

### APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval. This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents reference	ed within this form are available	e on the DSA Fo	orms or DSA Public	ations webpages.		
1. SUBMITTAL TYPE: (Is this a resubmittal? Yes□ No □)						
Deferred Submittal □	Addendum Number: Revision		on Number:	: CCD Number:		Category A $\square$ or B $\square$
2. PROJECT INFORMATION:						
School District/Owner:				DSA File Number:		
Project Name/School:				DSA Application Number:		
3. APPLICANT INFORMATION:						
Date Submitted:	Attached Pages? No ☐ Yes ☐ Number of pages?					
Firm Name:	Contact Name:					
Work Email:			Work Phone:			
Firm Address:			City: State			Zip Code:
4. REASON FOR SUBMITTAL: (Check applicable boxes)						
☐ For revision or adden		☐ For a project currently under construction.				
□ For a project that has a form DSA 301-N: Notification of Requirement for Certification, DSA 301-P: Posted Notification of Requirement for Certification or a 90-Day Letter issued.						
☐ To obtain DSA approval of an existing uncertified building or buildings.						
□ For Category B CCD this is: □ a voluntary submittal, □ a DSA required submittal (attach DSA notice requiring submission).						
5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:						
Name of the Design Professional In General Responsible Charge:						
Professional License Number: Discipline:						
Design Professional in General Responsible Charge Statement: The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project.  Signature:  DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE						
6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:						
For addenda, revisions, or CCDs: CHECK THIS BOX $\square$ to confirm that <i>all</i> post-approval documents have been stamped and signed by the Responsible Design Professional listed on form <i>DSA 1: Application for Approval of Plans and Specifications</i> for this project. (For <i>Deferred Submittals</i> , refer to <i>IR A-18: Use of Construction Documents Prepared by Other Professionals</i> , and <i>IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents</i> , when applicable, for signature and seal requirements.)						
Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed):						
List of DSA-approved drawings affected by this post-approval document:						
DOALIGE ONLY						
		D	SA USE ONLY	Returned		DSA STAMP
	ate	]Disapproved □I	Not Required D	ate:		DOA OTAIII
Comments:			В	y:		
FLSD Comments:	ate □Approved □	□Disapproved □I	Not Required			
		]Disapproved □I	Not Required			



- 6 WOOD BUILDING AND CONCRETE PAD

- (R) RELOCATE EXISTING ITEMS, CONTRACTOR SHALL TEMPORARILY RELOCATE ON-SITE TO ACCOMPLISH PAVING WORK. UPON COMPLETION OF PAVING WORK, THE ITEMS SHALL BE REPLACED. COORDINATE WITH OAR

## **DEMOLITION GENERAL NOTES:**

- 1. REFER TO CIVIL AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL DEMOLITION INFORMATION AND ANY UTILITIES WORK REQUIRED OUTSIDE OF LIMITS OF WORK.
- 2. PROTECT EXISTING UTILITY LINES IN PLACE UNLESS
- 3. FOR DEMOLITION OR RELOCATION OF UNDERGROUND UTILITIES SEE SITE GRADING PLANS.
- 4. THE CONTRACTOR SHALL PROVIDE NOTIFICATION TO OWNERS PRIOR TO DEMOLITION OF EXISTING
- 5. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO PROTECT THE INTEGRITY OF THE ADJACENT STRUCTURES, POWER POLES, AND ANY IMPROVEMENTS OF ADJACENT PROPERTIES DURING DEMOLITION AND CONSTRUCTION OF NEW FENCING AND WALLS.
- 6. THE CONTRACTOR SHALL REPAIR AND RESTORE ANY STRUCTURES OR ADJOINING WALLS THAT RE DAMAGED
- 7. CONSTRUCTOR SHALL DOCUMENT LOCATION OF ADA PARKING STRIPING AND SYMBOLS FOR RESTORATION UPON COMPLETION OF PAVING WORK.

— — — LIMIT OF WORK

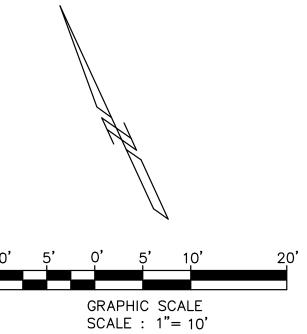
REMOVE EXISTING CONCRETE PAVEMENT 1

REMOVE EXISTING ASPHALT CONCRETE PAVEMENT 2

(1+1+1+1) REMOVE EXISTING UTILITY

# ITEMS TO BE REMOVED UNLESS OTHERWISE NOTED.





DIVISION OF THE STATE ARCHITECT



### **VENTURA COUNTY COMMUNITY COLLEGE DISTRICT**

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

## VCCCD - #4 OUTDOOR WORKOUT - AEC Campus Student Center

4667 Telegraph Road Ventura, CA 93003

COMMISSIONED ARCHITECT

# **AMADÓR**

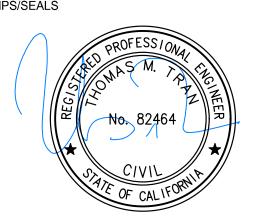
amador whittle architects, inc. 28328 AGOURA RD, 203 | AGOURA HILLS CA, 91301 | 805-558-4334



CIVIL ENGINEERING SURVEYING+MAPPING LAND DEVELOPMENT 213 624 2661 TEL

919 W. GLENOAKS BLVD., 2nd FLOOR GLENDALE, CA 91202

STAMPS/SEALS

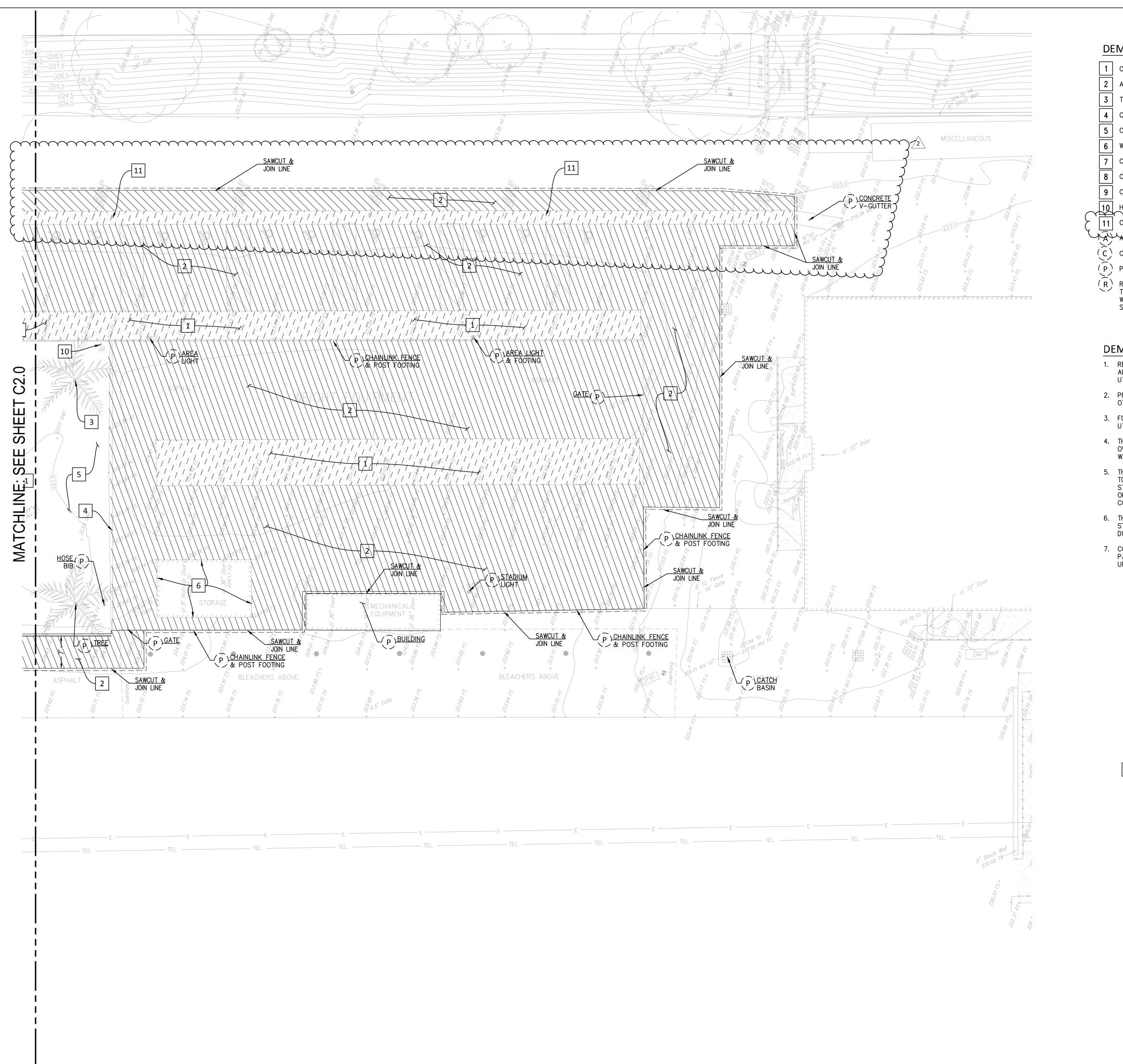


50% CONSTRUCTION DOCUMENTS 2022-10-04 100% CONSTRUCTION DOCUMENTS 2022-10-17 DSA SUBMITTAL

06/02/23 Revision 2 SHEET TITLE:

DEMOLITION PLAN

PROJECT NO.:22-VCCCD-10 PROJECT ARCH: Designer DRAWN: Author



### **DEMOLITION NOTES:**

- 1 CONCRETE PAVEMENT
- 2 | ASPHALT CONCRETE PAVEMENT
- 3 TREE
- 4 CHAINLINK FENCE AND POST FOOTING
- 5 CLEAR AND GRUB
- 6 WOOD BUILDING AND CONCRETE PAD
- 7 | CONCRETE CATH BASIN
- 8 CURB RAMP
- 9 CONCRETE CURB
- HOSE BIB CUT AND CAP LINE CONCRETE V-GUTTER
- WADUSTYTO GRADEN VALUE OF A PART A BUT OF A BUT
- C CUT AND PLUG
- P PROTECT IN PLACE
- (R) RELOCATE EXISTING ITEMS, CONTRACTOR SHALL TEMPORARILY RELOCATE ON-SITE TO ACCOMPLISH PAVING WORK. UPON COMPLETION OF PAVING WORK, THE ITEMS SHALL BE REPLACED. COORDINATE WITH OAR

### **DEMOLITION GENERAL NOTES:**

- 1. REFER TO CIVIL AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL DEMOLITION INFORMATION AND ANY UTILITIES WORK REQUIRED OUTSIDE OF LIMITS OF WORK.
- 2. PROTECT EXISTING UTILITY LINES IN PLACE UNLESS OTHERWISE NOTED.
- 3. FOR DEMOLITION OR RELOCATION OF UNDERGROUND UTILITIES SEE SITE GRADING PLANS.
- 4. THE CONTRACTOR SHALL PROVIDE NOTIFICATION TO OWNERS PRIOR TO DEMOLITION OF EXISTING WALL/FENCE.
- 5. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO PROTECT THE INTEGRITY OF THE ADJACENT STRUCTURES, POWER POLES, AND ANY IMPROVEMENTS OF ADJACENT PROPERTIES DURING DEMOLITION AND CONSTRUCTION OF NEW FENCING AND WALLS.
- 6. THE CONTRACTOR SHALL REPAIR AND RESTORE ANY STRUCTURES OR ADJOINING WALLS THAT RE DAMAGED DURING DEMOLITION.
- 7. CONSTRUCTOR SHALL DOCUMENT LOCATION OF ADA PARKING STRIPING AND SYMBOLS FOR RESTORATION UPON COMPLETION OF PAVING WORK.

### LEGEND:

— — — LIMIT OF WORK 

REMOVE EXISTING CONCRETE PAVEMENT 1

REMOVE EXISTING ASPHALT CONCRETE PAVEMENT 2

# ITEMS TO BE REMOVED UNLESS OTHERWISE NOTED.

GRAPHIC SCALE SCALE : 1"= 10'



DIVISION OF THE STATE ARCHITECT

## **VENTURA COUNTY COMMUNITY** COLLEGE DISTRICT

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

### VCCCD - #4 OUTDOOR WORKOUT - AEC Campus Student Center 4667 Telegraph Road

COMMISSIONED ARCHITECT

Ventura, ČA 93003

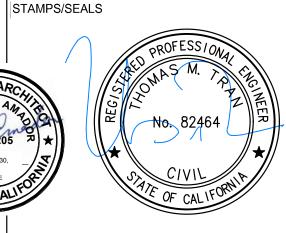
# **AMADÓR**

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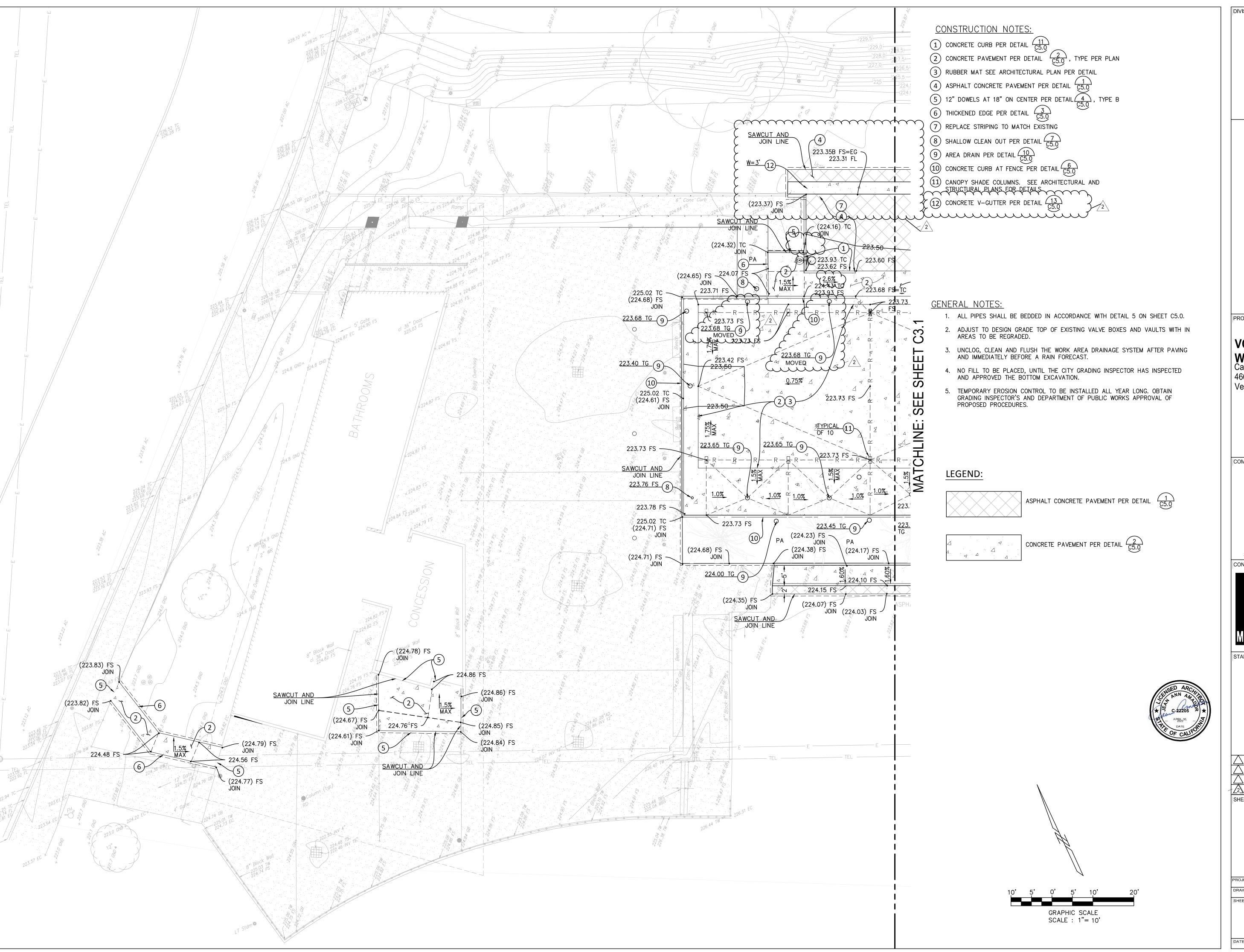
50% CONSTRUCTION DOCUMENTS 2022-10-04 100% CONSTRUCTION DOCUMENTS 2022-10-17 DSA SUBMITTAL

06/02/23 Revision 2

SHEET TITLE:

**DEMOLITION PLAN** 

PROJECT NO.: 22-VCCCD-10 PROJECT ARCH: Designer DRAWN: Author Checker



DIVISION OF THE STATE ARCHITECT



## VENTURA COUNTY COMMUNITY COLLEGE DISTRICT

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

# VCCCD - #4 OUTDOOR WORKOUT - AEC Campus Student Center

Campus Student Center 4667 Telegraph Road Ventura, CA 93003

COMMISSIONED ARCHITECT

## **AMADOR**

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CIVIL ENGINEERING SURVEYING+MAPPING LAND DEVELOPMENT 213 624 2661 TEL

919 W. GLENOAKS BLVD., 2nd FLOOR GLENDALE, CA 91202 GROUP

STAMPS/SEALS



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DSA SUBMITTAL 2022-12-07

DSA SUBMITTAL

2 06/02/23 Revision 2

| SHEET TITLE:

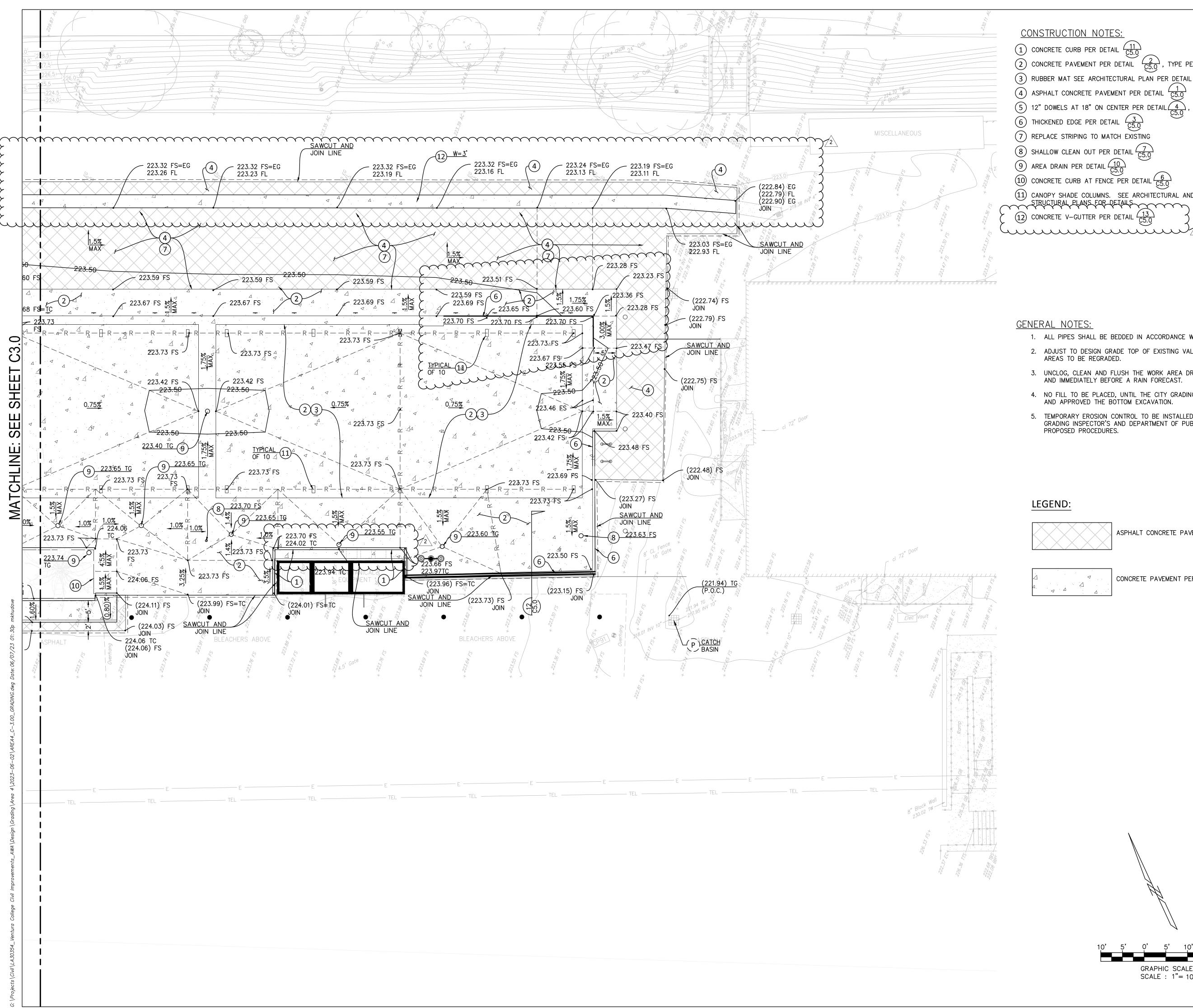
GRADING PLAN

PROJECT NO.: 22-VCCCD-10 PROJECT ARCH: Designer

DRAWN: Author CHECKED: Checker

C3.0

SHEET: 4





- 2 CONCRETE PAVEMENT PER DETAIL  $\frac{2}{C5.0}$ , TYPE PER PLAN

- (5) 12" DOWELS AT 18" ON CENTER PER DETAIL (4), TYPE B
- (7) REPLACE STRIPING TO MATCH EXISTING
- 8 SHALLOW CLEAN OUT PER DETAIL  $\frac{7}{C5.0}$
- (11) CANOPY SHADE COLUMNS. SEE ARCHITECTURAL AND
- STRUCTURAL PLANS FOR DETAILS
- (12) CONCRETE V-GUTTER PER DETAIL  $\frac{13}{0.50}$
- 1. ALL PIPES SHALL BE BEDDED IN ACCORDANCE WITH DETAIL 5 ON SHEET C5.0.
- 2. ADJUST TO DESIGN GRADE TOP OF EXISTING VALVE BOXES AND VAULTS WITH IN AREAS TO BE REGRADED.
- 3. UNCLOG, CLEAN AND FLUSH THE WORK AREA DRAINAGE SYSTEM AFTER PAVING AND IMMEDIATELY BEFORE A RAIN FORECAST.
- 4. NO FILL TO BE PLACED, UNTIL THE CITY GRADING INSPECTOR HAS INSPECTED AND APPROVED THE BOTTOM EXCAVATION.
- 5. TEMPORARY EROSION CONTROL TO BE INSTALLED ALL YEAR LONG. OBTAIN GRADING INSPECTOR'S AND DEPARTMENT OF PUBLIC WORKS APPROVAL OF PROPOSED PROCEDURES.

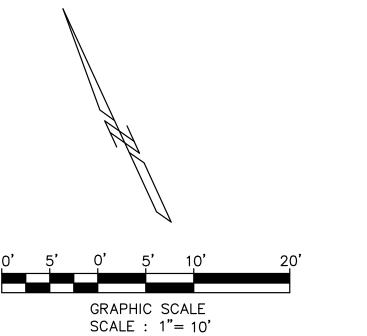


ASPHALT CONCRETE PAVEMENT PER DETAIL (5.0)



CONCRETE PAVEMENT PER DETAIL (5.0)





DIVISION OF THE STATE ARCHITECT



### **VENTURA COUNTY COMMUNITY COLLEGE DISTRICT**

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

### **VCCCD - #4 OUTDOOR WORKOUT - AEC** Campus Student Center

4667 Telegraph Road Ventura, CA 93003

COMMISSIONED ARCHITECT

## **AMADOR**

amador whittle architects, inc. 28328 AGOURA RD, 203 | AGOURA HILLS CA, 91301 | 805-558-4334



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STAMPS/SEALS



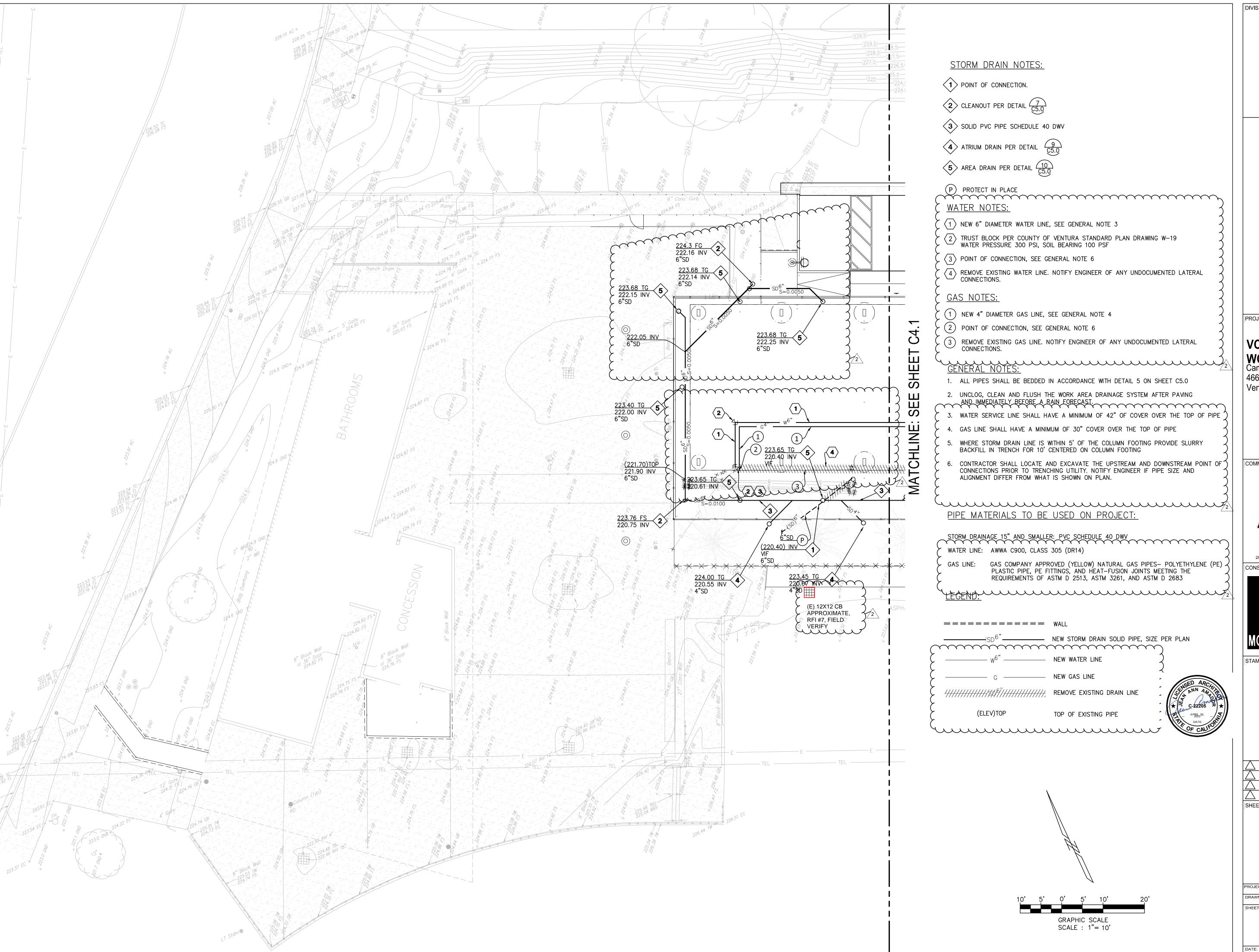
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06/02/23 Revision 2 SHEET TITLE:

**GRADING PLAN** 

ROJECT ARCH: Designer PROJECT NO.: 22-VCCCD-10

DRAWN: Author



DIVISION OF THE STATE ARCHITECT



## VENTURA COUNTY COMMUNITY COLLEGE DISTRICT

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

## VCCCD - #4 OUTDOOR WORKOUT - AFC

WORKOUT - AEC Campus Student Center 4667 Telegraph Road Ventura, CA 93003

COMMISSIONED ARCHITECT

# **AMADOR**

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 2022-10-04

 ∑
 100% CONSTRUCTION DOCUMENTS
 2022-10-17

 ∑
 DSA SUBMITTAL
 2022-12-07

SHEET TITLE:

UTILITY PLAN

PROJECT NO.:22-VCCCD-10

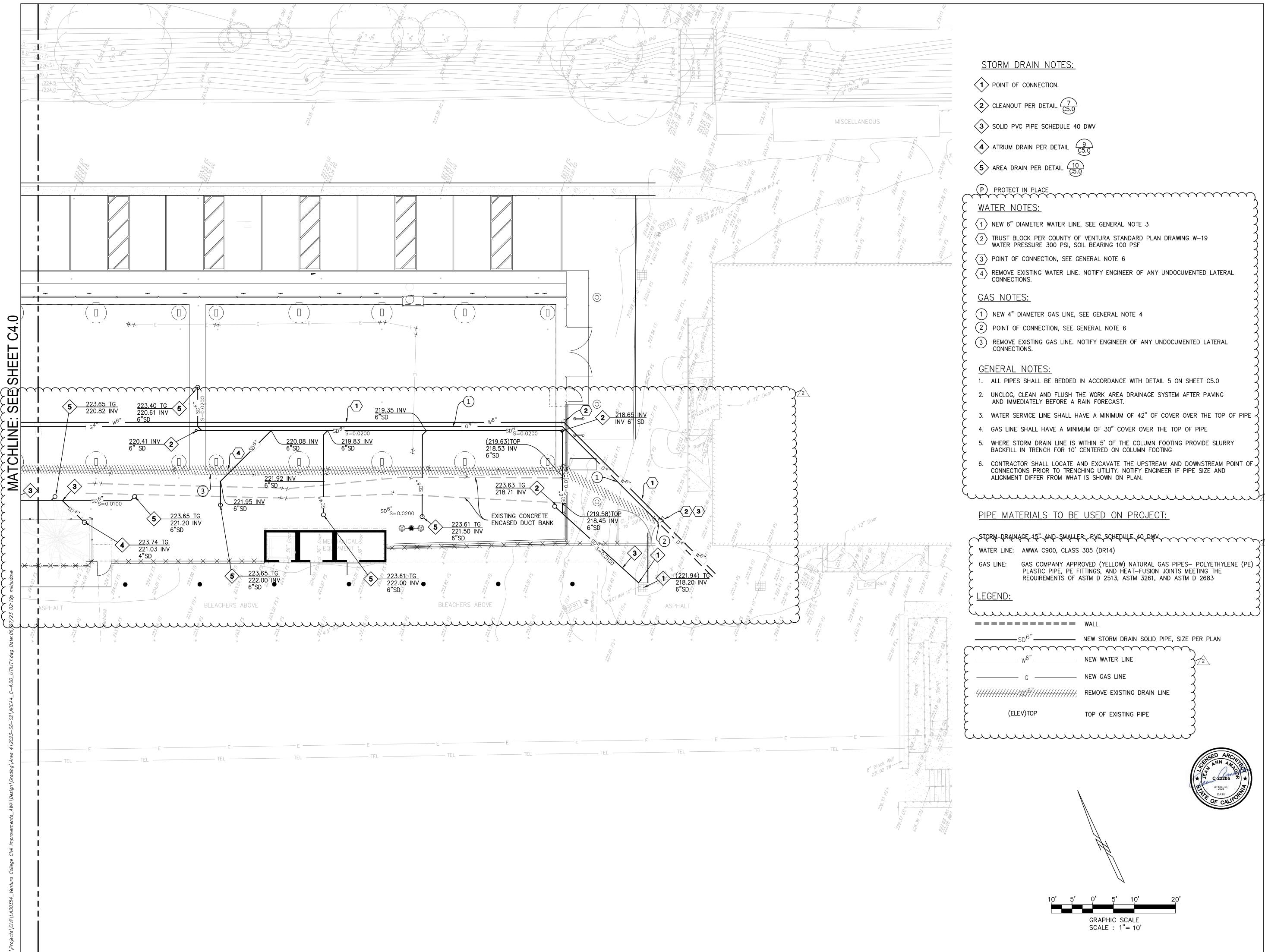
PROJECT ARCH: Designer

CHECKED: Checker

SHEET NUMBER:

C4.0

SHEET:



C4.0

SHEET

- TRUST BLOCK PER COUNTY OF VENTURA STANDARD PLAN DRAWING W-19 WATER PRESSURE 300 PSI, SOIL BEARING 100 PSF
- REMOVE EXISTING WATER LINE. NOTIFY ENGINEER OF ANY UNDOCUMENTED LATERAL CONNECTIONS.
- 1) NEW 4" DIAMETER GAS LINE, SEE GENERAL NOTE 4
- REMOVE EXISTING GAS LINE. NOTIFY ENGINEER OF ANY UNDOCUMENTED LATERAL CONNECTIONS.
- 1. ALL PIPES SHALL BE BEDDED IN ACCORDANCE WITH DETAIL 5 ON SHEET C5.0
- 2. UNCLOG, CLEAN AND FLUSH THE WORK AREA DRAINAGE SYSTEM AFTER PAVING
- 3. WATER SERVICE LINE SHALL HAVE A MINIMUM OF 42" OF COVER OVER THE TOP OF PIPE
- 4. GAS LINE SHALL HAVE A MINIMUM OF 30" COVER OVER THE TOP OF PIPE
- 5. WHERE STORM DRAIN LINE IS WITHIN 5' OF THE COLUMN FOOTING PROVIDE SLURRY BACKFILL IN TRENCH FOR 10' CENTERED ON COLUMN FOOTING
- CONTRACTOR SHALL LOCATE AND EXCAVATE THE UPSTREAM AND DOWNSTREAM POINT OF  $\downarrow$ CONNECTIONS PRIOR TO TRENCHING UTILITY. NOTIFY ENGINEER IF PIPE SIZE AND ALIGNMENT DIFFER FROM WHAT IS SHOWN ON PLAN.

### PIPE MATERIALS TO BE USED ON PROJECT:

WATER LINE: AWWA C900, CLASS 305 (DR14)

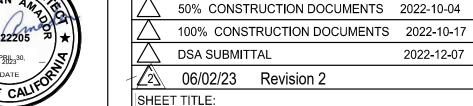
GAS COMPANY APPROVED (YELLOW) NATURAL GAS PIPES- POLYETHYLENE (PE)  $\downarrow$ PLASTIC PIPE, PE FITTINGS, AND HEAT-FUSION JOINTS MEETING THE

NEW STORM DRAIN SOLID PIPE, SIZE PER PLAN

REMOVE EXISTING DRAIN LINE

TOP OF EXISTING PIPE





UTILITY PLAN

DIVISION OF THE STATE ARCHITECT

**VENTURA COUNTY COMMUNITY** 

**COLLEGE DISTRICT** 

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

WORKOUT - AEC Campus Student Center

4667 Telegraph Road

Ventura, ČA 93003

COMMISSIONED ARCHITECT

CONSULTANT

STAMPS/SEALS

**VCCCD - #4 OUTDOOR** 

**AMADÓR** 

amador whittle architects, inc. 28328 AGOURA RD, 203 | AGOURA HILLS CA, 91301 | 805-558-4334

CIVIL ENGINEERING

SURVEYING+MAPPING LAND DEVELOPMENT

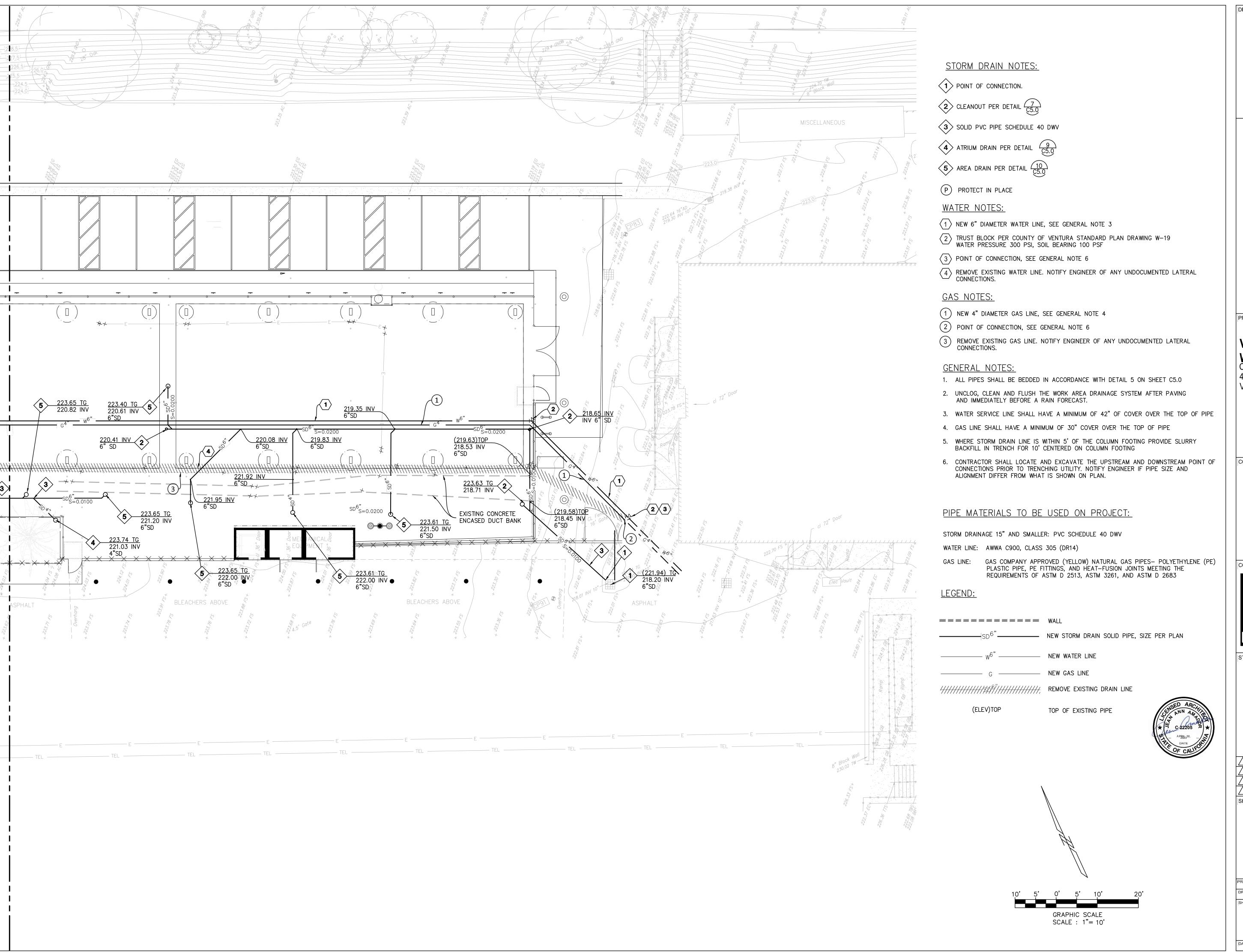
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2nd FLOOR GLENDALE, CA 91202

PROJECT NO.: 22-VCCCD-10 PROJECT ARCH: Designer DRAWN: Author Checker

7 OF



SHEET C4.0

SEE

MATCHLINE

DIVISION OF THE STATE ARCHITECT



## VENTURA COUNTY COMMUNITY COLLEGE DISTRICT

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

# VCCCD - #4 OUTDOOR WORKOUT - AEC Campus Student Center

Campus Student Center 4667 Telegraph Road Ventura, CA 93003

COMMISSIONED ARCHITECT

## **AMAD**OR

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CIVIL ENGINEERING SURVEYING+MAPPING LAND DEVELOPMENT 213 624 2661 TEL

919 W. GLENOAKS BLVD., 2nd FLOOR GLENDALE, CA 91202 GROUP

STAMPS/SEALS



50% CONSTRUCTION DOCUMENTS 2022-10-04 100% CONSTRUCTION DOCUMENTS 2022-10-17

DSA SUBMITTAL

SHEET TITLE:

UTILITY PLAN

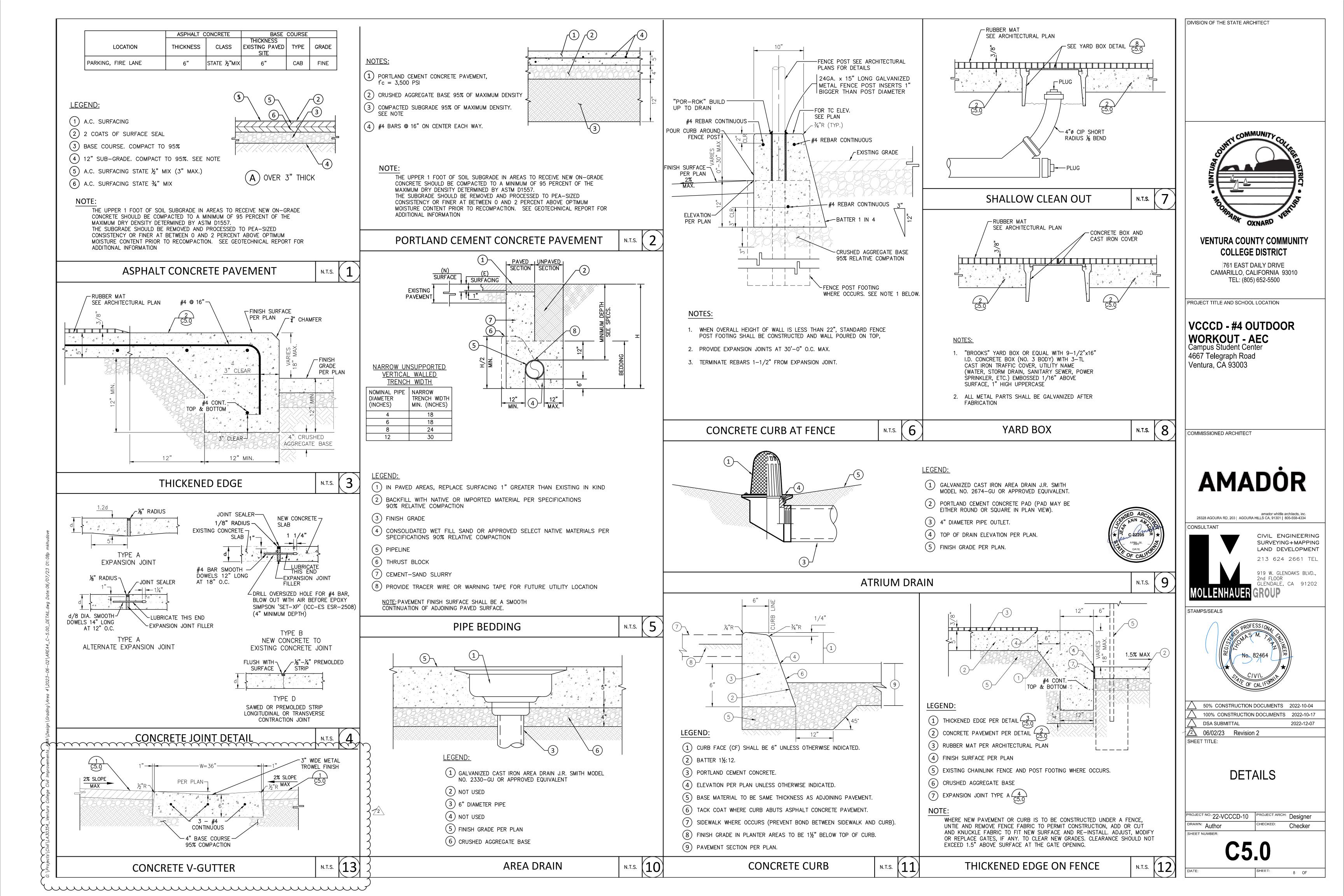
PROJECT NO.:22-VCCCD-10

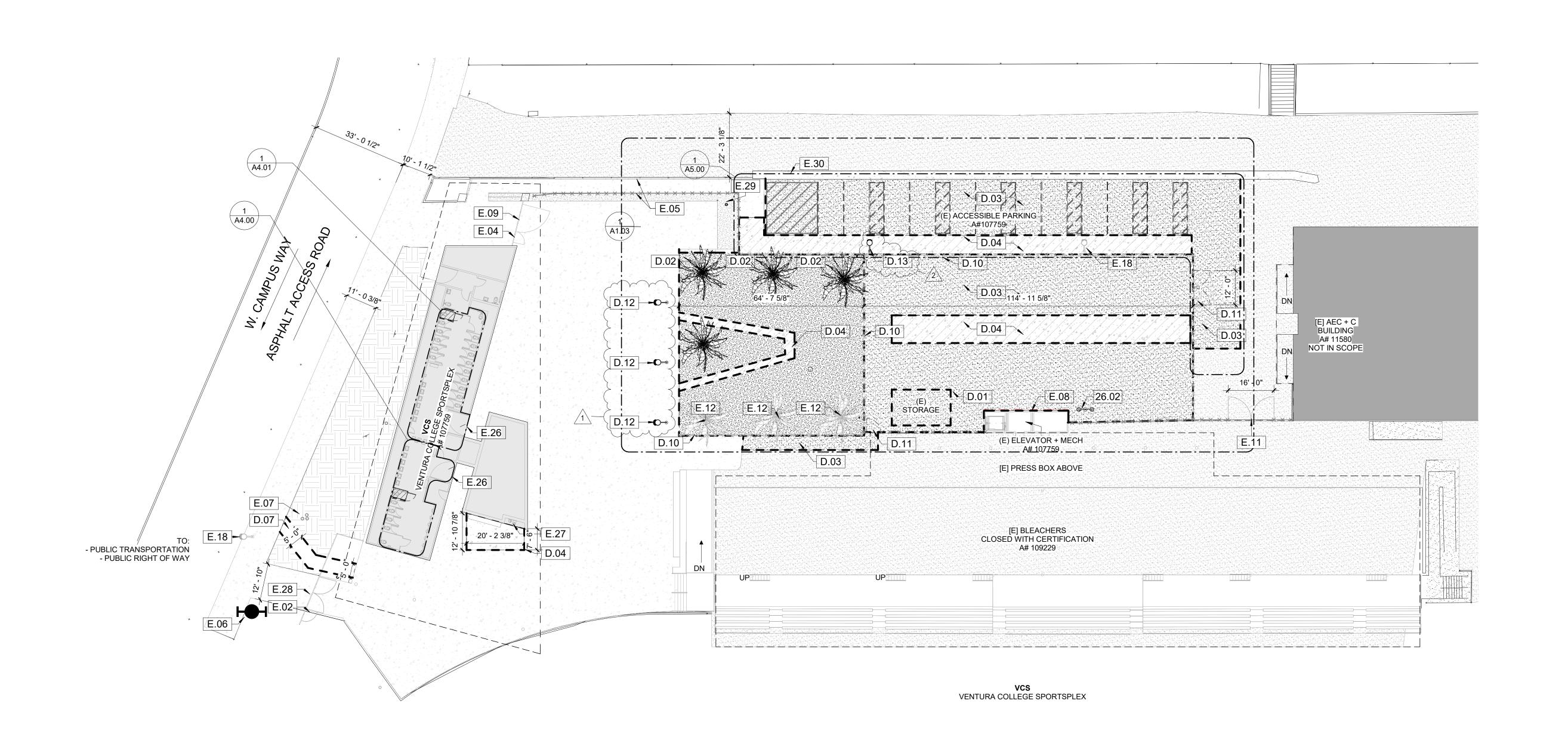
PROJECT ARCH: Designer

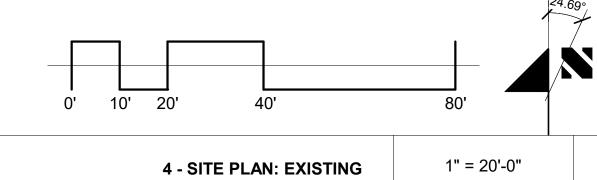
CHECKED: Checker

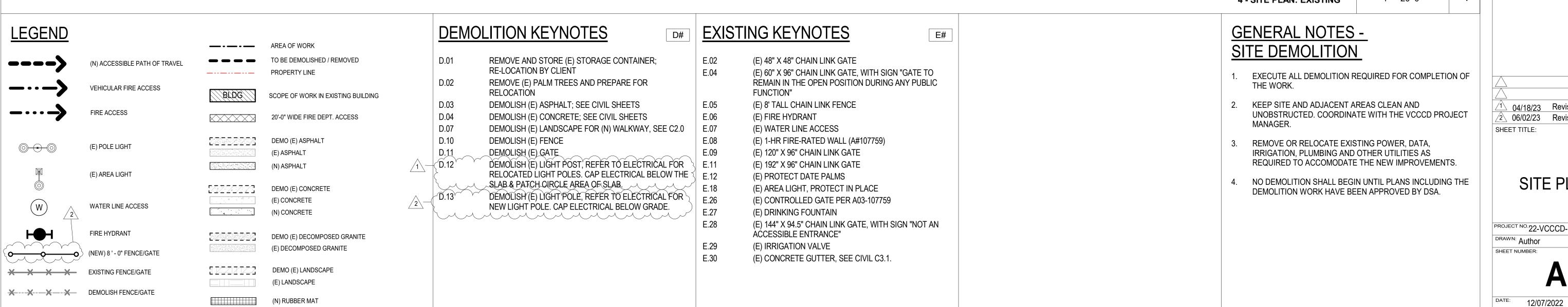
C4.1

SHEET: 7 OF











DIVISION OF THE STATE ARCHITECT

### **VENTURA COUNTY COMMUNITY COLLEGE DISTRICT**

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

## A#03-122956 OUTDOOR WORKOUT SPACE Ventura Community College 4667 Telegraph Road Ventura, CA 93003

COMMISSIONED ARCHITECT

# **AMADOR**

28328 AGOURA RD, 203 | AGOURA HILLS CA, 91301 | 805-558-4334

CONSULTANT

STAMPS/SEALS

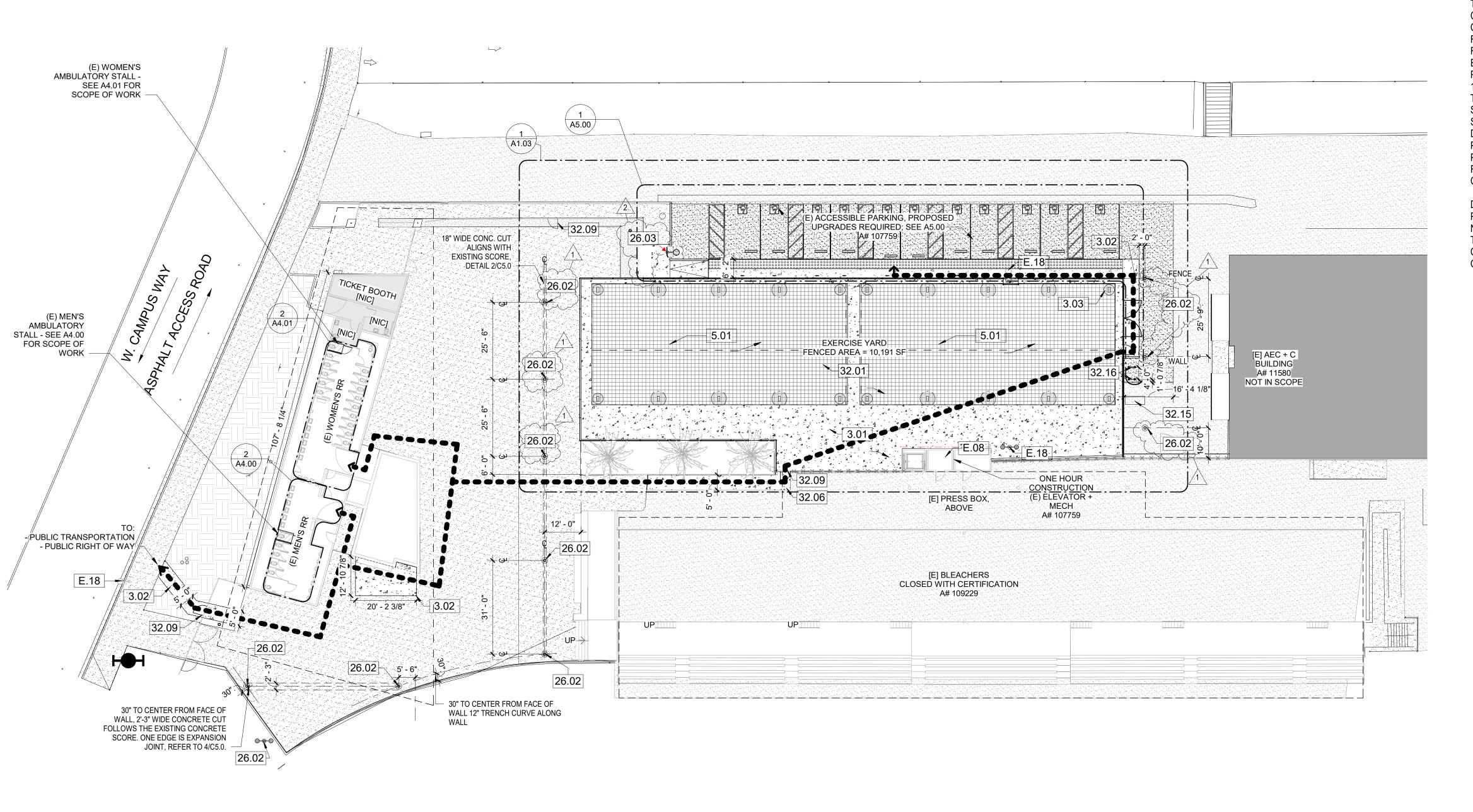


04/18/23 Revision 1 ∆ 06/02/23 Revision 2

SITE PLAN - DEMO

PROJECT NO. 22-VCCCD-10 PROJECT ARCH: Designer DRAWN: Author

\_\_\_\_ OF \_\_\_\_



## DESIGN PROFESSIONAL RESPONSIBLE **CHARGE STATEMENT**

THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE CONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTION OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

## DSA IR A-4 METAL STRUCTURES, GEOLOGICAL **SURVEY**

#### 3.2 EXISTING SITES OUTSIDE OF A MAPPED GEOLOGIC HAZARD ZONE:

IN ADDITION TO THE PROJECT SCOPES DESCRIBED IN SECTION 3.1 ABOVE PROJECTS ON EXISTING SITES WHICH ARE OUTSIDE OF A "MAPPED GEOLOGIC HAZARD ZONE" (AS DEFINED IN SECTION 4 BELOW) ARE EXEMPT FROM THE REQUIREMENT TO PROVIDE A GEOHAZARD REPORT IF THEIR SCOPE IS LIMITED TO THE FOLLOWING:

3.2.3 OPEN METAL SITE STRUCTURES (E.G., STRUCTURAL STEEL, ALUMINUM, ETC.) SEISMICALLY SEPARATED INTO AREAS OF 4,000 SQ. FT. OR LESS IN COVERED AREA INCLUDING ALL OVERHANGS. SUCH STRUCTURES MAY INCLUDE BUT ARE NOT LIMITED TO SHADE STRUCTURES, BLEACHERS, CANOPIES AND

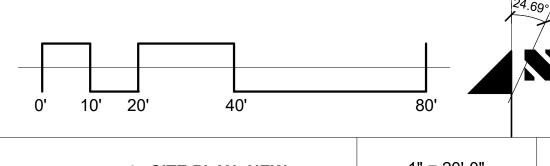
### 4. MAPPED GEOLOGIC HAZARD ZONE

A MAPPED GEOLOGIC HAZARD ZONE AS USED IN THIS IR ARE THOSE DESIGNATED BY CGS OR THE LOCAL JURISDICTION IN ACCORDANCE WITH CBC SECTION 1803A.6, EXCEPTION 1. TO DATE CGS HAS MAPPED EARTHQUAKE FAULT HAZARD ZONES THROUGHOUT THE STATE, AND LIQUEFACTION HAZARD GEOLOGIC HAZARD ZONES DESIGNATED BY CGS, AS WELL AS THOSE REGIONS YET TO BE EVALUATED, CAN BE FOUND THROUGH THE WEB-BASED

VENTURA COLLEGE IS MAPPED IN THE GEOLOGIC HAZARD ZONE AND HAS BEEN EXEMPTED FROM REQUIREMENT BY PRE-DSA MEETING 09-28-2022 BASED ON GEOLOGICAL SURVEY (CGS) DEEMED THOSE PREVIOUSLY-SUBMITTED STUDIES ADEQUATELY ADDRESSED FAULT RUPTURE AND LIQUEFACTION HAZARDS AS NEGLEGIBLE.

## DSA CERTIFICATION OF ADJANCENT BUILDINGS

- 1. (E) VENTURA COLLEGE SPORTSPLEX (VCS) A# 107759 WAS CERTIFIED 3/20/2013
- 2. (E) VENTURA COLLEGE SPORTSPLEX- BLEACHERS A#109229 WAS CERTIFIED 3/24/2010



4 - SITE PLAN: NEW

#

### 1" = 20'-0"

#### **LEGEND** TO BE DEMOLISHED / REMOVED (N) ACCESSIBLE PATH OF TRAVEL VEHICULAR FIRE ACCESS BLDG SCOPE OF WORK IN EXISTING BUILDING FIRE ACCESS 20'-0" WIDE FIRE DEPT. ACCESS 6.545.5.5.5.5.6.**7** DEMO (E) ASPHALT (E) POLE LIGHT (E) ASPHALT (N) ASPHALT (E) AREA LIGHT DEMO (E) CONCRETE ن کے کے کے کے کے کے (E) CONCRETE $\bigcirc$ WATER LINE ACCESS (N) CONCRETE FIRE HYDRANT DEMO (E) DECOMPOSED GRANITE (E) DECOMPOSED GRANITE (NEW) 8 ' - 0" FENCE/GATE D T = 7 | T / T - 7 DEMO (E) LANDSCAPE **X** X EXISTING FENCE/GATE (E) LANDSCAPE X---X---X DEMOLISH FENCE/GATE

(N) RUBBER MAT

## **CODE ANALYSIS**

## **NEW SHADE STRUCTURES**

1. OCCUPANCY GROUP: A-3

2. CONSTRUCTION TYPE: II - B

3. NUMBER OF STORIES: 1

4. STRUCTURE HEIGHT: 18' - 8"

5. STRUCTURE AREA: ENCLOSED AREA 0 SF COVERED AREA (1 SHADE STRUCTURES) 3360 SF COVERED AREA (1 SHADE STRUCTURES) 3360 SF

TOTAL 6,720 SF NEW COVERED AREA 6. FIRE SPRINKLERS: NOT REQUIRED

7. EXITS REQUIRED: 2 10,191 SF FENCED AREA: OCC. LOAD FACTOR FOR EXERCISE ROOM: 1/50 SF

TOTAL OCCUPANTS: EXITS REQUIRED:

8. ROOF CLASS: A

## **EXISTING KEYNOTES**

(E) 1-HR FIRE-RATED WALL (A#107759) (E) AREA LIGHT, PROTECT IN PLACE

3.01 (N) CONCRETE, REFER TO DETAIL 11/C5.0 AND 2/A5.01 3.02 (N) CONCRETE PAVING, <2% CROSS SLOPE, REFER TO DETAIL 3/C5.0

**KEYNOTES** 

32.15

E#

(N) CONCRETE PIER, POUR CONCRETE SLAB BELOW RUBBER MAT, REFER TO LS4.0

(N) PARK PLANET SHADE STRUCTURE; STRUCTURE: MATTE BLACK; ROOF: BONE WHITE, SEE LS SHEETS

CONC. PEDESTAL, DETAIL 2/E602. (Ñ) PÔLE L'IGHT, SEE ELECTRICAL SHEETS. 24" DIA. CONC. PEDESTAL, DETAIL -/---

(N) POLE LIGHT, SEE ELECTRICAL SHEETS. 24" DIA.

(N) RUBBER MAT, REFER TO DETAIL 2/A5.01 32.06 (N) CONCRETE SIDEWALK, <1.5% CROSS SLOPE, REFER TO DETAIL 2/C5.0

(N) 40" X 96" CHAIN LINK PEDESTRIAN GATE WITH PANIC HARDWARE IN (E) CHAIN-LINK FENCE, REFER TO DETAIL

(N) BICYCLE STORAGE UNIT. ECOPARK STANDARD MODEL, TWO DOOR, SANDSTONE, RAL 1019, T-HANDLE,

(N) BICYCLE U RACK W/ CROSS BAR MODEL, STANDARD: BLACK PLASTISOL, SURFACE MOUNT

## GENERAL NOTES - SITE NEW

- ALL FIRE ACCESS ROADS, ACCESS GATES, FIRE HYDRANTS AND FIRE FLOW ARE EXISTING TO REMAIN UNMODIFIED
- REFER TO CIVIL PLANS FOR NEW CONCRETE SIDEWALK AND ASPHALT PAVING GRADES.
- FOR WALKWAYS, THE SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:20 GRADIENT (5.0%) AND CROSS SLOPE SHALL NOT EXCEED 1:50 GRADIENT (2.0%), WITH A MINIMUM WIDTH OF FORTY EIGHT INCHES (48"). CBC 1133B.7.3 & 1133B.7.1.3
- UNAUTHORIZED PARKING SIGN IS SHOWN ON SHEET G0.03

DIVISION OF THE STATE ARCHITECT



### **VENTURA COUNTY COMMUNITY COLLEGE DISTRICT**

761 EAST DAILY DRIVE CAMARILLO, CALIFORNIA 93010 TEL: (805) 652-5500

PROJECT TITLE AND SCHOOL LOCATION

### A#03-122956 OUTDOOR **WORKOUT SPACE** Ventura Community College

4667 Telegraph Road Ventura, ČA 93003

COMMISSIONED ARCHITECT

# **AMADOR**

28328 AGOURA RD, 203 | AGOURA HILLS CA, 91301 | 805-558-4334

CONSULTANT

STAMPS/SEALS

SHEET TITLE:



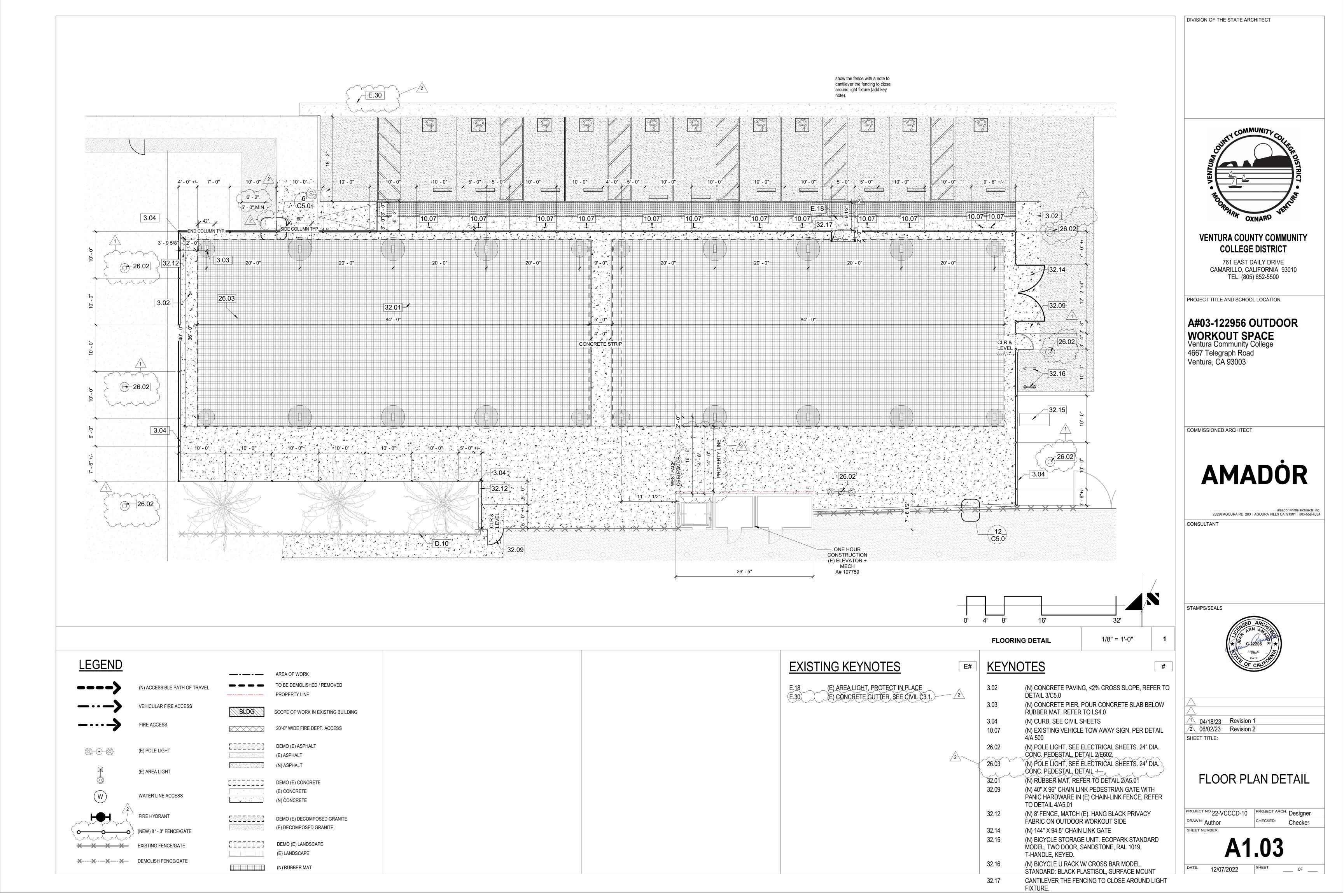
04/18/23 Revision 1 06/02/23 Revision 2

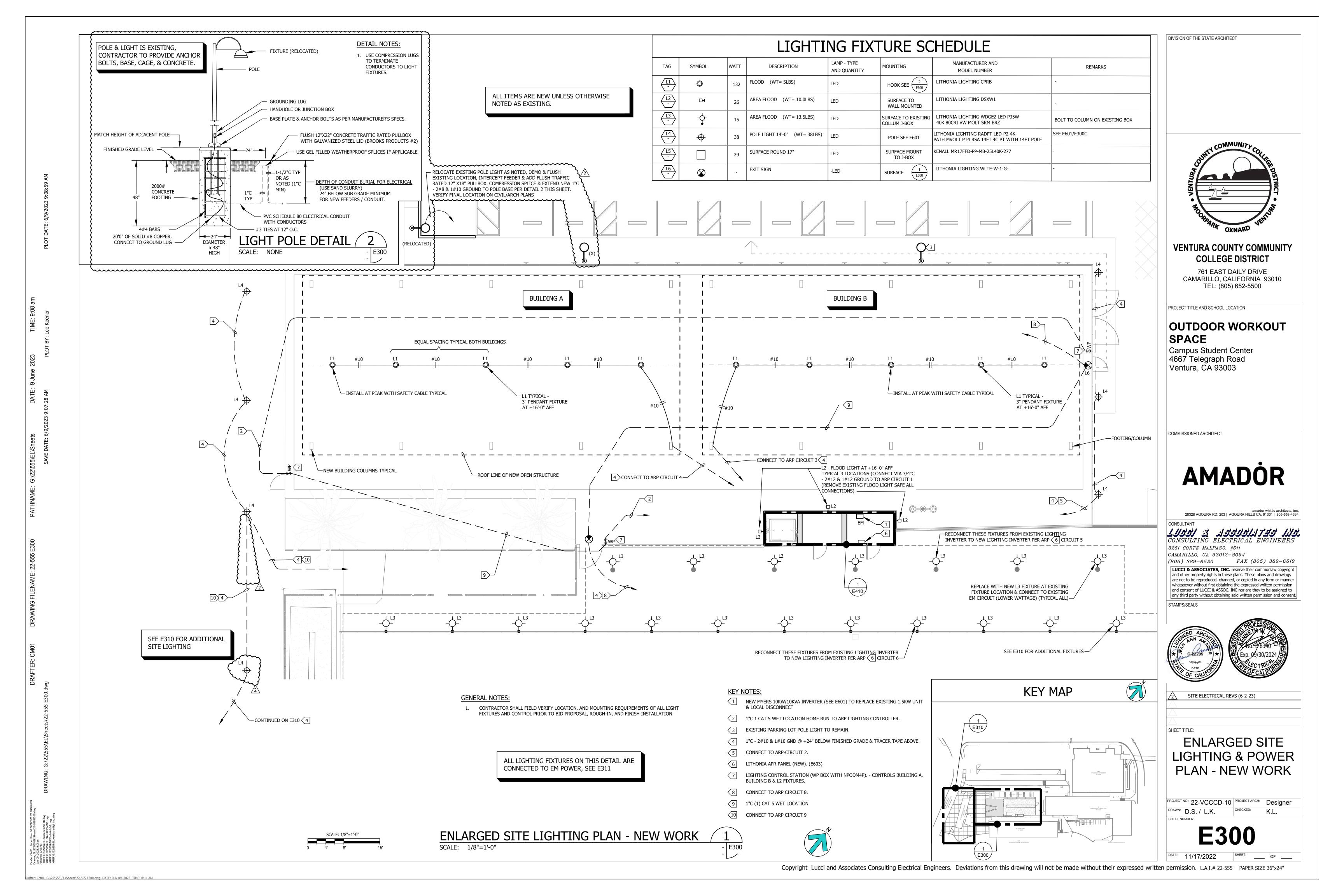
> SITE PLAN - NEW CONSTRUCTION

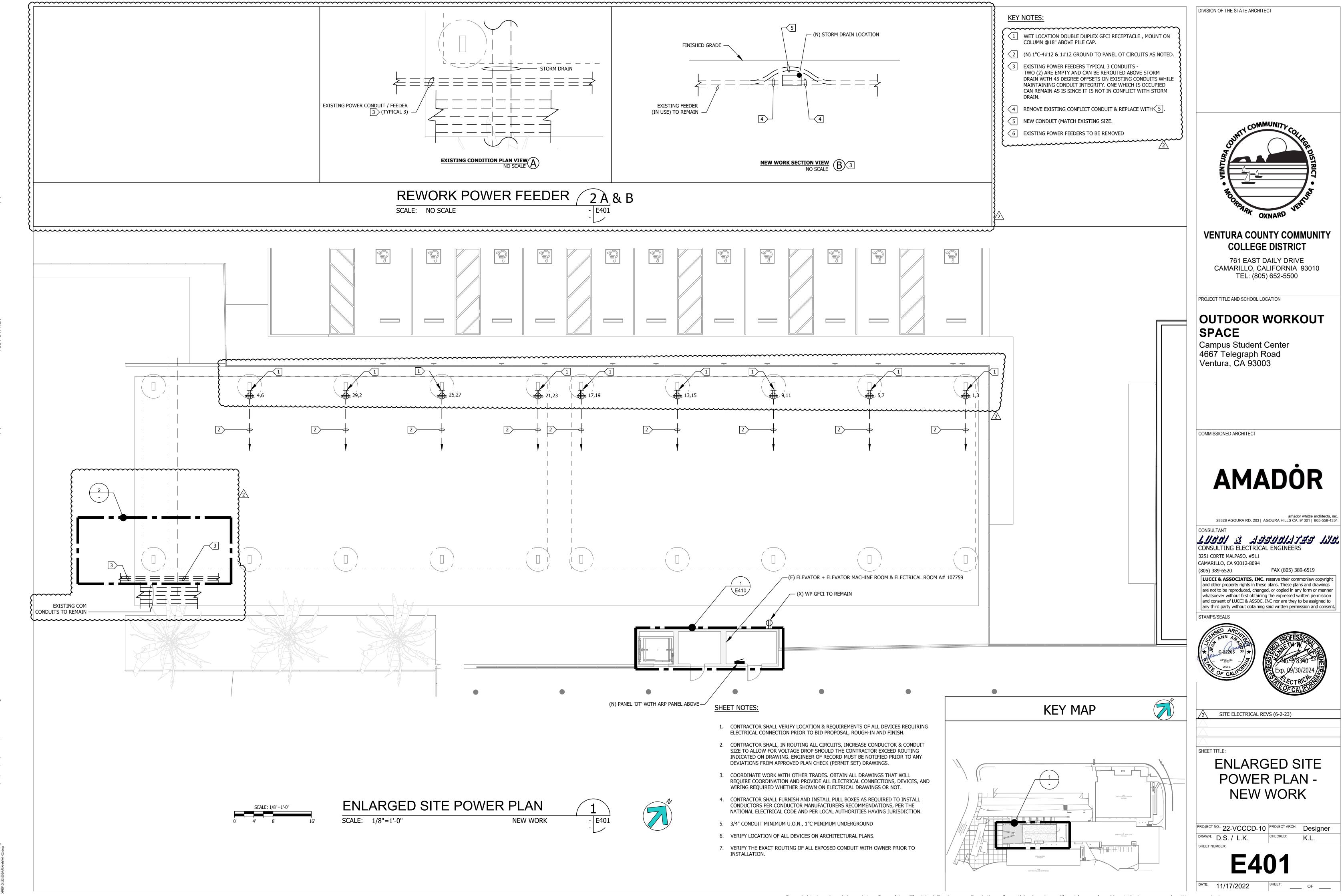
PROJECT NO. 22-VCCCD-10 PROJECT ARCH: Designer DRAWN: Author

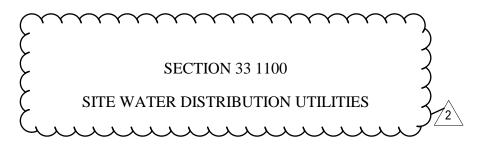
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12/07/2022









#### PART 1 - GENERAL

#### 1.01 SUMMARY

#### A. Section Includes:

1. Site water distribution systems located outside the building perimeter, extending to an existing water line or meter.

#### B. Related Requirements:

- 1. Division 01 General Requirements.
- 2. Section 01 3593 Off-site Improvement Procedures.
- 3. Division 22 Plumbing.
- 4. Section 31 2316 Excavation and Fill for Paving.
- 5. Section 31 2323 Excavation and Fill for Utilities.
- 6. Section 32 0117 Pavement Repair.
- 7. Section 32 1313 Site Concrete Work.
- 8. Section 33 3000 Site Sanitary Sewer Utilities.

#### 1.02 SUBMITTALS

- A. Shop Drawings: Submit site plan indicating locations of lines, valves, and related appurtenances.
- B. Product Data: Manufacturer's catalog data for materials. Include technical data for accessories, gaskets, joints and couplings.
- C. Certificates: Certificates attesting that tests set forth in referenced publications have been performed, and the performance requirements have been satisfied.

#### 1.03 QUALITY ASSURANCE

- A. Comply with the following as a minimum requirement:
  - 1. ANSI:
    - a. ANSI B16.18 Cast Copper Alloy Solder Joint Pressure Fittings.
    - b. ANSI B18.5.2.1M Metric Round Head Short Square Neck Bolts.

#### 2. ASME:

- a. ASME B16.3 Malleable Iron Threaded Fittings.
- b. ASME B16.4 Grey Iron Threaded Fittings.
- c. ASME B16.22 Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.
- d. ASME B16.26 Cast Copper Alloy Fitting for Flared Copper Tubes.
- e. ASME B18.2.2 Nuts for General Applications (Inches Series).
- f. ASME B18.5.2M Metric Round Head Square Neck Bolts.

#### 3. ASTM:

- a. ASTM A47 Standard Specification for Ferritic Malleable Iron Castings.
- b. ASTM A48 Standard Specification for Gray Iron Castings.
- c. ASTM A53 Standard Specification for Pipe, Steel, Black and Hit-Dipped, Zinc-Coated Welded and Seamless.
- d. ASTM A307 Standard Specification for Carbon Steel bolts and Studs, 60,000 psi Tensile Strength.
- e. ASTM A536 Standard Specification for Ductile Iron Castings.
- f. ASTM A563 Standard Specification for Carbon and Alloy Steel Nuts.
- g. ASTM B61 Standard Specification for Steam or Valve Bronze Castings.
- h. ASTM B62 Standard Specification for Composition Bronze or Ounce Metal Castings.
- i. ASTM B88 Standard Specification for Seamless Copper Water Tube.
- j. ASTM C94 Standard Specification for Ready-Mixed Concrete.
- k. ASTM D1527 Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe, Schedules 40 and 80.
- 1. ASTM D1785 Standard Specification for Poly Vinyl Chloride (PVC) Plastic Pipe, Schedules 40, 80 and 120.
- m. ASTM D2235 Standard Specification for Solvent Cement for ABS Plastic Pipe, and Fittings.
- n. ASTM D2241 Standard Specification for PVC Plastic Pipe Fittings, Schedule 40.

- o. ASTM D2282 Standard Specification for ABS Plastic Pipe.
- p. ASTM D2466 Standard Specification for PVC Plastic Pipe Fittings, Schedule 80.
- q. ASTM D2468 Standard Specification for ABS Plastic Pipe Fittings, Schedule 40.
- r. ASTM D2564 Standard Specification for PVC Plastic Piping Systems.
- s. ASTM D2774 Standard Practice for Underground Installation of Thermoplastic Pressure Piping.
- t. ASTM D2855 Standard Test Method for Making Solvent-Cemented Joints with PVC Pipe and Fittings.
- u. ASTM D3139 Standard Specification for Joints Pressure Pipes Using Flexible Elastomeric Seals.
- v. ASTM F402 Standard Practice for Safe Handling Of Solvent Cements, Primer and Cleaners Used for Joining Thermoplastic Pipes and Fittings.
- w. ASTM F477 Standard Specification for Elastomeric Seals for Joining Plastic Pipes.
- 4. American Water Works Association (AWWA) Standards:
  - a. AWWA C104/A21.4 Cement-Mortar Lining For Ductile-Iron Pipe and Fittings For Water.
  - b. AWWA C110/A21.10 Ductile-Iron and Gray-Iron Fittings, 3 inches through 48 inches, for Water and Other Liquids.
  - c. AWWA C111/A21.11 Rubber-Gasket Joints for Ductile-Iron pressure Pipe and Fittings.
  - d. AWWA C153/A21.53 Ductile-Iron Compact Fittings, 3 inches through 16 inches, for Water and Other Liquids.
  - e. AWWA C500 Metal Seated Gate Valves for Water and Sewage Systems.
  - f. AWWA C503 Wet- Barrel Fire Hydrants.
  - g. AWWA C508 Swing-Check Valves for Waterworks Service, 2 inches through 24 inches NPS.
  - h. AWWA C509 Resilient Seated Gate Valves for Water and Sewerage Systems.
  - i. AWWA C511 Reduced-Pressure Principal Backflow-Prevention Assembly.

- j. AWWA C600 Installation of Ductile-Iron Water Mains and Their Appurtenances.
- k. AWWA C651 Disinfecting Water Mains.
- 1. AWWA C800 Underground Service Line valves and Fittings.
- m. AWWA C900 PVC Pressure Pipe, 4 inches through 12 inches, for Water Distribution.
- n. AWWA M23 PVC Pipe Design and Installation.
- 5. Manufacturers Standardization Society (MSS) of the Valve and Fittings Industry:
  - a. MSS SP-80 Bronze Gate, Globe, Angle and Check Valves.
- 6. Uni-Bell PVC Pipe Association (UBPPA):
  - a. UBPPA UNI-B-3 Installation of PVC Pressure Pipe.
  - b. UBPPA UNI-B-8 Direct Tapping of PVC Pressure Water Pipe.
  - c. UBPPA UNI-B-13 Standard Performance Specification on joined restrained devices for use with Poly Vinyl Chloride (PVC) Pipe.
- 7. Underwriters Laboratories Inc. (UL):
  - a. UL 246 Hydrants for Fire-Protection Service.
  - b. UL 262 Gate Valves for Fire-Protection Service.
  - c. UL 312 Check Valves for Fire-Protection Service.
  - d. UL 789 Indicator Posts for Fire-Protection Service.
- 8. National Pollutant Discharge Eliminations System (NPDES):
  - a. Comply with storm water requirements of general permit for storm water discharges when flushing pipe systems including storm drains and maintaining logs.
- B. Provide valves from the same manufacturer.
- C. Manufacturer of plumbing products must be third-party certified to ANSI/NSF Standard 61, Section 9 certification, and ANSI/NSF 372 to demonstrate compliance with the federal requirements for lead contribution to drinking water, the Safe Drinking Water Act SDWA, and the California Health and Safety Code Section 116875. No pipe, pipe fitting, or any other fitting or fixture intended to convey or dispose water for human consumption for drinking or cooking is allowed in the domestic plumbing system, if they do not meet the low lead definition of Health and Safety Code 116875.

Weighted average lead content of the wetted surface area of pipes, fittings and fixtures may not exceed 0.25 percent.

D. Qualifications of Manufacturer: Products used in the Work of this Section shall be produced by manufacturers regularly engaged in manufacture of similar items and with a history of successful production as reviewed by the ARCHITECT.

#### 1.04 PRODUCT HANDLING

- A. Store items above ground on platforms, skids, or other required supports.
- B. Protect materials from direct sunlight.
- C. Protect coating and linings on piping, fittings, and accessories from damage. Repair and/or replace damaged coatings or linings.

#### PART 2 - PRODUCTS

#### 2.01 MATERIALS

- A. Pipes, Fittings, and Joints:
  - P-1: Pipe sizes up to 4-inch shall be Copper water tubing, Type K hard, ANSI H23.1, ASTM B88, IAPMO IS.

Manufacturer: Mueller, Cerro Brass, Cambridge-Lee, Halstead, or equal.

An approved protective wrap shall be used to completely isolate and protect underground copper tubing and extend past the surface a minimum 12-inch. The excess wrapping shall be trimmed down and taped to copper tubing with 10 mill PVC pipe tape at grade level of concrete or asphalt.

PF-1a: Copper Press-Connect pressure fittings, comply with ASME B16.51 "Copper Alloy Press-Connect Pressure Fittings", with Ethylene Propylene Diene Monomer, EPDM O-Ring Seal in each end. Fittings with the sizes of 2-1/2" and larger shall have cross-section Grab Rings and separation rings.

Manufacturer: Viega, Mueller Industries, Apollo, or equal.

PF-1b: Wrought Copper - solder type ANSI B 16.22.

Manufacturer: Mueller Brass, Nibco, Lee Brass, or equal.

PF-1c: Grooved end type— ASTM B75 or B152 and ANSI B16.22 Wrought Copper, bronze sand casting per ASTM B584-87 copper alloy CDA 836 per ANSIbB16.18. Couplings shall be CTS style 606 supplied with angle pattern bolt pads for rigidity, coated with copper coated alkyd enamel. Gaskets shall be pre-lubricated Flush seal type.

Manufacturer: Victaulic, or equal.

P-2: Underground pipe sizes 4-inch and larger shall be C900 water main pipe material complying with AWWA C900, and ASTM D1784 Cell Class 12454B

with tracer wire, NSF and UL listed. Piping shall be plain end or gasket bell end, pressure class 200 (DR14) with cast iron pipe equivalent outside diameter.

- PF-2a: Fire Water Main Fittings shall be cast-iron conforming to AWWA C110/A21.10 or AWWA C153/A21.53 and shall have cement mortar lining conforming to AWWA C104/A21.4, standard thickness unless otherwise indicated on Drawings. Fittings shall be mechanical joints.
- PF-2b: Domestic Water and Irrigation Main Fittings, Joints and Jointing Materials shall be C900 Compatible.
  - a. Pipe joints shall be push on as specified in ASTM D3139.
  - b. Joints between pipe and metal fittings, valves, and other accessories shall be mechanical joints as specified in AWWA C111/A21.11.
  - c. Provide each joint connection with an elastomeric gasket suitable for the bell or coupling installation.
  - d. Gaskets for push on joints for pipe shall conform to ASTM F477.
  - e. Gaskets for push on joints and compression type joints or mechanical joints for connections between pipes and metal fittings, valves, and other accessories shall be as specified in AWWA C111/A21.11.
  - f. Sleeve-type mechanically coupled joints may be provided instead of push-on joints on plain-end PVC plastic joints. Comply with requirements of ASTM D3139.

#### D. Gates Valves for PVC:

- 1. Non-rising stem type with resilient wedge gates or iron body bronze wedge gates and mechanical joint ends conform to AWWA C500.
- 2. Non-rising stem type with mechanical joints ends shall conform to AWWA C509.
- 3. Valves designed for a working pressure of 175 PSI shall be inside-screw type with operating nut, and resilient wedge type gate. Valve shall be provided with mechanical joints as required for the pipe to which it is intended to connect.
- 4. Valves with UL listing of 262 shall conform to AWWA C500. Valves shall open by counter-clockwise rotation of valve stem.
- 5. Stuffing boxes shall be provided with O-ring stem seals and shall be bolted and constructed to permit easy removal of parts for repair.
- 6. Sleeve type mechanical couplings may be provided instead of mechanical and push on joint ends.

7. Valve ends and gaskets for connection to sleeve type mechanical couplings shall conform to specified requirements for the joint or coupling.

#### E. Gate Valves in Valve Pits:

- 1. Outside screw and yoke rising stem type valves with resilient wedge gates and flanged ends shall conform to AWWA C500.
- 2. Outside screw and yoke rising stem type valves with flanged ends shall conform to AWWA C509.
- 3. Outside screw and yoke type Valves with double disc gates or split-wedge type gate and flanged ended ends shall be designed for 175 psi and conform to UL 262.
- 4. Provide valves with hand wheels that open by counterclockwise rotation of the valve stem.
- 5. Stuffing boxes shall be provided with O-ring stem seals and shall be bolted and constructed to permit easy removal of parts for repair.

#### F. Check Valves for PVC:

- 1. Valves shall be swing-check type conforming to AWWA C508 or UL 312.
- 2. Valves shall be provided with cast iron or steel body and cover, flanged ends and clear port opening.
- 3. Valves shall be designed for a working pressure of 175 PSI.
- G. Valve Boxes: 14 ¾-inch by 20-inch by 12-inch cast concrete with cast iron, traffic grade cover marked "WATER" (for use over water valves).
  - 1. Brooks 36-H MB with No. 36-T cast iron cover EISEL 363.5, or equal.

#### H. Mechanical Thrust Restraint:

- 1. Restraint shall be incorporated into the follower gland.
- 2. Restraint shall consist of individually actuated wedges that increase resistance to pull out as internal pressure or external forces increase.
- 3. Gland shall be ductile iron conforming to ASTM A536.
- 4. Provide twist off nuts and tee-head bolts of the same size to ensure proper actuating of restraint devices.
- 5. Restraining device shall be provided with pressure rating equal to that of the pipe on which it is installed.
- 6. Restraining gland shall be UL listed.

7. Mechanical thrust restraint devices shall be EBAA Iron "Megalug" or equal.

#### I. Restraint Device Adapters:

- 1. Restrained flange adapters shall be provided instead of threaded or welded flange spool pieces on plain end of ductile iron or PVC pipe.
- 2. Flange adapters shall be manufactured of ductile iron conforming to ASTM A536 and be provided with flange bolt circles compatible with ANSI/AWWA C115/A21.15.
- 3. Restraint of flange adapter shall consist of a multiple number of individually actuated gripping wedges to maximize restraint capability.
- 4. Torque limiting actuating screws shall be provided to insure proper initial set of gripping wedges.
- 5. Flange adapter shall be capable of deflection during assembly or permit lengths of pipe to be field cut to allow at least 0.6 inch of gap between end of pipe and mating flange without affecting integrity of seal.
- 6. Flange adapter shall be provided with a safety factor of at least 2:1 for rated pressure.
- 7. Restraint device adapters shall be EBAA Iron "Megaflange", or equal.
- J. Tracer Wire for Nonmetallic Pipes: Tracer wires shall be electrically continuous #14 copper tracer wire, Type TW, blue plastic covered for domestic water and red for fire sprinkler. (Aluminum wire is prohibited). Provide in sufficient length to be continuous over each installed section of nonmetallic pipe.
- K. Pipe markers shall be a concrete plaque inscribed with the word "WATER."
- L. Water Service Line Materials:
  - 1. Copper Tubing: Copper tubing shall conform to ASTM B88, Type K.
  - 2. Fittings for Copper Tubing: Fittings for solder-type joints shall conform to ANSI B16.18 or ASME/ANSI B16.22. Fittings for compression-type joints shall conform to ASME/ANSI B16.26, flared tube type.
  - 3. Water Service Line Appurtenances:
    - a. Corporation stops shall be ground key type; manufactured of bronze conforming to ASTM B61 or ASTM B62; and suitable for the working pressure of the system. Ends shall be suitable for solder-joint or flared tube compression type joint connection. Threaded ends for inlet and outlet of corporation stops shall conform to AWWA C800; coupling nut for connection to flared copper tubing and shall conform to ASME/ANSI B16.26.

- b. Goosenecks shall be type K copper tubing. Joint ends for goosenecks shall be as required for connecting to corporation stop and service line. Where multiple gooseneck connections are required for individual service, connect goosenecks to service line through brass or bronze branch connection; the total clear area of branches shall be at least equal to clear area of service line. Length of goosenecks shall be as indicated or required.
- c. Curb or service stops shall be ground key, round way, inverted key type; bronze, conforming to ASTM B61 or ASTM B62; and rated at 150 psi. Ends shall be as required for connection to service piping. Arrow shall be cast into body of curb or service stop indicating direction of flow.
- d. Gate valves 2.5-inch and larger shall be MSS SP-80, Class 150, solid wedge, or resilient wedge gate, and non-rising stem. Valves shall be provided with flanged end connections. Provide hand wheel operators if easily accessible. Provide operating nut if inside a vault, pit or valve box.
- e. Gate valves in valve pits 2-inch, and smaller shall be MSS SP-80, Class 150, bronze, solid wedge, inside screw, rising stem. Valves shall be provided with flanged end connections or threaded end connections with union on one side of valve and hand wheel operator.
- f. Valve boxes shall be provided at each gate valve installed underground. Valve boxes shall be a size suitable for valve on which it is installed.
- N. Water meter will be installed by water purveyor for the area, unless noted otherwise.
- O. Strainers:
  - STR-1 Description: Wye type with Monel or Stainless Steel strainer cylinder (manufacturer's standard mesh), and gasketed machine strainer cap. Where indicated on Drawings, provide with valved (globe valve) blow out piping, same size as blow out plug:
    - 2-inch and smaller: C.M. Bailey #100-A, bronze, 250 pound, or ductile iron with fusion bonded epoxy coating.
    - 2 ½-inch and larger: Watts 77F-DI-FDA-125 pound, or other ductile iron fusion bonded epoxy coated flanged strainer, conforming to ASTM A312 for the strainer body, and ASTM A240 for the stainless steel strainer element. (No iron body strainer shall be used on potable water that is not fusion bonded epoxy coated inside and out.)
    - C.M.Bailey, Armstrong, Wilkins, Watts, or equal.
  - STR-2 "Y" pattern, cast iron bodies, 125 psi, Monel screen 16 square. mesh. Open area at least twice the cross-sectional area of IPS pipe in which strainer is installed and may be woven wire or perforated type. Screwed

ends for sizes up to 2-inch, flanged ends for 2 ½-inch and larger perforations, in accordance with the following:

Bailey #100, Armstrong, Rp & C , Keckley, or equal.

STR-3 Bucket type, flange, semi-steel body, 125 psi, stainless steel screen with 1/8 inch diameter perforations (mounted above grade for water service). All sizes, for mains serving fire sprinkler risers:

Bailey #1, Zurn 150 Series, Rp 7 C, Watts 97fb-Fsfe, or equal.

STR-42" and larger: Watts 077-F-SS Stainless steel flange type strainer, or equal conforming to ASTM A312 for strainer body, ASTM A240 for the SS strainer element and ASTM A36 for base flange material.

#### P. Backflow Preventer Assemblies:

- 1. Assembly shall be provided with flanged connections, ductile iron with fusion bonded epoxy coated construction, bronze, or stainless steel.
- 2. Backflow preventer shall be suitable for cold water working pressure of 175 psi.
- 3. Internal parts shall be designed for replacement without removing valves from line.
- 4. Double check backflow preventer assembly shall consist of two independently acting spring cam or poppet style check valves, 2 shut-off valves and 4 test cocks. Check valve shall be designed to provide drip tight closure against reverse flow, low pressure drop at maximum flow capacity. Spring-loaded checks shall cause valve to seal against a higher inlet pressure than outlet pressure when there is no flow.
- 5. Double check backflow preventer assembly shall meet AWWA Standard C510-89. Assembly shall be Ames 2000ss, Febco 850, Watts 709, Wilkins 350, or equal.
- 6. Reduced pressure backflow preventer assembly shall consist of two check valves located between two shut-off valves with an area of reduced pressure between two check valves and a relief device arranged to discharge to atmosphere.
  - a. Comply with AWWA Standard C511.
  - b. Fluctuation in piping pressure shall not cause cycling. Backflow preventer shall automatically maintain low pressure zone to positively prevent backflow of water into system. Assembly shall automatically indicated failure of any part vital to backflow prevention by the continuous discharge relief device.
  - c. Reduced pressure backflow preventer assembly shall be Cla-Val Model RP-4, or equal.

7. Backflow prevention assemblies (devices), shall be tested and certified by a certified backflow tester, and a test report shall be provided to the water agency having jurisdiction. Testing shall be performed in the presence of the Project Inspector.

#### PART 3 - EXECUTION

#### 3.01 EXCAVATION, BACKFILLING AND COMPACTING

A. Conform to requirements in Section 31 2323 - Excavation and Fill for Utilities or Section 31 2313 - Excavation and Fill.

#### 3.02 PIPE INSTALLATION

A. Project site water lines shall terminate approximately 5 feet from buildings, unless otherwise indicated on Drawings. Temporarily cap or plug terminals for future connection to building.

#### 3.03 CLEARANCES OF WATER LINE

- A. Building or Structures: Two feet.
- B. Parallel to Sewer Line:
  - 1. Water line 4-inch or less in diameter shall not be installed in a common trench with the building sanitary drain unless the bottom of the water line is at least 12 inches above the top of the building sanitary drain or where the water line is installed on a solid shelf excavated on one side of the common trench with a minimum clear horizontal distance of 12 inches from the building sanitary drain.
  - 2. Water mains 6-inch and larger in diameter shall be separated from the Project site sanitary sewer, receiving more than one building sanitary drain or acid pipeline, in accordance with the requirement of the State of California, Human and Welfare Agency, Department of Health Services.

#### C. Crossing Sewer Line:

- 1. A water main shall be separated from sanitary sewer in accordance with the requirements of the State of California Administrative Code, Title 22, Section 64630(e)(2).
- 2. Install water main a minimum of 12 inches clear, above or below a sanitary sewer
- 3. A water main 6-inch or greater in diameter, crossing under a Project site sanitary sewer line, shall be installed with joints located at least 10 feet away from each side of the sanitary sewer line.

- 4. A water main 6-inch or greater in diameter, crossing over a Project site sanitary sewer line, shall be installed with joints located at least 4 feet away from each side of a purple pipe or sanitary sewer line.
- D. Install water mains no closer than 10 feet horizontally clear from the edge of sewage leach fields, seepage pits, and septic tanks.

#### 3.04 PIPE INSTALLATION AND JOINING

- A. Remove fins and burrs from pipe and fittings.
- B. Clean piping, fitting, valves, and accessories before installing. Maintain items in a clean condition.
- C. Provide proper facilities for lowering sections of pipe into trenches. Do not drop into piping, fittings, or other materials into trenches. Accurately cut pipe and install without springing or forcing. Replace any piping or fitting that does not provide sufficient space for proper installation of joining material.
- D. Blocking or wedging between bells and spigots is not permitted. Install bell and spigot pipe with bell end pointing in the direction of flow.
- E. Install piping to the lines and grades indicated or required. Low points and dips are not permitted. Support piping at proper elevation and grade with secure and uniform supports. Wood support blocking is not permitted. Where sand cement slurry will not be furnished for backfill, install piping so that full length of each section of pipe and each fitting will solidly rest on pipe bedding. Excavate recesses to accommodate bells, joints, and couplings. Provide anchors and supports where indicated or required for installation. Provide proper allowances and devices for expansion and contraction of piping and systems.
- F. Maintain trenches free of standing water until pipe joints have been installed.
- G. At the end of each day close open ends of pipe with temporary caps of the same material as the pipe.
- H. Do not install piping when trench or weather conditions prevent proper installation.

#### 3.05 INSTALLATION OF TRACER WIRE AND PIPE MARKERS

- A. Tracer Wire: Install continuous length of tracer wire for full length of each run of nonmetallic pipe. Fasten wire to top of pipe in such a manner that it will not be displaced during construction operations. Wire shall be fastened to pipe at not greater than 20-foot intervals. Wire shall terminate above finished grade with a 12-inch lead taped around each riser. Provide a tracer wire to grade under a permanent marker where straight-line transitions of metallic to non-metallic pipe are installed.
- B. Underground Pipe Markers: Provide markers at grade where non-metallic pipe is installed and for each horizontal change in direction.

#### 3.06 CONNECTIONS TO EXISTING WATER LINES

- A. After Project Inspector has inspected installation, perform connections to servicing water lines. Schedule service shutdown for connecting new system at a time causing minimum disruption.
- B. Use a tap or drilling machine with valve and mechanical joint type sleeves for connections to waterlines under pressure, only if other means of scheduling a shutdown time have been unsuccessful, and with the approval of the responsible engineer, and Project Inspector.
- C. Bolt sleeves around mains; bolt valve conforming to AWWA C500 to branch. Open valve, attach drilling machine, perform tap, close valve, and remove drilling machine, without interruption of service. Notify the Project Inspector in writing at least five days prior to the date of scheduled connections.

#### 3.07 INSTALLATION OF PVC PLASTIC WATER MAINS

A. Unless otherwise indicated, install pipe and fittings as specified and in accordance with UBPPA UNI-B-3 and AWWA M23, Chapter 7, "Installation".

#### B. Jointing:

- 1. Provide push on joints with elastomeric gaskets specified for this type of joint, furnishing either elastomeric-gasket bell-end pipe or elastomeric-gasket couplings. For pipe-to-pipe push on joint connections, provide pipe with push on joint ends furnished with factory installed bevel; for push on joint connections to metal fittings, valves and other accessories, square cut spigot end off pipe end.
- 2. Provide push on joint lubricant recommended by manufacturer.
- 3. Install push on joints for pipe-to-pipe connections in accordance with UBPPA UNI-B-3 and AWWA M23, Chapter 7, "Installation."
- 4. Install push on joints for connection to fittings, valves, and other accessories in accordance with requirements of UBPPA Uni-B-3 and with applicable requirements of AWWA C600.
- 5. Compression-type joints/mechanical-joints with gaskets, glands, bolts, nuts and internal stiffeners shall be installed in accordance with the requirements of UBPPA UNI-B-3 and AWWA C600 and Appendix A to AWWA C 111/A21.11.
  - a. Square cut spigot off end of pipe for compression-type joint/mechanical-joint connections and do not re-bevel.
- 6. Sleeve-type mechanical couplings shall be provided in strict accordance with coupling manufacturer's recommendations using internal stiffeners as specified for compression-type joints.
- C. Provide mechanical thrust restraint devices for anchorage and piping unless thrust blocks are indicated on the Drawings. Thrust blocks shall be installed in accordance with the requirements of UBPPA UNI-B-3 except that size and location of blocks shall

be as indicated. Thrust blocks shall be provided as specified in Section 32 1313 - Site Concrete Work.

#### 3.08 INSTALLATION OF VALVES

- A. Provide gate valves conforming to AWWA C500 and UL 262 in accordance with AWWA C600 for valve and fitting installation and with recommendations of AWWA C500 Appendix "Installation, Operation, and Maintenance of Gate Valves".
- B. Provide gate valves conforming to AWWA C600 in accordance with AWWA C509 for valve and fitting installation and with recommendations of AWWA C500 Appendix "Installation, Operation, and Maintenance of Gate Valves".
- C. Provide gate valves on PVC water mains in accordance with AWWA M23 Chapter 7, "Installation."
- D. Provide check valves and fittings in accordance with applicable requirements of AWWA C600 unless noted otherwise on the Drawings.
- E. Provide gate and check valve joints as specified for the type of joints between pipe and fittings.

#### 3.10 INSTALLATION OF BACKFLOW PREVENTERS

A. Install reduced pressure backflow preventers to comply with RULE 16D of LADWP in the jurisdictional boundaries of Los Angeles Department of Water and Power.

#### 3.11 WATER SERVICE LINE CONNECTION TO WATER MAINS

- A. Connect service line to main by corporation stop and gooseneck. Install service stop as indicated on the Drawings. Connect service lines to PVC plastic water mains in accordance with UBPPA UNI-B8 and AWWA M23, Chapter 9, "Service Connections".
- B. Special Requirements for Plastic Piping: Unless otherwise indicated, install pipe and fittings in accordance with ASTM D2774 and ASTM D2855. Handle solvent cements for plastic pipe jointing in accordance with ASTM F402. Install joints according to ASTM D2855. Install other joints to materials other than pipe materials in accordance with plastic pipe manufacturer's recommendations.
- C. Connect plastic pipe service lines to corporation stops and gate valves according to plastic pipe manufacture's recommendations.

#### 3.12 INSTALLATION OF STRAINERS:

- A. Strainers shall be installed on each water main downstream of the meter, above grade at the pressure regulating station. When a pressure regulating station (assembly) is not provided, "wye" type flange strainer shall be provided, with a shut off valve on the inlet and the outlet side.
- B. If the water main is serving fire sprinkler risers or hydrants, then an approved fire service strainer shall be used: Watts 97DB-FSFE, or equal.

#### 3.13 DISINFECTION OF DOMESTIC WATER PIPING SYSTEM

- A. When water piping has been installed and tested, sterilize system before use and/or Substantial Completion.
- B. Inject solution of liquid chlorine or sodium hypochlorite and water containing at least 50 PPM of free chlorine into a system in a manner to ensure that entire system is completely filled with solution. During this procedure operate valves and test outlets for residual chlorine. Continue injection until outlets indicate at least 59 PPM of free chlorine.
- C. After injection, isolate system and hold solution in retention for a period of at least 8 hours. Perform tests for residual chlorine after retention. If such tests indicate less than 50 PPM of residual chlorine, repeat entire procedure. After satisfactory sterilization has been verified, flush entire system until traces of chlorine have been removed or until chlorine content is no greater than in existing water supply.

#### 3.14 ELECTROLYSIS PREVENTION

- A. A minimum 6-inch long brass nipple shall be installed at locations specified or as required. Flanges shall be provided with a complete insulating component consisting of; gasket bolt sleeves and bolt washers. Dielectric insulators shall be installed at locations indicated or as required. Dielectric fittings are prohibited.
- B. Where steel or cast iron below grade connects to copper or brass piping above grade, the transition from steel or cast iron pipe to copper or brass pipe shall be installed in an above grade accessible location.
- C. Underground connections between dissimilar metals shall be in accessible yard boxes.
- D. Above ground dielectric connections shall be exposed.

#### 3.15 ABANDONING WATER LINES AND STRUCTURES

- A. Water lines and appurtenances to be abandoned in place shall be cut and removed from areas where new Work is being installed.
- B. Cap or plug abandoned existing drain lines below grade in a yard box and according to CBC.

#### 3.16 TESTS AND INSPECTIONS

- A. Provide labor, equipment, materials, test equipment and incidentals required for performing required field tests.
- B. Tests shall not be performed for five days after concrete thrust blocks have been installed.
- C. Testing Procedure: Water mains and service lines shall be tested in accordance with applicable specified standard.

- 1. Test PVC plastic water system in accordance with UBPPA UNI-B-3 for pressure and leakage. The amount of leakage from PVC piping shall not exceed the amounts given in UBPPA UNI-B-3, except that no leakage is permitted for joints installed with sleeve type mechanical couplings.
- 2. Test water service lines in accordance with applicable requirements of AWWA C600. No leakage is permitted.
- 3. Pressure testing: Before pressure test, fill portion of piping being tested with water for a minimum of 24 hours. Provide hydrostatic pressure of at least 50 psi greater than the maximum working pressure of tested system, but no less than 200 psi hydrostatic test pressure for system piping of 2-inch in diameter and larger. Provide and maintain hydrostatic test pressure for at least two hours to ensure no leakage of any portion of piping or appurtenances under pressure test.

#### 3.17 CLEANING

A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

#### 3.18 PROTECTION

A. Protect the Work of this section until Substantial Completion.

**END OF SECTION**