

**Grading, Erosion Control, and Construction Process Details
from NexGen for Winter Grading for Lots 9 and 10**

Date: October 29, 2019

NOTE ON LOT 11: There will be no work (vegetation/tree removal, grading, etc.) on Lot 11 until Spring 2020. No materials or trash shall be stored on Lot 11 until a building permit is issued for construction on that lot. The applicant will notify the County when work will begin on Lot 11; a separate Exception to the Winter Grading Moratorium from the Community Development Director is required for any work that will occur during the wet season (October 1 – April 30).

NexGen (Noel Chamberlain and Bob Pellegrine): We will start work on Lot 9 first. Overall grading duration is expected to be approximately 8-10 weeks to complete building pads on Lots 9 and 10.


1. Clearing and Grubbing (1 week): First stage of grading will be tree removal, clearing and grubbing of the pad site. Green waste will be trucked off site to Ox Mountain for disposal.
2. Excavation of Keyway (1 week): After clearing, we will excavate approximately 800 yards in order to establish our grading key way. The 800 yards will be stock piled and covered until the key is established. Soil will be sorted by spreading and raking soils to remove organics and unsuitable soil. Organics and unsuitable soil will be off-hauled to Ox Mountain and suitable soil will be stockpiled and re-used. The stockpile will be located in flatter areas of the site in the area of the building pad. Over the weekends and in the event of rain, NexGen will use geotextile blankets secured by U-shaped pins to protect stockpiles and all graded areas, as well as fiber rolls along the perimeter of stockpiles and graded areas. All grading activities will cease prior to the onset of rain, with adequate time for the site to be fully protected.
3. Fill Importation and Soil Compaction (4 weeks): After completion of the key, we will compact the onsite 800 c.y. stock pile. We will need an additional 1100 yards of fill from an offsite source. NexGen will use 6-wheelers, high-sided dump trucks (approx. capacity 11 c.y.), which are smaller than the standard 8-wheeler dump trucks (approx. 15 c.y.) and can better navigate the residential streets. We will bring up the pad in vertical lifts of 1 foot in depth. NexGen will compact all lifts by end of day and ensure that all remaining stock piled materials are securely covered and contained. After the 800 cubic yards of stockpiled materials have been used, NexGen will only import as much soil per day as can be applied to the site and protected that day. The onsite equipment will be an excavator, compactor, and skip loader backhoe. During the compaction stage, NexGen will use visqueen to cover compacted areas, along with fiber rolls along the edges of the visqueen, where fiber rolls are weighed down by rock/sand bags every 3-5 feet. All grading activities will cease prior to the onset of rain, with adequate time for the site to be fully protected.



4. Pier Drilling (2 weeks): Pier sizes for the project are a combination of 24", 18" and 12" in diameter. Depth of piers will be determined by the soils engineer, who will observe pier construction. Pier drilling will take approximately 5 days to complete per house. Pier spoils (approximately 70 c.y. per house) will be collected and stockpiled and securely covered and contained daily. Usable piers spoil material will be stockpiled on-site and re-used. Unsuitable material will be stockpiled and off-hauled to Ox Mountain. Stockpiles will be located in flatter areas of the site in the area of the building pad. No drilling or other earth moving activities will occur in the event of rain.


5. Pier Pouring and Curing (2 weeks): Each house will require 2 pours (1 for the upper level and 1 for the lower level). Each pour will take about 2-3 days (time includes 1 day for pier inspection). There will be 30 days between each pour. Piers will be poured in by a concrete boom pump. The pump and concrete trucks will stage on the construction entrance. Piers do not need to be protected from the rain; rain does not affect their curing. NexGen will continue to protect exposed/disturbed soil as described above.

We agree to carry out construction of houses on Lots 9 and 10 according to the above process, as well as to comply with "Chamberlain Lots 9-10, Construction and Grading Requirements Reminder, dated October 29, 2019". Both documents will be included in the construction plans.


_____ 10/31/2019

Noel Chamberlain

Date


_____ 10-31-2019

Bob Pellegrine

Date

Chamberlain Lots 9 and 10, Construction and Grading Requirements Reminder

Date: October 29, 2019

Grading:

1. Applicant shall obtain authorization from the Community Development Director or his designee, prior to the initiation of each phase of the winter grading plan, in order to confirm that no rain events are predicted to occur during the planned duration of that phase.
2. If the grading period for any phase must be extended, provide an updated schedule to the project planner.
3. Grading may occur only on dry days. No grading shall occur within 24-hours after a rain event.
4. All grading work shall stop 48-hours prior to a predicted major rain event and the site shall be stabilized.
5. After a major rain event, prior to re-start of grading work, the Building Inspection Section Manager or his designee shall inspect the site and identify necessary corrections. Corrections shall be completed prior to re-start of grading.
6. Applicant shall send photos of final stabilization to the project planner within one week of completion of grading.

Grading/Construction Traffic:

1. DPW has approved the construction management plan which limits construction traffic on Ticonderoga Road to the hours of 9:00 a.m. to 2:00 p.m. during weekdays.
2. Per the City of San Mateo Department of Public Works, use of De Anza Boulevard is prohibited, as De Anza Boulevard is not a designated truck route.

Dust Control/Air Quality Guidelines:

Upon the start of grading activities and through to the completion of the project, the applicant shall be responsible for ensuring that the following dust control guidelines are implemented:

- a. All graded surfaces and materials, whether filled, excavated, transported or stockpiled, shall be wetted, protected or contained in such a manner as to prevent any significant nuisance from dust, or spillage upon adjoining water body, property, or streets. Equipment and materials on the site shall be used in such a manner as to avoid excessive dust. A dust control plan may be required at anytime during the course of the project.
- b. A dust palliative shall be applied to the site when required by the County. The type and rate of application shall be recommended by the soils engineer and approved



by the Department of Public Works, the Planning and Building Department's Geotechnical Section, and the Regional Water Quality Control Board.

Mitigation Measure AQ-1: The Project Applicant shall require that the following BAAQMD recommended and additional PM10 reduction practices be implemented by including them in the contractor construction documents:

The first phase of construction shall require 30 percent of construction equipment to meet Tier 1 EPA certification standards for clean technology. The remainder of construction equipment (70 percent), which would consist of older technologies, shall be required to use emulsified fuels.

- The second phase of construction shall require 30 percent of construction equipment to meet Tier 2 EPA certification standards for clean technology and 50 percent to meet Tier 1 EPA certification standards. The remaining 20 percent of construction equipment, which would consist of older technologies, shall use emulsified fuels.
- For all larger vehicles, including cement mixers or other devices that must be delivered by large trucks, vehicles shall be equipped with CARB level three verified control devices.
- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at the construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at the construction sites.
- Sweep public streets adjacent to construction sites daily (with water sweepers) if visible soil material is carried onto the streets.
- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.). Limit traffic speeds on unpaved roads to 15 miles per hour.
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as soon as possible.



- Install wheel washers for all exiting trucks or wash off the tires or tracks of all trucks and equipment leaving the construction site.
- Install wind breaks at the windward sides of the construction areas.
- Suspend excavation and grading activities when wind (as instantaneous gusts) exceeds 25 miles per hour.

Noise Control:

Mitigation Measure NOI-1: The Project Applicant shall require that the following noise reduction practices be implemented by including them in the contractor construction documents:

- Equipment and trucks used for project grading and construction would utilize the best available noise control techniques (e.g., improved exhaust mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds) in order to minimize construction noise impacts.
- Equipment used for project grading and construction would be hydraulically or electrically powered impact tools (e.g., jack hammers and pavement breakers) wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. Compressed air exhaust silencers would be used on other equipment. Other quieter procedures would be used such as drilling rather than impact equipment whenever feasible.
- The grading and construction activity would be kept to the hours of 7:00 AM to 7:00 PM, Monday through Friday. Saturday hours (8:00 AM to 5:00 PM) are permitted upon the discretion of County approval based on input from nearby residents and businesses. Saturday construction (8:00 AM to 5:00 PM) would be allowed once the buildings are fully enclosed. Noise generating grading and construction activities shall not occur at any time on Sundays, Thanksgiving and Christmas.

