



14390 Chantilly Crossing Lane in Chantilly

Sully District Council Land Use and Transportation Committee  
October 17, 2022

Accelerating success.



Engineering  
& Design



- Location Map





# Existing Site Aerial

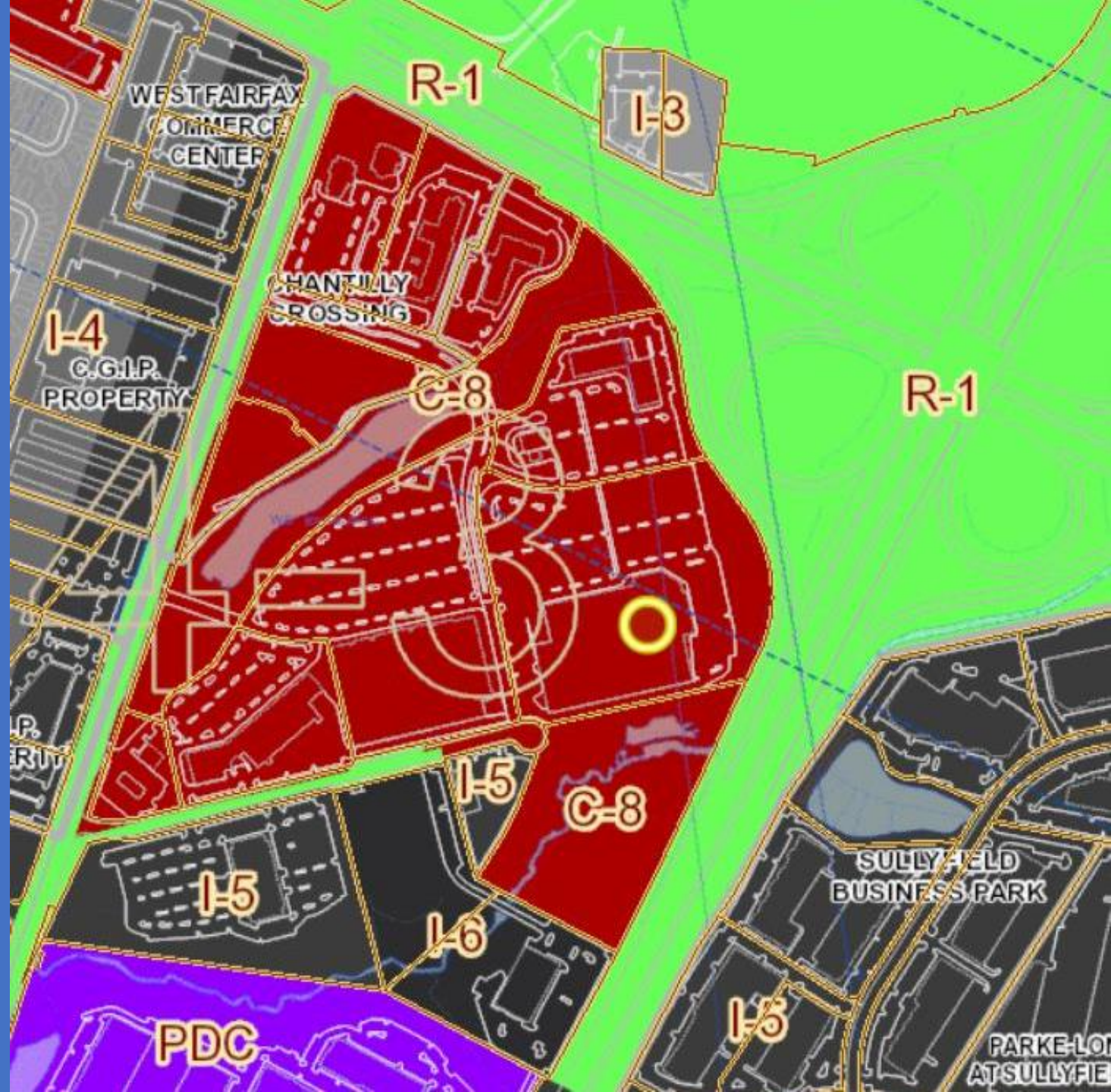
- 13.39 Acre site
- 0.37 Acre project area
- 1 Deed Parcel
  - Tax Map #0343 01 0041B



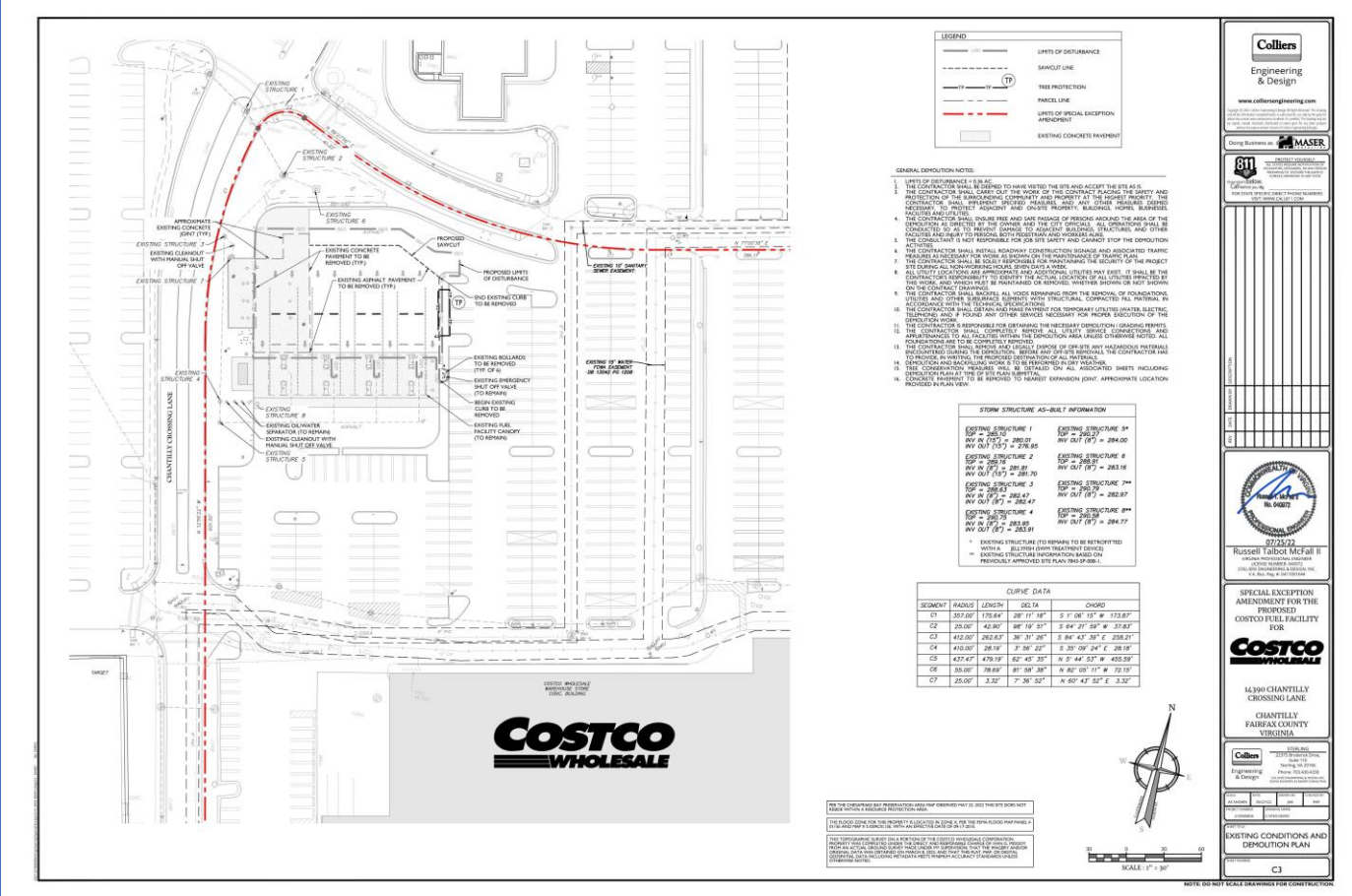


# Current Zoning

- Zoned as C-8
  - Highway Commercial District
- Surrounding area is C-8



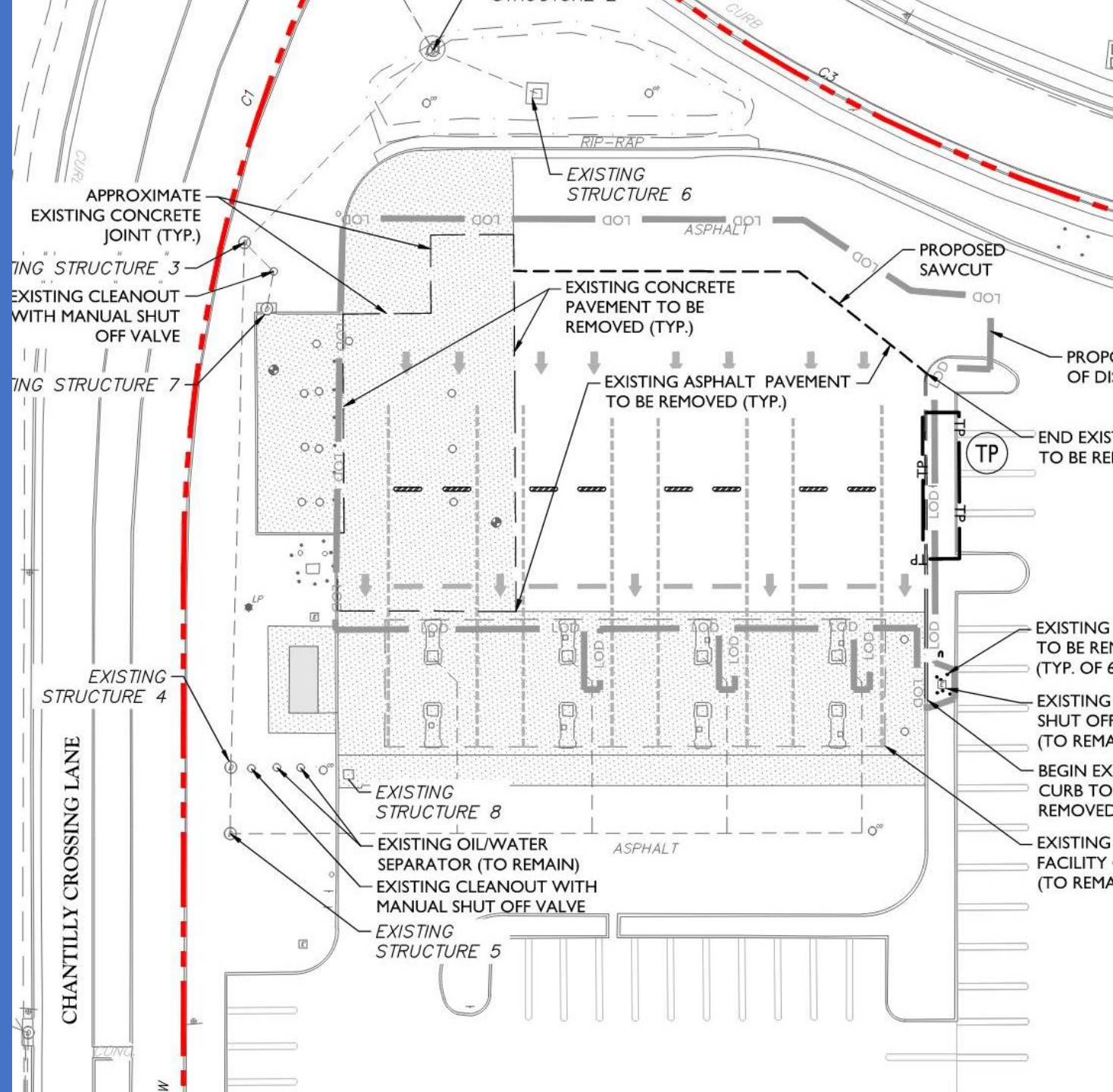
# Existing Condition Plan



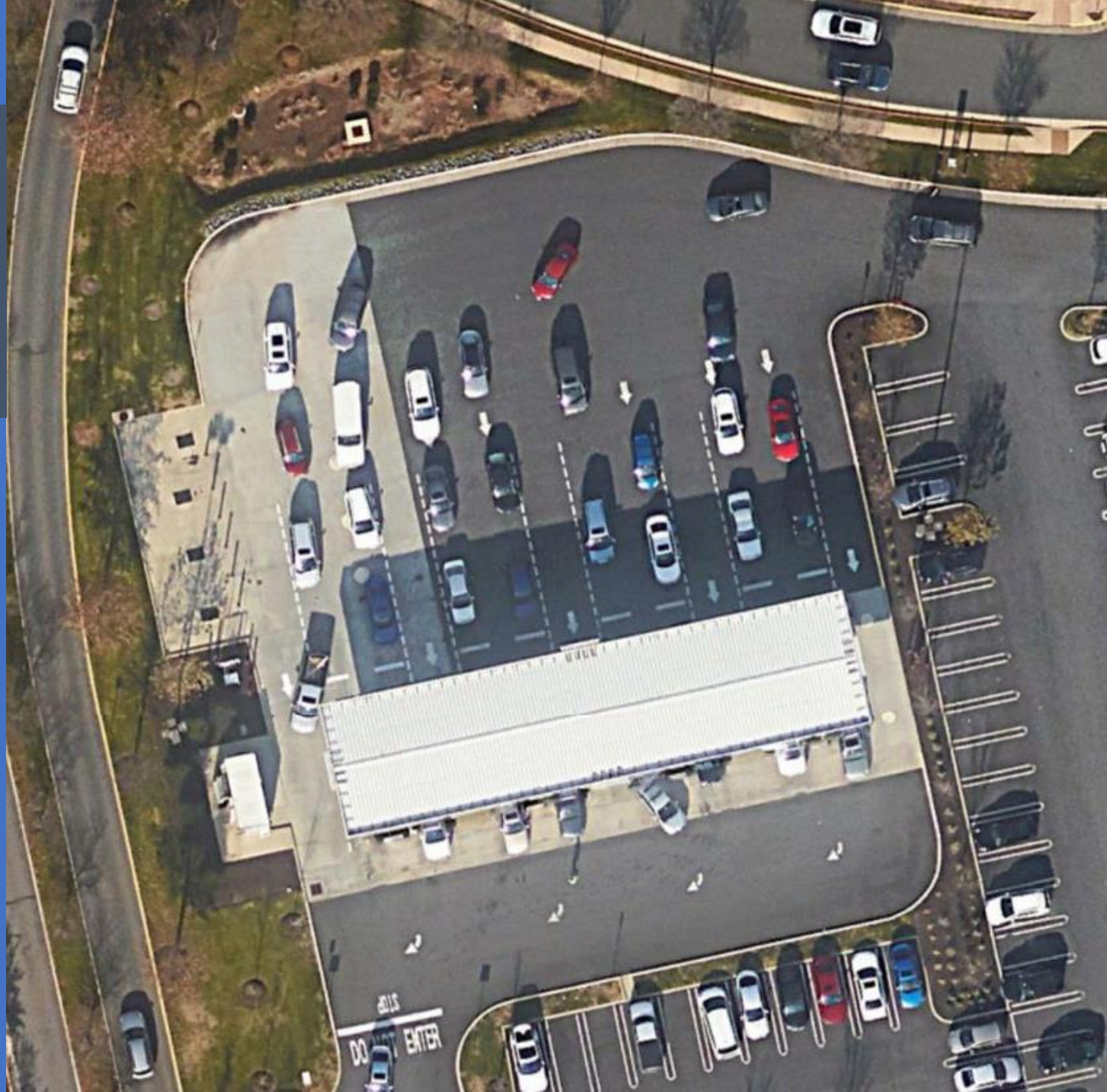


# Existing Fuel Facility

- 2 rows of 4 fuel islands
- 8 fuel islands
- 16 total fuel positions
- USTs
- Controller enclosure
- SWM facility (Bio-Retention)



- Existing Fuel Facility Aerial





# Existing SWM Facility

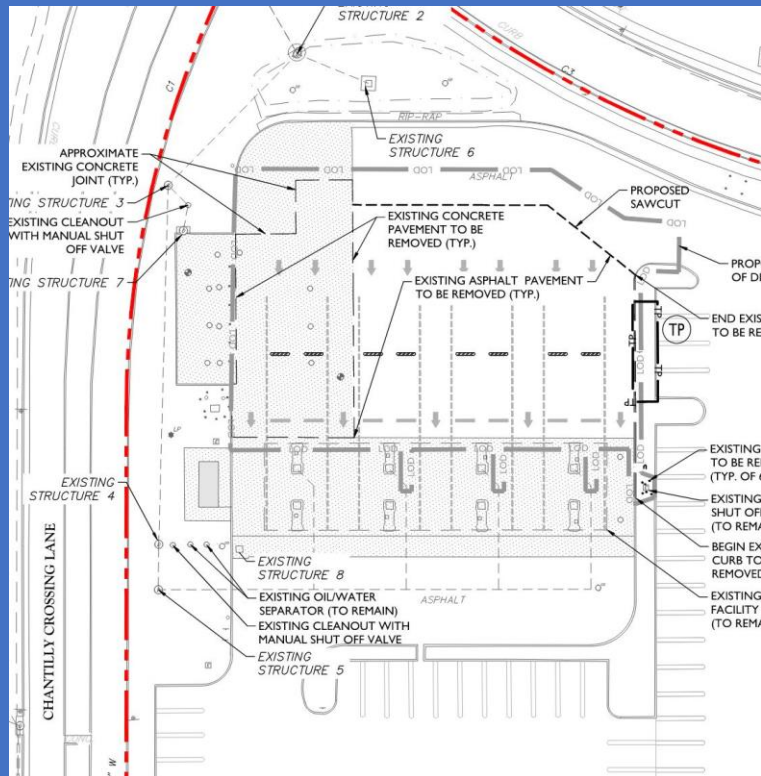
- Bio-Retention facility
- Treats an estimated 0.61 acres of surface runoff



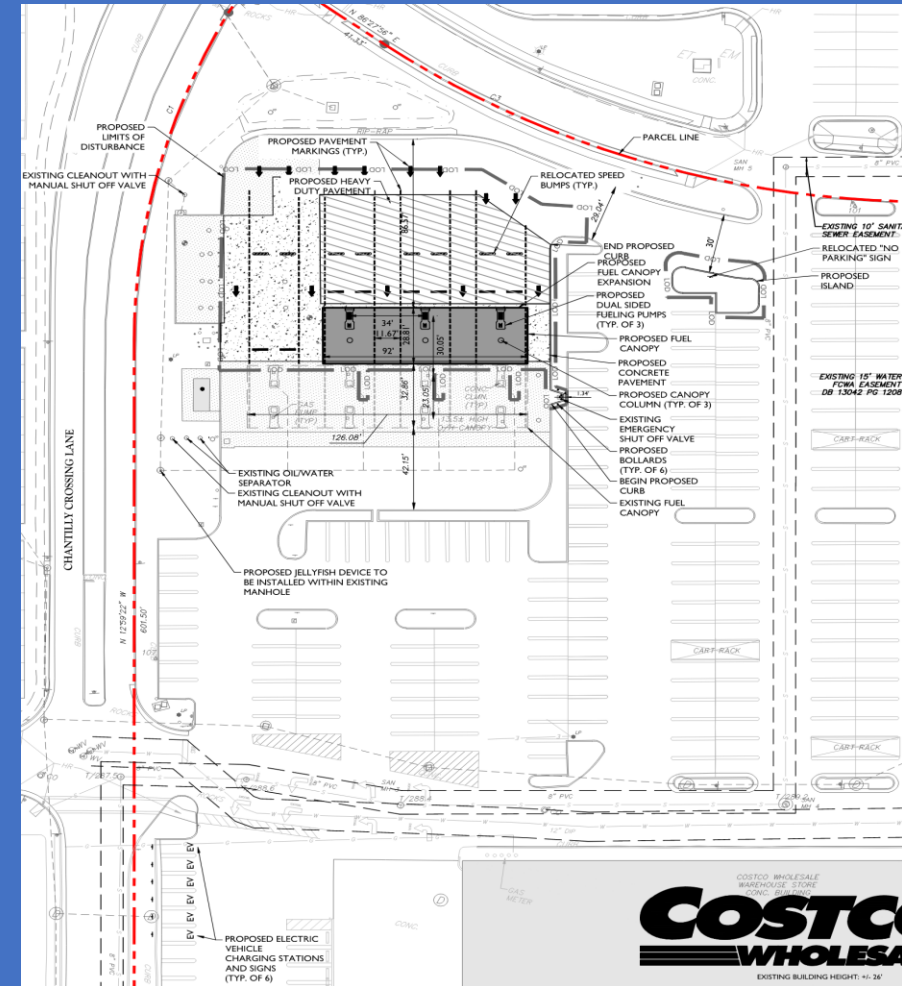


# Fuel Facility Expansion

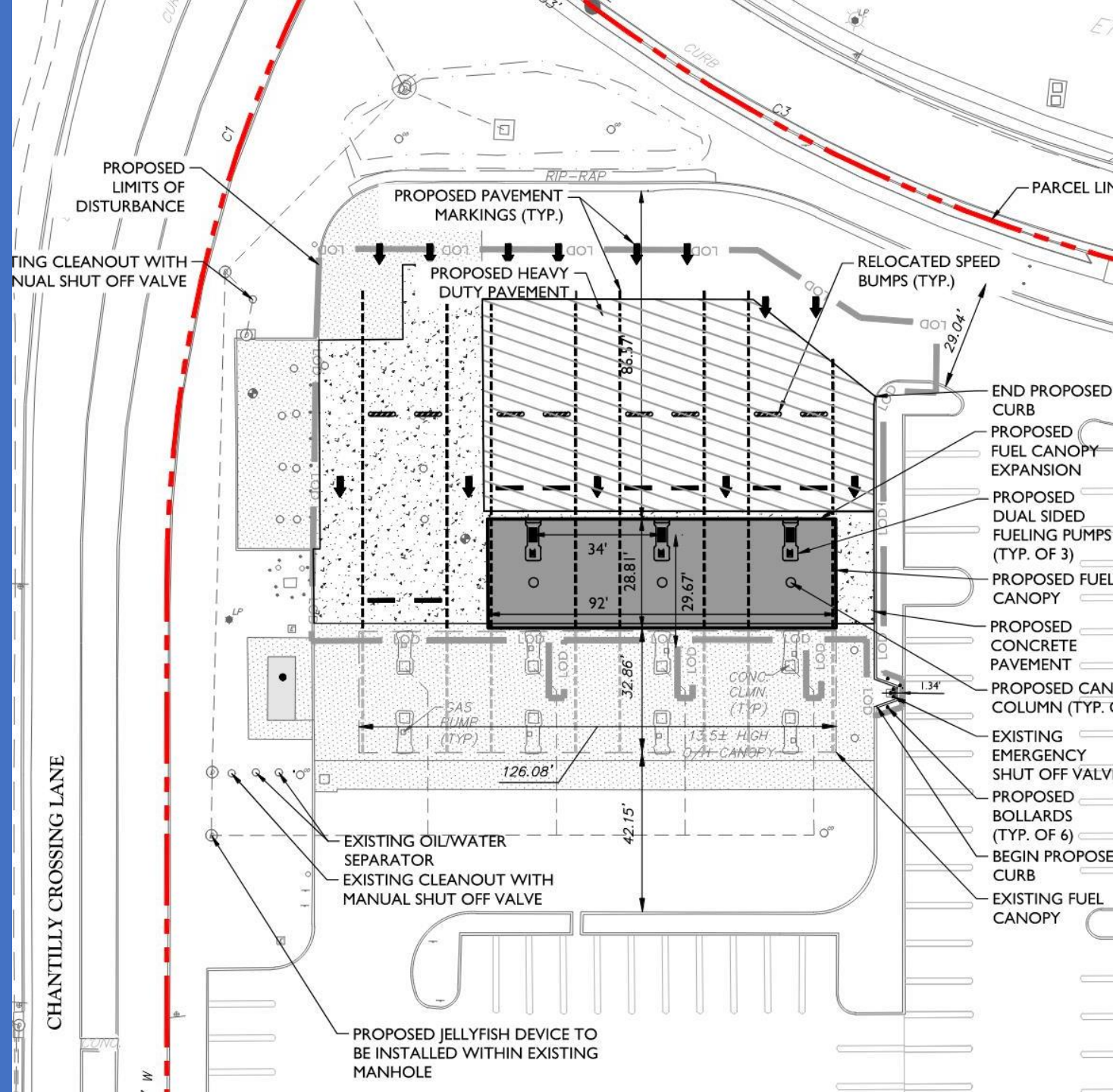
## Existing



## Proposed



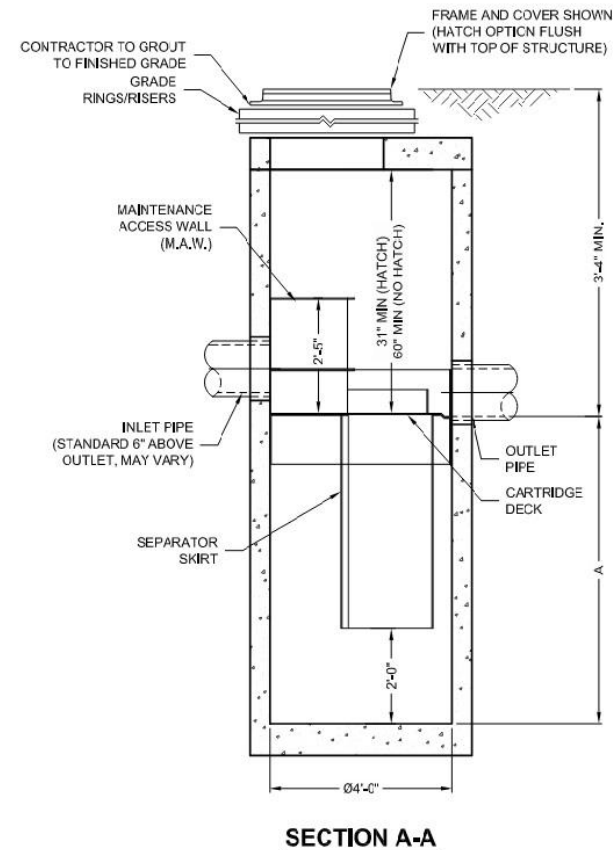
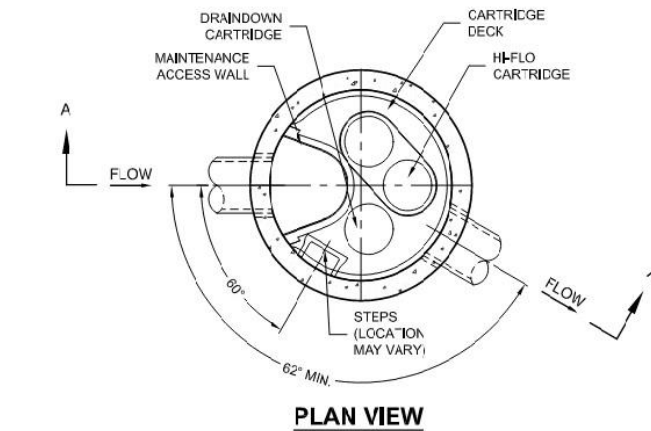
- 2 rows of 4 fuel islands
- 1 row of 3 fuel islands
- 22 total fuel positions
- Jellyfish device to assist in filtering of stormwater runoff
- USTs remain undisturbed
- Controller enclosure remains undisturbed
- ADA access to emergency shut off valve





# Proposed Jellyfish Device

- Typically size of a manhole
- High flow rate membrane filtration
- High surface area rinseable/reusable membrane cartridges
- Treating 0.16 acres of stormwater runoff from the expanded canopy

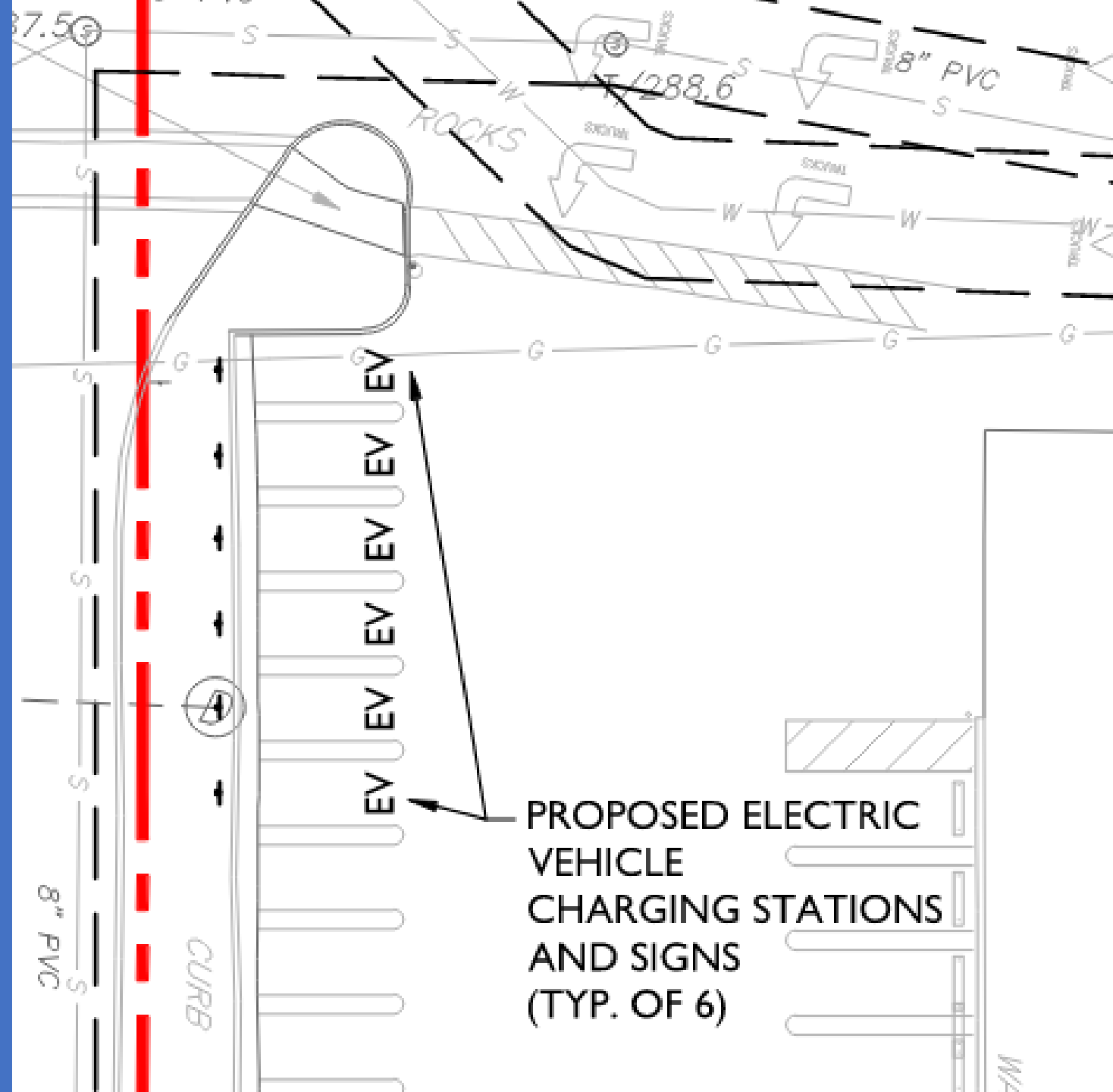


Jellyfish® Filter

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENT NO. 8,267,726; 8,221,818 & US 8,123,939; OTHER INTERNATIONAL PATENTS PENDING

# EV Charging Stations

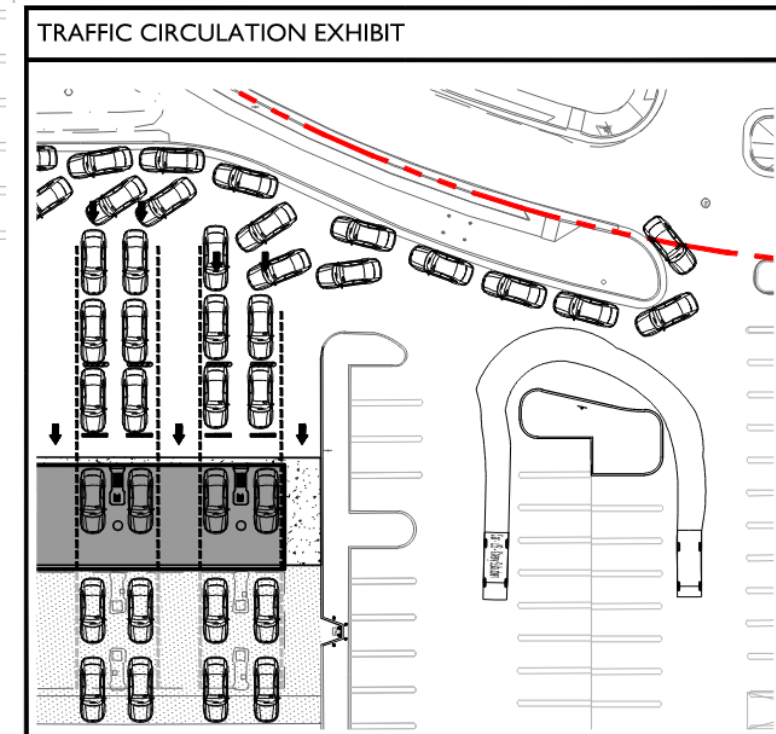
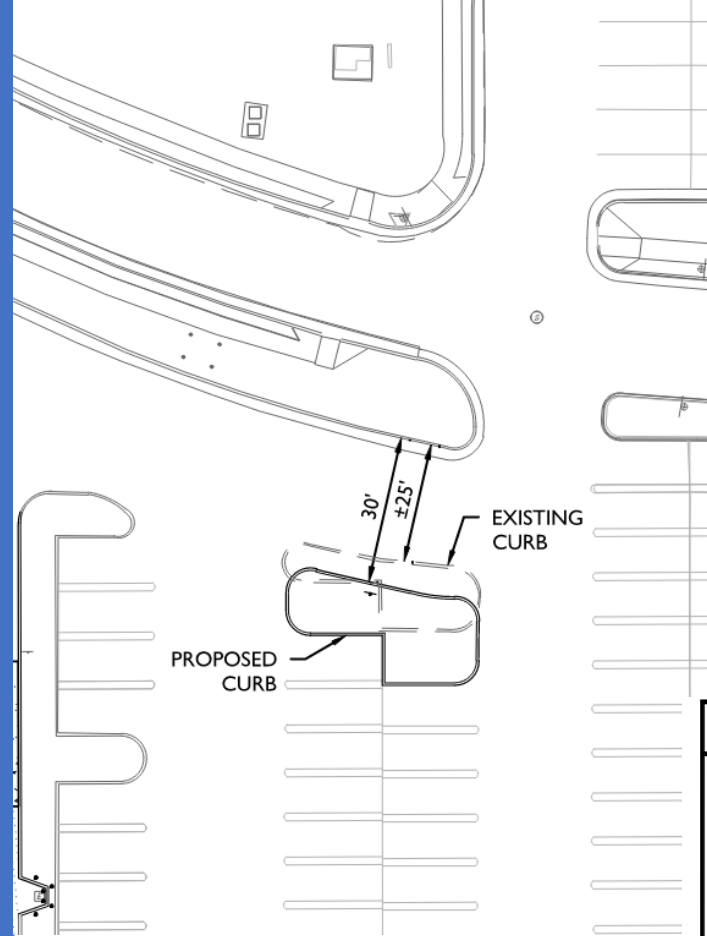
- 6 electric vehicle charging stations
- Accommodate Costco shoppers who have made the transition to EV



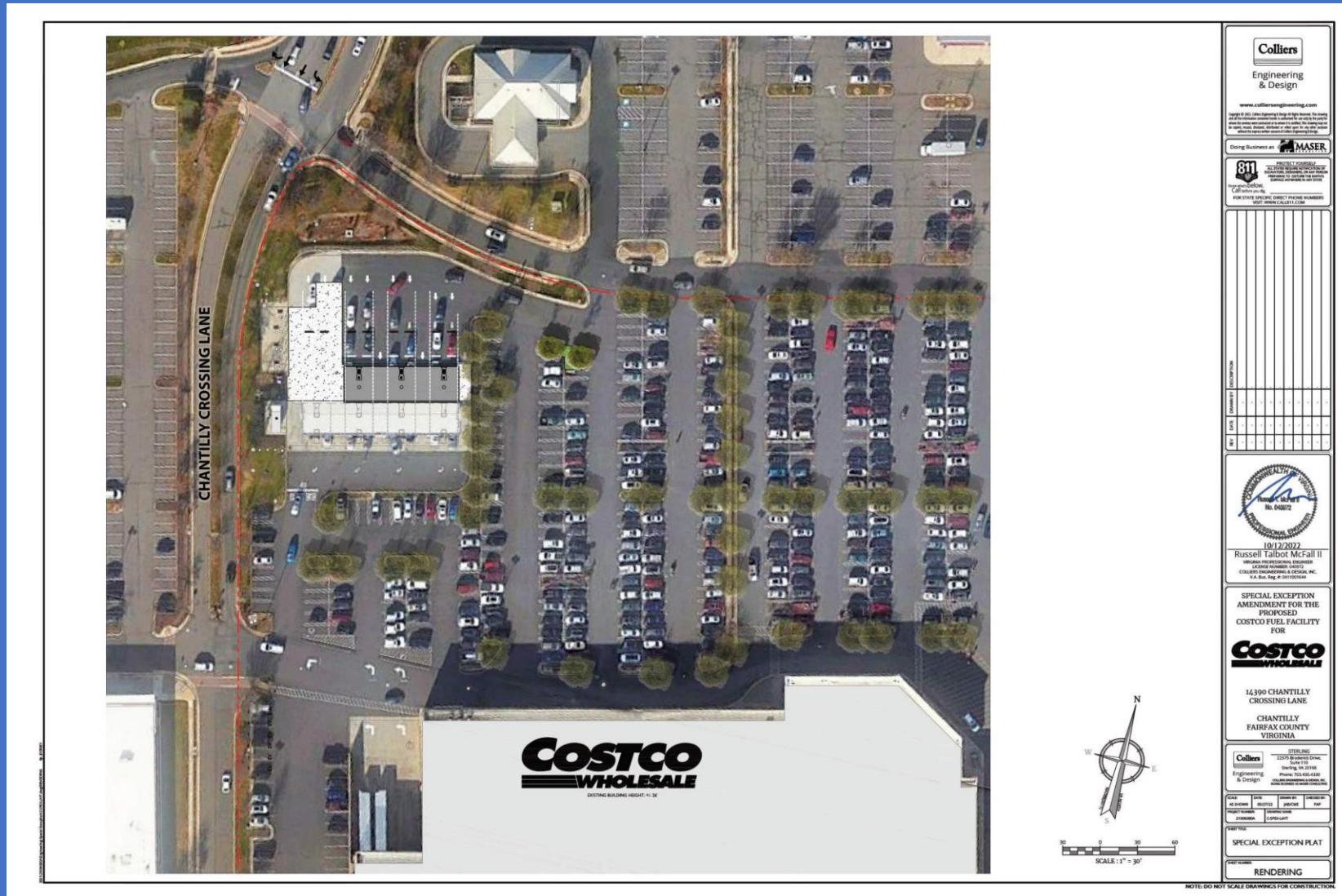


# Larger Drive Aisle

- Increasing the width of the drive aisle approaching the facility from approximately 25 feet to 30 feet
- Improve two-way traffic in the aisle
- Improve navigation of parking lot without getting stuck in fuel facility traffic
- Accommodate Costco customers driving passenger vehicles with larger turning radii

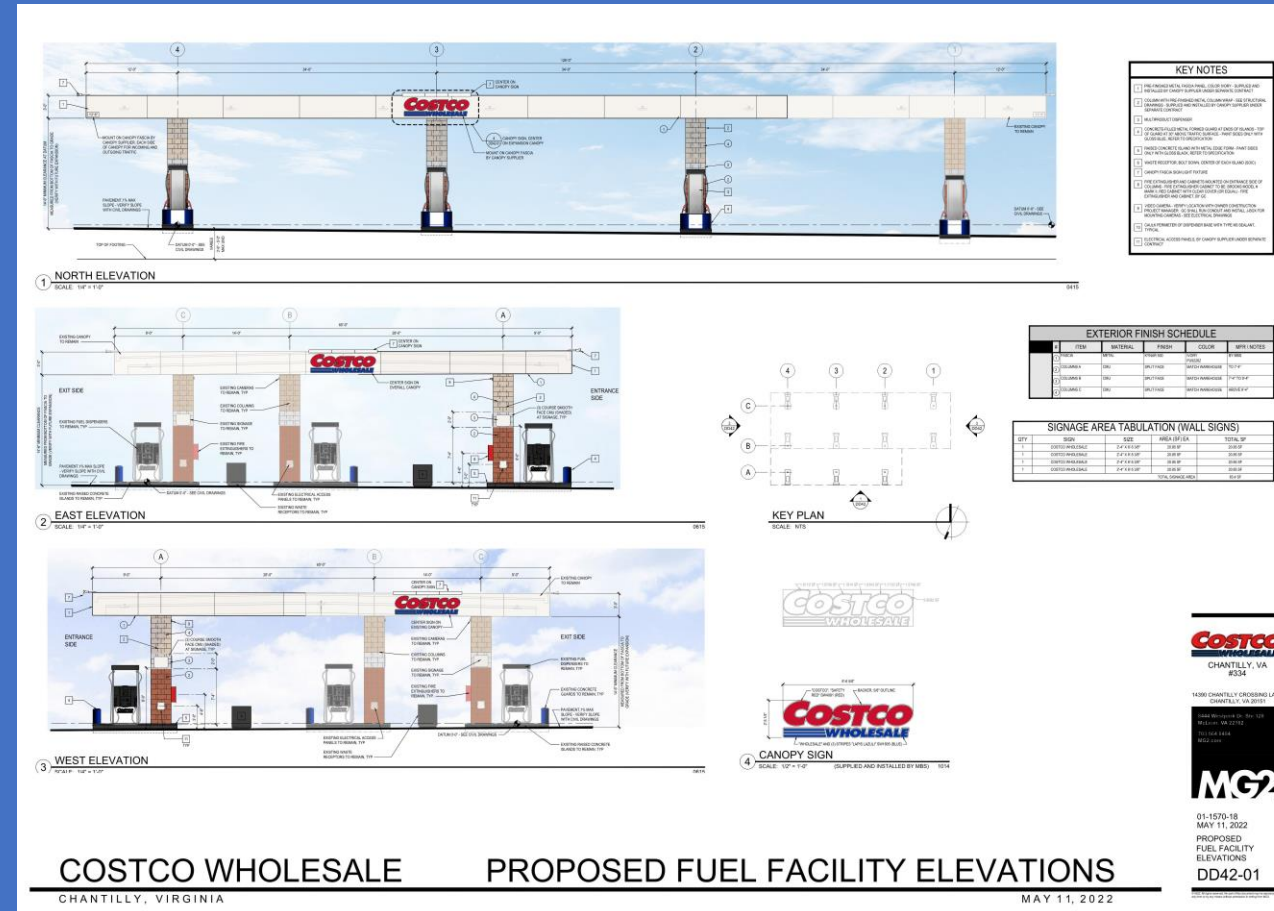


# Proposed Rendering

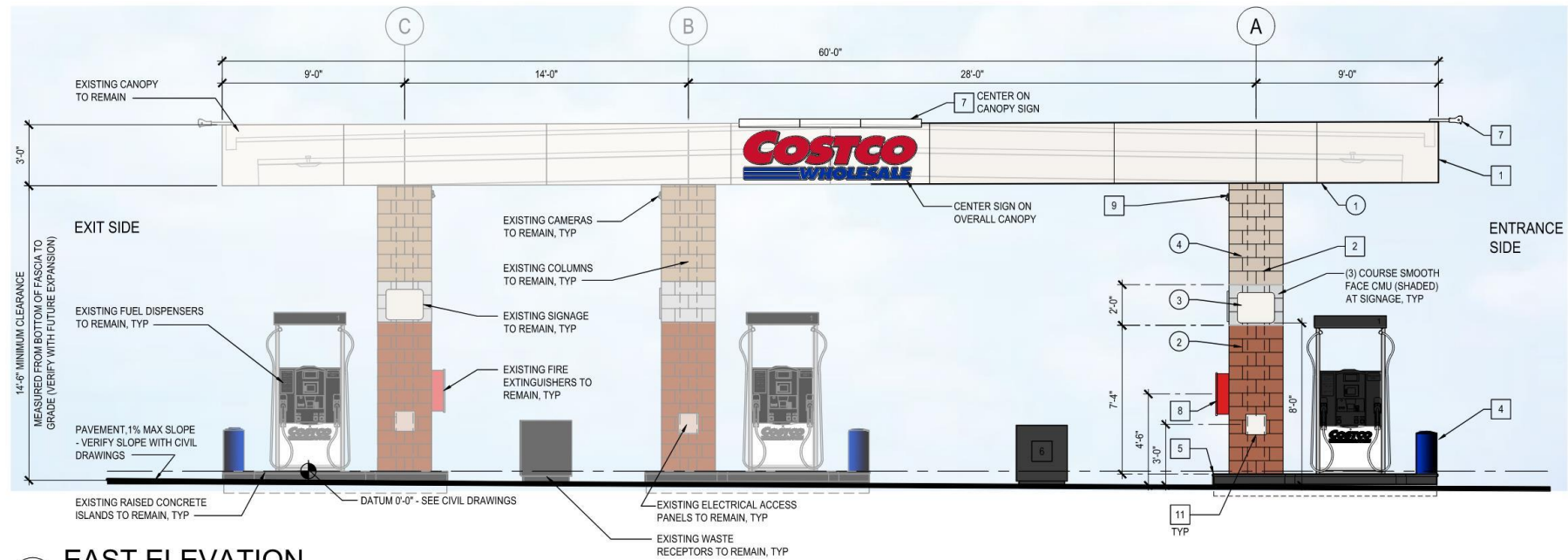




# Proposed Elevations



# Proposed Elevations



**2 EAST ELEVATION**  
SCALE: 1/4" = 1'-0"



# Process

- |   |   |   |  |
|---|---|---|--|
| 1 | Expansion of fuel facility  | 6 | No impact to existing USTs, controller enclosure or SWM facility |
| 2 | C-8 Zone – Fuel facility is a special exception. §4102.5.NN               | 7 | Deduction of surface runoff to SWM facility by expanding canopy  |
| 3 | Property is 13.39 acres, project site is only 0.37 acres (minimal impact) | 8 | Addition of 6 EV charging stations                               |
| 4 | Implementation of Jellyfish device (second SWM device for site)           | 9 | Improving drive aisle access for fuel facility                   |
| 5 | ADA access to emergency shut off valve                                    |   |  |