

Attachment 16: Draft Fuel Use Monitoring Plan

Draft Fuel Monitoring Plan

Plantel Nurseries Eastside Expansion Project

Prepared on September 20, 2024

1) Introduction

This plan is for monitoring fuel use and minimizing impacts of the Plantel Nurseries Eastside Expansion Project (herein referred to as “proposed project” or “project”) in unincorporated Santa Barbara County. The project would include the construction of a new seed transplant facility comprised of 13 additional greenhouses on the site adjacent to an existing Plantel Nurseries agricultural facility (herein referred to as the “existing facility”). Rincon Consultants, Inc. (Rincon) prepared this plan under contract to Rich-Grow Nursery Products Inc. (Client) in support of environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The purpose of this plan is to provide a means to monitor natural gas fuel use on a daily basis for the proposed project to document the project air emissions of criteria air pollutants related to long-term operation of the project. The recorded data will also include a monthly total and a rolling 12-month total for the purposes of greenhouse gas (GHG) emissions annual reporting.

2) Fuel Combustion Equipment

The proposed project would consist of a 24,000 square foot germination building and 13 greenhouses, which would include three 106,560 square foot greenhouses, nine 120,960 square foot greenhouses, and one 164,160 square foot greenhouse. The germination building will have a 400,000 British thermal unit (BTU)/hour hot water heater. Each of the greenhouses will have an allotted number of space heaters that will combust natural gas. The project will have a total of 416 heaters. The size of the heaters will be 441,000 BTU/hour each.

A separate gas sales line from Southern California Gas (SCG) distribution line (located at Clark Road) will be required for the project. The line will be separate from the existing sales line serving the existing operations. Hence the proposed project will have its own sales meter from SCG. The new line will likely be an 8-inch diameter line and buried in accordance with the building and plumbing codes. The design of the line layout has not been finalized but a conceptual plan would be the 8-inch diameter line would go to the midpoint of parcel and branch out to the individual greenhouses (see attached figures).

3) Project Requirements

The project would be required to monitor and record daily natural gas volumes consumed by the project’s natural gas combustion equipment. The project would have a daily natural gas fuel use limit of 2,045 million (MM) BTU/Day (or 1.947 thousand cubic feet (MCF)/Day).

4) Fuel Monitoring

4a) Meter

An industry approved flow rate meter will be installed on an above ground meter run downstream of a SCG sales meter. The meter run will consist of a above ground straight

horizontal long section of pipe approximately 10 feet with the meter near the midpoint of the pipe section. The meter run will be placed prior to any branch sections of pipe that distribute the flow to the individual greenhouses or the germination building. This placement will allow measurement of total flow to the Eastside Expansion combustion equipment. The meter section will have a valve bypass section to allow equipment maintenance or calibration. When the bypass is in use, Plantel will commit to flow data capture by one of two means:

- 1) *Install a second meter for the bypass line to allow maintenance on the primary line or*
- 2) *During maintenance, Plantel would rely on the real time information from the Southern California Gas Company revenue meter upstream dedicated to the expansion project.*

4b) Peripheral Equipment

Depending on the type of meter, temperature and pressure sensors may be needed to be installed upstream of the meter in the above ground meter run. The sensors would be connected to the meter electronic components measured so volumetric rate output is compensated for pressure and temperature to read standard cubic feet per minute (SCFM). Some meters have internal pressure temperature compensation.

Depending on the specific type of meter installed, there will be an external wireless transmitter of the meter data to transfer the flow data to a Plantel data logger. Some meters have internal wireless capability.

4c) Data Logging

There will be a dedicated data logger computer in the administration building to capture individual minute by minute data of the volumetric flow. The data logger will log minute data.

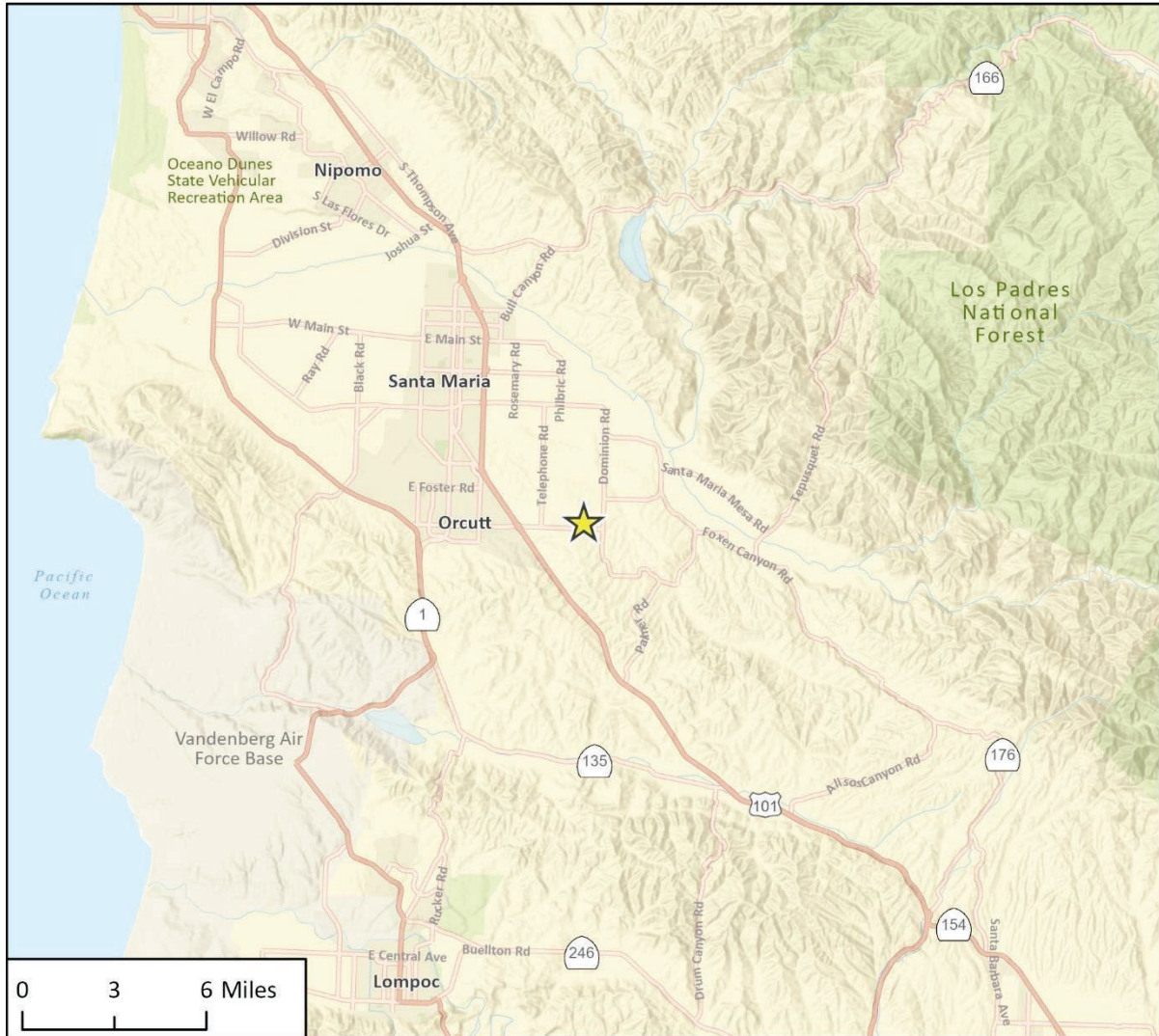
5) Reporting

Datalogging will include a summation of the minute by minute daily and produce daily volumetric throughput. The daily data will be logged and summarized for the calendar month.

6) Procedures

The operations supervisor will review the daily use of the natural gas to ensure compliance. In addition, a quality review check will be performed to identify any anomalous trends. The operations supervisor will create a monthly report of daily volumes and calculated daily energy use (MMBTU/Day). The higher heating value of the natural gas (BTU/SCF) would be gathered from SCG invoices. The monthly report would be cross-checked with the monthly invoice from SCG to ensure consistency. The daily records will be made available to the County Planning and Development upon request.

Figure 1 Regional Location



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Fig 1 Regional Location

★ Project Location

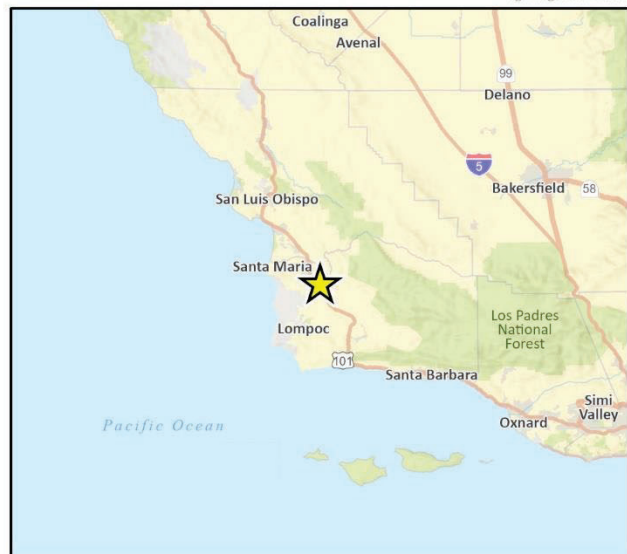


Figure 2 Project Site Location

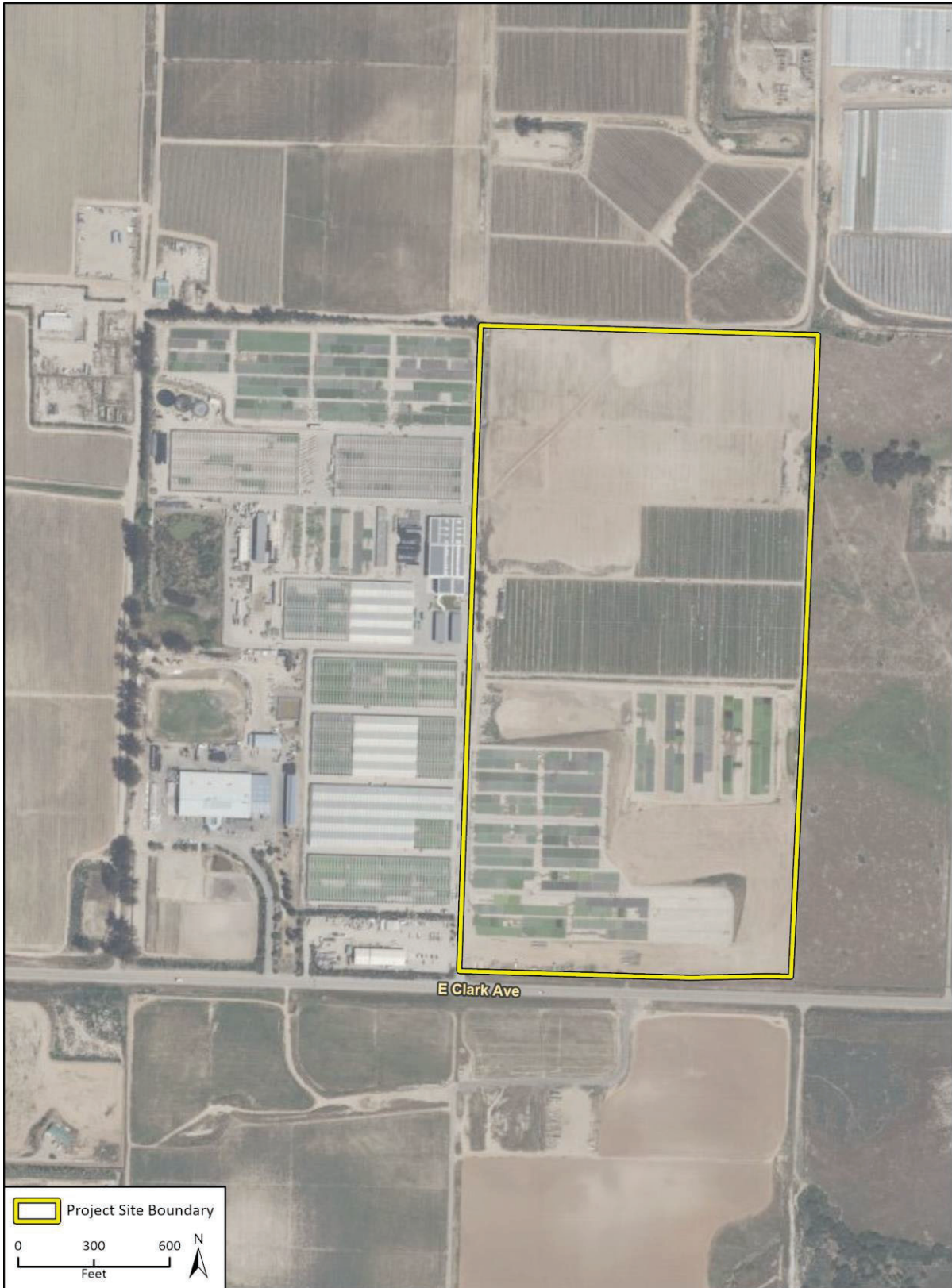
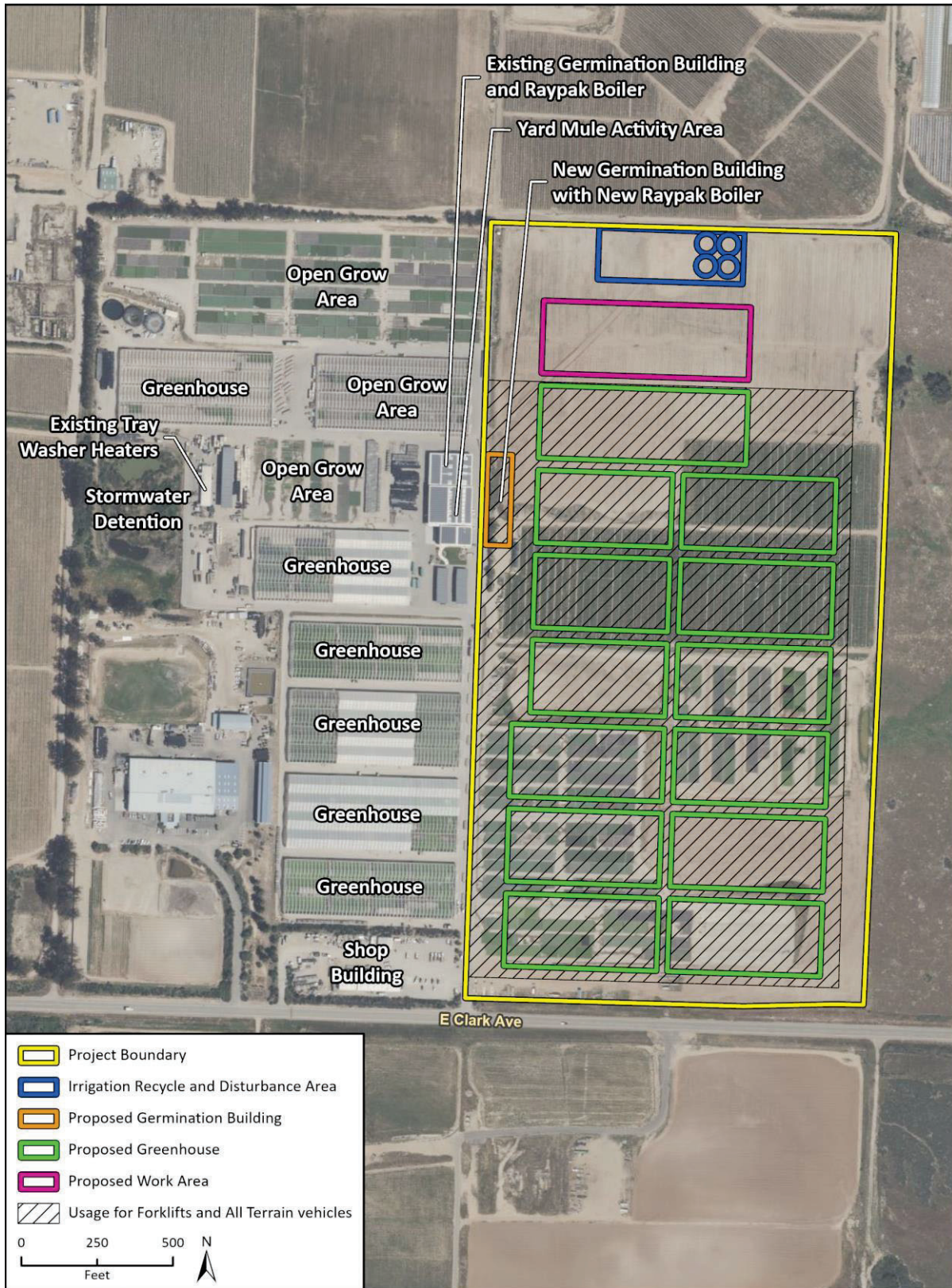
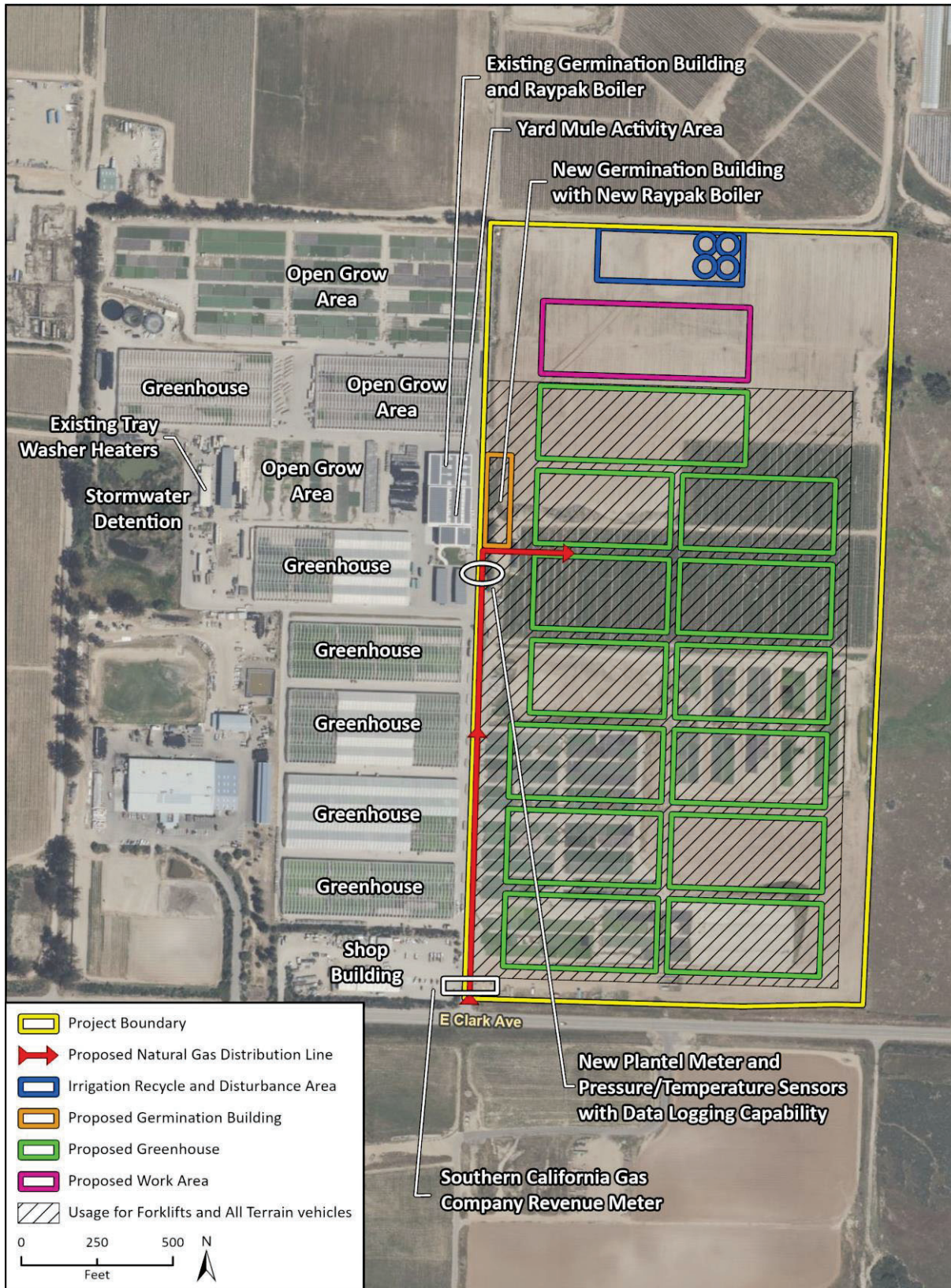


Figure 3 Project Site Plans



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Figure 4 Conceptual Gas Line



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