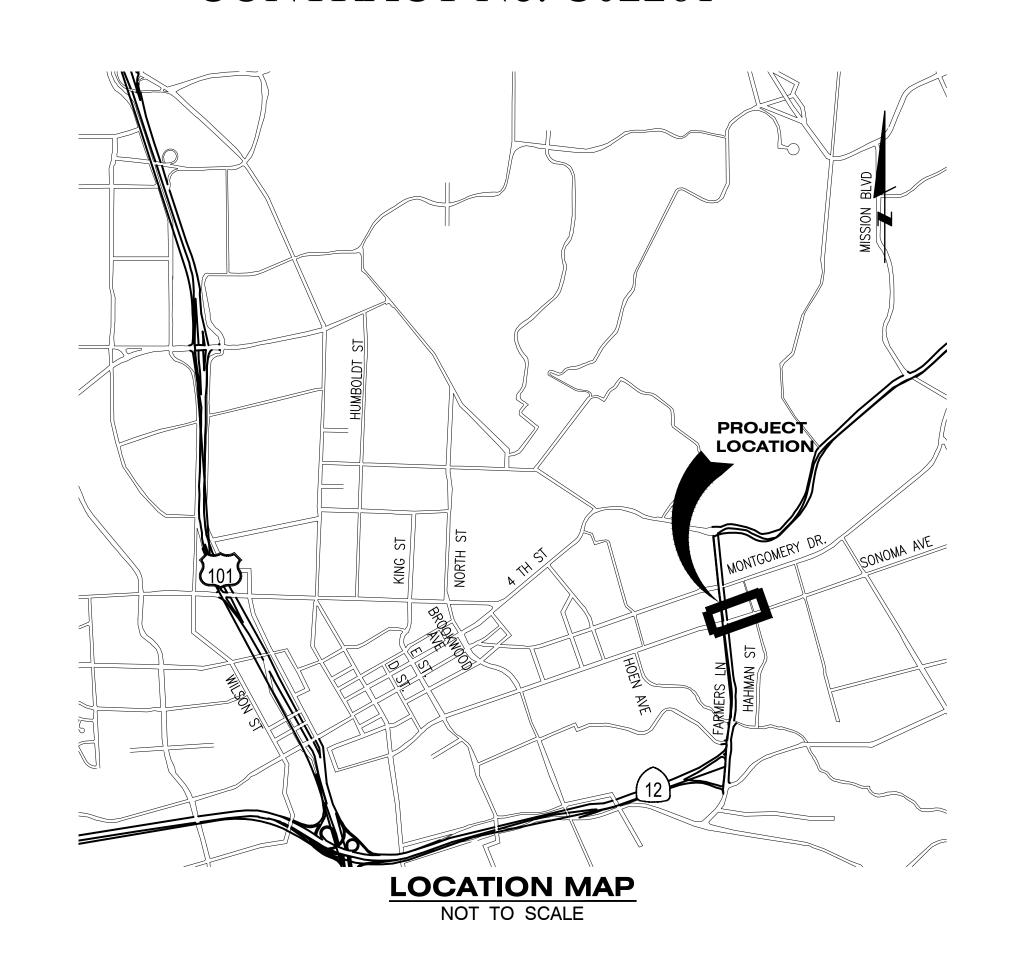


IMPROVEMENT PLANS FOR

SONOMA AVENUE PAVEMENT REHABILITATION FARMERS LANE TO HAHMAN DRIVE

CONTRACT No. C02261



SHEET NO.	DESCRIPTION					
1	TITLE SHEET					
2	NOTES, LEGEND AND ABBREVIATIONS					
3	DEMOLITION PLAN "S2" 11+00 TO "S2" 16+51					
4	IMPROVEMENT PLAN "S2" 11+00 TO "S2" 14+50					
5	IMPROVEMENT PLAN "S2" 14+50 TO "S2" 16+51					
6	STRIPING PLAN "S2" 11+00 TO "S2" 16+51					
7	TYPICAL SECTIONS AND DETAILS 1					
8	PROFILE PLAN "S2" 11+00 TO "S2" 14+50					
9	PROFILE PLAN "S2" 14+50 TO "S2" 16+51					
10	PAVEMENT CROSS SECTIONS					
11	CURB RAMP DETAILS					
12	CURB RAMP DETAILS					
13	SIGNAL AND LIGHTING MODIFICATION PLAN					
14	CONSTRUCTION AREA SIGNS					
15	STAGE CONSTRUCTION					
16	TRAFFIC HANDLING (STAGE 1)					
17	TRAFFIC HANDLING (STAGE 2)					
18	WATER SERVICE REPLACEMENT PLAN					
19	IRRIGATION SCHEMATIC DESIGN					
20	IRRIGATION SPECIFICATIONS AND DETAILS					

RE	CORD PLAN DATA
PROJECT START: PROJECT END: GEN. CONTRACTOR: SUPERINTENDENT: UNDERGROUND CONTRACTOR: FOREMAN: SEWER PIPE TYPE: MANUFACTURER: SEWER FITTINGS MANUFACTURER: M.H. MANUFACTURER: WATER PIPE TYPE: MANUFACTURER: WATER PIPE TYPE:	WATER SERVICE TYPE: MANUFACTURER: FIRE HYDRANT TYPE: MANUFACTURER: INSPECTOR: CONSTRUCTION MANAGER: RECORD PLANS BY: ADDITIONAL INFO:
WATER VALVE MANUFACTURER: WATER FITTINGS MANUFACTURER:	

CITY OF SANTA ROSA SONOMA AVENUE - PAVEMENT REHABIL FARMERS LN TO HAHMAN DR

PREPARED UNDER THE DIRECTION OF:	
THE BIRESHOT ST. U	07/17/2025

VICINITY MAP

NOT TO SCALE



PROJECT LOCATION





Call before you dig.
BEFORE EXCAVATING CALL U.S.A. UNDERGROUND SERVICE ALERT
800-642-2444
TWO WORKING DAYS BEFORE ALL
PLANNED WORK OPERATIONS

PPROVED: DIRE	CTOR OF TRANSF	ON AND	CHK BY:	FH		
	PUBLIC WORKS			DATE:	02/05/2025	
BY Dan Hennessey (Jul 22, 2	025 12:05 PDT)	DATE	7/22/25	DWN BY:	PS	
DAN H	HENNESSEY			SCALE:	AS SHOWN	
ESIGN/CONST	Agr JUH Sara Mathews (Jul 22, 2025 15:51 PDT)		7/22/25	CONT	RACT NO.	
ATERIALS LAB	GHagstrom GHagstrom (Int 24, 2025 11:17:21 PDT)		7/24/25]	22261	
NATER - OPS	<u>Joe Schiavone</u> Joe Schiavone (Jul 22, 2025 11:54 PDT)		7/22/25	C02261		
SURVEY	Darryl Welvin Darryl Melyn (Jul 22, 2025 13:53 PDT)		7/22/25	OUEET	1 65 00	
TRAFFIC	Michael VanMidde Michael VanMidde (Jul 22, 2025 11:23 PDT)		7/22/25	SHEET	1 OF 20	
TRANSIT	Yuri Koslen Yuri Koslen (Jul 30, 2025 14:28:09 PDT)		7/30/25			
W-FIELD SVCs	Dave Avila (Jul 22, 2025 11:35 PDT)		7/22/25	FILE NO.		
				2027	0015	
DEPT.	SIGNATUR	E	DATE	2023	3–0015	

AB	AGGREGATE BASE	MH	MANHOLE
AC	ASPHALT CONCRETE	MAX	MAXIMUM
APPROX	APPROXIMATE	MIN	MINIMUM
BC	BEGIN CURVE	MISC	MISCELLANEOUS
	BONDED CONCRETE OVERLAY ON ASPHALT		
BSW	BACK OF SIDEWALK	N	NORTH
		NTS	NOT TO SCALE
C&G/ CG	CURB AND GUTTER	# OR NO	NUMBER
CB	CATCH BASIN	±	PLUS OR MINUS
CF	CUBIC FEET	PCC	PORTLAND CEMENT CONCRETE C
CL	CENTERLINE		POINT OF COMPOUND CURVE
CLR	CLEAR	PL	PROPERTY LINE
CMP	CORRUGATED METAL PIPE	PT	
	CLEAN OUT		PUBLIC UTILITY EASEMENT
CONC		PVMT	
	CONTROL POINT		
CY		R	RADIUS
<u> </u>		REVEG	
DI	DROP INLFT	RT.R	RIGHT
ø OR DIA		R/W, RW, ROW	RIGHT-OF-WAY
DW OR DWY			1110111 01 11111
DII ON DII1	DINVENT	S	SLOPE SOUTH
E	FAST		STORM DRAIN
EA			STORM DRAIN MANHOLE
EASE		SE	SQUARE FOOT/FEET
	EXISTING GRADE	SHT	SHEET
ELEC			SANITARY SEWER MANHOLE
	EDGE OF PAVEMENT		SANITARY SEWER CLEAN OUT
EL		SS	SANITARY SEWER, STAINLESS ST
	END OF CURVE	STA	STATION
EX		STD	
LA	LAISTING	SY	SQUARE YARD
FH	FIRE HYDRANT	SI	SQUARE TARD
FG		TDC	TOP BACK OF CURB
	FRONT FACE CURB		TOP FRONT OF CURB
	FLOWLINE		TOP OF WALL
FND	FOUND	TYP	TYPICAL
	FINISHED SURFACE	117	ITPICAL
FS		LICE	LINDEDODOLIND ELECTRIC
FSPL '	FINISHED SURFACE AT PARKING LOT	UGE U/G	UNDERGROUND ELECTRIC
FT_OR_'	FOOT, FEET	0/0	UNDERGROUND
G	GAS	W	WATER
GB		WL	
GD	GRADE BREAK	W/	WATER LINE
ЦD	LICH DOINT		WITH
HP		WM	WATER METER
HOR			
HMAC	HOT MIXED ASPHALT CONCRETE		

		SONOMA AVE		
CONTROL POINT TABLE				
POINT	NORTHING	EASTING	ELEV.	DESCRIPTION
1	1924391.244	6364638.334	195.190	SET CUT X
2	1924573.742	6364970.104	196.968	SET CUT X
3	1924191.639	6364786.707	194.400	FND CUT X
4	1924623.520	6365320.613	199.135	SET CUT X
5	1924414.984	6365331.476	197.060	SET PK NAIL
3008	1924427.774	6364545.145	195.240	FND CUT X

INVERT ELEVATION

CORE SUMMARY								
#	DIR	STA	OFF	AC LIFT 1	AC LIFT 2	AC LIFT 3	TOTAL AC	SUBGRADE
1	W/B	STA. 14+20+-	28' LEFT +-	0.2'	0.4'	0.6'	1.2'	BLACK CLAY
2	E/B	STA. 14+51+-	24' RIGHT +-	0.2'	0.4'	0.4'	1.0'	BLACK CLAY
BY: CIT	BY: CITY OF SANTA ROSA							
DATE: FEBRUARY 13, 2020								
SEE SH	EET 4							

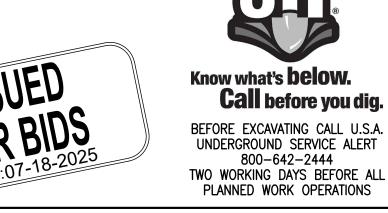
TOPOGRAPHIC SURVEY DATA BY: CITY OF SANTA ROSA DATE: JANUARY 21, 2021

BASIS OF BEARINGS

NORTH 6" 48' 08" WEST BETWEEN CITY OF SANTA ROSA HORIZONTAL CONTROL NETWORK COORDINATE MONUMENTS G-56 & G-280. NAD83 - ZONE 2 - EPOCH 2010.00

BENCHMARK

CITY OF SANTA ROSA VERTICAL CONTROL NETWORK BENCHMARK C-83. ELEVATION = 195.031 FEET (NGVD 29). SONOMA AVE AND FARMERS LN; CITY DISK IN WELL MONUMENT AT CL INTERSECTION. (COORDINATE MONUMENT G-560 3/84



Know what's **below**. **Call** before you dig. BEFORE EXCAVATING CALL U.S.A. UNDERGROUND SERVICE ALERT 800-642-2444

				Ву
				Revision
				No. Date
				No.

						N C
PROJECT NO: DESIGNED BY: CHECKED BY: CHECK DATE:	FH 02/05/2025	SUBMILIAL DAIE:	6707/81//0			
DESIGNED BY:	PS	DRAWN BY:	2			
PROJECT NO:	644.04.55	SCALE:	AS NOIEU			
1						

HAHMAN DR END

10 AVENUE - F FARMERS I NOT

CONTRACT NO. C02261

SHEET 2 OF 20 FILE NO. 2023-0015

ALL DRAWINGS AND SPECIFICATIONS ARE CONSIDERED PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION MAY BE ISSUED. WORK NOT CONFORMING TO THE CONTRACT DOCUMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO THE CITY.

ALL WORKMANSHIP, MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY OF SANTA ROSA STANDARD PLANS, THE CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, THE SPECIAL PROVISIONS FOR THIS PROJECT AND THE STATE STANDARD SPECIFICATIONS AND STANDARD PLANS. THE CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING ALL STANDARDS PERTAINING TO THIS PROJECT.

THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) AT 1-800-642-2444 NO LESS THAN 2 WORKING DAYS PRIOR TO ANY EXCAVATION FOR MARK OUTS OF EXISTING UNDERGROUND FACILITIES IN ACCORDANCE WITH SECTION 15-7 OF THE

THE LOCATIONS OF UNDERGROUND UTILITIES AND OTHER OBSTACLES SHOWN ON THE PLANS ARE BASED ON THE INFORMATION AVAILABLE AT THE TIME OF SURVEY. THE CONTRACTOR SHALL POTHOLE AND DETERMINE THE EXACT LOCATION OF ALL POTENTIAL CONFLICTS IN ACCORDANCE WITH UNDERGROUND SERVICES ALERT, LAWS AND THESE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS. IF ANY UNMARKED UTILITIES ARE ENCOUNTERED, OR IF UNABLE TO LOCATE A MARKED UTILITY AFTER POT HOLING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THAT UTILITY AND THE ENGINEER.

ALL SEWER MANHOLES, MAINLINE CLEANOUTS AND WATER VALVES THAT ARE ON ACTIVE SYSTEMS SHALL BE ACCESSIBLE TO CITY PERSONNEL AT ALL TIMES AND SHALL BE BROUGHT TO GRADE WITHIN 48 HOURS OF PAVING.

THE CONTRACTOR SHALL PROTECT AND PRESERVE CITY MONUMENTS. THE CONTRACTOR SHALL COORDINATE WITH THE CITY ENGINEER 10 WORKING DAYS IN ADVANCE FOR REFERENCING OF EXISTING MONUMENTS TO BE DISTURBED. THE CONTRACTOR SHALL RECONSTRUCT DISTURBED MONUMENTS IN ACCORDANCE WITH CITY STANDARD 280.

OVERHEAD UTILITY SERVICE DROPS ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL INVESTIGATE THE SITE AND BE AWARE OF LIMITED CLEARANCES UNDER OVERHEAD UTILITY LINES AND LOW HANGING TREE BRANCHES. THE CONTRACTOR'S TRUCKS AND EXCAVATION EQUIPMENT SHALL BE SIZED SO THAT OVERHEAD WIRES AND TREE BRANCHES ARE NOT DAMAGED.

ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AS GENERATED AND AT NO TIME SHALL THE CONTRACTOR PLACE EXCAVATED MATERIAL AT THE WORK SITE.

9. THE CONTRACTOR SHALL ONLY REMOVE EXISTING TREES OR SHRUBS AS NOTED ON THE PLANS OR AS DIRECTED BY THE

10. FOR CLARITY OF EXISTING SUBSURFACE CONDITIONS, NOT ALL CROSSWALKS, STOP BARS, OR EXISTING PAVEMENT MARKINGS ARE SHOWN ON THE PLANS. TRAFFIC STRIPES, RAISED PAVEMENT MARKERS AND PAVEMENT MARKINGS DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED PER CITY OF SANTA ROSA TRAFFIC STANDARDS PART III, TRAFFIC MARKINGS. PATCHING OF DAMAGED MARKINGS WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE ENGINEER. ALL DAMAGED RAISED PAVEMENT (NON-REFLECTIVE) MARKERS MUST BE CERAMIC.

11. DRAWING BASE MAP IS BASED ON PARCEL INFORMATION AVAILABLE FROM CITY OF SANTA ROSA. PARCEL LINES ARE APPROXIMATE AND ARE FOR INFORMATIONAL PURPOSES ONLY.

12. SPECIFIC NOTES AND DETAILS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATIONS AND DEPTH OF EXISTING FACILITIES AND TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY FIELD CONFLICTS.

14. CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.

15. DUST CONTROL DURING ALL PHASES OF CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN GOOD HOUSEKEEPING WITHIN THE CONSTRUCTION AREA AND STAGING AREA.

16. THE CONTRACTOR SHALL MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES AFFECTED BY THE PROJECT THROUGHOUT THE LIFE OF THE CONTRACT AS SPECIFIED IN THE SPECIAL PROVISIONS.

17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE EXISTENCE, LOCATION AND DEPTH OF ALL UNDERGROUND

ANY DAMAGE TO THE EXISTING FACILITIES INCLUDING BUT NOT LIMITED TO TREES, LANDSCAPING, IRRIGATION, FENCES, WALLS, SIDEWALK, MAILBOXES, UTILITIES, AND OTHER PAVEMENT SURFACES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE. CONTRACTOR SHALL RESTORE ANY AND ALL PAVEMENT AND OTHER FACILITIES OUTSIDE LIMITS OF WORK AFFECTED BY THE CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VIDEOTAPE OR DOCUMENT EXISTING CONDITIONS PRIOR TO START OF WORK TO SUBSTANTIATE ANY PREVIOUS DAMAGE, ETC.; COPIES OF WHICH SHALL BE PROVIDED TO THE ENGINEER.

19. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT THEIR WORK AREA FROM DAMAGE. TRENCH PLATES OR OTHER PROTECTION MAY BE REQUIRED FOR PCC WORK.

20. SURVEY MONUMENTS SHALL ONLY BE RESET BY A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR IN THE STATE OF CALIFORNIA AT THE DIRECTION OF THE ENGINEER.

21. STRIPING AND MARKINGS IN ROADWAYS SHALL BE THERMOPLASTIC. BLUE REFLECTIVE FIRE HYDRANT MARKERS SHALL BE SET 12" OFF THE STREET CENTERLINE OR CENTERLINE STRIPING, UNLESS OTHERWISE NOTED.

22. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN, AND OTHER DEVICES TO PROVIDE FOR SAFE PASSAGE OF PUBLIC VEHICULAR, BICYCLE, AND PEDESTRIAN TRAFFIC IN ACCORDANCE WITH THE LATEST VERSION OF THE CA MUTCD.

23. TYPICAL DETAILS REFERRED TO ON THESE DRAWINGS ARE FROM THE LATEST VERSIONS OF THE CITY STANDARD PLANS AND CALTRANS STANDARD PLANS.

24. CONTRACTOR SHALL POSSESS A VALID CLASS 'A' LICENSE AT THE TIME OF AWARD OF THE CONTRACT.

25. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A 3 WEEK LOOK AHEAD SCHEDULE AT WEEKLY MEETINGS; AND DAILY SCHEDULE OF PLANNED WORK A MINIMUM OF 24 HOURS IN ADVANCE FOR PAVEMENT REMOVAL, BASE REPAIR, TRAFFIC STRIPING AND CONCRETE WORK FOR EACH PROJECT LOCATION.

26. TRAFFIC DETECTOR LOOPS AND DETECTOR HANDHOLES SHALL BE INSTALLED PER CALTRANS STANDARD PLANS ES-5A, 5B, 5C,

27. WORK SHALL BE LIMITED TO BETWEEN THE HOURS OF 8:00 A.M. AND 5:00 P.M., MONDAY THROUGH FRIDAY AND INSPECTION REQUESTS SHALL BE LIMITED TO NORMAL CITY BUSINESS HOURS: 8:00 A.M. TO 5:00 P.M., MONDAY THROUGH FRIDAY. SEE TECHNICAL SPECIFICATION SECTION "TRAFFIC REGULATION AND CONSTRUCTION AREA SIGNS" FOR SPECIAL WORK HOURS IN ARTERIALS AND MAJOR COLLECTORS AND WORK NEAR SCHOOL AREAS.

PROPOSED FEATURES

EDGE OF PAVEMENT MAJOR CONTOUR MINOR CONTOUR CURB AND GUTTER UTILITY VAULT OR POLE ADJUSTMENT EDGE OF PAVEMENT ----

EXISTING FEATURES

——— GAS ———

____ U ____

_____ _ _ _ SL__ _ ____

E

ELEC VLT

SIDEWALK

BUILDING

VEGETATION

BRICK

FLOWLINE

WATER LINE

STORM DRAIN

GAS LINE

TELEVISION

SANITARY SEWER

UNDERGROUND ELECTRIC

UNDERGROUND UTILITY

UNKNOWN UTILITY LINE

TRAFFIC SIGNAL LINE

SIGNAL LIGHT LINE

RIGHT-OF-WAY

ELECTRICAL BOX

SIGN

TS BOX

PUBLIC UTILITY EASEMENT

UNDERGROUND COMMUNICATION

CURB AND GUTTER

CONCRETE FENCE

DETAIL IDENTIFICATION NUMBER NUMBER OF SHEET ON WHICH

DETAIL IS LOCATED HMA OVERLAY

PORTLAND CONCRETE CEMENT

CONCRETE PAVEMENT ISOLATION JOINTS

ENDURABLEND COLORED CONCRETE

REINFORCED BCOA

PCC BUS PAD

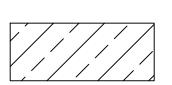
SLOPE INDICATORS

PROPOSED SIDEWALK EASEMENT

TEMPORARY CONSTRUCTION EASEMENT

CORE #

CORE LOCATION



ELECTRICAL VAULT LEFT LT OR L $_{-}$ LENGTH TELCOM BOX TELCOM VAULT TELEVISION BOX TRAFFIC SIGNAL VAULT WATER VAULT WATER VALVE

GAS VALVE GAS BOX SS CLEANOUT

VLT MISC VAULT F/A FIRE ALARM MAILBOX SD INLETS

STORM DRAIN MANHOLE SANITARY SEWER MANHOLE

 \circ

POLE ELECTROLIER SIGNAL

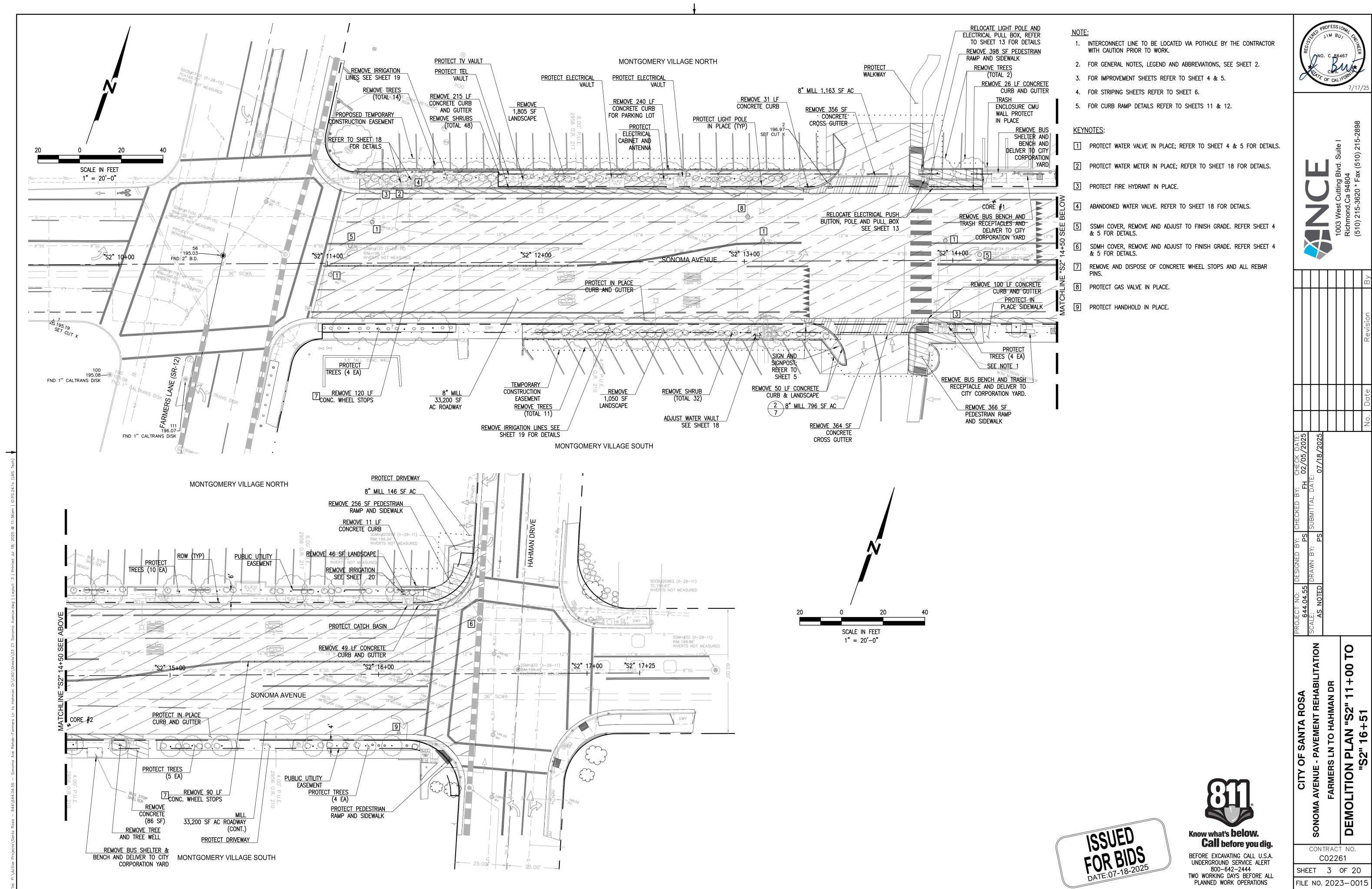
> TRAFFIC SIGNAL WITH ARM BENCH

SURVEY MONUMENT

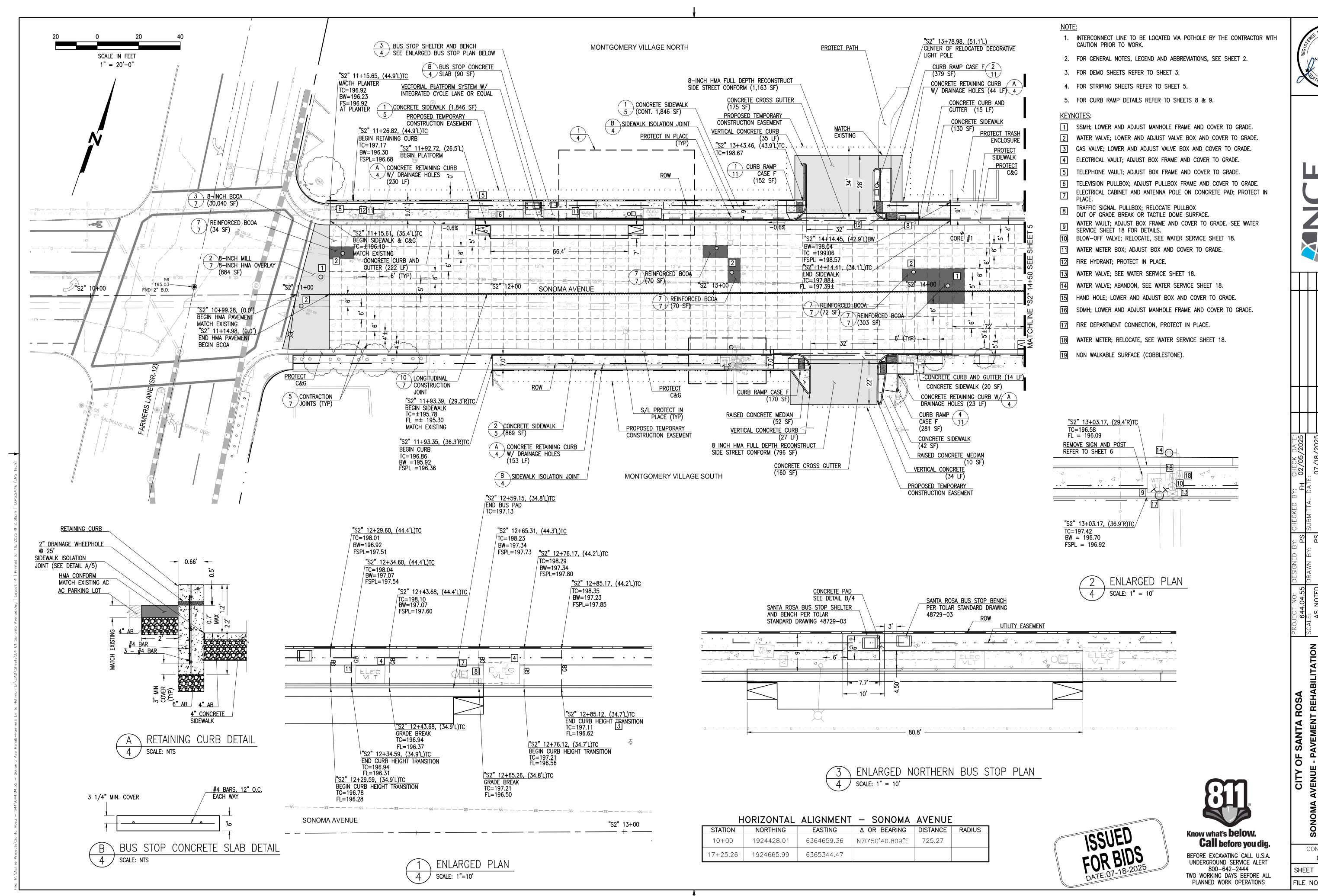
CURB RAMP

TREE

CONCRETE



C02261 SHEET 3 OF 20 FILE NO. 2023-0015



COLTY OF S

COTA OL SONOMA AVENUE - PA

CO5261

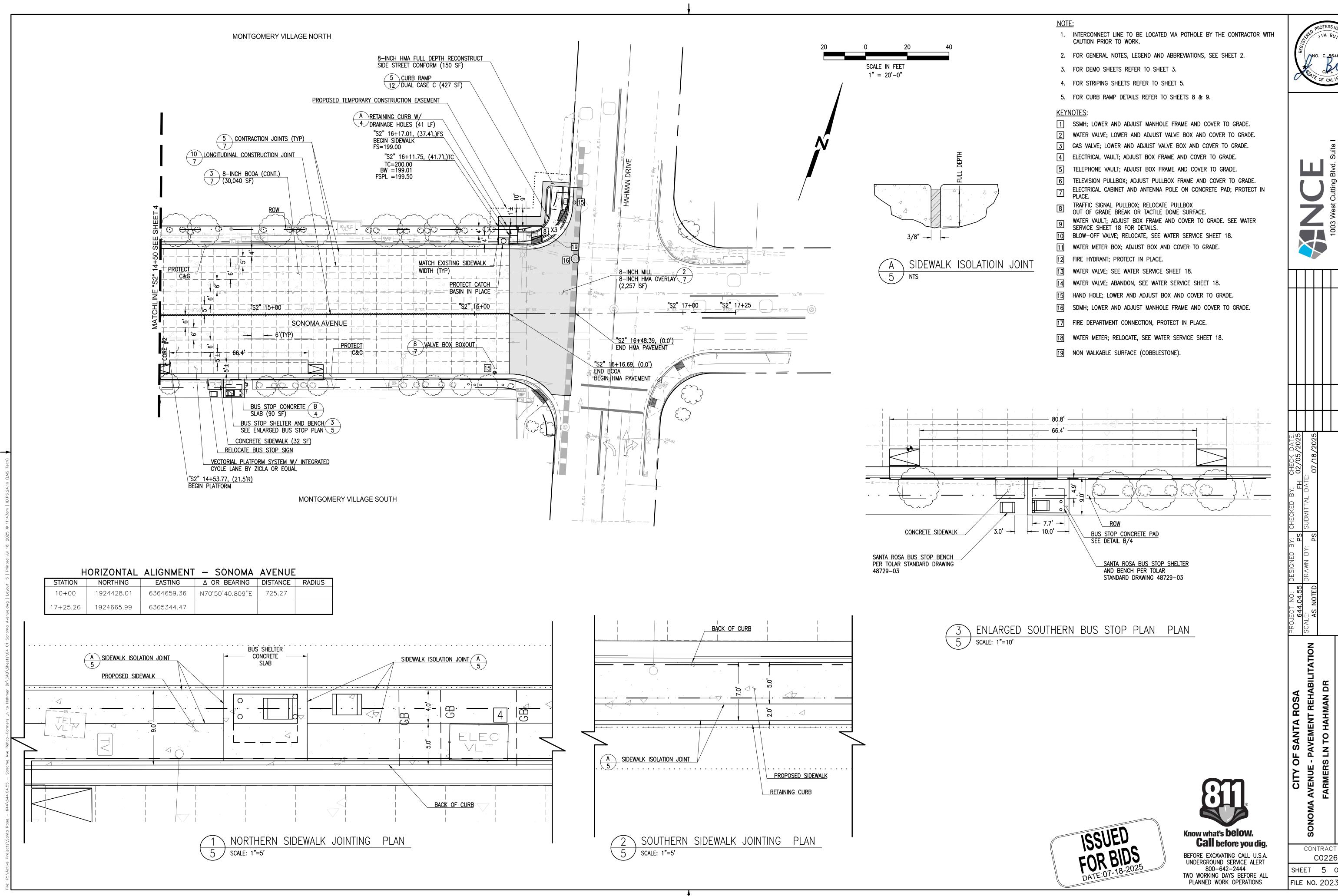
SHEET 4 OF 50

FILE NO. 5023-0015

8

PLAN ... 14+5

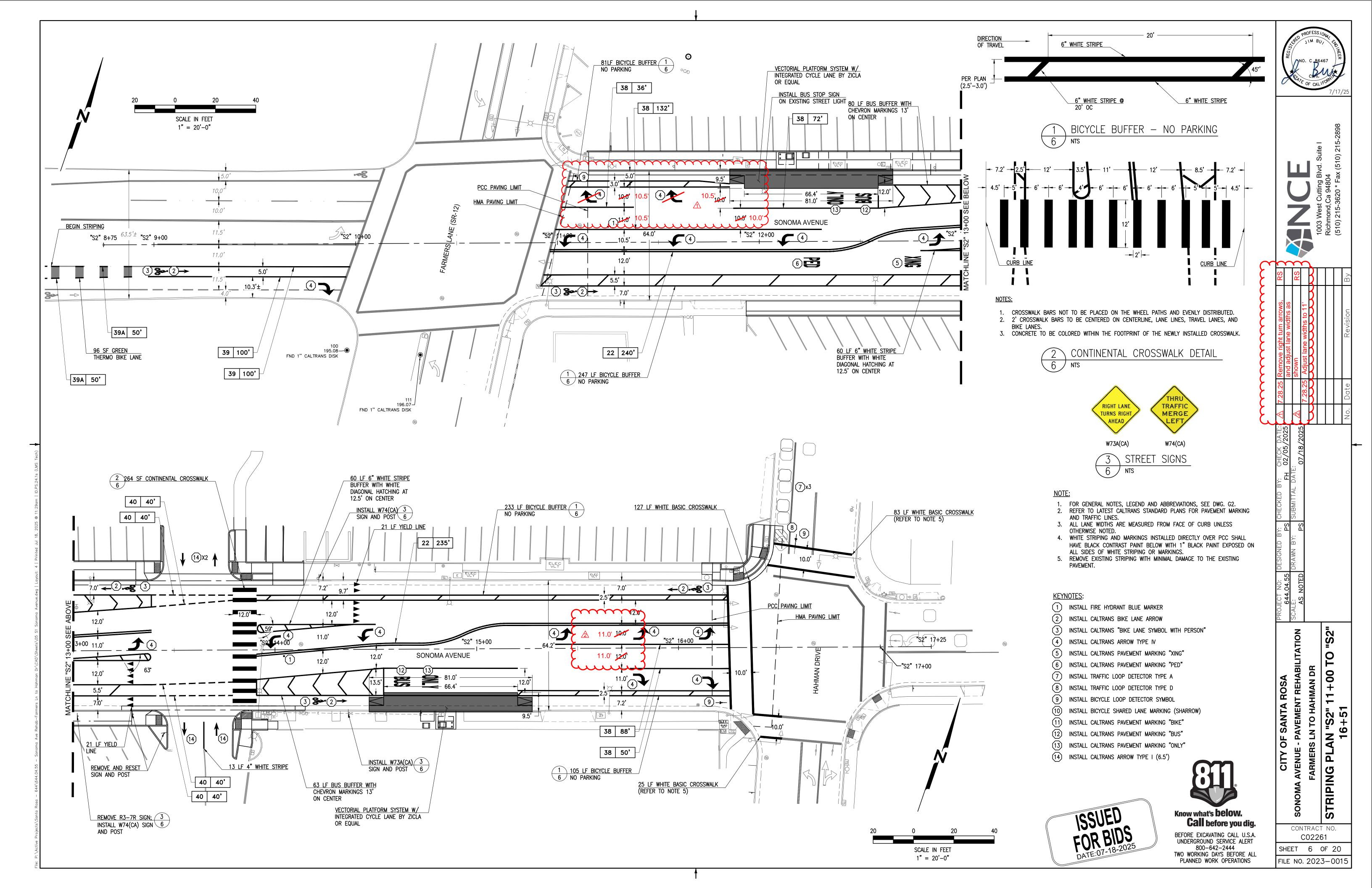
LN TO HAHMAN DR

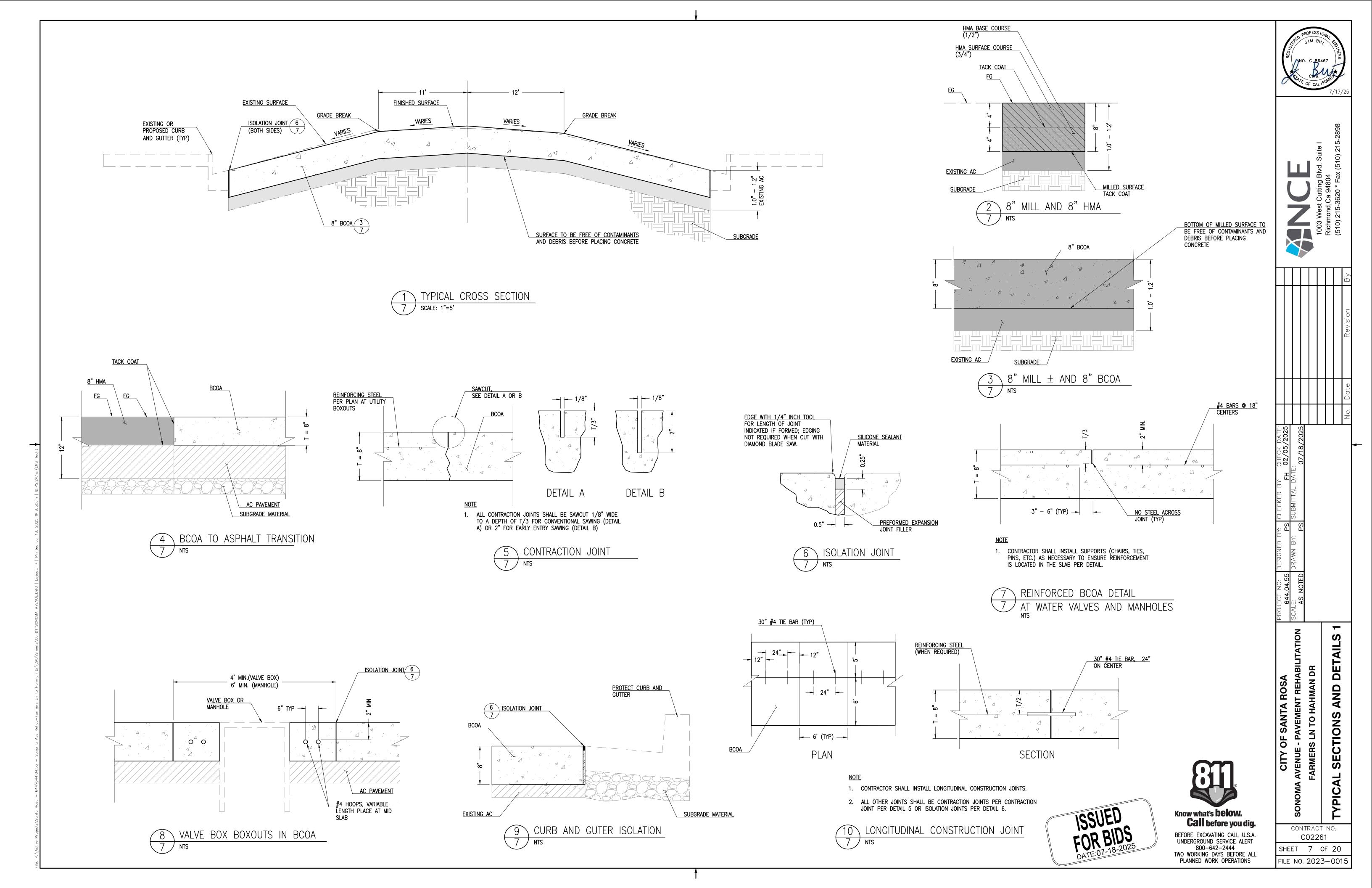


CONTRACT NO. C02261

IMPROVEMENT PLAN "S2" 16+

SHEET 5 OF 20 FILE NO. 2023-0015





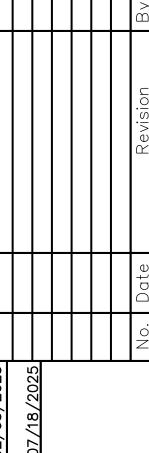


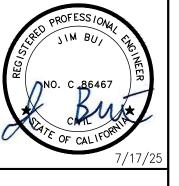
VERTICAL: 1" = 1'

BEFORE EXCAVATING CALL U.S.A.
UNDERGROUND SERVICE ALERT
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TWO WORKING DAYS BEFORE ALL
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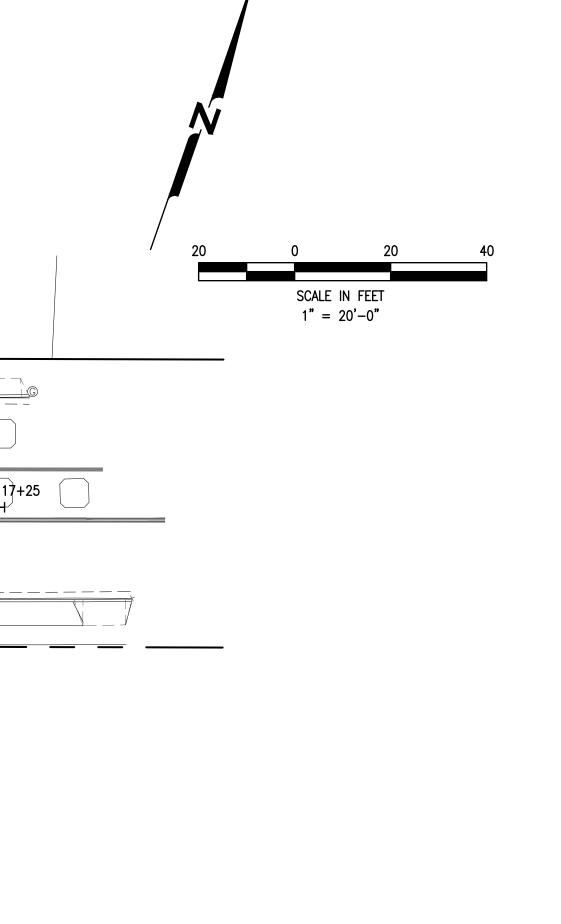
C02261 FILE NO. 2023-0015

SONOMA AVENUE - PAVEMENT REHABILITATION
FARMERS LN TO HAHMAN DR
14+50 CONTRACT NO. SHEET 8 OF 20





S2 PROFILE 200 ______ 200 EG CENTERLINE FG CENTERLINE 195 195 "S2" 14+50 "S2" 16+00 "S2" 17+00 "S2" 15+00



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UNDERGROUND SERVICE ALERT
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TWO WORKING DAYS BEFORE ALL
PLANNED WORK OPERATIONS

HORIZONTAL: 1" = 20'

VERTICAL: 1" = 1'

C02261 FILE NO. 2023-0015

CONTRACT NO. SHEET 9 OF 20

SONOMA AVENUE - PAVEMENT REHABILITATION
FARMERS LN TO HAHMAN DR
16+51

199.0 -13+00.00 _Offset=0.00 Elev = 196.98198.5 199.0 -Offset=-32.62 Elev = 196.72 PCC PAVEMENT 11+25.00 12+00.00 Offset=10.19 $\sqrt{Elev} = 196.77$ 197.5 — 198.0 198.0 198.5 -Offset = -33.44_Offset=0.00 Offset=-11.00 Γ Elev = 195.90 PCC PAVEMENT Offset=-11.00 Elev = 196.68 \Box Elev = 197.22 197.0 -197.5 PCC PAVEMENT Elev = 196.92198.0 -Offset=27.04 Offset=0.00 Offset = -11.00PCC PAVEMENT _0ffset=0.00 Elev = 197.28_Offset=26.42 Elev = 195.86Elev = 196.62Elev = 196.23MILLED PAVEMENT 196.5 -197.0 197.0 197.5 -<u>FG</u> __*Offset=12.00* 196.0 196.5 197.0 196.0 -195.5 $Offset = -33.14_{-}$ Elev = 196.57 MILLED SURFACE $Elev = 196.25^{-}$ 195.0 +195.5 -MILLED PAVEMENT Offset=27.28 MILLED PAVEMENT 195.0 _ ______ -50 -40 -30 -20 -10 0 10 20 30 40 50 -50 -40 -30 -20 -10 0 -40 -30 -20 -10 0 -40 -30 -20 -10 -50 40 20 30 13+75.00 199.5 \neg 13+25.00 13+50.00 Offset=-11.00 Elev = 197.67199.0 ⊤ PCC PAVEMENT 199.0 Offset=0.00 Offset=-11.00 Elev = 197.52 Offset=-32.09_Offset=0.00 Elev = 197.43 PCC PAVEMENT _Offset=-32.29 _Offset=-32.48 Elev = 197.28 \int Elev = 197.73 198.5 -Elev = 197.10_Offset=0.00 Elev = 196.92198.5 198.5 Elev = 197.58 __Offset=12.00 Offset=12.00 Offset=12.00 Offset=-11.00_ $\int Elev = 197.49$ \Box Elev = 197.19 $| Elev = 197.37^{-}$ Elev = 197.34198.0 Offset=27.50 198.0 PCC PAVEMENT Offset=27.56 Elev = 196.41 $\Box \textit{Elev} = 196.82$ _Offset=27.53 197.5 \Box Elev = 196.66 197.5 -197.0 + 197.0 -196.5 PAVEMENT 196.5 MILLED SURFACE 196.0 -50 -40 -30 -20 -10 0 10 20 30 MILLED PAVEMENT 40 50 60 70 10 20 30 40 50 60 14+50.00 14+00.00 199.5 ¬ 199.5 -Offset = -11.00_Offset=0.00 Offset=0.00 15+00.00 15+50.00 Elev = 197.82 \int Elev = 197.88 199.0 +Offset=-11.00199.5 $_{\top}$ 200.0 -PCC PAVEMENT Offset = -31.97Elev = 198.12Offset=12.00 PCC PAVEMENT Offset=0.00 _0ffset=-11.00 Elev = 198.72 Elev = 197.43 Elev = 198.48Offset=-31.89_ ___Elev = 197.94 Offset=12.00 Offset=-11.00PCC PAVEMENT 198.5 -198.5 Offset=12.00 Elev = 198.24 <u>Elev = 197.66</u> PCC PAVEMENT \int Elev = 197.64 199.0 199.5 Offset=0.00 Elev = 198.42 $\sqrt{\text{Elev}} = 198.78$ _0ffset=27.82 Offset=27.98 _*Offset=28.29* Offset=-31.44 $\frac{\text{Constant}}{\text{FG}} / \frac{\text{Offset} = 12.00}{\text{Elev}} = 198.54$ Elev = 197.91EG ___Elev = 196.96 Elev = 197.12 198.0 -198.0 ___Elev = |197.63 | Elev = 198.19198.5 199.0 -0.5% Offset=28.55 Elev = 197.91 -0.5% 2.0% -0.5% 197.5 198.0 -198.5 -197.0 197.5 -198.0 -MILLED SURFACE MILLED SURFACE 196.5 197.0 -197.5 -MILLED PAVEMENT MILLED SURFACE MILLED PAVEMENT MILLED PAVEMENT 196.0_{-60}^{\top} -50 -40 -30 -20 -10 0 10 20 -50 -40 -30 -20 -10 0 10 20 30 40 10 20 30 -50 -40 -30 -20 -10-50 -40 -30 -20 -10 0 10 20 30 40 50 - PAVEMENT REHABIL 16+00.00 16+25.00 200.5 -_Offset=0.00 PCC PAVEMENT Offset=-30.86Offset = -31.08Elev = 199.22Elev = 198.67 $_{\rm Offset=-0.24}$ \Box Elev = 198.47 PCC PAVEMENT CITY OF AVENUE - F FARMERS I 200.0 $\sqrt{\text{Elev}} = 199.08$ 200.0 -Offset=-11.00 _Offset=12.00 Offset=-11.00 Elev = 199.16__Offset=12.43 __Elev = 198.88 Elev = 199.02___Elev = 199.10 199.5 199.5 -_Offset=30.23 Offset=28.90 Elev = 198.32 *□ Elev = 198.34* 199.0 --0.5% -0.5% 198.5 ISSUED FOR BIDS FOR BIDS Know what's **below**. **Call** before you dig. 198.0 -Pavement

MILLED \$URFACE

 $197.5 \frac{1}{-60} + -50 + -40 + -30 + -20 + -10 + 0$

10 20

40

12+50.00

HORIZONTAL: 1" = 20'

VERTICAL: 1" = 1

SECTIONS

CROSS

PAVEMENT

CONTRACT NO.

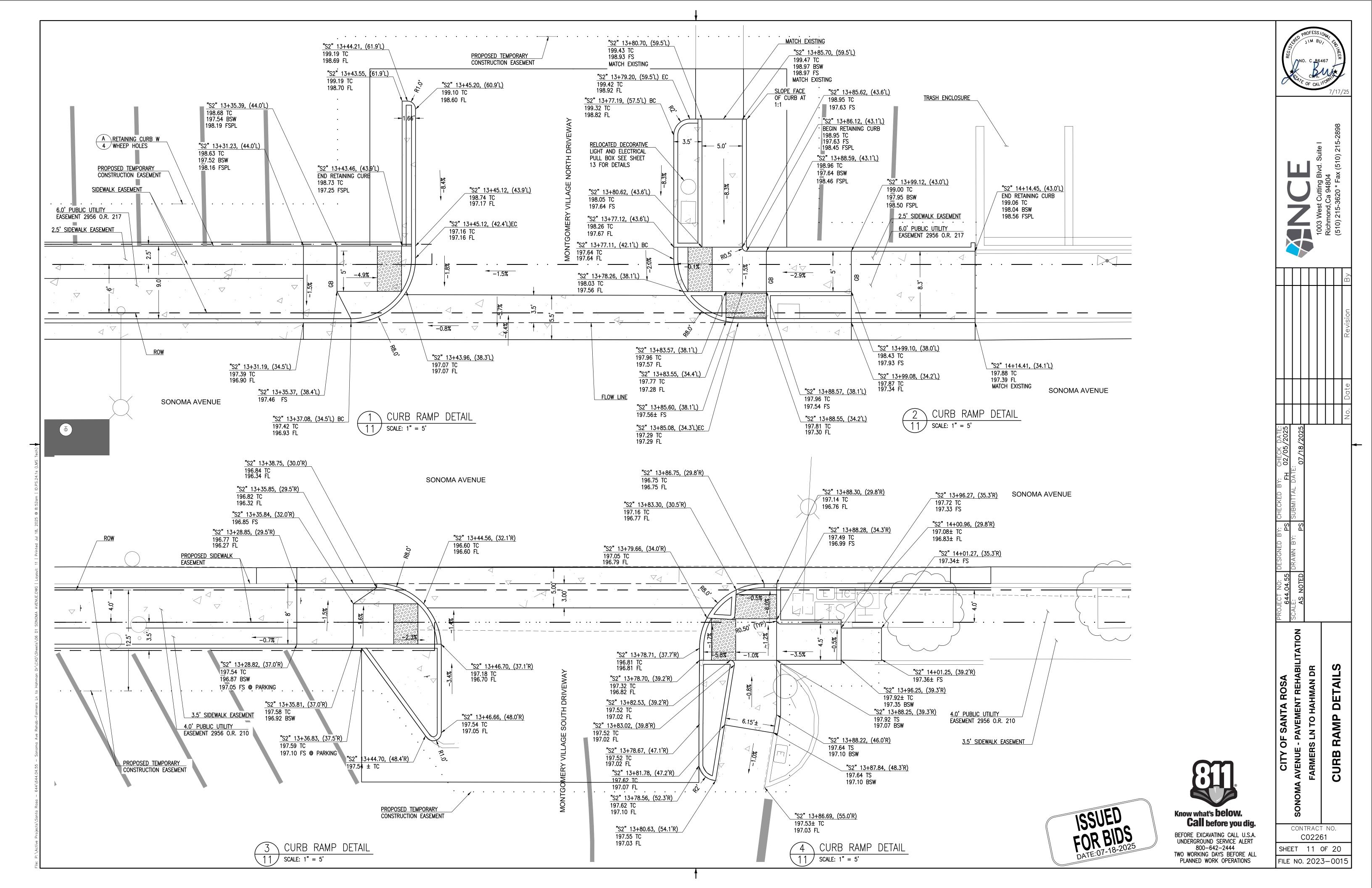
C02261

SHEET 10 OF 20

FILE NO. 2023-0015

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TWO WORKING DAYS BEFORE ALL

PLANNED WORK OPERATIONS



PROPOSED TEMPORARY CONSTRUCTION EASEMENT "S2" 16+42.53, (60.7'L) "S2" 16+37.54, (61.0'L)_ 199.74 TC 199.74 FS MATCH EXISTING 199.84 BSW "S2" 16+45.97, (60.5'L) "S2" 16+37.04, (61.1'L)_ 199.56 TC 198.98 FL RETAINING CURB 200.34 TC : 199.85 FSPL . MATCH EXISTING "S2" 16+34.91, (59.2'L) 200.40 TC 199.90 FSPL "S2" 16+36.80, (50.1'L) <u>"S2" 16+41.80, (49.8'L)</u> RAISED 199.44 TC 199.54 TC 199.04 BSW CONCRETE ISLAND 198.94 FS "S2" 16+27.41, (41.6'L) "S2" 16+36.64, (47.6'L)_ "S2" 16+42.22, (49.3'L) 200.04 TC 199.54 TC 198.59 BSW 199.44 TC 199.00 BSW 198.94 FS 199.54 FSPL "S2" 16+35.95, (45.1'L) "S2" 16+44.66, (48.9'L) "S2" 16+17.13, (41.6'L) 200.01 TC 199.62 TC 198.94 BSW 199.37 TC 198.89 FL "S2" 16+33.84, (43.3'L) 200.01 BSW 199.52 FSPL 199.55 FSPL "S2" 16+17.01, (37.4'L)_ "S2" 16+32.42, (42.0'L) 199.53 TC "S2" 16+41.80, (44.3'L) 199.00 FS 199.32 TC 198.83 FS "S2" 16+11.75, (41.7'L)_ 198.66 BSW RAISED CONCRETE 200.00 TC 199.55 FSPL <u>"S2" 16+43.18, (44.1'L)</u> 199.01 BSW <u>"S2" 16+29.91, (41.6'L)</u> ISLAND 199.50 FSPL 200.05 TC 198.81 FI 198.66 BSW 6.0' PUBLIC UTILITY EASEMENT 2956 O.R. 217 "S2" 16+40.78, (43.8'L) 199.32 TC 198.82 FS -1.0% RAISED CONCRETE ISLAND CONSTRUCT CONCRETE CURB AND GUTTER PER CITY STD. 241 REMOVE EXISTING CURB AND GUTTER
AS REQUIRED TO ACCOMMODATE
PROPOSED IMPROVEMENTS "S2" 16+32.99, (36.7'L) 199.09 TC CONSTRUCT CUSTOM DUAL CASE C / F
CONCRETE CURB RAMP **EXISTING** 198.59 FS LANDSCAPE "S2" 16+32.39, (35.8'L) PER CALTRANS STANDARD EXISTING CATCH BASIN 198.64 TC 198.57 FS **EXISTING** PLAN RSP A8BA CONCRETE SIDEWALK "S2" 16+32.38, (33.8'L) <u>"S2" 16+11.73, (37.4'L)</u> 199.01± BSW 198.57 TC 198.56 FL "S2" 16+16.62, (33.1'L) 198.89± TC MATCH EXISTING SIDEWALK WIDTH (TYP) 198.42± FL "S2" 16+27.37, (32.9'L) CONSTRUCT CONCRETE SIDEWALK
PER CITY STD. 237 198.48 TC 198.47 FL REMOVE EXISTING
CONCRETE SIDEWALK <u>"S2" 16+25.7</u>0, (32.9'L) / 198.53 TC 198.45 FL EDGE OF HMA PAVING LIMITS SONOMA AVENUE CURB RAMP DETAIL 12 | SCALE: 1" = 5' KEYNOTES: 1 TRAFFIC SIGNAL POLE; PROTECT POLE AND FOUNDATION IN PLACE. TRAFFIC SIGNAL PULL BOX; RELOCATE AWAY FROM VERTICAL CURB AND ADA TACITIL DOME SURFACE



Know what's below . Call before you dig
BEFORE EXCAVATING CALL U.S.A
UNDERGROUND SERVICE ALERT 800-642-2444
TWO WORKING DAYS BEFORE AL PLANNED WORK OPERATIONS

CITY OF SANTA ROSA
AVENUE - PAVEMENT REHABILITATION
FARMERS LN TO HAHMAN DR

DETAILS

CURB

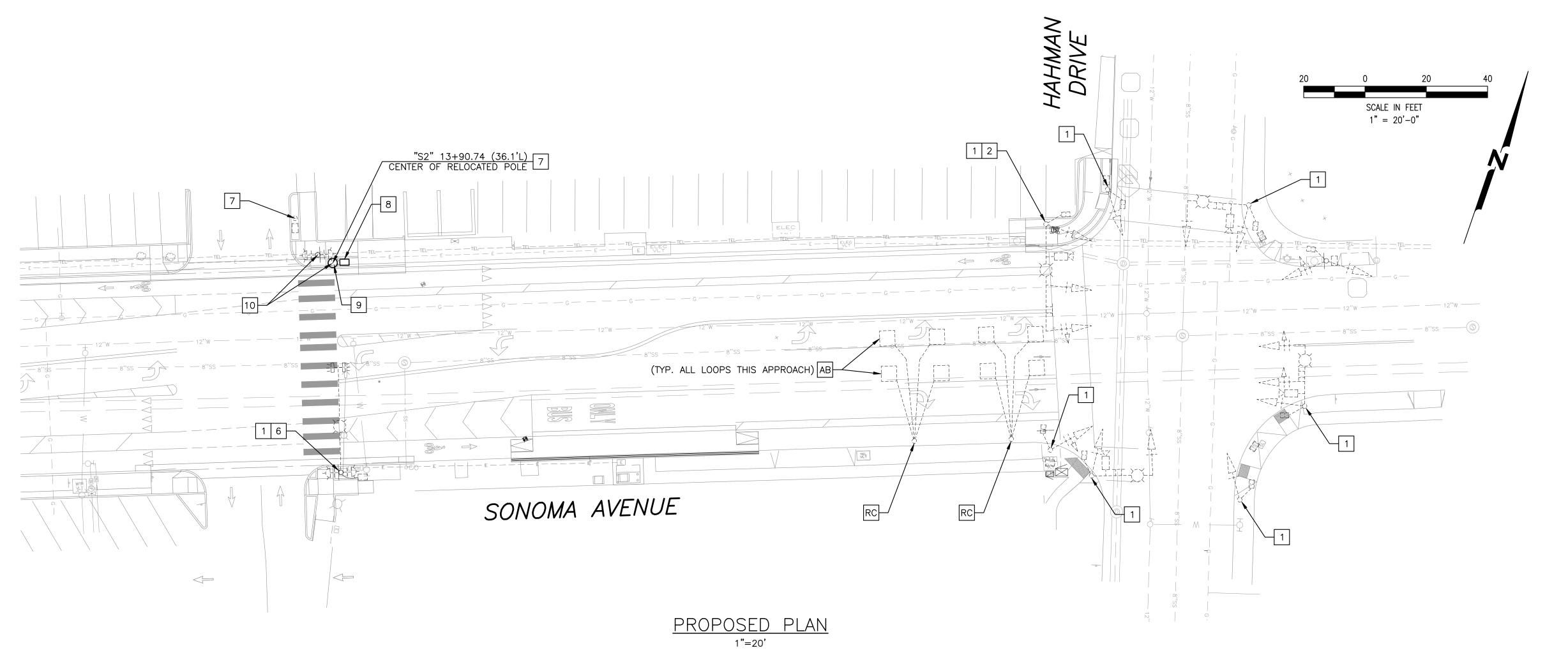
CONTRACT NO. C02261 SHEET 12 OF 20 FILE NO. 2023-0015

GENERAL NOTES:

- 1. EXISTING PULL BOXES ARE DIAGRAMMATIC ONLY.
- 2. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING CONDUITS AND CONDUCTORS UNLESS OTHERWISE NOTED ON THESE PLANS.

PROJECT NOTES (THIS SHEET ONLY):

- ADJUST PEDESTRIAN PUSH BUTTON TO 42" ABOVE FINISHED GRADE OF ADJACENT SIDEWALK
- FURNISH AND INSTALL TYPE 2 POST PER CALTRANS STANDARD PLAN ES-7A
- FURNISH AND INSTALL 2"C, 3#14 (SIGNAL)
- RELOCATE PEDESTRIAN PUSH BUTTON ASSEMBLY FROM EXISTING POLE TO NEW TYPE 2 POST
- INSTALL PULL BOX IN EXISTING CONDUIT RUN. SPLICE NEW TO EXISTING CONDUCTORS
- INSTALL PUSH BUTTON EXTENSION ARM SUCH THAT PUSH BUTTON IS LESS THAN 10" FROM THE ADJACENT LEVEL LANDING
- PROTECT IN PLACE EXISTING LIGHT TO REMAIN.
- INSTALL NEW NO. 5 PULL BOX. INSTALL 2"C AND CONDUCTORS FROM EXISTING PULL BOX TO PROPOSED PULL BOX TO MAINTAIN FLASHING BEACON IS OPERATIONAL AT ALL TIMES.
- INSTALL FOUNDATION FOR CALTRANS TYPE 1B POLE, PER CALTRANS STANDARD PLAN ES—7B. BASE PLATE TO ALLOW FOR INSTALLATION OF EXISTING FLASHING BEACON POLE ON NEW FOUNDATION. INSTALL 2"C TO ADJACENT NEW NO. 5 PULLBOX.
- RELOCATE EXISTING FLASHING BEACON POLE AND EQUIPMENT ONTO NEW FOUNDATION. SPLICE CONDUCTORS. ABANDON EXISTING FOUNDATION 6" BELOW GRADE.







CHECK DATE: 07/16/2025

SIGNAL AND LIGHTING MODIFICATION PLAN SONOMA AV

> CONTRACT NO. C02261

SHEET 13 OF 20 FILE NO. 2023-0015

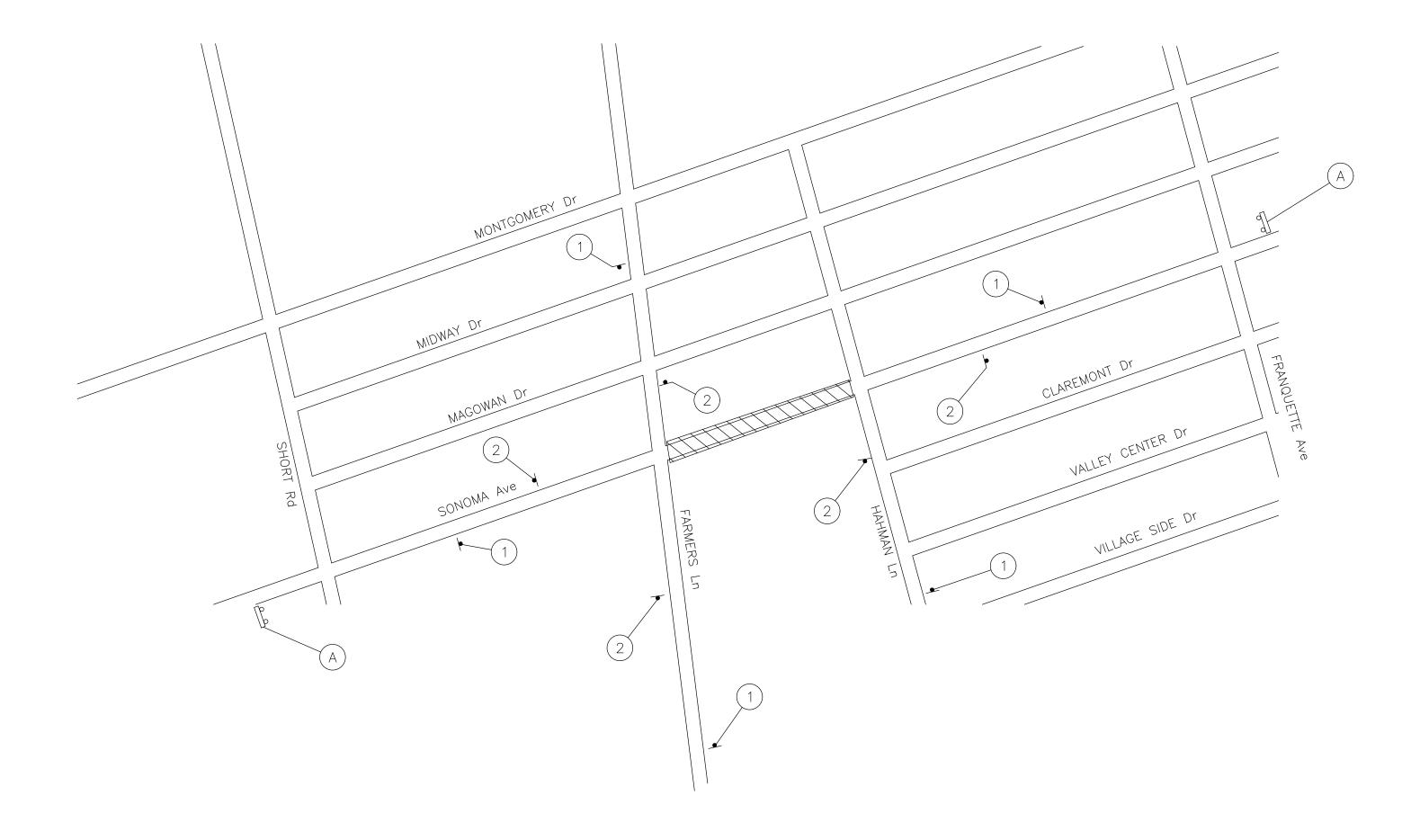
GENERAL NOTES (THIS SHEET ONLY)

- 1. ALL CONSTRUCTION AREA SIGN WORK SHALL MEET CALTRANS STANDARD SPECIFICATIONS 2022, CALTRANS STANDARD PLANS CURRENT AS OF THE DATE OF THESE PLANS, AND APPLICABLE CITY STANDARDS.
- 2. EXACT LOCATION AND POSITION OF CONSTRUCTION AREA SIGNS SHALL BE DETERMINED BY THE ENGINEER.
- 3. SIGNS AND CMS BOARDS SHOWN ON THIS PLAN SHALL BE IN PLACE FOR THE DURATION OF CONSTRUCTION UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
- 4. ADDITIONAL CONSTRUCTION AREA SIGNS SHOWN ON OTHER PLAN SHEETS.

LEGEND (THIS SHEET ONLY)

- CONSTRUCTION AREA SIGN NUMBER
- A CHANGEABLE MESSAGE SIGN (CMS)
- DIRECTION OF TRAVEL

- DELINEATOR (28 INCHES HIGH CONE UNLESS OTHERWISE NOTED)
- CHANGEABLE MESSAGE SIGN

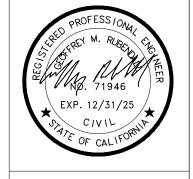


STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN DESIGNATION	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
1	W20-1	36" X 36"	ROAD WORK AHEAD	1 - 4" X 6"	4
2	G20-2	36" X 18"	END ROAD WORK	1 - 4" X 4"	4

<u>PCMS SIGN</u>

PCMS No.	MESSAGE
А	ROAD WORK AHEAD



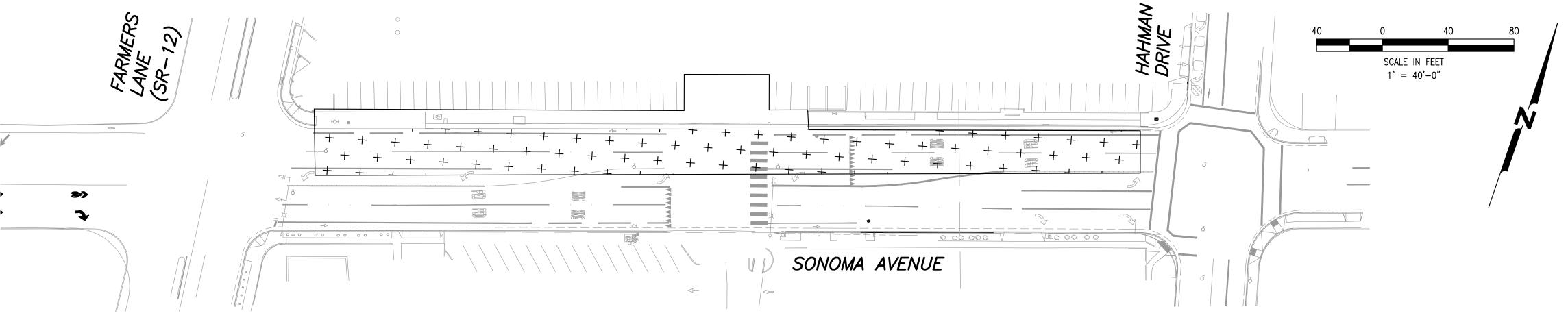
						Ву	
						Revision	
						No. Date	
						No.	
/16 /2025	7 2020	710 / O / O	0707/				
116	2	0	0			•	

CONTRACT NO. C02261

SHEET 14 OF 20 FILE NO. 2023-0015

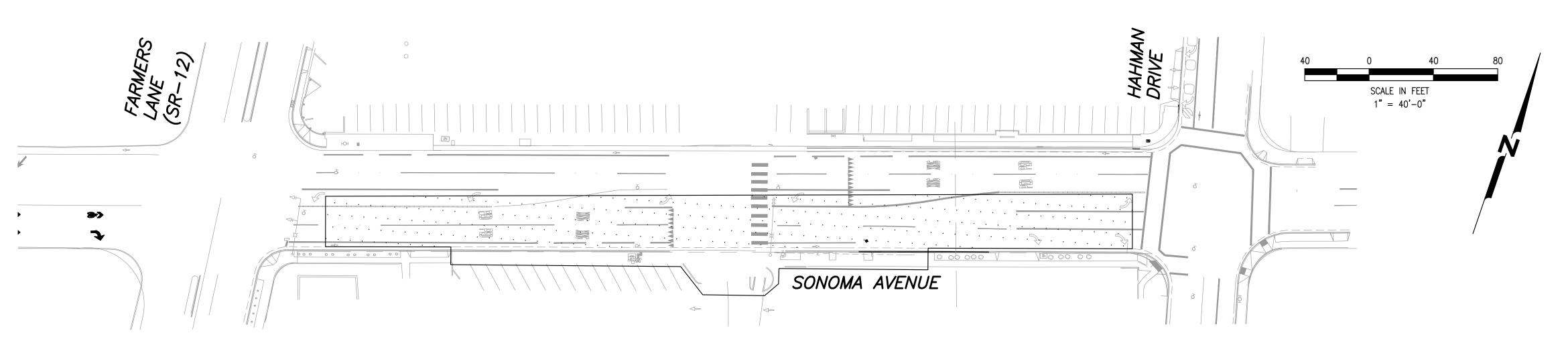
GENERAL NOTES (THIS SHEET ONLY)

- 1. ALL STAGE CONSTRUCTION WORK SHALL MEET CALTRANS STANDARD SPECIFICATIONS 2022, CALTRANS STANDARD PLANS CURRENT AS OF THE DATE OF THESE PLANS, AND APPLICABLE CITY STANDARDS.
- 2. ANY MODIFICATIONS TO THE TEMPORARY TRAFFIC CONTROL DEVICE AS SHOWN IN THESE PLANS MUST BE REVIEWED AND APPROVED IN WRITING BY THE CITY ENGINEER WITH CONCURRENCE FROM CALTRANS ENGINEER WHERE APPLICABLE.
- 3. TO THE EXTENT POSSIBLE, WORK SHALL BE SEQUENCED TO LIMIT THE DISRUPTION TO TRAFFIC AND THE NEIGHBORING COMMUNITY. CONTRACTOR SHALL COMPLY WITH CITY AND CALTRANS REQUIREMENTS ABOUT ADVANCE NOTIFICATION FOR TEMPORARY TRAFFIC CONTROL, LANE CLOSURES, DETOURS, AND RELATED WORK.
- 4. CONTRACTOR SHALL COORDINATE WITH CITY AND SANTA ROSA CITYBUS TO FACILITATE TEMPORARY RELOCATION OF BUS STOPS IF DEEMED APPROPRIATE BY CITY AND SANTA ROSA CITYBUS



STAGE 1

Northern sidewalk and northern half of roadway



STAGE 2

Southern sidewalk and southern half of roadway

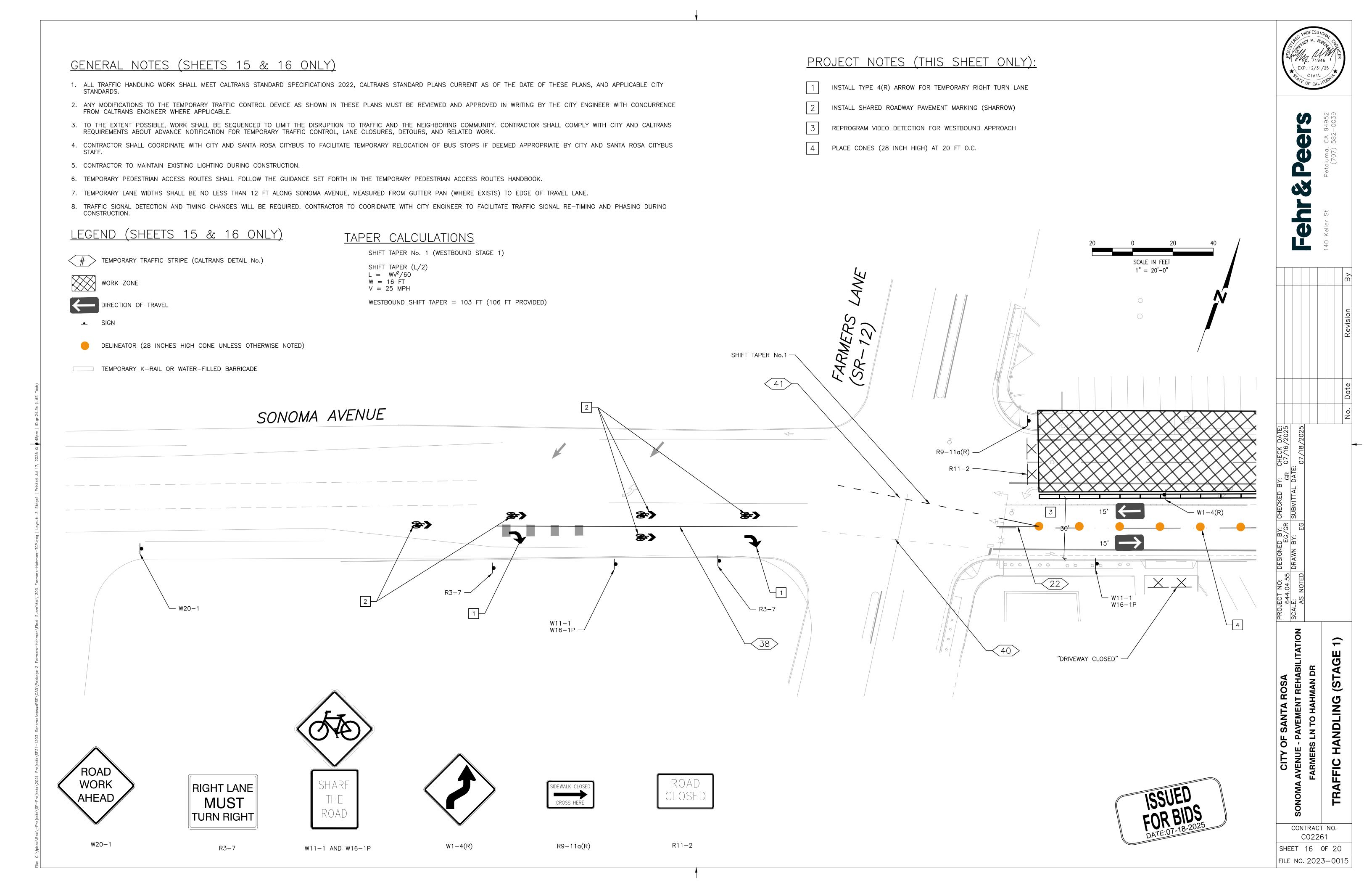


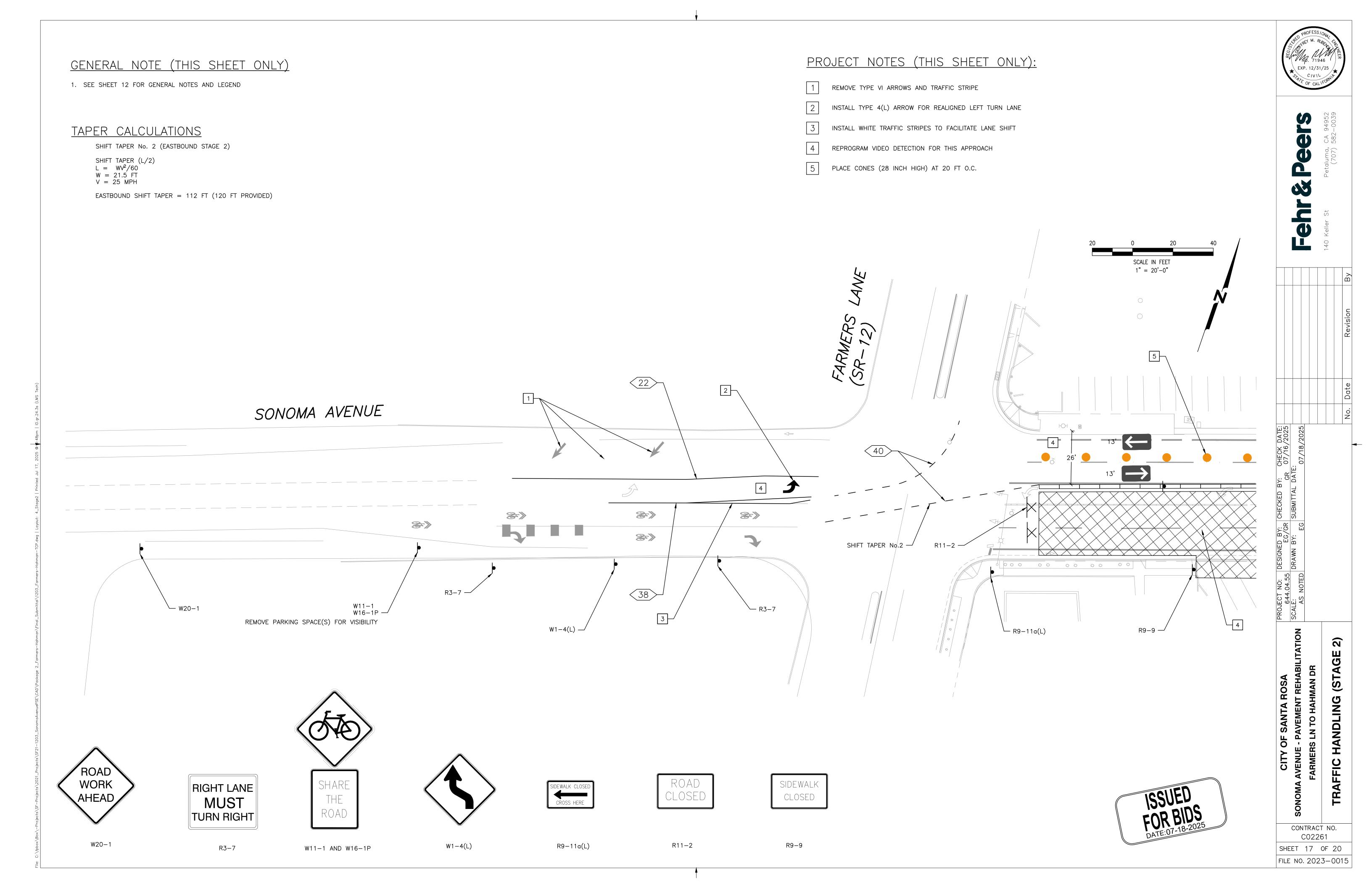
SONOMA AVENUE - PAVEMENT REHABII FARMERS LN TO HAHMAN DR

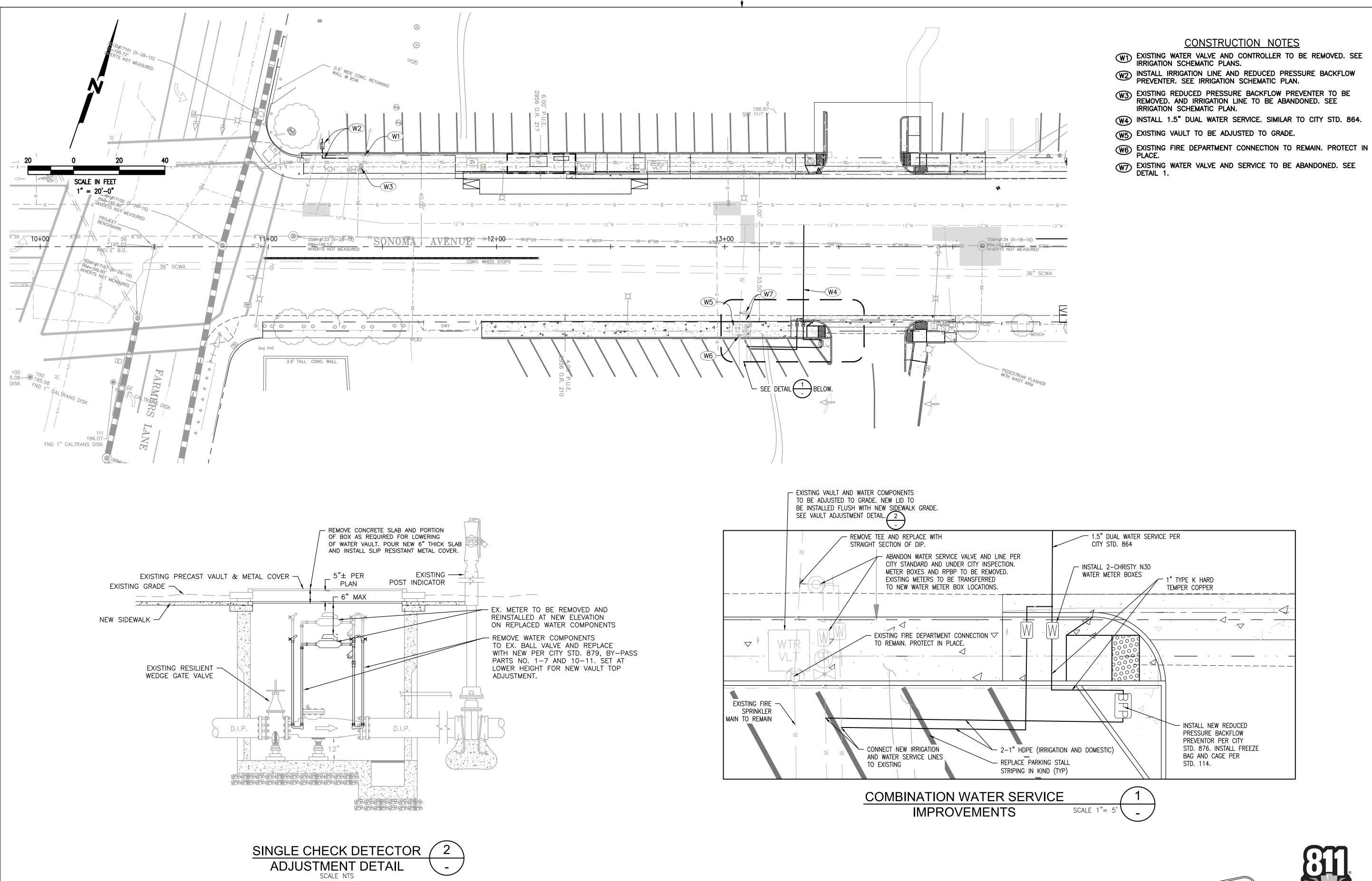
CONTRACT NO. C02261

STAGE CONSTRUCTION

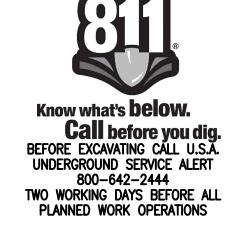
SHEET 15 OF 20 FILE NO. 2023-0015











Coastland DCM PLANS PREPARED BY:

COASTLAND | DCCM PLANS PREPARED BY:

COASTLAND | DC

CITY OF SANTA ROSA

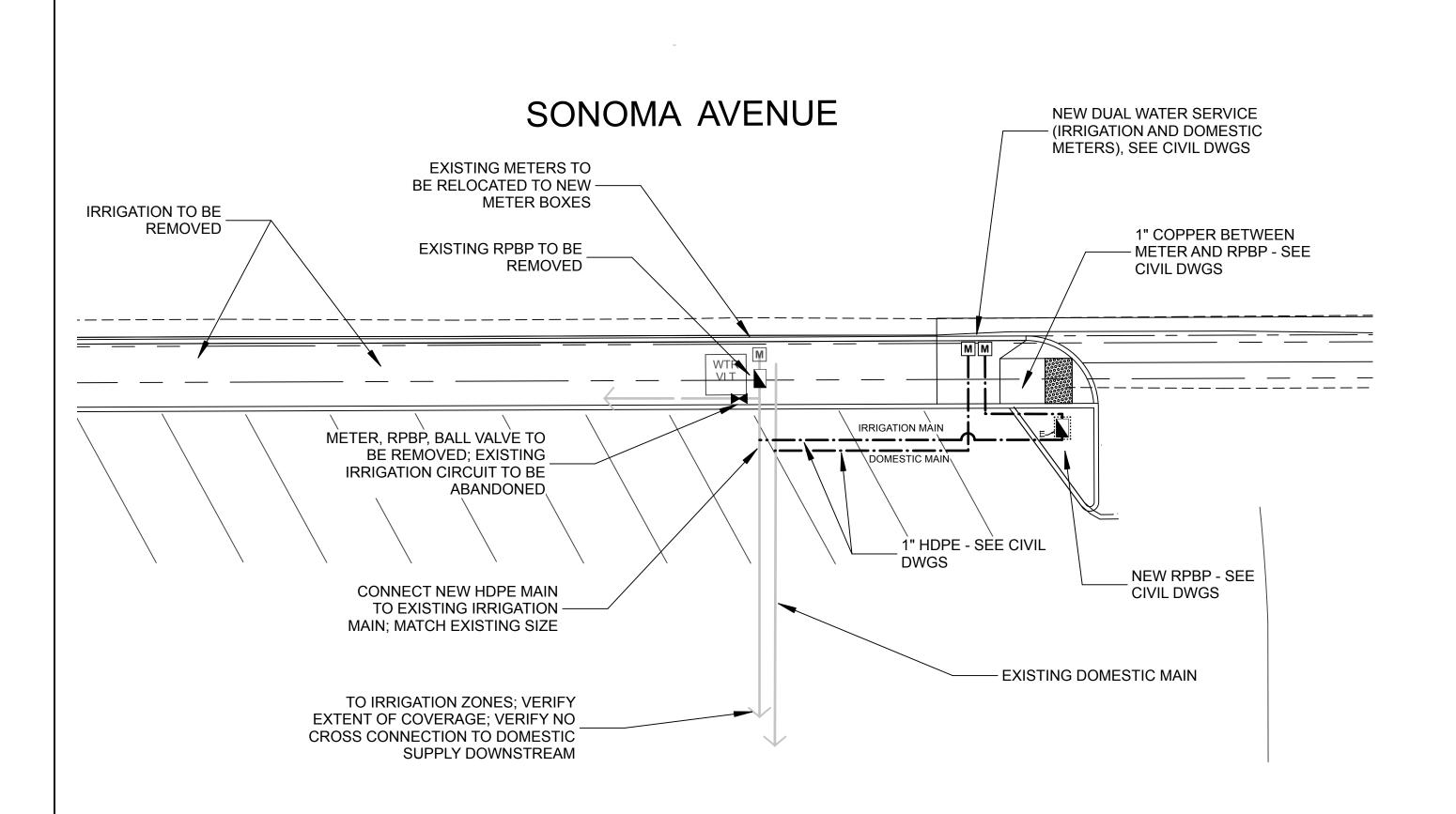
1A AVENUE - PAVEMENT REHABILITATION
FARMERS LN TO HAHMAN DR

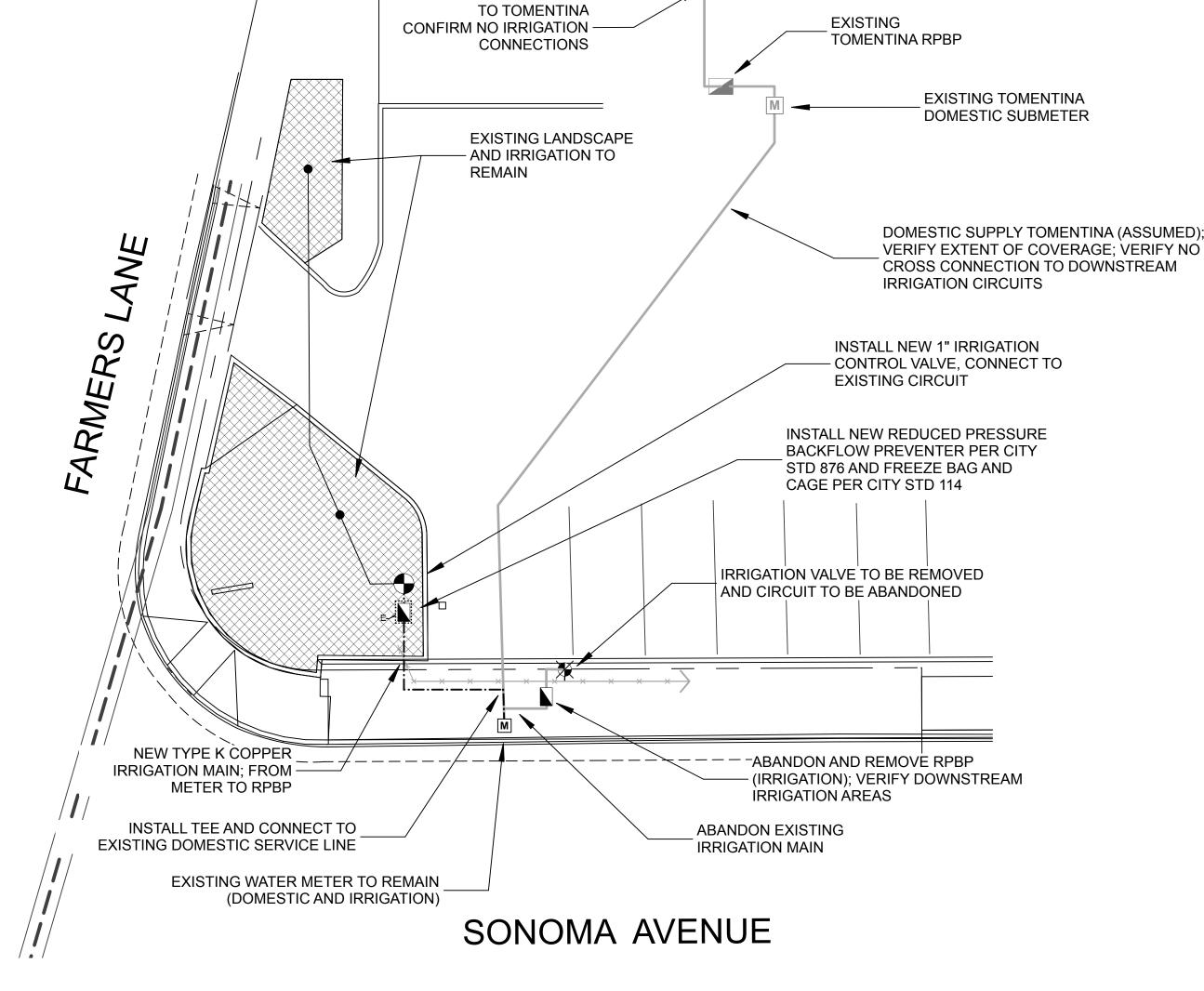
WATER SERVICE

REPLACEMENT PLAN

CONTRACT NO.
CO2261

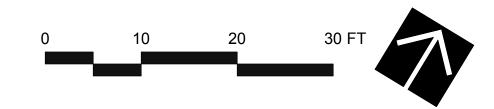
C02261
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SOUTH IRRIGATION SCHEMATIC

Scale: 1" - 10'-0"



NORTH IRRIGATION SCHEMATIC

Scale: 1" = 10'-0"

IRRIGATION NOTES

- . ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE NOTED ON THE PLANS.
- 2. THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM STATIC PRESSURE OF 35 PSI AT THE VALVES AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT THE POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION OF THE IRRIGATION SYSTEM. IF THE WATER PRESSURE SHOWN ON THE DRAWINGS DIFFERS FROM THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO THE START OF CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS
- 3. THE CONTROLLER TO BE BATTERY OPERATED AND SHALL BE INSTALLED INTEGRAL TO THE VALVE AND LOCATED WITHIN THE VALVE BOX.
- 4. ALL CONSTRUCTION IS TO BE PER THE LATEST EDITION OF THE UNIFORM BUILDING CODE.
- 5. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ROOT BARRIERS, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY. INSTALL PIPING AND VALVES IN PLANTING AREAS WHERE POSSIBLE, AND LOCATE ELECTRIC CONTROL AND QUICK COUPLING VALVES IN GROUND COVER/SHRUB AREAS, 6" TO 12" AWAY FROM HARDSCAPE OR TURF AREA
- FOR EASY ACCESS.

 6. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVER SPRAY ONTO WALKS, ROADWAYS, AND/OR BUILDINGS. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITIONS AND THROTTLING THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.
- 7. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE THEMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL EXERCISE EXTREME CARE, AND BE RESPONSIBLE FOR ANY DAMAGE IN EXCAVATING AND WORKING NEAR UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR AND OTHER SUB-CONTRACTORS FOR THE LOCATION OF UTILITIES AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, AND NEAR STRUCTURES. PRIOR TO CONSTRUCTION, CONTACT ALL APPLICABLE AGENCIES AND U.S.A. AT
- 1-800-642-2444 TO FIELD LOCATE ALL EXISTING UTILITIES.

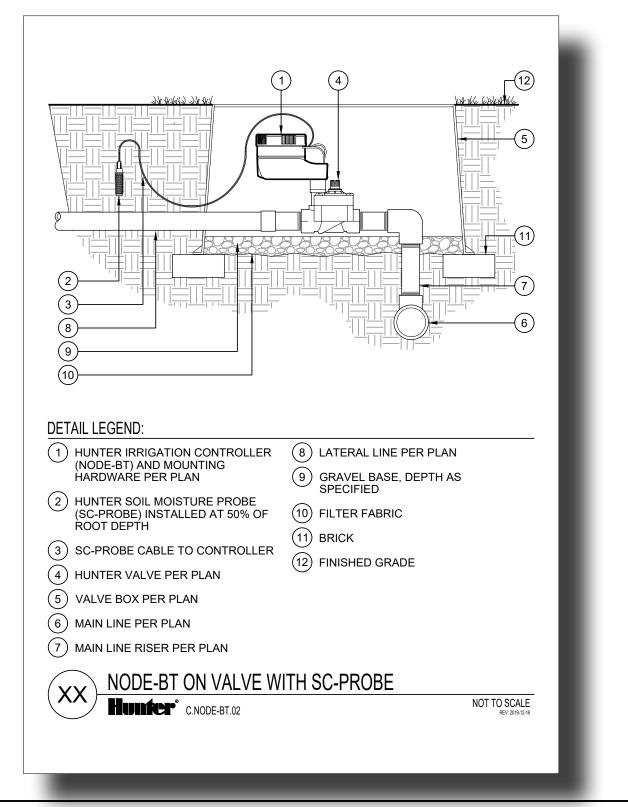
 8. FIELD ADJUSTMENTS MAY BE REQUIRED TO PROVIDE OPTIMUM OPERATING EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LANDSCAPE ARCHITECT TO REVIEW FIELD ADJUSTMENTS PRIOR TO INSTALLATION. IN THE EVENT THAT NO CONTACT IS MADE WITH THE LANDSCAPE ARCHITECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY
- 9. SLEEVE ALL IRRIGATION PIPE AND CONTROL WIRES UNDER STREETS AND CONCRETE WALKWAYS
- WITH THE PROPER SIZE CLASS 200 PVC PIPE TO DEPTH AS SPECIFIED.

 10. FOR ADDITIONAL INFORMATION, SEE PROJECT DETAILS AND SPECIFICATIONS.
- 10. FOR ADDITIONAL INFORMATION, SEE PROJECT DETAILS AND SPECIFICATIONS.

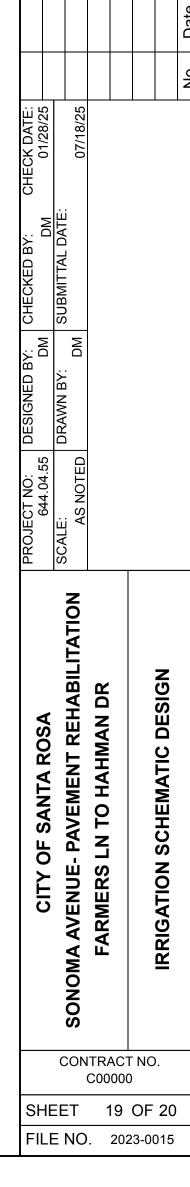
 11. ALL WORK SHALL CONFORM TO ALL APPLICABLE CITY OF SANTA ROSA CONSTRUCTION
- STANDARDS. 12. NO GALVANIZED IRON PIPE OR FITTINGS SHALL BE ALLOWED.
- 13. A BALL VALVE IN A SEPARATE ROUND VALVE BOX IS TO BE INSTALLED IMMEDIATELY UPSTREAM FROM EACH REMOTE CONTROL VALVE OR GROUP OF VALVES. VALVE SHALL BE SIZED TO
- MAINLINE SUPPLY AT THE RC VALVE. SEE DETAIL.

 14. INSTALL 3" WIDE DETECTABLE TAPE (#3" DTP, AS MANUFACTURED BY T. CHRISTY). TAPE SHALL BE INSTALLED 6" ABOVE THE IRRIGATION MAIN.
- 15. INSTALL ALL LANDSCAPE DRIPLINE BENEATH MULCH. INSTALL ALL TUBING 3" BELOW GRADE, PARALLEL AT SPACING INDICATED. USE LANDSCAPE STAPLES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO SECURE TUBING TO GROUND.
- 16. A SIGNED CERTIFICATE OF COMPLETION IS REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE CITY OF SANTA ROSA. IF THE INSTALLATION OF THE LANDSCAPE DOES MEET OR SUBSTANTIALLY COMPLY WITH THE APPROVED LANDSCAPE CONSTRUCTION DOCUMENTS, THE CERTIFICATE OF COMPLETION WILL NOT BE SIGNED OR APPROVED BY THE LANDSCAPE ARCHITECT OF RECORD.

IRRIGATION LEGEND						
SYMBOL	EQUIPMENT	MANUFACTURER	MODEL	REMARKS		
E	Backflow Preventer Enclosure	Le Muer	BF 18" X 42" X 30"	Install per City Specs		
•	Node-BT Controller with PGV-101G	Hunter		Install with SC-Probe and Rain-Clik		
	Mired Rain /Freeze-Clik Sensor	Hunter	RFC	Pole Mount		
	Soil Moisture Sensor	Hunter	SC-Probe	For use with Node-BT		
	Mainline	Copper	Туре К	Install between meter and RPBP		
	Mainline	HDPE	DR11 (200 PSI)	Install downstream from RPBP		
	Lateral	HDPE	DR11 (200 PSI)	Install downstream from RPBP		
8.9 /1D\	Valve Station and Sequence					
1"	Valve Size					
	Gallons Per Minute					







PART 1 GENERAL

1.01 SCOPE

to the following:

A Work Included: perform all work necessary and required for the construction of the project as indicated. Such work includes but is not limited

1. Furnish and install complete irrigation system.

2. Trenching and backfilling. 3. Sleeves for irrigation piping and remote control valve wiring under pavements and walls as noted.

B. Related Work in Other Sections: The following items of associated work are included in other sections of these specifications:

1. Landscaping, Section 02800

C. By Others: The following items of work will be performed by others and are not included in the contract.

1. Electrical stub-out for irrigation controller.

Irrigation water meter. 3. Water stub-out(s) for irrigation system.

1.02 INSPECTION OF CONDITIONS: Examine related work and surfaces before starting work of this section. Report to the landscape architect, in writing, conditions which will prevent the proper provision of this work. Beginning the work of this section without reporting unsuitable conditions to the landscape architect constitutes acceptance of conditions by the contractor. Any required removal, repair, or replacement of this work caused by unsuitable conditions to be done at no additional cost to the

1.03 CODES, RULES AND SAFETY ORDERS

A All work and materials to be in full accordance with the latest rules and regulations of safety orders of Division of Industrial Safety; the Uniform Plumbing Code published by the Western Plumbing Officials' Association: and other applicable laws or regulations, including the presiding local plumbing code. Nothing in these drawings or specifications is to be construed to permit work not conforming to these codes. Should the construction documents, or instructions, be at variance with the aforementioned rules and regulations, notify the landscape architect and get instructions before proceeding with the work affected.

B. Furnish and maintain all warning signs, shoring, barricades, red lanterns, etc., as required by the Safety Orders of the Division of Industrial Safety and local ordinances.

C. Contact U.S.A. for location of underground utilities.

STANDARDS: American Society of Testing and Materials

PERMITS AND FEES: Obtain all permits and pay required fees to any governmental agency having jurisdiction over the work. Arrange inspections required by local agencies and ordinances during the course of construction as required.

1.06 APPROVAL: Wherever the terms "approve", "approval", or "approved" are used in the specifications, they mean approval of landscape architect in writing

1.07 WORK SCHEDULE: Submit a proposed work schedule to landscape architect at least 5 days prior to start of work under this Section. After approval, no modification shall be made to this schedule with out written authorization by the landscape architect.

1.08 OBSERVATION SCHEDULE Schedule a job start meeting with the landscape architect at least 5 days before beginning work under this Section. All requests for observation must be made 72 hours in advance.

A. Job start meeting

The purpose of this conference is to review questions the contractor may have regarding the work, administrative procedures during construction and project work schedule.

B. Irrigation installation and hydrostatic tests

Observation of installation and hydrostatic test results to be made by the landscape architect prior to backfilling of trenches.

C. Pre-maintenance

When all work has been completed a pre-maintenance walk-through will be conducted. If approved, the 90 calendar day maintenance period will begin.

Final Observation will be after the 90 calendar day maintenance period and all required work is completed. Please give 1 week notice for this observation meeting.

1.09 SUBSTITUTIONS

A. Specific reference to manufacturer's names and products specified in this Section are used as standards, but this implies no right to substitute other material or methods without written approval of the landscape architect.

B. Installation of any approved substitution is contractor's responsibility. Any changes required for installation of any approved substitution must be made to the satisfaction of the landscape architect and without additional cost to the owner.

1.10 PROTECTION OF EXISTING CONDITIONS

A. Contractor shall acquaint themself with all site conditions. Should utilities or other work not shown on the plans be found during excavations contractor shall promptly notify landscape architect for instructions as to further action. Failure to do so will make contractor liable for any and all damage thereto arising from their operations subsequent to discovery of such utilities not shown on plans.

1.11 COORDINATION: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as

1.12 PRODUCT HANDLING: Protect work and materials under this Section from damage during construction and storage. Protect polyvinyl chloride (PVC) pipe and fittings from direct sunlight. Beds on which PVC is stored must be full length of pipe. Do not use any pipe or fitting that has been damaged or dented.

1.13 SAMPLES: Landscape architect reserves the right to take and analyze samples of materials for conformity to specifications at any time. Contractor shall furnish samples upon request by the landscape architect. Rejected material shall be removed from the site immediately and replaced at the contractors expense. Cost of testing materials not meeting specifications shall be paid by contractor.

1.14 HYDROSTATIC TESTS

A. Make hydrostatic tests when welded PVC joints have cured at least 24 hours. Apply continuous static water pressure of 100 psi as follows:

1. All piping on the pressure side of control valves shall be tested for two 2. At completion of hydrostatic test, mainline shall be opened at farthest most point from the location of the pump to verify continuity of the mainline.

B. Leaks resulting from tests shall be repaired and tests repeated until system passes tests.

1.15 "AS-BUILT" IRRIGATION DRAWINGS: Contractor shall furnish Record Drawings of the complete irrigation system. Procure from the landscape architect full sized sepias of Contract Drawings. Construction drawings shall be on the construction site at all times while the irrigation system is being installed. Actual location of valves and all irrigation and drainage piping shall be shown on the prints by dimensions from easily identified permanent features, such as buildings, curbs, fences, walks or property lines. Drawings shall show approved substitutions, if any, of material including manufacturer's name and catalog number. The drawings shall be at scale and all indications shall be neat. All information noted on the print shall be transferred to the prints by contractor and all indications shall be recorded in a neat, orderly way. The record drawings shall be turned over to the landscape architect at or before the Final Acceptance of

1.18 CLEAN-UP: Keep all areas of work clean, neat and orderly at all times. Keep paved areas clean during installation. Clean up and remove all debris from the entire work area prior to Final Acceptance to satisfaction of landscape architect.

1.19 FINAL ACCEPTANCE: Work under this Section will be accepted by landscape architect upon satisfactory completion of all work. Upon Final Acceptance, owner will assume responsibility for maintenance of the work. Said assumption does not relieve contractor of obligations under Warranty.

1.20 WARRANTY: In addition to manufacturer's guarantees or warranties, all work shall be warranted for one year from the date of Final Acceptance against defects in material, equipment and workmanship by contractor. Warranty shall also cover repair of damage to any part of the premises resulting from leaks or other defects in materials, equipment and workmanship to the satisfaction of the owner.

PART 2 MATERIALS

2.01 GENERAL: Materials throughout the system shall be new and in perfect condition. At least 14 days prior to beginning work, submit for approval 2 copies of manufacturer's catalog cuts, specifications, and operating instructions of the complete list of materials and assemblies to be installed. Quantities of materials and equipment need not be included. No deviations from the specifications shall be allowed. The decision of the landscape architect shall be final in the determination of the quality of materials and equipment.

2.02 WATER METERS: To be provided and installed by contractor.

2.03 PIPE

back flow prevention device.

A. Mainline piping on pressure side of irrigation control valves:

1. 2" size and greater to be Polyvinyl Chloride (P.V.C.) 1120-1220. Class 315 and shall conform to ASTM D 2241-73 and D 2672-73. 2. Up to and including 1-1/2" size to be Polyvinyl Chloride (P.V.C.) 1120-1220. Schedule 40 and shall conform to ASTM D 1785-73. 3. Galvanized Steel: Standard wall, Schedule 40, capable of working pressure up to 600 psi shall run from the point of connection to

4. Piping from the point of connection to the back flow prevention device shall be as approved by local code.

Lateral line piping on non-pressure side of irrigation control valves:

1. 2" size and greater to be Polyvinyl Chloride (P.V.C.) 1120-1220, Class 315 and shall conform to ASTM D 2241-73 and D 2672-73. 2. Up to and including 1-1/2" size to be Polyvinyl Chloride (P.V.C.) 1120-1220, Schedule 40 and shall conform to ASTM D 1785-73.

A. PVC Fittings: Schedule 40, Polyvinyl Chloride, high impact weight, as manufactured by Sloane, Lasco, medium or approved equal.

B. Fittings for Galvanized Steel Pipe: Schedule 40, standard weight as manufactured by Grinnell, or approved equal.

C. Connections between main and valves shall be PVC Schedule 80 nipples and fittings.

2.05 SLEEVE MATERIALS

A. For Control Wires: PVC 1120-1220, Class 200 pipe or heavy wall galvanized steel conduit.

B. For Water Lines: PVC 1120-1220, Class 200 pipe or heavy wall galvanized steel conduit.

2.06 IRRIGATION CONTROLLERS

A. Controller to be as shown on plans and is to be installed as per detail and manufacturer's specifications.

2.07 IRRIGATION CONTROL VALVES

A. Remote Control Valves: Valves to be as shown on plans and installed per details and manufacturer's specifications.

2.08 CONTROL WIRE

A. Wire: Solid copper wire, U.L. approved for direct burial in ground. Minimum gauge: #14. Common ground wire shall be white.

B. Splicing Materials: Wire connectors shall be Pentite or snap connectors.

C. All wires shall be labeled with the valve number at the controller and

D. 120 wiring shall be as required by local code and installed by an electrician. It shall not be on a switched circuit.

E. Common wire shall be white. Control wires shall be other than white. Use a different color control wire for each controller.

2.09 VALVE BOXES

A. Remote Control Valves: To be Brooks, Green or approved equal, one per

B. Gate Valves and Control Wire Stub-out Locations: To be Brooks. Green or approved equal, one per valve or stub-out location.

A. Back-flow prevention device as shown in legend and drawings.

PART 3 EXECUTION

3.01 LAYOUT

diagrammatic to the extent that swing joints, offsets and all fittings are not

B. Full and complete coverage is required. Contractor shall make any necessary minor adjustments to layout required to achieve full coverage of irrigated areas at no additional cost to owner.

C. Dig trenches wide enough to allow a minimum of 6 in. between parallel pipe lines. Trenches shall be of sufficient depth to provide minimum cover

2. Over pipe on non-pressure side of irrigation control valve: 12

3.03 BACK FLOW PREVENTION DEVICE INSTALLATION

B. Install with union on discharge side for servicing, or with flanges, as required.

A. Where pipes or wires must be installed under paving place them in sleeves with a 24" minimum depth and sufficient size to accommodate irrigation lines and/or wires.

3.05 PIPE LINE ASSEMBLY

A. Install pipe in accordance with manufacturer's instructions.

B. Solvent weld all PVC pipe and fittings using solvents (including primer) and methods as recommended by the manufacturer, except where screw connections are required. Clean pipe and fittings of dirt and moisture before assembly. PVC pipe may be assembled on ground surface beside trench. Snake pipe from side to side of trench bottom to allow for expansion and contraction. Make all connections between PVC pipe and metal valves or pipe with threaded fittings using PVC male adapters.

C. Use Teflon tape on all threaded fittings.

D. Thrust blocks shall be installed where the irrigation main changes direction as at ells and tees and where the irrigation main terminates. Pressure tests shall not be made for a period of 36-48 hours following the completion of pouring of the thrust blocks. Concrete thrust blocks for supply mains shall be sized and placed in strict accordance with the pipe manufacturer's specifications and shall be of an adequate size and so placed as to take all thrust created by the maximum internal water pressure.

IRRIGATION CONTROL VALVES:

A. Install control valves in valve boxes where shown and group together where practical. Place no closer than 18 in. to walk edges, buildings and walls and other valves. Valve boxes shall be placed in relation to finish grade as follows:

1. 1" above grade when no mulch is used 2. 1/2" with seeded lawn

3. 1 1/2" with sod lawn 4. 2" with plant beds

> B. The contractor shall paint on the cover of each valve box in 2" white stenciled letters with the value number as designated on the plan

C. Clearance between the highest part of the valve and the bottom of the valve box lid shall be 2" minimum and 4" maximum. (Lid must not rest on any part of valve and valves must not be buried too deep for convenient

D. Clearance between the top of the piping and the bottom of the valve box and/or the valve box knock outs, shall be a minimum of 2". (The box must not rest on the piping.)

E. Clearance between the valve and the sides of the valve box shall be a minimum of 3".

3.09 AUTOMATIC CONTROLLER

A. Install per local code and manufacturer's instructions.

B. Grounding of Irrigation controller shall be as per manufacturer's recommendations and as per local code.

3.10 CONTROL WIRING

A. Install control wires with sprinkler mains and laterals in common trenches wherever possible. Lay to the side of pipe line. Provide looped slack at valves of 18" and snake wires in trench to allow for contraction of wires. Tie wires in bundles at 10 ft. intervals. Provide expansion loop at all 90 degree angles, and every 100' of straight wire run.

B. Control wire splices at remote control valves to be crimped and sealed with specified splicing materials. Line splices will be allowed only on runs of more than 500 ft. All line splices to be in separate valve box.

C. Install one continuous ground wire and one extra wire to all valves.

3.11 CLOSING OF PIPE AND FLUSHING OF LINES

A. Thoroughly flush out all water lines before installing heads, valves and other hydrants.

B. Test as specified.

3.12 PRESSURE TESTS

A. The contractor shall partially backfill, leaving all fittings exposed before

B. Cap all valve openings and test the mainline pipe at full line working pressure and visually check all fittings.

3.13 BACKFILL AND COMPACTING

A. After system is operating and required tests and inspections have been made, backfill excavations and trenches with clean soil, free of rubbish. All pipe shall have a bedding of 2" under and 4" over of select, rock free

B. Backfill for all trenches, regardless of the type of pipe covered, shall be compacted to minimum 95% density under pavements, 85% under planted

E. Any settling more than 1" which may occur during the guarantee period shall be brought to finish grade by the contractor at his expense.

C. Compact trenches in areas to be planted by thoroughly flooding the backfill. Jetting process may be used in those areas.

x END OF SECTION 02750

D. Dress off all areas to finish grades.

2.13 BACK-FLOW PREVENTION ASSEMBLIES

A. Layout work as accurately as possible to drawings. Drawings are

1. Over PVC pipe on pressure side of irrigation control valve, control wires and quick coupling valves: 18 inches.

A. Install according to local code and manufacturer's instructions.

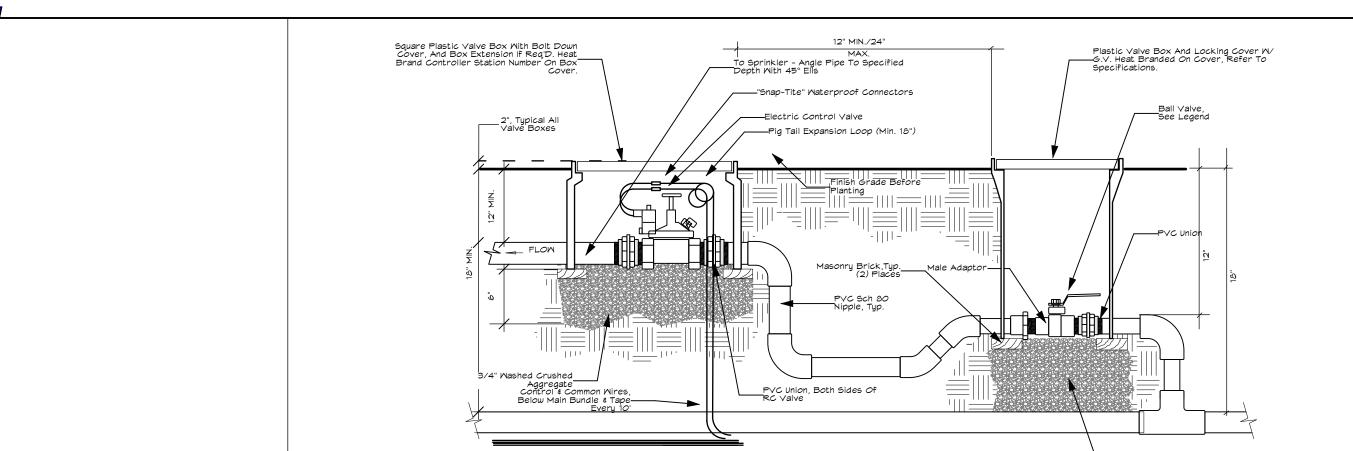
3.04 SLEEVING

B. Lack of pipe chase coordination does not relieve the contractor from installing the pipes and control wire shown on the drawing. In the event pipe chases were not installed prior to paving the contractor shall bore under the paving to accommodate pipes and wires.

C. All control wire shall be in Schedule 40 conduit from trench to controller.

When valves are grouped together allow 12" between valve boxes, each

valve in a separate box, (not to be placed in drainage swales, but kept in ground cover areas.)



1) INSTALL CONTROL VALVES A MINIMUM OF 18" FROM STRUCTURES OR HARDSCAPING. 2) INSTALL VALVES IN PLANT BEDS WHEREVER POSSIBLE. 3) PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.

4) INSTALL VALVE BOX SO THAT TOP OF BOX IS FLUSH WITH AD IACENT HARDSCAPING 5) PLACE AGGREGATE PRIOR TO INSTALLATION OF VALVE BOX. 6) INSTALL VALVE BOXES SO THAT TOP OF BOX IS FLUSH WITH ADJACENT HARDSCAPE.

ELECTRIC CONTROL VALVE MITH SHUT OFF

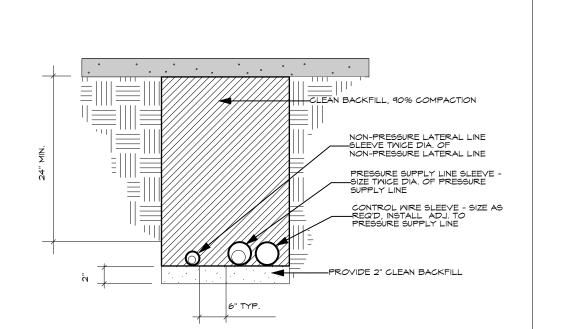
7) INSTALL ONE BALL VALVE IN BOX IMMEDIATELY UPSTREAM FROM EACH REMOTE CONTROL VALVE.

PROVIDE 2" OF CLEAN Concrete Curb, Walk Or PLAN VIEW

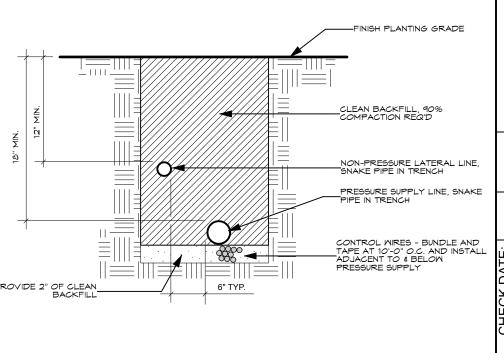
B VALVE BOX LAYOUT

3) SET VALVE BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE

1) CENTER VALVE BOX OVER VALVE ASSEMBLY.



1) ALL SLEEVES TO BE SCH 40 PVC. 2) EXTEND ALL SLEEVES 12" BEYOND EDGE OF HARDSCAPING AT BOTH ENDS.



NTS

1) PIGTAIL AND LOOP CONTROL WIRE AT ALL CHANGES IN DIRECTION. 2) PROVIDE 18" EXPANSION LOOP AT ALL 90° ANGLES, AND EVERY 100' OF STRAIGHT CURVE RUN.

NO: 1.04.55 NTA ROSA MENT REH 2

> CONTRACT NO. C00000 SHEET 20 OF 20 FILE NO. 2023-0015