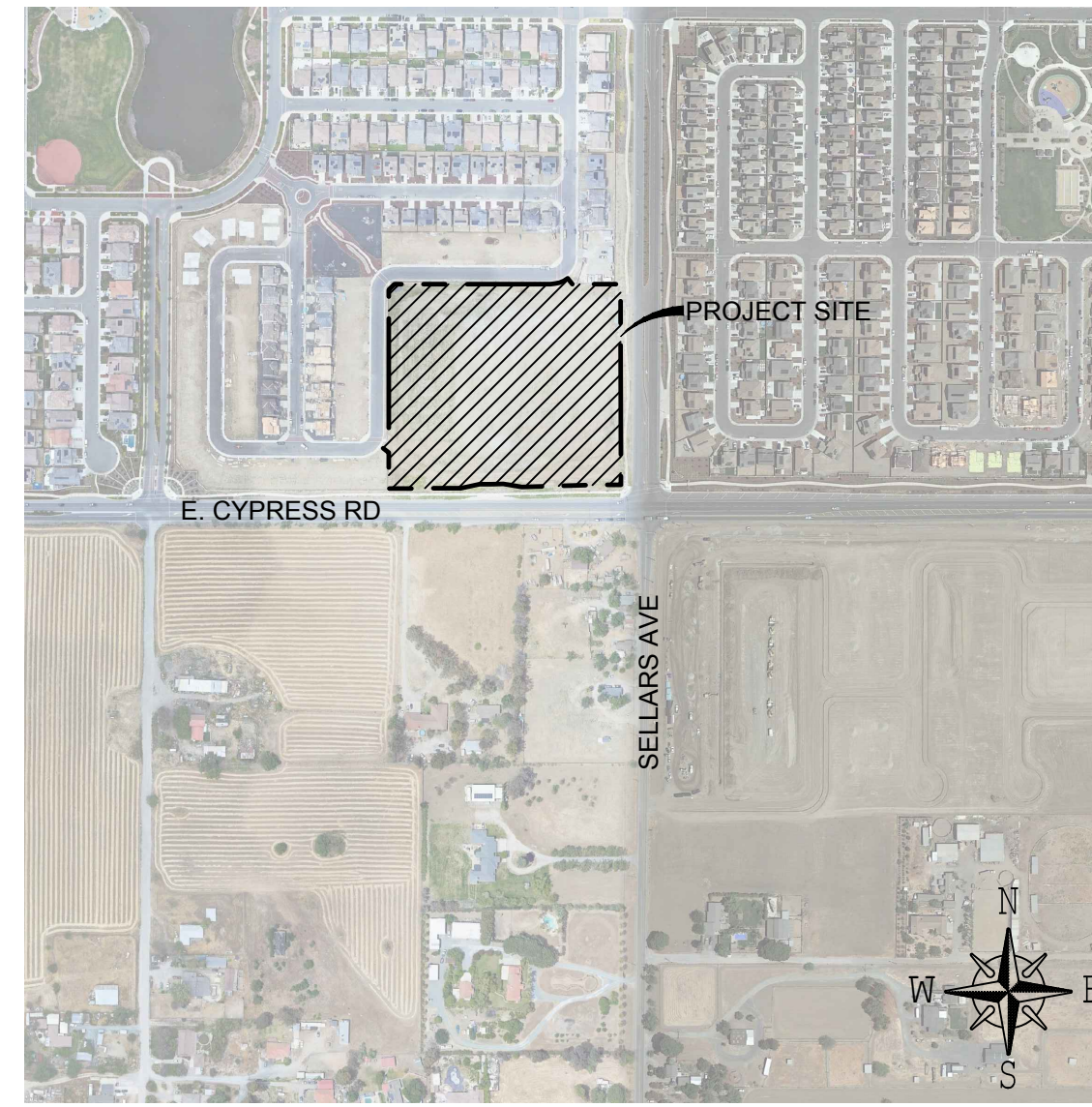


DESIGN REVIEW

FOR
SHELL HYDROGEN FUEL FACILITY
920 CYPRESS RD. @ SELLERS AVE.
OAKLEY, CA 94561
APN: 037-192-038

VICINITY MAP



SITE INFORMATION

I. SITE:		
LOT SIZE:	340,228 SQ. FT.	7.81 ACRES
AREA OF DISTURBANCE:	2,038 SQ. FT.	0.05 ACRES
ASSESSORS PARCEL #:	037-192-038	
PROPERTY ADDRESS:	920 CYPRESS RD., OAKLEY CA, 94561	
ZONING:	P-1 (PLANNED UNIT DEVELOPMENT)	
II. PERVIOUS VS. IMPERVIOUS AREAS:		
<u>LANDSCAPE:</u>		
EXISTING:	189 SQ. FT.	0.1 %
EXISTING TO BE REMOVED:	-189 SQ. FT.	-0.1 %
NEW:	561 SQ. FT.	0.2 %
NET TOTAL:	561 SQ. FT.	0.2 %

HARD SURFACE (PAVEMENT & STRUCTURES, INCLUSIVE OF PAVEMENT UNDERNEATH CANOPY):		
EXISTING:	1,849 SQ. FT.	0.5 %
EXISTING TO BE REMOVED:	-1,849 SQ. FT.	-0.5 %
NEW:	1,477 SQ. FT.	0.4 %
NET TOTAL:	1,477 SQ. FT.	0.4 %

*EXISTING WITHIN AREA OF DISTURBANCE PER APPROVED SITE DEVELOPMENT PLAN BY MI ARCHITECTS DATED 12-07-20

III. BUILDINGS:
NOTE: NO BUILDING PROPOSED

IV. PARKING DATA:
NOTE: NO CHANGE TO PARKING CONFIGURATIONS

PROJECT TEAM

PROJECT OWNER/DEVELOPER:
EQUILON ENTERPRISES, LLC
D/B/A SHELL OIL PRODUCTS U.S.
ATTN: JOSEPH LEWIS
910 LOUISIANA
HOUSTON, TX 77002-4916

CIVIL ENGINEER:
PATRICK O. FIEDLER, P.E.
FIEDLER GROUP
(213) 381-7891
299 N. EUCLID AVE., STE. 550
PASADENA, CA 91101

APPLICANT/AGENT:
PATRICK O. FIEDLER, P.E.
FIEDLER GROUP
(213) 381-7891
299 N. EUCLID AVE., STE. 550
PASADENA, CA 91101

SCOPE OF WORK

PROJECT SCOPE IS TO INSTALL HYDROGEN FUELING EQUIPMENT AT A PROPOSED SITE DEVELOPMENT PROJECT LOCATED AT:

920 CYPRESS RD., OAKLEY, CA 94561

INSTALLATION OF HYDROGEN FUELING EQUIPMENT CONSISTS OF, BUT IS NOT LIMITED TO:

1. NEW ENCLOSED EQUIPMENT ENCLOSURE THAT HOLDS HYDROGEN STORAGE AND COMPRESSION EQUIPMENT
2. NEW (2) HYDROGEN DISPENSERS
3. NEW INTERCONNECTING MECHANICAL PIPING & ELECTRICAL CONDUITS
4. NEW SAFETY SYSTEMS & SIGNAGE &
5. OTHER MINOR SITE IMPROVEMENT

BENCHMARK

CONTRA COSTA COUNTY BENCHMARK BM#3095.

A BRASS DISC IN CONCRETE NORTHWEST CORNER OF NEW BRIDGE OVER MARSH CREEK AT ITS INTERSECTION WITH CYPRESS ROAD, 400 FEET EAST OF THE INTERSECTION OF CYPRESS ROAD AND STATE HIGHWAY 4.

ELEV = 22.993 FEET (NGVD 29)

FLOOD INFORMATION

SUBJECT PROPERTY IS LOCATED WITHIN ZONE "X", "AREA WITH REDUCED FLOOD RISK DUE TO LEVEE." THIS AREA IS SHOWN BEING PROTECTED FROM THE 1-PERCENT-ANNUAL-CHANCE OR GREATER FLOOD HAZARD BY A LEVEE SYSTEM. OVERTOPPING OR FAILURE OF ANY LEVEE SYSTEM IS POSSIBLE. SEE THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO.: 06013C0360G, EFFECTIVE MARCH 21, 2017.

SHEET INDEX

SHEET NO.	SHEET TITLE
C0.0	COVER SHEET
C1.0	OVERALL SITE PLAN
C1.1	SITE PLAN
C2.0	EQUIPMENT ENCLOSURE ELEVATIONS
L1.0	SITE DEVELOPMENT LANDSCAPE PLAN (FOR REFERENCE)

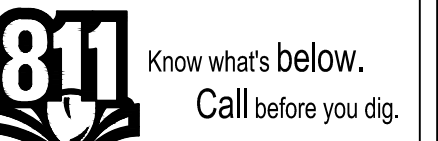
BASIS OF DESIGN

1. NFPA 2 PERFORMANCE BASED ASSESSMENT BASED ON "NEPTUNE HYDROGEN REFUELING STATION NETWORK FACILITY SEPARATION DISTANCE RISK ASSESSMENT ISSUE 8.0" DATED 05/27/2022.
2. EQUIPMENT PLACEMENT BASED ON TECHNICAL BOOK REVISION 11 DATED 05/11/2022.



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DEVELOPMENT INFORMATION:

SHELL
PROPOSED
HYDROGEN
FUELING STATION

SITE ADDRESS:
920 CYPRESS RD.
@ SELLERS AVE.
OAKLEY, CA 94561

DESIGNED BY: TH	FG PM BH
CHECKED BY: TH	MEP PM -
DRAWN BY: TH	CONSULTANT PM -
DATE: 09/08/2022	PROJECT NO.: 16752

COVER SHEET

SHEET NO.:

C0.0

City of Oakley
Planning Division

SEP 19, 2022

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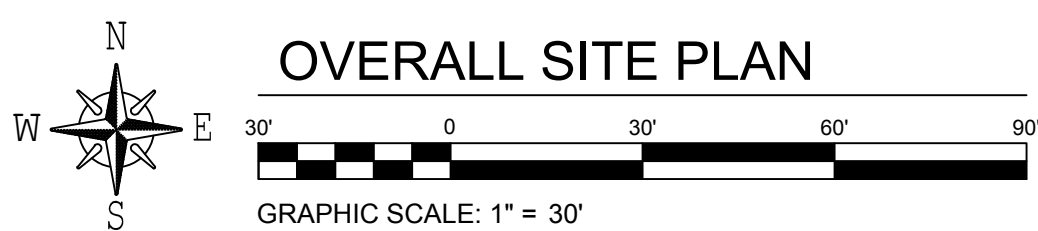
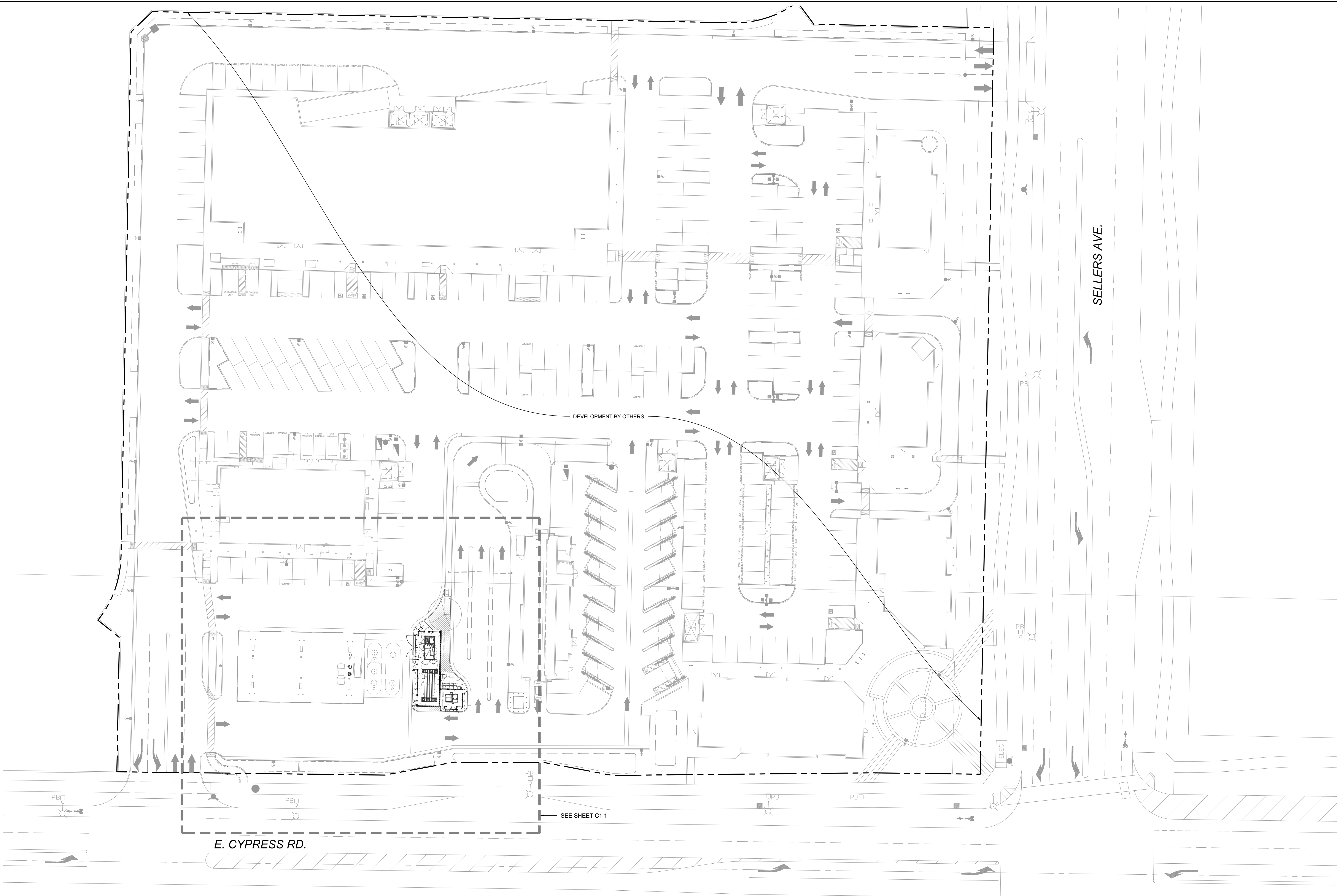
<small>DESIGNED BY:</small>	TH	<small>FG PM:</small>	BH
<small>CHECKED BY:</small>	TH	<small>MEP PM:</small>	-
<small>DRAWN BY:</small>	TH	<small>CONSULTANT PM:</small>	-
<small>DATE:</small>	09/08/2022	<small>PROJECT NO.:</small>	16752

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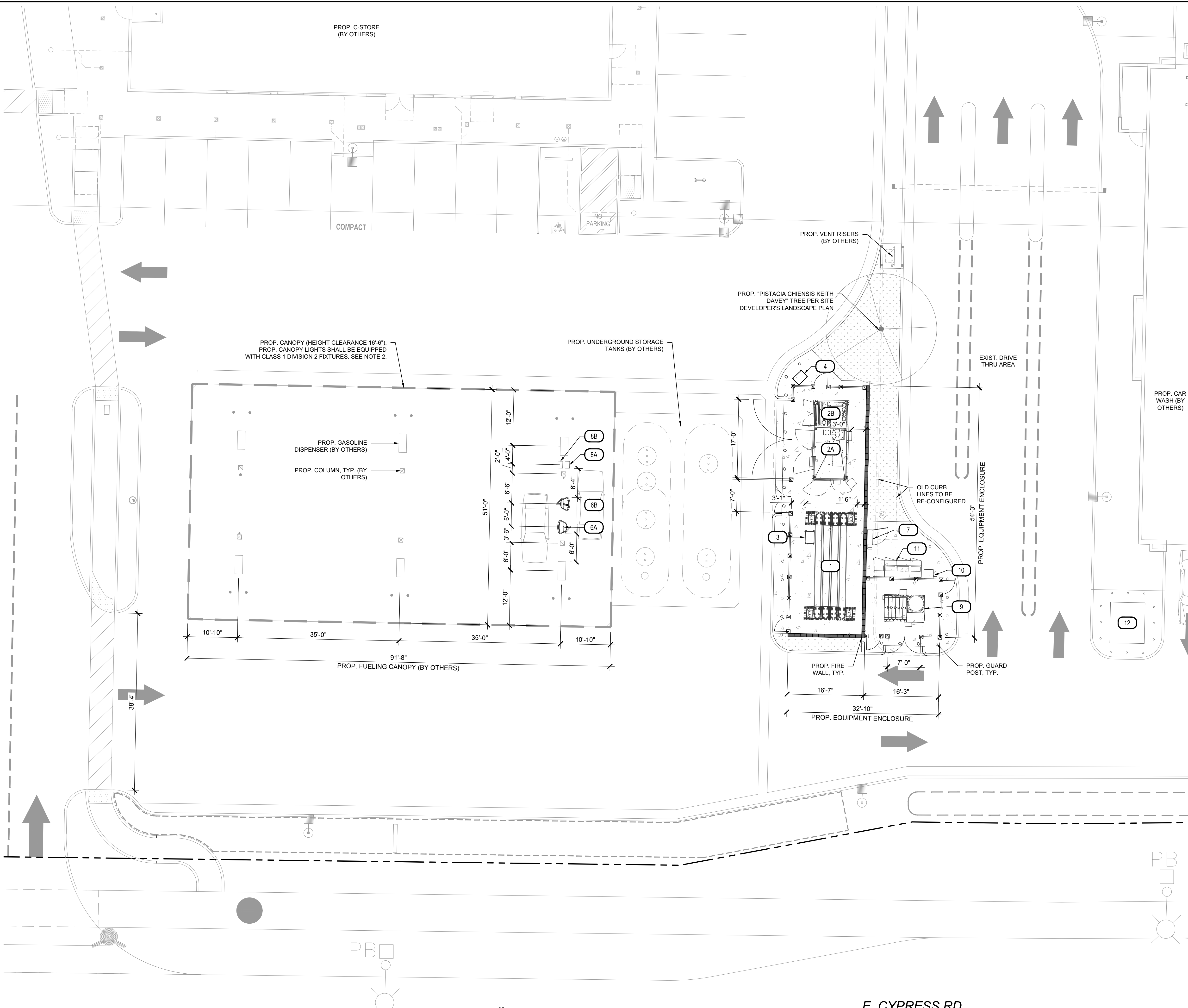
**OVERALL
SITE PLAN**

SHEET NO.:

C1.0



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EQUIPMENT NOTES

- # NOTE
- 1 MAX MEDIUM PRESSURE (MP) STORAGE
- 2A MAX COMPRESSION SYSTEM
- 2B MAX HIGH PRESSURE STORAGE & FLOW TECH SUPPLY (VALVE PANEL)
- 3 MAX MEDIUM PRESSURE FLOW TECH SUPPLY (VALVE PANEL)
- 4 MAX SUPPLY PANEL (OFFLOAD PANEL)
- 5 NOT USED
- 6A/6B HYDROGEN DISPENSER
- 7 DISPENSER CONNECTION BOX (UPS PANEL)
- 8A/8B PAYMENT OPERATING SYSTEM (P.O.S.)
- 9 MAX CHILLER UNIT
- 10 DATA ACQUISITION PANEL
- 11 SERVICE SWITCHBOARD W/ UTILITY METER
- 12 UTILITY TRANSFORMER BY UTILITY

LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED LANDSCAPE



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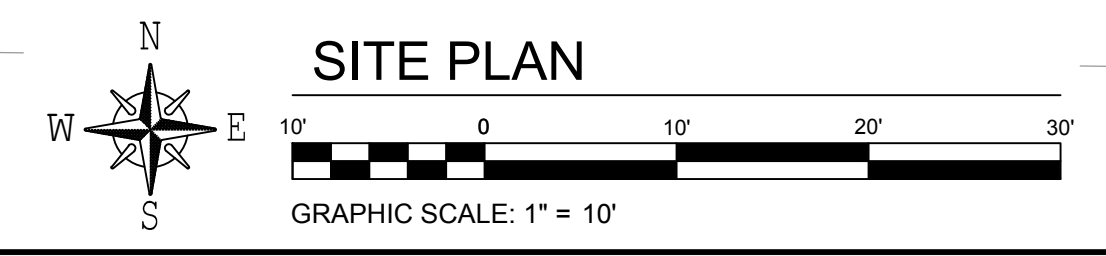
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DESIGNED BY: TH	FG PM
CHECKED BY: TH	MEP PM
DRAWN BY: TH	CONSULTANT PM
DATE: 09/08/2022	PROJECT NO.: 16752
<small>DRAWING TITLE:</small>	

SITE PLAN

SHEET NO.:

C1.1



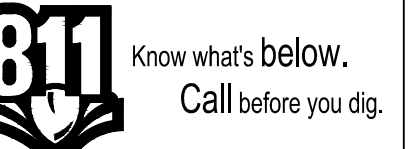
E. CYPRESS RD.

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EQUIPMENT LIST

#	EQUIPMENT
1	MAX MEDIUM PRESSURE (MP) STORAGE
2A	MAX COMPRESSION SYSTEM
2B	MAX HIGH PRESSURE STORAGE & FLOW TECH SUPPLY (VALVE PANEL)
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10	DATA ACQUISITION PANEL (PENDING DIMENSIONS)
11	SERVICE SWITCHBOARD W/ UTILITY METER (PENDING DIMENSIONS)
12	UTILITY TRANSFORMER BY UTILITY

FINISH SCHEDULE

#	NOTE	MATERIAL	COLOR	FINISH
A	EQUIPMENT ENCLOSURE WALL	CMU	GLACIER WHITE AND GREYSTONE	SPLIT-FACE
B	EQUIPMENT ENCLOSURE FENCE, POST & GATE	STEEL W/ ZINC COATING	DUSTY GREY	ZINC COATING
C	GUARD POST	CONC.	SHELL WARM WHITE & 12" HIGH SHELL GREY BAND	SEMI-GLOSS PAINT

(N) COLOR/MATERIAL LEGEND

	CMU BLOCKS COLOR: GLACIER WHITE STYLE: MEDIUM WEIGHT SPLIT FACE MANUFACTURER: ANGELUS BLOCK CO.
	CMU BLOCKS COLOR: GREYSTONE STYLE: MEDIUM WEIGHT SPLIT FACE MANUFACTURER: ANGELUS BLOCK CO.
	STEEL FENCING COLOR: DUSTY GREY FINISH: POWDER COAT COLOR MANUFACTURER: PALM SHIELD
	STEEL TUBE CONCRETE GUARD POST COLOR: SHELL WHITE FINISH: SEMI-GLOSS COLOR
	STEEL TUBE CONCRETE GUARD POST COLOR: SHELL GREY FINISH: SEMI-GLOSS COLOR

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DRAWING TITLE:
EQUIPMENT ENCLOSURE ELEVATIONS

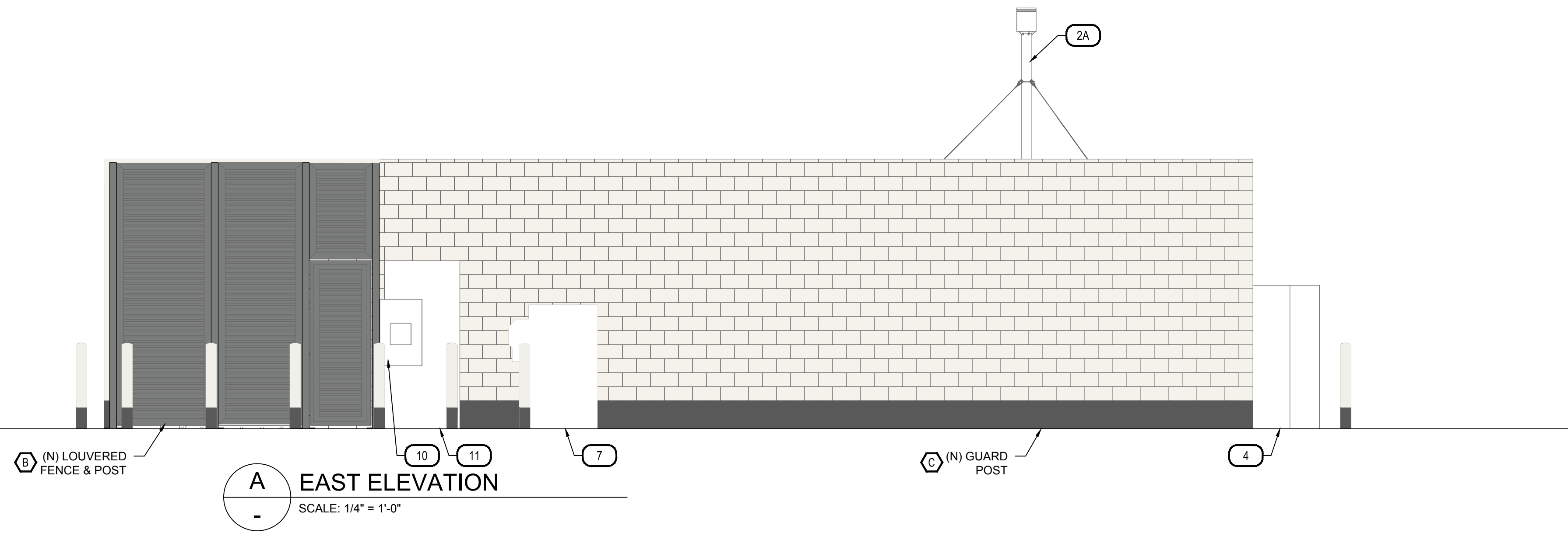
SHEET NO.:

C2.0

20'-1" TOP OF VENT STACK

12'-8" TOP OF CMU WALL
TOP OF METAL LOUVERED FENCE

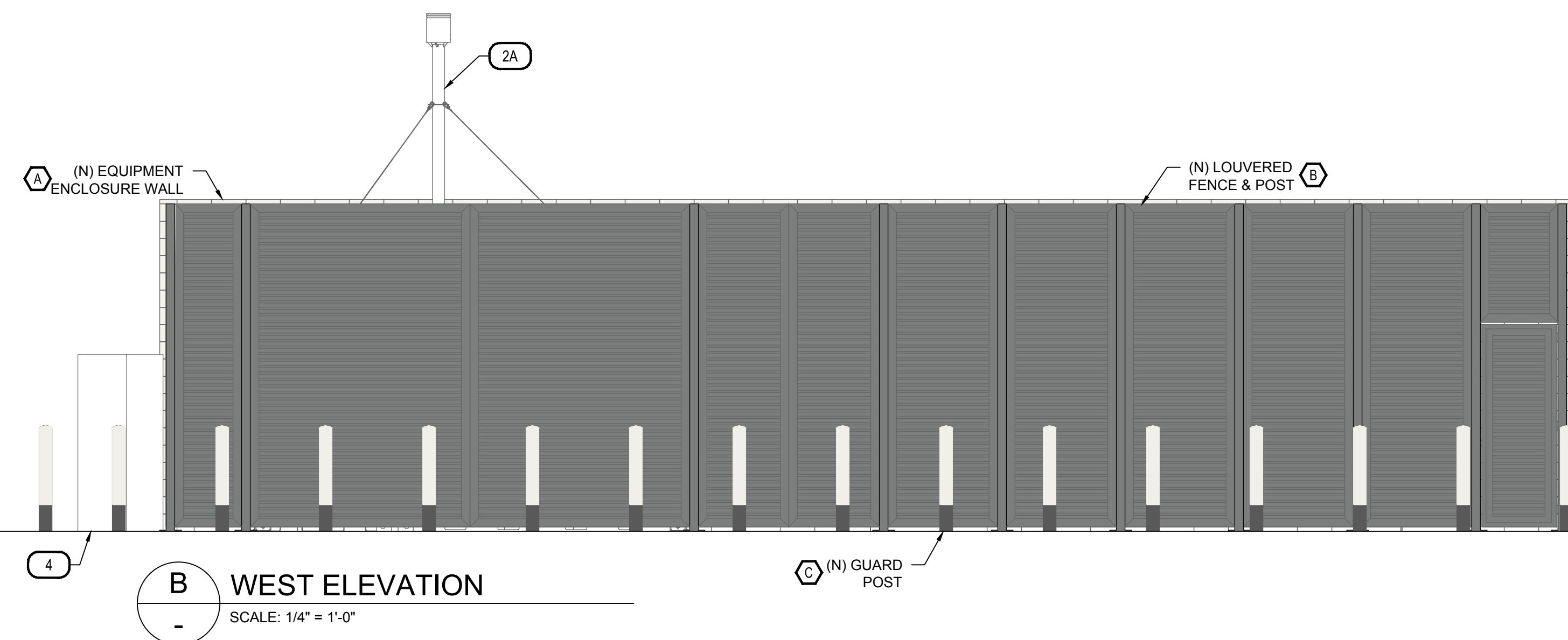
0' FINISHED SURFACE



20'-1" TOP OF VENT STACK

12'-8" TOP OF CMU WALL WITH CAP &
TOP OF METAL LOUVERED FENCE

0' FINISHED SURFACE

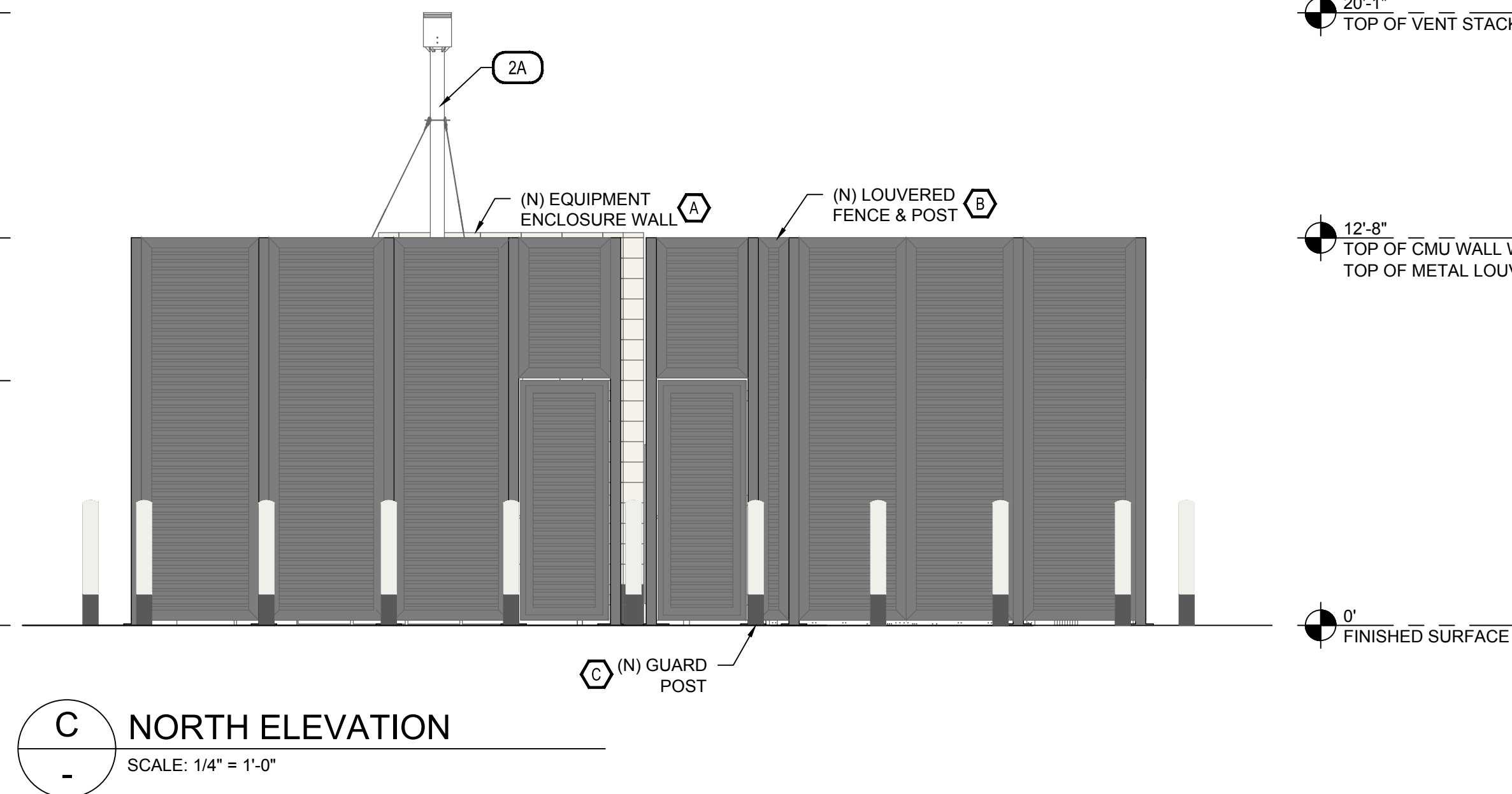


20'-1" TOP OF VENT STACK

12'-8" TOP OF CMU WALL &
TOP OF METAL LOUVERED FENCE

8'-0" TOP OF METAL LOUVERED FENCE

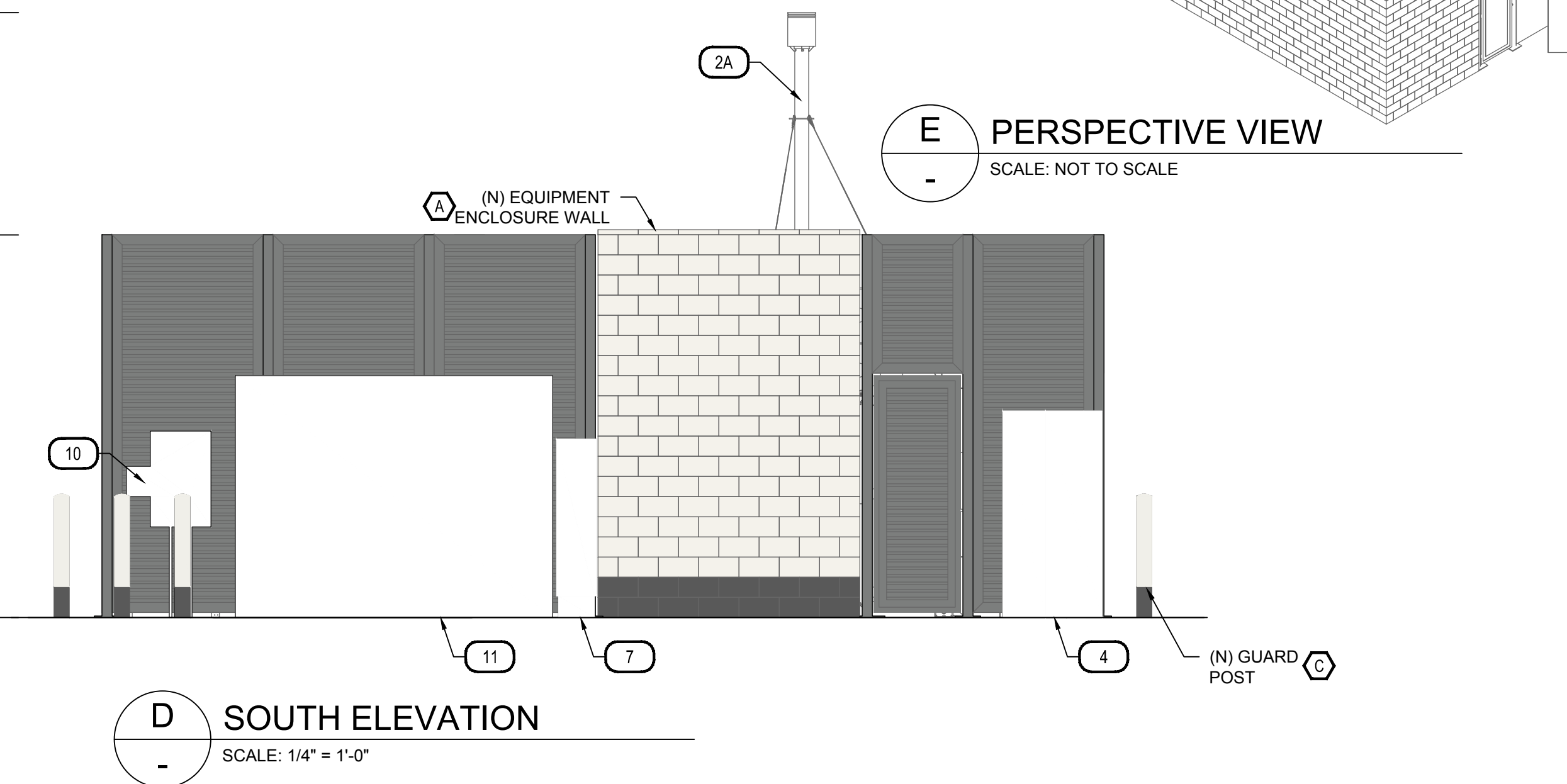
0' FINISHED SURFACE



20'-1" TOP OF VENT STACK

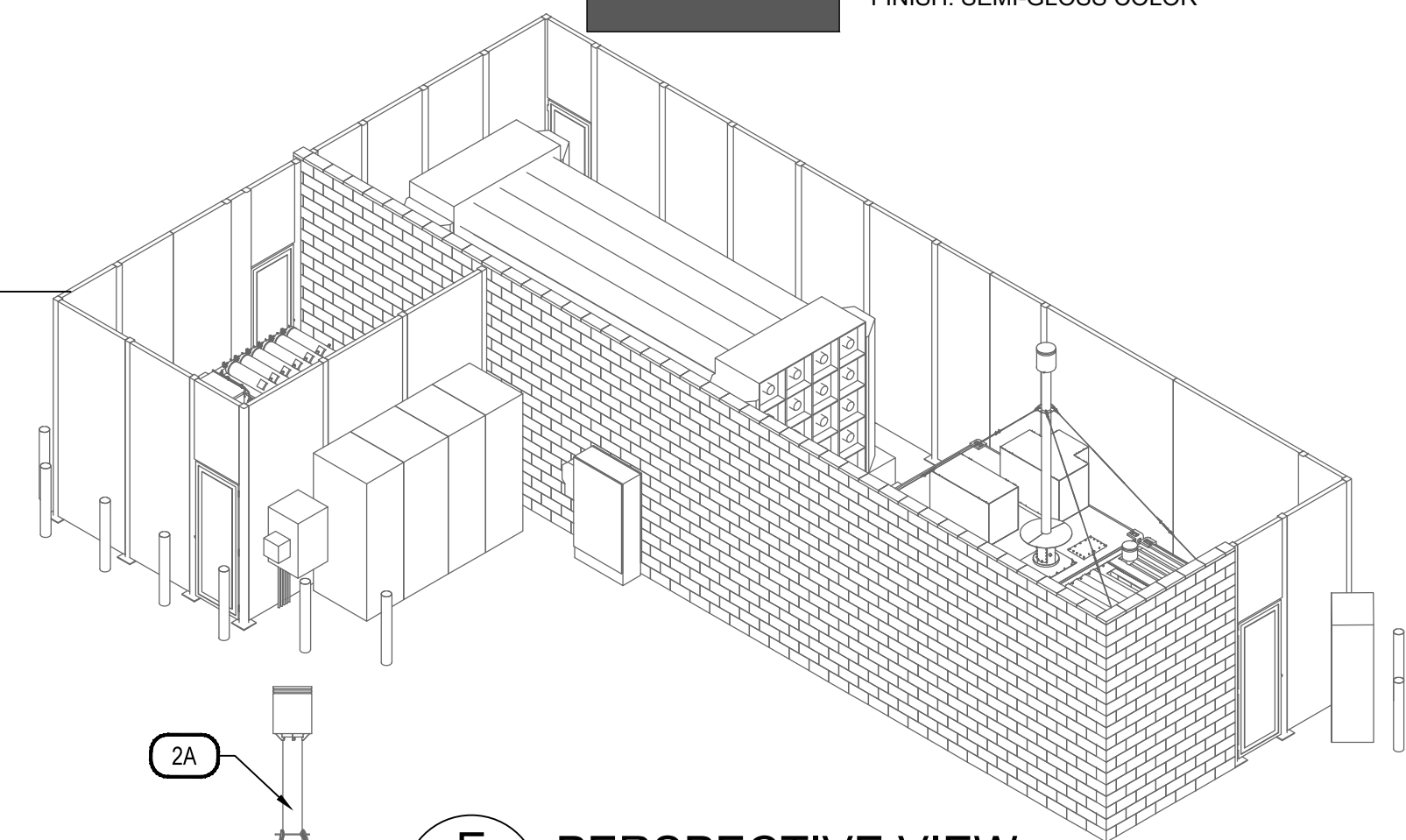
12'-8" TOP OF CMU WALL WITH CAP &
TOP OF METAL LOUVERED FENCE

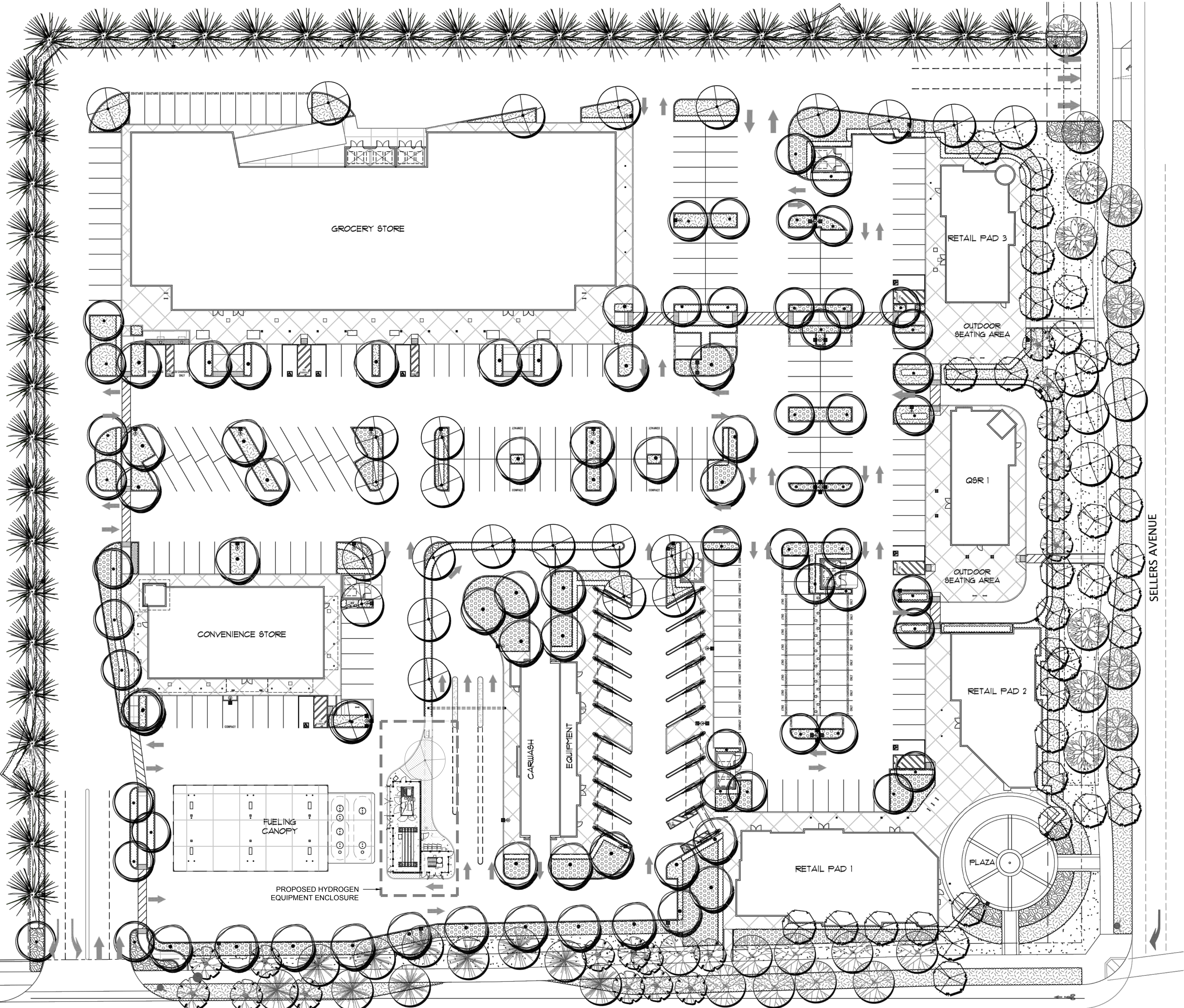
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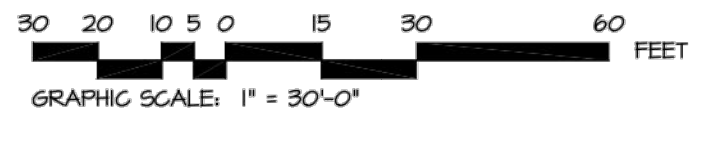
E PERSPECTIVE VIEW

SCALE: NOT TO SCALE





1 PRELIMINARY LANDSCAPE PLAN
1" = 30'-0"



NOTE: DRAWING FOR REFERENCE ONLY AND NOT TO SCALE.



Parking Lots Shade Calculation

Parking Lot Surface (sf)	186,000
50% SHADE AREA REQUIRED (sf)	93,000
TOTAL SHADE AREA PROVIDED (sf)	111,397
PERCENT SHADE	59.89%

Arterial Streets Landscape Setback Tree Density Calculations 1 Tree/400sf

Street	Setback	Area	Required	Provided
Cypress Road	624 lf x 22' Landscape Setback	13728 sf	34	35
	540 lf x 22' Landscape Setback	11880 sf	30	33
Sellers Road	624 lf x 22' Landscape Setback	13728 sf	34	35
	540 lf x 22' Landscape Setback	11880 sf	30	33

PLANTING LEGEND

- Tree**
 - Evergreen Screen
 - Bayonet Palm 25' w
 - Parrot Palm 35' w
 - Deciduous Shade Trees
 - Gleditsia triacanthos 'Skyline' Skyline Honey Locust 35' w
 - Jacaranda mimosifolia Jacaranda 35' w
 - Deciduous Fall Color / Flowering
 - Pistacia chinensis 'Keith Davey' Chinese Pistache 45' w
 - Lagerstroemia indica 'Tuscarora' Grape Myrtle 25' w
 - Street Trees
 - Cypress Road
 - Ulmus 'Frontier' Frontier Elm 30' w
 - Celtis sinensis Chinese Hackberry 40' w
 - Grataegus phaenopyrum Washington Thorn 20' w
 - Sellers Avenue
 - Quercus virginiana Southern Live Oak 50' w
 - Pistacia chinensis 'Keith Davey' Chinese Pistache 45' w
 - Lagerstroemia indica 'Tuscarora' Grape Myrtle 25' w
 - Shrubs and Vines**
 - Screen Shrubs at Property Line and Trash Enclosures
 - Dodonaea viscosa 'Purplea' Purple Hopseed Bush
 - Dodonaea viscosa Hopseed Bush
 - Xylosma congestum Shiny Xylosma
 - Hedge and Shrubs
 - Ligustrum texanum Shiny Xylosma
 - Xylosma congestum Shiny Xylosma
 - Grevillea X 'Scarlet Sprite' Scarlet Sprite Grevillea
 - Raphiolepis indica 'Springtime' Springtime Raphiolepis
 - Vines
 - Parthenocissus tricuspidata Boston Ivy
 - Ground Cover**
 - Rosmarinus officinalis 'Huntington Carpet' Rosemary
 - Myoporum parviflorum 'Putah Creek' Prostrate Myoporum
 - Cotoneaster dammeri 'Lowfast' / Lowfast Cotoneaster
 - Cistus salviifolius 'Prostratus' Sageleaf Rockrose
 - Chondropetalum elephantinum Large Cape Rush
 - Juncus patens 'Enigma' Blue Ca. Gray Rush
 - Annual Flowers

PLANTING NOTES

- All trees are to be staked as shown in the staking diagram per city requirement.
- Plant locations are to be adjusted as necessary to screen utilities but not block windows or impede access.
- All ground cover and shrub areas shall be top-dressed with a 3" layer of bark mulch.
- All Planting and Irrigation shall comply with Water Efficient Landscape Ordinance.
- All plant material shall be nursery grown stock. All plant materials shall be tagged at the nursery at least 1 month prior to planting for the Landscape Architects review.
- Landscape shall be maintained in a manner to prevent landscaping from growing above 3' in height in the areas indicated in the plans as being located within a safety visibility triangle area.
- CERTIFICATION: Prior to occupancy, the Landscape Architect shall certify in writing in a manner acceptable to the Building Inspection Division, that the landscaping has been installed in accordance with all aspects of the approved landscape plans.
- A minimum of 2" of non-mechanically compacted soil shall be available for water absorption and root growth in planted areas.
- Incorporate compost or natural fertilizer into the soil to a minimum depth of 6" at a minimum rate of 6 cubic yards per 1000 square feet.
- All Plantings shall be automatically irrigated utilizing state of the art system, components and installation techniques.

CIARDELLA ASSOCIATES
200 Clock Tower Place
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Carmel by the Sea, CA 93921
Tel 831 624 6100
Tel 450 326 6100
ca@ciardella-assoc.com



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DRAWN BY: TH	CONSULTANT PM: -
DATE: 09/08/2022	PROJECT NO.: 16752

SITE DEVELOPMENT LANDSCAPE PLAN (FOR REFERENCE)

SHEET NO.:

L1.0

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