## PROJECT DIRECTORY

#### **OWNER INFO**

CHABOT–LOS POSITAS CCD CONTACT PERSON: MICHAEL GARR 7600 DUBLIN BLVD DUBLIN, CA 94568 PH: 510.723.7637 EMAIL: MGARR@CLPCCD.ORG

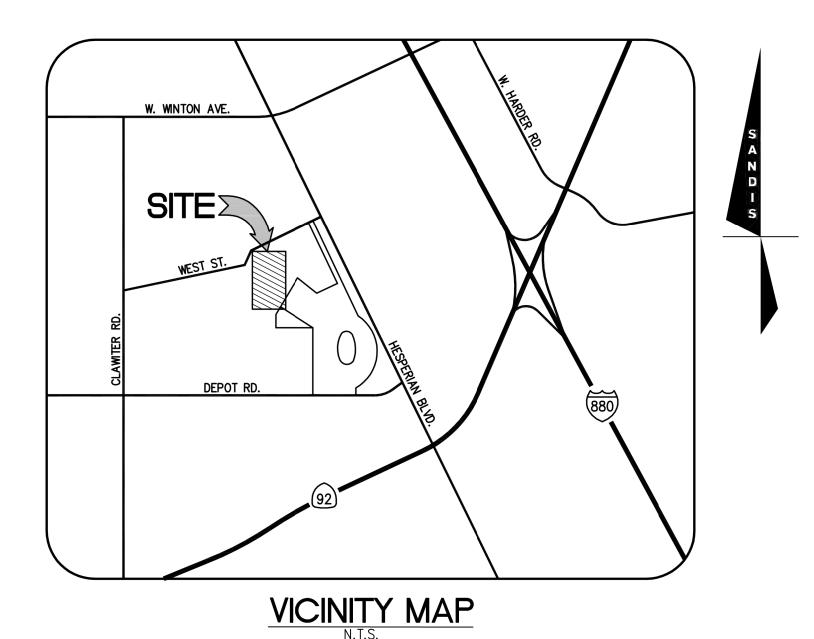
## **CIVIL ENGINEER**

SANDIS CONTACT PERSON: BRIAN CANCIMILLA 636 9TH STREET OAKLAND, CA 94607 PH: 510.873.8866

# CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT CHABOT COLLEGE 25555 HESPERIAN BLVD, HAYWARD, CA 94545

## FIRE WATER UPGRADE PROJECT DSA # 01-120049

DSA SUBMITTAL MARCH 24, 2022





CHABOT FIRE WATER UPGRADE PROJECT PROPOSES TO INSTALL A NEW FIRE WATER LINE LINKING THE MAIN CAMPUS FIRE WATER NETWORK TO THE BASEBALL LATERAL OFF OF WEST STREET. PROJECT SHALL CONSIST OF UTILITY INSTALLATION AND SURFACE RESTORATION.

#### SHEET INDEX

G-001	COVER SHEET
C-001	NOTES, LEGEND, AND ABBREVIATIONS
C-002	KEY MAP
C-101	TOPOGRAPHIC SURVEY
C-102	TOPOGRAPHIC SURVEY
C–103	TOPOGRAPHIC SURVEY
C–104	TOPOGRAPHIC SURVEY
C–105	TOPOGRAPHIC SURVEY
C–201	UTILITY PLAN AND PROFILE
C-202	UTILITY PLAN AND PROFILE
C-203	UTILITY PLAN AND PROFILE
C-204	UTILITY PLAN AND PROFILE
C–205	UTILITY PLAN AND PROFILE
C–301	CONSTRUCTION DETAILS
C-302	CONSTRUCTION DETAILS

## RADTIAL LICT OF ADDILOADLE OODEO AC OF LANUADY A OOO

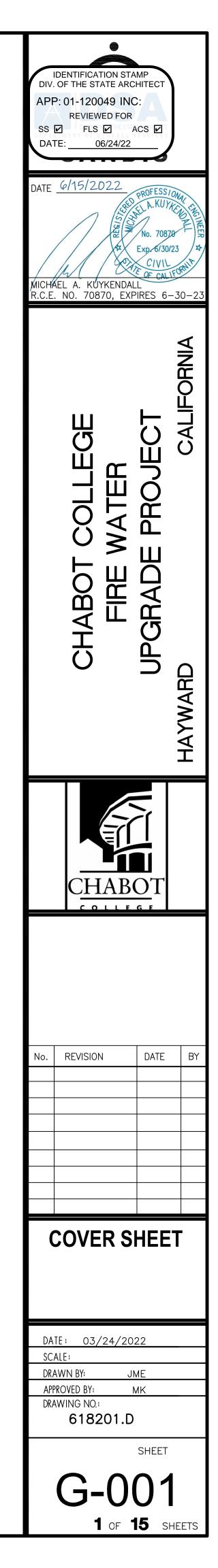
PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2020*	
2019 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR*	
2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR	
(2018 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2019 CALIFORNIA AMENDMENTS)	
2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR	
(2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS)	
2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR	
(2018 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)	
2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR	
(2018 IAPMO UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)	
2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR	
2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR	
(2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS)	
2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR	
(2018 INTERNATIONAL EXISTING BUILDING CODE (CEBC), PART TO, TITLE 24 CCR	
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE AND 2019 CALIFORNIA AMENDMENTS)	
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART IT, TITLE 24 CCR 2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR	
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS	
2016 ASME A17.1/CSA B44–13 SAFETY CODE FOR ELEVATORS AND ESCALATORS (PER 2019 CBC PART 2 CH 35)	
NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION	
PARTIAL LIST OF APPLICABLE STANDARDS	
NFPA 13 – STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	N
NFPA 14 – STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS (CA AMENDED)	
NFPA 17 – STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS	
NFPA 17A – STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS	
NFPA 20 - STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION	
NFPA 22 - STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION	V
NFPA 24 - STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND	<b>1 A</b> /
THEIR APPURTENANCES (CA AMENDED)	7V NA 1
NFPA 72 – NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)	//V )///
NFPA 200 – STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES	
UL 300 – STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS (CA AMENDED)	/ V
PROTECTION OF COMMERCIAL COOKING EQUIPMENT	(נ
UL 464 – AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS,	<i>'</i>
INCLUDING ACCESSORIES	J
UL 521 – STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	
UL 1971 – STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	)
ICC 300 – STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	
FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2019 CBC (SFM) CHAPTER 35 AND CALIFORNIA	
FIRE CODE CHAPTER 80.	

FIRE CODE CHAPTER 80.

\*ALL PARTS OF THE 2019 CALIFORNIA BUILDING CODE BECOME EFFECTIVE JANUARY 1, 2020 EXCEPT THE EFFECTIVE DATE FOR THE USE OF THE 2019 BUILDING ENERGY EFFICIENCY STANDARDS (TITLE 24, PART 1, CHAPTER 10) IS JANUARY 8, 2019 AND THE EFFECTIVE DATE FOR THE USE OF THE CALIFORNIA ADMINISTRATIVE CODE (TITLE 24, PART 1, CHAPTER 4) IS JANUARY 8, 2019.

#### APPLICABLE CODES AND REGULATIONS

SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.



	EXISTING	PROPOSED	
SAWCUT AND CONFORM LINE			AB AC AD
RETAINING WALL			ADA ASB
A.C. PAVEMENT			BC BFP
CONC. VALLEY GUTTER			BLDC BLDG
CONC. SIDEWALK OR PAD			BOD BOL
6" CURB & GUTTER			BOS BOW
EDGE OF A.C. PAVEMENT	EP~		BVC BW
6" VERTICAL CURB			C C&G
CENTER LINE			CB CI
SANITARY SEWER MAIN		<u> </u>	CIP CL
STORM DRAIN MAIN	SD	<u> </u>	CMP CO
PERFORATED PIPE	- <sup>11</sup>	$\frac{-6^{"}}{6^{"}}SD$	CONC CONST
WATER MAIN	6"W	W	CY DCDA
FIRE WATER MAIN	<u>6</u> "FW	<u>4</u> <i>FW</i>	DI DIP
DOMESTIC WATER MAIN	6" DW	DW	DOM DW
CHILLED WATER MAIN	CHW	<u>4</u> <i>4</i> " <i>UPP</i>	DWG E
IRRIGATION LINE	IRR		E EC EP
HOT WATER SUPPLY & RETURN	——HWS-HWR——	——————————————————————————————————————	EP ER EVC
STEAM LINE	ST	ST	ELEV
TRENCH DRAIN			EX., EXI FC FDC
CONDENSATE RETURN	CR	CR	FDC FF
METAL BEAM GUARD RAIL		O O	FG FH Fl
SILT FENCE		oo	FL FOUND
FLOW LINE			FS FT
CHAIN LINK FENCE	× ×	××	FW G
GAS MAIN	G	<u> </u>	GB GV
ELECTRIC AND SIGNAL DUCT BANK	———— E ———	——————————————————————————————————————	HCR HP
OVERHEAD ELECTRIC LINE	OHE		INV JP
INDERGROUND ELECTRIC LINE	UGE		JT LIP
STREET LIGHT CONDUIT	SL	<i>SL</i>	LP LSA
CONTOUR ELEVATION LINE		<u> </u>	MAX MEP
SPOT ELEVATION	x 95.94	FG 95.94	MH MIN
DIRECTION OF SLOPE	10	2:1 1%	MPVC MON
GAS METER	G	GM	N N.I.C.
GAS VALVE	GV	GV	NO NTS
WATER METER		WM	P PCC
WATER VALVE	₩V o	WV	PIV
FIRE HYDRANT	<b>10+</b>	ж	PL PMH
BACK FLOW PREVENTOR			POC PP
POST INDICATOR VALVE	PIV O	PIV	PRC PVC
FIRE DEPARTMENT CONNECTION	Ъс.		R RC
WATER LINE TEE		,±,	RCP RPPA
CAP AND PLUG END			R/W S
AIR RELEASE VALVE		■ ARV	S.A.D. SB
SIGN	c	4	SD SD S.E.D.
ACCESSIBLE RAMP			S.E.D. SF SG
CONCRETE THRUST BLOCK		<b>—</b>	S.L.D.
REDUCER			S.M.D. SMH
SANITARY SEWER MANHOLE	$\bigcirc$	$\bullet$	S.P.D. SS
SANITARY SEWER CLEANOUT	ssço	SSCO	STA STD
STORM DRAIN MANHOLE	$\odot$	lacksquare	S/W TC
STORMCEPTOR		$\bigcirc$	TD TOD
STORM DRAIN AREA DRAIN			TOE TOS
STORM DRAIN CATCH BASIN	□СВ		TOW TS
STORM DRAIN CURB INLET			TYP UON
STORM DRAIN CLEANOUT	SDCO	SDCO	U/G VC
ELECTROLIER	G————————————————————————————————————	œ—券 <del>⋩ œ 救</del>	WM WV
JOINT POLE	JP -0-	-0-	W
			WWF

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for iob site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged in connection with the performance of work on this project, excepting liability arising from sole negligence of design professional.

#### UNAUTHORIZED CHANGES AND USES

**CAUTION**: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of the plans.

ABBREVIATIONS – AGGREGATE BASE – ASPHALT CONCRETE – AREA DRAIN – AMERICANS WITH DISABILITIES ACT – AGGREGATE SUBBASE - BEGINNING OF CURVE - BACK FLOW PREVENTOR – BUILDING CORNER – BUILDING - BOTTOM OF DOCK – BOLLARD - BOTTOM OF STEP - FG @ BOTTOM OF WALL – BEGIN VERTICAL CURVE – BACK OF WALK - CONCRETE OR CIVIL – CURB AND GUTTER – CATCH BASIN – CURB INLET – CAST IRON PIPE - CENTER LINE OR CLASS – CORRUGATED METAL PIPE – CLEANOUT – CONCRETE - CONSTRUCTION OR CONSTRUCT – CUBIC YARD - DOUBLE CHECK DETECTOR ASSEMBLY – DROP INLET – DUCTILE IRON PIPE – DOMESTIC – DOMESTIC WATER – DRAWING – EAST - END OF CURVE - EDGE OF PAVEMENT – END OF RETURN

– END VERTICAL CURVE – ELEVATION EX., EXIST. – EXISTING – FACE OF CURB

> - FIRE DEPARTMENT CONNECTION – FINISHED FLOOR – FINISHED GRADE – FIRE HYDRANT FLOW LINE

– FOUNDATION – FINISHED SURFACE

– FOOT

– NORTH

– FIRE WATER - GROUND ELEVATION – GRADE BREAK

– GATE VALVE - ACCESSIBLE RAMP

- HIGH POINT — INVERT ELEVATION

– JOINT POLE – JOINT TRENCH

– LIP OF GUTTER - LOW POINT

– LANDSCAPE ARCHITECT — MAXIMUM - MECHANICAL/ELECTRICAL/PLUMBING

- MANHOLE – MINIMUM - MIDPOINT OF VERTICAL CURVE - MONUMENT

- NOT IN CONTRACT

– NUMBER - NOT TO SCALE

- PAVEMENT ELEVATION – PORTLAND CEMENT CONCRETE / POINT OF CONTINUOUS CURVATURE

- POST INDICATOR VALVE - PROPERTY LINE

- POWER MANHOLE - POINT ON CURVE

– POWER POLE - POINT OF REVERSE CURVATURE - POLYVINYL CHLORIDE PIPE – RADIUS

- RELATIVE COMPACTION - REINFORCED CONCRETE PIPE - REDUCED PRESSURE PRINCIPLE ASSEMBLY - RIGHT OF WAY

- SLOPE OR SOUTH – SEE ARCHITECTURAL DRAWINGS – SEDIMENT BASIN - STORM DRAIN

- SEE ELECTRICAL DRAWINGS - SILT FENCE - SUBGRADE

- SEE LANDSCAPE DRAWINGS - SEE MECHANICAL DRAWINGS - SIGNAL MANHOLE - SEE PLUMBING DRAWINGS – SANITARY SEWER

– STANDARD – SIDEWALK - TOP OF CURB - TRENCH DRAIN - TOP OF DOCK - TOE OF SLOPE

– STATION

– WEST

— WITH

- TOP OF STAIR - FG @ TOP OF WALL - TOP OF SLAB – TYPICAL

- UNLESS OTHERWISE NOTED – UNDERGROUND - VERTICAL CURVE – WATER METER – WATER VALVE

- WELDED WIRE FABRIC

#### CONSTRUCTION NOTES

- 1. ALL OFF-SITE CONSTRUCTION MATERIAL AND METHODS SHALL COMPLY WITH THE LATEST EDITION OF THE CITY OF HAYWARD STANDARD PLANS & SPECIFICATIONS AND THE LATEST CALTRANS STANDARD SPECIFICATIONS.
- 2. WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 33 OF THE CBC & CFC, "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION".
- 3. CONTRACTOR SHALL LEAVE AN EMERGENCY PHONE NUMBER WITH THE POLICE AND FIRE DEPARTMENTS.
- 4. CONTRACTOR SHALL POST ON THE SITE, EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, AMBULANCE, POLICE. AND FIRE DEPARTMENTS.
- 5. CONTRACTOR SHALL NOTIFY ALL PUBLIC OR PRIVATE UTILITY OWNERS 48 HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO THE UTILITY UNLESS AN EXCAVATION PERMIT SPECIFIES OTHERWISE.
- 6. UTILITIES AND UNDERGROUND FACILITIES INDICATED ARE FOR INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE CITY NOR THE DESIGN PROFESSIONAL ASSUMES RESPONSIBILITY THAT THE UTILITIES AND UNDERGROUND FACILITIES INDICATED WILL BE THE UTILITIES AND UNDERGROUND FACILITIES ENCOUNTERED.
- 7. CONTRACTOR TO CONTACT UNDERGROUND SERVICE ALERT U.S.A. 800–227–2600 FORTY–EIGHT (48) HOURS PRIOR TO BEGINNING WORK TO HAVE THE LOCATION OF EXISTING UNDERGROUND UTILITIES MARKED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, LOCATE, AND PROTECT ALL UNDERGROUND FACILITIES.
- 8. THE CONTRACTOR SHALL HIRE A STREET CLEANING CONTRACTOR TO CLEAN UP DIRT AND DEBRIS FROM CITY STREETS THAT ARE ATTRIBUTABLE TO THE DEVELOPMENT'S CONSTRUCTION ACTIVITIES.
- 9. ALL GRADING SHALL BE PERFORMED IN SUCH A MANNER AS TO COMPLY WITH THE STANDARDS ESTABLISHED BY THE AIR QUALITY MAINTENANCE DISTRICT FOR AIRBORNE PARTICULATES (DUST).
- 10. ALL GRADING SHALL CONFORM TO APPROVED SPECIFICATIONS PRESENTED HEREON OR ATTACHED HERETO. ALL GRADING WORK SHALL BE OBSERVED AND APPROVED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS BEFORE BEGINNING ANY GRADING. UNOBSERVED AND UNAPPROVED GRADING WORK SHALL BE REMOVED AND REDONE AT THE CONTRACTORS EXPENSE.
- 11. ALL MATERIALS, REQUIRED FOR THE COMPLETE EXECUTION OF THE PROJECT, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
- 12. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY DURING THE CONSTRUCTION PERIOD.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY EXISTING IMPROVEMENTS OF UNDERGROUND FACILITIES DAMAGED DURING THE CONSTRUCTION PERIOD.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL ENCROACHMENT, EXCAVATION, CONCRETE ELECTRICAL, PLUMBING, ETC. PERMITS NECESSARY PRIOR TO BEGINNING CONSTRUCTION FOR ANY WORK.
- 15. THE CONTRACTOR SHALL HAVE A SUPERINTENDENT OR REPRESENTATIVE ON SITE AT ALL TIMES DURING CONSTRUCTION.
- 16. STORAGE OF CONSTRUCTION MATERIAL AND EQUIPMENT ON CITY STREETS WILL NOT BE PERMITTED.
- 17. CONSTRUCTION EQUIPMENT SHALL BE PROPERLY MUFFLED. UNNECESSARY IDLING OF GRADING CONSTRUCTION EQUIPMENT IS PROHIBITED.
- 18. CONSTRUCTION EQUIPMENT, TOOLS, ETC. SHALL NOT BE CLEANED OR RINSED INTO A STREET, GUTTER OR STORM DRAIN.
- 19. A CONTAINED AND COVERED AREA ON-SITE SHALL BE USED FOR STORAGE OF CEMENT BAGS, PAINTS, FLAMMABLE, OILS, FERTILIZERS, PESTICIDES, OR ANY OTHER MATERIALS THAT HAVE POTENTIAL FOR BEING DISCHARGED TO THE STORM DRAIN SYSTEM BY WIND OR IN THE EVENT OF A MATERIAL SPILL.
- 20. ALL CONSTRUCTION DEBRIS SHALL BE GATHERED ON A REGULAR BASIS AND PLACED IN A DUMPSTER WHICH IS EMPTIED OR REMOVED WEEKLY. WHEN FEASIBLE, TARPS SHALL BE USED ON THE GROUND TO COLLECT FALLEN DEBRIS OR SPLATTERS THAT COULD CONTRIBUTE TO STORMWATER POLLUTION.
- 21. ANY TEMPORARY ON-SITE CONSTRUCTION PILES SHALL BE SECURELY COVERED WITH A TARP OR OTHER DEVICE TO CONTAIN DEBRIS.
- 22. CONCRETE TRUCKS AND CONCRETE FINISHING OPERATIONS SHALL NOT DISCHARGE WASH WATER INTO THE STREET GUTTERS OR DRAINS.

## DISCREPANCIES

IF THERE ARE ANY DISCREPANCIES BETWEEN DIMENSIONS IN DRAWINGS AND EXISTING CONDITIONS WHICH WILL AFFECT THE WORK, THE CONTRACTOR SHALL BRING SUCH DISCREPANCIES TO THE ATTENTION OF THE ENGINEER FOR ADJUSTMENT BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FITTING OF ALL WORK AND FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND PERSONS ENGAGED UPON THIS CONTRACT.

## HAZARDOUS MATERIALS NOTE

ASBESTOS CONTAINING PIPE AND PIPE INSULATION IS KNOWN TO EXIST WITHIN THE PROJECT AREA. THE CONTRACTOR WILL PROTECT ALL ASBESTOS CONTAINING ITEMS DURING THE EXECUTION OF THIS CONTRACT. ADDITIONALLY THE CONTRACTOR WILL COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS REGARDING CONSTRUCTION ACTIVITIES NEAR ASBESTOS CONTAINING MATERIALS.

## UTILITY/POTHOLE NOTE

THE TYPES, LOCATIONS, SIZES AND /OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ARE APPROXIMATE AND WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND FACILITIES AND UTILITIES BY POTHOLING PRIOR TO COMMENCING CONSTRUCTION.

#### BENCHMARK NOTE

THE BASIS OF ELEVATION FOR THIS SURVEY IS A CITY OF HAYWARD BENCHMARK LOCATED AT THE INTERSECTION OF HESPERIAN BOULEVARD AND CATHY WAY. ELEVATION = 39.40 FEET

#### BOUNDARY NOTE

THE CHABOT BOUNDARY IS BASED ON LEGAL DESCRIPTION PER BOOK 1126 O.R. PAGE 821, ALAMEDA COUNTY RECORDS.

MONUMENTS WERE FOUND LOCATING CL OF HESPERIAN BOULEVARD ON OUR EASTERLY BOUNDARY, AND THE SOUTHERLY LINE OF TRACT 1407, WHICH IS OUR NORTHERLY BOUNDARY. THE WESTERLY BOUNDARY WAS ESTABLISHED BY FINDING PROPERTY PIPES ON BOTH SIDES OF THE COURSE SHOWN ON TRACT 6713 AS "N78-02-25E 221.80'" THE METES AND BOUNDS DESCRIPTION PER DEED CONNECTED CENTERLINE MONUMENTS ON HESPERIAN BOULEVARD ON OUR EASTERLY LINE, AND THE EXTERIOR BOUNDARY OF TRACT 6713 ON OUR WESTERLY LINE, TO THE ORIGINAL CENTERLINE OF DEPOT ROAD, WHEN IT WAS A 50' RIGHT-OF-WAY. (DATA TAKEN FROM TITLE REPORT SUPPLIED BY OWNER, DATED APRIL 27, 1964.)

#### ADA NOTES

1. ALL SITE WORK SHALL BE IN CONFORMANCE WITH TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS, CALIFORNIA BUILDING CODE CHAPTER 11B, AND WITH THE AMERICANS WITH DISABILITIES ACT.

2. CURB RAMPS SHALL NOT EXCEED A SLOPE OF 1:12 (8.33%).

3. PATH OF TRAVEL TO BUILDINGS SHALL NOT EXCEED A SLOPE OF 1:20 (5%) UNLESS RAILINGS ARE SHOWN ON ARCHITECTURAL PLANS, IN WHICH CASE THE SLOPE SHALL NOT EXCEED 1:12 (8.33%).

4. A 2% MAXIMUM SLOPE LANDING SHALL BE PROVIDED AT PRIMARY ENTRANCES TO BUILDINGS, THE LANDINGS SHALL HAVE A MINIMUM WIDTH OF 60" AND A MINIMUM DEPTH OF 60" WHEN THE DOOR OPENS INTO THE BUILDING. AND 42" PLUS THE WIDTH OF THE DOOR WHEN THE DOOR OPEN ONTO THE LANDING.

5. RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES OF 1:20 (5%) AND 1:12 (8.33%), AND SHALL HAVE A MINIMUM WIDTH OF 48" AND A MAXIMUM CROSS-SLOPE OF 2%. RAMPS EXCEEDING 2'-6" VERTICAL SHALL HAVE INTERMEDIATE (2% MAXIMUM SLOPE) LANDINGS HAVING A MINIMUM LENGTH IN THE DIRECTION OF TRAVEL OF 60". BOTTOM LANDINGS AT CHANGES IN RAMP DIRECTION SHALL HAVE A MINIMUM LENGTH OF 72".

MAXIMUM CROSS SLOPE ON ANY SIDEWALK OR RAMP SHALL BE 2%. MAXIMUM. MAXIMUM SLOPE WITHIN PARKING STALLS DESIGNATED AS ACCESSIBLE PARKING SHALL BE 2% IN ANY DIRECTION.

7. ALL SIDEWALKS SHALL HAVE A 4' MINIMUM CLEAR WIDTH FOR ACCESSIBLE CONFORMANCE.

8. GROUND FINISHES ALONG ACCESSIBLE ROUTE SHALL BE FIRM STABLE AND SLIP RESISTANT

## TRENCHLESS INSTALLATION

AT THE CONTRACTORS OPTION DIRECTIONAL DRILLING CAN BE USED FOR THE INSTALLATION OF FIRE WATER MAINS. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL SUBMIT A METHOD STATEMENT FOR THE DISTRICTS REVIEW. THE METHOD STATEMENT SHOULD INCLUDE (BUT IS NOT LIMITED TO) A MAP SHOWING THE LOCATION OF THE LAUNCH AND RECEIVING PITS, PROPOSED POTHOLE LOCATIONS FOR EXISTING UTILITIES, AND THE PROPOSED ALIGNMENT OF THE DIRECTIONAL DRILLED WATER LINES. THE CONTRACTOR MUST CCTV ALL EXISTING STORM AND SANITARY SEWER DRAINAGE LINES THAT CROSS THE ALIGNMENT OF THE DIRECTIONAL DRILLED WATER LINE BOTH PRIOR TO AND FOLLOWING COMPLETION OF THE DRILLING OPERATION. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES SUSTAINED TO THE SANITARY SEWER AND STORM DRAIN CROSSINGS DUE TO DIRECTIONAL DRILLING.

#### BASIS OF DESIGN

ALL PROPOSED FIRE WATER PIPING TO BE MECHANICALLY RESTRAINED. CONTRACTOR TO MAINTAIN A MINIMUM 3 FOOT COVERAGE OVER ANY INSTALLED WATER LINES AND VERTICAL PIPE SEPARATION OF 6 INCHES BETWEEN INSTALLED FIRE WATER LINE AND ANY EXISTING UTILITIES. A MINIMUM HORIZONTAL CLEARANCE OF 24 INCHES SHALL BE MAINTAINED BETWEEN THE INSTALLED FIRE WATER LINE AND THE ADJACENT UTILITIES ON SITE. ANY EXISTING LIGHT POLES, FOUNDATIONS AND UTILITIES SHALL BE PROTECTED UNLESS OTHERWISE SPECIFIED. TREES THAT ARE TO BE REMOVED AS PART OF THE FIRE WATER LINE INSTALLATION SHALL HAVE THEIR ENTIRE STUMP AND TRUNK REMOVED IN WHOLE.

#### UTILITY NOTES

INSTALLATIONS.

1. CONTRACTOR TO PHOTOGRAPH THE EXISTING LANDSCAPING PRIOR TO THE START OF WORK AND TO RESTORE IN KIND AT THE CONCLUSION OF CONSTRUCTION.

2. ALL JOINTS AND FITTINGS SHALL BE MECHANICALLY RESTRAINED. 3. CONTRACTOR TO INCLUDE TRACER WIRES IN ALL WATER MAIN

4. THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH A DETAILED SCHEDULE FOR ANY SERVICE INTERRUPTIONS AND SHALL NOTIFY THE OWNERS REPRESENTATIVE AT LEAST 48 HOURS PRIOR TO COMMENCING A SHUTDOWN. THE SHUTDOWN PERIOD SHALL NOT EXCEED 24 HOURS.

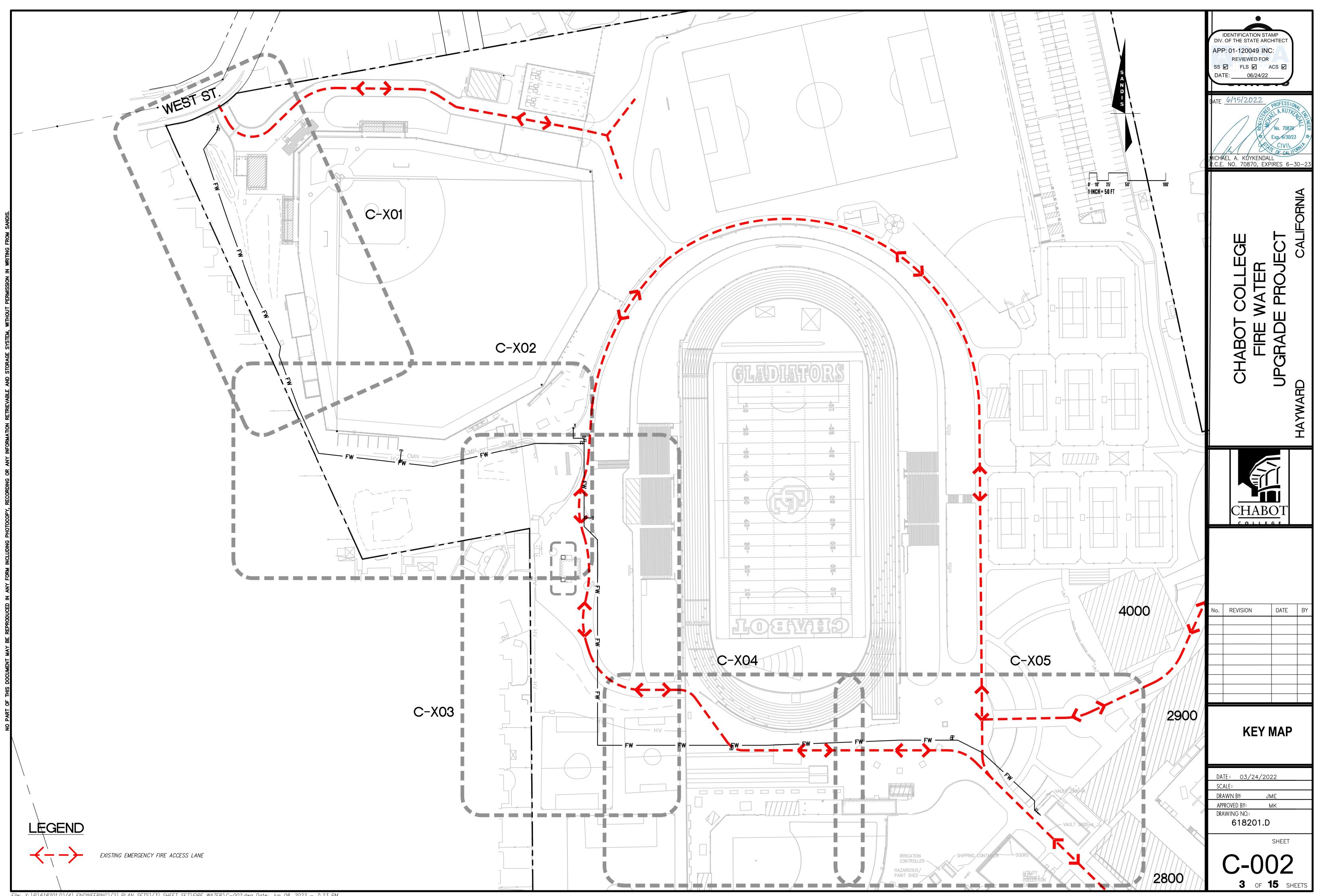
5. CONTRACTOR TO POTHOLE AND VERIFY LOCATION AND DEPTH EXISTING OF UTILITIES AT UTILITY CROSSINGS AND ADJUST DEPTH OF NEW FIRE WATER MAIN AS NECESSARY TO AVOID EXISTING UTILITIES.

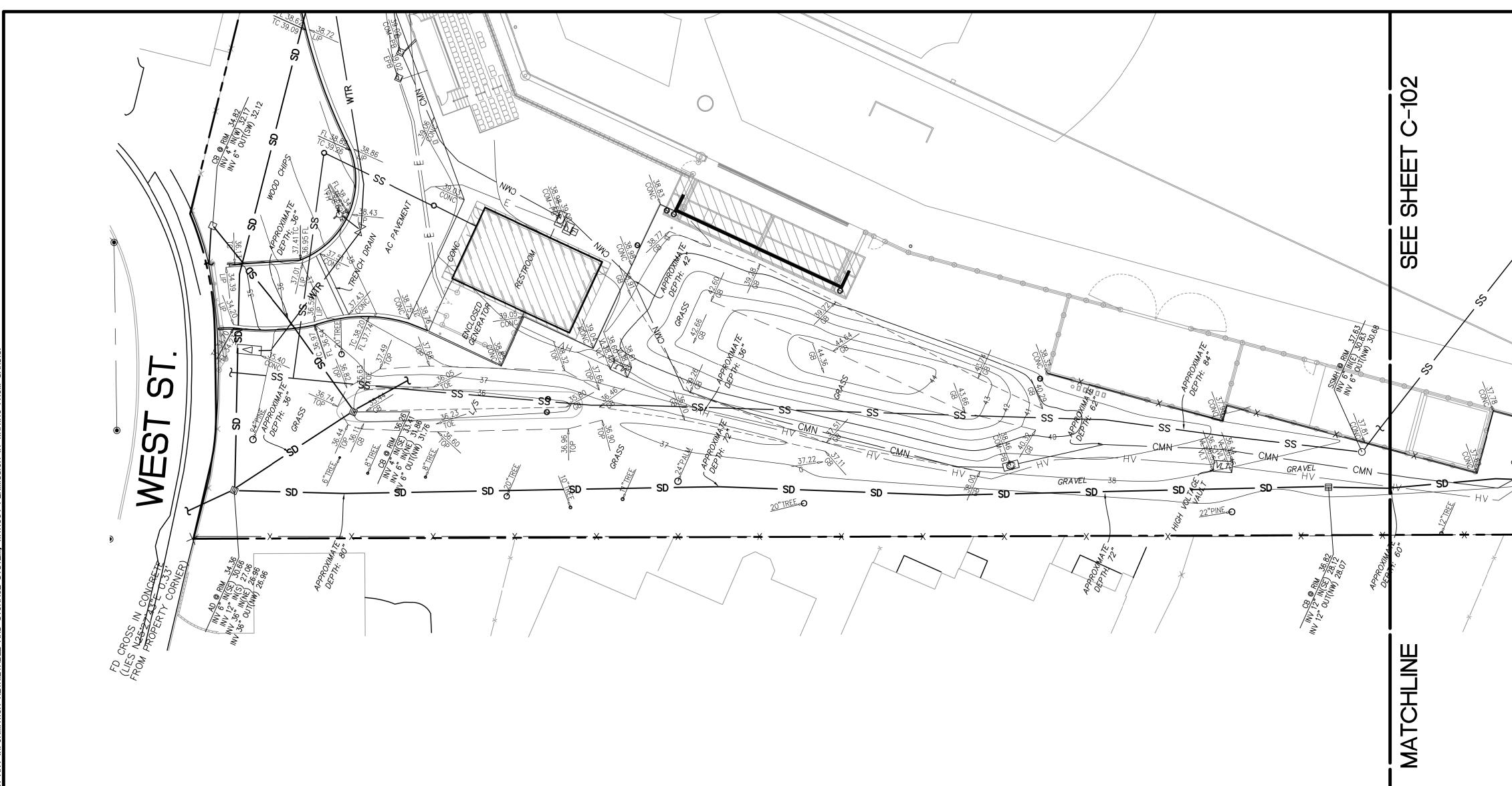
6. PER INFORMATION FROM PG&E THERE ARE NO HIGH-PRESSURE (80 PSI+) NATURAL GAS MAINS WITHIN 1.500 FT OF THE CHABOT COLLEGE CAMPUS AND THE EXTENTS OF THIS PROJECT.

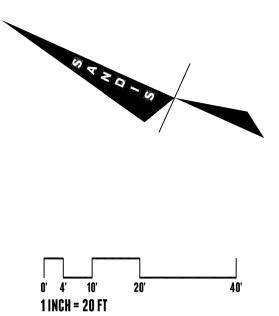


DIV. OF APP: ( SS 🗹 DATE:		TE ARC <b>19 INC</b> D FOR <u>7</u> A <u>7</u> A	HITECT ;: .cs ☑		
MICHAEL	A. KUYH	KENDAL		FORMIT	28
	CHABOT COLLEGE	FIRE WATER	UPGRADE PROJECT	HAYWARD CALIFORNIA	
	CH/				
No.	REVISION		DATE	B	Y
No.	REVISION		DATE	B	Y
NO	TES,	ND	GEN	••••••••••••••••••••••••••••••••••••••	Y
NO AB DATE	TES, A BRE		GEN	••••••••••••••••••••••••••••••••••••••	Y
NO NO AB DATE SCALE DRAW APPRO	TES, A BRE		GEN	••••••••••••••••••••••••••••••••••••••	Y
NO NO AB DATE SCALE DRAW APPRO	TES, A BRE : 03/2 : N BY: VED BY:	ND VIA 24/202 JN	GEN TIO	••••••••••••••••••••••••••••••••••••••	Y

2 OF 15 SHEETS







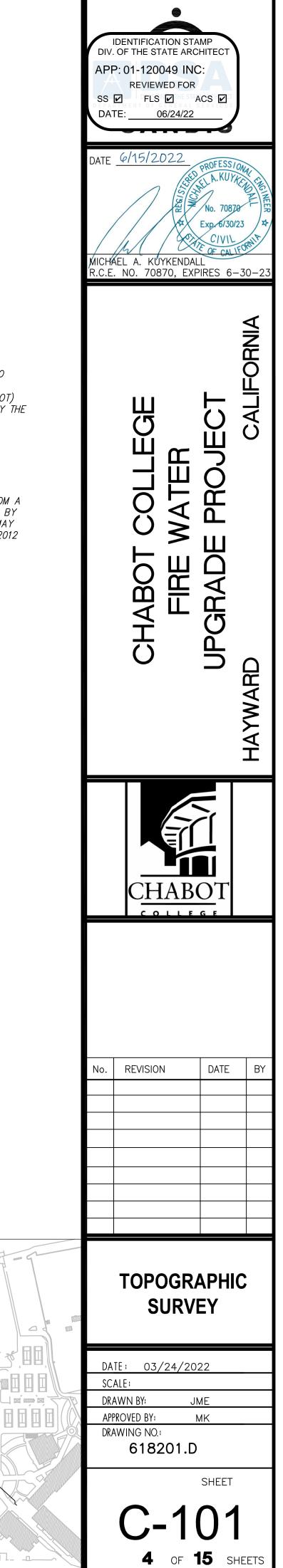
#### GENERAL NOTE

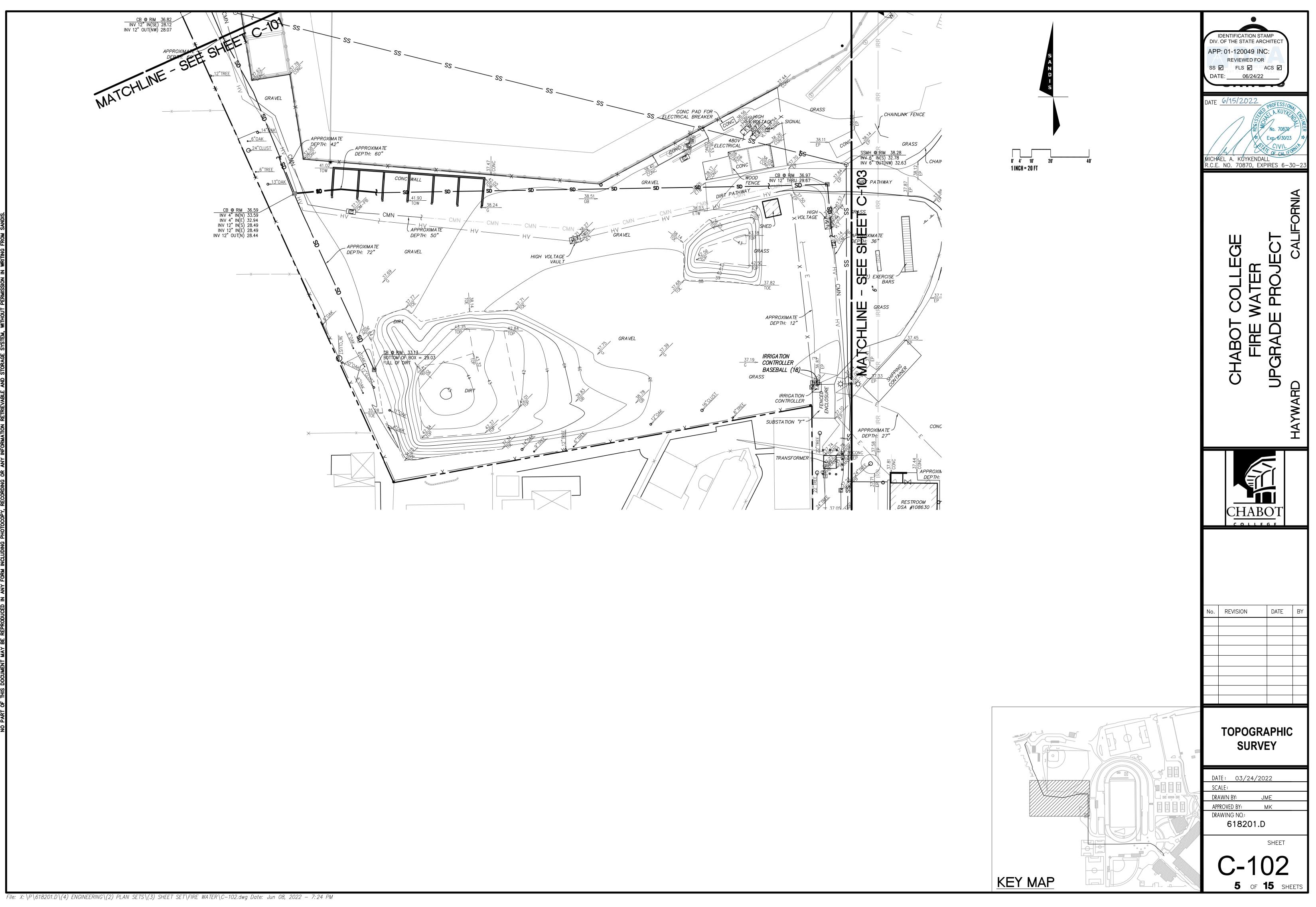
CONTRACTOR SHALL CONDUCT FIELD INVESTIGATIONS, AS REQUIRED, TO VERIFY THE LOCATION AND ELEVATION OF EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES (WHETHER SHOWN ON THE PLANS OR NOT) PRIOR TO THE COMMENCEMENT OF WORK. CONTRACTOR SHALL NOTIFY THE CIVIL DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS IN THE FIELD AND INFORMATION SHOWN ON THESE PLANS.

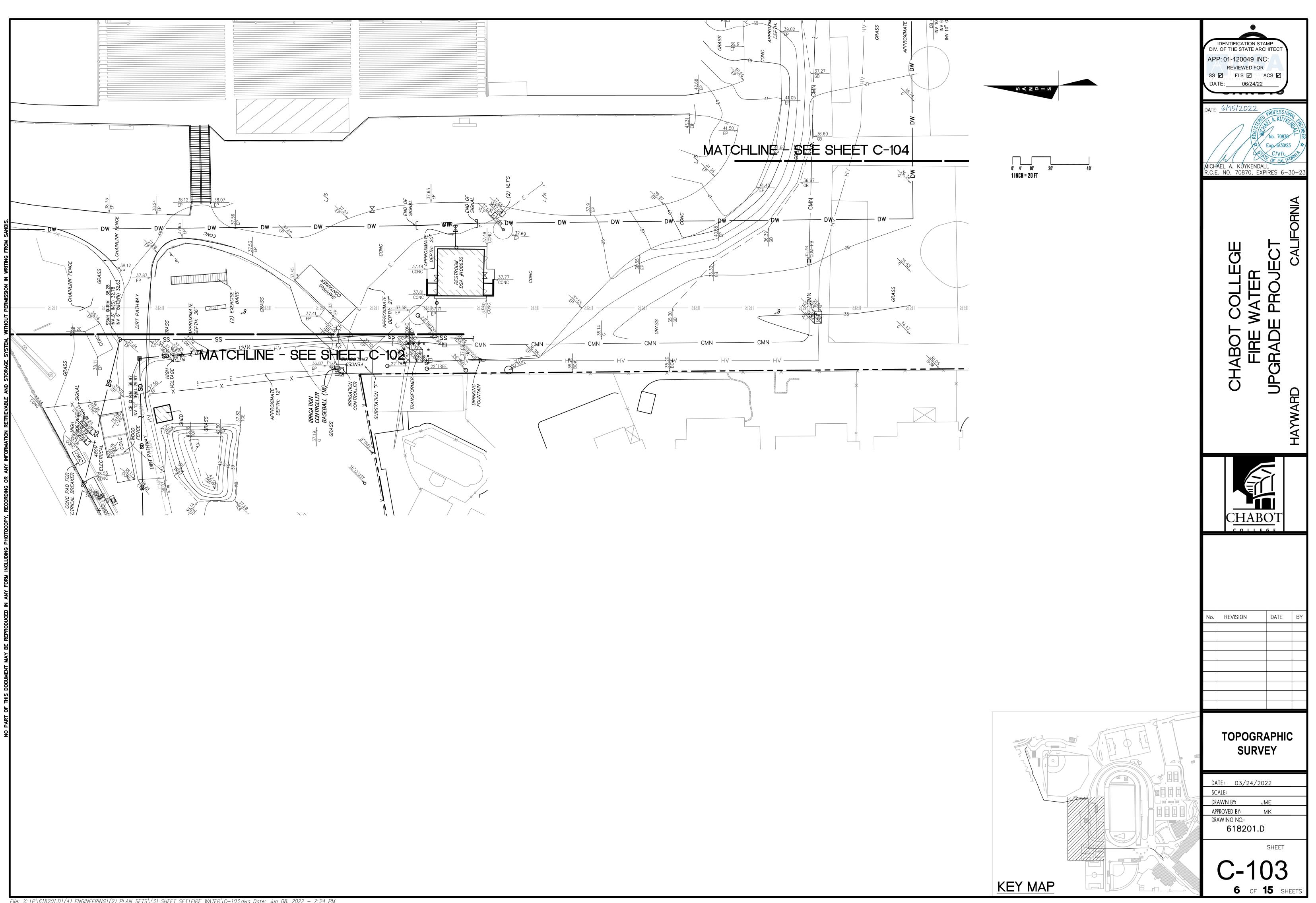
#### SURVEY NOTE

KEY MAP

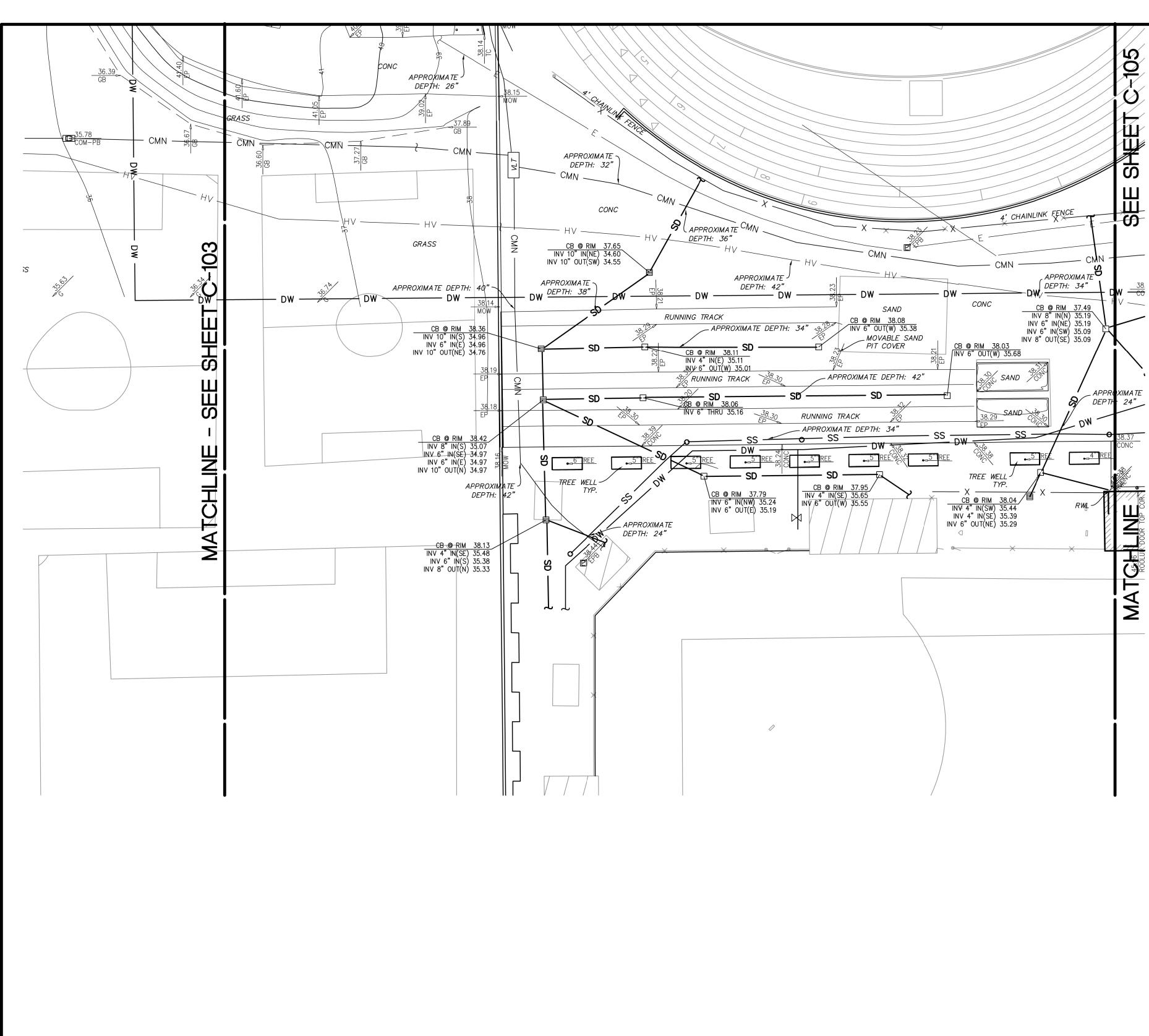
ADDITIONAL BACKGROUND INFORMATION IS SHOWN ON THIS SHEET FROM A VARIETY OF SOURCES INCLUDING A TOPOGRAPHIC SURVEY PERFORMED BY SANDIS IN 2021, DESIGN LINEWORK FROM RECORD DRAWINGS DATED MAY 2010, AND A COMPOSITE UTILITY SURVEY PERFORMED BY SANDIS IN 2012 AND UPDATED IN 2021.

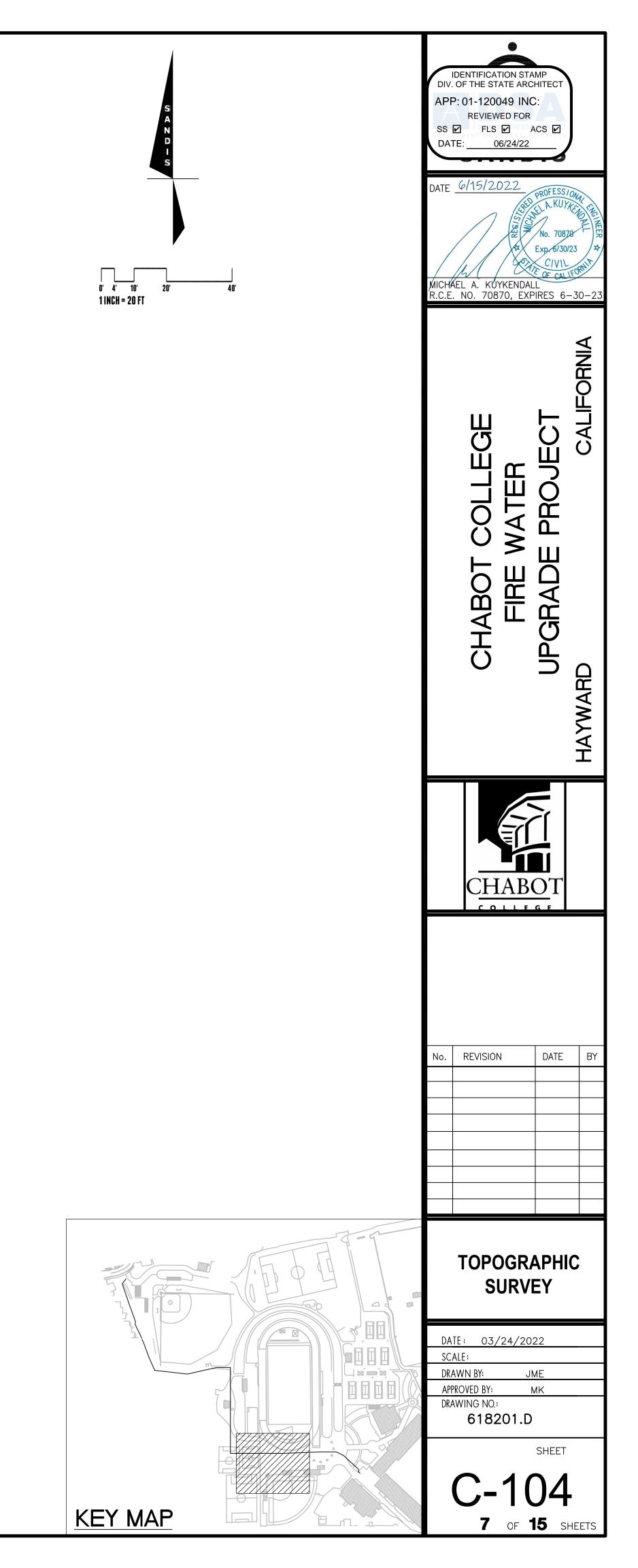


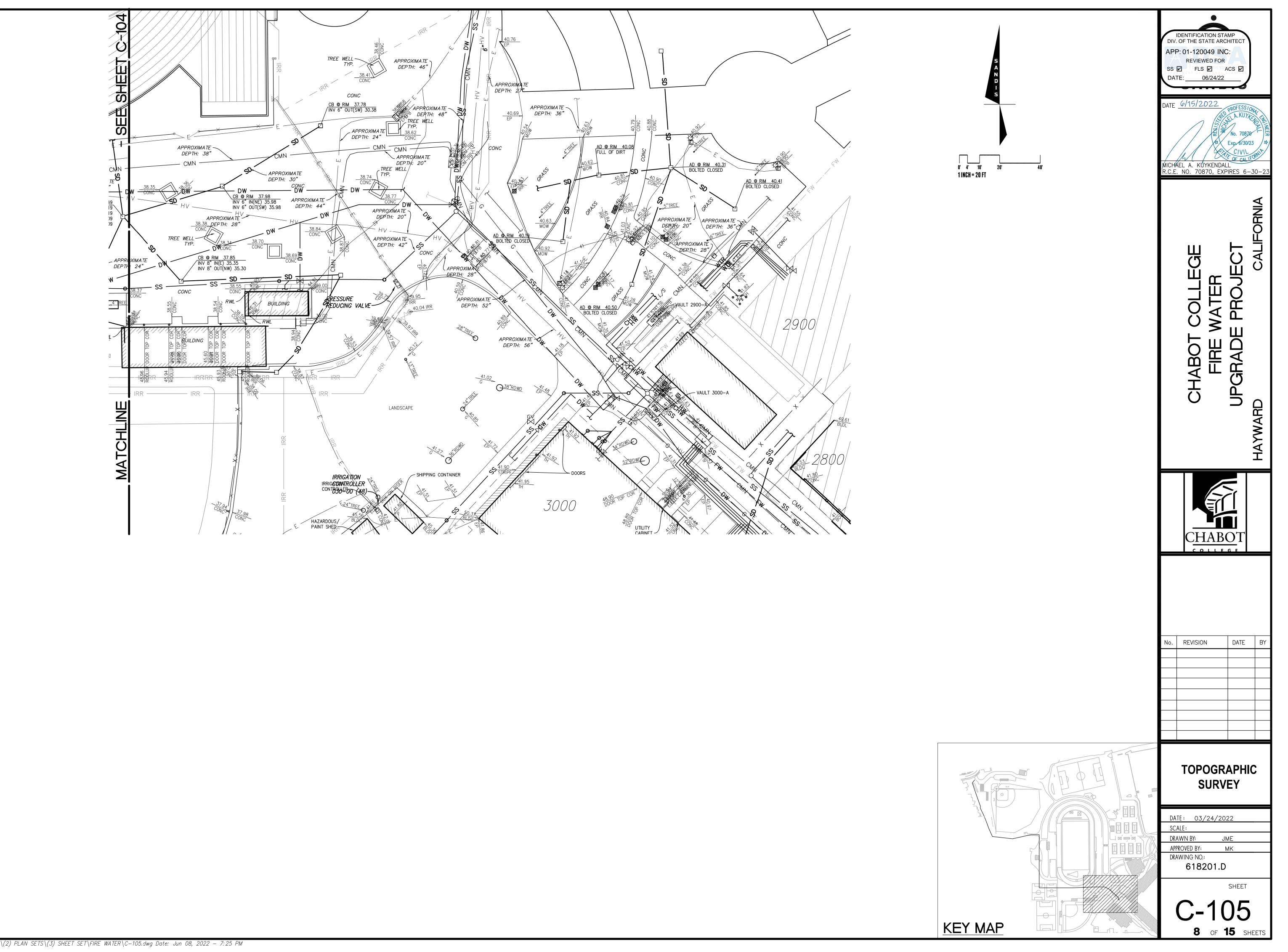


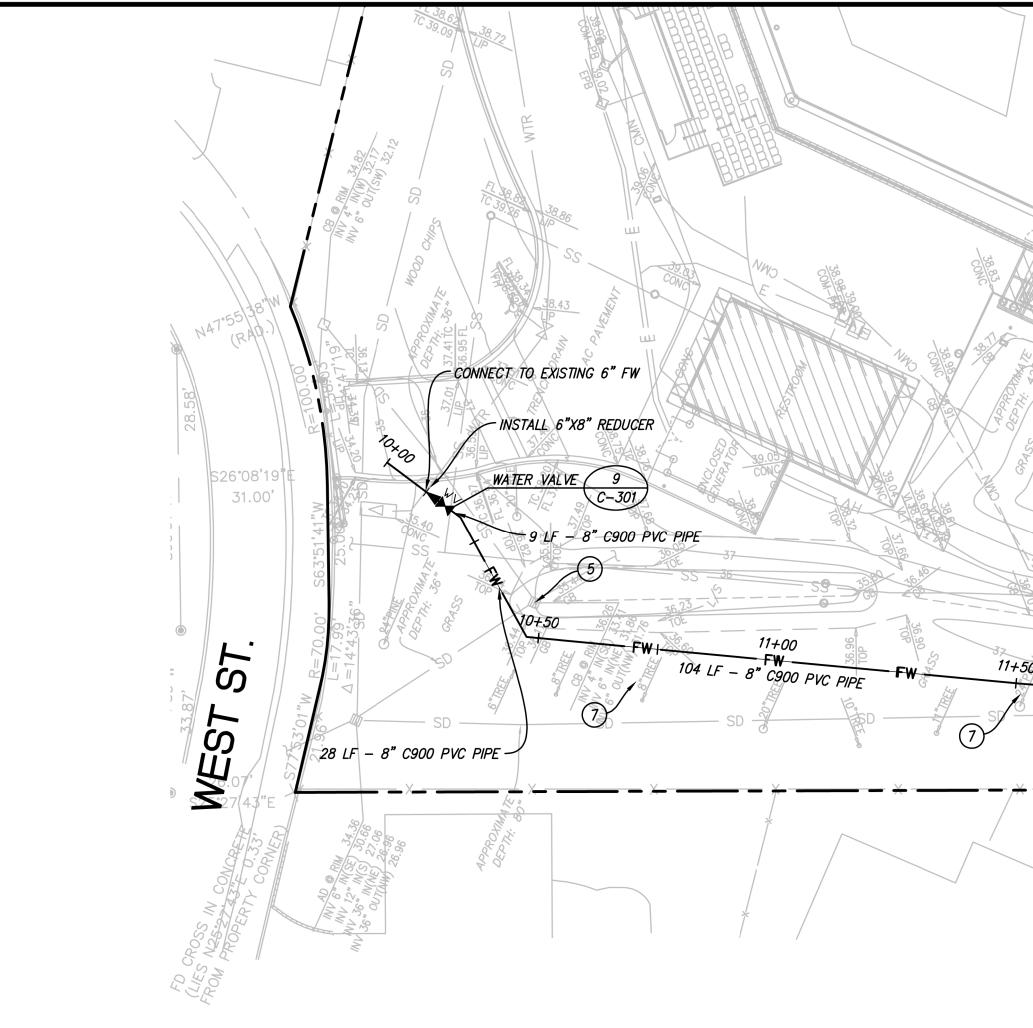


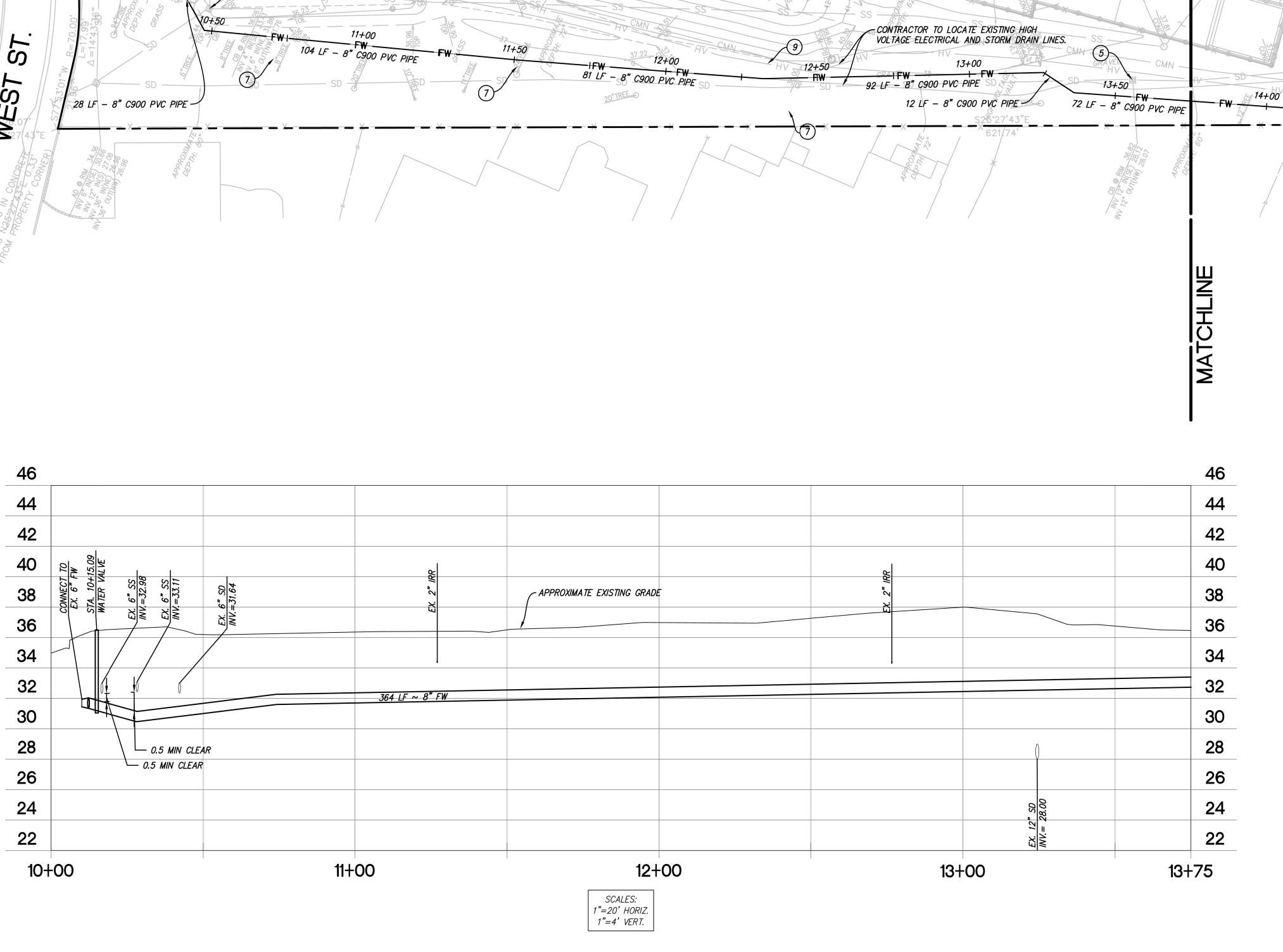
File: X:\P\618201.D\(4) ENGINEERING\(2) PLAN SETS\(3) SHEET SET\FIRE WATER\C—103.dwg Date: Jun 08, 2022 — 7:24 PM











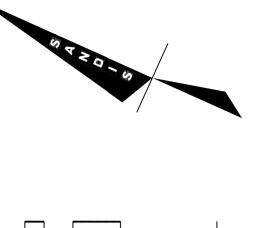
 $\bigcirc$ 

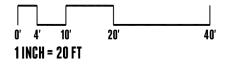
 $\mathbf{O}$ 

Ш

SHE

Ш S





#### LEGEND \_ \_ \_\_

PROPERTY LINE SAWCUT LINE PROPOSED FIRE WATER MAIN (8" C900 PVC PIPE)

——— FW ———

\_\_\_\_

AC PAVEMENT



#### TREE NOTES

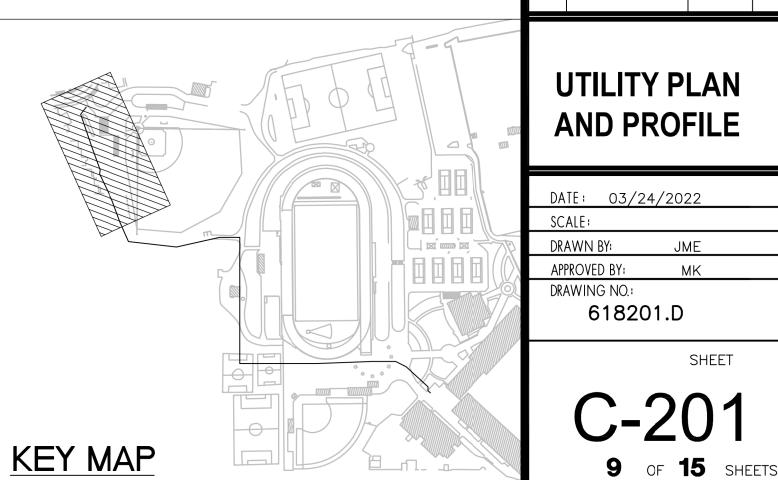
- 1. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING TREES TO THE MAXIMUM EXTENT POSSIBLE.
- 2. WHERE DIRECTIONAL BORING IS NOT POSSIBLE DUE TO EITHER DENSITY OF CROSSING UTILITIES OR RAPID CHANGES IN ALIGNMENT DIRECTION, TRENCHING FOR UTILITIES IS REQUIRED. WHERE TRENCHING FOR UTILITIES IS REQUIRED WITHIN DRIP LINES, TUNNELING UNDER AND AROUND ROOTS SHALL BE DONE BY HAND DIGGING TO MINIMIZE DAMAGE TO TREE ROOT SYSTEM.

#### GENERAL NOTES

1. ALL BELL AND SPIGOT JOINTS AND FITTINGS INCLUDING; TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES, AND HYDRANT BRANCHES, SHALL BE MECHANICALLY RESTRAINED PER DETAIL 3, SHEET C–302.

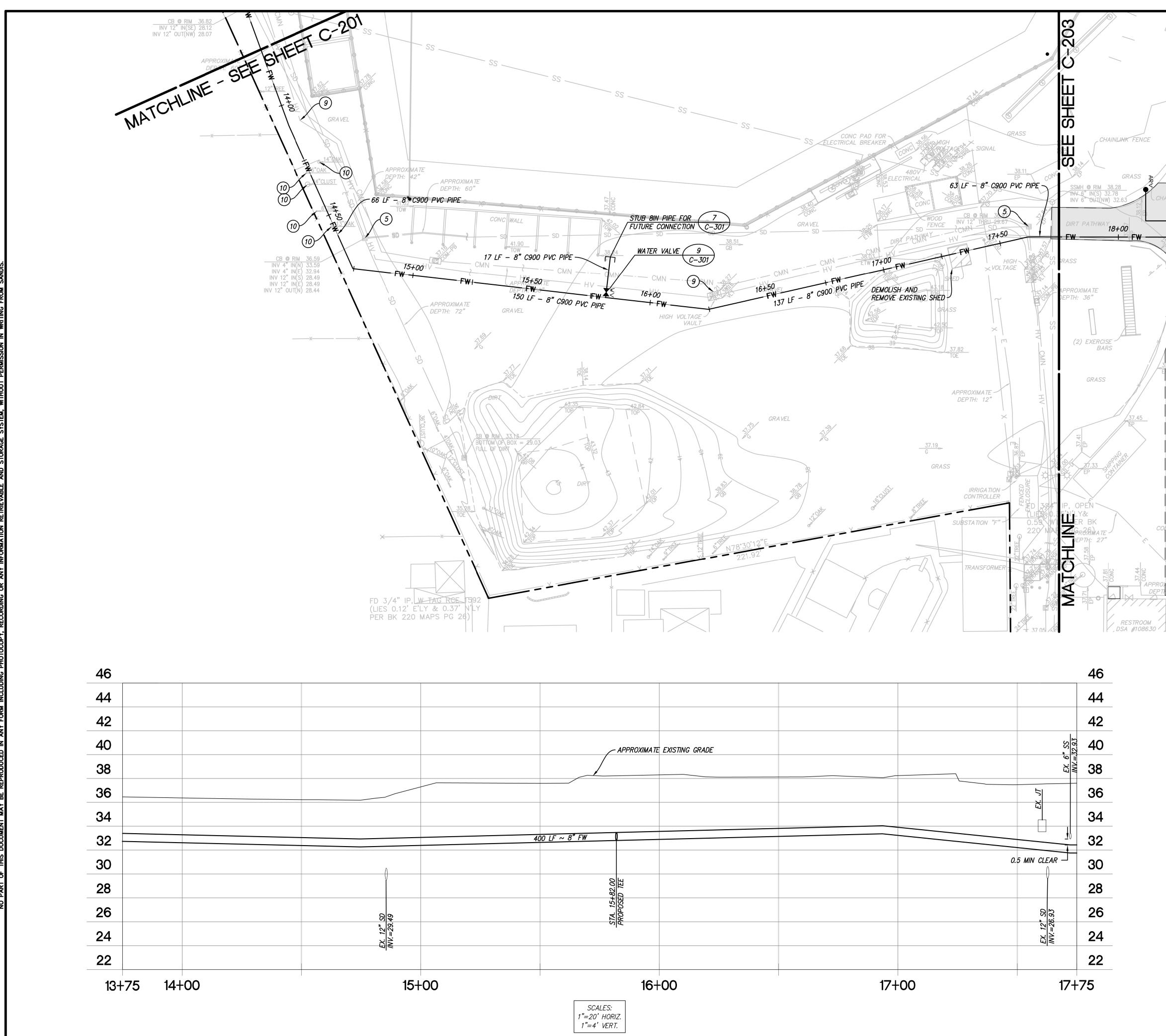
## UTILITY SHEET NOTES

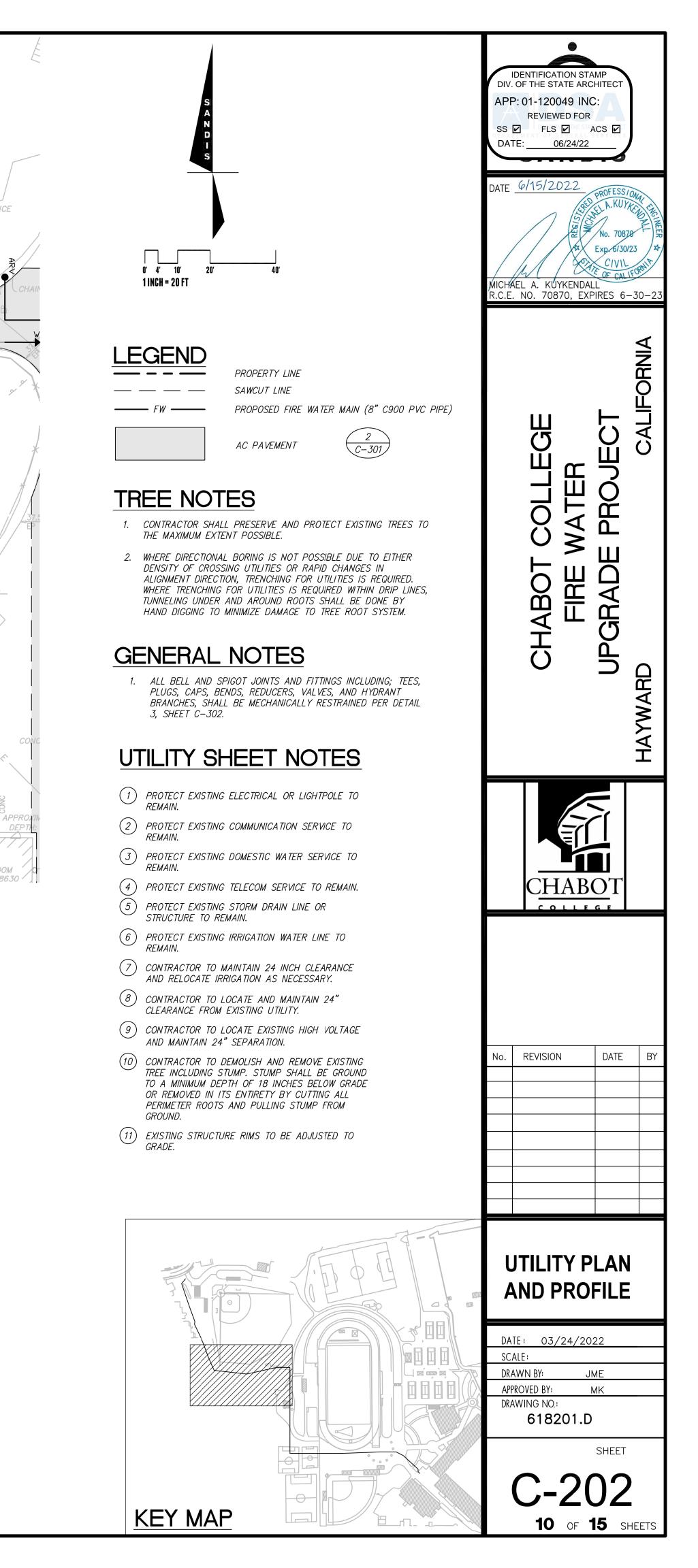
- 1 PROTECT EXISTING ELECTRICAL OR LIGHTPOLE TO REMAIN.
- 2 PROTECT EXISTING COMMUNICATION SERVICE TO REMAIN.
- 3 PROTECT EXISTING DOMESTIC WATER SERVICE TO REMAIN.
- (4) PROTECT EXISTING TELECOM SERVICE TO REMAIN.
- 5 PROTECT EXISTING STORM DRAIN LINE OR STRUCTURE TO REMAIN.
- 6 PROTECT EXISTING IRRIGATION WATER LINE TO REMAIN.
- (7) CONTRACTOR TO MAINTAIN 24 INCH CLEARANCE AND RELOCATE IRRIGATION AS NECESSARY.
- 8 CONTRACTOR TO LOCATE AND MAINTAIN 24" CLEARANCE FROM EXISTING UTILITY.
- 9 CONTRACTOR TO LOCATE EXISTING HIGH VOLTAGE AND MAINTAIN 24" SEPARATION.
- (1) CONTRACTOR TO DEMOLISH AND REMOVE EXISTING TREE INCLUDING STUMP. STUMP SHALL BE GROUND TO A MINIMUM DEPTH OF 18 INCHES BELOW GRADE OR REMOVED IN ITS ENTIRETY BY CUTTING ALL PERIMETER ROOTS AND PULLING STUMP FROM GROUND.
- (1) EXISTING STRUCTURE RIMS TO BE ADJUSTED TO GRADE.

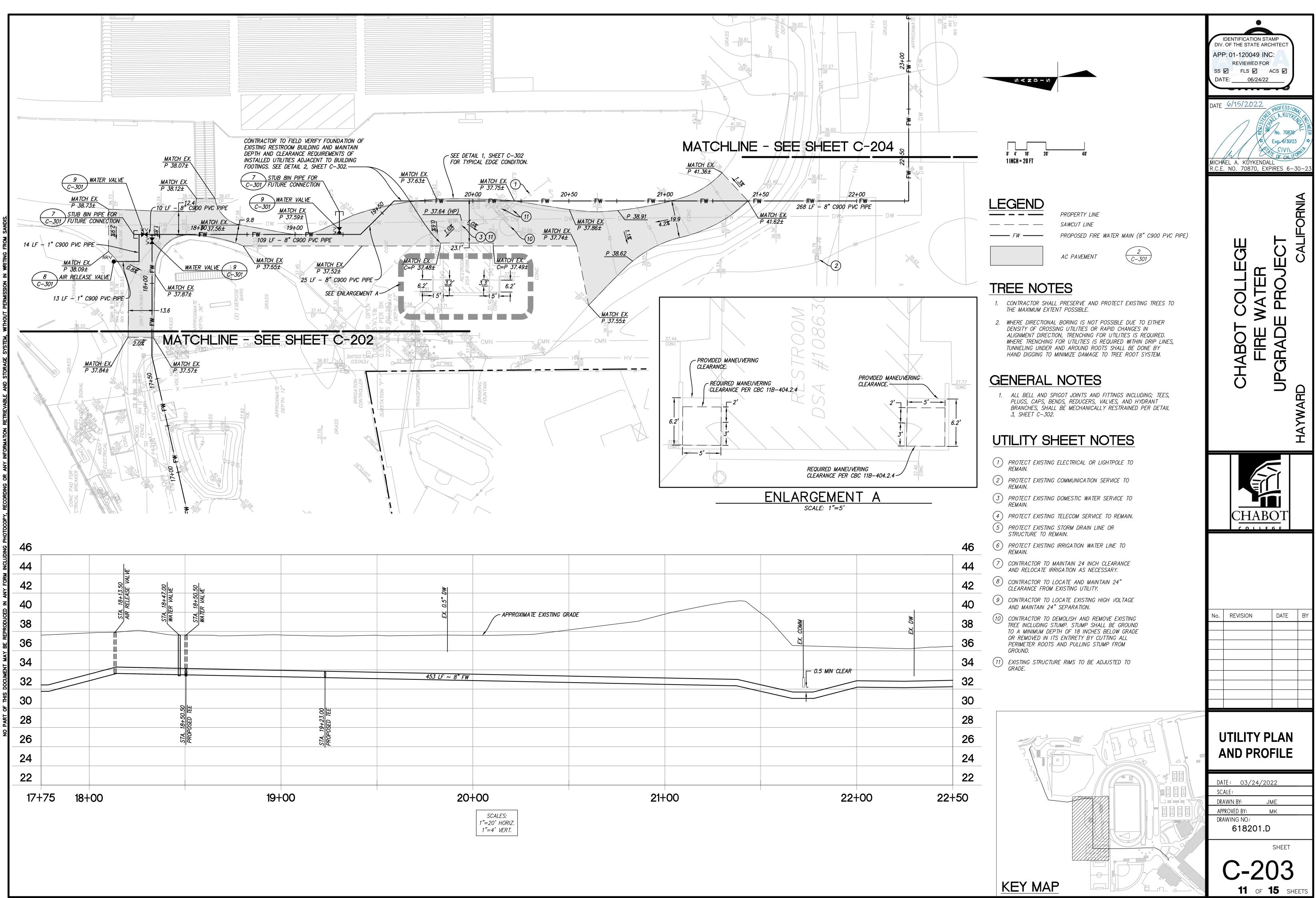


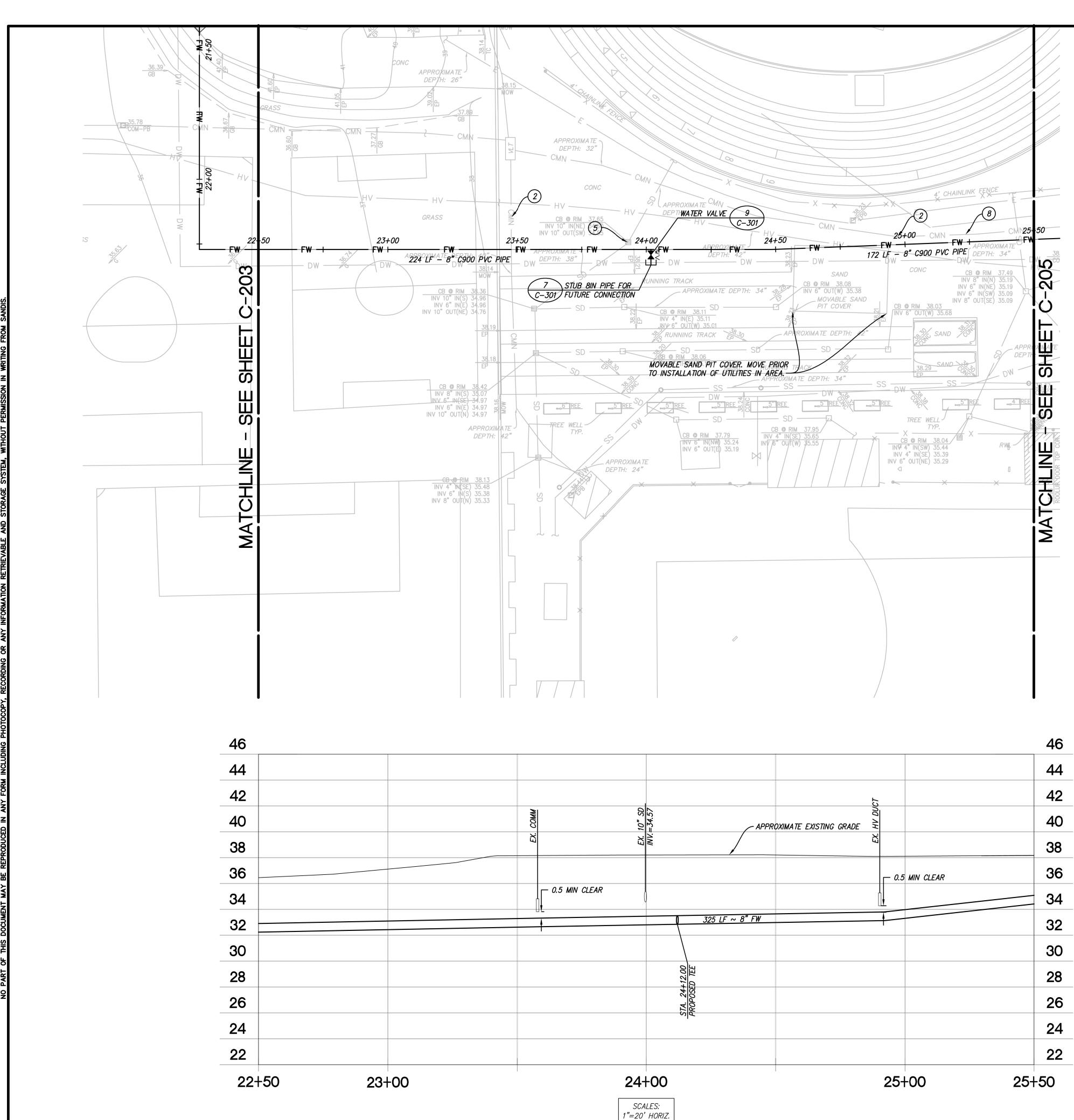
DIV. APF SS DA <sup>-</sup> DATE		ATE ARC 49 INC ED FOR 6/24/22	HITECT C: ACS PROFESS KLA.KU No. 708 Exp. 6/30 C/VIN S OF CAN	IFO	ANIP 4
	CHABOT COLLEGE	FIRE WATER	UPGRADE PROJECT		
	CH				
No.	REVISION	1	DATE		BY
No.	REVISION	I	DATE		BY
No.	REVISION		DATE		BY
		Y P			BY

SHEET

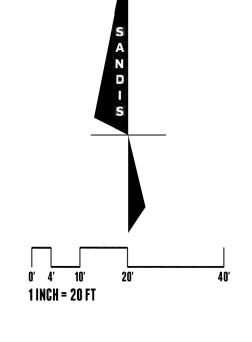








1"=4' VERT.



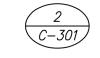
#### LEGEND

PROPERTY LINE SAWCUT LINE PROPOSED FIRE WATER MAIN (8" C900 PVC PIPE)



— FW — \_\_\_\_

AC PAVEMENT



IDENTIFICATION STAME DIV. OF THE STATE ARCHITEC

APP: 01-120049 INC:

DATE 6/15/2022

MICHAEL A. KUYKENDALL

С U

Ш

б

Ю ВО

 $\triangleleft$ 

U

4

 $\geq$ 

Ē

R.C.E. NO. 70870, EXPIRES 6-30-

DATE:

**REVIEWED FOR** SS 🗹 FLS 🗹 ACS 🗹

06/24/22

No. 70870

ORNIA

CALIF

 $\mathbf{O}$ 

Щ С

PRO

Ш

UPGRAD

CHABO

COLLEGE

No. REVISION

DATE E

A

Exp. 6/30/23

#### TREE NOTES

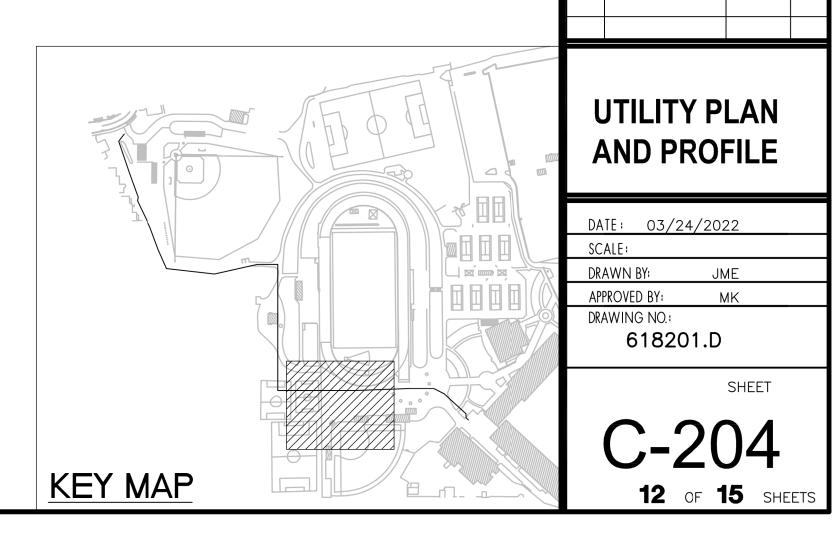
- 1. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING TREES TO THE MAXIMUM EXTENT POSSIBLE.
- 2. WHERE DIRECTIONAL BORING IS NOT POSSIBLE DUE TO EITHER DENSITY OF CROSSING UTILITIES OR RAPID CHANGES IN ALIGNMENT DIRECTION, TRENCHING FOR UTILITIES IS REQUIRED. WHERE TRENCHING FOR UTILITIES IS REQUIRED WITHIN DRIP LINES, TUNNELING UNDER AND AROUND ROOTS SHALL BE DONE BY HAND DIGGING TO MINIMIZE DAMAGE TO TREE ROOT SYSTEM.

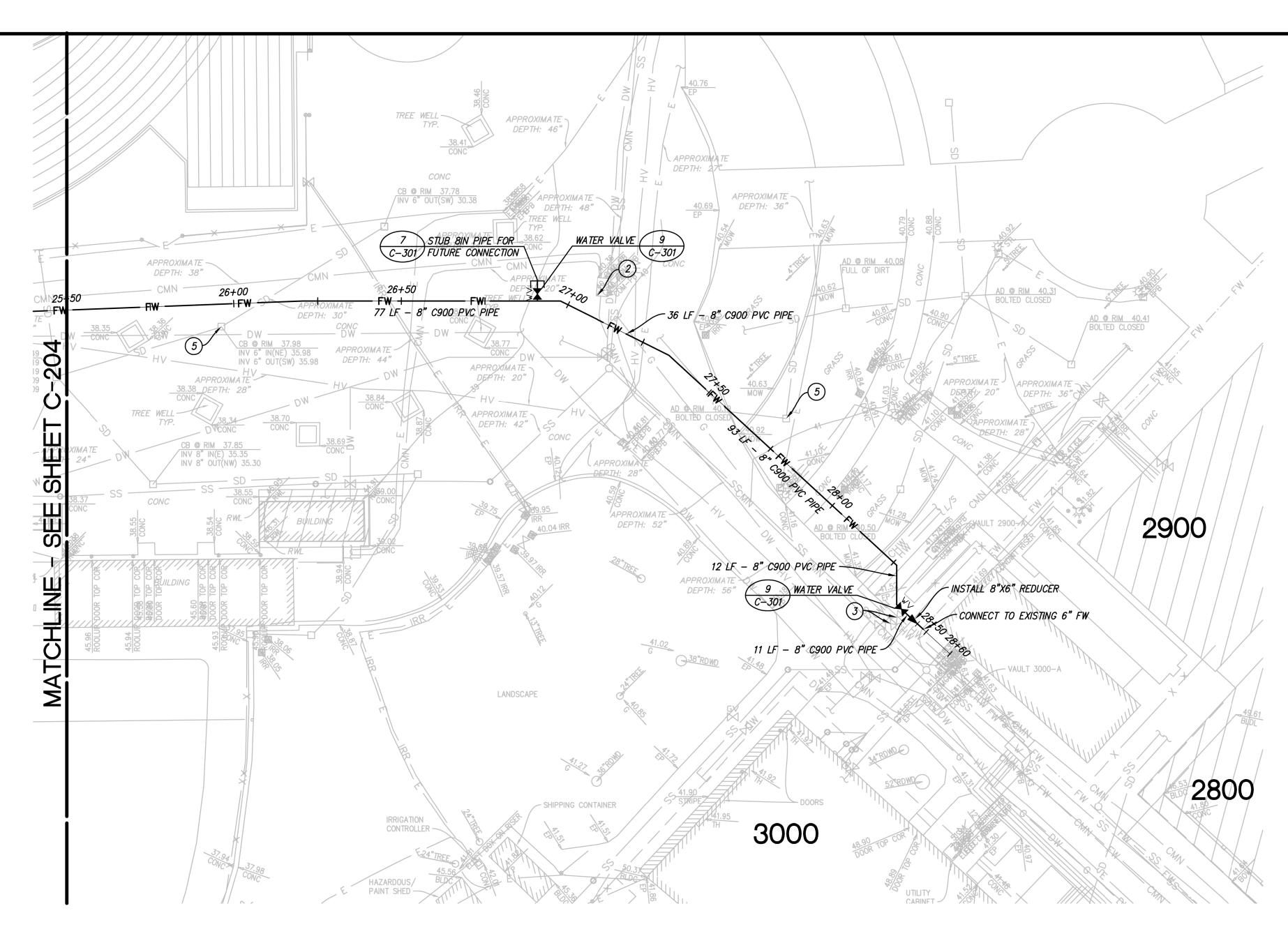
#### GENERAL NOTES

1. ALL BELL AND SPIGOT JOINTS AND FITTINGS INCLUDING; TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES, AND HYDRANT BRANCHES, SHALL BE MECHANICALLY RESTRAINED PER DETAIL 3, SHEET C-302.

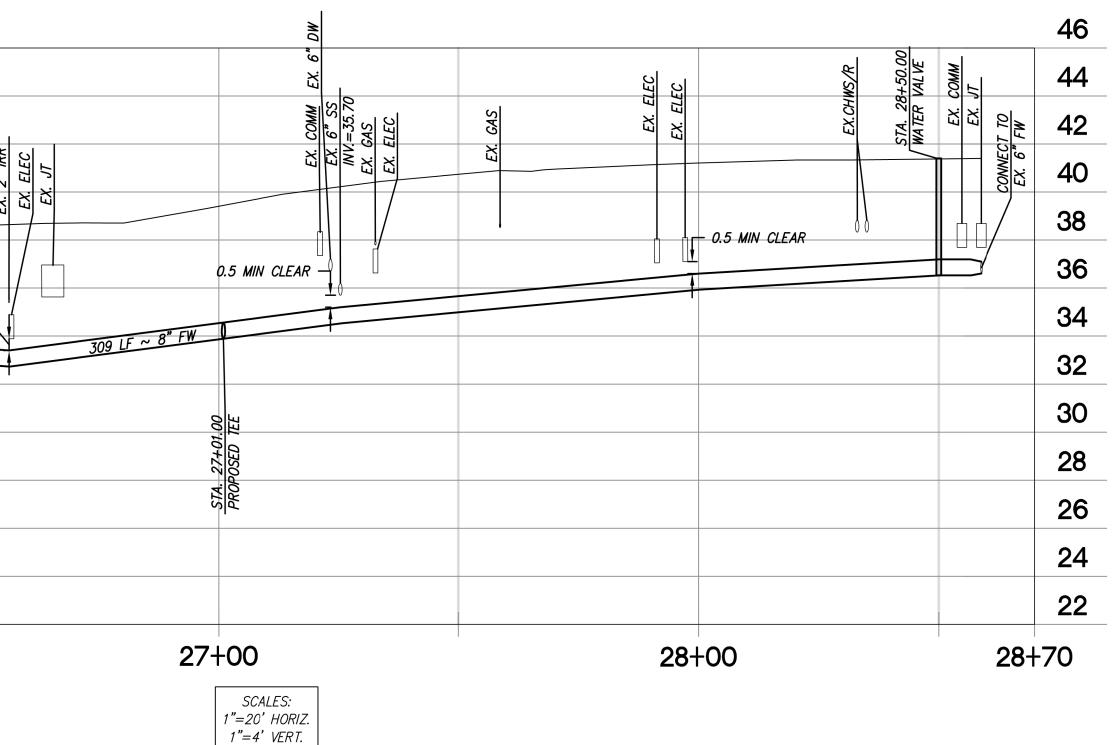
## UTILITY SHEET NOTES

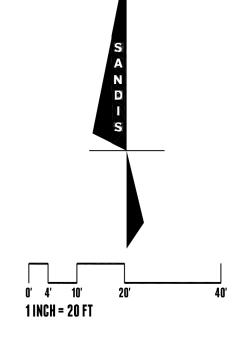
- 1 PROTECT EXISTING ELECTRICAL OR LIGHTPOLE TO REMAIN.
- 2 PROTECT EXISTING COMMUNICATION SERVICE TO REMAIN.
- 3 PROTECT EXISTING DOMESTIC WATER SERVICE TO REMAIN.
- (4) PROTECT EXISTING TELECOM SERVICE TO REMAIN.
- 5 PROTECT EXISTING STORM DRAIN LINE OR STRUCTURE TO REMAIN.
- 6 PROTECT EXISTING IRRIGATION WATER LINE TO REMAIN.
- (7) CONTRACTOR TO MAINTAIN 24 INCH CLEARANCE AND RELOCATE IRRIGATION AS NECESSARY.
- 8 CONTRACTOR TO LOCATE AND MAINTAIN 24" CLEARANCE FROM EXISTING UTILITY.
- 9 CONTRACTOR TO LOCATE EXISTING HIGH VOLTAGE AND MAINTAIN 24" SEPARATION.
- (10) CONTRACTOR TO DEMOLISH AND REMOVE EXISTING TREE INCLUDING STUMP. STUMP SHALL BE GROUND TO A MINIMUM DEPTH OF 18 INCHES BELOW GRADE OR REMOVED IN ITS ENTIRETY BY CUTTING ALL PERIMETER ROOTS AND PULLING STUMP FROM GROUND.
- (1) EXISTING STRUCTURE RIMS TO BE ADJUSTED TO GRADE.





46				
44				
42	APPI	Roximate exis		
40	EX. 8" SD IMV.= 35.39	EX. 6" SD	:=34.63	EX. 2" IRR
38	EX. 8 INV:=	EX.	ANI	EX.
36	- 0.5 MIN CLEAR			
34			0.5 MIN CLEAR	' —
32				
30				
28				
26				
24				
22				
25-	+50 26-	-00		





#### LEGEND

PROPERTY LINE SAWCUT LINE PROPOSED FIRE WATER MAIN (8" C900 PVC PIPE)

— *FW* — — –

AC PAVEMENT



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITED

APP: 01-120049 INC:

DATE:

DATE 6/15/2022

С Ш

Ш

ヿ

**D** BO

4

CH

≥

**REVIEWED FOR** 

SS 🗹 FLS 🗹 ACS 🗹

06/24/22

MICHAEL A. KUYKENDALL R.C.E. NO. 70870, EXPIRES 6-30-2

o. 70870

**RNIA** 

CALI

O

Ш

5

PRO

Ш

UPGRAD

CHABO

COLLEGE

No. REVISION

DATE E

2

Exp. 6/30/23

#### TREE NOTES

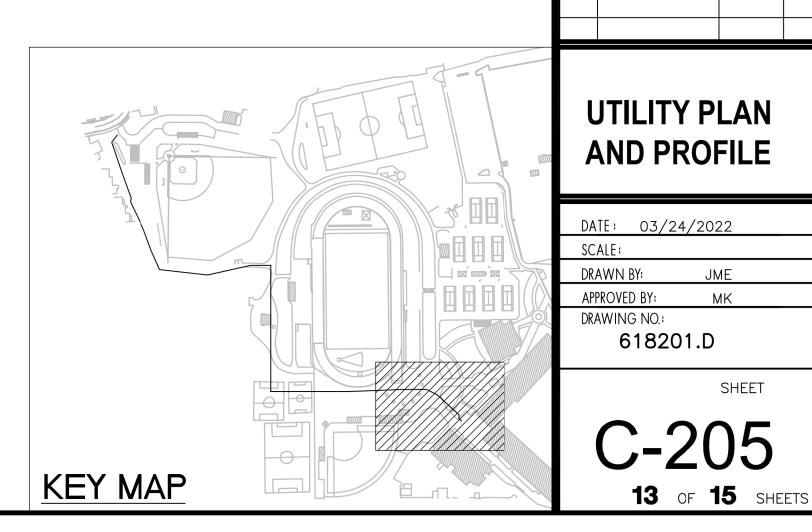
- 1. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING TREES TO THE MAXIMUM EXTENT POSSIBLE.
- 2. WHERE DIRECTIONAL BORING IS NOT POSSIBLE DUE TO EITHER DENSITY OF CROSSING UTILITIES OR RAPID CHANGES IN ALIGNMENT DIRECTION, TRENCHING FOR UTILITIES IS REQUIRED. WHERE TRENCHING FOR UTILITIES IS REQUIRED WITHIN DRIP LINES, TUNNELING UNDER AND AROUND ROOTS SHALL BE DONE BY HAND DIGGING TO MINIMIZE DAMAGE TO TREE ROOT SYSTEM.

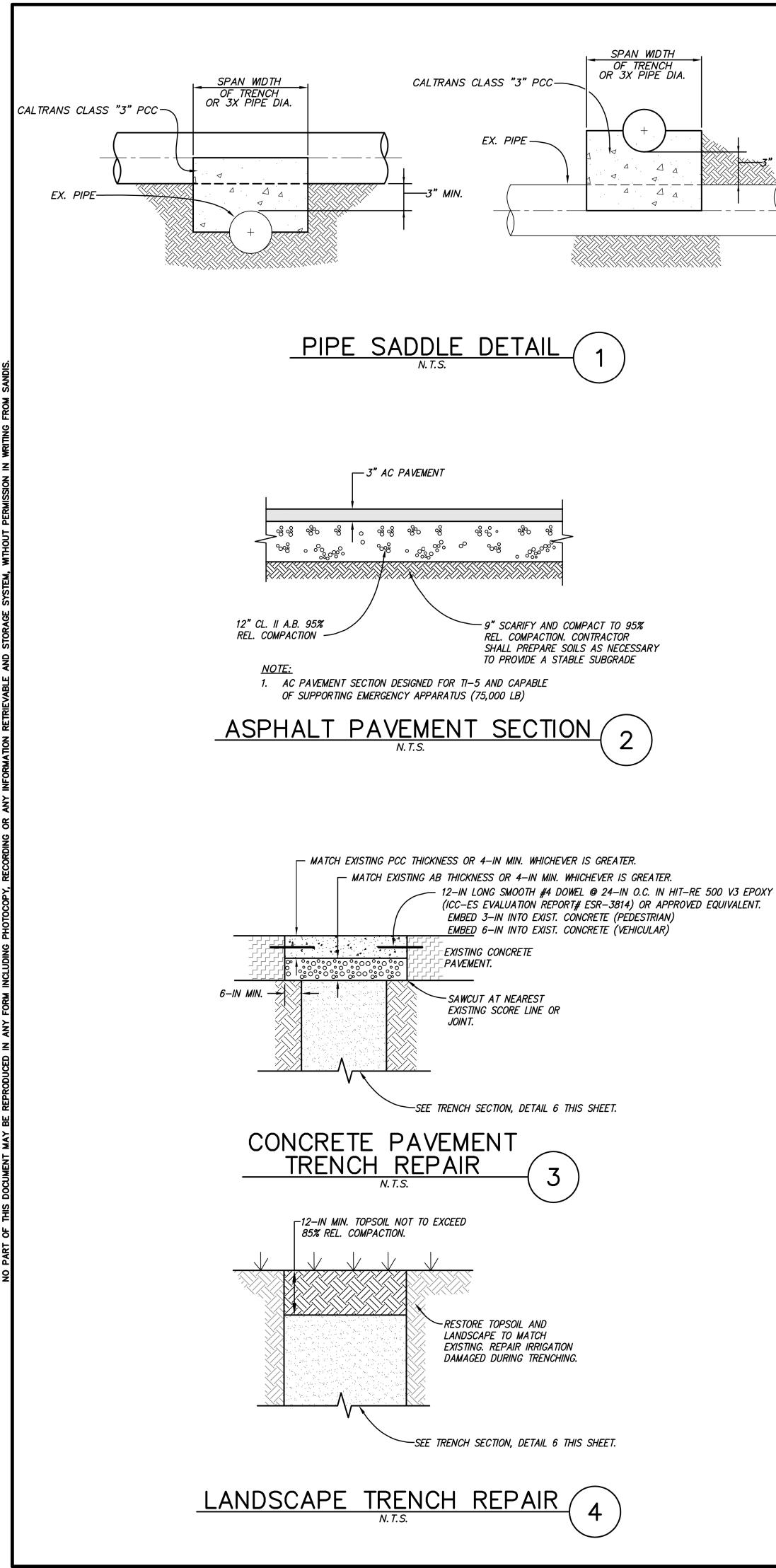
#### **GENERAL NOTES**

1. ALL BELL AND SPIGOT JOINTS AND FITTINGS INCLUDING; TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES, AND HYDRANT BRANCHES, SHALL BE MECHANICALLY RESTRAINED PER DETAIL 3, SHEET C-302.

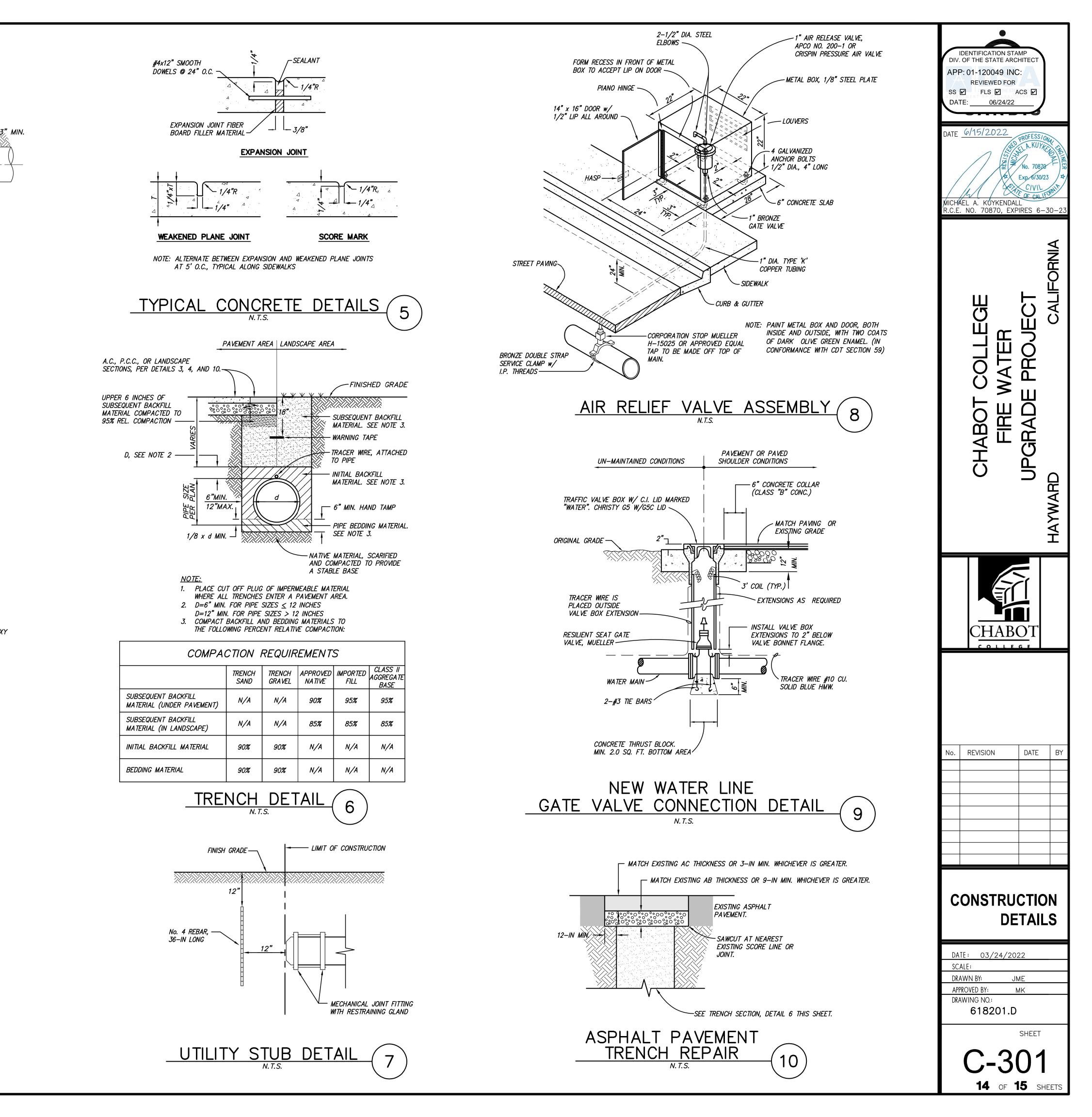
## UTILITY SHEET NOTES

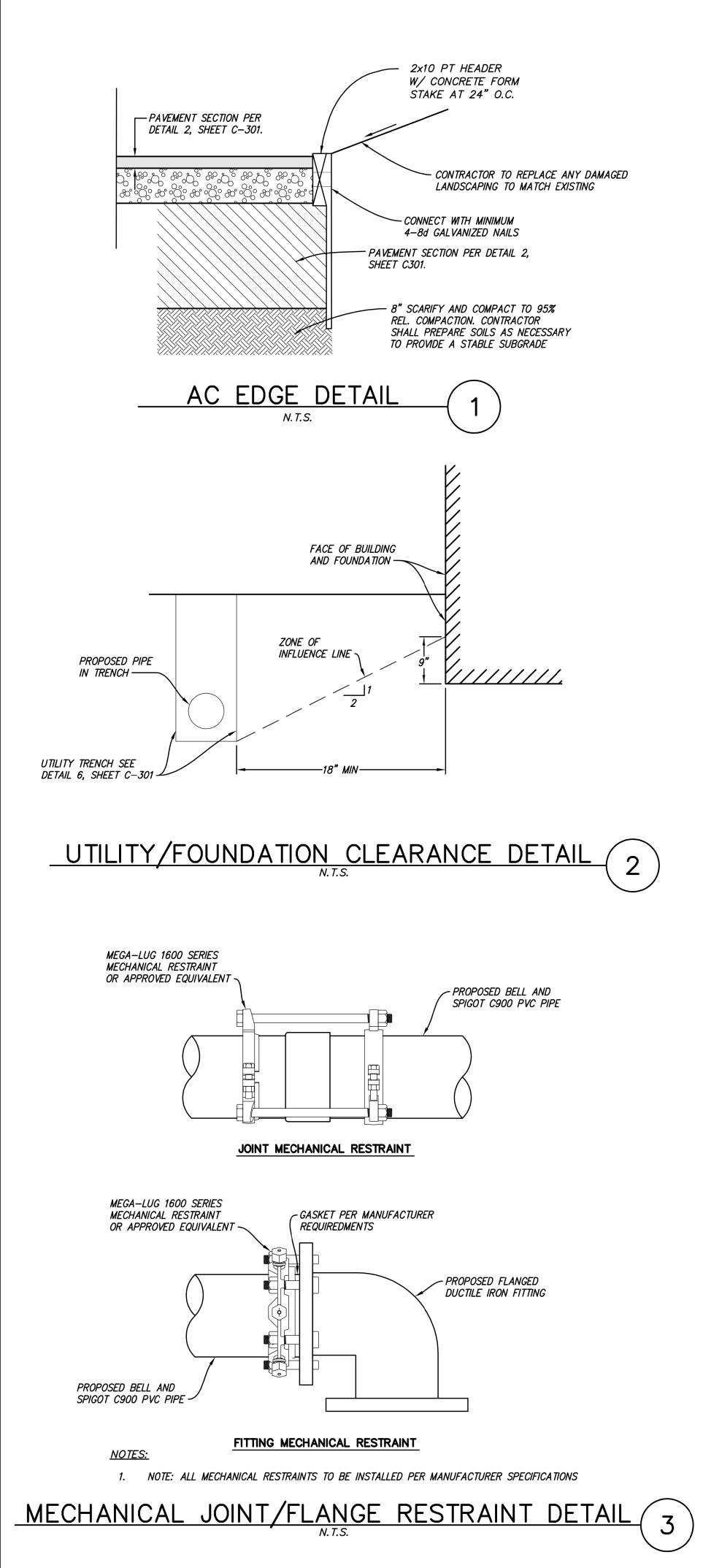
- 1 PROTECT EXISTING ELECTRICAL OR LIGHTPOLE TO REMAIN.
- 2 PROTECT EXISTING COMMUNICATION SERVICE TO REMAIN.
- 3 PROTECT EXISTING DOMESTIC WATER SERVICE TO REMAIN.
- 4 PROTECT EXISTING TELECOM SERVICE TO REMAIN.
- 5 PROTECT EXISTING STORM DRAIN LINE OR STRUCTURE TO REMAIN.
- 6 PROTECT EXISTING IRRIGATION WATER LINE TO REMAIN.
- (7) CONTRACTOR TO MAINTAIN 24 INCH CLEARANCE AND RELOCATE IRRIGATION AS NECESSARY.
- 8 CONTRACTOR TO LOCATE AND MAINTAIN 24" CLEARANCE FROM EXISTING UTILITY.
- 9 CONTRACTOR TO LOCATE EXISTING HIGH VOLTAGE AND MAINTAIN 24" SEPARATION.
- (10) CONTRACTOR TO DEMOLISH AND REMOVE EXISTING TREE INCLUDING STUMP. STUMP SHALL BE GROUND TO A MINIMUM DEPTH OF 18 INCHES BELOW GRADE OR REMOVED IN ITS ENTIRETY BY CUTTING ALL PERIMETER ROOTS AND PULLING STUMP FROM GROUND.
- (1) EXISTING STRUCTURE RIMS TO BE ADJUSTED TO GRADE.





File: X: P 618201.D (4) ENGINEERING (2) PLAN SETS (3) SHEET SET FIRE WATER C-302.dwg Date: Jun 08, 2022 – 7:29 PM





File: X: \P\618201.D\(4) ENGINEERING\(2) PLAN SETS\(3) SHEET SET\FIRE WATER\C-302.dwg Date: Jun 08, 2022 - 7:29 PM

DIV. APP SS E DAT	DENTIFICAT OF THE STA 2: 01-1200 REVIEWE 2 FLS E: 06	TE ARC 49 INC ED FOR ☑ A 5/24/22		
місня	EL A. KUY NO. 7087	KENDAL	Exp. 6/30	FORMIA
	CHABOT COLLEGE	FIRE WATER	UPGRADE PROJECT	CALIFORNIA
	CHA	ш.	UPGF	HAYWARD
	CH.			
No.	REVISION		DATE	BY
C	ONST		CTIC TAI	
SCA				
APP	<u>WN BY:</u> ROVED BY: WING NO.: 6182	Ν	<u>ИЕ</u> ИК	
	C-(		SHEET )2 15 s	•