

TRAFFIC PATTERNS



August 24, 2023

Helen Gannon
City of Foster City
Planning / Code Enforcement and Building Division
610 Foster City Blvd
Foster City, CA 94404

Subject: Peer Review of 106 Challenge Court Parking Access Plan

- Recommendations:**
- 1) Traffic Patterns finds that addition of the proposed 552 SF addition at 106 Challenge Ct will negatively impact access to the garage and driveway parking facilities of 104 Challenge Ct.
 - 2) Traffic Patterns recommends finds that the vehicle turning templates applied to the existing driveway of the neighboring resident (104 Challenge Ct) to the project are incorrectly applied.

Introduction:

Traffic Patterns serves as an on-call traffic engineering firm to the City of Foster City. The City requested a peer review of the site plans for proposed residential addition at 106 Challenge Ct. The project includes the reconfiguration of the garage structure to 106 Challenge Ct so that garage access is provided through its own new driveway from Challenge Ct. The garage modifications are intended to accommodate a new 552 SF bedroom addition to 106 Challenge Ct.

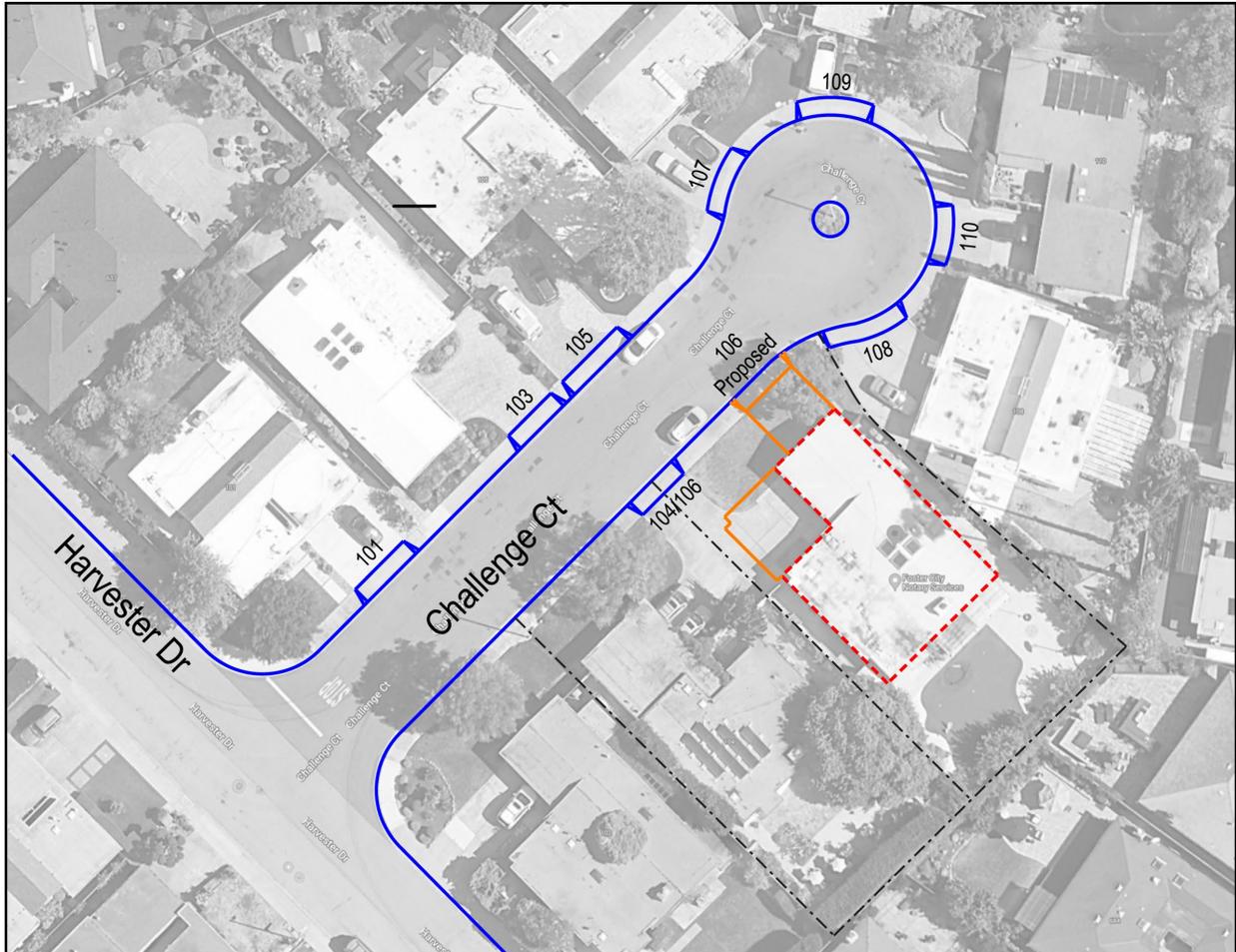
The Traffic Patterns peer-review focused on evaluation of the project site plans (dated received by the City on 8-15-2023) and vehicle turning templates and memorandum prepared by Kimley-Horn for the applicant.

Background:

Challenge Ct is located east of Foster City with access from Balclutha Dr and Pilgrim Dr via Harvester Dr. 106 Challenge Ct is accessed via a shared driveway with 104 Challenge Ct, see Figure 1 – 104/106 Challenge Ct Google Satellite Image.

Shared driveways for two or more homes is not uncommon but does require close coordination between residents so that site access on one property does not impede access to the other residences for either parking or emergency access. City staff notes that the project neighbor at 104 Challenge Ct is not planning and prefers no modifications to their site as part of the 106 Challenge Ct application.

Figure 1
106 Challenge Ct – Google Satellite Image



- Notes:
- Blue lines represent street curb face and driveways
 - Red Dash lines represents approximate outline of project site, 106 Challenge Ct
 - Orange lines proposed new driveway for 106 Challenge Ct
 - Black Dash represents property lines

Figure 1 above shows the existing street configuration of Challenge Ct. There are approximately nine homes on the street. The only two homes that currently share a driveway are the application driveway (106 Challenge Ct) and their neighbor at 104 Challenge Ct.

The applicants proposed new driveway is shown in Figure 1 along with the approximate footprint of the applications proposed addition which lies just under 6-FT from the property line.

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Analysis:

Single Access Parking Movement

During site planning for parking operations, the engineering best practice is for a motorist to achieve entry and exit from a residential property as a single movement without the need for 2- or 3-point turns to reposition a vehicle in or from a rest location. Under the current shared driveway condition configuration for both the project application (106 Challenge Ct) and their neighbor (104 Challenge Ct), access into both private garages and on-site parking for each lot can be accommodated as a single-entry movement and single “back-out” movement as the movements are unimpeded.

The 106 Challenge Ct proposed site improvement relocates the sites existing on-site parking access from the shared driveway to a private driveway also located on Challenge Ct, approximately 30-FT north of the shared driveway; this reconfiguration includes relocation of the 106 Challenge Ct garage door to face Challenge Ct. The proposed site reconfiguration is intended to accommodate a new 551 SF addition to the home.

While the proposed site improvements do improve parking and access circulation to 106 Challenge Ct, the resulting improvements do result in an impediment to the ability of the neighbor at 104 Challenge Ct enter and exit the site in a continuous movement. This impediment is noted in the applicants own project submittal drawings prepared by Kimley-Horn. The Kimley-Horn email memo fails to note impacts to the existing single-access movement condition.

The applicant did modify their site plans by providing a “notch” in the proposed addition in an attempt to lessen the impact to the 104 Challenge Ct neighbor. Even with the notch the resulting access and circulation impact to 104 Challenge Ct is still impacted. Traffic Patterns identifies this a significant impact to the 104 Challenge Ct neighbor that may result in property damage to the proposed 106 Challenge Ct over time. This finding is also noted due to the change in consistency with existing best practices to single-movement entry and exit from a private property to an impeded access condition.

Vehicle Turning Templates

The section above notes the impacts to the existing single-access movement that is intended through both the original site design and achieve engineering best practices design for residential development. Traffic Patterns notes that the Kimley-Horn vehicle turning templates are draws in segments and do not represent continuous vehicle movements. Instead, multiple vehicle start and stop positions are shown and patched together to demonstrate an intended movement. In the drawings the “vehicle overhang” is not properly shown. The vehicle overhangs if shown for all movements would show the vehicles striking existing vegetation at 104 Challenge Ct and potentially impact proposed site improvements at 106 Challenge Ct.

The vehicle turning templates can be used to demonstrate parking and circulation but do not accurately represent the full vehicle movements required for site entry and exit movements.

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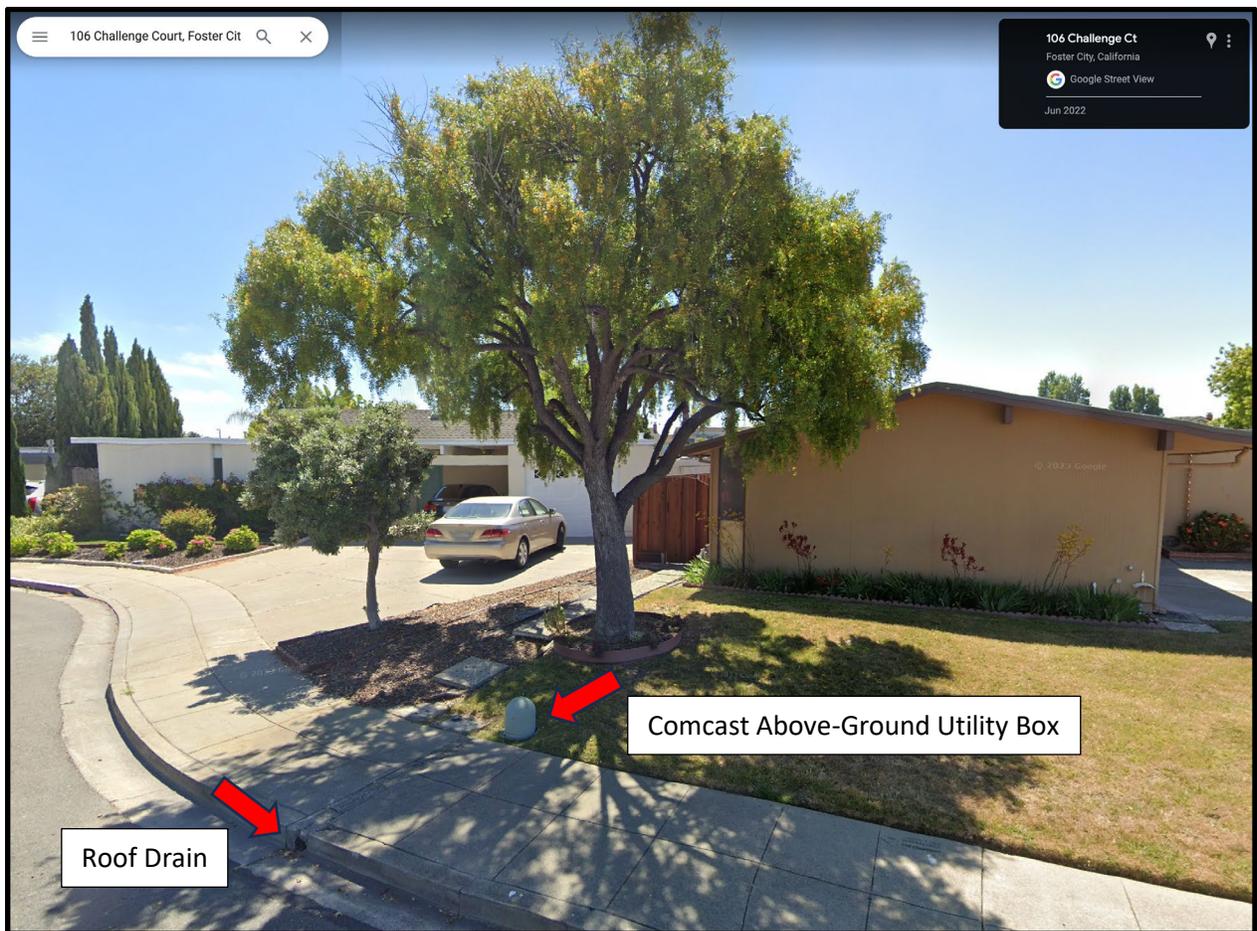
Other Site Observations

The proposed site improvements to 106 Challenge Ct include construction of a new driveway and garage access via Challenge Ct. The proposed location of the new driveway does impact existing roof drainage and Comcast utility cable service to 106 Challenge Ct.

Figure 2 shows a Google Streetview image of 106 Challenge Ct. A roof drain to 106 Challenge Ct appears to have been added after construction of the structure, the new driveway would result in the loss of the roof drainage. No site plan improvements were noted to correct the roof drain impact nor the Comcast above-ground utility box.

The existing tree on 106 Challenge Ct appears to be impacted and would likely result in tree remove due to impacts to the root system of the tree along with driveway proximity.

Figure 2
Google Streetview Image – 106 Challenge Ct Proposed Driveway Location



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Conclusions and Findings

This peer-review does not provide recommendations to approve or not approve the proposed site improvements to 106 Challenge Ct. The peer review is intended only to help advise policy decisions regarding impacts to the parking, access, and circulation that result from the project, specifically to the applicant neighbor at 104 Challenge Ct. Traffic Patterns finds that the proposed site improvements (as currently proposed) result in significant parking, access, and circulation impacts to 104 Challenge Ct.

If you have any questions, please feel free to contact Jaime Rodriguez at (408) 916-8141.



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