1. "▲" BLOCK ALL EDGES
2. "▲" BLOCK ALL ADJOINING PLYWOOD EDGES WITH 3x LUMBER AND STAGGER NAILS (PLATES, STUDS, POST, BLOCKING, ETC.) USE 3x MDSBILL
3. OFFSET PANEL JOINTS ON DIFFERENT FRAMING MEMBERS WHERE PLYWOOD SHEAR MATERIAL OCCURS ON EACH SIDE OF WALL. OTHERWISE USE 3x MIN. LUMBER. NAILS SHALL BE STAGGERED ON BOTH SIDES
4. USE PNEUMATICALLY DRIVEN 16d NAILS FOR ALL SPACING LESS THAN 6" o.c. IF SILL PLATES SPLITS, NAILS SHALL BE DRIVEN IN PRE-DRILLED HOLES. NAILS SHALL NOT BE UNDERDRIVEN, OVERDRIVEN AND/OR SLANTED.
5. ALL NAILS SHALL BE COMMON.
6. 'N/A' INDICATES NOT APPLICABLE WHEN PLYWOOD IS ON THE EXTERIOR FACE OF WALL. SEE PLANS FOR ATTACHMENTS WHEN PLYWOOD IS ON INTERIOR FACE OF WALL.
7. PROVIDE STUDS AT 16" O.C. (MAX)
8. OSB (ORIENTED STRAND BOARD) APA RATED BOARD MAYBE USED IN LIEU OF PLYWOOD WITH BUILDING OWNERS OR ARCHITECTS APPROVAL. HOWEVER, OSB BOARDS SHALL BE RATED EQUAL OR BETTER THAN THE PLYWOOD SPECIFIED.
9. USE 5/8" ALL-THREAD ROD EMBED 6" INTO (E) CONCRETE & SET W/ SIMPSON SET EPOXY AT EXISTING FOOTING CONDITIONS ONLY.
10. USE 3x BLK'S OR RIM BOARD EACH SIDE OF WALL FOR LTP4.
11. T.N. INDICATES TRANSFER NAILING CLIP (DO NOT TOENAIL)
12. ALL SILL NAILING T.N. & S.N. APPLY TO THE EXTENT OF SHEAR WALLS ONLY.
13. ' + ' PRE-DRILL HOLES, IF WOOD SPLITS.
14. USE 3" x 3" x 1/4" WASHER PLATE FOR ALL ANCHOR BOLTS.

SEE DETAIL 14 SD-5 FOR SOLE PLATE ALTERNATE CONNECTION

USE 3x P.T.D.F. MDSBILL AT FOUNDATION FOR SHEAR WALL TYPES BELOW (OTHERWISE USE 2x P.T.D.F. MDSBILL W/ REDUCED A.B.'S SPACING BY HALF (1/2) AS SHOWN ON SHEAR WALL SCHEDULE W/ 3" SQ. x 1/4" THK. WASHER PLATE)

USE 3x P.T.D.F. MDSBILL AT FOUNDATION FOR SHEAR WALL TYPES BELOW:

4	5	6
3	4	6
3	4	6

SHEAR WALL SCHEDULE NOTE # 12

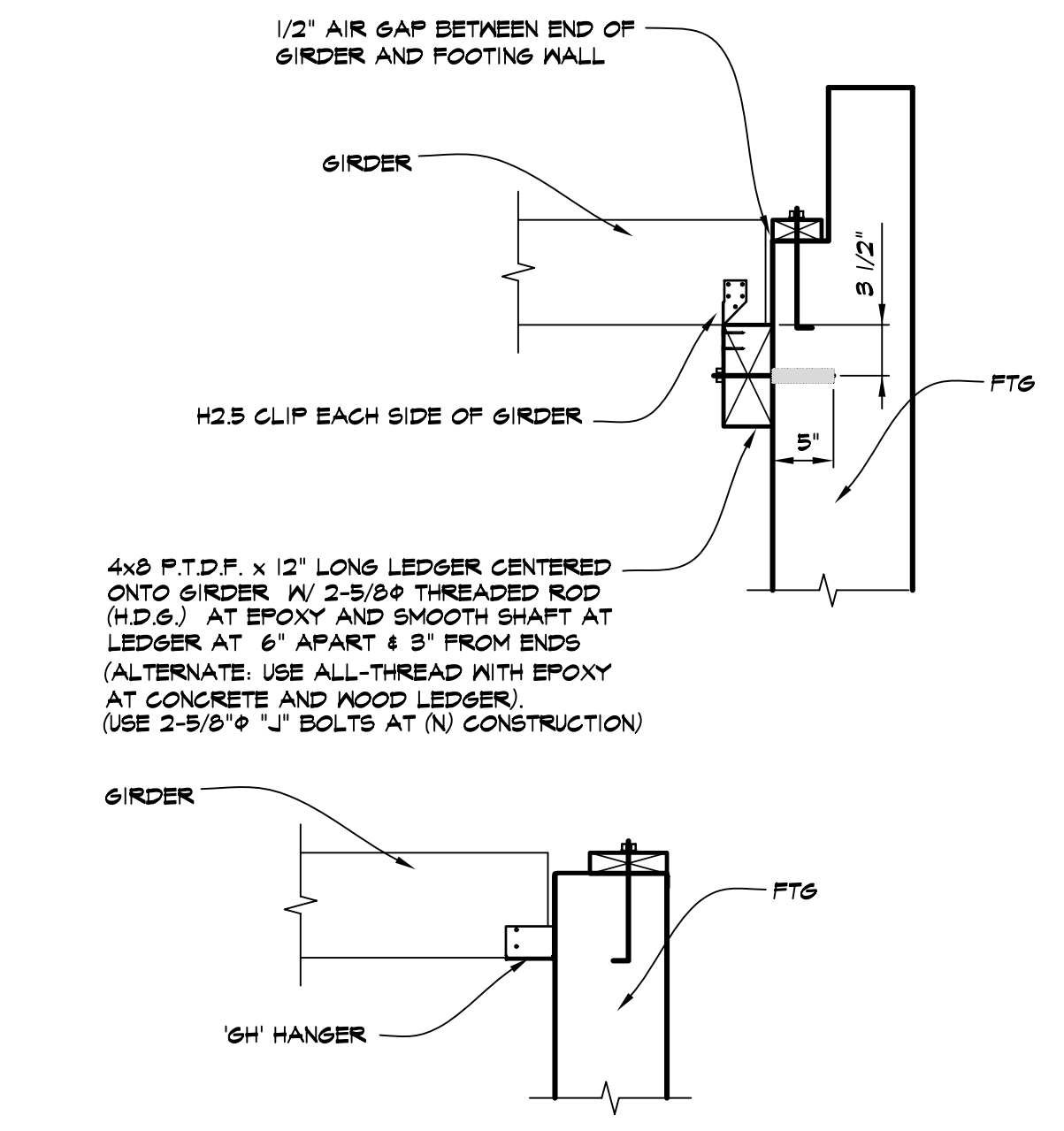
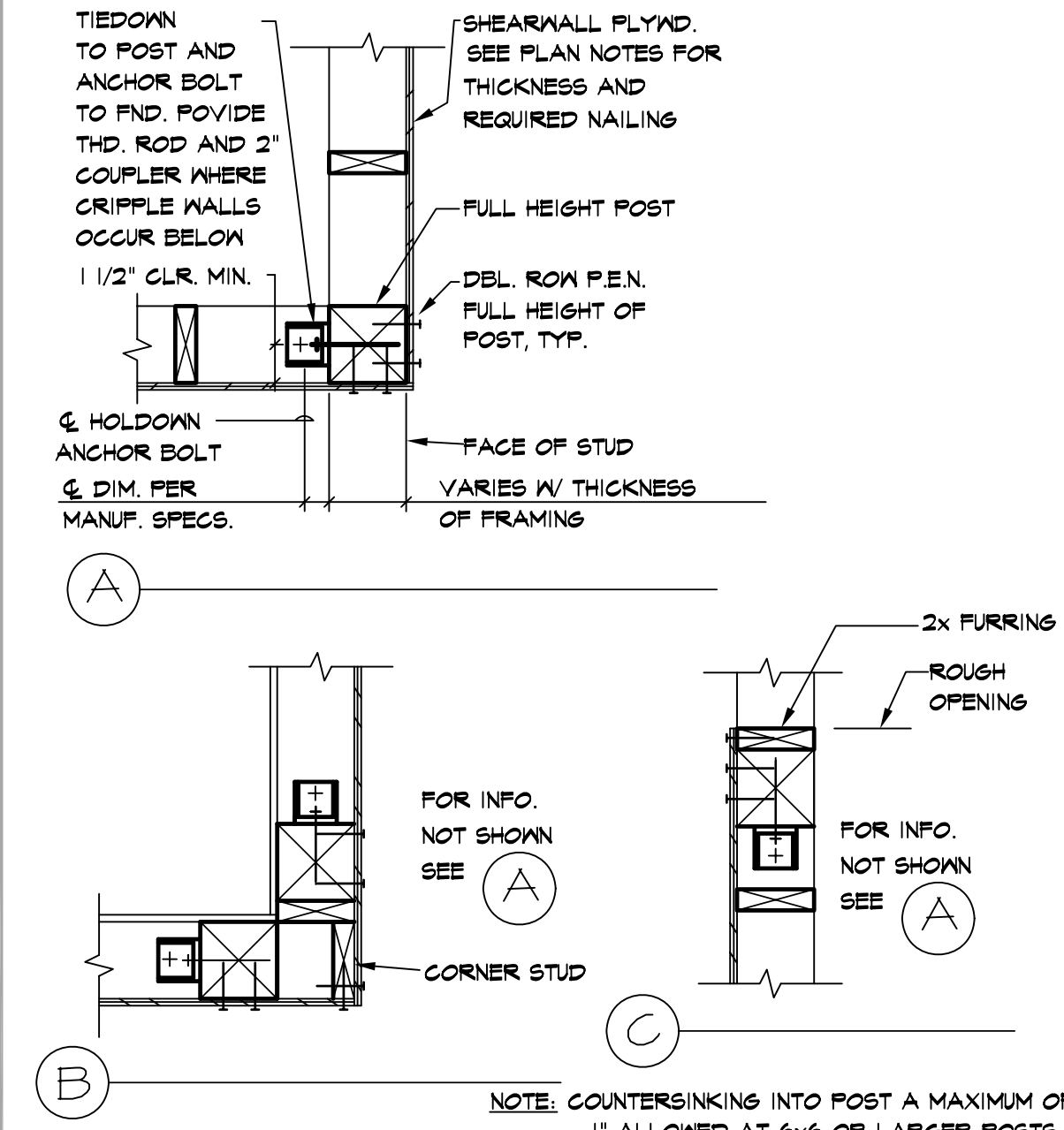
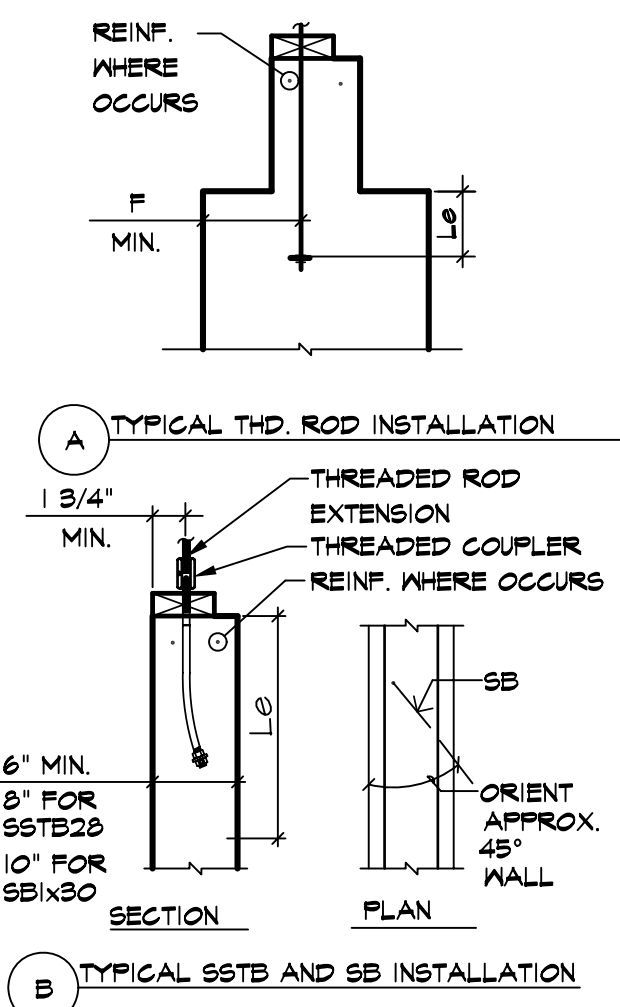
MARK	MATERIAL	PLYWOOD NAILING	SHEAR TRANSFER NOTE#1	NAILING (S.N.) FOR 2x SOLE PLATE ONLY	ANCHOR BOLTS (A.B.'S) REMARKS	SHEAR WALL CAPACITY (lb/ft)
1	3/8" CDX PLYWOOD P.I.: 24/O *	8d AT 6" o.c. EN. 8d AT 12" o.c. F.N.	16d AT 5" o.c. OR A35 @ 16" o.c. OR LTP4 AT 24" o.c.	16d AT 5" o.c.	5/8" AB. AT 4'-0" o.c.	260
2	3/8" CDX PLYWOOD P.I.: 24/O *	8d AT 4" o.c. EN. 8d AT 12" o.c. F.N.	16d AT 5" o.c. OR A35 @ 12" o.c. OR LTP4 AT 20" o.c.	14 SD-5	5/8" AB. AT 3'-0" o.c.	350
3	3/8" CDX PLYWOOD P.I.: 24/O **	8d AT 3" o.c. EN. 8d AT 12" o.c. F.N.	A35 @ 10" o.c. OR LTP4 AT 16" o.c.	14 SD-5	5/8" AB. AT 2'-4" o.c.	490
4	3/8" CDX PLYWOOD P.I.: 24/O **	8d AT 2" o.c. EN. 8d AT 12" o.c. F.N.	A35 @ 10" o.c. OR LTP4 AT 12" o.c.	14 SD-5	5/8" AB. AT 1'-8" o.c.	636
5	1/2" CDX PLYWOOD P.I.: 24/O **	10d AT 2" o.c. EN. 10d AT 12" o.c. F.N.	2 - A35 @ 12" o.c. OR LTP4 AT 10" o.c.	14 SD-5	5/8" AB. AT 1'-6" o.c.	710
6	1/2" STR. I PLYWOOD P.I.: 24/O **	10d AT 2" o.c. EN. 10d AT 12" o.c. F.N.	2 - A35 @ 12" o.c. OR LTP4 AT 8" o.c.	14 SD-5	5/8" AB. AT 1'-4" o.c.	870
3	3/8" CDX PLYWOOD ** EACH SIDE P.I.: 24/O	8d AT 3" o.c. EN. 8d AT 12" o.c. F.N.	2 - A35 @ 12" o.c. OR LTP4 AT 8" o.c.	14 SD-5	5/8" AB. AT 1'-2" o.c.	980
4	3/8" CDX PLYWOOD ** EACH SIDE P.I.: 24/O	8d AT 2" o.c. EN. 8d AT 12" o.c. F.N.	NOTE#10 LTP4 AT 12" o.c. EACH SIDE, STAGGER	14 SD-5	5/8" AB. AT 11" o.c.	1272
6	1/2" STRUCT. I PLYWOOD ** EACH SIDE P.I.: 24/O	10d AT 2" o.c. EN. 10d AT 12" o.c. F.N.	NOTE#10 LTP4 AT 8" o.c. EACH SIDE, STAGGER	14 SD-5	5/8" AB. AT 8" o.c.	1740

11

12 TYP. SHEAR TRANSFER DET.

13 TYPICAL PLYWOOD SHEAR WALL SCHEDULE

HOLDOWN SIZE	CAPACITY POST SIZE MIN(INCHES)	OPTION A: THRD. ROD WITH DEL. NUT/WASHER		REMARKS	OPTION B: SIMPSON SSBT ANCHOR BOLT		REMARKS
		ANCHOR BOLT SIZE	MIN. CLEARANCE Le F		ANCHOR BOLT SIZE #	MIN. EMBED. (Le) inches	
HDU2	3075# 3"x3 1/2"	5/8" THD. ROD	-	-	SB5/8x24	18	
HDU4	4865# 3"x3 1/2"	5/8" DIA. THD. ROD	-	-	SB5/8x24	18	FOR INSTALLATION REQUIREMENT SEE (B)
HDU5	5645# 3"x3 1/2"	5/8" DIA. THD. ROD	-	-	SB5/8x24	18	REFER TO SIMPSON CATALOGS FOR ADDL. REQUIREMENT
HDU8	7870# 4 1/2"x3 1/2"	7/8" DIA. THD. ROD	-	-	SB1/8x24	18	
				SEE (A)			
HDU11	11175# 7 1/4"x3 1/2"	1" DIA. THD. ROD	10"	15"			PROVIDE DEL. NUT AND FL. 3/8"x3x3 WASHER AT BOTTOM
HDU14	14925# 7 1/4"x3 1/2"	1" DIA. THD. ROD	12"	18"			
HDI5	15305# 5 1/2"x5 1/2"	1 1/4" DIA. THD. ROD	14"	21"			
HDI9	19070# 5 1/2"x5 1/2"	1 1/4" DIA. THD. ROD	24"	24"			* MONO FOUR

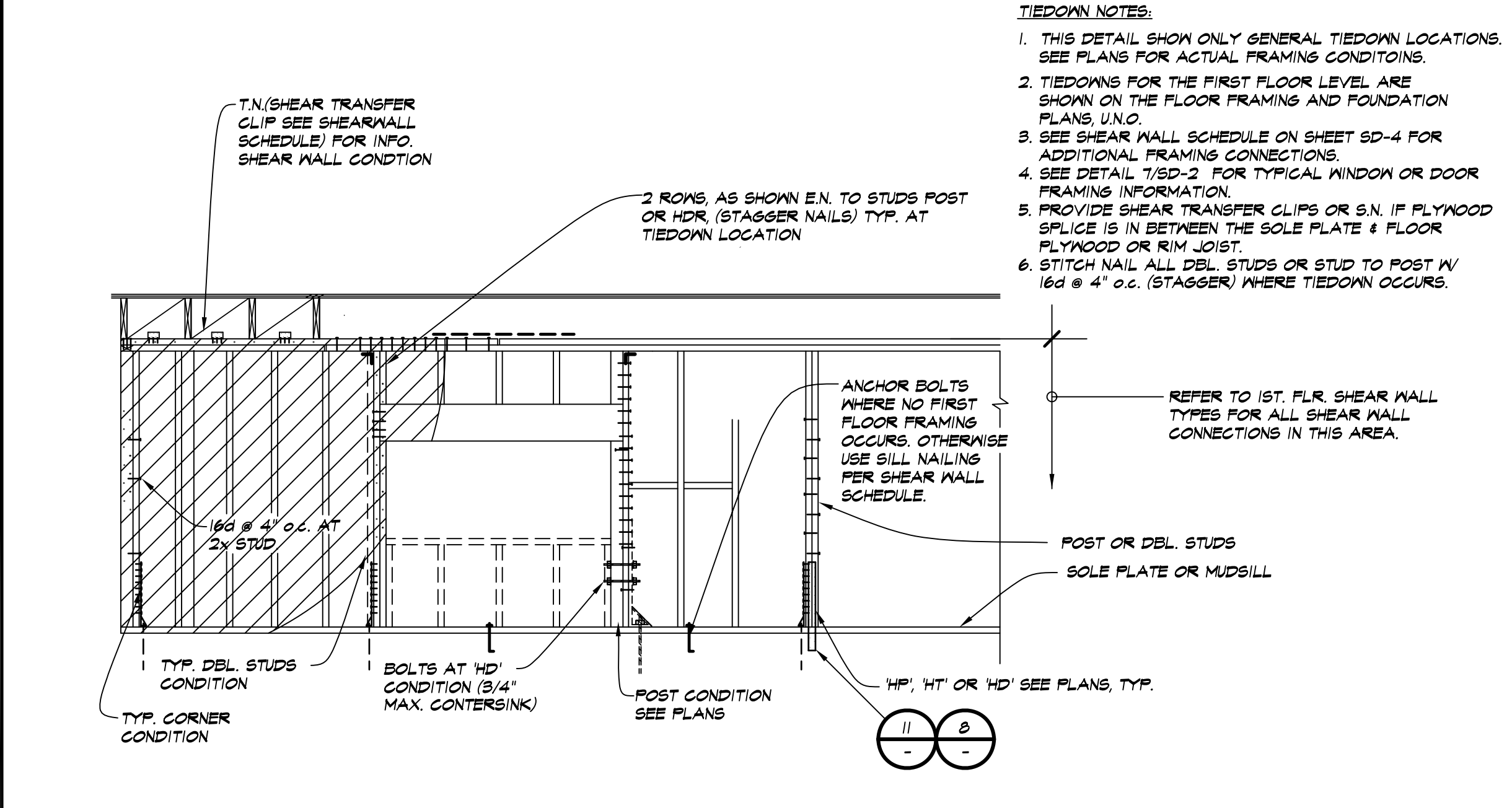


1 HOLDOWN ANCHOR BOLT SCHEDULE

3 TYP. PLAN @ HOLDOWN

4 GIRDER TO FOUNDATION DET.

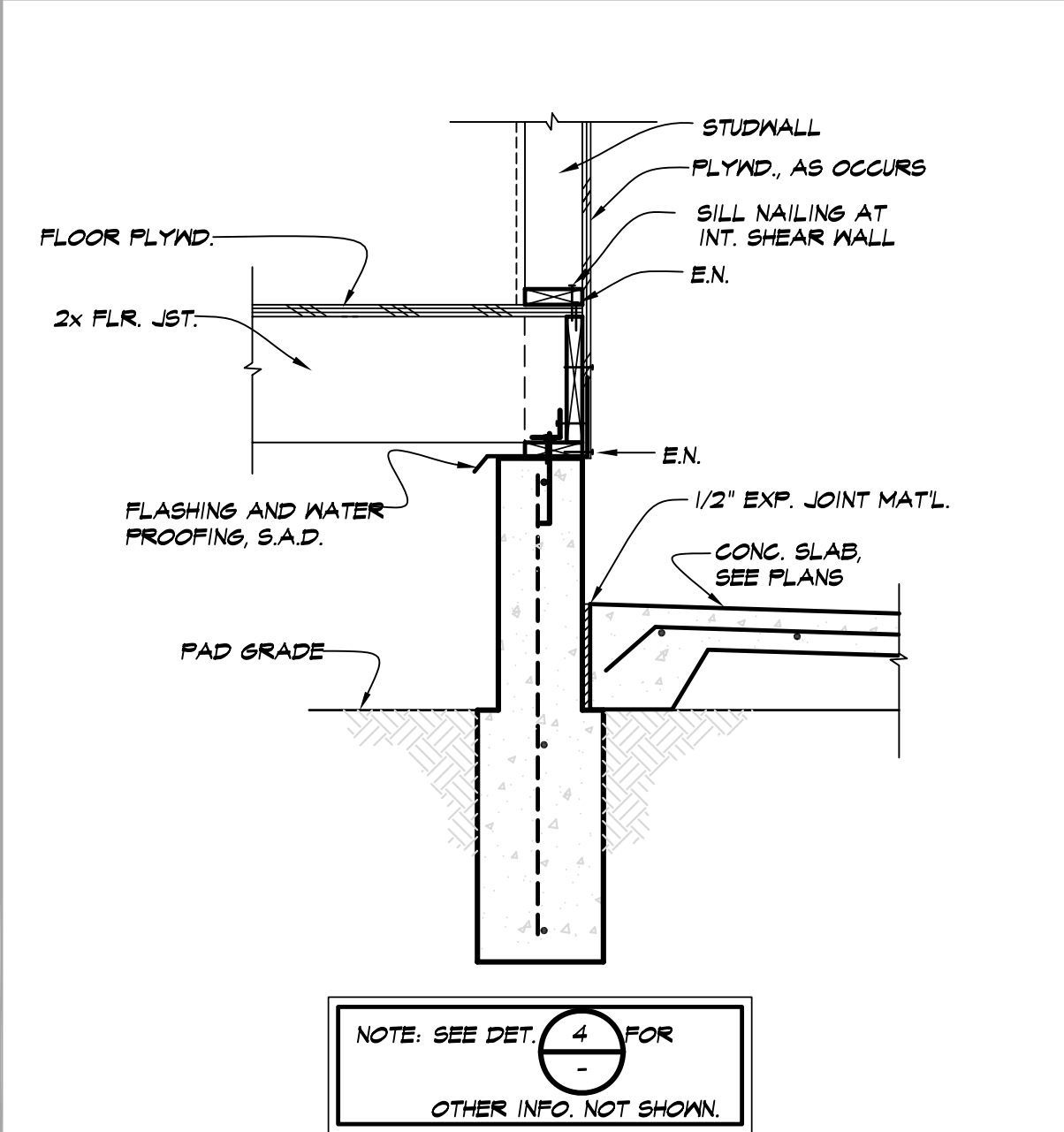
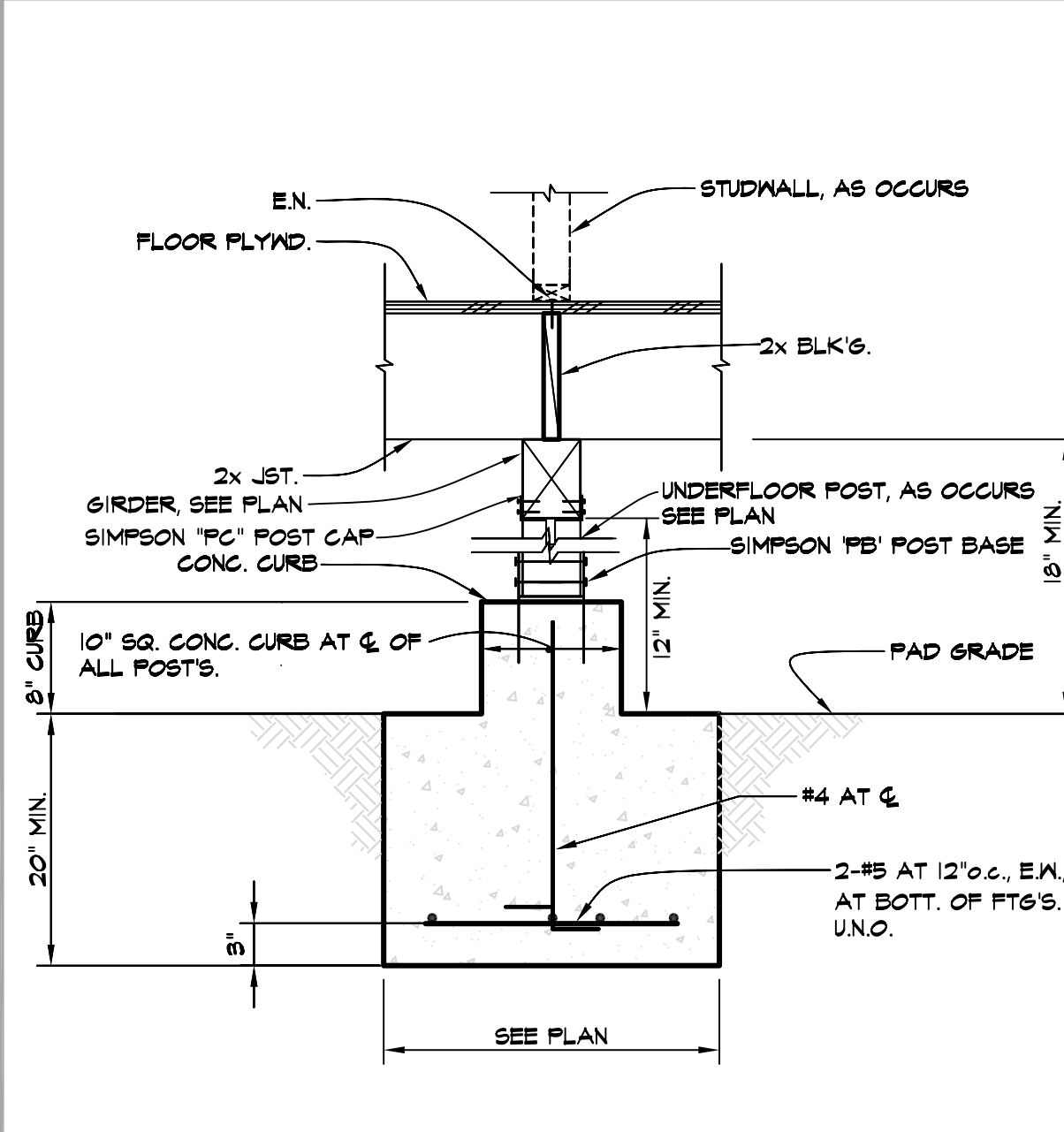
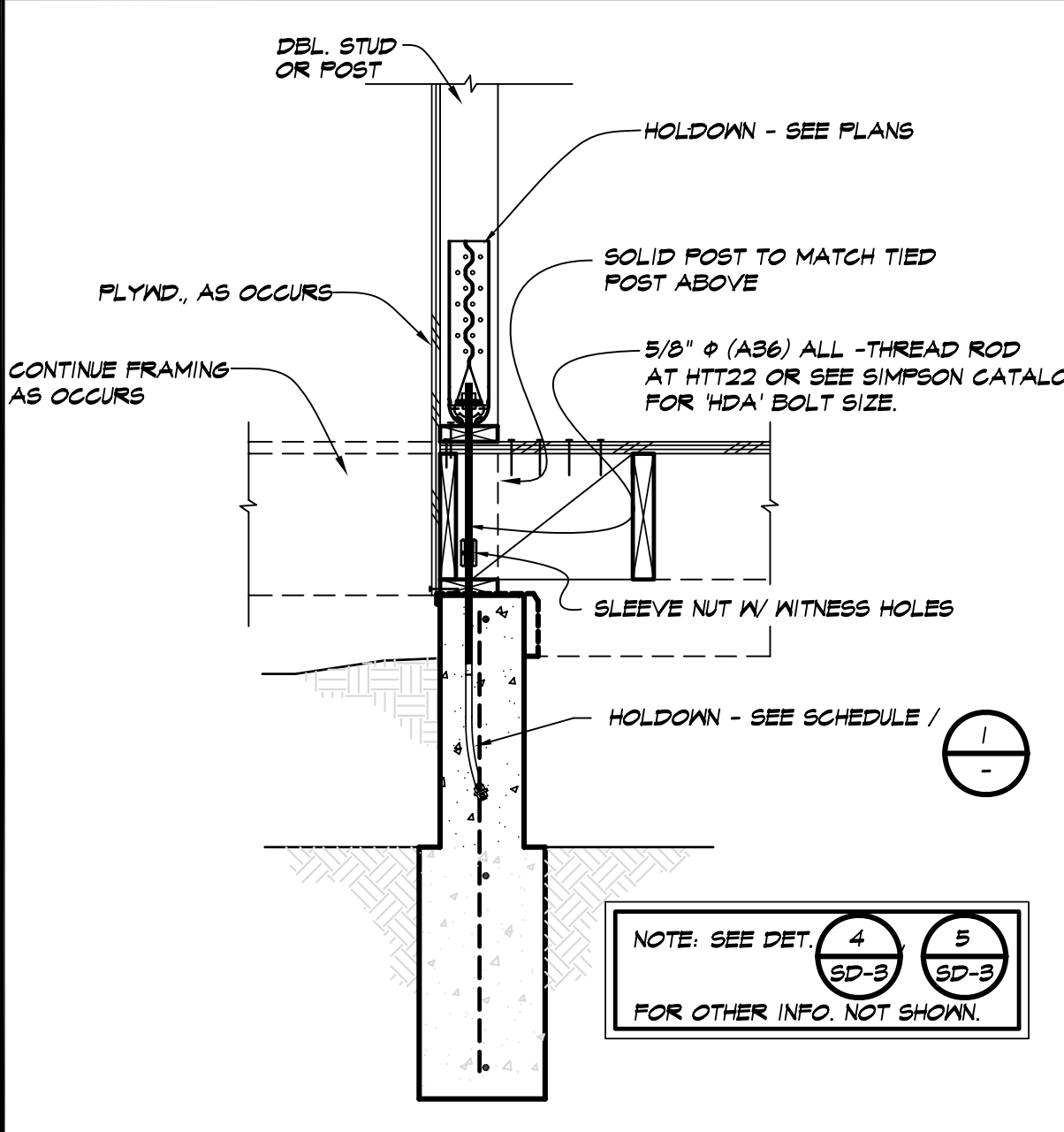
5



8

9 SPECIAL WINDOW / DOOR REINFORCING

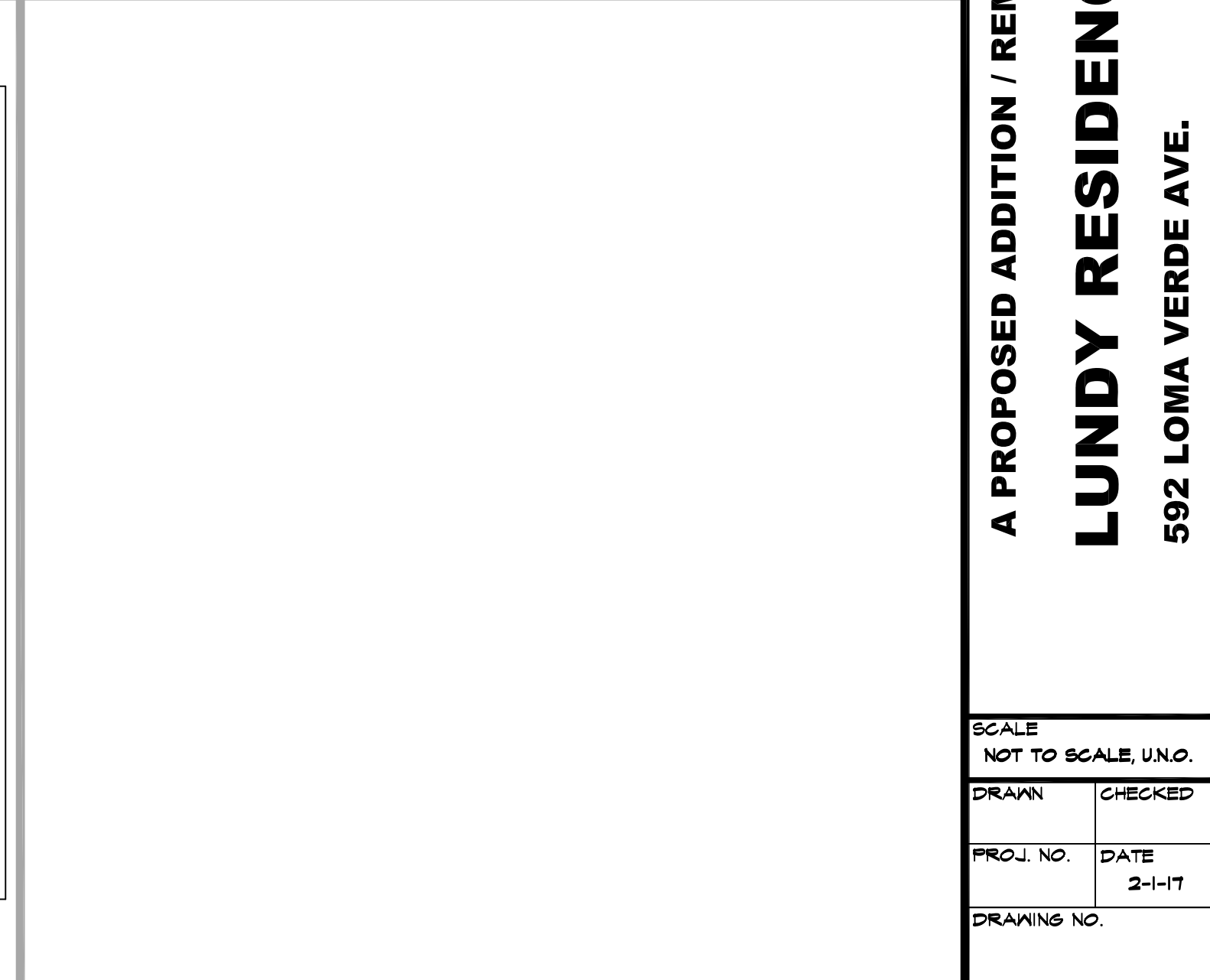
SCALE: NOT TO SCALE (N.T.S) TYP. (DO NOT SCALE DETAILS, SEE PLANS FOR ACTUAL DIMENSIONS OR SIZES)



REQUIRED CONNECTIONS FOR 3x SOLE PLATE & ALTERNATE SOLE PLATE CONNECTION FOR 2x PLATE

MARK	2x SOLE PLATE (W/ 1 1/8" MAX. PLYWOOD SUBFLOOR) W/ SIMPSON SDS25412 LONG SCREWS	3x SOLE PLATE (W/ 1 1/8" MAX. PLYWOOD SUBFLOOR) W/ SIMPSON SDS25600 LONG SCREWS	SHEAR WALL CAPACITY (#)
1	16" oc	16" oc	260
2	12" oc	12" oc	350
3	8" oc	8" oc	490
4	6" oc	6" oc	636
5	5" oc (STAGGERED)	5" oc	770
6	4" oc (STAGGERED)	4" oc (STAGGERED)	870
7	N/A	4" oc (STAGGERED)	980
8	N/A	3" oc (STAGGERED)	1272
9	N/A	2 ROWS @ 4" oc (STAGGERED)	1740

14 SOLE PLATE SCREWING SCHEDULE



11 TYP. FTG. DET.

12 TYP. INT. FTG. DET.

13 FOOTING AT SLAB

14 SOLE PLATE SCREWING SCHEDULE

15

NO. REVISIONS

Ali Fatopour, M.S., P.E.
Structural & Civil Engineering Consultant
1088 Barnes Court
San Jose, CA 95120
tel (408)268-5937
fax (408)268-0288

A PROPOSED ADDITION / REMODEL FOR:
LUNDY RESIDENCE
592 LOMA VERDE AVE.
PALO ALTO, CA

SCALE: NOT TO SCALE, U.N.O.
DRAWN: CHECKED:
PROJ. NO.: DATE: 2-1-17
DRAWING NO.:
SD-5
OF SHEET(S)

OWNER:

COPYRIGHT © 2017
SMP ENGINEERS
CIVIL ENGINEERS

COVER SHEET/NOTES/DETAILS
592 LOMA VERDE AVENUE
PALO ALTO, CA
APN: 132-10-198
GRADING AND DRAINAGE PLANS



Revisions:

Date: 4/6/2017
Scale: N.T.S.
Designed by: K.A.
Checked by: S.R.
Job #: 217038

GRADING AND DRAINAGE PLANS

COTTAGE ADDITION

592 LOMA VERDE AVENUE, PALO ALTO, CA

APN: 132-10-198

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINE
W	W	WATER LINE
SD	SD	STORM DRAIN LINE
SS	SS	SANITARY SEWER LINE
OH e.T.V	OH e.T.V	OVERHEAD UTILITIES WITH POLE
JT	JT	JOINT TRENCH
SSMH	SSMH	SANITARY SEWER MANHOLE
○	○	MANHOLE
⊙	⊙	MONUMENT IN WELL
⊗ WM	⊗ WM	WATER METER
○	○	TREE WITH TRUNK
—x—x—	—x—x—	6' WOOD FENCE
x-102.23	x-102.23	SPOT ELEVATION
---	---	SWALE
□	□	SPLASH BLOCKS FOR ROOF DOWNSPOUTS

ABBREVIATIONS	
DESCRIPTION	DESCRIPTION
AB	AGGREGATE BASE (CLASS AS NOTED)
AC	ASPHALT CONCRETE
AD	AREA DRAIN
BC	BACK OF CURB
BFL	BACK FLOW WATER PREVENTOR VALVE
BW	BOTTOM OF WALL
BW	BACK OF WALK
C&G	CURB AND GUTTER
CFF	GARAGE FINISH FLOOR (BACK)
C/L	CENTERLINE
CLSW	CENTERLINE SWALE
CO	CLEANOUT
CP	CONTROL POINT
DWY	DRIVEWAY
DI	DROP INLET
DTL	DETAIL
ELCT	ELECTRIC
EP	EDGE OF PAVEMENT ELEVATION
EUC	EUCALYPTUS TREE
(E),EX	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FNC	FENCE
FOC	FACE OF CURB
GB	GRADE BREAK
GFF	GARAGE FINISH FLOOR (FRONT)
GUY	GUY WIRE
HP	HIGH POINT
IP	IRON PIPE
INV	INVERT
JP	JOINT POLE
JB	JUNCTION BOX (UTILITY)
LIP	LIP OF GUTTER
LP	LOW POINT
MON	MONUMENT
(N)	NEW
OG	ORIGINAL GROUND
PB	PULL BOX
PGEV	PG&E VAULT
P/L	PROPERTY LINE
PP	POWER POLE
PPP	PLASTIC PERFORATED PIPE
PSE	PUBLIC SERVICE EASEMENT
PVC	POLYVINYL CHLORIDE
R/W	RIGHT OF WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SSMH	STORM DRAIN MANHOLE
STD	STANDARD
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SW	SIDEWALK
TC	TOP OF CURB
TF	TOP OF FOUNDATION
TOS	TOP OF SLAB
TW	TOP OF WALL
TP	TOP OF PAVEMENT
(TYP)	TYPICAL
USS	UNDERGROUND SANITARY SEWER
UE	UTILITY EASEMENT
UT	UNDERGROUND TELEPHONE
UW	UNDERGROUND WATER
VCP	VITRIFIED CLAY PIPE
WL	WHITE LINE STRIPE
WLK	WALKWAY
WM	WATER METER
WV	WATER VALVE

SITE GRADING NOTES

- ALL GRADING IS SUBJECT TO OBSERVATION BY THE CITY. CONTRACTOR SHALL NOTIFY THE CITY OF PALO ALTO AT LEAST 48 HOURS BEFORE THE START OF ANY GRADING WORK.
- ALL DEBRIS, VEGETATION AND ORGANICALLY CONTAMINATED SOILS SHALL BE CLEARED FROM THE BUILDING AREAS AND REMOVED FROM THE SITE.
- FILL MATERIAL MAY INCLUDE ORGANIC-FREE SOILS AVAILABLE AT THE SITE OR IMPORTED MATERIALS.
- FILLS SHALL BE PLACED ON LEVEL BENCHES IN LIFTS NO GREATER THAN 6 INCHES AND SHALL BE COMPACTED.
- PERMANENT CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 2:1.
- CONTRACTOR SHALL NOT STAGE, STORE, OR STOCKPILE ANY MATERIAL OR EQUIPMENT WITHIN THE PUBLIC ROAD RIGHT-OF-WAY.

DRAINAGE NOTES

- SURFACE WATER SHALL BE DIRECTED AWAY FROM ALL BUILDINGS INTO DRAINAGE SWALES, GUTTERS OR PAVED SURFACES.
- ALL ROOF DOWN SPOUTS SHALL DISCHARGE ONTO SPLASH BLOCKS AND DIRECTED AWAY FROM BUILDING.

NOTE:

GRADING AND DRAINAGE PLANS SHALL BE REVIEWED AND APPROVED BY THE PROJECT SOILS ENGINEER.

UTILITY NOTES:

- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- CONNECT SANITARY SEWER AND WATER LINE TO EXISTING STREET SERVICES.
- CONNECT GAS AND ELECTRIC LINES TO EXISTING GAS AND POWER SERVICES, PER UTILITY COMPANY STANDARDS.
- CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
- ALL ELECTRIC, TELEPHONE AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.

ELECTRICAL NOTES:

- APPLICANT RESPONSIBLE FOR ALL PERMITS AND SUBSTRUCTURE.
- CARE MUST BE TAKEN TO LIMIT OUTAGES FOR OTHER CUSTOMERS.
- ALL SUBSTRUCTURE MUST BE APPROVED BY CALLING UNDERGROUND INSPECTOR AT 650-496-5934.
- NEW 400A SERVICE PANEL TO BE APPROVED BY ELECTRIC ENGINEERING PRIOR TO FINAL CONNECTION.
- ALL PANEL WORK MUST BE INSPECTED AND APPROVED BY BUILDING INSPECTOR PRIOR TO BEING ENERGIZED.
- ALL WORK PER NEC AND CPAU CODE

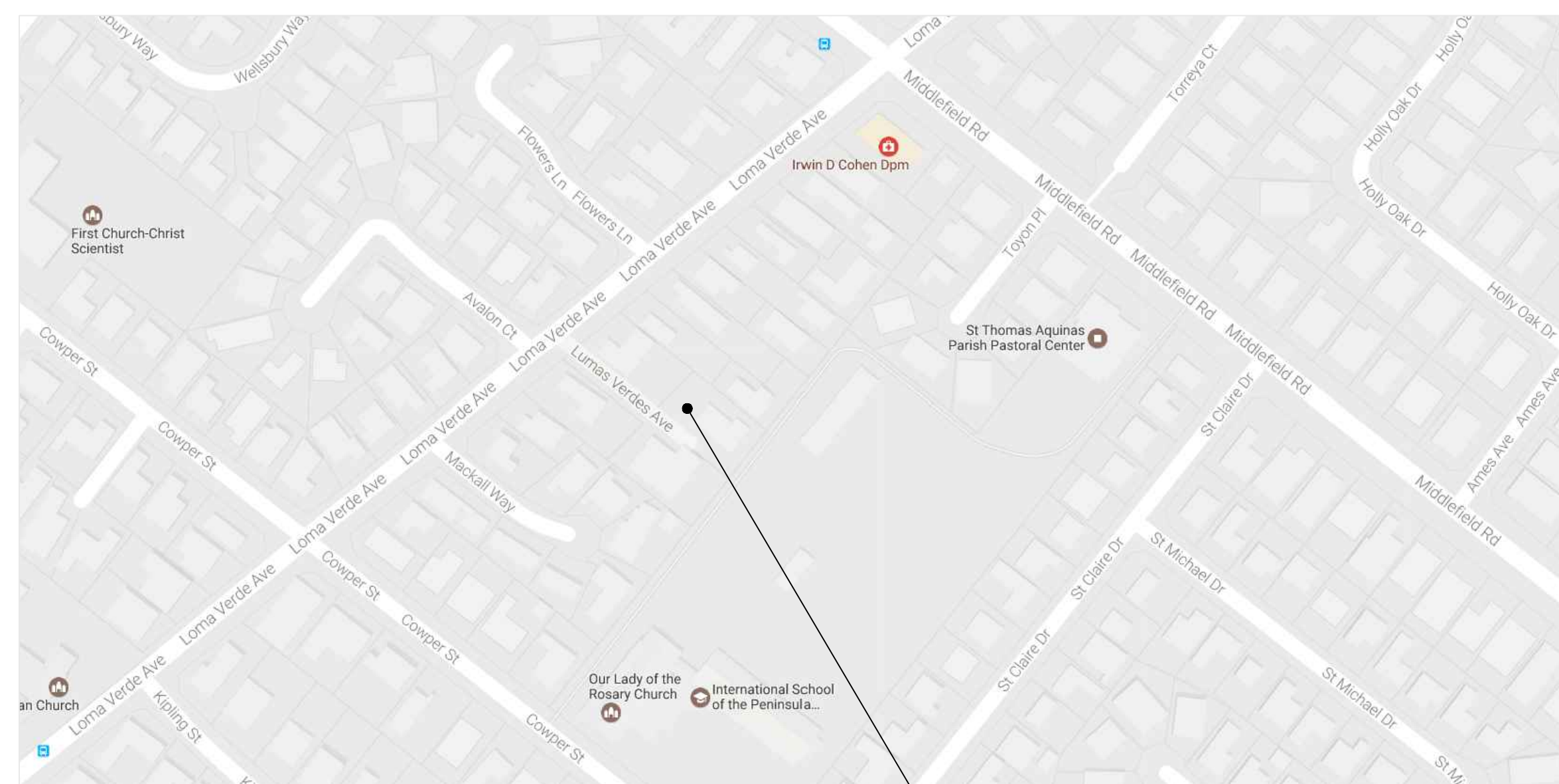
CITY OF PALO ALTO NOTE:

ANY CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY MUST HAVE AN APPROVED "PERMIT FOR CONSTRUCTION IN THE PUBLIC STREET" PRIOR TO COMMENCEMENT OF THIS WORK. THE PERFORMANCE OF THIS WORK IS NOT AUTHORIZED BY THE BUILDING PERMIT ISSUANCE BUT SHOWN ON THE BUILDING PERMIT FOR INFORMATION ONLY.

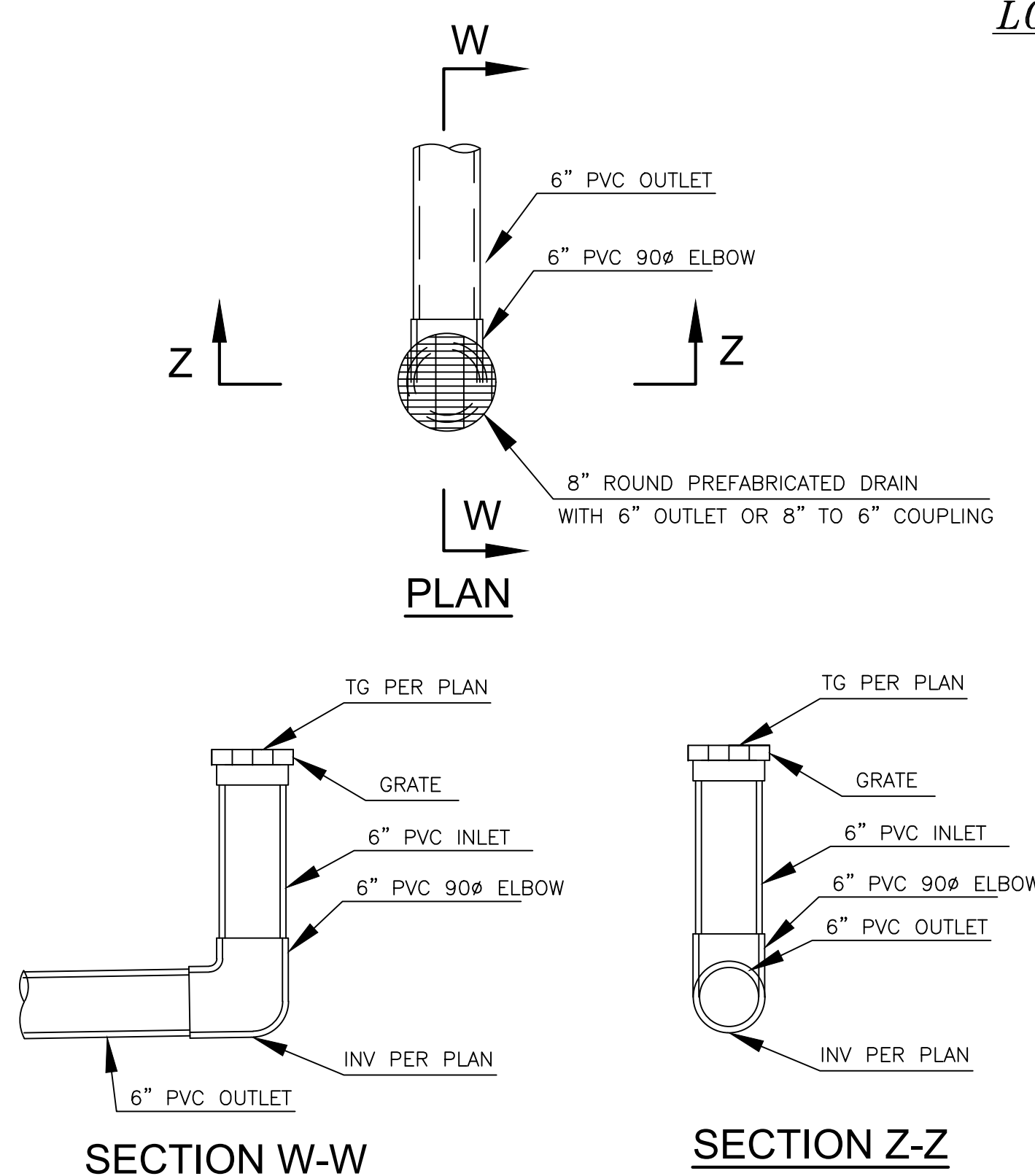
APPLICANT AND CONTRACTOR WILL BE RESPONSIBLE FOR RESURFACING PORTIONS OF LOS PALOS PL BASED ON THE ROADWAY SURFACE CONDITION AFTER PROJECT COMPLETION AND LIMITS OF TRENCH WORK. AT A MINIMUM PAVEMENT RESURFACING OF THE FULL WIDTH OF THE STREET ALONG THE PROJECT FRONTAGE MAY BE REQUIRED.

PROJECT-SPECIFIC NOTE

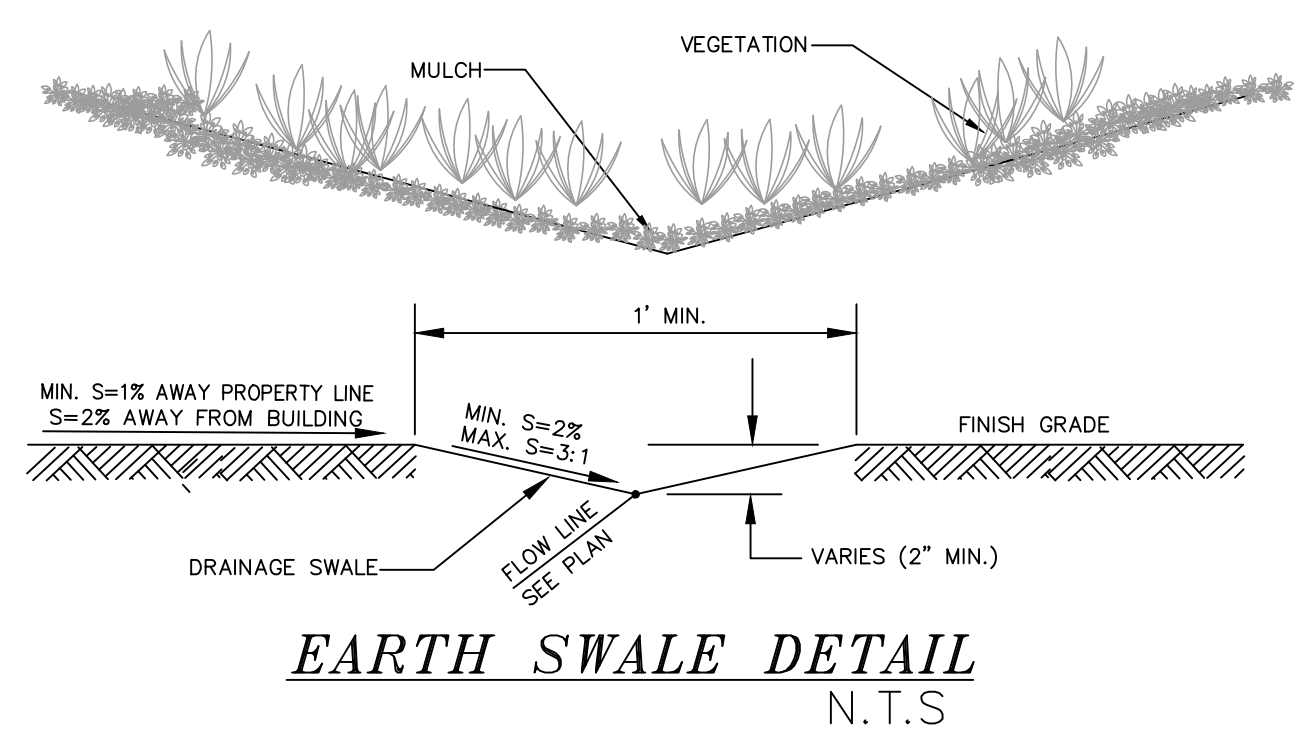
"THE GEOTECHNICAL ASPECTS OF THE CONSTRUCTION, INCLUDING BASEMENT AND DRILLED PIER EXCAVATIONS, RETAINING WALL BACKDRAINS AND BACKFILL, SUBGRADE PREPARATION BENEATH HARDSCAPE, COMPACTION OF ENGINEERED FILL, PLACEMENT AND COMPACTION OF ENGINEERED FILL, BACKFILL IN UTILITY TRENCHES, AND INSTALLATION OF SITE DRAINAGE CONTROLS, SHOULD BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY MURRAY ENGINEERS, INC., DATED AUGUST 12, 2016. MURRAY ENGINEERS INC. SHOULD BE PROVIDED AT LEAST 48 HOURS ADVANCE NOTIFICATION (650-559-9980) OF ANY GEOTECHNICAL ASPECTS OF THE CONSTRUCTION AND SHOULD BE PRESENT TO OBSERVE AND TEST THE EARTHWORK, FOUNDATION, AND DRAINAGE INSTALLATION PHASES OF THE PROJECT."



LOCATION MAP
N.T.S.



SECTION W-W SECTION Z-Z
STORM DRAIN AREA DRAIN
N.T.S.



EARTH SWALE DETAIL
N.T.S.

SWALE MAINTENANCE NOTE:

Maintenance is to be performed as follows:
Earth swales shall be inspected periodically and maintained as needed. Daily during extended rain events, weekly during the rainy season, and bi-monthly during the non-rainy season. Remove debris and sediment and repair slopes and replace vegetation as needed.

SHEET INDEX:

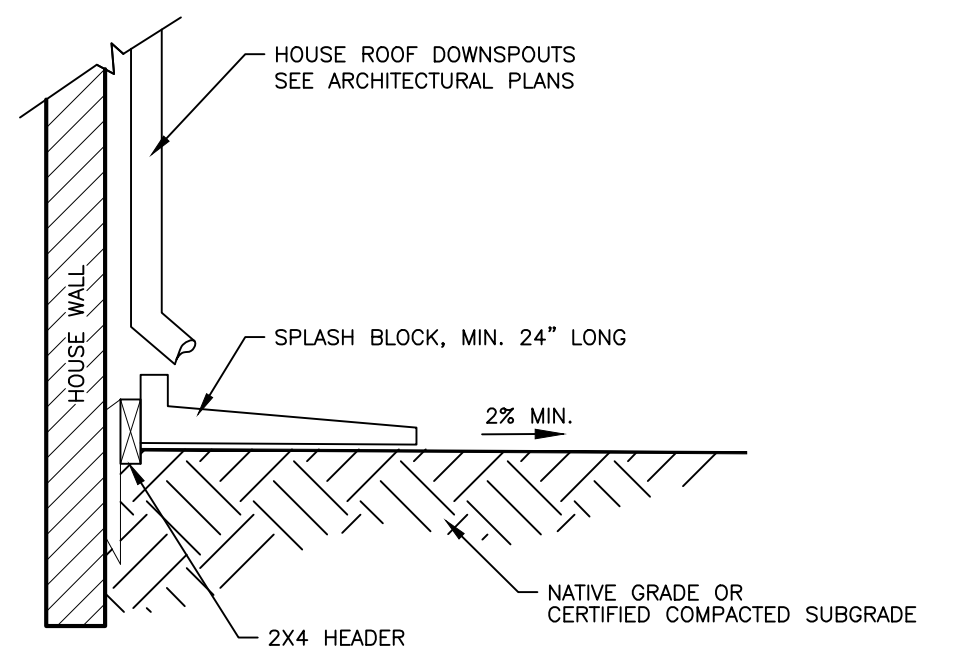
- C-1 COVER SHEET/ NOTES/ DETAILS
- C-2 GRADING AND DRAINAGE PLAN/ DETAILS
- C-3 POLLUTION PREVENTION PLAN

EARTHWORK TABLE

	FILL (CY)	CUT (CY)	IMPORT (CY)	EXPORT (CY)
BUILDING	0	25		
SITE	3	10		
TOTAL	3	35	0	32

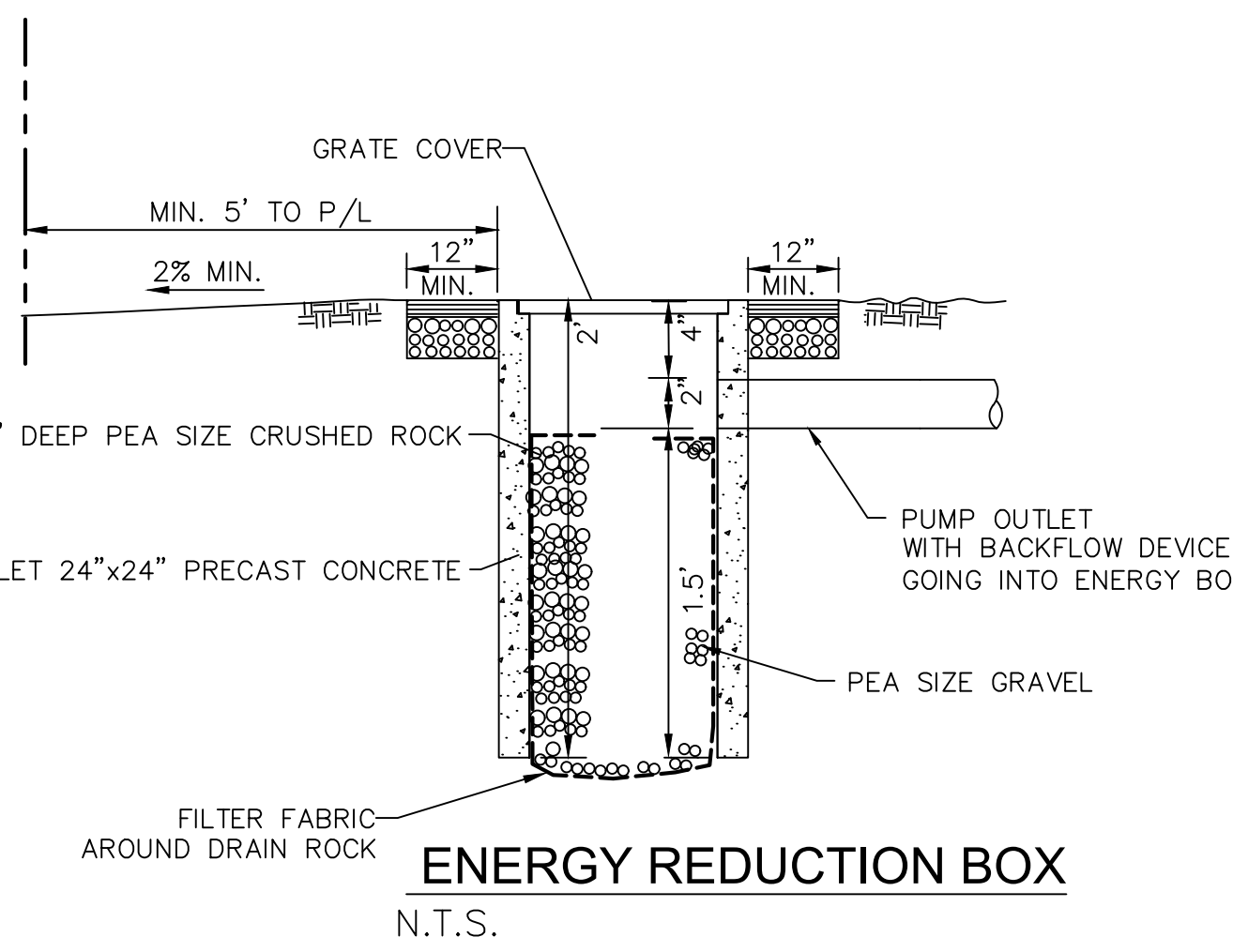
NOTE:

EARTHWORK QUANTITIES ON THIS TABLE ARE FOR INFORMATION ONLY. CONTRACTORS ARE TO PERFORM THEIR OWN QUANTITY TAKE OFFS.

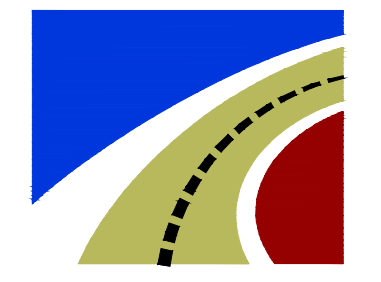


ROOF DOWNSPOUT/SPLASH BLOCK
N.T.S.

NOTICE TO CONTRACTORS
CONTRACTOR TO NOTIFY U.S.A. (UNDERGROUND SERVICE ALERT) AT 800-227-2600 A MINIMUM OF 2 WORKING DAYS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION AND DEPTH OF UNDERGROUND UTILITIES.



ENERGY REDUCTION BOX
N.T.S.



OWNER:

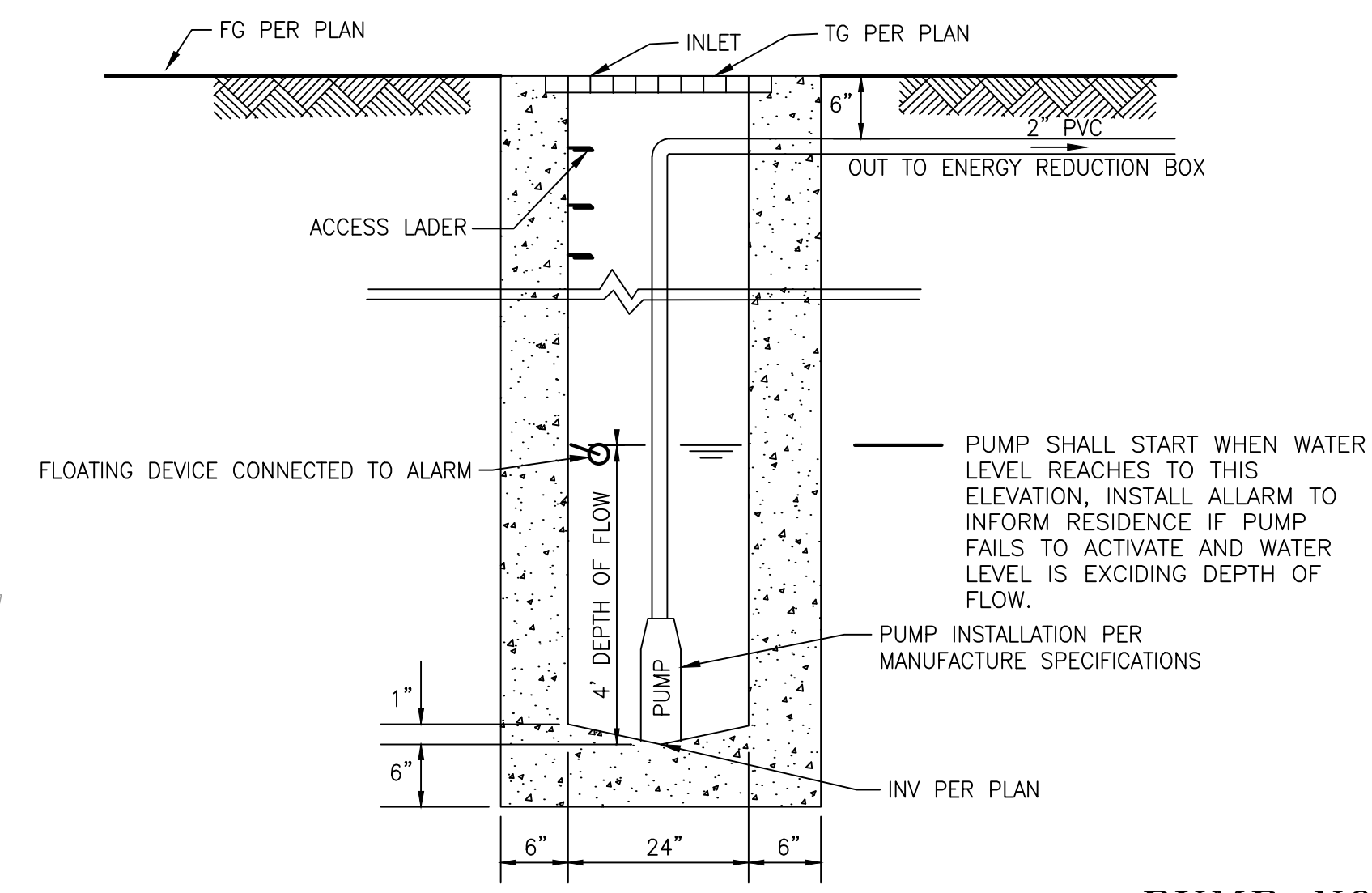
GRADING AND DRAINAGE PLAN/ DETAILS
592 LOMA VERDE AVENUE
PALO ALTO, CA
APN: 132-10-198
GRADING AND DRAINAGE PLANS



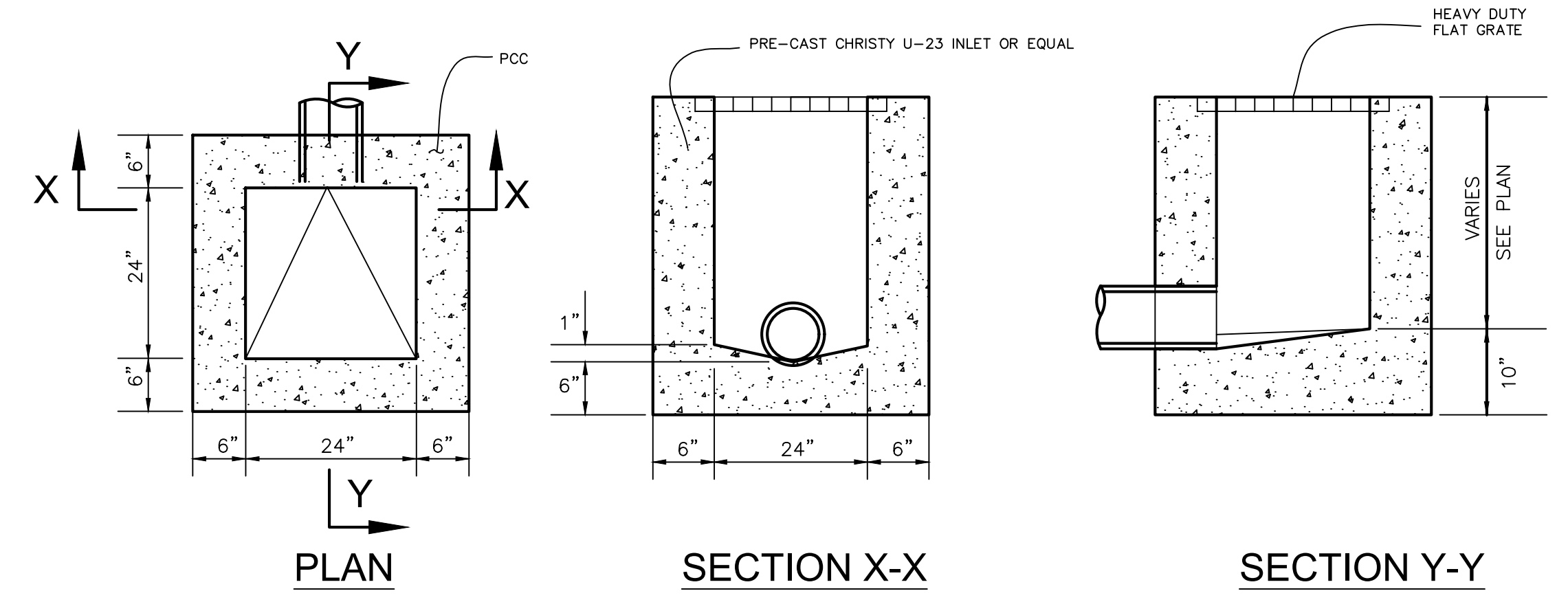
Sketio Razaqi

Revisions:

Date: 4/6/2017
Scale: 1"=10'
Designed by: K.A.
Checked by: S.R.
Job #: 217038



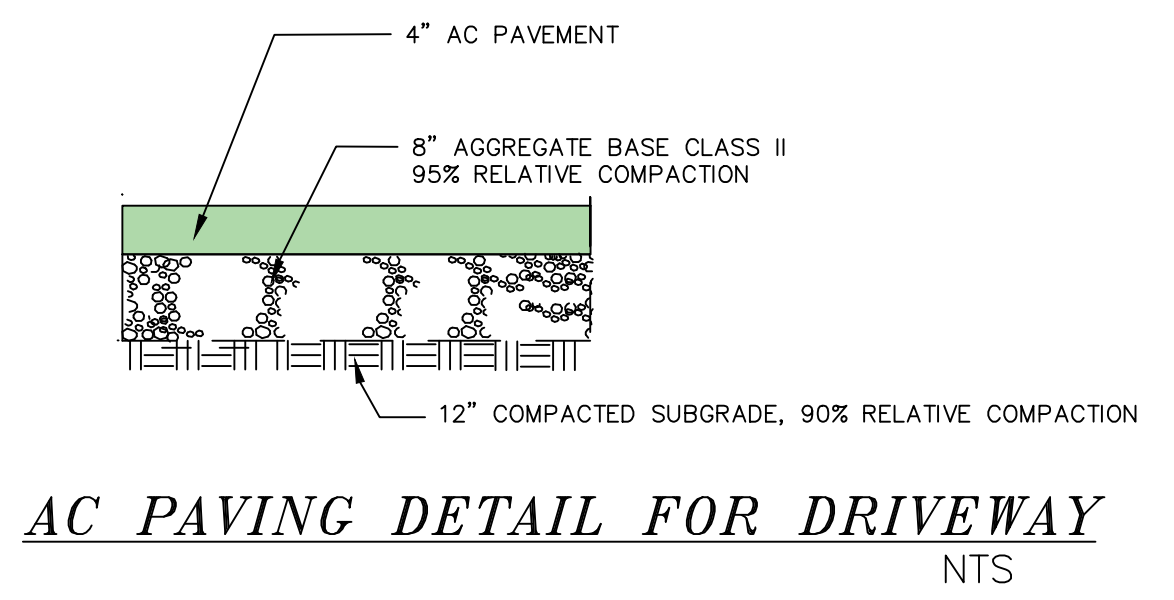
ELEVATION VIEW
4. INLET/ PUMPWELL DETAIL
NTS



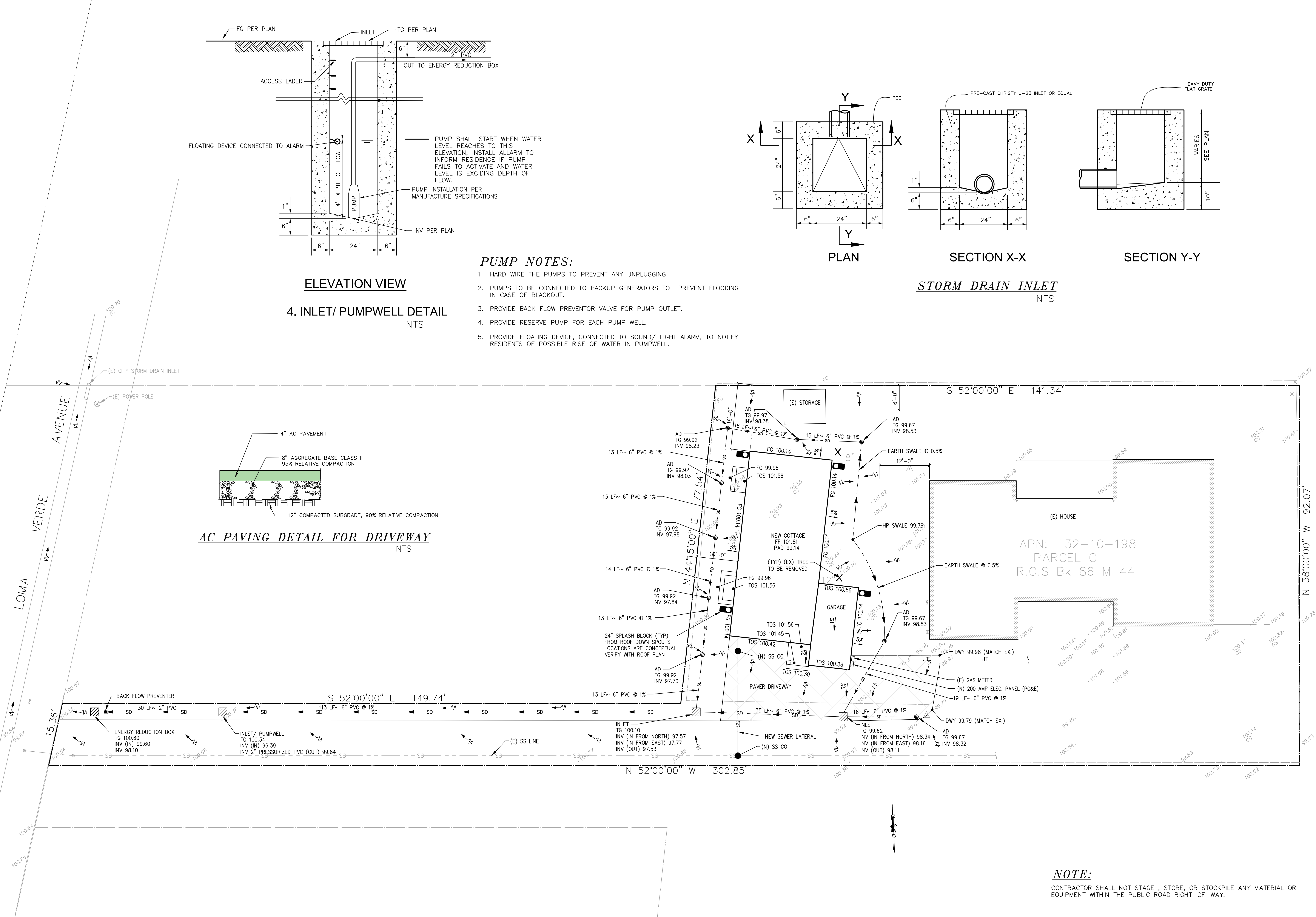
STORM DRAIN INLET
NTS

PUMP NOTES:

1. HARD WIRE THE PUMPS TO PREVENT ANY UNPLUGGING.
2. PUMPS TO BE CONNECTED TO BACKUP GENERATORS TO PREVENT FLOODING IN CASE OF BLACKOUT.
3. PROVIDE BACK FLOW PREVENTOR VALVE FOR PUMP OUTLET.
4. PROVIDE RESERVE PUMP FOR EACH PUMP WELL.
5. PROVIDE FLOATING DEVICE, CONNECTED TO SOUND/ LIGHT ALARM, TO NOTIFY RESIDENTS OF POSSIBLE RISE OF WATER IN PUMPWELL.



AC PAVING DETAIL FOR DRIVEWAY
NTS

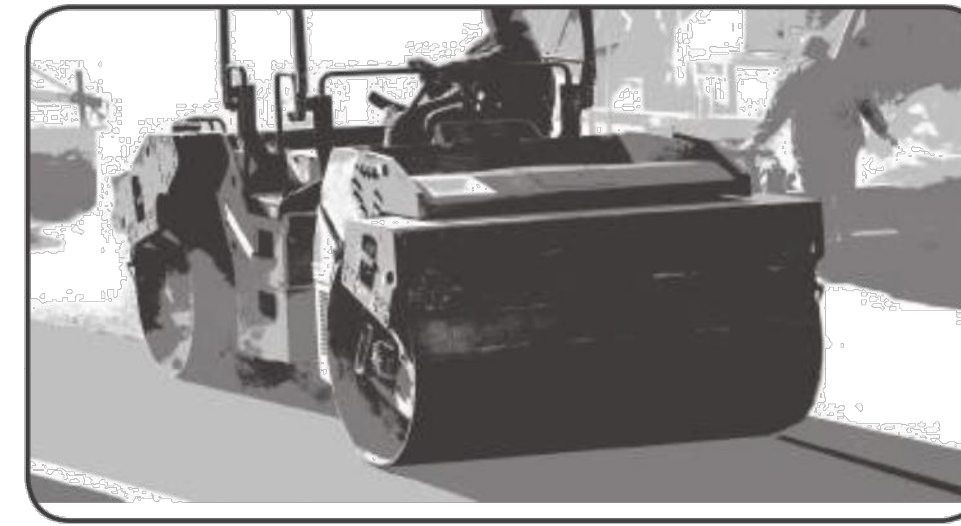
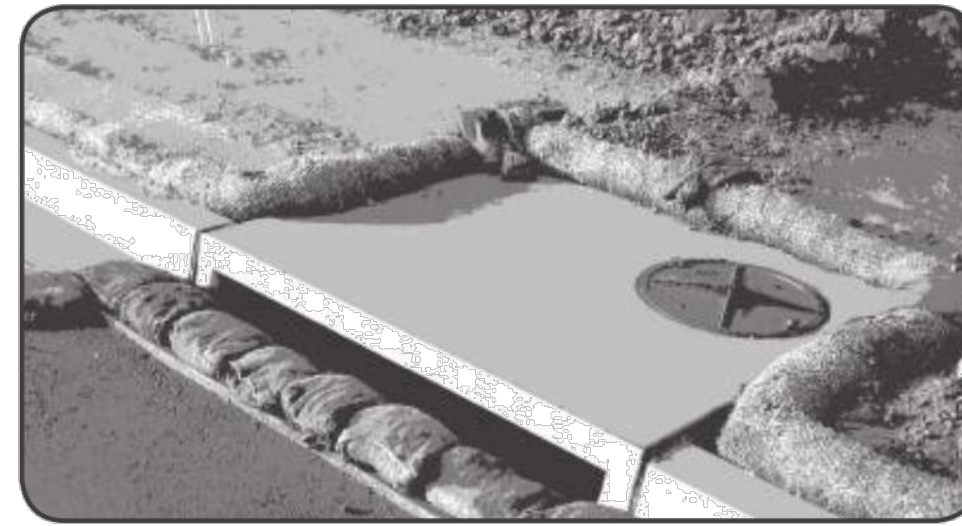


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MATERIALS & WASTE MANAGEMENT

Non-Hazardous Materials

- Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or when they are not in use.
- Use (but don't overuse) reclaimed water for dust control.
- Ensure dust control water doesn't leave site or discharge to storm drains.

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- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- Follow manufacturer's application instructions for hazardous materials and do not use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- Arrange for appropriate disposal of all hazardous wastes.

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- Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leaks. Never clean out a dumpster by hosing it down on the construction site.
- Place portable toilets away from storm drains. Make sure they are in good working order. Check frequently for leaks.
- Dispose of all wastes and demolition debris properly. Recycle materials and wastes that can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation.
- Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
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- Prevent litter from uncovered loads by covering loads that are being transported to and from site.

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- Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
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- Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- Stack bagged material on pallets and under cover.
- Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

CONCRETE MANAGEMENT & DEWATERING

Concrete Management

- Store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Store materials off the ground, on pallets. Protect dry materials from wind.
- Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) block any storm drain inlets and vacuum washwater from the gutter. If possible, sweep first.
- Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and make sure wash water does not leach into the underlying soil. (See CASQA Construction BMP Handbook for properly designed concrete washouts.)

Dewatering

- Reuse water for dust control, irrigation or another on-site purpose to the greatest extent possible.
- Be sure to obtain a Permit for Construction in the Public Street from Public Works Engineering before discharging water to a street, gutter, or storm drain. Call the Regional Water Quality Control Plant (RWQCP) at (650) 329-2598 for an inspection prior to commencing discharge. Use filtration or diversion through a basin, tank, or sediment trap as required by the approved dewatering plan. Dewatering is not permitted from October to April.
- In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the City inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

PAVING/ASPHALT WORK

Paving

- Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- Cover storm drain inlets and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.

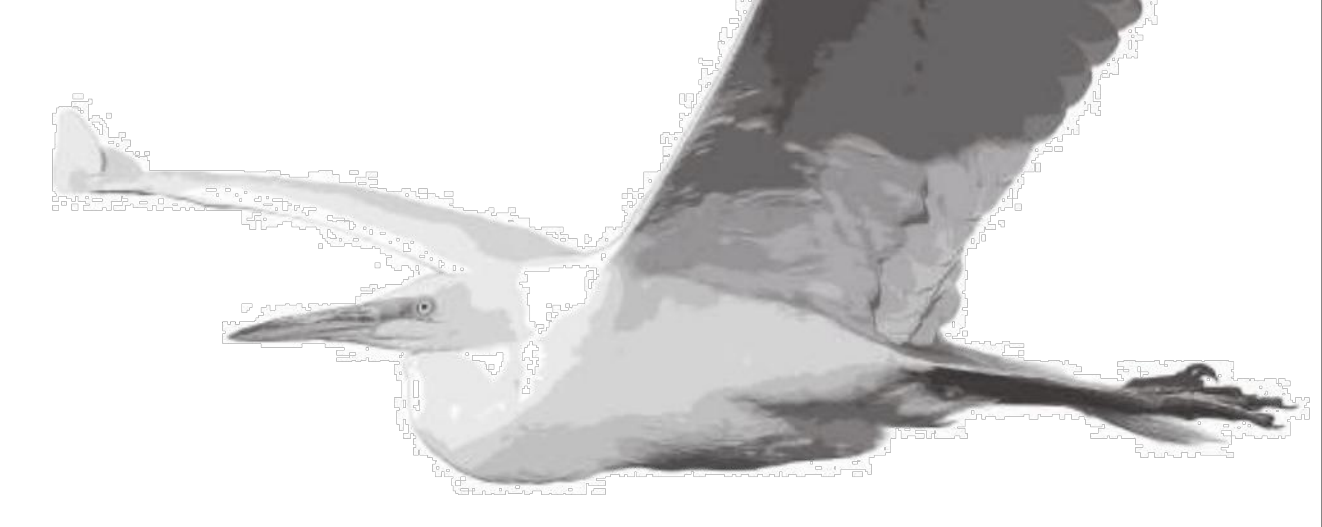
Sawcutting & Asphalt/Concrete Removal

- Protect storm drain inlets during saw cutting.
- If saw cut slurry enters a catch basin, clean it up immediately.
- Shovel or vacuum saw cut slurry deposits and remove from the site. When making saw cuts, use as little water as possible. Sweep up, and properly dispose of all residues.

PAINTING & PAINT REMOVAL

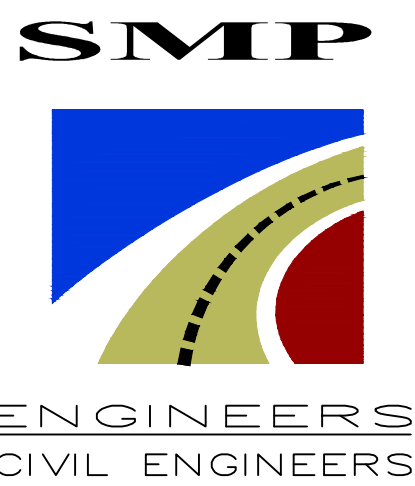
Painting Cleanup and Removal

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- Sweep up or collect paint chips and dust from non-hazardous dry stripping and sand blasting into plastic drop cloths and dispose of as trash.
- Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state certified contractor.



STORM DRAIN POLLUTERS MAY BE LIABLE FOR FINES OF UP TO \$10,000 PER DAY!

250 Hamilton Avenue
Palo Alto, CA 94301
650.329.2211
cityofpaloalto.org



1534 CAROB LANE
LOS ALTOS, CA 94024
TEL: (650) 941-8055
FAX: (650) 941-8755

OWNER:

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SMP ENGINEERS
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POLLUTION PREVENTION PLAN
592 LOMA VERDE AVENUE
PALO ALTO, CA
APN: 132-10-198

GRADING AND DRAINAGE PLANS



Revisions:

Date: 4/6/2017
Scale: NTS
Designed by: K.A.
Checked by: S.R.
Job #: 217038

3 OF 3
C-3

OWNER:

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COVER SHEET/NOTES/DETAILS
592 LOMA VERDE AVENUE
PALO ALTO, CA
APN: 132-10-198
GRADING AND DRAINAGE PLANS



Revisions:

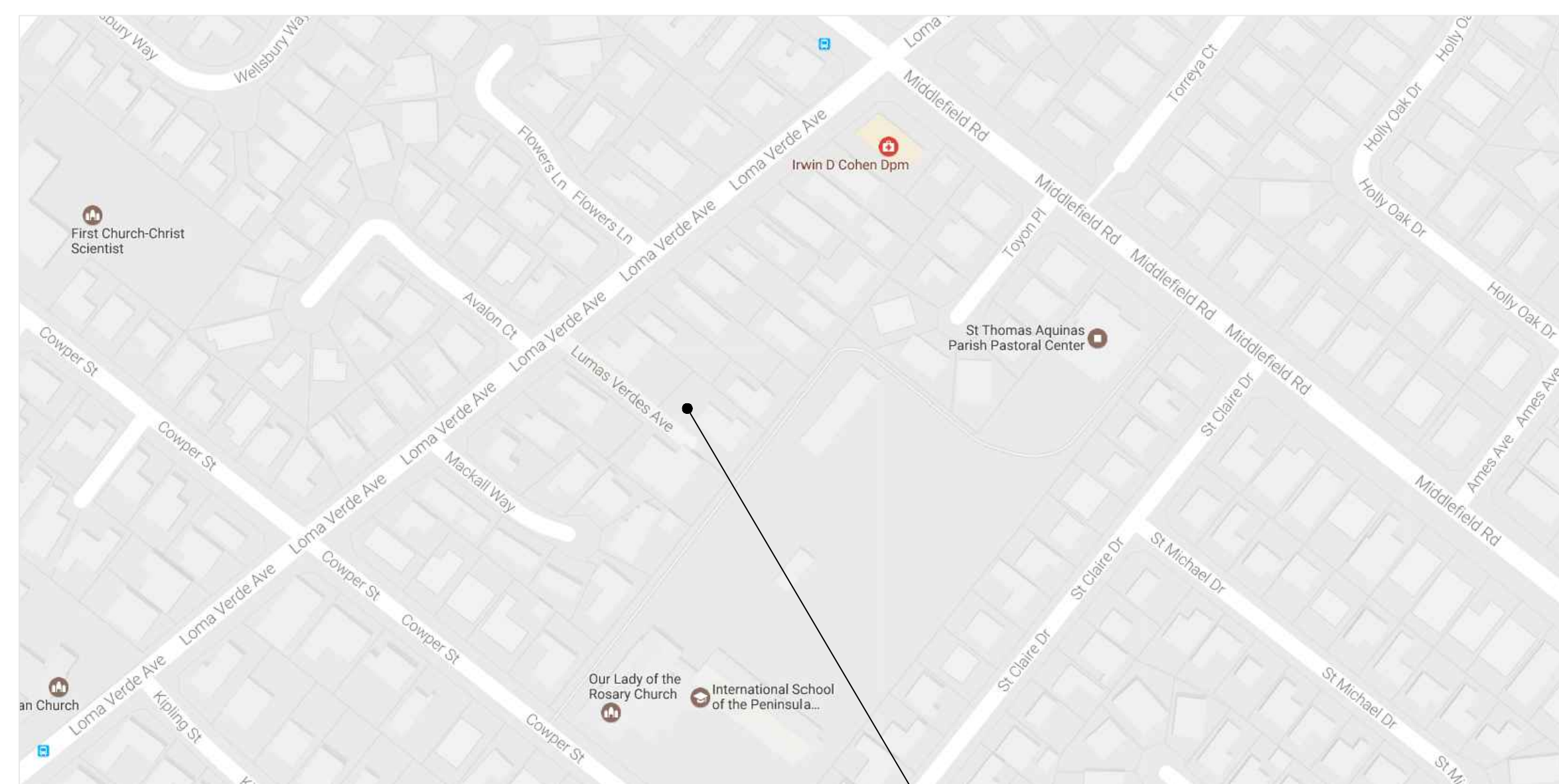
Date: 4/6/2017
Scale: N.T.S.
Designed by: K.A.
Checked by: S.R.
Job #: 217038

GRADING AND DRAINAGE PLANS

COTTAGE ADDITION

592 LOMA VERDE AVENUE, PALO ALTO, CA

APN: 132-10-198



LOCATION MAP
N.T.S.

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINE
W	W	WATER LINE
SD	SD	STORM DRAIN LINE
SS	SS	SANITARY SEWER LINE
OH e.T.V	OH e.T.V	OVERHEAD UTILITIES WITH POLE
JT	JT	JOINT TRENCH
SSMH	SSMH	SANITARY SEWER MANHOLE
○	○	MANHOLE
⊙	⊙	MONUMENT IN WELL
⊗ WM	⊗ WM	WATER METER
○	○	TREE WITH TRUNK
—x—x—	—x—x—	6' WOOD FENCE
x-102.23	x-102.23	SPOT ELEVATION
---	---	SWALE
□	□	SPLASH BLOCKS FOR ROOF DOWNSPOUTS

ABBREVIATIONS	
DESCRIPTION	DESCRIPTION
AB	AGGREGATE BASE (CLASS AS NOTED)
AC	ASPHALT CONCRETE
AD	AREA DRAIN
BC	BACK OF CURB
BFL	BACK FLOW WATER PREVENTOR VALVE
BW	BOTTOM OF WALL
BW	BACK OF WALK
C&G	CURB AND GUTTER
CFF	GARAGE FINISH FLOOR (BACK)
C/L	CENTERLINE
CLSW	CENTERLINE SWALE
CO	CLEANOUT
CP	CONTROL POINT
DWY	DRIVEWAY
DI	DROP INLET
DTL	DETAIL
ELCT	ELECTRIC
EP	EDGE OF PAVEMENT ELEVATION
EUC	EUCALYPTUS TREE
(E),EX	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FNC	FENCE
FOC	FACE OF CURB
GB	GRADE BREAK
GFF	GARAGE FINISH FLOOR (FRONT)
GUY	GUY WIRE
HP	HIGH POINT
IP	IRON PIPE
INV	INVERT
JP	JOINT POLE
JB	JUNCTION BOX (UTILITY)
LIP	LIP OF GUTTER
LP	LOW POINT
MON	MONUMENT
(N)	NEW
OG	ORIGINAL GROUND
PB	PULL BOX
PGEV	PG&E VAULT
P/L	PROPERTY LINE
PP	POWER POLE
PPP	PLASTIC PERFORATED PIPE
PSE	PUBLIC SERVICE EASEMENT
PVC	POLYVINYL CHLORIDE
R/W	RIGHT OF WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SSMH	STORM DRAIN MANHOLE
STD	STANDARD
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SW	SIDEWALK
TC	TOP OF CURB
TF	TOP OF FOUNDATION
TOS	TOP OF SLAB
TW	TOP OF WALL
TP	TOP OF PAVEMENT
(TYP)	TYPICAL
USS	UNDERGROUND SANITARY SEWER
UE	UTILITY EASEMENT
UT	UNDERGROUND TELEPHONE
UW	UNDERGROUND WATER
VCP	VITRIFIED CLAY PIPE
WL	WHITE LINE STRIPE
WLK	WALKWAY
WM	WATER METER
WV	WATER VALVE

- SITE GRADING NOTES**
- ALL GRADING IS SUBJECT TO OBSERVATION BY THE CITY. CONTRACTOR SHALL NOTIFY THE CITY OF PALO ALTO AT LEAST 48 HOURS BEFORE THE START OF ANY GRADING WORK.
 - ALL DEBRIS, VEGETATION AND ORGANICALLY CONTAMINATED SOILS SHALL BE CLEARED FROM THE BUILDING AREAS AND REMOVED FROM THE SITE.
 - FILL MATERIAL MAY INCLUDE ORGANIC-FREE SOILS AVAILABLE AT THE SITE OR IMPORTED MATERIALS.
 - FILLS SHALL BE PLACED ON LEVEL BENCHES IN LIFTS NO GREATER THAN 6 INCHES AND SHALL BE COMPACTED.
 - PERMANENT CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 2:1.
 - CONTRACTOR SHALL NOT STAGE, STORE, OR STOCKPILE ANY MATERIAL OR EQUIPMENT WITHIN THE PUBLIC ROAD RIGHT-OF-WAY.

- DRAINAGE NOTES**
- SURFACE WATER SHALL BE DIRECTED AWAY FROM ALL BUILDINGS INTO DRAINAGE SWALES, GUTTERS OR PAVED SURFACES.
 - ALL ROOF DOWN SPOUTS SHALL DISCHARGE ONTO SPLASH BLOCKS AND DIRECTED AWAY FROM BUILDING.

NOTE:
- GRADING AND DRAINAGE PLANS SHALL BE REVIEWED AND APPROVED BY THE PROJECT SOILS ENGINEER.

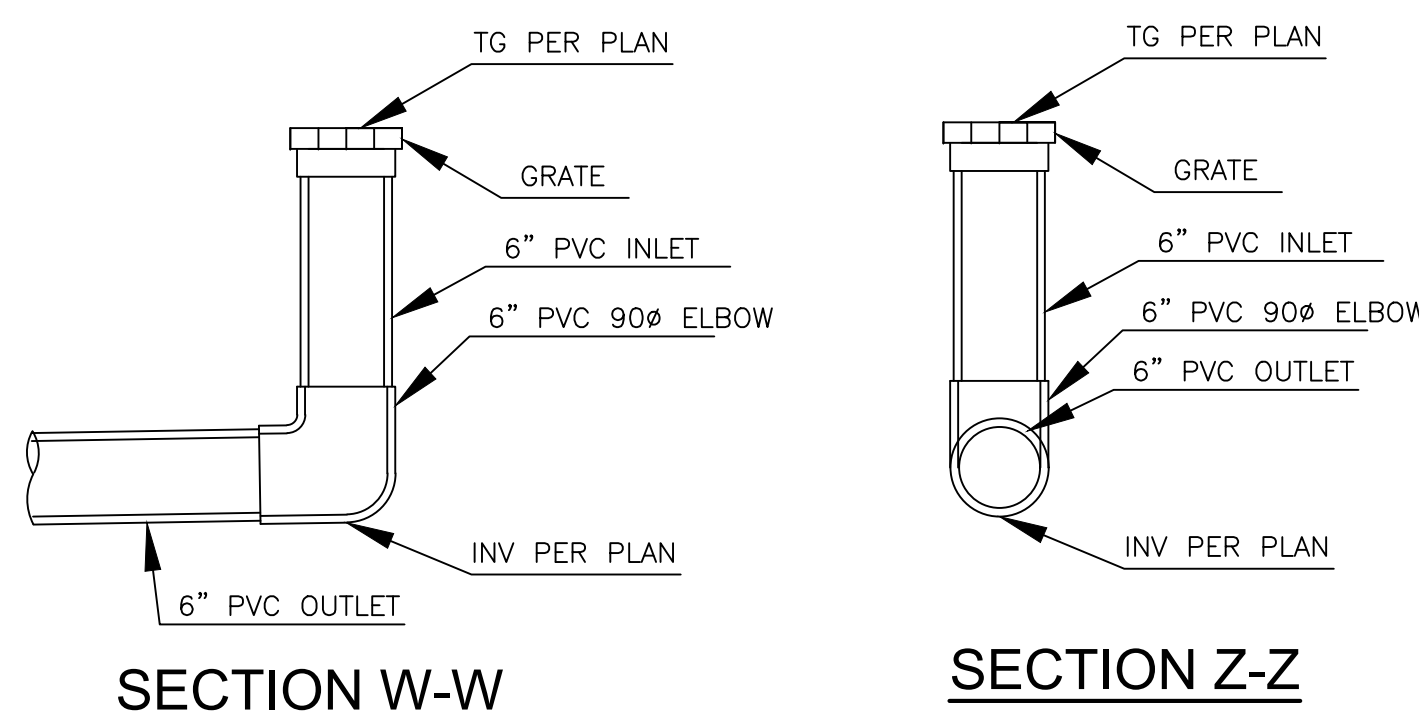
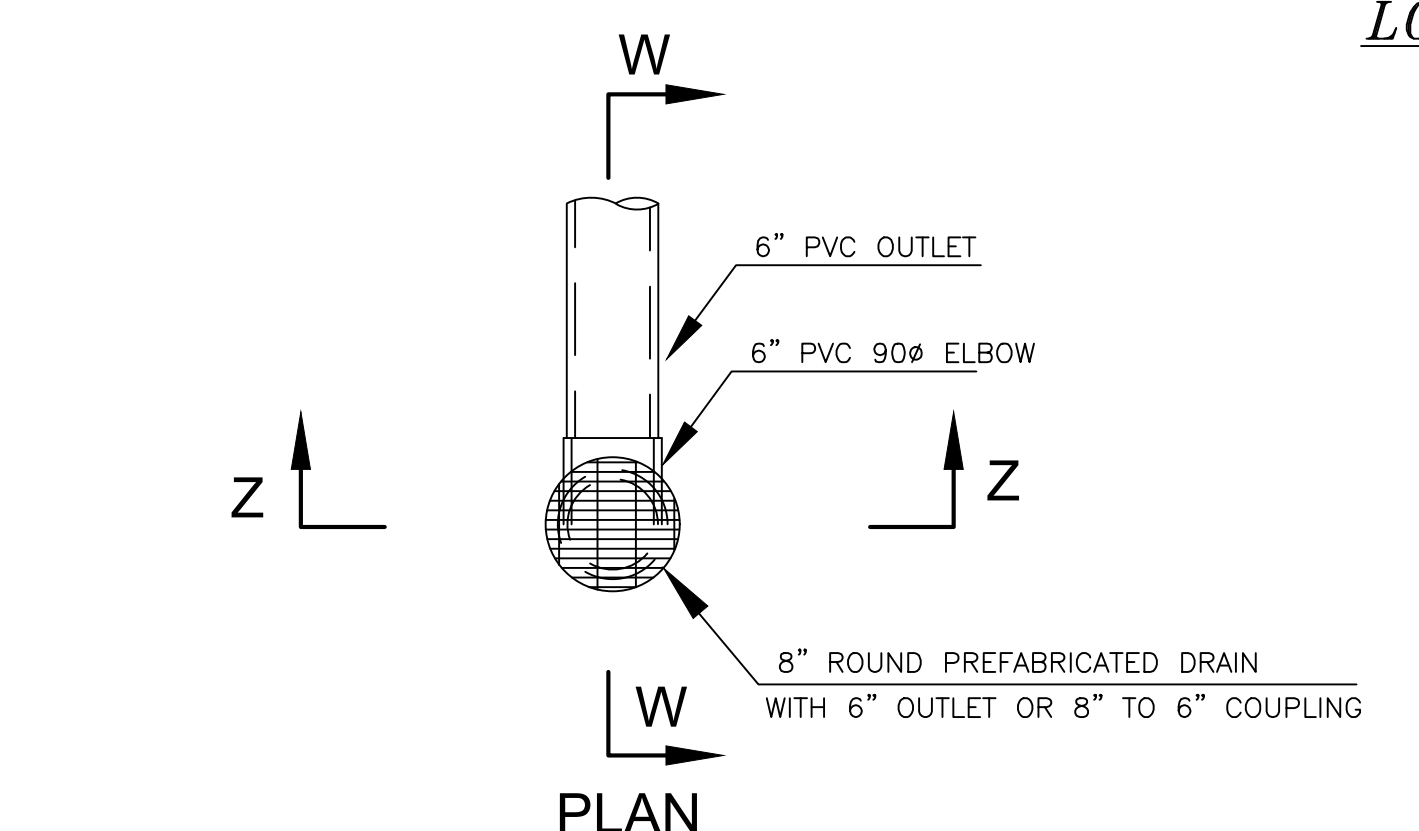
- UTILITY NOTES:**
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
 - CONNECT SANITARY SEWER AND WATER LINE TO EXISTING STREET SERVICES.
 - CONNECT GAS AND ELECTRIC LINES TO EXISTING GAS AND POWER SERVICES, PER UTILITY COMPANY STANDARDS.
 - CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
 - ALL ELECTRIC, TELEPHONE AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.

- ELECTRICAL NOTES:**
- APPLICANT RESPONSIBLE FOR ALL PERMITS AND SUBSTRUCTURE.
 - CARE MUST BE TAKEN TO LIMIT OUTAGES FOR OTHER CUSTOMERS.
 - ALL SUBSTRUCTURE MUST BE APPROVED BY CALLING UNDERGROUND INSPECTOR AT 650-496-5934.
 - NEW 400A SERVICE PANEL TO BE APPROVED BY ELECTRIC ENGINEERING PRIOR TO FINAL CONNECTION.
 - ALL PANEL WORK MUST BE INSPECTED AND APPROVED BY BUILDING INSPECTOR PRIOR TO BEING ENERGIZED.
 - ALL WORK PER NEC AND CPAU CODE

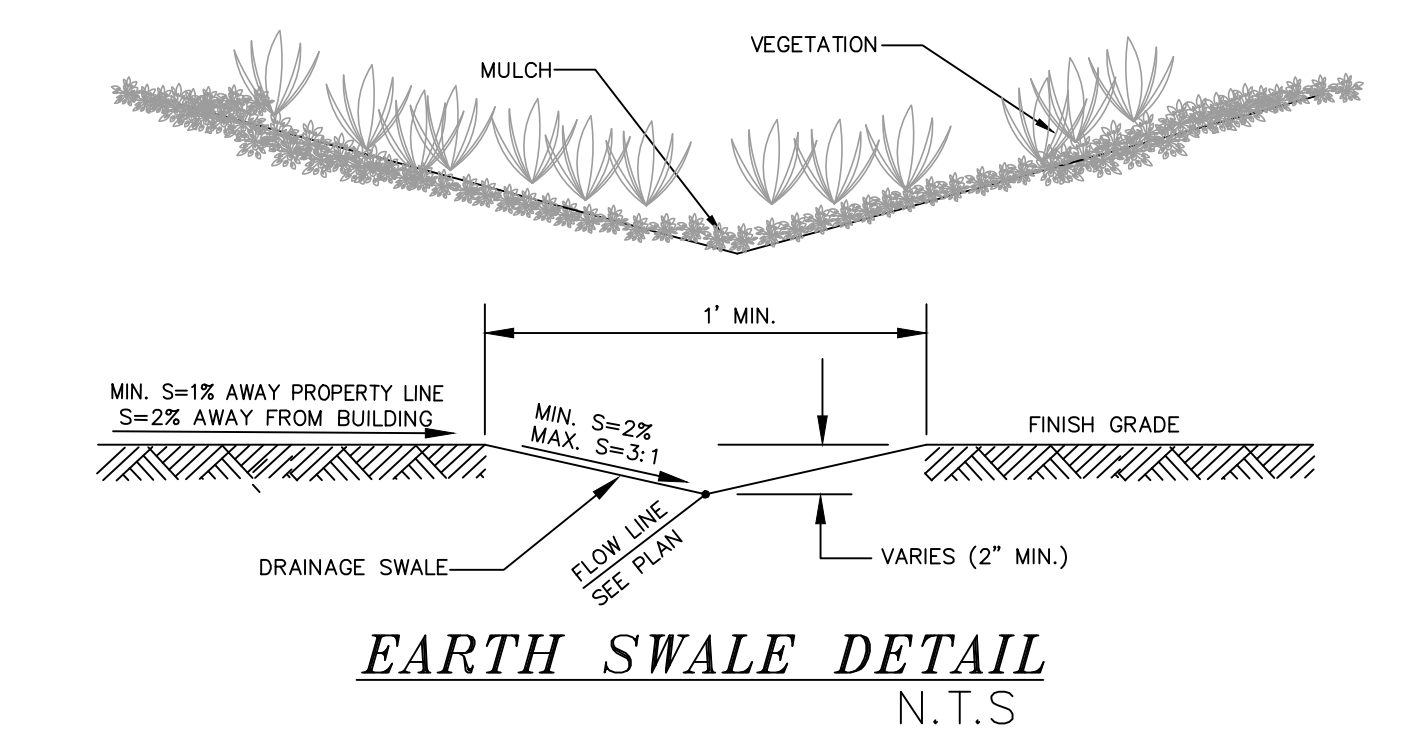
CITY OF PALO ALTO NOTE:
ANY CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY MUST HAVE AN APPROVED "PERMIT FOR CONSTRUCTION IN THE PUBLIC STREET" PRIOR TO COMMENCEMENT OF THIS WORK. THE PERFORMANCE OF THIS WORK IS NOT AUTHORIZED BY THE BUILDING PERMIT ISSUANCE BUT SHOWN ON THE BUILDING PERMIT FOR INFORMATION ONLY.

APPLICANT AND CONTRACTOR WILL BE RESPONSIBLE FOR RESURFACING PORTIONS OF LOS PALOS PL BASED ON THE ROADWAY SURFACE CONDITION AFTER PROJECT COMPLETION AND LIMITS OF TRENCH WORK. AT A MINIMUM PAVEMENT RESURFACING OF THE FULL WIDTH OF THE STREET ALONG THE PROJECT FRONTAGE MAY BE REQUIRED.

PROJECT-SPECIFIC NOTE
"THE GEOTECHNICAL ASPECTS OF THE CONSTRUCTION, INCLUDING BASEMENT AND DRILLED PIER EXCAVATIONS, RETAINING WALL BACKDRAINS AND BACKFILL, SUBGRADE PREPARATION BENEATH HARDSCAPE, COMPACTION OF ENGINEERED FILL, PLACEMENT AND COMPACTION OF ENGINEERED FILL, BACKFILL IN UTILITY TRENCHES, AND INSTALLATION OF SITE DRAINAGE CONTROLS, SHOULD BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED BY MURRAY ENGINEERS, INC., DATED AUGUST 12, 2016. MURRAY ENGINEERS INC. SHOULD BE PROVIDED AT LEAST 48 HOURS ADVANCE NOTIFICATION (650-559-9980) OF ANY GEOTECHNICAL ASPECTS OF THE CONSTRUCTION AND SHOULD BE PRESENT TO OBSERVE AND TEST THE EARTHWORK, FOUNDATION, AND DRAINAGE INSTALLATION PHASES OF THE PROJECT."



STORM DRAIN AREA DRAIN
N.T.S.



SWALE MAINTENANCE NOTE:
Maintenance is to be performed as follows:
Earth swales shall be inspected periodically and maintained as needed. Daily during extended rain events, weekly during the rainy season, and bi-monthly during the non-rainy season. Remove debris and sediment and repair slopes and replace vegetation as needed.

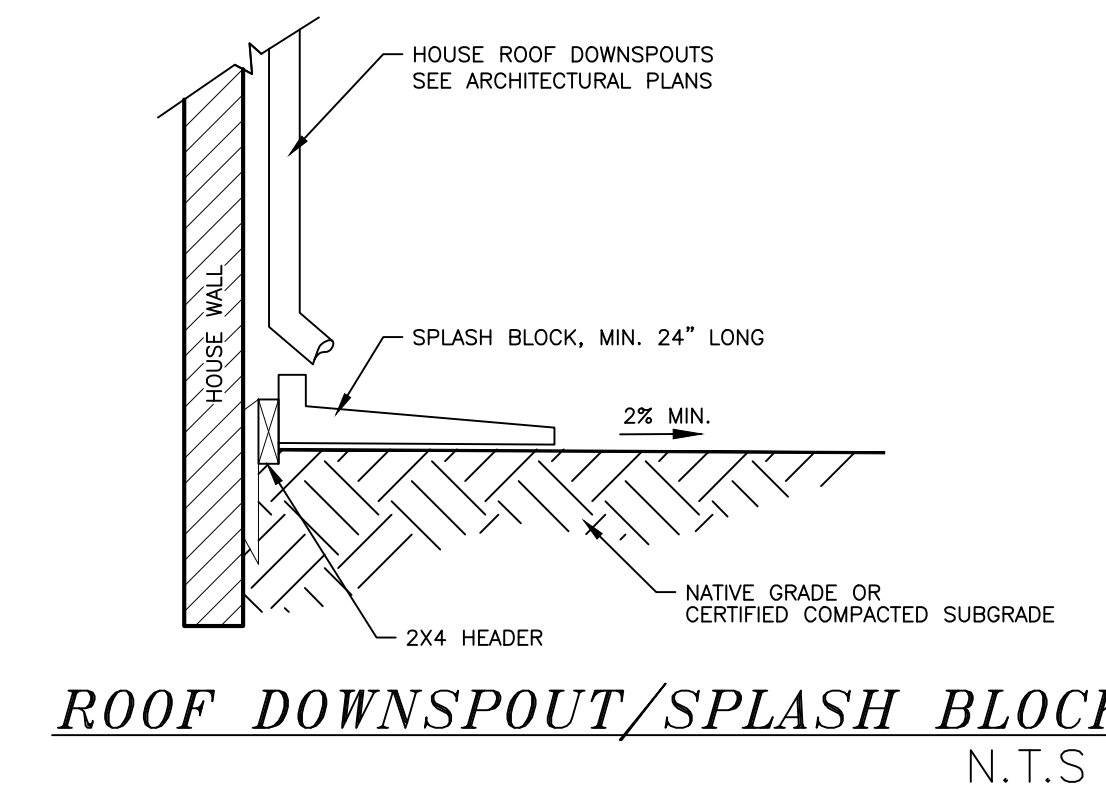
SHEET INDEX:

C-1	COVER SHEET/ NOTES/ DETAILS
C-2	GRADING AND DRAINAGE PLAN/ DETAILS
C-3	POLLUTION PREVENTION PLAN

EARTHWORK TABLE

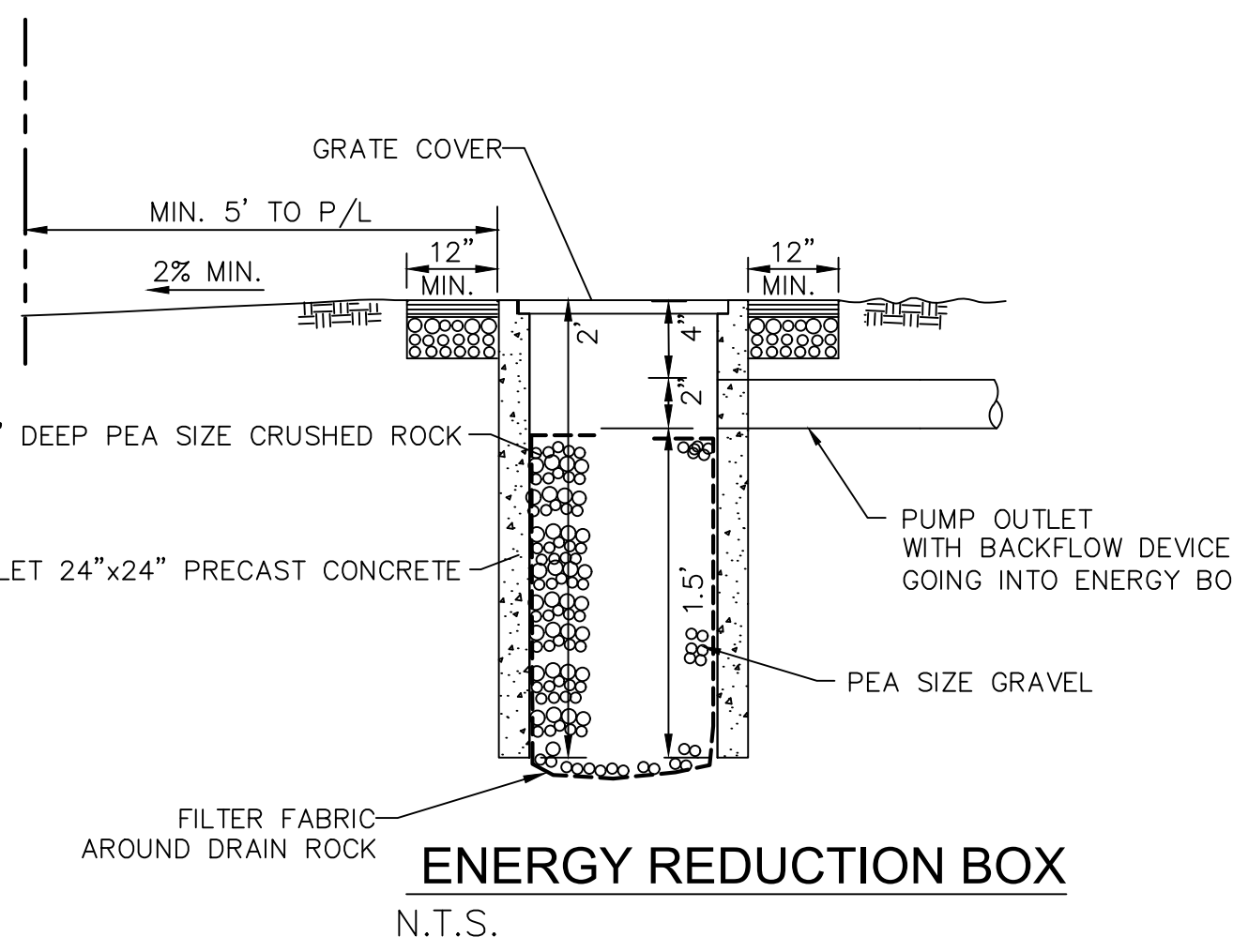
	FILL (CY)	CUT (CY)	IMPORT (CY)	EXPORT (CY)
BUILDING	0	25		
SITE	3	10		
TOTAL	3	35	0	32

NOTE:
EARTHWORK QUANTITIES ON THIS TABLE ARE FOR INFORMATION ONLY. CONTRACTORS ARE TO PERFORM THEIR OWN QUANTITY TAKE OFFS.



ROOF DOWNSPOUT/SPLASH BLOCK
N.T.S.

NOTICE TO CONTRACTORS
CONTRACTOR TO NOTIFY U.S.A. (UNDERGROUND SERVICE ALERT) AT 800-227-2600 A MINIMUM OF 2 WORKING DAYS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION AND DEPTH OF UNDERGROUND UTILITIES.



ENERGY REDUCTION BOX
N.T.S.

OWNER:

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 SMP ENGINEERS
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GRADING AND DRAINAGE PLAN/ DETAILS
592 LOMA VERDE AVENUE
PALO ALTO, CA
APN: 132-10-198

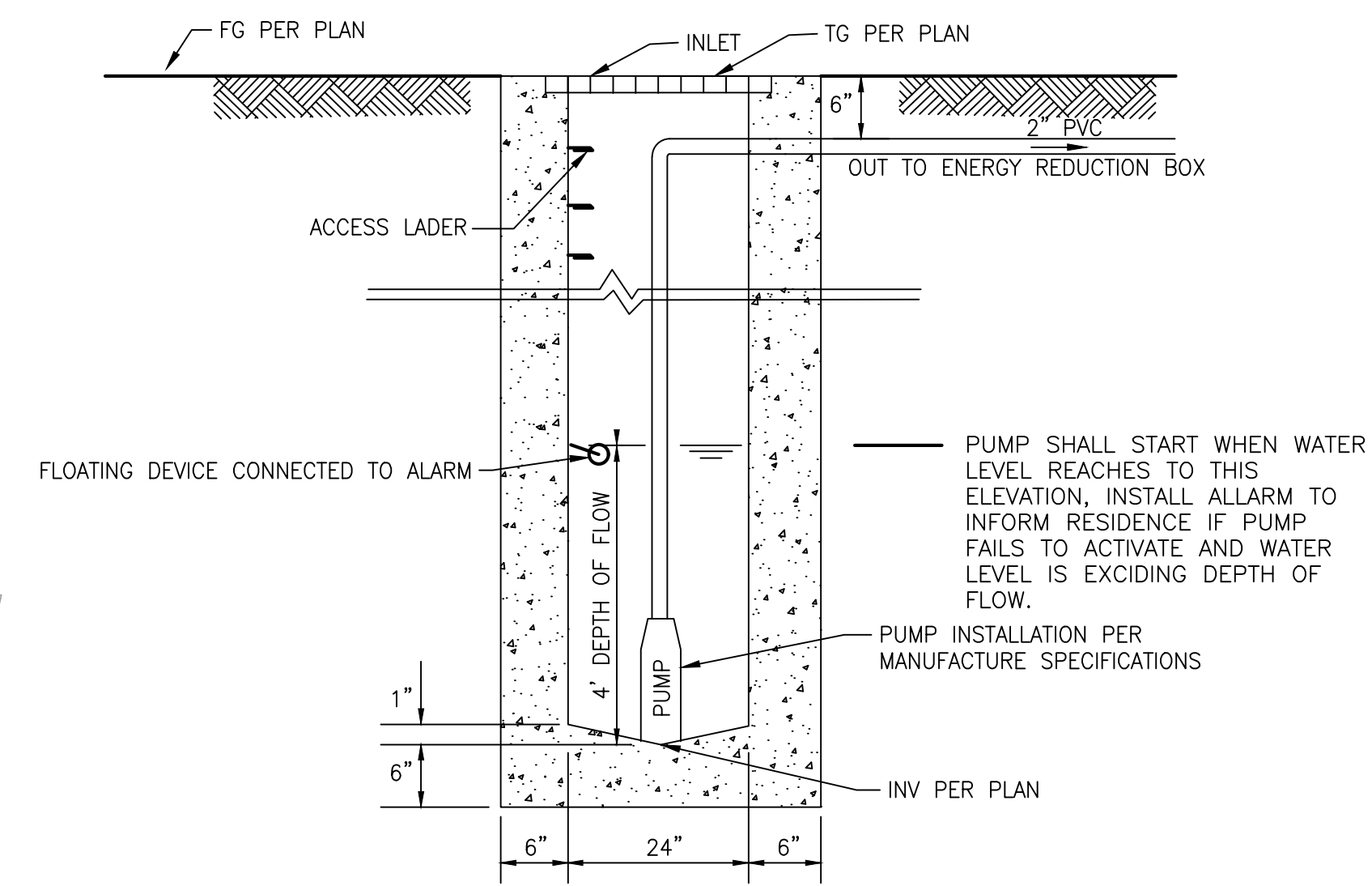
GRADING AND DRAINAGE PLANS



Sketio Razaqi

Revisions:

Date: 4/6/2017
 Scale: 1"=10'
 Designed by: K.A.
 Checked by: S.R.
 Job #: 217Q38

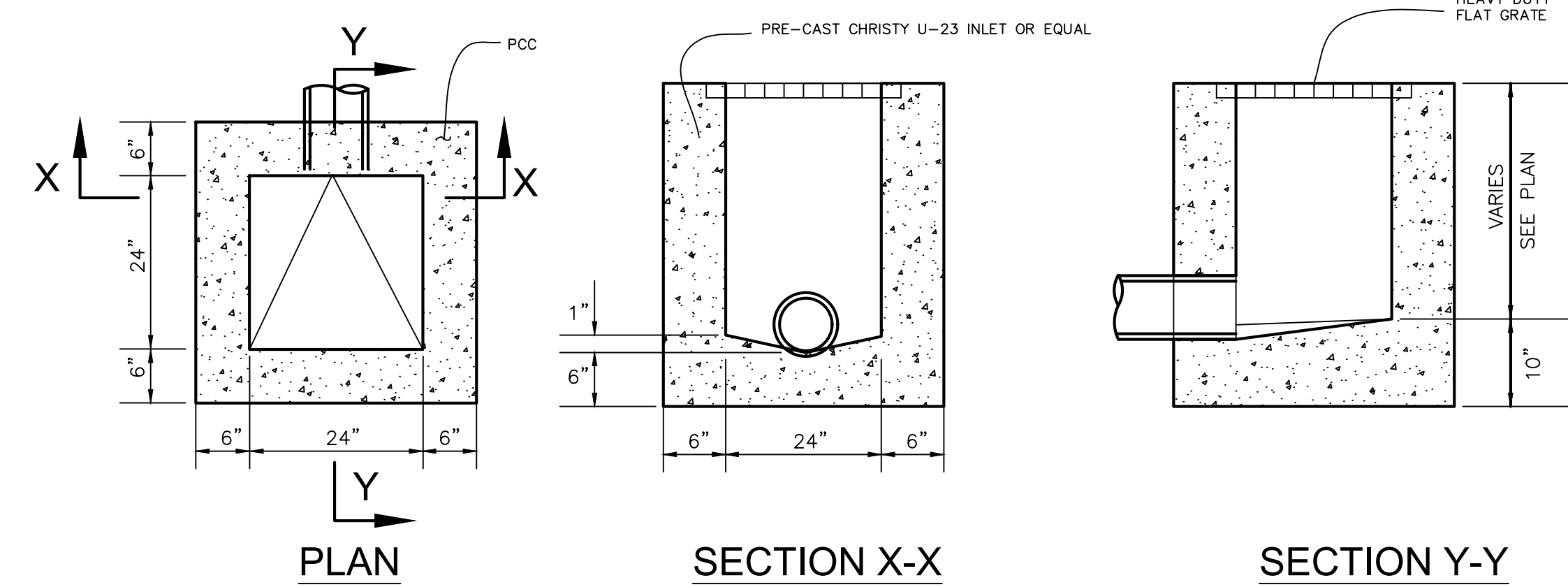


ELEVATION VIEW

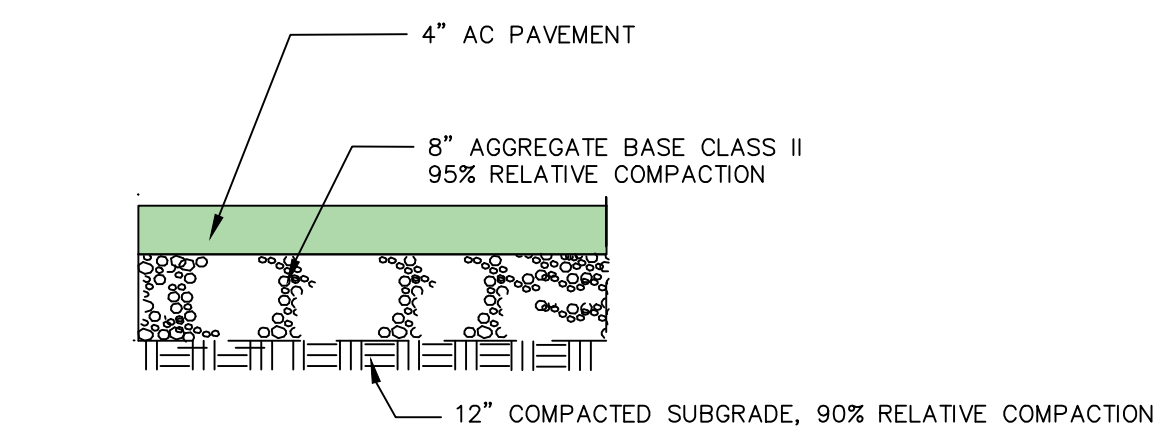
4. INLET/ PUMPWELL DETAIL
 NTS

PUMP NOTES:

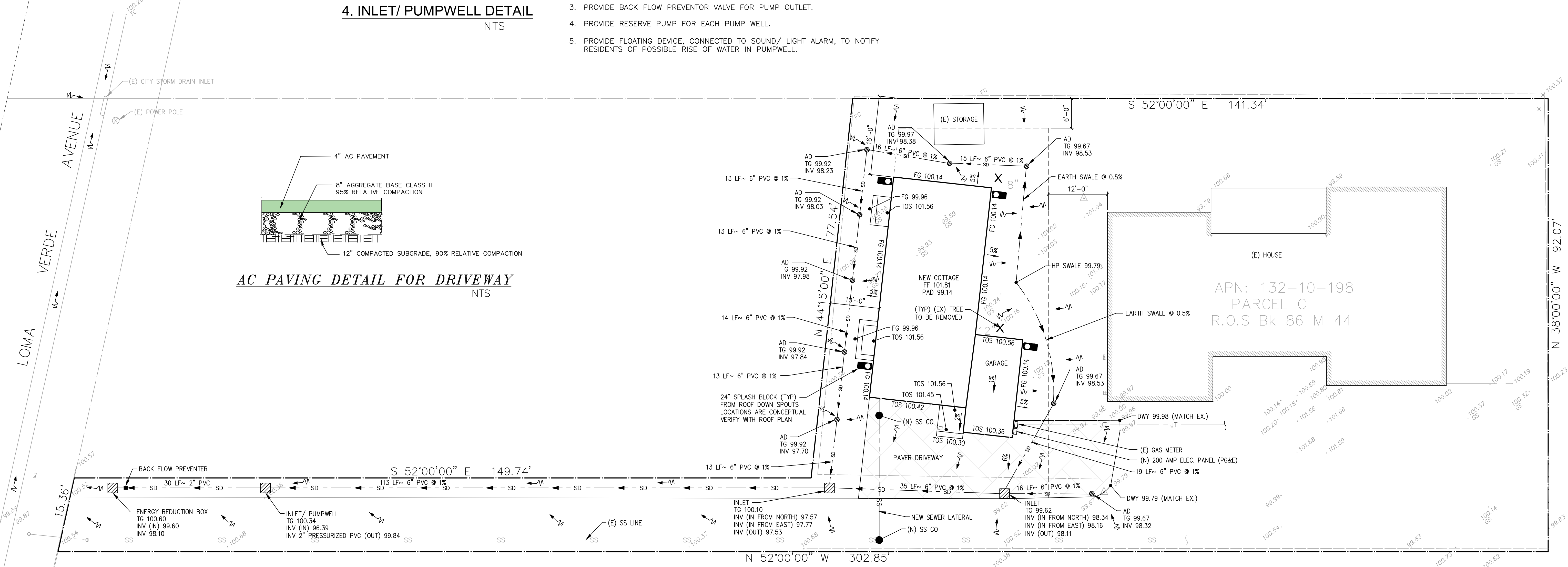
1. HARD WIRE THE PUMPS TO PREVENT ANY UNPLUGGING.
2. PUMPS TO BE CONNECTED TO BACKUP GENERATORS TO PREVENT FLOODING IN CASE OF BLACKOUT.
3. PROVIDE BACK FLOW PREVENTOR VALVE FOR PUMP OUTLET.
4. PROVIDE RESERVE PUMP FOR EACH PUMP WELL.
5. PROVIDE FLOATING DEVICE, CONNECTED TO SOUND/ LIGHT ALARM, TO NOTIFY RESIDENTS OF POSSIBLE RISE OF WATER IN PUMPWELL.



STORM DRAIN INLET
 NTS



AC PAVING DETAIL FOR DRIVEWAY
 NTS



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Concrete Management

- Store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Store materials off the ground, on pallets. Protect dry materials from wind.
- Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) block any storm drain inlets and vacuum washwater from the gutter. If possible, sweep first.
- Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and make sure wash water does not leach into the underlying soil. (See CASQA Construction BMP Handbook for properly designed concrete washouts.)

Dewatering

- Reuse water for dust control, irrigation or another on-site purpose to the greatest extent possible.
- Be sure to obtain a Permit for Construction in the Public Street from Public Works Engineering before discharging water to a street, gutter, or storm drain. Call the Regional Water Quality Control Plant (RWQCP) at (650) 329-2598 for an inspection prior to commencing discharge. Use filtration or diversion through a basin, tank, or sediment trap as required by the approved dewatering plan. Dewatering is not permitted from October to April.
- In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the City inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

PAVING/ASPHALT WORK

Paving

- Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- Cover storm drain inlets and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.

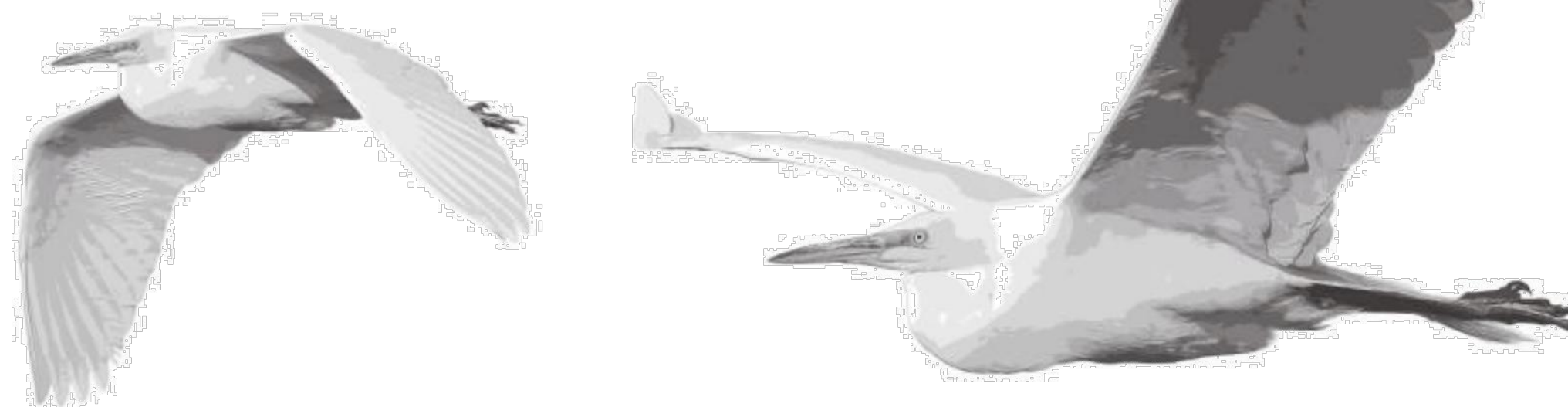
Sawcutting & Asphalt/Concrete Removal

- Protect storm drain inlets during saw cutting.
- If saw cut slurry enters a catch basin, clean it up immediately.
- Shovel or vacuum saw cut slurry deposits and remove from the site. When making saw cuts, use as little water as possible. Sweep up, and properly dispose of all residues.

PAINTING & PAINT REMOVAL

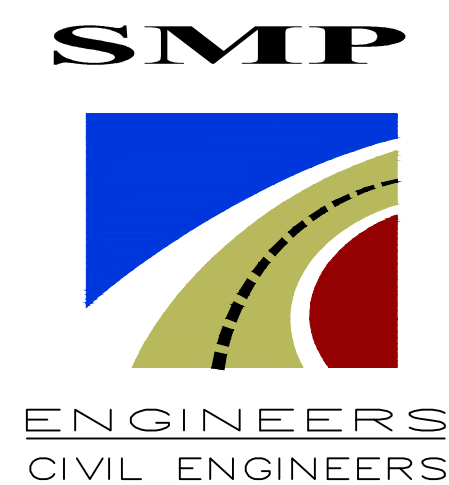
Painting Cleanup and Removal

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- Sweep up or collect paint chips and dust from non-hazardous dry stripping and sand blasting into plastic drop cloths and dispose of as trash.
- Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state certified contractor.



STORM DRAIN POLLUTERS MAY BE LIABLE FOR FINES OF UP TO \$10,000 PER DAY!

250 Hamilton Avenue
Palo Alto, CA 94301
650.329.2211
cityofpaloalto.org



1534 CAROB LANE
LOS ALTOS, CA 94024
TEL: (650) 941-8055
FAX: (650) 941-8755

OWNER:

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SMP ENGINEERS
CIVIL ENGINEERS

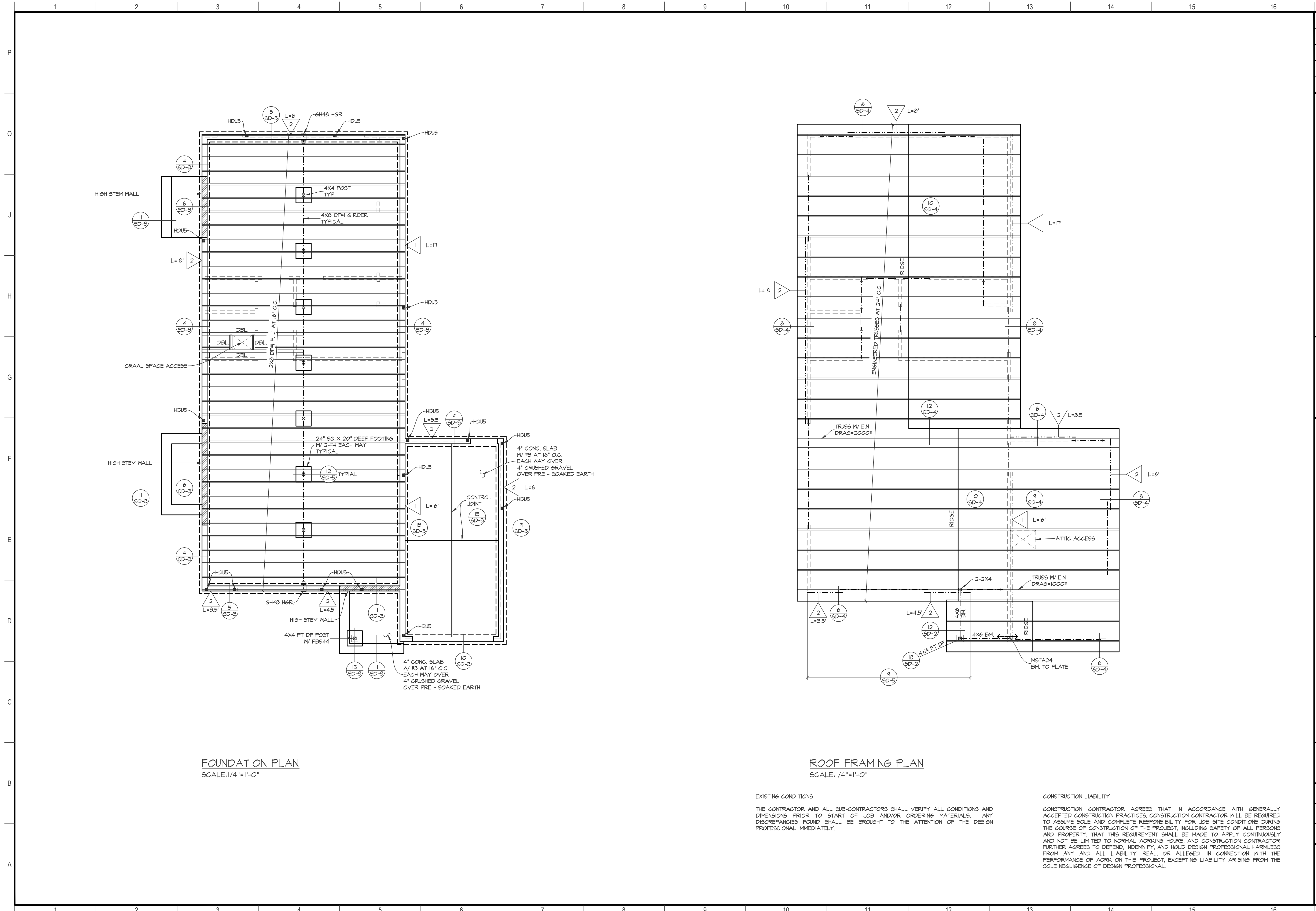
POLLUTION PREVENTION PLAN
592 LOMA VERDE AVENUE
PALO ALTO, CA
APN: 132-10-198
GRADING AND DRAINAGE PLANS



S. RAZAVI

Revisions:

Date: 4/6/2017
Scale: NTS
Designed by: K.A.
Checked by: S.R.
Job #: 217038



FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

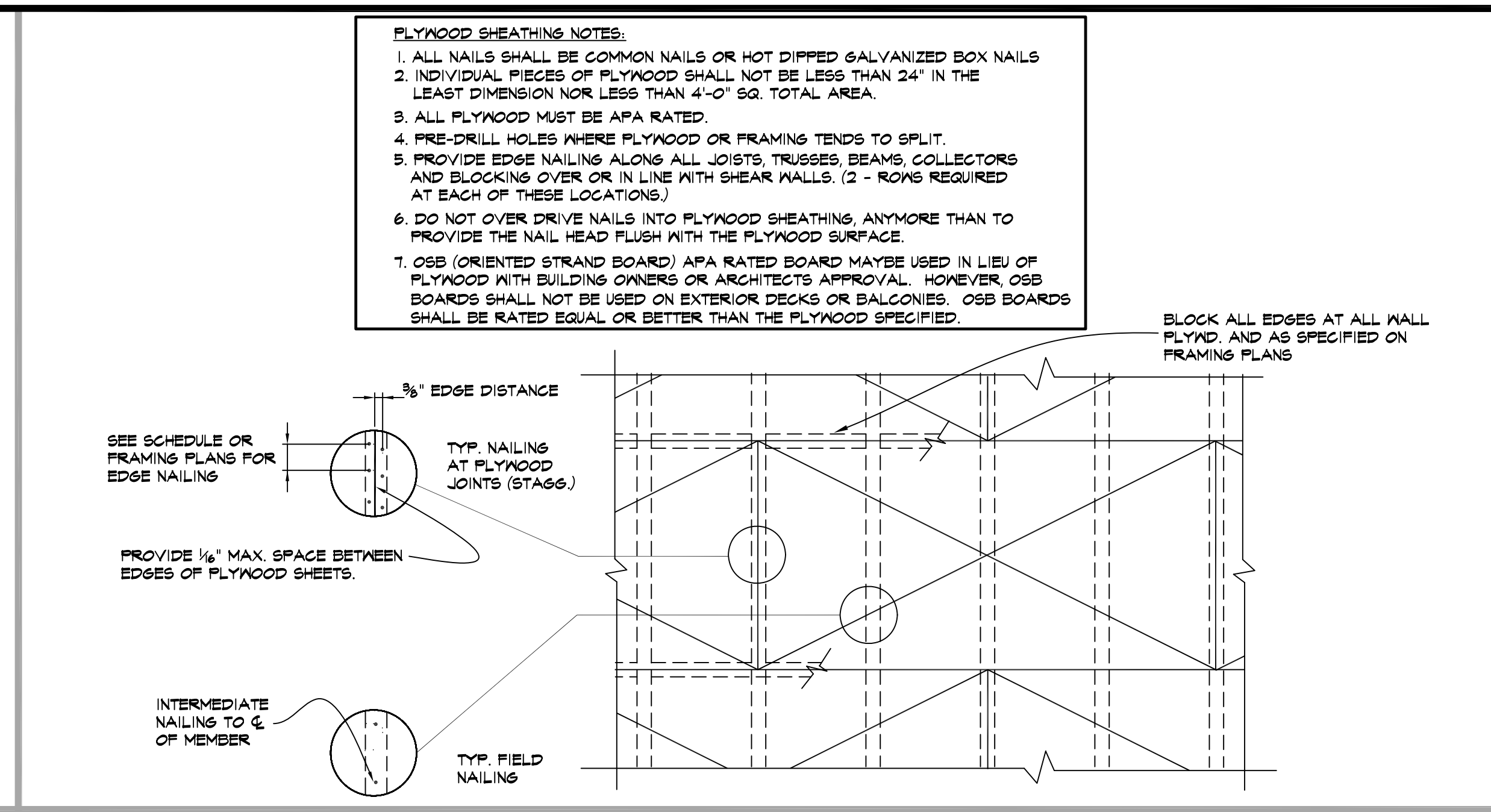
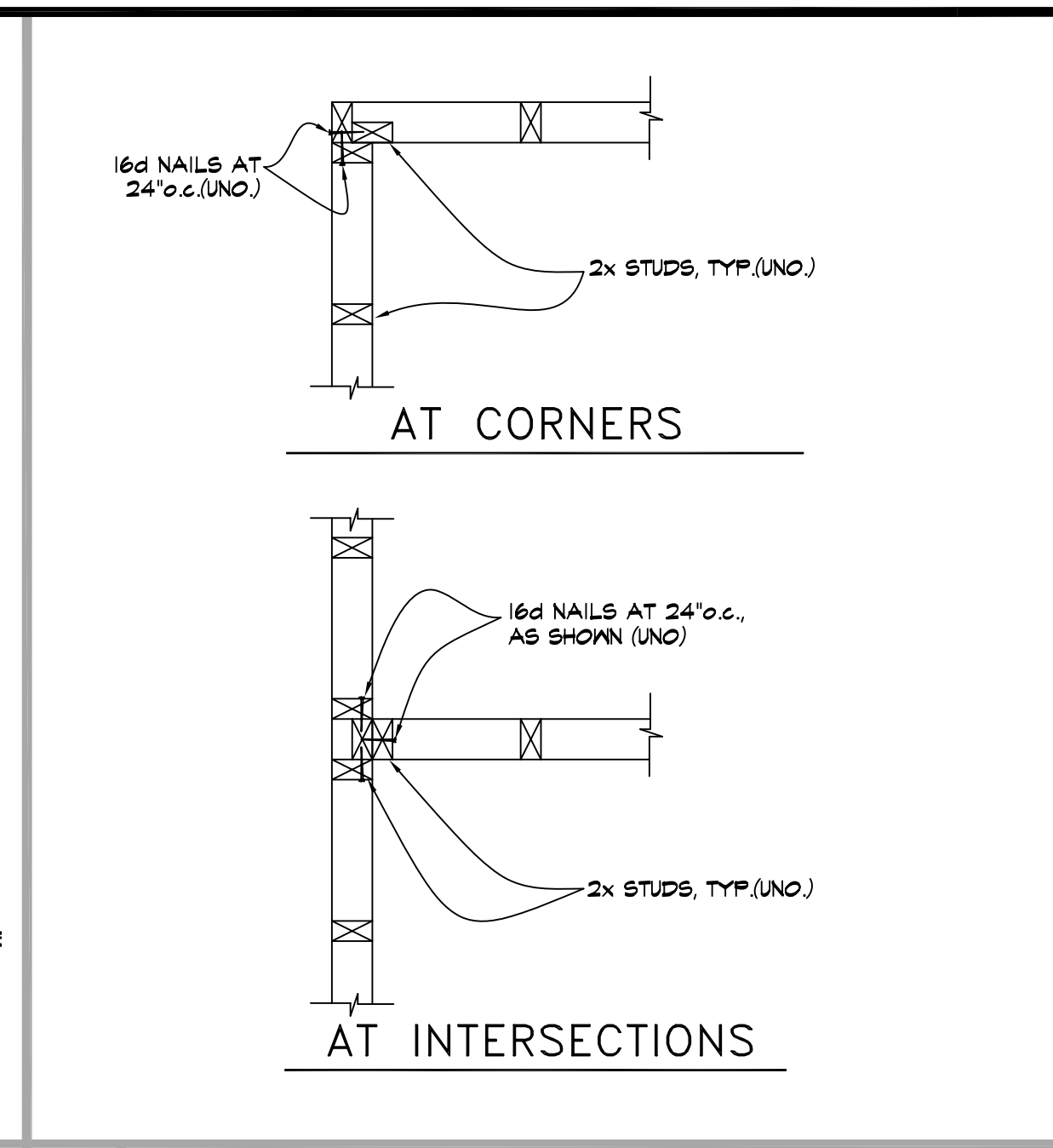
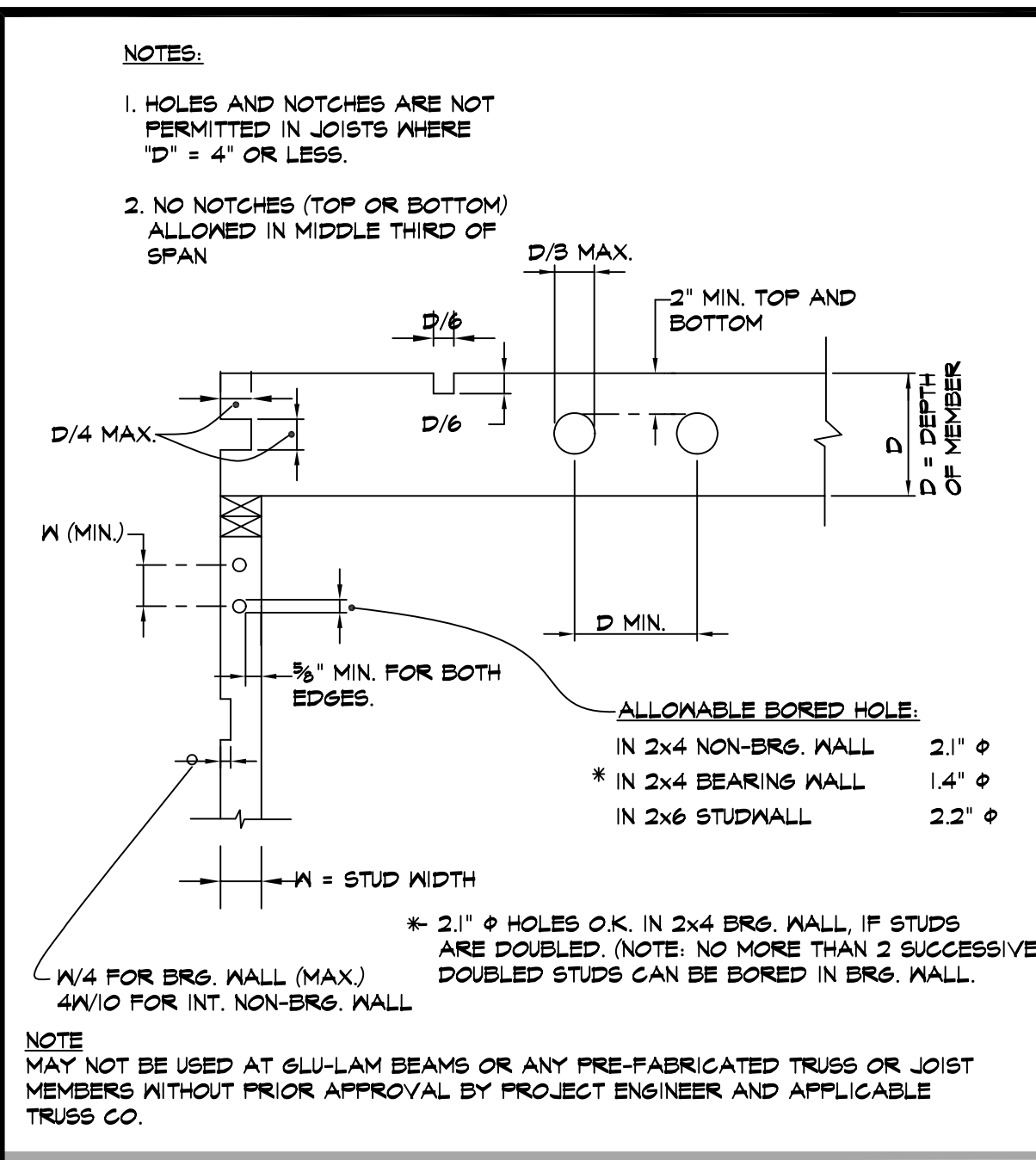
EXISTING CONDITIONS

THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO START OF JOB AND/OR ORDERING MATERIALS. ANY DISCREPANCIES FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL IMMEDIATELY.

CONSTRUCTION LIABILITY

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

NO.		REVISIONS	
Ali Fatapour, P.E. Structural & Civil Engineering Consultant 1088 Barnes Court San Jose, CA, 95120 (408) 268-5937			
LUNDY RESIDENCE 592 LOMA VERDE AVENUE PALO ALTO, CALIFORNIA			
DRAWING TITLE			
DRAWN DM	CHECKED AF	PROJ. NO.	DATE MAY 2017
CAD FILE NO.			
DRAWING NO.			
S-1			
OF		SHEETS	



NO.	REVISIONS

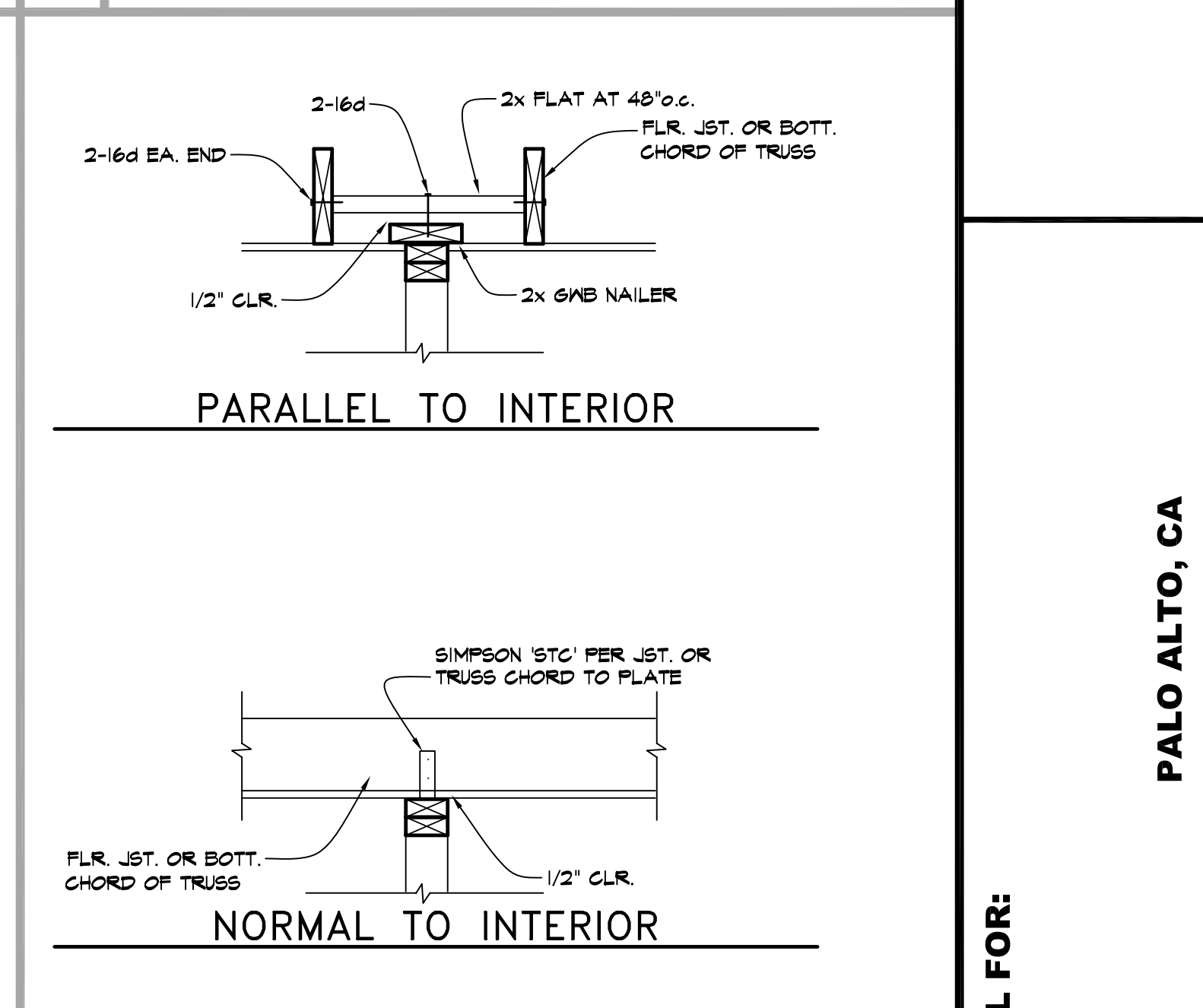
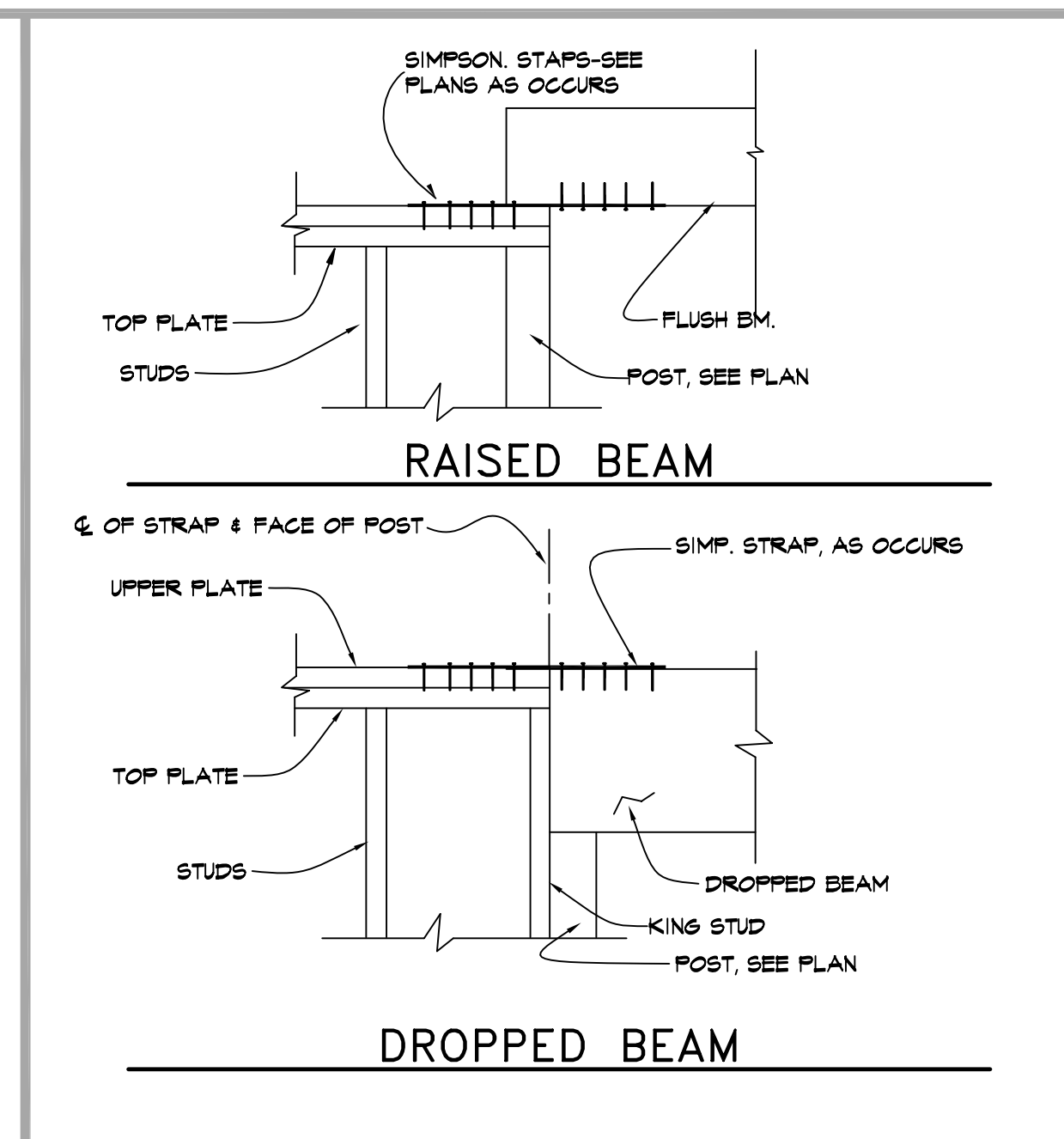
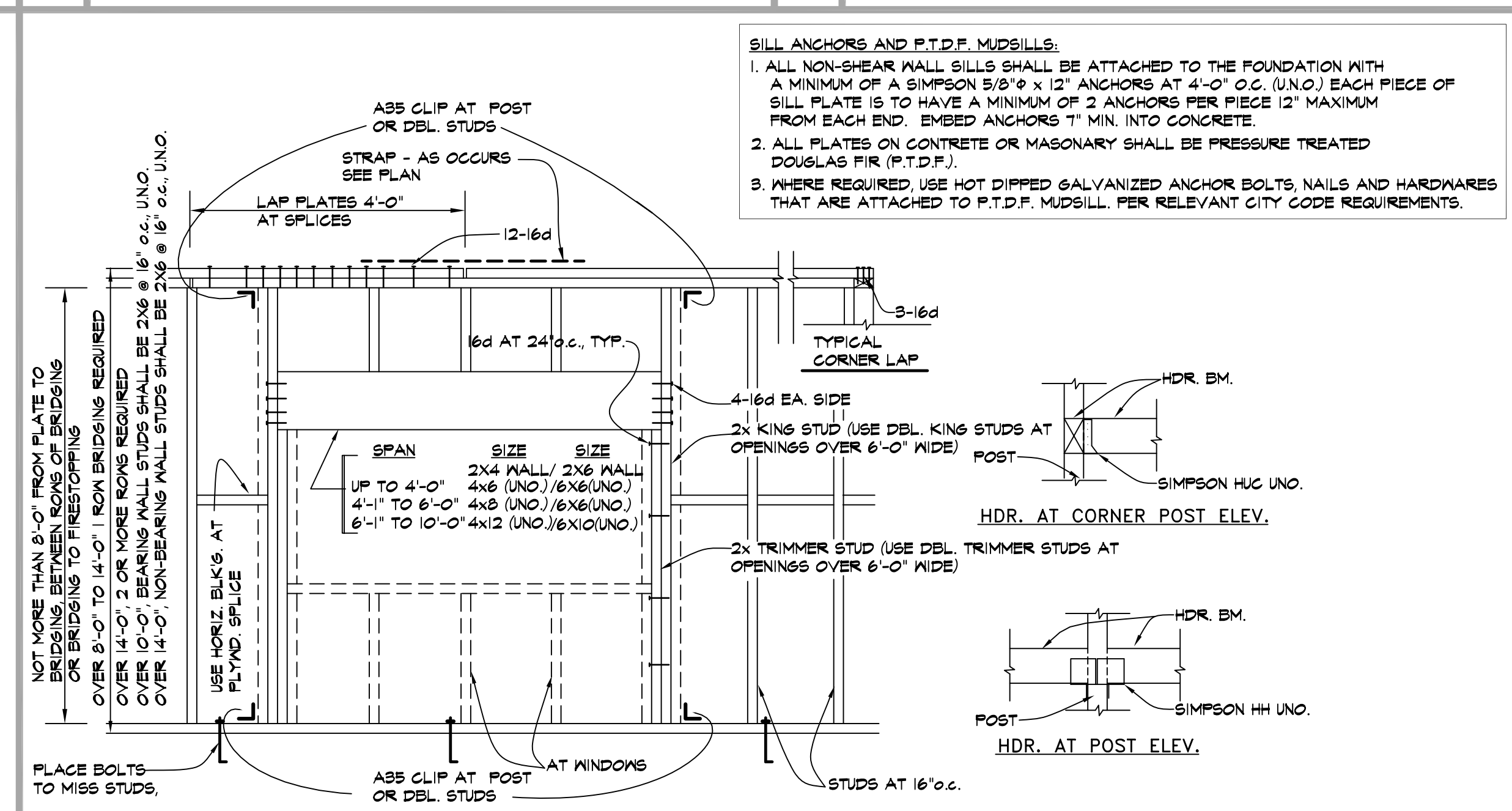
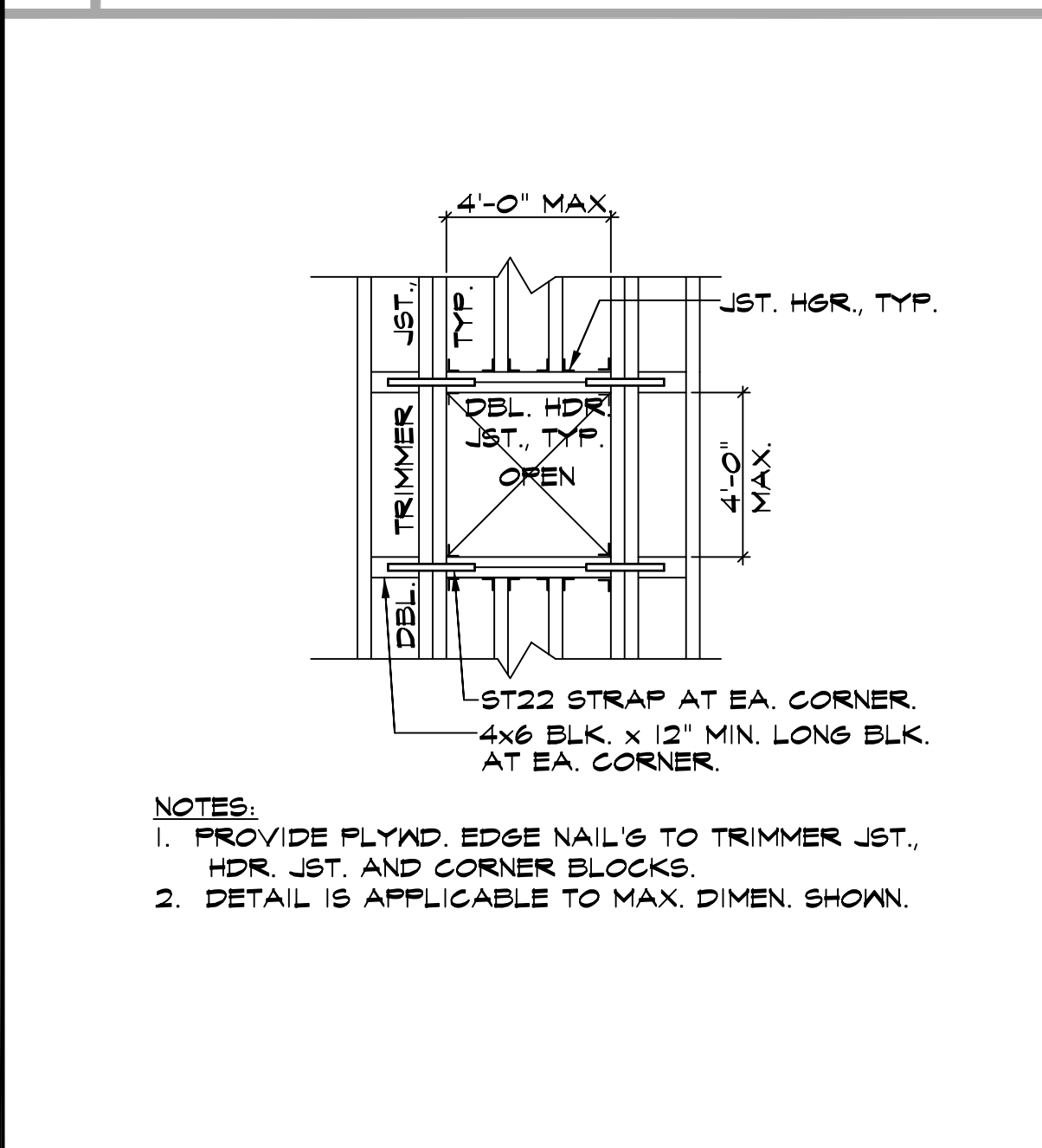
Ali Fatapour, M.S., P.E.
 Structural & Civil Engineering Consultant
 1088 Barnes Court
 San Jose, CA 95120
 Tel: (408)268-5937
 Fax: (408)268-0288

1 JOIST AND STUD CUTOUT DET.

2 TYPICAL STUD LOCATIONS (U.N.O.)

3 PLYWOOD SHEATHING DETAIL

5

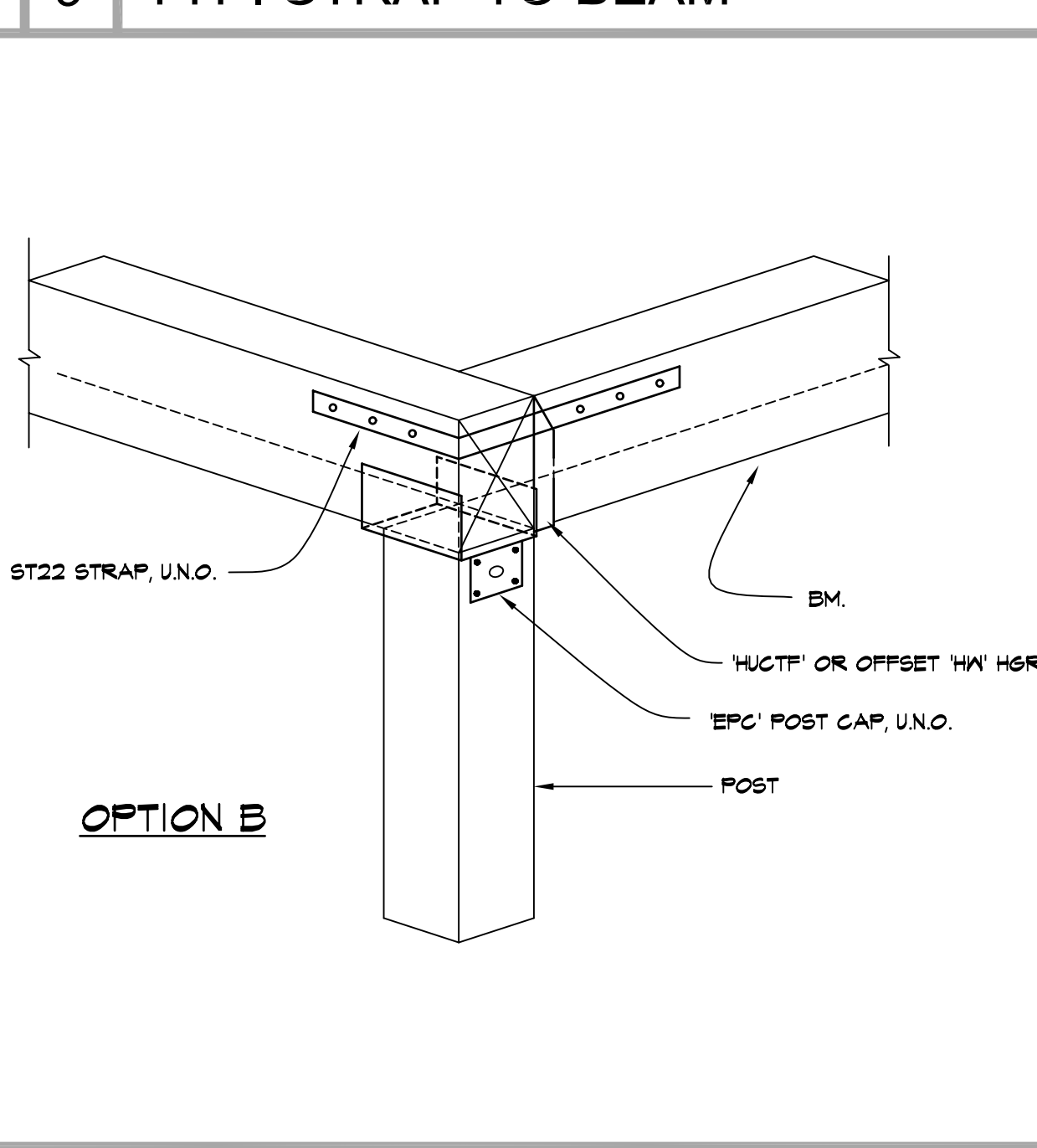
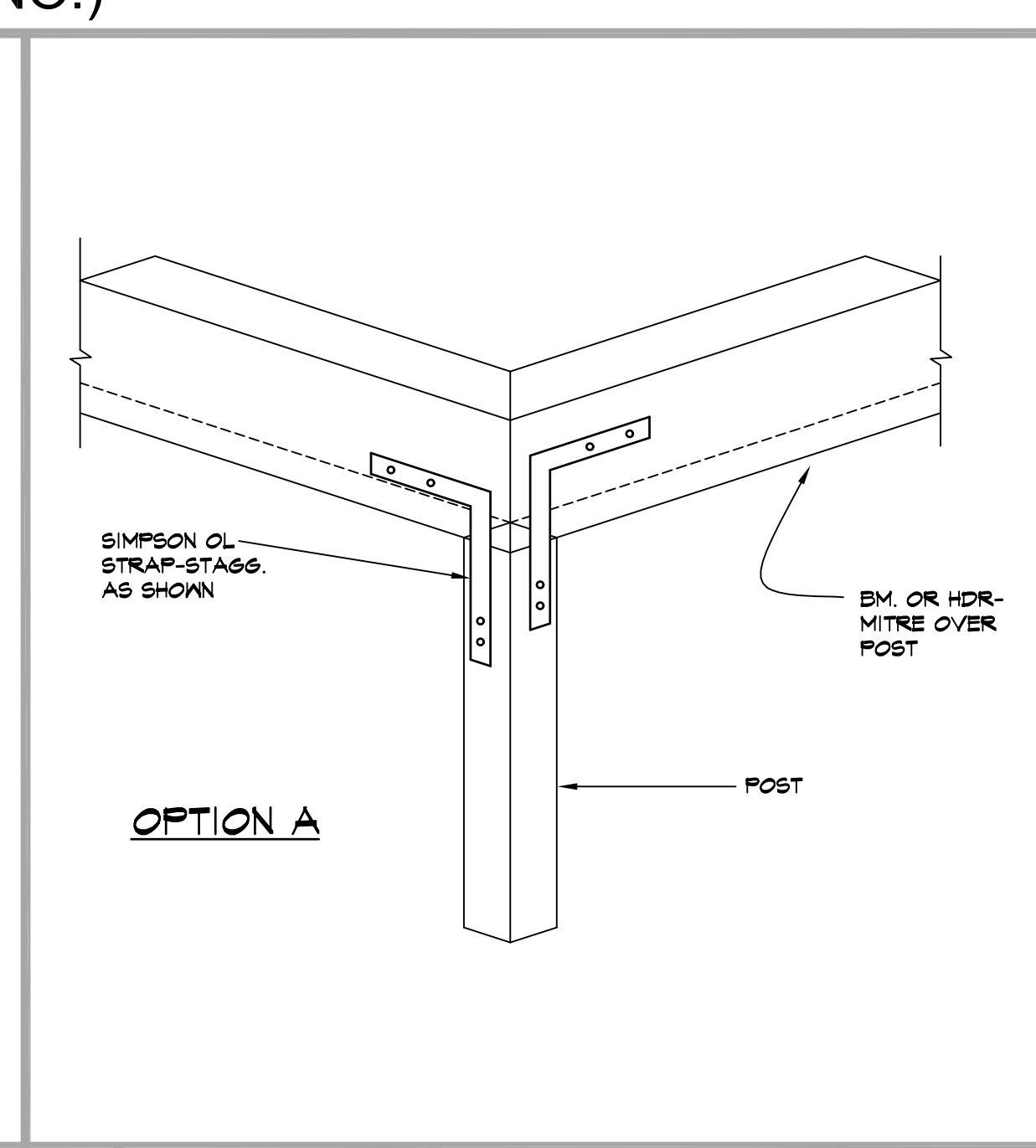
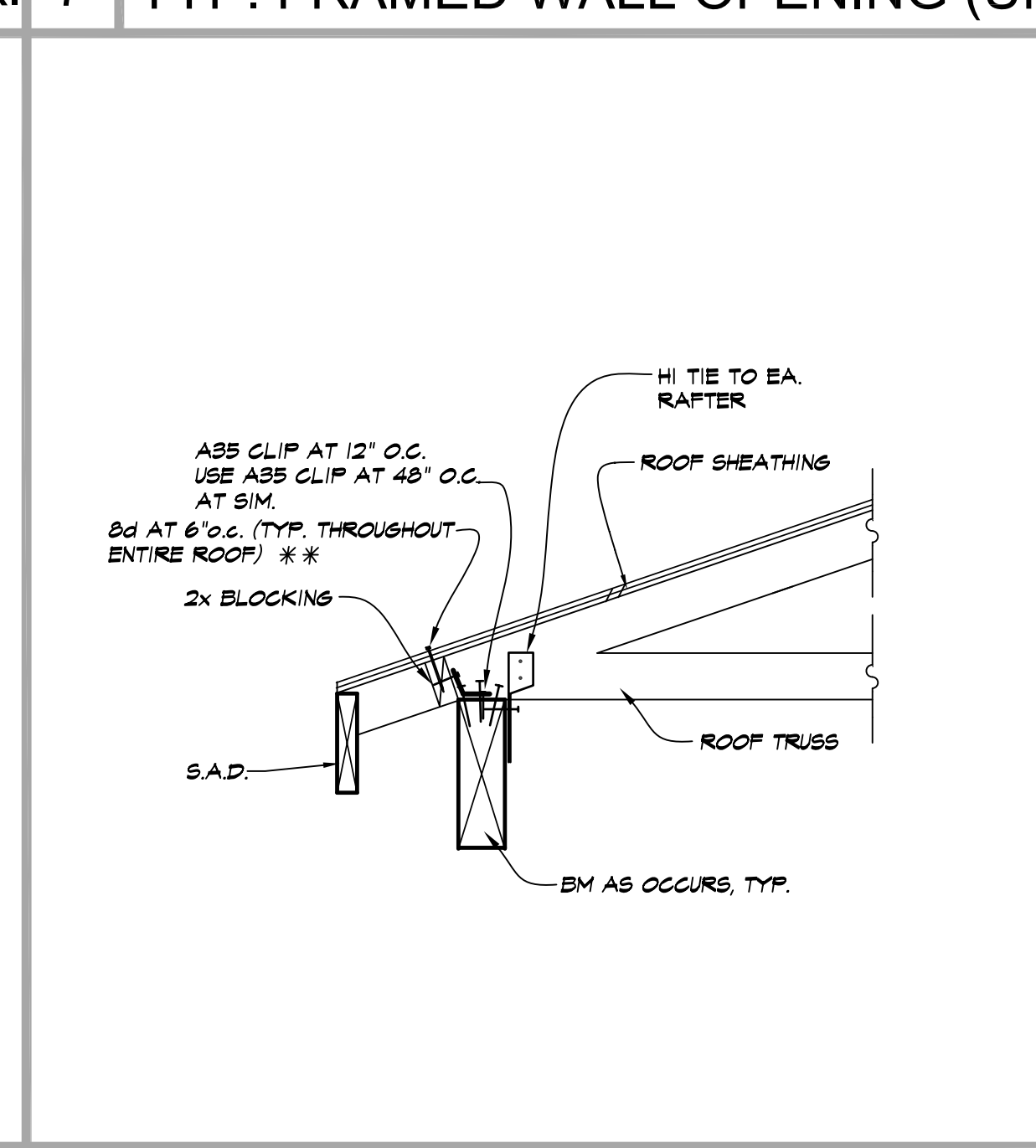
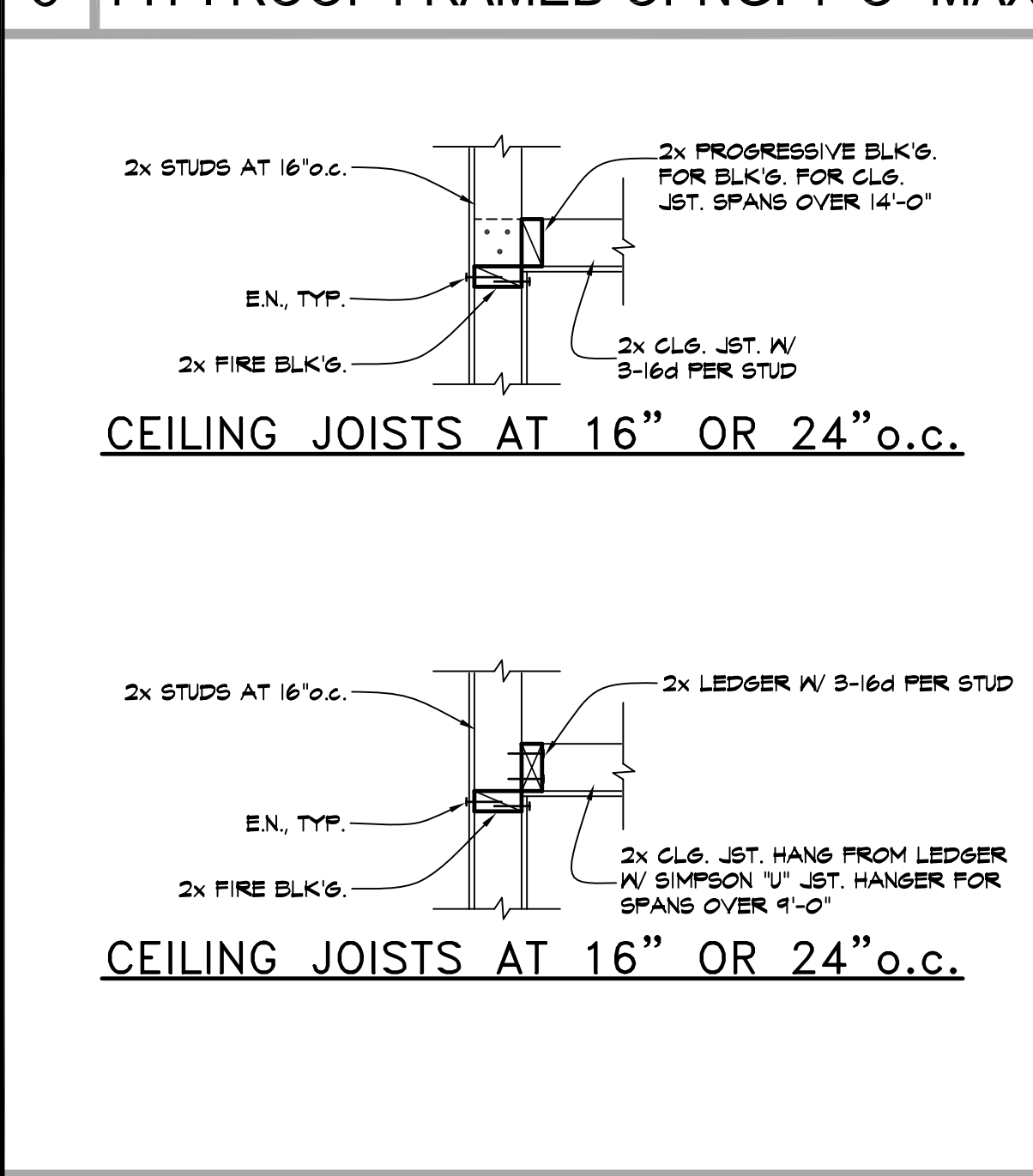


6 TYP. ROOF FRAMED OPNG. 4'-0" MAX.

7 TYP. FRAMED WALL OPENING (U.N.O.)

9 TYP. STRAP TO BEAM

10 NON-BRG. WALL DET.



11 CEILING JOIST TO BALLOON FRAME WALL

12 TYP. PERPENDICULAR FRMG.

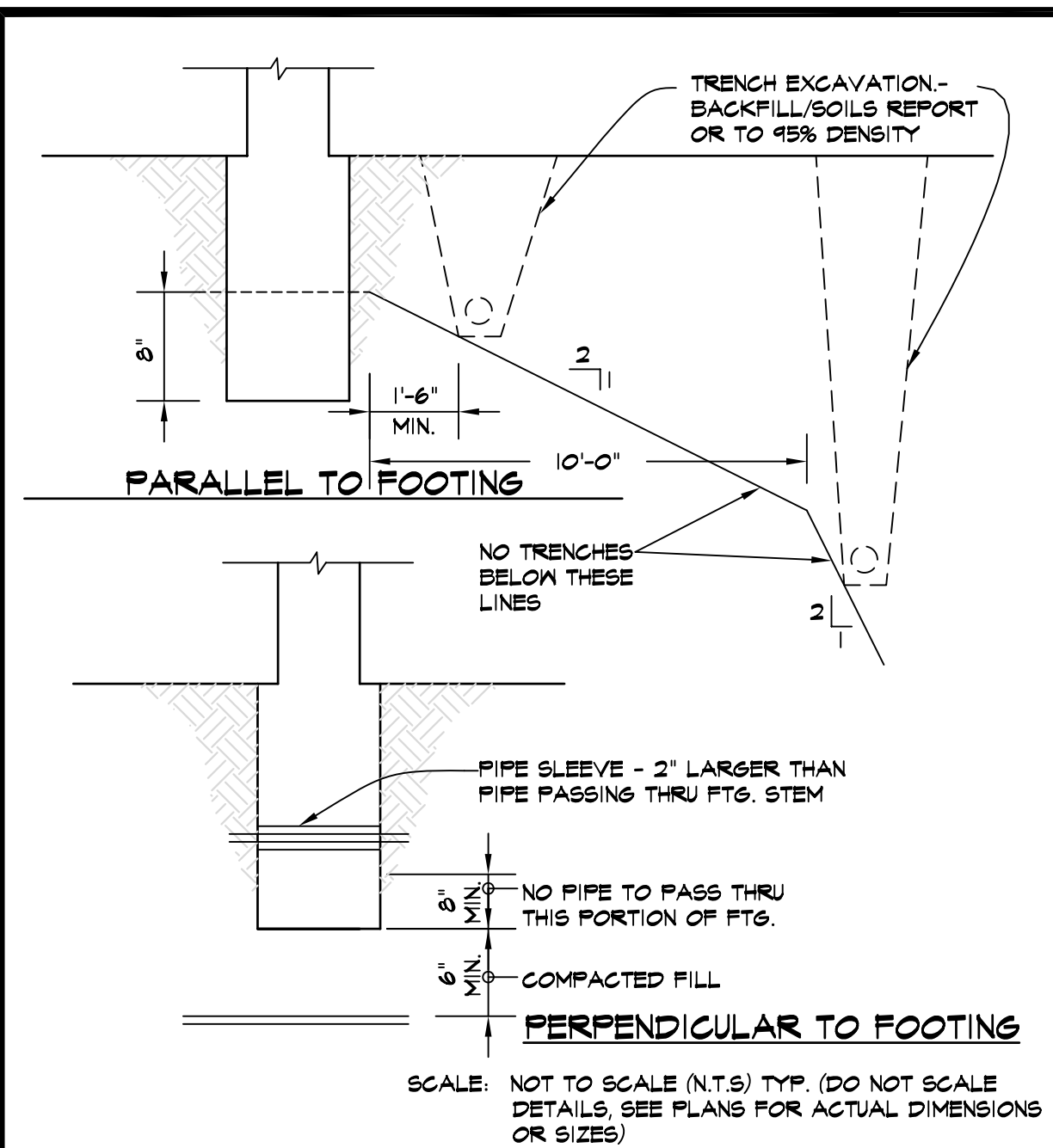
13 POST/BM DETAIL

15 TYP. BM. CONN.

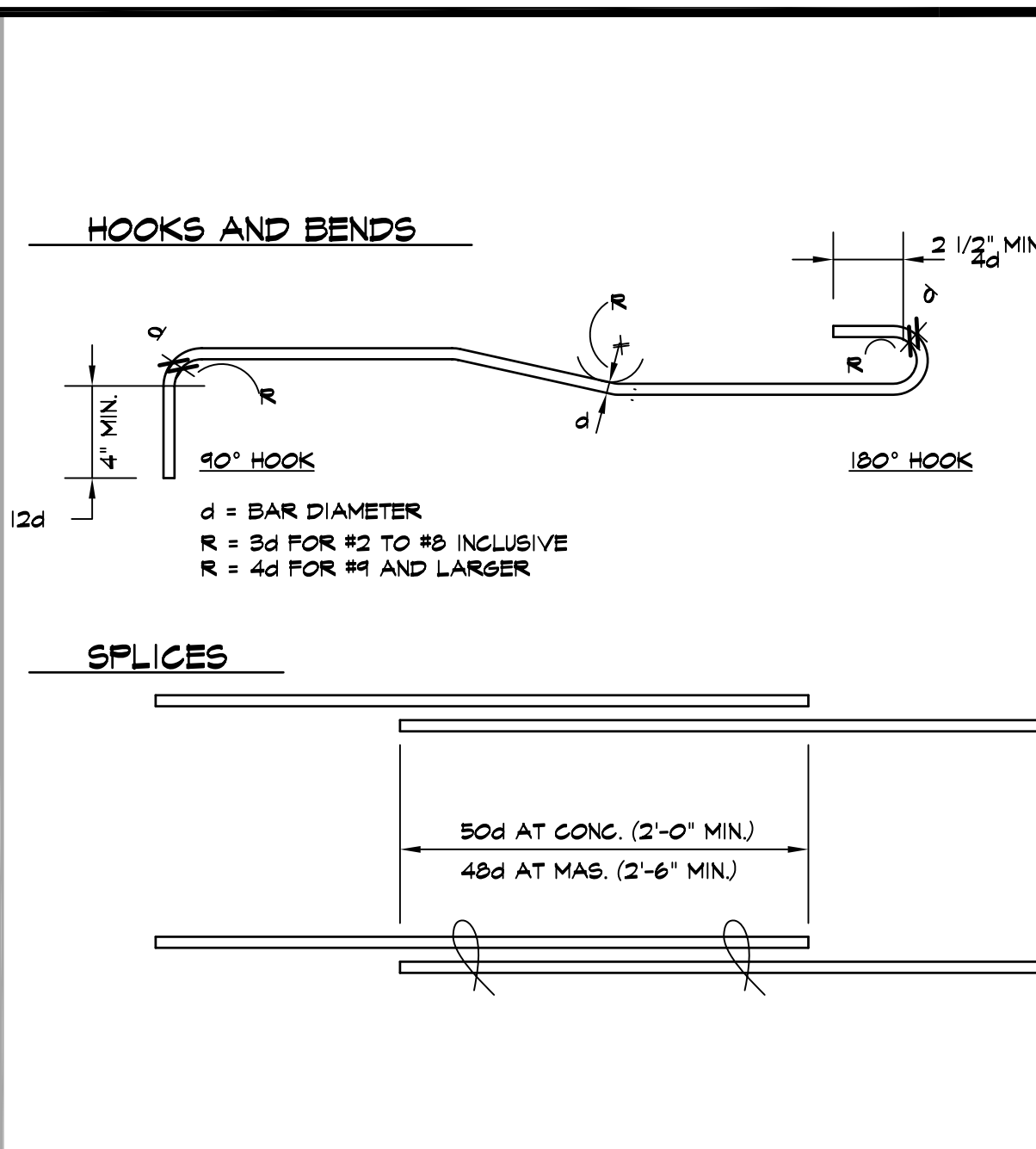
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A PROPOSED ADDITION / REMODEL FOR:
LUNDY RESIDENCE
 592 LOMA VERDE AVE.

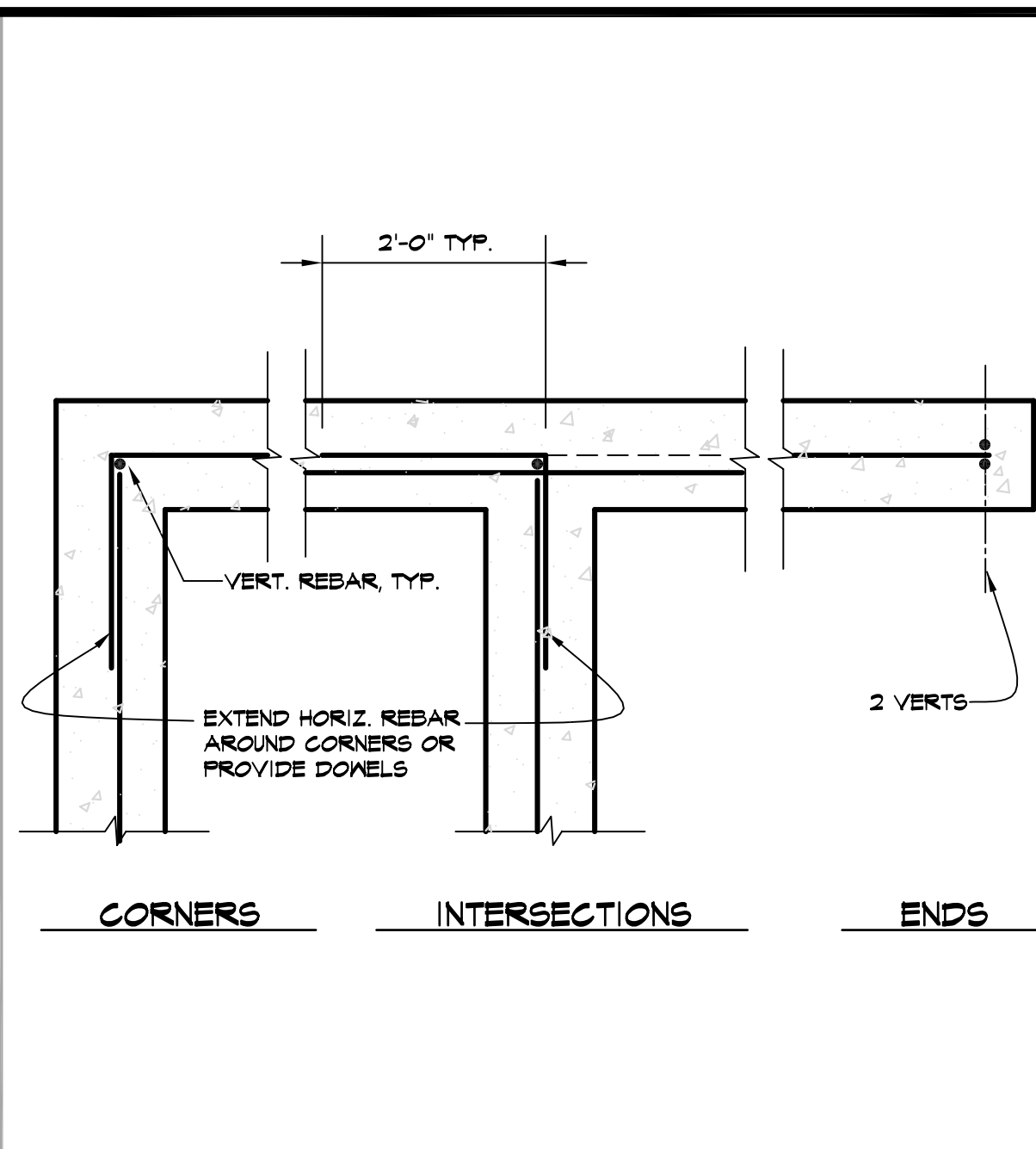
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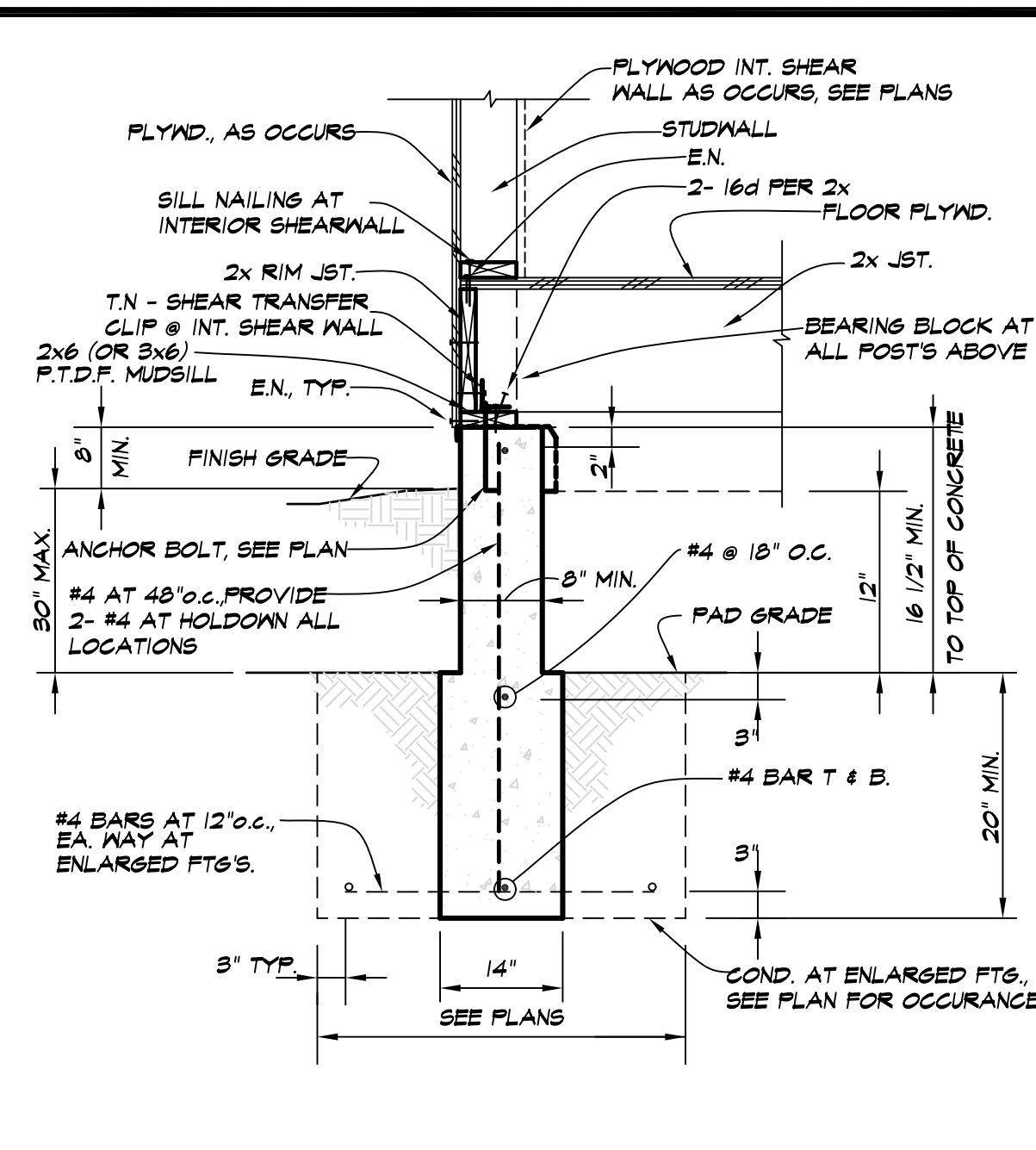
1 TRENCH DETAIL



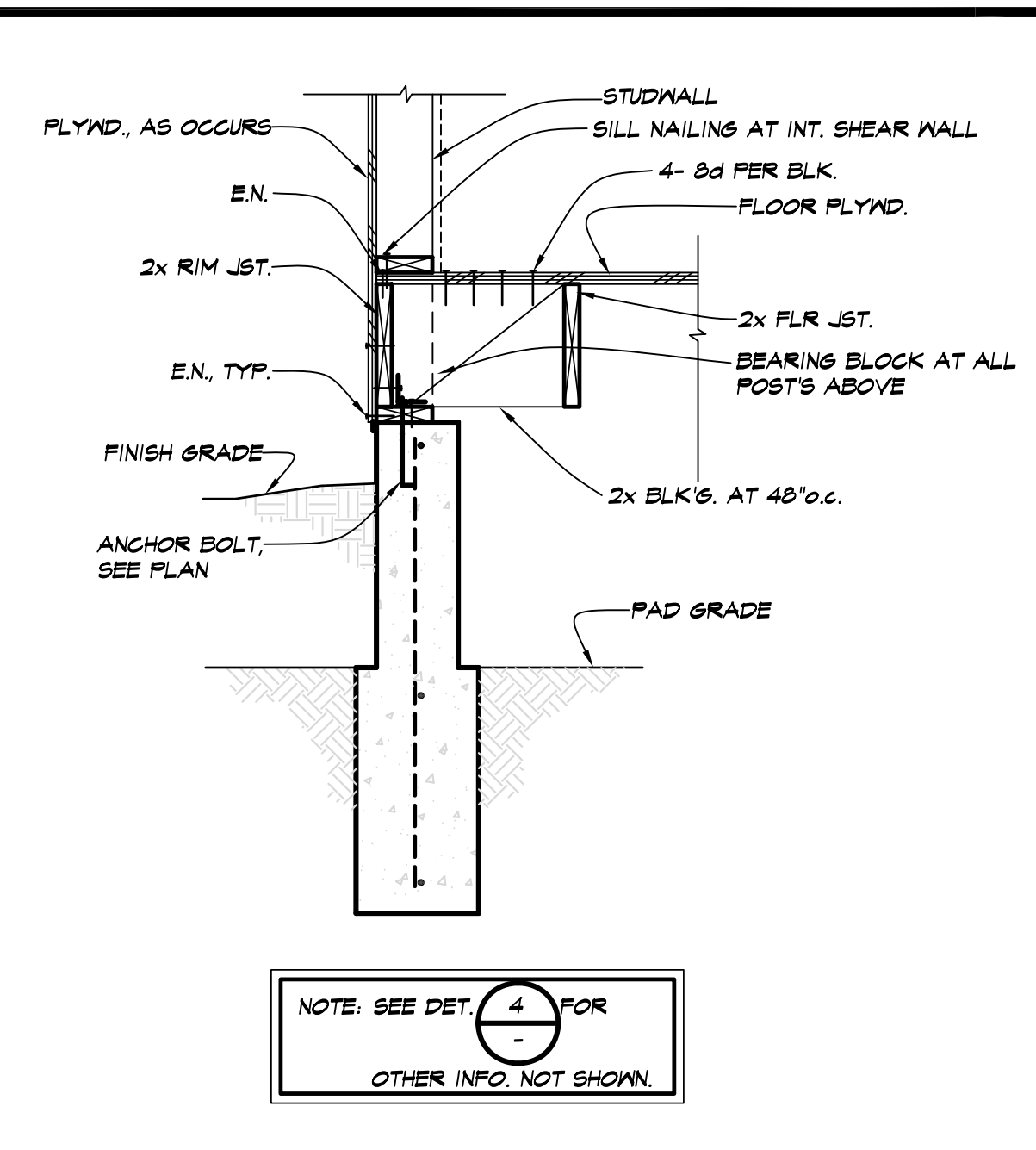
2 TYP. REINF. BAR DET.



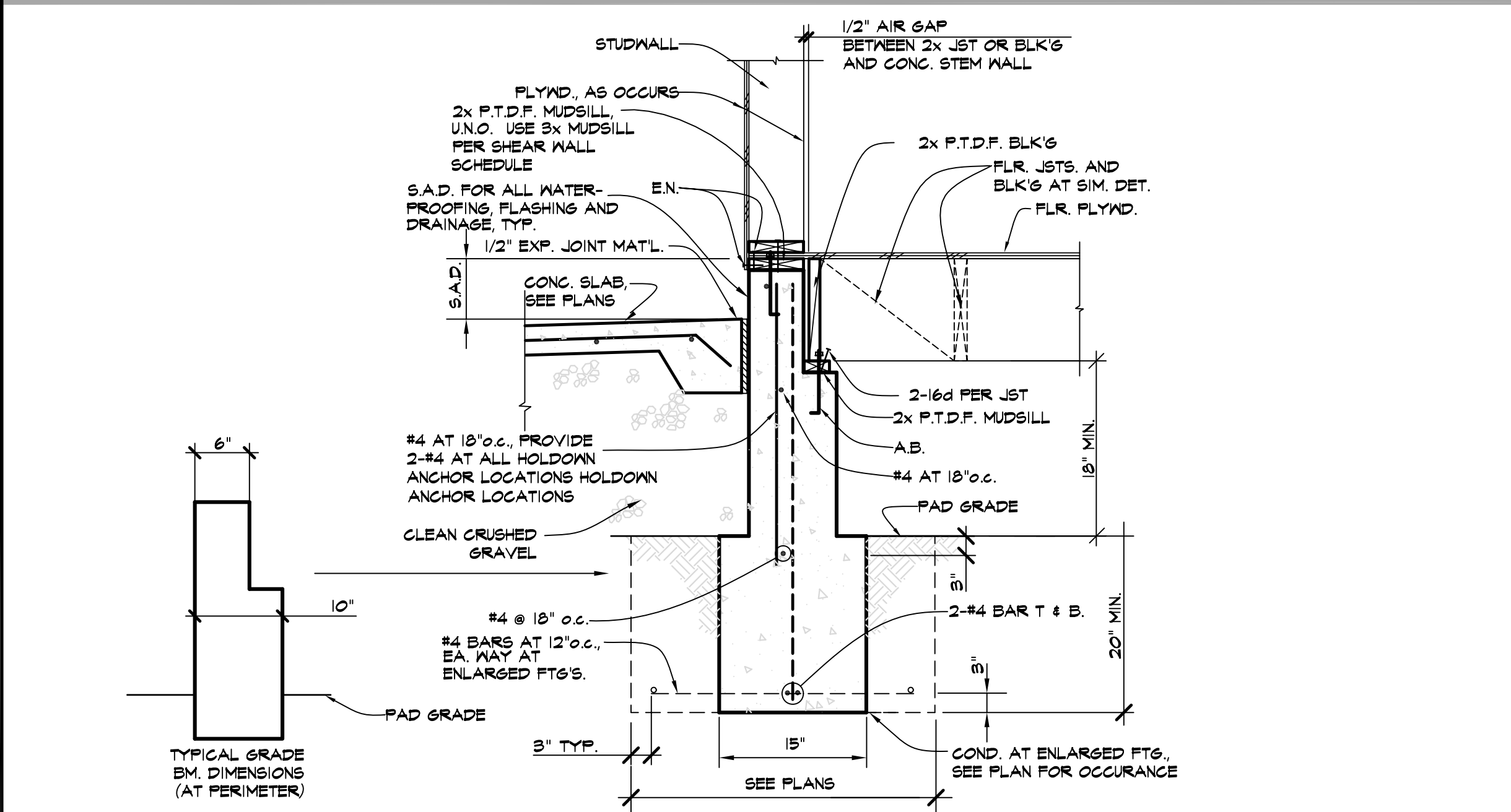
3 TYP. REINF. AT FTG. AND WALL CORNERS AND INTERSECTIONS



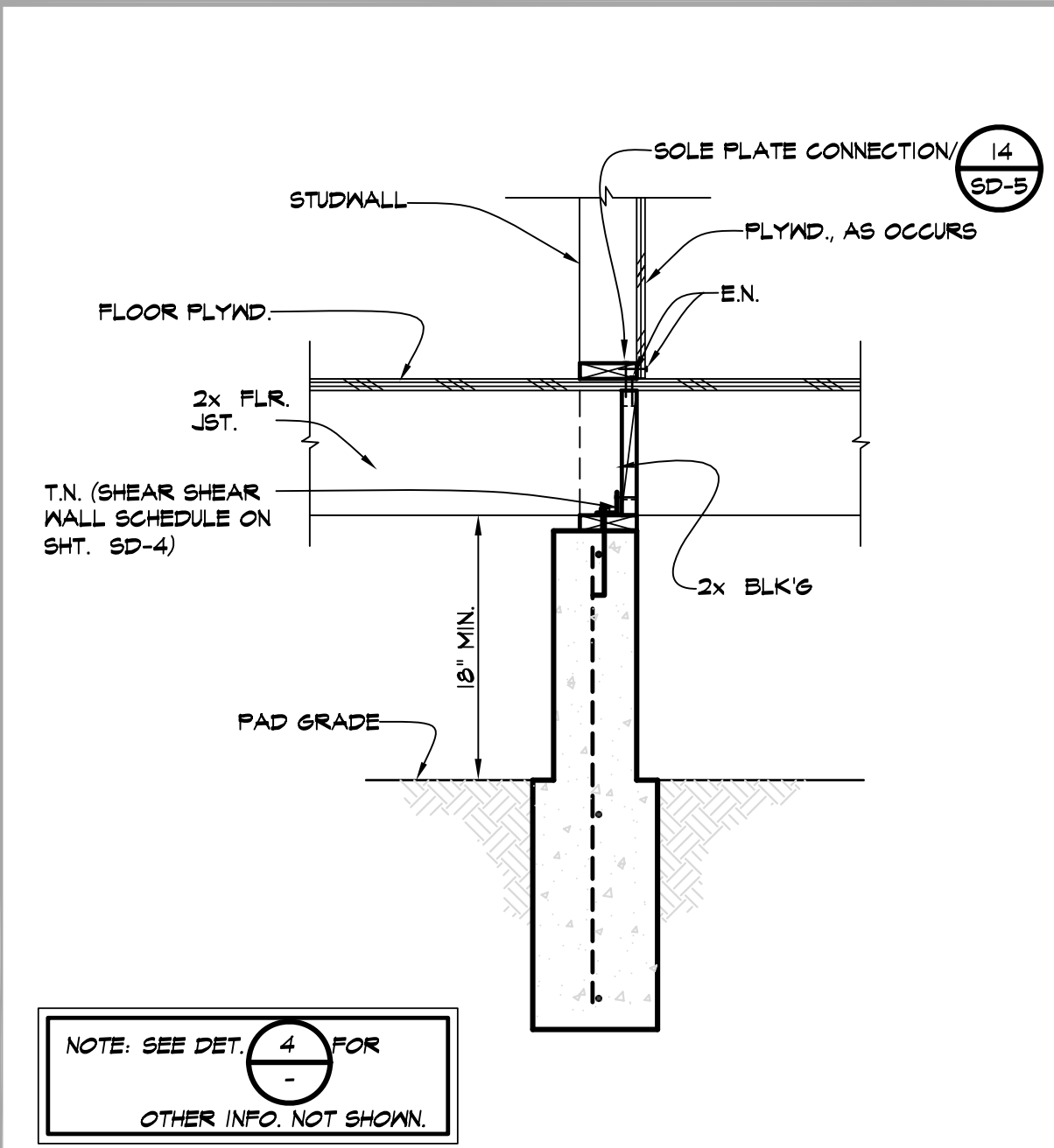
4 TYP. FOOTING DET.



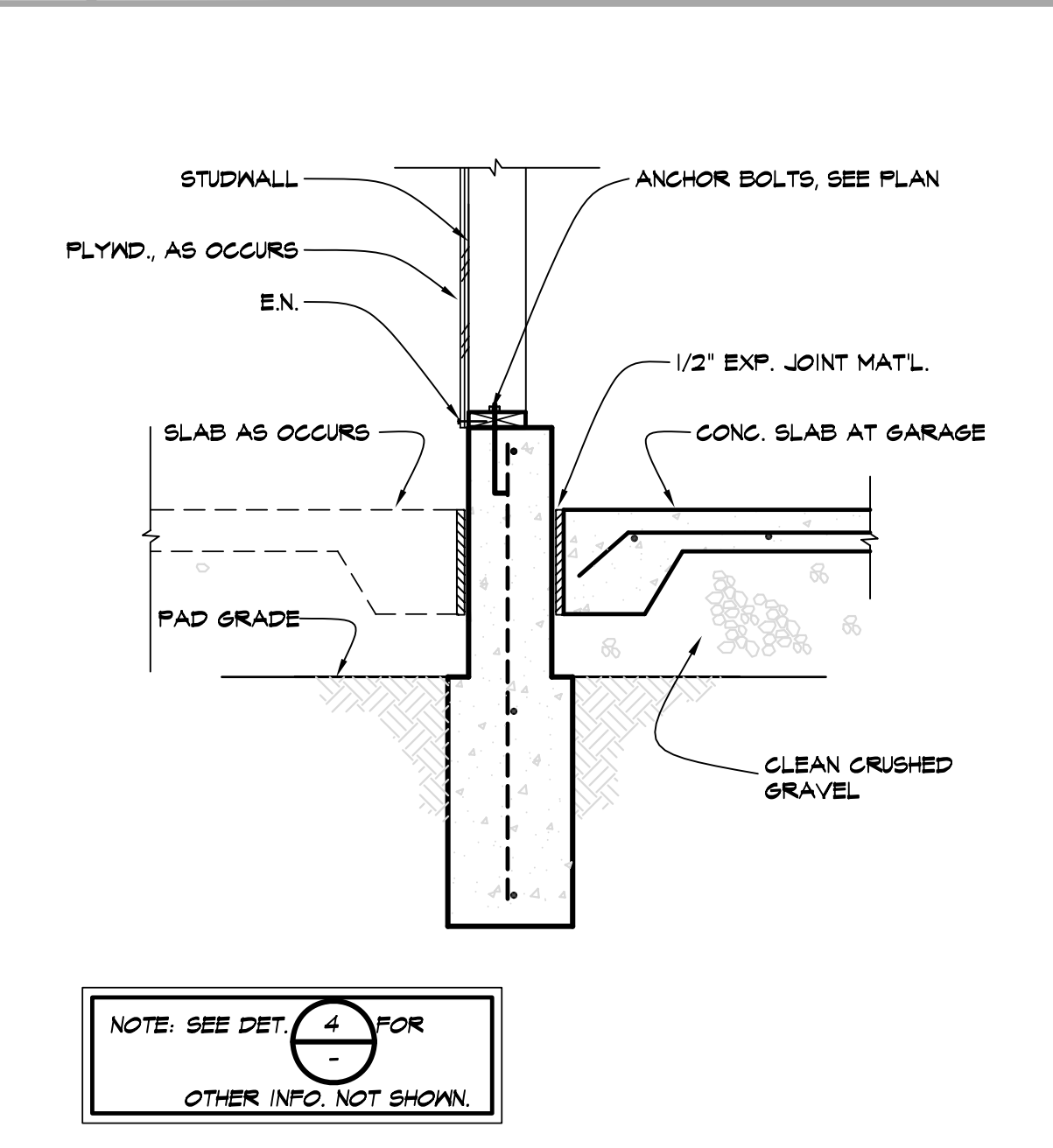
5 TYP. FOOTING DET.



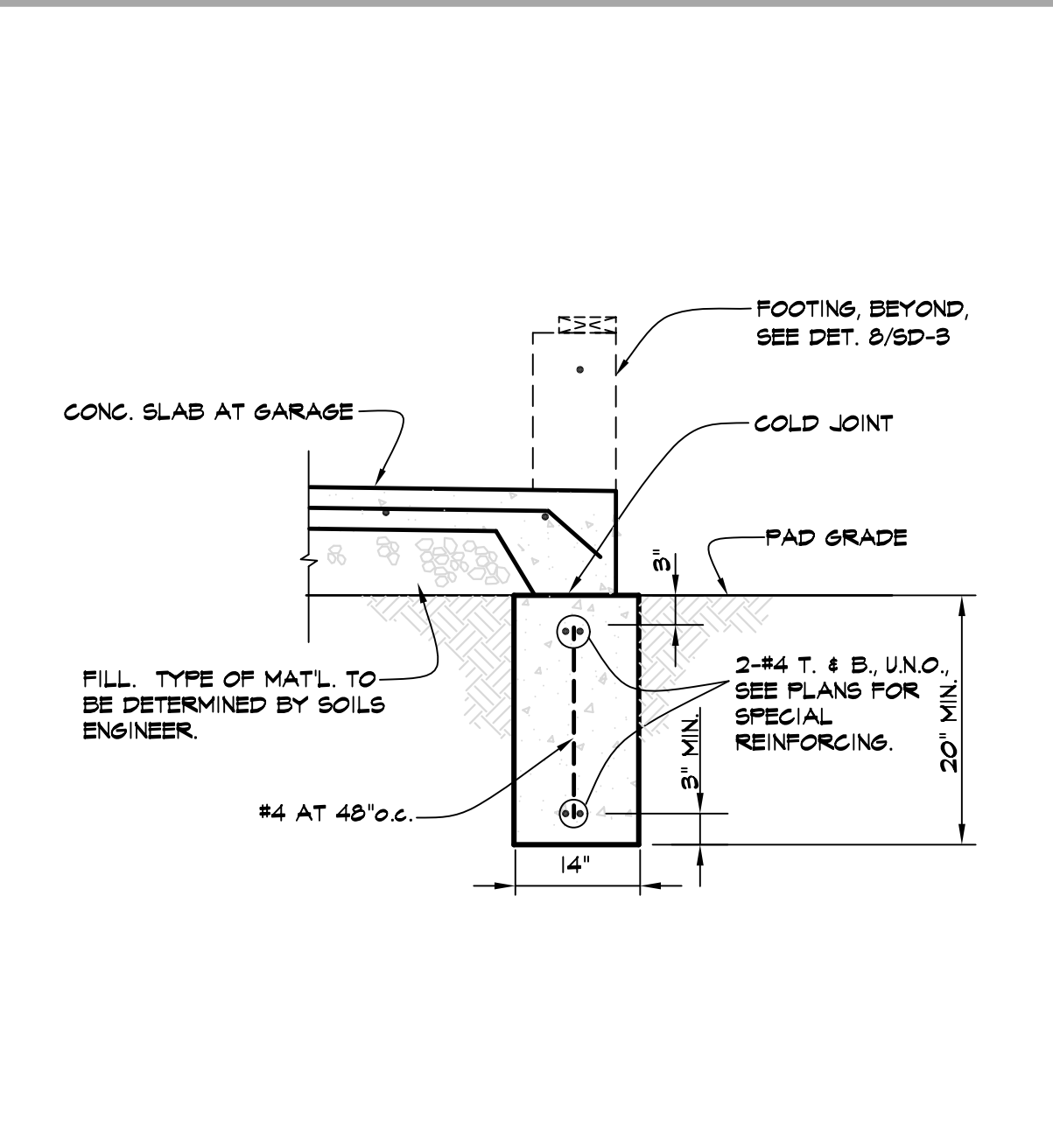
6 HIGH STEMWALL DETAIL



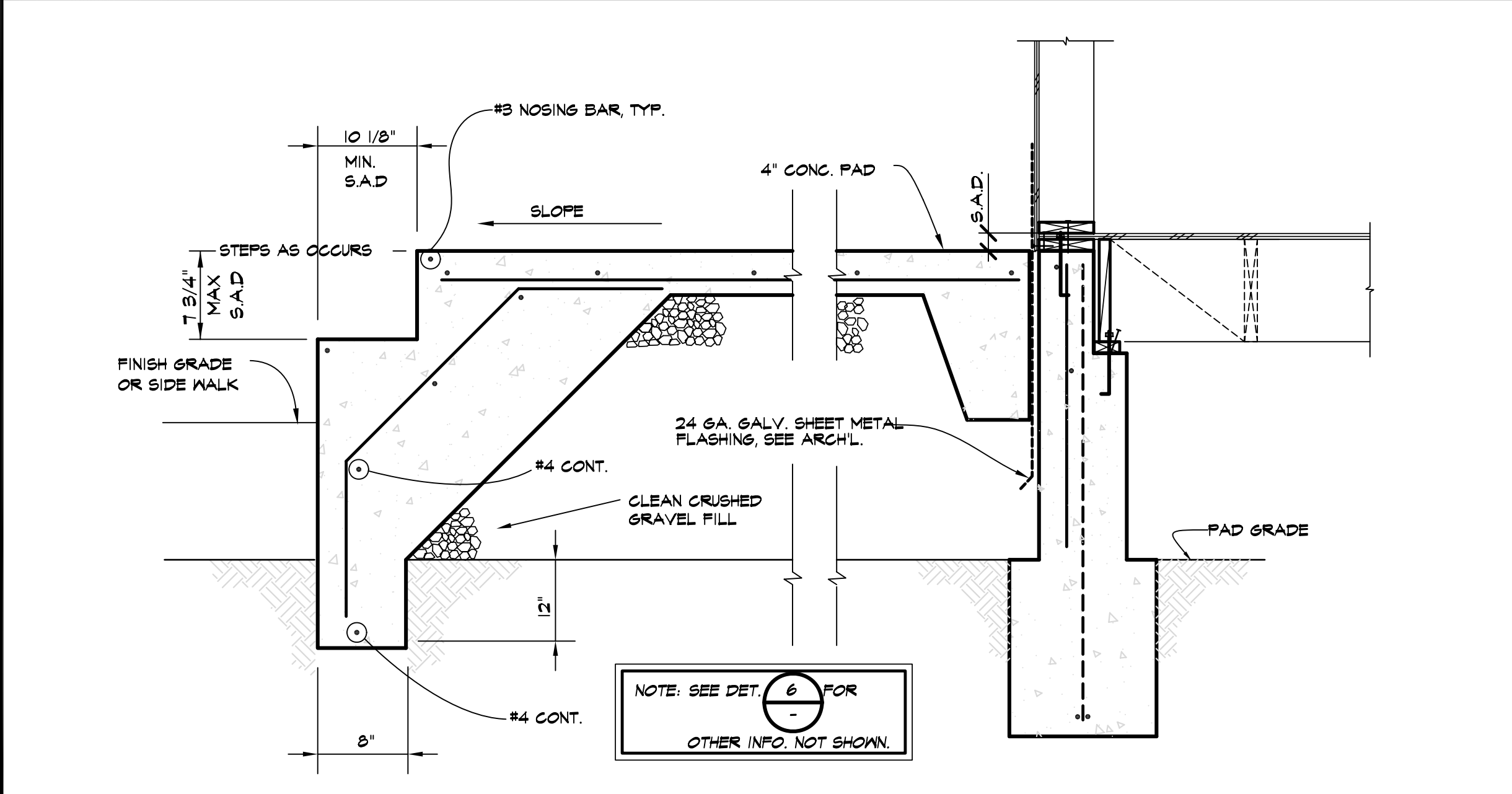
8 TYP. INT. FOOTING DET.



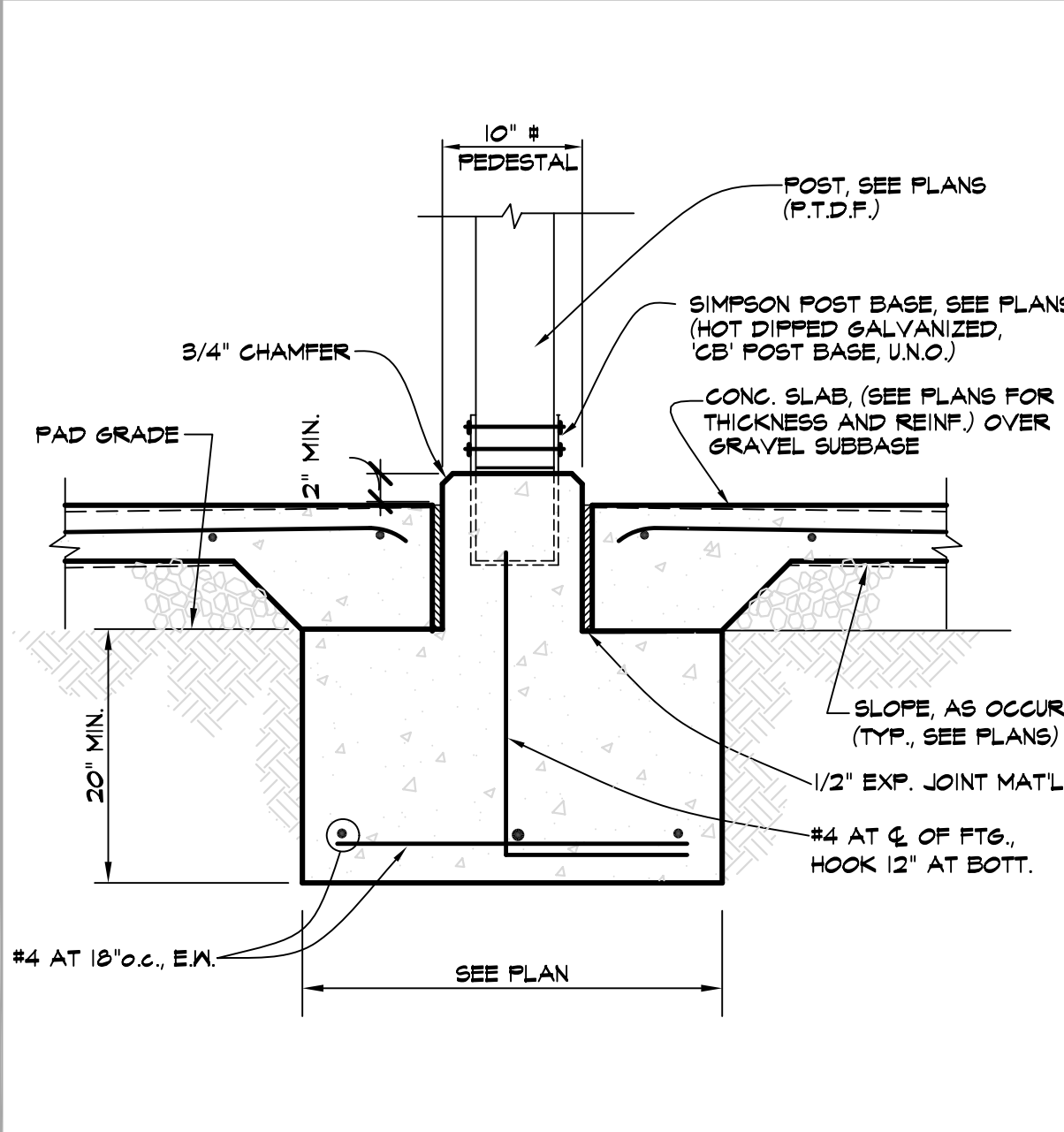
9 FOOTING AT GARAGE



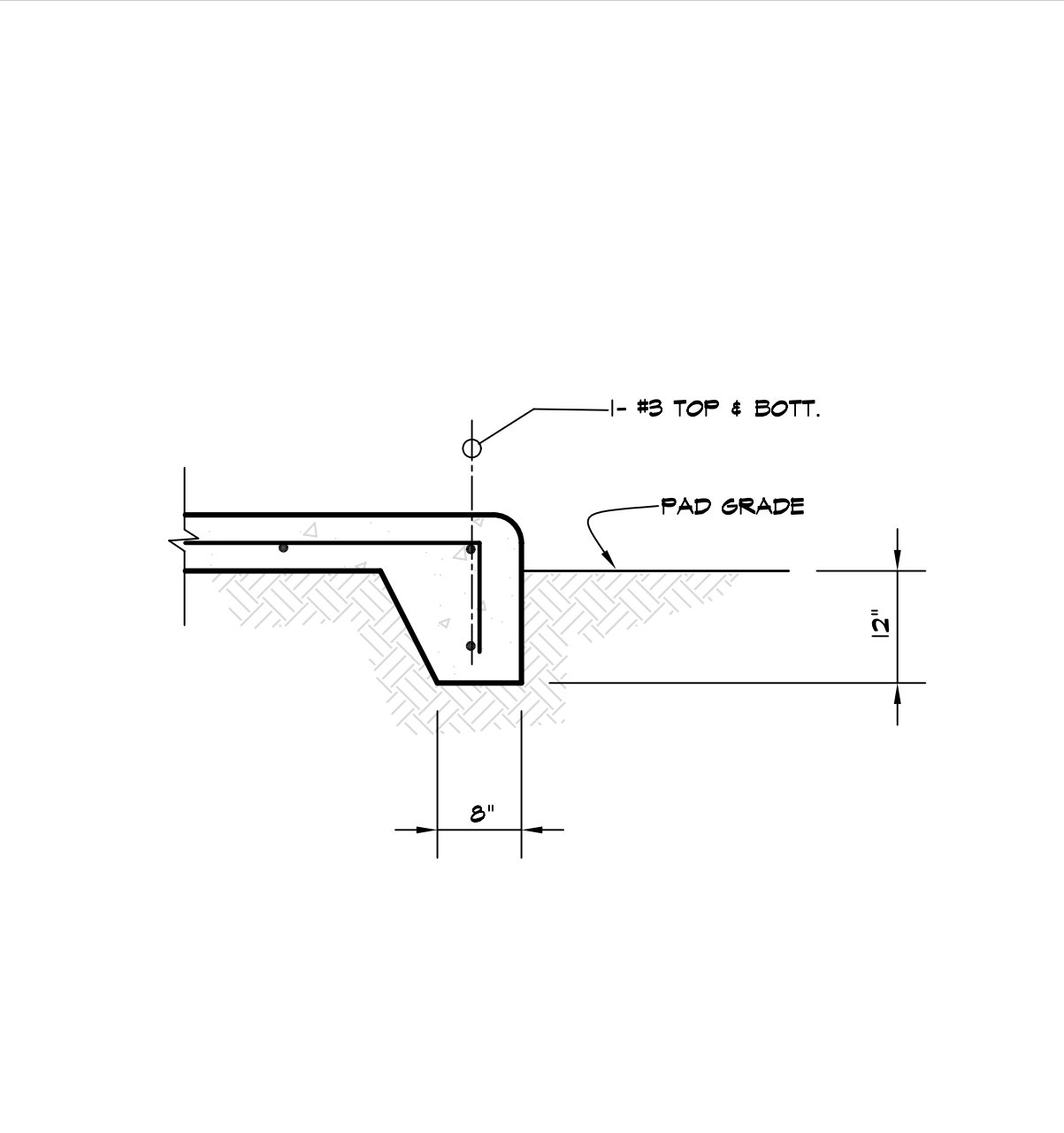
10 FTG. AT GARAGE DRIVE



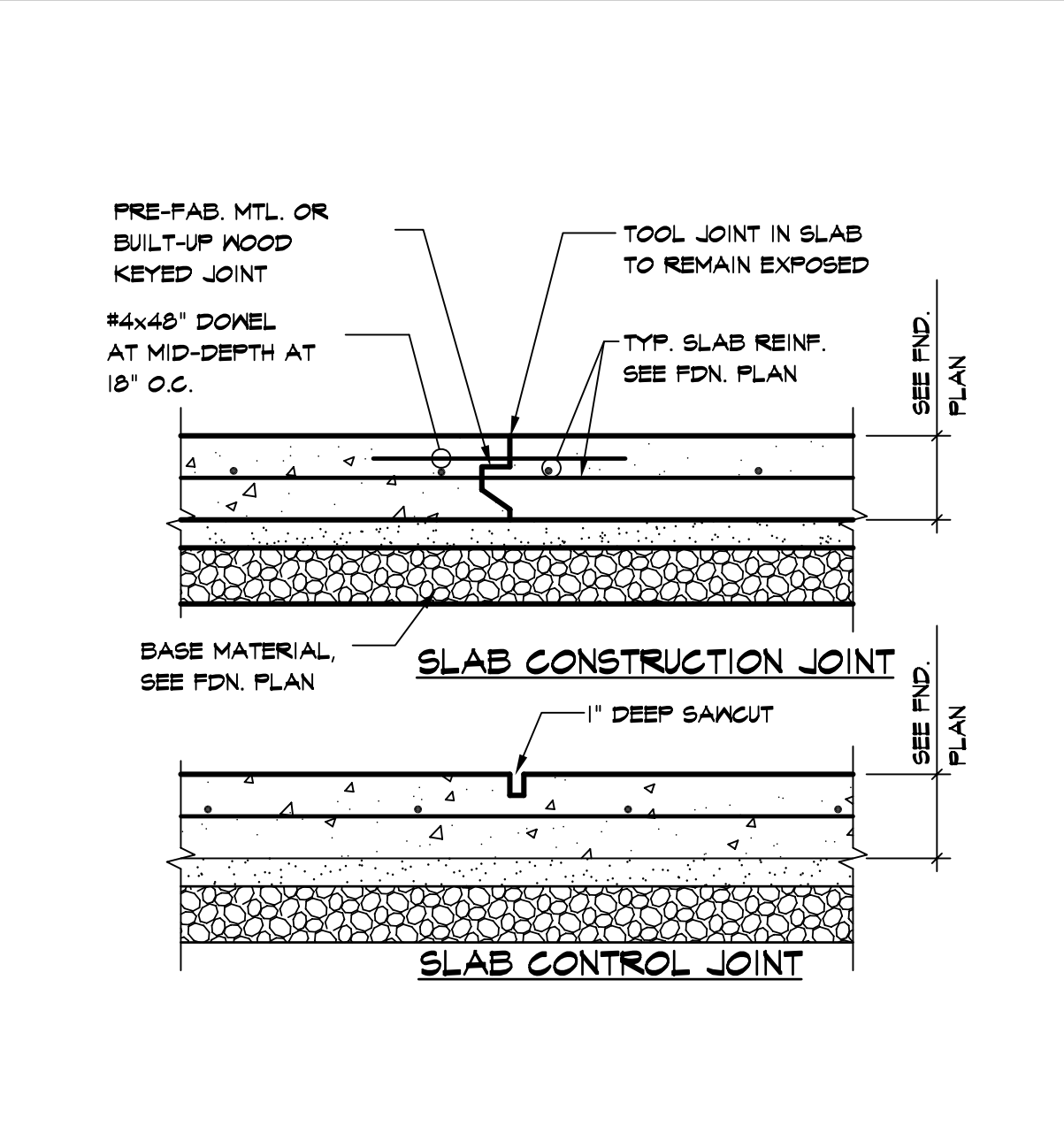
11 TYP. PORCH FOOTING DET.



13 PORCH COL. FTG. DET.

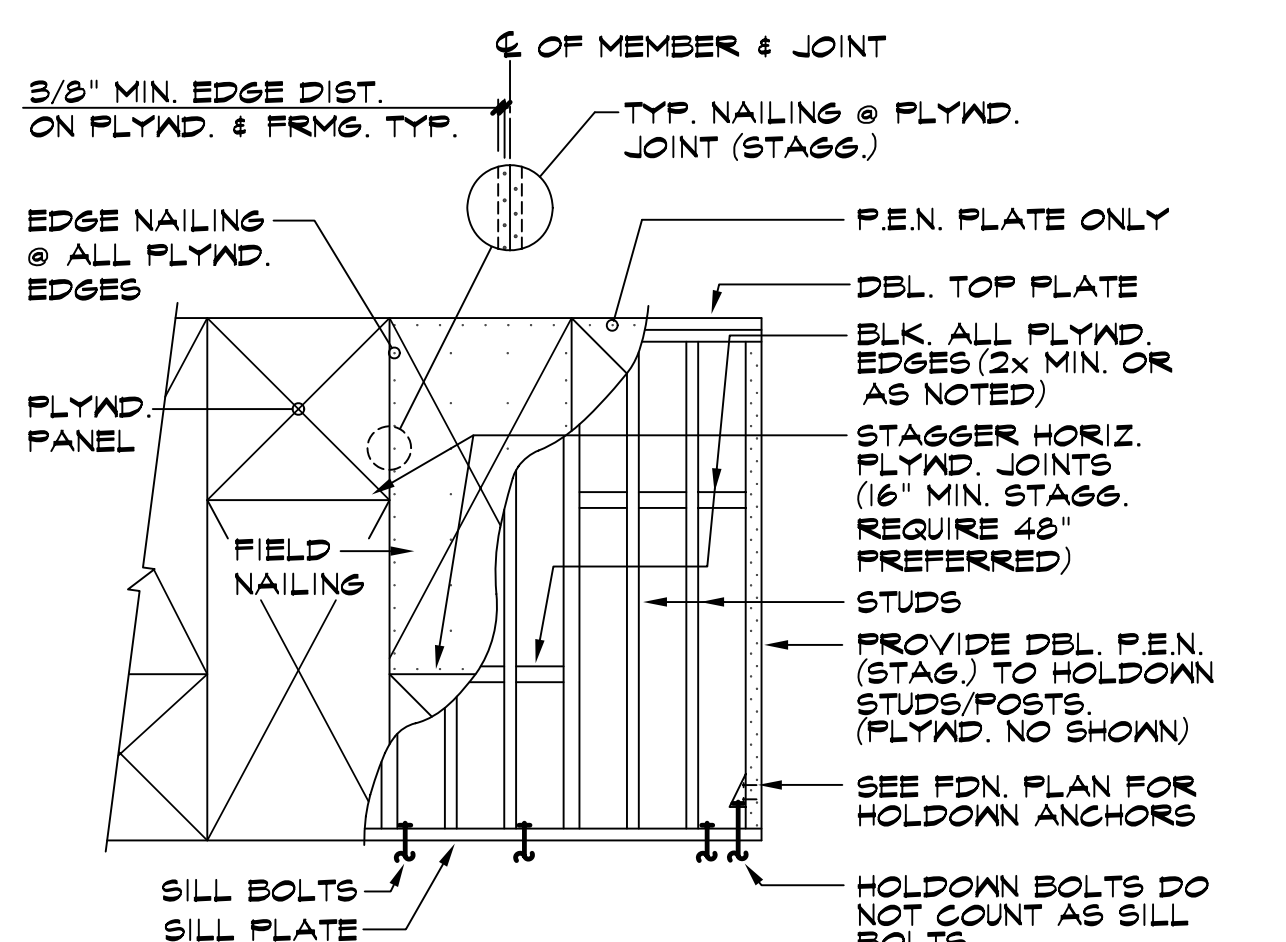
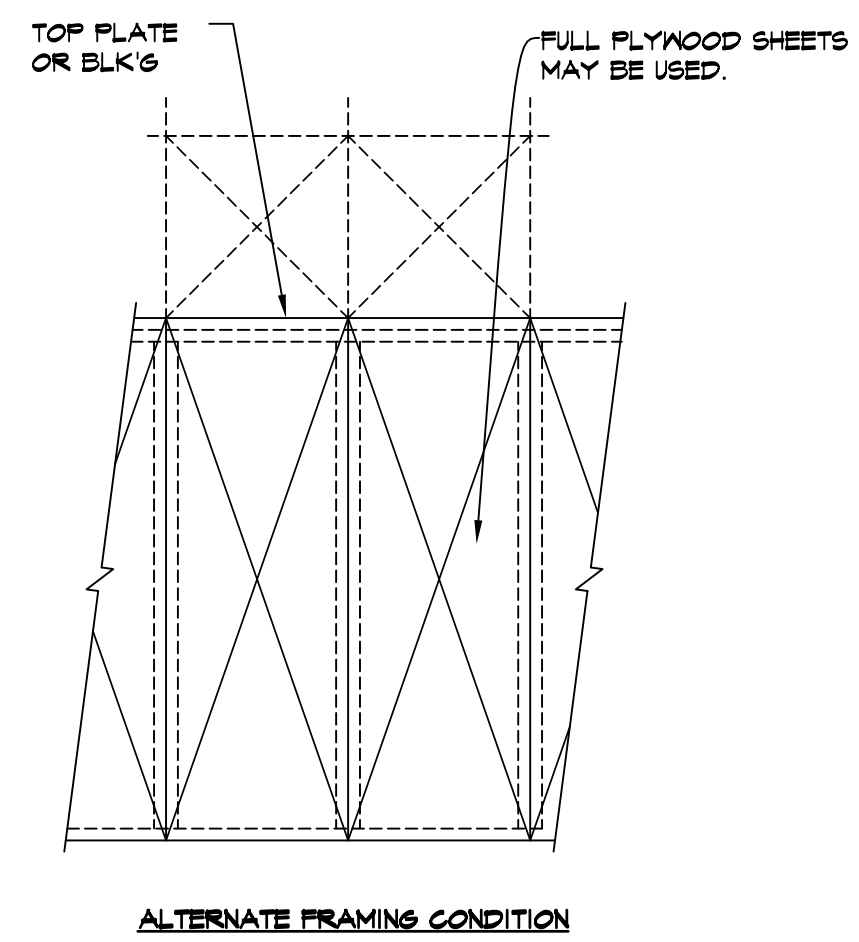


14 TURNDOWN EDGE

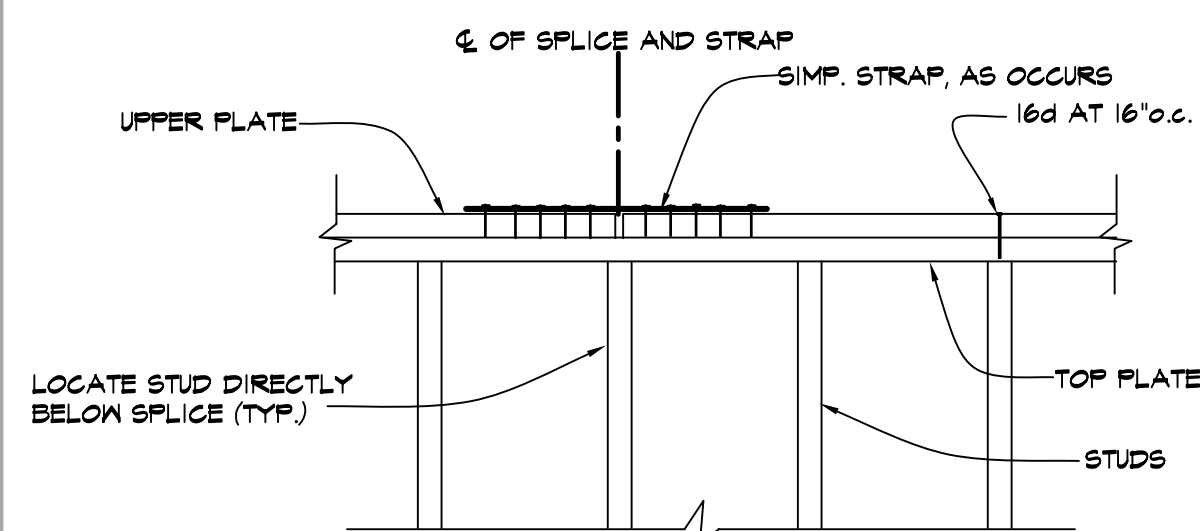


15 SLAB JOINTS

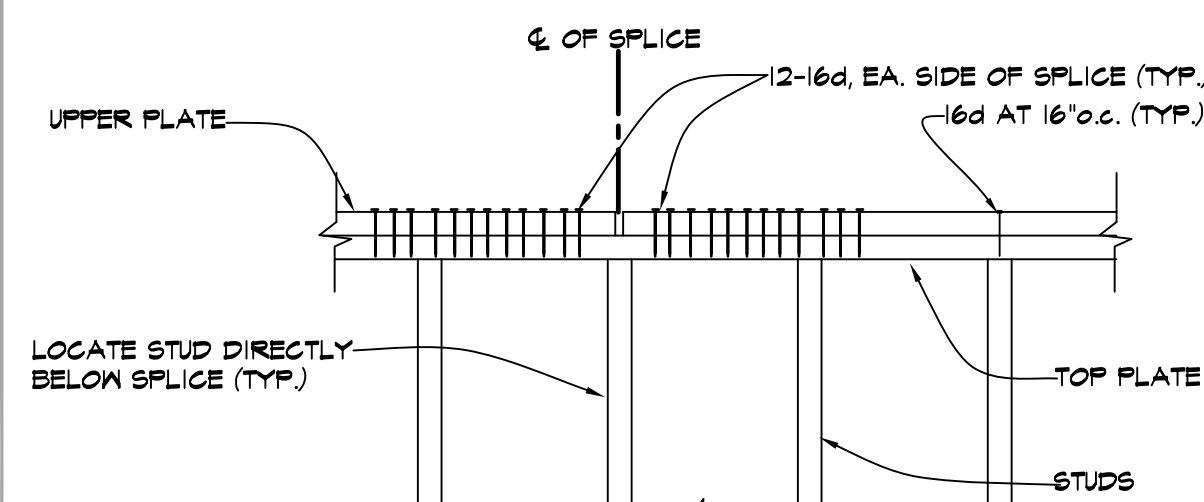
NO.	REVISIONS
<p>Ai Fatopour, M.S., P.E. Structural & Civil Engineering Consultant 1088 Barnes Court San Jose, CA 95120 tel (408)268-5937 fax (408)268-0288</p>	
<p>A PROPOSED ADDITION / REMODEL FOR: LUNDY RESIDENCE 592 LOMA VERDE AVE. PALO ALTO, CA</p>	
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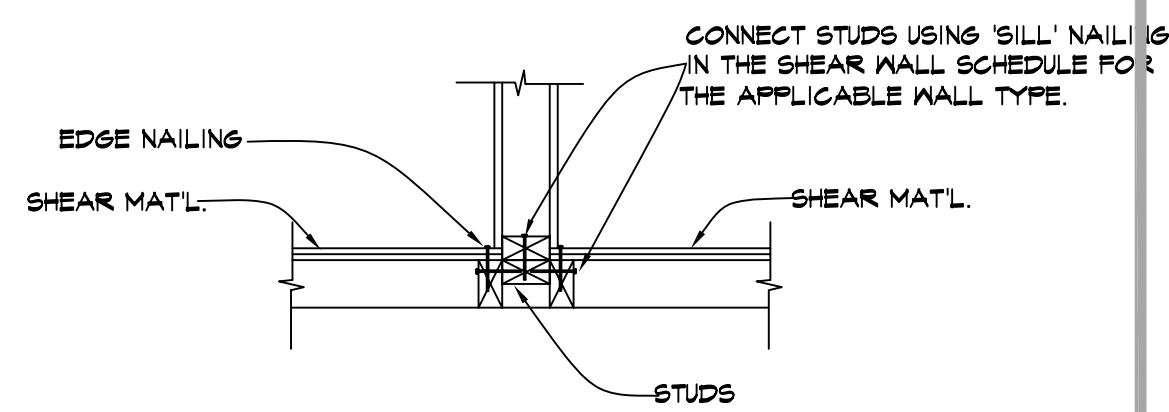
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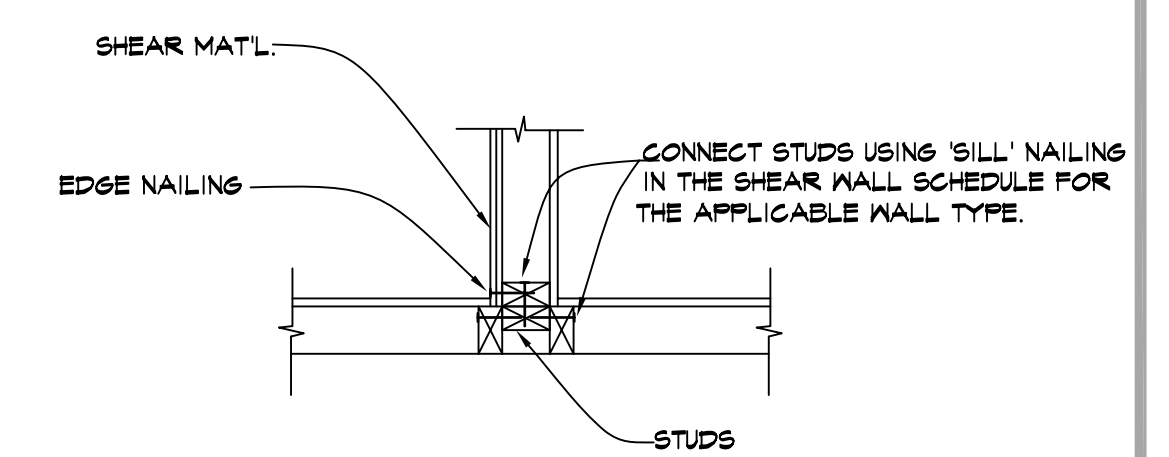
AT STRAP CONDITION



AT NAILING CONDITION



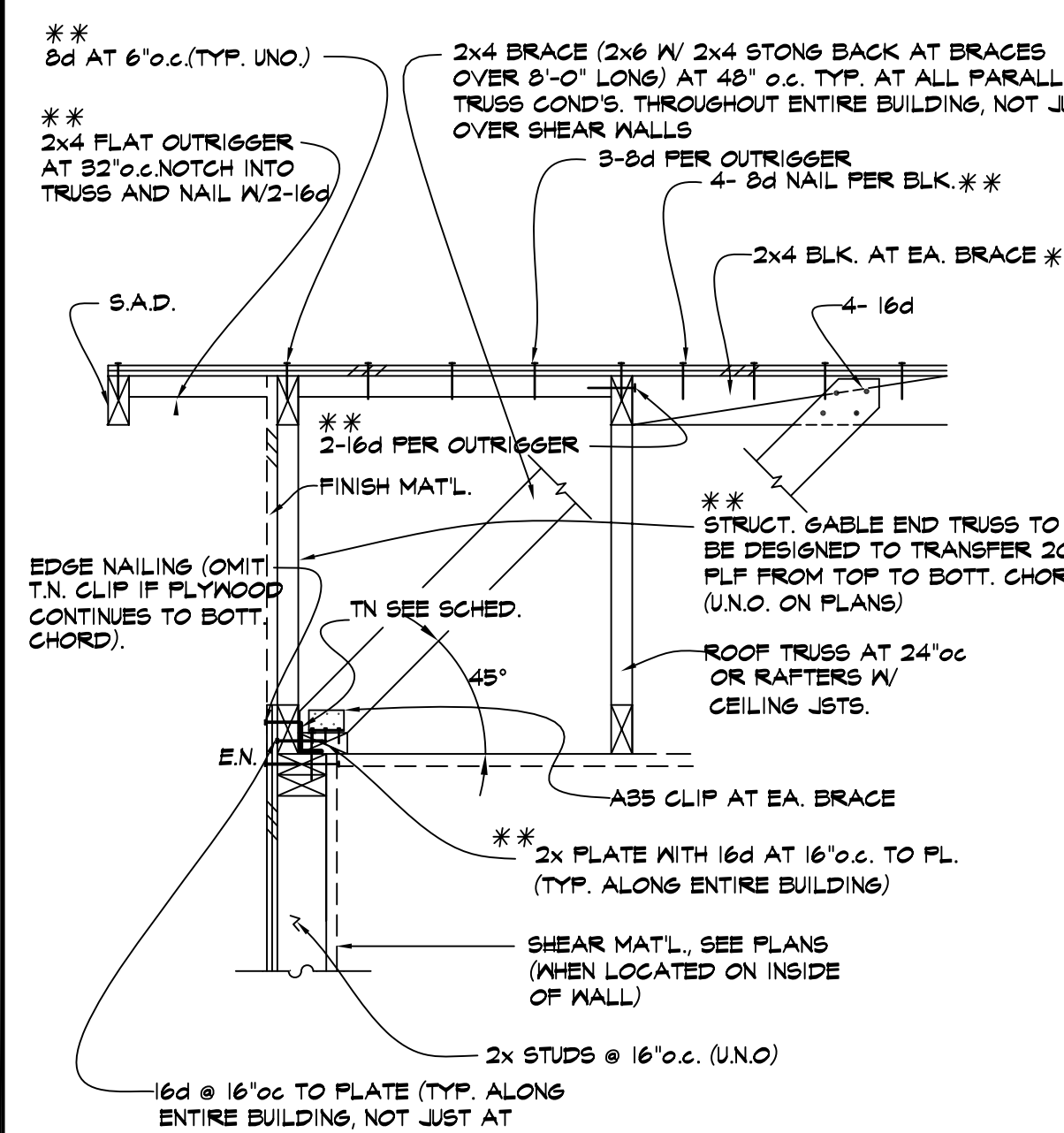
SHR. CONN. AT ADJOINING WALL



SHR. CONN. AT ADJOINING WALL

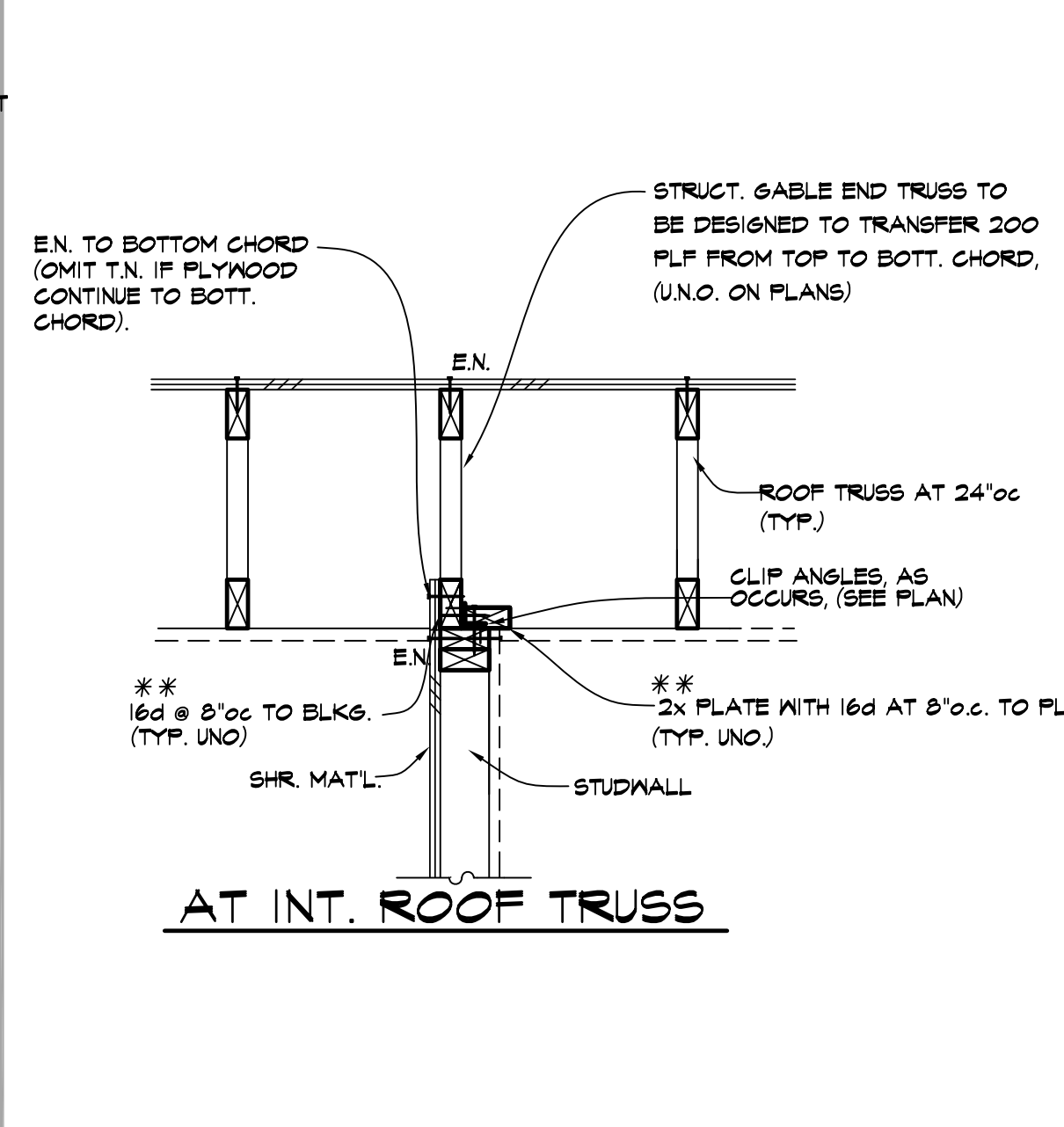
- SHEAR WALL NOTES:**
1. "-----" SYMBOL INDICATES LOCATION OF SHEAR MATERIAL.
 2. "▲" SYMBOL IS A SHEAR WALL IDENTIFIER, AND INDICATES SIDE ON WHICH SHEAR MATERIAL IS TO BE PLACED. SEE SHEAR WALL SCHEDULE FOR MORE INFORMATION.
 3. BLOCK AND NAIL ALL JOINTS WITH NAILING SPECIFIED IN SHEAR WALL SCHEDULE.
 4. 8d AND 10d NAILS SHALL BE COMMON NAILS OR HOT DIPPED GALVANIZED BOX NAILS.
 5. 5/8" ANCHORS SHALL BE CAST INTO CONCRETE AT 4'-0" O.C. MAXIMUM, EXCEPT WHERE SHOWN OTHERWISE (SEE "SHEAR WALL SCHEDULE"). POWER DRIVEN FASTENERS WILL NOT BE PERMITTED ON EXTERIOR WALLS, OR SHEAR WALLS.
 6. NAIL ROOF SHEATHING WITH 8d NAILS AT 6' O.C. @ EDGES AND 12' O.C. INTERIOR (U.N.O.).
 7. ALL HOLDOWNS, STRAPS AND ANCHORS CALLED OUT ON THESE PLANS ARE TO BE MANUFACTURED BY SIMPSON CO. OR EQUAL.
 8. NAIL SHEAR MATERIAL TO ALL POSTS ATTACHED TO HOLDOWN OR STRAPS WITH 2-ROWS EDGE NAILING.
 9. ALL SIMPSON PRODUCTS ARE TO BE INSTALLED PER SIMPSON CO. SPECIFICATIONS.
 10. ALL "PA" TYPE ANCHORS TO BE INSTALLED OVER PLYWOOD SHEAR MATERIAL.
 11. DO NOT OVERDRIVE NAILS INTO PLYWOOD. IF NAIL GUN IS USED, GUN SHOULD BE ADJUSTED TO UNDERDRIVE NAIL, THEN NAILS ARE TO BE HAND DRIVEN SO THAT THE HEAD OF THE NAIL IS FLUSH WITH THE FACE OF THE PLYWOOD.

1 PLYWOOD SHEAR WALLS



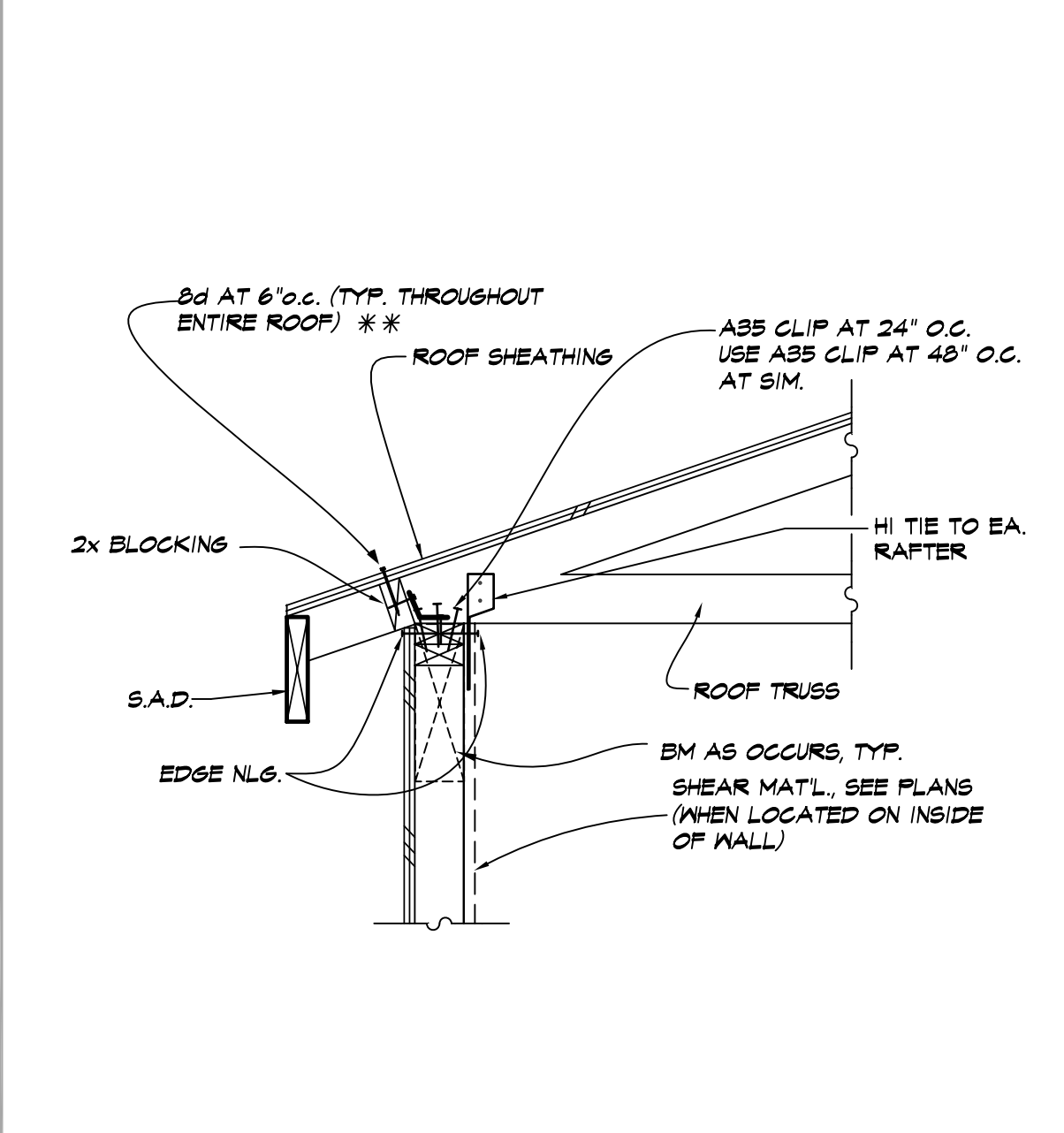
6 TYP. PARALLEL FRMG.

3 TOP PL. SPLICE DET.



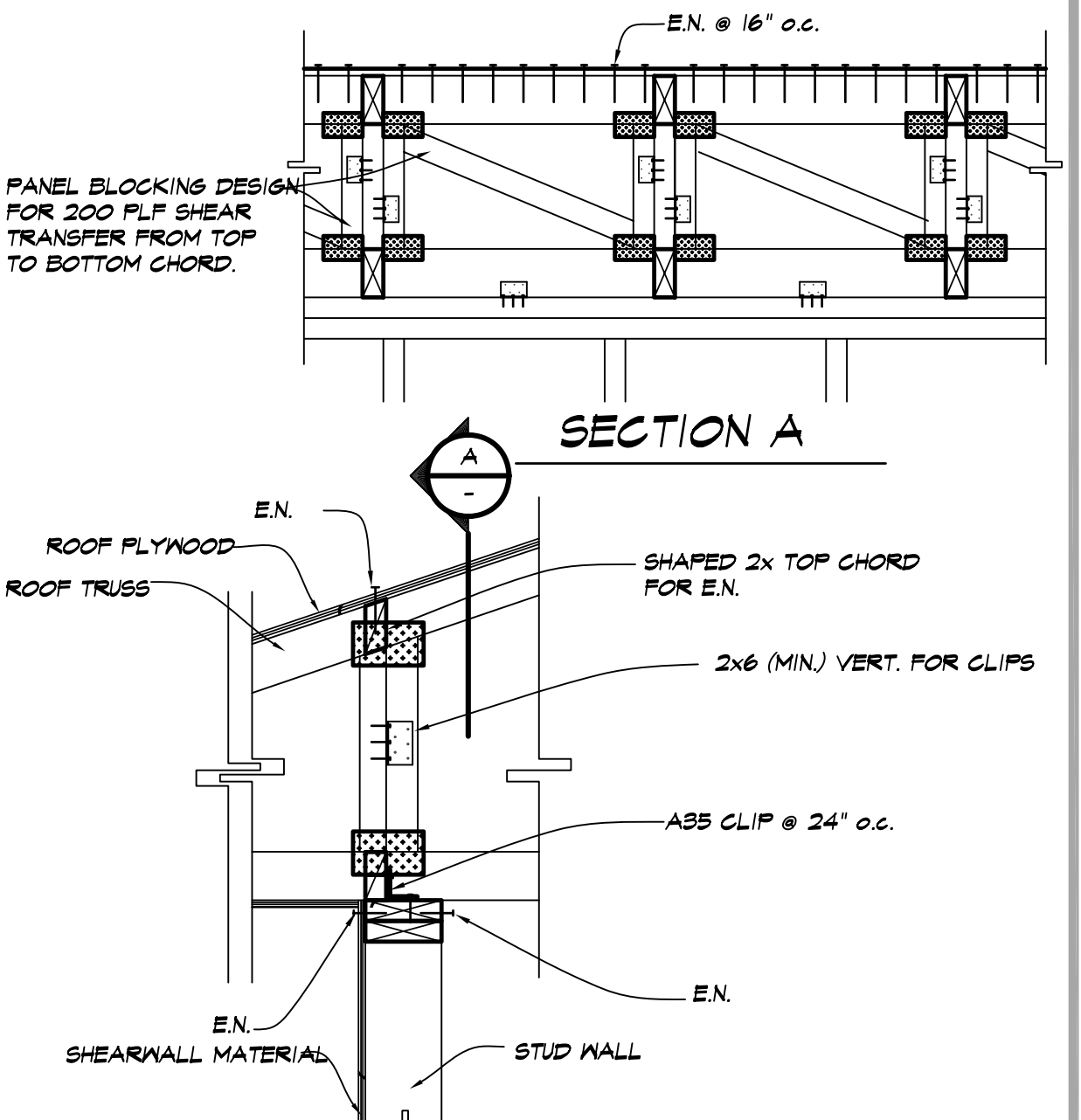
7 SHEAR TRANSFER DET.

4 SHEAR TRANSFER DET.



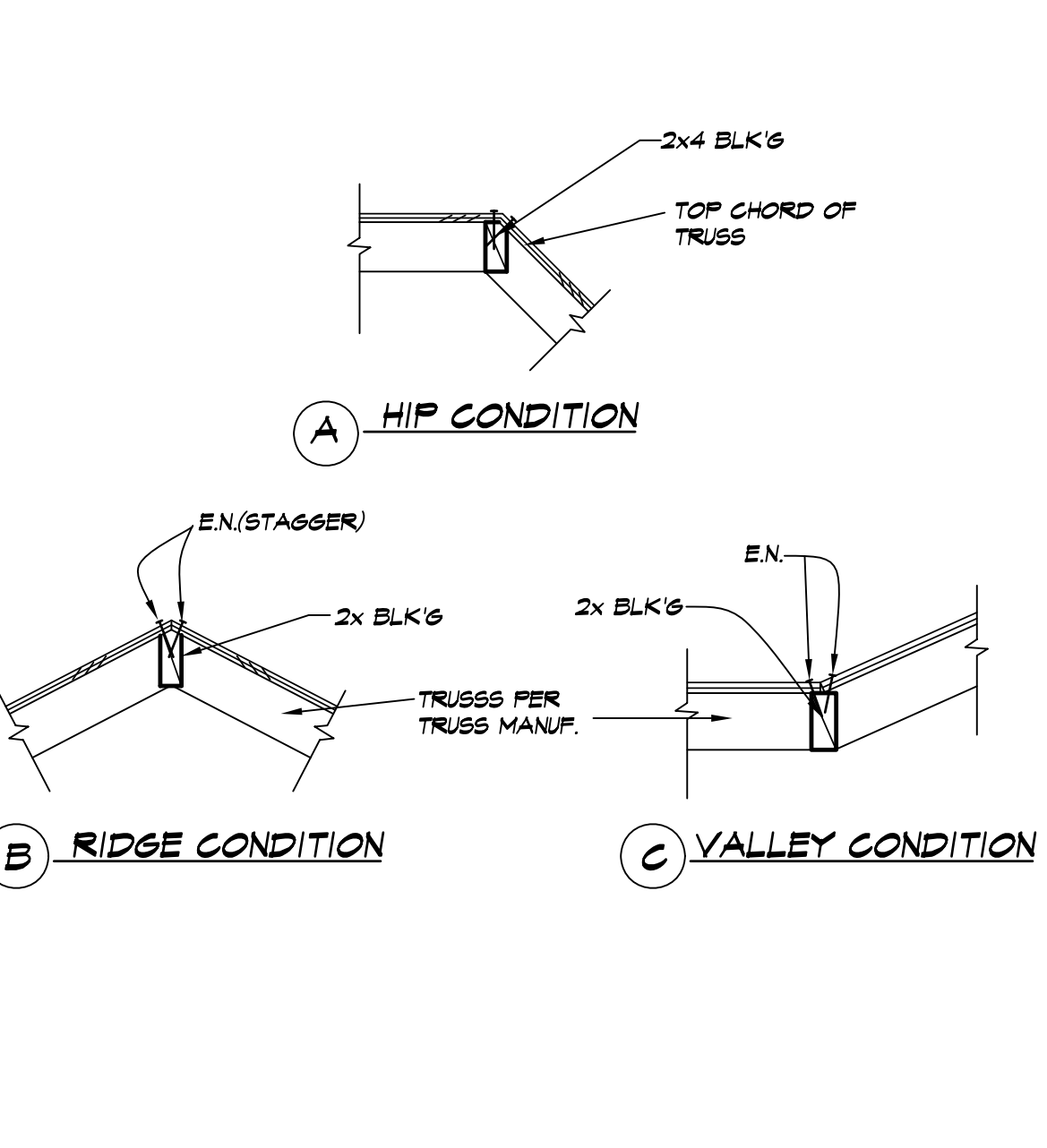
8 TYP. PERPENDICULAR FRMG.

5 SHEAR WALL NOTES



9 TRUSS CONNECTION

10 TRUSS BLOCKING DET.



11 TYP. SHEAR TRANSFER DET.

NOTES: (U.N.O. ON PLANS)

1. "▲" BLOCK ALL EDGES
2. "▲▲" BLOCK ALL ADJOINING PLYWOOD EDGES WITH 3x LUMBER AND STAGGER NAILS (PLATES, STUDS, POST, BLOCKING, ETC.) USE 3x MDSBILL
3. OFFSET PANEL JOINTS ON DIFFERENT FRAMING MEMBERS WHERE PLYWOOD SHEAR MATERIAL OCCURS ON EACH SIDE OF WALL. OTHERWISE USE 3x MIN. LUMBER. NAILS SHALL BE STAGGERED ON BOTH SIDES
4. USE PNEUMATICALLY DRIVEN 16d NAILS FOR ALL SPACING LESS THAN 6" O.C. IF SILL PLATES SPLITS, NAILS SHALL BE DRIVEN IN PRE-DRILLED HOLES. NAILS SHALL NOT BE UNDERDRIVEN, OVERDRIVEN AND/OR SLANTED.
5. ALL NAILS SHALL BE COMMON
6. "N/A" INDICATES NOT APPLICABLE WHEN PLYWOOD IS ON THE EXTERIOR FACE OF WALL. SEE PLANS FOR ATTACHMENTS WHEN PLYWOOD IS ON INTERIOR FACE OF WALL.
7. PROVIDE STUDS AT 16" O.C. (MAX)
8. OSB (ORIENTED STRAND BOARD) APA RATED BOARD MAY BE USED IN LIEU OF PLYWOOD WITH BUILDING OWNERS OR ARCHITECTS APPROVAL. HOWEVER, OSB BOARDS SHALL BE RATED EQUAL OR BETTER THAN THE PLYWOOD SPECIFIED.
9. USE 5/8" ALL-THREAD ROD EMBED 6" INTO (E) CONCRETE & SET W/ SIMPSON SET EPOXY AT EXISTING FOOTING CONDITIONS ONLY.
10. USE 3x BLK'S OR RIM BOARD EACH SIDE OF WALL FOR LTP4.
11. T.N. INDICATES TRANSFER NAILING CLIP (DO NOT TOENAIL)
12. ALL SILL NAILING T.N. & S.N. APPLY TO THE EXTENT OF SHEAR WALLS ONLY.
13. " + " PRE-DRILL HOLES, IF WOOD SPLITS.
14. USE 3" x 3" x 1/4" WASHER PLATE FOR ALL ANCHOR BOLTS.

SEE DETAIL 14 FOR SOLE PLATE ALTERNATE CONNECTION

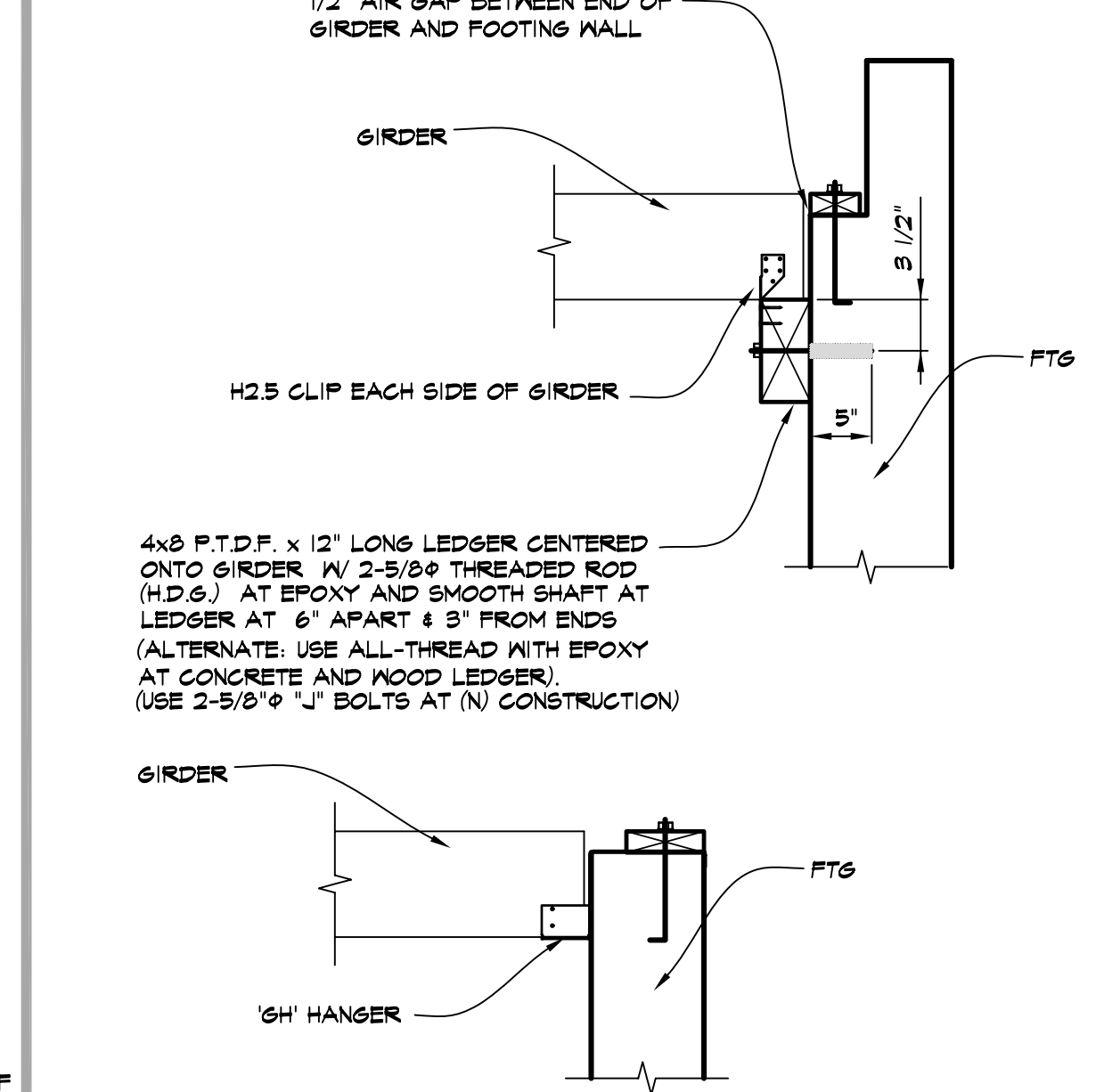
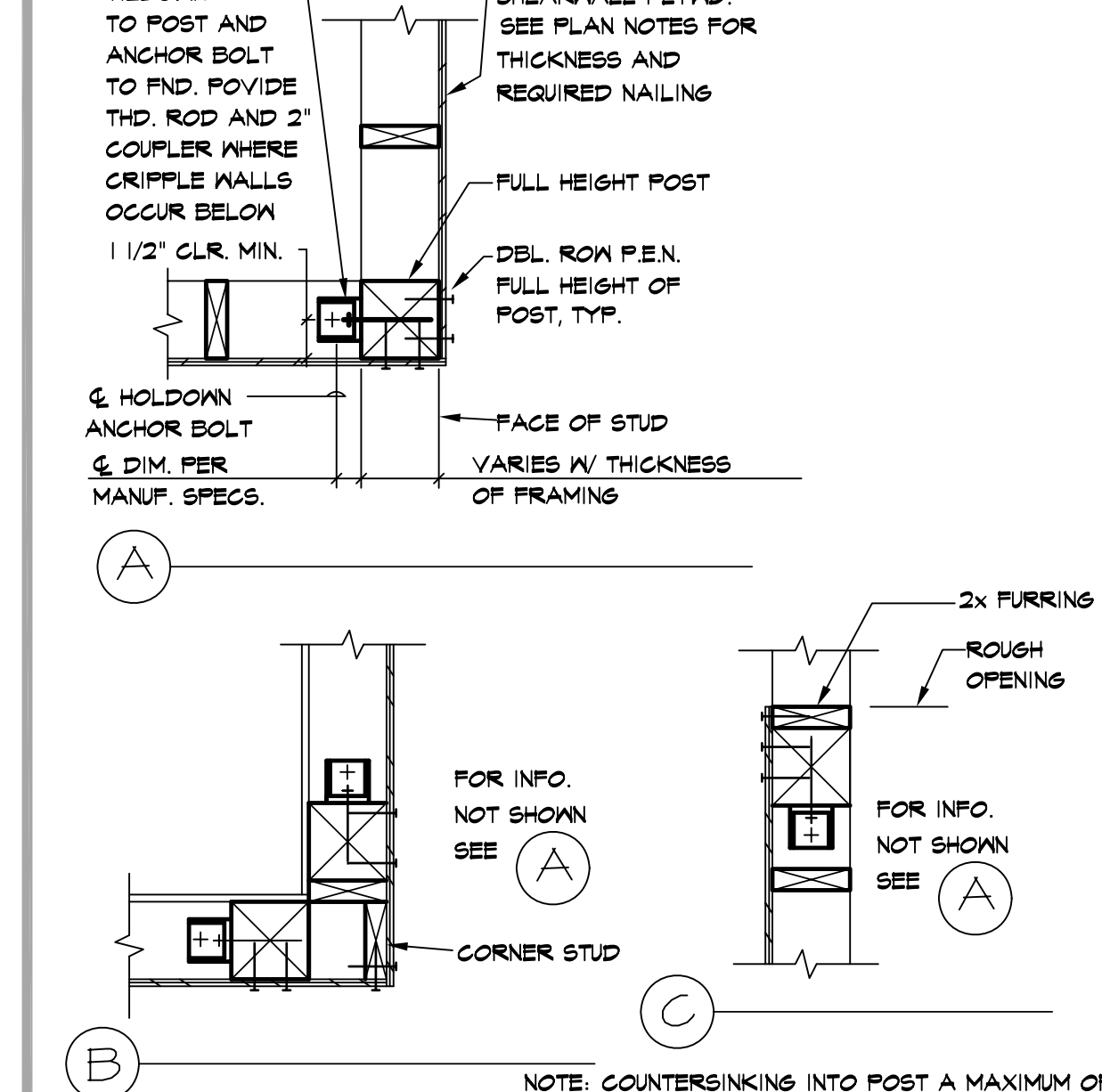
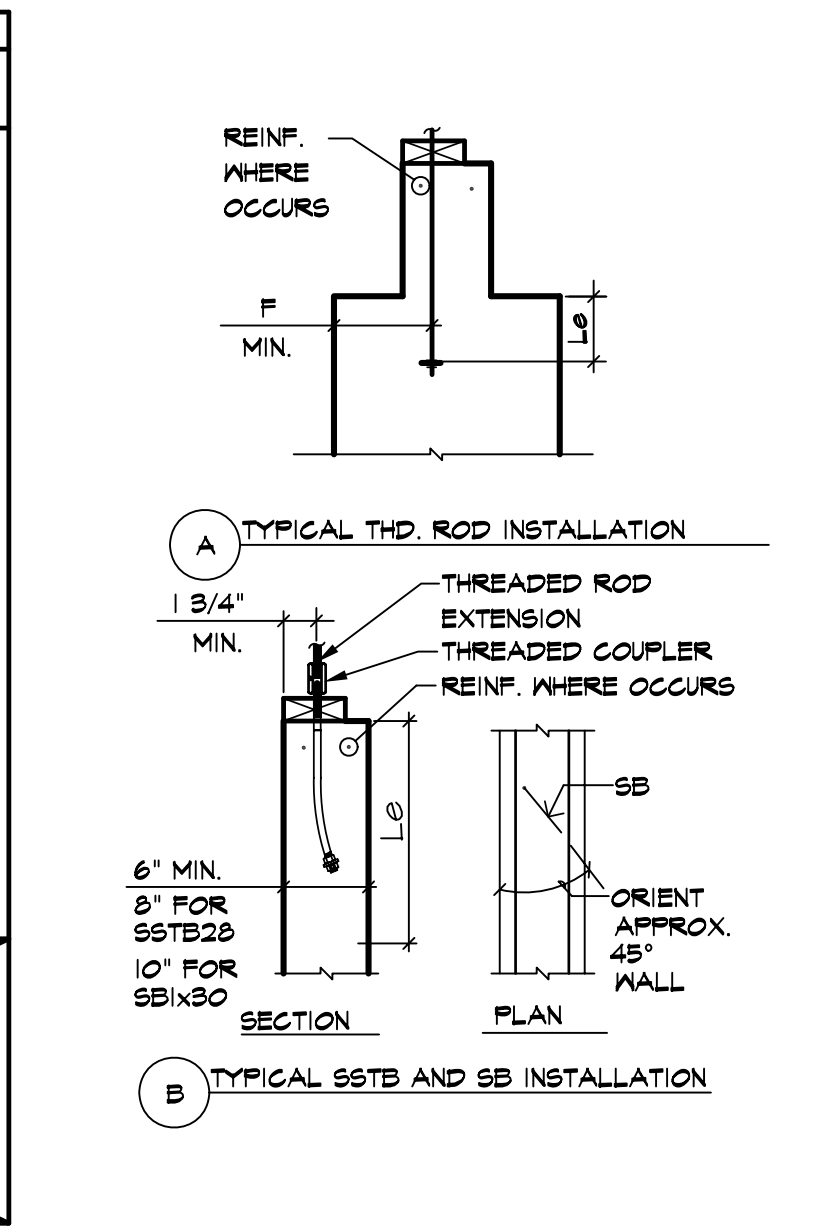
SHEAR WALL SCHEDULE						NOTE # 12
SHEAR WALL CONNECTION		SHEAR TRANSFER NOTE#1		SILL PLATE CONNECTIONS (SEE NOTE # 9 @ EXISTING CONCRETE)		SHEAR WALL CAPACITY (lb/ft)
MARK	MATERIAL	PLYWOOD NAILING	NAILING OR CLIPS (T.N)	NAILING (S.N) FOR 2x SOLE PLATE ONLY	ANCHOR BOLTS (A.B.'S) REMARKS	
1	3/8" CDX PLYWOOD P.I.: 24/0 *	8d AT 6" O.C. EN. 8d AT 12" O.C. F.N.	16d AT 5" O.C. OR A35 @ 16" O.C. OR LTP4 AT 24" O.C.	16d AT 5" O.C.	5/8" AB. AT 4'-0" O.C.	260
2	3/8" CDX PLYWOOD P.I.: 24/0 *	8d AT 4" O.C. EN. 8d AT 12" O.C. F.N.	16d AT 5" O.C. OR A35 @ 12" O.C. OR LTP4 AT 20" O.C.	14 SD-5	5/8" AB. AT 3'-0" O.C.	350
3	3/8" CDX PLYWOOD P.I.: 24/0 **	8d AT 3" O.C. EN. 8d AT 12" O.C. F.N.	A35 @ 10" O.C. OR LTP4 AT 16" O.C.	14 SD-5	5/8" AB. AT 2'-4" O.C.	490
4	3/8" CDX PLYWOOD P.I.: 24/0 **	8d AT 2" O.C. EN. 8d AT 12" O.C. F.N.	A35 @ 10" O.C. OR LTP4 AT 12" O.C.	14 SD-5	5/8" AB. AT 1'-8" O.C.	636
5	1/2" CDX PLYWOOD P.I.: 24/0 **	10d AT 2" O.C. EN. 10d AT 12" O.C. F.N.	2 - A35 @ 12" O.C. OR LTP4 AT 10" O.C.	14 SD-5	5/8" AB. AT 1'-6" O.C.	710
6	1/2" STR. I PLYWOOD P.I.: 24/0 **	10d AT 2" O.C. EN. 10d AT 12" O.C. F.N.	2 - A35 @ 12" O.C. OR LTP4 AT 8" O.C.	14 SD-5	5/8" AB. AT 1'-4" O.C.	870
7	3/8" CDX PLYWOOD ** EACH SIDE P.I.: 24/0	8d AT 3" O.C. EN. 8d AT 12" O.C. F.N.	2 - A35 @ 12" O.C. OR LTP4 AT 8" O.C.	14 SD-5	5/8" AB. AT 1'-2" O.C.	980
8	3/8" CDX PLYWOOD ** EACH SIDE P.I.: 24/0	8d AT 2" O.C. EN. 8d AT 12" O.C. F.N.	LTP4 AT 12" O.C. EACH SIDE, STAGGER	14 SD-5	5/8" AB. AT 11" O.C.	1272
9	1/2" STRUCT. I PLYWOOD ** EACH SIDE P.I.: 24/0	10d AT 2" O.C. EN. 10d AT 12" O.C. F.N.	LTP4 AT 8" O.C. EACH SIDE, STAGGER	14 SD-5	5/8" AB. AT 8" O.C.	1740

11 TYP. SHEAR TRANSFER DET.

12 TYP. SHEAR TRANSFER DET.

13 TYPICAL PLYWOOD SHEAR WALL SCHEDULE

HOLDOWN SIZE	CAPACITY POST SIZE MIN(INCHES)	OPTION A: THRD. ROD WITH DEL NUT/WASHER		REMARKS	OPTION B: SIMPSON SSBT ANCHOR BOLT		REMARKS
		ANCHOR BOLT SIZE	MIN. CLEARANCE Le F		ANCHOR BOLT SIZE #	MIN. EMBED. (Le) inches	
HDU2	8075# 3'x3 1/2"	5/8" THD. ROD	-	-	SB5/8x24	18	
HDU4	4565# 3'x3 1/2"	5/8" DIA. THD. ROD	-	-	SB5/8x24	18	FOR INSTALLATION REQUIREMENT SEE (B)
HDU5	5645# 3'x3 1/2"	5/8" DIA. THD. ROD	-	-	SB5/8x24	18	REFER TO SIMPSON CATALOG FOR ADDL. REQUIREMENT
HDU8	7870# 4 1/2'x3 1/2"	7/8" DIA. THD. ROD	-	-	SB1/8x24	18	
				SEE (A)			
HDU11	11175# 7 1/4'x3 1/2"	1" DIA. THD. ROD	10"	15"	-	-	PROVIDE DEL NUT AND PL 3/8x 3x3 WASHER AT BOTTOM
HDU14	14425# 7 1/4'x3 1/2"	1" DIA. THD. ROD	12"	18"			
HD15	15305# 5 1/2'x5 1/2"	1 1/4" DIA. THD. ROD	14"	21"			
HD19	19070# 5 1/2'x5 1/2"	1 1/4" DIA. THD. ROD	24"	24"			* MONO FOUR

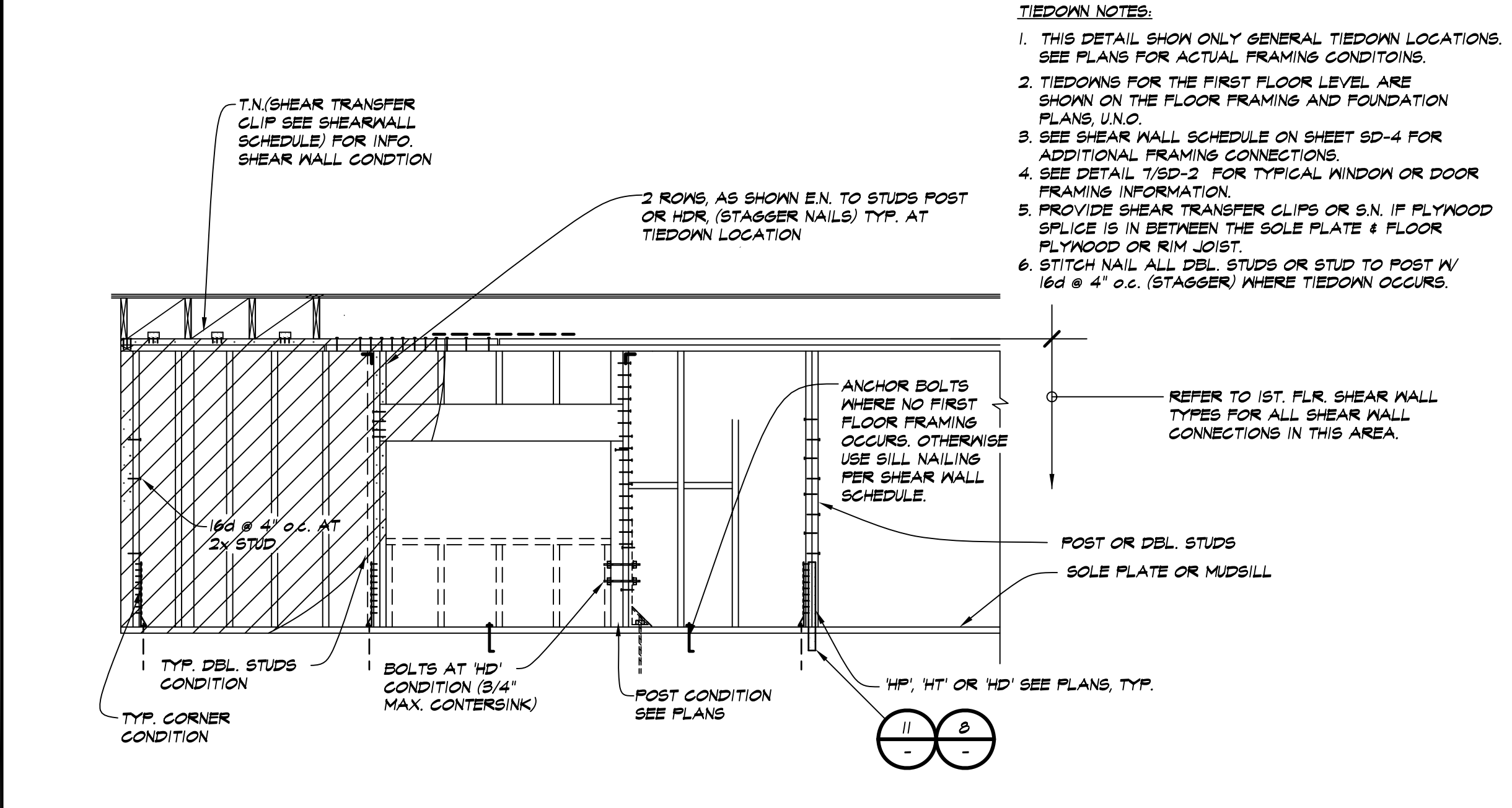


1 HOLDOWN ANCHOR BOLT SCHEDULE

3 TYP. PLAN @ HOLDOWN

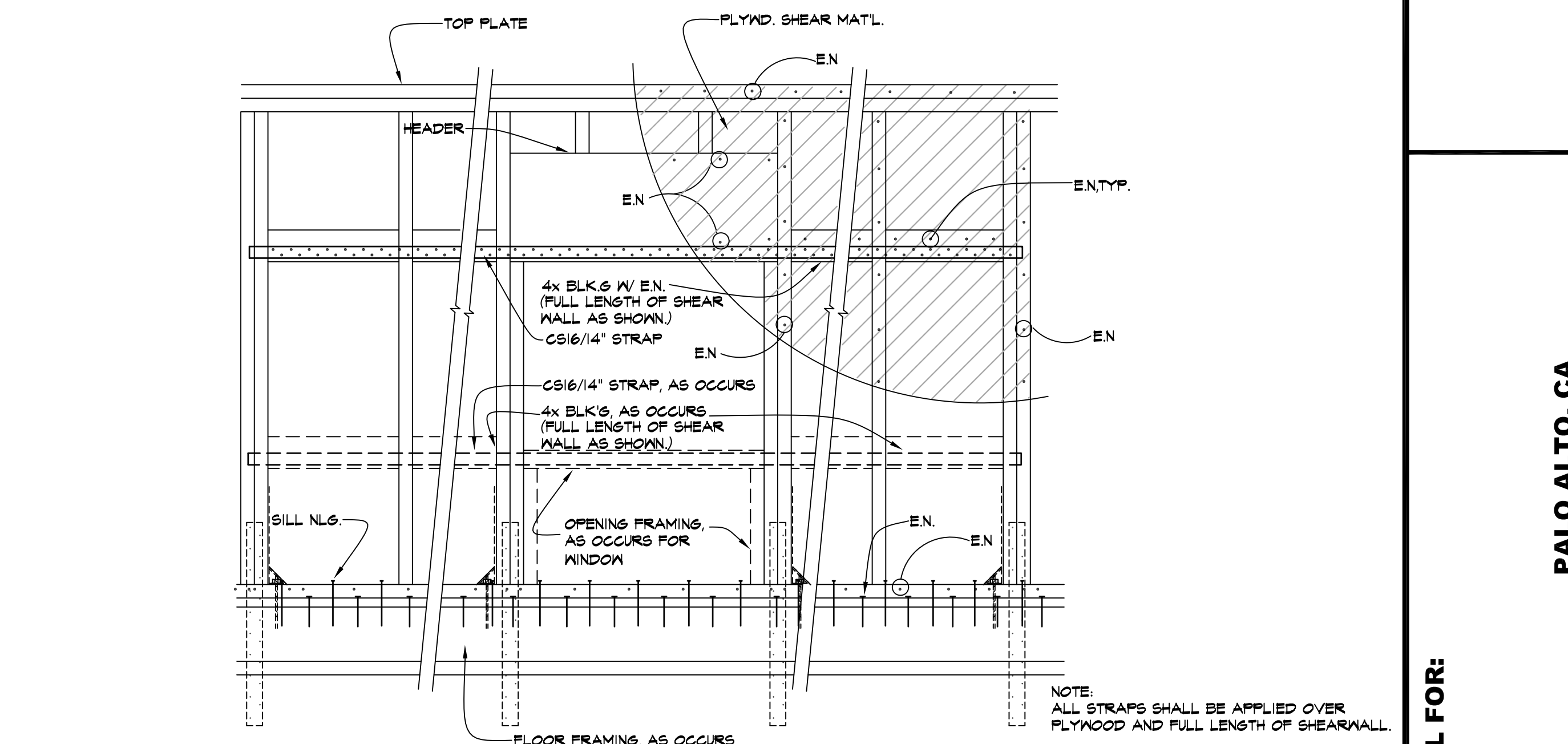
4 GIRDER TO FOUNDATION DET.

5



TIEDOWN NOTES:

- THIS DETAIL SHOWS ONLY GENERAL TIEDOWN LOCATIONS. SEE PLANS FOR ACTUAL FRAMING CONDITIONS.
- TIEDOWNS FOR THE FIRST FLOOR LEVEL ARE SHOWN ON THE FLOOR FRAMING AND FOUNDATION PLANS, UNO.
- SEE SHEAR WALL SCHEDULE ON SHEET SD-4 FOR ADDITIONAL FRAMING CONNECTIONS.
- SEE DETAIL T/SD-2 FOR TYPICAL WINDOW OR DOOR FRAMING INFORMATION.
- PROVIDE SHEAR TRANSFER CLIPS OR S.N. IF PLYWOOD SPLICE IS IN BETWEEN THE SOLE PLATE & FLOOR PLYWOOD OR RIM JOIST.
- STITCH NAIL ALL DBL. STUDS OR STUD TO POST W/ 16d @ 4" o.c. (STAGGER) WHERE TIEDOWN OCCURS.

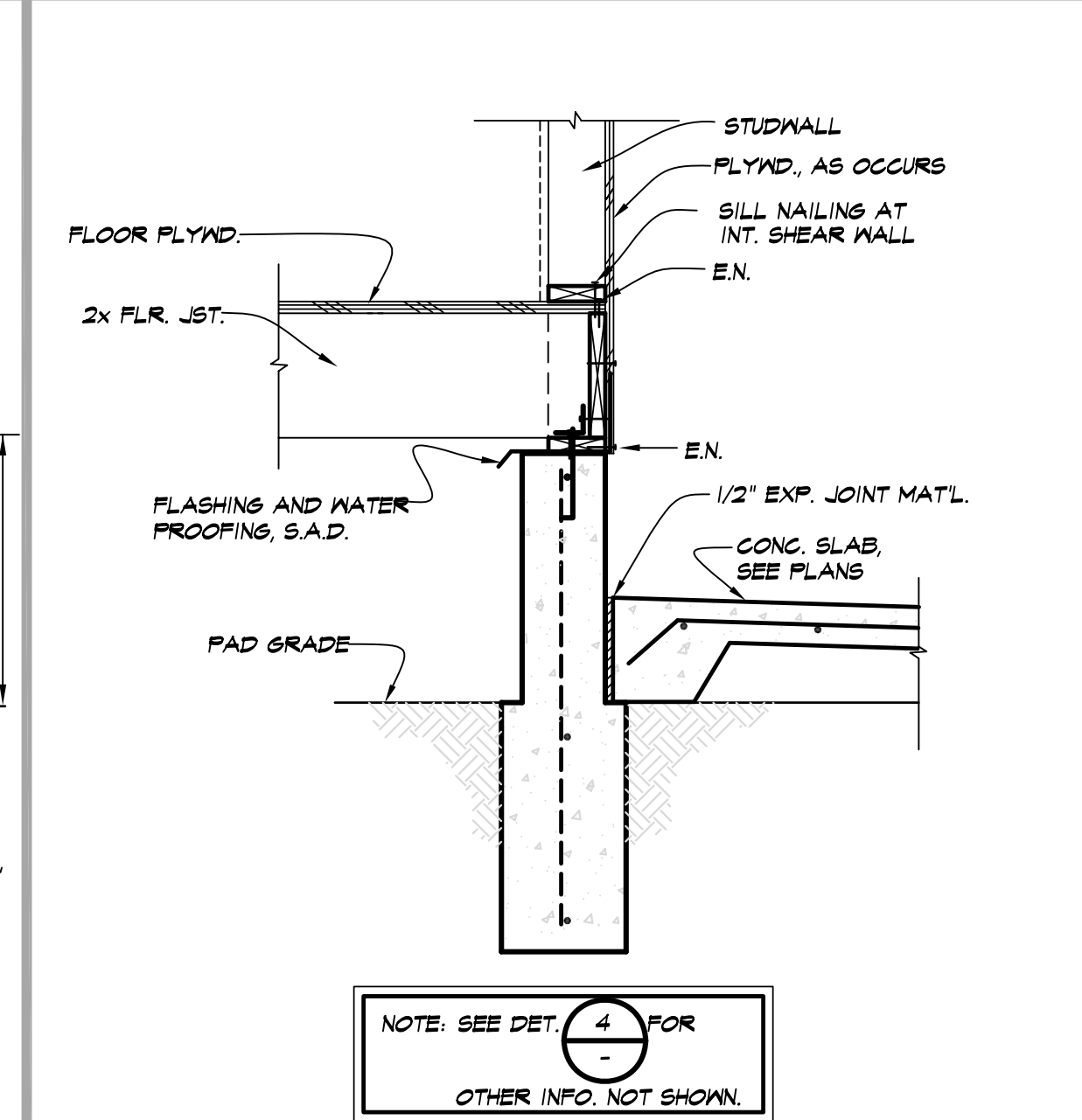
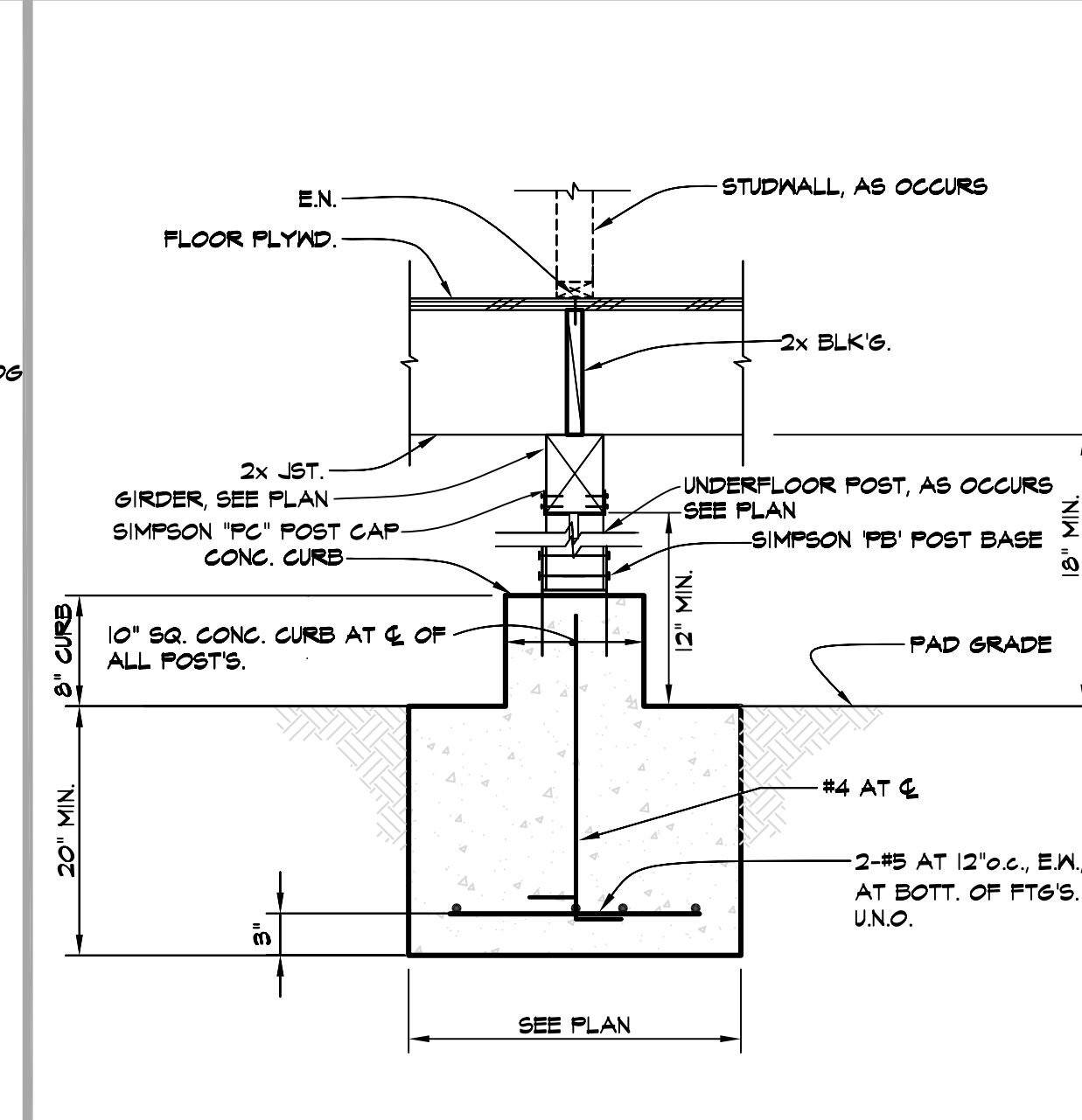
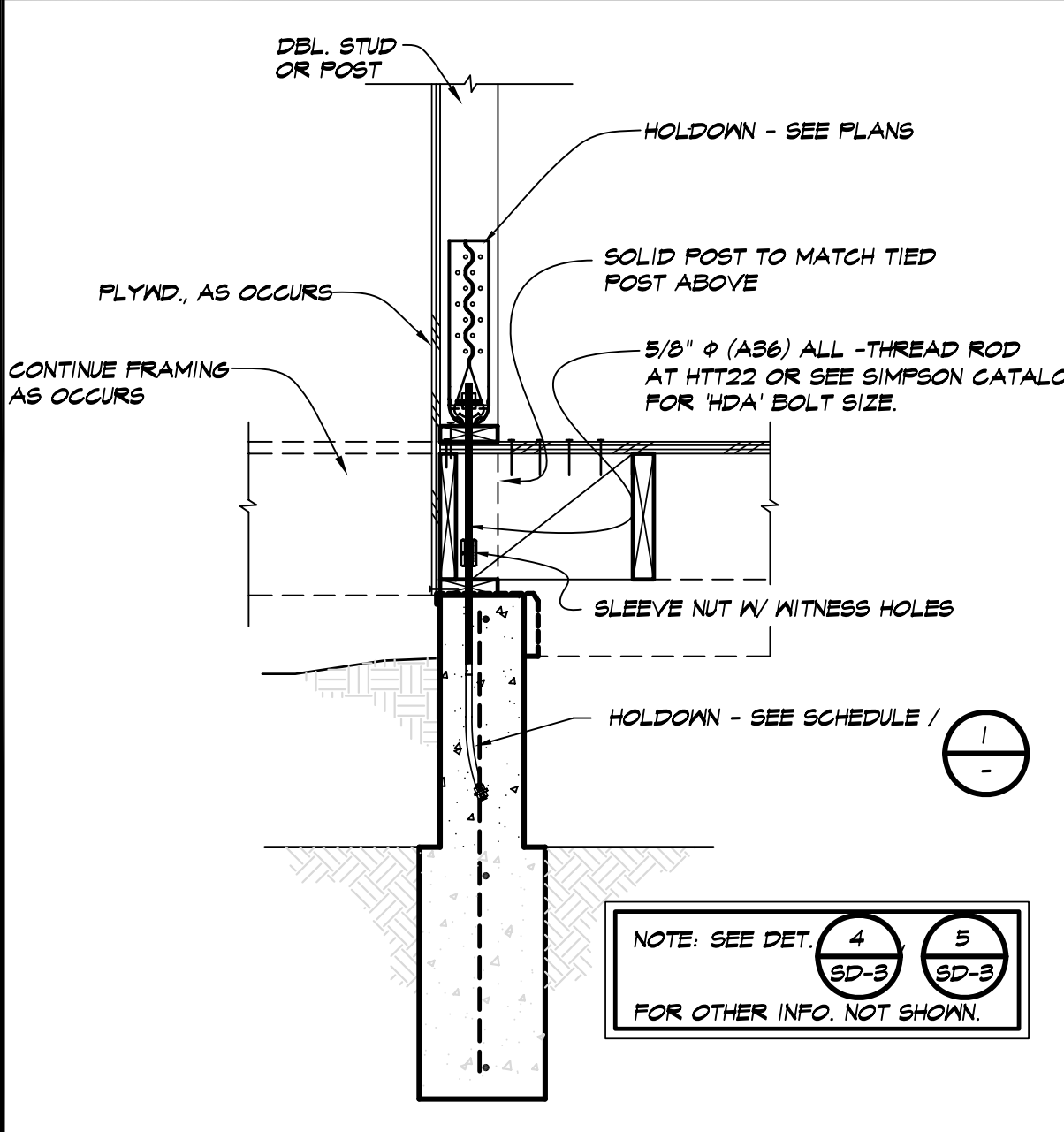


6 TYP. HOLDOWN TIEDOWN DET. LOCATION

8

9 SPECIAL WINDOW / DOOR REINFORCING

SCALE: NOT TO SCALE (N.T.S) TYP. (DO NOT SCALE DETAILS. SEE PLANS FOR ACTUAL DIMENSIONS OR SIZES)



REQUIRED CONNECTIONS FOR 3x SOLE PLATE & ALTERNATE SOLE PLATE CONNECTION FOR 2x PLATE

MARK	2x SOLE PLATE (W/ 1 1/8" MAX. PLYWOOD SUBFLOOR) W/ SIMPSON SD525412 LONG SCREWS	3x SOLE PLATE (W/ 1 1/8" MAX. PLYWOOD SUBFLOOR) W/ SIMPSON SD525600 LONG SCREWS	SHEAR WALL CAPACITY (#/')
1	16" oc	16" oc	260
2	12" oc	12" oc	350
3	8" oc	8" oc	490
4	6" oc	6" oc	636
5	5" oc (STAGGERED)	5" oc	770
6	4" oc (STAGGERED)	4" oc (STAGGERED)	870
7	N/A	4" oc (STAGGERED)	980
8	N/A	3" oc (STAGGERED)	1272
9	N/A	2 ROWS @ 4" oc (STAGGERED)	1740

11 TYP. FTG. DET.

12 TYP. INT. FTG. DET.

13 FOOTING AT SLAB

14 SOLE PLATE SCREWING SCHEDULE

15

NO. REVISIONS

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Structural & Civil Engineering Consultant
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San Jose, CA 95120
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fax (408)268-0288

A PROPOSED ADDITION / REMODEL FOR:
LUNDY RESIDENCE
592 LOMA VERDE AVE.
PALO ALTO, CA

SCALE: NOT TO SCALE, UNO.
DRAWN: CHECKED:
PROJ. NO.: DATE: 2-1-17
DRAWING NO.:
SD-5
OF SHEET(S)