

CONSTRUCTION PLANS  
FOR THE  
**CMWD VALVE REPLACEMENT  
PHASE III**  
PROJECT NO. 5019-F



BOARD OF DIRECTORS

MAYOR/PRESIDENT OF THE BOARD - KEITH BLACKBURN

DISTRICT 1 - MELANIE BURKHOLDER

DISTRICT 2 - CAROLYN LUNA

DISTRICT 3 - PRIYA BHAT-PATEL

DISTRICT 4 - TERESA ACOSTA

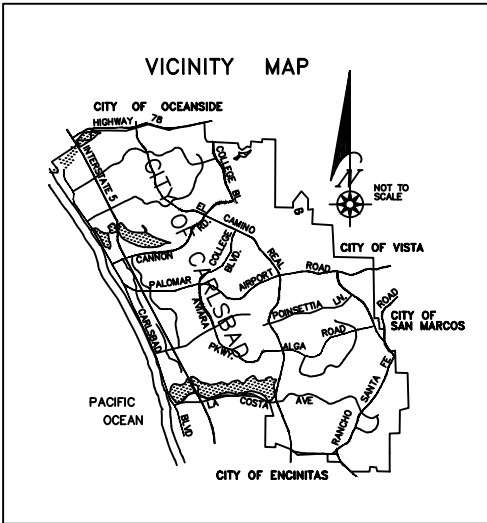
EXECUTIVE MANAGER- SCOTT CHADWICK

**"DECLARATION OF RESPONSIBLE CHARGE"**

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CARLSBAD DOES NOT RELIEVE ME AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

FIRM: KLEINFELDER  
ADDRESS: 770 FIRST AVENUE, SUITE 400  
CITY, ST.: SAN DIEGO, CA  
TELEPHONE: 619 831 4600  
BY: BRIAN TRAN DATE: 12-21-2023  
(NAME OF ENGINEER)  
R.C.E. NO.: 86704  
REGISTRATION EXPIRATION DATE: 3-31-2025



DECEMBER 2023

100% SUBMITTAL

"AS BUILT"	
CIVIL ENGINEER	DATE
REVIEWED BY:	
INSPECTOR	DATE

G-1




DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 1	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III COVER SHEET</b>		
APPROVED: <u>Brian Tran</u>		DATE <u>5/13/2024</u>
DISTRICT ENGINEER		RCE 55974 EXPIRES 12/31/24
DWN BY: <u>AMD</u>	PROJECT NO.	DRAWING NO.
CHKD BY: <u>BT</u>	<u>5019-F</u>	<u>545-1</u>
RVWD BY: <u>KH</u>		

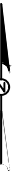
DESCRIPTION	DRAWING NO.	SHEET NO.
COVER SHEET	G-1	1
SHEET LIST	G-2	2
KEYPLAN I	G-3	3
KEYPLAN II	G-4	4
GENERAL NOTES AND LEGEND	G-5	5
SITE 1 - EXISTING: Harding St and Chestnut Ave	C-1A	6
SITE 1 - PROPOSED: Harding St and Chestnut Ave	C-1B	7
SITE 2 - EXISTING: Carlsbad Village Dr and Harding St	C-2A	8
SITE 2 - PROPOSED: Carlsbad Village Dr and Harding St	C-2B	9
SITE 3 - EXISTING: Madison St and Oak Ave	C-3A	10
SITE 3 - PROPOSED: Madison St and Oak Ave	C-3B	11
SITE 4 - EXISTING: Oak Ave and Roosevelt St	C-4A	12
SITE 4 - PROPOSED: Oak Ave and Roosevelt St	C-4B	13
SITE 5 - EXISTING: Tamarack Ave- West of Railroad	C-5A	14
SITE 5 - PROPOSED: Tamarack Ave- West of Railroad	C-5B	15
SITE 6 - EXISTING: Carlsbad Blvd and Sequoia Ave	C-6A	16
SITE 6 - PROPOSED: Carlsbad Blvd and Sequoia Ave	C-6B	17
SITE 7 - EXISTING: Carlsbad Village Dr and Tyler St	C-7A	18
SITE 7 - PROPOSED: Carlsbad Village Dr and Tyler St	C-7B	19
SITE 8 - EXISTING: Pine Ave and Garfield St	C-8A	20
SITE 8 - PROPOSED: Pine Ave and Garfield St	C-8B	21
SITE 9 - EXISTING: Hillside Dr and Kelly Dr	C-9A	22
SITE 9 - PROPOSED: Hillside Dr and Kelly Dr	C-9B	23
SITE 10 - EXISTING: Redwood Ave and Garfield St	C-10A	24
SITE 10 - PROPOSED: Redwood Ave and Garfield St	C-10B	25
SITE 11 - EXISTING: 2634 El Camino Real	C-11A	26
SITE 11 - PROPOSED: 2634 El Camino Real	C-11B	27
SITE 12 - EXISTING: 2618 El Camino Real	C-12A	28
SITE 12 - PROPOSED: 2618 El Camino Real	C-12B	29
SITE 13 - EXISTING: Tamarack Ave and Simsbury Ct	C-13A	30
SITE 13 - PROPOSED: Tamarack Ave and Simsbury Ct	C-13B	31

DESCRIPTION	DRAWING NO.	SHEET NO.
SITE 14 - EXISTING: Pontiac Dr and Regent Rd	C-14A	32
SITE 14 - PROPOSED: Pontiac Dr and Regent Rd	C-14B	33
SITE 15 - EXISTING: Palomar Airport Rd and El Camino Real	C-15A	34
SITE 15 - PROPOSED: Palomar Airport Rd and El Camino Real	C-15B	35
SITE 16 - EXISTING: 2175 Camino Vida Roble	C-16A	36
SITE 16 - PROPOSED: 2175 Camino Vida Roble	C-16B	37
SITE 17 - EXISTING: Las Palamas and Camino Vida Roble	C-17A	38
SITE 17 - PROPOSED: Las Palamas and Camino Vida Roble	C-17B	39
SITE 18 - EXISTING: 2712 Loker Ave West	C-18A	40
SITE 18 - PROPOSED: 2712 Loker Ave West	C-18B	41
SITE 19 - EXISTING: Alicante Rd and Altisma Way	C-19A	42
SITE 19 - PROPOSED: Alicante Rd and Altisma Way	C-19B	43
SITE 20 - EXISTING: Cannon Rd and Paseo Del Norte	C-20A	44
SITE 20 - PROPOSED: Cannon Rd and Paseo Del Norte	C-20B	45
SITE 21 - EXISTING: 2043 Alga Rd	C-21A	46
SITE 21 - PROPOSED: 2043 Alga Rd	C-21B	47
SITE 22 - EXISTING: Flamenco St and Colibri Ln	C-22A	48
SITE 22 - PROPOSED: Flamenco St and Colibri Ln	C-22B	49
SITE 23 - EXISTING: Altisma Way	C-23A	50
SITE 23 - PROPOSED: Altisma Way	C-23B	51
SITE 24 - EXISTING: Elder Ct and Montia Ct	C-24A	52
SITE 24 - PROPOSED: Elder Ct and Montia Ct	C-24B	53
SITE 25 - EXISTING: 7148 Lantana Terrace	C-25A	54
SITE 25 - PROPOSED: 7148 Lantana Terrace	C-25B	55
SITE 26 - EXISTING: Windrose Circle and Navigator Circle	C-26A	56
SITE 26 - PROPOSED: Windrose Circle and Navigator Circle	C-26B	57
DETAILS I	D-01	58
DETAILS II	D-02	59
DETAILS III	D-03	60
DETAILS IV	D-04	61
RECORD DRAWING LIST	D-05	62

G-2

					SHEET 2 CITY OF CARLSBAD ENGINEERING DEPARTMENT SHEETS 62	
	IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III SHEET LIST</b>					
				APPROVED: <i>Dave Padilla</i> 5/13/2024 DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24 DATE		
DATE INITIAL ENGINEER OF WORK		REVISION DESCRIPTION		DATE INITIAL OTHER APPROVAL		
				DATE INITIAL CITY APPROVAL		
				DWN BY: AMD PROJECT NO. 5019-F DRAWING NO. 545-1 CHKD BY: BT RVWD BY: KH		





G-3



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>3</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III KEYPLAN I</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 RCE 55974 EXPIRES 12/31/24	DAVE PADILLA DATE
DWN BY: <u>AMD</u> CHKD BY: <u>BT</u> RVWD BY: <u>KH</u>	PROJECT NO. <u>5019-F</u>	DRAWING NO. <u>545-1</u>



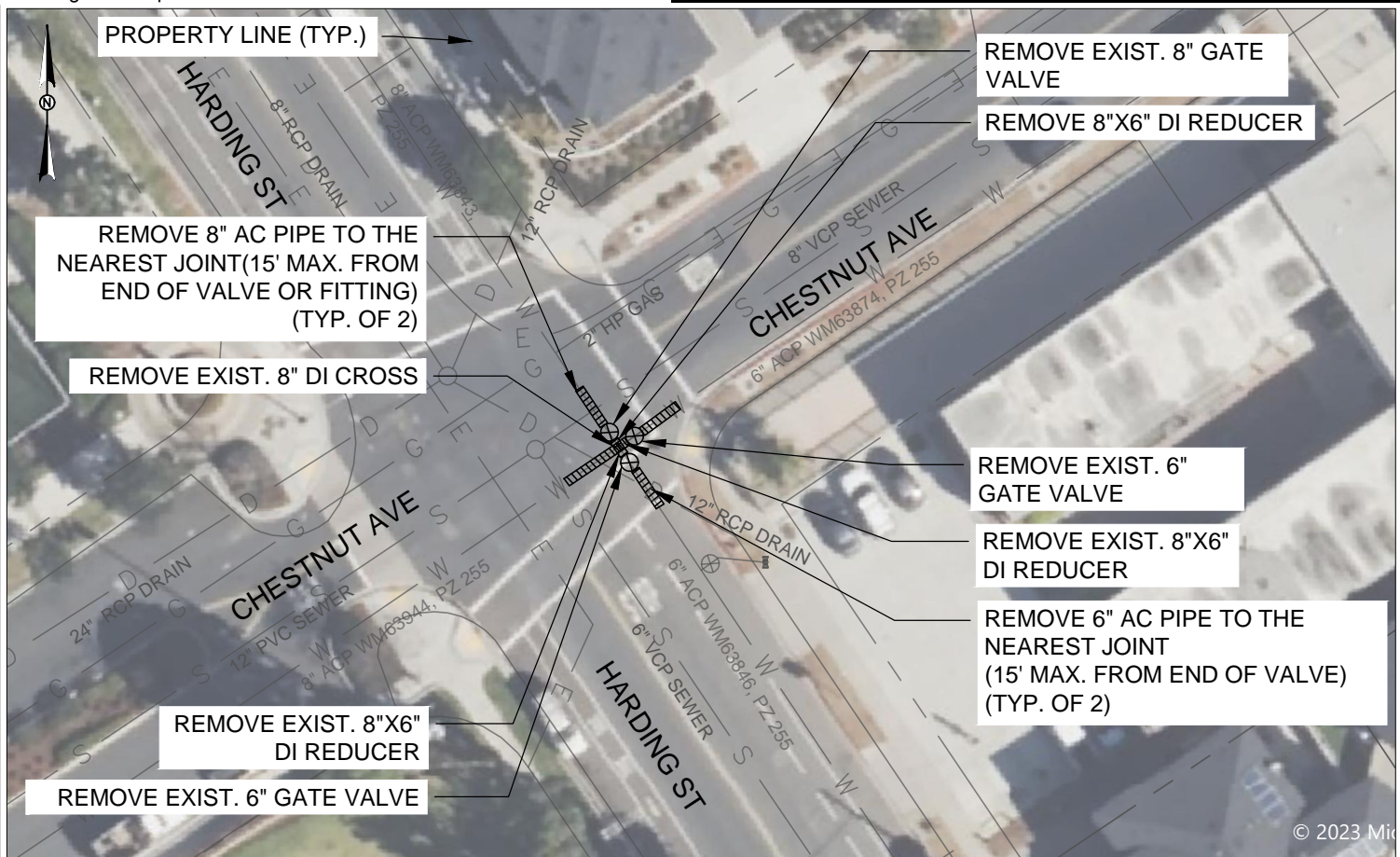
G-4



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 4	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III KEYPLAN II</b>		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVMD BY: KH		





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- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM EAST LOOKING WEST

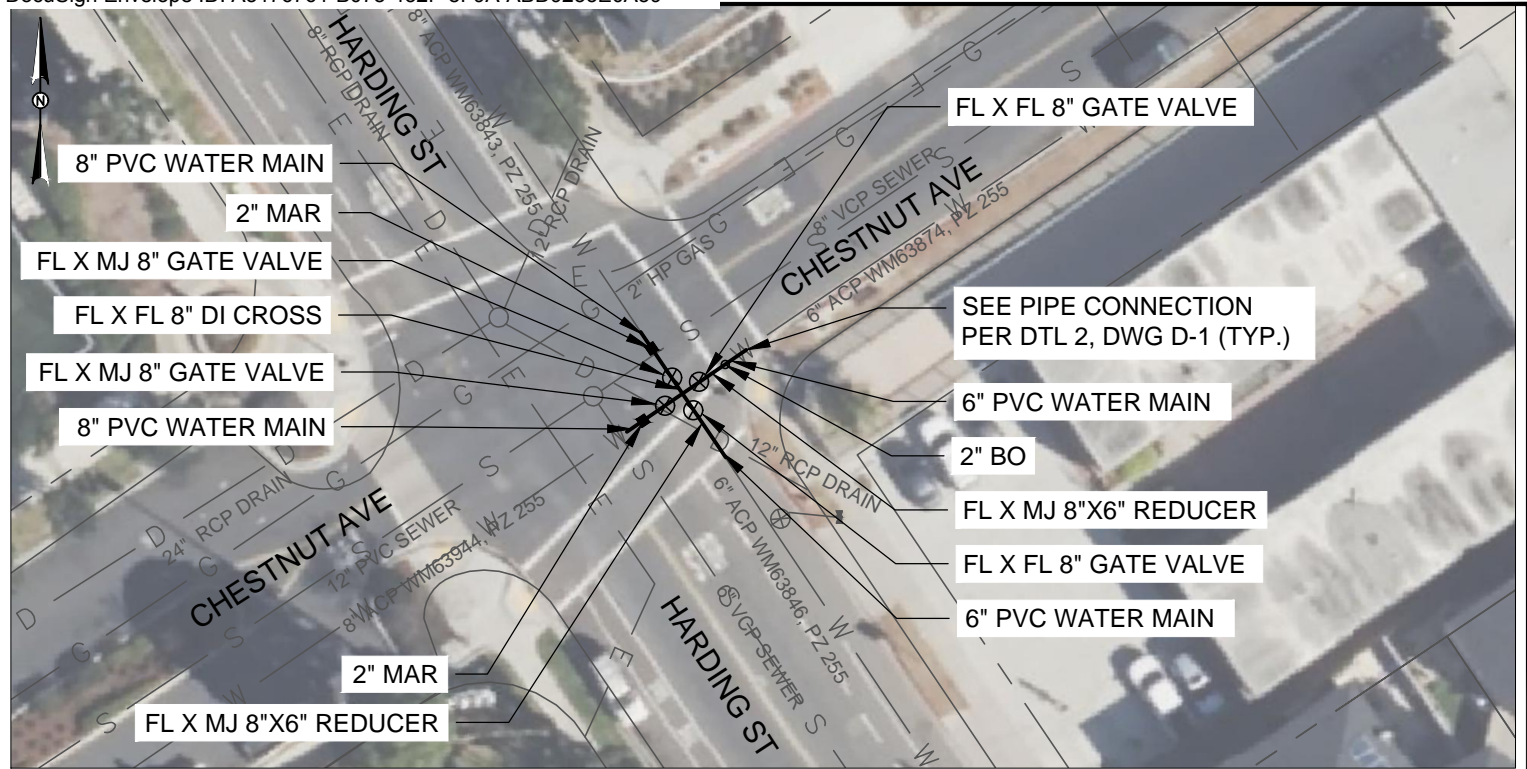
SITE 1 - EXISTING: HARDING ST AND CHESTNUT AVE

C-1A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

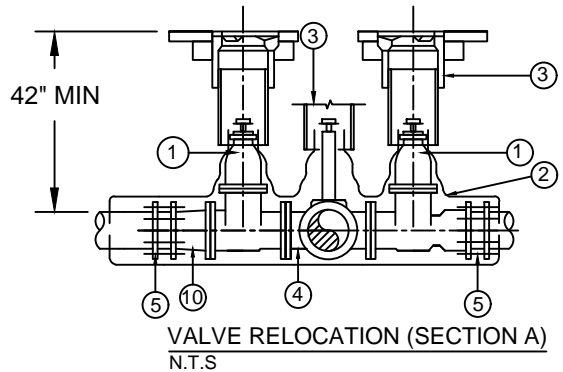
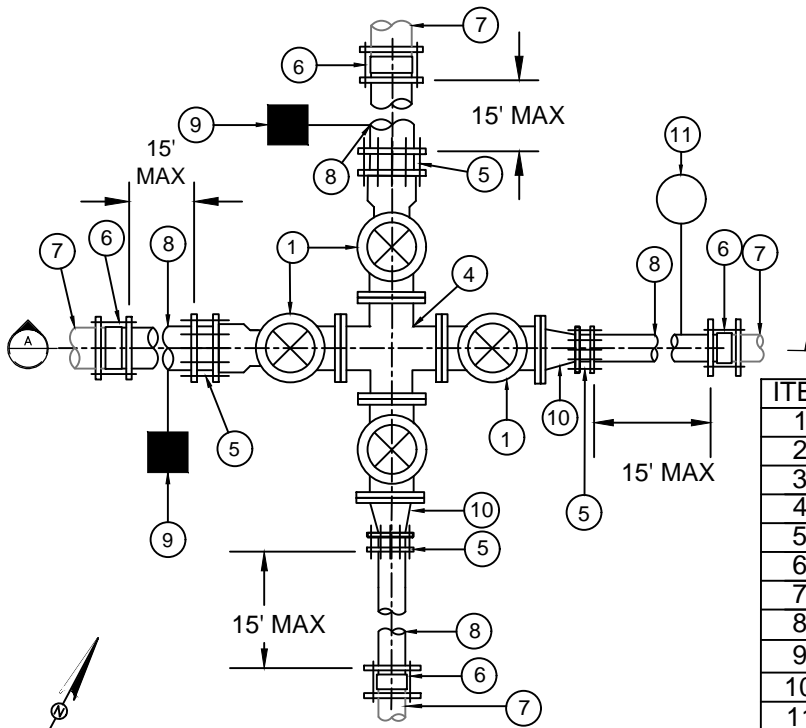
SHEET <b>6</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
<b>IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 1 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i> <span style="float: right;">5/13/2024</span>		DAVE PADILLA
DISTRICT ENGINEER		RCE 55974 EXPIRES 12/31/24
DWN BY: <b>AMD</b>	PROJECT NO.	DRAWING NO.
CHKD BY: <b>BT</b>	<b>5019-F</b>	<b>545-1</b>
RVWD BY: <b>KH</b>		



**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN(W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	DI REDUCER, SIZE/CONNECTION PER PLAN
11	BLOW-OFF (W-10)

VALVE RELOCATION PLAN  
N.T.S.

SITE 1 - PROPOSED: HARDING ST AND CHESTNUT AVE

C-1B



DATE	INITIAL	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK		OTHER APPROVAL	CITY APPROVAL		
REVISION DESCRIPTION					

SHEET  
**7**

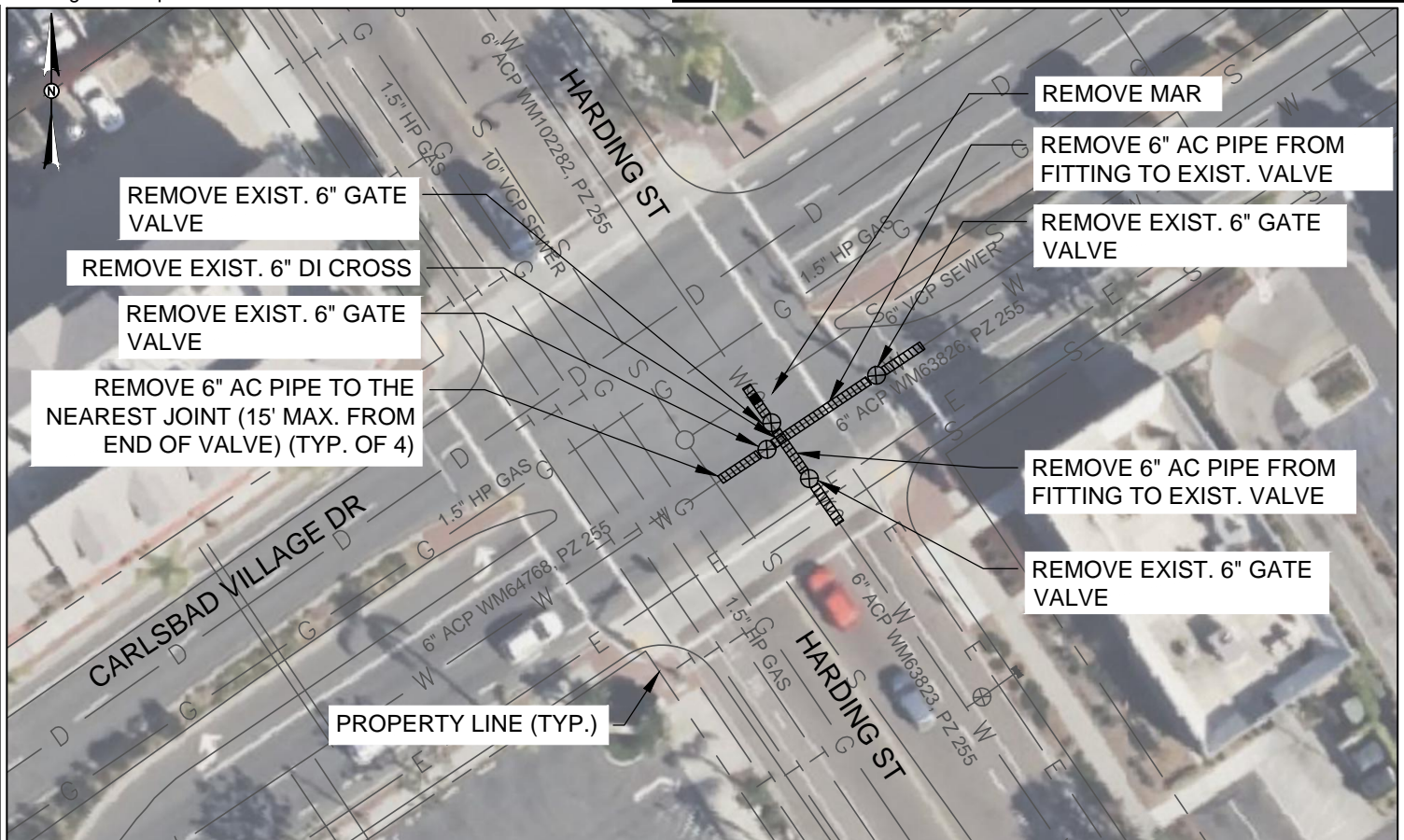
**CITY OF CARLSBAD**  
ENGINEERING DEPARTMENT

SHEETS  
**62**

IMPROVEMENT PLAN FOR:  
**CMWD VALVE REPLACEMENT PHASE III**  
**1 - PROPOSED**

APPROVED: *Dave Padilla* 5/13/2024  
DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24 DATE

DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



# PLAN

- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.



PHOTO 1 - FROM NORTH EAST LOOKING SOUTH WEST ON CARLSBAD VILLAGE DR

### SITE 2 - EXISTING: CARLSBAD VILLAGE DR AND HARDING ST

C-2A

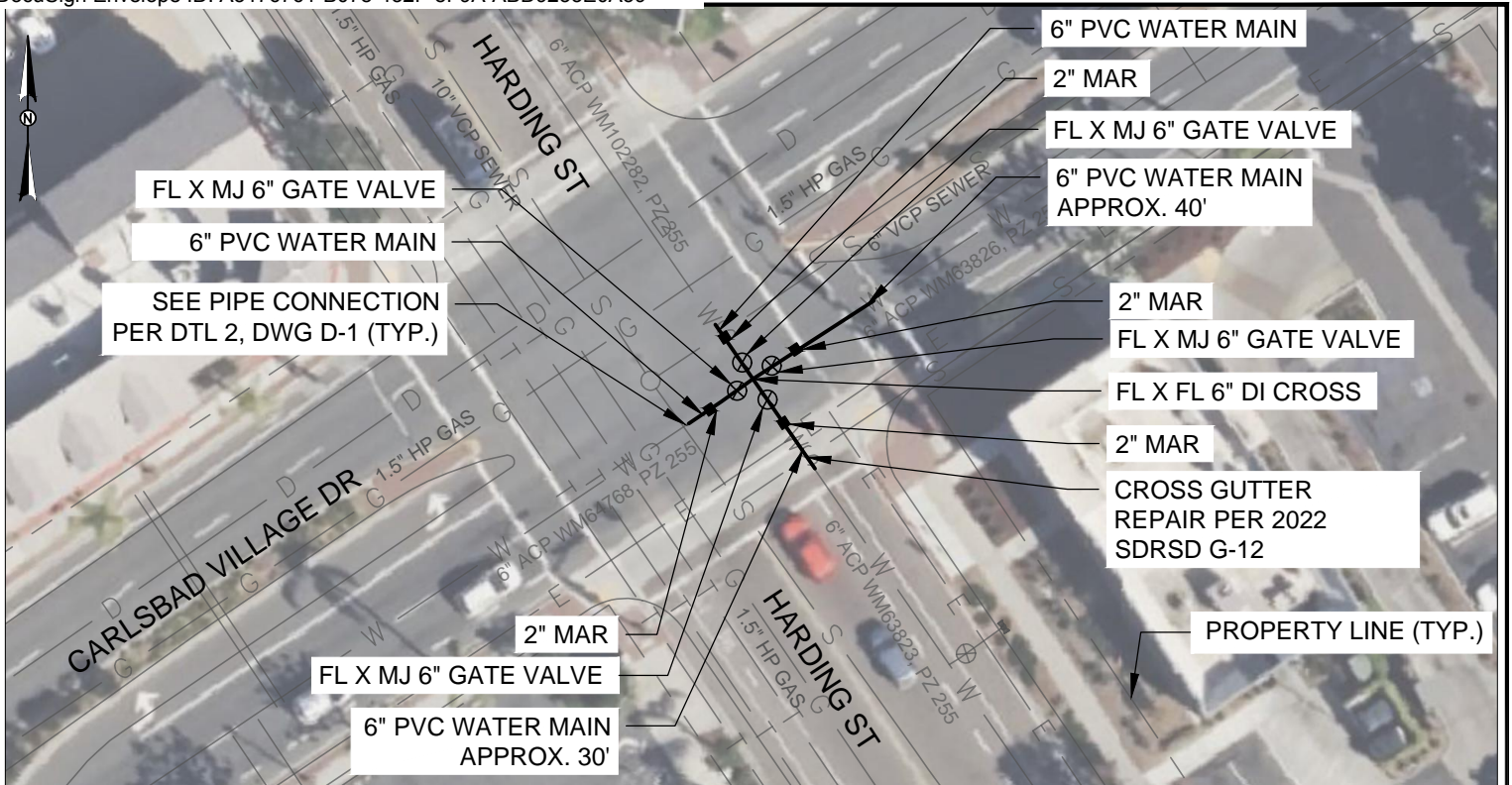


DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 8	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 2 - EXISTING		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



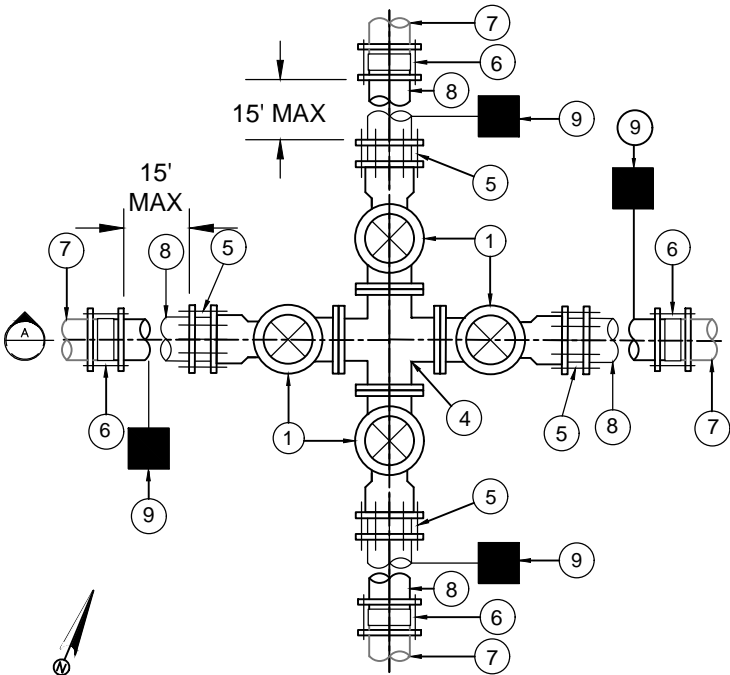




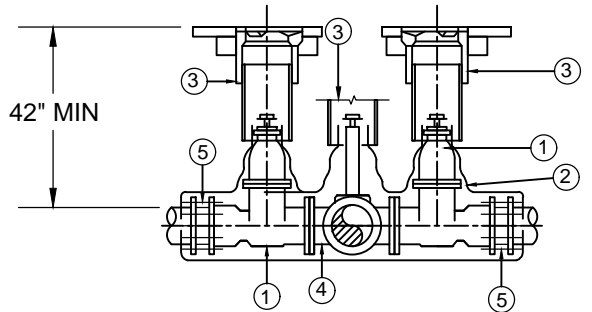
**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



VALVE RELOCATION PLAN  
N.T.S.



VALVE RELOCATION (SECTION A)  
N.T.S.

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)

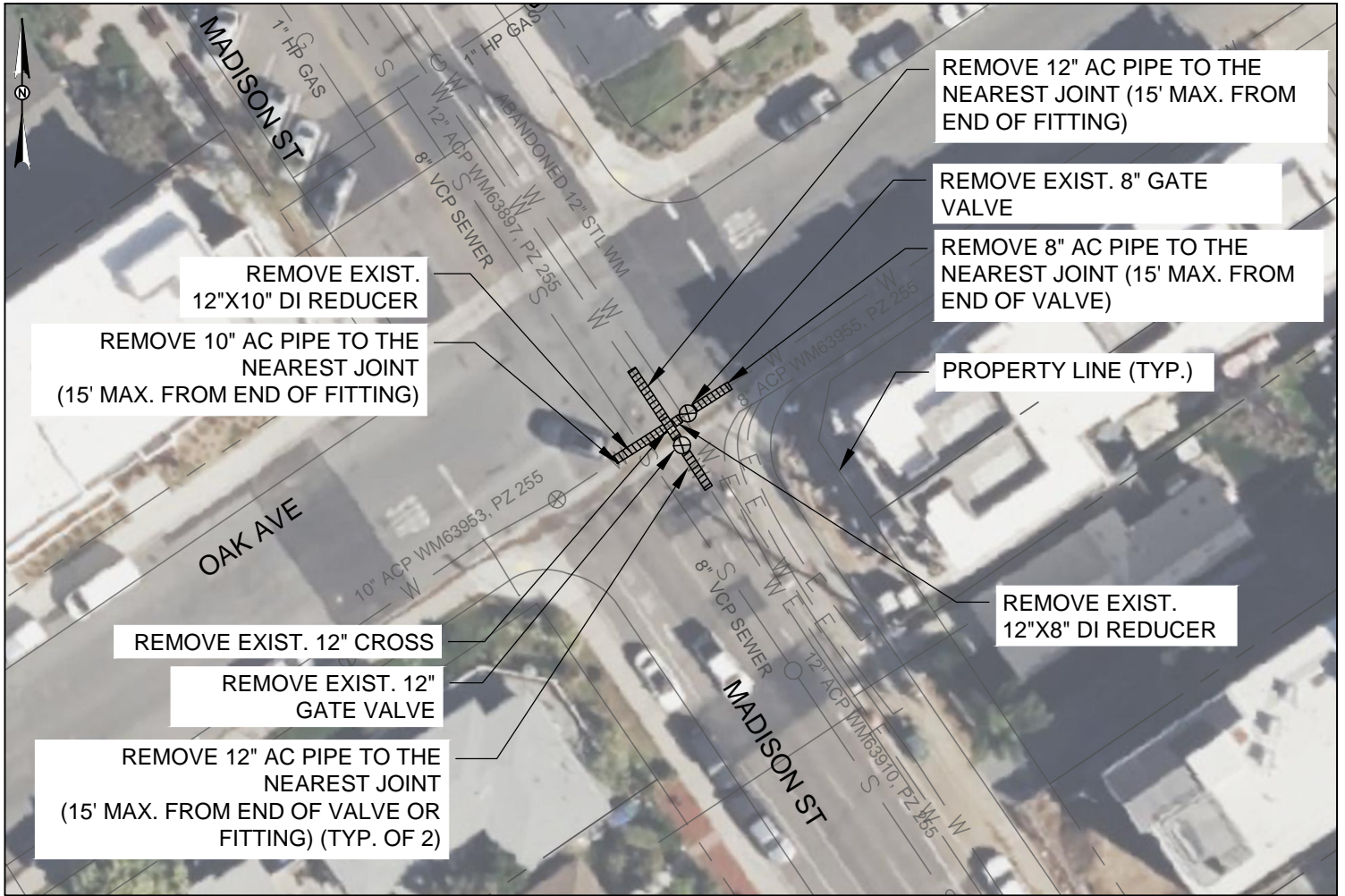
**SITE 2 - PROPOSED: CARLSBAD VILLAGE DR AND HARDING ST**

C-2B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>9</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>2 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545-1



# PLAN

**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.



PHOTO 1 - FROM SOUTH WEST LOOKING NORTH EAST ON OAK AVE

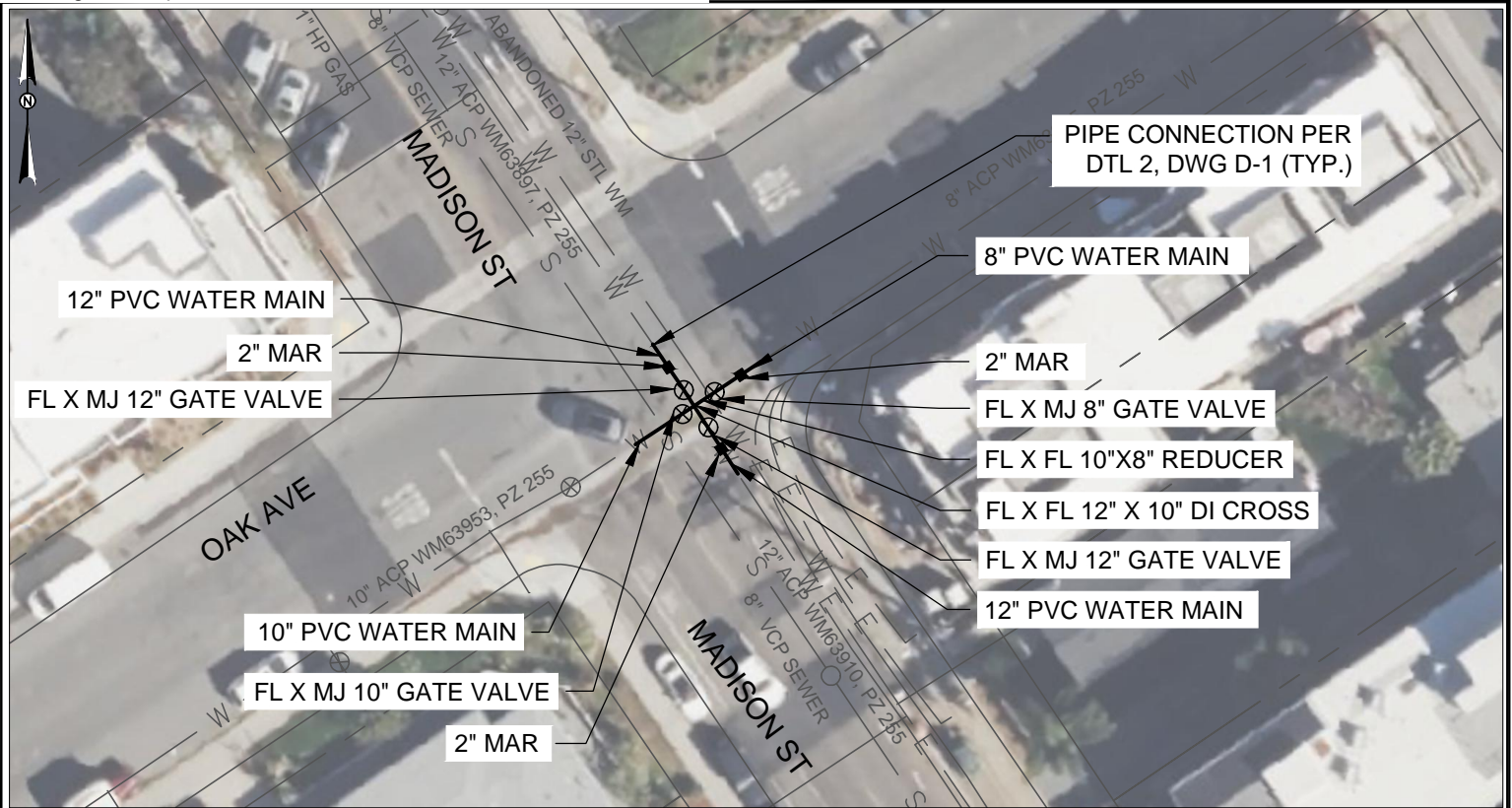
SITE 3 - EXISTING: MADISON ST AND OAK AVE

C-3A



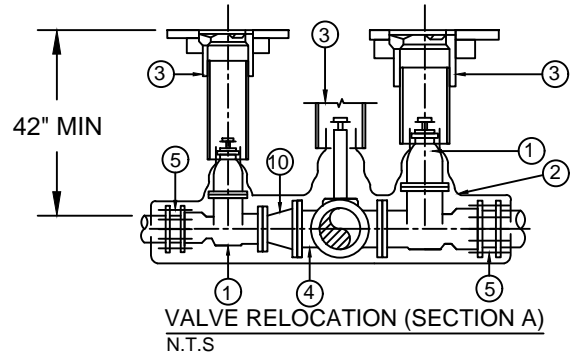
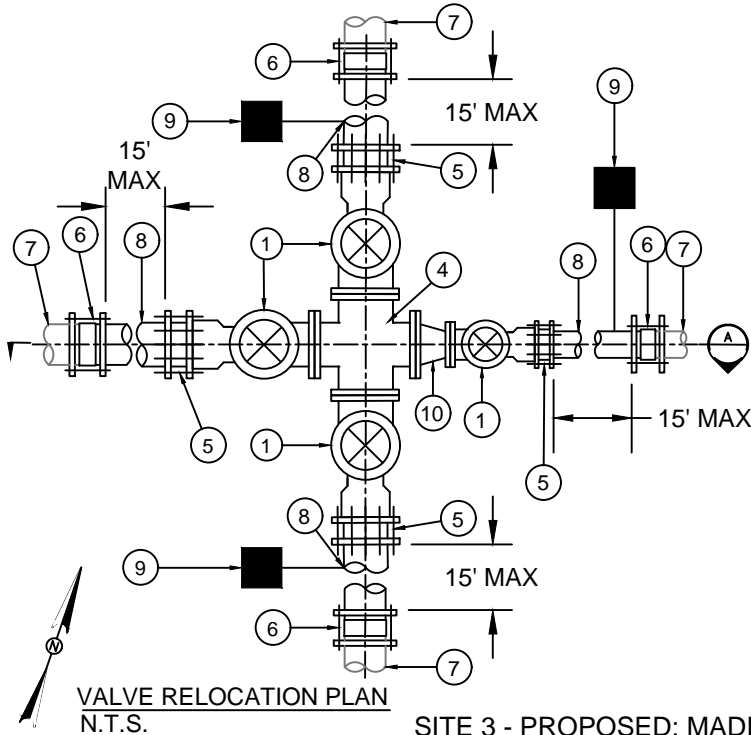
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>10</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
<b>IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 3 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	DAVE PADILLA RCE 55974 EXPIRES 12/31/24
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	DI REDUCER, SIZE/CONNECTION PER PLAN

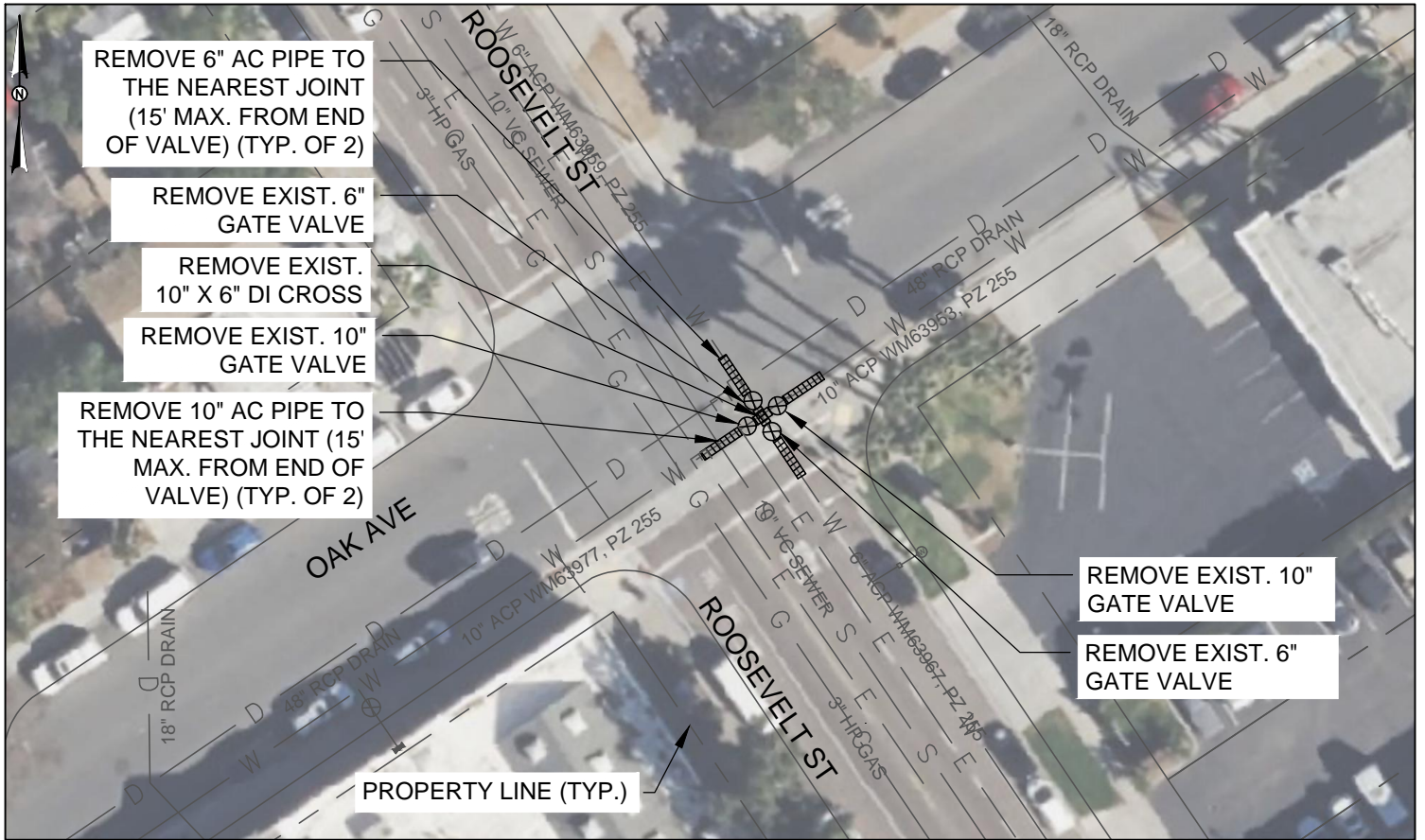
SITE 3 - PROPOSED: MADISON ST AND OAK AVE

C-3B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>11</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III 3 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	
DWN BY: <b>AMD</b>	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: <b>BT</b>		
RVWD BY: <b>KH</b>		



**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM SOUTH EAST LOOKING NORTH WEST ON ROOSEVELT ST

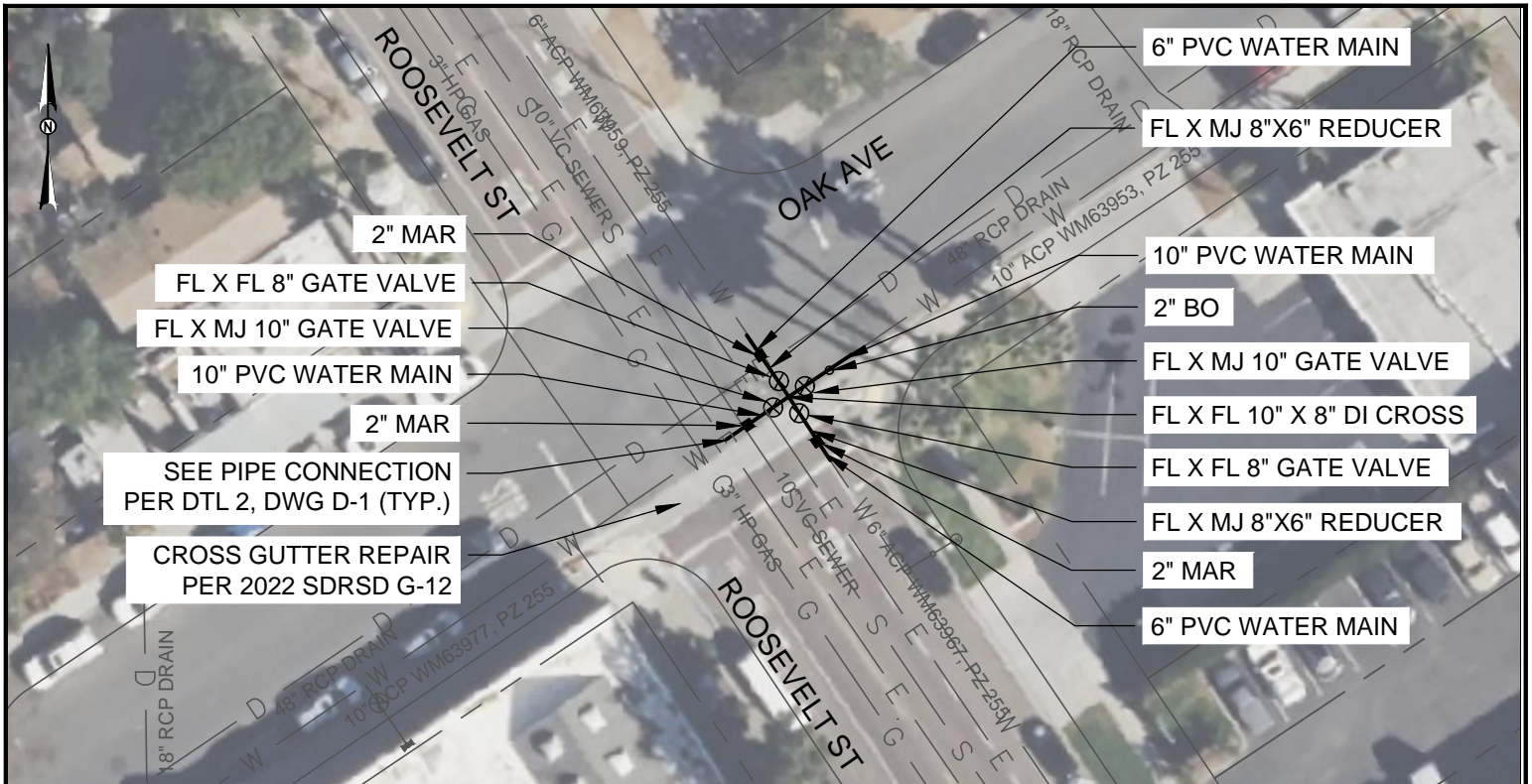
SITE 4 - EXISTING: OAK AVE AND ROOSEVELT ST

C-4A



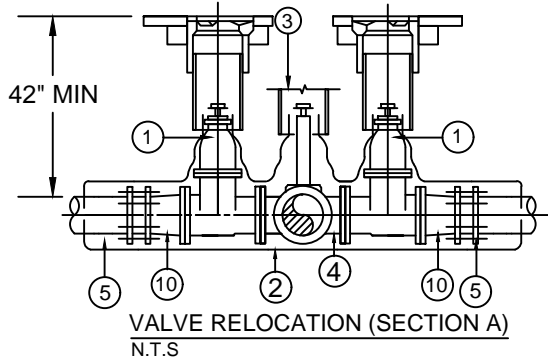
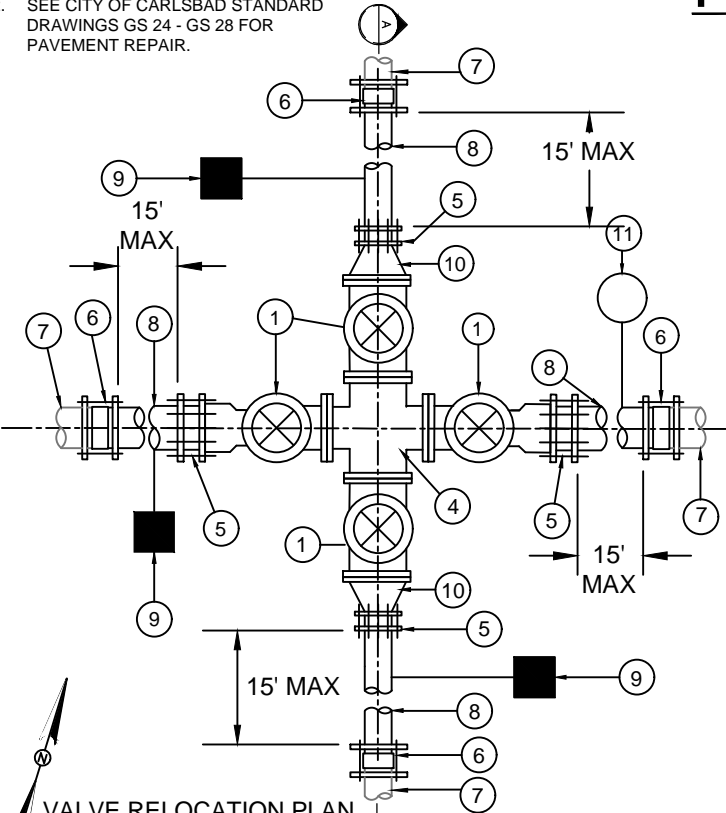
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>12</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
<b>IMPROVEMENT PLAN FOR:</b> CMWD VALVE REPLACEMENT PHASE III 4 - EXISTING		
APPROVED: <i>David Padilla</i>		5/13/2024
DISTRICT ENGINEER		DATE
RCE 55974 EXPIRES 12/31/24		
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



NOTE:  
 1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.  
 2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	DI REDUCER, SIZE/CONNECTION PER PLAN
11	BLOW-OFF (W-10)

VALVE RELOCATION PLAN  
N.T.S.

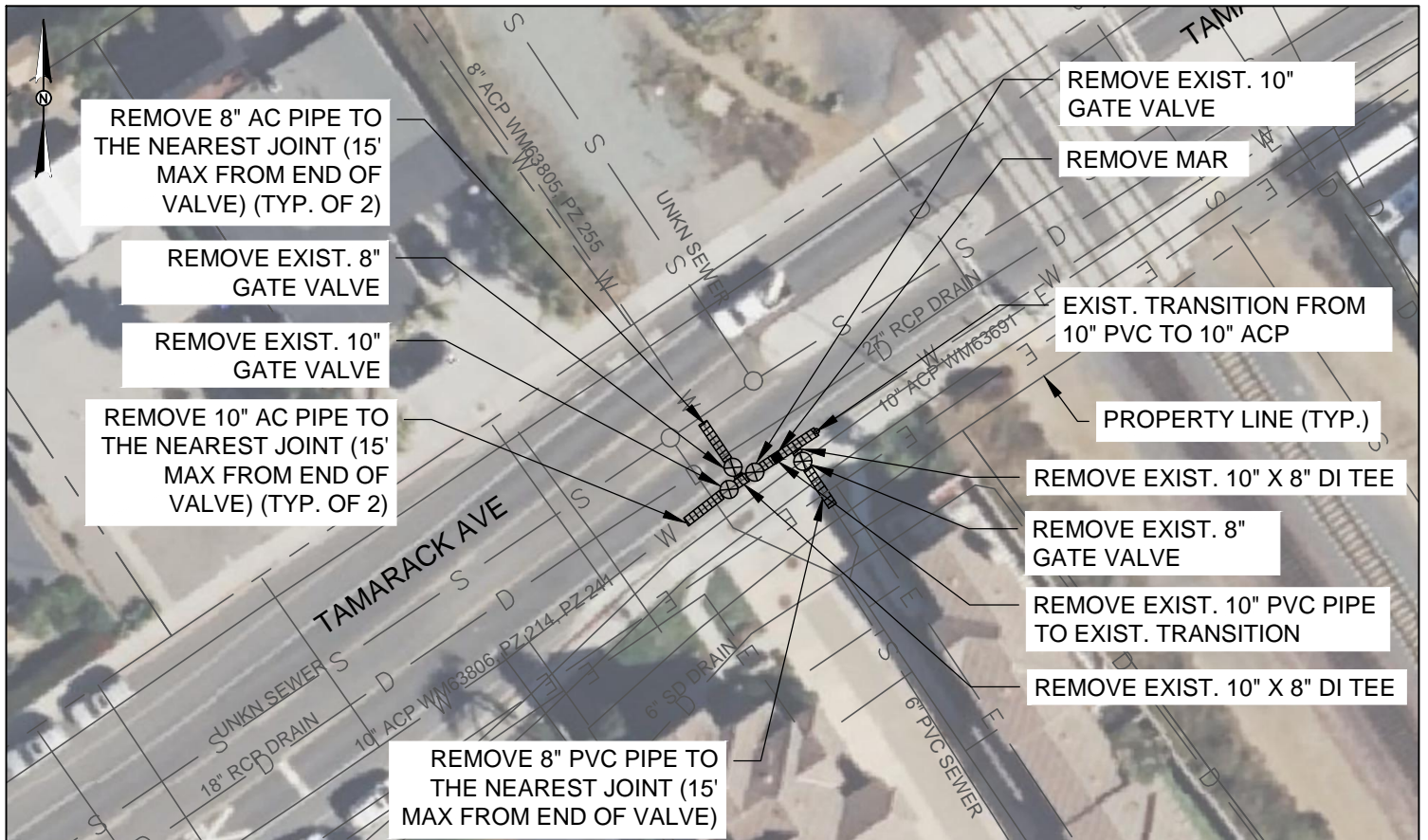
SITE 4 - PROPOSED: OAK AVE AND ROOSEVELT ST

C-4B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>13</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>4 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



# PLAN

- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.



PHOTO 1 - FROM SOUTH WEST LOOKING NORTH EAST ON TAMARACK AVE

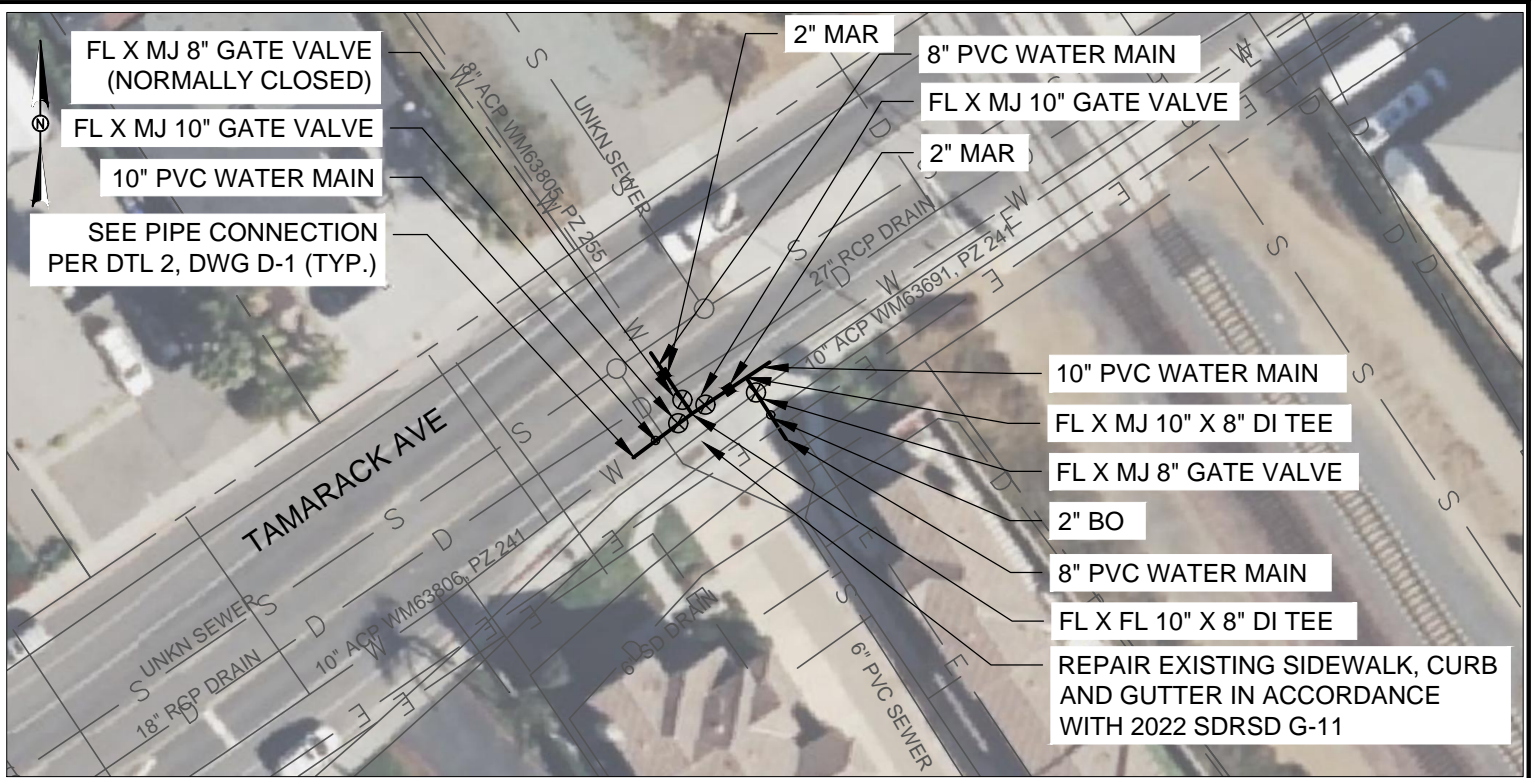
SITE 5 - EXISTING: TAMARACK AVE - WEST OF RAILROAD

C-5A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

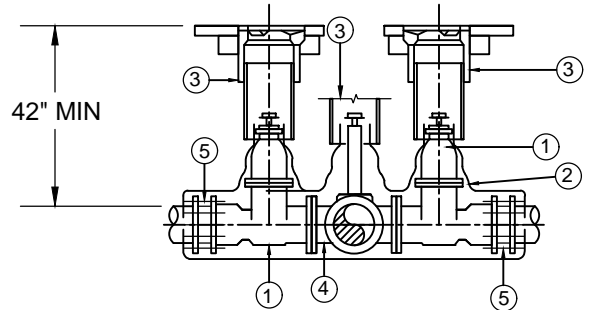
SHEET 14	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 5 - EXISTING		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	DAVE PADILLA
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545-1



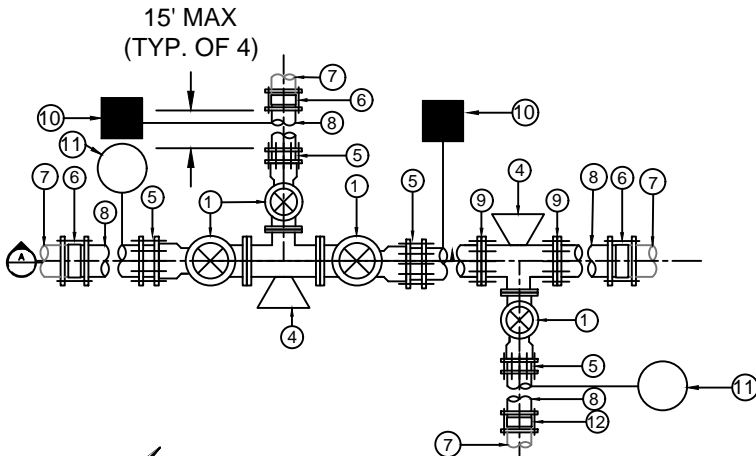
**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.

# PLAN



VALVE RELOCATION (SECTION A)  
N.T.S



VALVE RELOCATION (PLAN)  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE (W-2)
9	RESTRAINED FLANGE COUPLING ADAPTER
10	MANUAL AIR RELEASE VALVE (W-10)
11	BLOW-OFF (W-10)
12	PVC TO PVC COUPLING

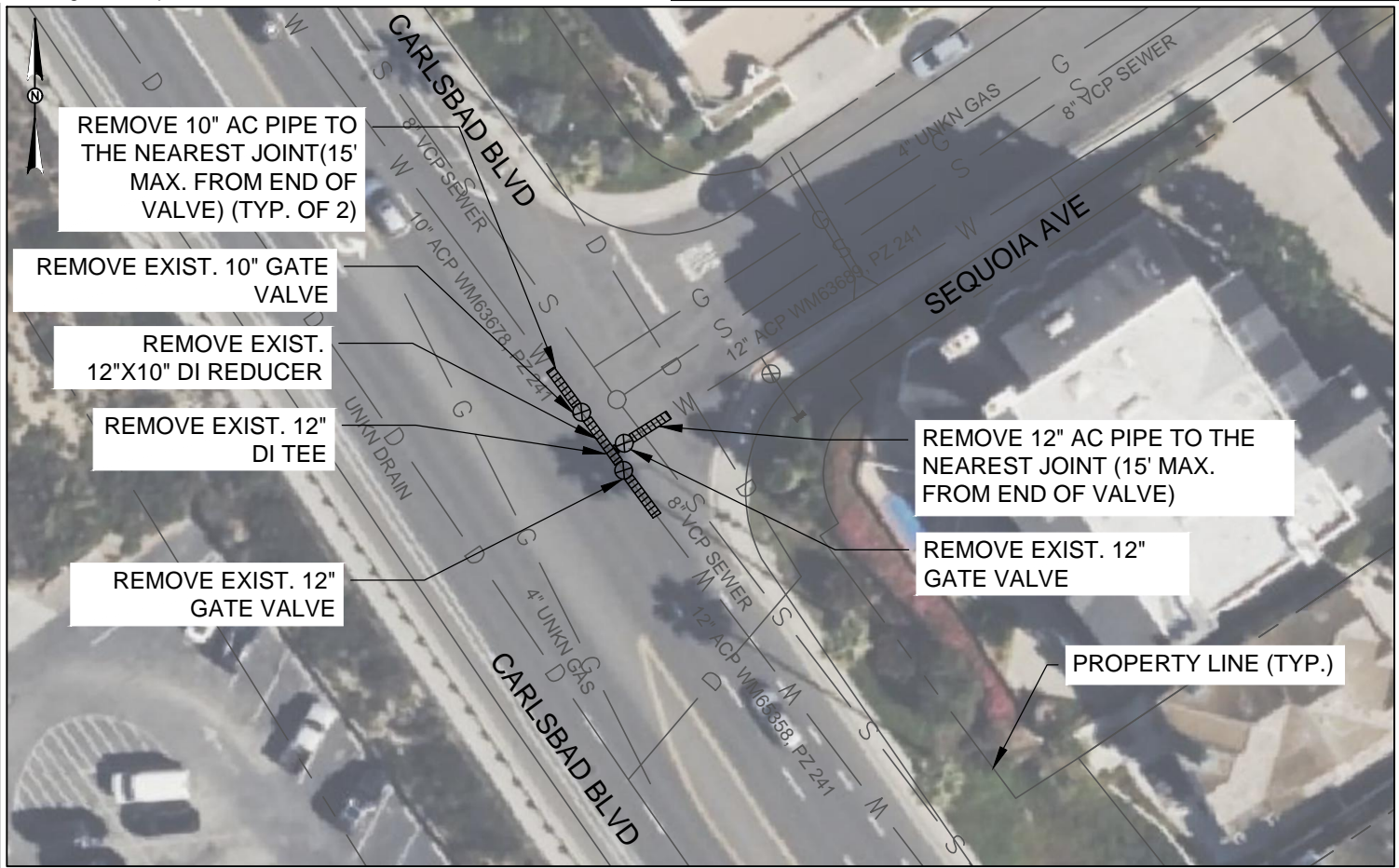
SITE 5 - PROPOSED: TAMARACK AVE - WEST OF RAILROAD

C-5B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 15	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 5 - PROPOSED		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN

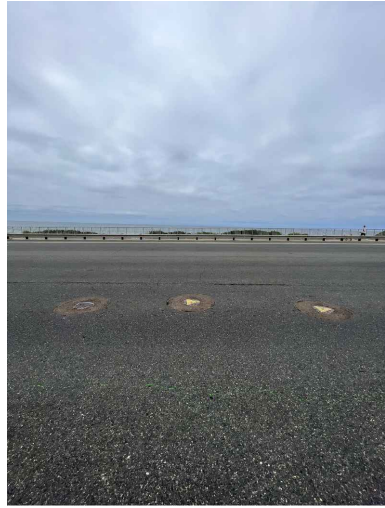


PHOTO 1 - FROM NORTH EAST LOOKING SOUTH WEST

SITE 6 - EXISTING: CARLSBAD BLVD AND SEQUOIA AVE

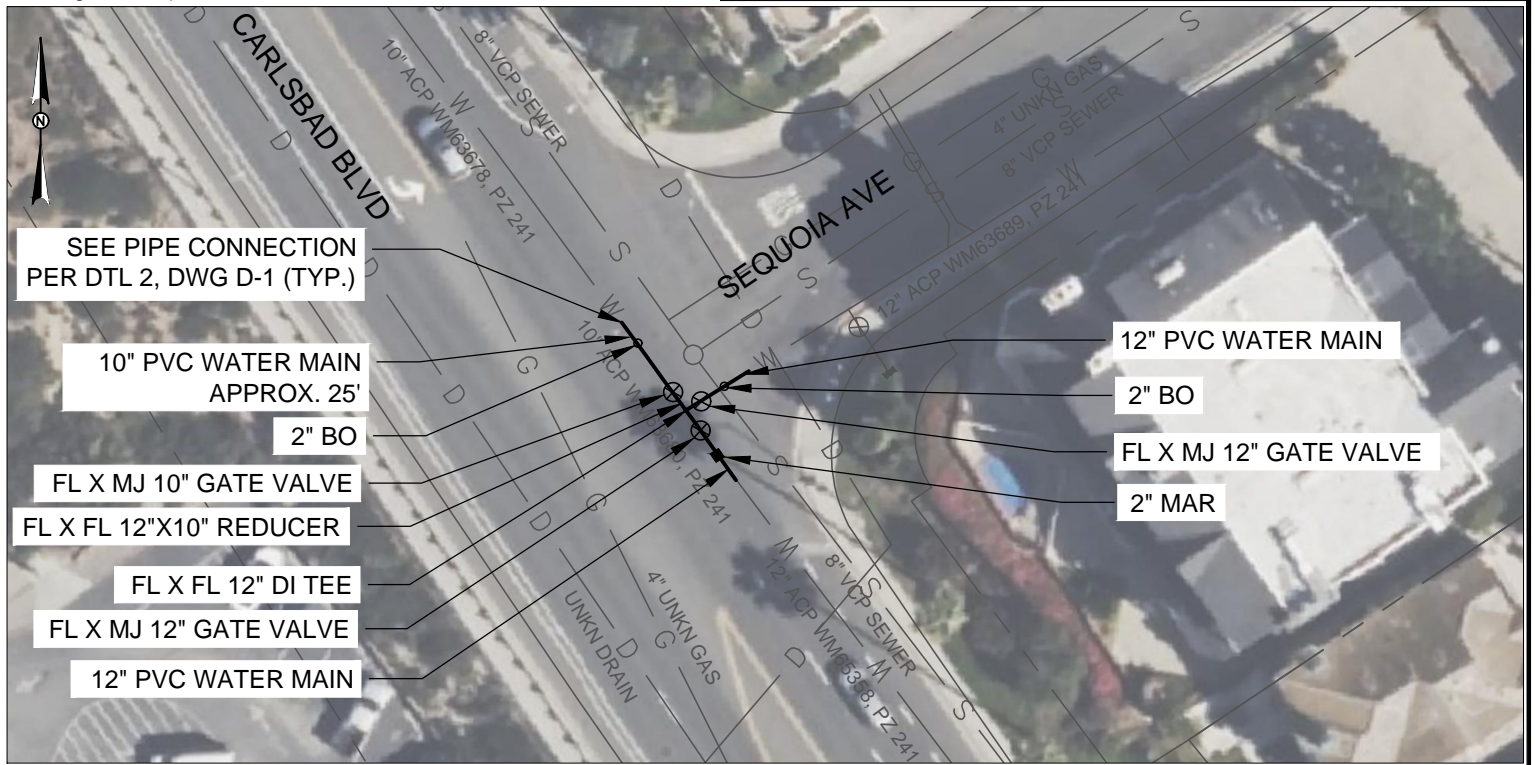
C-6A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

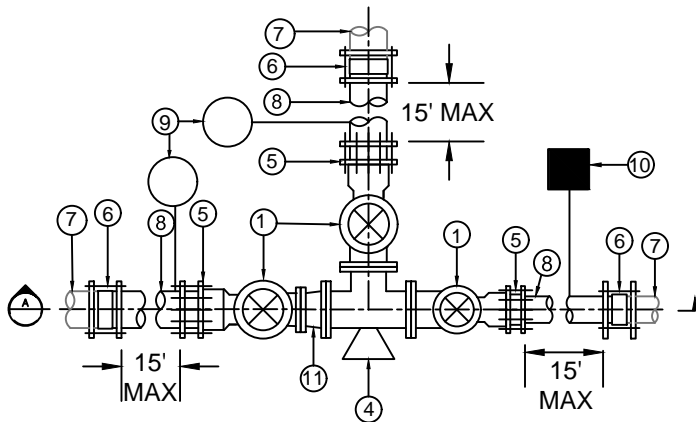
SHEET <b>16</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III 6 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER		5/13/2024 DATE
DWN BY: AMD		PROJECT NO. 5019-F
CHKD BY: BT		DRAWING NO. 545-1
RVWD BY: KH		RCE 55974 EXPIRES 12/31/24



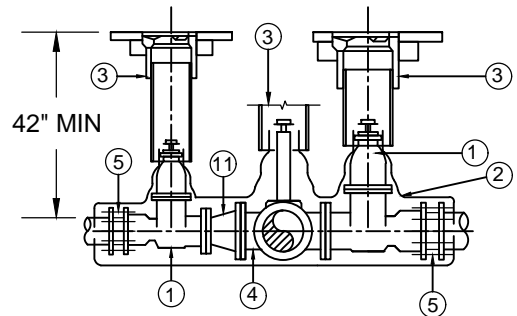


- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24- GS 28 FOR PAVEMENT REPAIR.

# PLAN



**VALVE RELOCATION (PLAN)**  
N.T.S



**VALVE RELOCATION (SECTION A)**  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	BLOW-OFF (W-10)
10	MANUAL AIR RELEASE VALVE (W-10)
11	DI REDUCER, SIZE/CONNECTION PER PLAN

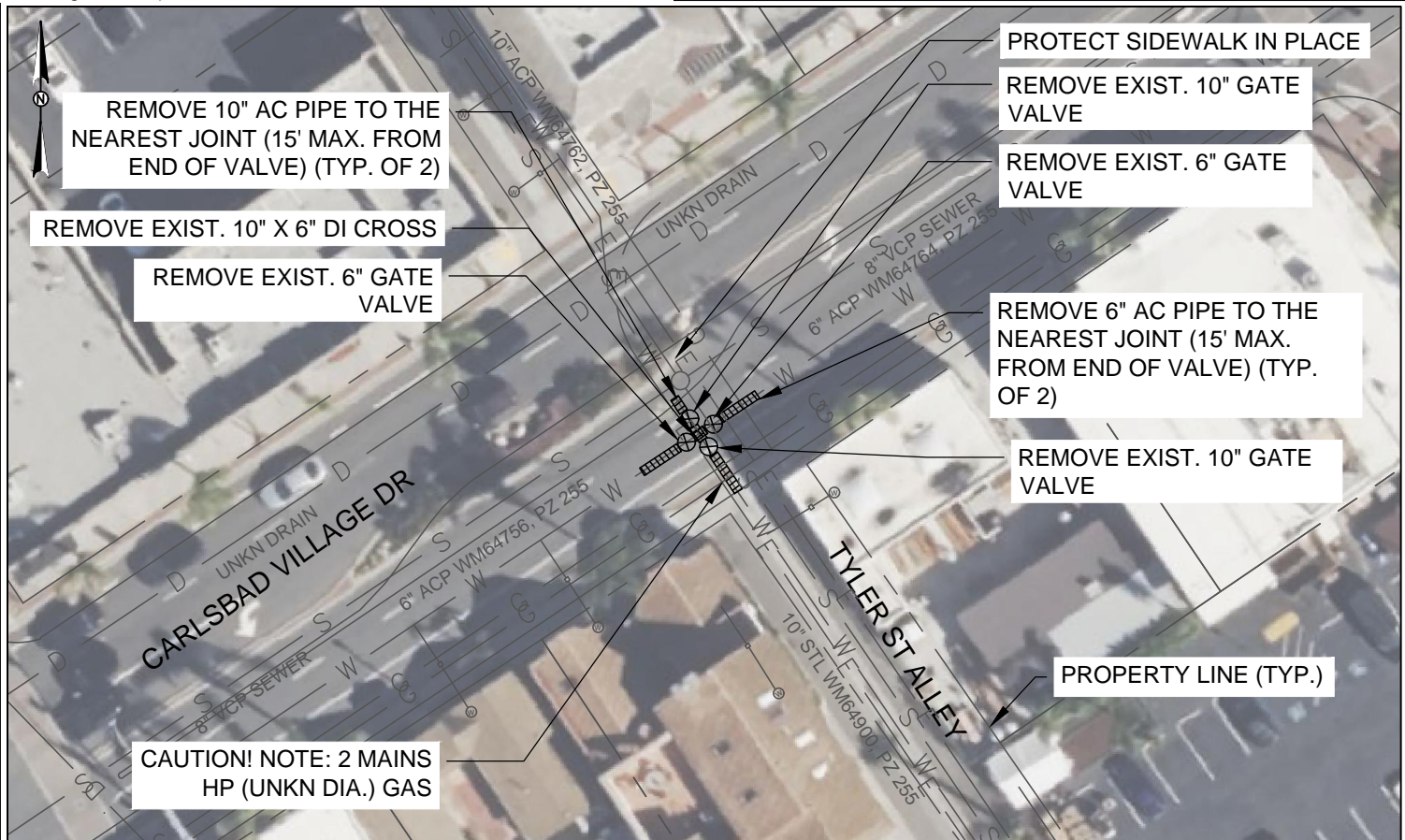
SITE 6 - PROPOSED: CARLSBAD BLVD AND SEQUOIA AVE

C-6B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>17</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>6 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i>		5/13/2024 D. PADILLA
DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24		DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM SOUTH EAST LOOKING NORTH WEST

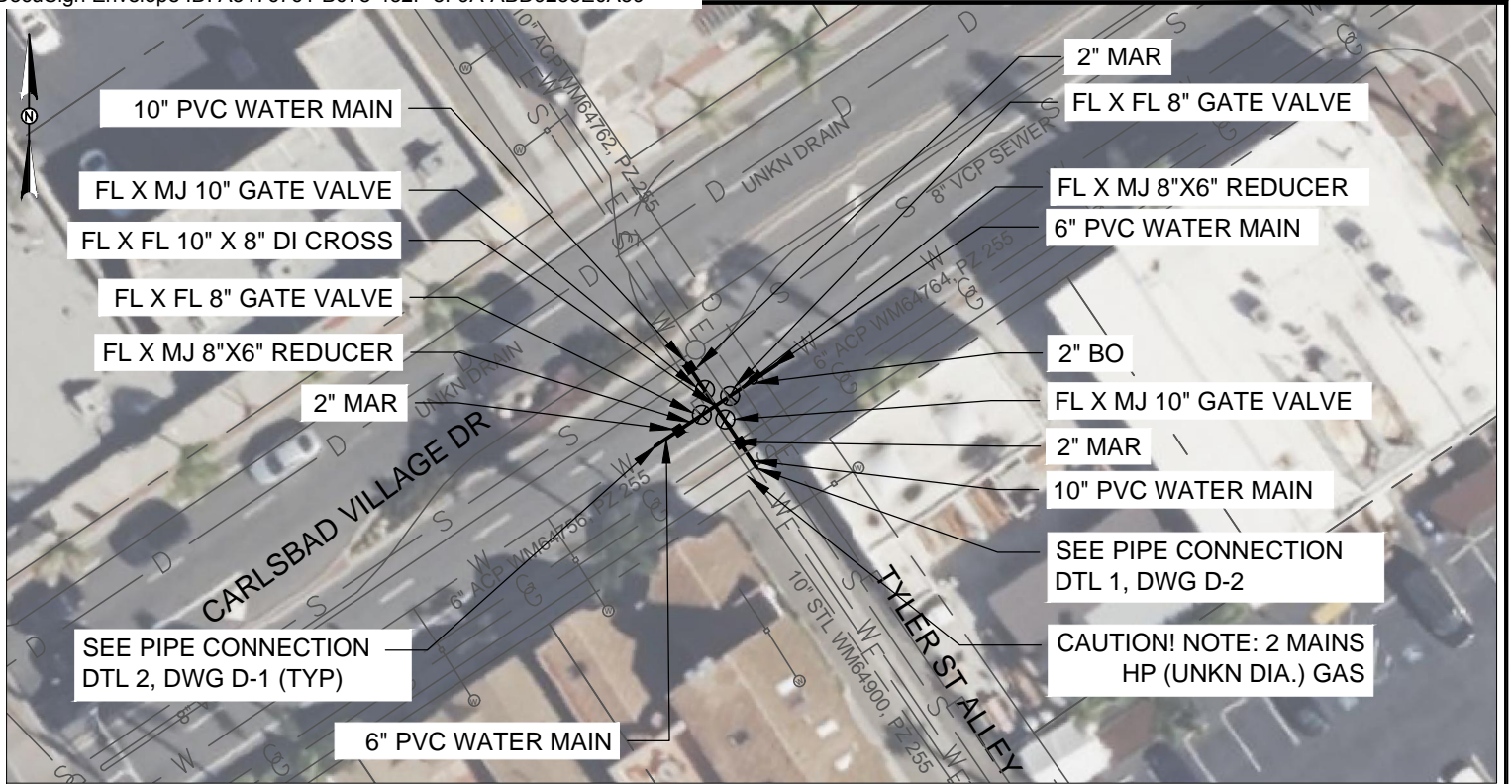
SITE 7 - EXISTING: CARLSBAD VILLAGE DR AND TYLER ST

C-7A



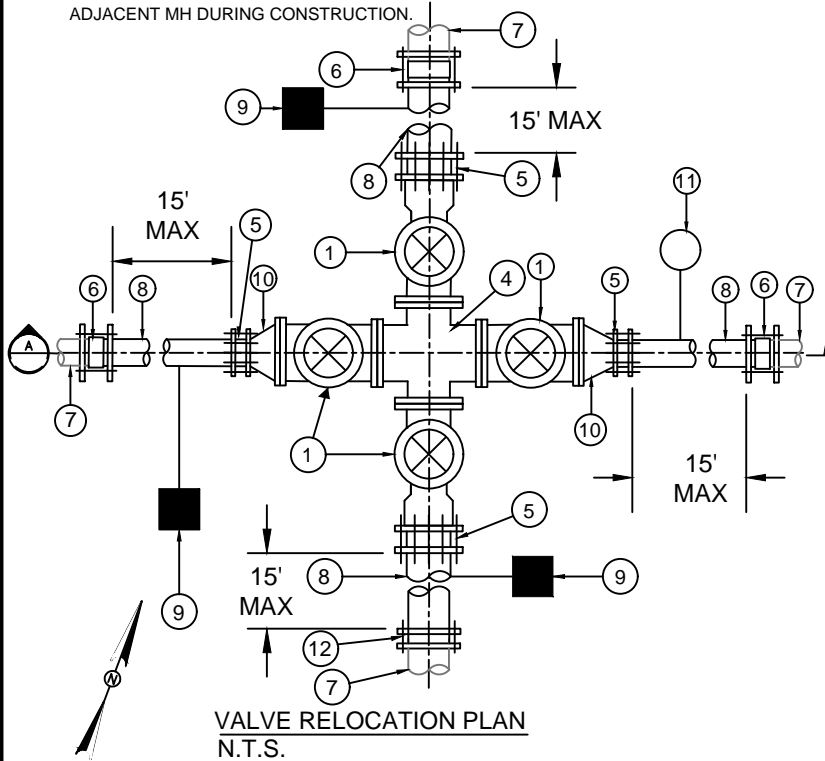
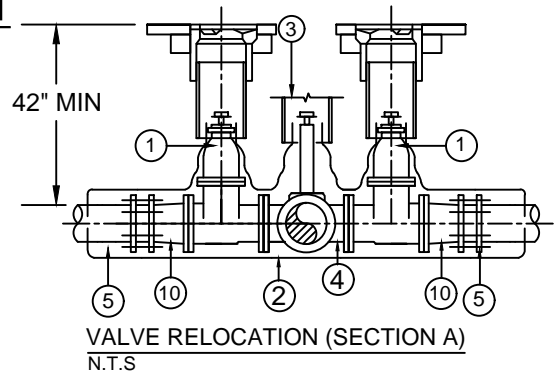
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 18	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 7 - EXISTING		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.
  3. CONTRACTOR TO PROTECT EXISTING ADJACENT MH DURING CONSTRUCTION.

# PLAN



ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	DI REDUCER, SIZE/CONNECTION PER PLAN
11	BLOW-OFF (W-10)
12	STL TO PVC CONNECTION, WELD ON STL FLANGE W/ RESTRAINED FLANGE ADAPTER

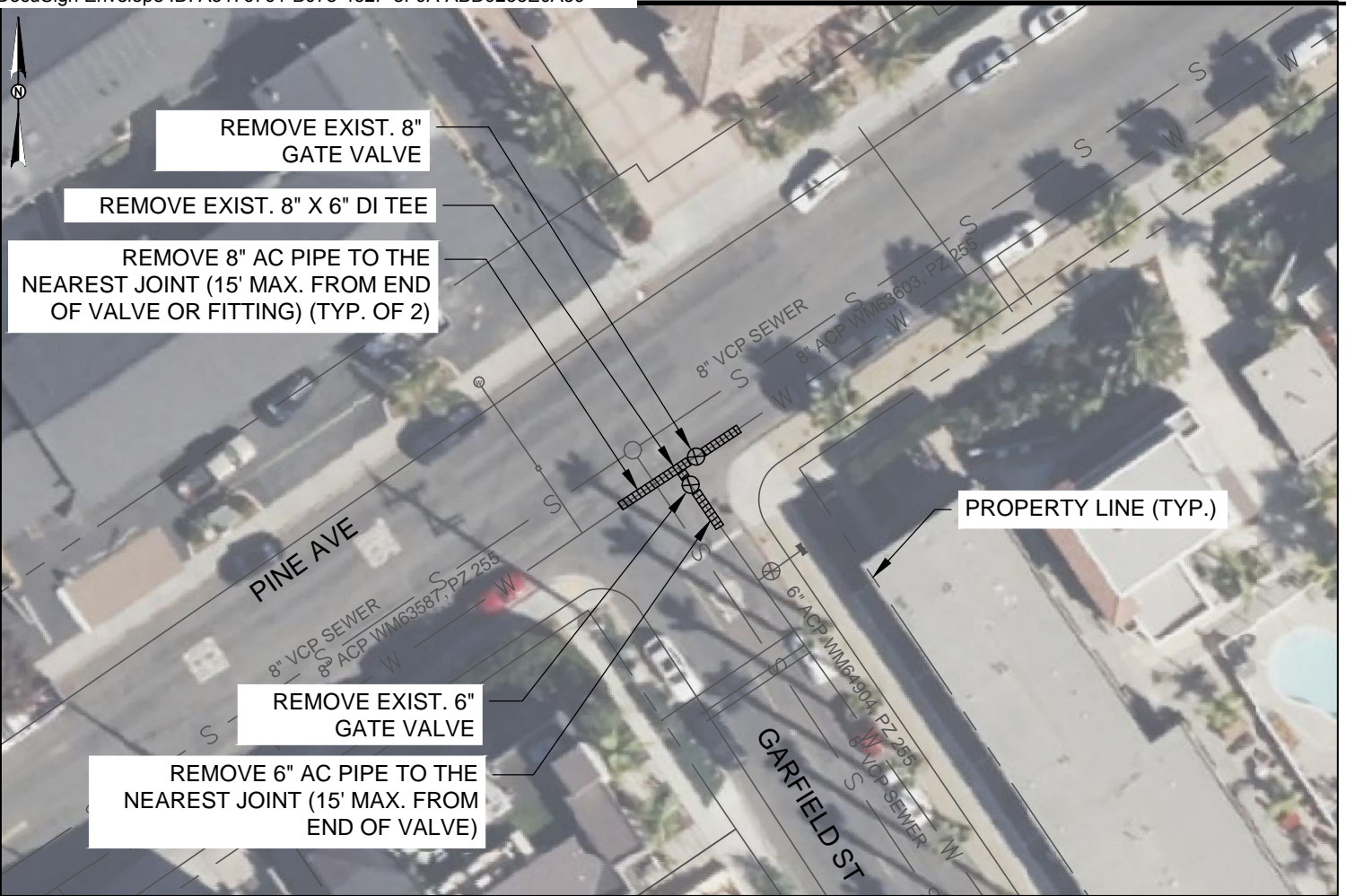
## SITE 7 - PROPOSED: CARLSBAD VILLAGE DR AND TYLER ST

C-7B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>19</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>7 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: <u>AMD</u>	PROJECT NO.	DRAWING NO.
CHKD BY: <u>BT</u>	5019-F-_____	545-1
RVWD BY: <u>KH</u>		



REMOVE EXIST. 8\"/>

REMOVE EXIST. 8\"/>

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PROPERTY LINE (TYP.)

NOTE:

- 1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
- 2. ASSUME EXISTING PAVEMENT TO BE 4\"/>

# PLAN



PHOTO 1 - FROM NORTH EAST LOOKING SOUTH WEST ON PINE AVE

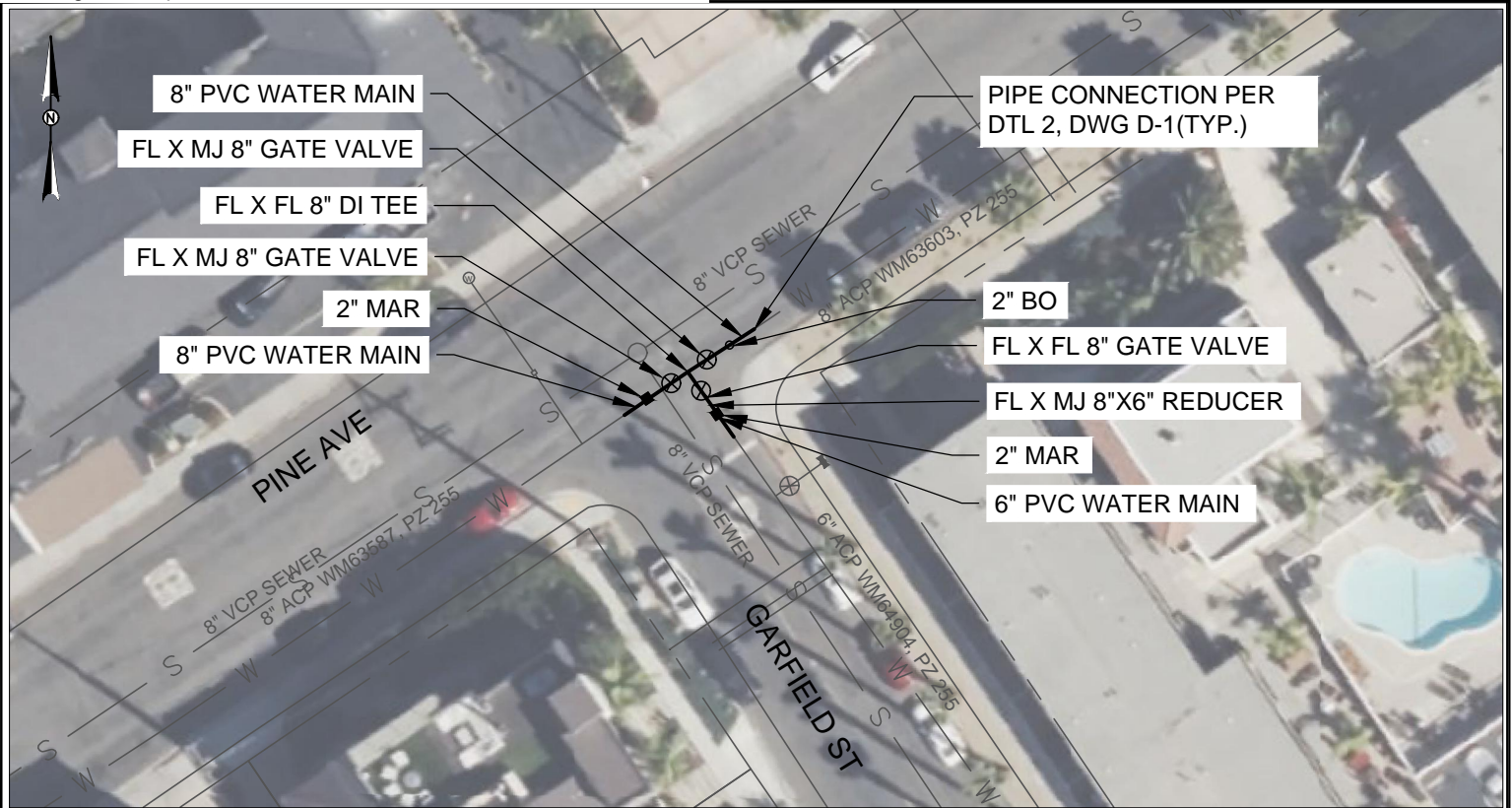
SITE 8 - EXISTING: PINE AVE AND GARFIELD ST

C-8A



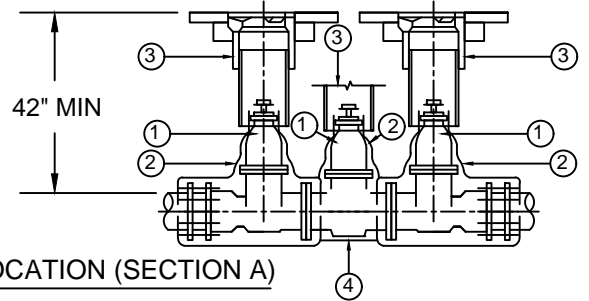
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>20</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>8 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER RCE 55974		5/13/2024 DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		

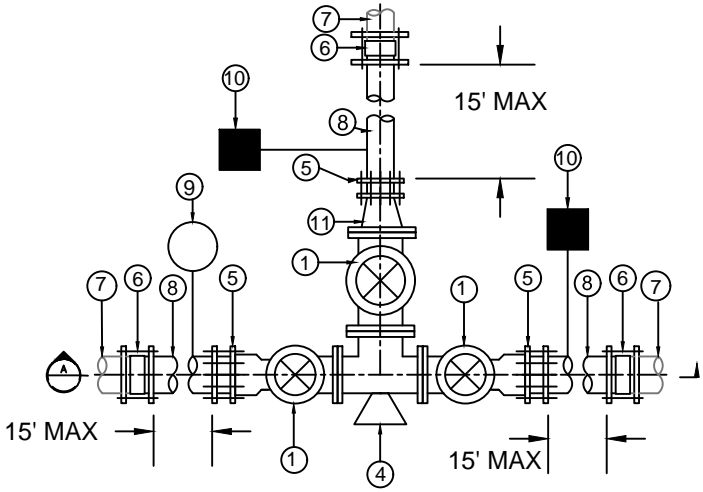


- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



VALVE RELOCATION (SECTION A)  
N.T.S



VALVE RELOCATION (PLAN)  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	BLOW-OFF (W-10)
10	MANUAL AIR RELEASE VALVE (W-10)
11	DI REDUCER, SIZE/CONNECTION PER PLAN

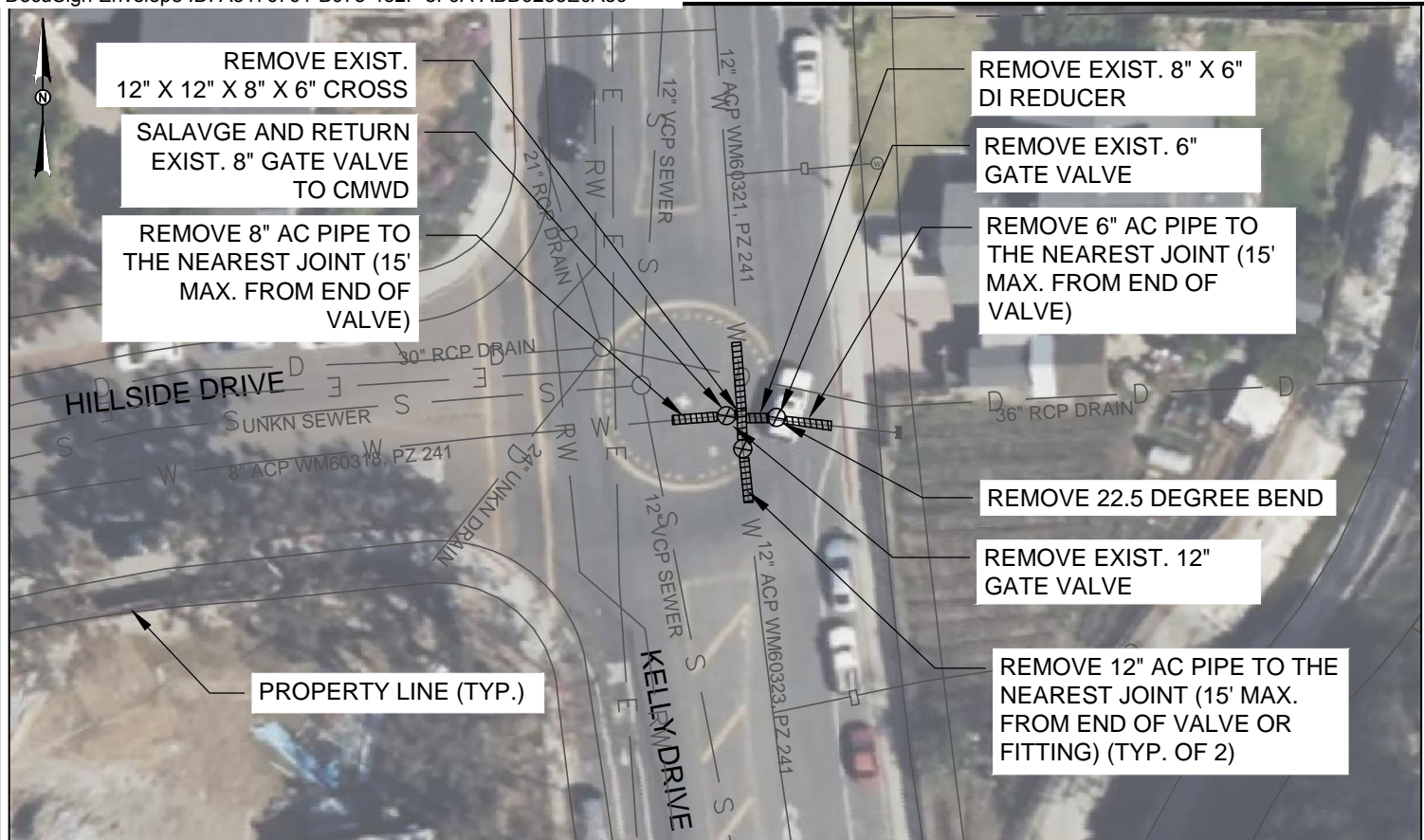
SITE 8 - PROPOSED: PINE AVE AND GARFIELD ST

C-8B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 21	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III 8 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545-1



**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN

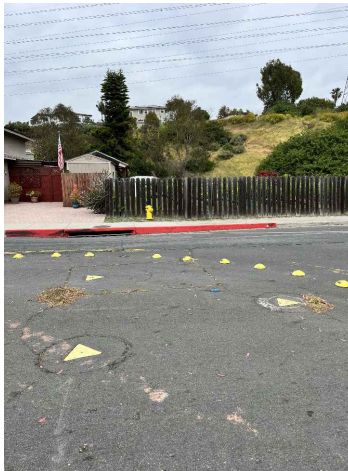


PHOTO 1 - FROM WEST LOOKING EAST

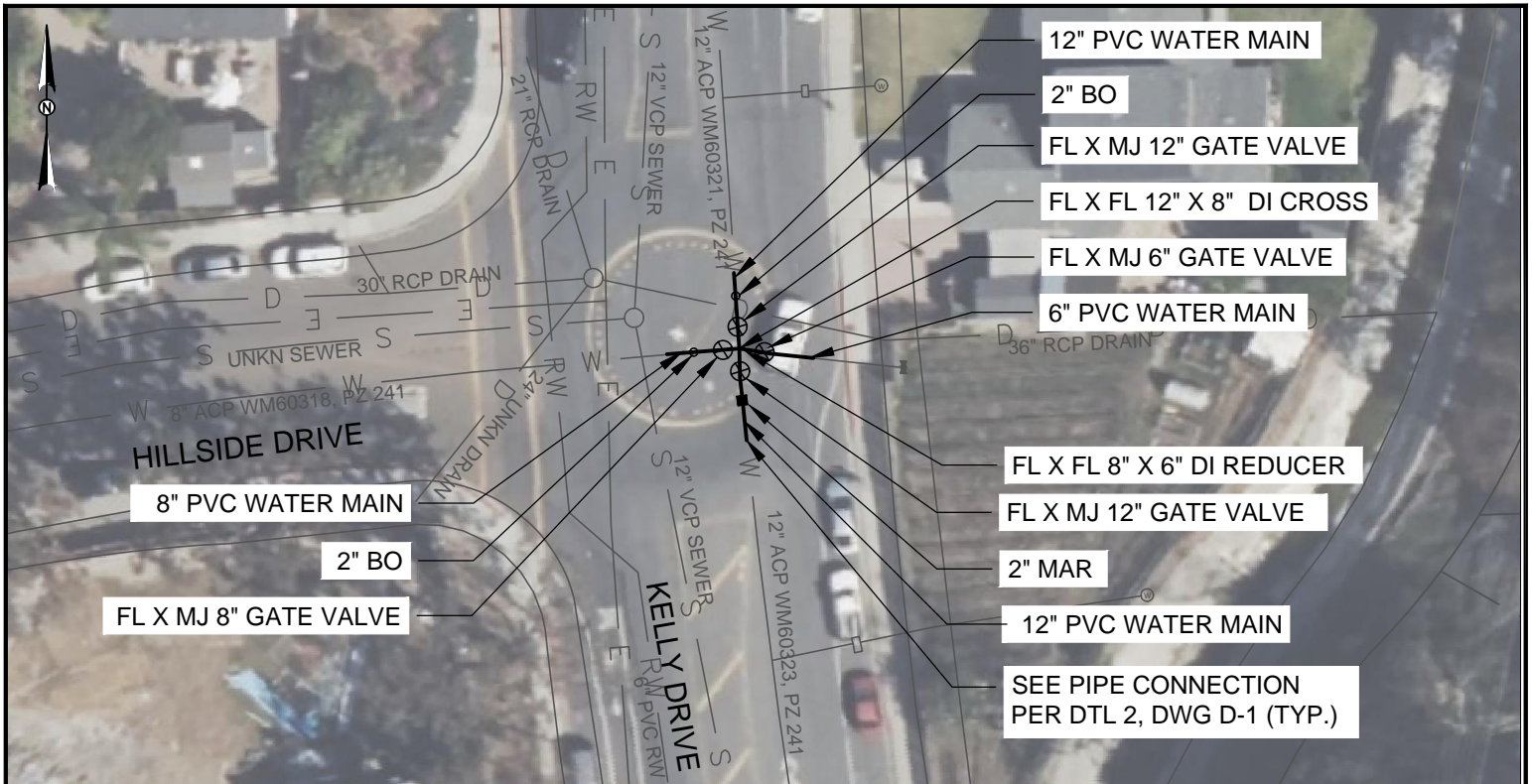
SITE 9 - EXISTING: HILLSIDE DR AND KELLY DR

C-9A



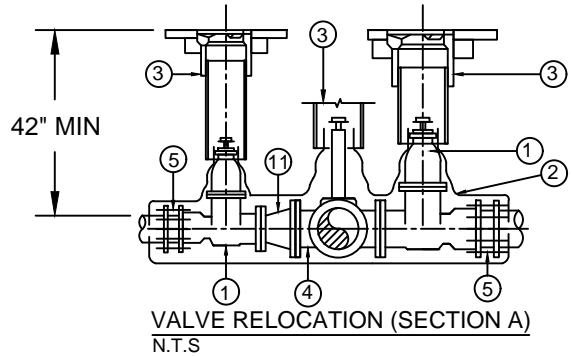
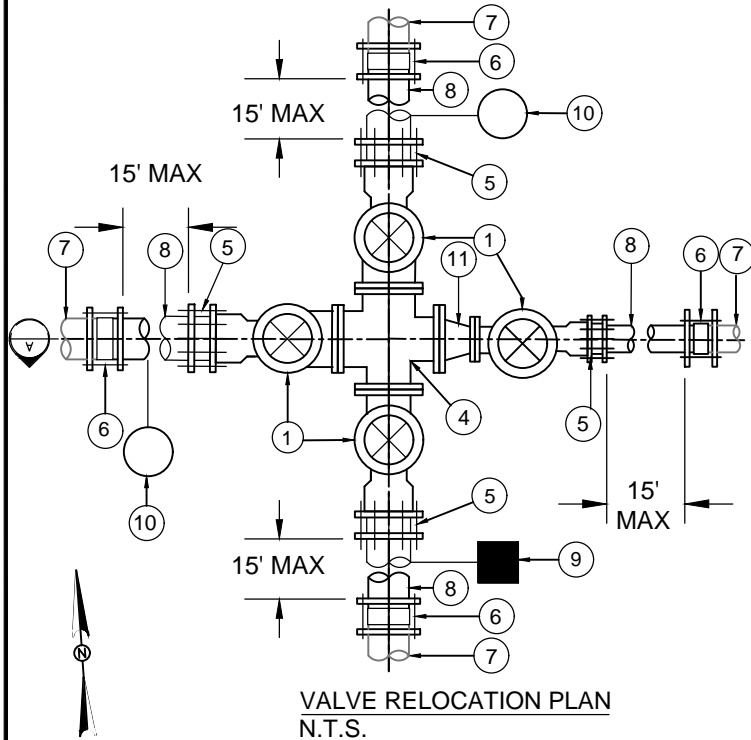
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>22</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
<b>IMPROVEMENT PLAN FOR:</b> <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>9 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i>		5/13/2024
DISTRICT ENGINEER RCE 55974		DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASUREMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)
11	DI REDUCER, SIZE/CONNECTION PER PLAN

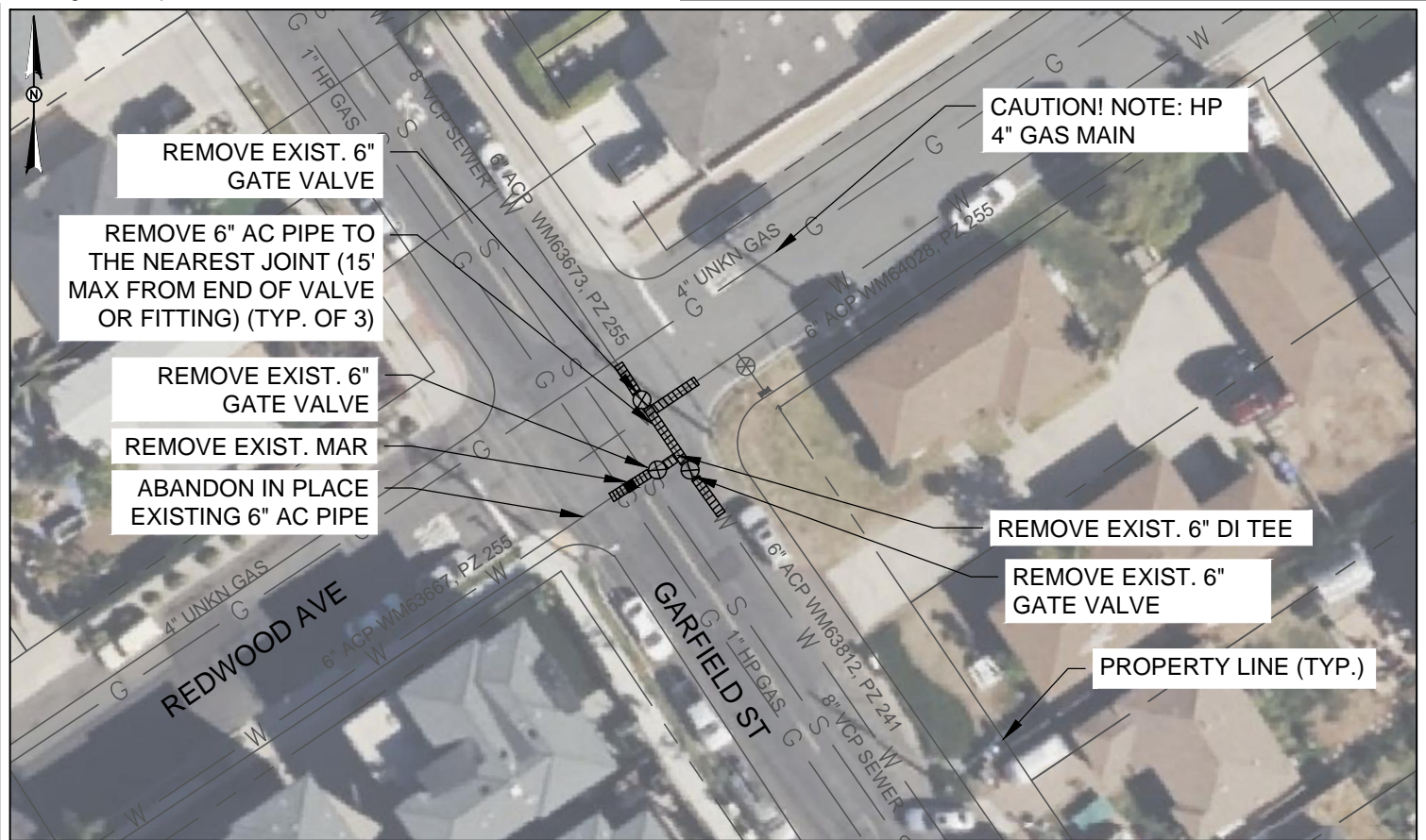
SITE 9 - PROPOSED: HILLSIDE DR AND KELLY DR

C-9B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>23</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>9 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i>	DATE 5/13/2024	DRAWN BY: AMD
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	PROJECT NO. 5019-F
CHKD BY: BT	RVWD BY: KH	DRAWING NO. 545-1



- NOTE:**
- 1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  - 2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  - 3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  - 4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



**PHOTO 1 - FROM SOUTH EAST LOOKING NORTH WEST ON GARFIELD ST**

**SITE 10 - EXISTING: REDWOOD AVE AND GARFIELD ST**

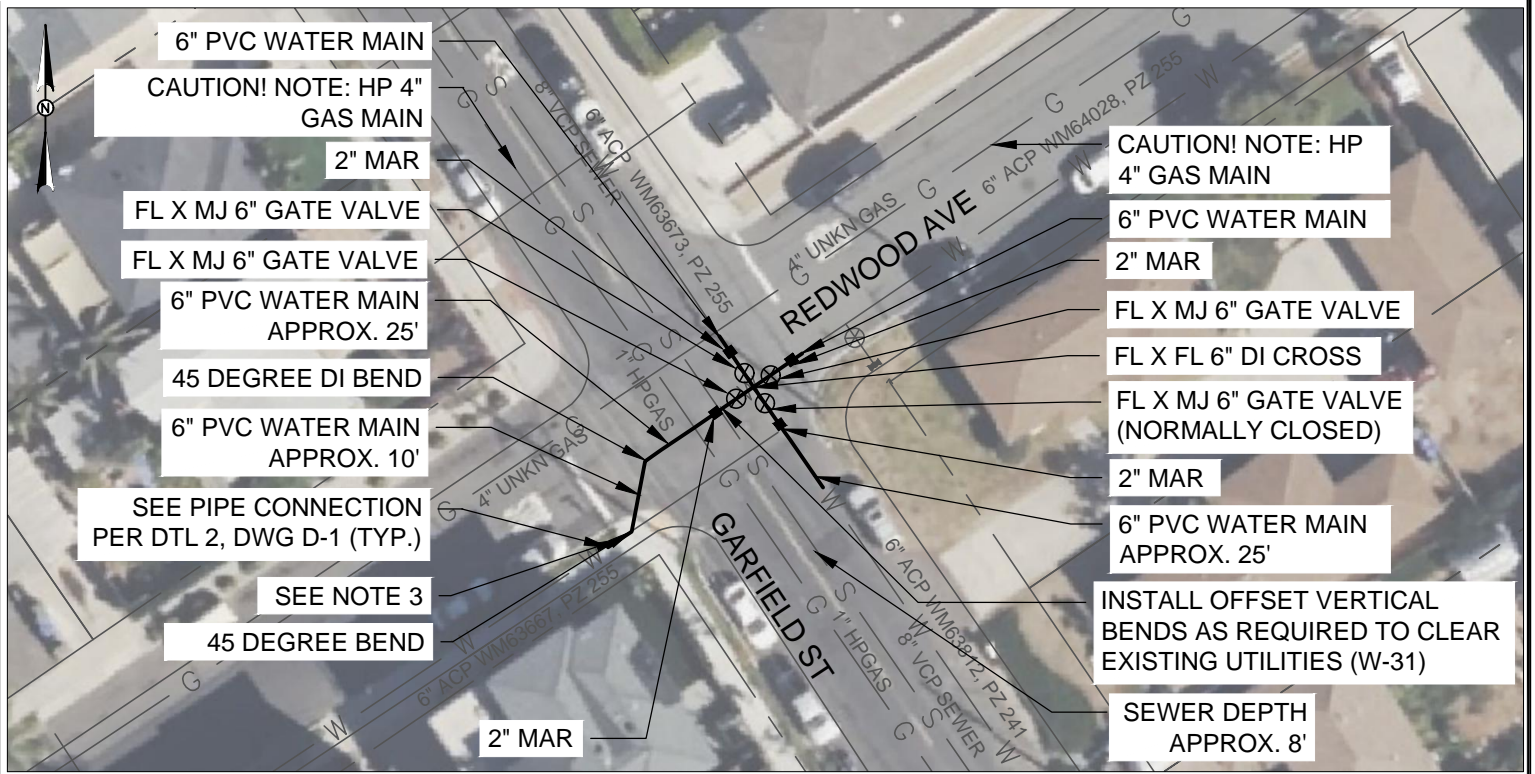
**C-10A**



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

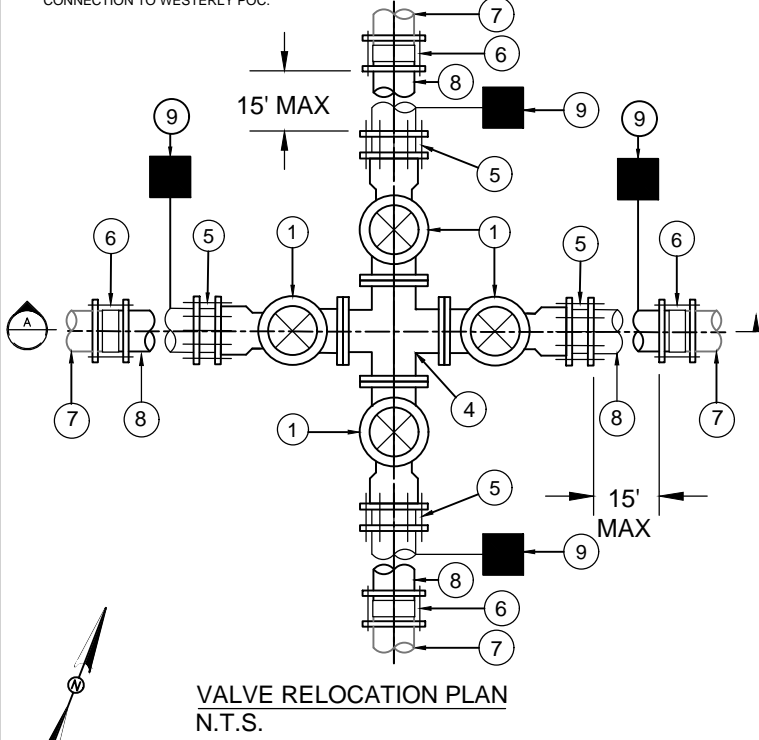
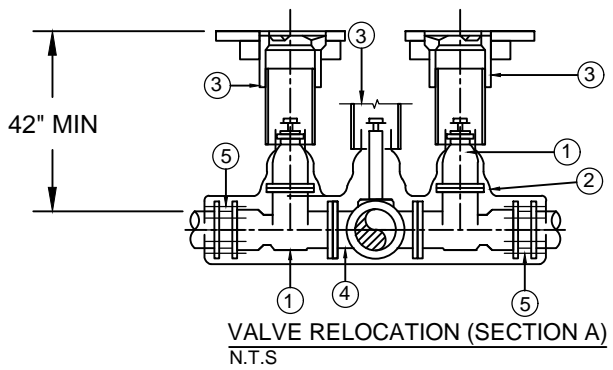
SHEET <b>24</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
<b>IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 10 - EXISTING</b>		
APPROVED: <u>Dave Padilla</u> <span style="float: right;">5/13/2024</span>		DATE
DISTRICT ENGINEER RCE 55974		EXPIRES 12/31/24
DWN BY: <u>AMD</u>	PROJECT NO. <u>5019-F</u>	DRAWING NO. <u>545-1</u>
CHKD BY: <u>BT</u>		
RVWD BY: <u>KH</u>		





- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.
  3. CONTRACTOR MUST COORDINATE WITH CMWD FOR PROPOSED CONNECTION LOCATION TO EXISTING PIPE ON WESTERLY POC. THE CONTRACTOR MUST FIELD LOCATE AND POTHOLE ALL UTILITY CONFLICTS AND BELOW GRADE OBSTRUCTIONS PRIOR TO CONSTRUCTION. THE ENGINEER ASSUMES PROPOSED PIPELINE WILL MATCH THE EXISTING PIPELINE VERTICAL ALIGNMENT. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF ANY WATER MAIN VERTICAL ALIGNMENT DISCREPANCIES TO THE EXISTING PIPELINE. THE CONTRACTOR MUST INSTALL ANY NECESSARY FITTINGS AND APPURTENANCES TO ESTABLISH CONNECTION TO WESTERLY POC.

# PLAN



ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)

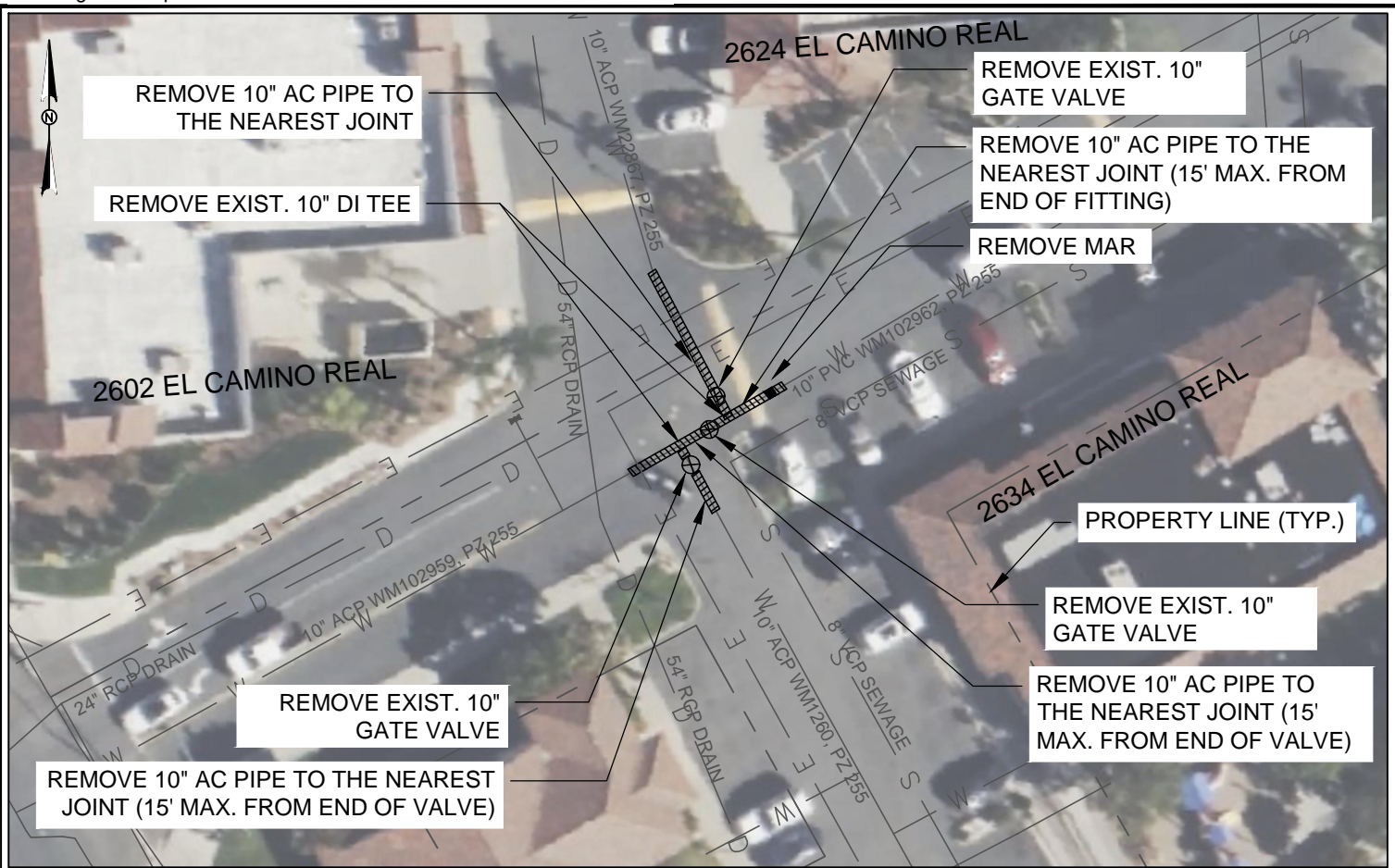
SITE 10 - PROPOSED: REDWOOD AVE AND GARFIELD ST

C-10B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 25	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 10 - PROPOSED		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DATE
DISTRICT ENGINEER	RCE 55974	EXPIRES 12/31/24
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



NOTE:

- 1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
- 2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
- 3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
- 4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM SOUTH EAST LOOKING NORTH TOWARDS 2624 EL CAMINO REAL

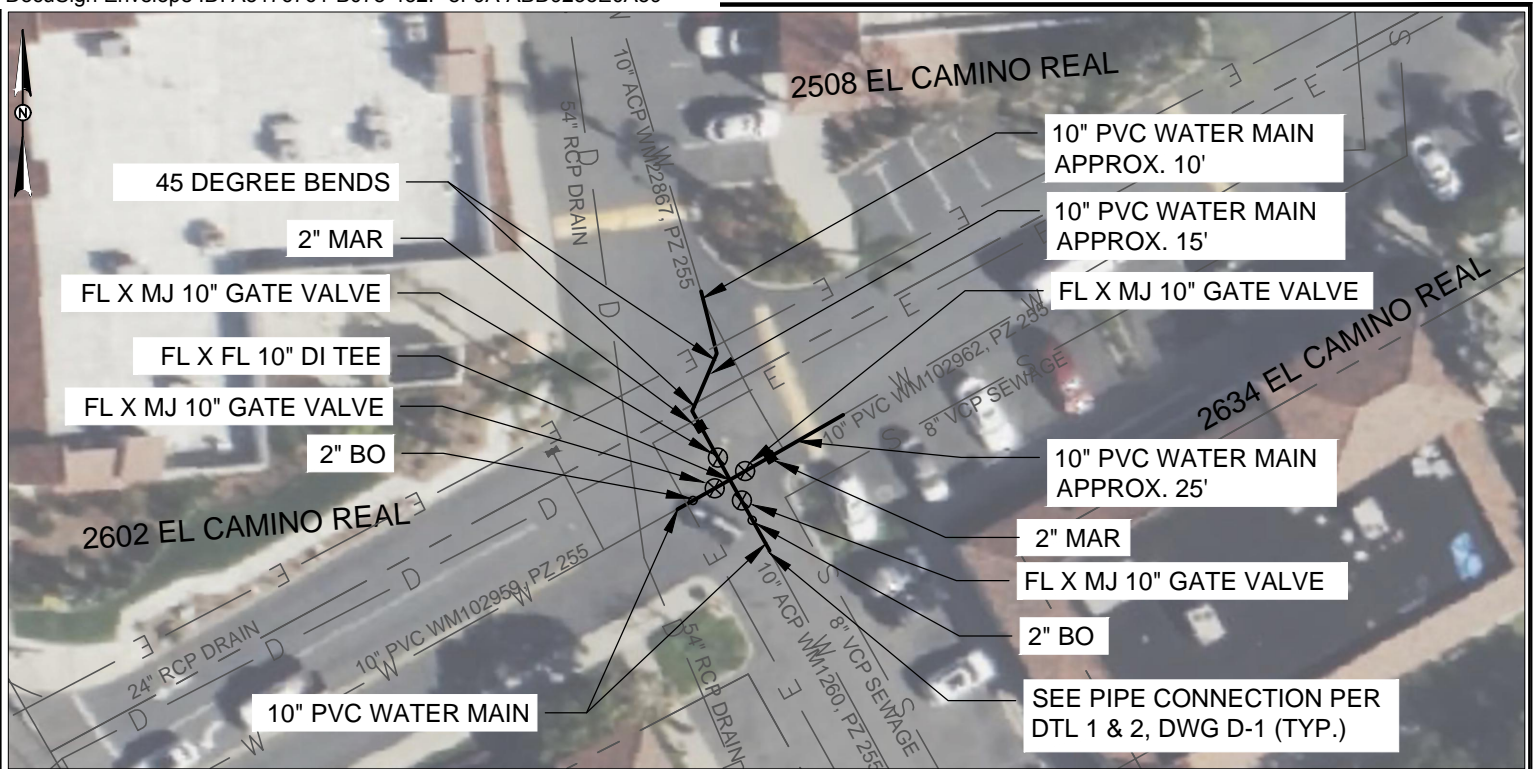
SITE 11 - EXISTING: 2634 EL CAMINO REAL

C-11A



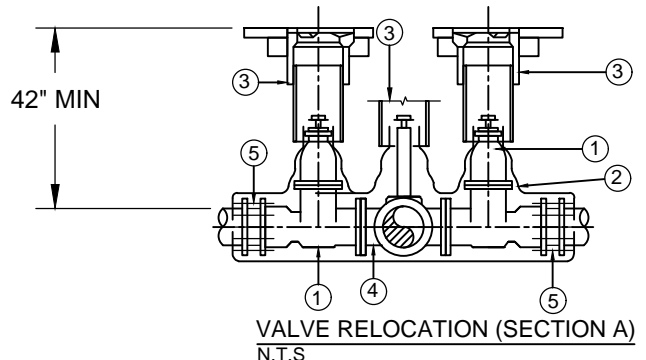
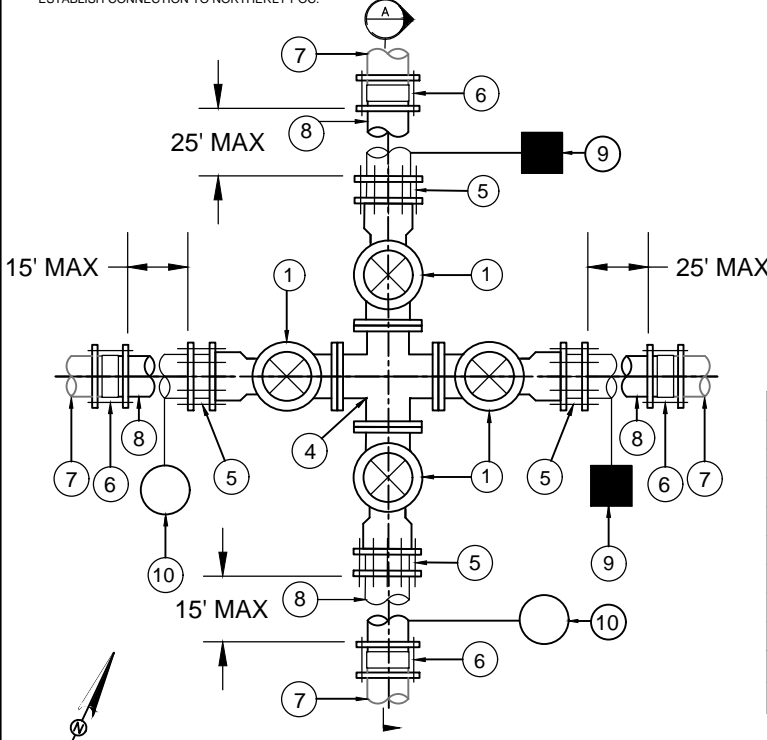
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 26	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>11 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DAVE PADILLA RCE 55974 EXPIRES 12/31/24 DATE	
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545 - 1



NOTE:  
 1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.  
 2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24- GS 28 FOR PAVEMENT REPAIR.  
 3. CONTRACTOR MUST COORDINATE WITH CMWD FOR PROPOSED CONNECTION LOCATION TO EXISTING PIPE ON NORTHERLY POC. THE CONTRACTOR MUST FIELD LOCATE AND POTHOLE ALL UTILITY CONFLICTS AND BELOW GRADE OBSTRUCTIONS PRIOR TO CONSTRUCTION. THE ENGINEER ASSUMES PROPOSED PIPELINE WILL MATCH THE EXISTING PIPELINE VERTICAL ALIGNMENT. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF ANY WATER MAIN VERTICAL ALIGNMENT DISCREPANCIES TO THE EXISTING PIPELINE. THE CONTRACTOR MUST INSTALL ALL NECESSARY FITTINGS AND APPURTENANCES TO ESTABLISH CONNECTION TO NORTHERLY POC.

# PLAN



ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY (W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

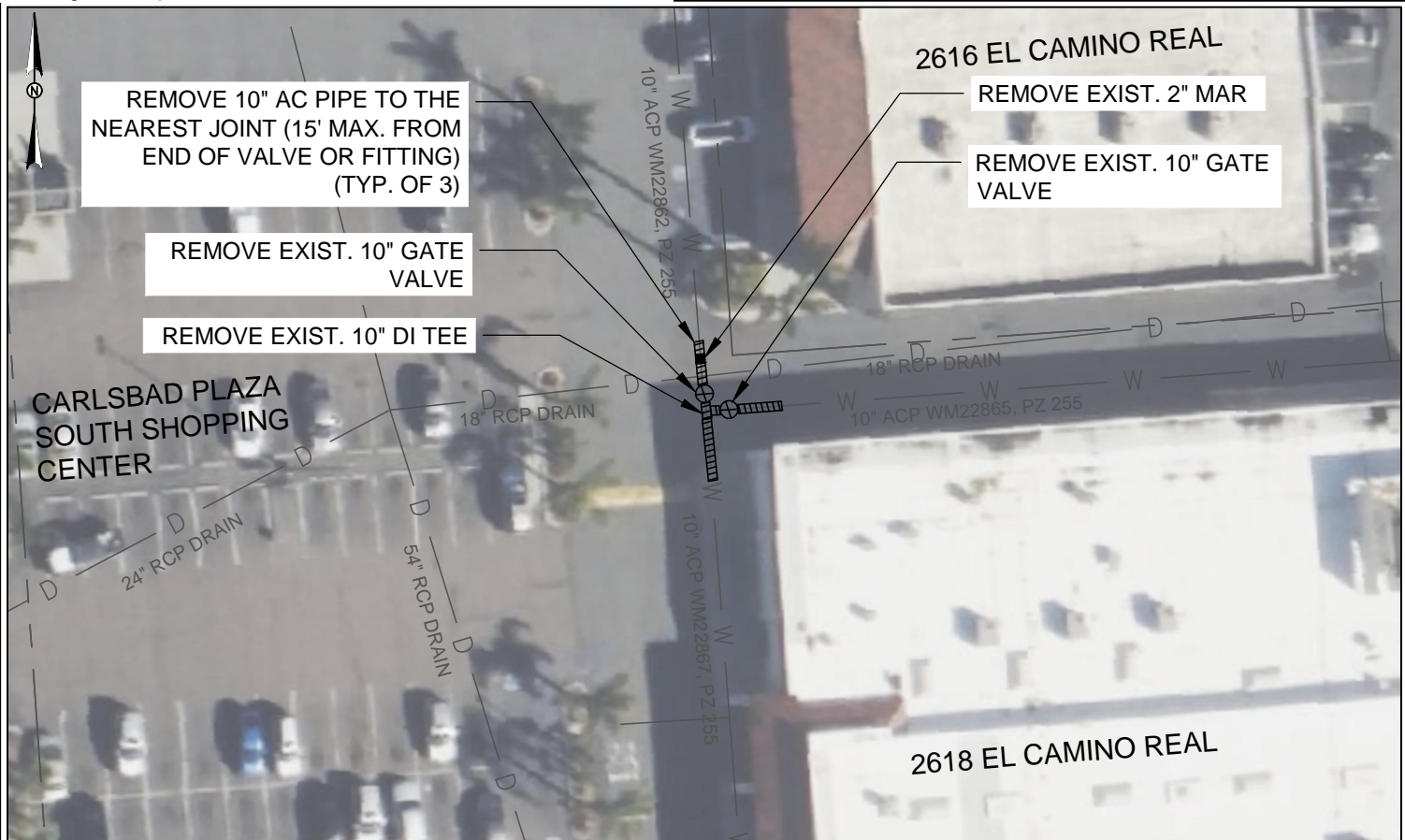
VALVE RELOCATION PLAN N.T.S. SITE 11 - PROPOSED: 2634 EL CAMINO REAL

C-11B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>27</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>11 - PROPOSED</b>		
APPROVED: <i>David Padilla</i>	5/13/2024	D. PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM EAST LOOKING WEST

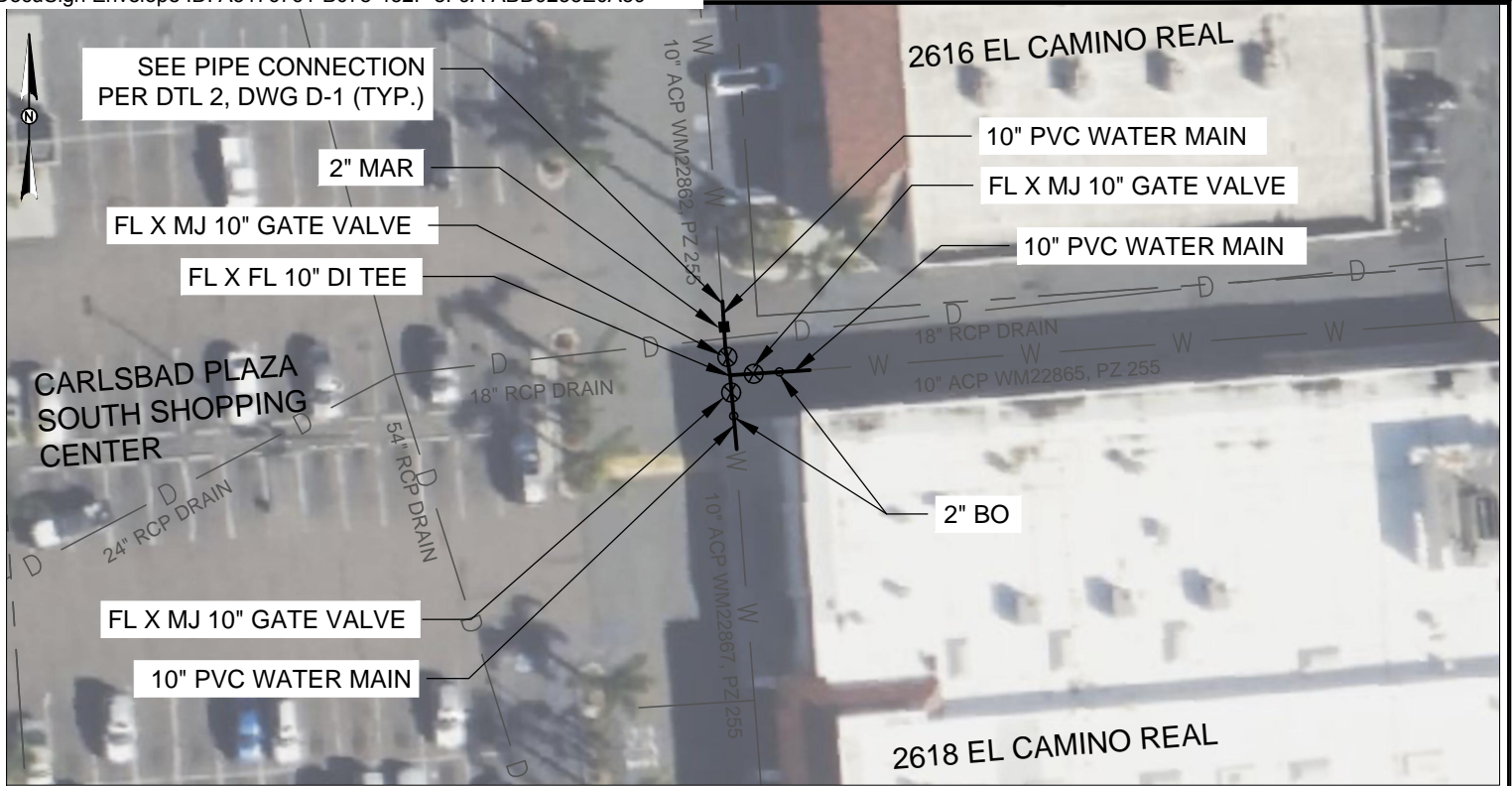
SITE 12 - EXISTING: 2618 EL CAMINO REAL

C-12A



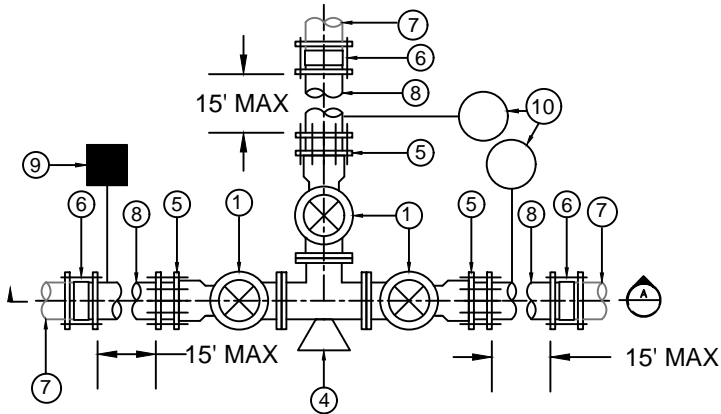
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>28</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
<b>IMPROVEMENT PLAN FOR:</b> CMWD VALVE REPLACEMENT PHASE III 12 - EXISTING		
APPROVED: <i>Dave Padilla</i>		5/13/2024 DAVE PADILLA
DISTRICT ENGINEER		RCE 55974 EXPIRES 12/31/24 DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



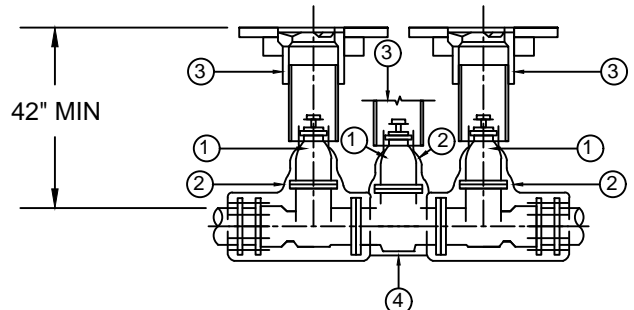
- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



VALVE RELOCATION (PLAN)

N.T.S



VALVE RELOCATION (SECTION A)

N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

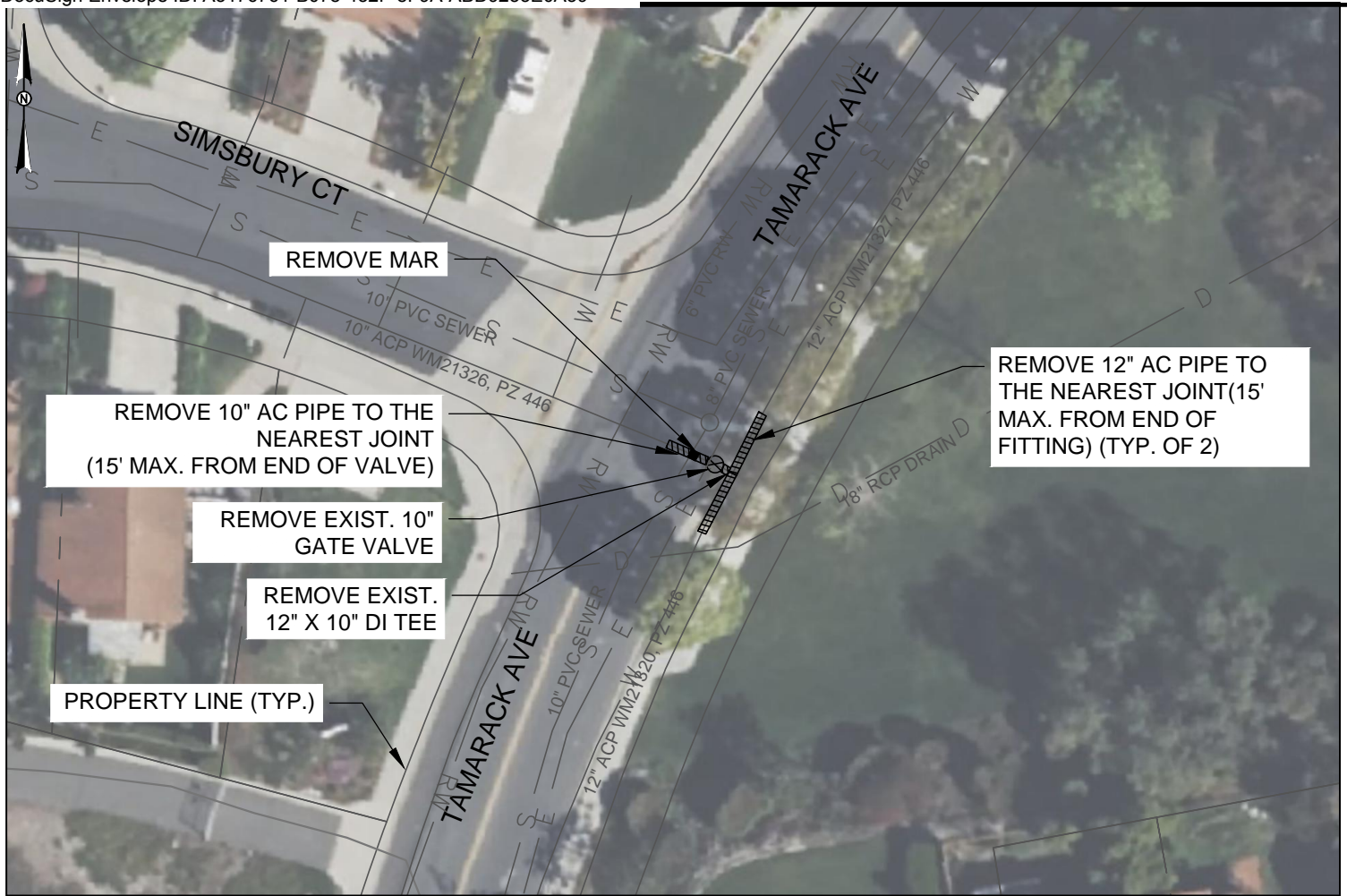
SITE 12 - PROPOSED: 2618 EL CAMINO REAL

C-12B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>29</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>12 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	DAVE PADILLA RCE 55974 EXPIRES 12/31/24
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F-_____	DRAWING NO. 545-1



- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4\"/>

# PLAN



PHOTO 1 - FROM EAST LOOKING WEST ON SIMSBURY CT

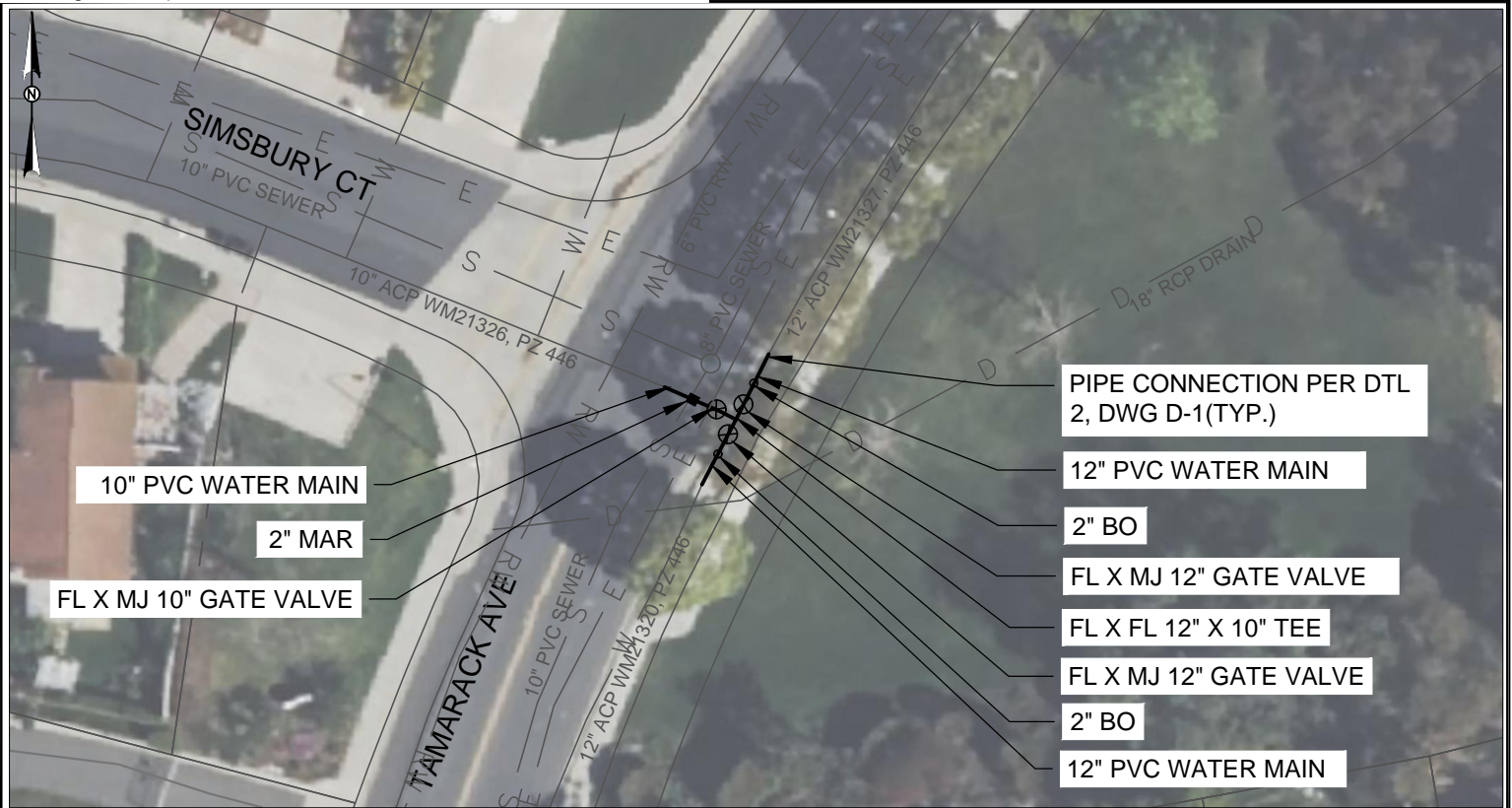
SITE 13 - EXISTING: TAMARACK AVE AND SIMSBURY CT

C-13A

		SHEET <b>30</b>	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS <b>62</b>
		IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III 13 - EXISTING</b>		
		APPROVED: <i>Dave Padilla</i> 5/13/2024 DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24 DATE		
		DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019 - F	DRAWING NO. 545 - 1

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

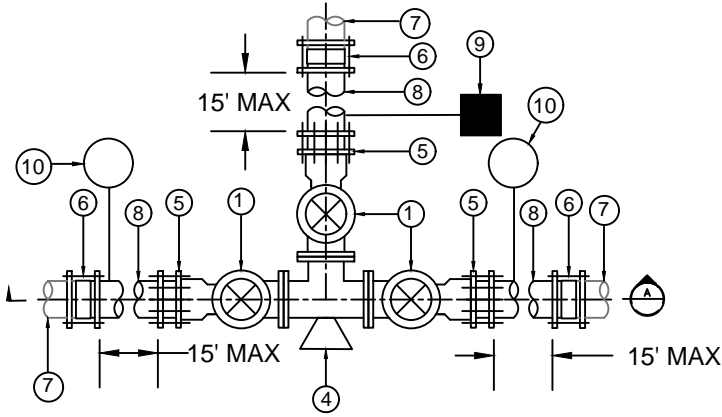




NOTE:

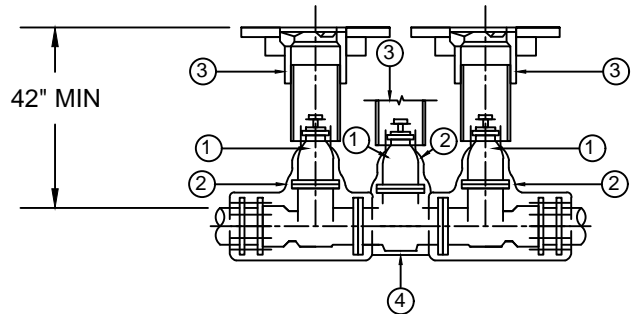
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



VALVE RELOCATION (PLAN)

N.T.S



VALVE RELOCATION (SECTION A)

N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASUREMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

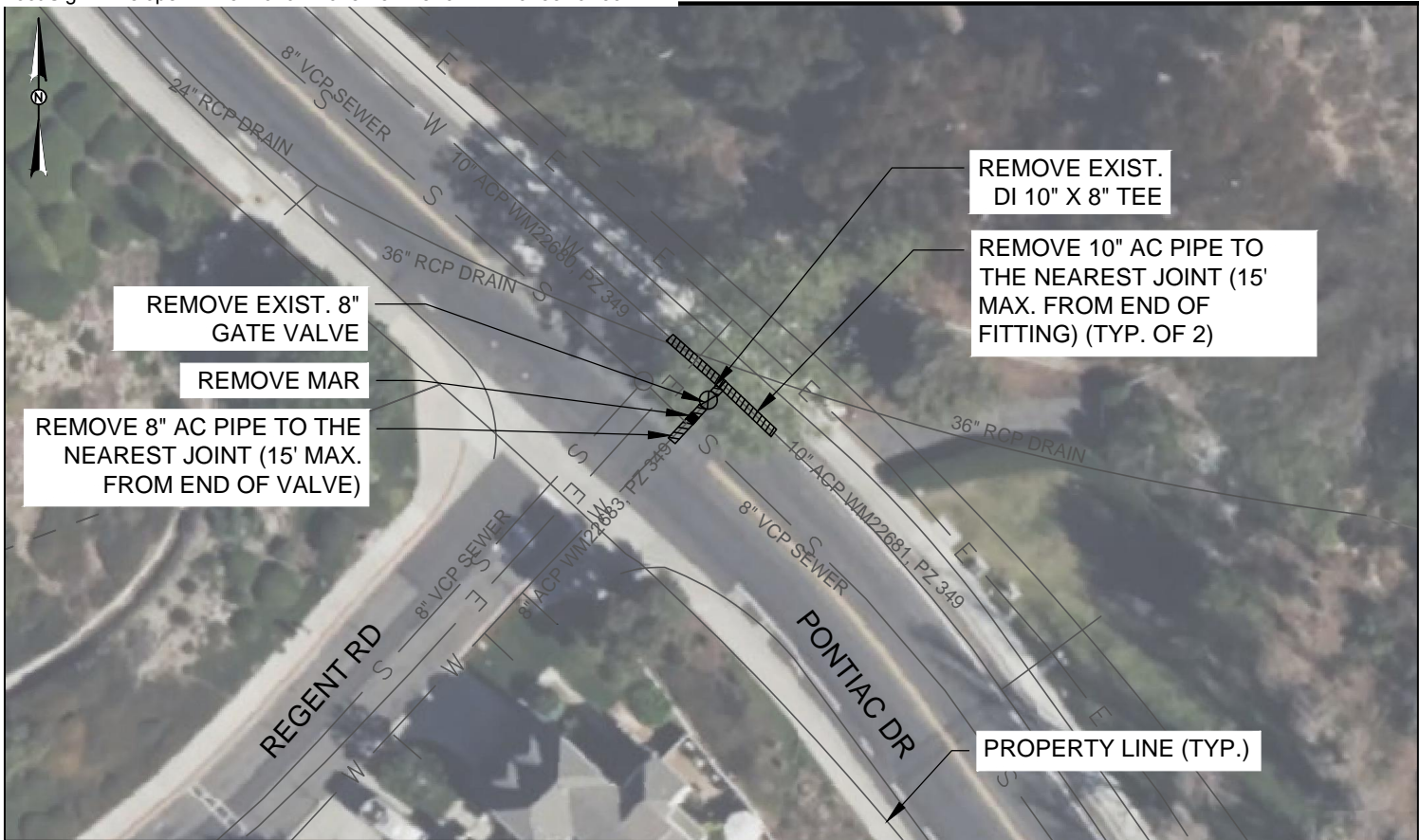
SITE 13 - PROPOSED: TAMARACK AVE AND SIMSBURY CT

C-13B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 31	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 13 - PROPOSED		
APPROVED: <i>Dave Padilla</i>		5/13/2020 DAVIDA
DISTRICT ENGINEER		RCE 55974 EXPIRES 12/31/24 DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM NORTH EAST LOOKING SOUTH WEST ON REGENT RD

C-14A

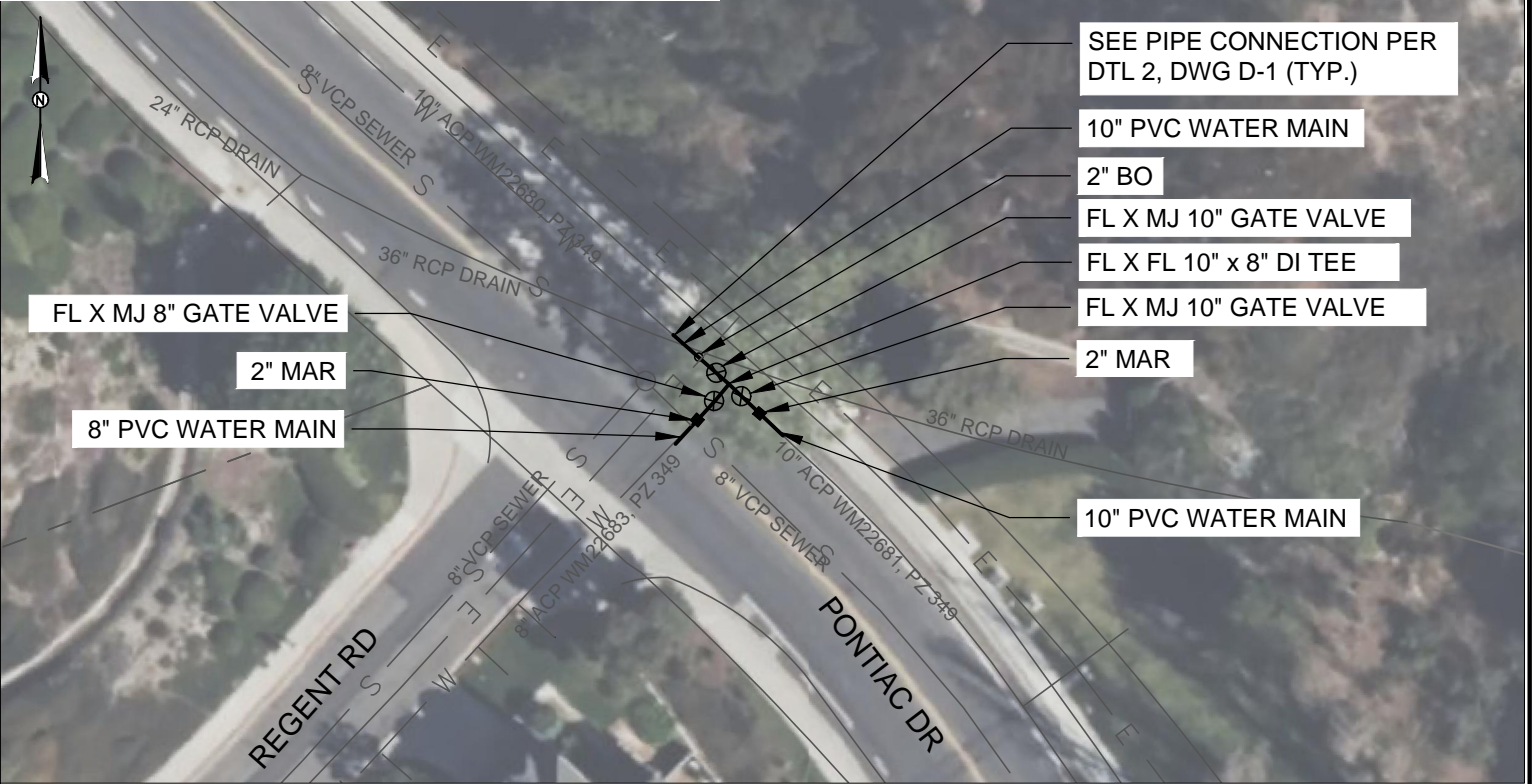
**SITE 14 - EXISTING: PONTIAC DR AND REGENT RD**



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>32</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
<b>IMPROVEMENT PLAN FOR:</b> CMWD VALVE REPLACEMENT PHASE III 14 - EXISTING		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		

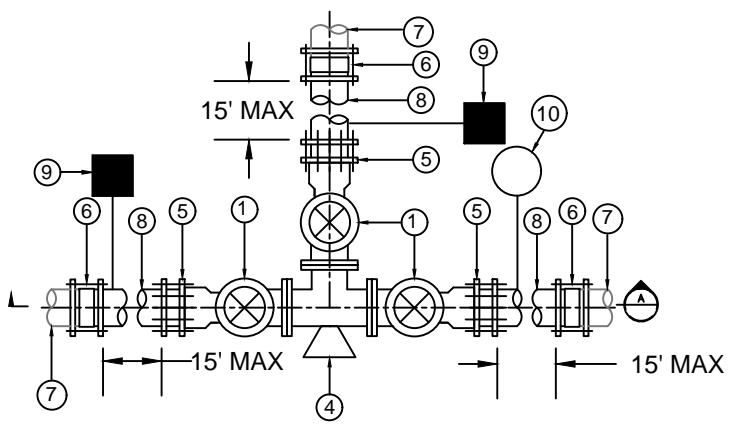




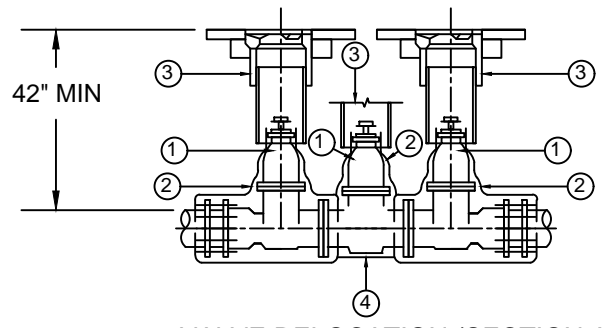
**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



**VALVE RELOCATION (PLAN)**  
N.T.S



**VALVE RELOCATION (SECTION A)**  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

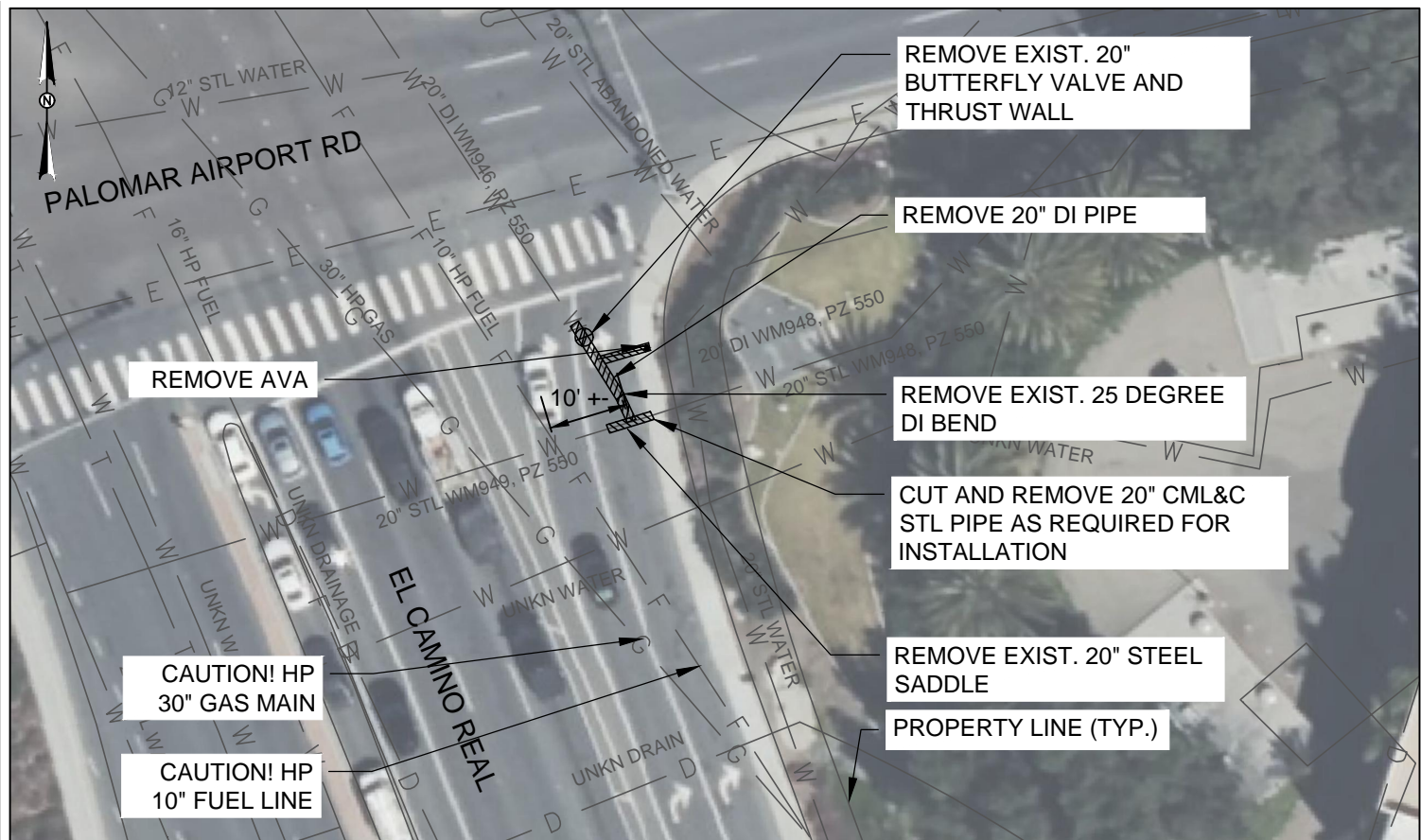
**SITE 14 - PROPOSED: PONTIAC DR AND REGENT RD**

C-14B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>33</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>14 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	DAVE PADILLA
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545-1



- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.
  5. SEE KINDER MORGAN FUEL AND SDGE GAS TRANSMISSION REQUIREMENTS ON SHEET G-5.

# PLAN



PHOTO 1 - FROM SOUTH LOOKING NORTH ON EL CAMINO REAL

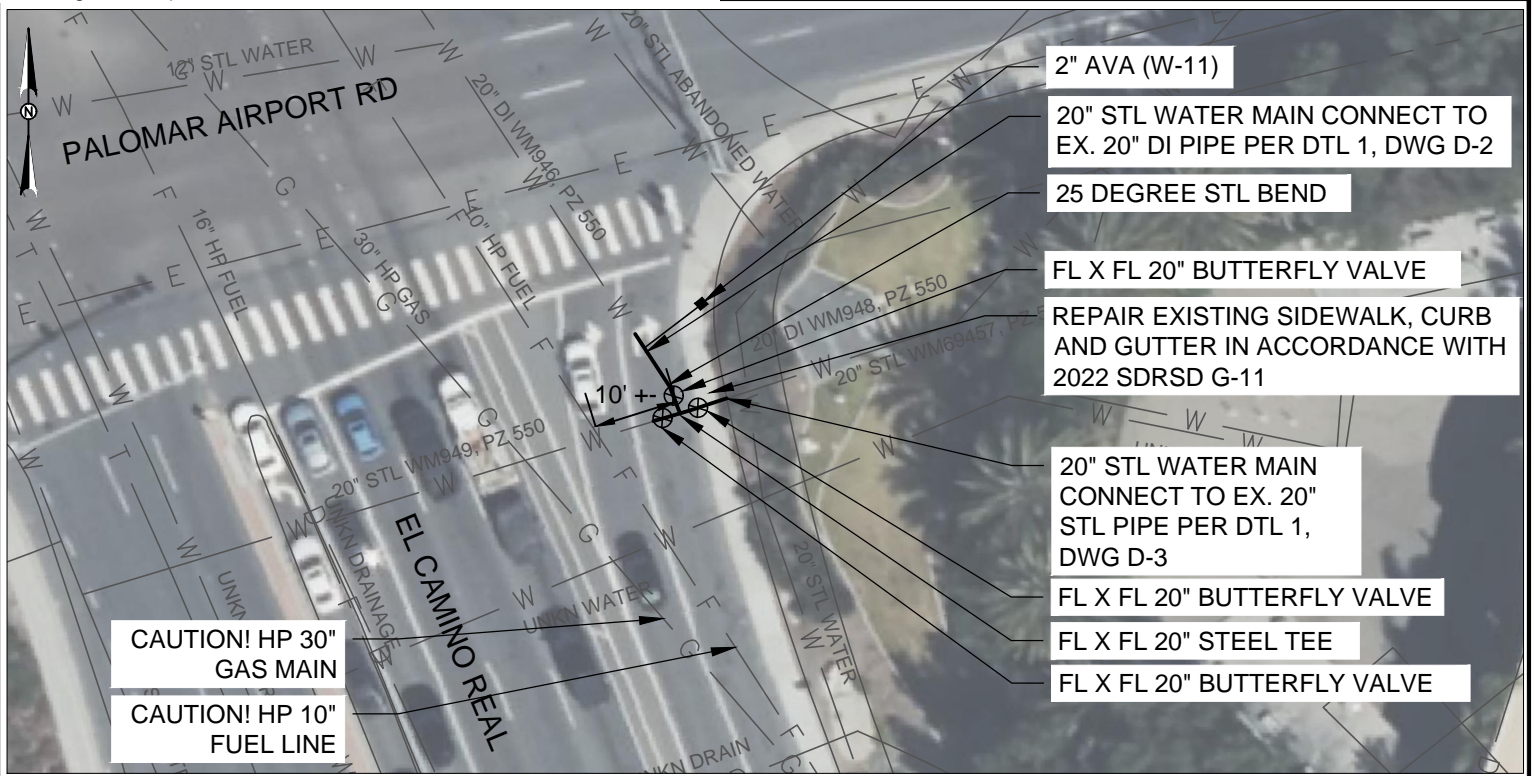
## SITE 15 - EXISTING: PALOMAR AIRPORT RD AND EL CAMINO REAL

C-15A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

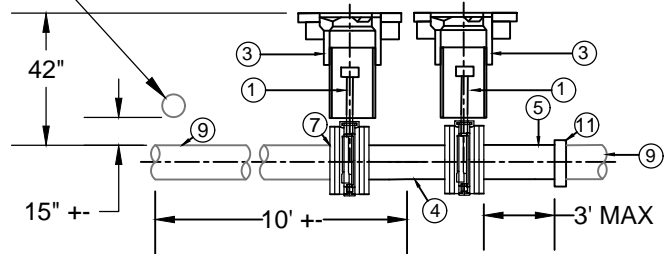
SHEET <b>34</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>15 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



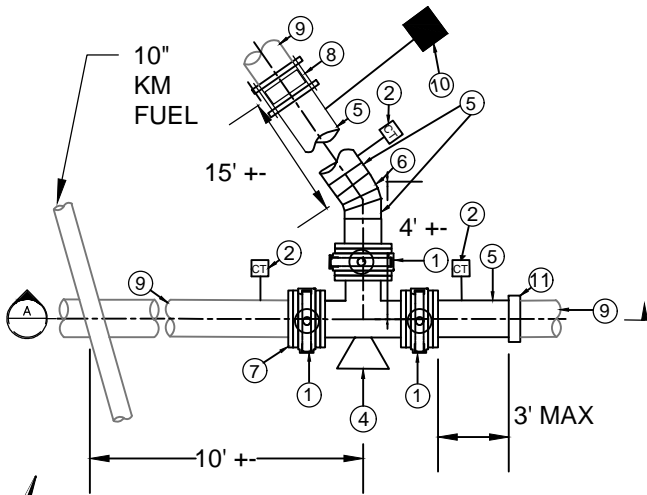
- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.
  3. POT HOLE TO FIELD VERIFY PIPE CONNECTION PRIOR TO ORDERING MATERIALS.
  4. SEE CITY OF CARLSBAD STD DWG WC-4 FOR JOINT BONDING.

# PLAN

10" KM FUEL



**VALVE RELOCATION (SECTION A)**  
N.T.S



**VALVE RELOCATION (PLAN)**  
N.T.S

ITEM	DESCRIPTION
1	BFV, SIZE/CONNECTION PER PLAN (W-21)
2	CORROSION TEST STATION (WC-10)
3	VALVE BOX ASSEMBLY(W-23)
4	STL TEE, SIZE/CONNECTION PER PLAN & THRUST BLOCK (W-19)
5	STL PIPE, SIZE/CONNECTION PER PLAN
6	25 DEGREE STL BEND WELD X WELD
7	FIELD WELD STL FLANGE TO EXISTING PIPE
8	RESTRAINED FLANGE COUPLING ADAPTER, CONNECTION PER DWG D-2
9	EXISTING PIPE, SIZE/MATERIAL PER PLAN
10	AIR VACUUM ASSEMBLY (W-11)
11	BUTT STRAP, CONNECTION PER DWG D-3

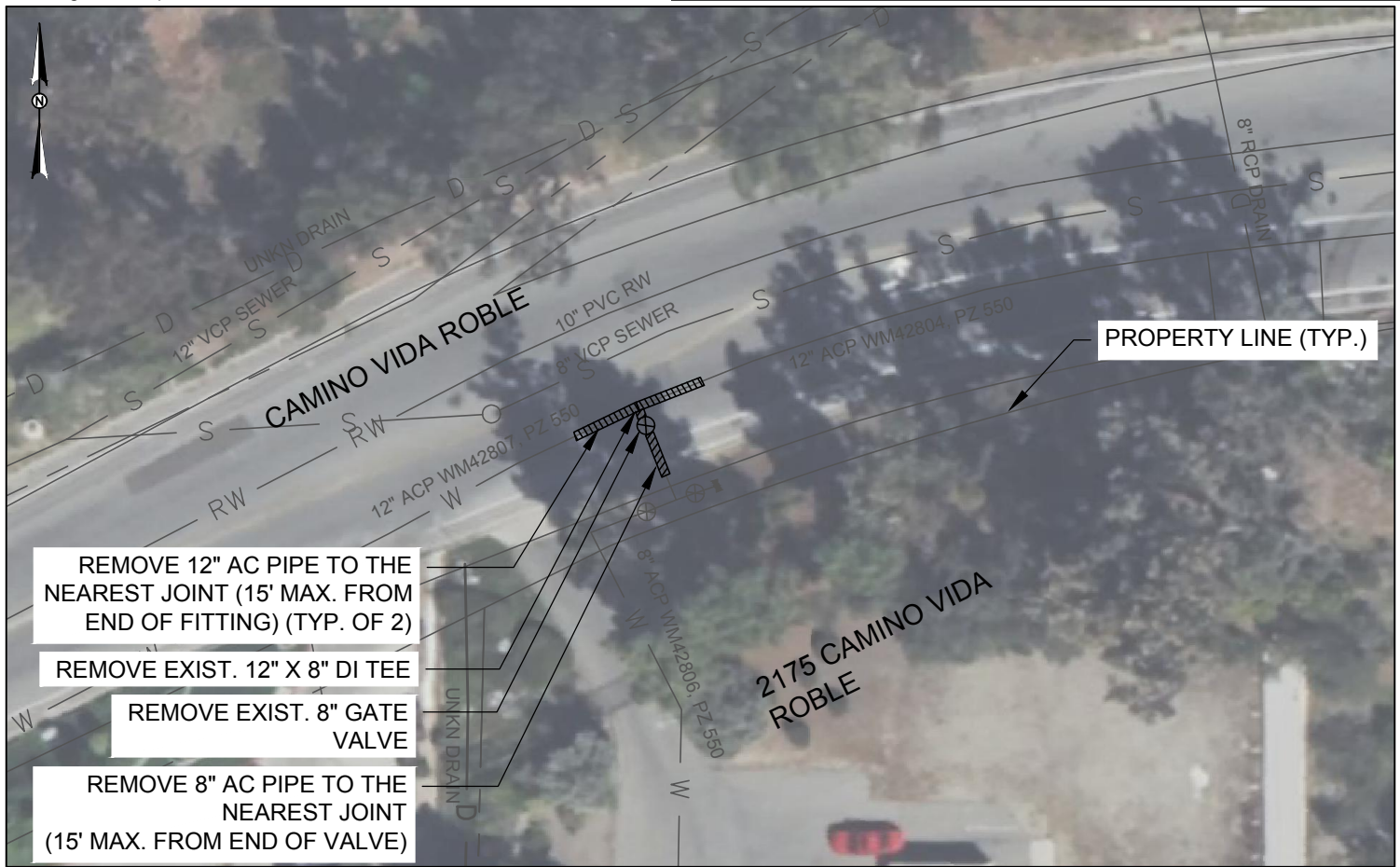
SITE 15 - PROPOSED: PALOMAR AIRPORT RD AND EL CAMINO REAL

C-15B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>35</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>15 - PROPOSED</b>		
APPROVED: <i>David Padilla</i>		5/13/2024 DILLA
DISTRICT ENGINEER		RCE 55974 EXPIRES 12/31/24 DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



- REMOVE 12" AC PIPE TO THE NEAREST JOINT (15' MAX. FROM END OF FITTING) (TYP. OF 2)
- REMOVE EXIST. 12" X 8" DI TEE
- REMOVE EXIST. 8" GATE VALVE
- REMOVE 8" AC PIPE TO THE NEAREST JOINT (15' MAX. FROM END OF VALVE)

- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN

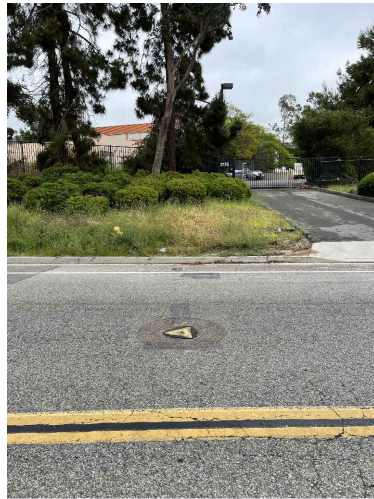


PHOTO 1 - FROM NORTH LOOKING SOUTH TOWARDS 2175 CAMINO VIDA ROBLE

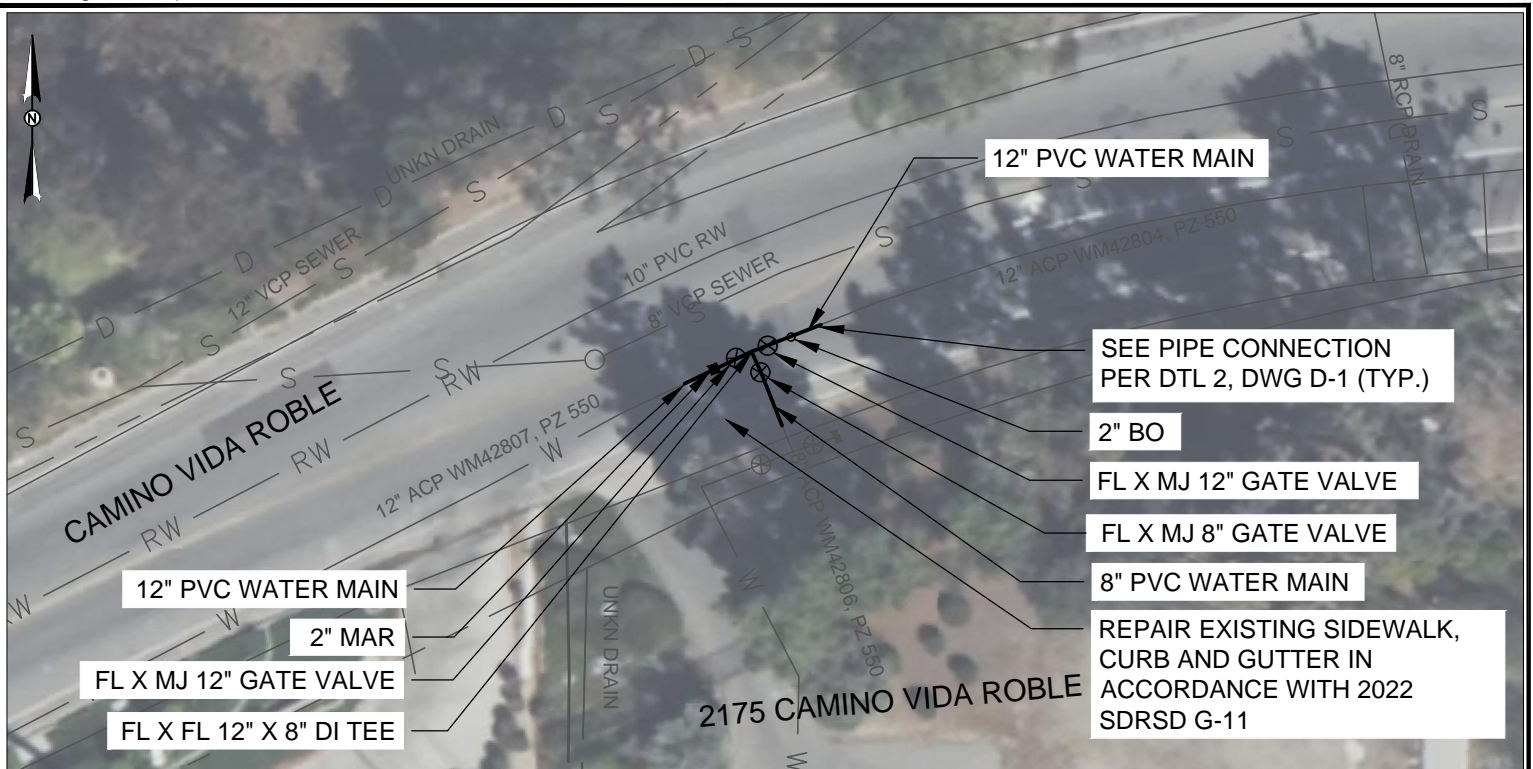
SITE 16 - EXISTING: 2175 CAMINO VIDA ROBLE

C-16A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

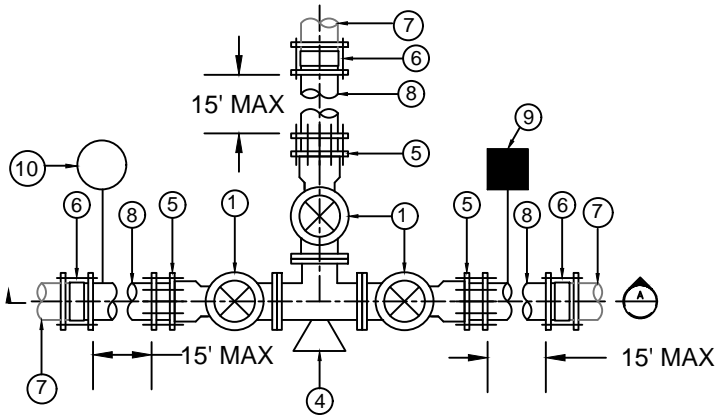
SHEET <b>36</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>16 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i>	DATE <b>5/13/2024</b>	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: <b>AMD</b>	PROJECT NO.	DRAWING NO.
CHKD BY: <b>BT</b>	<b>5019-F</b>	<b>545-1</b>
RVWD BY: <b>KH</b>		



**NOTE:**

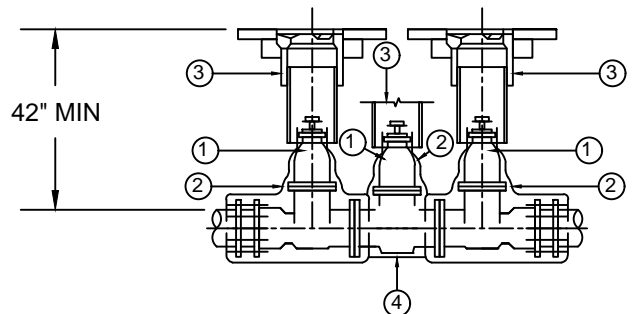
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24- GS 28 FOR PAVEMENT REPAIR.

# PLAN



**VALVE RELOCATION (PLAN)**

N.T.S



**VALVE RELOCATION (SECTION A)**

N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASUREMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

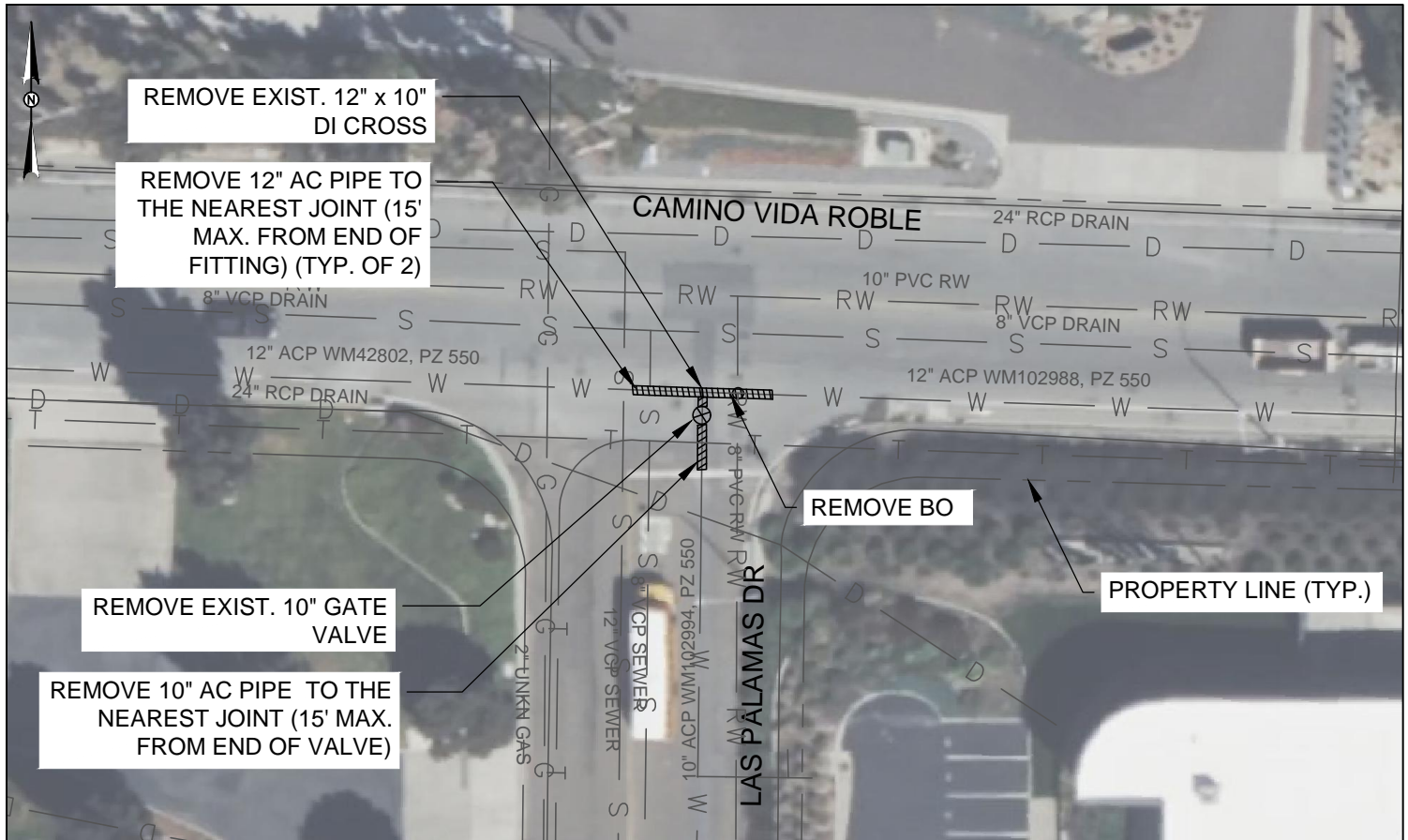
SITE 16 - PROPOSED: 2175 CAMINO VIDA ROBLE

C-16B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 37	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
<b>IMPROVEMENT PLAN FOR:</b> CMWD VALVE REPLACEMENT PHASE III 16 - PROPOSED		
APPROVED: <i>Dave Padilla</i>		5/13/2024
DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24		DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



NOTE:

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM EAST LOOKING WEST ON CAMINO VIDA ROBLE

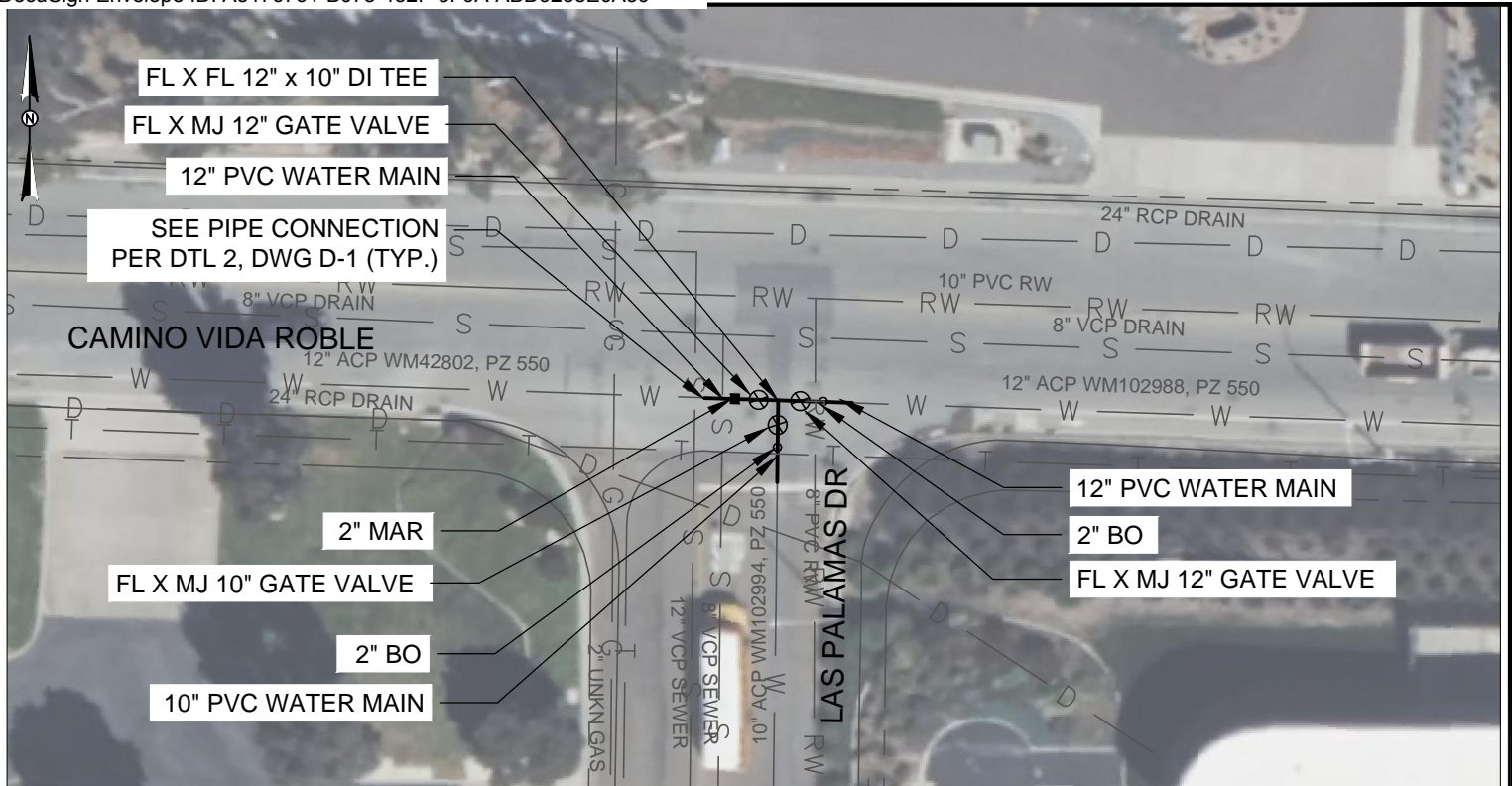
SITE 17 - EXISTING: LAS PALMAS AND CAMINO VIDA ROBLE

C-17A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

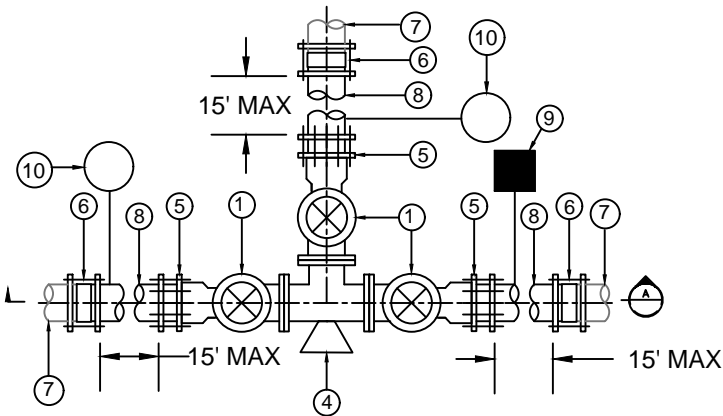
SHEET <b>38</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>17 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	DADILLA
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



NOTE:

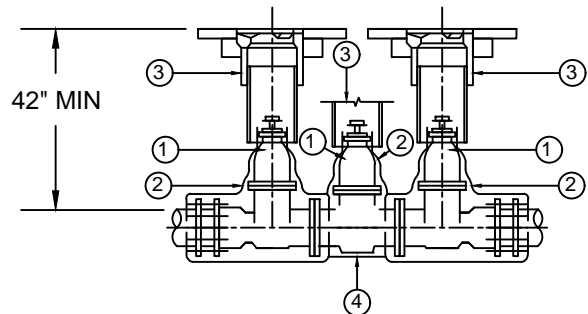
- AERIAL UTILITIES NOT SHOWN FOR CLARITY.
- SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



VALVE RELOCATION (PLAN)

N.T.S.



VALVE RELOCATION (SECTION A)

N.T.S.

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

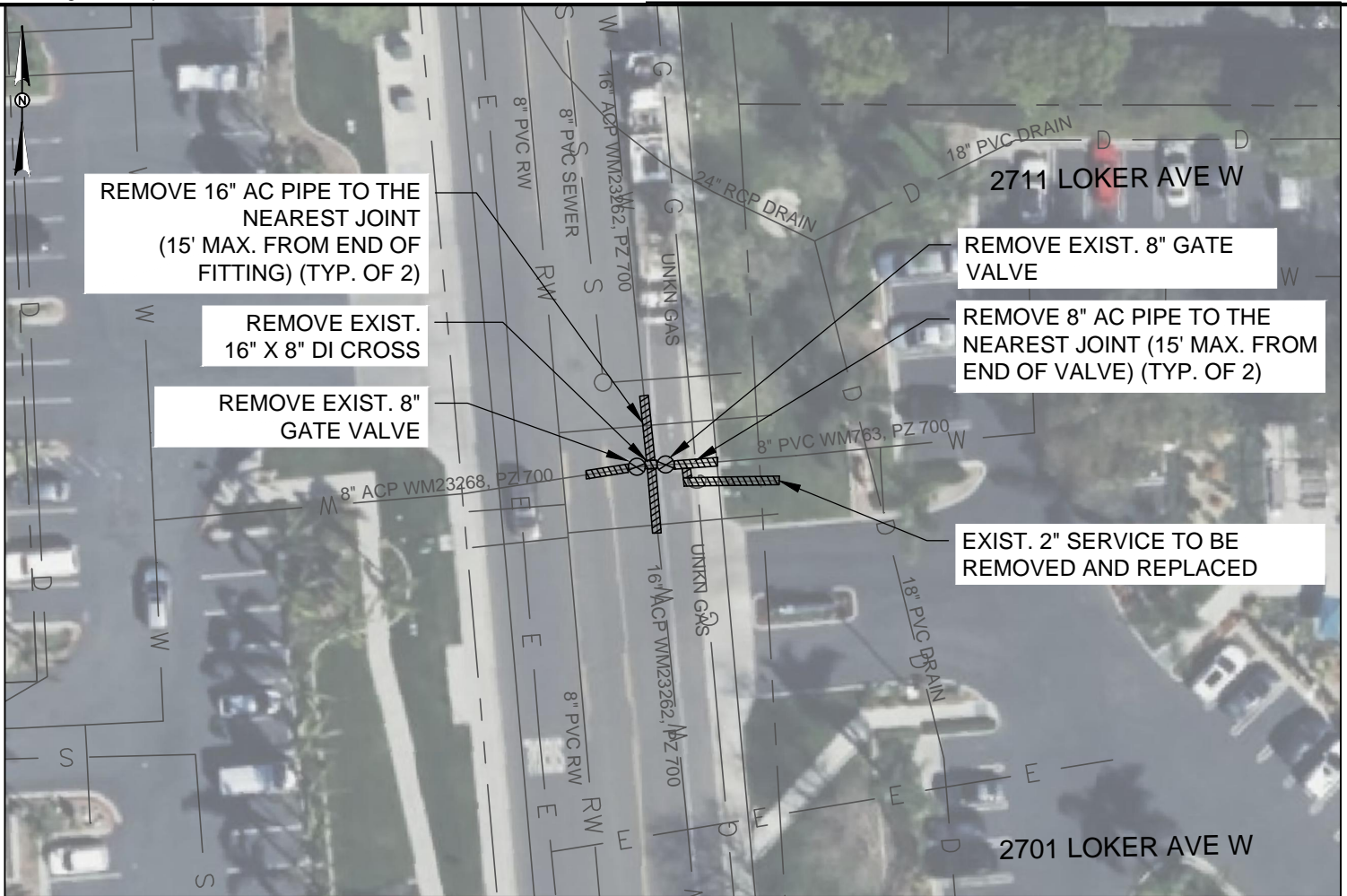
SITE 17 - PROPOSED: LAS PALMAS AND CAMINO VIDA ROBLE

C-17B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>39</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>17 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i> 5/19/2024 DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24 DATE		DATE
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545 - 1



NOTE:

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM EAST LOOKING WEST

SITE 18 - EXISTING: 2712 LOKER AVE WEST

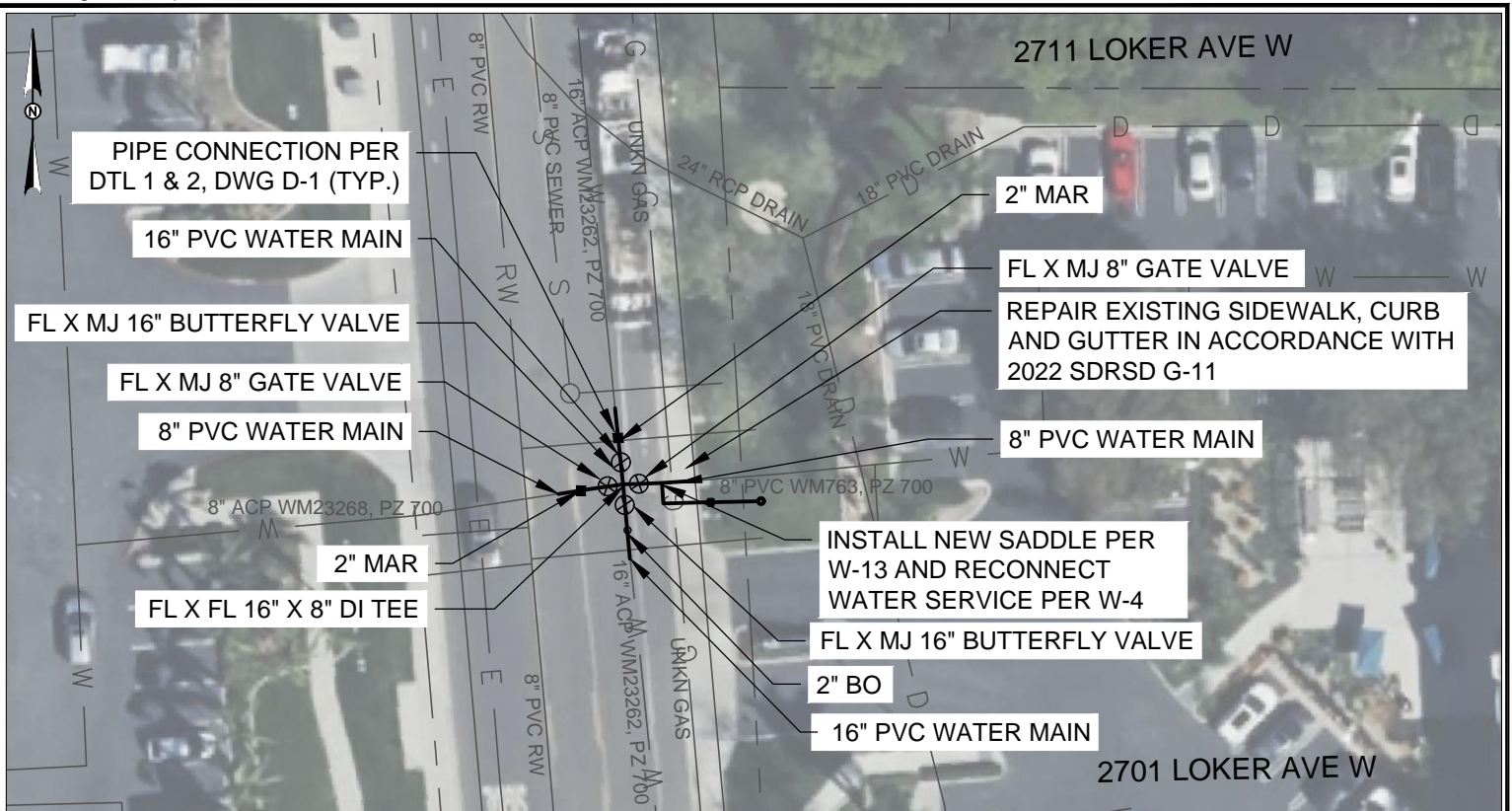
C-18A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

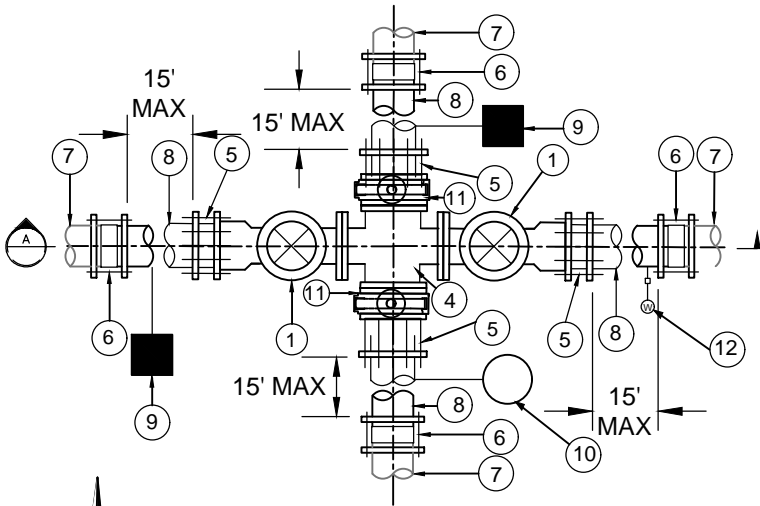
SHEET 40	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>18 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i>		5/13/2024
DISTRICT ENGINEER		RCE 55974 EXPIRES 12/31/24
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



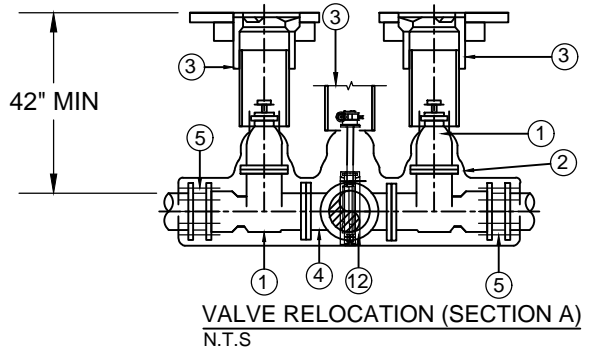


- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



VALVE RELOCATION PLAN  
N.T.S.



VALVE RELOCATION (SECTION A)  
N.T.S.

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY (W-23)
4	DI CROSS, SIZE/CONNECTION PER PLAN
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)
11	BFV, SIZE/CONNECTION PER PLAN (W-21)
12	2\"/>

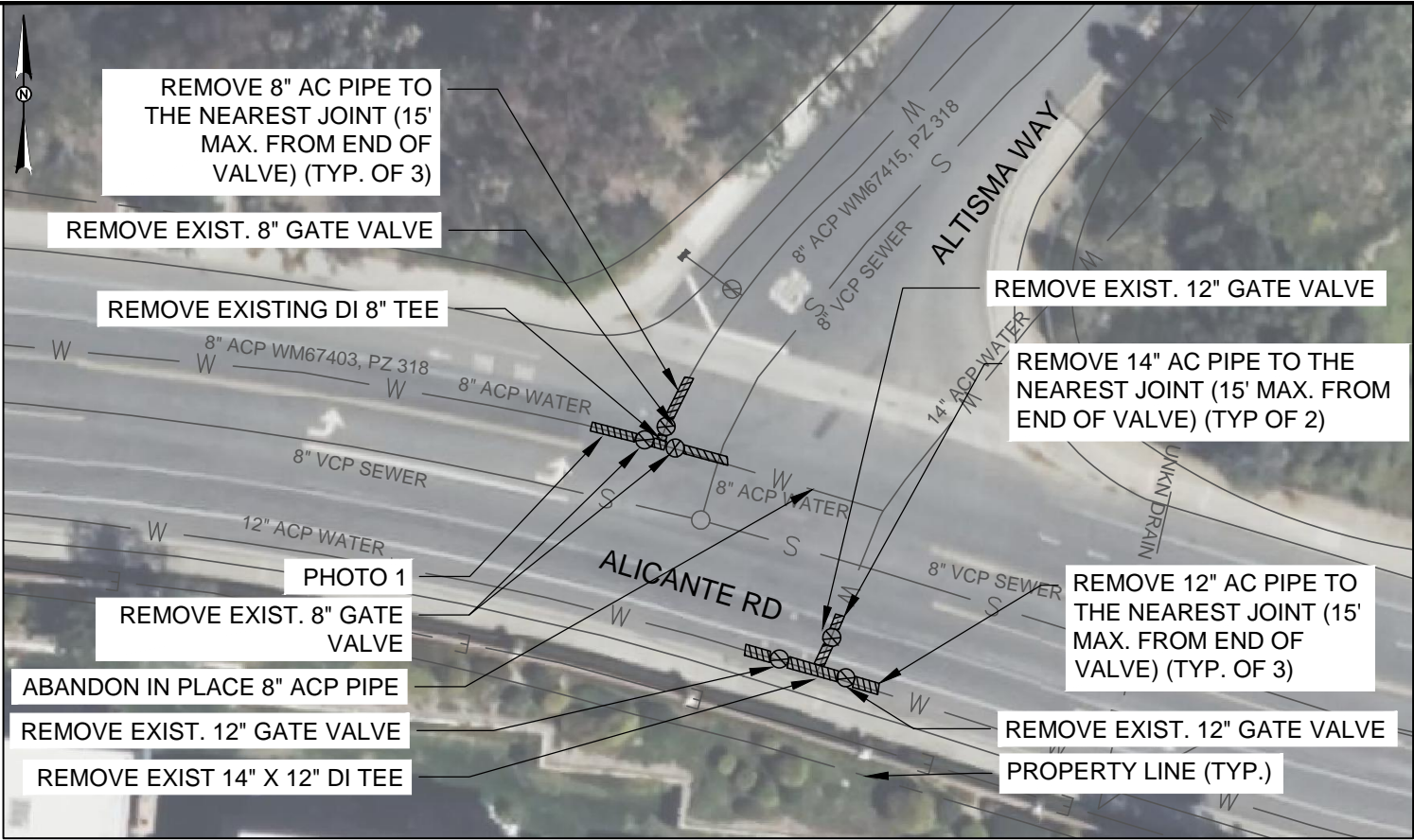
SITE 18 - PROPOSED: 2712 LOKER AVE WEST

C-18B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 41	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 18 - PROPOSED		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM NORTH LOOKING SOUTH

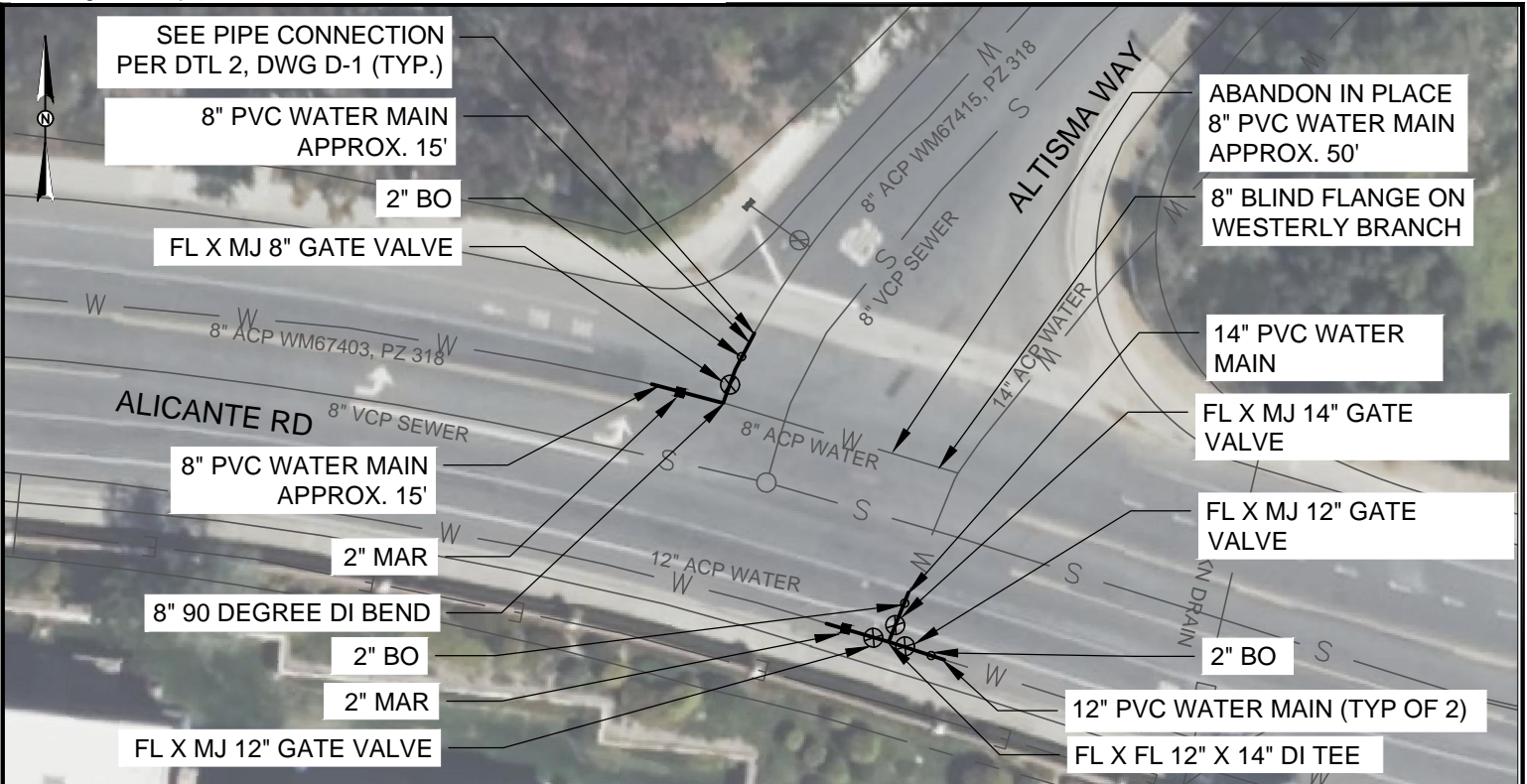
SITE 19 - EXISTING: ALICANTE RD AND ALTISMA WAY

C-19A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

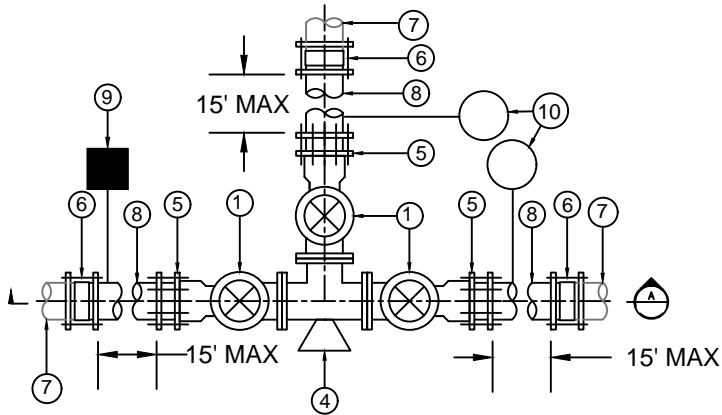
SHEET 42	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 19 - EXISTING		
APPROVED: Dave Padilla DISTRICT ENGINEER	5/13/2024 DAVE PADILLA RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545-1



**NOTE:**

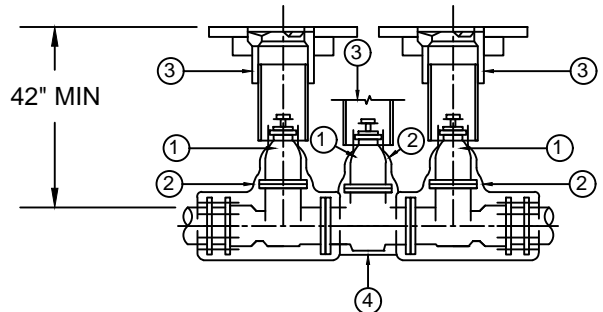
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



**VALVE RELOCATION (PLAN)**

N.T.S



**VALVE RELOCATION (SECTION A)**

N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASUREMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

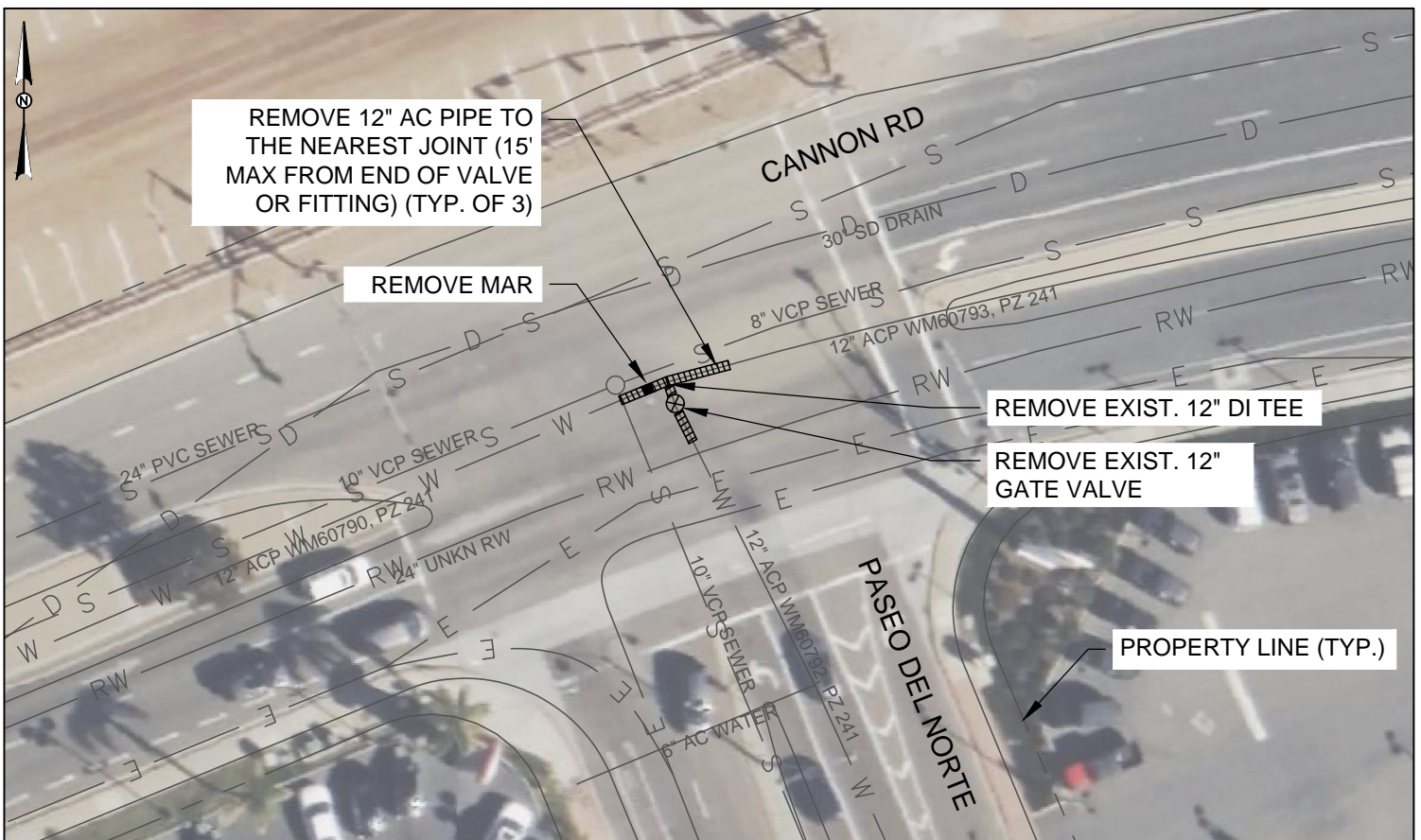
**SITE 19 - PROPOSED: ALICANTE RD AND ALTISMA WAY**

C-19B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 43	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> 19 - PROPOSED		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DAVE PADILLA RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545-1



- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM SOUTH LOOKING NORTH

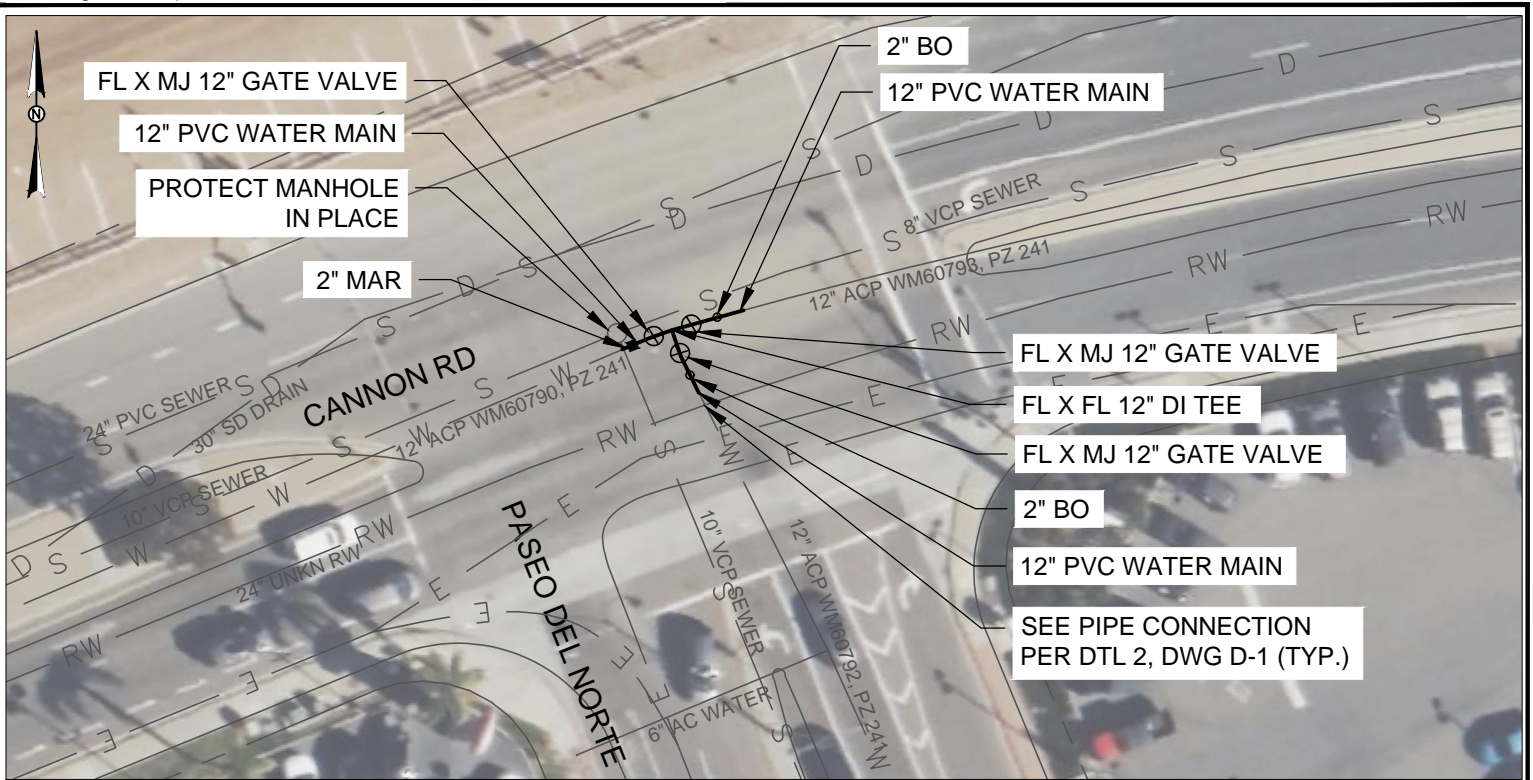
SITE 20 - EXISTING: CANNON RD AND PASEO DEL NORTE

C-20A



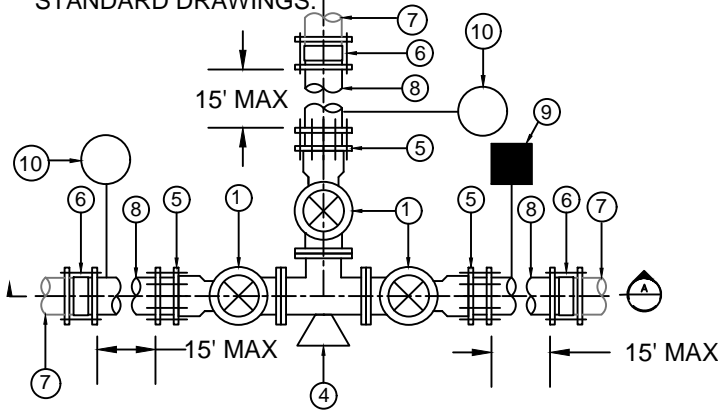
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 44	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 20 - EXISTING		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DAVE PADILLA DATE	RCE 55974 EXPIRES 12/31/24
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		

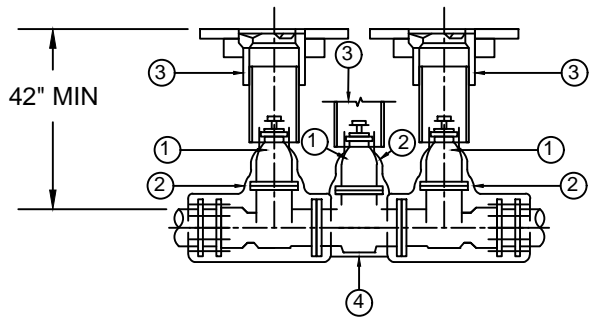


- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.

# PLAN



**VALVE RELOCATION (PLAN)**  
N.T.S.



**VALVE RELOCATION (SECTION A)**  
N.T.S.

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASUREMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

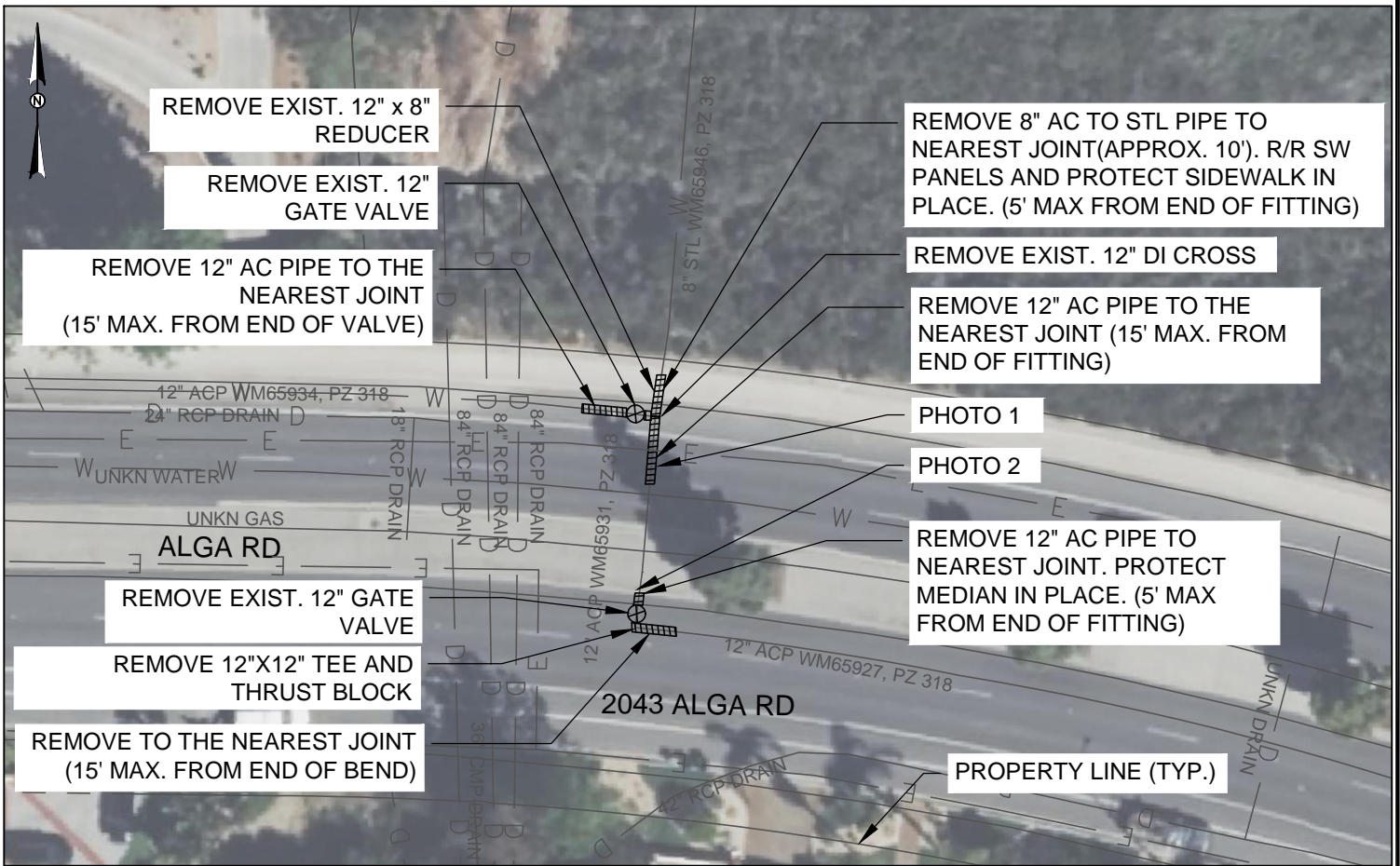
SITE 20 - PROPOSED: CANNON RD AND PASEO DEL NORTE

C-20B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 45	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>20 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER		5/13/2024 DAVE PADILLA DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



- NOTE:**
1. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  2. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  3. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN

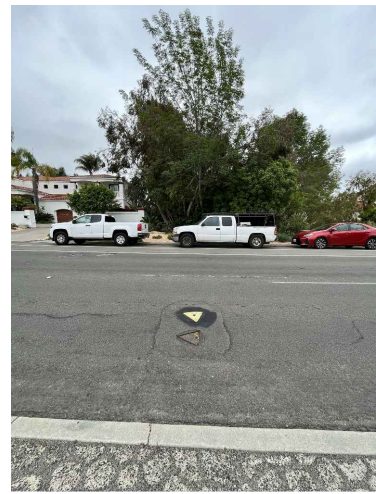


PHOTO 1 & PHOTO 2 - FROM NORTH LOOKING SOUTH

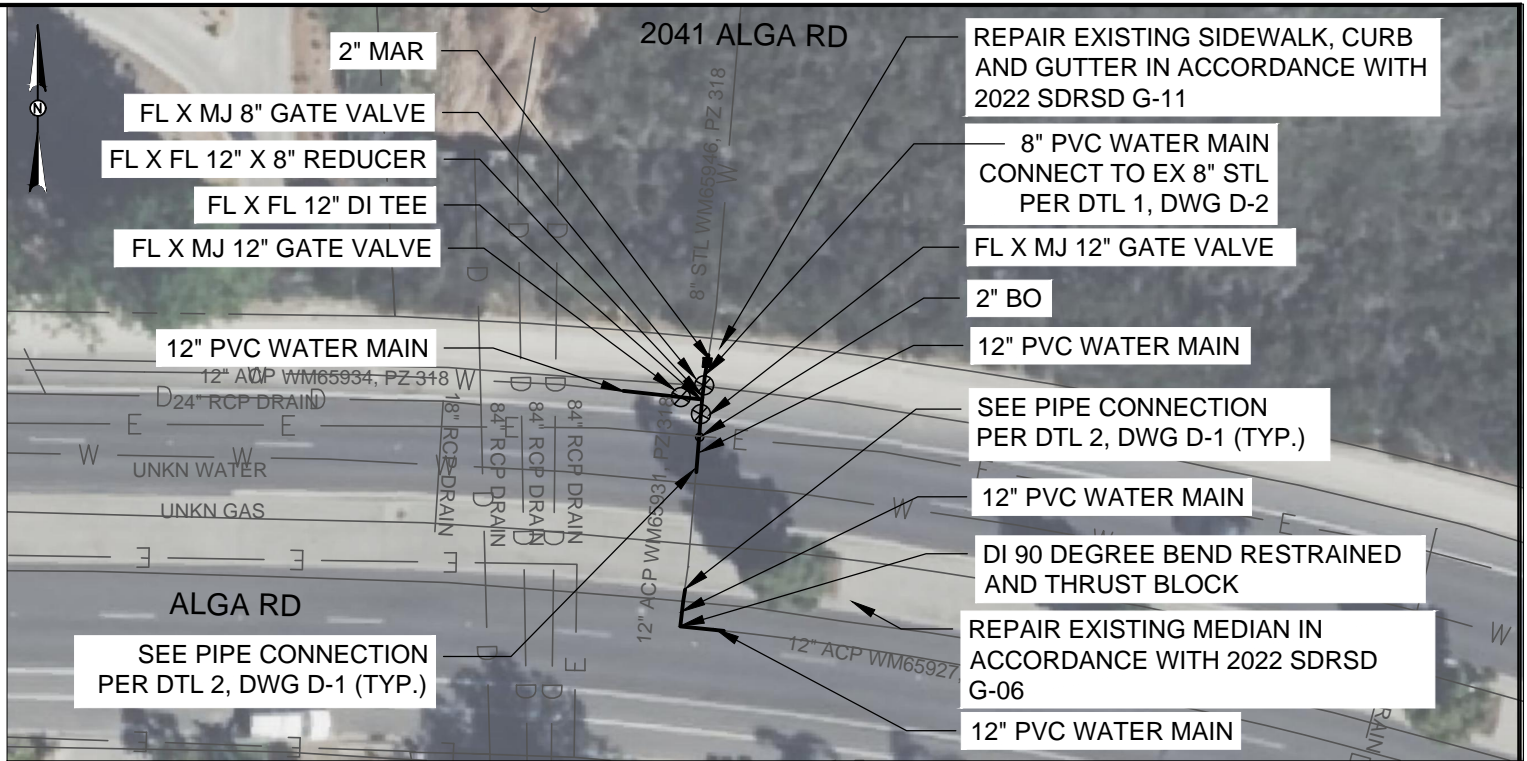
SITE 21 - EXISTING: 2043 ALGA RD

C-21A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

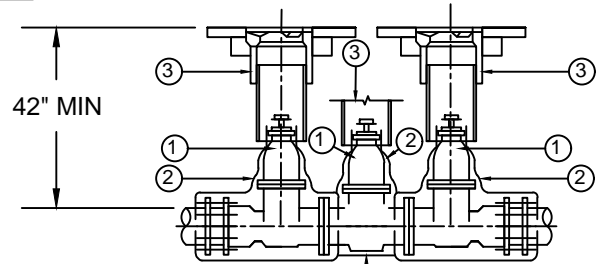
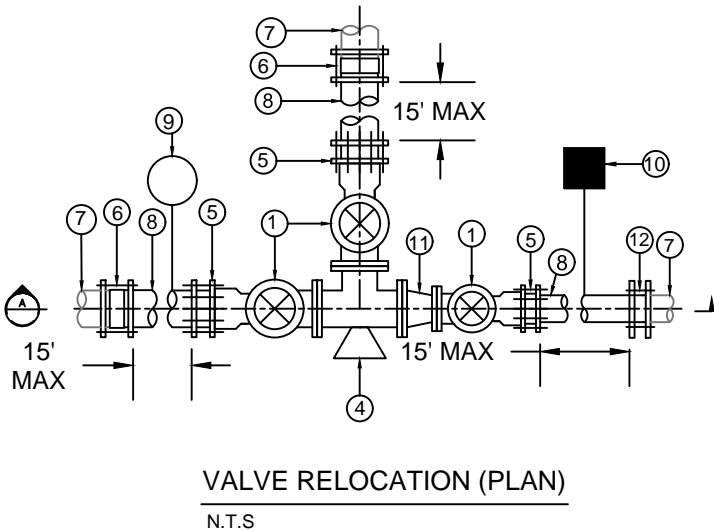
SHEET 46	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 21 - EXISTING		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER		5/13/2024 DATE
DWN BY: AMD CHKD BY: BT RVWD BY: KH		PROJECT NO. 5019-F
DATE		DRAWING NO. 545-1



**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24- GS 28 FOR PAVEMENT REPAIR.

# PLAN



**VALVE RELOCATION (SECTION A)**  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASUREMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	BLOW-OFF (W-10)
10	MANUAL AIR RELEASE VALVE (W-10)
11	DI REDUCER, SIZE/CONNECTION PER PLAN
12	PVC TO STL CONNECTION, WELD ON STL FLANGE W/ RESTRAINED FLANGE ADAPTER

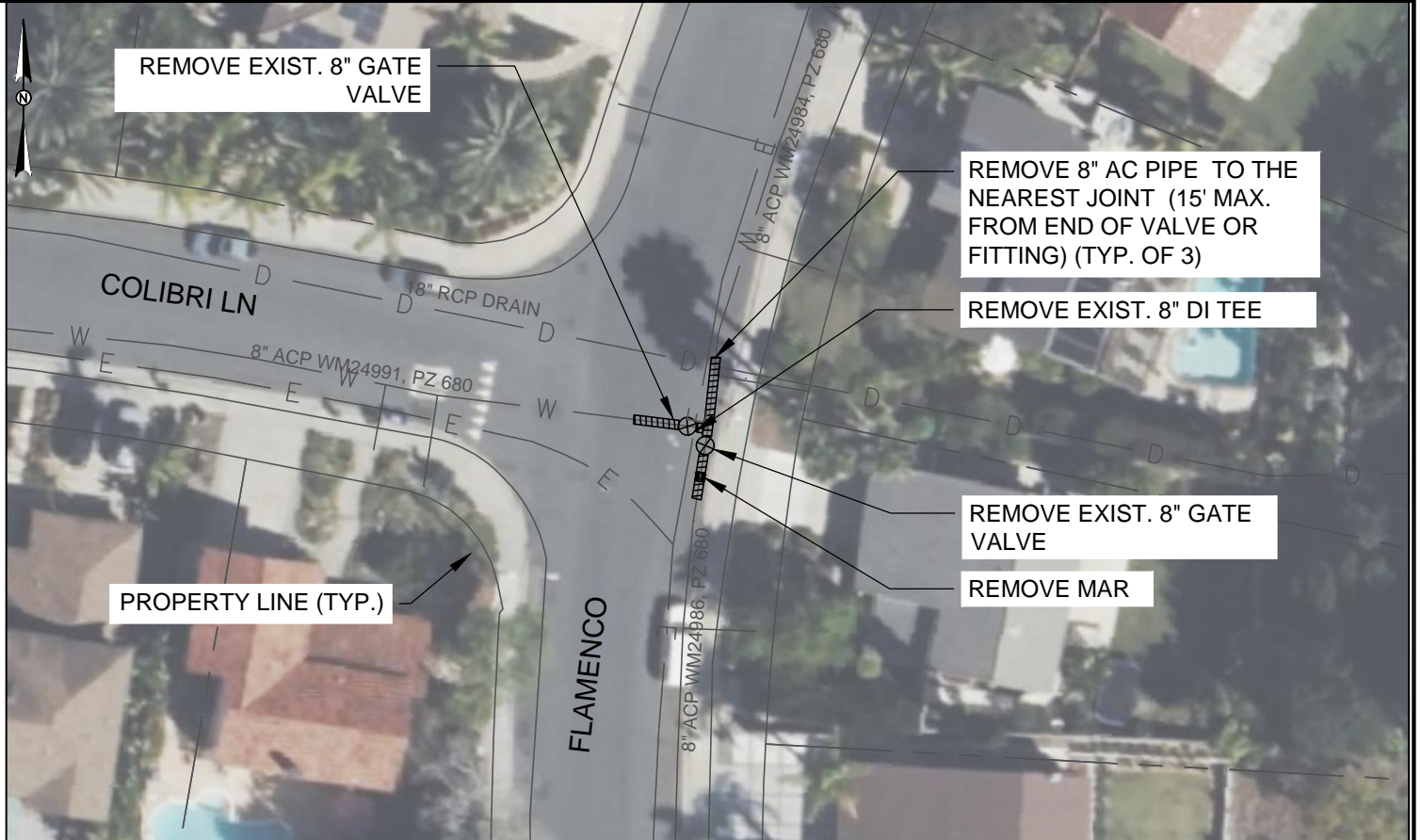
SITE 21 - PROPOSED: 2043 ALGA RD

C-21B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 47	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> 21 - PROPOSED		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM NORTH LOOKING SOUTH ON FLAMENCO ST

SITE 22 - EXISTING: FLAMENCO ST AND COLIBRI LN

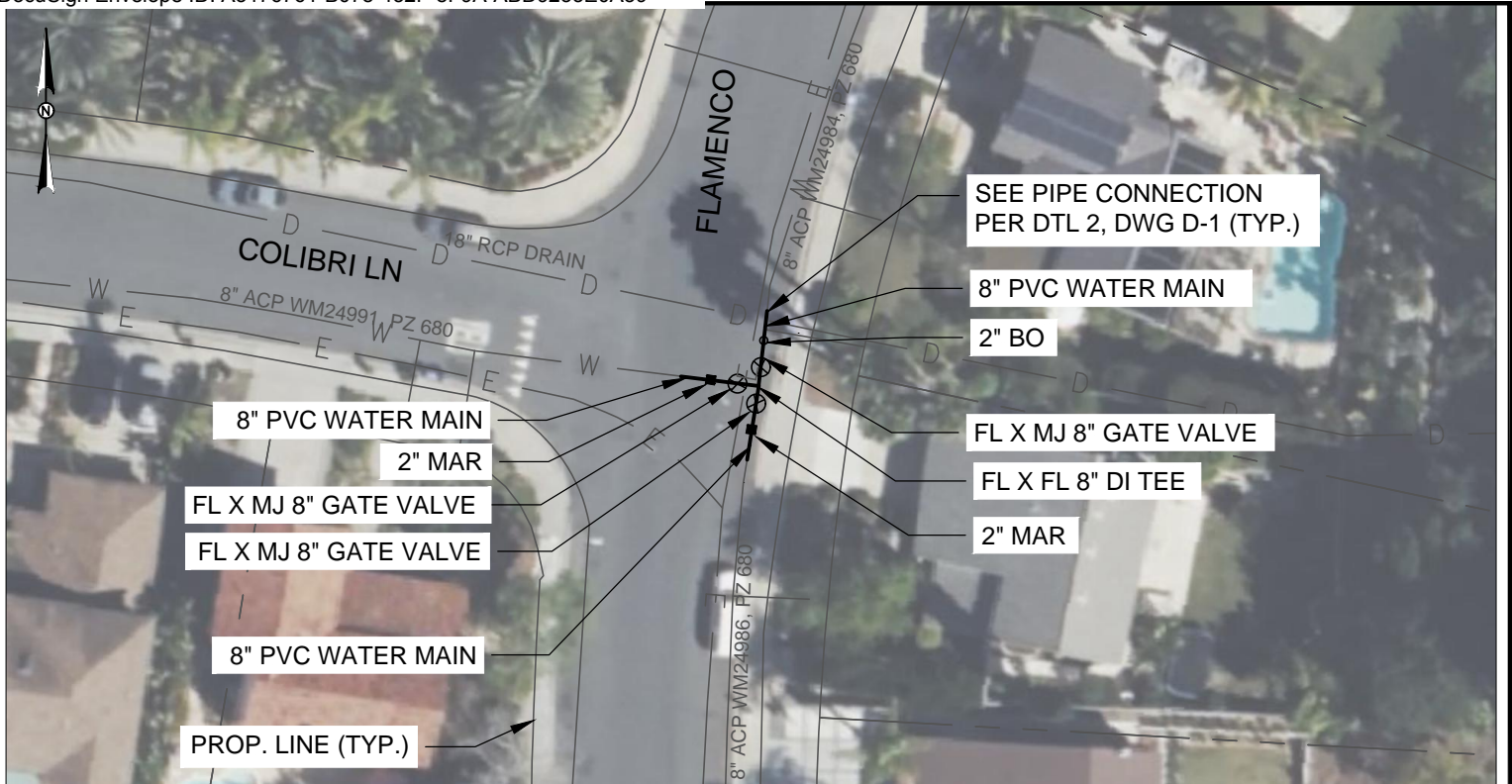
C-22A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 48	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 22 - EXISTING		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		

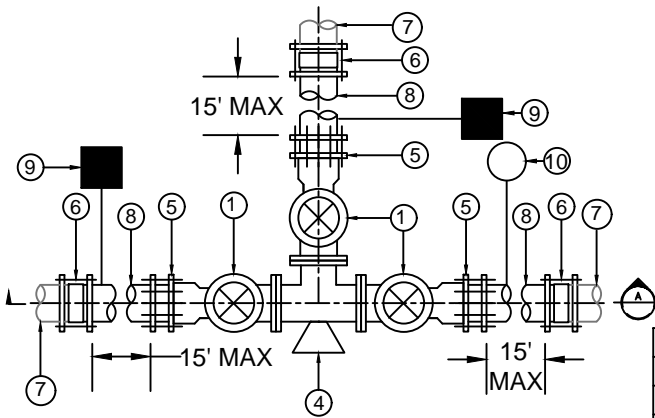




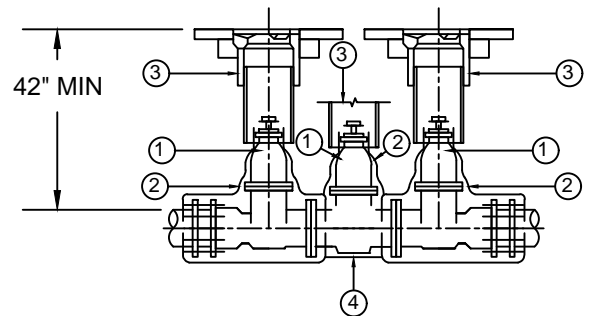
**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



**VALVE RELOCATION (PLAN)**  
N.T.S



**VALVE RELOCATION (SECTION A)**  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASUREMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	MANUAL AIR RELEASE VALVE (W-10)
10	BLOW-OFF (W-10)

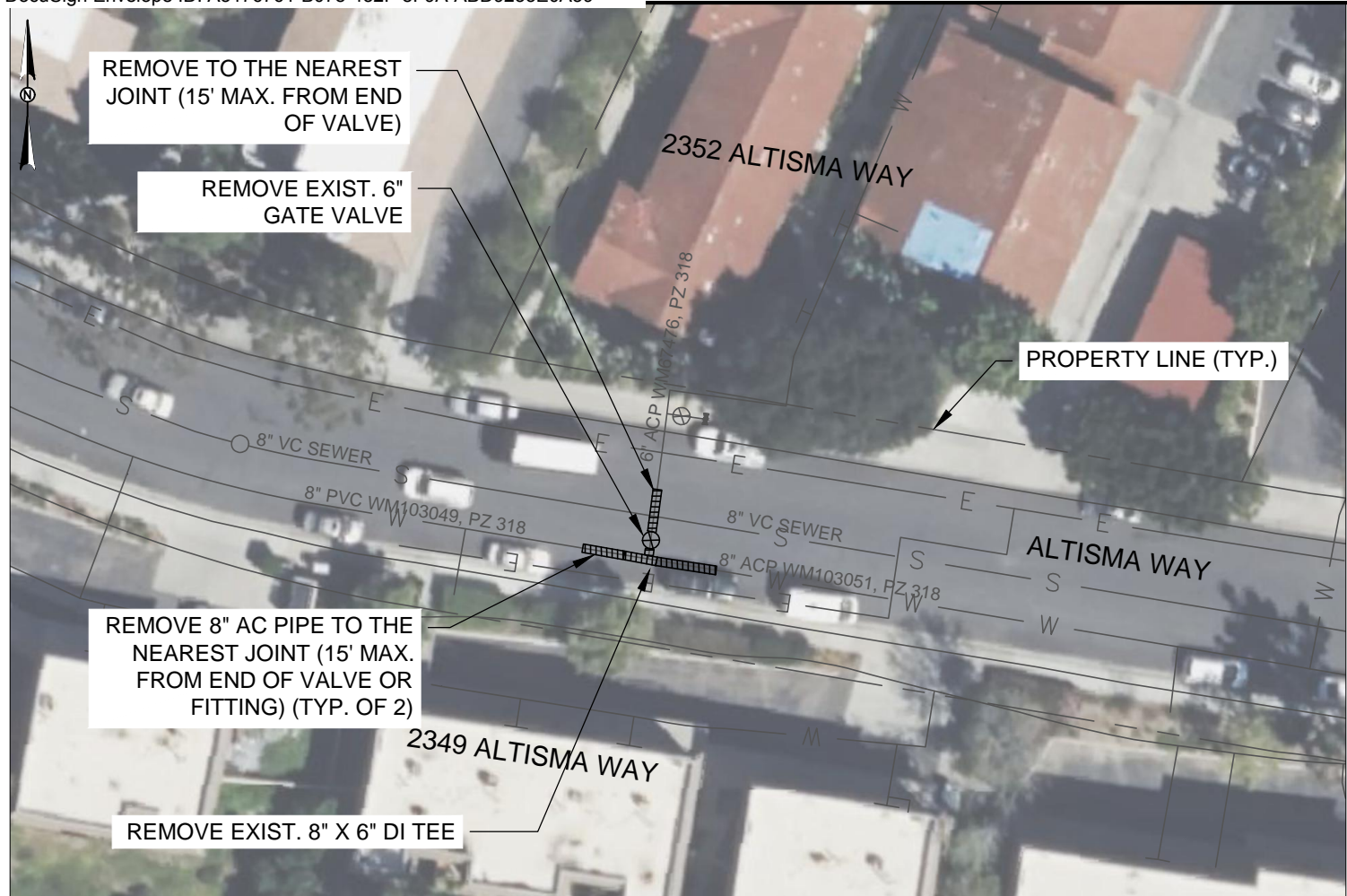
SITE 22 - PROPOSED: FLAMENCO ST AND COLIBRI LN

C-22B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>49</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>22 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: <u>AMD</u>	PROJECT NO.	DRAWING NO.
CHKD BY: <u>BT</u>	5019-F	545-1
RVWD BY: <u>KH</u>		



NOTE:

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM SOUTH LOOKING NORTH  
AT 2352 ALTISMA WAY

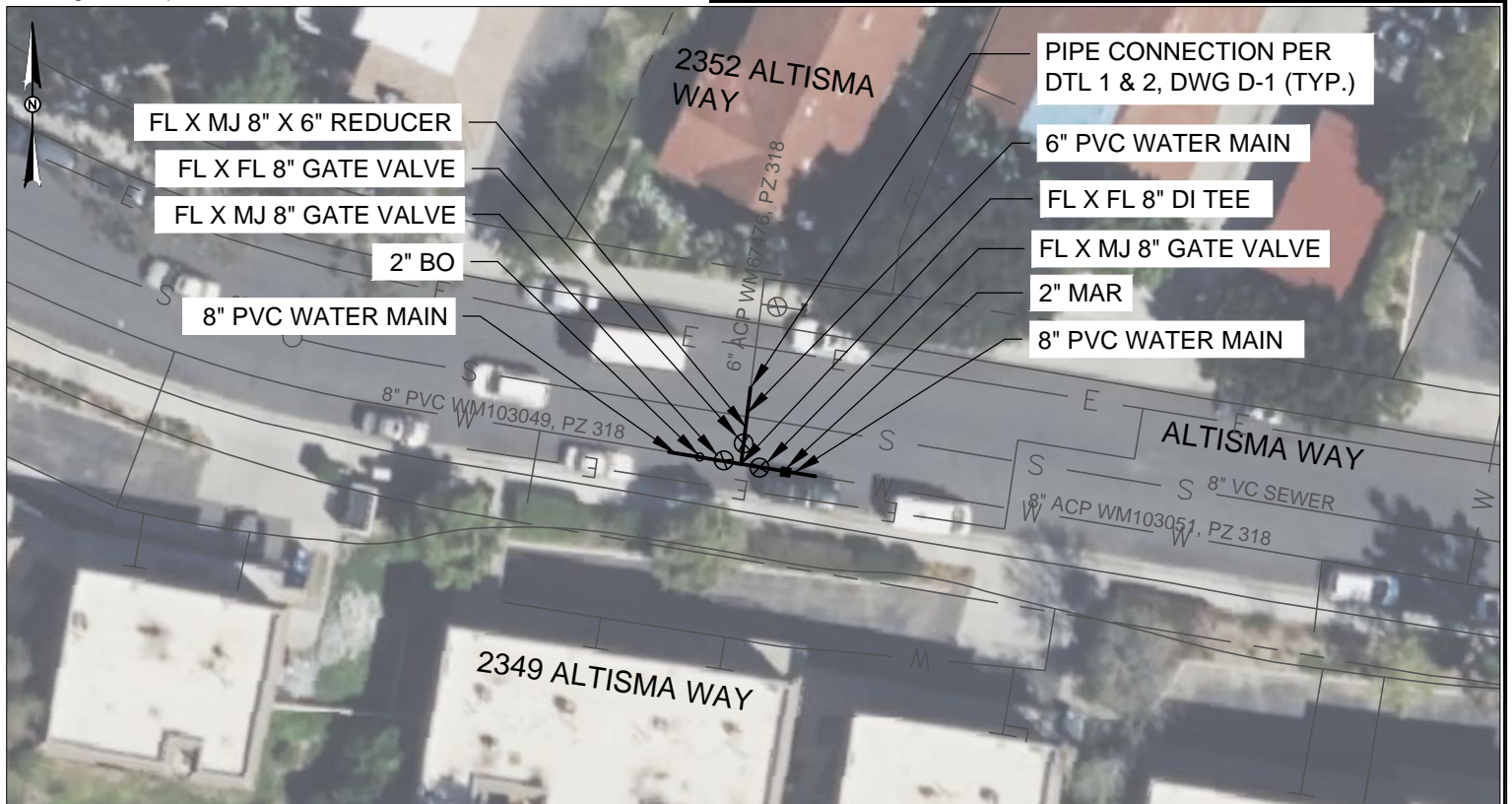
SITE 23 - EXISTING: ALITSMA WAY

C-23A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL

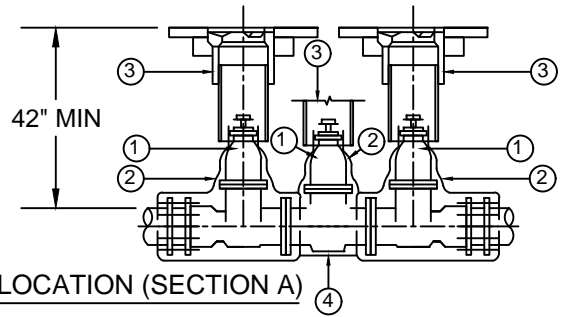
SHEET <b>50</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
<b>IMPROVEMENT PLAN FOR:</b> <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>23 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i> 5/13/2024 DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24 DATE		DATE
DWN BY: <u>AMD</u>	PROJECT NO. <u>5019-F</u>	DRAWING NO. <u>545-1</u>
CHKD BY: <u>BT</u>		
RVWD BY: <u>KH</u>		



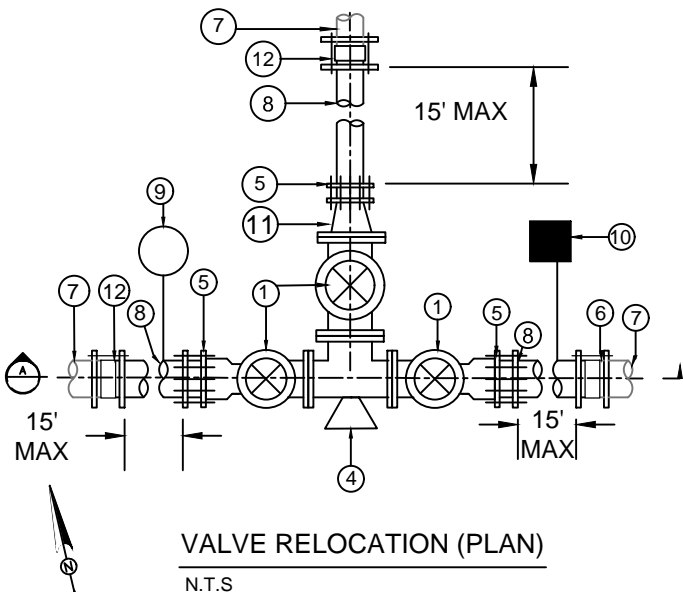
**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

**PLAN**



**VALVE RELOCATION (SECTION A)**  
N.T.S



**VALVE RELOCATION (PLAN)**  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	BLOW-OFF (W-10)
10	MANUAL AIR RELEASE VALVE (W-10)
11	DI REDUCER, SIZE/CONNECTION PER PLAN
12	PVC TO PVC TRANSITION COUPLING

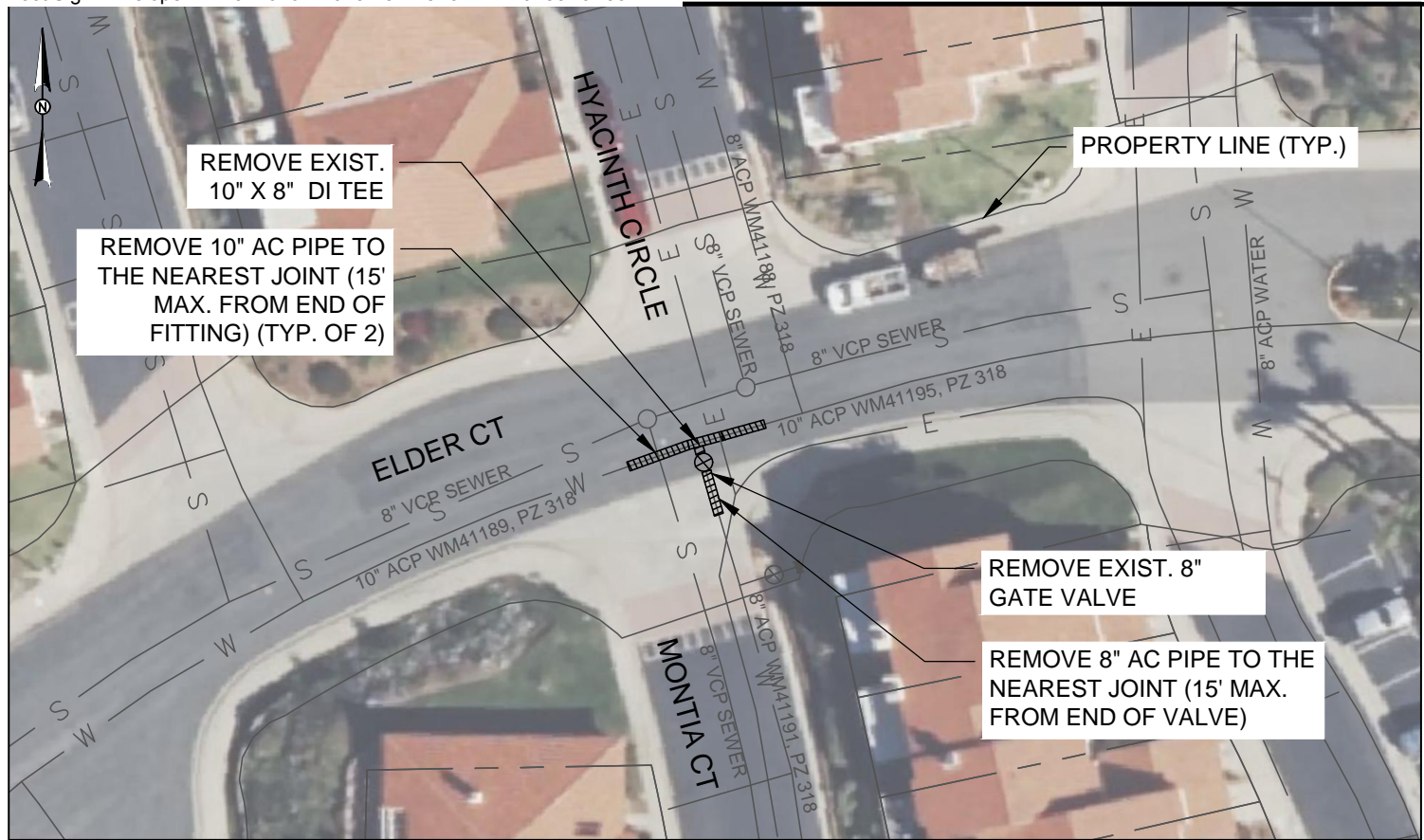
SITE 23 - PROPOSED: ALITSMA WAY

C-23B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 51	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 23 - PROPOSED		
APPROVED: <i>Dave Padilla</i>	5/19/2024	D. PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



- NOTE:
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
  3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
  4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM WEST LOOKING EAST ON ELDER CT

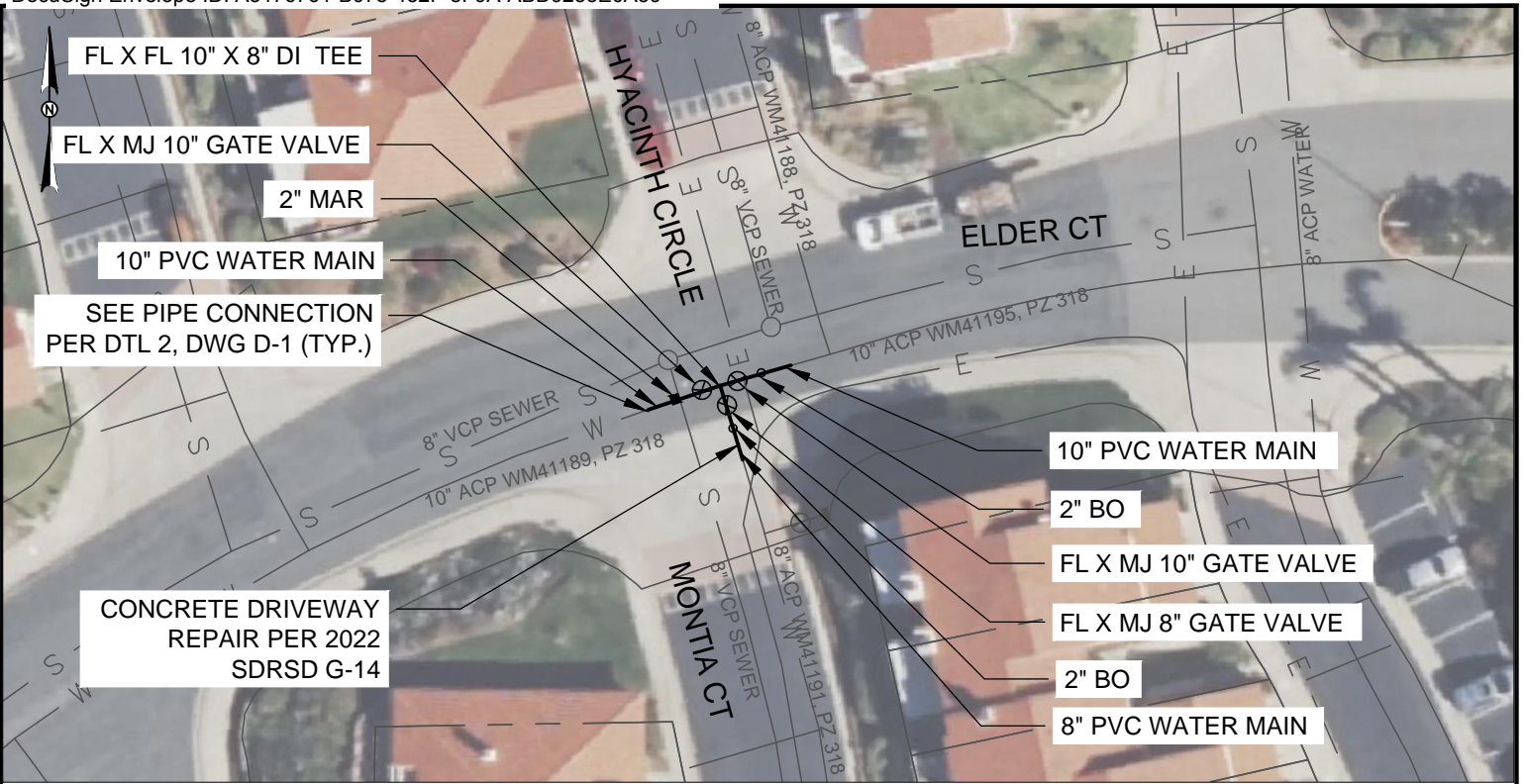
SITE 24 - EXISTING: ELDER CT AND MONTIA CT

C-24A



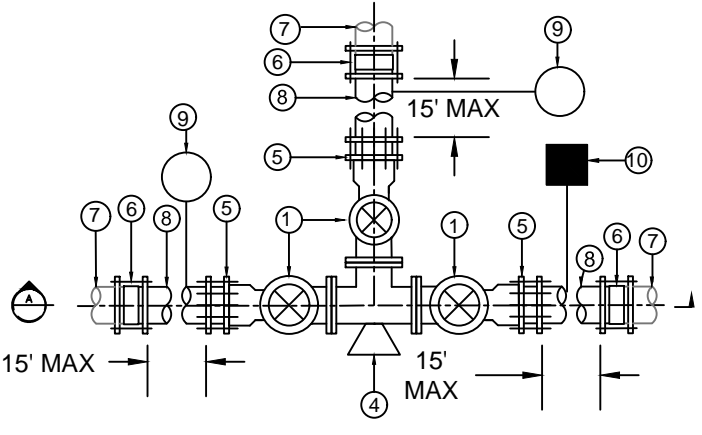
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 52	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 24 - EXISTING		
APPROVED: Dave Padilla DISTRICT ENGINEER	5/13/2024 DATE	DAVE PADILLA
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		

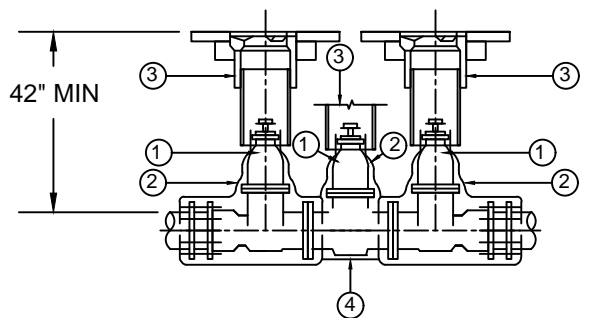


- NOTE:**
1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
  2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



VALVE RELOCATION (PLAN)  
N.T.S



VALVE RELOCATION (SECTION A)  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASUREMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	BLOW-OFF (W-10)
10	MANUAL AIR RELEASE VALVE (W-10)

SITE 24 - PROPOSED: ELDER CT AND MONTIA CT

C-24B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 53	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 24 - PROPOSED		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		



**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM SOUTH LOOKING NORTH ON LANTANA TERRACE

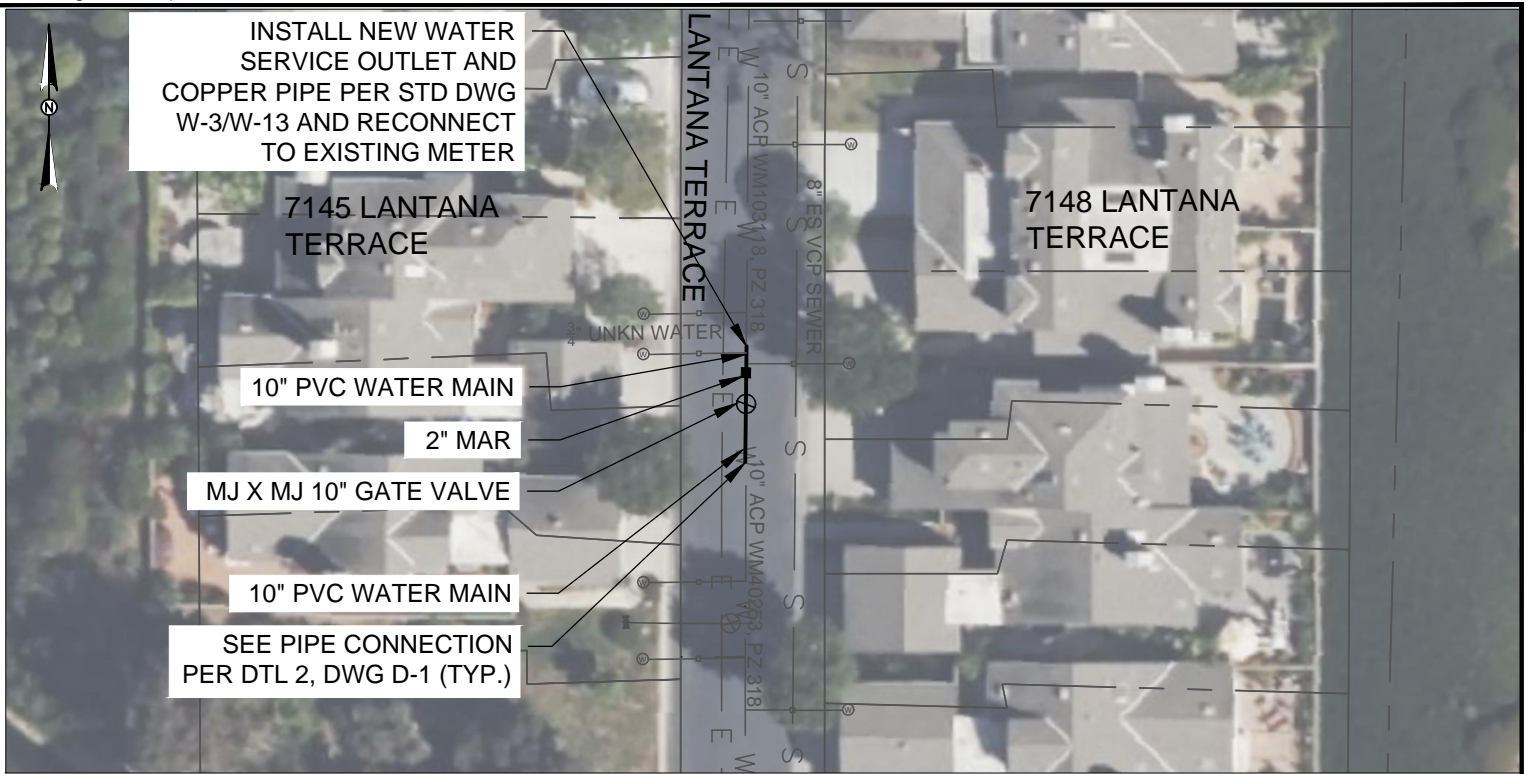
SITE 25 - EXISTING: 7148 LANTANA TERRACE

C-25A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

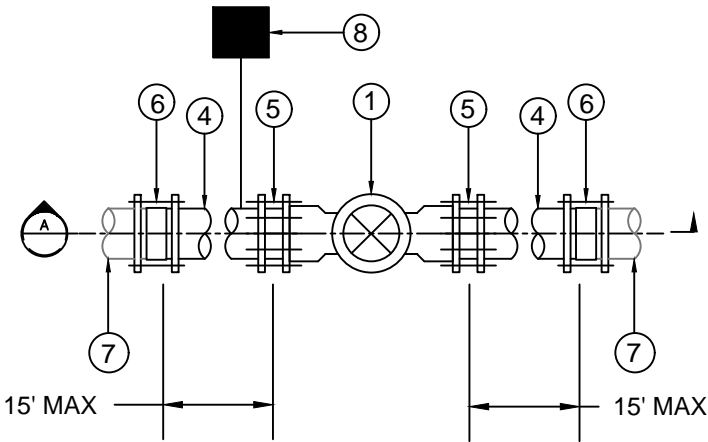
SHEET 54	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III 25 - EXISTING		
APPROVED: <u>Dave Padilla</u>		5/13/2024
DISTRICT ENGINEER		DATE
RCE 55974 EXPIRES 12/31/24		
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		



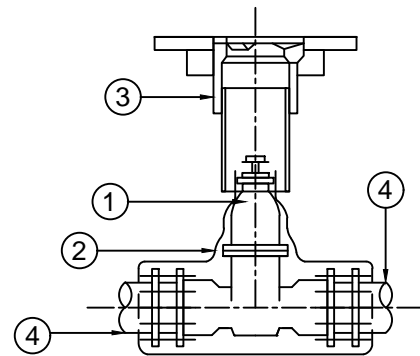
**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

# PLAN



**VALVE RELOCATION (PLAN)**  
N.T.S



**VALVE RELOCATION (SECTION A)**  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION (W-21)
2	POLYETHYLENE ENCASEMENT
3	VALVE BOX ASSEMBLY(W-23)
4	C900 PVC PIPE, SIZE PER PLAN (W-2)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/CONNECTION PER PLAN
8	MANUAL AIR RELEASE VALVE (W-10)

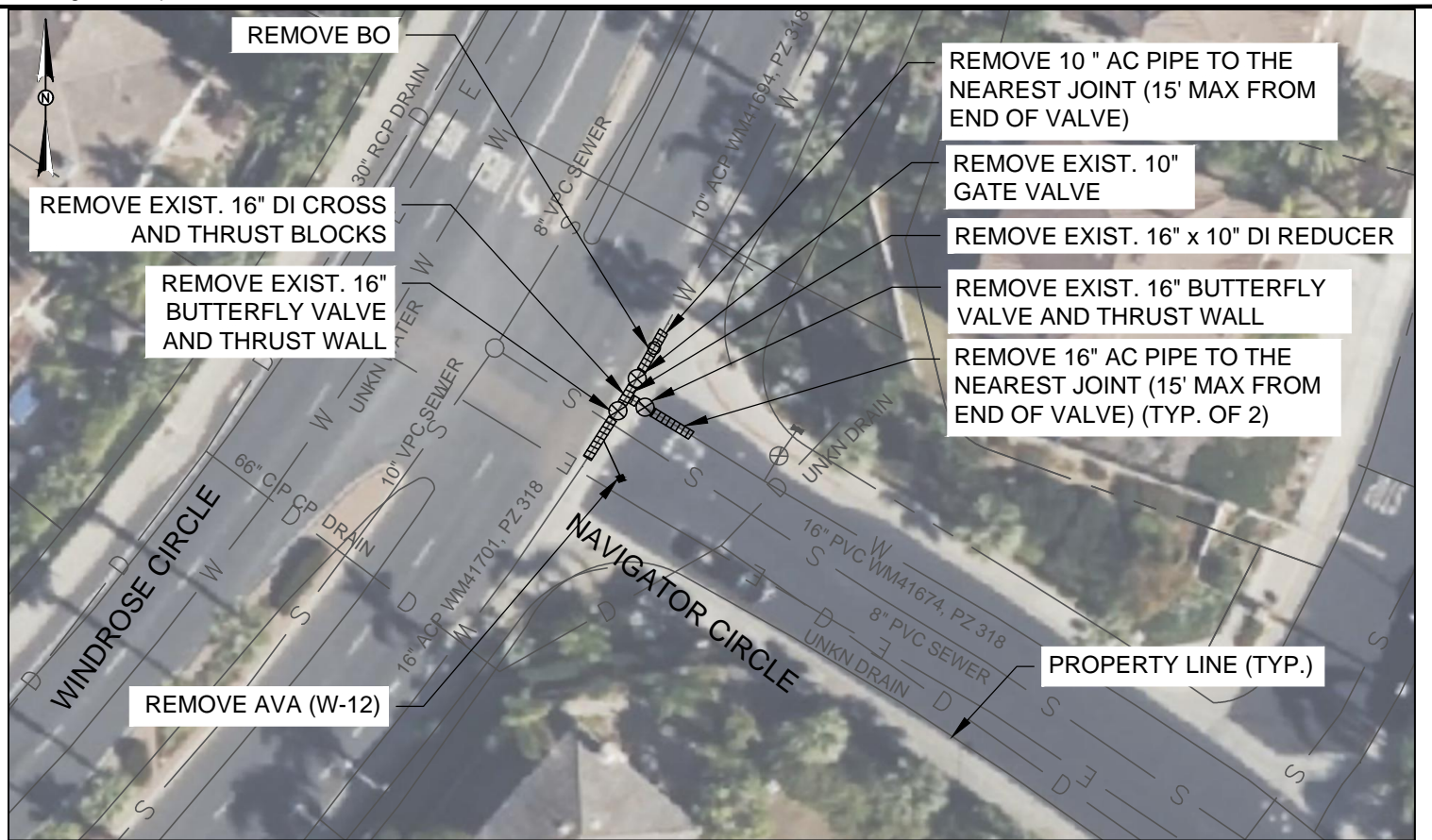
SITE 25 - PROPOSED: 7148 LANTANA TERRACE

C-25B



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 55	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III 25 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	DAVE PADILLA DATE
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545-1



NOTE:

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. ASSUME EXISTING PAVEMENT TO BE 4" AC PAVEMENT WITH 12" OF CLASS II AGGREGATE BASE.
3. ALL SURFACE IMPROVEMENTS MUST BE REPAIRED PER LATEST CITY OF CARLSBAD STANDARDS AND REGIONAL 2022 SAN DIEGO REGIONAL STANDARD DRAWINGS.
4. LOCATION OF UTILITIES SHOWN ON PLAN ARE DIAGRAMMATIC ONLY, DRAWN FROM AVAILABLE RECORDS, AND ARE NOT GUARANTEED. THE CONTRACTOR MUST BE RESPONSIBLE FOR LOCATING ALL STRUCTURES AND FACILITIES, WHETHER SHOWN HEREIN OR NOT, AND PROTECTING THEM FROM DAMAGE. THE EXPENSE OF REPAIR OF REPLACEMENT OF SAID SUBSTRUCTURES AND UTILITIES MUST BE BORNE BY THE CONTRACTOR.

# PLAN



PHOTO 1 - FROM SOUTH EAST LOOKING NORTH WEST

SITE 26 - EXISTING: WINDROSE CIRCLE AND NAVIGATOR CIRCLE

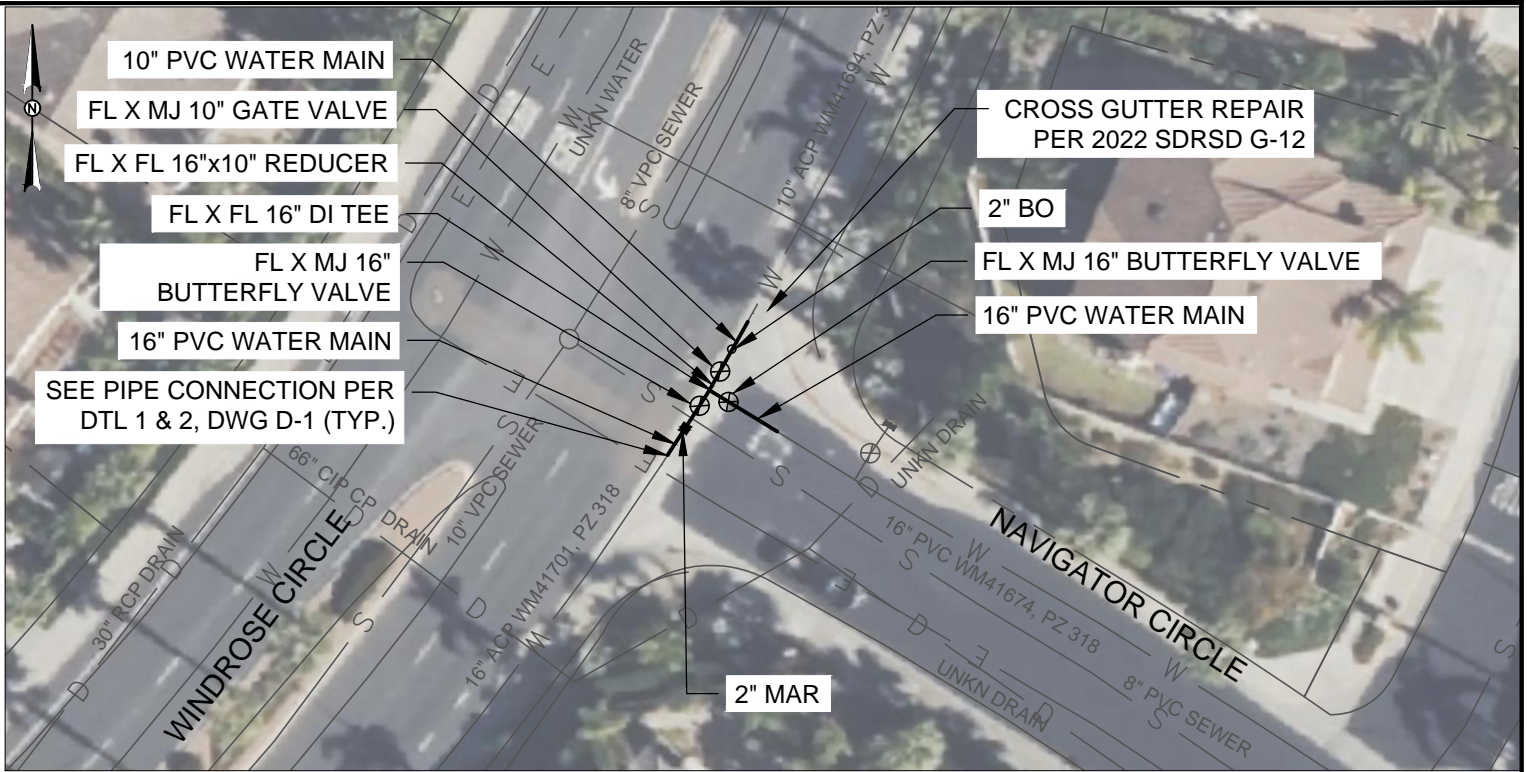
C-26A



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET 56	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>26 - EXISTING</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		

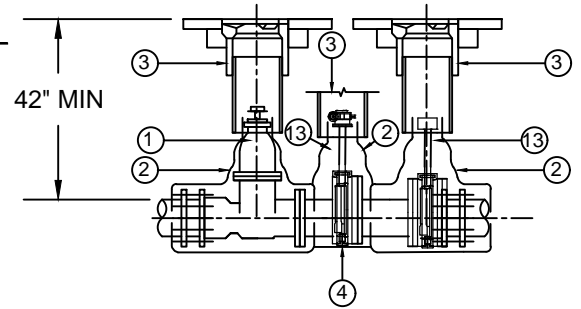




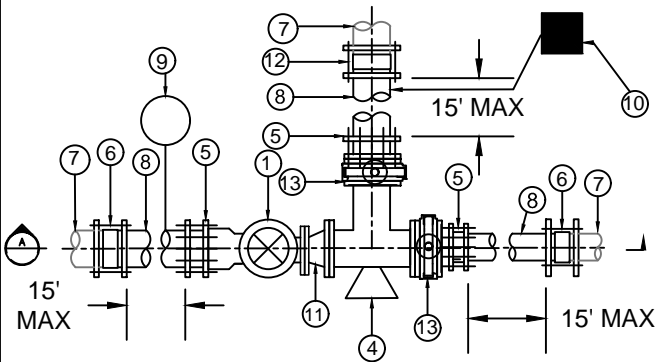
**NOTE:**

1. AERIAL UTILITIES NOT SHOWN FOR CLARITY.
2. SEE CITY OF CARLSBAD STANDARD DRAWINGS GS 24 - GS 28 FOR PAVEMENT REPAIR.

**PLAN**



**VALVE RELOCATION (SECTION A)**  
N.T.S



**VALVE RELOCATION (PLAN)**  
N.T.S

ITEM	DESCRIPTION
1	GATE VALVE, SIZE/CONNECTION PER PLAN (W-21)
2	POLYETHYLENE ENCASMENT
3	VALVE BOX ASSEMBLY(W-23)
4	DI TEE, SIZE/CONNECTION PER PLAN AND THRUST BLOCK (W-19)
5	RESTRAINED MECHANICAL JOINT FITTING
6	PVC TO AC TRANSITION COUPLING
7	EXISTING PIPE, SIZE/MATERIAL PER PLAN
8	C900 PVC PIPE, SIZE PER PLAN (W-2)
9	BLOW-OFF (W-10)
10	MANUAL AIR RELEASE VALVE (W-10)
11	DI REDUCER, SIZE/CONNECTION PER PLAN
12	PVC TO PVC TRANSITION COUPLING
13	BFV, SIZE/CONNECTION PER PLAN (W-21)

**SITE 26 - PROPOSED: WINDROSE CIRCLE AND NAVIGATOR CIRCLE**

**C-26B**

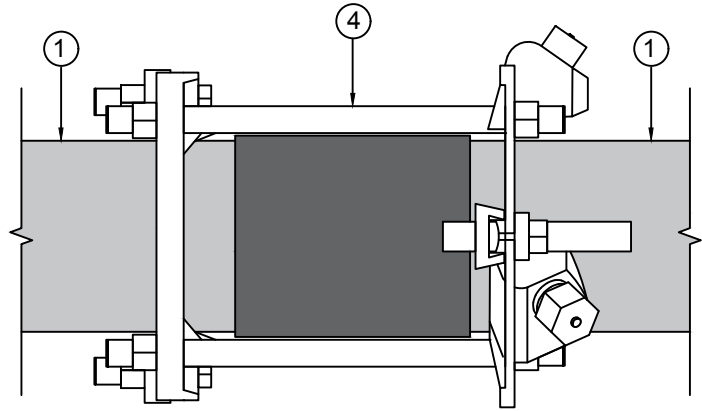


DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

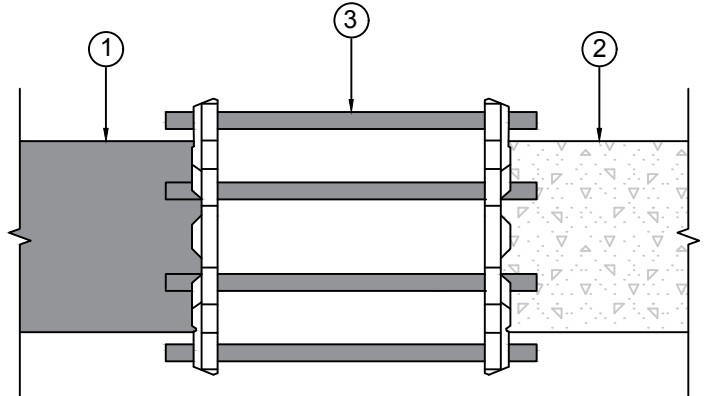
SHEET <b>57</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>26 - PROPOSED</b>		
APPROVED: <i>Dave Padilla</i>		5/13/2024 DAVE PADILLA
DISTRICT ENGINEER		RCE 55974 EXPIRES 12/31/24
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		

**GENERAL NOTES:**

1. PIPE SIZES, LENGTHS, INTERIOR AND EXTERIOR DIAMETERS MAY VARY BETWEEN PROJECT SITES. CONTRACTOR IS TO VERIFY PIPE DIMENSIONS IN FIELD PRIOR TO INSTALLATION.
2. CONTRACTOR MUST ADHERE TO ALL MANUFACTURER FURNISH AND INSTALLATION INSTRUCTIONS.
3. CONTRACTOR MUST FOLLOW ALL MITIGATION METHODS OUTLINED IN THE SPECIFICATIONS FOR REMOVAL OF ASBESTOS CEMENT PIPE.



1  
D-1 PVC TO PVC PIPE CONNECTION



2  
D-1 PVC TO ASBESTOS CEMENT CONNECTION

ITEM	DESCRIPTION
1	PVC PIPE
2	EXISTING ASBESTOS CEMENT PIPE
3	TRANSITION COUPLING
4	PVC REPAIR COUPLING WITH SPLIT RESTRAINT

D-1



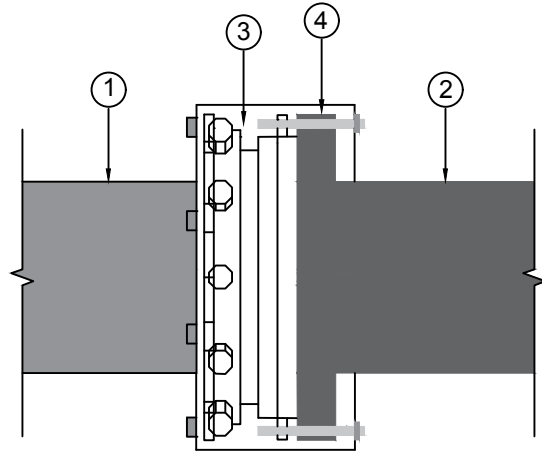
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 58	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III DETAILS 1		
APPROVED: <i>Dave Padilla</i>	5/13/2024	DAVE PADILLA
DISTRICT ENGINEER	RCE 55974 EXPIRES 12/31/24	DATE
DWN BY: AMD	PROJECT NO.	DRAWING NO.
CHKD BY: BT	5019-F	545-1
RVWD BY: KH		

**GENERAL NOTES:**

1. PIPE SIZES, LENGTHS, INTERIOR AND EXTERIOR DIAMETERS MAY VARY BETWEEN PROJECT SITES. CONTRACTOR IS TO VERIFY PIPE DIMENSIONS IN FIELD PRIOR TO INSTALLATION.
2. CONTRACTOR MUST ADHERE TO ALL MANUFACTURER FURNISH AND INSTALLATION INSTRUCTIONS.
3. CONTRACTOR SHALL FOLLOW ALL MITIGATION METHODS OUTLINED IN THE SPECIFICATIONS FOR REMOVAL OF ASBESTOS CEMENT PIPE.
4. CONTRACTOR TO WELD ON FLANGE TO EXISTING STEEL PIPE PER CMWD STANDARDS.

ITEM	DESCRIPTION
1	PVC OR DUCTILE IRON PIPE
2	STEEL PIPE
3	RESTRAINED FLANGE COUPLING ADAPTER
4	WELDED ON FLANGE



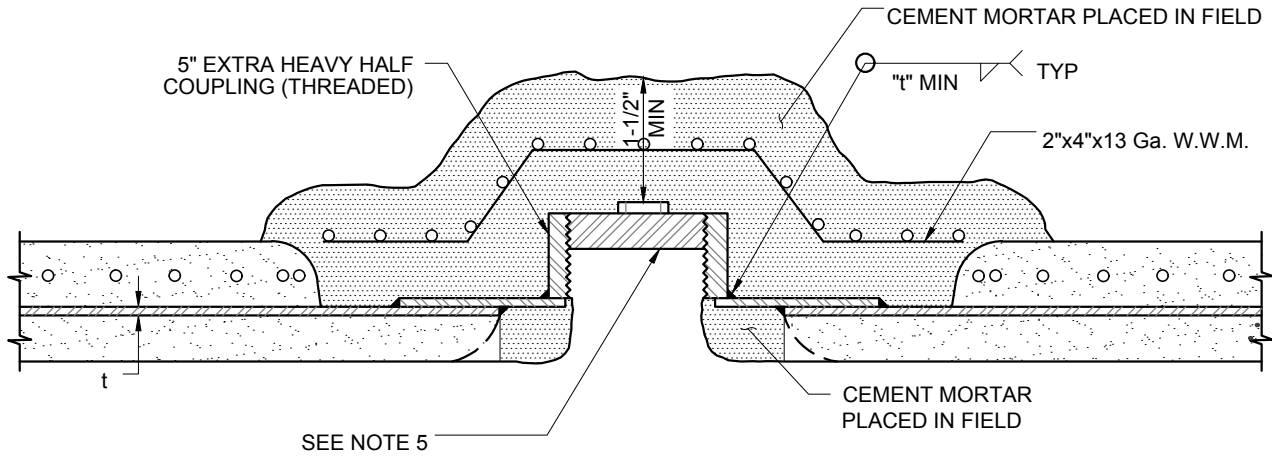
① PVC TO STEEL TRANSITION  
D-2

D-2



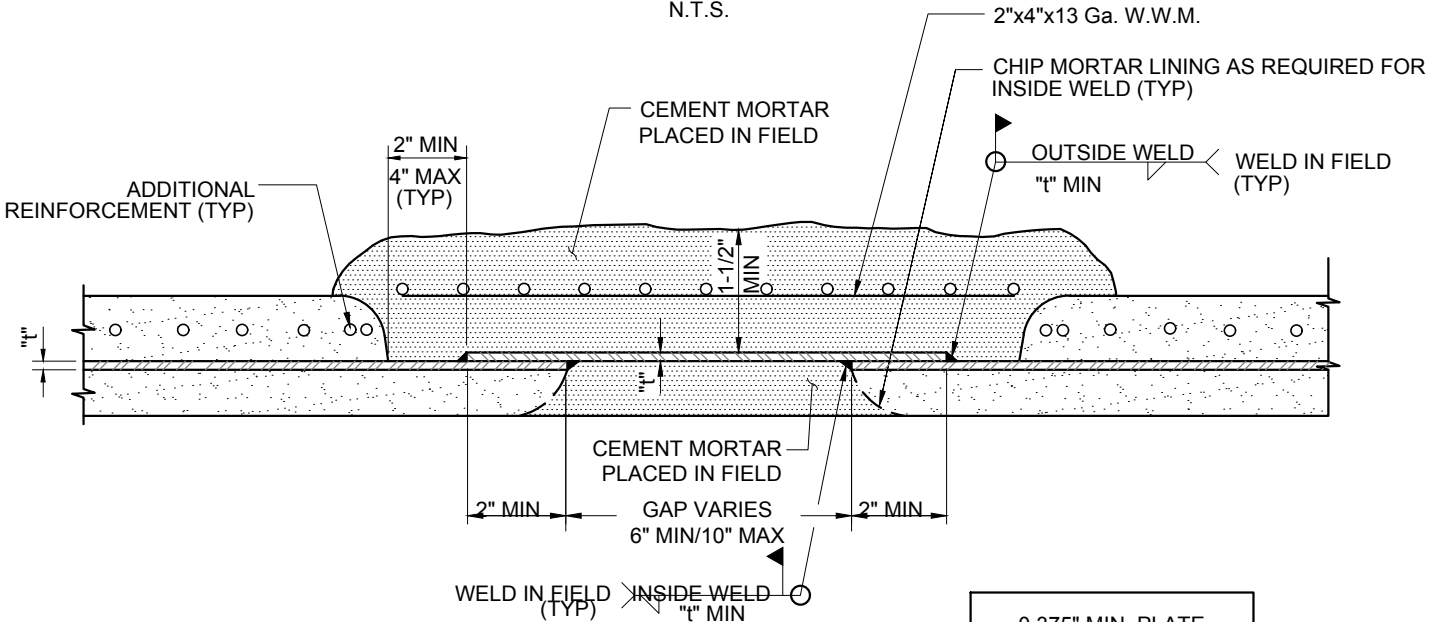
DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>59</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>DETAILS 2</b>		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER	5/13/2024 DATE	DAVE PADILLA
DWN BY: AMD CHKD BY: BT RVWD BY: KH	PROJECT NO. 5019-F	DRAWING NO. 545-1



**HANDHOLE DETAIL**

N.T.S.



**TYPICAL SECTION**

NTS

0.375" MIN. PLATE  
"t"=THICKNESS

**NOTES FOR BUTT-STRAP JOINT:**

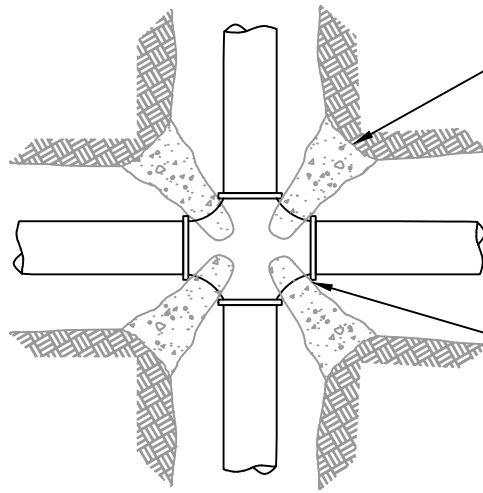
1. BUTT-STRAPS TO BE FURNISHED IN TWO PIECES AND SHIPPED LOOSE FOR FIELD JOINING. (BACKING PLATE SHALL BE 3/8" THICK BY 1" WIDE)
2. 14" MAXIMUM LENGTH OF BUTT-STRAP FOR FIELD CLOSING SECTION
3. FOR PIPING 12" IN DIAMETER AND SMALLER, ONE HANDHOLE IS REQUIRED PER EACH BUTT-STRAP JOINT. FOR PIPING 14" IN DIAMETER THROUGH 24" IN DIAMETER, TWO HANDHOLES ARE REQUIRED PER EACH BUTT-STRAP JOINT; THE HANDHOLES MUST BE LOCATED 120° APART. FOR PIPING 36" IN DIAMETER, FOUR HANDHOLES ARE REQUIRED PER EACH BUTT-STRAP JOINT; THE HANDHOLES MUST BE LOCATED 90° APART.
4. FOR PIPING SMALLER THAN 30" IN DIAMETER, INSIDE WELDS ARE NOT REQUIRED.
5. WELD PLUG TO COUPLING AND CEMENT MORTAR LINE OR COAT EXPOSED INTERIOR METAL SURFACES WITH ELEVEN (11) MILS (MIN) EPOXY COATING IN FIELD.

D-3



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET <b>60</b>	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS <b>62</b>
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> DETAILS 3		
APPROVED: <i>Dave Padilla</i>	DATE <b>5/13/2024</b>	DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT		
RVWD BY: KH		

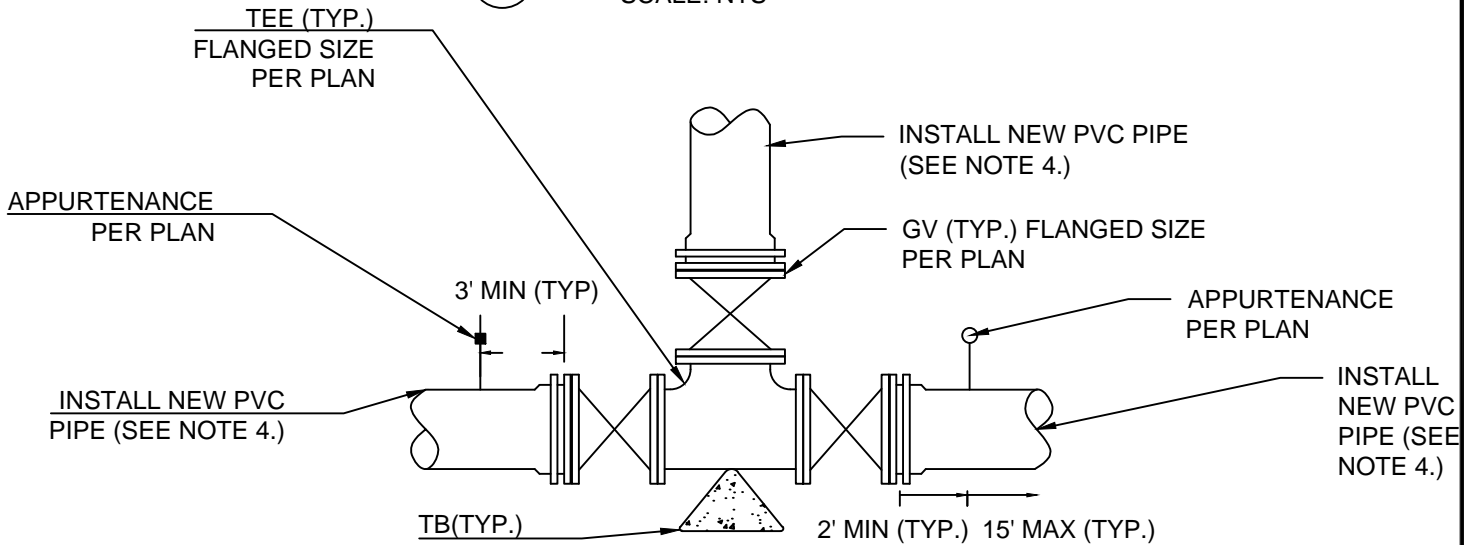


THRUST BLOCKS AT CROSSES SHALL BE SIZED BASED ON 90 DEGREE BEND SIZING CHART PER DISTRICT STANDARD W-19 (TYP. OF 4)

CONTRACTOR SHALL INSTALL CONCRETE THRUST BLOCKS TO ALLOW FOR ACCESS TO ALL FLANGES, JOINTS, AND COUPLINGS POST CURING

NOTES:  
THRUST BLOCKS FOR CAPPED ENDS, BENDS AND TEES SHALL BE INSTALLED PER DISTRICT STANDARD DWGS. W-15 & W-19.

1 THRUST BLOCK AT CROSSES  
SCALE: NTS



NOTES:

1. TYPICAL DETAIL APPLIES TO ALL NEW IN-LINE VALVES, CROSSES, TEES, AND BENDS.
2. MAR, AVAR, AND BO TO BE 3' FROM FACE OF FITTINGS
3. INSTALL GV IN ACCORDANCE WITH CMWD STANDARD DWG W-16
4. CONTRACTOR SHALL REPLACE PIPE THROUGH THE FIRST JOINT AFTER THE VALVE CLUSTER. IF FIRST JOINT IS WITHIN 2' OF THE VALVE CONTRACTOR SHALL INSTALL THROUGH THE NEXT TWO JOINTS (15" MAX)
5. REFER TO DETAIL 1, THIS SHEET FOR THRUST BLOCKS INSTALLATION AT CROSSES. ALL OTHER THRUST BLOCKS SHALL BE DESIGNED IN ACCORDANCE WITH DISTRICT STANDARD DRAWINGS W-15 & W-19.
6. ASSUMED SOIL BEARING CAPACITY OF 1500 POUNDS PER SQUARE FOOT. CONTRACTOR IS TO VERIFY AFTER EXCAVATION AND SUBMIT A REQUEST FOR INFORMATION IF A CHANGE IS NECESSARY.

2 TYP. REPLACEMENT DETAIL  
SCALE: NTS

D-4



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 61	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: CMWD VALVE REPLACEMENT PHASE III DETAILS 4		
APPROVED: <i>Dave Padilla</i> DISTRICT ENGINEER		5/13/2024 DATE
DWN BY: AMD	PROJECT NO. 5019-F	DRAWING NO. 545-1
CHKD BY: BT	RCE 55974 EXPIRES 12/31/24	
RVWD BY: KH		

# RECORD DRAWINGS LIST

Site	Record Drawing Number
1	134-3
2	291-2D
3	145-8
4	122-10, 319-7
5	321-6
6	159-9, 230-5
7	269-2
8	157-7A, 159-9
9	157-4
10	517-1A
11	189-2
12	189-2
13	242-6, 244-3
14	243-7
15	936-4
16	405-7
17	405-7
18	405-7
19	170-2
20	157-1
21	233-6
22	None
23	170-2
24	185-8
25	175-9
26	265-2

D-5



DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL

SHEET 62	<b>CITY OF CARLSBAD</b> ENGINEERING DEPARTMENT	SHEETS 62
IMPROVEMENT PLAN FOR: <b>CMWD VALVE REPLACEMENT PHASE III</b> <b>RECORD DRAWING LIST</b>		
APPROVED: <u>Dave Padilla</u> 5/13/2024		
DISTRICT ENGINEER RCE 55974 EXPIRES 12/31/24 DATE		
DWN BY: <u>AMD</u>	PROJECT NO.	DRAWING NO.
CHKD BY: <u>BT</u>	5019-F	545-1
RVMD BY: <u>KH</u>		

# CARLSBAD MUNICIPAL WATER DISTRICT

San Diego County

California

CONTRACT DOCUMENTS,  
GENERAL PROVISIONS, SUPPLEMENTAL  
PROVISIONS, AND TECHNICAL SPECIFICATIONS

FOR

VALVE REPLACEMENT - PHASE III

CONTRACT NO. 5019-F

BID NO. PWS24-3421UTIL



Signed: 1/17/2024



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09900	Painting and Coating
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- 15057 Copper Tubing, Brass and Bronze Pipe Fittings
- 15061 Cement-Mortar Lined and Tape Coated Steel Pipe and Specials
- 15064 Polyvinyl Chloride (PVC) Pressure Pipe and Fittings (AWWA C900)
- 15074 Blow-Off Assemblies
- 15099 Process Valves, Regulators and Miscellaneous Valves
- 15100 Resilient Wedge Gate Valves (RWGVs)
- 15102 Butterfly Valves (BFVs)
- 15108 Air Release, Air and Vacuum, and Combination Air Valve Assemblies

**Documents Incorporated by Reference:**

City of Carlsbad Engineering Standards, Volume 3, Standard Drawings and Specifications:

<https://www.carlsbadca.gov/home/showpublisheddocument/334/637980518271200000>

City of Carlsbad Engineering Standards, Volume 2, Potable and Recycled Water Standards and Approved Materials List:

<https://www.carlsbadca.gov/home/showpublisheddocument/332/637980517690370000>

**APPENDICES**

- Appendix A Technical Specifications
- Appendix B Water Shut Down Request Form (E-28)
- Appendix C CARB Fleet Compliance Certification



# CARLSBAD MUNICIPAL WATER DISTRICT, CALIFORNIA

## NOTICE INVITING BIDS

Until 11 a.m. on **XXXX, 2024**, the Carlsbad Municipal Water District shall accept bids via electronic format via the City of Carlsbad Electronic Bidding Site, PlanetBids, which may be accessed at <https://www.carlsbadca.gov/departments/finance/contracting-purchasing>. The Work includes the provision of all equipment, labor, materials, tools, services, transportation, permits, utilities, and all other items necessary to complete the construction of the following, as specified and shown in the Construction Documents. The work includes water valves and pipeline construction at twenty-six (26) non-contiguous sites within the city and CMWD service areas. The work will replace water lines with polyvinyl chloride and steel pipe of varying sizes (6-20 inch) and remove or abandon asbestos cement water pipeline. The work shall include installation of potable water valves, replacement of potable water services, hydrostatic testing, and disinfection; and all incidental work including, but not limited to, surveying services; utility potholing; storm water and non-storm water pollution prevention; excavation support systems; traffic control; earthwork; paving and site restoration. The Work Sites are in the City of Carlsbad, in the County of San Diego, California.

### VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F PWS24-3421UTIL

**ELECTRONIC FORMAT RECEIPT AND OPENING OF BIDS:** Bids will be received in electronic format (eBids) **EXCLUSIVELY** at the City of Carlsbad’s electronic bidding (eBidding) site, at: [Contracting & Purchasing | Carlsbad, CA \(carlsbadca.gov\)](https://www.carlsbadca.gov/departments/finance/contracting-purchasing) and are due by the date and time shown on the cover of this solicitation.

**BIDDERS MUST BE PRE-REGISTERED** with the City’s bidding system and possess a system-assigned Digital ID in order to submit an electronic bid.

The City’s electronic bidding (eBidding) system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City’s bidding system will keep a history of every login instance including the time of login, and other information about the user’s computer configuration such as the operating system, browser type, version, and more. Because of these security features, Bidders who disable their browsers’ cookies will not be able to log in and use the City’s bidding system.

The City’s electronic bidding system is responsible for bid tabulations. Upon the bidder’s or proposer’s entry of their bid, the system will ensure that all required fields are entered. The system will not accept a bid for which any required information is missing. This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.

### **BIDS REMAIN SEALED UNTIL DUE DATE AND TIME**

eBids are transmitted into the City’s bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128-256-bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Bids submitted prior to the Due Date and Time are not available for review by anyone other than the submitter, who will have until the Due Date and Time to change, rescind or retrieve its bid should they desire to do so.



### **BIDS MUST BE SUBMITTED BY DUE DATE AND TIME**

Once the deadline is reached, no further submissions are accepted into the system. Once the Due Date and Time has passed, bidders, proposers, the general public, and City staff are able to immediately see the results online. City staff may then begin reviewing the submissions for responsiveness, compliance and other issues.

### **RECAPITULATION OF THE WORK**

Bids shall not contain any recapitulation of the Work. Conditional Bids may be rejected as being non-responsive. Alternative proposals will not be considered unless called for.

**BIDS MAY BE WITHDRAWN by the Bidder prior to, but not after, the time set as Due Date and Time.**

**Important Note:** Submission of the electronic bid into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder's submission to upload and be received by the City's eBidding system. It is the bidder's sole responsibility to ensure their bids are received on time by the City's eBidding system. The City of Carlsbad is not responsible for bids that do not arrive by the Due Date and Time.

### **ELECTRONIC SUBMISSIONS CARRY FULL FORCE AND EFFECT**

The Bidder, by submitting their electronic proposal, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this proposal are true and correct. The bidder, by submitting its electronic bid, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature. By submitting an electronic bid, the bidder certifies that the bidder has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits and the solicitation documents), and that by submitting the eBid as its bid proposal, the bidder acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.

### **BIDS ARE PUBLIC RECORDS**

Upon receipt by the City, bids shall become public records subject to public disclosure. It is the responsibility of the Bidder to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the proposal's General references to sections of the California Public Records Act (PRA) will not suffice. If the Bidder does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Bidder agrees to hold the City harmless for any such release of this information.

### **INSTRUCTIONS TO BIDDERS AND BID REQUIREMENTS**

There are multiple bid schedules for the Work of this Contract and the Bidder shall complete all Bid Schedules for the bid to be deemed responsive. The Agency shall determine the low Bid as described in the Contractor's Proposal form.

This bid and the terms of the Contract Documents and General Provisions constitute an irrevocable offer that shall remain valid and in full force for a period of 90 days and such



additional time as may be mutually agreed upon by the Carlsbad Municipal Water District and the Bidder.

No bid will be received unless it is made on a proposal form furnished by the Purchasing Department. Each bid must be accompanied by security in a form and amount required by law. The bidder's security of the second and third next lowest responsive bidders may be withheld until the Contract has been fully executed. The security submitted by all other unsuccessful bidders shall be returned to them, or deemed void, within ten (10) days after the Contract is awarded. Pursuant to the provisions of law (Public Contract Code section 10263), appropriate securities may be substituted for any obligation required by this notice or for any monies withheld by the District to ensure performance under this Contract. Section 10263 of the Public Contract Code requires monies or securities to be deposited with the District or a state or federally chartered bank in California as the escrow agent. The escrow agent shall maintain insurance to cover negligent acts and omissions of the agent in connection with the handling of retentions under this section in an amount not less than \$100,000 per contract.

The Carlsbad Municipal Water District may disqualify a contractor or subcontractor from participating in bidding when a contractor or subcontractor has been debarred by the Carlsbad Municipal Water District or another jurisdiction in the State of California as an irresponsible bidder.

The work shall be performed in strict conformity with the plans, provisions, and specifications as approved by the City Council of the City of Carlsbad on file with the City Clerk's Office. The specifications for the work include City of Carlsbad Engineering Standards and the Standard Specifications for Public Works Construction, Parts 2 through 8, hereinafter designated "SSPWC", as amended. Specification Reference is hereby made to the plans and specifications for full particulars and description of the work. The General Provisions (Part 1) to the SSPWC do not apply.

The Carlsbad Municipal Water District encourages the participation of minority and women-owned businesses.

The Carlsbad Municipal Water District encourages all bidders, suppliers, manufacturers, fabricators and contractors to utilize recycled and recyclable materials when available, appropriate and approved by the Engineer.

### **BID DOCUMENTS**

The bid documents comprise the following documents which must be completed and properly executed including notarization, where indicated.

1. Contractor's Proposal
2. Bidder's Bond (at time of Bid submit PDF copy via PlanetBids / All Bidders). Bid Bond (Original) within two (2) business days of bid Opening / three (3) Apparent Low Bidders.
3. Noncollusion Declaration
4. Designation of Subcontractor and Amount of Subcontractor's Bid
5. Bidder's Statement of Technical Ability and Experience
6. Acknowledgement of Addendum(a)
7. Certificate of Insurance. The riders covering the City, its officials, employees and volunteers may be omitted at the time of bid submittal but shall be provided by the Bidder prior to award of this contract.
8. Bidder's Statement Re Debarment



9. Bidder's Disclosure of Discipline Record
10. CARB Fleet Compliance Certification (Appendix C)
11. Escrow Agreement for Security Deposits - (optional, must be completed if the Bidder wishes to use the Escrow Agreement for Security)

### **BIDDER'S GUARANTEE OF GOOD FAITH (BID SECURITY)**

At the time of bid submission, bidders must upload and submit an electronic PDF copy of the aforementioned bid security. Whether in the form of a cashier's check, a properly certified check or an approved corporate surety bond payable to the City of Carlsbad, the bid security must be uploaded to the City's eBidding system. Within two (2) business days after the bid opening date, the first three (3) apparent low bidders must provide the City with the original bid security.

Failure to submit the electronic version of the bid security at time of bid submission shall cause the bid to be rejected and deemed **non-responsive**. Only the three (3) apparent low bidders are required to submit original bid security to the City within two (2) business days after bid opening date. Failure to provide the original within two (2) business days may deem the bidder **non-responsive**.

### **ENGINEER'S ESTIMATE**

All bids will be compared on the basis of the Engineer's Estimate. The estimated quantities are approximate and serve solely as a basis for the comparison of bids. The Engineer's Estimate is **\$3,783,000**.

### **TIME OF COMPLETION**

The Contractor shall complete the Work within the time set in the contract as defined in the General Provisions Section 6-7.

### **SPECIALTY CONTRACTORS: ACCEPTABLE LICENSE TYPES**

Except as provided herein a bid submitted to the District by a Contractor who is not licensed as a contractor pursuant to the Business and Professions Code shall be considered nonresponsive and shall be rejected by the District. In all contracts where federal funds are involved, no bid submitted shall be invalidated by the failure of the bidder to be licensed in accordance with California law. Where federal funds are involved, the contractor shall be properly licensed at the time the contract is awarded. In all other cases the contractor shall state their license number, expiration date and classification in the proposal, under penalty of perjury. This invitation to bid does **not** use federal funds. The following classifications are acceptable for this contract:

#### **A - General Engineering.**

### **ESCROW AGREEMENT**

If the Contractor intends to utilize the escrow agreement included in the contract documents in lieu of the usual 5% retention from each payment, these documents must be completed and submitted with the signed contract. The escrow agreement may not be substituted at a later date.

### **OBTAINING PLANS AND SPECIFICATIONS**

Sets of plans, various supplemental provisions, and Contract documents may be obtained from the City of Carlsbad website at <https://www.carlsbadca.gov/departments/finance/contracting-purchasing> Paper copies will not be sold.





### **INTENT OF PLANS AND SPECIFICATIONS**

Any prospective bidder who is in doubt as to the intended meaning of any part of the drawings, specifications or other contract documents, or finds discrepancies in or omissions from the drawings and specifications may submit to the Engineer a written request for clarification or correction. Any response will be made only by a written addendum duly issued by the Engineer a copy of which will be mailed or delivered to each person receiving a set of the contract documents. No oral response will be made to such inquiry. **Prior to the award of the contract, no addition to, modification of or interpretation of any provision in the contract documents will be given by any agent, employee or contractor of the Carlsbad Municipal Water District except as hereinbefore specified. No bidder may rely on directions given by any agent, employee or contractor of the Carlsbad Municipal Water District except as hereinbefore specified.**

### **BIDDER'S INQUIRIES**

Questions on the bid documents during the bid period shall be submitted in writing, via the eBidding website.

Questions shall be definite and certain and shall reference applicable drawing sheets, notes, details or specification sheets.

The deadline to submit questions is **XXXX, 2024**, at 5 p.m. No questions will be entertained after that date.

The answers to questions submitted during the bidding period will be published in an addendum and provided to those bidding on the project no later than **XXXX, 2024**.

### **REJECTION OF BIDS**

The Carlsbad Municipal Water District reserves the right to reject any or all bids and to waive any minor irregularity or informality in such bids.

### **PREVAILING WAGE TO BE PAID**

The general prevailing rate of wages for each craft or type of worker needed to execute the Contract shall be those as determined by the Director of Industrial Relations pursuant to the sections 1770, 1773, and 1773.1 of the Labor Code. Pursuant to section 1773.2 of the Labor Code, a current copy of applicable wage rates is on file in the Office of the City Engineer. The Contractor to whom the Contract is awarded shall not pay less than the said specified prevailing rates of wages to all workers employed by him or her in the execution of the Contract.

The Prime Contractor shall be responsible for insuring compliance with provisions of section 1777.5 of the Labor Code and section 4100 et seq. of the Public Contracts Code, "Subletting and Subcontracting Fair Practices Act." The City Engineer is the District's "duly authorized officer" for the purposes of section 4107 and 4107.5.

The provisions of Part 7, Chapter 1, of the Labor Code commencing with section 1720 shall apply to the Contract for work.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work



pursuant to Section 1725.5. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The Prime Contractor and all subcontractors shall comply with Section 1776 of the Labor Code, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require all subcontractors to comply with Section 1776.

### **PRE BID MEETING**

A pre-bid meeting and tour of the project sites will be held on XXXX, 2024, at XXXX. at the Carlsbad Municipal Water District located at 5950 El Camino Real, Carlsbad, California 92008.

### **UNIT PRICES AND COMPUTATION OF BIDS**

All bids are to be computed on the basis of the given estimated quantities of work, as indicated in this proposal, times the unit price as submitted by the bidder.

### **ADDENDA**

**Bidders are advised to verify the issuance of all addenda and receipt thereof one day prior to bidding.** Submission of bids without acknowledgment of addenda may be cause of rejection of bid.

### **BOND AND INSURANCE REQUIREMENTS**

The Contractor shall provide bonds to secure faithful performance and warranty of the work in an amount equal to one hundred percent (100%) of the Contract price on this project. The Contractor shall provide bonds to secure payment of laborers and materials suppliers, in an amount equal to one hundred percent (100%) of the total amount payable by the terms of the contract. These bonds shall be kept in full force and effect during the course of this project and shall extend in full force and effect and be retained by the District until they are released as stated in the General Provisions section of this contract. All bonds are to be placed with a surety insurance carrier admitted and authorized to transact the business of insurance in California and whose assets exceed their liabilities in an amount equal to or in excess of the amount of the bond. The bonds are to be accompanied by the following documents:

1. An original, or a certified copy, of the unrevoked appointment, power of attorney, by laws, or other instrument entitling or authorizing the person who executed the bond to do so.
2. A certified copy of the certificate of authority of the insurer issued by the insurance commissioner.

If the bid is accepted, the District may require copies of the insurer's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code, within 10 calendar days of the insurer's receipt of a request to submit the statements.

Insurance is to be placed with insurers that:

1. Have a rating in the most recent Best's Key Rating Guide of at least A-VII
2. Are admitted and authorized to transact the business of insurance in the State of California by the Insurance Commissioner.

Auto policies offered to meet the specification of this contract must:

1. Meet the conditions stated above for all insurance companies.
2. Cover any vehicle used in the performance of the contract, used onsite or offsite, whether owned, non-owned or hired, and whether scheduled or non-scheduled.



Workers' compensation insurance required under this contract must be offered by a company meeting the above standards with the exception that the Best's rating condition is waived. The District does accept policies issued by the State Compensation Fund meeting the requirement for workers' compensation insurance.

The Contractor shall be required to maintain insurance as specified in the Contract. Any additional cost of said insurance shall be included in the bid price.

The award of the contract by the District is contingent upon the Contractor submitting the required bonds and insurance, as described in the contract, within twenty days of bid opening. If the Contractor fails to comply with these requirements, the District may award the contract to the second or third lowest bidder and the bid security of the lowest bidder may be forfeited.

**BUSINESS LICENSE**

The prime contractor and all subcontractors are required to have and maintain a valid City of Carlsbad Business License for the duration of the contract.

Approved by the Board of Directors of the Carlsbad Municipal Water District, California, by Resolution No. XXXX, adopted on the XX<sup>th</sup> day of June 2024.

\_\_\_\_\_, 2024  
Date

\_\_\_\_\_  
Graham Jordan, Deputy Clerk



# CARLSBAD MUNICIPAL WATER DISTRICT

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

### CONTRACTOR'S PROPOSAL

Board of Directors  
 Carlsbad Municipal Water District  
 1200 Carlsbad Village Drive  
 Carlsbad, California 92008

The undersigned declares he/she has carefully examined the location of the work, read the Notice Inviting Bids, examined the Plans, Specifications, General Provisions, Contract Documents, and addenda thereto, and hereby proposes to furnish all labor, materials, equipment, transportation, and services required to do all the work to complete Contract No. 5019-F in accordance with the Plans, Specifications, General Provisions, Contract Documents, and addenda thereto and that he/she will take in full payment therefore the following unit prices for each item complete, to wit (refer to Section 9-4 for bid item descriptions):

#### SCHEDULE “A” – General

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
A-1	Mobilization (not to exceed 5% of Total Bid for all Bid Schedules Combined)	LS	1		
A-2	Preconstruction Videos and Photographs	LS	1		
A-3	Excavation Support Systems	LS	1		
A-4	Storm Water Pollution Prevention Plan (SWPPP)	LS	1		
A-5	Traffic Control	LS	1		
A-6	AC Pipe Sample for Testing	EA	50		

Total amount of bid (in figures) for Schedule “A”: \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule “A”: \_\_\_\_\_



**SCHEDULE "B" – Site 1 Harding St and Chestnut Ave**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
B-1	AC Pipe Removal & Disposal	LS	1		
B-2	Demolition of Existing Pipe and Valves	LS	1		
B-3	Furnish and Install 6-inch PVC Water Main and Fittings	LS	1		
B-4	Furnish and Install 8-inch PVC Water Main and Fittings	LS	1		
B-5	Furnish and Install 8-inch Gate Valve	EA	4		
B-6	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
B-7	Water Main Connection	EA	4		
B-8	Over-excavation and Backfill	CY	10		
B-9	Pavement Repair	LS	1		
B-10	Repair Pavement Markings	LS	1		
B-11	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "B": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "B": \_\_\_\_\_

**SCHEDULE "C" – Site 2 Carlsbad Village Dr and Harding St**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
C-1	AC Pipe Removal & Disposal	LS	1		
C-2	Demolition of Existing Pipe and Valves	LS	1		
C-3	Furnish and Install 6-inch PVC Water Main	LS	1		
C-4	Furnish and Install 6-inch Gate Valve	EA	4		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
C-5	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	4		
C-6	Water Main Connection	EA	4		
C-7	Over-excavation and Backfill	CY	10		
C-8	Pavement Repair	LS	1		
C-9	Portland Cement Concrete	LS	1		
C-10	Repair Pavement Markings	LS	1		
C-11	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "C": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "C": \_\_\_\_\_

**SCHEDULE "D" – Site 3 Madison St and Oak Ave**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
D-1	AC Pipe Removal & Disposal	LS	1		
D-2	Demolition of Existing Pipe and Valves	LS	1		
D-3	Furnish and Install 8-inch PVC Water Main	LS	1		
D-4	Furnish and Install 10-inch PVC Water Main	LS	1		
D-5	Furnish and Install 12-inch PVC Water Main	LS	1		
D-6	Furnish and Install 8-inch Gate Valve	EA	1		
D-7	Furnish and Install 10-inch Gate Valve	EA	1		
D-8	Furnish and Install 12-inch Gate Valve	EA	2		
D-9	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
D-10	Water Main Connection	EA	4		
D-11	Over-excavation and Backfill	CY	10		
D-12	Pavement Repair	LS	1		
D-13	Repair Pavement Markings	LS	1		
D-14	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "D": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "D": \_\_\_\_\_

**SCHEDULE "E" – Site 4 Oak Ave and Roosevelt**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
E-1	AC Pipe Removal & Disposal	LS	1		
E-2	Demolition of Existing Pipe and Valves	LS	1		
E-3	Furnish and Install 6-inch PVC Water Main	LS	1		
E-4	Furnish and Install 10-inch PVC Water Main	LS	1		
E-5	Furnish and Install 8-inch Gate Valve	EA	2		
E-6	Furnish and Install 10-inch Gate Valve	EA	2		
E-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	4		
E-8	Water Main Connection	EA	4		
E-9	Over-excavation and Backfill	CY	10		
E-10	Pavement Repair	LS	1		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
E-11	Portland Cement Concrete	LS	1		
E-12	Repair Pavement Markings	LS	1		
E-13	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "E": \$\_\_\_\_\_

Total amount of bid (in words) for Schedule "E": \_\_\_\_\_

**SCHEDULE "F" – Site 5 Tamarack Ave, West of Railroad**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
F-1	AC Pipe Removal & Disposal	LS	1		
F-2	Demolition of Existing Pipe and Valves	LS	1		
F-3	Furnish and Install 8-inch PVC Water Main	LS	1		
F-4	Furnish and Install 10-inch PVC Water Main	LS	1		
F-5	Furnish and Install 8-inch Gate Valve	EA	2		
F-6	Furnish and Install 10-inch Gate Valve	EA	2		
F-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	4		
F-8	Water Main Connection	EA	4		
F-9	Over-excavation and Backfill	CY	10		
F-10	Pavement Repair	LS	1		
F-11	Portland Cement Concrete	LS	1		





Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
F-12	Repair Pavement Markings	LS	1		
F-13	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "F": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "F": \_\_\_\_\_

**SCHEDULE "G" – Site 6 Carlsbad Blvd and Sequoia Ave**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
G-1	AC Pipe Removal & Disposal	LS	1		
G-2	Demolition of Existing Pipe and Valves	LS	1		
G-3	Furnish and Install 10-inch PVC Water Main	LS	1		
G-4	Furnish and Install 12-inch PVC Water Main	LS	1		
G-5	Furnish and Install 10-inch Gate Valve	EA	1		
G-6	Furnish and Install 12-inch Gate Valve	EA	2		
G-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
G-8	Water Main Connection	CY	3		
G-9	Over-excavation and Backfill	LS	10		
G-10	Pavement Repair	LS	1		
G-11	Repair Pavement Markings	LS	1		
G-12	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "G": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "G": \_\_\_\_\_



**SCHEDULE "H" – Site 7 Carlsbad Village Dr and Tyler St**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
H-1	AC Pipe Removal & Disposal	LS	1		
H-2	Demolition of Existing Pipe and Valves	LS	1		
H-3	Furnish and Install 6-inch PVC Water Main	LS	1		
H-4	Furnish and Install 10-inch PVC Water Main	LS	1		
H-5	Furnish and Install 8-inch Gate Valve	EA	2		
H-6	Furnish and Install 10-inch Gate Valve	EA	2		
H-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	4		
H-8	Water Main Connection	EA	4		
H-9	Over-excavation and Backfill	CY	10		
H-10	Pavement Repair	LS	1		
H-11	Repair Pavement Markings	LS	1		
H-12	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "H": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "H": \_\_\_\_\_

**SCHEDULE "I" – Site 8 Pine Ave and Garfield St**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
I-1	AC Pipe Removal & Disposal	LS	1		
I-2	Demolition of Existing Pipe and Valves	LS	1		
I-3	Furnish and Install 6-inch PVC Water Main	LS	1		
I-4	Furnish and Install 8-inch PVC Water Main	LS	1		
I-5	Furnish and Install 8-inch Gate Valve	EA	3		
I-6	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
I-7	Water Main Connection	EA	3		
I-8	Over-excavation and Backfill	CY	10		
I-9	Pavement Repair	LS	1		
I-10	Repair Pavement Markings	LS	1		
I-11	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "I": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "I": \_\_\_\_\_

**SCHEDULE "J" – Site 9 Hillside Dr and Kelly Dr**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
J-1	AC Pipe Removal & Disposal	LS	1		
J-2	Demolition of Existing Pipe and Valves	LS	1		
J-3	Furnish and Install 6-inch PVC Water Main	LS	1		
J-4	Furnish and Install 8-inch PVC Water Main	LS	1		
J-5	Furnish and Install 12-inch PVC Water Main	LS	1		
J-6	Furnish and Install 6-inch Gate Valve	EA	1		
J-7	Furnish and Install 8-inch Gate Valve	EA	1		
J-8	Furnish and Install 12-inch Gate Valve	EA	2		
J-9	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
J-10	Water Main Connection	EA	4		
J-11	Over-excavation and Backfill	CY	10		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
J-12	Pavement Repair	LS	1		
J-13	Repair Pavement Markings	LS	1		
J-14	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "J": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "J": \_\_\_\_\_

**SCHEDULE "K" – Site 10 Redwood Ave and Garfield St**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
K-1	AC Pipe Removal & Disposal	LS	1		
K-2	Demolition of Existing Pipe and Valves	LS	1		
K-3	Furnish and Install 6-inch PVC Water Main	LS	1		
K-4	Furnish and Install 6-inch Gate Valve	EA	4		
K-5	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	4		
K-6	Water Main Connection	EA	4		
K-7	Over-excavation and Backfill	CY	10		
K-8	Pavement Repair	LS	1		
K-9	Repair Pavement Markings	LS	1		
K-10	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "K": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "K": \_\_\_\_\_



**SCHEDULE "L" – Site 11 2634 El Camino Real**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
L-1	AC Pipe Removal & Disposal	LS	1		
L-2	Demolition of Existing Pipe and Valves	LS	1		
L-4	Furnish and Install 10-inch PVC Water Main	LS	1		
L-5	Furnish and Install 10-inch Gate Valve	EA	4		
L-6	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	4		
L-7	Water Main Connection	EA	4		
L-8	Over-excavation and Backfill	CY	10		
L-9	Pavement Repair	LS	1		
L-10	Repair Pavement Markings	LS	1		
L-11	AC Pipe Removal & Disposal	LS	1		
L-12	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "L": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "L": \_\_\_\_\_

**SCHEDULE "M" – Site 12 2618 El Camino Real**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
M-1	AC Pipe Removal & Disposal	LS	1		
M-2	Demolition of Existing Pipe and Valves	LS	1		
M-3	Furnish and Install 10-inch PVC Water Main	LS	1		
M-4	Furnish and Install 10-inch Gate Valve	EA	3		
M-5	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
M-6	Water Main Connection	EA	3		
M-7	Over-excavation and Backfill	CY	10		
M-8	Pavement Repair	LS	1		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
M-9	Repair Pavement Markings	LS	1		
M-10	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "M": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "M": \_\_\_\_\_

**SCHEDULE "N" – Site 13 Tamarack Ave and Simsbury Ct**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
N-1	AC Pipe Removal & Disposal	LS	1		
N-2	Demolition of Existing Pipe and Valves	LS	1		
N-3	Furnish and Install 10-inch PVC Water Main	LS	1		
N-4	Furnish and Install 12-inch PVC Water Main	LS	1		
N-5	Furnish and Install 10-inch Gate Valve	EA	1		
N-6	Furnish and Install 12-inch Gate Valve	EA	2		
N-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
N-8	Water Main Connection	EA	3		
N-9	Over-excavation and Backfill	CY	10		
N-10	Pavement Repair	LS	1		
N-11	Repair Pavement Markings	LS	1		
N-12	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "N": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "N": \_\_\_\_\_



**SCHEDULE "O" – Site 14 Pontiac Dr and Regent Rd**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
O-1	AC Pipe Removal & Disposal	LS	1		
O-2	Demolition of Existing Pipe and Valves	LS	1		
O-3	Furnish and Install 8-inch PVC Water Main	LS	1		
O-4	Furnish and Install 10-inch PVC Water Main	LS	1		
O-5	Furnish and Install 8-inch Gate Valve	EA	1		
O-6	Furnish and Install 10-inch Gate Valve	EA	2		
O-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
O-8	Water Main Connection	EA	3		
O-9	Over-excavation and Backfill	CY	10		
O-10	Pavement Repair	LS	1		
O-11	Repair Pavement Markings	LS	1		
O-12	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "O": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "O": \_\_\_\_\_

**SCHEDULE "P" – Site 15 Palomar Airport Rd and El Camino Real**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
P-1	Demolition of Existing Pipe and Valves	LS	1		
P-2	Furnish and Install 20-inch STL Water Main	LS	1		
P-3	Furnish and Install 20-inch Butterfly Valve	EA	3		
P-4	Furnish and Install 2-inch Combination Air Release / Air Vacuum Valve	EA	1		
P-5	Furnish and Install Corrosion Protection	LS	1		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
P-6	Water Main Connection	EA	3		
P-7	Over-excavation and Backfill	CY	10		
P-8	Pavement Repair	LS	1		
P-9	Portland Cement Concrete	LS	1		
P-10	Repair Pavement Markings	LS	1		
P-11	Utility Locating and Potholing	LS	1		
P-12	Traffic Control	LS	1		

Total amount of bid (in figures) for Schedule "P": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "P": \_\_\_\_\_

**SCHEDULE "Q" – Site 16 2175 Camino Vida Roble**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
Q-1	AC Pipe Removal & Disposal	LS	1		
Q-2	Demolition of Existing Pipe and Valves	LS	1		
Q-3	Furnish and Install 8-inch PVC Water Main	LS	1		
Q-4	Furnish and Install 12-inch PVC Water Main	LS	1		
Q-5	Furnish and Install 8-inch Gate Valve	EA	1		
Q-6	Furnish and Install 12-inch Gate Valve	EA	2		
Q-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	2		
Q-8	Water Main Connection	EA	3		
Q-9	Over-excavation and Backfill	CY	10		
Q-10	Pavement Repair	LS	1		
Q-11	Repair Pavement Markings	LS	1		
Q-12	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "Q": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "Q": \_\_\_\_\_





**SCHEDULE "R" – Site 17 Las Palmas and Camino Vida Roble**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
R-1	AC Pipe Removal & Disposal	LS	1		
R-2	Demolition of Existing Pipe and Valves	LS	1		
R-3	Furnish and Install 10-inch PVC Water Main	LS	1		
R-4	Furnish and Install 12-inch PVC Water Main	LS	1		
R-5	Furnish and Install 10-inch Gate Valve	EA	1		
R-6	Furnish and Install 12-inch Gate Valve	EA	2		
R-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
R-8	Water Main Connection	EA	3		
R-9	Over-excavation and Backfill	CY	10		
R-10	Pavement Repair	LS	1		
R-11	Repair Pavement Markings	LS	1		
R-12	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "R": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "R": \_\_\_\_\_

**SCHEDULE "S" – Site 18 2712 Loker Ave West**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
S-1	AC Pipe Removal & Disposal	LS	1		
S-2	Demolition of Existing Pipe and Valves	LS	1		
S-3	Furnish and Install 8-inch PVC Water Main	LS	1		
S-4	Furnish and Install 16-inch PVC Water Main	LS	1		
S-5	Furnish and Install 8-inch Gate Valve	EA	2		



S-6	Furnish and Install 16-inch Butterfly Valve	EA	2		
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
S-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
S-8	Install New Saddle and Reconnect Water Service	EA	1		
S-9	Water Main Connection	EA	4		
S-10	Over-excavation and Backfill	CY	10		
S-11	Pavement Repair	LS	1		
S-12	Portland Cement Concrete	LS	1		
S-13	Repair Pavement Markings	LS	1		
S-14	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "S": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "S": \_\_\_\_\_

**SCHEDULE "T" – Site 19 Alicante Rd and Altisma Way**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
T-1	AC Pipe Removal & Disposal	LS	1		
T-2	Demolition of Existing Pipe and Valves	LS	1		
T-3	Furnish and Install 8-inch PVC Water Main	LS	1		
T-4	Furnish and Install 12-inch PVC Water Main	LS	1		
T-5	Furnish and Install 14-inch PVC Water Main	LS	1		
T-6	Furnish and Install 8-inch Gate Valve	EA	1		
T-7	Furnish and Install 12-inch Gate Valve	EA	2		
T-8	Furnish and Install 14-inch Gate Valve	EA	1		
T-9	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	5		
T-10	Water Main Connection	EA	5		



T-11	Over-excavation and Backfill	CY	10		
T-12	Pavement Repair	LS	1		
T-13	Repair Pavement Markings	LS	1		
T-14	Abandon Water Main	LS	1		
T-15	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "T": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "T": \_\_\_\_\_

**SCHEDULE "U" – Site 20 Cannon Rd and Paseo Del Norte**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
U-1	AC Pipe Removal & Disposal	LS	1		
U-2	Demolition of Existing Pipe and Valves	LS	1		
U-3	Furnish and Install 12-inch PVC Water Main	LS	1		
U-4	Furnish and Install 12-inch Gate Valve	EA	3		
U-5	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
U-6	Water Main Connection	EA	3		
U-7	Over-excavation and Backfill	CY	10		
U-8	Pavement Repair	LS	1		
U-9	Repair Pavement Markings	LS	1		
U-10	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "U": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "U": \_\_\_\_\_



**SCHEDULE "V" – Site 21 2043 Alga Rd**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
V-1	AC Pipe Removal & Disposal	LS	1		
V-2	Demolition of Existing Pipe and Valves	LS	1		
V-3	Furnish and Install 8-inch PVC Water Main	LS	1		
V-4	Furnish and Install 12-inch PVC Water Main	LS	1		
V-5	Furnish and Install 8-inch Gate Valve	EA	1		
V-6	Furnish and Install 12-inch Gate Valve	EA	2		
V-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
V-8	Water Main Connection	EA	3		
V-9	Over-excavation and Backfill	CY	10		
V-10	Pavement Repair	LS	1		
V-11	Portland Cement Concrete	LS	1		
V-12	Repair Pavement Markings	LS	1		
V-13	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "V": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "V": \_\_\_\_\_

**SCHEDULE "W" – Site 22 Flamenco St and Colibri Ln**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
W-1	AC Pipe Removal & Disposal	LS	1		
W-2	Demolition of Existing Pipe and Valves	LS	1		
W-3	Furnish and Install 8-inch PVC Water Main	LS	1		
W-4	Furnish and Install 8-inch Gate Valve	EA	3		
W-5	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
W-6	Water Main Connection	EA	3		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
W-7	Over-excavation and Backfill	CY	10		
W-8	Pavement Repair	LS	1		
W-9	Repair Pavement Markings	LS	1		
W-10	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "W": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "W": \_\_\_\_\_

**SCHEDULE "X" – Site 23 Altisma Way**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
X-1	AC Pipe Removal & Disposal	LS	1		
X-2	Demolition of Existing Pipe and Valves	LS	1		
X-3	Furnish and Install 6-inch PVC Water Main	LS	1		
X-4	Furnish and Install 8-inch PVC Water Main	LS	1		
X-5	Furnish and Install 8-inch Gate Valve	EA	3		
X-6	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	2		
X-7	Water Main Connection	EA	3		
X-8	Over-excavation and Backfill	CY	10		
X-9	Pavement Repair	LS	1		
X-10	Repair Pavement Markings	LS	1		
X-11	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "X": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "X": \_\_\_\_\_



**SCHEDULE "Y" – Site 24 Elder Ct and Montia Ct**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
Y-1	AC Pipe Removal & Disposal	LS	1		
Y-2	Demolition of Existing Pipe and Valves	LS	1		
Y-3	Furnish and Install 8-inch PVC Water Main	LS	1		
Y-4	Furnish and Install 10-inch PVC Water Main	LS	1		
Y-5	Furnish and Install 8-inch Gate Valve	EA	1		
Y-6	Furnish and Install 10-inch Gate Valve	EA	2		
Y-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	3		
Y-8	Water Main Connection	EA	3		
Y-9	Over-excavation and Backfill	CY	10		
Y-10	Pavement Repair	LS	1		
Y-11	Portland Cement Concrete	LS	1		
Y-12	Repair Pavement Markings	LS	1		
Y-13	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "Y": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "Y": \_\_\_\_\_

**SCHEDULE "Z" – Site 25 7148 Lantana Terrace**

<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
Z-1	AC Pipe Removal & Disposal	LS	1		
Z-2	Demolition of Existing Pipe and Valves	LS	1		
Z-3	Furnish and Install 10-inch PVC Water Main	LS	1		
Z-4	Furnish and Install 10-inch Gate Valve	EA	1		
Z-5	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	2		



Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
Z-6	Furnish and Install Water Service Outlet and Reconnection Existing Water service	EA	2		
Z-7	Water Main Connection	EA	2		
Z-8	Over-excavation and Backfill	CY	10		
Z-9	Pavement Repair	LS	1		
Z-10	Repair Pavement Markings	LS	1		
Z-11	Utility Locating and Potholing	LS	1		

Total amount of bid (in figures) for Schedule "Z": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "Z": \_\_\_\_\_

**SCHEDULE "AA" – Site 26 Windrose Circle and Navigator Circle**

Item No.	Item Description	Unit	Quantity	Unit Price	Total Amount
AA-1	AC Pipe Removal & Disposal	LS	1		
AA-2	Demolition of Existing Pipe and Valves	LS	1		
AA-3	Furnish and Install 10-inch PVC Water Main	LS	1		
AA-4	Furnish and Install 16-inch PVC Water Main	LS	1		
AA-5	Furnish and Install 10-inch Gate Valve	EA	1		
AA-6	Furnish and Install 16-inch Butterfly Valve	EA	2		
AA-7	Furnish and Install 2-inch Manual Air Release/Blow Off Assembly	EA	2		
AA-8	Water Main Connection	EA	3		
AA-9	Over-excavation and Backfill	CY	10		
AA-10	Pavement Repair	LS	1		
AA-11	Portland Cement Concrete	LS	1		
AA-12	Repair Pavement Markings	LS	1		
AA-13	Utility Locating and Potholing	LS	1		



Total amount of bid (in figures) for Schedule "AA": \$ \_\_\_\_\_

Total amount of bid (in words) for Schedule "AA": \_\_\_\_\_

Total Bid Price, Schedules "A" through "AA" (in numbers): \$ \_\_\_\_\_

Total Bid Price, Schedules "A" through "AA" (in words): \$ \_\_\_\_\_

In case of discrepancy between the written price, the numerical price, or the price as submitted via the online bidding portal, the online bidding portal price shall prevail.

The Agency shall determine the low Bid based on the sum of all Bid schedules. After the low Bid has been determined, the Agency may, at its sole discretion, award the Contract based on the total of all Bid Schedules or on the total of Schedule "A" plus any combination of Schedule "B" through Schedule "AA". The Agency has the right to reject any or all Bids or to waive any irregularities or informalities in any Bids or in the Bidding process.

The costs for any Work shown or required in the Contract Documents, but not specifically identified as a bid item, are to be included in the related bid item and no additional compensation shall be due to Contractor for the performance of the Work.

The estimated quantities for Unit Price items are for purposes of comparing Bids only and the Agency makes no representation that the actual quantities of Work performed will not vary from the estimates. Final payment shall be determined by the Engineer from measured quantities of Work performed based upon the Unit Price.

The undersigned agrees that this Bid Form constitutes a firm offer to the Agency which cannot be withdrawn for ninety (90) Calendar Days from and after the Bid opening, or until a Contract for the Work is fully executed by the Agency and the lowest responsible Bidder, whichever is later.

Price(s) given above are firm for 90 days after the date of bid opening.

Addendum(a) No(s). \_\_\_\_\_ has/have been received and is/are included in this proposal.

The Undersigned has carefully checked all of the above figures and understands that the District will not be responsible for any error or omission on the part of the Undersigned in preparing this bid.

The Undersigned agrees that in case of default in executing the required Contract with necessary bonds and insurance policies within twenty (20) days from the date of award of Contract by the Board of Directors of the Carlsbad Municipal Water District, the District may administratively authorize award of the contract to the second or third lowest bidder and the bid security of the lowest bidder may be forfeited.





The Undersigned bidder declares, under penalty of perjury, that the undersigned is licensed to do business or act in the capacity of a contractor within the State of California, validly licensed under license number \_\_\_\_\_, classification \_\_\_\_\_ which expires on \_\_\_\_\_, and Department of Industrial Relations PWC registration number \_\_\_\_\_ which expires on \_\_\_\_\_, and that this statement is true and correct and has the legal effect of an affidavit.

A bid submitted to the District by a Contractor who is not licensed as a contractor pursuant to the Business and Professions Code shall be considered nonresponsive and shall be rejected by the District § 7028.15(e). In all contracts where federal funds are involved, no bid submitted shall be invalidated by the failure of the bidder to be licensed in accordance with California law. However, at the time the contract is awarded, the contractor shall be properly licensed.

The Undersigned bidder hereby represents as follows:

1. That no Board member, officer agent, or employee of the City of Carlsbad is personally interested, directly or indirectly, in this Contract, or the compensation to be paid hereunder; that no representation, oral or in writing, of the Board of Directors, its officers, agents, or employees has inducted him/her to enter into this Contract, excepting only those contained in this form of Contract and the papers made a part hereof by its terms; and
2. That this bid is made without connection with any person, firm, or corporation making a bid for the same work, and is in all respects fair and without collusion or fraud.

Accompanying this proposal is \_\_\_\_\_ (Cash, Certified Check, Bond or Cashier's Check) for ten percent (10%) of the amount bid.

The Undersigned is aware of the provisions of section 3700 of the Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code and agrees to comply with such provisions before commencing the performance of the work of this Contract and continue to comply until the contract is complete.

The Undersigned is aware of the provisions of the Labor Code, Part 7, Chapter 1, Article 2, relative to the general prevailing rate of wages for each craft or type of worker needed to execute the Contract and agrees to comply with its provisions.



IF A SOLE OWNER OR SOLE CONTRACTOR SIGN HERE:

(1) Name under which business is conducted \_\_\_\_\_

(2) Signature (given and surname) of proprietor \_\_\_\_\_

(3) Place of Business \_\_\_\_\_  
(Street and Number)  
City and State \_\_\_\_\_

(4) Zip Code \_\_\_\_\_ Telephone No. \_\_\_\_\_

(5) E-Mail \_\_\_\_\_

IF A PARTNERSHIP, SIGN HERE:

(1) Name under which business is conducted \_\_\_\_\_

(2) Signature (given and surname and character of partner) (Note: Signature must be made by a general partner)

\_\_\_\_\_  
\_\_\_\_\_

(3) Place of Business \_\_\_\_\_  
(Street and Number)  
City and State \_\_\_\_\_

(4) Zip Code \_\_\_\_\_ Telephone No. \_\_\_\_\_

(5) E-Mail \_\_\_\_\_



IF A CORPORATION, SIGN HERE:

(1) Name under which business is conducted \_\_\_\_\_

\_\_\_\_\_

(2) \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

Impress Corporate Seal here

(3) Incorporated under the laws of the State of \_\_\_\_\_

(4) Place of Business \_\_\_\_\_  
(Street and Number)

City and State \_\_\_\_\_

(5) Zip Code \_\_\_\_\_ Telephone No. \_\_\_\_\_

(6) E-Mail \_\_\_\_\_

**NOTARIAL ACKNOWLEDGMENT OF EXECUTION BY ALL SIGNATORIES MUST BE ATTACHED**

List below names of president, vice president, secretary and assistant secretary, if a corporation; if a partnership, list names of all general partners, and managing partners:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____



# BID SECURITY FORM

(Check to Accompany Bid)

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

(NOTE: The following form shall be used if check accompanies bid.)

Accompanying this proposal is a \*Certified \*Cashier's check payable to the order of CARLSBAD MUNICIPAL WATER DISTRICT, in the sum of \_\_\_\_\_ dollars (\$ \_\_\_\_\_), this amount being ten percent (10%) of the total amount of the bid. The proceeds of this check shall become the property of the District provided this proposal shall be accepted by the District through action of its legally constituted contracting authorities and the undersigned shall fail to execute a contract and furnish the required Performance, Warranty and Payment Bonds and proof of insurance coverage within the stipulated time; otherwise, the check shall be returned to the undersigned. The proceeds of this check shall also become the property of the District if the undersigned shall withdraw his or her bid within the period of fifteen (15) days after the date set for the opening thereof, unless otherwise required by law, and notwithstanding the award of the contract to another bidder.

\_\_\_\_\_

\_\_\_\_\_  
BIDDER

\_\_\_\_\_  
\*Delete the inapplicable word.

(NOTE: If the Bidder desires to use a bond instead of check, the Bid Bond form on the following pages shall be executed--the sum of this bond shall be not less than ten percent (10%) of the total amount of the bid.)



# BIDDER'S BOND TO ACCOMPANY PROPOSAL

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

KNOW ALL PERSONS BY THESE PRESENTS:

That we, \_\_\_\_\_, as Principal, and \_\_\_\_\_, as Surety are held and firmly bound unto the Carlsbad Municipal Water District, California, in an amount as follows: (must be at least ten percent (10%) of the bid amount) \_\_\_\_\_ for which payment, well and truly made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that if the proposal of the above-bounden Principal for:

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

in the City of Carlsbad, is accepted by the Board of Directors, and if the Principal shall duly enter into and execute a Contract including required bonds and insurance policies within twenty (20) days from the date of award of Contract by the Board of Directors of the Carlsbad Municipal Water District of the City of Carlsbad, being duly notified of said award, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect, and the amount specified herein shall be forfeited to the said District.

In the event Principal executed this bond as an individual, it is agreed that the death of Principal shall not exonerate the Surety from its obligations under this bond.

SIGNED AND SEALED, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_(SEAL) \_\_\_\_\_(SEAL)  
(Principal) (Surety)

By: \_\_\_\_\_ By: \_\_\_\_\_  
(Signature) (Signature)

\_\_\_\_\_(Print Name/Title) \_\_\_\_\_(Print Name/Title)

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY – ATTACH ATTORNEY-IN-FACT CERTIFICATE)

APPROVED AS TO FORM:

CINDIE K. McMAHON  
General Counsel

By: \_\_\_\_\_  
Assistant General Counsel



## **GUIDE FOR COMPLETING THE “DESIGNATION OF SUBCONTRACTORS” FORM**

**REFERENCES** Prior to preparation of the following “Subcontractor Disclosure Form” Bidders are urged to review the definitions in section 1-2 of the General Provisions to this Contract, especially, “Bid”, “Bidder”, “Contract”, “Contractor”, “Contract Price”, “Contract Unit Price”, “Engineer”, “Own Organization”, “Subcontractor”, and “Work”. Bidders are further urged to review sections 2-3 SUBCONTRACTS of the General Provisions.

**CAUTIONS** This form will be used by the Agency to determine the percentage of work that the Bidder proposes to perform. Bidders are cautioned that failure to provide complete and correct information may result in rejection of the bid as non-responsive. Any bid that proposes performance of more than 50 percent of the work by subcontractors or otherwise to be performed by forces other than the Bidder’s own organization will be rejected as non-responsive. Specialty items of work that may be so designated by the Engineer on the “Contractor’s Proposal” are not included in computing the percentage of work proposed to be performed by the Bidder.

**INSTRUCTIONS** The Bidder shall set forth the name and location of business of each and every subcontractor whom the Bidder proposes to perform work or labor or render service in or about the work or improvement, and every subcontractor licensed as a contractor by the State of California whom the Bidder proposes to specially fabricate and install any portion of the work or improvement according to detailed drawings contained in the plans and specifications in excess of one-half of one percent (0.5%) of the Bidder’s total bid or, in the case of bids or offers for the construction of streets and highways, including bridges, in excess of one-half of one percent (0.5%) or ten thousand dollars (\$10,000) whichever is greater. Said name(s) and location(s) of business of subcontractor(s) shall be set forth and included as an integral part of the bid offer.

The Designation of Subcontractors form must be submitted as a part of the Bidder’s sealed bid. Failure to provide complete and correct information may result in rejection of the bid as non-responsive.

Suppliers of materials from sources outside the limits of work are not subcontractors. The value of materials and transport of materials from sources outside the limits of work, as shown on the plans, shall be assigned to the Contractor or the Subcontractor as the case may be, that the Bidder proposes as installer of said materials. The value of material incorporated in any Subcontractor-installed bid item that is supplied by the Bidder shall be included as a part of the work that the Bidder proposes to be performed by the Subcontractor installing said item.

When a Subcontractor has a Carlsbad business license, the number must be entered on the proper form. If the Subcontractor does not have a valid business license, enter “NONE” in the appropriate space.

When the Bidder proposes using a Subcontractor to construct or install less than 100 percent of a bid item, the Bidder shall attach an explanation sheet to the Designation of Subcontractor form. The explanation sheet shall clearly apprise the District of the specific facts that show the Bidder proposes to perform no less than fifty percent (50%) of the work with its own forces.



Determination of the subcontract amounts for purposes of award of the contract shall be determined by the Board of Directors in conformance with the provisions of the contract documents and the various supplemental provisions. The decision of the Board of Directors shall be final.

Contractor is prohibited from performing any work on this project with a subcontractor who is ineligible to perform work on a public works project pursuant to Labor Code Sections 1771.1 or 1777.7.

Bidders shall make any additional copies of the disclosure forms as may be necessary to provide the required information. The page number and total number of additional form pages shall be entered in the location provided on each type of form so duplicated.



# DESIGNATION OF SUBCONTRACTOR AND AMOUNT OF SUBCONTRACTOR'S BID ITEMS

(To Accompany Proposal)

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

The Bidder certifies that it has used the sub-bid of the following listed subcontractors in preparing this bid for the Work and that the listed subcontractors will be used to perform the portions of the Work as designated in this list in accordance with applicable provisions of the specifications and section 4100 et seq. of the Public Contract Code, "Subletting and Subcontracting Fair Practices Act." The Bidder further certifies that no additional subcontractor will be allowed to perform any portion of the Work in excess of one-half of one percent (0.5%) of the Bidder's total bid, or in the case of bids or offers for construction of streets and highways, including bridges, in excess of one-half of one percent (0.5%) or ten thousand dollars (\$10,000), whichever is greater, and that no changes in the subcontractors listed work will be made except upon the prior approval of the Agency.

### SUBCONTRACTOR'S BID ITEMS

Portion of Work	Subcontractor Name and Location of Business	Phone No. and Email Address	DIR Registration No.	Subcontractor's License No. and Classification*	Amount of Work by Subcontractor in Dollars*

Page \_\_\_\_\_ of \_\_\_\_\_ pages of this Subcontractor Designation form

\* Pursuant to section 4104 (a)(3)(A) California Public Contract Code, receipt of the information preceded by an asterisk may be submitted by the Bidder up to 24 hours after the deadline for submitting bids contained in the "Notice Inviting Bids."



# BIDDER'S STATEMENT OF TECHNICAL ABILITY AND EXPERIENCE

(To Accompany Proposal)

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

The Bidder is required to state what work of a similar character to that included in the proposed Contract he/she has successfully performed and give references, with telephone numbers, which will enable the City to judge his/her responsibility, experience and skill. An attachment can be used.

The bidder shall demonstrate at least five years of experience successfully completing potable water distribution pipeline construction and **at least three potable water valve replacement and pipeline construction projects** with a value of \$2,000,000 or greater and similar in scope to the Work of the proposed Contract. Bidder must also submit the qualifications of its Representatives in accordance with Section 7-6. The proposal shall be deemed non-responsive if the required technical ability and experience for the Bidder or its representative is not demonstrated.

Date Contract Completed	Name and Address of the Employer	Name and Phone No. of Person to Contract	Type of Work	Amount of Contract

**BIDDER'S CERTIFICATE OF INSURANCE FOR  
GENERAL LIABILITY, EMPLOYERS' LIABILITY,  
AUTOMOTIVE  
LIABILITY AND WORKERS' COMPENSATION**

(To Accompany Proposal)

**VALVE REPLACEMENT – PHASE III  
CONTRACT NO. 5019-F**

As a required part of the Bidder's proposal the Bidder must attach either of the following to this page.

1) Certificates of insurance showing conformance with the requirements herein for each of:

- Comprehensive General Liability
- Automobile Liability
- Workers Compensation
- Employer's Liability

2) Statement with an insurance carrier's notarized signature stating that the carrier can, and upon payment of fees and/or premiums by the Bidder, will issue to the Bidder Policies of insurance for Comprehensive General Liability, Automobile Liability, Workers Compensation and Employer's Liability in conformance with the requirements herein and Certificates of insurance to the Agency showing conformance with the requirements herein.

All certificates of insurance and statements of willingness to issue insurance for auto policies offered to meet the specification of this contract must:

- 1) Meet the conditions stated in The Notice Inviting Bids and the General Provisions for this project for each insurance company that the Contractor proposes.
- 2) Cover any vehicle used in the performance of the contract, used onsite or offsite, whether owned, non-owned or hired, and whether scheduled or non-scheduled.



# BIDDER'S STATEMENT RE DEBARMENT

(To Accompany Proposal)

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

- 1) Have you or any of your subcontractors ever been debarred as an irresponsible bidder by another jurisdiction in the State of California?

\_\_\_\_\_      \_\_\_\_\_  
yes                  no

- 2) If yes, what was/were the name(s) of the agency(ies) and what was/were the period(s) of debarment(s)? Attach additional copies of this page to accommodate more than two debarments.

_____	_____
party debarred	party debarred
_____	_____
agency	agency
_____	_____
period of debarment	period of debarment

BY CONTRACTOR:

\_\_\_\_\_  
(name of Contractor)

By: \_\_\_\_\_  
(sign here)

\_\_\_\_\_  
(print name/title)

Page \_\_\_\_\_ of \_\_\_\_\_ pages of this Re Debarment form



# BIDDER'S DISCLOSURE OF DISCIPLINE RECORD

(To Accompany Proposal)

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

- 1) Have you ever had your contractor's license suspended or revoked by the California Contractors' State License Board two or more times within an eight year period?

                                            
yes                              no

- 2) Has the suspension or revocation of your contractor's license ever been stayed?

                                            
yes                              no

- 3) Have any subcontractors that you propose to perform any portion of the Work ever had their contractor's license suspended or revoked by the California Contractors' State License Board two or more times within an eight year period?

                                            
yes                              no

- 4) Has the suspension or revocation of the license of any subcontractor's that you propose to perform any portion of the Work ever been stayed?

                                            
yes                              no

- 5) If the answer to either of 1. or 3. above is yes fully identify, in each and every case, the party disciplined, the date of and violation that the disciplinary action pertains to and describe the nature of the violation and the disciplinary action taken therefore.

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(If needed attach additional sheets to provide full disclosure.)

Page \_\_\_\_\_ of \_\_\_\_\_ pages of this Disclosure of Discipline form



**BIDDER'S DISCLOSURE OF DISCIPLINE RECORD**

**(CONTINUED)**

(To Accompany Proposal)

**VALVE REPLACEMENT – PHASE III**

**CONTRACT NO. 5019-F**

- 6) If the answer to either of 2. or 4. above is yes fully identify, in each and every case, the party whose discipline was stayed, the date of the violation that the disciplinary action pertains to, describe the nature of the violation and the condition (if any) upon which the disciplinary action was stayed.

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(If needed attach additional sheets to provide full disclosure.)

**BY CONTRACTOR:**

\_\_\_\_\_ (name of Contractor)

By: \_\_\_\_\_ (sign here)

\_\_\_\_\_ (print name/title)

Page \_\_\_\_ of \_\_\_\_ pages of this Disclosure of Discipline form

**NONCOLLUSION DECLARATION TO BE EXECUTED BY  
BIDDER AND SUBMITTED WITH BID  
PUBLIC CONTRACT CODE SECTION 7106**

**VALVE REPLACEMENT – PHASE III  
CONTRACT NO. 5019-F**

The undersigned declares:

I am the \_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_, 20\_\_\_\_ at \_\_\_\_\_ [city], \_\_\_\_\_ [state].

\_\_\_\_\_  
Signature of Bidder



# CONTRACT PUBLIC WORKS

This agreement is made this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by and between the Carlsbad Municipal Water District of the City of Carlsbad, California, a municipal corporation, (hereinafter called "District"), and \_\_\_\_\_ whose principal place of business is \_\_\_\_\_ (hereinafter called "Contractor").

District and Contractor agree as follows:

**1. Description of Work.** Contractor shall perform all work specified in the Contract documents for:

**VALVE REPLACEMENT – PHASE III  
CONTRACT NO. 5019-F**

(hereinafter called "project")

**2. Provisions of Labor and Materials.** Contractor shall provide all labor, materials, tools, equipment, and personnel to perform the work specified by the Contract Documents.

**3. Contract Documents.** The Contract Documents consist of this Contract, Notice Inviting Bids, Contractor's Proposal, Bidder's Bond, Noncollusion Declaration, Designation of Subcontractors, Technical Ability and Experience, Bidder's Statement Re Debarment, Escrow Agreement, Release Form, the Plans and Specifications, the General Provisions, addendum(s) to said Plans and Specifications and General Provisions, and all proper amendments and changes made thereto in accordance with this Contract or the Plans and Specifications, and all bonds for the project; all of which are incorporated herein by this reference.

Contractor, her/his subcontractors, and materials suppliers shall provide and install the work as indicated, specified, and implied by the Contract Documents. Any items of work not indicated or specified, but which are essential to the completion of the work, shall be provided at the Contractor's expense to fulfill the intent of said documents. In all instances through the life of the Contract, the District will be the interpreter of the intent of the Contract Documents, and the District's decision relative to said intent will be final and binding. Failure of the Contractor to apprise subcontractors and materials suppliers of this condition of the Contract will not relieve responsibility of compliance.

**4. Payment.** For all compensation for Contractor's performance of work under this Contract, District shall make payment to the Contractor per section 9-3 PAYMENT of the General Provisions section of this contract. The Engineer will close the estimate of work completed for progress payments on the last working day of each month. The District shall withhold retention as required by Public Contract Code Section 9203.

**5. Independent Investigation.** Contractor has made an independent investigation of the jobsite, the soil conditions at the jobsite, and all other conditions that might affect the progress of the work and is aware of those conditions. The Contract price includes payment for all work that may be done by Contractor, whether anticipated or not, in order to overcome underground conditions. Any information that may have been furnished to Contractor by District about



underground conditions or other job conditions is for Contractor's convenience only, and District does not warrant that the conditions are as thus indicated. Contractor is satisfied with all job conditions, including underground conditions and has not relied on information furnished by District.

**6. Hazardous Waste or Other Unusual Conditions.** If the contract involves digging trenches or other excavations that extend deeper than four feet below the surface Contractor shall promptly, and before the following conditions are disturbed, notify District, in writing, of any:

**A. Hazardous Waste.** Material that Contractor believes may be material that is hazardous waste, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

**B. Differing Conditions.** Subsurface or latent physical conditions at the site differing from those indicated.

**C. Unknown Physical Conditions.** Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

District shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in contractor's costs of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in this contract.

In the event that a dispute arises between District and Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the contractor's cost of, or time required for, performance of any part of the work, contractor shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

**7. Immigration Reform and Control Act.** Contractor certifies it is aware of the requirements of the Immigration Reform and Control Act of 1986 (8 USC sections 1101-1525) and has complied and will comply with these requirements, including, but not limited to, verifying the eligibility for employment of all agents, employees, subcontractors, and consultants that are included in this Contract.

**8. Prevailing Wage.** Pursuant to the California Labor Code, the director of the Department of Industrial Relations has determined the general prevailing rate of per diem wages in accordance with California Labor Code, section 1773 and a copy of a schedule of said general prevailing wage rates is on file in the office of the City Engineer and is incorporated by reference herein. Pursuant to California Labor Code, section 1775, Contractor shall pay prevailing wages. Contractor shall post copies of all applicable prevailing wages on the job site. Contractor shall comply with California Labor Code, section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require all subcontractors to comply with Section 1776.





**9. Indemnification.** Contractor shall assume the defense of, pay all expenses of defense, and indemnify and hold harmless the District, and its officers and employees, from all claims, loss, damage, injury and liability of every kind, nature and description, directly or indirectly arising from or in connection with the performance of the Contract or work; or from any failure or alleged failure of Contractor to comply with any applicable law, rules or regulations including those relating to safety and health; and from any and all claims, loss, damages, injury and liability, howsoever the same may be caused, resulting directly or indirectly from the nature of the work covered by the Contract, except for loss or damage caused by the sole or active negligence or willful misconduct of the District. The expenses of defense include all costs and expenses including attorneys' fees for litigation, arbitration, or other dispute resolution method.

Contractor shall also defend and indemnify the District against any challenges to the award of the contract to Contractor, and Contractor will pay all costs, including defense costs for the District. Defense costs include the cost of separate counsel for District, if District requests separate counsel.

Contractor shall also defend and indemnify the District against any challenges to the award of the contract to Contractor, arising in whole or in part from alleged inaccuracies or misrepresentation by the Contractor, whether intentional or otherwise, and Contractor will pay all costs, including defense costs for the District. Defense costs include the cost of separate counsel for District, if District requests separate counsel.

**10. Insurance.** Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his or her agents, representatives, employees or subcontractors. Said insurance shall meet the City of Carlsbad's policy for insurance as stated in City Council Policy # 70.

**(A) Coverages and Limits** Contractor shall maintain the types of coverages and minimum limits indicated herein:

a. **Commercial General Liability (GLC) Insurance:** Insurance written on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than **\$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

b. **Business Automobile Liability Insurance:** \$2,000,000 combined single limit per accident for bodily injury and property damage. In addition, the auto policy must cover any vehicle used in the performance of the contract, used onsite or offsite, whether owned, non-owned or hired, and whether scheduled or non-scheduled.

c. **Workers' Compensation and Employers' Liability Insurance:** Workers' compensation limits as required by the Labor Code of the State of California and Employers' Liability limits of \$1,000,000 per incident. Workers' compensation offered by the State Compensation Insurance Fund is acceptable to the District.

**(B) Additional Provisions:** Contractor shall ensure that the policies of insurance required under this agreement with the exception of Workers' Compensation and Business Automobile Liability Insurance contain, or are endorsed to contain, the following provisions.



a. The District, its officials, employees and volunteers are to be covered as additional insured as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the contractor; premises owned, leased, hired or borrowed by the contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, its officials, employees or volunteers. All additional insured endorsements must be evidenced using separate documents attached to the certificate of insurance; one for each company affording general liability, and employers' liability coverage.

b. The Contractor's insurance coverage shall be primary insurance as respects the District, its officials, employees and volunteers. Any insurance or self-insurance maintained by the District, its officials, employees or volunteers shall be in excess of the contractor's insurance and shall not contribute with it.

c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officials, employees or volunteers.

d. Coverage shall state that the contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

**(C) Notice of Cancellation.** Each insurance policy required by this agreement shall be endorsed to state that coverage shall not be nonrenewed, suspended, voided, canceled, or reduced in coverage or limits except after ten (10) days' prior written notice has been sent to the District by certified mail, return receipt requested.

**(D) Deductibles and Self-Insured Retention (S.I.R.) Levels.** Any deductibles or self-insured retention levels must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retention levels as respects the District, its officials and employees; or the contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

**(E) Waiver of Subrogation.** All policies of insurance required under this agreement shall contain a waiver of all rights of subrogation the insurer may have or may acquire against the District or any of its officials or employees.

**(F) Subcontractors.** Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. Coverages for subcontractors shall be subject to all of the requirements stated herein.

**(G) Acceptability of Insurers.** Insurance is to be placed with insurers that have a rating in Best's Key Rating Guide of at least A-:VII. Insurers must also be authorized to transact the business of insurance by the State of California Insurance Commissioner as admitted carriers as evidenced by a listing in the official publication of the Department of Insurance of the State of California and/or under the standards specified by City Council Policy # 70.

**(H) Verification of Coverage.** Contractor shall furnish the District with certificates of insurance and original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be in forms



approved by the District and are to be received and approved by the District before the Contract is executed by the District.

**(I) Cost of Insurance.** The Cost of all insurance required under this agreement shall be included in the Contractor's bid.

**11. Claims and Lawsuits.** All claims by Contractor shall be resolved in accordance with Public Contract Code section 9204, which is incorporated by reference. A copy of Section 9204 is included in Section 3 of the General Provisions. In addition, all claims by Contractor for \$375,000 or less shall be resolved in accordance with the provisions in the Public Contract Code, Division 2, Part 3, Chapter 1, Article 1.5 (commencing with section 20104) which are incorporated by reference. A copy of Article 1.5 is included in Section 3 of the General Provisions. In the event of a conflict between Section 9204 and Article 1.5, Section 9204 shall apply. Notwithstanding the provisions of this section of the contract, all claims shall comply with the Government Tort Claim Act (section 900 et seq., of the California Government Code) for any claim or cause of action for money or damages prior to filing any lawsuit for breach of this agreement.

**(A) Assertion of Claims.** Contractor hereby agrees that any contract claim submitted to the District must be asserted as part of the contract process as set forth in this agreement and not in anticipation of litigation or in conjunction with litigation.

**(B) False Claims.** Contractor acknowledges that if a false claim is submitted to the District, it may be considered fraud and the Contractor may be subject to criminal prosecution.

**(C) Government Code.** Contractor acknowledges that California Government Code sections 12650 et seq., the False Claims Act, provides for civil penalties where a person knowingly submits a false claim to a public entity. These provisions include false claims made with deliberate ignorance of the false information or in reckless disregard of the truth or falsity of the information.

**(D) Penalty Recovery.** If the Carlsbad Municipal Water District seeks to recover penalties pursuant to the False Claims Act, it is entitled to recover its litigation costs, including attorney's fees.

**(E) Debarment for False Claims.** Contractor hereby acknowledges that the filing of a false claim may subject the Contractor to an administrative debarment proceeding wherein the Contractor may be prevented from further bidding on public contracts for a period of up to five years.

**(F) Carlsbad Municipal Code.** The provisions of Carlsbad Municipal Code sections 3.32.025, 3.32.026, 3.32.027 and 3.32.028 pertaining to false claims are incorporated herein by reference.

**(G) Debarment from Other Jurisdictions.** Contractor hereby acknowledges that debarment by another jurisdiction is grounds for the Board of Directors of the Carlsbad Municipal Water District of the City of Carlsbad to disqualify the Contractor or subcontractor from participating in future contract bidding.



**(H) Jurisdiction.** Contractor agrees and hereby stipulates that the proper venue and jurisdiction for resolution of any disputes between the parties arising out of this agreement is San Diego County, California.

**I have read and understand all provisions of Section 11 above.** \_\_\_\_\_ init \_\_\_\_\_ init

**12. Maintenance of Records.** Contractor shall maintain and make available at no cost to the District, upon request, records in accordance with sections 1776 and 1812 of Part 7, Chapter 1, Article 2, of the Labor Code. If the Contractor does not maintain the records at Contractor's principal place of business as specified above, Contractor shall so inform the District by certified letter accompanying the return of this Contract. Contractor shall notify the District by certified mail of any change of address of such records.

**13. Labor Code Provisions.** The provisions of Part 7, Chapter 1, commencing with section 1720 of the Labor Code are incorporated herein by reference.

**14. Security.** Securities in the form of cash, cashier's check, or certified check may be substituted for any monies withheld by the District to secure performance of this contract for any obligation established by this contract. Any other security that is mutually agreed to by the Contractor and the District may be substituted for monies withheld to ensure performance under this Contract.

**15. Unfair Business Practices.** In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.

**16. Provisions Required by Law Deemed Inserted.** Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and included herein, and if, through mistake or otherwise, any such provision is not inserted, or is not correctly inserted, then upon application of either party, the Contract shall forthwith be physically amended to make such insertion or correction.

**17. Additional Provisions.** Any additional provisions of this agreement are set forth in the "General Provisions" or "Supplemental Provisions" attached hereto and made a part hereof.

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**NOTARIAL ACKNOWLEDGMENT OF EXECUTION BY ALL SIGNATORIES MUST BE ATTACHED**

**(CORPORATE SEAL)**

CONTRACTOR:

CARLSBAD MUNICIPAL WATER DISTRICT  
a municipal corporation of the State of  
California

\_\_\_\_\_

(name of Contractor)

By: \_\_\_\_\_

(sign here)

\_\_\_\_\_

(print name and title)

By: \_\_\_\_\_

(sign here)

\_\_\_\_\_

(print name and title)

By: \_\_\_\_\_

KEITH BLACKBURN, President

ATTEST:

\_\_\_\_\_

SHERRY FREISINGER, Secretary

President or vice-president **and** secretary or assistant secretary must sign for corporations. If only one officer signs, the corporation must attach a resolution certified by the secretary or assistant secretary under the corporate seal empowering that officer to bind the corporation.

APPROVED AS TO FORM:

CINDIE K. McMAHON  
General Counsel

By: \_\_\_\_\_

Assistant General Counsel



## LABOR AND MATERIALS BOND

WHEREAS, the Board of Directors of the Carlsbad Municipal Water District located in the State of California has awarded to \_\_\_\_\_ (hereinafter designated as the "Principal"), a Contract for:

### VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

in the City of Carlsbad, in strict conformity with the drawings and specifications, and other Contract Documents now on file in the Office of the Secretary of the Carlsbad Municipal Water District and all of which are incorporated herein by this reference.

WHEREAS, Principal has executed or is about to execute said Contract and the terms thereof require the furnishing of a bond, providing that if Principal or any of their subcontractors shall fail to pay for any materials, provisions, provender or other supplies or teams used in, upon or about the performance of the work agreed to be done, or for any work or labor done thereon of any kind, the Surety on this bond will pay the same to the extent hereinafter set forth.

NOW, THEREFORE, WE, \_\_\_\_\_, as Principal, (hereinafter designated as the "Contractor"), and \_\_\_\_\_ as Surety, are held firmly bound unto the Carlsbad Municipal Water District in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), said sum being an amount equal to: One hundred percent (100%) of the total amount payable under the terms of the contract by the Carlsbad Municipal Water District, and for which payment well and truly to be made we bind ourselves, our heirs, executors and administrators, successors, or assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Contractor or his/her subcontractors fail to pay for any materials, provisions, provender, supplies, or teams used in, upon, for, or about the performance of the work contracted to be done, or for any other work or labor thereon of any kind, consistent with California Civil Code section 9100, or for amounts due under the Unemployment Insurance Code with respect to the work or labor performed under this Contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the contractor and subcontractors pursuant to section 13020 of the Unemployment Insurance Code with respect to the work and labor, that the Surety will pay for the same, and, also, in case suit is brought upon the bond, reasonable attorney's fees, to be fixed by the court consistent with California Civil Code section 9554.

This bond shall inure to the benefit of any of the persons named in California Civil Code section 9100, so as to give a right of action to those persons or their assigns in any suit brought upon the bond.

Surety stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed hereunder or the specifications accompanying the same shall affect its obligations on this bond, and it does hereby waive notice



of any change, extension of time, alterations or addition to the terms of the contract or to the work or to the specifications.

In the event that Contractor is an individual, it is agreed that the death of any such Contractor shall not exonerate the Surety from its obligations under this bond.

SIGNED AND SEALED, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_(SEAL)  
(Principal)

\_\_\_\_\_(SEAL)  
(Surety)

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name & Title)

\_\_\_\_\_  
(Print Name & Title)

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY – ATTACH ATTORNEY-IN-FACT CERTIFICATE)

APPROVED AS TO FORM:

CINDIE K. McMAHON  
General Counsel

By: \_\_\_\_\_  
Assistant General Counsel



# FAITHFUL PERFORMANCE/WARRANTY BOND

WHEREAS, the Board of Directors of the Carlsbad Municipal Water District located in the State of California has awarded to \_\_\_\_\_ (hereinafter designated as the "Principal"), a Contract for:

## VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

in the City of Carlsbad, in strict conformity with the contract, the drawings and specifications, and other Contract Documents now on file in the Office of the Secretary of the Carlsbad Municipal Water District, all of which are incorporated herein by this reference.

WHEREAS, Principal has executed or is about to execute said Contract and the terms thereof require the furnishing of a bond for the faithful performance and warranty of said Contract;

NOW, THEREFORE, WE, \_\_\_\_\_, as Principal, (hereinafter designated as the "Contractor"), and \_\_\_\_\_ as Surety, are held firmly bound unto the Carlsbad Municipal Water District in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_),

said sum being an amount equal to: One hundred percent (100%) of the total amount payable under the terms of the contract by the Carlsbad Municipal Water District, and for which payment well and truly to be made we bind ourselves, our heirs, executors and administrators, successors, or assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the above bounden Contractor, their heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the Contract and any alteration thereof made as therein provided on their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Carlsbad Municipal Water District, its officers, employees and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by the District in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

Surety stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed there under or the specifications accompanying the same shall affect its obligations on this bond, and it does hereby waive notice of any change, extension of time, alterations or addition to the terms of the contract or to the work or to the specifications.





In the event that Contractor is an individual, it is agreed that the death of any such Contractor shall not exonerate the Surety from its obligations under this bond.

SIGNED AND SEALED, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
(Principal) (SEAL)

\_\_\_\_\_  
(Surety) (SEAL)

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name & Title)

\_\_\_\_\_  
(Print Name & Title)

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY – ATTACH ATTORNEY-IN-FACT CERTIFICATE)

APPROVED AS TO FORM:

CINDIE K. McMAHON  
General Counsel

By: \_\_\_\_\_  
Assistant General Counsel



# OPTIONAL ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between the Carlsbad Municipal Water District whose address is 5950 El Camino Real, Carlsbad, California, 92008, hereinafter called "District" and \_\_\_\_\_ whose address is \_\_\_\_\_ hereinafter called "Contractor" and \_\_\_\_\_ whose address is \_\_\_\_\_ hereinafter called "Escrow Agent."

For the consideration hereinafter set forth, the District, Contractor and Escrow Agent agree as follows:

1. Pursuant to section 22300 of the Public Contract Code of the State of California, the Contractor has the option to deposit securities with the Escrow Agent as a substitute for retention earnings required to be withheld by the District pursuant to the Construction Contract entered into between the City and Contractor for

### VALVE REPLACEMENT – PHASE III CONTRACT NO. 5019-F

in the amount of \_\_\_\_\_ dated \_\_\_\_\_ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the District shall make payments of the retention earnings directly to the Escrow Agent. When the Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the District within 10 days of the deposit. The market value of the securities at the time of the substitution shall be a least equal to the cash amount then required to be withheld as retention under the terms of the contract between the District and Contractor. Securities shall be held in the name of the District and shall designate the Contractor as the beneficial owner.

2. The District shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

3. When the District makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until such time as the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the District pays the Escrow Agent directly.

4. The Contractor shall be responsible for paying all fees for the expenses incurred by the Escrow Agent in administering the Escrow Account and all expenses of the District. These expenses and payment terms shall be determined by the District, Contractor and Escrow Agent.

5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the District.



6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from District to the Escrow Agent that District consents to the withdrawal of the amount sought to be withdrawn by Contractor.

7. The District shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the District of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the District.

8. Upon receipt of written notification from the City certifying that the Contract is final and complete and that the Contractor has complied with all requirements and procedures applicable to the Contract, the Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

9. The Escrow Agent shall rely on the written notifications from the District and the Contractor pursuant to sections (1) to (8), inclusive, of this agreement and the District and Contractor shall hold Escrow Agent harmless from Escrow Agent's release, conversion and disbursement of the securities and interest as set forth above.

10. The names of the persons who are authorized to give written notices or to receive written notice on behalf of the District and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

For District:

Title FINANCE DIRECTOR

Name \_\_\_\_\_

Signature \_\_\_\_\_

Address 1635 Faraday Avenue, Carlsbad, CA 92008

For Contractor:

Title \_\_\_\_\_

Name \_\_\_\_\_

Signature \_\_\_\_\_

Address \_\_\_\_\_

For Escrow Agent:

Title \_\_\_\_\_

Name \_\_\_\_\_

Signature \_\_\_\_\_

Address \_\_\_\_\_



At the time the Escrow Account is opened, the City and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

For District:

Title PRESIDENT

Name \_\_\_\_\_

Signature \_\_\_\_\_

Address 1200 Carlsbad Village Drive, Carlsbad, CA  
92008

For Contractor:

Title \_\_\_\_\_

Name \_\_\_\_\_

Signature \_\_\_\_\_

Address \_\_\_\_\_

For Escrow Agent:

Title \_\_\_\_\_

Name \_\_\_\_\_

Signature \_\_\_\_\_

Address \_\_\_\_\_



# GENERAL PROVISIONS FOR

## 2024-25 VALVE REPLACEMENT

### CONTRACT NO. 5019-F

#### CARLSBAD MUNICIPAL WATER DISTRICT

### BIDDERS ARE ADVISED THAT THIS SECTION REPLACES PART 1, GENERAL PROVISIONS, OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

#### SECTION 1 -- TERMS, DEFINITIONS, ABBREVIATIONS, AND SYMBOLS

**1-1 TERMS.** Unless otherwise stated, the words *directed, required, permitted, ordered, instructed, designated, considered necessary, prescribed, approved, acceptable, satisfactory,* or words of like meaning, refer to actions, expressions, and prerogatives of the Engineer.

**1-1.1 Reference to Drawings.** Where words “shown”, “indicated”, “detailed”, “noted”, “scheduled”, or words of similar import are used, it shall be understood that reference is made to the plans accompanying these provisions, unless stated otherwise.

**1-1.2 Directions.** Where words “directed”, “designated”, “selected”, or words of similar import are used, it shall be understood that the direction, designation or selection of the Engineer is intended, unless stated otherwise. The word “required” and words of similar import shall be understood to mean “as required to properly complete the work as required and as approved by the Engineer,” unless stated otherwise.

**1-1.3 Equals and Approvals.** Where the words “equal”, “approved equal”, “equivalent”, and such words of similar import are used, it shall be understood such words are followed by the expression “in the opinion of the Engineer”, unless otherwise stated. Where the words “approved”, “approval”, “acceptance”, or words of similar import are used, it shall be understood that the approval, acceptance, or similar import of the Engineer is intended.

**1-1.4 Perform.** The word “perform” shall be understood to mean that the Contractor, at its expense, shall perform all operations, labor, tools and equipment, and further, including the furnishing and installing of materials that are indicated, specified or required to mean that the Contractor, at its expense, shall furnish and install the work, complete and in-place and ready to use, including furnishing of necessary labor, materials, tools, equipment, and transportation.

**1-2 DEFINITIONS.** The following words, or groups of words, shall be exclusively defined by the definitions assigned to them herein.



**Addendum** – Written or graphic instrument issued prior to the opening of Bids which clarifies, corrects, or changes the bidding or Contract Documents. The term Addendum shall include bulletins and all other types of written notices issued to potential bidders prior to opening of Bids.

**Agency** – the Carlsbad Municipal Water District.

**Agreement** – See Contract.

**Assessment Act Contract** – A Contract financed by special assessments authorized under a State Act or procedural ordinance of a City or County.

**Average Sound Level** – The level, in decibels, of the mean-square A-weighted sound pressure during a stated time period, with reference to the square of the standard reference sound pressure of 20 micropascals. The "average sound level" is equivalent to the industry standard Leq. See Equivalent Continuous Sound Level.

**Base** – A layer of specified material of planned thickness placed immediately below the pavement or surfacing.

**Bid** – The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work.

**Bidder** – Any individual, firm, partnership, corporation, or combination thereof, submitting a Bid for the Work, acting directly or through a duly authorized representative.

**Board** – The officer or body constituting the awarding authority of the Agency, the Board of Directors of Carlsbad Municipal Water District.

**Bond** – Bid, performance, and payment bond or other instrument of security.

**Caltrans** – The State of California, Department of Transportation.

**Cash Contract** – A Contract financed by means other than special assessments.

**Certificate of Compliance** – A written document signed and submitted by a supplier or manufacturer that certifies that the material or assembled material supplied to the Work site conforms to the requirements of the Contract Documents.

**Change Order** – A written order to the Contractor signed by the Agency directing an addition, deletion, or revision in the Work, or an adjustment in the Contract Price or the Contract time issued after the effective date of the Contract. A Change Order may or may not also be signed by the Contractor.

**Code** – The terms *Government Code*, *Labor Code*, etc., refer to codes of the State of California.

**Construction Manager**– the Project Inspector's immediate supervisor and first level of appeal for informal dispute resolution.

**Contract** – The written agreement between the Agency and the Contractor covering the Work.



**Contract Documents** – Including but not limited to; the Contract, any Addendum (which pertain to the Contract Documents), Notice Inviting Bids, Instructions to Bidders; Bid (including documentation accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Contract, the Bonds, the General Provisions, permits, the Technical Specifications, the Supplemental Provisions, the Plans, Standard Plans, Standard Specifications, Reference Specifications, and all Modifications issued after the execution of the Contract.

**Contractor** – The individual, partnership, corporation, joint venture, or other legal entity having a Contract with the Agency to perform the Work. In the case of work being done under permit issued by the Agency, the permittee shall be constructed to be the Contractor. The term “prime contractor” shall mean Contractor.

**Contract Time** - The number of Working Days to complete the Work as specified in the Contract Documents.

**Contract Price** – The total amount of money for which the Contract is awarded.

**Contract Unit Price** – The amount stated in the Bid for a single unit of an item of work.

**County Sealer** – The Sealer of Weights and Measures of the county in which the Contract is let.

**Critical Path** – In the construction schedule, the sequence of activities that represents the longest path through the Project network of activities and the shortest possible Project duration.

**Days** – Days shall mean consecutive calendar’s days unless otherwise specified.

**Decibel** – A unit for measuring the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals.

**Defective Work** - Work that does not conform to the requirements of the Contract Documents.

**Deputy City Engineer** – The Engineering Manager of the Construction Management & Inspection Department, the Construction Manager’s immediate supervisor and the Engineer’s designated representative. The Deputy City Engineer is the second level of appeal for informal dispute resolution.

**Dispute Board** – Persons designated by the City Manager of the City of Carlsbad or Executive Manager of the Carlsbad Municipal Water District to hear and advise the City Manager or Executive Manager on claims submitted by the Contractor. The City Manager for the City of Carlsbad or the Executive Manager for the Carlsbad Municipal Water District is the last appeal level for informal dispute resolution.

**Disputed Work** – Work in which the Agency and the Contractor are in disagreement.

**Electrolier** – Street light assembly complete, including foundation, standard, luminaire arm, luminaire, etc.



**Engineer** – The City Engineer of the City of Carlsbad or his/her approved representative. The Engineer is the third level of appeal for informal dispute resolution.

**Engineer of Record/Design Engineer** – A registered professional engineer licensed in the State of California who is qualified to act as an agent of a project owner or to prepare plans for facilities to be accepted by the City of Carlsbad or the Carlsbad Municipal Water District. The term includes persons licensed in the State of California as Civil Engineers or Structural Engineers

**Equivalent Continuous Sound Level (Leq)** – The average sound level which, over a given period of time, has the same total energy as the fluctuating noise and is also known as the time-average sound level.

**Extra Work** – New or unforeseen work not covered by a Contract Unit Price or Stipulated Unit Price.

**Float** – The number of days by which an activity in the construction schedule may be delayed from either its earliest start date or earliest completion date without extending the Contract Time (total float). Total float belongs to the Project and to any Party to accommodate changes in the Work or to mitigate the effect of events which may delay completion.

**Holiday** – Holidays and the days observed are listed below. If a holiday falls on a Saturday, the holiday is observed on the preceding Friday. If the holiday falls on a Sunday, it is observed the following Monday. Unless specified otherwise in the Contract Documents or authorized by the Engineer, do not work on holidays.

New Year's Day	January 1
Martin Luther King Day	3rd Monday in January
Presidents' Day	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	1st Monday in September
Indigenous People's Day	2nd Monday in October
Veteran's Day	November 11
Thanksgiving Day	4th Thursday in November
Thanksgiving Friday	Day after Thanksgiving
Christmas Day	December 25

**House Connection Sewer** – A sewer, within a public street or right-of-way, proposed to connect any parcel, lot, or part of a lot with a mainline sewer.

**House Sewer** – A sewer, wholly within private property, proposed to connect any building to a house connection sewer.

**Luminaire** – The lamp housing including the optical and socket assemblies (and ballast if so specified).

**Luminaire Arm** – The structural member, bracket, or mast arm, which, mounted on the standard, supports the luminaire.





**Minor Bid Item** – a single contract item constituting less than 10 percent (10%) of the original Contract Price bid.

**Modification** – Includes Change Orders and Supplemental Agreements. A Modification may only be used after the effective date of the Contract.

**Moratorium** – A period of time during the contract time in which no construction activity is allowed and such period of time is not included in the contract time as a working day.

**Night Work** – See Working Night.

**Notice of Award** – The written notice by the Agency to the successful Bidder stating that upon compliance by it with the required conditions, the Agency will execute the Contract.

**Notice to Proceed** – A written notice given by the Agency to the Contractor fixing the date on which the Contract time will start.

**Own Organization** - When used in Sections 2-3.1 and 2-3.2 – Employees of the Contractor who are hired, directed, supervised and paid by the Contractor to accomplish the completion of the Work. Further, such employees have their employment taxes, State disability insurance payments, State and Federal income taxes paid and administered, as applicable, by the Contractor. Further, “own organization” means construction equipment that the Contractor owns or leases and uses to accomplish the Work. Equipment that is owner operated or leased equipment with an operator is not part of the Contractor's Own Organization and will not be included for the purpose of compliance with Sections 2-3.1 and 2-3.2.

**Person** – Any individual, firm, association, partnership, corporation, trust, joint venture, or other legal entity.

**Plans** – The drawings, profiles, cross sections, working drawings, and supplemental drawings, or reproductions thereof, approved by the Engineer, which show the location, character, dimensions, or details of the Work.

**Private Contract** – Work subject to Agency inspection, control, and approval, involving private funds, not administered by the Agency.

**Project Inspector** – the Engineer’s designated representative for inspection, contract administration and first level for informal dispute resolution.

**Proposal** – See Bid.

**Reference Specifications** – Those bulletins, standards, rules, methods of analysis or test, codes, and specifications of other agencies, engineering societies, or industrial associations referred to in the Contract Documents. These refer to the latest edition, including amendments in effect and published at the time of advertising the project or issuing the permit, unless specifically referred to by edition, volume, or date.

**Roadway** – The portion of a street reserved for vehicular use.

**Service Connection** – Service connections are all or any portion of the conduit, cable, or duct, including meter, between a utility distribution line and an individual consumer.



**Sewer** – Any conduit intended for the reception and transfer of sewage and fluid industrial waste.

**Shop Drawings** – Drawings showing the details of manufactured or assembled products proposed to be incorporated into the Work.

**Sound Level** – The weighted sound pressure level obtained using a sound level meter and frequency weighting network as provided in the American National Standards Institute (ANSI) specifications for sound level meters. "Sound level" means the same as "noise level."

**Special Provisions** – Revisions to the Standard Specifications setting forth conditions and requirements peculiar to the Work.

**Specifications** – General Provisions, Standard Specifications, Technical Specifications, Reference Specifications, Supplemental Provisions, and specifications in Supplemental Agreements between the Contractor and the Board.

**Standard** – The shaft or pole used to support street lighting luminaire, traffic signal heads, mast arms, etc.

**Standard Plans** – Details of standard structures, devices, or instructions referred to on the Plans or in Specifications by title or number.

**Standard Specifications** – The Standard Specifications for Public Works Construction (SSPWC), the "Greenbook".

**State** – State of California.

**Stipulated Unit Price** – Unit prices established by the Agency in the Contract Documents.

**Storm Drain** – Any conduit and appurtenances intended for the reception and transfer of storm water.

**Street** – Any road, highway, parkway, freeway, alley, walk, or way.

**Subbase** – A layer of specified material of planned thickness between a base and the subgrade.

**Subcontractor** – An individual, firm, or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work.

**Subgrade** – For roadways, that portion of the roadbed on which pavement, surfacing, base, subbase, or a layer of other material is placed. For structures, the soil prepared to support a structure.

**Supervision** – Supervision, where used to indicate supervision by the Engineer, shall mean the performance of obligations, and the exercise of rights, specifically imposed upon and granted to the Agency in becoming a party to the Contract. Except as specifically stated herein, supervision by the Agency shall not mean active and direct superintendence of details of the Work.



**Supplemental Agreement** – A written amendment of the Contract Documents signed by both parties.

**Supplemental Provisions** – See Special Provisions.

**Surety** – Any individual, firm, or corporation, bound with and for the Contractor for the acceptable performance, execution, and completion of the Work, and for the satisfaction of all obligations incurred.

**Tonne** – Also referred to as “metric ton”. Represents a unit of measure in the International System of Units equal to 1,000 kilograms.

**Utility** – Tracks, overhead or underground wires, pipelines, conduits, ducts, or structures, sewers, or storm drains owned, operated, or maintained in or across a public right of way or easement.

**Work** – That which is proposed to be constructed or done under the Contract or permit, including the furnishing of all labor, materials, equipment, and services.

**Working Drawings** – Drawings showing the details not shown on the Plans which are required to be designed by the Contractor.

**Working Night** – A period of night-time work, allowed only on Sunday through Thursday, excluding holidays.

### 1-3 ABBREVIATIONS.

**1-3.1 General.** The abbreviation herein, together with others in general use, are applicable to these Standard Specifications and to project Plans or other Contract Documents.

All abbreviations and symbols used on Plans for structural steel construction shall conform to those given by the “Manual of Steel Construction” published by the American Institute of Steel Construction, Inc.

#### 1-3.2 Common Usage

<u>Abbreviation</u>	<u>Word or Words</u>	<u>Abbreviation</u>	<u>Word or Words</u>
ABAN .....	Abandon	BM.....	Benchmark
ABAND.....	Abandoned	BVC.....	Beginning of vertical curve
ABS.....	Acrylonitrile – butadiene – styrene	B/W .....	Back of wall
AC .....	Asphalt Concrete	C/C.....	Center to center
ACP.....	Asbestos cement pipe	CAB.....	Crushed aggregate base
ACWS .....	Asphalt concrete wearing surface	CAL/OSHA.....	California Occupational Safety and Health Administration
ALT .....	Alternate	CalTrans .....	California Department of Transportation
APTS.....	Apartment and Apartments	CAP.....	Corrugated aluminum pipe
AMER STD .....	American Standard	CB.....	Catch Basin
AWG .....	American Wire Gage (nonferrous wire)	Cb .....	Curb
BC .....	Beginning of curve	CBP.....	Catch Basin Connection Pipe
BCR .....	Beginning of curb return	CBR .....	California Bearing Ratio
BDRY .....	Boundary	CCR .....	California Code of Regulations
BF .....	Bottom of footing	CCTV .....	Closed Circuit TV
BLDG .....	Building and Buildings		



CES..... Carlsbad Engineering Standards  
 CF ..... Curb face  
 CF ..... Cubic foot  
 C&G ..... Curb and gutter  
 CFR..... Code of Federal Regulations  
 CFS..... Cubic Feet per Second  
 CIP ..... Cast iron pipe  
 CIPP..... Cast-in place pipe  
 CL ..... Clearance, center line  
 CLF ..... Chain link fence  
 CMB ..... Crushed miscellaneous base  
 CMC ..... Cement mortar-coated  
 CML ..... Cement mortar-lined  
 CMWD ..... Carlsbad Municipal Water District  
 CO ..... Cleanout (Sewer)  
 COL ..... Column  
 COMM..... Commercial  
 CONC ..... Concrete  
 CONN ..... Connection  
 CONST ..... Construct, Construction  
 COORD..... Coordinate  
 CSP ..... Corrugated steel pipe  
 CSD ..... Carlsbad Standard Drawings  
 CTB ..... Cement treated base  
 CV ..... Check valve  
 CY ..... Cubic yard  
 D ..... Load of pipe  
 dB..... Decibels  
 DBL..... Double  
 DF ..... Douglas fir  
 DIA ..... Diameter  
 DIP ..... Ductile iron pipe  
 DL ..... Dead load  
 DR ..... Dimension Ratio  
 DT ..... Drain Tile  
 DWG ..... Drawing  
 DWY ..... Driveway  
 DWY APPR ..... Driveway approach  
 E ..... Electric  
 EA ..... Each  
 EC ..... End of curve  
 ECR ..... End of curb return  
 EF ..... Each face  
 EG ..... Edge of gutter  
 EGL ..... Energy grade line  
 El ..... Elevation  
 ELC ..... Electrolier lighting conduit  
 ELT ..... Extra long ton  
 ENGR..... Engineer, Engineering  
 EP ..... Edge of pavement  
 ESMT ..... Easement  
 ETB ..... Emulsion-treated base  
 EVC ..... End of vertical curb  
 EWA ..... Encina Wastewater Authority  
 EXC ..... Excavation  
 EXP JT ..... Expansion joint  
 EXST ..... Existing  
 F ..... Fahrenheit  
 F&C ..... Frame and cover  
 F&I ..... Furnish and install  
 FAB ..... Fabricate  
 FAS ..... Flashing arrow sign

FD ..... Floor drain  
 FDN..... Foundation  
 FED SPEC ..... Federal Specification  
 FG ..... Finished grade  
 FH ..... Fire hydrant  
 FL ..... Flow line  
 FS ..... Finished surface  
 FT-LB ..... Foot-pound  
 FTG ..... Footing  
 FW ..... Face of wall  
 G ..... Gas  
 GA ..... Gauge  
 GAL ..... Gallon and Gallons  
 GALV ..... Galvanized  
 GAR ..... Garage and Garages  
 GIP ..... Galvanized iron pipe  
 GL ..... Ground line or grade line  
 GM ..... Gas meter  
 GNV ..... Ground Not Visible  
 GP ..... Guy pole  
 GPM..... gallons per minute  
 GR ..... Grade  
 GRTG ..... Grating  
 GSP ..... Galvanized steel pipe  
 H ..... High or height  
 HB ..... Hose bib  
 HC ..... House connection  
 HDWL ..... Headwall  
 HGL ..... Hydraulic grade line  
 HORIZ ..... Horizontal  
 HP ..... Horsepower  
 HPG ..... High pressure gas  
 HPS ..... High pressure sodium (Light)  
 HYDR ..... Hydraulic  
 IE ..... Invert Elevation  
 ID ..... Inside diameter  
 INCL ..... Including  
 INSP ..... Inspection  
 INV ..... Invert  
 IP ..... Iron pipe  
 JC ..... Junction chamber  
 JCT ..... Junction  
 JS ..... Junction structure  
 JT ..... Joint  
 L ..... Length  
 LAB ..... Laboratory  
 LAT ..... Lateral  
 LB ..... Pound  
 LD ..... Local depression  
 LF ..... Linear foot  
 LH ..... Lamp hole  
 LL ..... Live load  
 LOL ..... Layout line  
 LONG ..... Longitudinal  
 LP ..... Lamp post  
 LPS ..... Low pressure sodium (Light)  
 LS ..... Lump sum  
 LTS ..... Lime treated soil  
 LWD ..... Leucadia Wastewater District  
 MAINT ..... Maintenance  
 MAX ..... Maximum  
 MCR ..... Middle of curb return  
 MEAS ..... Measure  
 MH ..... Manhole, maintenance hole



MIL SPEC .....	Military specification	(ratio of pipe O.D. to minimum wall thickness)
MISC .....	Miscellaneous	SDRSD .....
MOD .....	Modified, modify	San Diego Regional Standard Drawings
MON .....	Monument	SE .....
MSL..	Mean Sea Level (Reg. Standard Drawing M-12)	Sand Equivalent
MTBM .....	Microtunneling Boring Machine	SEC .....
MULT .....	Multiple	Section
MUTCD .....	Manual on Uniform Traffic Control Devices	SF .....
MVL .....	Mercury vapor light	Square foot
NCTD .....	North County Transit District	SFM .....
NRCP .....	Nonreinforced concrete pipe	Sewer Force Main
OBS .....	Obsolete	SI .....
OC .....	On center	International System of Units (Metric)
OD .....	Outside diameter	SPEC .....
OE .....	Outer edge	Specifications
OHE .....	Overhead Electric	SPPWC .....
OMWD .....	Olivenhain Municipal Water District	Standard Plans for
OPP .....	Opposite	Public Works Construction
ORIG .....	Original	SSPWC .....
PB .....	Pull box	Standard Specifications for
PC .....	Point of curvature	Public Works Construction
PCC .....	Portland cement concrete or point	ST HWY .....
	of compound curvature	State highway
PCVC .....	Point of compound vertical curve	STA .....
PE .....	Polyethylene	Station
PI .....	Point of intersection	STD .....
PL .....	Property line	Standard
PMB .....	Processed miscellaneous base	STR .....
POC .....	Point on curve	Straight
POT .....	Point on tangent	STR GR .....
PP .....	Power pole	Straight grade
PRC .....	Point of reverse curve	STRUC .....
PRVC .....	Point of reverse vertical curve	Structural/Structure
PSI .....	Pounds per square inch	SW .....
PT .....	Point of tangency	Sidewalk
PVC .....	Polyvinyl chloride	SWD .....
PVMT .....	Pavement	Sidewalk drain
PVT R/W .....	Private right-of-way	SY .....
Q .....	Rate of flow in cubic feet per second	Square yard
QUAD .....	Quadrangle, Quadrant	T .....
R .....	Radius	Telephone
R&O .....	Rock and oil	TAN .....
R/W .....	Right-of-way	Tangent
RA .....	Recycling agent	TC .....
RAC .....	Recycled asphalt concrete	Top of curb
RAP .....	Reclaimed asphalt pavement	TEL .....
RBAC .....	Rubberized asphalt concrete	Telephone
RC .....	Reinforced concrete	TF .....
RCB .....	Reinforced concrete box	Top of footing
RCE .....	Registered civil engineer	TOPO .....
RCP .....	Reinforced concrete pipe	Topography
RCV .....	Remote control valve	TR .....
REF .....	Reference	Tract
REINF .....	Reinforced or reinforcement	TRANS .....
RES .....	Reservoir	Transition
RGE .....	Registered geotechnical engineer	TS .....
ROW .....	Right-of-Way	Traffic signal or transition structure
RR .....	Railroad	TSC .....
RSE .....	Registered structural engineer	Traffic signal conduit
RTE .....	Registered traffic engineer	TSS .....
S .....	Sewer or Slope, as applicable	Traffic signal standard
SCCP .....	Steel cylinder concrete pipe	TW .....
SD .....	Storm drain	Top of wall
SDNR .....	San Diego Northern Railway	TYP .....
SDR .....	Standard thermoplastic pipe dimension ratio	Typical
		UE .....
		Underground Electric
		USA .....
		Underground Service Alert
		VAR .....
		Varies, Variable
		VB .....
		Valve box
		VC .....
		Vertical curve
		VCP .....
		Vitrified clay pipe
		VERT .....
		Vertical
		VOL .....
		Volume
		VWD .....
		Vallecitos Water District
		W .....
		Water, Wider or Width, as applicable
		WATCH .....
		Work Area Traffic Control Handbook
		WI .....
		Wrought iron
		WM .....
		Water meter
		WPJ .....
		Weakened plane joint
		XCONN .....
		Cross connection
		XSEC .....
		Cross section



### 1-3.3 Institutions.

#### Abbreviation

#### Word or Words

AASHTO .....	American Association of State Highway and Transportation Officials
ACI.....	American Concrete Institute
AISC .....	American Institute of Steel Construction
ANSI .....	American National Standards Institute
AREA.....	American Railway Engineering Association
ASME .....	American Society of Mechanical Engineers
ASQ.....	American Society for Quality
ASTM.....	American Society for Testing and Materials
AWPA .....	American Wood Preservers Association
AWS .....	American Welding Society
AWWA .....	American Water Works Association
EEI.....	Edison Electric Institute
EIA.....	Electronic Industries Alliance
EPA .....	Environmental Protection Agency
ETL.....	Electrical Testing Laboratories
FCC .....	Federal Communications Commission
FHWA .....	Federal Highway Administration
GRI.....	Geosynthetic Research Institute
IEEE .....	Institute of Electrical and Electronics Engineers
IMSA.....	International Municipal Signal Association
ISSA .....	International Slurry Surfacing Association
ITE.....	Institute of Transportation Engineers
NCHRP.....	National Cooperative Highway Research Program
NEMA .....	National Electrical Manufacturers Association
NSF .....	National Science Foundation
OSHA .....	Occupational Safety and Health Administration
PPI.....	Plastics Pipe Institute
RUS .....	Rural Utilities Service
SAE .....	Society of Automotive Engineers
SSPC.....	Society for Protective Coatings
UL.....	Underwriters' Laboratories Inc.

### 1-4 UNITS OF MEASURE.

**1-4.1 General.** U.S. Standard Measures, also called U.S. Customary System, are the principal measurement system in these specifications. However, certain material specifications and test requirements contained herein use SI units specifically and conversions to U.S. Standard Measures may or may not have been included in these circumstances. When U.S. Standard Measures are not included in parenthesis, then the SI units shall control. S.I. units and U.S. Standard Measures in parenthesis may or may not be exactly equivalent.

Reference is also made to ASTM E 380 for definitions of various units of the SI system and a more extensive set of conversion factors.



## 1-4.2 Units of Measure and Their Abbreviations.

<u>U.S. Customary Unit</u> <u>(Abbreviations)</u>	(Equal To)	<u>SI Unit</u> <u>(Abbreviations)</u>
1 mil (=0.001 in) .....		25.4 micrometer ( $\mu\text{m}$ )
1 inch (in) .....		25.4 millimeter (mm)
1 inch (in) .....		2.54 centimeter (cm)
1 foot (ft) .....		0.3048 meter (m)
1 yard (yd) .....		0.9144 meter (m)
1 mile (mi) .....		1.6093 kilometer (km)
1 square foot ( $\text{ft}^2$ ) .....		0.0929 square meter ( $\text{m}^2$ )
1 square yard ( $\text{yd}^2$ ) .....		0.8361 square meter ( $\text{m}^2$ )
1 cubic foot ( $\text{ft}^3$ ) .....		0.0283 cubic meter ( $\text{m}^3$ )
1 cubic yard ( $\text{yd}^3$ ) .....		0.7646 cubic meter ( $\text{m}^3$ )
1 acre .....		0.4047 hectare (ha)
1 U.S. gallon (gal) .....		3.7854 Liter (L)
1 fluid ounce (fl. oz.) .....		29.5735 milliliter (mL)
1 pound mass (lb) (avoirdupois) .....		0.4536 kilogram (kg)
1 ounce mass (oz) .....		0.02835 kilogram (kg)
1 Ton (=2000 lb avoirdupois) .....		0.9072 Tonne (= 907 kg)
1 Poise .....		0.1 pascal · second ( $\text{Pa} \cdot \text{s}$ )
1 centistoke (cs) .....		1 square millimeters per second ( $\text{mm}^2/\text{s}$ )
1 pound force (lbf) .....		4.4482 Newton (N)
1 pounds per square inch (psi) .....		6.8948 Kilopascal (kPa)
1 pound force per foot (lbf/ft) .....		1.4594 Newton per meter (N/m)
1 foot-pound force (ft-lbf) .....		1.3558 Joules (J)
1 foot-pound force per second ([ft-lbf]/s) .....		1.3558 Watt (W)
1 part per million (ppm) .....		1 milligram/liter (mg/L)

### Temperature Units and Abbreviations

Degree Fahrenheit ( $^{\circ}\text{F}$ ): .....	Degree Celsius ( $^{\circ}\text{C}$ ):
$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$ .....	$^{\circ}\text{C} = (^{\circ}\text{F} - 32)/1.8$

### SI Units (abbreviation) Commonly Used in Both Systems

- 1 Ampere (A)
- 1 Volt (V)
- 1 Candela (cd)
- 1 Lumen (lm)
- 1 second (s)

### Common Metric Prefixes

kilo (k) .....	$10^3$
centi (c) .....	$10^{-2}$
milli (m) .....	$10^{-3}$
micro ( $\mu$ ) .....	$10^{-6}$
nano (n) .....	$10^{-9}$
pico (p) .....	$10^{-12}$

## 1-5 SYMBOLS.

$\Delta$	Delta, the central angle or angle between tangents
$\sphericalangle$	Angle
%	Percent
'	Feet or minutes
"	Inches or seconds
1	Number
/	per or (between words)
$^{\circ}$	Degree
PL	Property line
CL	Centerline
SL	Survey line or station line



## SECTION 2 – SCOPE AND CONTROL OF WORK

**2-1 AWARD AND EXECUTION OF CONTRACT.** Award and execution of Contract will be as provided for in the Specifications, Instruction to Bidders, or Notice Inviting Bids.

**2-2 ASSIGNMENT.** No Contract or portion thereof may be assigned without consent of the board, except that the contractor may assign money due or which will accrue to it under the contract. If given written notice, such assignment will be recognized by the Board to the extent permitted by law. Any assignment of money shall be subject to all proper withholdings in favor of the Agency and to all deductions provided for in the Contract. All money withheld, whether assigned or not, shall be subject to being used by the Agency for completion of the work, should the Contractor be in default.

### **2-3 SUBCONTRACTS.**

**2-3.1 General.** Each Bidder shall comply with the Chapter of the Public Contract Code including Sections 4100 through 4113. The following excerpts or summaries of some of the requirements of this Chapter are included below for information:

The Bidder shall set forth in the Bid, as provided in 4104:

“(a) The name and location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvements, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor’s total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the prime contractor’s total bid or ten thousand dollars (\$10,000), whichever is greater.”

“(b) The portion of the work which will be done by each such subcontractor under this act. The prime contractor shall list only one subcontractor for each such portion as is defined by the prime contractor in his bid.”

If the Contractor fails to specify a Subcontractor or specifies more than one Subcontractor for the same portion of the work to be performed under the Contract (in excess of one-half of 1 percent of the Contractor’s total Bid), the Contractor shall be qualified to perform that portion itself, and shall perform that portion itself, except as otherwise provided in the Code.

As provided in Section 4107, no Contractor whose Bid is accepted shall substitute any person as Subcontractor in place of the Subcontractor listed in the original Bid, except for causes and by procedures established in Section 4107.5. This section provides procedures to correct a clerical error in the listing of a Subcontractor.

Section 4110 provides that a Contractor violating any of the provisions of the Chapter violates the Contract and the Board may exercise the option either to cancel the Contract or assess the Contractor a penalty in an amount of not more than 10 percent of the subcontract involved, after a public hearing.





Should the Contractor fail to adhere to the provisions requiring the Contractor to complete **50 percent** of the contract price with its own organization, the Agency may at its sole discretion elect to cancel the contract or deduct an amount equal to 10 percent of the value of the work performed in excess of **50 percent** of the contract price by other than the Contractor's own organization. The Board shall be the sole body for determination of a violation of these provisions. In any proceedings under this section, the prime contractor shall be entitled to a public hearing before the Board and shall be notified ten (10) days in advance of the time and location of said hearing. The determination of the Board shall be final.

**2-3.2 Additional Responsibility.** The Contractor shall give personal attention to the fulfillment of the Contract and shall keep the Work under its control.

The Contractor shall perform, with its own organization, Contract work amounting to at least 50 percent of the Contract Price except that any designated "Specialty Items" may be performed by subcontract, and the amount of any such "Specialty Items" so performed may be deducted from the Contract Price before computing the amount required to be performed by the Contractor with its own organization. "Specialty Items" will be identified by the Agency in the Bid or Proposal. Where an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

Before the work of any Subcontractor is started, the Contractor shall submit to the Engineer for approval a written statement showing the work to be subcontracted giving the name and business of each Subcontractor and description and value of each portion of the work to be so subcontracted.

**2-3.3 Status of Subcontractors.** Subcontractors shall be considered employees of the Contractor, and the Contractor shall be responsible for their work.

**2-4 CONTRACT BONDS.** Before execution of the Contract, the Bidder shall file surety bonds with the Agency to be approved by the Board in the amounts and for the purposes noted below. Bonds issued by a surety, who is authorized to issue bonds in California, and whose bonding limitation shown in said circular is sufficient to provide bonds in the amount required by the Contract shall be deemed to be approved unless specifically rejected by the Agency. Bonds from all other sureties shall be accompanied by all of the documents enumerated in Code of Civil Procedure 995.660 (a). The Bidder shall pay all bond premiums, costs, and incidentals.

Before execution of the Contract, the Bidder shall file surety bonds with the Agency to be approved by the Board in the amounts and for the purposes noted below. Bonds issued by a surety, who is authorized to issue bonds in California, and whose bonding limitation shown in said circular is sufficient to provide bonds in the amount required by the Contract shall be deemed to be approved unless specifically rejected by the Agency. Bonds from all other sureties shall be accompanied by all of the documents enumerated in Code of Civil Procedure 995.660 (a). The Bidder shall pay all bond premiums, costs, and incidentals.

Each bond shall incorporate, by reference, the Contract and be signed by both the Bidder and Surety and the signature of the authorized agent of the Surety shall be notarized.



The Contractor shall provide a faithful performance/warranty bond and payment bond (labor and materials bond) for this contract. The faithful performance/warranty bond shall be in a sum not less than one hundred percent of the total amount payable by the terms of this contract. The Contractor shall provide bonds to secure payment of laborers and materials suppliers in a sum not less than one hundred percent of the total amount payable by the terms of this contract.

Both bonds shall extend in full force and effect and be retained by the Agency during this project until they are released according to the provisions of this section.

The faithful performance/warranty bond will be reduced to 25 percent of the original amount 30 days after recordation of the Notice of Completion and will remain in full force and effect for the one-year warranty period and until all warranty repairs are completed to the satisfaction of the Engineer. The bonds to secure payment of laborers and materials suppliers shall be released six months plus 30 days after recordation of the Notice of Completion if all claims have been paid.

All bonds are to be placed with a surety insurance carrier admitted and authorized to transact the business of insurance in California and whose assets exceed their liabilities in an amount equal to or in excess of the amount of the bond. The bonds are to contain the following documents:

1. An original, or a certified copy, of the un-revoked appointment, power of attorney, by laws, or other instrument entitling or authorizing the person who executed the bond to do so.
2. A certified copy of the certificate of authority of the insurer issued by the insurance commissioner.

If the bid is accepted, the Agency may require a financial statement of the assets and liabilities of the insurer at the end of the quarter calendar year prior to 30 days next preceding the date of the execution of the bond. The financial statement shall be made by an officer's certificate as defined in Section 173 of the Corporations Code. In the case of a foreign insurer, the financial statement may be verified by the oath of the principal officer or manager residing within the United States.

Should any bond become insufficient, the Contractor shall renew the bond within 10 days after receiving notice from the Agency.

Should any Surety at any time be unsatisfactory to the Board, notice will be given the Contractor to that effect. No further payments shall be deemed due or will be made under the contract until a new Surety shall qualify and be accepted by the Board.

Changes in the Work or extensions of time, made pursuant to the Contract, shall in no way release the Contractor or Surety from its obligations. Notice of such changes or extensions shall be waived by the Surety.

## **2-5 PLANS AND SPECIFICATIONS.**

**2-5.1 General.** The Contractor shall keep at the Work site a copy of the Plans and Specifications, to which the Engineer shall have access at all times.

The specifications for the work include the General Provisions, Supplemental Provisions, Project Technical Specifications, Carlsbad Engineering Standards (CES), Standard Specifications for Public Works Construction (SSPWC) and the latest supplements thereto,



2021 edition as published by the "Greenbook" Committee of Public Works Standards, Inc., hereinafter designated "SSPWC", as amended and excepting Part 1 thereof.

The Plans shall consist of the construction drawings, Drawing No. 545-1 issued under this Contract.

The Standard Drawings consist of the latest edition of the San Diego Area Regional Standard Drawings, hereinafter designated SDRSD, as issued by the San Diego County Department of Public Works, together with the most recent editions of the City of Carlsbad Engineering Standards and Carlsbad Standard Drawings, as issued by the City of Carlsbad and the Carlsbad Municipal Water District, hereinafter designated as CES and CSD, respectively. Modified standard drawings, if applicable, are enclosed in the appendices to these General Provisions.

The Plans, Specifications, and other Contract Documents shall govern the Work. The Contract Documents are intended to be complementary and cooperative. Anything specified in the Specifications and not shown on the Plans or shown on the Plans and not specified in the Specifications, shall be as though shown on or specified in both.

The Plans shall be supplemented by such working drawings and shop drawings as are necessary to adequately control the Work.

The Contractor shall ascertain the existence of any conditions affecting the cost of the Work through a reasonable examination of the Work site prior to submitting the Bid.

Existing improvements visible at the Work site, for which no specific disposition is made on the Plans, but which interfere with the completion of the Work, shall be removed and disposed of by the Contractor.

The Contractor shall, upon discovering any error or omission in the Plans or Specifications, immediately call it to the attention of the Engineer.

## **2-5.2 Precedence of Contract Documents.**

If there is a conflict in the Contract Documents, the document highest in precedence shall control. The precedence shall be the most recent edition of the following documents listed in order of highest to lowest precedence:

1. Permits from other agencies as may be required by law.
2. Change orders, whichever occurs last.
3. Contract addenda, whichever occurs last.
4. Contract.
5. Carlsbad General and Supplemental Provisions.
6. Carlsbad Engineering Standards.
7. Technical Specifications.
8. Plans.
9. Standards Plans.
  - a. City of Carlsbad Standard Drawings.
  - b. Carlsbad Municipal Water District Standard Drawings.
  - c. City of Carlsbad modifications to the San Diego Area Regional Standard Drawings.
  - d. San Diego Area Regional Standard Drawings.



- e. Traffic Signal Design Guidelines and Standards.
  - f. State of California Department of Transportation Standard Plans.
  - g. State of California Department of Transportation Standard Specifications.
  - h. California Manual on Uniform Traffic Control Devices (CA MUTCD).
- 10. Standard Specifications for Public Works Construction, as amended.
  - 11. Reference Specifications.
  - 12. Manufacturer's Installation Recommendations

Detail drawings shall take precedence over general drawings.

Detailed plans and plan views shall have precedence over general plans.

**2-5.2.1 Precedence of Caltrans Specifications.** Where Caltrans specifications are used to modify the SSPWC or are added to the SSPWC by the Contract Documents, the Caltrans specifications shall have precedence only in reference to the materials referred to in the Caltrans specifications. The documents listed in Section 2-5.2 above, in their order of precedence above, shall prevail over the Caltrans specifications in all other matters.

### **2-5.3 Submittals.**

**2-5.3.1 General.** Submittals shall be provided, at the Contractor's expense, as required in 2-5.3.2, 2-5.3.3 and 2-5.3.4, when required by the Plans or Special Provisions, or when requested by the Engineer.

One electronic (PDF) file shall be submitted. If revisions are required, the Engineer will return one redlined copy for resubmission. Upon acceptance, the Engineer will return one electronic copy to the Contractor.

Materials shall neither be furnished nor fabricated, nor shall any work for which submittals are required be performed, before the required submittals have been reviewed and accepted by the Engineer. Neither review nor acceptance of submittals by the Engineer shall relieve the Contractor from responsibility for errors, omissions, or deviations from the Contract Documents, unless such deviations were specifically called to the attention of the Engineer in the letter of transmittal. The Contractor shall be responsible for the correctness of the submittals.

The Contractor shall allow a minimum of 20 working days for review of submittals unless otherwise specified in the Special Provisions. Each submittal shall be accompanied by a letter of transmittal.

Each submittal shall be consecutively numbered. Resubmittals shall be labeled with the number of the original submittal followed by an ascending alphabetical designation (e.g. The label '4-C' would indicate the third instance that the fourth submittal had been given to the Engineer). Each sheet of each submittal shall be consecutively numbered. Each set of shop drawings and submittals shall be accompanied by a letter of transmittal on the Contractor's letterhead. The letter of transmittal shall contain the following:

1. Project title and Agency contract number.
2. Number of complete sets.
3. Contractor's certification statement.
4. Specification section number(s) pertaining to material submitted for review.



5. Submittal number (Submittal numbers shall be consecutive including subsequent submittals for the same materials.)
6. Description of the contents of the submittal.
7. Identification of deviations from the Contract Documents.
8. The signature, printed name, title and company name of the Contractor's representative.

The Contractor shall subscribe to and shall place the following certification on all submittals:

"I hereby certify that the (equipment, material, procedure(s)) shown and marked in this submittal is that proposed to be incorporated into this Project, is in compliance with the Contract Documents, can be installed in the allocated spaces, and is submitted for approval."

or

"I hereby certify that the (equipment, material, procedure(s)) contained herein meet all requirements shown or specified in the Contract Documents, except for the following deviation(s): \_\_\_\_\_"

**2-5.3.2 Working Drawings.** Working drawings are drawings showing details not shown on the Plans which are required to be designed by the Contractor. Working drawings shall be of a size and scale to clearly show all necessary details.

Working drawings are required in the following sections:

**TABLE 2-5.3.2**

Item	Section Number	Title	Subject
1	7-8.6.1	Dewatering	Excavation Dewatering
2	7-10.4.1	Safety Orders	Trench Shoring
3	7-10.4.8	Steel Plate Covers	Steel Plate Bridging
4	300-3.2	Cofferdams	Structure Excavation & Backfill
5	300-12.1	SWPPP	SWPPP
6	303-1.6.1	General	Falsework
7	303-1.7.1	General	Placing Reinforcement
8	303-3.1	General	Prestressed Concrete Construction
9	304-1.1.2	Falsework Plans	Structural Steel
10	307-1.1	General	Jacking Operations
11	307-2.1	General	Tunneling Operations
12	306-8	Microtunneling	Microtunneling Operations
13	601-2	Temporary Traffic Control Plan	Traffic Control

Working drawings listed above as Items 2, 3, 4, 7, 8, 9, 10, 11, 12, and 13 shall be prepared by a Civil or Structural Engineer registered by the State of California.

**2-5.3.3 Shop Drawings.** Shop drawings are drawings showing details of manufactured or assembled products proposed to be incorporated into the Work. Shop drawings are required in the following sections and as specified in the Special Provisions:



**TABLE 2-5.3.3**

Item	Section Number	Title	Subject
1	207-2.5	Joints	Reinforced Concrete Pipe
2	207-8.4	Joints	Vitrified Clay Pipe
3	304-1.1.1	Shop Drawings	Structural Steel
4	304-2.1	General	Metal Hand Railings

**2-5.3.4 Supporting Information.** Supporting information is information required by the Specifications for the purposes of administration of the Contract, analysis for verification of conformance with the Specifications, the operation and maintenance of a manufactured product or system to be constructed as part of the Work, and other information as may be required by the Engineer. Three hard copies and one electronic (PDF) file of the supporting information shall be submitted to the Engineer prior to the start of the Work unless otherwise specified in the Special Provisions or directed by the Engineer. Supporting information for systems shall be bound together and include all manufactured items for the system. If resubmittal is not required, one red lined copy will be returned to the Contractor. Supporting information shall consist of the following and is required unless otherwise specified in the Special Provisions:

1. List of Subcontractors per 2-3.2.
2. List of Materials per 4-1.4.
3. Certifications per 4-1.5.
4. Construction Schedule per 6-1 and Work Plan per 6-2.2.
5. Confined Space Entry Program per 7-10.4.4.
6. Concrete mix designs per 201-1.1.
7. Asphalt concrete mix designs per 203-6.1.
8. Controller Cabinet Wiring Diagrams per 701-17.2.2
9. Data, including, but not limited to, catalog sheets, manufacturer's brochures, technical bulletins, specifications, diagrams, product samples, and other information necessary to describe a system, product or item. This information is required for irrigation systems, street lighting systems, and traffic signals, and may also be required for any product, manufactured item, or system.

**2-5.4 Record Drawings.** The Contractor shall maintain a complete "as-built" record set of blue-line prints, which shall be corrected in red ink daily and show every change from the original drawings and specifications and the exact "as-built" locations, sizes and kinds of equipment, underground piping, conduits, valves, and all other work not visible at surface grade. Prints for this purpose may be obtained from the Agency at cost. The official record drawing shall accurately reflect all changes and modifications to the original plan. The Contractor shall formally submit the final record drawing at the final walk-through meeting. At the direction of the Engineer, the Contractor shall correct and revise the Record Drawings to accurately reflect field conditions. Re-submittal of the Record Drawings shall be completed within ten (10) working days of the final walk-through meeting date and shall reflect any additional punch list items. Payment for the upkeep, revision, and submittal of the record drawings shall be included in the lump sum price for mobilization.

**2-5.5 Project Management and Document Control.** The Contractor shall utilize the Agency's standardized online project management and document control platform: Procore (www.procore.com). The Contractor is required to create a free, web-based, user account(s) and utilize web-based training / tutorials (as needed) to become familiar with the system. Unless the Engineer approves otherwise, the Contractor shall process all project documents through Procore. If unfamiliar or not otherwise trained with Procore, the Contractor and applicable team



members shall complete a free training certification course at the following site: <http://learn.procore.com/procore-certification-subcontractor>. The Contractor is responsible for obtaining their own technical support, as needed, either through online training or by contacting the Procore support team. The Contractor shall regularly check Procore and review updated documents as they are added. There will be no cost to the Contractor for the use of Procore.

The Contractor shall provide at least one on-site individual with mobile access to the Procore App to provide real-time access to current and updated drawings, specifications, RFIs, submittals, schedules, change orders, and other project documents as well as any deficient observations or punch list items. The Contractor shall post all communications addressed to the Engineer, and shall review and act on all communications addressed to the Contractor, in the Procore App. The use of Procore does not relieve the contractor of any other requirements as may be specified in the Contract Documents.

Procore for Windows, iOS: <https://apps.apple.com/us/app/procore-construction-management/id374930542>

Procore for Android: <https://play.google.com/store/apps/details?id=com.procore.activities>

**2-6 WORK TO BE DONE.** The Contractor shall perform all work necessary to complete the Contract in a satisfactory manner. Unless otherwise provided, the Contractor shall furnish all materials, equipment, tools, labor, and incidentals necessary to complete the Work.

**2-7 SUBSURFACE DATA.** All soil and test hole data, water table elevations, and soil analyses shown on the drawings or included in the Specifications apply only at the location of the test holes and to the depths indicated. Soil test reports for test holes, if conducted, are available for inspection at the office of the Engineer.

The Contractor may make independent investigations of the project site, including evaluation of the soil or groundwater conditions and/or the presence of rock, in order to characterize the subsurface conditions that may be encountered to the Contractor's satisfaction. The costs for such investigations shall be considered included in the bid price and no additional compensation will be made therefor.

The indicated elevation of the water table is that which existed on the date when test hole data was determined. It is the Contractor's responsibility to determine and allow for the elevation of groundwater at the time of project construction. A difference in elevation between groundwater shown in soil boring logs and groundwater actually encountered during construction will not be considered as a basis for extra work.

**2-8 RIGHT-OF-WAY.** Rights-of-way, easements, or rights-of-entry for the Work, when indicated on the Plans, will be provided by the Agency. Unless otherwise provided, the Contractor shall make arrangements, pay for, and assume all responsibility for acquiring, using, and restoring additional work areas and removing and/or disposing of facilities temporarily required. The Contractor shall indemnify and hold the agency harmless from all claims for damages caused by such actions.

At the Contractor's option and in accordance with the following conditions, the Contractor may use a limited portion of CMWD property at the La Costa Low Reservoir yard located on Alga Road, south of Corte Casitas and north of Paseo Candelero, for construction staging at no cost to the Contractor. Use of the property for staging is conditioned upon the Contractor's strict



adherence to the conditions listed below. Non-compliance will result in the revocation of use of the property for staging, requiring the Contractor to immediately vacate and restore it to its original condition.

1. All provisions of the contract apply to the staging area. The Contractor's attention is directed to Section 7 RESPONSIBILITIES OF THE CONTRACTOR with specific reference to Section 7-8 PROJECT SITE MAINTENANCE as it applies to water pollution control. Contractor shall install and maintain BMPs at the staging area at all times.
2. Use of the staging area is strictly limited to normal work hours specified for this Contract. The Contractor may not enter the staging area, park vehicles and/or create a queue along the driveway entrance before or after normal work hours unless prior, written authorization is provided by the City Inspector.
3. Prior to use of the staging area, the Contractor shall inspect the site with the City Inspector to confirm the use boundaries and shall include the property in the preconstruction survey per Section 7-9.1 prior to mobilization.
4. The Contractor shall secure and lock the gate upon leaving the yard.
5. All excavated material shall be hauled off-site. Materials, including excavation spoils, aggregate base, sand, rock, etc., shall be covered daily and secured with appropriate erosion and sediment control BMPs. All materials shall be removed from the storage area upon completion of the Project (i.e., no spreading/dispersing of material).
6. No concrete crushing or demolition activities are allowed at the yard.
7. The Contractor shall install temporary fencing around the staging area. At a minimum, the Contractor shall install orange snow fence and silt fence around the perimeter of the staging area.
8. Upon completion of the work, the Contractor shall demobilize and remove all materials and equipment from the staging area and restore the staging area to its pre-use condition as documented in the Contractor's preconstruction survey.
9. If project construction activity is inactive for a period of **60 days**, the Contractor shall remove all equipment and materials and restore the yard to the original condition within **15 days** of receipt of notice to vacate by the Engineer.

## **2-9 SURVEYING.**

**2-9.1 General.** The Contractor will perform and be responsible for the accuracy of surveying adequate for construction. The Contractor shall set and preserve construction survey stakes and marks for the duration of their usefulness. If any construction survey stakes are lost or disturbed and need to be replaced, such replacement shall be performed at the expense of the Contractor.

The Contractor shall notify the Engineer in writing at least 2 Working Days before survey services in connection with the laying out of any portion of the Work. The Contractor shall set all stakes for line and grade. Tolerances for construction staking shall conform with Chapter 12, Construction Surveys of the Caltrans Surveys Manual. Surveying to determine the boundaries of the public right-of-way or easements shall conform with Chapter 10, Right-of-Way Surveys.

Unless otherwise specified in the Special Provisions, stakes will be set and stationed for alignments for pipelines (sewers, storm drains, potable water, recycled water) and their appurtenances, curbs, headers, structures, rough grade, finish grade and right-of-way or easement boundaries. A corresponding cut or fill to finished grade (or flowline) will be indicated on a grade sheet.





**2-9.2 Permanent Survey Markers.** The Contractor shall not cover or disturb permanent survey monuments or benchmarks without the consent of the Engineer. Where the Engineer concurs, in writing, with the Contractor that protecting an existing monument in place is impractical, the Contractor shall employ a licensed land surveyor or a registered civil engineer authorized to practice land surveying within the State of California, hereinafter Surveyor, to establish the location of the monument before it is disturbed. The Contractor shall have the monument replaced by the Surveyor no later than thirty (30) days after construction at the site of the replacement is completed. The Surveyor shall file corner record(s) as required by §§ 8772 and 8773, et seq. of the California Business and Professions Code.

The Contractor shall have a Record of Survey prepared by the Surveyor and file it in conformance with §8700 - 8805 of the State of California Business and Professions Code when the Surveyor performs any surveying that such map is required under §8762 of the State of California Business and Professions Code and whenever the Surveyor shall establish, set or construct any permanent survey monument. SDRS Drawing No. M-10 type monuments, bolts, spikes, leaded tacks and nails (when set in concrete), iron pipes, reinforcing steel and all monuments and marks that are at, or accessory to, property corners and street centerlines are permanent survey monuments. The Record of Survey shall show all monuments set, control monuments used, the basis of bearings and all other data needed to determine the procedure of survey and the degree of accuracy attained by the field surveying including the unadjusted ratio of closure. The unadjusted ratio of closure shall not exceed 1 part in 40,000. The Record of Survey shall show the location and justification of location of all permanent monuments set and their relation to the street right-of-way. Record(s) of Survey(s) shall be submitted for the Engineer's review and approval before submittal to the County Surveyor and before submittal to the County Recorder.

When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the Contractor shall adjust the monument frame and cover to the new grade within 7 days of paving unless the Engineer shall approve otherwise. Monument frames and covers shall be protected during street sealing or painting projects or be cleaned to the satisfaction of the Engineer.

**2-9.3 Line and Grade.** All work shall conform to the lines, elevations, and grades shown on the Plans.

Three consecutive points set on the same slope shall be used together so that any variation from a straight grade can be detected. Any such variation shall be reported to the Engineer. In the absence of such report, the Contractor shall be responsible for any error in the grade of the Work.

Grades for underground conduits will be set at the surface of the ground. The Contractor shall transfer them to the bottom of the trench.

**2-9.4 Payment for Survey.** Payment for survey work shall be included in the bid items requiring the survey work and no additional payment will be made. Extension of unit prices for extra work shall include full compensation for attendant survey work and no additional payment will be made. Payment for the replacement of disturbed monuments and the filing of records of survey and/or corner records, including filing fees, shall be incidental to the work necessitating the disturbance of said monuments and no additional payment will be made.



**2-10 AUTHORITY OF BOARD AND ENGINEER.** The Board has the final authority in all matters affecting the Work. Within the scope of the Contract, the Engineer has the authority to enforce compliance with the Plans and Specifications. The Contractor shall promptly comply with instructions from the Engineer or an authorized representative.

The decision of the Engineer is final and binding on all questions relating to: quantities; acceptability of material, equipment, or work; execution, progress or sequence of work; and interpretation of the Plans, Specifications, or other drawings. This shall be precedent to any payment under the Contract, unless otherwise ordered by the Board.

**2-10.1 Availability of Records.** The Contractor shall, at no charge to the Agency, provide copies of all records in the Contractor's or subcontractor's possession pertaining to the work that the Engineer may request.

**2-10.2 Audit and Inspection.** Contractor agrees to maintain and/or make available, to the Engineer, within San Diego County, accurate books and accounting records relative to all its activities and to contractually require all subcontractors to this Contract to do the same. The Engineer shall have the right to monitor, assess, and evaluate Contractor's and its subcontractors' performance pursuant to this Agreement, said monitoring, assessments, and evaluations to include, but not be limited to, audits, inspection of premises, reports, contracts, subcontracts and interviews of Contractor's staff and the staff of all subcontractors to this contract. At any time during normal business hours and as often as the Engineer may deem necessary, upon reasonable advance notice, Contractor shall make available to the Engineer for examination, all of its, and all subcontractors to this contract, records with respect to all matters covered by this Contract and will permit the Engineer to audit, examine, copy and make excerpts or transcripts from such data and records, and to make audits of all invoices, materials, payrolls, records of personnel, and other data relating to all matters covered by this Contract. However, any such activities shall be carried out in a manner so as to not unreasonably interfere with Contractor's ongoing business operations. Contractor and all subcontractors to this contract shall maintain such data and records for as long as may be required by applicable laws and regulations.

**2-11 INSPECTION.** The Work is subject to inspection and approval by the Engineer. The Contractor shall notify the Engineer before noon of the working day before inspection is required. Work shall be done only in the presence of the Engineer, unless otherwise authorized. Any work done without proper inspection will be subject to rejection. The Engineer and any authorized representatives shall at all times have access to the Work during its construction at shops and yards as well as the project site. The Contractor shall provide every reasonable facility for ascertaining that the materials and workmanship are in accordance with these Specifications. Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all conditions of the Contract.



## SECTION 3 – CHANGES IN WORK

### 3-1 CHANGES REQUESTED BY THE CONTRACTOR.

**3-1.1 General.** Changes in the Plans and Specifications, requested in writing by the Contractor, which do not materially affect the Work and which are not detrimental to the Work or to the interests of the Agency, may be granted by the Engineer. Nothing herein shall be construed as granting a right to the Contractor to demand acceptance of such changes.

**3-1.2 Payment for Changes Requested by the Contractor.** If such changes are granted, they shall be made at a reduction in cost or no additional cost to the Agency.

### 3-2 CHANGES INITIATED BY THE AGENCY.

**3-2.1 General.** The Agency may change the Plans, Specifications, character of the work, or quantity of work provided the total arithmetic dollar value of all such changes, both additive and deductive, does not exceed 25 percent of the Contract Price. Should it become necessary to exceed this limitation, the change shall be by written Supplemental Agreement between the Contractor and Agency, unless both parties agree to proceed with the change by Change Order.

Change Orders shall be in writing and state the dollar value of the change or established method of payment, any adjustment in contract time of completion, and when negotiated prices are involved, shall provide for the Contractor's signature indicating acceptance.

#### 3-2.2 Payment.

**3-2.2.1 Contract Unit Prices.** If a change is ordered in an item of work covered by a Contract Unit Price, and such change does not involve substantial change in character of the work from that shown on the Plans or specified in the Specifications, then an adjustment in payment will be made. This adjustment will be based upon the increase or decrease in quantity and the Contract Unit Price.

If the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications varies from the Bid quantity by 50 percent or less, payment will be made at the Contract Unit Price. If the actual quantity of said item of work varies from the Bid quantity by more than 50 percent, payment will be made per Section 3-2.2.2 or 3-2.2.3 as appropriate.

If a change is ordered in an item of work covered by a Contract Unit Price, and such change does involve a substantial change in the character of the work from that shown on the Plans or specified in the Specifications, an adjustment in payment will be made per Section 3-2.4.

**3-2.2.2 Increases of More Than 50 Percent.** Should the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications, exceed the Bid quantity by more than 50 percent, payment for the quantity in excess of 150 percent of the Bid quantity will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the Agency, or at the option of the Engineer, on the basis of Extra Work per Section 3-3. The Extra Work per Section 3-3, basis of payment, shall not include fixed costs. Fixed costs shall be deemed to have been recovered by the Contractor through payment for 150 percent of the Bid quantity at the Contract Unit Price.



**3-2.2.3 Decreases of More Than 50 Percent.** Should the actual quantity of an item of work covered by a Contract Unit Price, and constructed in conformance with the Plans and Specifications, be less than 50 percent of the Bid quantity, an adjustment in payment will not be made unless so requested in writing by the Contractor. If the Contractor so requests, payment will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the Agency, or at the option of the Engineer, on the basis of Extra Work per Section 3-3; however, in no case will payment be less than would be made for the actual quantity at the Contract Unit Price nor more than would be made for 50 percent of the Bid quantity at the Contract Unit Price.

**3-2.3 Stipulated Unit Prices.** Stipulated Unit Prices are unit prices established by the Agency in the Contract Documents as distinguished from Contract Unit Prices submitted by the Contractor. Stipulated Unit Prices may be used for the adjustment of Contract changes when so specified in the Special Provisions.

**3-2.4 Agreed Prices.** Agreed Prices are prices for new or unforeseen work, or adjustments in Contract Unit Prices per Section 3-2.2, established by mutual agreement between the Contractor and the Agency. If mutual agreement cannot be reached, the Engineer may direct the Contractor to proceed on the basis of Extra Work in accordance per Section 3-3, except as otherwise specified in Sections 3-2.2.2 and 3-2.2.3.

**3.2.4.1 Schedule of Values.** Prior to construction, Contractor shall provide a schedule of values for all lump sum bid items that shall be used for the purpose of progress payments. The prices shall be valid for the purpose of change orders to the project.

**3.2.5 Eliminated Items.** Should any Bid item be eliminated in its entirety, payment will be made to the Contractor for its actual costs incurred in connection with the eliminated item prior to notification in writing from the Engineer so stating its elimination. If material conforming to the Plans and Specifications is ordered by the Contractor for use in the eliminated item prior to the date of notification of elimination by the Engineer, and if the order for that material cannot be canceled, payment will be made to the Contractor for the actual cost of the material. In this case, the material shall become the property of the Agency. Payment will be made to the Contractor for its actual costs for any further handling. If the material is returnable, the material shall be returned and payment will be made to the Contractor for the actual cost of charges made by the supplier for returning the material and for handling by the Contractor. Actual costs, as used herein, shall be computed on the basis of Extra Work per Section 3-3.

### **3-3 EXTRA WORK.**

**3-3.1 General.** New or unforeseen work will be classified as “extra work” when the Engineer determines that it is not covered by Contract Unit Prices or stipulated unit prices.

#### **3-3.2 Payment.**

**3-3.2.1 General.** When the price for the extra work cannot be agreed upon, the Agency will pay for the extra work based on the accumulation of costs as provided herein.



### 3-3.2.2 Basis for Establishing Costs.

(a) **Labor.** The costs of labor will be the actual cost for wages of workers performing the extra work at the time the extra work is done, plus employer payments of payroll taxes, workers compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs, resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements.

The use of a labor classification which would increase the extra work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental. The labor cost for foremen shall be proportioned to all of their assigned work and only that applicable to extra work will be paid.

Nondirect labor costs, including superintendence, shall be considered part of the markup of Section 3-3.2.3 (a).

(b) **Materials.** The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the job site in the quantities involved, plus sales tax, freight, and delivery.

The Agency reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary, for the progress of the Work. No markup shall be applied to any material provided by the Agency.

(c) **Tool and Equipment Rental.** No payment will be made for the use of tools which have a replacement value of \$200 or less.

Regardless of ownership, the rates and right-of-way delay factors to be used in determining rental and delay costs shall be the edition of the "Labor Surcharge and Equipment Rental Rates" published by Caltrans, current at the time of the actual use of the tool or equipment. The right-of-way delay factors therein shall be used as multipliers of the rental rates for determining the value of costs for delay to the Contractor and subcontractors, if any. The labor surcharge rates published therein are not a part of this contract.

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Necessary loading and transportation costs for equipment used on the extra work shall be included.

If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the Agency than holding it at the Work site, it shall be returned, unless the Contractor elects to keep it at the Work site, at no expense to the Agency.

All equipment shall be acceptable to the Engineer, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and approved modifications shall be used to classify equipment and it shall be powered by a unit of at least the minimum rating recommended by the manufacturer.



The reported rental time for equipment already at the Work site shall be the duration of its use on the extra work. This time begins when equipment is first put into actual operation on the extra work, plus the time required to move it from its previous site and back, or to a closer site.

(d) **Other Items.** The Agency may authorize other items which may be required on the extra work, including labor, services, material, and equipment. These items must be different in their nature from those required for the Work and be of a type not ordinarily available from the Contractor or Subcontractors.

Invoices covering all such items in detail shall be submitted with the request for payment.

(e) **Invoices.** Vendors' invoices for material, equipment rental and other expenditures shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, the Agency may establish the cost of the item involved at the lowest price which was current at the time of the report.

### 3-3.2.3 Markup.

(a) **Work by Contractor.** The following percentages shall be added to the Contractor's costs and shall constitute the markup for all overhead and profits:

1. Labor ..... 20
2. Materials ..... 15
3. Equipment Rental ..... 15
4. Other Items and Expenditures .. 15

To the sum of the costs and markups provided for in this section, 1 percent shall be added as compensation for bonding.

(b) **Work by Subcontractor.** When all or any part of the extra work is performed by a Subcontractor, the markup established in Section 3-3.2.3(a) shall be applied to the Subcontractor's actual cost of such work. A markup of 10 percent on the first \$5,000 of the subcontracted portion of the extra work and a markup of 5 percent on work added in excess of \$5,000 of the subcontracted portion of the extra work may be added by the Contractor.

**3-3.3 Daily Reports by Contractor.** When the price for the extra work cannot be agreed upon, the Contractor shall submit a daily report to the Engineer on forms approved by the Agency. Included are applicable delivery tickets, listing all labor, materials, and equipment involved for that day, and other services and expenditures when authorized. Payment for extra work will not be made until such time that the Contractor submits completed daily reports and all supporting documents to the Engineer. Failure to submit the daily report by the close of the next working day may waive any rights for that day. An attempt shall be made to reconcile the report daily, and it shall be signed by the Engineer and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by Subcontractors or others shall be submitted through the Contractor.

The report shall:

1. Show names of workers, classifications, and hours worked.
2. Describe and list quantities of materials used.



3. Show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable.
4. Describe other services and expenditures in such detail as the Agency may require.

**3-4 CHANGED CONDITIONS.** The Contractor shall promptly notify the Engineer of the following work site conditions (hereinafter called changed conditions), in writing, upon their discovery and before they are disturbed:

1. Subsurface or latent physical conditions differing materially from those represented in the Contract Documents;
2. Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character being performed; and
3. Material differing from that represented in the Contract which the Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

The Engineer will promptly investigate conditions which appear to be changed conditions. If the Engineer determines that conditions are changed conditions and they will materially affect performance time, the Contractor, upon submitting a written request, will be granted an extension of time subject to the provisions of 6-6.

If the Engineer determines that the conditions do not justify an adjustment in compensation, the Contractor will be notified in writing. This notice will also advise the Contractor of its obligation to notify the Engineer in writing if the Contractor disagrees.

The Contractor's failure to give notice of changed conditions promptly upon their discovery and before they are disturbed shall constitute a waiver of all claims in connection therewith.

The Contractor shall not be entitled to the payment of any additional compensation for any act, or failure to act, by the Engineer, including failure or refusal to issue a change order, or for the happening of any event, thing, occurrence, or other cause, unless the Contractor shall have first given the Engineer due written notice of potential claim as hereinafter specified. Compliance with this section shall not be required as a prerequisite to notice provisions in Section 6-7.3 Contract Time Accounting, nor to any claim that is based on differences in measurement or errors of computation as to contract quantities. The written notice of potential claim for changed conditions shall be submitted by the Contractor to the Engineer upon their discovery and prior to the time that the Contractor performs the work giving rise to the potential claim. The Contractor's failure to give written notice of potential claim for changed conditions to the agency upon their discovery and before they are disturbed shall constitute a waiver of all claims in connection therewith.

The Contractor shall provide the District with a written document containing a description of the particular circumstances giving rise to the potential claim, the reasons for which the Contractor believes additional compensation may be due and nature of any and all costs involved within 20 working days of the date of service of the written notice of potential claim for changed conditions. Verbal notifications are disallowed.

The potential claim shall include the following certification relative to the California False Claims Act, Government Code Sections 12650-12655:



“The undersigned certifies that the above statements are made in full cognizance of the California False Claims Act, Government Code Sections 12650-12655. The undersigned further understands and agrees that this potential claim, unless resolved, must be restated as a claim in response to the City’s proposed final estimate in order for it to be further considered.”

By: \_\_\_\_\_ Title: \_\_\_\_\_

Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

The Contractor’s estimate of costs may be updated when actual costs are known. The Contractor shall submit substantiation of its actual costs to the Engineer within 20 working days after the affected work is completed. Failure to do so shall be sufficient cause for denial of any claim subsequently filed on the basis of said notice of potential claim.

It is the intention of this section that differences between the parties arising under and by virtue of the contract be brought to the attention of the Engineer at the earliest possible time in order that such matters be settled, if possible, or other appropriate action promptly taken.

**3-5 DISPUTED WORK.** The Contractor shall give the Agency written notice of potential claim prior to commencing any disputed work. Failure to give said notice shall constitute a waiver of all claims in connection therewith. If the Contractor and the Agency are unable to reach agreement on disputed work, the Agency may direct the Contractor to proceed with the Work.

Prior to proceeding with dispute resolution pursuant to Public Contract Code provisions specified hereinafter, the contractor shall attempt to resolve all disputes informally through the following dispute resolution chain of command:

1. Project Inspector
2. Construction Manager
3. Deputy City Engineer
4. City Engineer
5. Executive Manager, Carlsbad Municipal Water District

The Contractor shall submit a complete report within 20 working days after completion of the disputed work stating its position on the claim, the contractual basis for the claim, along with all documentation supporting the costs and all other evidentiary materials. At each level of claim or appeal of claim the District will, within 10 working days of receipt of said claim or appeal of claim, review the Contractor’s report and respond with a position, request additional information or request that the Contractor meet and present its report. When additional information or a meeting is requested, the District will provide its position within 10 working days of receipt of said additional information or Contractor’s presentation of its report. The Contractor may appeal each level’s position up to the Executive Manager after which the Contractor may proceed under the provisions of the Public Contract Code.

The authority within the dispute resolution chain of command is limited to recommending a resolution to a claim to the Executive Manager. Actual approval of the claim is subject to the change order provisions in the contract.





All claims by the -Contractor shall be resolved in accordance with Public Contract Code section 9204, which is set forth below:

9204. (a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3) (A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is



disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.



(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2020, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2020, deletes or extends that date.

In addition, all claims by Contractor for \$375,000 or less shall be resolved in accordance with the procedures in the Public Contract Code, Division 2, Part 3, Chapter 1, Article 1.5 (commencing with Section 20104) which is set forth below.

## **ARTICLE 1.5 RESOLUTION OF CONSTRUCTION CLAIMS**

**20104.** (a)(1) This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and a local agency.

(2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.

(b)(1) "Public work" has the same meaning as in Sections 3100 and 3106 of the Civil Code, except that "public work" does not include any work or improvement contracted for by the state or the Regents of the University of California.

(2) "Claim" means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the



claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.

(c) The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.

(d) This article applies only to contracts entered into on or after January 1, 1991.

**20104.2.** For any claim subject to this article, the following requirements apply:

(a) The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

(b)(1) For claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.

(c)(1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.

(d) If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

(f) This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.



**20104.4.** The following procedures are established for all civil actions filed to resolve claims subject to this article:

(a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b)(1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil procedure) shall apply to any proceeding brought under the subdivision consistent with the rules pertaining to judicial arbitration.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

(c) The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

**20104.6.** (a) No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

(b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

Although not to be construed as proceeding under extra work provisions, the Contractor shall keep and furnish records of disputed work in accordance with Section 3-3.



## SECTION 4 – CONTROL OF MATERIALS

### 4-1 MATERIALS AND WORKMANSHIP.

**4-1.1. General.** All materials, parts, and equipment furnished by the Contractor in the Work shall be new, high grade, and free from defects. Quality of work shall be in accordance with the generally accepted standards. Material and work quality shall be subject to the Engineer's approval.

Materials and work quality not conforming to the requirements of the Specifications shall be considered defective and will be subject to rejection. Defective work or material, whether in place or not, shall be removed immediately from the site by the Contractor, at its expense, when so directed by the Engineer.

If the Contractor fails to replace any defective or damaged work or material after reasonable notice, the Engineer may cause such work or materials to be replaced. The replacement expense will be deducted from the amount to be paid to the Contractor.

Used or secondhand materials, parts, and equipment may be used only if permitted by the Specifications.

**4-1.2 Protection of Work and Materials.** The Contractor shall provide and maintain storage facilities and employ such measures as will preserve the specified quality and fitness of materials to be used in the Work. Stored materials shall be reasonably accessible for inspection. The Contractor shall also adequately protect new and existing work and all items of equipment for the duration of the Contract.

The Contractor shall not, without the Agency's consent, assign, sell, mortgage, hypothecate, or remove equipment or materials which have been installed or delivered and which may be necessary for the completion of the Contract.

### 4-1.3 Inspection Requirements.

**4-1.3.1 General.** Unless otherwise specified, inspection is required at the source for such typical materials and fabricated items as bituminous paving mixtures, structural concrete, metal fabrication, metal casting, welding, concrete pipe manufacture, protective coating application, and similar shop or plant operations.

Steel pipe in sizes less than 6 inches and vitrified clay and cast-iron pipe in all sizes are acceptable upon certification as to compliance with the Specifications, subject to sampling and testing by the Agency. Standard items of equipment such as electric motors, conveyors, elevators, plumbing fixtures, etc., are subject to inspection at the job site only. Special items of equipment such as designed electrical panel boards, large pumps, sewage plant equipment, etc., are subject to inspection at the source, normally only for performance testing. The Specifications may require inspection at the source for other items not typical of those listed in this section.

The Contractor shall provide the Engineer free and safe access to any and all parts of work at any time. Such free and safe access shall include means of safe access and egress, ventilation, lighting, shoring, dewatering and all elements pertaining to the safety of persons as contained in



the State of California, California Code of Regulations, Title 8, Industrial Relations, Chapter 4, Division of Industrial Safety, Subchapter 4, Construction Safety Orders and such other safety regulations as may apply. Contractor shall furnish Engineer with such information as may be necessary to keep the Engineer fully informed regarding progress and manner of work and character of materials. Inspection or testing of the whole or any portion of the work or materials incorporated in the work shall not relieve Contractor from any obligation to fulfill this Contract.

**4-1.3.2 Inspection of Materials Not Locally Produced.** When the Contractor intends to purchase materials, fabricated products, or equipment from sources located more than 50 miles outside the geographical limits of the Agency, an inspector or accredited testing laboratory (approved by the Engineer), shall be engaged by the Contractor at its expense, to inspect the materials, equipment or process. This approval shall be obtained before producing any material or equipment. The inspector or representative of the testing laboratory shall judge the materials by the requirements of the Plans and Specifications. The Contractor shall forward reports required by the Engineer. No material or equipment shall be shipped nor shall any processing, fabrication or treatment of such materials be done without proper inspection by the approved agent. Approval by said agent shall not relieve the Contractor of responsibility for complying with the Contract requirements.

**4-1.3.3 Inspection by the Agency.** The Agency will provide all inspection and testing laboratory services within 50 miles of the geographical limits of the Agency. For private contracts, all costs of inspection at the source, including salaries and mileage costs, shall be paid by the permittee.

**4-1.4 Test of Material.** Before incorporation in the Work, the Contractor shall submit samples of materials, as the Engineer may require, at no cost to the Agency. The Contractor, at its expense, shall deliver the materials for testing to the place and at the time designated by the Engineer. Unless otherwise provided, all initial testing will be performed under the direction of the Engineer, and at no expense to the Contractor. If the Contractor is to provide and pay for testing, it will be stated in the Specifications. For private contracts, the testing expense shall be borne by the permittee.

The Contractor shall notify the Engineer in writing, at least 15 days in advance, of its intention to use materials for which tests are specified, to allow sufficient time to perform the tests. The notice shall name the proposed supplier and source of material.

If the notice of intent to use is sent before the materials are available for testing or inspection or is sent so far in advance that the materials on hand at the time will not last but will be replaced by a new lot prior to use on the Work, it will be the Contractor's responsibility to renotify the Engineer when samples which are representative may be obtained.

Except as specified in these Provisions, the Agency will bear the cost of testing of locally produced materials and/or on-site workmanship where the results of such tests meet or exceed the requirements indicated in the Standard Specifications, Technical Specification, and any Supplemental Provisions. The cost of all other tests shall be borne by the Contractor.

At the option of the Engineer, the source of supply of each of the materials shall be approved by the Engineer before the delivery is started. All materials proposed for use may be inspected or tested at any time during their preparation and use. If, after incorporating such materials into the Work, it is found that sources of supply that have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall



furnish approved material from other approved sources. If any product proves unacceptable after improper storage, handling or for any other reason it shall be rejected, not incorporated into the work and shall be removed from the project site all at the Contractor's expense.

Compaction tests may be made by the Engineer and all costs for tests that meet or exceed the requirements of the specifications shall be borne by the Agency. Said tests may be made at any place along the work as deemed necessary by the Engineer. The costs of any retests made necessary by noncompliance with the specifications shall be borne by the Contractor.

**4-1.5 Certification.** The Engineer may waive materials testing requirements of the Specifications and accept the manufacturer's written certification that the materials to be supplied meet those requirements. Material test data may be required as part of the certification.

**4-1.6 Trade Names or Equals.** The Contractor may supply any of the materials specified or offer an equivalent. The Engineer shall determine whether the material offered is equivalent to that specified. Adequate time shall be allowed for the Engineer to make this determination.

Whenever any particular material, process, or equipment is indicated by patent, proprietary or brand name, or by name of manufacturer, such wording is used for the purpose of facilitating its description and shall be deemed to be followed by the words "**or equal**". A listing of materials is not intended to be comprehensive, or in order of preference. The Contractor may offer any material, process, or equipment considered to be equivalent to that indicated. The substantiation of offers shall be submitted as provided in the Contract Documents.

The Contractor shall, at its expense, furnish data concerning items offered by it as equivalent to those specified. The Contractor shall have the material tested as required by the Engineer to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, dimensions, service, and suitability are such that the item will fulfill its intended function.

Test methods shall be subject to the approval of the Engineer. Test results shall be reported promptly to the Engineer, who will evaluate the results and determine if the substitute item is equivalent. The Engineer's findings shall be final. Installation and use of a substitute item shall not be made until approved by the Engineer.

If a substitute offered by the Contractor is not found to be equal to the specified material, the Contractor shall furnish and install the specified material.

The specified Contract completion time shall not be affected by any circumstance developing from the provisions of this section.

The Contractor is responsible for the satisfactory performance of substituted items. If, in the sole opinion of the Engineer, the substitution is determined to be unsatisfactory in performance, appearance, durability, compatibility with associated items, availability of repair parts and suitability of application the Contractor shall remove the substituted item and replace it with the originally specified item at no cost to the Agency.

**4-1.7 Weighing and Metering Equipment.** All scales and metering equipment used for proportioning materials shall be inspected for accuracy and certified within the past 12 months by the State of California Bureau of Weights and Measures, by the County Director or Sealer of Weights and Measures, or by a scale mechanic registered with or licensed by the County.





The accuracy of the work of a scale service agency, except as stated herein, shall meet the standards of the California Business and Professions Code and the California Code of Regulations pertaining to weighing devices. A certificate of compliance shall be presented, prior to operation, to the Engineer for approval and shall be renewed whenever required by the Engineer at no cost to the Agency.

All scales shall be arranged so they may be read easily from the operator's platform or area. They shall indicate the true net weight without the application of any factor. The figures of the scales shall be clearly legible. Scales shall be accurate to within 1 percent when tested with the plant shut down. Weighing equipment shall be so insulated against vibration or moving of other operating equipment in the plant area that the error in weighing with the entire plant running will not exceed 2 percent for any setting nor 1.5 percent for any batch.

**4-1.8 Calibration of Testing Equipment.** Testing equipment, such as, but not limited to pressure gages, metering devices, hydraulic systems, force (load) measuring instruments, and strain-measuring devices shall be calibrated by a testing agency acceptable to the Engineer at intervals not to exceed 12 months and following repairs, modification, or relocation of the equipment. Calibration certificates shall be provided when requested by the Engineer.

**4-1.9 Construction Materials Dispute Resolution (Soils, Rock Materials, Concrete, Mortar and Related Materials, Masonry Materials, Bituminous Materials, Rock Products, and Modified Asphalts).** In the interest of safety and public value, whenever credible evidence arises to contradict the test values of materials, the Agency and the Contractor will initiate an immediate and cooperative investigation. Test values of materials are results of the materials' tests, as defined by these Specifications or by the special provisions, required to accept the Work. Credible evidence is process observations or test values gathered using industry accepted practices. A contradiction exists whenever test values or process observations of the same or similar materials are diverse enough such that the work acceptance or performance becomes suspect. The investigation shall allow access to all test results, procedures, and facilities relevant to the disputed work and consider all available information and, when necessary, gather new and additional information in an attempt to determine the validity, the cause, and if necessary, the remedy to the contradiction. If the cooperative investigation reaches any resolution mechanism acceptable to both the Agency and the Contractor, the contradiction shall be considered resolved and the cooperative investigation concluded. Whenever the cooperative investigation is unable to reach resolution, the investigation may then either conclude without resolution or continue by written notification of one party to the other requesting the implementation of a resolution process by committee. The continuance of the investigation shall be contingent upon recipient's agreement and acknowledged in writing within 3 calendar days after receiving a request. Without acknowledgement, the investigation shall conclude without resolution. The committee shall consist of three State of California Registered Civil Engineers. Within 7 calendar days after the written request notification, the Agency and the Contractor will each select one engineer. Within 14 calendar days of the written request notification, the two selected engineers will select a third engineer. The goal in selection of the third member is to complement the professional experience of the first two engineers. Should the two engineers fail to select the third engineer, the Agency and the Contractor shall each propose 2 engineers to be the third member within 21 calendar days after the written request notification. The first two engineers previously selected shall then select one of the four proposed engineers in a blind draw. The committee shall be a continuance of the cooperative investigation and will re-consider all available information and if necessary, gather new and additional information to determine the validity, the cause, and if necessary, the remedy to the



contradiction. The committee will focus upon the performance adequacy of the material(s) using standard engineering principles and practices and to ensure public value, the committee may provide engineering recommendations as necessary. Unless otherwise agreed, the committee will have 30 calendar days from its formation to complete their review and submit their findings. The final resolution of the committee shall be by majority opinion, in writing, stamped and signed. Should the final resolution not be unanimous, the dissenter may attach a written, stamped, and signed minority opinion. Once started, the resolution process by committee shall continue to full conclusion unless:

1. Within 7 days of the formation of the committee, the Agency and the Contractor reach an acceptable resolution mechanism; or
2. Within 14 days of the formation of the committee, the initiating party withdraws its written notification and agrees to bear all investigative related costs thus far incurred; or
3. At any point by the mutual agreement of the Agency and the Contractor. Unless otherwise agreed, the Contractor shall bear and maintain a record for all the investigative costs until resolution. Should the investigation discover assignable causes for the contradiction, the assignable party, the Agency or the Contractor, shall bear all costs associated with the investigation. Should assignable causes for the contradiction extended to both parties, the investigation will assign costs cooperatively with each party or when necessary, equally. Should the investigation substantiate a contradiction without assignable cause, the investigation will assign costs cooperatively with each party or when necessary, equally. Should the investigation be unable to substantiate a contradiction, the initiator of the investigation shall bear all investigative costs. All claim notification requirements of the contract pertaining to the contradiction shall be suspended until the investigation is concluded.

**4-2 MATERIALS TRANSPORTATION, HANDLING AND STORAGE.** The Contractor shall order, purchase, transport, coordinate delivery, accept delivery, confirm the quantity and quality received, prepare storage area(s), store, handle, protect, move, relocate, remove and dispose excess of all materials used to accomplish the Work. Materials shall be delivered to the site of the work only during working hours, as defined in Section 6-7.2, and shall be accompanied by bills of lading that shall clearly state for each delivery: the name of the Contractor as consignee, the project name and number, address of delivery and name of consignor and a description of the material(s) shipped. Prior to storage of any materials which have been shipped to or by the Contractor to any location within the Agency's boundaries the Contractor shall provide the Engineer a copy of lease agreements for each property where such materials are stored. The lease agreement shall clearly state the term of the lease, the description of materials allowed to be stored and shall provide for the removal of the materials and restoration of the storage site within the time allowed for the Work. All such storage shall conform to all laws and ordinances that may pertain to the materials stored and to preparation of the storage site and the location of the site on which the materials are stored. Loss, damage or deterioration of all stored materials shall be the Contractor's responsibility. Conformance to the requirements of this section, both within and outside the limits of work are a part of the Work. The Engineer shall have the right to verify the suitability of materials and their proper storage at any time during the Work.



## SECTION 5 – UTILITIES

**5-1 LOCATION.** The Agency and affected utility companies have, by a search of known records, endeavored to locate and indicate on the Plans, all utilities which are known to exist within the limits of the work. However, the accuracy and/or completeness of the nature, size and/or location of utilities indicated on the Plans is not guaranteed.

Where underground main distribution conduits such as water, gas, sewer, electric power, telephone, or cable television are shown on the Plans, the Contractor shall assume that every property parcel will be served by a service connection for each type of utility.

As provided in Section 4216 of the California Government Code, at least 2 working days prior to commencing any excavation, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California) and obtain an inquiry identification number.

The California Department of Transportation is not required by Section 4216 to become a member of the regional notification center. The Contractor shall contact it for location of its subsurface installations.

Prior to pipeline excavation, the Contractor shall determine, by potholing, the locations and depths of all utilities which are shown on the Contract Documents or have been marked by the utility owners and which may affect or be affected by its operations. The Contractor shall pothole all service connections, utilities that cross or parallel (within 5 feet) the proposed construction, and all connection points to existing utilities. The Contractor shall record the material size (outside diameter and wall thickness), type of pipe, joint type, and horizontal and vertical locations (bearing and slope) and submit the data and allow time for the Engineer's review in accordance with Section 2-5.3.

If no separate pay item is provided in the Contract for potholing, full compensation for such work shall be considered included in the bid item of work requiring the potholing and no separate payment shall be made therefor.

**5-2 PROTECTION.** The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the owner or order from the Agency. All valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities located as shown on the Plans or in accordance with Section 5-1, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at its expense.

Upon learning of the existence and location of any utility omitted from or shown incorrectly on the Plans, the Contractor shall immediately notify the Engineer in writing. When authorized by the Engineer, support or protection of the utility will be paid for as provided in Section 3-2.2.3 or 3-3.

The Contractor shall immediately notify the Engineer and the utility owner if any utility is disturbed or damaged. The Contractor shall bear the costs of repair or replacement of any utility damaged if located as noted in Section 5-1.

When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:



1. Furnish and install a 2-inch cushion of expansion joint material or other similar resilient material; or
2. Provide a sleeve or other opening which will result in a 2-inch minimum-clear annular space between the concrete and the utility; or
3. Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill or for structures which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer and arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system.

**5-3 REMOVAL.** Unless otherwise specified, the Contractor shall remove all interfering portions of utilities shown on the Plans or indicated in the Bid documents as "abandoned" or "to be abandoned in place". Before starting removal operations, the Contractor shall ascertain from the Agency whether the abandonment is complete, and the costs involved in the removal and disposal shall be included in the Bid for the items of work necessitating such removals.

The costs involved in the removal and disposal shall be considered incidental to the bid items of work necessitating such removals and no separate payment shall be made therefor, unless a bid item for "Removal" is specifically included in the bid proposal.

**5-4 RELOCATION.** When feasible, the owners responsible for utilities within the area affected by the Work will complete their necessary installations, relocations, repairs, or replacements before commencement of work by the Contractor. When the Plans or Specifications indicate that a utility installation is to be relocated, altered, or constructed by others, the Agency will conduct all negotiations with the owners and work will be done at no cost to the Contractor, except for manhole frame and cover sets to be brought to grade as directed and approved by the City. Utilities which are relocated in order to avoid interference shall be protected in their position and the cost of such protection shall be included in the Bid for the items of work necessitating such relocation.

After award of the Contract, portions of utilities which are found to interfere with the Work will be relocated, altered or reconstructed by the owners, or the Engineer may order changes in the Work to avoid interference. Such changes will be paid for in accordance with Section 3-2.

When the Plans or Specifications provide for the Contractor to alter, relocate, or reconstruct a utility, all costs for such work shall be included in the Bid for the items of work necessitating such work. Temporary or permanent relocation or alteration of utilities requested by the Contractor for its convenience shall be its responsibility and it shall make all arrangements and bear all costs.

The utility owner will relocate service connections as necessary within the limits of the Work or within temporary construction or slope easements. When directed by the Engineer, the Contractor shall arrange for the relocation of service connections as necessary between the meter and property line, or between a meter and the limits of temporary construction or slope easements. The relocation of such service connections will be paid for in accordance with provisions of Section 3-3. Payment will include the restoration of all existing improvements which may be affected thereby. The Contractor may agree with the owner of any utility to



disconnect and reconnect interfering service connections. The Agency will not be involved in any such agreement.

In conformance with Section 5-6 the Contractor shall coordinate the work with utility agencies and companies. Prior to the installation of any and all utility structures within the limits of work by any utility agency or company, or its contractor, the Contractor shall place all curb or curb and gutter that is a part of the work and adjacent to the location where such utility structures are shown on the plans and are noted as being located, relocated or are otherwise shown as installed by others. In order to minimize delays to the Contractor caused by the failure of other parties to relocate utilities that interfere with the construction, the Contractor, upon the Engineer's approval, may be permitted to temporarily omit the portion of work affected by the utility. If such temporary omission is approved by the Engineer, the Contractor shall place survey or other physical control markers sufficient to locate the curb or curb and gutter to the satisfaction of the utility agency or company. Such temporary omission shall be for the Contractor's convenience and no additional compensation will be allowed therefore or for additional work, materials or delay associated with the temporary omission. The portion thus omitted shall be constructed by the Contractor immediately following the relocation of the utility involved unless otherwise directed by the Engineer.

**5-5 DELAYS.** The Contractor shall notify the Engineer of its construction schedule insofar as it affects the protection, removal, or relocation of utilities. Said notification shall be included as a part of the construction schedule required in Section 6-1. The Contractor shall notify the Engineer in writing of any subsequent changes in the construction schedule which will affect the time available for protection, removal, or relocation of utilities.

The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, noted, and completed in accordance with Section 5-1.

The Contractor may be given an extension of time for unforeseen delays attributable to unreasonably protracted interference by utilities in performing work correctly shown on the Plans.

The Agency will assume responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities within the area affected by the Work if such utilities are not identified in the Contract Documents. The Contractor will not be assessed liquidated damages for any delay caused by failure of Agency to provide for the timely removal, relocation, or protection of such existing facilities.

If the Contractor sustains loss due to delays attributable to interferences, relocations, or alterations not covered by Section 5-1, which could not have been avoided by the judicious handling of forces, equipment, or plant, there shall be paid to the Contractor such amount as the Engineer may find to be fair and reasonable compensation for such part of the Contractor's actual loss as was unavoidable and the Contractor may be granted an extension of time.

**5-6 COOPERATION.** When necessary, the Contractor shall so conduct its operations as to permit access to the Work site and provide time for utility work to be accomplished during the progress of the Work. Close cooperation with CMWD Operations staff will be required prior to water utility shutdowns, construction, testing, and project completion.



## **SECTION 6 – PROSECUTION, PROGRESS, AND ACCEPTANCE OF THE WORK**

### **6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK.**

Except as otherwise provided herein and unless otherwise prohibited by permits from other agencies as may be required by law the Contractor shall begin work within ten (10) calendar days after receipt of the "Notice to Proceed".

**6-1.1 Pre-Construction Meeting.** After, or upon, notification of contract award, the Engineer will set the time and location for the Preconstruction Meeting. Attendance of the Contractor's management personnel responsible for the management, administration, and execution of the project is mandatory for the meeting to be convened. Failure of the Contractor to have the Contractor's responsible project personnel attend the Preconstruction Meeting will be grounds for default by Contractor per Section 6-4. No separate payment will be made for the Contractor's attendance at the meeting. The notice to proceed will only be issued on or after the completion of the preconstruction meeting.

**6-1.1.1 Baseline Construction Schedule.** The Contractor shall prepare the Baseline Construction Schedule as a Critical Path Method (CPM) Schedule in the precedence diagram method (activity-on-node) format and submit the schedule in accordance with 2-5.3. The schedule shall:

- A. Be prepared using a commercially available, Windows compatible software program, "Suretrak" by Primavera or "Project" by Microsoft Corporation or approved equal.
- B. Be prepared in hard copy (paper) and electronic (Adobe PDF) format and free of file locking, encryption or any other protocol that would impede full access to the data and labeled with the project name and number, the Contractor's name and the date of preparation.
- C. Begin with the date projected for the Notice to Proceed and conclude with the date of final completion conforming with the Contract time.
- D. Depict a time-scaled network diagram of all activities, logic relationships of interdependent activities, and milestones comprising the complete period of Work with tasks on the vertical axis and their durations on the horizontal axis. Use distinctive texture patterns or line types to show the critical path within the Contract time. Include a tabular listing of each activity and its identification number, description, duration, early start, early finish, late start, late finish, total float, and all predecessor and successor activities. The number of activities will communicate the Contractor's plan for project execution, accurately describe the project work and allow monitoring and evaluation of progress and time impacts. Activity descriptions shall accurately define the work planned for the activity. Activity durations shall not be shorter than 1 working day or longer than 15 working days unless approved by the Engineer.
- E. Include detail of all project phasing, staging and sequencing including all milestones necessary to define beginning and ending of each phase or stage and constraints which may impact any activity. Include time allowances for coordination with utility companies and other agencies, equipment and material deliveries, submittal reviews and approvals,



traffic control setup and phasing, Work performed by others, inspections, testing and commissioning, corrective work, and any non-work periods.

Float or slack time within the schedule is available without charge or compensation to whatever party or contingency first exhausts it. A schedule which shows a project duration longer than the Contract Time will not be acceptable and will be grounds to consider the Contractor in default of the Contract per 6-4.

The Engineer may choose to accept the Contractor's proposal of a project duration which is shorter than the Contract time provided the shortened Baseline Construction Schedule is reasonable and demonstrates, to the satisfaction of the Engineer, that the Agency and all other entities, public and private, which interface with the project are able to support the provisions of the shortened schedule. Acceptance of a shortened Baseline Construction Schedule will be confirmed through the execution of a Change Order revising the Contract time.

The Engineer's approval of the Baseline Construction Schedule is a condition precedent to issuance of the Notice to Proceed. If the schedule does not meet the requirements of these specifications, the Contractor shall revise the schedule and resubmit it to the Engineer. Failure to obtain the Engineer's approval of the schedule within twenty (20) working days after the date of the preconstruction meeting shall be grounds to consider the Contractor in default of the Contract per 6-4. The number of working days used by the Engineer to review the initial Baseline Construction Schedule submittal will not be included in the 20 working days. The Engineer shall complete subsequent reviews of the revised schedule and progress updates within 5 working days of receipt. The Engineer's response to each review will consist of one of the following:

"Accepted." The Contractor may proceed with the Work upon issuance of the Notice to Proceed. Payment for the schedule may be requested by the Contractor.

"Accepted with Comments." The Contractor may proceed with the Work upon issuance of the Notice to Proceed. The Contractor must revise and resubmit the schedule and receive the Engineer's acceptance of the schedule before payment for the schedule is requested by the Contractor.

"Not Accepted." The Contractor may not proceed with the Work, must revise and resubmit the schedule and may not request payment for the schedule.

**6-1.1.2 Schedule Updates and Revisions.** The Contractor shall meet with the Engineer during the last week of each month to agree upon the completion level of each activity as a basis for progress payments. Schedule updates shall conform with the requirements for the initial submittal in 6-1.1.1 and shall:

- A. Show the actual dates of each activity start and/or finish during the month. The schedule update shall include specific notation for any changes in actual dates after they are first reported.
- B. Report the percent complete for each activity in progress at the end of the month as determined by the Engineer.



- C. Include a list and explanation of all changes made to the activities, dates or interconnecting logic.
- D. Include activity and network revisions reflecting the Change Orders approved in the previous month as agreed upon during the review and acceptance of the Change Orders.

The Engineer's responses to the progress schedule updates shall be as described in 6-1.1.1. The Contractor shall proceed with Work and request payment for the progress schedule updates as described therein.

If the Contractor fails to submit the progress schedule updates as required herein, the Contractor may elect to proceed with the Work at its own risk and shall forfeit payment for the progress schedule update until compliance is met. If the Contractor elects to delay or cease Work after failure to submit the progress schedule updates, any resulting delay, impact, or disruption to the Work will be the Contractor's responsibility.

**6-1.1.3 Interim Revisions.** Should the actual or projected progress of the Work exceed 5 percent of the Contract Time, the Contractor shall prepare and submit a revised Baseline Construction Schedule independently of and prior to the next progress schedule update with a list and explanation of each change made to the schedule. The submittal, schedule review and acceptance requirements of 6-1.1.2 shall apply.

**6-1.1.4 Late Completion or Milestone Dates.** If a schedule update indicates a completion date later than the Contract time or contractually required milestone completion date, the Agency may withhold Liquidated Damages for the number of days late. Should a subsequent schedule update which removes all or a portion of the delay be "Accepted" by the Engineer, all or the allocated portion of the previously held Liquidated Damages shall be released in the monthly payment to the Contractor immediately following such acceptance.

**6-1.1.5 Final Schedule Update.** The Contractor shall prepare and submit a final schedule update when one hundred percent of the Work is completed. The update must accurately represent the actual dates for all activities. The final schedule update shall be prepared and reviewed in accordance with 6-1.1.2. Acceptance of the final schedule update is required for release of funds retained per 9-3.2.

**6-1.1.6 Measurement and Payment.** The Contractor's preparation, revision and maintenance of the Construction Schedule are incidental to the Work and no separate payment will be made therefor.

**6-2 PROSECUTION OF WORK.** To minimize public inconvenience and possible hazard and to restore street and other work areas to their original condition and state of usefulness as soon as practicable, the Contractor shall diligently prosecute the Work to completion. If the Engineer determines that the Contractor is failing to prosecute the Work to the proper extent, the Contractor shall, upon orders from the Engineer, immediately take steps to remedy the situation. All costs of prosecuting the Work as described herein shall be included in the Contractor's Bid. Should the Contractor fail to take the necessary steps to fully accomplish said purposes, after orders of the Engineer, the Engineer may suspend the work in whole or part, until the Contractor takes said steps.





As soon as possible under the provisions of the Specifications, the Contractor shall backfill all excavations and restore to usefulness all improvements existing prior to the start of the Work.

If Work is suspended through no fault of the Agency, all expenses and losses incurred by the Contractor during such suspensions shall be borne by the Contractor. If the Contractor fails to properly provide for public safety, traffic, and protection of the Work during periods of suspension, the Agency may elect to do so, and deduct the cost thereof from monies due the Contractor. Such actions will not relieve the Contractor from liability.

The Contractor shall incorporate non-workdays, moratoriums, special events or restricted work hours or dates specified in the Contract Documents into the Construction Schedule required by Section 6.1. No additional payment, adjustment of bid prices or adjustments of contract time will be allowed as a consequence of these scheduling constraints.

**6-2.1 Order of Work.** The work to be done shall consist of furnishing all labor, equipment and materials, and performing all operations necessary to complete the Work as shown or specified on the Contract Documents. The work descriptions in this section are an overview only and shall not relieve the Contractor from its responsibilities to conduct all coordination and perform the Work in accordance with the Contract Documents. The Contractor shall conduct the following general work activities:

1. Submit construction schedule, schedule of values, working drawings and shop drawings and secure necessary permits and approvals in accordance with the Contract Documents. Develop and submit a Work Plan identifying staging areas and haul routes and describing the materials, equipment and procedures for each phase of the Work and submit the Work Plan in accordance with Section 2-5.3.
2. Secure laydown/staging areas including any off-site staging area(s) if necessary.
3. Complete the Application for Water Meter Permit (Form [E-27](#)) to obtain a construction water meter from the City for any temporary water usage throughout duration of construction.
4. Conduct surveying and staking of areas to be graded, pipeline alignments and proposed improvements and appurtenances, limits of right-of-way or easements. Conduct Underground Service Alert (DigAlert) notification and utility mark-out after completion of surveying and staking. Conduct pre-construction video and photographs of haul routes and work areas showing construction stakes and/or alignment stationing.
5. Mobilize labor force, materials and equipment for subsequent phases of Work and install temporary facilities and BMPs, traffic control and excavation safety measures. The installation of temporary construction BMPs shall precede ground disturbing activities.
6. Pothole all utilities that cross or parallel (within 5 feet of) planned excavations and immediately notify the Engineer of any potential conflicts. Submit potholing data in accordance with Section 2-5.3. Pavement saw-cutting or excavation shall not commence at any construction heading until the project alignments have been staked and existing utilities have been potholed and confirmed by the Contractor to have no conflict with the Work.
7. Submit a Utility Shutdown/Connection Request (Form [E-28](#), Appendix "C") with two weeks advance notice and all required information. CMWD forces will isolate the existing water main for each construction heading on the date so approved. The Contractor shall dewater the pipeline and excavations.
8. Remove existing pipelines or appurtenances specified for removal or that are abandoned (or to be abandoned) and in conflict with the work as specified or required. Salvage existing equipment to the District where specified. Construct the new pipelines,



isolation valves, appurtenances (e.g., air valve and blow-off assemblies) and utility services. Employ disinfection procedures for pipeline connections in accordance with CMWD standards. Install thrust restraint systems and backfill all excavations.

9. Conduct hydrostatic pressure testing and disinfection of new pipe systems.
10. Complete the connections to the existing water mains, place and compact backfill, aggregate base, and restore finished surfaces to original or better condition, including but not limited to, pavement restoration, replacement of pavement markings, markers, and striping, and existing landscape and irrigation repairs in areas disturbed by construction.

**6-2.2 Construction Phasing.** The following construction phase guidelines are provided for the Contractor's use in developing the construction schedule and a Work Plan that describes the labor, materials, equipment and procedures to conduct the Work. The work of any phase shall be completed prior to beginning the work of a subsequent phase unless otherwise noted or approved.

The phasing guidelines listed herein are not intended to be a complete list of all construction activities and shall not relieve the Contractor from its responsibilities to coordinate and perform the Work, revise the phasing descriptions, or to develop additional phases or revise the order of phasing as necessary to complete the Work in its entirety in accordance with the Contract Documents. Any modification of the phasing described below shall not commence until accepted by the Engineer.

**6-2.2.1 Phasing Criteria.** The Contractor shall accommodate the following criteria into the construction schedule and Work Plan:

1. All construction activities shall comply with the scheduling constraints identified in these specifications or as determined by CMWD during review of the Contractor's Work Plan.
2. Utility Shutdown/Connection Request (Form [E-28](#)) must be submitted at least two weeks prior to the desired shutdown date. The Agency will isolate all pipelines. The Contractor shall conduct all dewatering and water disposal.
3. The Contractor shall restore all traffic lanes through the project site outside of Work hours. During Work hours, one lane of travel with a flagging operation may be allowed, subject to approval of the Contractor's Traffic Control Plan submittal.
4. Excavations must be backfilled or securely shored and covered with trench plates at the end of each work day.
5. Each excavation for pipeline connections or dewatering points shall be lined with plastic sheeting and a layer of  $\frac{3}{4}$ " rock with a sump and pump for dewatering. Existing isolation valves may not provide drip-tight shut off and the Contractor shall implement all means and methods necessary to handle water leakage during pipeline connection work.
6. At least 2 working days prior to the shutdown:
  - a. All underground utilities at the pipeline connection sites shall be exposed, and the materials necessary for the connection work shall be verified in the presence of the Inspector;
  - b. All dewatering shall be functioning and demonstrated to the Inspector;
7. Excavations shall be backfilled and the base course of paving placed within 3 working days of energizing the respective pipeline segment.
8. Each site shall be fully restored and completed within 15 working days of energizing the pipeline in each phase.
9. Each site shall adhere to the requirements, as shown in the following table:



Site	Required Construction Time	Shutdown Constraints*	
1	Harding St and Chestnut Ave	No Constraints	8 Hour shutdown, 8am to 4pm
2	Carlsbad Village Dr and Harding St	Night work, restaurants will be impacted	8 Hour shutdown, 10pm to 6am
3	Madison St and Oak Ave	No Constraints	8 Hour shutdown, 10pm to 6am
4	Oak Ave and Roosevelt St	No Constraints	8 Hour shutdown, 10pm to 6am
5	Tamarack Ave- West of Railroad		8 Hour shutdown, 8am to 4pm
6	Carlsbad Blvd and Sequoia Ave	Avoid summer months due to high traffic	8 Hour shutdown, 8am to 4pm
7	Carlsbad Village Dr and Tyler St	Night Work	8 Hour shutdown, 8am to 4pm
8	Pine Ave and Garfield St	No Constraints	8 Hour shutdown, 8am to 4pm
9	Hillside Dr and Kelly Dr	Work to be completed during school break	8 Hour shutdown, 8am to 4pm
10	Redwood Ave and Garfield St	No Constraints	8 Hour shutdown, 8am to 4pm
11	2634 El Camino Real	Night Work	8 Hour shutdown, 10pm to 6am
12	2618 El Camino Real	Night Work	8 Hour shutdown, 10pm to 6am
13	Tamarack Ave and Simsbury Ct	Work to be completed during school break. Work area will impact Hope Elementary school traffic	8 Hour shutdown, 8am to 4pm
14	Pontiac Dr and Regent Rd	No Constraints	8 Hour shutdown, 8am to 4pm
15	Palomar Airport Rd and El Camino Real	Night Work	8 Hour shutdown, 10pm to 6am
16	2175 Camino Vida Roble	Plan for night work. Will have to verify with impacted business if day shutdown is ok.	8 Hour shutdown, 10pm to 6am
17	Las Palamas and Camino Vida Roble	Plan for night work. Will have to verify with impacted business if day shutdown is ok.	8 Hour shutdown, 10pm to 6am
18	2712 Loker Ave West	Plan for night work. Will have to verify with impacted business if day shutdown is ok.	8 Hour shutdown, 10pm to 6am
19	Alicante Rd and Altisma Way	No Constraints	8 Hour shutdown, 8am to 4pm
20	Cannon Rd and Paseo Del Norte	Night Work, will impact dealerships	8 Hour shutdown, 10pm to 6am
21	2043 Alga Rd	No Constraints	8 Hour shutdown, 8am to 4pm
22	Flamenco St and Colibri Ln	No Constraints	8 Hour shutdown, 8am to 4pm
23	Altisma Way	No Constraints	8 Hour shutdown, 8am to 4pm
24	Elder Ct and Montia Ct	No Constraints	8 Hour shutdown, 8am to 4pm
25	7148 Lantana Terrace	No Constraints	8 Hour shutdown, 8am to 4pm
26	Windrose Circle and Navigator Circle	No Constraints	8 Hour shutdown, 8am to 4pm

\* Maximum shutdown duration.

**6-2.3 Project Meetings.** The Engineer will establish the time and location of weekly Project Meetings. The Contractor's Representative shall attend each Project Meeting. The Project Representative shall be the individual determined under Section 7-6, "The Contractor's Representative". No separate payment for attendance of the Contractor, the Contractor's Representative or any other employee or subcontractor or subcontractor's employee at these meetings will be made.



### **6-3 SUSPENSION OF WORK.**

**6-3.1 General.** The Work may be suspended in whole or in part when determined by the Engineer that the suspension is necessary in the interest of the Agency. The Contractor shall comply immediately with any written order of the Engineer. Such suspension shall be without liability to the Contractor on the part of the Agency except as otherwise specified in Section 6-6.3.

**6-3.2 Archaeological and Paleontological Discoveries.** The Contractor shall include 15 working days for coordination with the Archaeological and Cultural Monitor in the construction schedule.

If discovery is made of items of archaeological or paleontological interest, the Contractor shall immediately cease excavation in the area of discovery and shall not continue until ordered by the Engineer. When resumed, excavation operations within the area of discovery shall be as directed by the Engineer.

Discoveries which may be encountered may include, but not be limited to, dwelling sites, stone implements or other artifacts, animal bones, human bones, and fossils.

The Contractor shall be entitled to an extension and compensation in accordance with Section 6-6.

**6-4 DEFAULT BY CONTRACTOR.** If the Contractor fails to begin delivery of material and equipment, to commence the Work within the time specified, to maintain the rate of delivery of material, to execute the Work in the manner and at such locations as specified, or fails to maintain the Work schedule which will insure the Agency's interest, or, if the Contractor is not carrying out the intent of the Contract, the Agency may serve written notice upon the Contractor and the Surety on its Faithful Performance Bond demanding satisfactory compliance with the Contract.

The Contract may be canceled by the Board without liability for damage, when in the Board's opinion the Contractor is not complying in good faith, has become insolvent, or has assigned or subcontracted any part of the Work without the Board's consent. In the event of such cancellation, the Contractor will be paid the actual amount due based on Contract Unit Prices or lump sums bid and the quantity of the Work completed at the time of cancellation, less damages caused to the Agency by acts of the Contractor. The Contractor, in having tendered a Bid, shall be deemed to have waived any and all claims for damages because of cancellation of Contract for any such reason. If the Agency declares the Contract canceled for any of the above reasons, written notice to that effect shall be served upon the Surety. The Surety shall, within five (5) days, assume control and perform the Work as successor to the Contractor.

If the Surety assumes any part of the Work, it shall take the Contractor's place in all respects for that part and shall be paid by the Agency for all work performed by it in accordance with the Contract. If the Surety assumes the entire Contract, all money due the Contractor at the time of its default shall be payable to the Surety as the Work progresses, subject to the terms of the Contract.

If the Surety does not assume control and perform the Work within 5 days after receiving notice of cancellation, or fails to continue to comply, the Agency may exclude the Surety from the premises. The Agency may then take possession of all material and equipment and complete



the Work by Agency forces, by letting the unfinished Work to another Contractor, or by a combination of such methods. In any event, the cost of completing the Work shall be charged against the Contractor and its Surety and may be deducted from any money due or becoming due from the Agency. If the sums due under the Contract are insufficient for completion, the Contractor or Surety shall pay to the Agency within 5 days after the completion, all costs in excess of the sums due.

The provisions of this section shall be in addition to all other rights and remedies available to the Agency under law.

**6-5 TERMINATION OF CONTRACT.** The Board may terminate the Contract at its own discretion or when conditions encountered during the Work make it impossible or impracticable to proceed, or when the Agency is prevented from proceeding with the Contract by act of God, by law, or by official action of a public authority.

**6-6 DELAYS AND EXTENSIONS OF TIME.**

**6-6.1 General.** If delays are caused by unforeseen events beyond the control of the Contractor, such delays will entitle the Contractor to an extension of time as provided herein, but the Contractor will not be entitled to damages or additional payment due to such delays, except as provided in 6-6.3. Such unforeseen events may include war, government regulations, labor disputes, strikes, fires, floods, adverse weather or elements necessitating cessation of work, inability to obtain materials, labor or equipment, required extra work, or other specific events as may be further described in the Specifications.

No extension of time will be granted for a delay caused by the Contractor's inability to obtain materials unless the Contractor furnishes to the Engineer documentary proof. The proof must be provided in a timely manner in accordance with the sequence of the Contractor's operations and the approved construction schedule.

If delays beyond the Contractor's control are caused by events other than those mentioned above, the Engineer may deem an extension of time to be in the best interest of the Agency. The Contractor will not be entitled to damages or additional payment due to such delays, except as provided in Section 6-6.3.

If delays beyond the Contractor's control are caused solely by action or inaction by the Agency, such delays will entitle the Contractor to an extension of time as provided in Section 6-6.2.

**6-6.2 Extensions of Time.** Extensions of time, when granted, will be based upon the effect of delays to the Work. They will not be granted for noncontrolling delays to minor portions of the Work unless it can be shown that such delays did or will delay the progress of the Work.

**6-6.3 Payment for Delays to Contractor.** The Contractor will be compensated for damages incurred due to delays for which the Agency is responsible. Such actual costs will be determined by the Engineer. The Agency will not be liable for damages which the Contractor could have avoided by any reasonable means, such as judicious handling of forces, equipment, or plant. The determination of what damages the Contractor could have avoided will be made by the Engineer.

**6-6.4 Written Notice and Report.** The Contractor shall provide written notice to the Engineer within two hours of the beginning of any period that the Contractor has placed any workers or



equipment on standby for any reason that the Contractor has determined to be caused by the Agency or by any organization that the Agency may otherwise be obligated by. The Contractor shall provide continuing daily written notice to the Engineer, each working day, throughout the duration of such period of delay. The initial and continuing written notices shall include the classification of each workman and supervisor and the make and model of each piece of equipment placed on standby, the cumulative duration of the standby, the Contractor's opinion of the cause of the delay and a cogent explanation of why the Contractor could not avoid the delay by reasonable means. Should the Contractor fail to provide the notice(s) required by this section the Contractor agrees that no delay has occurred and that it will not submit any claim(s) therefore.

## **6-7 TIME OF COMPLETION.**

**6-7.1 General.** The Contractor shall complete the Work within the time set forth in the Contract. The Contractor shall complete each portion of the Work within such time as set forth in the Contract for such portion. The time of completion of the Contract shall be expressed in calendar days. The Contractor shall diligently prosecute the work to completion within **250 working days** after the starting date specified in the Notice to Proceed.

**6-7.2 Working Day.** A working day is any day within the period between the start of the Contract time as defined in Section 6-1 and the date provided for completion, or upon field acceptance by the Engineer for all work provided for in the Contract, whichever occurs first, other than:

1. Saturday or Sunday,
2. any day designated as a holiday by the Agency,
3. any day identified as a construction moratorium due to special events or holiday periods,
4. any other day designated as a holiday in a Master Labor Agreement entered into by the Contractor or on behalf of the Contractor as an eligible member of a contractor association,
5. any day the Contractor is prevented from working at the beginning of the workday for cause as defined in Section 6-6.1,
6. any day the Contractor is prevented from working during the first 5 hours with at least 60 percent of the normal work force for cause as defined in Section 6-6.1.

In addition to Agency holidays, open excavations and service shutdowns will not be allowed on Thanksgiving week and between December 23, 2024, and January 3, 2025.

Main line or service shutdowns will not be allowed on Mondays and Fridays.

Unless otherwise approved in writing by the Engineer, the hours of work shall be between the hours of 7 a.m. and 4 p.m. on Mondays through Fridays, excluding Agency holidays and other restricted days or times as specified in the Contract Documents.

The Contractor shall obtain the written approval of the Engineer if the Contractor desires to work outside said hours or at any time during weekends and/or holidays. This written permission must be obtained at least 48 hours prior to such work. The Engineer may approve work outside the hours and/or days stated herein when, in his/her sole opinion, such work conducted by the Contractor is beneficial to the best interests of the Agency. The Contractor shall pay the inspection costs of such work.



The Contractor shall incorporate the dates, areas and types of work prohibited elsewhere in the Contract Documents into the construction schedule. No additional payment, adjustment of bid prices or adjustment of contract time of completion will be allowed as a consequence of the prohibition of work being performed within the dates, areas and/or types of work prohibited in this section.

Contractor is hereby advised that the Engineer may require after hours or weekend work if required for the protection and safety of existing facilities, workers or the public.

**6-7.3 Contract Time Accounting.** The Engineer will make a daily determination of each working day to be charged against the Contract time. These determinations will be discussed, and the Contractor will be furnished a periodic statement showing allowable number of working days of Contract time, as adjusted, at the beginning of the reporting period. The statement will also indicate the number of working days charged during the reporting period and the number of working days of Contract time remaining. If the Contractor does not agree with the statement, it shall file a written protest within 15 days after receipt, setting forth the facts of the protest. Otherwise, the statement will be deemed to have been accepted.

## **6-8 COMPLETION, ACCEPTANCE, AND WARRANTY.**

**6-8.1 Site Walk-Through.** After the site has been fully restored, the Inspector will schedule an inspection within five days of the Contractor's request. The Contractor and Inspector shall attend the inspection and all outstanding deficiencies shall be identified in a List of Deficiencies.

A review of the red-line record drawings and asset schedule shall also be completed at the Site Walk-Through and all red-line deficiencies will be added to the List of Deficiencies.

**6-8.2 List of Deficiencies.** Following the Site Walk-Through, the Inspector will generate the List of Deficiencies (also known as the punchlist) within five working days. The Contractor shall then have 10 working days to perform corrective work and provide a written response to each punchlist item.

**6-8.3 Site Follow-Up Walk-Through.** Upon receipt of written responses to the List of Deficiencies, the Inspector will complete a follow-up inspection. Any outstanding deficiencies will be noted and returned to the Contractor. Outstanding deficiencies will delay full payment of any relevant bid items.

**6-8.4 Request for Final Walk-Through.** Once the Contractor asserts they have satisfied the terms of the Contract and with the Inspector's permission, the Contractor may submit written assertion in the form of a Request for Final Walk-Through, certifying that all deficiencies identified through the Site Walk-Through process have been addressed and request a Final Inspection to demonstrate project completion to the Agency. The Contractor shall provide an attachment to the Request for Final Inspection with the Contractor's written response to each deficiency. The Request for Final Inspection shall not be considered complete without the Contractor's written response to each deficiency.

**6-8.5 Final Walk-Through.** Upon receipt of the Request for Final Walk-Through, the Inspector shall schedule the Final Inspection. The Inspector and Contractor shall attend the final inspection. Representatives from other Agency departments reserve the right to be present at the Final Inspection.



The red-line record drawings and asset schedules shall also be reviewed.

If any deficiencies are not satisfactorily addressed or additional deficiencies are identified, the Contractor will have 10 working days to complete the corrective work.

**6-8.6 Request for Completion.** The Engineer will not accept the Work or any portion of the Work before all of the Work is completed and all outstanding deficiencies are corrected by the Contractor, and the Engineer is satisfied that all of the Work meets the requirements of the Contract Documents.

Once the Final Walk-Through has been completed and all outstanding deficiencies satisfactorily completed to Agency's approval, the Contractor shall submit a written assertion in the form of Request for Completion letter, certifying that the Work has been completed.

**6-8.7 Completion.** Upon receipt of the Request for Completion letter, the Agency shall review the written assertion within 2 working days. If, in the Engineer's judgment, the Work has been completed in accordance with the Contract Documents, the Agency will issue a Completion Letter.

The completion date will be the date to which liquidated damages will be computed.

Use, temporary, interim or permanent, of all, or portions of, the Work does not constitute completion or acceptance of the Work.

**6-8.8 Acceptance.** Acceptance will occur after all the requirements contained in the Contract Documents have been fulfilled. If, in the Engineer's judgment, the Contractor has fully performed the Contract, the Engineer will so certify to the Board. Upon such certification by the Engineer, the Board may accept the Work. Upon the Board's acceptance of the Work, the Agency will cause a "Notice of Completion" to be filed in the office of the San Diego County Recorder. The date of recordation shall be the date of acceptance of the Work.

**6-8.9 Warranty.** All work shall be warranted for one (1) year after acceptance of the Work and any faulty work or materials discovered during the warranty period shall be repaired or replaced by the Contractor, at its expense. Twenty-five percent of the faithful performance bond shall be retained as a warranty bond for the warranty period. The Contractor shall replace or repair any such defective work in a manner satisfactory to the Engineer, after notice to do so from the Engineer, and within the time specified in the notice. If the Contractor fails to make such replacement or repairs within the time specified in the notice, the Agency may perform this work and the Contractor's sureties shall be liable for the cost thereof.

**6-9 LIQUIDATED DAMAGES.** Failure of the Contractor to complete the Work within the time allowed will result in damages being sustained by the Agency. For each consecutive calendar day in excess of the time specified for completion of Work, as adjusted in accordance with Section 6-6, the Contractor shall pay the Agency, or have withheld monies due it, the sum of **two thousand five hundred dollars (\$2,500.00)**. Such sum is liquidated damages and shall not be construed as a penalty and may be deducted from payments due the Contractor if such delay occurs.

Execution of the Contract shall constitute agreement by the Agency and Contractor that the amount specified above per day is the minimum value of costs and actual damages caused by





the Contractor to complete the Work within the allotted time. Any progress payments made after the specified completion date shall not constitute a waiver of this paragraph or of any damages.

**6-10 USE OF IMPROVEMENT DURING CONSTRUCTION.** The Agency reserves the right to take over and utilize all or part of any completed facility or appurtenance. The Contractor will be notified in writing in advance of such action. Such action by the Agency will relieve the Contractor of responsibility for injury or damage to said completed portions of the improvement resulting from use by public traffic or from the action of the elements or from any other cause, except Contractor operations or negligence. The Contractor will not be required to reclean such portions of the improvement before field acceptance, except for cleanup made necessary by its operations. Nothing in this section shall be construed as relieving the Contractor from full responsibility for correcting defective work or materials.

In the event the Agency exercises its right to place into service and utilize all or part of any completed facility or appurtenance, the Agency will assume the responsibility and liability for injury to persons or property resulting from the utilization of the facility or appurtenance so placed into service, except for any such injury to persons or property caused by any willful or negligent act or omission by the Contractor, Subcontractor, their officers, employees, or agents.



## SECTION 7 – RESPONSIBILITIES OF THE CONTRACTOR

**7-1 CONTRACTOR'S EQUIPMENT AND FACILITIES.** The Contractor shall furnish and maintain in good condition all equipment and facilities as required for the proper execution and inspection of the Work. Such equipment and facilities shall meet all requirements of applicable ordinances and laws.

### **7-2 LABOR.**

**7-2.1 General.** Only competent workers shall be employed on the Work. Any person employed who is found to be incompetent, intemperate, troublesome, disorderly, or otherwise objectionable, or who fails or refuses to perform work properly and acceptably, shall be immediately removed from the Work by the Contractor and not be reemployed on the Work.

**7-2.2 Laws.** The Contractor, its agents, and employees shall be bound by and comply with applicable provisions of the Labor Code and Federal, State, and local laws related to labor.

The Contractor shall strictly adhere to the provisions of the Labor Code regarding minimum wages; the 8-hour day and 40-hour week; overtime; Saturday, Sunday, and holiday work; and nondiscrimination because of race, color, national origin, sex, or religion. The Contractor shall forfeit to the Agency the penalties prescribed in the Labor Code for violations.

In accordance with the Labor Code, the Board has on file and will publish a schedule of prevailing wage rates for the types of work to be done under the Contract. The Contractor shall not pay less than these rates.

Each worker shall be paid subsistence and travel as required by the collective bargaining agreement on file with the State of California Department of Industrial Relations.

The Contractor's attention is directed to Section 1776 of the Labor Code which imposes responsibility upon the Contractor for the maintenance, certification, and availability for inspection of such records for all persons employed by the Contractor or Subcontractor in connection with the project. The Contractor shall agree through the Contract to comply with this Section and the remaining provisions of the Labor Code.

**7-3 LIABILITY INSURANCE.** Insurance shall be required as specified in section 10 of the Public Works Contract.

The cost of this insurance shall be included in the Contractor's Bid.

**7-4 WORKERS' COMPENSATION INSURANCE.** Before execution of the Contract by the Board, the Contractor shall file with the Engineer the following signed certification:

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract."



The Contractor shall also comply with Section 3800 of the Labor Code by securing, paying for, and maintaining in full force and effect for the duration of the contract, complete Workers' Compensation Insurance, and shall furnish a Certificate of Insurance to the Engineer before execution of the Contract. The Agency, its officers, or employees, will not be responsible for any claims in law or equity occasioned by failure of the Contractor to comply with this paragraph.

All compensation insurance policies shall bear an endorsement or shall have attached a rider whereby it is provided that, in the event of expiration or proposed cancellation of such policies for any reason whatsoever, the Agency shall be notified by registered mail not less than 30 days before expiration or cancellation is effective.

All insurance is to be placed with insurers that are admitted and authorized to conduct business in the state of California and are listed in the official publication of the Department of Insurance of the State of California. Policies issued by the State Compensation Fund meet the requirement for workers' compensation insurance.

**7-5 PERMITS.** Except as specified herein the Contractor will obtain, at no cost to the Contractor all City of Carlsbad encroachment, right-of-way, grading and building permits necessary to perform work for this contract on Agency property, streets, or other rights-of-way. Contractor shall not begin work until all permits incidental to the work are obtained. The Contractor shall obtain and pay for all permits for the disposal of all materials removed from the project. The cost of said permit(s) shall be included in the price bid for the appropriate bid item and no additional compensation will be allowed therefor. The Contractor shall obtain and pay for all costs incurred for permits necessitated by its operations such as, but not limited to, those permits required for night work, overload, blasting, and demolition.

The Contractor shall pay all business taxes or license fees that are required for the work.

**7-5.1 Resource Agency Permits.** No resource agency permits are required for the Work. Refer to Appendix E for biological resources monitoring requirements and potential noise mitigation measures.

**7-5.2 Air Pollution Control Permits.** Diesel-engine driven generators or equipment shall have a valid permit or registration in accordance with the California Air Resources Board and the San Diego County Air Pollution Control District regulations prior to mobilization to the site. The Contractor shall maintain the permit or registration documents in valid standing during the performance of the Work. Submit a copy of the permit or registration documents for all equipment subject to state or local air pollution control regulations in accordance with 2-5.3.

**7-6 THE CONTRACTOR'S REPRESENTATIVE.** Before starting work, the Contractor shall designate in writing a representative who shall have complete authority to act for it. An alternative representative may be designated as well. The representative or alternate shall be present at the Work site whenever work is in progress or whenever actions of the elements necessitate its presence to take measures necessary to protect the Work, persons, or property. Any order or communication given to this representative shall be deemed delivered to the Contractor. A joint venture shall designate only one representative and alternate. In the absence of the Contractor or its representative, instructions or directions may be given by the Engineer to the superintendent or person in charge of the specific work to which the order applies. Such order shall be complied with promptly and referred to the Contractor or its representative.



In order to communicate with the Agency, the Contractor's representative, superintendent, or person in charge of specific work shall be able to speak, read, and write the English language.

The qualifications for the Contractor's Representative shall include at a minimum:

1. At least five years of experience in a superintendent capacity for projects that are similar in scope and cost to the projects identified in the Contractor's Statement of Technical Ability and Experience submitted with the bid, and successful completion of at least two projects specific to potable water distribution pipelines with contract values over \$2,000,000. The Contractor shall be responsible for submitting verifiable experience records.
2. Completion of OSHA 30-hour Construction Training Course. Submit certification as proof.
3. Completion of Asbestos Cement Pipe workplace safety course as administered by regulatory citation CCR Title 8, Section 341.17. Submit certification as proof.

CMWD reserves the right to disqualify bidders if the required technical ability and experience for the Contractor's Representative is not demonstrated.

In the event that the Contractor proposes to change the Contractor's Representative prior to Project completion, the Contractor shall notify the Agency and submit the qualifications of the proposed Contractor's Representative for the Engineer's review at least two weeks prior to the proposed change. The qualifications shall demonstrate that the minimum requirements of the position, as described herein, are satisfied. The Engineer will review the qualifications of proposed Contractor's Representative within 5 working days of receipt.

No change in Contractor's Representative will be allowed without the Agency's approval. In the event of a change in Contractor's Representative without prior approval, Agency reserves the right to suspend work, at the Contractor's cost, until a qualified Contractor's Representative is approved for the Project.

**7-7 COOPERATION AND COLLATERAL WORK.** The Contractor shall be responsible for ascertaining the nature and extent of any simultaneous, collateral, and essential work by others. The Agency, its workers and contractors and others, shall have the right to operate within or adjacent to the Work site during the performance of such work.

The Agency, the Contractor, and each of such workers, contractors and others, shall coordinate their operations and cooperate to minimize interference.

The Contractor shall include in its Bid all costs involved as a result of coordinating its work with others. The Contractor will not be entitled to additional compensation from the Agency for damages resulting from such simultaneous, collateral, and essential work. If necessary to avoid or minimize such damage or delay, the Contractor shall redeploy its work force to other parts of the Work.

Should the Contractor be delayed by the Agency, and such delay could not have been reasonably foreseen or prevented by the Contractor, the Engineer will determine the extent of the delay, the effect on the project, and any extension of time.

**7-7.1 Coordination.** The Contractor shall coordinate and cooperate with all utility companies during the mark-out and locating of their lines or during their relocation or construction if



necessary. The Contractor may be granted a time extension if, in the opinion of the Engineer, a delay is caused by the utility company. No additional compensation will be made to the Contractor for any such delay.

## **7-8 PROJECT SITE MAINTENANCE.**

**7-8.1 Cleanup and Dust Control.** Throughout all phases of construction, including suspension of work, and until the final acceptance, the Contractor shall keep the site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping and sprinkling with water, or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other methods.

When required by the Plans or Specifications, the Contractor shall furnish and operate a self-loading motor sweeper with spray nozzles at least once each working day for the purpose of keeping paved areas acceptably clean wherever construction, including restoration, is incomplete.

Materials and equipment shall be removed from the site as soon as they are no longer necessary. Before the final inspection, the site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All cleanup costs shall be included in the Contractor's Bid.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

Excess excavation material from catch basins or similar structures shall be removed from the site immediately. Sufficient material may remain for use as backfill if permitted by the Specifications. Forms and form lumber shall be removed from the site as soon as practicable after stripping.

Failure of the Contractor to comply with the Engineer's cleanup orders may result in an order to suspend work until the condition is corrected. No additional compensation will be allowed as a result of such suspension.

Cleanup and dust control required herein shall also be executed on weekends and other non-working days when needed to preserve the health safety or welfare of the public. The Contractor shall conduct effective cleanup and dust control throughout the duration of the Contract. The Engineer may require increased levels of cleanup and dust control that, in his/her sole discretion, are necessary to preserve the health, safety and welfare of the public. Cleanup and dust control shall be considered incidental to the items of work that they are associated with, and no additional payment will be made therefor.

**7-8.2 Air Pollution Control.** The Contractor shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate the regulations of any legally constituted authority.

**7-8.3 Vermin Control.** At the time of acceptance, structures entirely constructed under the Contract shall be free of rodents, insects, vermin, and pests. Necessary extermination work shall be arranged and paid for by the Contractor as part of the Work within the Contract time and shall be performed by a licensed exterminator in accordance with requirements of



governing authorities. The Contractor shall be liable for injury to persons or property and responsible for the elimination of offensive odors resulting from extermination operations.

**7-8.4 Sanitation.** The Contractor shall provide and maintain enclosed toilets for the use of employees engaged in the Work. These accommodations shall be maintained in a neat and sanitary condition. They shall also comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation of dwellings and camps.

Wastewater shall not be interrupted. Should the Contractor disrupt existing sewer facilities, sewage shall be conveyed in closed conduits and disposed of in a sanitary sewer system. Sewage shall not be permitted to flow in trenches or be covered by backfill.

**7-8.5 Temporary Light, Power, and Water.** The Contractor shall furnish, install, maintain, and remove all temporary light, power, and water at its own expense. These include piping, wiring, lamps, and other equipment necessary for the Work. The Contractor shall not draw water from any fire hydrant (except to extinguish a fire), without obtaining permission from the water agency concerned. The Contractor shall obtain a construction meter for water used for the construction, plant establishment, maintenance, cleanup, testing and all other work requiring water related to this contract. The Contractor shall contact the appropriate water agency for requirements. The Contractor shall pay all costs of temporary light, power and water including hookup, service, meter and any, and all, other charges, deposits and/or fees therefor. Said costs shall be considered incidental to the items of work that they are associated with and no additional payment will be made therefor.

**7-8.6 Water Pollution Control.** The Contractor shall exercise every reasonable precaution to protect channels, storm drains, and bodies of water from pollution. It shall conduct and schedule operations so as to minimize or avoid muddying and silting of said channels, drains, and waters. Water pollution control work shall consist of constructing those facilities which may be required to provide prevention, control, and abatement of water pollution.

The Contractor shall limit the land disturbance area resulting from construction activities to less than 1 acre and comply with a City of Carlsbad Tier 2 Construction SWPPP. The Contractor shall comply with the City's Construction Storm Water Pollution Prevention Plan (SWPPP) standards and requirements to ensure construction compliance with the City of Carlsbad Storm Water Ordinance and the Municipal Permit, as issued by the San Diego California Regional Water Quality Control Board (SDRWQCB) San Diego Region Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100; National Pollutant Discharge Elimination System (NPDES) No. CAS0109266 and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within San Diego Region and any amendment, revision or re-issuance thereof.

A Tier 2 Storm Water Pollution Prevention Plan (SWPPP) is provided to the Contractor, in Appendix "B", for use in preparing the Project SWPPP for approval by the City. The Contractor shall be responsible for the preparation and implementation of the SWPPP and coordination with the City and the Regional Water Quality Control Board. Refer to Section 300-12.

**7-8.7 Drainage Control.** The Contractor shall maintain drainage within and through the work areas. Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete, or other acceptable material will be permitted when necessary. Such dams shall be removed from the site as soon as their use is no longer necessary.



**7-8.8 Noise Control.** All internal combustion engines used in the construction shall be equipped with mufflers in good repair when in use on the project with special attention to the City Noise Control Ordinance, Carlsbad Municipal Code Chapter 8.48.

In accordance with Appendix E, noise mitigation requirements include limiting construction noise during the general breeding season (January 15 to September 15) that could affect the breeding of the coastal California gnatcatcher, migratory songbirds, and other bird species associated with adjacent undeveloped areas. Construction noise exceeding 60 dBA hourly average, adjusted for ambient noise levels at a nesting site, shall not occur within 500 feet of active nesting sites during the general breeding season (January 15 through September 15). The Agency will retain a qualified biologist to perform a preconstruction survey and monitoring for biological resources and monitor the construction activities that occur adjacent to undeveloped open space that potentially supports breeding birds. The Contractor shall be responsible for noise mitigation, if required.

**7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS.** The Contractor shall be responsible for the protection of public and private property adjacent to the Work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements within the right-of-way which are not designated for removal (e.g., curbs, sidewalks, driveways, fences, walls, signs, utility installations, pavement, structures, etc.) which are damaged or removed as a result of its operations. When a portion of a sprinkler system within the right-of-way must be removed, the remaining lines shall be capped. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension.

Maintenance of street and traffic signal systems that are damaged, temporarily removed or relocated shall be done in conformance with 307-1.5.

Trees, lawns, and shrubbery that are not to be removed shall be protected from damage or injury. If damaged or removed due to Contractor's operations, they shall be restored or replaced in as nearly the original condition and location as is reasonably possible. Lawns shall be restored with sod and unpaved areas covered with suitable mulch.

The Contractor shall give reasonable notice to occupants or owners of adjacent property to permit them to salvage or relocate plants, trees, fences, sprinklers, and other improvements, within the right-of-way which are designated for removal and would be destroyed because of the Work.

All costs to the Contractor for protecting, removing, and restoring existing improvements shall be included in the Bid.

**7-9.1 Preconstruction Survey.** The Contractor shall perform a preconstruction survey of the project site to provide a record of preconstruction conditions. This survey shall include the following as a minimum:

1. Video of existing public right-of-way, proposed alignment, working areas, staging and storage areas.
2. Video of construction access roads to be used by the Contractor, including all public and private streets used for access to and from the work site. Indicate areas of damaged paving.



3. Any other areas as directed by the Owner which may be disturbed or which are to be protected from the Contractor's operations.
4. Photographs and video of potential "problem areas".
5. Notify the Owner seven calendar days in advance and coordinate the scheduling of the video so that a representative of the Owner may accompany the Contractor during the videotaping.
6. At the completion of the survey, the Contractor shall present the Owner with a report detailing the existing conditions at each proposed pipeline site, staging, and stockpile areas. The report shall include the following as a minimum:
  - a. Preconstruction video in color and in digital format.
  - b. One digital photograph of each "potential problem area".
  - c. Written summary of "potential problem areas" and the Contractor's recommendations to address these problem areas.
7. Documentation (including report) of existing conditions shall be completed within 15 days of the Notice to Proceed. The Contractor will not be allowed to begin potholing, excavation or dewatering activities until the final report has been submitted and accepted by the Owner.

## **7-10 PUBLIC CONVENIENCE AND SAFETY.**

**7-10.1 Traffic and Access.** The Contractor's operations shall cause no unnecessary inconvenience. The access rights of the public shall be considered at all times. Unless otherwise authorized, traffic shall be permitted to pass through the Work, or an approved detour shall be provided.

In areas where site access is restricted, the Contractor is responsible for coordinating site access. All communications shall be made through the City inspector unless otherwise approved.

No excavation or vehicle access will be allowed to occur outside of the easement, outside of the right-of-way, or in vegetated or landscaped areas unless otherwise shown on the Plans or as approved by the Engineer.

Safe and adequate pedestrian and vehicular access shall be provided and maintained to fire hydrants; commercial and industrial establishments; churches, schools and parking lots; service stations and motels; hospitals; police and fire stations; public transportation stops and establishments of similar nature. Access to these facilities shall be continuous and unobstructed unless otherwise approved by the Engineer. Pedestrian crossings of the Work at intervals not exceeding 300 feet (90 m) shall be provided and maintained unless otherwise approved by the Engineer.

The Contractor shall refer to and comply with the requirements of Section 302-15 and Part 6 of the Supplemental Provisions.

**7-10.2 Storage of Equipment and Materials in Public Streets.** Construction materials shall not be stored in streets, roads, or highways after unloading. Construction equipment shall not be stored at the Work site before its actual use on the Work or after it is no longer needed. All materials or equipment not installed or used in construction on any given day shall be stored elsewhere by the Contractor at its expense unless otherwise approved by the Engineer.





Excavated material, except that which is to be used as backfill in the adjacent trench on the same day, shall not be stored in public streets. After placing backfill, all excess material shall be removed immediately from the site.

**7-10.3 Street Closures, Detours, Barricades.** The Contractor shall comply with all applicable State, County, and City requirements for closure of streets. The Contractor shall provide barriers, guards, lights, signs, temporary bridges, flag persons, and watchpersons. The Contractor shall be responsible for compliance with additional public safety requirements which may arise. The Contractor shall furnish and install signs and warning devices and promptly remove them upon completion of the Work.

After obtaining the Engineers approval and at least 5 working days before closing, detouring, partially closing or reopening any street, alley or other public thoroughfare the Contractor shall notify the following:

The Engineer.....	442-339-2766
Carlsbad Fire Administration .....	442-339-2141
Carlsbad Police Department Dispatch .....	442-339-2197
Carlsbad Traffic Signals Maintenance .....	760-438-2980
Carlsbad Traffic Signals Operations .....	442-339-2736
North County Transit District .....	760-966-6500
Republic Services .....	760-332-6464

The Contractor shall comply with their requirements. The Contractor shall obtain the Engineer’s written approval prior to deviating from the requirements of the agencies above. The Contractor shall obtain the written approval no less than five working days prior to placing any traffic control that affects bus stops.

The Contractor shall secure approval, in advance, from authorities concerned for the use of any bridges proposed by it for public use. Temporary bridges shall be clearly posted as to load limit, with signs and posting conforming to current requirements covering “signs” as set forth in the Traffic Manual published by the California Department of Transportation. This manual shall also apply to the street closures, barricades, detours, lights, and other safety devices required.

All costs involved shall be included in the Bid.

Temporary traffic controls shall be in accordance with the Plans, the TCP, the California Manual on Uniform Traffic Control Devices (MUTCD), current edition, and the Contract Documents.

**7-10.3.1 Construction Area Signs and Control Devices.** All construction traffic signs and control devices shall be maintained throughout the duration of work in good order and according to the approved traffic control plan. All temporary traffic control devices shall conform to Caltrans Standard Specification 12-3.

Warning and advisory signs, lights and devices shall be furnished, installed and maintained by the Contractor and shall be promptly removed by the Contractor when no longer required. Warning and advisory signs that remain in place overnight shall be stationary mounted signs. Stationary signs that warn of non-existent conditions shall be removed from the traveled way and from the view of motorists in the traveled way or shielded from the view of the traveling public during such periods that their message does not pertain to existing conditions.



All excavation required to install stationary construction area signs shall be performed by hand methods without the use of power equipment. Warning and advisory signs that are used only during working hours may be portable signs. Portable signs shall be removed from the traveled way and shielded from the view of the traveling public during non-working hours.

Personal vehicles of the Contractor's employees shall not be parked within the traveled way, including any Section closed to public traffic. Whenever the Contractor's vehicles or equipment are parked on the shoulder within 6' of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at not less than 25' intervals to a point not less than 25' past the last vehicle or equipment. A minimum of nine (9) cones or portable delineators shall be used for the taper. A W20-1 (Road Work Ahead) or C24 (Shoulder Work Ahead) sign shall be mounted, as required herein, on a signpost or telescoping flag tree with flags. The signpost or flag tree shall be placed where directed by the Engineer.

**7-10.3.2 Maintaining Traffic.** The Contractor's personnel shall not work closer than 1.8 m (6') nor operate equipment within 0.6 m (2') from any traffic lane occupied by traffic. For equipment, the distance shall be measured from the closest approach of any part of the equipment as it is operated and/or maneuvered in performing the work. This requirement may be waived when the Engineer has given written authorization to the reduction in clearance that is specific to the time, duration and location of such waiver, when such reduction is shown on the traffic control plans included in these Contract Documents, when such reduction is shown on the traffic control plans prepared by the Contractor and approved by the Engineer or for the work of installing, maintaining and removing traffic control devices. As a condition of such waiver the Engineer may require the Contractor to detour traffic, adjust the width of, or realign the adjacent traffic lane, close the adjacent traffic lane or provide barriers.

During construction, a minimum of one, 12-foot wide paved traffic lane shall be open for use by public traffic in each direction of travel. For Work in prime arterial streets having more than two lanes of travel in each direction, a minimum of two traffic lanes shall be open for use by public traffic in each direction of travel.

**7-10.3.3 Traffic Control System for Lane Closure.** A traffic control system consists of closing traffic lanes or pedestrian walkways in accordance with the details shown on the plans, California Manual on Uniform Traffic Control Devices (FHWA MUTCD, current edition, as amended for use in California) and provisions under "Maintaining Traffic" elsewhere in these Provisions. The provisions in this section will not relieve the Contractor from its responsibility to provide such additional devices or take such measures as may be necessary to maintain public safety.

When lanes are closed for only the duration of work periods, all components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way, shall be removed from the traveled way and shoulder at the end work period. If the Contractor so elects, said components may be stored at selected central locations, approved by the Engineer, within the limits of the right-of-way.

**7-10.3.4 Traffic Control for Permanent and Temporary Traffic Striping.** During traffic striping operations, traffic shall be controlled with lane closures, as provided for under "Traffic Control System for Lane Closure" of these Supplemental Provisions or by use of an alternative traffic control plan proposed by the Contractor and approved by the Engineer. The Contractor shall not



start traffic striping operations using an alternative plan until the Contractor has submitted its plan to the Engineer and has received the Engineer's written approval of said plan.

**7-10.3.5 Temporary Pavement Delineation.** Temporary pavement delineation shall be furnished, placed, maintained and removed in accordance with the minimum standards specified in the latest California Manual on Uniform Traffic Control Devices (CAMUTCD) published by Caltrans. Whenever the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic. Lane line or centerline pavement delineation shall be provided at all times for traveled ways open to public traffic. All work necessary, including any required lines or marks, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. When temporary pavement delineation is removed, all lines and marks used to establish the alignment of the temporary pavement delineation shall be removed by grinding.

Surfaces to receive temporary pavement delineation shall be dry and free of dirt and loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until superseded or replaced with permanent pavement delineation.

Temporary pavement delineation shall be removed when, as determined by the Engineer, the temporary pavement delineation conflicts with the permanent pavement delineation or with a new traffic pattern for the area and is no longer required for the direction of public traffic. When temporary pavement delineation is required to be removed, all lines and marks used to establish the alignment of the temporary pavement delineation shall be removed.

**7-10.3.6 Preparation of Traffic Control Plans.** The Contractor shall submit traffic control plans (TCPs) as a part of the Work for all construction activities that are located within the traveled way. TCPs shall be prepared by a professional engineer registered in the State of California and regularly engaged in the preparation of traffic control plans. Design of TCPs for construction shall meet the requirements of the City and the California Manual on Uniform Traffic Control Devices as published by Caltrans. Submittal and review requirements for TCPs shall conform to Section 2-5.3 Shop Drawings and Submittals.

The Contractor must obtain the Engineer's approval prior to implementing TCPs. The minimum 20-day review period specified in Section 2-5.3.1 for shop drawings and submittals shall pertain to each submittal of TCPs. New or revised TCP submittals shall include all TCPs needed for the entire duration of the Work. Each TCP phase shall be prepared in sufficient scale and detail to show the lane widths, transition lengths, curve radii, stationing of features affecting the traffic control plan and the methodology proposed to transition to the subsequent TCP phase. When the vertical alignment of the traveled surface differs from the finished pavement elevation, vertical curves must also be shown. The Engineer shall be the sole judge of the suitability and quality of any such TCPs.

**7-10.3.7 Payment.** The contract price paid for Traffic Control shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for performing all work involved to implement the traffic control system, complete in-place, including, but not limited to, preparing and revising TCPs, flag persons, installing temporary or permanent traffic control devices such as barriers, delineators, lighting, signage, portable changeable message signs, striping, pavement markers and markings in accordance with the Contract Documents and as directed by the Engineer. Progress payments for Traffic Control will be based on the percentage of the improvement work necessitating traffic control and completed.



## **7-10.4 Safety.**

**7-10.4.1 Safety Orders.** The Contractor shall have at the Work site, copies or suitable extracts of: Construction Safety Orders, Tunnel Safety Orders and General Industry Safety Orders issued by the State Division of Industrial Safety. The Contractor shall comply with provisions of these and all other applicable laws, ordinances, and regulations.

Before excavating any trench 5 feet or more in depth, the Contractor shall submit a detailed plan to the Agency showing the design of shoring, bracing, sloping, or other provisions to be made for the workers' protection from the hazard of caving ground during the excavation of such trench. If the plan varies from the shoring system standards, the plan shall be prepared by a registered Civil Engineer. No excavation shall start until the Engineer has accepted the plan and the Contractor has obtained a permit from the State Division of Industrial Safety. A copy of the permit shall be submitted to the Engineer.

Payment for performing all work necessary to provide safety measures shall be included in the prices bid for other items of work except where separate bid items for excavation safety are provided or required by law.

**7-10.4.2 Use of Explosives.** Explosives may be used only when authorized in writing by the Engineer, or as otherwise stated in the Specifications. Explosives shall be handled, used, and stored in accordance with all applicable regulations.

The Engineer's approval of the use of explosives shall not relieve the Contractor from liability for claims caused by blasting operations.

**7-10.4.3 Special Hazardous Substances and Processes.** Materials that contain hazardous substances or mixtures may be required on the Work. A Material Safety Data Sheet as described in Section 5194 of the California Code of Regulations shall be requested by the Contractor from the manufacturer of any hazardous products used.

Material usage shall be accomplished with strict adherence to California Division of Industrial Safety requirements and all manufacturer warnings and application instructions listed on the Material Safety Data Sheet and on the product container label.

The Contractor shall notify the Engineer if a specified product cannot be used under safe conditions.

### **7-10.4.4 Confined Spaces.**

(a) Confined Space Entry Program. The Contractor shall be responsible for implementing, administering and maintaining a confined space entry program (CSEP) in accordance with Sections 5156, 5157 and 5158, Title 8, CCR.

Prior to starting the Work, the Contractor shall prepare and submit its comprehensive CSEP to the Engineer. The CSEP shall address all potential physical and environmental hazards and contain procedures for safe entry into confined spaces, including, but not limited to the following:

1. Training of personnel
2. Purgig and cleaning the space of materials and residue



3. Potential isolation and control of energy and material inflow
4. Controlled access to the space
5. Atmospheric testing of the space
6. Ventilation of the space
7. Special hazards consideration
8. Personal protective equipment
9. Rescue plan provisions

The Contractor's submittal shall include the names of its personnel, including subcontractor personnel, assigned to the project who will have CSEP responsibilities, their CSEP training, and their specific assignment and responsibility in carrying out the CSEP.

(b) **Permit-Required Confined Spaces.** Entry into permit-required confined spaces as defined in Section 5157, Title 8, CCR may be required as a part of the Work. All manholes, tanks, vaults, pipelines, excavations, or other enclosed or partially enclosed spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. The Contractor shall implement a permit space program prior to performing any work in a permit-required confined space. A copy of the permit shall be available at all times for review by Contractor and Agency personnel at the Work site.

(c) **Payment.** Payment for implementing, administering, and providing all equipment and personnel to perform the CSEP shall be included in the bid items for which the CSEP is required.

**7-10.4.5 Safety and Protection of Workers and Public.** The Contractor shall take all necessary precautions for the safety of employees on the work and shall comply with all applicable provisions of Federal, State and Municipal safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the work is being performed. The Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of workers and public and shall use danger signs warning against hazards created by such features of construction as protruding nails, hoists, well holes, and falling materials.

#### **7-10.4.6 Flood Lighting.**

**7-10.4.6.1 General.** When work is being performed during hours of darkness, as defined in Division 1, Section 280, of the California Vehicle Code, flood lighting shall be used to illuminate the Work site, flagger stations, equipment crossings and other hazardous areas. Flood lighting shall provide visibility for a distance of 1/2 mile (800 m). Flood lights shall not shine directly into the view of oncoming traffic.

**7-10.4.6.2 Payment.** No separate or additional payment will be made for flood lighting. Payment shall be included in the Contract Unit Price or lump sum price in the Bid for the various Bid items.

#### **7-10.4.7 Security and Protective Devices.**

**7-10.4.7.1 General.** Security and protective devices shall consist of fencing, steel plates, or other devices as specified in the Special Provisions to protect open excavations.



**7-10.4.7.2 Security Fencing.** The Contractor shall completely fence open excavations. Security fencing shall conform to 304-5. Security fencing shall remain in place unless workers are present and construction operations are in progress during which time the Contractor shall provide equivalent security.

**7-10.4.7.3 Payment.** No separate or additional payment will be made for security fencing or protective devices. Payment shall be included in the Contract Unit Price or lump sum price in the Bid for the various Bid items.

#### **7-10.4.8 Steel Plate Covers.**

**7-10.4.8.1 General.** The Contractor shall provide, install, and maintain steel plate covers as necessary to protect from accidental entry into openings, trenches, and excavations. Plates shall provide complete coverage to prevent any person, bicycle, motorcycle, or motor vehicle from being endangered due to plate movement causing separations or gaps. The Contractor shall submit the design in accordance with Section 2-5.3 which shall include the following criteria:

1. The approval of steel plate bridging shall be at the sole discretion of the Engineer.
2. Steel plate bridging shall be designed to support HS20-44 truck loading per Caltrans Bridge Design Specifications Manual.
3. Surfaces exposed to pedestrian or vehicular traffic shall be non-skid. The Contractor shall maintain a non-skid surface on the steel plate having a minimum coefficient of friction equivalent to 0.35 as determined by California Test Method 342. If a different test method is used, the Contractor may utilize standard test plates with known coefficients of friction available from each Caltrans District Materials Engineer to correlate skid resistance results to California Test Method 342.
4. The Contractor shall install signage with a 2-inch (51 mm) minimum letter height indicating the steel plate cover load limit, the Company's name, and a 24-hour emergency contact phone number.
5. The Contractor shall install Rough Road (W33) sign with black lettering on an orange background in advance of steel plate bridging.
6. The Contractor is responsible for the maintenance of the plates and asphalt concrete ramps or other devices used to secure the plates and shoring of the trench to support all loads.
7. The Contractor shall immediately mobilize necessary personnel and equipment to repair plate movements, separation, noise, anchors, asphalt ramps or any other deficiency. Failure to respond within 2 hours after being notified by the Engineer shall be grounds for the City to perform necessary repairs at the expense of the Contractor.
8. When plates are removed, the pavement surface shall be repaired to the satisfaction of the Engineer.
9. For trench widths exceeding those in Table 7-10.4.8.2, a structural design shall be prepared by a California registered civil or structural engineer regularly engaged in the design of shoring systems.

**7-10.4.8.2 Thickness.** Steel plate covers shall conform to Table 7-10.4.8.2.



**TABLE 7-10.4.8.2**

Trench Width	Steel Plate Cover Thickness
Less than 10"	1/2" (12.5 mm)
10" (250 mm) to 1'-11" (580 mm)	3/4" (19 mm)
2' (600 mm) to 2'-7" (790 mm)	7/8" (22 mm)
2'-8" (820 mm) to 3'-5" (1040 mm)	1" (25 mm)
3'-6" (1070 mm) to 5'-3" (1600 mm)	1-1/4" (32 mm)
More than 5'-3" (1600 mm)	See Note 1

## Notes:

- 1) The Contractor shall submit a Working Drawing and calculations based on AASHTO H20-44 bridge loading.

**7-10.4.8.3 Installation.** Steel plate covers shall extend a minimum of 2 feet (600 mm) beyond trench edges. Unless otherwise specified in the Special Provisions or approved by the Engineer for the site conditions prior to use, steel plate covers shall be installed using Method 1. Method 2 shall not be used in a traveled lane.

Method 1. The pavement shall be cold milled to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate. The cold milling shall produce a flat surface to support the plate with no horizontal or vertical movement. Horizontal gaps between the unmilled pavement and the plate shall not exceed 1 inch (25 mm) and shall be filled with elastomeric sealant material which may, at the Contractor's option, be mixed with no more than 50%, by volume, of Type I aggregate conforming to the requirements of Tables 203-5.2(B) and 203-5.3(A).

Method 2. The approach plate and ending plate (in longitudinal placement) shall be attached to the surface by a minimum of 2 dowels, 3/4" diameter (19 mm), drilled at the corners of the plate and drilled 6 inches (150 mm) into the pavement. Subsequent plates may be butted next to each other. Temporary asphalt concrete (D2-SC 800) shall be used to construct tapers from the steel plate surface to the existing surface at a 12-inch (300 mm) run for each 1-inch (25 mm) thickness of steel plate. When steel plates are removed, the dowel holes in the pavement section shall be completely filled with elastomeric sealant material.

Advance traffic warning signs shall be installed as specified in the Special Provisions or shown on the TCP.

**7-10.4.8.4 Payment.** Steel plate bridge materials including, but not limited to steel plates, anchoring devices, cold milling, elastomeric sealant material, asphalt ramping and padding, signage, placing, installation, removal, relocation, preparation and processing of shop drawings and submittals to support the use of steel plate bridging and all other materials, labor, supervision, overhead of any type or description will be considered as incidental to the work. No separate or additional payment for steel plate bridging will be made. No extension to contract time will be allowed for, or because of, the use of steel plate bridging.

**7-11 PATENT FEES OR ROYALTIES.** The Contractor shall absorb in its Bid the patent fees or royalties on any patented article or process furnished or used in the Work. The Contractor shall indemnify and hold the Agency harmless from any legal action that may be brought for infringement of patents.

**7-12 ADVERTISING.** The names, addresses and specialties of Contractors, Subcontractors, architects, or engineers may be displayed on removable signs. The size and location shall be subject to the Engineer's approval.



Commercial advertising matter shall not be attached to or painted on the surfaces of buildings, fences, canopies, or barricades.

**7-13 LAWS TO BE OBSERVED.** The Contractor shall keep fully informed of State and National laws and County and Municipal ordinances and regulations which in any manner affect those employed in the Work or the materials used in the Work or in any way affect the conduct of the Work. The Contractor shall at all times observe and comply with such laws, ordinances, and regulations. Municipal ordinances that affect this work include Chapter 11.06. Excavation and Grading. If this notice specifies locations or possible materials, such as borrow pits or gravel beds, for use in the proposed construction project which would be subject to Section 1601 or Section 1603 of the Fish and Game Code, the conditions established pursuant to Section 1601 et seq. of the Fish and Game Code shall become conditions of the contract.

**7-14 ANTITRUST CLAIMS.** Section 7103.5 of the Public Contract Code provides:

“In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec 15) or Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or subcontract. The assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment of the parties.”





## SECTION 8 – FACILITIES FOR AGENCY PERSONNEL

**8-1 GENERAL.** No office space is required for Agency personnel. However, Contractor is required to maintain a laydown area within the general vicinity of the Project. The District will not provide a laydown yard. Contractor is responsible for acquiring a laydown yard.



## SECTION 9 – MEASUREMENT AND PAYMENT

### 9-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK.

**9-1.1 General.** Unless otherwise specified, quantities of work shall be determined from measurements or dimensions in horizontal planes. Linear quantities of pipe or conduit shall be measured along the alignment centerline stationing. Piling, fencing and timber shall be considered as being the true length measured along longitudinal axis.

Unless otherwise provided in Specifications, volumetric quantities shall be the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimension. The planimeter shall be considered an instrument of precision adapted to measurement of all areas.

**9-1.2 Methods of Measurement.** Materials and items of work which are to be paid for on basis of measurement shall be measured in accordance with methods stipulated in the particular sections involved.

**9-1.3 Certified Weights.** When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing actual net weights. The Agency will accept the certificates as evidence of weights delivered.

**9-1.4 Units of Measurement.** The system of measure for this contract shall be the U.S. Standard Measures.

### 9-2 LUMP SUM WORK.

Items for which quantities are indicated "Lump Sum", "L.S.", or "Job", shall be paid for at the price indicated in the Bid. Such payment shall be full compensation for the items of work and all work appurtenant thereto.

The Contractor shall submit to the Engineer within 15 days after award of Contract, a detailed schedule in triplicate, to be used as a basis for determining progress payments on a lump sum contract or designated lump sum bid item. This schedule shall equal the lump sum bid and shall be in such form and sufficiently detailed as to satisfy the Engineer that it correctly represents a reasonable apportionment of the lump sum.

### 9-3 PAYMENT.

**9-3.1 General.** The quantities listed in the Bid schedule will not govern final payment. Payment to the Contractor will be made only for actual quantities of Contract items constructed in accordance with the Plans and Specifications. Upon completion of construction, if the actual quantities show either an increase or decrease from the quantities given in the Bid schedule, the Contract Unit Prices will prevail subject to the provisions of Section 3-2.2.1.

The unit and lump sum prices to be paid shall be full compensation for the items of work and all appurtenant work, including furnishing all materials, labor, equipment, tools, and incidentals.



Payment will not be made for materials wasted or disposed of in a manner not called for under the Contract. This includes rejected material not unloaded from vehicles, material rejected after it has been placed, and material placed outside of the Plan lines. No compensation will be allowed for disposing of rejected or excess material.

Payment for work performed or materials furnished under an Assessment Act Contract will be made as provided in particular proceedings or legislative act under which such contract was awarded.

Whenever any portion of the Work is performed by the Agency at the Contractor's request, the cost thereof shall be charged against the Contractor, and may be deducted from any amount due or becoming due from the Agency.

Whenever immediate action is required to prevent violation of any law, injury, death, or property damage, and precautions which are the Contractor's responsibility have not been taken and are not reasonably expected to be taken, the Agency may, after reasonable attempt to notify the Contractor, cause such precautions to be taken and shall charge the cost thereof against the Contractor, or may deduct such cost from any amount due or becoming due from the Agency. Agency action or inaction under such circumstances shall not be construed as relieving the Contractor or its Surety from liability.

Payment shall not relieve the Contractor from its obligations under the Contract; nor shall such payment be construed to be acceptance of any of the Work. Payment shall not be construed as the transfer of ownership of any equipment or materials to the Agency. Responsibility of ownership shall remain with the Contractor who shall be obligated to store any fully or partially completed work or structure for which payment has been made; or replace any materials or equipment required to be provided under the Contract which may be damaged, lost, stolen or otherwise degraded in any way prior to acceptance of the Work, except as provided in Section 6-10.

Guarantee periods shall not be affected by any payment but shall commence on the date of recordation of the "Notice of Completion."

If, within the time fixed by law, a properly executed notice to stop payment is filed with the Agency, due to the Contractor's failure to pay for labor or materials used in the Work, all money due for such labor or materials will be withheld from payment to the Contractor in accordance with applicable laws.

At the expiration of 35 days from the date of acceptance of the Work by the Board, or as prescribed by law, the amount deducted from the final estimate and retained by the Agency will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the Contract to be further retained.

**9-3.2 Partial and Final Payment.** The Engineer will, after award of Contract, establish a closure date for the purpose of making monthly progress payments. The Contractor may request in writing that such monthly closure date be changed. The Engineer may approve such request when it is compatible with the Agency's payment procedure.

Each month, the Engineer will make an approximate measurement of the work performed to the closure date as basis for making monthly progress payments. The estimated value will be based



on contract unit prices, completed change order work and as provided for in Section 9-2 of these General Provisions. Progress payments shall be made no later than thirty (30) calendar days after the closure date. Five (5) working days following the closure date, the Engineer shall complete the detailed progress pay estimate and submit it to the Contractor for the Contractor's information. Should the Contractor assert that additional payment is due, the Contractor shall within ten (10) days of receipt of the progress estimate, submit a supplemental payment request to the Engineer with adequate justification supporting the amount of supplemental payment request. Upon receipt of the supplemental payment request, the Engineer shall, as soon as practicable after receipt, determine whether the supplemental payment request is a proper payment request. If the Engineer determines that the supplemental payment request is not proper, then the request shall be returned to the Contractor as soon as practicable, but not later than seven (7) days after receipt. The returned request shall be accompanied by a document setting forth in writing the reasons why the supplemental payment request was not proper. In conformance with Public Contract Code Section 20104.50, the City shall make payments within thirty (30) days after receipt of an undisputed and properly submitted supplemental payment request from the Contractor. If payment of the undisputed supplemental payment request is not made within thirty (30) days after receipt by the Engineer, then the City shall pay interest to the Contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

From each progress estimate, 10 percent will be deducted and retained by the Agency, and the remainder less the amount of all previous payments will be paid. After 50 percent of the Work has been completed and if progress on the Work is satisfactory, the deduction to be made from remaining progress estimates and from the final estimate may be limited to \$500 or 10 percent of the first half of total Contract amount, whichever is greater.

No progress payment made to the Contractor or its sureties will constitute a waiver of the liquidated damages under 6-9.

As provided in Section 22300 of the California Public Contract Code, the Contractor may substitute securities for any monies withheld by the Agency to ensure performance under the Contract.

After final inspection, the Engineer will make a Final Payment Estimate and process a corresponding payment. This estimate will be in writing and shall be for the total amount owed the Contractor as determined by the Engineer and shall be itemized by the contract bid item and change order item with quantities and payment amounts and shall show all deductions made or to be made for prior payments and amounts to be deducted under provisions of the contract. All prior estimates and progress payments shall be subject to correction in the Final Payment Estimate.

The Contractor shall have 30 calendar days from receipt of the Final Payment Estimate to make written statement disputing any bid item or change order item quantity or payment amount. The Contractor shall provide all documentation at the time of submitting the statement supporting its position. Should the Contractor fail to submit the statement and supporting documentation within the time specified, the Contractor acknowledges that full and final payment has been made for all contract bid items and change order items.

If the Contractor submits a written statement with documentation in the aforementioned time, the Engineer will review the disputed item within 30 calendar days and make any appropriate



adjustments on the Final Payment. Remaining disputed quantities or amounts not approved by the Engineer will be subject to resolution as specified in Section 3-5, Disputed Work.

The written statement filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said disputed items. The Engineer will consider the merits of the Contractor's claims. It will be the responsibility of the Contractor to furnish within a reasonable time such further information and details as may be required by the Engineer to determine the facts or contentions involved in its claims. Failure to submit such information and details will be sufficient cause for denying payment for the disputed items.

**9-3.2.1 Payment for Claims.** Except for those final payment items disputed in the written statement required in Section 9-3.2 all claims of any dollar amount shall be submitted in a written statement by the Contractor no later than the date of receipt of the final payment estimate. Those final payment items disputed in the written statement required in Section 9-3.2 shall be submitted no later than 30 days after receipt of the Final Payment estimate. No claim will be considered that was not included in this written statement, nor will any claim be allowed for which written notice or protest is required under any provision of this contract including Sections 3-4 Changed Conditions, 3-5 Disputed Work, 6-6.3 Payment for Delays to Contractor, 6-6.4 Written Notice and Report, or 6-7.3 Contract Time Accounting, unless the Contractor has complied with notice or protest requirements.

The claims filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said claims. The Engineer will consider and determine the Contractor's claims and it will be the responsibility of the Contractor to furnish within a reasonable time such further information and details as may be required by the Engineer to determine the facts or contentions involved in its claims. Failure to submit such information and details will be sufficient cause for denying the claims.

Payment for claims shall be processed within 30 calendar days of their resolution for those claims approved by the Engineer. The Contractor shall proceed with informal dispute resolution under Section 3-5, Disputed Work, for those claims remaining in dispute.

**9-3.3 Delivered Materials.** The cost of materials and equipment delivered but not incorporated into the work will not be included in the progress estimate.

**9-3.4 Mobilization.** When a bid item is included in the Proposal form for Mobilization and subject to the conditions and limitations in the Specifications, the costs of work in advance of construction operations and not directly attributable to any specific bid item will be included in the progress estimate. When no such bid item is provided, payment for such costs will be considered to be included in the other items of work.

**9-3.4.1 Mobilization and Preparatory Work.** Payment for Mobilization and Preparatory Work will be made at the Contract price and includes full compensation for furnishing all insurance, bonds, licenses, labor, materials, utilities, tools, equipment and incidentals, and for doing all the work involved in mobilization and preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidental to preparing to conduct work on and off the project site and other offsite facilities necessary for work on the project; for all other facilities, sureties, work and operations which must be performed or costs incurred prior to beginning work on various contract items on or off the project site, excepting those specifically paid for under separate bid items. Such activities shall include, but are not limited to, coordination with Agency forces, securing permits, surveying and



staking, demobilization and any other work or services not included in any other bid item. The Contractor hereby agrees that the price paid is sufficient for Mobilization and Preparatory Work, as described in this section, and that the Contractor shall have no right to additional compensation for Mobilization and Preparatory Work.

Progress payments for Mobilization and Preparatory Work will be made as follows:

For the first progress payment (after the issuance of the Notice to Proceed), payment will be made at forty percent (40%) of the amount bid for Mobilization and Preparatory Work. For the second progress payment, payment will be made at fifty percent (50%) of the amount bid for Mobilization and Preparatory Work. The remaining 10% of the amount bid for Mobilization and Preparatory Work will be made when all punch list items are corrected and completed to the satisfaction of the City Inspector, and the Contractor has completely demobilized from the project site(s).

**9-4 BID ITEMS.** Payment for each Bid Item shall be made at the quantity and type as listed in the Contractor's Proposal. All work shown or mentioned on the plans, in the Contract Documents, General Provisions, or Technical Provisions/Specifications shall be considered as included in the Bid Items. Contractor must protect existing utilities, improvements, landscaping, irrigation systems, and vegetation in place. If damaged during the work, Contractor is responsible to repair or replace any utilities, improvements, landscaping, irrigation systems, and vegetation at his expense.

#### **Mobilization**

The contract price paid for this bid item shall constitute payment for all mobilization and preparatory work in accordance with Section 9-3.4 of these General Conditions. Field offices, laboratories, and bathhouse facilities are not required.

#### **Preconstruction Video and Photographs**

The contract price for work under this item shall include, but not be limited to, furnishing all labor, material, tools and equipment, and performing all work required for preconstruction video and photographs and all other work necessary to complete this item of work as described in the Contract Documents.

#### **Excavation Support Systems**

The contract price paid for this bid item shall constitute full compensation to furnish and install sheeting, shoring, bracing, sloping or equivalent method of support for excavations for the protection of life or limb which shall conform to applicable safety orders. This includes, but is not limited to, the preparation and submittal of a shoring plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground in or adjacent to trenches or open excavations, and acceptance of said plan by the Engineer, in accordance with California Labor Codes 6705 and 6707. If such plan varies from the excavation support system standards of CCR, Title 8, Section 1541.1, the plan shall be prepared by a California registered civil or structural engineer. This bid item shall also include obtaining any required permit from the State Division of Industrial Safety.

#### **Tier 2 SWPPP Preparation, Implementation and Maintenance**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials, and equipment to submit for approval, implement, maintain, report, document, and amend as necessary a Tier 2 Storm Water Pollution Prevention Plan per Section 300-12.



**Traffic Control**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials, equipment and services to prepare traffic control plans, and to implement and maintain the temporary traffic control systems necessary to complete all phases of work in accordance with Section 601.

**Utility Locating and Potholing**

The contract unit price shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals to locate existing utilities within the site, perform exploratory excavation where existing utilities cross the proposed trench zone, and protecting utilities during construction. This item includes, but is not limited to, Underground Service Alert and utility mark-out notifications, coordination and standby inspection of potholing excavations, excavating, utility locating and logging, backfilling, and pavement restoration per Carlsbad Standard Drawing GS-29, and submitting a report of the located utility depths prior to trenching.

**Asbestos Cement Pipe Sample for Testing**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials, tools and equipment to provide asbestos cement pipe samples for testing, including; labeling, bagging, sealing samples for AC Pipe Testing, and delivery of samples to CMWD (Monday through Thursday only), in accordance with Section 02060 and 02262 of the Carlsbad Engineering Standards and other requirements of the Contract Documents. CMWD will perform AC Pipe Testing.

**Asbestos Cement Pipe Removal and Disposal**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment to remove and dispose existing asbestos cement pipe in accordance with the Contract Documents. This item shall include the preparation and submittal of any required health and safety plans; excavation; dewatering; cutting, removal of ACP; polyethylene encasement of AC pipe to be disposed; placement of ACP in designated waste containers; legal disposal of pipe, providing manifest of disposal and all incidental work in accordance with applicable regulations.

**Demolition of Existing Pipe and Valves**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials, tools and equipment and remove existing water main, fittings, valves, and appurtenances of the size and to the limits specified in accordance with the Contract Documents. Salvage valve box lids to CMWD. This bid item shall include pavement saw-cutting; demolition of pavements; excavation; dewatering and any required water disposal; removal of existing or to be abandoned conduits or structures. This bid item shall not include pavement structural section restoration which is measured and paid for under a separate bid item.

**Furnish and Install PVC Water Main**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials, tools and equipment and install new polyvinyl chloride (PVC) water main of the size specified per CMWD W-2 and in accordance with the Contract Documents. This bid item shall include placement and compaction of imported pipe zone bedding and backfill and trench zone backfill, pipe, gaskets, hardware, fittings, corrosion protection of fittings and hardware, thrust blocks and thrust restraint devices, installation of tracer wire and utility warning tape, hydrostatic pressure testing, disinfection, disposal of surplus materials and all incidental work. This bid item shall not include pavement structural section restoration which is measured and paid for under a separate bid item.



### **Furnish and Install Steel Water Main**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials, tools and equipment and install new Steel water main of the size and to the limits specified in accordance with the Contract Documents. This bid item shall include placement and compaction of imported pipe zone bedding and backfill and trench zone backfill; pipe; welding; hardware; fittings; corrosion protection of fittings and hardware; thrust blocks and thrust restraint devices; installation of tracer wire and utility warning tape; hydrostatic pressure testing; disinfection; disposal of surplus materials and all incidental work. This bid item shall not include pavement structural section restoration which is measured and paid for under a separate bid item.

### **Furnish and Install Gate Valve**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials, tools and equipment and install new resilient wedge gate valve of the size specified and valve box assembly per CMWD Standard Drawing W-21 and in accordance with the Contract Documents. This bid item shall include gaskets; hardware; corrosion protection coatings; polyethylene encasement; valve support blocks; thrust restraint fittings or concrete thrust blocks; valve box and lid; locating wire; placement and compaction of imported pipe zone bedding and backfill; and trench zone backfill. Gate valves installed for fire service or fire hydrant assemblies shall be measured and paid for under separate bid items.

### **Furnish and Install Butterfly Valve**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials, tools and equipment and install new AWWA butterfly valve of the size specified and valve box assembly per CMWD Standard Drawing W-22 and in accordance with the Contract Documents. This bid item shall include gaskets; hardware; corrosion protection coatings; polyethylene encasement; valve support blocks; thrust restraint fittings or concrete thrust blocks; valve box and lid; locating wire; placement and compaction of imported pipe zone bedding and backfill; and trench zone backfill. Gate valves installed for fire service or fire hydrant assemblies shall be measured and paid for under separate bid items.

### **Furnish and Install 2-Inch Manual Air Release/Blow Off Assembly**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment and install new manual air release/blow-off assembly per CMWD Standard Drawing No. W-10 and in accordance with the Contract Documents. This item includes, but is not limited to, pavement saw-cutting; demolition of pavements; excavation; dewatering and any required water disposal; removal of existing or to be abandoned conduits or structures; imported bedding and backfill materials; piping; valves; fittings; valve box and lid; locating wire; placement and compaction of imported pipe zone bedding and backfill; and trench zone backfill. This bid item shall not include pavement structural section restoration which is measured and paid for under a separate bid item.

### **Furnish and Install 2-Inch Combination Air & Vacuum Valve Assembly**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment and install new combination air and vacuum valve assembly per CMWD Standard Drawing No. W-11 and in accordance with the Contract Documents. This item includes, but is not limited to, pavement saw-cutting; demolition of pavements; excavation; dewatering and any required water disposal; removal of existing or to be abandoned conduits or structures; imported bedding and backfill materials; piping; isolation valves; fittings; combination air valve and enclosure; appurtenance pad; valve box and lid; locating wire; placement and





compaction of imported pipe zone bedding and backfill; and trench zone backfill. This bid item shall not include pavement structural section restoration which is measured and paid for under a separate bid item.

### **Furnish and Install 1-inch Water Service Outlet and Reconnect Existing Service**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment and install new water service outlet assembly per CMWD Standard Drawing No. W-3 and W-13 and reconnect existing water service and in accordance with the Contract Documents. This item includes, but is not limited to, pavement saw-cutting; demolition of pavements; excavation; dewatering and any required water disposal; removal of existing or to be abandoned conduits or structures; imported pipe zone bedding and backfill and trench zone backfill; service saddle; corporation stop; copper tubing; fittings; angle meter valve; sacrificial anodes; meter box and site restoration. New water meters, where needed, will be furnished and installed by the District. This bid item shall not include pavement structural section restoration which is measured and paid for under a separate bid item.

### **Water Main Connection**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment not included in any other bid item and connect the new pipeline to the existing water main as identified on the plans and in accordance with the Contract Documents. This item shall include pavement saw-cutting; demolition of pavements; excavation; dewatering and any required water disposal; removal of existing or to be abandoned conduits or structures; pipe; fittings and couplings required to facilitate the connection; disinfection; bacteriological testing; placement and compaction of imported pipe zone bedding and backfill; and trench zone backfill. This bid item shall not include pavement structural section restoration which shall be measured and paid for under a separate bid item.

### **Abandon Water Main**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment and slurry fill, cut and plug, and abandon in-place existing water mains in accordance with the Contract Documents. This item shall include all excavation, dewatering, concrete slurry filling or plugging of pipe to be abandoned in-place, removing valve box and lid, backfill of excavations and all incidental work. This bid item shall not include pavement structural section restoration which is measured and paid for under a separate bid item.

### **Furnish and Install Cathodic Protection**

The contract price paid for this bid item shall constitute full compensation for all labor, materials and equipment required to construct new cathodic protection as shown on the drawings, in accordance with the Contract Documents. This item shall include, but not be limited to excavation; anodes; wiring; conduit; warning tape; test boxes; and connections to existing pipe; disposal of waste or surplus materials; and all incidental work or services.

### **Over-excavation and Backfill**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment to over-excavate unsuitable materials from the trench and construct foundation stabilization in accordance with Section 02223 of the Carlsbad Engineering Standards and the Contract Documents. The removal limits shall be as ordered by the Engineer.



**Pavement Repair**

Aggregate Base: The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment and place untreated aggregate base (Caltrans Class II, Section 26- 1.02B), complete in-place in accordance with City of Carlsbad Standard Drawings (GS-17 and GS-25 or GS-26) and other requirements of the Contract Documents. The price paid shall include, but not be limited to preparing and compacting the subgrade and importing, placing and compacting aggregate base above the trench zone, beneath asphalt concrete or beneath Portland cement concrete pavement, flatwork or curb and gutter.

Asphalt Concrete: The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment and place asphalt concrete pavement, complete in-place in accordance with City of Carlsbad Standard Drawings (GS-17 and GS-25 or GS-26) and other requirements of the Contract Documents. The price paid shall include, but not be limited to saw-cutting and cold milling not included in any other bid item; applying tackifiers; placing and compacting asphalt concrete along the water main trench, service piping, appurtenances and excavations for abandoned water mains or other areas damaged by construction; and applying seal coat. Pavement that is damaged during construction, when such damage could have been prevented using rubber-tired equipment, steel plating or similar protective measures, will not be measured for payment and shall be replaced at the Contractor's expense.

**Portland Cement Concrete**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment and construct Portland cement concrete flatwork, pavement, curb and gutter, complete in-place, in accordance with the Contract Documents. The price paid shall include, but not be limited to saw-cutting, subgrade preparation, formwork, steel reinforcement, concrete, curing and all incidental work or services. Portland cement concrete improvements that are damaged during construction, when such damage could have been prevented using rubber-tired equipment, steel plating or similar protective measures, will not be measured for payment and shall be replaced at the Contractor's expense.

**Replace Pavement Markings**

The contract price paid for this bid item shall constitute full compensation to furnish all labor, materials and equipment to replace in-kind per Section 314 all pavement striping, markings, markers and signage disturbed, removed or damaged by construction.



# **SUPPLEMENTAL PROVISIONS TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION PART 2, CONSTRUCTION MATERIALS**

## **SECTION 200 - ROCK MATERIALS**

### **200-2 UNTREATED BASE MATERIALS.**

#### **200-2.1 General.**

Replace this subsection in its entirety with the following:

Materials for use as untreated base or subbase shall be classified in the order of preference as follows:

- a) Class II Aggregate Base conforming to Caltrans Standard Specification, Section 26: Aggregate Bases, Subsection 26-1.02B Class II Aggregate Base,  $\frac{3}{4}$ " maximum size.
- b) Crushed Miscellaneous Base conforming to subsection 200-2.4.

When base material without further qualification is specified, the Contractor shall supply Class II aggregate base. When a particular classification of base material is specified, the Contractor may substitute any higher classification of base material for that specified, following the order of preference listed above. All processing or blending of materials to meet the grading requirement will be performed at the plant or source. The materials shall compact to a hard, firm, unyielding surface and shall remain stable when saturated with water.

Add the following section:

#### **200-2.2.4 Class II Aggregate Base.**

If the results of either or both the aggregate grading and Sand Equivalent tests do not meet the requirements specified for "Operating Range" but meet the "Contract Compliance" requirements, placement of the aggregate base may be continued for the remainder of that day. However, another day's work may not be started until tests indicate that the next material to be used in the work will comply with the requirements specified for "Operating Range."

If the results of either or both the aggregate grading and Sand Equivalent tests do not meet the requirements specified for "Contract Compliance," the aggregate base which is represented by these tests shall be removed. However, if requested by the Contractor and approved by the Engineer, the aggregate base may remain in place and the Contractor shall pay to the City 15 percent of the material cost per cubic yard for such aggregate base left in place. The City may deduct this amount from any moneys due, or that may become due, the Contractor under the contract. If both the aggregate grading and Sand Equivalent do not conform to the "Contract Compliance" requirements, only one adjustment shall apply.

No single aggregate grading or Sand Equivalent test shall represent more than 500 cubic yards or one day's production, whichever is smaller.



**200-2.4.3 Quality Requirements.**

Add the following:

If the test results of the tests for either or both aggregate grading and Sand Equivalent tests do not meet the requirements specified, placement of the Crushed Miscellaneous Base may be continued for the remainder of the working day. Work shall not resume until tests indicate that the aggregate to be used complies with the requirements specified.

If the results of either or both the aggregate grading and Sand Equivalent tests do not meet the requirements specified, the Crushed Miscellaneous Base which is represented by these tests shall be removed. However, if requested by the Contractor and approved by the Engineer, the material may remain in place and the Contractor shall pay to the City 15 percent of the material cost per cubic yard for such aggregate base left in place. The City may deduct this amount from any moneys due, or that may become due, the Contractor under the contract. If both the aggregate grading and Sand Equivalent do not conform to the requirements for Crushed Miscellaneous Base, only one adjustment shall apply.

No single aggregate grading or Sand Equivalent test shall represent more than 500 cubic yards or one day's production, whichever is smaller.

**SECTION 201 - CONCRETE, MORTAR, AND RELATED MATERIALS**

**201-1 PORTLAND CEMENT CONCRETE.**

**TABLE 201-1.1.2(A)** Modify as follows:

**TABLE 201-1.1.2(A) <sup>(3)</sup>  
PORTLAND CEMENT CONCRETE**

<b>Type of Construction</b>	<b>Concrete Class</b>	<b>Maximum Slump Inches (mm)</b>
All Concrete Used Within the Right-of-Way	560-C-3250 <sup>(1)</sup> (330-C-23)	<sup>(2)</sup>
Trench Backfill Slurry	190-E-400 (115-E-3)	8" (200)
Street Light Foundations and Survey Monuments	560-C-3250 (330-C-23)	4" (100)
Traffic Signal Foundations	590-C-3750 (350-C-27)	4" (100)
Concreted-Rock Erosion Protection	520-C-2500P 310-C-17	per Table 300-11.3.1

(1) Except that concrete required to be of higher strength by Table 201-1.1.2(A) SSPWC shall be as per Table 201-1.1.2(A) SSPWC.

(2) As per Table 201-1.1.2(A) SSPWC.

(3) Portions of Table 201-1.1.2(A) of the Standard Specifications for Public Works Construction not shown herein as changed are not affected by this table.



#### **201-1.2.4 Chemical Admixtures.**

Substitute the following:

**(d) Air-Entraining Admixtures.** The air content shall not deviate from the percentage specified or permitted by more than 1-1/2 percentage points. The air content of freshly mixed concrete will be determined by California Test 504.

#### **201-3 EXPANSION JOINT FILLER AND JOINT SEALANTS.**

**201-3.4 Type "A" Sealant (Two-Part Polyurethane Sealant).** Add the following: All finished concrete surfaces shall have a 1/2" continuous expansion joint at locations indicated on the plans and notes and shall be located either parallel or perpendicular to the curb line. When not otherwise indicated, all expansion joints located adjacent to colored concrete shall be sealant Type "A" and colored to match the color of the concrete surface.

Contractor shall provide joint sealants that have been produced and installed to establish and to maintain watertight and airtight continuous seals without causing staining or deterioration of joint substrates.

Contractor shall submit product data from the manufacturer of each joint sealant product required, including instructions for joint preparation and joint sealer application. Contractor shall also submit samples for initial selection purposes in form of manufacturer's standard bead samples, consisting of strips of actual products showing full range of colors available, for each product exposed to view. Samples shall be submitted to Engineer. Submit complete schedule of type (and location where type is to be used) of each sealant.

Contractor shall engage an experienced installer who has completed joint sealant applications similar in material, design and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance.

Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

When matching existing colored concrete or for new colored concrete, provide color selections from manufacturer's full range of standard colors for products of type indicated. Sealant color parallel to curb line shall match color of Paving Treatment as specified in Section 303-7 of these Special Provisions.

Joint sealants shall be multi-component polyurethane sealant. Except as otherwise indicated, provide manufacturer's standard, non-modified, 2-or-more-part, polyurethane-based, elastomeric sealant complying with either ASTM-C920, Type M, Grade P, Class 25, or FS TT-S 0227E Class A, non-sag, Type II.

Acceptable Products: "Sonneborn NP11"; Sonneborn Building Products Division; "Scofield Lithoseal Trafficalk 3-G", L.M. Scofield Company; or equivalent, as approved by the Engineer.

Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.



Plastic foam joint fillers shall be pre-formed, compressible, resilient, nonstaining, nonwaxing, nonextruding strips of flexible plastic foam either open-cell polyurethane foam or closed-cell polyethylene foam, subject to approval of sealant manufacturer, for cold-applied sealants only. Polystyrene foam is not acceptable.

## **SECTION 203 - BITUMINOUS MATERIALS**

### **203-6 ASPHALT CONCRETE.**

#### **203-6.2.1. Asphalt Binder.**

Add the following:

Wet Mix or Core sampled asphalt concrete will be considered in conformance with the mix design when the Asphalt Binder content is within +/-0.5% of the design mix and the gradation conforms to the grading as shown in Table 203-6.4.4. Deviations in gradation may be considered in conformance with the mix design provided the stability of the completed mix complies with the requirements for Hveem Stability per Table 203-6.4.4.

#### **203-6.4 Asphalt Concrete Mixtures.**

Add the following:

Conventional Asphalt concrete shall be class C2-PG64-10 for a surface course 2 inches in depth and B-PG64-10 for all base courses. Asphalt concrete shall be class D2-PG70-10 for dikes and class E-PG70-10 ditches.

#### **203-6.4.4 Composition and Grading.**

Add the following:

Evaluation of asphalt concrete shall be determined from samples of asphalt concrete taken after completion of all processing (Wet Mix) or by core sample analysis of the in-place asphalt concrete or by direct central plant inspection that confirms the production of a particular mix design and verifies using samples of aggregate taken before the addition of asphalt and mineral filler (Bin). All samples shall be taken in accordance with Calif. Test 125.

When Wet Mix or Core samples of asphalt concrete are to be used for evaluation, sufficient size samples shall be taken to ensure representative and adequate quantity of material for:

1. Asphalt Content and Gradation of Extraction using Calif. Test 382 or ASTM 2172, and Calif. Test 202.
2. Stability using:
  - a. Hveem stability Value using Calif. Tests 304 and 366 shall be the average of three individual Values and/or
  - b. Marshall Stability<sup>1</sup> in accordance with the Asphalt Institute's MS-2 fabricated and tested for traffic volume and shall be the average of three specimens.

<sup>1</sup>Only use Marshall Stability when the deviation between individual Hveem Stabilometer Values are greater than +/-5.

When using core sample analysis, the samples must be properly prepared to safeguard against influx of outside contaminants and so that the cut surfaces do not influence the test results.



The amount of asphalt binder used in asphalt concrete placed in dikes, gutters, gutter flares, overside drains and aprons at the ends of drainage structures shall be increased one percent by mass of the aggregate over the amount of asphalt binder determined for use in asphalt concrete placed on the traveled way.

Wet Mix or Core sampled asphalt concrete will be considered in conformance with the mix design when the asphalt content is within +/- .40 of the design mix and the gradation conforms to the grading as shown in Table 203-6.4.4. Deviations in gradation may be considered in conformance with the mix design provided the stability of the completed mix complies with the requirements for Hveem Stability per Table 203-6.4.4.

## SECTION 213 - ENGINEERING GEOSYNTHETICS

### 213-5 GEOTEXTILES AND GEOGRIDS.

Add the following section:

**213-5.1 General.** Geotextile types shall be used for the applications listed in Table 213-5.1.

**Table 213-5.1  
GEOTEXTILE APPLICATIONS**

Application of Geotextile	Type Designation
Separation of Soil and Street Structural Section	90WS
Separation of Soil and Subsurface Aggregate Drain	180N
Reinforcement of Street Structural Section	200WS
Remediation and Separation of Soil	270WS
Reinforcement of Soil	270WS
Drainage at the Interface of Soil Structures	N/A
Drainage at the Interface of Soil and Structures	N/A
Rock Slope Protection Fabric for Rock Sizes Below 225 kg (1/4 Ton)	180N
Rock Slope Protection Fabric for Rock Sizes Including and Above 225 kg (1/4 Ton)	250N
Plant Protection Covering	90N
Erosion Control Fence with 14 AWG - 150 mm x 150 mm (6"x6") Wire and 3 m (10') Post Spacing	90WS
Erosion Control Fence with 1.8 m (6') Post Spacing and No Wire Fencing	200WS

Add the following section:

**213-5.2 Erosion Control Specialties.** Storm water erosion control plans shall be prepared, implemented, and maintained by individuals with the respective qualifications and certification as specified in the City of Carlsbad Engineering Standards Volume 4.

Add the following section:

**213-5.3 Gravel bags.** Gravel bags for the use of temporary erosion control shall be burlap type, filled with no less than 23kg (50lbs) of 19 mm (3/4") crushed rock and securely tied closed. Plastic bags are not acceptable.



## SECTION 214 TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

### 214-4 PAINT FOR STRIPING AND MARKINGS.

**214-4.1 General:** Modify as follows: Paint for traffic lane lines, turn pocket lines, edge lines, channelizing lines, bike lane lines, chevrons, and curbs shall be rapid dry water borne conforming to Caltrans Specification No. PTWB-01. Paint for pavement legends, pavement symbols, pavement arrows, cross walks, parking stall markings and stop bars shall be alkyd thermoplastic conforming to Caltrans Specification No. 8010-19A. Glass beads shall be applied to the surface of the rapid dry water borne paint and the molten thermoplastic material and shall conform to the requirements of Caltrans Specification No. 8010-004 (Type II). Caltrans Specifications for water borne paint, thermoplastic material and glass beads may be obtained from the Caltrans Transportation Laboratory, P.O. Box 19128, Sacramento, CA 95819, telephone number (916) 227-7000.

### 214-6 PAVEMENT MARKERS.

Add the following section:

**214-6.4.3.1 Temporary Reflective Pavement Markers.** Temporary pavement markers shown on the plans and required in the specifications shall be one of the types shown in Table 214-6.4.3.1, or equal thereto.

**TABLE 214-6.4.3.1  
TEMPORARY REFLECTIVE PAVEMENT MARKERS**

Type	Manufacturer of Distributor
TOM- Temporary Overlay Markers	Davidson Traffic Control Products, 3110 70 <sup>th</sup> Avenue East, Tacoma, WA 98424, (877) 335-4638

Add the following section:

**214-6.4.3.2 Permanent Reflective Channelizer.** Reflective Channelizer shall be new surface-mounted type and shall be furnished, placed, and maintained at the locations shown on the plans. Reflective channelizer posts shall be orange in color. Reflective channelizers shall have affixed white reflective sheeting as specified in the special provisions. The reflective sheeting shall be 75 mm x 300 mm in size. The reflective sheeting shall be visible at 300 m at night under illumination of legal high beam headlights, by persons with vision of or corrected to 20/20. Reflective channelizer shall be one of the types shown in Table 214-6.4.3.2, or equal thereto.





**TABLE 214-6.4.3.2  
REFLECTIVE CHANNELIZER**

<b>Type</b>	<b>Manufacturer of Distributor</b>
Safe-Hit SH336SMA	Safe-Hit, A Division of Energy Absorption Systems, Inc. 35 East Wacker Drive, Suite 1100 Chicago, IL 60602 800-537-8958
Carsonite "Super Duck" SDR3036	Carsonite Composites, LLC 605 Bob Gifford Boulevard Early Branch, SC 29916 800-648-7916
Repo "The Replaceable Post"	Western Highway Products 10680 Fern Avenue Stanton, CA 90680 800-854-3360

The Contractor shall provide the Engineer with a Certificate of Compliance in accordance with the provisions of Section 2-5.3.3 "Submittals". Said certificate shall certify that the permanent reflective channelizers comply with the plans and specifications and conform to the prequalified design and material requirements approved by the engineer and were manufactured in accordance with the approved quality control program.



**SUPPLEMENTAL PROVISIONS  
TO  
STANDARD SPECIFICATIONS FOR PUBLIC WORKS  
CONSTRUCTION**

**PART 3, CONSTRUCTION METHODS**

**SECTION 300 – EARTHWORK**

Add the following section:

**300-2.10 Grading Tolerance.** The Contractor shall finish excavated areas other than slopes and subgrade below structures, within the roadway and sidewalk areas within 30 mm (0.1') of the grades shown on the plans. Subgrade tolerances shall conform to the requirements of section 301-1.4.

Add the following section:

**300-12 STORM WATER POLLUTION PREVENTION PLAN**

**300-12.1 Storm Water Pollution Prevention Plan.** As part of the storm water pollution prevention work, the Contractor shall prepare and submit Storm Water Pollution Prevention Plan, hereafter referred to as the "SWPPP,". The SWPPP shall conform to the requirements of the City of Carlsbad Engineering Standards Volume 4 "*SWPPP Manual*", "Greenbook" Standard Specifications for Public Works Construction, the requirements in the California Storm Water Quality Association, Stormwater Best Management Practice Handbook, Construction ("Handbook"), the requirements of the Permit, the requirements in the plans and these supplemental provisions.

**300-12.2 SWPPP Document.** Within 15 calendar days after the execution of the contract, the Contractor shall submit 3 copies of the SWPPP to the Engineer, in accordance with Section 2-5.3. If revisions are required, the Contractor shall revise and resubmit the SWPPP within 15 days of receipt of the Engineer's comments and shall allow 5 days for the Engineer to review the revisions. Upon the Engineer's acceptance of the SWPPP, 3 additional copies of the SWPPP, incorporating the required changes, shall be submitted to the Engineer.

The objectives of the SWPPP shall be to identify pollution sources that may adversely affect the quality of storm water discharges associated with the project and to identify, construct, implement and maintain storm water pollution prevention measures, hereafter referred to as control measures, to reduce to the extent feasible pollutants in storm water discharges from the construction site both during and after construction is completed under this contract.

The SWPPP shall incorporate control measures in the following categories:

1. Soil stabilization practices;
2. Sediment control practices;
3. Wind erosion control practices;
4. Non-storm water management and waste management and disposal control practices.
5. Daily street sweeping



Specific objectives and minimum requirements for each category of control measures are contained in the Handbook.

The Contractor shall designate a Water Pollution Control Manager who will have the responsibilities outlined in the SWPPP.

The SWPPP shall include, but not be limited to, the following items as described in the SWPPP:

1. Source Identification;
2. Erosion and Sediment Controls;
3. Non-Storm Water Management;
4. Waste Management and Disposal;
5. Maintenance, Inspection and Repair;
6. Training;
7. List of Contractors and Subcontractors;
8. Post-Construction Storm Water Management;
9. Preparer;
10. Copy of the local permit;
11. BMP Consideration Checklist;
12. SWPPP Checklist;
13. Schedule of Values; and
14. Storm Water Pollution Prevention Drawings.

The Contractor shall amend the SWPPP, graphically and in narrative form, whenever there is a change in construction activities or operations which may affect the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems, or when deemed necessary by the Engineer. The SWPPP shall also be amended if it is in violation of any condition of the Permit or has not effectively achieved the objective of reducing pollutants in storm water discharges. Amendments shall show additional control measures or revised operations, including those in areas not shown in the initially accepted SWPPP, which are required on the project to control water pollution effectively. Amendments to the SWPPP shall be submitted for review and acceptance by the Engineer in the same manner specified for the initially accepted SWPPP. Accepted amendments shall be dated and logged in the SWPPP. Upon acceptance of the amendment, the Contractor shall implement the additional control measures or revised operations.

The Contractor shall keep a copy of the accepted SWPPP and accepted amendments at the project site. The SWPPP shall be made available upon request of a representative of the Regional Water Quality Control Board, State Water Resources Control Board, U.S. Environmental Protection Agency or local storm water management agency. Requests by the public shall be directed to the Engineer.

**300-12.3 SWPPP Implementation.** Upon acceptance of the SWPPP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting and maintaining the control measures included in the SWPPP and any amendments thereto and for removing and disposing of temporary control measures. Unless otherwise directed by the Engineer or specified in these supplemental provisions, the Contractor's responsibility for SWPPP implementation shall continue throughout any temporary suspension of work ordered in accordance with Section 6-3, "Suspension of Work". Requirements for installation, construction, inspection, maintenance, removal and disposal of control measures are specified in the "Handbook" and these supplemental provisions.



Soil stabilization practices and sediment control measures, including minimum requirements, shall be provided throughout the rainy season, defined as between October 1 and April 30.

Implementation of soil stabilization practices and sediment control measures for soil-disturbed areas of the project site shall be completed, except as provided for below, no later than 20 days prior to the beginning of the rainy season or upon start of applicable construction activities for projects which begin either during or within 20 days of the rainy season.

The Contractor shall implement, year-round and throughout the duration of the project, control measures included in the SWPPP for sediment tracking, wind erosion, non-storm water management and waste management and disposal.

The Engineer may order the suspension of construction operations, at the Contractor's cost, which create water pollution if the Contractor fails to conform to the requirements of this section as determined by the Engineer.

**300-12.4 Maintenance.** To ensure the proper implementation and functioning of control measures, the Contractor shall regularly inspect and maintain the construction site for the control measures identified in the SWPPP, as described in Section 7-8. The Contractor shall identify corrective actions and time frames to address any damaged measures or reinitiate any measures that have been discontinued.

The construction site inspection checklist provided in the "Handbook" shall be used to ensure that the necessary measures are being properly implemented, and to ensure that the control measures are functioning adequately. The Contractor shall submit one copy of each site inspection record to the Engineer, within two days of the inspection.

During the rainy season, inspections of the construction site shall be conducted by the Contractor to identify deficient measures, as follows:

1. When the five-day rain probability forecast exceeds forty percent (40%).
2. After any precipitation which causes runoff capable of carrying sediment from the construction site;
3. At 24-hour intervals during extended precipitation events; and
4. Routinely, at a minimum of once every week.

If the Contractor or the Engineer identifies a deficiency in the deployment or functioning of an identified control measure, the deficiency shall be corrected by the Contractor immediately, or by a later date and time if requested by the Contractor and accepted by the Engineer in writing, but not later than the onset of subsequent precipitation events. The correction of deficiencies shall be at no additional cost to the City.

**300-12.5 Payment.** The contract lump sum price paid for the SWPPP work shall include full compensation for the design, submittal, obtaining approval, and amending the Tier 2 SWPPP and for furnishing all labor, materials, tools, equipment, and incidentals to install, implement, maintain and remove construction BMPs per the approved SWPPP. The most recent Tier 2 construction SWPPP Template is available on the City Website and an example is included in Appendix "B".

Partial payment shall be based on the percentage of the total value of work completed.



## **SECTION 301 - SUBGRADE PREPARATION, TREATED MATERIALS AND PLACEMENT OF BASE MATERIALS**

### **301-1 SUBGRADE PREPARATION.**

#### **301-1.2 Preparation of Subgrade.**

Modify the second and third paragraphs as follows:

Change each instance reading "150 mm (6 inches)" to "300 mm (12)".

#### **301-1.3 Relative Compaction.**

Delete the first paragraph and substitute the following:

The Contractor shall compact the upper 300 mm (12") of subgrade beneath areas to be paved, have base or subbase material placed on them (including pipelines), or curb, gutter, curb and gutter, alley pavement, driveway, sidewalk constructed over them, to no less than 95 percent maximum dry density as determined by ASTM D1557.

#### **301-1.7 Payment.**

Modify the first paragraph as follows:

Payment for subgrade preparation shall be incidental to the contract bid price for which the subgrade is prepared and shall include all labor, materials; including water, operations and equipment to scarify, adjust moisture, compact or recompact the subgrade, both in cut areas and in fill areas, and no further compensation will be allowed.

## **SECTION 302 - ROADWAY SURFACING**

### **302-5 ASPHALT CONCRETE PAVEMENT.**

Add the following section:

**302-5.2 Pavement Transitions.** The Contractor shall ramp the approaches and termini to all structures and vertical joints in the cold-milled area which are transverse to through traffic with temporary asphalt concrete pavement as specified in Section 306-13.1. Ramps shall be constructed the same day as cold milling and removed the same day as permanent paving. Ramp dimensions and compaction shall be as approved by the Engineer.

**302-5.4 Tack Coat.** Add the following: If the asphalt concrete pavement is being constructed directly upon an existing hard-surfaced pavement, a tack coat of PG 64-10 paving asphalt at a rate of 0.05 gallon per square yard or SS-1h emulsion at a rate between 0.05 and 0.10 gal/SY shall be uniformly applied upon the existing pavement preceding the placement of the asphalt concrete.

The contact surfaces of all cold pavement joints, curbs, gutters, manholes, and the like shall be painted with PG 64-10 paving asphalt, or SS-1h emulsion, immediately before the adjoining asphalt concrete is placed.

The Contractor shall place a tack coat between the successive interfaces of existing pavement and new asphalt concrete.



### **302-5.5 Distribution and Spreading.**

Add after the second sentence of sixth paragraph:

The Contractor shall provide the self-propelled spreading and finishing machine used to construct the asphalt concrete surface course with an automatic screed control. The automatic screed control shall be 5.5 m (18') minimum length. The paving machine shall be operated by an operator and two full-time screed men during all paving. The Contractor shall provide an on-site backup paving during all paving operations. No conveyor belt systems will be allowed for moving the AC. No AC windrows will be allowed. Only a surge volume/remix material transfer vehicle (MTV) is allowed to receive the AC from the haul trucks and then place it in the self-propelled spreading and finishing machine. If the Engineer determines the use of the MTV is not practical for a portion of the project, the Engineer may waive its requirement for that portion.

### **302-5.6.1 General.**

Add to the second paragraph, Part (2):

Pinched joint rolling procedures shall be required, and vibratory rollers shall be limited to breakdown, unless otherwise directed by the Engineer.

Add after the last paragraph:

Unless directed otherwise by the Engineer, the initial breakdown rolling shall be followed by a pneumatic-tired roller as described in this section.

**302-5.9 Measurement and Payment.** Replace the first sentence with the following: Payment for pavement resurfacing shall be made at the unit bid price for the item requiring such work.

Add the following section:

### **302-15 PUBLIC CONVENIENCE AND TRAFFIC CONTROL.**

The Contractor shall schedule the work so as to prevent damage by all traffic. The Contractor shall not schedule work so as to conflict with trash pickup. The trash hauling schedule can be obtained by calling the city's contracted waste company. The Contractor shall accommodate mail delivery to residences and businesses during the work.

At least two weeks prior to work, Contractor shall send, by first class mail, notification letters to all property addresses on which resurfacing shall occur. Obtaining the appropriate addresses shall be the Contractor's responsibility. A sample letter shall be provided by the city and the Contractor shall use the city's sample letter and modify it with the appropriate street names, dates, times, and phone numbers specific to the work.

The limits and sequencing of the Contractor's resurfacing operations shall impact no more than 900 lineal feet of street or curb-side parking for residents and business on any given day.

Seventy-two hours prior to the start of any construction in the public right-of-way that affects vehicular traffic and/or parking or pedestrian routes, the Contract shall give written notification of the impending disruption via door hangers. For a full street closure, all residences and/or businesses on the affected street or alley shall be notified. For partial street closures, or curb, sidewalk and driveway repairs, the residences and/or businesses directly affected by the work shall be notified.

The Contractor shall deliver the 72-hour advance notification door hanger which shall state the date and time the work will begin and its anticipated duration. The notification shall list two telephone numbers that may be called to obtain additional information. One number shall be the



Contractor's permanent office or field office and the other number shall be a 24-hour number answered by a representative of the Contractor who is knowledgeable about the project. At least one of the phone numbers shall be in the 760 area code. An answering machine shall not be connected to either number. The notification shall also give a brief description of the work and simple instructions to the home or business owner on what they need to do to facilitate the construction. The Contractor shall use the sample door hanger provided by the city and submit door hangars to the Inspector for approval. Notices shall not be distributed until approved by the Inspector.

The notification shall be pre-cut in a manner that enables it to be affixed to a doorknob without adhesives. It shall be a minimum size of 4 inches by 8-1/2 inches and shall be brightly colored with contrasting printing. The material shall be equivalent in strength and durability to 65-lb card stock. The printing on the notice shall be no smaller than 12-point. The door hanger shall list the street name, date, time, phone numbers, and appropriate information specific to the work.

The preparation, materials, printing and distribution of the notifications shall be included in the contract price for the Work requiring such notifications and no separate or additional payment shall be made.

## **SECTION 303 CONCRETE AND MASONRY CONSTRUCTION.**

### **303-1 CONCRETE STRUCTURES.**

#### **303-1.2 Subgrade for Concrete Structures.**

Add the following:

If groundwater is encountered, Contractor shall work a minimum 2' deep of ¾" gravel into soil to provide an adequate base for construction of concrete structure.

#### **303-1.11 Measurement.**

Delete the subsection in its entirety and replace with the following:

Concrete structures will be measured for payment by each structure installed as specified in the bid schedule and in accordance with the plans and any referenced standard drawings.

#### **303-1.12 Payment.**

Delete the subsection in its entirety and replace with the following:

Payment for concrete structures will be made as set forth in the Bid Schedule. Payment shall include compensation for furnishing all labor, materials, tools, and equipment necessary to construct the concrete structures complete in place. Items shall include submittal of PCC mix design for approval, structure excavation, subgrade and base preparation, furnishing PCC and casting-in-place, steel reinforcement, forms, covers, rims, grates, frames, collars, cone and draft sections, bases, steps, clean up; and for all other work necessary to install the concrete structure, complete in place, and no additional compensation will be allowed therefor.



### **303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS, AND DRIVEWAYS.**

#### **303-5.1.1 General.**

Add the following:

Portland Cement Concrete construction shall include, but not limited to, curbs, walkways, cross gutters, access ramps, driveways, concrete curb outlet, terrace ditches, and all other miscellaneous PCC construction items as indicated on the plans and per these Specifications.

Removal of adjacent asphalt concrete and aggregate base removal associated with concrete curb construction shall be replaced with full depth asphalt concrete with a minimum width of one foot perpendicular to the face of concrete edge. The replaced section shall conform to the requirements of Sections 203-6, 302-5, 401-3 and match the depth of the adjacent concrete gutter.

The Contractor shall verify with a “smart level”, string line and/or water testing that positive drainage is maintained upon completion of finishing, and any irregularities causing water ponding shall be corrected and refinished. The CITY shall be present to verify the concrete forms, prior to pouring any PCC construction improvements.

#### **303-5.5.2 Curb.**

Add the following:

The Contractor shall stamp the curb face with 75 mm (3”) high block letters directly above the point that it is crossed by underground facilities with the marking specified in Table 303-5.5.2(A)

**TABLE 303-5.5.2(A)  
Curb Face Markings**

Type of underground facilities	Marking
Water Service Lateral	<b>W</b>
Sewer Service Lateral	<b>S</b>
Irrigation Water Lateral or Sleeve	<b>RW</b>

#### **303-5.9 Measurement and Payment.**

Add the following:

Curb and gutter, and curb, shall be considered as continuing across driveways, access ramps and drainage inlets when constructed adjacent thereto. Neither curb and gutter nor curb will be paid for across the length of local depressions, except that which occurs in gutter transitions at each side of an inlet.

## **SECTION 306 – OPEN TRENCH CONDUIT CONSTRUCTION**

### **306-3 TRENCH EXCAVATION.**

Add the following:

**306-3.1 General.** When the actual elevation or position of any existing pipe, conduit, or other underground appurtenances cannot be determined without excavation, the Contractor shall excavate and expose the existing improvement at the location shown on the Plans and any other locations deemed necessary by the Engineer. Such excavation shall be considered as part of the excavation necessary for the work. The Engineer shall be given the opportunity to





inspect the existing improvements when it is exposed. Any adjustments in line or grade which may be necessary to accomplish the intent of the plans shall be made at no additional costs.

Add the following:

**306-3.2 Removal of Surface Improvements.**

Add the following:

Bituminous pavement, concrete pavement, curbs, sidewalks, or driveways removed in connection with construction shall be removed in accordance with Subsection 401 of the Standard Specifications and these Special Provisions and reconstructed in-kind.

**306-3.5 Maximum Length of Open Trench.**

Delete the first sentence for the first paragraph and replace with the following:

Except by permission of the Engineer, the maximum length of open trench where prefabricated pipe is used shall be the distance necessary to accommodate the amount of pipe installed and backfilled in a single work day.

**306-12 BACKFILL.**

**306-12.1 General.**

Add the following:

The Contractor shall install detectable underground utility marking tape above each or, in the case of bundled underground conduit of the same type, the upper underground conduit being installed by the open trench method.

Delete the following section in its entirety and replace with the following:

**306-12.3.2 Compaction Requirements.** The Contractor shall densify trench backfill to a minimum of 90 percent relative compaction except that in the top 915 mm (36") of the street right-of-way, compaction shall be 95 percent.

**306-13 TRENCH RESURFACING.**

**306-13.1 Temporary Resurfacing.**

Add the following:

Temporary bituminous resurfacing materials which are placed by the Contractor are for its convenience and shall be at no cost to the Agency. Temporary bituminous resurfacing materials shall be used in lieu of permanent resurfacing only when approved by the Engineer. When temporary bituminous resurfacing materials are used in lieu of permanent resurfacing it shall be removed and replaced with permanent resurfacing within 7 days of placement. No additional payment will be made for temporary bituminous resurfacing materials. The price bid for the associated conduit or structure shall include full compensation for furnishing, placing, maintaining, removing, and disposing of such temporary resurfacing materials.

**306-13.2 Permanent Resurfacing.**

Add the following:

Except as provided in section 306-13.1, "Temporary Resurfacing," the Contractor shall perform permanent trench resurfacing within 24 hours after the completion of backfill and compaction of backfill and aggregate base materials.



## SECTION 314 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

### 314-4 APPLICATION OF TRAFFIC STRIPING AND CURB AND PAVEMENT MARKINGS.

#### 314-4.3.1 General.

Add the following:

The Contractor shall furnish all equipment, materials, labor, and supervision necessary for painting traffic lanes, directional arrows, guidelines, curbs, parking lines, crosswalks, and other designated markings in accordance with the Striping Plans, or for approved temporary traffic control essential for safe control of traffic through and around the construction site. The Contractor shall remove by wet grinding all existing or temporary traffic markings and lines that may confuse the public. When temporary detour striping or markings are no longer required, they shall be removed prior to painting the new traffic stripes or markings.

#### 314-4.3.4.1 General.

Add the following:

The Contractor shall provide a wet grinding machine with sufficient capacity to completely remove all existing or temporary traffic striping or markings that conflict with the striping plan, or are contrary to the Traffic Manual, or that may be confusing to the public. The surface produced by grinding the existing or temporary traffic striping or markings on pavement shall not exceed variations from a uniform plane more than 3 mm ( $1/8$ " ) in 3 m (10') when measured parallel to the centerline of the street or more than 6 mm ( $1/4$ " ) in 3 m (10') when measured perpendicular to the centerline of the street. The use of any equipment that leaves ridges, indentations or other objectionable marks in the pavement shall be discontinued, and equipment capable of providing acceptable surface shall be furnished by the Contractor. This equipment shall meet all requirements of the air pollution control district having jurisdiction.

Add the following section:

**314-4.3.5.1 Preparation of Existing Surfaces.** The Contractor shall remove all existing markings and striping, either permanent or temporary, which are to be abandoned, obliterated or that conflict with the plans by wet grinding methods. Removal of striping by high velocity water jet may be permitted when there is neither potential of the water and detritus from the high velocity water jetting to damage vehicles or private property nor to flow from the street into any storm drain or water course and when approved by the Engineer. The Contractor shall vacuum all water and detritus resulting from high velocity water jet striping removal from the pavement immediately after the water jetting and shall not allow such materials to flow in the gutter, enter the storm drain system or to leave the pavement surface. Surface variation limitations for high velocity water jet striping removal shall be the same as for grinding. The Contractor shall not use dry or wet sandblasting in any areas. Alternate methods of paint removal require prior approval of the Engineer. Obliteration of traffic striping with black paint, light emulsion oil or any other masking method other than a minimum 30 mm (0.10') thick asphalt concrete overlay is not permitted.

Add the following section:

**314-4.3.5.2 Layout, Alignment, and Spotting.** The Contractor shall establish the necessary control points for all required pavement striping and markings by surveying methods. No layout of traffic striping shall be performed by the Contractor before establishment of the necessary control points. The Contractor shall establish all traffic striping between these points by string line or other method to provide striping that will vary less than 80 mm per 100 m (1/2 inch in 50



feet) from the specified alignment. The Contractor shall obliterate, straight stripes deviating more than 80 mm per 100 mm (1/ 2 inch in 50 feet) by wet grinding, and then correcting the markings. The Contractor shall lay out (cat track) immediately behind installation of surface course asphalt and as the work progresses.

Add the following section:

**314-4.3.5.3 Application of Paint.** The Contractor shall apply the first coat of paint immediately upon approval of striping layout by the Engineer and within the same working day of pavement resurfacing. After fourteen (14) calendar days, a second coat of paint shall be applied to all final, approved striping. The Contractor shall paint the ends of each median nose yellow. If required by the approved traffic control plans, the Contractor shall apply temporary traffic stripes in one coat. Temporary traffic stripes shall be maintained by the Contractor so that the stripes are clearly visible both day and night.

#### **314-4.3.6 Payment.**

Delete this section and replace with the following:

The contract lump sum price shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for the installation of two coats of paint, pavement markers, thermoplastic legends and symbols, inlet stenciling, signing, the plan, and contract documents. Reapplication of temporary stripes and markings shall be repainted at the Contractor's expense, and no additional compensation will be allowed therefor.

#### **314-4.4.1 General.**

Add the following:

Thermoplastic legends, symbols and striping shall be installed 14 calendar days after asphalt paving.

### **314-5 PAVEMENT MARKERS.**

#### **314-5.4 Placement.**

Add the following:

Temporary pavement markers shall be installed on the asphalt concrete pavement immediately after placement of the asphalt concrete pavement course on which the pavement markers are to be placed. All temporary markers shall be removed and replaced with permanent pavement markers fourteen (14) calendar days after paving.

Add the following section:

**314-5.4.1 Reflective Channelizer Placement and Removal.** The Contractor shall place and remove reflective channelizers the same as for pavement marker placement and removal. The Contractor shall place the channelizers uniformly, straight on tangent alignment and on a true arc on curved alignment to the same tolerances of position as for application of paint in Section 310-5. The Contractor shall perform all layout work necessary to place the channelizers to the proper alignment. If the channelizers are displaced or fail to remain in an upright position, from any cause, the channelizers shall immediately be replaced or restored to their original location, by the Contractor. When reflective channelizers are removed the pavement surface shall be restored to the same color and surface finish as the adjacent pavement.



**SUPPLEMENTAL PROVISIONS  
TO  
STANDARD SPECIFICATIONS FOR PUBLIC WORKS  
CONSTRUCTION**

**PART 4, EXISTING IMPROVEMENTS**

**SECTION 400 – PROTECTION AND RESTORATION**

**400-1 GENERAL.**

Add the following:

The Contractor shall replace all pavement striping, markings and markers which are not designated for removal and are damaged as a result of its operations.

**400-2 PERMANENT SURVEY MARKERS.**

Delete the second paragraph and subparagraphs a), b) and c).

**400-3 PAYMENT.**

Delete in its entirety and replace with the following:

No separate or additional payment will be made for 1) protection of existing improvements, and 2) restoration of existing improvements.

No separate or additional payment will be made to restore permanent survey makers.

**SECTION 401 – REMOVAL**

**401-3 CONCRETE AND MASONRY IMPROVEMENTS.**

**401-3.2 Concrete Curb, Walk, Gutters, Cross Gutters, Curb Ramps, Driveway and Alley Intersections.**

Delete the third and fourth sentence and add the following:

All existing concrete shall be removed to the nearest joint. Concrete shall be removed to neatly sawed edges with saw cuts made to a depth deep enough to produce a clean straight break without loosening, cracking or damaging adjoining improvements. PCC and all other material unsuitable for use as fill, as determined by the Engineer, shall be removed from the right-of-way and disposed of by the Contractor at a site of his own choice and shall pay all costs incidental to the disposal.

Add the following section:

**401-3.2.1 Adjacent Asphalt Concrete Removal.** Removal of asphalt concrete and aggregate base associated with concrete driveway, ramp and curb and gutter construction shall be replaced with full depth asphalt concrete to a minimum width of one foot perpendicular from face of nearest concrete edge. Removal of adjoining asphalt section and the full depth replacement is incidental to the concrete curb and gutter work as described in section 303-5.



**SUPPLEMENTAL PROVISIONS  
TO  
STANDARD SPECIFICATIONS FOR PUBLIC WORKS  
CONSTRUCTION**

**PART 6 TEMPORARY TRAFFIC CONTROL**

**SECTION 601 – TEMPORARY TRAFFIC CONTROL FOR  
CONSTRUCTION AND MAINTENANCE WORK ZONES**

Add the following section:

**601-1.2 Payment.**

The Contract price paid for Temporary Traffic Control shall include full compensation for, but not limited to, design, submittal and approval of the temporary traffic control plan (TCP) and furnishing all labor, materials, tools, equipment, and incidentals for storing, placing, maintaining, moving to new locations, replacing and removing all traffic control zone devices including flaggers, construction area signs and signage, channelizing devices including traffic barriers and end treatments, traffic sign enhancement devices including portable changeable message signs and flashing arrow signs, temporary traffic striping and pavement markings and as shown on the Plans or approved TCP and in accordance with the Contract Documents.

Full compensation for removing and salvaging the traffic control equipment and materials that are to be reused or reset in the Work shall be considered included in the Contract price paid for Temporary Traffic Control and no additional compensation will be allowed therefor.

Progress payments for Temporary Traffic Control shall be based on the percentage of the total value of work completed.

**601-3 TEMPORARY TRAFFIC CONTROL (TTC) ZONE DEVICES.**

**601-3.1 General.**

Add the following:

The Contractor shall furnish and install temporary traffic pavement markers, channelizers, signage, railing (type K), barriers, crash cushions and end treatments for railings and barriers at the locations shown on the Plans or the approved TCP and as required by the Contract Documents.

Add the following section:

**601-3.4.1 General.**

Add the following:

If temporary traffic signs are displaced or overturned by any cause during the progress of the Work, the Contractor shall immediately replace the signs in their approved locations. The Contractor shall maintain all temporary traffic signs used in the Work in a clean, reflective and readable condition. The Contractor shall replace or restore graffiti marked temporary traffic signs and posts used in the Work within 8 hours of such discovery.



In the event that the Contractor fails to install and/or maintain barricades or such other traffic signs, markings, delineation or devices, the Engineer may, at his/her sole option, may correct the deficiency and charge the Contractor fifty dollars (\$50.00) per day per traffic sign or device, or the actual cost of providing such traffic control facility, whichever is greater.

### **601-3.5 Signs and Signage**

#### **601-3.5.1 General.**

Delete in its entirety and replace with the following:

Unless otherwise specified, signs shall conform to the California MUTCD. Portable signs shall consist of a base, standard or framework, and a sign panel and conform with applicable provisions for portable signs in Caltrans Standard Specification 12-3.11. Sign units shall be capable of being delivered to the Work site and placed into immediate operation. The Contractor shall provide and install all temporary traffic control signs, markers, markings, and delineators at locations shown on plans and specified herein.

Signage shall include all temporary signs required for the direction of traffic through or around the Work site. Sign placement shall conform to the California MUTCD and the TCP.

Temporary "No Parking" and "No Stopping" signs shall be installed at least 24 hours before enforcement. Public notification of temporary "No Parking" restriction shall be posted at least 72 hours before enforcement of the "No Parking" zone. The notification shall state the date and time of parking restriction for a duration not to exceed the time necessary to complete the Work at that location. Failure to meet the date so indicated will require re-posting the notification in advance of the rescheduled Work.

#### **601-3.5.2 Payment.**

Modify this section as follows:

Payment for signs and signage shall be included in the contract price for Temporary Traffic Control as specified in Section 601-2.2.

### **601-3.6 Channelizing Devices**

#### **601-3.6.1 General.**

Replace this section with the following:

Channelizers shall be new surface-mounted type and shall be furnished, placed, and maintained at the locations shown on the plans. Channelizer posts shall be orange in color. Channelizers shall have affixed white reflective sheeting as specified in the special provisions. The reflective sheeting shall be 75 mm x 300 mm (3" x 12") in size. The reflective sheeting shall be visible at 300 m (1000') at night under illumination of legal high beam headlights, by persons with vision of or corrected to 20/20. The channelizer bases shall be cemented to the pavement in the same manner as provided for cementing pavement markers to pavement in Section 312-1, "Placement." Channelizers shall be applied only on a clean, dry surface. Channelizers shall be placed on the alignment and location shown on the plans and as directed by the Engineer. The channelizers shall be placed uniformly, straight on tangent alignment and on a true arc on curved alignment. All layout work necessary to place the channelizers to the proper alignment shall be performed by the Contractor. If the channelizers are displaced or fail to remain in an upright position, from any cause, the channelizers shall immediately be replaced or restored to their original location, by the Contractor. The Contractor shall provide the Engineer with a Certificate of Compliance in accordance with the provisions of Section 4-1.5, "Certification". Said certificate shall certify that the channelizers comply with the plans and specifications and



conform to the prequalified design and material requirements approved by the Engineer and were manufactured in accordance with a quality control program approved by the Engineer.

Add the following subsection:

**601-3.6.5.1 Temporary Railing and Crash Cushions.** Temporary railing (Type K) shall consist of interconnected new or undamaged used precast concrete barrier units as shown on the plans. Temporary sand-filled crash cushions shall consist of new or undamaged used temporary sand-filled crash cushions units as shown on the plans.

Add the following subsection:

**601-3.6.5.2 Appearance.** Exposed surfaces of new and used units of temporary railing (Type K) shall be freshly coated with a white color paint prior to their first use on the project. The paint shall conform to the provisions in sections 210-1.5 "Paint Systems" and 310 "Painting". Contractor shall be responsible for the removal and cleanup or painting over the graffiti from the K-Rails within 48 hours. The Contractor shall replace or repaint units of temporary railing (Type K) or shall remove graffiti, tire or vehicle marks, dirt or other materials that mar the appearance when ordered by the Engineer.

Add the following subsection:

**601-3.6.5.3 Manufacture of Temporary Railing.** In addition to the requirements herein, the temporary railing (Type K) shall be manufactured per Caltrans Standard Drawing T3. Concrete used to manufacture Temporary railing (Type K) shall conform to the provisions in sections 201-1, "Portland Cement Concrete" and 303-1 "Concrete Structures". Load tickets and a Certificate of Compliance will not be required. Reinforcing steel shall conform to Section 201-1, "Portland Cement Concrete" and Section 303-1 "Concrete Structures". Steel bars to receive bolts at ends of concrete panels shall conform to ASTM A36/A36M. The bolts shall conform to ASTM A307. A round bar of the same diameter may be substituted for the end-connecting bolt shown on the plans. The bar shall conform to ASTM A36/A36M, shall have a minimum length of 660 mm and shall have a 75 mm (3") diameter by 9 mm (3/8") thick plate welded on the upper end with a 5 mm (3/16") fillet weld. The final surface finish of temporary railings (Type K) shall conform to the provisions in Section 303-1.9.2 "Ordinary Surface Finish." Exposed surfaces of concrete elements shall be cured by the water method, the forms-in-place method, or the pigmented curing compound method. The pigmented curing compound shall be type 2 curing compound. Temporary railing (Type K) may have the Contractor's name or logo on each panel. The name or logo shall not be more than 100 mm in height and shall be located not more than 300 mm above the bottom of the rail panel.

Add the following subsections:

**601-3.6.5.4 Installation of Temporary Railing.** In addition to the requirements herein, the temporary railing (Type K) shall be installed per Caltrans Standard Drawing T3. Temporary railing (Type K) shall be set on firm, stable foundation. The foundation shall be graded to provide a uniform bearing throughout the entire length of the railing. Abutting ends of precast concrete units shall be placed and maintained in alignment without substantial offset to each other. The precast concrete units shall be positioned straight on tangent alignment and on a true arc on curved alignment. Each rail unit placed within 3 m (10') of a traffic lane shall have a reflector installed on top of the rail as directed by the Engineer. Reflectors and adhesive will be furnished by the Contractor. A Type P marker panel conforming to the requirements of the Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition as amended by the MUTCD 2009 California Supplement shall also be installed at each end of railing installed adjacent to a two-lane, two-way highway and at the end facing traffic of railing installed adjacent to a one-way roadbed. If the railing is placed on a skew, the



marker shall be installed at the end of the skew nearest the traveled way. Type P marker panels shall conform to the provisions of Section 206-7.2, "Temporary Traffic Signs". Where shown on the plans, threaded rods or dowels shall be bonded in holes drilled in existing concrete. When temporary railings (Type K) are removed, any area where temporary excavation or embankment was used to accommodate the temporary railing shall be restored to its previous condition or constructed to its planned condition.

**601-3.6.5.5 Temporary Sand-Filled Crash Cushions.** Temporary sand-filled crash cushion units shall be selected from the latest Caltrans Authorized Material List for highway safety features and shall meet NCHRP 350 standards. Other features will be suitability to application, operational characteristics, durability and other such characteristics that the Engineer shall determine. Temporary sand-filled crash cushions (TSFCC) shall be of the type and array configurations shown on plans, and installed at every end of, or gap in, the temporary railing (Type K) whenever the closest point of approach of traffic, regardless of direction, is 4.6 m (15') or less to the end of the temporary railing (Type K) being considered. The TSFCC shall be installed per Caltrans Standard Drawings T1 and T2 for approach speeds no less than the posted speed of the street prior to construction or 55 kilometers per hour (35 mph), whichever is the greater. The TSFCC array shall be appropriate to the application as shown on said standard drawings. A Type J and/or P marker panel conforming to the requirements of the Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition as amended by the MUTCD 2009 California Supplement shall also be installed at each TSFCC array as shown in Caltrans Standard Drawings T1 and T2. Particular care shall be taken to assure that crash cushions are installed with the soil supporting them and the adjacent soil leveled to match the elevation of the bottom of the temporary railing immediately adjacent to the crash cushion. All routes of approach to the TSCFF array shall be graded such that any vehicle diverging from the travelled way to strike the TSCFF will travel on a vertical alignment parallel to the segment of the travel lane that it departed from.

#### **601-3.7.5 Portable Changeable Message Signs (PCMS).**

Add the following:

**601-3.7.5.1 General.** Each portable changeable message sign (PCMS) unit shall consist of a controller unit, a power supply, and a structural support system all mounted on a trailer. The PCMS unit shall be assembled to form a complete self-contained portable changeable message sign, which can be delivered to the site of the work and placed in immediate operation. The complete PCMS unit shall be capable of operating in an ambient air temperature range of -20°C (-4°F) to +70°C (158°F) and shall not be affected by unauthorized mobile radio transmissions.

The trailer shall be equipped so that it can be leveled and plumbed. Full operation height shall be with the bottom of the sign at least 2.1 m (7') above the ground and the top no more than 4.4 m (14.5') above the ground. After initial placement, PCMS shall be moved from location to location as directed by the Engineer.

**601-3.7.5.2 Message Board.** The message displayed on the PCMS shall be visible from a distance of 460 m (1500') and shall be legible from a distance of 230 m (750'), at noon on a cloudless day, by persons with vision corrected to 20/20. The sign panel shall be 3-line matrix and shall display not less than 7 characters per line. Sign messages to be displayed shall be as approved by the Engineer. The sign face shall be flat black and shall be protected from glare of the sun by a method which does not interfere with the clarity of the sign message. The sign shall be raised and lowered by means of a power driven lifting mechanism. The matrix sign shall be capable of complete alphanumeric selection.





Lamp matrix type signs shall be equipped with an automatic dimming operational mode that automatically compensates for the influence of a temporary light source or other abnormal lighting conditions. The sign shall have manual dimming operation modes of 3 or more different lamp intensities.

Matrix signs not utilizing lamps shall be either internally or externally illuminated at night.

The controller shall be an all solid-state unit containing all the necessary circuitry for the storage of at least 5 pre-programmed messages. The controller shall be installed in a location allowing the operator to perform all functions from one position. A keyboard entry system shall be provided to allow an operator to generate an infinite number of additional messages over the pre-programmed stored messages. The keyboard shall be equipped with a security lockout feature to prevent unauthorized use of the controller. The controller shall contain a nonvolatile memory to hold the keyboard created messages in memory during periods when the power is not activated. The controller shall provide for a variable message display rate which allows the operator to match the information display to the speed of the approaching traffic. The flashing off time shall be operator adjustable within the control cabinet.

**601-3.7.5.3 Operation and Maintenance.** PCMS shall be furnished, placed, operated, and maintained at locations shown on the plans, specified herein, or designated by the Engineer. The PCMS will be diligently maintained and repaired by the Contractor throughout the project in accordance with the manufacturer's recommendations. When ownership is transferred to the City (at the end of the job), it must be demonstrated to be in good working condition, and meet the provisions of these specifications, including current registration.

**601-3.7.5.4 Measurement and Payment.** Payment for all traffic signs, including Portable Changeable Message Signs, are incidental to the bid item for Temporary Traffic Control and no other compensation will be made therefor.

#### **601-4 TEMPORARY TRAFFIC STRIPING AND PAVEMENT MARKINGS.**

**601-4.2.1 Application of Temporary Pavement Markers.** Temporary reflective raised pavement markers shall be placed in accordance with the manufacturer's instructions. Temporary reflective raised pavement markers shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place temporary reflective raised pavement markers in areas where removal of the markers will be required. Pavement striping, legends and markers which conflict with any traffic pattern shall be removed by grinding as determined by the Engineer. The Contractor shall use temporary reflective raised pavement markers for temporary pavement marking, except when the temporary pavement markers are used to replace patterns of temporary traffic stripe that will be in place for less than 30 days. Reflective pavement markers used in place of the removable-type pavement markers shall conform to the Section 314-3 *Removal of Pavement Markers* and Section 314-5 *Pavement Markers*, except the 14-day waiting period before placing the pavement markers on new asphalt concrete surfacing as specified in Section 314-5.4 *Placement*, shall not apply; and epoxy adhesive shall not be used to place pavement markers in areas where removal of the markers will be required.

