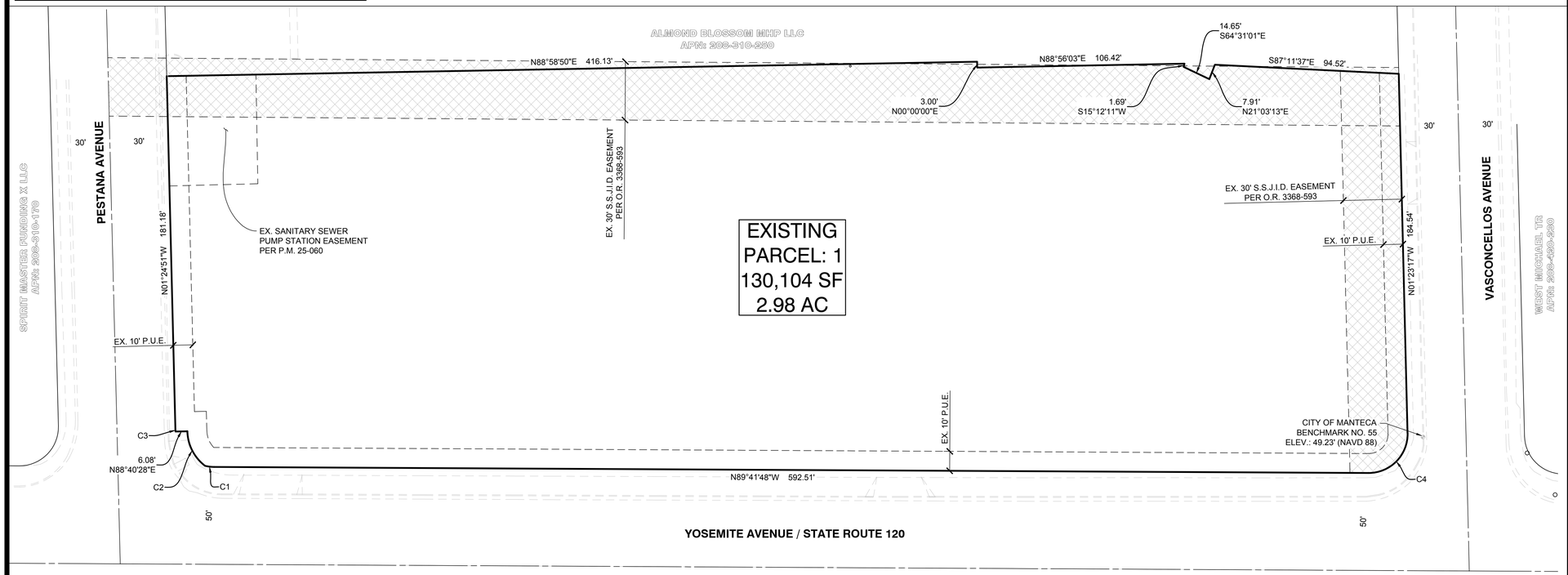
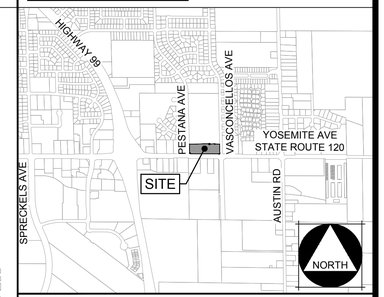
ATTACHMENT 4

## EXISTING BOUNDARY & EASEMENTS




## VICINITY MAP




## PROJECT INFORMATION

1. PROPERTY OWNERS:
   MAJOR SINGH & HARBANS KAUR
   1580 GARDEN FARMS AVE
   LATHROP, CA 95330
2. ENGINEERING:
   MCR ENGINEERING INC.
   1242 DUPONT COURT
   MANTECA, CA 95336
   (209) 239-6229
   ATTN: SHAWN SAMANIEGO
3. PURPOSE OF THE TENTATIVE MAP: SUBDIVIDE EXISTING 2.98 ACRE PARCEL INTO TWO (2) NEW COMMERCIAL PARCELS.
4. CURRENT ZONING: CG - GENERAL COMMERCIAL
5. SCHOOL DISTRICT:
   MANTECA UNIFIED SCHOOL DISTRICT
6. SEWAGE DISPOSAL BY CONNECTION TO EXISTING CITY SEWER SYSTEM.
7. STORM DRAINAGE SHALL BE COLLECTED BY ON-SITE SYSTEM AND DISCHARGED INTO EXISTING CITY STORM DRAINAGE SYSTEM.
8. DOMESTIC WATER BY CONNECTION TO CITY WATER SYSTEM.
9. ALL IMPROVEMENTS TO CONFORM TO CITY OF MANTECA STANDARDS.
10. THIS MAP WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT WHICH MAY DISCLOSE ANY EASEMENTS & OTHER ENCUMBRANCES NOT NOTED ON THIS MAP.

## LEGEND

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| WATER VALVE | | |
| AIR RELEASE VALVE | | |
| BLOWOFF | | |
| FIRE HYDRANT | | |
| WATER METER | W | W |
| SEWER MANHOLE | S | S |
| STORM MANHOLE | SD | SD |
| DRAIN INLET | | |
| CURB INLET | | |
| CLEANOUT | | |
| SEWER MANHOLE NUMBER | EX | 1 |
| STORM MANHOLE NUMBER | EX | 1 |
| WATER LINE | EX W | 8"W |
| SANITARY SEWER | EX S | 6"SS |
| STORM DRAIN | EX SD | 12"SD |
| TYPICAL ELECTROLIER | | |
| TYPICAL LUMINAIRE | | |
| ELECTRICAL VAULT | E | E |
| SURVEY MONUMENT | | |
| UTILITY POLE | | |
| SIGNAGE | | |
| ELEVATION | 40.50TC 40.00P | 40.50TC 40.00P |
| DIRECTION OF FLOW | 2.00 % | 2.00 % |
| ORIGINAL GROUND | × 40.59 | N/A |
| BARBED WIRE FENCE | | |
| WOOD FENCE | | |
| RETAINING WALL | | |
| MASONRY WALL | | |
| CURB, GUTTER & SIDEWALK | | |

## ABBREVIATION LIST

| | |
|---|---|
| @ | AT |
| AB | AGGREGATE BASE |
| AC | ASPHALT CONCRETE |
| ADA | AMERICAN DISABILITIES ACT |
| BC | BEGINNING OF CURVE |
| BDRY | BOUNDARY |
| BSL | BUILDING SET BACKLINE |
| BVC | BEGIN VERTICAL CURVE |
| BW | BOTTOM WALL |
| C & G | CURB AND GUTTER |
| CB | CATCH BASIN |
| CI | CURB INLET |
| CIP | CAST IN PLACE PIPE |
| CL | CENTER LINE |
| CO | CLEAN OUT |
| CONC | CONCRETE |
| COM | CITY OF MANTECA |
| CR | CURB RETURN |
| CRN | ROAD CROWN |
| DCDA | DOUBLE CHECK DETECTOR ASSEMBLY |
| DIA | DIAMETER |
| DIP | DUCTILE IRON PIPE |
| DO | DRIVE OVER |
| DW | DRIVEWAY |
| EC | END OF CURVE |
| EG | EXISTING GROUND |
| ELEV | ELEVATION |
| EP | EDGE OF PAVEMENT |
| ESMT | EASEMENT |
| EVA | EMERGENCY VEHICLE ACCESS |
| EVC | END OF VERTICAL CURVE |
| EX. (EX), EXIST | EXISTING |
| FDC | FIRE DEPARTMENT CONNECTION |
| FG | FINISHED GRADE |
| FH | FIRE HYDRANT |
| FL | FLOW LINE |
| G | GROUND |
| GB | GRADE BREAK |
| GW | GREASE WASTE |
| HGL | HYDRAULIC GRADE LINE |
| HP | HIGH POINT |
| INV | INVERT |
| IRR | IRRIGATION |
| LF | LINEAL FEET OR LINEAR FEET |
| LP | LOW POINT |
| MAX | MAXIMUM |
| MH | MAINTENANCE HOLE |
| MIN | MINIMUM |
| MS4 | MUNICIPAL SEPARATE STORM SEWER SYSTEM |
| NTS | NOT TO SCALE |
| OG | ORIGINAL GROUND / GRADE |
| O.R. | OFFICIAL RECORD |
| (P) | PROPOSED |
| P | PAVEMENT |
| P.A.E. | PRIVATE ACCESS EASEMENT |
| PIV | POST INDICATOR VALVE |
| PL | PROPERTY LINE |
| P.M. | PARCEL MAP (SAN JOAQUIN COUNTY RECORDS) |
| PP | POWER POLE |
| PRC | POINT OF REVERSE CURVATURE |
| PT | POINT |
| PUE | PUBLIC UTILITY EASEMENT |
| PVC | POLYVINYL CHLORIDE PIPE |
| R | RADIUS |
| RBW | RETAINING BOTTOM OF WALL |
| RCP | REINFORCED CONCRETE PIPE |
| RET | RETURN |
| RGRCP | RUBBER GASKET REINFORCED CONCRETE PIPE |
| ROW/RW | RIGHT-OF-WAY |
| RPA | REDUCED PRESSURE BACKFLOW ASSEMBLY |
| RPBA | REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY |
| RPDA | REDUCED PRESSURE DETECTOR ASSEMBLY |
| RPV | PRESSURE REDUCING VALVE |
| RTW | RETAINING TOP OF WALL |
| RWL | RAIN WATER LEADER |
| S | SLOPE |
| SCDA | SINGLE CHECK DETECTOR ASSEMBLY |
| SD | STORM DRAIN |
| SHT | SHEET |
| SL | SECTION LINE |
| SNS | STREET NAME SIGN |
| STA | STATION |
| STD | STANDARD |
| SW / S/W | SIDEWALK |
| SS | SANITARY SEWER |
| S.S.J.I.D. | SOUTH SAN JOAQUIN IRRIGATION DISTRICT |
| TB | THRUST BLOCK |
| TC | TOP OF CURB |
| TEMP | TEMPORARY |
| THRU | THROUGH |
| TI | TRAFFIC INDEX |
| TPE | TREE PLANTING EASEMENT |
| TR | TRANSITION |
| TW | TOP OF WALL |
| TYP. | TYPICAL |
| U.N.O. | UNLESS NOTED OTHERWISE |
| V | 6" VERTICAL CURB |
| VM | 4" VERTICAL CURB (MODIFIED) |
| W | WATER |
| WS | WATER SERVICE |
| ± | PLUS OR MINUS (NOT EXACT) |

| CURVE TABLE | | | |
|---|---|---|---|
| CURVE | RADIUS | LENGTH | DELTA |
| C1 | 20.00 | 4.78 | 13°40'55" |
| C2 | 22.97 | 20.55 | 51°15'56" |
| C3 | 20.00 | 1.34 | 3°50'31" |
| C4 | 20.00 | 32.01 | 91°41'29" |

**BENCHMARK:**
CITY OF MANTECA BENCHMARK NO. 55, ELEVATION=49.23' (NAVD 88)
FOUND 2" BRASS DISK, STAMPED NO.55, DRILLED AND EPOXIED INTO THE TOP OF CURB NEAR THE NORTH CURB RETURN , AT THE N.W. CORNER OF YOSEMITE BLVD AND VASCONCELLOS AVENUE PER CORNER RECORD 19-016 ON FILE WITH S.J.CO. SURVEYOR'S OFFICE.

**BASIS OF BEARINGS:**
THE BASIS OF BEARINGS FOR THIS SURVEY IS ESTABLISHED BY FOUND MONUMENTS ON THE CENTERLINE OF VASCONCELLOS AVENUE WHICH BEARS NORTH 01°23'17" WEST PER P.M. 25-60, S.J.C.R.

## SHEET INDEX



## APPROVALS

FILED AS A TENTATIVE MAP THIS _____ DAY OF _____, 2023
FEE: _____

_____
CITY OF MANTECA PLANNING COMMISSION

APPROVED BY THE CITY OF MANTECA PLANNING COMMISSION
THIS _____ DAY OF _____, 2023

_____
CHAIRMAN

APPROVED BY THE CITY ENGINEER OF THE CITY OF MANTECA
THIS _____ DAY OF _____, 2023

_____
CITY ENGINEER


MCR ENGINEERING
www.mcreng.com
1242 DUPONT COURT
MANTECA, CA 95336
TEL : ( 209 ) 239 - 6229
FAX : ( 209 ) 239 - 8839


REGISTERED PROFESSIONAL ENGINEER
J. DAN EAVENSON
No. C54088
EXP. 12-31-25
CIVIL
STATE OF CALIFORNIA

APPROVED:

| PLAN REVISIONS | | |
|---|---|---|
| NO. | DESCRIPTIONS | DATE |
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |

# TENTATIVE PARCEL MAP
# 1901 E. YOSEMITE AVENUE
MANTECA, CALIFORNIA

Know what's below.
Call before you dig.
811 / 800-227-2600

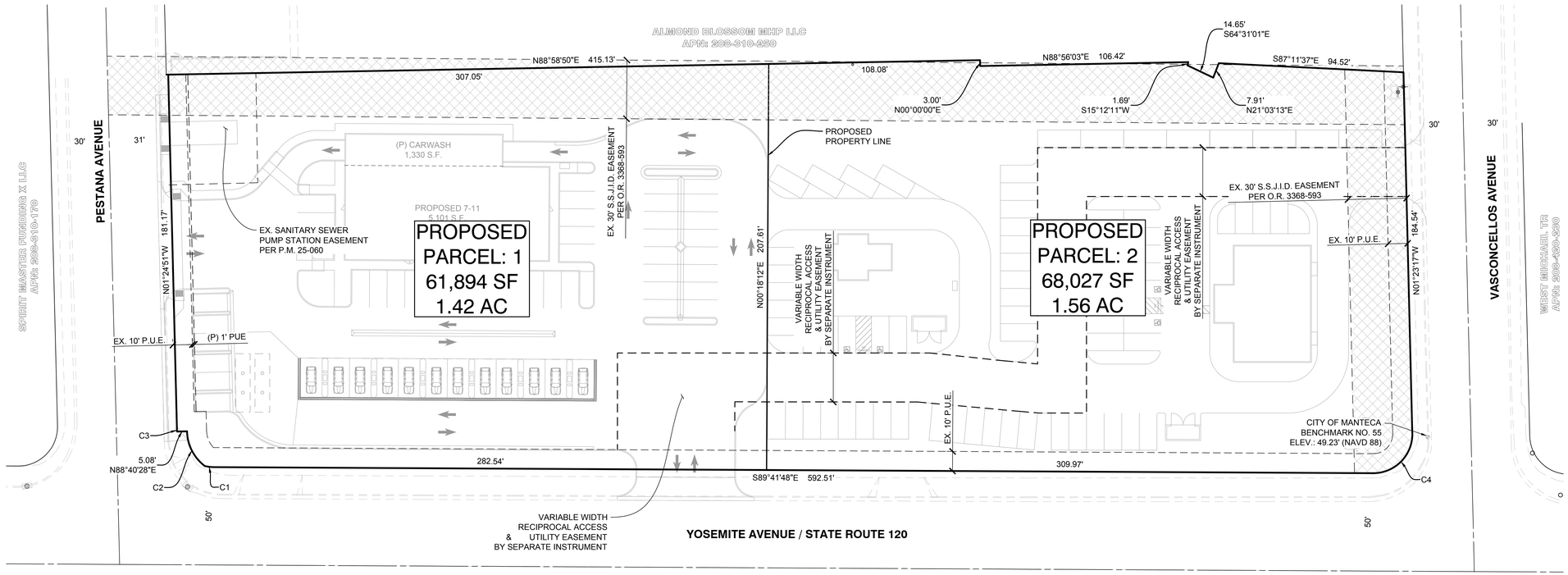
| | |
|---|---|
| JOB NO.: | 23-037 |
| DATE: | JANUARY 8, 2024 |
| SCALE: | AS SHOWN |
| DR. BY: | RP, RBP |
| CK. BY: | SLS, DE |

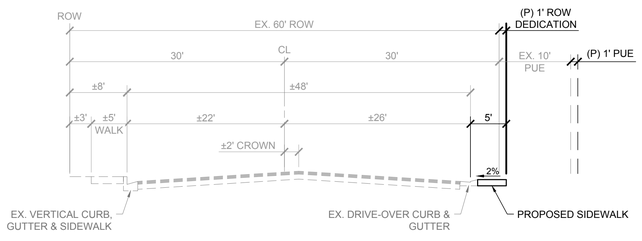
SHEET NO.

**TPM 1**

OF 5 SHEETS

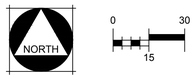
ATTACHMENT 4




1 PESTANA AVENUE

SCALE: 1" = 10'




| PARCEL DATA TABLE | | | | | |
|---|---|---|---|---|---|
| PARCEL | LOT SIZE (SF) | LOT COVERAGE | EXISTING & PROPOSED ZONING | PROPOSED LAND USE DESIGNATION | PARKING PROVIDED |
| 1 | 62,077 | 10.4% | GC - GENERAL COMMERCIAL | C - RETAIL RESTAURANT & CAR WASH | STANDARD - 27<br>EV - 2<br>ACCESSIBLE - 2<br>TOTAL = 41 STALLS |
| 2 | FUTURE PHASE | | | | |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EXP. 12-31-25
CIVIL
STATE OF CALIFORNIA

APPROVED:

PLAN REVISIONS

| NO. | DESCRIPTIONS | DATE |
|---|---|---|
| 1 | | |
| 2 | | |
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| 7 | | |

# TENTATIVE PARCEL MAP
# 1901 E. YOSEMITE AVENUE

MANTECA, CALIFORNIA

811 Know what's below. Call before you dig. 811 / 800-227-2600

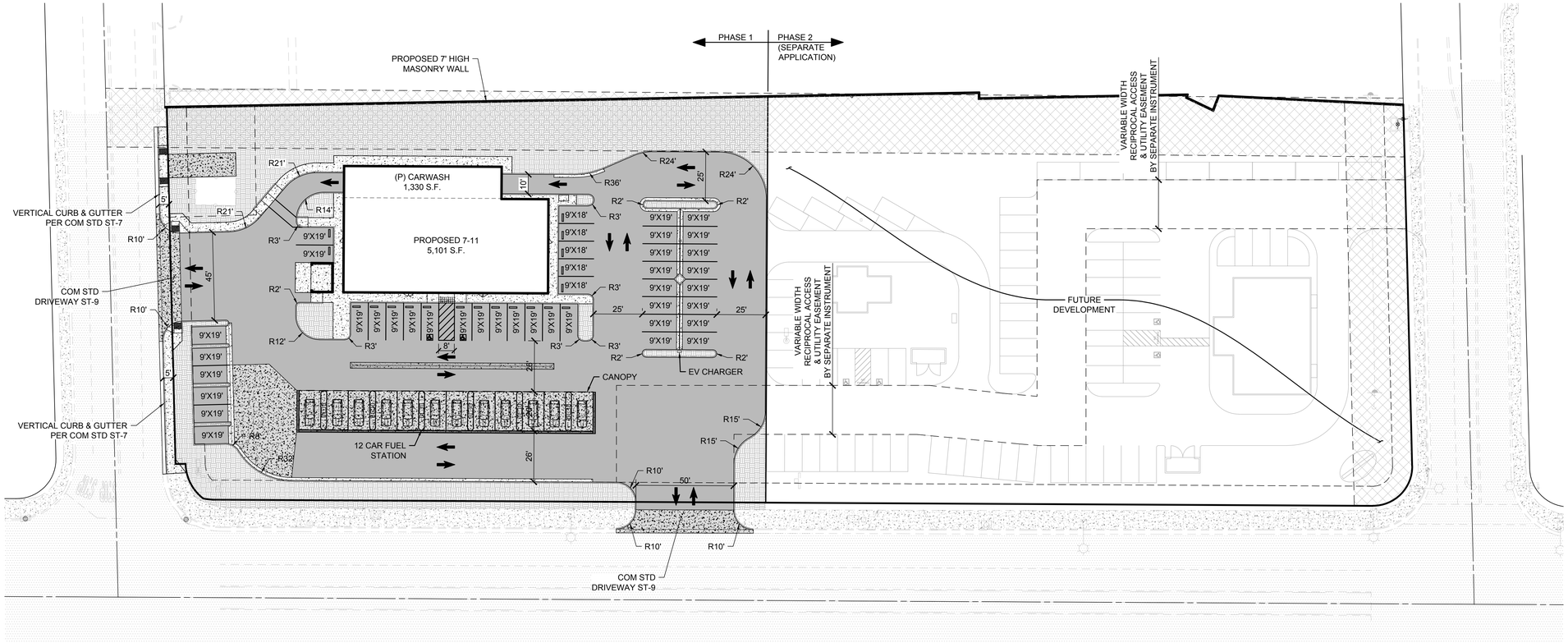
JOB NO.: 23-037
DATE: JANUARY 8, 2024
SCALE: AS SHOWN
DR. BY: RP, RBP
CK. BY: SLS, DE

SHEET NO.

**TPM 2**

OF 5 SHEETS

ATTACHMENT 4




NORTH

0 30
15

## SITE PLAN LEGEND

- LANDSCAPE
- CONCRETE (PROPOSED)
- PAVEMENT (PROPOSED)
- PAVEMENT (EXISTING)

## SITE PLAN INFO

PAVEMENT AREA: 34,674 S.F.
CONCRETE AREA: 5,829 S.F.
LANDSCAPE AREA: 16,317 S.F.

PARKING PROVIDED:

| | |
|---|---|
| STANDARD: | 37 STALLS |
| ELECTRIC VEHICLE: | 2 STALLS |
| ACCESSIBLE: | 2 STALLS |
| TOTAL: | 41 STALLS |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EXP. 12-31-25
CIVIL
STATE OF CALIFORNIA

APPROVED:

PLAN REVISIONS

| NO. | DESCRIPTIONS | DATE |
|---|---|---|
| 1 | | |
| 2 | | |
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| 5 | | |
| 6 | | |
| 7 | | |

# SITE PLAN & PHASING PLAN
## 1901 E. YOSEMITE AVENUE
MANTECA, CALIFORNIA

Know what's below.
Call before you dig.
811 / 800-227-2600

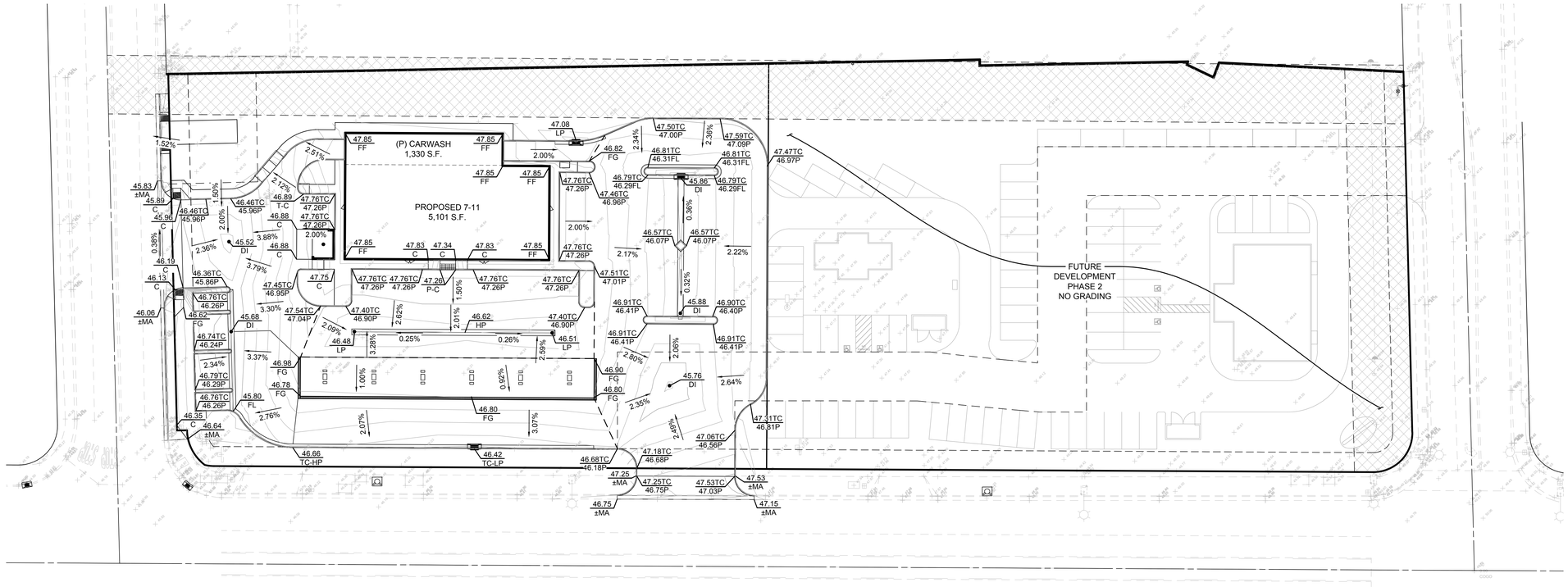
| | |
|---|---|
| JOB NO.: | 23-037 |
| DATE: | JANUARY 8, 2024 |
| SCALE: | AS SHOWN |
| DR. BY: | RP, RBP |
| CK. BY: | SLS, DE |

SHEET NO.

**TPM 3**

OF 5 SHEETS

ATTACHMENT 4




NORTH

0 30
15

**LEGEND**

| EXISTING | | PROPOSED | |
|---|---|---|---|
| XX.XX / XX | ELEVATION | XX.XX / XX | ELEVATION |
| X.XX% | SLOPE | X.XX% | SLOPE |
| | EXISTING GROUND | ##### | DIRECTION OF FLOWLINE |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MANTECA, CA 95336
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J. DAN EAVENSON
No. C54088
EXP. 12-31-25
CIVIL
STATE OF CALIFORNIA

APPROVED:

PLAN REVISIONS

| NO. | DESCRIPTIONS | DATE |
|---|---|---|
| 1 | | |
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| 7 | | |

# PRELIMINARY GRADING & DRAINAGE PLAN
## 1901 E. YOSEMITE AVENUE
MANTECA, CALIFORNIA

811 Know what's below. Call before you dig. 811 / 800-227-2600

| | |
|---|---|
| JOB NO.: | 23-037 |
| DATE: | JANUARY 8, 2024 |
| SCALE: | AS SHOWN |
| DR. BY: | RP, RBP |
| CK. BY: | SLS, DE |

SHEET NO.

**TPM 4**

OF 5 SHEETS

**MCR ENGINEERING**
1242 Dupont Court
Manteca, CA 95336
**(209) 239-6229**
**FAX (209) 239-8839**

| | | | |
|---|---|---|---|
| JOB | 1901 E. YOSEMITE AVENUE | | |
| SHEET | 1 | OF | 1 |
| BY | RBP | DATE | 1/8/2024 |

## FRENCH DRAIN - Design Calculations

*Precipitation Depth Per City of Manteca Storm Drain Master Plan (SDMP)*

Volume Requirements:

| | | | |
|---|---|---|---|
| Design Frequency = | 10 | Year | |
| Storm Duration = | 48.0 | Hours | |
| Runoff, R = | 3.56 | inches | 0.30 ft |

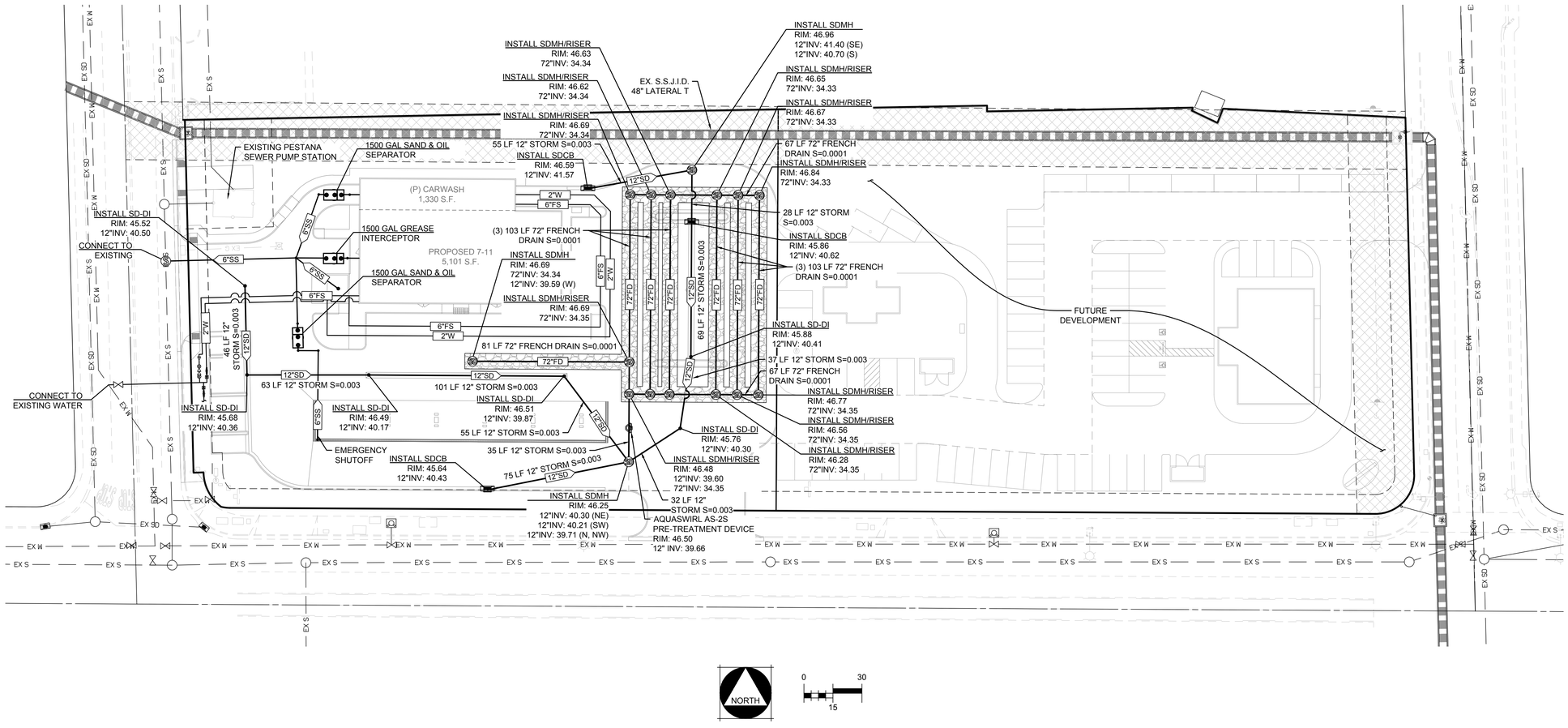
| | C | A (ac) | A (sf) | R (ft) | V (ac-ft) | V (cf) |
|---|---|---|---|---|---|---|
| Weighted Coefficient | 0.95 | 1.43 | 62,077 | 0.30 | 0.40 | 17,495 |
| Totals: | 0.95 | 1.43 | 62,077 | 0.30 | 0.40 | 17,495 |

| | | | | |
|---|---|---|---|---|
| Required Volume of Storage = | 0.40 | ac-ft | 17,495 | cf |
| 200% Required Volume of Storage = | 0.80 | ac-ft | 34,991 | cf |

Volume Calculations:

| | | | | |
|---|---|---|---|---|
| Pipe Diameter = | 72 | in | | |
| 72" Design Perforated Pipe Length = | 833 | ft | | |
| Min Req. 72" Perf. Pipe Length = | 822 | ft | | |
| Rock Channel Length = | 833 | ft | | |
| Rock Channel Width = | 8.0 | ft | | |
| Rock Channel Depth = | 8.0 | ft | | |
| Gross Rock Channel Volume = | 53,312 | cf | | |
| Drain Rock Porosity = | 0.40 | | Pipe Volume = | 23,553 cf |
| Drain Rock Volume = | 29,759 | cf | Void Volume = | 11,904 cf |

| | | | | |
|---|---|---|---|---|
| Total French Drain Volume = | 0.81 | ac-ft | 35,456 | cf |
| Remaining Required Storage Volume = | -0.01 | ac-ft | -466 | cf |

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REGISTERED PROFESSIONAL ENGINEER
J. DAN EAVERSON
No. C54088
EXP. 12-31-25
CIVIL
STATE OF CALIFORNIA

APPROVED:

PLAN REVISIONS

| NO. | DESCRIPTIONS | DATE |
|---|---|---|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |

# PRELIMINARY UTILITY PLAN
# 1901 E. YOSEMITE AVENUE
MANTECA, CALIFORNIA

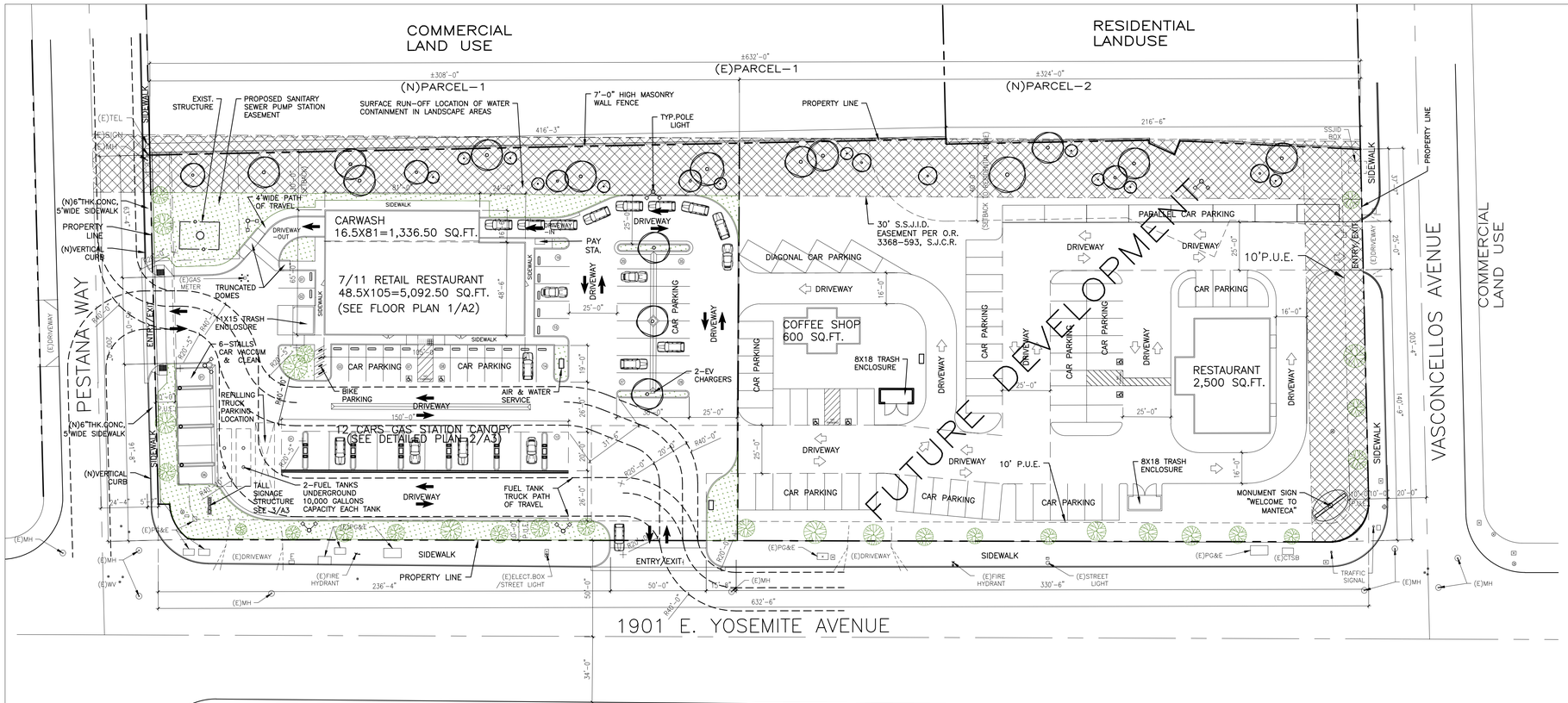
811 Know what's **below.** **Call** before you dig.
**811 / 800-227-2600**

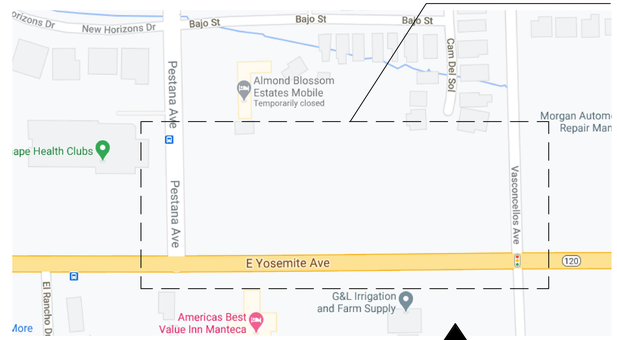
| | |
|---|---|
| JOB NO.: | 23-037 |
| DATE: | JANUARY 8, 2024 |
| SCALE: | AS SHOWN |
| DR. BY: | RP, RBP |
| CK. BY: | SLS, DE |

SHEET NO.

**TPM 5**

OF 5 SHEETS




VICINITY MAP

NTS

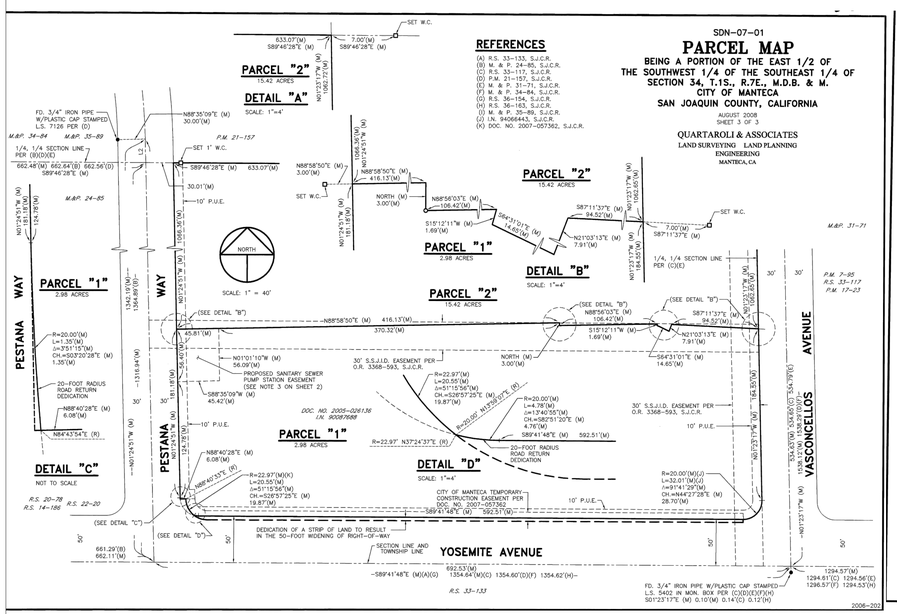
| (E)PARCEL-1 SUBDIVISION | | |
|---|---|---|
| LOT PARCEL NAME | AREA (SQ.FT.) | PERCENTAGE (%) |
| (N)PARCEL-1 | 61, 894.00 | 47.64% |
| (N)PARCEL-2 | 68, 027.00 | 52.36% |
| (E)PARCEL-1 | 129, 921.00 | 100.00% |

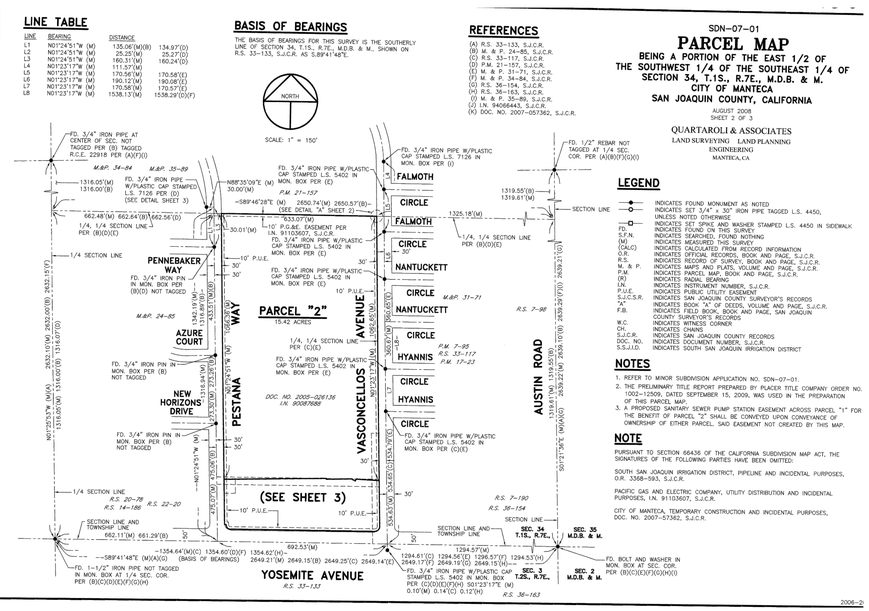
| SITE RATIO CALCULATIONS FOR LOT (N)PARCEL-1 | | |
|---|---|---|
| SURFACE AREA | AREA (SQ.FT.) | PERCENTAGE (%) |
| PAVEMENT | 36,277.00 | 59.00% |
| BUILDING | 6,429.00 | 10.00% |
| CANOPY | 3,000.00 | 5.00% |
| LANDSCAPE | 16,188.00 | 26.00% |
| (N) PARCEL-1 | 61,894.00 | 100.00% |

# PROPOSED SITE PLAN

SCALE: 1/32"=1'-0"

COMMERCIAL LAND USE




# PROJECT DATA

PROJECT LOCATION: 1901 E. YOSEMITE AVE, MANTECA, CA. 95336
PROJECT DESCRIPTION: PROPOSED GENERAL SITE PLAN

OWNER'S NAME: MR. MAJOR SINGH
CONTACT NUMBER: 601-4312

JURISDICTION: CITY OF MANTECA
1001 W. CENTER ST., MANTECA, CA

ASSESSOR'S PARCEL #: 208-310-26
ZONING: CG
TYPE OF CONSTRUCTION: V-B
NUMBER OF STORIES: 1

LOT AREA: (N)PARCEL-1 (61,894 SQ.FT.) 47.64%
(N)PARCEL-2 (68,027 SQ.FT.) 52.36%
(E)PARCEL-1 (129,921 SQ.FT.) 100.00%

FIRE SPRINKLER: YES

APPLICABLE CODES I. CALIFORNIA CODE OF REGULATION (CCR), TITLE 24:
PART 2. 2022 CALIFORNIA BUILDING CODE
PART 3. 2022 CALIFORNIA ELECTRICAL CODE
PART 4. 2022 CALIFORNIA MECHANICAL CODE
PART 5. 2022 CALIFORNIA PLUMBING CODE
PART 6. 2022 CALIFORNIA ENERGY CODE
PART 9. 2022 CALIFORNIA FIRE CODE
PART 11. 2022 CA GREEN BLDG STANDARDS CODE
PART 12. 2022 CA REFERENCE STANDARDS CODE

# DESIGN CRITERIA:

WIND SPEED: 110 MPH
WIND EXPOSURE CATEGORY: C
SEISMIC CATEGORY: D
ALLOWABLE DESIGN SOIL: 1500 PSF
CLIMATE ZONE: 12

# SCOPE OF WORKS:

- PROPOSED CONVENIENCE STORE AND RESTAURANT-5,092.50 SQ.FT.
- CARWASH - 1,336.50 SQ.FT.
- 12 CARS FUELING STATION WITH CANOPY
- 6 CARS VACUUM / CLEANING STALLS
- LANDSCAPING, PARKING AND DRIVEWAY
- SUBDIVIDE EXISTING 2.98 ACRES VACANT LOT

# SHEET INDEX



| No. | REVISION/ISSUE | DATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

FIRM NAME AND ADDRESS
LINE 2 DESIGN
COMMERCIAL & RESIDENTIAL DESIGN SPECIALIST
DAVID MIRAFLOR C.C.I.
P.O.BOX 690218
STOCKTON CA. 95269
CELL (209) 470-0318
FAX (209) 473-3223
LINE2DESIGN@YAHOO.COM

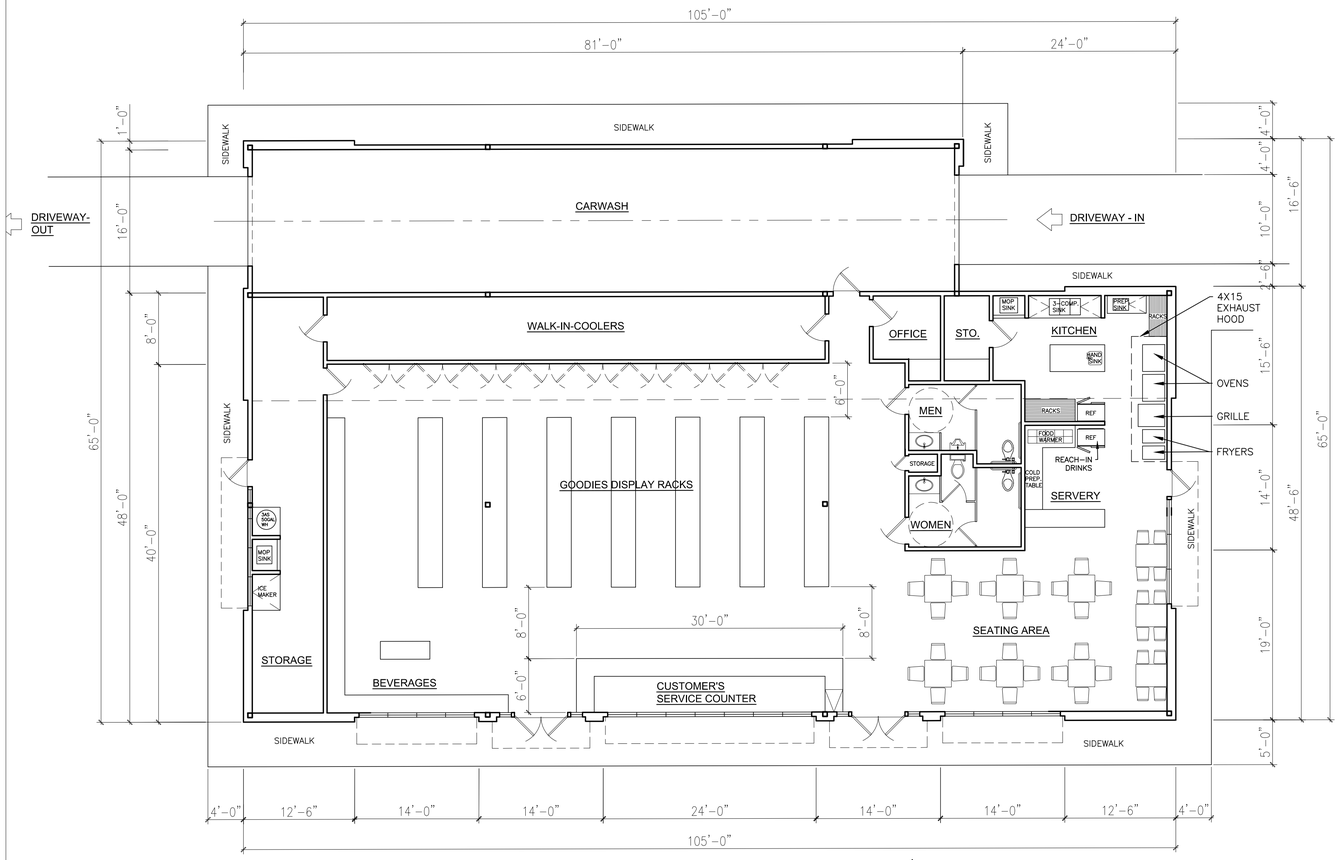


PROJECT NAME AND ADDRESS

PROPOSED IMPROVEMENTS TO EXISTING SITE PLAN LAYOUT FOR MAJOR SINGH @

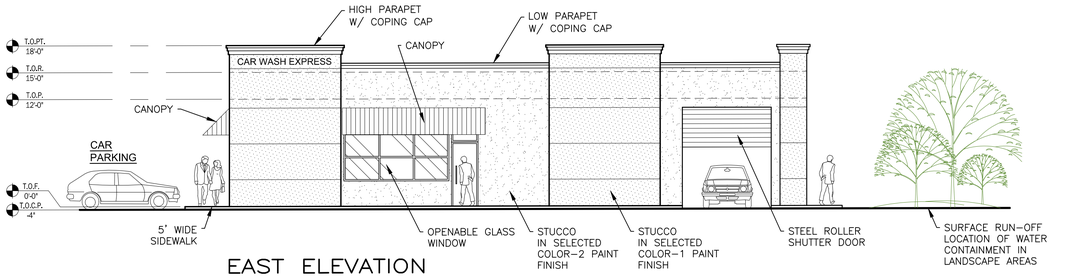
1901 E. YOSEMITE, MANTECA, CA. 95336

REVISED BY: D.MIRAFLOR
DRAWN BY: S. ADVENTO
DATE: 05/16/2023
SCALE: AS NOTED
SHEET # A1
OF: 4



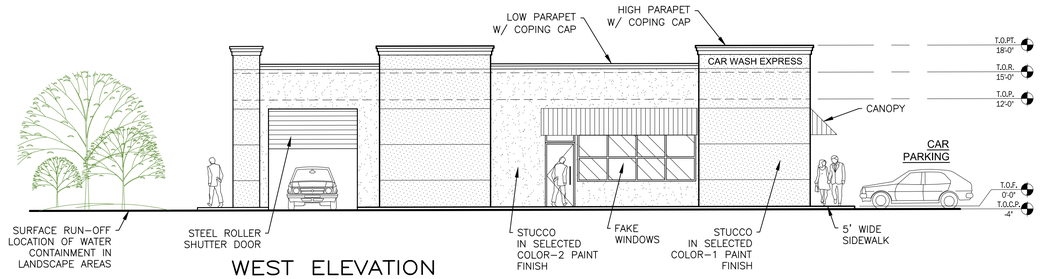

## PROPOSED FLOOR PLAN
## CARWASH & CONVENIENCE STORE

1 / A2 SCALE: 1/8"=1'-0"



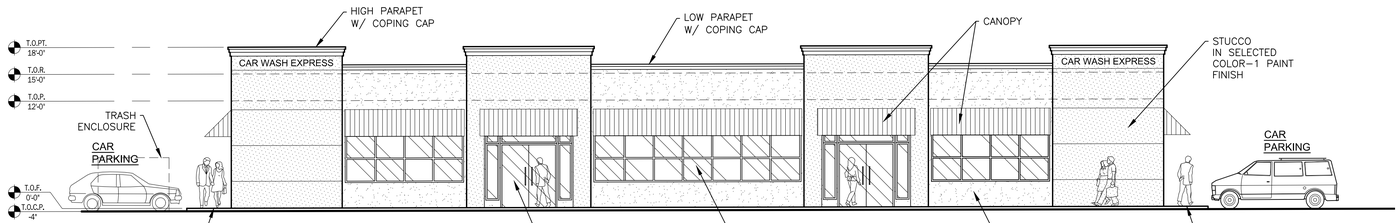

## EAST ELEVATION

SCALE: 1/8"=1'-0"



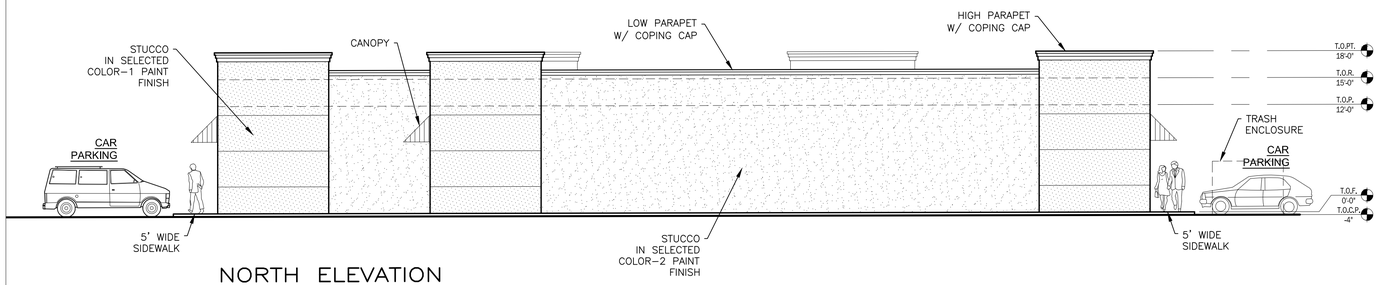

## WEST ELEVATION

SCALE: 1/8"=1'-0"




## SOUTH ELEVATION

SCALE: 1/8"=1'-0"




## NORTH ELEVATION

SCALE: 1/8"=1'-0"

| No. | REVISION/ISSUE | DATE |
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FIRM NAME AND ADDRESS

LINE 2 DESIGN
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DESIGN SPECIALIST
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PROJECT NAME AND ADDRESS

PROPOSED IMPROVEMENTS TO EXISTING SITE PLAN LAYOUT FOR MAJOR SINGH @

1901 E. YOSEMITE, MANTECA, CA. 95336

REVISED BY: D.MIRAFLOR

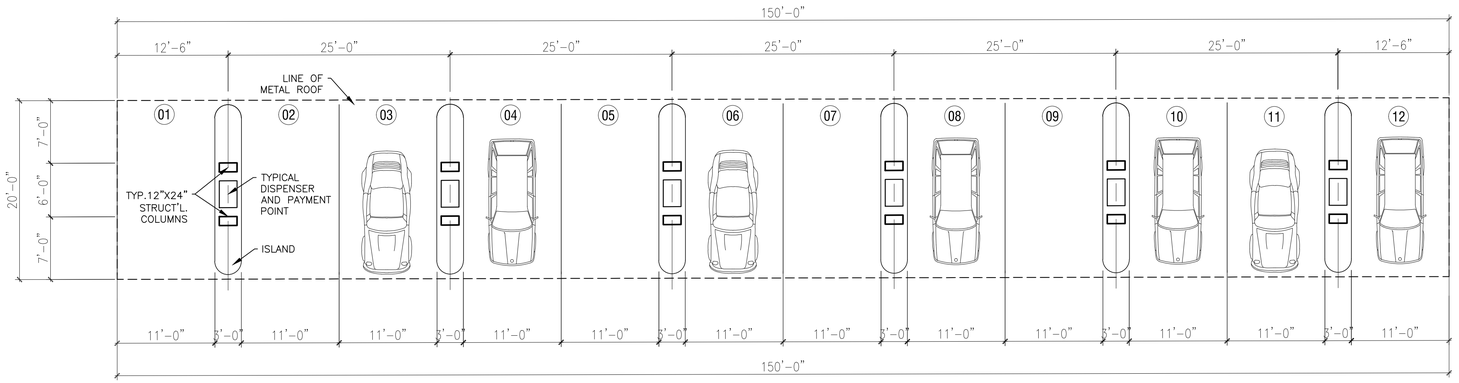
DRAWN BY: S. ADVENTO

DATE: 05/16/2023

SCALE: AS NOTED

SHEET # A2

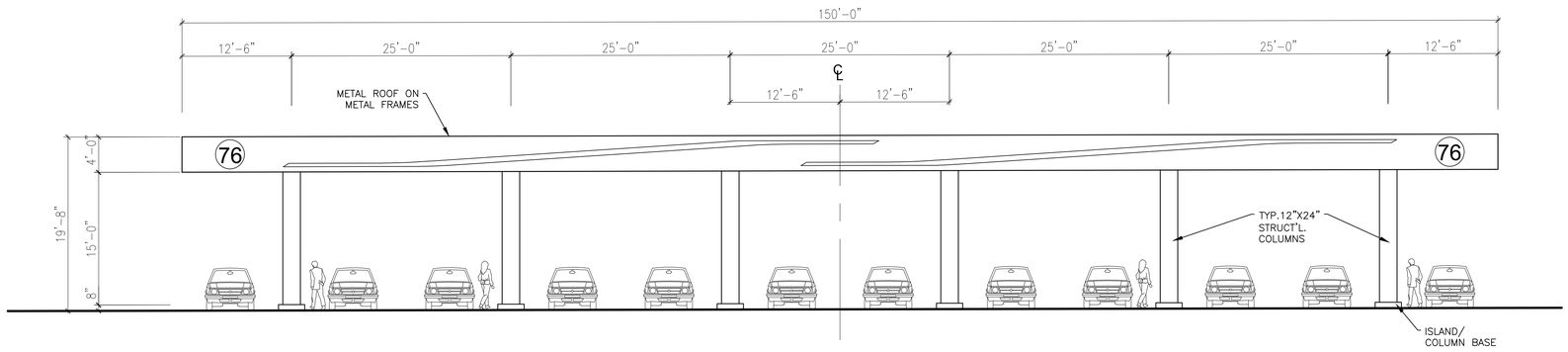
OF: 4




## PROPOSED FLOOR PLAN CANOPY AND PUMP ISLAND

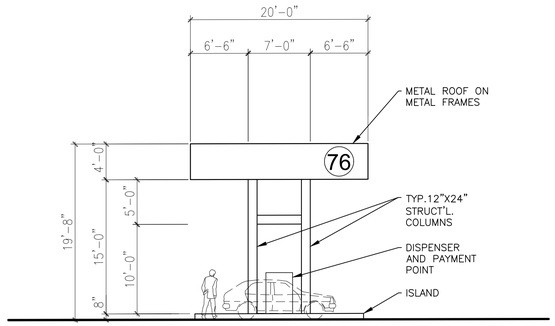
2 / A3

SCALE: 1/8"=1'-0"



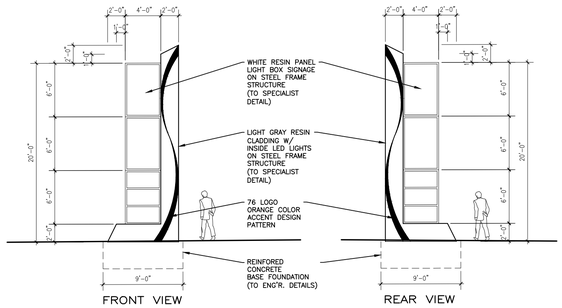

## SOUTH ELEVATION

SCALE: 1/8"=1'-0"




## EAST ELEVATION

SCALE: 1/8"=1'-0"

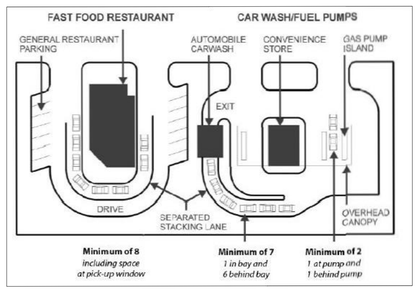



3 / A3 TALL SIGNAGE PLAN

SCALE: 1/8"=1'-0"

**Table 1229-2: Stacking Space Requirements**

| Activity | Minimum Stacking Spaces (per lane/service window) | Measured From: |
|---|---|---|
| Financial Institution or Automated Teller Machine (ATM) | 4 | Teller or Window |
| Restaurant | 8 | Pick-Up Window |
| Full Service Automotive Wash | 7 | Washing Bay |
| Self-Service Automotive Wash | 4 | Washing Bay |
| Fuel or Gasoline Pump Island | 2 | Pump Island |
| Other | A minimum of 6 spaces per lane or window. | |




Automata car wash is a one-bay facility. Cars arrive according to a Poisson distribution with a mean of 4 cars per hour and may wait in the facility's parking lot or on the street bordering the wash facility if the bay is busy. The time for washing and cleaning a car is exponential, with a mean of 10 minutes. This means that, for all practical purposes, there is no limit on the size of the system. The manager of the facility wants to determine the size of the parking lot.

For this situation, we have $\lambda = 4$ cars per hour, and $\mu = \frac{60}{10} = 6$ cars per hour. Because $\rho = \frac{\lambda}{\mu} < 1$, the system can operate under steady-state conditions.

| Lambda | Mu | c | System limit | Source limit |
|---|---|---|---|---|
| 4 | 6 | 1 | infinity | Infinity |

**(a)** Determine the percent utilization of the wash bay.

**(b)** Determine the probability that an arriving car must wait in the parking lot prior to entering the wash bay.

**(c)** If there are six parking spaces, determine the probability that an arriving car will find an empty parking space.

**(d)** How many parking spaces should be provided so that an arriving car may find a parking space 95% of the time?

(C) Design and layout.

1.) Drive-up facilities shall be located on that part of a site which is most distant from or most screened from existing or planned abutting sensitive uses (such as residences or offices) on abutting properties, except where existing uses are nonconforming. Where site conditions necessitate locating a drive-up facility near to a sensitive use, the area between the uses shall be heavily screened as directed by the PZC.

2.) Drive-up facilities, their stacking areas, and routes of access shall be located so as to not interfere with vehicles or pedestrian movement on the public street or within the site. Stacking areas for drive-up facilities shall not be the sole or primary site egress route. Stacking areas shall not utilize parking or aisles required for access to parking.

3.) Drive-up facilities which utilize microphones or other audible signals shall be designed to minimize sound impacts upon abutting uses. Hours of operation shall be as approved by the PZC.

4.) Stacking spaces shall be a minimum of ten feet by twenty feet in size.

5.) Stacking spaces may not impede on- or off-site traffic movements or movements in or out of off-street parking spaces.

6.) Stacking spaces shall be separated from other internal driveways by surface markings. Raised medians may be required where deemed necessary by the PZC for the purpose of traffic movement and safety.

| No. | REVISION/ISSUE | DATE |
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FIRM NAME AND ADDRESS

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PROJECT NAME AND ADDRESS

PROPOSED IMPROVEMENTS TO EXISTING SITE PLAN LAYOUT FOR MAJOR SINGH @

1901 E. YOSEMITE, MANTECA, CA. 95336

REVISED BY: D.MIRAFLOR

DRAWN BY: S. ADVENTO

DATE: 05/16/2023

SCALE: AS NOTED

SHEET # A3

OF: 4

# CALIFORNIA PUBLIC FACILITIES AND BUSINESSES: NEW CALIFORNIA AB1732 RESTROOM SIGNS ARE REQUIRED

Any California restroom that is single-occupant
(if you can lock the door behind you, it is a single-occupant restroom)
must be designated with all gender accessible signs meeting AB1732 regulations.

**Single-occupant/single-user restrooms that have gender-specific signs such as these on the wall**


**Will need one of these all gender or gender neutral signs to be compliant with AB1732**


**Single-occupant/single-user restrooms that have any gender-specific signs such as these on the door**

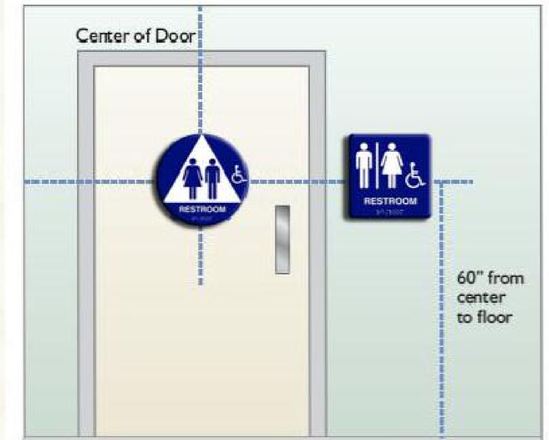
**Will need one of these signs to be compliant with AB1732**

**ADA SIGN DEPOT**

**All Gender, Gender Neutral, Unisex Restroom Signs Meeting ADA and California Title 24 and AB 1732 Regulations**

California Assembly Bill No. 1732
AB 1732 requires single-occupancy restrooms in California businesses, government buildings, and places of public accommodation to be universally accessible to all genders by March 1, 2017.

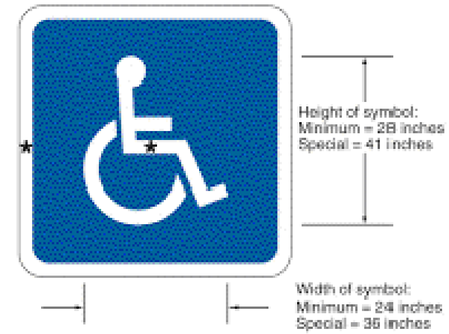
Installation Height for Braille Signs




Visual characters are raised and fonts are set in upper case, sans serif as per Regulation 703. Prescribed height and width of letters has been complied with.

Tactile Braille characters are raised 1/32 inch (0.8 mm) minimum above their background.

Figure 3B-22. International Symbol of Accessibility Parking Space Marking



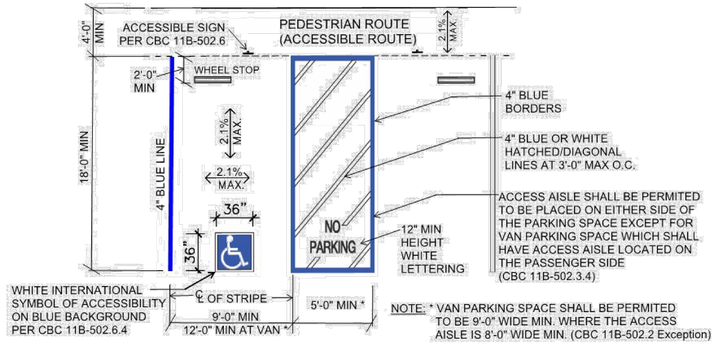




**FIGURE: SINGLE ACCESSIBLE PARKING STALL**

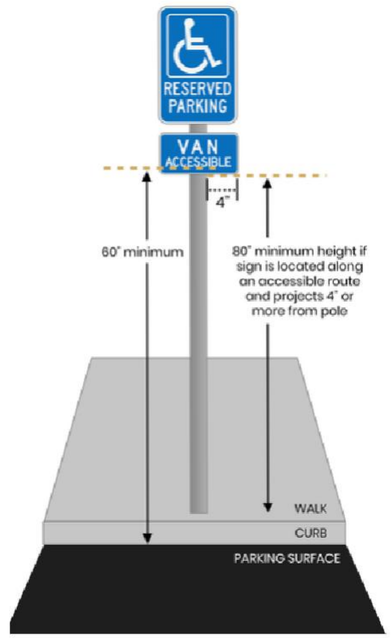
## Parking Space Signage


**PARKING SIGNAGE PER CBC 11B-502.6**




THIS "SIGN" SHALL BE POSTED EITHER:
1. IN A CONSPICUOUS PLACE AT EACH ENTRANCE TO AN OFF-STREET PARKING FACILITY OR,
2. IMMEDIATELY ADJACENT TO ON-SITE ACCESSIBLE PARKING AND VISIBLE FROM EACH PARKING SPACE.
3. THE BLANK SPACES SHALL BE FILLED IN WITH APPROPRIATE INFORMATION AS A PERMANENT PART OF THE SIGN.

**ADDITIONAL SIGNAGE PER CBC 11B-502.8**




# ADA SIGNAGES

NTS:

| No. | REVISION/ISSUE | DATE |
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LINE2DESIGN@YAHOO.COM

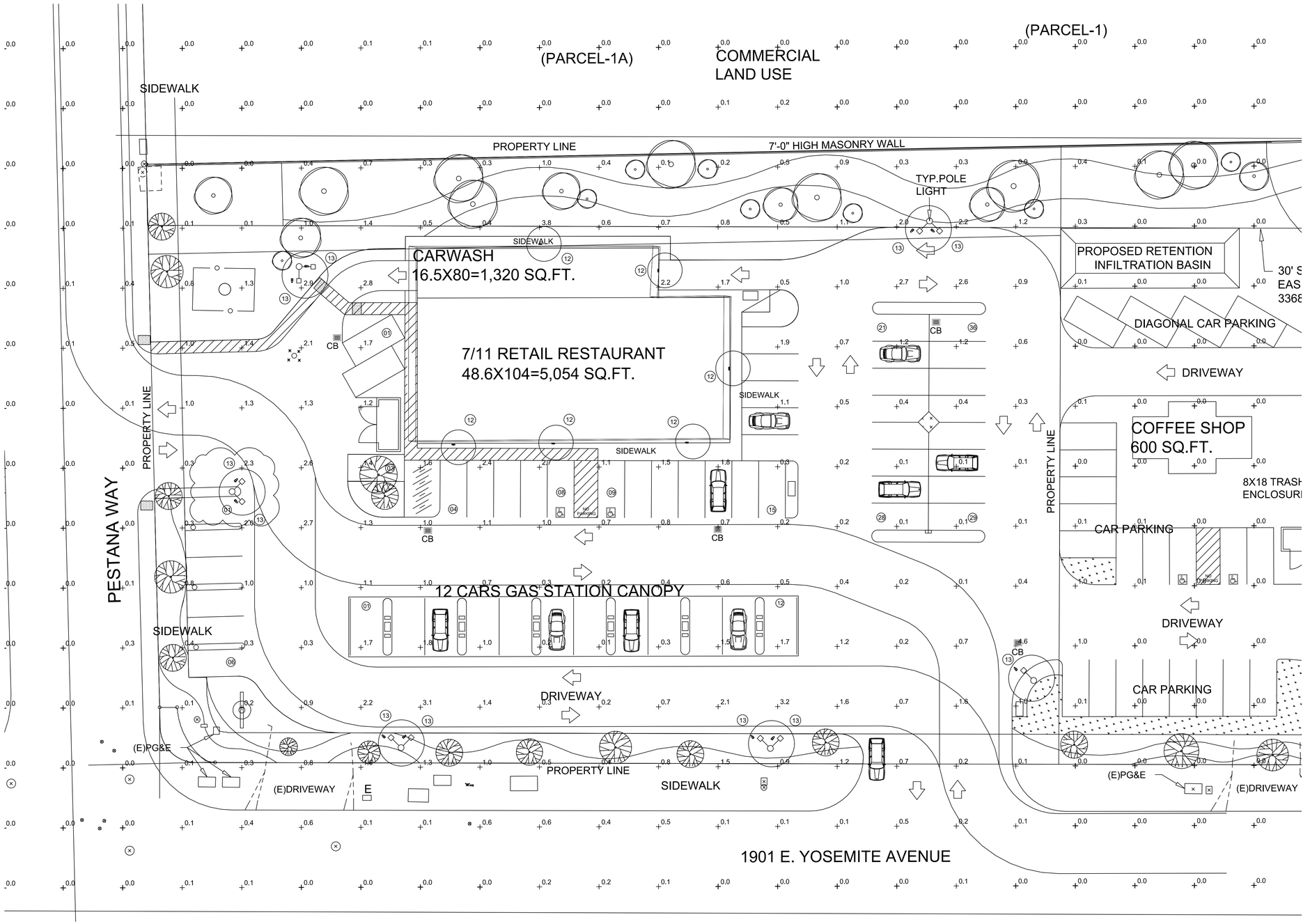


PROJECT NAME AND ADDRESS

PROPOSED GENERAL SITE PLAN LAYOUT FOR MR. MAJOR SINGH @

1901 E. YOSEMITE, MANTECA, CA. 95336

REVISED BY: D.MIRAFLOR
DRAWN BY: S.ADVENTO
DATE: 05/16/2023
SCALE: AS NOTED
SHEET # A4
OF: 4




SITE PHOTOMETRIC (FC)
SCALE: 1/16"

SHEET LIGHT FIXTURE SCHEDULE

| ITEM | QTY | TAG | DESCRIPTION |
|---|---|---|---|
| 13 | 11 | | LED POLE AREA LIGHT, MH=20', 8345 LUMEN, 73W, 277V, 4000K, B2/U0/G1 BUG, DARK BRONZE |
| 12 | 6 | | LED WALLPACK, MH=12', 3250 LUMEN, 23W, 277V, 4000K, DARK BRONZE |

| No. | REVISION/ISSUE | DATE |
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PROJECT NAME AND ADDRESS

PROPOSED GENERAL SITE PLAN LAYOUT FOR MR. MAJOR SINGH ©

1901 E. YOSEMITE, MANTECA, CA. 95336

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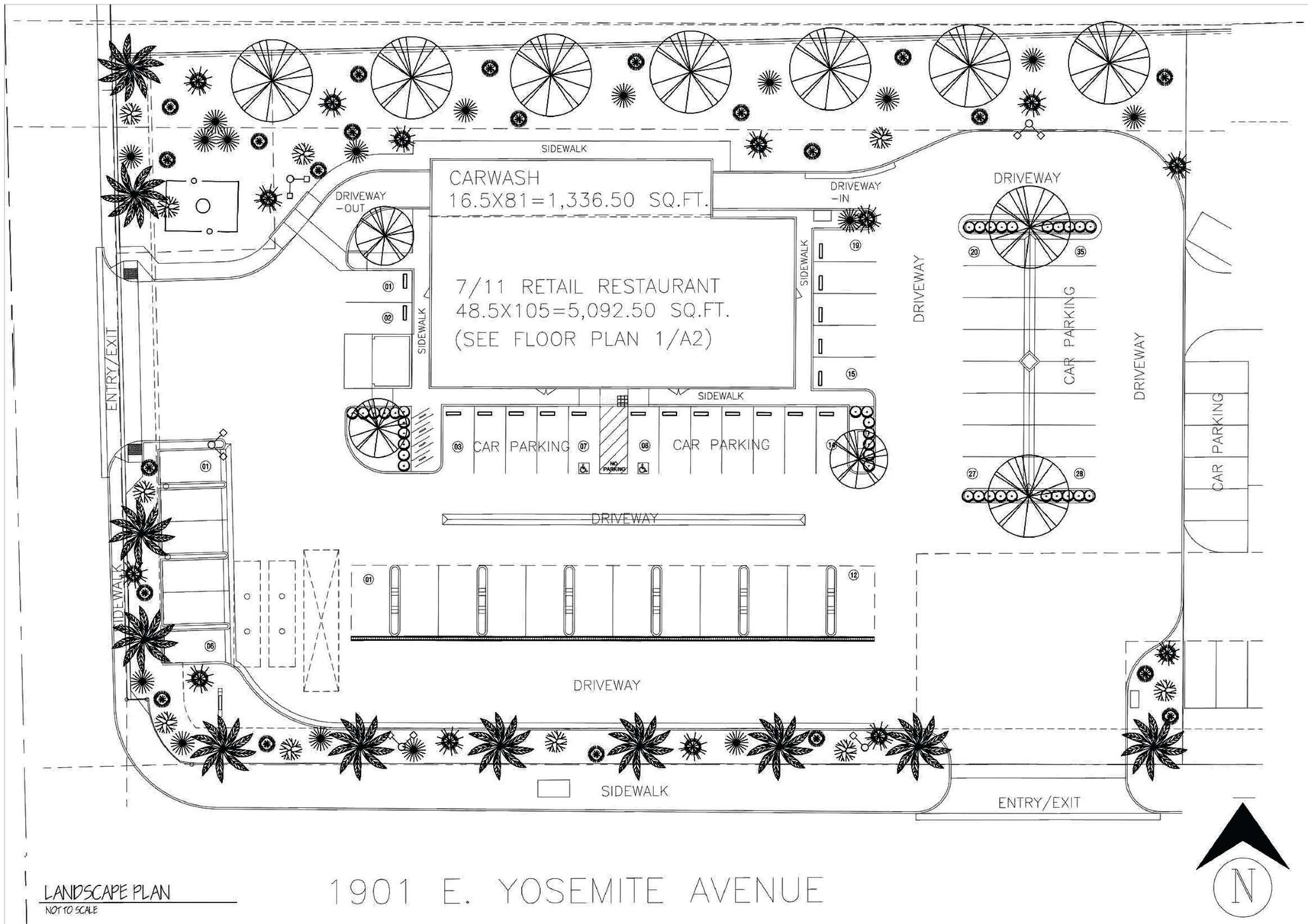
|---|---|
| REVISED BY: D.MIRAFLOR | |
| DRAWN BY: EJQ | SHEET # FC |
| DATE: 05/16/2022 | |
| SCALE: AS NOTED | OF: 1 |

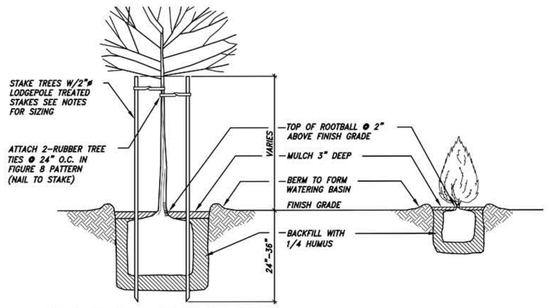



LANDSCAPE PLAN
NOT TO SCALE

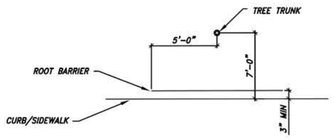
# 1901 E. YOSEMITE AVENUE

## LANDSCAPE LEGEND

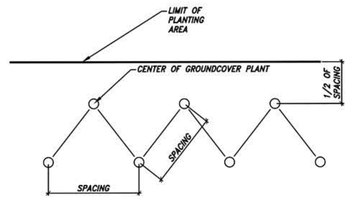
| SYMBOL | | | SIZE | WUCOLS WATER FACTOR CENTRAL WALLY |
|---|---|---|---|---|
| A | | WASHINGTONIA FILIFERA; CALIFORNIA FAN PALM 35-50 FT. AT MATURITY. | 15 GAL. | M |
| B | | OLEA EUROPAEA 'SWAN HILL' (SWAN HILL OLIVE) 30-35 FT. AT MATURITY. | 15 GAL. | M |
| C | | LAVANDULA SPECIES (LAVENDER) | 5 GAL. | L |
| D | | PINE MUHLY | 5 GAL. | L |
| E | | ENCELIA CALIFORNICA (CALIFORNIA ENCELIA) | 5 GAL. | L |
| F | | CALAMAGROSTIS FOLIOSA (MENDOCINO REED GRASS) | 5 GAL. | L |
| G | | BOX COMMON HEDGING; 30" HEIGHT | 5 GAL. | L |
| H | | GROUND COVER MULCH (BROWN SHREDDED HARDWOOD) DEPTH 3" | | |




PLANTING & STAKING
NOT TO SCALE




ROOTBARRIER
NOT TO SCALE




GROUNDCOVER SPACING
NOT TO SCALE

## PLANTING NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LOCAL CODES AND ORDINANCES WHICH APPLY TO THE CITY OF MANTECA.
2. THE LANDSCAPE CONTRACTOR SHALL INSPECT THE SITE AND BE FAMILIAR WITH ALL EXISTING SITE CONDITIONS PRIOR TO SUBMITTING A BID. THE LANDSCAPE CONTRACTOR SHALL REVIEW RELATED DRAWINGS AND SHALL ENSURE COORDINATION WITH ALL APPLICABLE TRADES PRIOR TO SUBMITTING A BID.
3. CONTRACTOR SHALL RECEIVE SITE GRADED TO +/- .1 FT. THE CONTRACTOR IS RESPONSIBLE FOR SURFACE DRAINAGE OF ALL PLANTING AREAS. NO LOW SPOTS WHICH HOLD STANDING WATER WILL BE ACCEPTED.
4. FOR SOILS LESS THAN 6% ORGANIC MATTER IN THE TOP SIX INCHES OF SOIL, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL PLANTING AREAS, AND ROTOTILL THOROUGHLY INTO THE TOP 6" OF SOIL.
5. CONTRACTOR SHALL OBTAIN A SOILS REPORT. IF THE ABOVE IS CONTRA-INDICATED BY THE SOILS REPORT, THE SOILS REPORT RECOMMENDATIONS SHALL BE FOLLOWED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH OBTAINING THE SOILS REPORT.
6. A COPY OF THE SOILS REPORT SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT, CITY OF MANTECA COMMUNITY DEVELOPMENT DEPARTMENT, AND BE ATTACHED TO THE JOB SITE COPY OF THE LANDSCAPE PLANS FOR INSPECTION PURPOSES
7. ALL PLANTING AREAS SHALL BE RAKED SMOOTH AND ALL ROCKS AND PEBBLES OVER 1" IN DIAMETER REMOVED FROM THE SITE.
8. SUPPLY 21G AGRIFORM TABLETS AS FOLLOWS: 1-1G, 2-5G 4-15G.
9. DIG PLANTING PITS TWO TIMES THE HEIGHT AND WIDTH OF THE ROOT BALL. BACKFILL PITS WITH 1/3 SOIL CONDITIONER AND 2/3 EXISTING SOIL. PLANT PITS ARE ALSO TO RECEIVE A COMMERCIAL FERTILIZER (6-20-20) AT 2.5 LBS. PER CUBIC YARD OF BACKFILL.
10. STAKE ALL 15G TREES WITH 2"øx8' STAKES AND 2 RUBBER TIES PER TREE SEE DETAIL FOR ADDITIONAL INFORMATION.
11. ROOT BARRIERS SHALL BE INSTALLED PER DETAIL WHEN TREES ARE WITHIN 7'-0" OF ANY HARDSCAPE.
12. ALL PLANTING AREAS SHALL RECEIVE 3" LAYER OF WALK ON BARK 1/4" x 1 1/2" DIAMETER AFTER ALL TREES, SHRUBS, AND GROUNDCOVERS HAVE BEEN PLANTED.
13. PLANT AT THE SPACING SHOWN. AFTER THE SITE IS PLANTED, A PRE-EMERGENT SHALL BE APPLIED TO ALL PLANTING AREAS AS PER MANUFACTURER'S RECOMMENDATIONS. THE LANDSCAPE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE USE OF CHEMICAL PRODUCTS AND IS TO SUPPLY THE OWNER WITH A WRITTEN RECORD OF THE TYPE OF CHEMICAL USED, DATE APPLIED AND RATE OF APPLICATION.
14. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE PROJECT FOR 60 DAYS FOLLOWING APPROVAL TO BEGIN THE MAINTENANCE PERIOD. REGULAR WATERING, CULTIVATING, WEEDING, REPAIR OF STAKES AND TIES, SPRAYING FOR INSECTS, SHALL BE PERFORMED.
15. ALL PLANTS AND PLANTINGS SHALL BE GUARANTEED TO BE IN A HEALTHY, THRIVING CONDITION UNTIL THE END OF THE MAINTENANCE PERIOD. ALL TREES SHALL BE GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF ACCEPTANCE.

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1901 E. YOSEMITE, MANTECA, CA. 95336

REVISED BY: D.MIRAFLOR

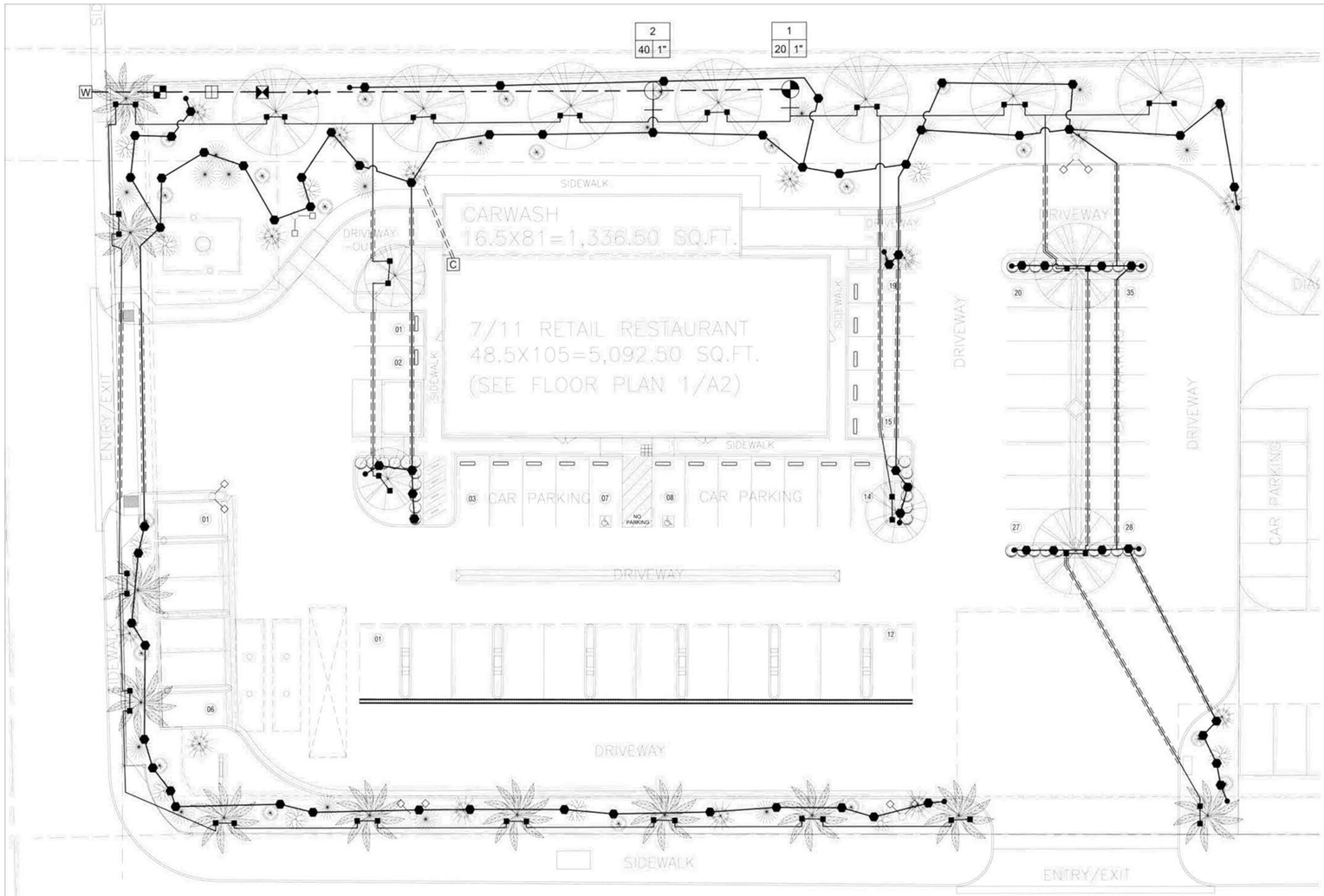
DRAWN BY: M.P.

DATE: 09/28/2021

SCALE: AS NOTED

SHEET # L1

OF: 3




IRRIGATION PLAN
scale 1/16"=1'-0"

# IRRIGATION LEGEND

- RAINBIRD RWS-M-B-C-1401 ROOT WATERING ASSEMBLY
- PEPCO OCT816 OCTABUBBLER
- PEPCO OB2-16 QUADRABUBBLER
- RAINBIRD BV0505SS BALL VALVE (MANUAL FLUSH VALVE)
- RAINBIRD PEB REMOTE CONTROL VALVE, SEE PLAN FOR SIZE.
- RAINBIRD PEB REMOTE CONTROL VALVE W/RAINBIRD RBY SERIES WYE FILTER, SEE PLAN FOR SIZE.
- FEBCO 825Y-1 1/4", REDUCED PRESSURE BACKFLOW PREVENTION DEVICE W/WEATHERGUARD BLANKET
- RAINBIRD FS100P FLOW SENSOR
- MASTER VALVE RAINBIRD PEB 1"
- NIBCO T-580 BALL VALVE - LINE SIZE
- C — RAINBIRD ESP-ME3 INDOOR MODULAR IRRIGATION CONTROLLER CONTROLLER SHALL BE EQUIPPED WITH RAINBIRD RSD-BEx RAIN SENSOR AND RAINBIRD SMRT-Y SOIL MOISTURE SENSOR
- W — WATER METER BY OTHERS.

- SCH. 40 PVC SLEEVE, TWICE THE SIZE OF THE PIPE
- SCH. 40 PVC MAINLINE, 2-1/2" ( W/ 18" COVER )
- CL 200 PVC LATERAL LINE, 1" ( W/ 12" COVER )
- CL 200 PVC LATERAL LINE, 1-1/4" ( W/ 12" COVER )

NOTE: DUE TO LONG RUNS OF PIPE ALL LATERALS SHALL BE 1" MINIMUM. NO 3/4" PIPE SHALL BE USED.

44.5 1.5"
- REMOTE CONTROL VALVE IDENTIFICATION NUMBER
- REMOTE CONTROL VALVE SIZE
- REMOTE CONTROL VALVE GPM

# IRRIGATION NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LOCAL CODES AND ORDINANCES WHICH APPLY TO THE CITY OF MANTECA.
2. THE IRRIGATION CONTRACTOR SHALL INSPECT THE SITE AND BE FAMILIAR WITH ALL EXISTING SITE CONDITIONS PRIOR TO SUBMITTING A BID. THE IRRIGATION CONTRACTOR SHALL REVIEW RELATED DRAWINGS AND SHALL ENSURE COORDINATION WITH ALL APPLICABLE TRADES PRIOR TO SUBMITTING A BID. THE IRRIGATION CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND THE INSTALLATION OF SLEEVES THROUGH WALLS, UNDER ROADWAYS, PAVING, STRUCTURES, ETC.
3. THIS PLAN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHERE POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, AND PLANTING AND ARCHITECTURAL FEATURES.
4. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS AND GRADE DIFFERENCES IN THE AREA EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
5. ELECTRICAL CONTRACTOR TO SUPPLY 120 VOLT A.C. (2.5 AMP) SERVICE TO CONTROLLER LOCATIONS. IRRIGATION CONTRACTOR TO MAKE FINAL CONNECTIONS FROM ELECTRICAL STUB-OUTS TO CONTROLLERS
6. EACH CONTROLLER SHALL HAVE IT'S OWN INDEPENDENT GROUND WIRE.
7. SPLICING OF ANY WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE AND 100 FEET ON CENTER ALONG WIRE RUN. TAPE WIRE IN BUNDLES 10 FEET ON CENTER. NO TAPING PERMITTED INSIDE SLEEVES. ALL WIRE SHALL BE U.L. APPROVED FOR DIRECT BURIAL, COPPER AWG-UF 600 VOLT #14 (MIN.). USE ONLY PACKAGED APPROVED WIRE CONNECTORS.
   FACILITATE RUNNING OF IRRIGATION WIRES.
8. INSTALL (1) SPARE CONTROL WIRE OF A DIFFERENT COLOR ALONG THE ENTIRE MAIN LINE. LOOP 36" EXCESS WIRE INTO EACH SINGLE VALVE BOX AND INTO ONE VALVE BOX IN EACH GROUP OF VALVES. EXTRA WIRE SHALL NOT MATCH OTHER WIRE COLORS. SPARE WIRES SHALL BE LABELED AS SUCH. ALL WIRES SHALL BE LABELED AT THE CLOCK WITH STATION NUMBERS. COMMON WIRE SHALL BE WHITE, CONTROL WIRES SHALL BE RED.
9. THE SPRINKLER SYSTEM IS DESIGNED TO OPERATE AT A MINIMUM OF 30 PSI. THE IRRIGATION CONTRACTOR IS TO PERFORM A STATIC AND DYNAMIC PRESSURE TEST; VERIFY AT LEAST 45 PSI STATIC AND RECORD THE PRESSURE READING AT 20 GPM. REPORT FINDINGS TO LANDSCAPE ARCHITECT. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
10. IRRIGATION CONTRACTOR TO NOTIFY ALL LOCAL JURISDICTIONS FOR INSPECTION AND TESTING OF BACKFLOW PREVENTION DEVICE.
11. PRIOR TO TRENCHING, CALL UNDERGROUND SERVICE ALERT AT: 1-800-642-2444.
12. NOTIFY THE LANDSCAPE ARCHITECT OF ANY ASPECTS OF LAYOUT WHICH WILL PROVIDE INCOMPLETE OR INSUFFICIENT WATER COVERAGE OF PLANT MATERIAL. DO NOT PROCEED UNTIL THE LANDSCAPE ARCHITECTS INSTRUCTIONS ARE OBTAINED.
13. LOCATE ALL BUBBLERS ON UPHILL SIDE OF TREES AND SHRUBS.
14. INSTALL DRIP EMITTERS AT THE FOLLOWING RATES:
    (1) PER 1 GALLON SHRUB, (2) PER 5 GALLON SHRUB
15. THREAD SEALANT SHALL BE NON-HARDENING AND COMPATIBLE WITH PIPE. ALL PVC WELDS SHALL BE CUT SQUARE AND PRIMER SHALL BE USED.
16. CONTRACTOR SHALL GUARANTEE THE IRRIGATION SYSTEM FOR A PERIOD OF (1) YEAR AFTER DATE OF FINAL ACCEPTANCE.
17. CONTRACTOR SHALL ENSURE THAT SLEEVES UNDER PAVEMENT ARE MARKED AT CURB, TO AID IN LOCATING THEM.
18. GENERAL CONTRACTOR SHALL STUB 2" CONDUIT THROUGH WALLS/FOUNDATIONS TO FACILITATE RUNNING OF IRRIGATION WIRES.

# WATER USE CALCULATION

MAWA = (51.2)(0.62)(0.45 X 14,957)

MAWA = 213,657.76 GALLONS PER YEAR

# ESTIMATED TOTAL WATER USE

REFERENCE EVAPOTRANSPIRATION (ETo): 51.2

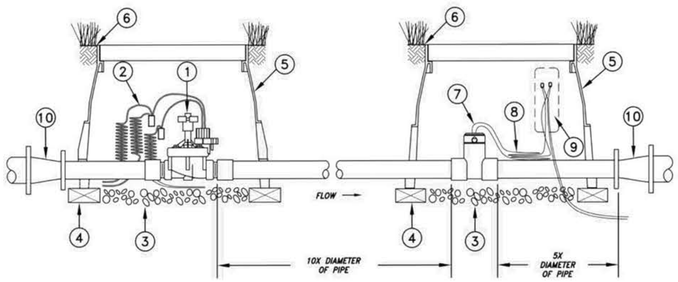
| HYDROZONE | PLANT FACTOR (PF) | IRRIGATION METHOD | IRRIGATION EFFICIENCY (IE) | ETAF (PF/IE) | LANDSCAPE AREA (SF) | ETAF X AREA | ESTIMATED TOTAL WATER USE (ETWU) |
|---|---|---|---|---|---|---|---|
| LOW: SHRUB BEDS | 0.2 | DRIP | 0.81 | 0.2469 | 14,209.15 | 3,508.24 | 111,371.67 |
| MEDIUM: TREES | 0.5 | DRIP | 0.81 | 0.6173 | 747.85 | 461.65 | 14,654.17 |
| | | | | TOTALS: | 14,957 | 3,969.89 | 126,025.84 |

# HYDROZONE INFORMATION

| HYDROZONE | VALVES | IRRIGATION METHOD | AREA | % OF LANDSCAPE AREA |
|---|---|---|---|---|
| LOW (SHRUB BEDS) | 2 | DRIP | 14,209.15 | 95 |
| MEDIUM (TREES) | 1 | DRIP | 747.85 | 5 |

TOTAL: 14,957 SQ.FT.

NOTE: 14,957 SF OF LANDSCAPE AREA NOTED ABOVE AND USED IN CALCULATIONS ABOVE REPRESENTS ALL LANDSCAPE AREA AT PROJECT SITE.




FLOW SENSOR
NOT TO SCALE

1. RAIN BIRD PE/BPE SERIES MASTER VALVE(S)
2. 36-INCH LENGTH OF COILED WIRE TO SATELLITE CONTROLLER MASTER VALVE CIRCUIT
3. 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
4. BRICK (1 OF 4)
5. VALVE BOX WITH COVER - 12-INCH SIZE
6. FINISH GRADE
7. RAIN BIRD FS SERIES 150-400P/FS-100A FLOW SENSOR(S)
8. 36-INCH LENGTH OF COILED PE-CABLE TO FLOW SENSING EQUIPMENT AT SATELLITE CONTROLLER ASSEMBLY
9. SEE SITECONROL DETAIL 612 FOR SPLICE. SEE FLOW SENSOR WIRING DETAIL FOR WIRING DIAGRAM
10. CONCENTRIC REDUCER

| No. | REVISION/ISSUE | DATE |
|---|---|---|
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| | | |

FIRM NAME AND ADDRESS
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COMMERCIAL & RESIDENTIAL DESIGN SPECIALIST
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LINE2DESIGN@YAHOO.COM



PROJECT NAME AND ADDRESS

PROPOSED GENERAL SITE PLAN LAYOUT FOR MR. MAJOR SINGH @

1901 E. YOSEMITE, MANTECA, CA. 95336

REVISED BY: D.MIRAFLOR

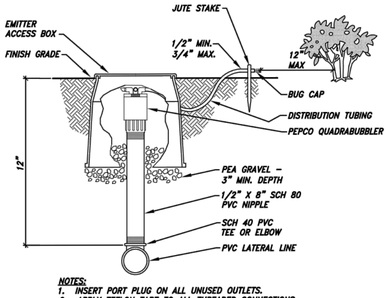
DRAWN BY: M.P.

DATE: 09/28/2021

SCALE: AS NOTED

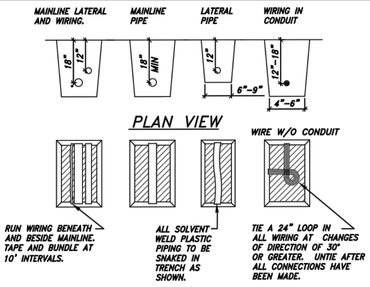
SHEET # L2

OF: 3



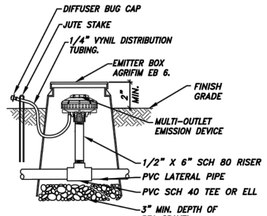

NOTES:
1. INSERT PORT PLUG ON ALL UNUSED OUTLETS.
2. APPLY TEFLON TAPE TO ALL THREADED CONNECTIONS.
3. LEAVE SLACK IN DISTRIBUTION TUBING, DO NOT PULL TIGHT!

## PEPCO QUADRABUBBLER
NOT TO SCALE



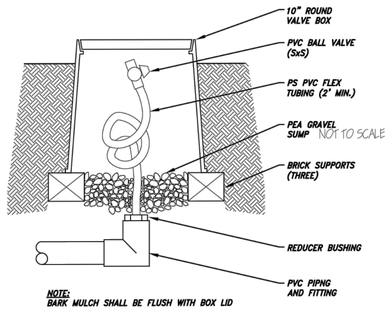

NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH SCH. 40 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS SEE SPECIFICATIONS.
3. SNAKE ALL PLASTIC PIPING IN TRENCHES FROM SIDE TO SIDE AS SHOWN.

## PIPE AND WIRE TRENCHING
NOT TO SCALE



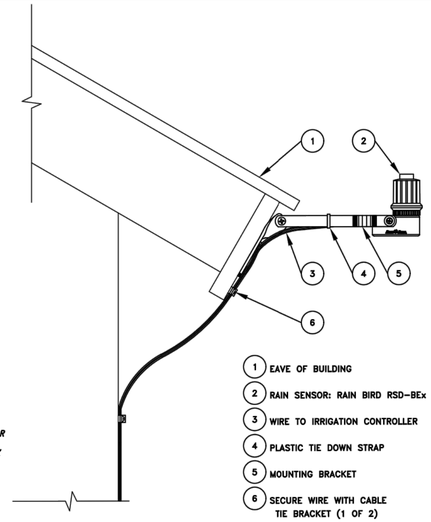

NOTES:
1. INSTALL (1) PORT PER 1 GAL., (2) PORTS PER 5 GAL., AND (4) PORTS PER 15 GAL. WHEN INSTALLING DISTRIBUTION TUBING, DO NOT PULL TIGHT!
2. BARK MULCH SHALL BE FLUSH WITH BOX LID

## PEPCO OCTABUBBLER
NOT TO SCALE



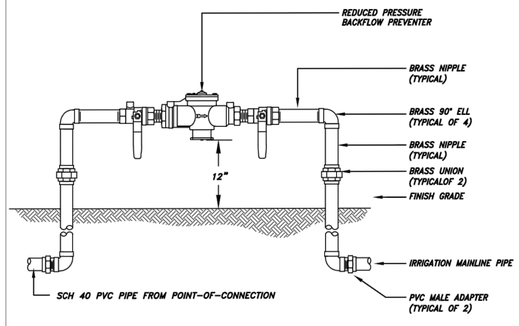

NOTE:
BARK MULCH SHALL BE FLUSH WITH BOX LID

## FLUSH VALVE
NOT TO SCALE

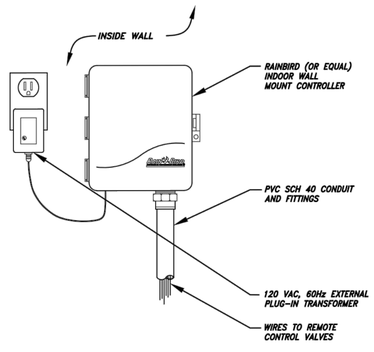



1. EAVE OF BUILDING
2. RAIN SENSOR: RAIN BIRD RSD-BEx
3. WIRE TO IRRIGATION CONTROLLER
4. PLASTIC TIE DOWN STRAP
5. MOUNTING BRACKET
6. SECURE WIRE WITH CABLE TIE BRACKET (1 OF 2)

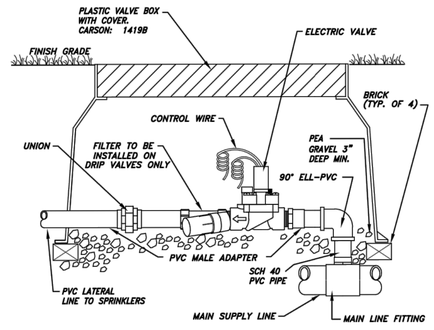
## RSD-BEx RAIN SENSOR
NOT TO SCALE



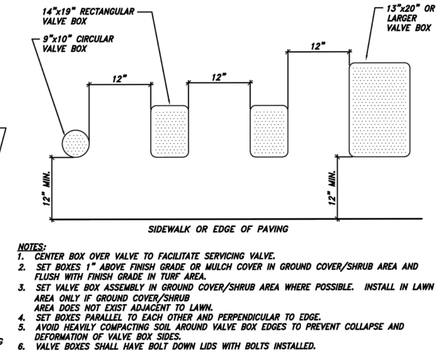

## REDUCED PRESSURE BACKFLOW PREVENTER
NOT TO SCALE




## INTERIOR CONTROLLER
NOT TO SCALE

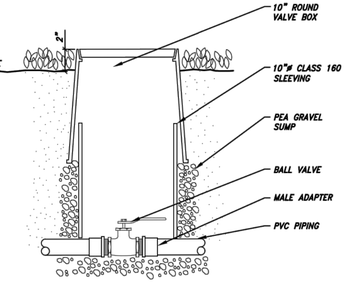



## REMOTE CONTROL VALVE
NOT TO SCALE

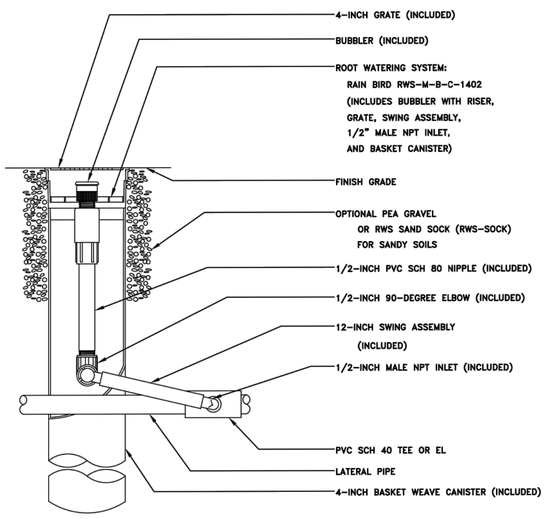



NOTES:
1. CENTER BOX OVER VALVE TO FACILITATE SERVICING VALVE.
2. SET BOXES 1" ABOVE FINISH GRADE OR MULCH COVER IN GROUND COVER/SHRUB AREA AND FLUSH WITH FINISH GRADE IN TURF AREA.
3. SET VALVE BOX ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE. INSTALL IN LAWN AREA ONLY IF GROUND COVER/SHRUB AREA DOES NOT EXIST ADJACENT TO LAWN.
4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
5. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOX EDGES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.
6. VALVE BOXES SHALL HAVE BOLT DOWN LIDS WITH BOLTS INSTALLED.

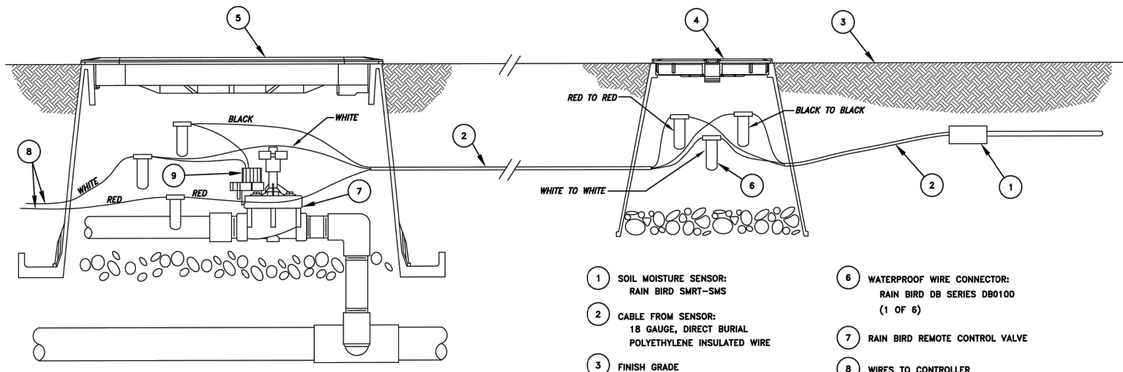
## VALVE BOXES
NOT TO SCALE




## BALL VALVE
NOT TO SCALE



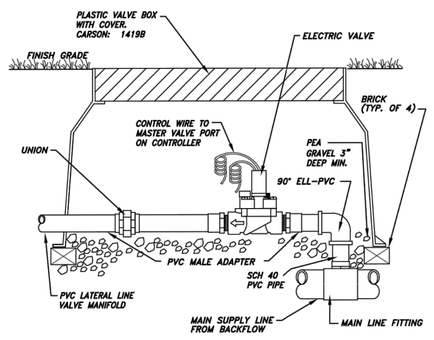

## TREE BUBBLER - RWS-M-B-C-1401
NOT TO SCALE




1. SOIL MOISTURE SENSOR: RAIN BIRD SMRT-SMS
2. CABLE FROM SENSOR: 18 GAUGE, DIRECT BURIAL POLYETHYLENE INSULATED WIRE
3. FINISH GRADE
4. ROUND VALVE BOX WITH COVER USED AS JUNCTION BOX: RAIN BIRD VB-7RND
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. WATERPROOF WIRE CONNECTOR: RAIN BIRD DB SERIES DB0100 (1 OF 6)
7. RAIN BIRD REMOTE CONTROL VALVE
8. WIRES TO CONTROLLER (LENGTH AS REQUIRED)
9. VALVE SOLENOID

NOTES:
1. SENSOR CANNOT BE LOCATED MORE THAN 4000' FROM CONTROLLER.
2. FOR LOCATION PURPOSES KEEP THE SENSOR, SPLICE BOX, AND VALVE BOX IN A STRAIGHT LINE.
3. SCRIBE A LINE ACROSS THE LID OF THE SPLICE BOX TO SHOW THE DIRECTION OF THE SENSOR.
4. USE WATERPROOF WIRE CONNECTORS TO ENSURE ADEQUATE SENSOR FUNCTIONALITY.
5. SELECT A ZONE WIRE WHICH ACTIVATES A SINGLE VALVE.
6. INSTALL THE SENSOR IN A LOCATION WHICH IS THE MOST REPRESENTATIVE OF THE ENTIRE SITE BEING IRRIGATED.

## SMRT-Y SOIL MOISTURE SENSOR
NOT TO SCALE




## MASTER CONTROL VALVE
NOT TO SCALE

| No. | REVISION/ISSUE | DATE |
|---|---|---|
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PROJECT NAME AND ADDRESS

PROPOSED GENERAL SITE PLAN LAYOUT FOR MR. MAJOR SINGH @

1901 E. YOSEMITE, MANTECA, CA. 95336

| | |
|---|---|
| REVISED BY: D.MIRAFLOR | |
| DRAWN BY: M.P. | SHEET # L3 |
| DATE: 09/28/2021 | |
| SCALE: AS NOTED | OF: 3 |

# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
# NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

## CHAPTER 3
## GREEN BUILDING
### SECTION 301 GENERAL

**301.1 SCOPE.** Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

**301.3 NONRESIDENTIAL ADDITIONS AND ALTERATIONS. [BSC-CG]** The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of $200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [N] or to additions and/or alterations [A]. When the code section applies to both, no banner will be used.

**301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only:**

**Note:** On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 *et seq*. for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance.

**301.3.2 Waste Diversion.** The requirements of Section 5.408 shall be required for additions and alterations whenever a permit is required for work.

301.4 PUBLIC SCHOOLS AND COMMUNITY COLLEGES. (see GBSC)
301.5 HEALTH FACILITIES. (see GBSC)

### SECTION 302 MIXED OCCUPANCY BUILDINGS

**302.1 MIXED OCCUPANCY BUILDINGS.** In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

### SECTION 303 PHASED PROJECTS

**303.1 PHASED PROJECTS.** For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new construction (or newly constructed) shall apply.

**303.1.1 Initial Tenant improvements.** The provisions of this code shall apply only to the initial tenant improvements to a project. Subsequent tenant improvements shall comply with the scoping provisions in Section 301.3 non-residential additions and alterations.

### ABBREVIATION DEFINITIONS:

| | |
|---|---|
| HCD | Department of Housing and Community Development |
| BSC | California Building Standards Commission |
| DSA-SS | Division of the State Architect, Structural Safety |
| OSHPD | Office of Statewide Health Planning and Development |
| LR | Low Rise |
| HR | High Rise |
| AA | Additions and Alterations |
| N | New |

## CHAPTER 5
## NONRESIDENTIAL MANDATORY MEASURES

## DIVISION 5.1 PLANNING AND DESIGN

### SECTION 5.101 GENERAL
**5.101.1 SCOPE**
The provisions of this chapter outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

### SECTION 5.102 DEFINITIONS
**5.102.1 DEFINITIONS**
The following terms are defined in Chapter 2 *(and are included here for reference)*

**CUTOFF LUMINAIRES.** Luminaires whose light distribution is such that the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees above nadir, and 100 (10 percent) at a vertical angle of 80 degrees above nadir. This applies to all lateral angles around the luminaire.

**LOW-EMITTING AND FUEL EFFICIENT VEHICLES.**
Eligible vehicles are limited to the following:

1. Zero emission vehicle (ZEV), enhanced advanced technology PZEV (enhanced AT ZEV) or transitional zero emission vehicles (TZEV) regulated under CCR, Title 13, Section 1962.
2. High-efficiency vehicles, regulated by U.S. EPA, bearing a fuel economy and greenhouse gas rating od 9 oe 10 as regulated under 40 CFR Section 600 Subpart D.

**NEIGHBORHOOD ELECTRIC VEHICLE (NEV).** A motor vehicle that meets the definition of "low-speed vehicle" either in Section 385.5 of the Vehicle Code or in 49CFR571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.

**TENANT-OCCUPANTS.** Building occupants who inhabit a building during its normal hours of operation as permanent occupants, such as employees, as distinguished from customers and other transient visitors.

**VANPOOL VEHICLE.** Eligible vehicles are limited to any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used primarily for the nonprofit work-related transportation of adults for the purpose of ridesharing.

**Note:** Source: Vehicle Code, Division 1, Section 668

**ZEV.** Any vehicle certified to zero-emission standards.

### SECTION 5.106 SITE DEVELOPMENT
**5.106.1 STORM WATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB LESS THAN ONE ACRE OF LAND.** Newly constructed projects and additions which disturb less than one acre of land, and are not part of a larger common plan of development or sale, shall prevent the pollution of storm water runoff from the construction activities through one or more of the following measures:

**5.106.1.1 Local ordinance**. Comply with a lawfully enacted storm water management and/or erosion control ordinance.

**5.106.1.2 Best Management Practices (BMPs).** Prevent the loss of soil through wind or water erosion by implementing an effective combination of erosion and sediment control and good housekeeping BMPs.

1. Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Scheduling construction activity during dry weather, when possible.
   b. Preservation of natural features, vegetation, soil, and buffers around surface waters.
   c. Drainage swales or lined ditches to control stormwater flow.
   d. Mulching or hydroseeding to stabilize disturbed soils.
   e. Erosion control to protect slopes.
   f. Protection of storm drain inlets (gravel bags or catch basin inserts).
   g. Perimeter sediment control (perimeter silt fence, fiber rolls).
   h. Sediment trap or sediment basin to retain sediment on site.
   i. Stabilized construction exits.
   j. Wind erosion control.
   k. Other soil loss BMPs acceptable to the enforcing agency.
2. Good housekeeping BMPs to manage construction equipment, materials, non-stormwater discharges and wastes that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Dewatering activities.
   b. Material handling and waste management.
   c. Building materials stockpile management.
   d. Management of washout areas (concrete, paints, stucco, etc.).
   e. Control of vehicle/equipment fueling to contractor's staging area.
   f. Vehicle and equipment cleaning performed off site.
   g Spill prevention and control.
   h. Other housekeeping BMPs acceptable to the enforcing agency.

**5.106.2 STORMWATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB ONE OR MORE ACRES OF LAND.** Comply with all lawfully enacted stormwater discharge regulations for projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of a larger common plan of development sale.

**Note:** Projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of the larger common plan of development or sale must comply with the post-construction requirements detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board or the Lahontan Regional Water Quality Control Board (for projects in the Lake Tahoe Hydrologic Unit).

The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration, and infiltration through nonstructural controls, such as Low Impact Development (LID) practices, and conversation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural practices and be approved by the enforcing agency.

Refer to the current applicable permits on the State Water Resources Control Board website at: www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development.

**5.106.4 BICYCLE PARKING.** For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2

**5.106.4.1 Bicycle parking. [BSC-CG]** Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the applicable local ordinance, whichever is stricter.

**5.106.4.1.1 Short-term bicycle parking.** If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack.
**Exception:** Additions or alterations which add nine or less visitor vehicular parking spaces.

**5.106.4.1.2 Long-term bicycle parking.** For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

**5.106.4.1.3** For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one bicycle parking facility.

**5.106.4.1.4** For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the anticipated tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

**5.106.4.1.5** Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3, and 5.106.4.1.4 shall be convenient from the street and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

**Note:** Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.

**5.106.4.2 Bicycle parking. [DSA-SS]** For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2

**5.106.4.2.1 Student bicycle parking.** Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.
**5.106.4.2.2 Staff bicycle parking.** Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

**5.106.5.3 Electric vehicle (EV) charging**. [N] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code.

Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcement agency substantiating the local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section

**5.106.5.3.1 EV capable spaces.**
**[N]** EV capable spaces shall be provided in accordance with Table 5.106.5.3.1 and the following requirements:
1. Raceways complying with the California Electrical Code and no less that 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the EV capable and into a suitable listed cabinet, box,enclosure or equivalent. A common raceway may be used to serve multiple EV charging spaces.
2. A service panel or subpanel (s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective devices space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

Note: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by an enforcement agency. See vehicle Code Section 22511.2 for further details.

TABLE 5.106.5.3.1

| TOTAL NUMBER OF ACTUAL PARKING SPACES | NUMBER OF REQUIRED EV CAPABLE SPACES | NUMBER OF EVCS (EV CAPABLE SPACES PROVIDED WITH EVSE)*2 |
|---|---|---|
| 0-9 | 0 | 0 |
| 10-25 | 2 | 0 |
| 26-50 | 8 | 2 |
| 51-75 | 13 | 3 |
| 76-100 | 17 | 4 |
| 101-150 | 25 | 6 |
| 151-200 | 35 | 9 |
| 201 AND OVER | 20% of total[1] | 25% of EV capable spaces[1] |

1. Where there is insufficient electrical supply.
2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count towards the total number of required EV capable spaces shown in column 2.

**5.106.5.3.2 Electric vehicle charging stations (EVCS)**
EV capable spaces shall be provided with EVSE to create EVCS in the number indicated in Table 5.106.5.3.1. The EVCS required by Table 5.106.5.3.1 may be provided with EVSE in any combination of Level 2 and Direct Current Fast Charging (DCFC), except that at least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

**5.106.5.3.3 Use of automatic load management systems (ALMS).**
ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in Section
5.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.

**5.106.5.3.4 Accessible EVCS.**
When EVSE is installed, accessible EVSC shall be provided in accordance with the *California Building Code*, Chapter 11B, Section 11B-228.3.
**Note:** For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

**5.106.5.4 Electric Vehicle (EV) charging: medium-duty and heavy-duty. [N]**
Construction shall comply with section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE.
Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply.
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

**5.106.5.4.1 Electric vehicle charging readiness requirements for warehouse, grocery stores and retail stores with planned off-street loading spaces.**
[N] In order to avoid future demolition when adding EV charging supply and distribution equipment, spare raceways(s) or busway(s) and adequate capacity for transformers(s), service panels(s) or subpanel(s) shall be installed at the time of construction in accordance with the California Electrical Code. Construction plans and specifications shall include but are not limited to, the following:
1. The transformer, main service equipment and subpanel shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
2. The construction documents shall indicate on or more location(s) convenient to the planned offstreet loading space(s) reserved for medium-and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s) as shown in Table 5.106.5.4.1
3. Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium-and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipments for medium- and heavy-duty vehicles.
4. The raceway(s) or busway(s) shall be sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty ZEVs as shown in Table 5.106.5.4.1.

TABLE 5.106.5.4.1 RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM- AND HEAVY-DUTY EVSE [N]

| BUILDING TYPE | BUILDING SIZE (SQ. FT.) | NUMBER OF OFF-STREET LOADING SPACES | ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY & BUSWAY AND TRANSFORMER & PANEL |
|---|---|---|---|
| Grocery | 10,000 to 90,000 | 1 or 2 | 200 |
| | | 3 or Greater | 400 |
| | Greater than 90,000 | 1 or Greater | 400 |
| Retail | 10,000 to 135,000 | 1 or 2 | 200 |
| | | 3 or Greater | 400 |
| | Greater than 135,000 | 1 or Greater | 400 |
| Warehouse | 20,000 to 256,000 | 1 or 2 | 200 |
| | | 3 or Greater | 400 |
| | Greater than 256,000 | 1 or Greater | 400 |

**5.106.8 LIGHT POLLUTION REDUCTION. [N].** I Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and
2. Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);
3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8) and
4. Allowable BUG ratings not exceeding those shown in Table 5.106.8, [N] or Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

**Exceptions: [N]**

1. Luminaires that qualify as exceptions in Sections 130.2 (b) and 140.7 of the California Energy Code.
2. Emergency lighting.
3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.
4. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.
5. Luminaires with less than 6,200 initial luminaire lumens.

TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS [1,2]

| ALLOWABLE RATING | LIGHTING ZONE LZ0 | LIGHTING ZONE LZ1 | LIGHTING ZONE LZ2 | LIGHTING ZONE LZ3 | LIGHTING ZONE LZ4 |
|---|---|---|---|---|---|
| **MAXIMUM ALLOWABLE BACKLIGHT RATING** [3] | | | | | |
| Luminaire greater than 2 mounting heights (MH) from property line | N/A | No Limit | No Limit | No Limit | No Limit |
| Luminaire back hemisphere is 1-2 MH from property line | N/A | B2 | B3 | B4 | B4 |
| Luminaire back hemisphere is 0.5-1 MH from property line | N/A | B1 | B2 | B3 | B3 |
| Luminaire back hemisphere is less than 0.5 MH from property line | N/A | B0 | B0 | B1 | B2 |
| **MAXIMUM ALLOWABLE UPLIGHT RATING (U)** | | | | | |
| For area lighting [3] | N/A | U0 | U0 | U0 | U0 |
| For all other outdoor lighting,including decorative luminaires | N/A | U1 | U2 | U3 | UR |
| **MAXIMUM ALLOWABLE GLARE RATING** [1] **(G)** | | | | | |
| **MAXIMUM ALLOWABLE GLARE RATING** [1] **(G)** | N/A | G1 | G2 | G3 | G4 |
| **MAXIMUM ALLOWABLE GLARE RATING** [1] **(G)** | N/A | G0 | G1 | G1 | G2 |
| **MAXIMUM ALLOWABLE GLARE RATING** [1] **(G)** | N/A | G0 | G0 | G1 | G1 |
| **MAXIMUM ALLOWABLE GLARE RATING** [1] **(G)** | N/A | G0 | G0 | G0 | G1 |

1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the *California Energy Code* and Chapter 10 of the *California Administrative Code.*

2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.

3. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaries located in these areas shall meet *U*-value limits for "all other outdoor lighting"

**5.106.8.1 Facing- Backlight**
Luminaries within 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, and shall comply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point of that property line.
**Exception: Corners.** If two property lines (or two segments of the same property line) have equidistant point to the luminaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is directly behind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property lines to determine the required backlight rating.

**5.106.8.2 Facing-Glare.**
For luminaires covered by 5.106.8.1, if a property line also exists within or extends into the front hemisphere within 2MH of the luminaire then the luminaire shall comply with the more stringent glare rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point on the nearest property line within the front hemisphere.

**Note: [N]**
1.See also *California Building Code*, Chapter 12, Section 1205.6 for college campus lighting requirements for parking facilities and walkways.
2.Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table A-1, *California Energy Code* Tables 130.2-A and 130.2-B.
3. Refer to the *California Building Code* for requirements for additions and alterations.

**5.106.10 GRADING AND PAVING.** Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales.
2. Water collection and disposal systems.
3. French drains.
4. Water retention gardens.
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.
**Exception:** Additions and alterations not altering the drainage path.

**5.106.12 SHADE TREES [DSA-SS].** Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

**5.106.12.1 Surface parking areas.** Shade tree plantings, minimum #10 container size or equal, shall be installed to provide shade over 50 percent of the parking area within 15 years.

**Exceptions:** Surface parking area covered by solar photovoltaic shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.

**5.106.12.2 Landscape areas.** Shade tress plantings, minimum #10 container size or equal shall be installed to provide shade of 20% of the landscape area within 15 years.

**Exceptions:** Playfields for organized sport activity are not included in the total area calculation.

**5.106.12.3. Hardscape areas.** Shade tree plantings, minimum #10 container size or equal shall be installed to provide shade over 20 percent of the hardscape area within 15 years.

**Exceptions:**
1. Walks, hardscape areas covered by solar photovoltaic shade structures or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.
2. Designated and marked play areas of organized sport activity are not included in the total area calculation.

## DIVISION 5.2 ENERGY EFFICIENCY

### SECTION 5.201 GENERAL
**5.201.1 Scope [BSC-CG]. *California Energy Code [DSA-SS].*** For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.

### SECTION 5.302 DEFINITIONS
**5.302.1 Definitions.** The following terms are defined in Chapter 2 *(and are included here for reference)*

**EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS].** An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape.

**FOOTPRINT AREA [DSA-SS].** The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks.

**METERING FAUCET**. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The volume or cycle duration can be fixed or adjustable.

**GRAYWATER.** Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or dishwashers.

**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).** The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters.

**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD]** The California model ordinance (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at least as effective as the MWELO.

**POTABLE WATER.** Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5.

**POTABLE WATER. [HCD]** Water that is satisfactory for drinking, culinary, and domestic purposes, and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Authority Having Jurisdiction.

**RECYCLED WATER.** Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again.

**SUBMETER. [HCD 1]** A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code Section 1954.202 (g) and Water code Section 517 for additional details.)

**WATER BUDGET.** Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO).

## DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION

### SECTION 5.301 GENERAL
**5.301.1 Scope.** The provisions of this chapter shall establish the means of conserving water use indoors, outdoors and in wastewater conveyance.

### SECTION 5.302 DEFINITIONS
**5.302.1 Definitions.** The following terms are defined in Chapter 2 *(and are included here for reference)*

**EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS].** An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape.

**FOOTPRINT AREA [DSA-SS].** The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks.

**METERING FAUCET**. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The volume or cycle duration can be fixed or adjustable.

**GRAYWATER.** Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or dishwashers.

**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).** The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters.

**MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD]** The California model ordinance (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at least as effective as the MWELO.

**POTABLE WATER.** Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5.

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**SUBMETER. [HCD 1]** A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code Section 1954.202 (g) and Water code Section 517 for additional details.)

**WATER BUDGET.** Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO).

| No. | REVISION/ISSUE | DATE |
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FIRM NAME AND ADDRESS
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PROJECT NAME AND ADDRESS
PROPOSED IMPROVEMENTS TO EXISTING SITE PLAN LAYOUT FOR MAJOR SINGH @
1901 E. YOSEMITE, MANTECA, CA. 95336

| | |
|---|---|
| REVISED BY: D.MIRAFLOR | |
| DRAWN BY: S. ADVENTO | SHEET # CG1.0 |
| DATE: 06/28/2022 | OF: 3 |
| SCALE: AS NOTED | |

# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
## NONRESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y | N/A | RESPON. PARTY

### SECTION 5.303 INDOOR WATER USE

**5.303.1 METERS.** Separate submeters or metering devices shall be installed for the uses described in Sections 503.1.1 and 503.1.2.

**5.303.1.1 Buildings in excess of 50,000 square feet.** Separate submeters shall be installed as follows:

1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.
2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems:
   a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
   b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
   c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW).

**5.303.1.2 Excess consumption.** A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day.

**5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

**5.303.3.1 Water Closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets.

**Note:** The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

**5.303.3.2 Urinals.**

**5.303.3.2.1 Wall-mounted Urinals.** The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.

**5.303.3.2.2 Floor-mounted Urinals.** The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush.

**5.303.3.3 Showerheads. [BSC-CG]**

**5.303.3.3.1 Single showerhead.** Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

**5.303.3.3.2 Multiple showerheads serving one shower.** When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.
**Note:** A hand-held shower shall be considered a showerhead.

**5.303.3.4 Faucets and fountains.**

**5.303.3.4.1 Nonresidential Lavatory faucets.** Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.

**5.303.3.4.2 Kitchen faucets.** Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

**5.303.3.4.3 Wash fountains.** Wash fountains shall have a maximum flow rate of not more than1.8 gallons per minute/20 [rim space (inches) at 60 psi].

**5.303.3.4.4 Metering faucets.** Metering faucets shall not deliver more than 0.20 gallons per cycle.

**5.303.3.4.5 Metering faucets for wash fountains.** Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi].

**Note:** Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

**5.303.3.4.6 Pre-rinse spray value**
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7), and shall be equipped with an integral automatic shutoff.

**FOR REFERENCE ONLY:**The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

| PRODUCT CLASS [spray force in ounce force (ozf)] | MAXIMUM FLOW RATE (gpm) |
|---|---|
| Product Class 1 (≤ 5.0 ozf) | 1.00 |
| Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf) | 1.20 |
| Product Class 3 (> 8.0 ozf) | 1.28 |

**5.303.4 COMMERCIAL KITCHEN EQUIPMENT.**

**5.303.4.1 Food Waste Disposers.** Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water.
**Note:** This code section does not affect local jurisdiction authority to prohibit or require disposer installation.

**5.303.5 AREAS OF ADDITION OR ALTERATION.** For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building.

**5.303.6 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS.** Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code* and in Chapter 6 of this code.

### SECTION 5.304 OUTDOOR WATER USE

**5.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

**Notes:**
1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, Title 23, Chapter 2.7, Division 2.
2. MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/.

**5.304.6 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations*, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.

**Exception**: Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELO.

**5.304.6.1 Newly constructed landscapes.** New construction projects with an aggregate landscape area equal to or greater than 500 square feet.

**5.304.6.2 Rehabilitated landscapes.** Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

## DIVISION 5.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

### SECTION 5.401 GENERAL

**5.401.1 SCOPE.** The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing and adjusting.

Y | N/A | RESPON. PARTY

### SECTION 5.402 DEFINITIONS

**5.402.1 DEFINITIONS.** The following terms are defined in Chapter 2 *(and are included here for reference)*

**ADJUST.** To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust a damper.

**BALANCE.** To proportion flows within the distribution system, including sub-mains, branches and terminals, according to design quantities.

**BUILDING COMMISSIONING.** A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.

**ORGANIC WASTE.** Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food soiled paper waste that is mixed in with food waste.

**TEST.** A procedure to determine quantitative performance of a system or equipment

### SECTION 5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT

**5.407.1 WEATHER PROTECTION.** Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local ordinance, whichever is more stringent.

**5.407.2 MOISTURE CONTROL.** Employ moisture control measures by the following methods.

**5.407.2.1 Sprinklers.** Design and maintain landscape irrigation systems to prevent spray on structures.

**5.407.2.2 Entries and openings**. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows:

**5.407.2.2.1 Exterior door protection.** Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

**5.407.2.2.2 Flashing.** Install flashings integrated with a drainage plane.

### SECTION 5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

**5.408.1 CONSTRUCTION WASTE MANAGEMENT.** Recycle and/or salvage for reuse a minimum of 65% of the non-hazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.

**5.408.1.1 Construction waste management plan.** Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan that:

1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.
2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
3. Identifies diversion facilities where construction and demolition waste material collected will be taken.
4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

**5.408.1.2 Waste Management Company.** Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.

**Note:** The owner or contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company.

**Exceptions to Sections 5.408.1.1 and 5.408.1.2:**

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.

**5.408.1.3 Waste stream reduction alternative.** The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65% minimum requirement as approved by the enforcing agency.

**5.408.1.4 Documentation.** Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1, through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.

**Notes:**

1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen may be used to assist in documenting compliance with the waste management plan.
2. Mixed construction and demolition debris processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

**5.408.2 UNIVERSAL WASTE. [A]** Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents.

**Note**: Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/universalwaste/

**5.408.3 EXCAVATED SOIL AND LAND CLEARING DEBRIS.** 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

**Exception:** Reuse, either on or off-site, of vegetation or soil contaminated by disease or pest infestation.

**Notes:**

1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material.
2. For a map of know pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)

### SECTION 5.410 BUILDING MAINTENANCE AND OPERATIONS

**5.410.1 RECYCLING BY OCCUPANTS.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive.

**Exception**: Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section.

**5.410.1.1 Additions.** All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30% or more in floor area, shall provide recycling areas on site.

**Exception**: Additions within a tenant space resulting in less than a 30% increase in the tenant space floor area.

**5.410.1.2 Sample ordinance.** Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the *Public Resources Code*. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).

**Note:** A sample ordinance for use by local agencies may be found in Appendix A of the document at the CalRecycle's web site.

Y | N/A | RESPON. PARTY

**5.410.2 COMMISSIONING. [N] New buildings 10,000 square feet and over.** For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. For I-occupancies that are not regulated by OSHPD or for I-occupancies and L-occupancies that are not regulated y the California Energy Code Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply.

**Note:** For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting systems and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements

Commissioning requirements shall include:

1. Owner's or Owner representative's project requirements.
2. Basis of design.
3. Commissioning measures shown in the construction documents.
4. Commissioning plan.
5. Functional performance testing.
6. Documentation and training.
7. Commissioning report.

**Exceptions:**

1. Unconditioned warehouses of any size.
2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses.
3. Tenant improvements less than 10,000 square feet as described in Section 303.1.1.
4. Open parking garages of any size, or open parking garage areas, of any size, within a structure.

**Note:** For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or air conditioning.

**Informational Notes:**

1. IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for qualifications of commissioning personnel. AC 476 des not certify individuals to conduct functional performance tests or to adjust and balance systems.

2. Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the *California Energy Code*.

**5.410.2.1 Owner's or Owner Representative's Project Requirements (OPR). [N]** The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following:
1. Environmental and sustainability goals.
2. Building sustainable goals.
3. Indoor environmental quality requirements.
4. Project program, including facility functions and hours of operation, and need for after hours operation.
5. Equipment and systems expectations.
6. Building occupant and operation and maintenance (O&M) personnel expectations.

**5.410.2.2 Basis of Design (BOD). [N]** A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse system.

**5.410.2.3 Commissioning plan. [N]** Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned. The commissioning plan shall include the following:
1. General project information.
2. Commissioning goals.
3. Systems to be commissioned. Plans to test systems and components shall include:
   a. An explanation of the original design intent.
   b. Equipment and systems to be tested, including the extent of tests.
   c. Functions to be tested.
   d. Conditions under which the test shall be performed.
   e. Measurable criteria for acceptable performance.
4. Commissioning team information.
5. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning shall be included.

**5.410.2.4 Functional performance testing. [N]** Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.

**5.410.2.5 Documentation and training. [N]** A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in *California Code of Regulations* (CCR), Title 8, Section 5142, and other related regulations.

**5.410.2.5.1 Systems manual. [N]** Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative. The systems manual shall include the following:
1. Site information, including facility description, history and current requirements.
2. Site contact information.
3. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log.
4. Major systems.
5. Site equipment inventory and maintenance notes.
6. A copy of verifications required by the enforcing agency or this code.
7. Other resources and documentation, if applicable.

**5.410.2.5.2 Systems operations training. [N]** A program for training of the appropriate maintenance staff for each equipment type and/or system shall be developed and documented in the commissioning report and shall include the following:
1. System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces).
2. Review and demonstration of servicing/preventive maintenance.
3. Review of the information in the Systems Manual.
4. Review of the record drawings on the system/equipment.

**5.410.2.6 Commissioning report. [N]** A report of commissioning process activities undertaken through the design and construction phases of the building project shall be completed and provided to the owner or representative.

**5.410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet.** Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.

**5.410.4.2 (Reserved)**

**Note:** For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)3 for additional testing requirements of specific systems.

**5.410.4.2 Systems.** Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse systems.

**5.410.4.3 Procedures.** Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.

**5.410.4.3.1 HVAC balancing.** In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.

Y | N/A | RESPON. PARTY

**5.410.4.4 Reporting.** After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

**5.410.4.5 Operation and maintenance (O & M) manual.** Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.

**5.410.4.5.1 Inspections and reports.** Include a copy of all inspection verifications and reports required by the enforcing agency.

## DIVISION 5.5 ENVIRONMENTAL QUALITY

### SECTION 5.501 GENERAL

**5.501.1 SCOPE.** The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

### SECTION 5.502 DEFINITIONS

**5.502.1 DEFINITIONS.** The following terms are defined in Chapter 2 *(and are included here for reference)*

**ARTERIAL HIGHWAY.** A general term denoting a highway primarily for through traffic usually on a continuous route.

**A-WEIGHTED SOUND LEVEL (dBA).** The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made.

**1 BTU/HOUR.** British thermal units per hour, also referred to as Btu. The amount of heat required to raise one pound of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is 12,000 Btu, the amount of heat required to melt a ton (2,000 pounds) of ice at 32° Fahrenheit.

**COMMUNITY NOISE EQUIVALENT LEVEL (CNEL).** A metric similar to the day-night average sound level (Ldn), except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening hours (7pm to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn.

**COMPOSITE WOOD PRODUCTS.** Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I–joists or finger–jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a).

**Note:** See CCR, Title 17, Section 93120.1.

**DAY-NIGHT AVERAGE SOUND LEVEL (Ldn).** The A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p.m. to 7 a.m.).

**DECIBEL (db).** A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

**ELECTRIC VEHICLE (EV).** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

**ELECTRIC VEHICLE CHARGING STATION(S) (EVCS)).** One or more spaces intended for charging electric vehicles.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

**ENERGY EQUIVALENT (NOISE) LEVEL (Leq).** The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time of period of interest.

**EXPRESSWAY.** An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.

**FREEWAY.** A divided arterial highway with full control of access and with grade separations at intersections.

**GLOBAL WARMING POTENTIAL (GWP).** The radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference compound with a GWP of one.

**GLOBAL WARMING POTENTIAL VALUE (GWP VALUE).** A 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995); or its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14.

**HIGH-GWP REFRIGERANT.** A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarbon, a hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, with a GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

**LONG RADIUS ELBOW.** Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.5 times the pipe diameter.

**LOW-GWP REFRIGERANT.** A compound used as a heat transfer fluid or gas that: (A) has a GWP value less than 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

**MERV.** Filter minimum efficiency reporting value, based on ASHRAE 52.2–1999.

**MAXIMUM INCREMENTAL REACTIVITY (MIR).** The maximum change in weight of ozone formed by adding a compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundreths of a gram (g $O^3$/g ROC).

**PRODUCT-WEIGHTED MIR (PWMIR).** The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

**PSIG.** Pounds per square inch, guage.

**REACTIVE ORGANIC COMPOUND (ROC).** Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

**SCHRADER ACCESS VALVES.** Access fittings with a valve core installed.

**SHORT RADIUS ELBOW.** Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 times the pipe diameter.

**SUPERMARKET.** For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 square feet or more conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units.

**VOC.** A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a)

**Note:** Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question.

### SECTION 5.503 FIREPLACES

**5.503.1 FIREPLACES.** Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances.

**5.503.1.1 Woodstoves.** Woodstoves and pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits.

### SECTION 5.504 POLLUTANT CONTROL

**5.504.1 TEMPORARY VENTILATION.** The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992 Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

**5.504.3 Covering of duct openings and protection of mechanical equipment during construction.** At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

| No. | REVISION/ISSUE | DATE |
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FIRM NAME AND ADDRESS
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PROJECT NAME AND ADDRESS

PROPOSED IMPROVEMENTS TO EXISTING SITE PLAN LAYOUT FOR MAJOR SINGH @

1901 E. YOSEMITE, MANTECA, CA. 95336

REVISED BY: D.MIRAFLOR

DRAWN BY: S. ADVENTO

DATE: 06/28/2022

SCALE: AS NOTED

SHEET #: CG2.0

OF: 3

# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
## NONRESIDENTIAL MANDATORY MEASURES, SHEET 3 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y N/A RESPON. PARTY

**5.504.4 FINISH MATERIAL POLLUTANT CONTROL.** Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

**5.504.4.1 Adhesives, sealants and caulks.** Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:
1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT[1,2]

| Less Water and Less Exempt Compounds in Grams per Liter | |
|---|---|
| **ARCHITECTURAL APPLICATIONS** | **CURRENT VOC LIMIT** |
| INDOOR CARPET ADHESIVES | 50 |
| CARPET PAD ADHESIVES | 50 |
| OUTDOOR CARPET ADHESIVES | 150 |
| WOOD FLOORING ADHESIVES | 100 |
| RUBBER FLOOR ADHESIVES | 60 |
| SUBFLOOR ADHESIVES | 50 |
| CERAMIC TILE ADHESIVES | 65 |
| VCT & ASPHALT TILE ADHESIVES | 50 |
| DRYWALL & PANEL ADHESIVES | 50 |
| COVE BASE ADHESIVES | 50 |
| MULTIPURPOSE CONSTRUCTION ADHESIVES | 70 |
| STRUCTURAL GLAZING ADHESIVES | 100 |
| SINGLE-PLY ROOF MEMBRANE ADHESIVES | 250 |
| OTHER ADHESIVES NOT SPECIFICALLY LISTED | 50 |
| **SPECIALTY APPLICATIONS** | |
| PVC WELDING | 510 |
| CPVC WELDING | 490 |
| ABS WELDING | 325 |
| PLASTIC CEMENT WELDING | 250 |
| ADHESIVE PRIMER FOR PLASTIC | 550 |
| CONTACT ADHESIVE | 80 |
| SPECIAL PURPOSE CONTACT ADHESIVE | 250 |
| STRUCTURAL WOOD MEMBER ADHESIVE | 140 |
| TOP & TRIM ADHESIVE | 250 |
| **SUBSTRATE SPECIFIC APPLICATIONS** | |
| METAL TO METAL | 30 |
| PLASTIC FOAMS | 50 |
| POROUS MATERIAL (EXCEPT WOOD) | 50 |
| WOOD | 30 |
| FIBERGLASS | 80 |

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF

TABLE 5.504.4.2 - SEALANT VOC LIMIT

| Less Water and Less Exempt Compounds in Grams per Liter | |
|---|---|
| **SEALANTS** | **CURRENT VOC LIMIT** |
| ARCHITECTURAL | 250 |
| MARINE DECK | 760 |
| NONMEMBRANE ROOF | 300 |
| ROADWAY | 250 |
| SINGLE-PLY ROOF MEMBRANE | 450 |
| OTHER | 420 |
| **SEALANT PRIMERS** | |
| ARCHITECTURAL | |
| NONPOROUS | 250 |
| POROUS | 775 |
| MODIFIED BITUMINOUS | 500 |
| MARINE DECK | 760 |
| OTHER | 750 |

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

**5.504.4.3 Paints and coatings.** Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

**5.504.4.3.1 Aerosol Paints and coatings.** Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

Y N/A RESPON. PARTY

TABLE 5.504.4.3 - CONT.

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

| COATING CATEGORY | CURRENT VOC LIMIT |
|---|---|
| **SPECIALTY COATINGS** | |
| ALUMINUM ROOF COATINGS | 400 |
| BASEMENT SPECIALTY COATINGS | 400 |
| BITUMINOUS ROOF COATINGS | 50 |
| BITUMINOUS ROOF PRIMERS | 350 |
| BOND BREAKERS | 350 |
| CONCRETE CURING COMPOUNDS | 350 |
| CONCRETE/MASONRY SEALERS | 100 |
| DRIVEWAY SEALERS | 50 |
| DRY FOG COATINGS | 150 |
| FAUX FINISHING COATINGS | 350 |
| FIRE RESISTIVE COATINGS | 350 |
| FLOOR COATINGS | 100 |
| FORM-RELEASE COMPOUNDS | 250 |
| GRAPHIC ARTS COATINGS (SIGN PAINTS) | 500 |
| HIGH-TEMPERATURE COATINGS | 420 |
| INDUSTRIAL MAINTENANCE COATINGS | 250 |
| LOW SOLIDS COATINGS[1] | 120 |
| MAGNESITE CEMENT COATINGS | 450 |
| MASTIC TEXTURE COATINGS | 100 |
| METALLIC PIGMENTED COATINGS | 500 |
| MULTICOLOR COATINGS | 250 |
| PRETREATMENT WASH PRIMERS | 420 |
| PRIMERS, SEALERS, & UNDERCOATERS | 100 |
| REACTIVE PENETRATING SEALERS | 350 |
| RECYCLED COATINGS | 250 |
| ROOF COATINGS | 50 |
| RUST PREVENTATIVE COATINGS | 250 |
| SHELLACS: | |
| CLEAR | 730 |
| OPAQUE | 550 |
| SPECIALTY PRIMERS, SEALERS & UNDERCOATERS | 100 |
| STAINS | 250 |
| STONE CONSOLIDANTS | 450 |
| SWIMMING POOL COATINGS | 340 |
| TRAFFIC MARKING COATINGS | 100 |
| TUB & TILE REFINISH COATINGS | 420 |
| WATERPROOFING MEMBRANES | 250 |
| WOOD COATINGS | 275 |
| WOOD PRESERVATIVES | 350 |
| ZINC-RICH PRIMERS | 340 |

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

**5.504.4.3.2 Verification.** Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:
1. Manufacturer's product specification
2. Field verification of on-site product containers

**5.504.4.4 Carpet Systems.**
All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers." Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.4.1 Carpet cushion.** All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,"Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.4.2 Carpet adhesive.** All carpet adhesive shall meet the requirements of Table 5.504.4.1.

**5.504.4.5 Composite wood products.** Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in Table 5.504.4.5.

**5.504.4.5.3 Documentation.** Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:
1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards.
5. Other methods acceptable to the enforcing agency.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS[1]

| MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION | |
|---|---|
| **PRODUCT** | **CURRENT LIMIT** |
| HARDWOOD PLYWOOD VENEER CORE | 0.05 |
| HARDWOOD PLYWOOD COMPOSITE CORE | 0.05 |
| PARTICLE BOARD | 0.09 |
| MEDIUM DENSITY FIBERBOARD | 0.11 |
| THIN MEDIUM DENSITY FIBERBOARD[2] | 0.13 |

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

Y N/A RESPON. PARTY

**5.504.4.6 Resilient flooring systems.** Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350)

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov//Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.6.1 Verification of compliance.** Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.

**5.504.4.7 Thermal insulation**
Comply with the requirements of the California Department of Public Health, "Standard Method of the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, "Version 1.2, January 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

**5.504.4.7.1 Verification of compliance.**
Documentation shall be provided verifying that thermal insulation materials meet the pollutant emission limits.

**5.504.4.8 Acoustical ceiling and wall panels.**
Comply with the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, " Version 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.

**5.504.4.8.1 Verification of compliance.** Documentation shall be provided verifying that acoustical finish materials meet the pollutant emission limits.

**5.504.5.3 Filters.** In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

**Exceptions:** Existing mechanical equipment.

**5.504.5.3.1 Labeling.** Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

**5.504.7 ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL.** Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations; or as enforced by ordinances, regulations or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post signage to inform building occupants of the prohibitions.

## SECTION 5.505 INDOOR MOISTURE CONTROL

**5.505.1 INDOOR MOISTURE CONTROL.** Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code.

## SECTION 5.506 INDOOR AIR QUALITY

**5.506.1 OUTSIDE AIR DELIVERY.** For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements For Ventilation) of the *California Energy Code*, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

**5.506.2 CARBON DIOXIDE ($CO_2$) MONITORING.** For buildings or additions equipped with demand control ventilation, $CO_2$ sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120(c)(4).

**5.506.3 Carbon dioxide (CO2) monitoring in classrooms.**
**(DSA-SS)** Each public K-12 school classroom, as listed in Table 120.1-A of the *California Energy Code*, shall be equipped with a carbon dioxide monitor or sensor that meets the following requirements:
1. The monitor or sensor shall be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from door and operable windows.
2. When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, the carbon dioxide readings shall be available to and regularly monitored by facility personnel.
3. A monitor shall provide notification though a visual indicator on the monitor when the carbon dioxide levels in the classroom have exceeded 1,100ppm. A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or audible indicator when the carbon dioxide levels in the classroom have exceeded 1,100ppm.
4. The monitor or sensor shall measure carbon dioxide levels at minimum 15- minute intervals and shall maintain a record of previous carbon dioxide measurements of not less than 30 days duration.
5. The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400ppm to 2000ppm or greater.
6. The monitor or sensor shall be certified by the manufacturer to be accurate within 75ppm at 1,000ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.

## SECTION 5.507 ENVIRONMENTAL COMFORT

**5.507.4 ACOUSTICAL CONTROL.** Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E 90 and ASTM E 413, or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.

**Exception:** Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings.

**Exception: [DSA-SS]** For public schools and community colleges, the requirements of this section and all subsections apply only to new construction.

**5.507.4.1 Exterior noise transmission, prescriptive method.** Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations:

1. Within the 65 CNEL noise contour of an airport.

   **Exceptions:**

   1. $L_{dn}$ or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICUZ) plan.
   2. $L_{dn}$ or CNEL for other airports and heliports for which a land use plan has not been developed shall be determined by the local general plan noise element.

2. Within the 65 CNEL or $L_{dn}$ noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway source as determined by the Noise Element of the General Plan.

**5.507.4.1.1. Noise exposure where noise contours are not readily available.** Buildings exposed to a noise level of 65 dB $L_{eq}$ - 1-hr during any hour of operation shall have building, addition or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30).

**5.507.4.2 Performance Method.** For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq-1Hr) of 50 dBA in occupied areas during any hour of operation.

**5.507.4.2.1 Site Features.** Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition or alteration project to mitigate sound migration to the interior.

**5.507.4.2.2 Documentation of Compliance.** An acoustical analysis documenting complying interior soundlevels shall be prepared by personnel approved by the architect or engineer of record.

**5.507.4.3 Interior sound transmission.** Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.

**Note:** Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control: www.toolbase.org/PDF/CaseStudies/stc_icc_ratings.pdf.

## SECTION 5.508 OUTDOOR AIR QUALITY

**5.508.1 Ozone depletion and greenhouse gas reductions.** Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

**5.508.1.1 Chlorofluorocarbons (CFCs).** Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

**5.508.1.2 Halons.** Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

Y N/A RESPON. PARTY

**5.508.2 Supermarket refrigerant leak reduction.** New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and the replacement of existing refrigeration systems in existing facilities.

**Exception:** Refrigeration systems containing low-global warming potential (low-GWP) refrigerant with a GWP value less than 150 are not subject to this section. Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide ($CO_2$), and potentially other refrigerants.

**5.508.2.1 Refrigerant piping.** Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.

**5.508.2.1.1 Threaded pipe.** Threaded connections are permitted at the compressor rack.

**5.508.2.1.2 Copper pipe.** Copper tubing with an OD less than 1/4 inch may be used in systems with a refrigerant charge of 5 pounds or less.

**5.508.2.1.2.1 Anchorage.** One-fouth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils.

**5.508.2.1.3 Flared tubing connections.** Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil.

**Exception:** Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for use with refrigerants and tightened in accordance with manufacturer's recommendations.

**5.508.2.1.4 Elbows.** Short radius elbows are only permitted where space limitations prohibit use of long radius elbows.

**5.508.2.2 Valves.** Valves Valves and fittings shall comply with the *California Mechanical Code* and as follows.

**5.508.2.2.1 Pressure relief valves.** For vessels containing high-GWP refrigerant, a rupture disc shall be installed between the outlet of the vessel and the inlet of the pressure relief valve.

**5.508.2.2.1.1 Pressure detection.** A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve.

**5.508.2.2.2 Access valves.** Only Schrader access valves with a brass or steel body are permitted for use.

**5.508.2.2.2.1 Valve caps.** For systems with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic.

**5.508.2.2.2.2 Seal caps.** If designed for it, the cap shall have a neoprene O-ring in place.

**5.508.2.2.2.2.1 Chain tethers.** Chain tethers to fit ovr the stem are required for valves designed to have seal caps.

**Exception:** Valves with seal caps that are not removed from the valve during stem operation.

**5.508.2.3 Refrigerated service cases.** Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coated to prevent corrosion from these substances.

**5.508.2.3.1 Coil coating.** Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency.

**5.508.2.4 Refrigerant receivers.** Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device tha indicates the level of refrigerant in the receiver.

**5.508.2.5 Pressure testing.** The system shall be pressure tested during installation prior to evacuation and charging.

**5.508.2.5.1 Minimum pressure.** The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum.

**5.508.2.5.2 Leaks.** Check the system for leaks, repair any leaks, and retest for pressure using the same gauge.

**5.508.2.5.3 Allowable pressure change.** The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge.

**5.508.2.6 Evacuation.** The system shall be evacuated after pressure testing and prior to charging.

**5.508.2.6.1 First vacuum.** Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and hold for 30 minutes.

**5.508.2.6.2 Second vacuum.** Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes.

**5.508.2.6.3 Third vacuum.** Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period.

# CHAPTER 7
# INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

## 702 QUALIFICATIONS

**702.1 INSTALLER TRAINING.** HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

**702.2 SPECIAL INSPECTION [HCD].** When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

**Notes:**

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

**[BSC-CG]** When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

**Note:** Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

## 703 VERIFICATIONS

**703.1 DOCUMENTATION.** Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

| No. | REVISION/ISSUE | DATE |
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FIRM NAME AND ADDRESS
LINE 2 DESIGN
COMMERCIAL & RESIDENTIAL
DESIGN SPECIALIST
DAVID MIRAFLOR C.C.I.
P.O.BOX 690218
STOCKTON CA. 95269
CELL (209) 470-0318
FAX (209) 473-3223
LINE2DESIGN@YAHOO.COM



PROJECT NAME AND ADDRESS

PROPOSED IMPROVEMENTS TO EXISTING SITE PLAN LAYOUT FOR MAJOR SINGH @

1901 E. YOSEMITE, MANTECA, CA. 95336

REVISED BY: D.MIRAFLOR

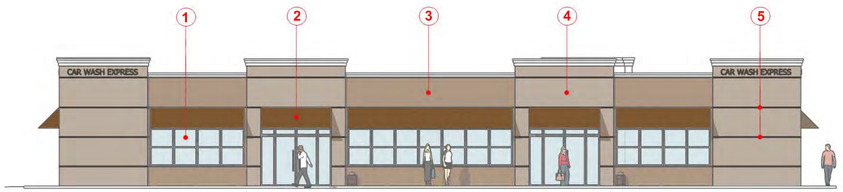
DRAWN BY: S. ADVENTO

SHEET # CG3.0

DATE: 06/28/2022

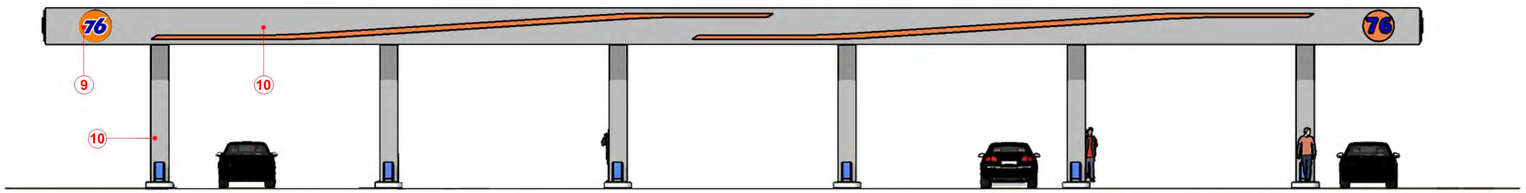
SCALE: AS NOTED

OF: 3



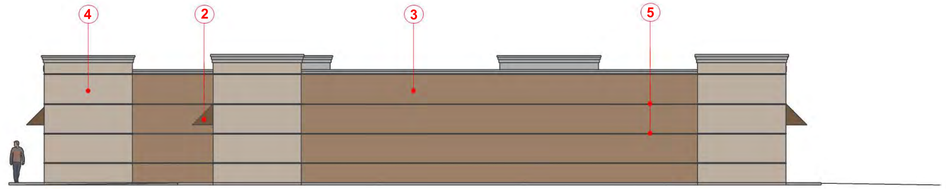

FRONT ELEVATION (CAR WASH / RESTAURANT)

0 5' 10' 15'




FRONT ELEVATION (FUEL STATION)

0 5' 10' 15'



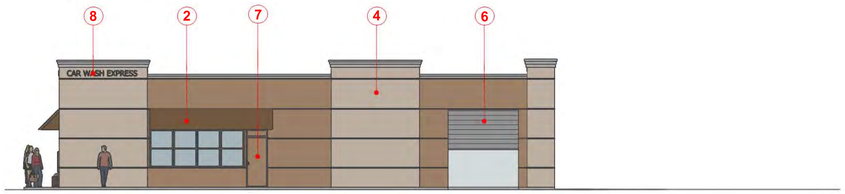

REAR ELEVATION

0 5' 10' 15'


RIGHT SIDE ELEVATION (FUEL STATION)

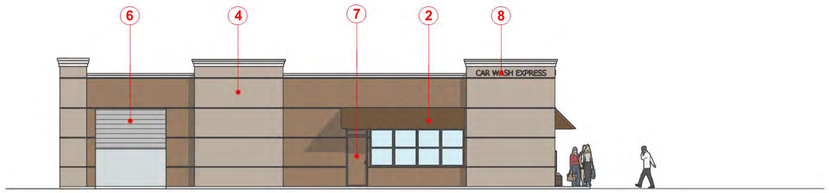
0 5' 10' 15'


PERSPECTIVE: BIRD'S EYE VIEW




RIGHT SIDE ELEVATION

0 5' 10' 15'




LEFT SIDE ELEVATION

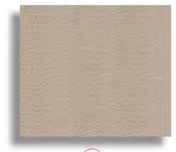
0 5' 10' 15'


PERSPECTIVE: NORMAL VIEW

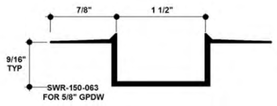
① **DOUBLE PANE GLASS:**
TYPE: FIXED WINDOW
FRAME: ALUMINUM
-ENERGY EFFICIENT
-SMASH RESISTANT
-WEATHER RESISTANT

② **WINDOW AWNING:**
COVER MATERIAL: WOVEN ACRYLIC
COVER MATERIAL GROUPING: FABRIC
COVER COLOR: DARK DROWN
PIECES INCLUDED: WALL BRACKETS, ALUM. FRAMES, SELF TAPPING SCREWS

③ **STUCCO WALL FINISH:**
COLOR: LIGHT BROWN
PIGMENT DOSE RATE: 7 LB PER LBS GRAY PORTLAND CEMENT



④ **STUCCO WALL FINISH:**
COLOR: BEIGE
PIGMENT DOSE RATE: 5 LB PER LBS GRAY PORTLAND CEMENT




⑤ **ALUMINUM DRYWALL TRIM:**
REVEAL BEAD 1 1/2"X5/8"
PRIMED FOR PAINTING 8'0" LENGTHS

⑥ **ROLLER SHUTTER DOOR:**
CORRUGATED METAL HORIZONTAL
PATTERN - 260NW-760126507
COLOR: METALLIC GRAY

⑦ **EXTERIOR DOOR:**
36"X80" BLANK OUT-SWING
ITEM # OD3680B
BRAND NAME: KINRO
FINISH: PAINTED LIGHT BROWN

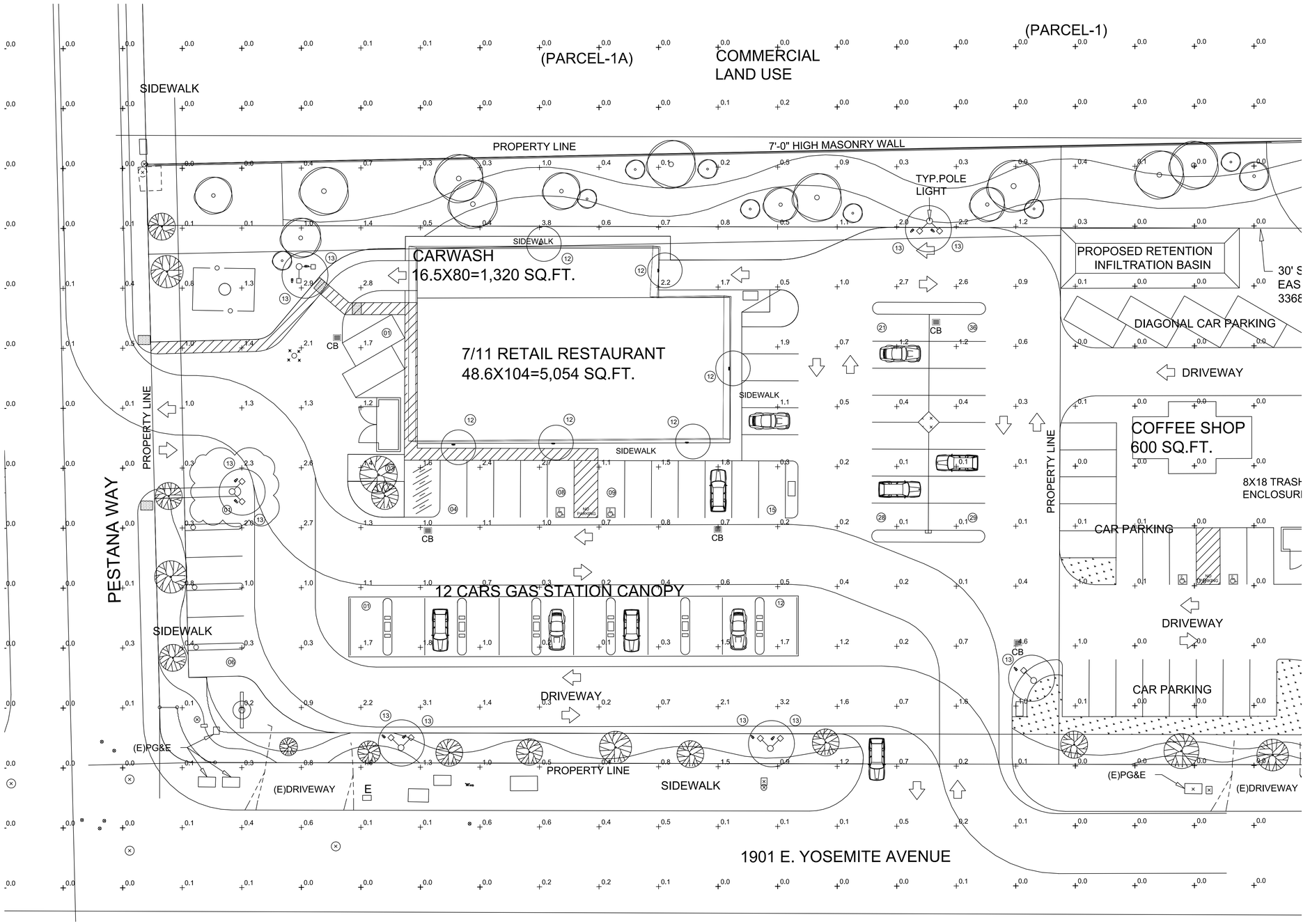
⑧ **3D STAINLESS STEEL LETTERS**
BUILT UP LETTERS (BOX LETTERS)
MADE FROM 1MM THICK STAINLESS STEEL
WITH STAINLESS STEEL RETURNS.
TEXT STYLE: ARIAL BOLD

⑨ **ACRYLIC PLASTIC SHEET:**
COLOR: ORANGE AND BLUE

⑩ **ALUMINUM COMPOSITE PANEL:**
COLOR: LIGHT GRAY

# BUILDING MATERIALS SELECTION:

**PROJECT NAME:** CARWASH / RESTAURANT AND FUEL STATION
**ADDRESS:** 1901 E YOSEMITE AVE, MANTECA, CA 95336
**OWNER:** MAJOR SINGH




SITE PHOTOMETRIC (FC)
SCALE: 1/16"

SHEET LIGHT FIXTURE SCHEDULE

| ITEM | QTY | TAG | DESCRIPTION |
|---|---|---|---|
| 13 | 11 | | LED POLE AREA LIGHT, MH=20', 8345 LUMEN, 73W, 277V, 4000K, B2/U0/G1 BUG, DARK BRONZE |
| 12 | 6 | | LED WALLPACK, MH=12', 3250 LUMEN, 23W, 277V, 4000K, DARK BRONZE |

| No. | REVISION/ISSUE | DATE |
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FIRM NAME AND ADDRESS

LINE 2 DESIGN
COMMERCIAL & RESIDENTIAL
DESIGN SPECIALIST
DAVID MIRAFLOR C.C.I.
P.O.BOX 690218
STOCKTON CA. 95269
CELL (209) 470-0318
FAX (209) 473-3223
LINE2DESIGN@YAHOO.COM



PROJECT NAME AND ADDRESS

PROPOSED GENERAL SITE PLAN LAYOUT FOR MR. MAJOR SINGH ©

1901 E. YOSEMITE, MANTECA, CA. 95336

| | |
|---|---|
| REVISED BY: D.MIRAFLOR | |
| DRAWN BY: EJQ | SHEET # FC |
| DATE: 05/16/2022 | |
| SCALE: AS NOTED | OF: 1 |