DRAWINGS MUST BE PRINTED AND VIEWED IN COLOR FOR CLARITY

PARADISE IRRIGATION DISTRICT

PLANS FOR THE CONSTRUCTION OF:

PHASE 1 MAINS REPLACEMENT PROJECT

SHEET INDEX

DWG NO.

C-1

SHEET NAME

COVER SHEET

GENERAL NOTES ABBREVIATIONS

PRIORITY OVERVIEW

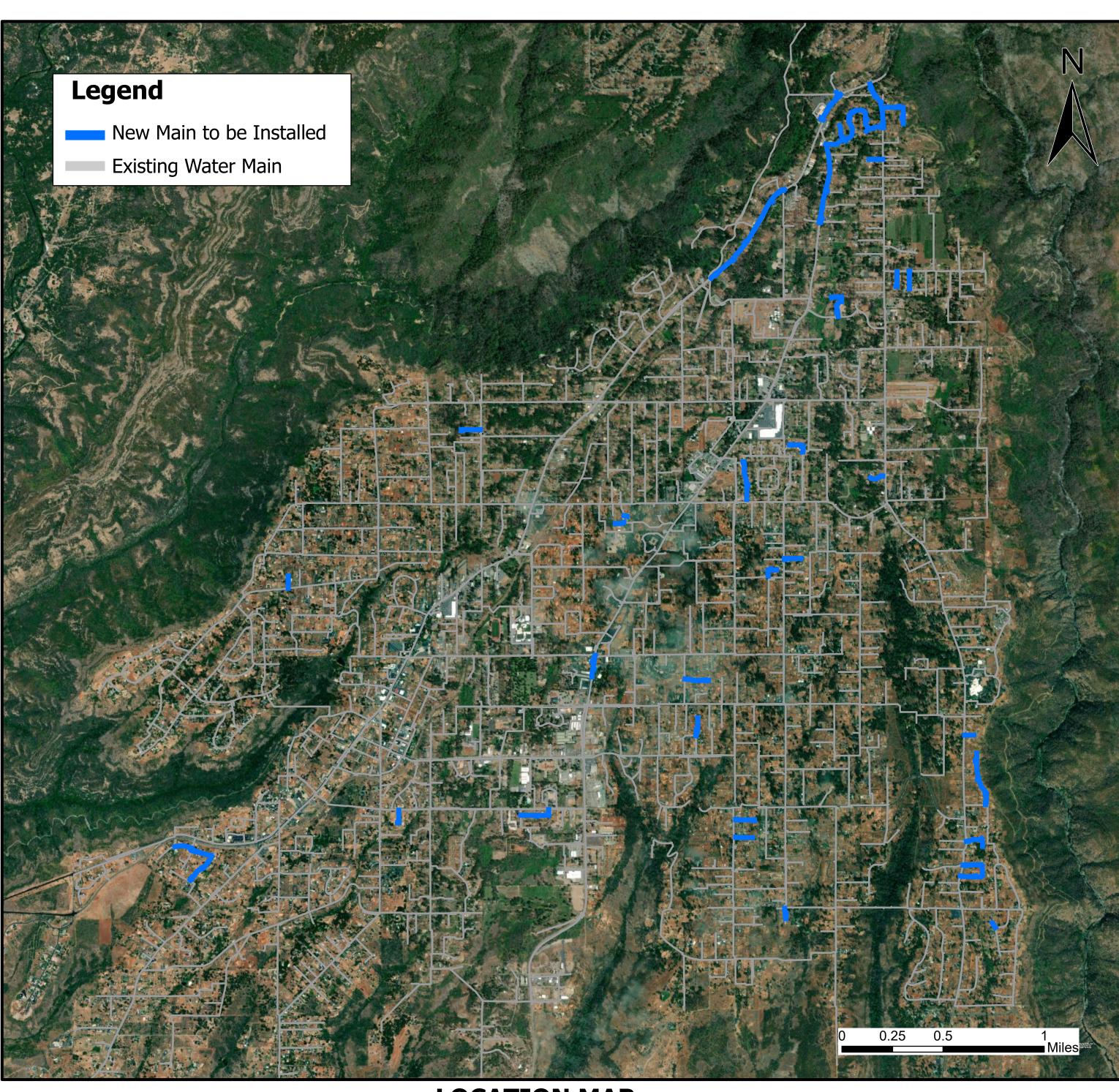
PRIORITY SHEET 2

PRIORITY SHEET 3
PRIORITY SHEET 4

LEGEND

XENO

SHEET NO.



PARADISE IRRIGATION DISTRICT STAFF
DISTRICT MANAGER - TOM LANDO
ASSISTANT DISTRICT MANAGER - MICKEY RICH
DISTRICT ENGINEER - BLAINE ALLEN, PE
DISTRIBUTION SUPERINTENDENT - JEFF HILL
DISTRIBUTION ASSISTANT SUPERINTENDENT - PETE GROUT
DISTRIBUTION UTILITY SUPERVISOR - TRENT FLAHERTY
WATED WODIC ENGINEEDS STAFE

WATER WORKS ENGINEERS STAFF

PROGRAM MANAGER - SAMI KADER, PE PROJECT MANAGER - COLLEN BOAK, PE DESIGN ENGINEER - KRISTINA ALACON, PE

GENERAL SCOPE OF WORK

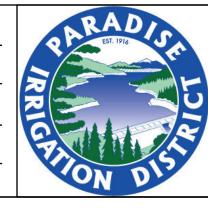
PROJECT INCLUDES ALL LABOR, MATERIALS, SERVICES, AND EQUIPMENT NECESSARY TO INSTALL NEW C900 PIPE, INCLUDING ALL VALVES AND APPURTENANCES; INSTALLATION OF NEW SERVICES AND RECONNECTION OF EXISTING SERVICES, INCLUDING RECONNECTION TO METERS OR INSTALLATION OF METERS AND BACKFLOW PREVENTION DEVICES; ABANDONMENT OF EXISTING WATER MAINS; COMPLETE RESTORATION OF ALL SITES, RETURNING ALL DISTURBED AREAS AND SURFACES BACK TO ORIGINAL CONDITIONS; AND TRAFFIC CONTROL AND SITE MAINTENANCE DURING CONSTRUCTION.



12	UDY GRACEPHIL GCANDIA FARBER LINRY CYPRESS A-ZONE-OVERVIEW A-ZONE-1 A-ZONE-2 A-ZONE-3 A-ZONE-4 A-ZONE-6 CLARK-A-1 CLARK-A-2 CRANDALL DEODARA HIMMEL FOREST YORK TOWNE PARADISE AVE MOON-HAZEL FAWNDALE GAWMILL FEATHER RIVER GKYWAY-1 GKYWAY-2 CLARK-B PACIFIC-ORCHARD CORAL AVE CORAL CIR BELLA VISTA-DEL MONTE ASPEN LOWRY GRAYSTONE GEMLYN WOODSDALE GTANDARD DETAILS 1 GTANDARD DETAILS 3 GTANDARD DETAILS 3 GTANDARD DETAILS 4 TIE-IN DETAILS 1
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LOCATION MAP

NOT TO SCALE



PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971 MAINS REPLACEMENT PROJECT PHASE 1
COVER SHEET

DATE <u>4/24/2023</u>

DWG <u>G-1</u> SHEET <u>1</u> OF <u>56</u>

BID DOCUMENTS

DATE SAVED:4/21/2023 12:55

GENERAL NOTES

- 1) SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES IN CASE OF CONFLICT.
- 2) A PRECONSTRUCTION CONFERENCE MEETING SHALL BE HELD PRIOR TO CONSTRUCTION, SEE SPECIFICATIONS FOR COORDINATION AND MEETING REQUIREMENTS.
- 3) INSPECTION BY THE DISTRICT OR DISTRICT'S REPRESENTATIVE (ENGINEER OR INSPECTOR) OF ALL WORK PERFORMED IS REQUIRED. THE CONTRACTOR SHALL COORDINATE WITH ENGINEER & PROVIDE ADVANCE NOTICE FOR ALL INSPECTION NEEDS, PER PROJECT SPECIFICATIONS. THE CONTRACTOR MUST SECURE APPROVAL FROM THE INSPECTOR PRIOR TO BACKFILLING OR COVERING ANY NEW FACILITIES.
- 4) ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS, THE PROJECT SPECIFICATIONS, THE PARADISE IRRIGATION DISTRICT STANDARD SPECIFICATIONS, THE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) 2021 EDITION, AND THE LATEST EDITION OF THE BUTTE COUNTY PUBLIC WORKS IMPROVEMENT STANDARDS. ANY CHANGE OR REVISIONS THERETO SHALL BE APPROVED BY THE DISTRICT AND ENGINEER PRIOR TO ANY REQUEST FOR INSPECTION. ORDER OF PRECEDENCE IS AS LISTED. DEVIATION FROM THESE PLANS WITHOUT THE PRIOR WRITTEN CONSENT MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY SHOULD ANY FIELD CONDITIONS BE ENCOUNTERED THAT VARY FROM THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS.
- 5) CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THE REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD PARADISE IRRIGATION DISTRICT AND ENGINEER HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT OR THE ENGINEER.
- 6) LOCATION AND ELEVATION OF IMPROVEMENTS INCLUDED IN OR TO BE MET BY WORK OF THIS CONTRACT SHALL BE CONFIRMED BY FIELD MEASUREMENTS BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF THE NEW WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO STARTING WORK, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND SHALL HAVE THEM RESOLVED PRIOR TO CONTINUING WORK. THE CONTRACTOR SHALL REQUEST A CLARIFICATION OF ANY CONDITIONS WHICH ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION OF THE ADJOINING PORTION OF THE WORK.
- 7) EXISTING MAINS, METERS, VALVES, SERVICE LATERALS, AND HYDRANTS SHOWN ON THESE PLANS ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING INFRASTRUCTURE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL OTHER EXISTING UTILITIES.
- 8) THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND WERE OBTAINED BY A SEARCH OF AVAILABLE PRE-FIRE MAP RECORDS, MAP RECORDS WERE NOT SURVEY-GRADE ACCURATE. NO SURVEY WAS CONDUCTED AND NO OTHER UTILITIES ARE MAPPED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND/OR VERIFY THE LOCATION OF ALL EXISTING UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO TAKE PRE-CAUTIONARY MEASURES TO PROTECT AND MAINTAIN ALL UTILITIES. IF AN UNDERGROUND UTILITY IS DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY CONTACT UTILITY OWNER AND THE UNDERGROUND SERVICE ALERT LOCATING SERVICE TO ARRANGE FOR REPAIRS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR THE DAMAGE CAUSED TO UTILITIES DURING CONSTRUCTION.

Path: W:\GIS\Projects\19-017 PID Disaster Recovery Management Services_{S}\Main Replacement Project\Mains Replacement Phase 1 Bid Docs\Mains Replacement Pha

9) THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. NOTICE OF THE PROPOSED WORK SHALL BE GIVEN TO THE FOLLOWING AGENCIES AT LEAST TWO (2) WORKING DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL REQUEST MARKOUT OF UNDERGROUND UTILITIES BY CALLING THE BELOW LISTED REGIONAL NOTIFICATION CENTER FOR AN INQUIRY IDENTIFICATION NUMBER:

DIG ALERT	(800) 422-4133
PARADISE IRRIGATION DISTRICT	(530) 877-4971
TOWN OF PARADISE	(530) 872-6291
COMCAST	(323) 342-5552
PG&E	(877) 743-7782
PACIFIC BELL	(510) 645-2929

- 10) CONTACTING DIGALERT DOES NOT RELIEVE THE CONTRACTOR OF CONTACTING ALL OWNERS TO REPAIR THE DAMAGE CAUSED TO UNDERGROUND UTILITIES DURING CONSTRUCTION.
- 11) APPROVAL OF THESE PLANS BY THE PARADISE IRRIGATION DISTRICT DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OR OF THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THE PROJECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES WITHIN THE LIMITS OF THE PROJECT.
- 12) THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS PREPARED BY A LICENSED TRAFFIC ENGINEER OR A QUALIFIED TRAFFIC CONTROL CONTRACTOR TO THE DISTRICT AND THE TOWN OF PARADISE AND OBTAIN TOWN OF PARADISE RIGHT-OF-WAY PERMIT FOR ALL WORK. SAID PERMITS SHALL BECOME PART OF THIS CONTRACT. PLAN SHALL IMPLEMENT TRAFFIC CONTROL IN THE PUBLIC RIGHT OF WAY THAT CONFORMS AT MINIMUM WITH CURRENT EDITION MUTCD, MUTCD CALIFORNIA SUPPLEMENTAL REQUIREMENTS, SECTION 12 OF CALTRANS STANDARD SPECIFICATIONS, AND CA ADA REQUIREMENTS.
- 13) THE CONTRACTOR SHALL SUBMIT THE PROPOSED CONSTRUCTION SCHEDULE FOR ALL WORK TO BE PERFORMED UNDER THIS CONTRACT TO THE ENGINEER FOR APPROVAL, PER REQUIREMENTS IN THE SPECIFICATIONS. PROPOSED SCHEDULE SHALL BE IN WRITING AND SHALL IDENTIFY DAYS AND HOURS OF CONSTRUCTION, AND COORDINATION REQUIREMENTS FOR ALL AFFECTED PUBLIC AGENCIES AND PRIVATE COMPANIES THAT HAVE FACILITIES WITHIN THE WORK AREA. ANY MODIFICATIONS TO THE APPROVED SCHEDULE SHALL BE SUBMITTED TO THE ENGINEER, PER THE SPECIFICATIONS.
- 14) THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE ON THE JOB SITE COPIES OF APPLICABLE STANDARDS SHOWN ON THESE PLANS AND SPECIFICATIONS AND BE FAMILIAR WITH THE REQUIREMENTS. CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY WITH THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR ON THE JOB SITE DURING ALL WORKING HOURS.
- 15) PRIVATE AND PUBLIC PROPERTY SHALL BE PROTECTED DURING THE CONSTRUCTION AND, IF DAMAGED DURING THE EXECUTION OF WORK, SHALL BE REPLACED AND/OR RESTORED TO MATCH EXISTING CONDITIONS OR UPDATED STANDARDS IF REQUIRED BY OWNER. CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS OF ALL WORK AREAS BY TAKING PRECONSTRUCTION PHOTOGRAPHS.
- 16) NO TREES, VEGETATION, OR IMPROVEMENTS (INCLUDING FENCING) SHALL BE REMOVED WITHOUT THE PRIOR WRITTEN CONSENT AND APPROVAL OF THE DISTRICT. VEGETATION AND IMPROVEMENTS WHICH ARE DESIGNATED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE DIRECTED BY THE DISTRICT.

PID NOTES

- 1) TRENCH BACKFILL SHALL CONFORM TO THE PROVISIONS IN SECTION, 02300 EARTHWORK, OF THE SPECIFICATIONS AND STANDARD DETAILS.
- 2) CONTRACTOR SHALL BEAR THE COST OF ALL SOIL DENSITY TESTING REQUIRED BY DISTRICT.
- 3) TRENCHING SHEETING, SHORING, AND BRACING SHALL BE INSTALLED FOR ANY TRENCH FIVE FEET OR MORE IN DEPTH, OR AS REQUIRED BY CONTRACT SPECIFICATIONS. SHORING SHALL CONFORM TO THE LATEST EDITION OF THE STATE DIVISION OF INDUSTRIAL SAFETY CONSTRUCTION SAFETY ORDERS, SECTION 1539-1542, PURSUANT TO STATE ASSEMBLY BILL NO. 150 AND CAL OSHA STANDARDS.
- 4) POLE BRACING MAY BE NECESSARY WHEN TRENCHING IN THE VICINITY OF EXISTING UTILITY POLES.
- 5) IT IS THE CONTRACTOR'S RESPOSIBILITY TO MAINATIN ALL PUBLIC STREETS AND PRIVATE ROADWAYS IN A CLEAN AND SAFE CONDITION. ALL VEHICLES SHALL BE CLEAN PRIOR TO EXISTING THE CONSTRUCTION ZONE. IF DIRT OR DEBRIS IS TRACKED OR SPILLED IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO REMOVE IMMEDIATELY.
- 6) CONTRACTOR SHALL CONSTRUCT AND INSTALL SERVICES IN CONFORMANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS, AND SHALL SUPPLY ALL NECESSARY MATERIALS AND LABOR, WITH THE EXCEPTION OF WATER METERS SUPPLIED BY THE DISTRICT.
- 7) WATER SERVICE INTERRUPTIONS FOR INSTALLATION OF NEW SERVICES OR RECONNECTION OF EXISTING SERVICES SHALL BE IN ACCORDANCE WITH THE PROVISIONS STATED IN SECTION 01130 SPECIAL PROJECT CONSTRAINTS. CONTRACTOR SHALL PERFORM WORK IN A MANNER THAT MINIMIZES SERVICE INTERRUPTIONS.
- 8) CONTRACTOR SHALL PERFORM WORK IN A MANNER THAT MINIMIZES DISTRURBANCES AND DAMAGE TO CUSTOMER PROPERTY. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING LANDSCAPING, HARDSCAPING, ETC. TO SAME AS OR BETTER CONDITIONS.
- 9) IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT PRE AND POST CONSTRUCTION CONDITION OF ALL AREAS THAT WILL BE DISTURBED OR IMPACTED DURING CONSTRUCTION ACTIVITIES; INCLUDING BUT NOT LIMITED TO AREAS WHERE INFRASTRUCTURE WILL BE INSTALLED, EQUIPMENT OR MATERIALS WILL BE STAGED, FLUSHING WATER WILL BE DISCHARGED, AND TRAVELLED WAY OF ANY CONTRACTOR VEHICLES NOT IN THE PUBLIC RIGHT OF WAY. DOCUMENTATION MAY CONSIST OF TIME-STAMPED PHOTOS AND/OR VIDEOS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DOCUMENTATION AND MUST PROVIDE PHOTO OR VIDEO DOCUMENTATION AT ENGINEER OR DISTRICT'S REQUEST. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CLAIMS FOR DAMAGE RECEIVED BY PID, WHERE THE POST-CONSTRUCTION CONDITION DOES NOT MATCH PRE-CONSTRUCTION CONDITION. CLAIMS MAY BE EVALUATED BY PID MANAGEMENT, PID ENGINEERING DEPARTMENT, PID'S ATTORNEYS, OR ANY COMBINATION THEREOF. IN THE ABSENCE OF ADEQUATE PHOTO OR VIDEO DOCUMENTATION TO ASSESS THE CLAIM, CONTRACTOR MAY BE HELD FINANCIALLY RESPONSIBLE AT PID'S DISCRETION.
- 10) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING IMPROVEMENTS INCLUDING BUT NOT LIMITED TO CURBS, GUTTERS, SIDEWALKS, SIGNS, AND PAVEMENT DURING CONSTRUCTION. ALL SUCH IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO ORIGINAL CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE.
- 11) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS OR SURVEY MARKERS DURING CONSTRUCTION. CONTRACTOR SHALL IDENTIFY ANY MONUMENT OR SURVEY MARKER WHICH CONFLICTS WITH CONSTRUCTION ACTIVITIES TO THE INSPECTOR IN THE FIELD. CONTRACTOR SHALL BE RESPOSIBLE FOR BEARING ANY COSTS ASSOCIATED WITH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION.

- 12) ALL PIPELINE CONSTRUCTION SHALL BE INSPECTED BY PARADISE IRRIGIATION DISTRICT (PID OR DISTRICT) OR DISTRICT'S REPRESENTATIVE AND SHALL CONFORM TO PROJECT DRAWINGS AND SPECIFICATIONS. BID DOCUMENTS, INCLUDING A COMPLETE DRAWING SET, ARE AVAILABLE AT CIPLIST.COM. ANY PIPING APPURTENANCES COVERED BEFORE INSPECTION AND APPROVAL SHALL BE UNCOVERED FOR INSPECTION AT CONTRACTOR'S EXPENSE.
- 13) NEW INFRASTRUCTURE SHALL NOT BE PUT IN SERVICE UNTIL IT HAS BEEN INSPECTED, TESTED, AND APPROVED. EXISTING WATER SYSTEM SHALL REMAIN OPERATIONAL UNTIL ALL SERVICES, FIRE HYDRANTS, AND CONNECTIONS TO THE EXISTING WATER MAINS HAVE BEEN COMPLETED, UNLESS OTHERWISE DIRECTED BY ENGINEER OR PID.
- 14) EXISTING PID VALVES ARE TO BE OPERATED BY PID PERSONNEL ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ENGINEER AND PID IN ADVANCE, PER SPECIFICATIONS, TO HAVE DISTRICT STAFF PRESENT FOR OPERATION OF VALVES.
- 15) TAPS AND TIE-INS ON EXISTING WATER MAINS ARE ONLY TO BE CONSTRUCTED WITH DISTRICT OR DISTRICT'S REPRESENTATIVE PRESENT. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADVANCE NOTICE TO ENGINEER AND DISTRICT, PER SPECIFICATIONS. CONTRACTOR SHALL MAKE ALL EFFORTS TO MINIMIZE THE DURATION AND EXTENT OF SERVICE INTERRUPTIONS. CONTRACTOR SHALL NOT SUSPEND WORK FOR THE DAY UNTIL WATER SERVICE IS RESTORED TO ALL AFFECTED CUSTOMERS.
- 16) CONTRACTOR SHALL PROVIDE DISTRICT AT LEAST 72-HOURS' NOTICE PRIOR TO EACH SCHEDULED SHUTDOWN FOR CONSTRUCTION OF TIE-INS AND WATER SERVICE CHANGE OVERS. CONTRCATOR SHALL BE RESPONSIBLE FOR HANGING DOOR HANGERS IN ADVANCE OF SERVICE INTERRUPTION, PER SPECIFICATIONS.
- 17) IN THE EVENT OF AN EMERGENCY WATER OUTAGE, CONTRACTOR IS TO NOTIFY ENGINEER IMMEDIATELY. CONTRACTOR SHALL TAKE STEPS TO PROTECT SURROUNDING PROPERTIES FROM DAMAGE.
- 18) MAIN FILLING, FLUSHING, AND PRESSURE TESTING SHALL BE PERFORMED BY CONTRACTOR AND OBSERVED BY DISTRICT OR DISTRICT'S REPRESENTATIVE.
- 19) BACTERIOLOGIAL SAMPLING AND TESTING WILL BE PERFORMED BY PID. IF A SAMPLE TESTS PRESENT FOR ANY INDICATOR BACTERIA, CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND CORRECTING THE SOURCE OF CONTAMINATION. THE COST OF ADDITIONAL SAMPLING AND TESTING SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
- 20) POSITIVE ISOLATION OF THE PROPOSED WATER MAIN AND THE EXISTING WATER MAIN IS REQUIRED UNTIL THE NEW WATER MAIN HAS BEEN DISINFECTED, FLUSHED, AND PASSED BACTERIOLOGICAL TESTING AND PRESSURE AND LEAKAGE TESTING. WHERE ISOLATION IS PROVIDED BY A VALVE, THE NEW WATER MAIN MUST PASS BACTERIOLOGICAL TESTING PRIOR TO PRESSURE TESTING. WHERE THE WATER MAIN IS CONSTRUCTED COMPLETELY DETACHED FROM THE EXISTING DISTRIBUTION SYSTEM, PRESSURE TESTING MAY BE CONDUCTED PRIOR TO BACTERIOLOGICAL TESTING.
- 21) CONTRACTOR SHALL FIELD VERIFY EXISTING MAIN SIZE, MATERIAL, AND LOCATION PRIOR TO CONSTRUCTION OF TAPS AND TIE-INS.
- 22) CONTRACTOR SHALL ABANDON EXISTING MAIN LINE COMPONENTS IDENTIFIED FOR ABANDONMENT BY THESE DRAWINGS FOLLOWING COMPLETION OF TIE-INS AND ACCEPTANCE BY ENGINEER.
- 23) MINIMUM DEPTH OF COVER SHALL BE 36 INCHES EXCEPT AS OTHERWISE INDICATED ON DRAWINGS, SPECIFICATIONS, OR DIRECTED BY ENGINEER.
- 24) NEW WATER MAIN SHALL BE C900 PVC PIPE, PRESSURE CLASS 150, EXCEPT WHERE OTHERWISE NOTED IN DRAWINGS.
- 26) THRUST BLOCKS MUST CURE A MINIMUM OF 48 HOURS BEFORE BEING SUBJECTED TO SYSTEM PRESSURE.

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d la.							APPROVED:	<u>BLANK</u>
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PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971 MAINS REPLACEMENT PROJECT PHASE 1

GENERAL NOTES

DATE <u>4/9/2023</u>

DWG <u>G-2</u> SHEET <u>2</u> OF <u>56</u>

ABBREVIATIONS

ABBREVIATION	DEFINITION
A D OD AD	ACCDECATE DACE
A.B. OR AB	AGGREGATE BASE
A.C. OR AC	ASPHALT CONCRETE
ADPT	ADAPTER COMBINATION AID DELEACE AND MACCUM DELICE MALVE
AIR VAC	COMBINATION AIR RELEASE AND VACCUM RELIEF VALVE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATELY
ASSY	ASSEMBLY
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
AVE	AVENUE
AWG	AMERICAN WIRE GAUGE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BAV	BALL VALVE
BF	BACKFLOW
CA-NV AWWA	CALIFORNIA NEVADA AMERICAN WATER WORKS ASSOCIATION
CARV	COMBINATION AIR RELEASE AND VACCUM RELIEF VALVE
CIR	CIRCLE
CML	CEMENT MORTAR LINED
COMP	COMPRESSION
CT	COURT
CTS	COPPER TUBING SIZE
CU	COPPER
D OR DIA	DIAMETER
DEG	DEGREE
DEMO	DEMOLISH
D.I.	DUCTILE IRON
DIP	DUCTILE IRON PIPE
DISTRICT	DISTRICT
DR	DIMENSION RATION
DTL	DETAIL
DWG	DRAWING
EL	ELEVATION
ELL	ELBOW
EP	EDGE OF PAVEMENT
EX	EXISTING
FC	FLEXIBLE COUPLING
FCA	FLANGED COUPLING ADAPTER
F.I.P OR FIP	FEMALE IRON PIPE THREAD
FLG	FLANGE
FT	FEET
GALV	GALVANIZED
HDPE	HIGH DENISTY POLYETHYLENE
HMA	HOT MIZ ASPHALT
HORIZ.	HORIZONTAL
VERT.	VERTICAL
HRS	HOURS
IN	INCH
LF	LINEAR FOOT
LN	LANE
MAX	MAXIMUM
M.I.P. OR MIP	MALE IRON PIPE THREAD
MI	MILE OR MILES
MTI	MILIMETED

DEFINITION
MINIMUM
METER INTERFACE UNIT
MECHANICAL JOINT
MANOR
NUMBER
NATIONAL PIPE THREAD
NOT TO SCALE
OUTER DIAMETER
PARADISE IRRIGATION DISTRICT
PLACE
PRESSURE REGULATING VALVE
POUND PER SQUARE FOOT
POUNDS PER SQUARE INCH
POLYVINYL
ROAD
REFERENCE
REQUIRED
RESTRAINED FLANGED COUPLING ADAPTER
RESTRAINED MECHANICAL JOINT
REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE
SOUTH
STAINLESS STEEL
STANDARD
STANDARD DIMENSION RATIO
SERVICE LATERAL REPLACEMENT
STANDARD
STEEL
THRUST BLOCK
TOWN OF PARADISE
TOWN OF PARADISE
TYPICAL
UNDERGROUND FEEDER
VARIES OR VARIOUS
VERTICAL
WATER
WITH
WATER WORKS ENGINEERS

prinking Water	1.0		_			\ . .		
Waste Market Mar	E	N	G	I	E		S	

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MIN

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CONSTRUCTION				CHECKED:	K. ALACON
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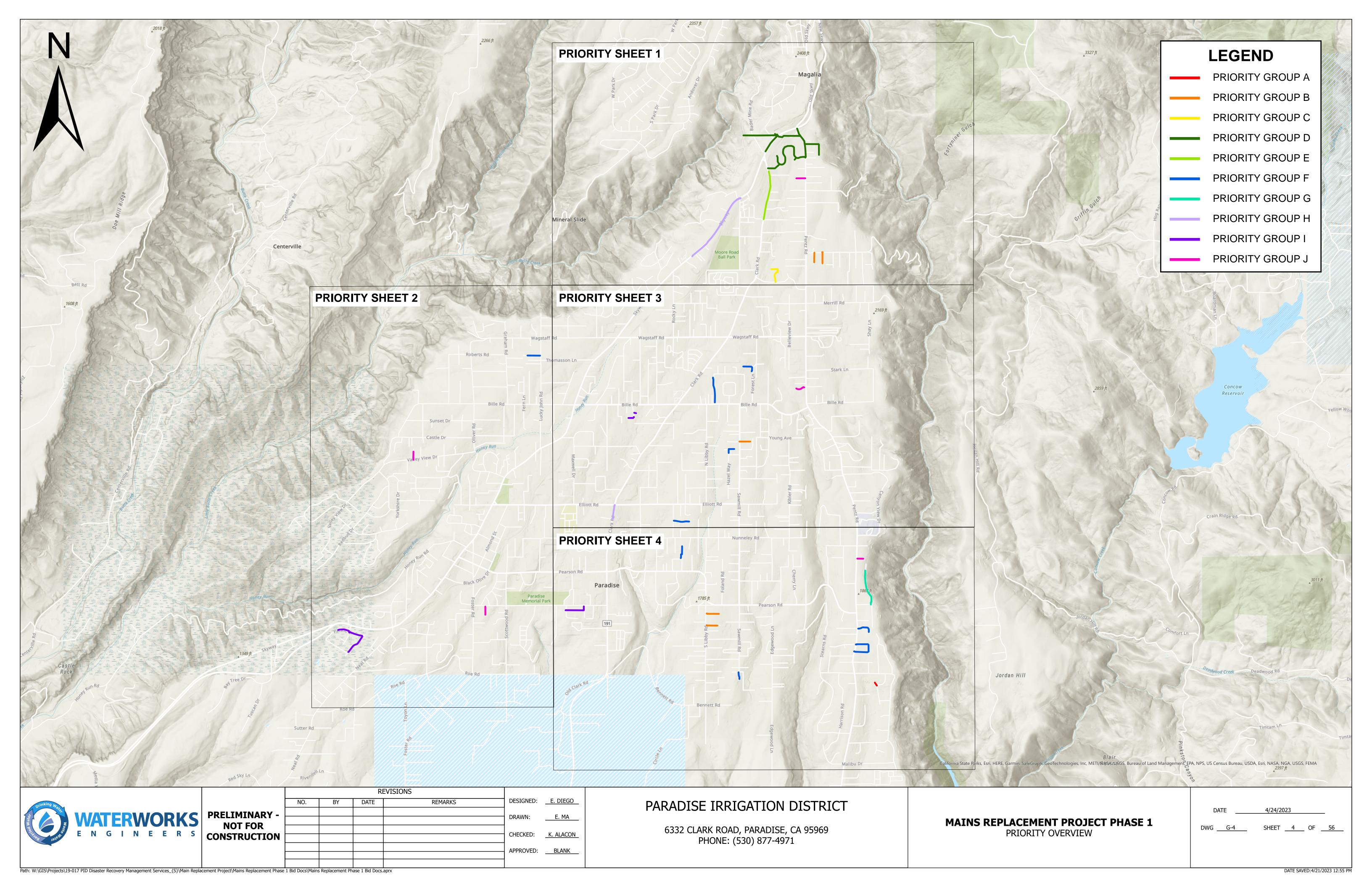
PARADISE IRRIGATION DISTRICT

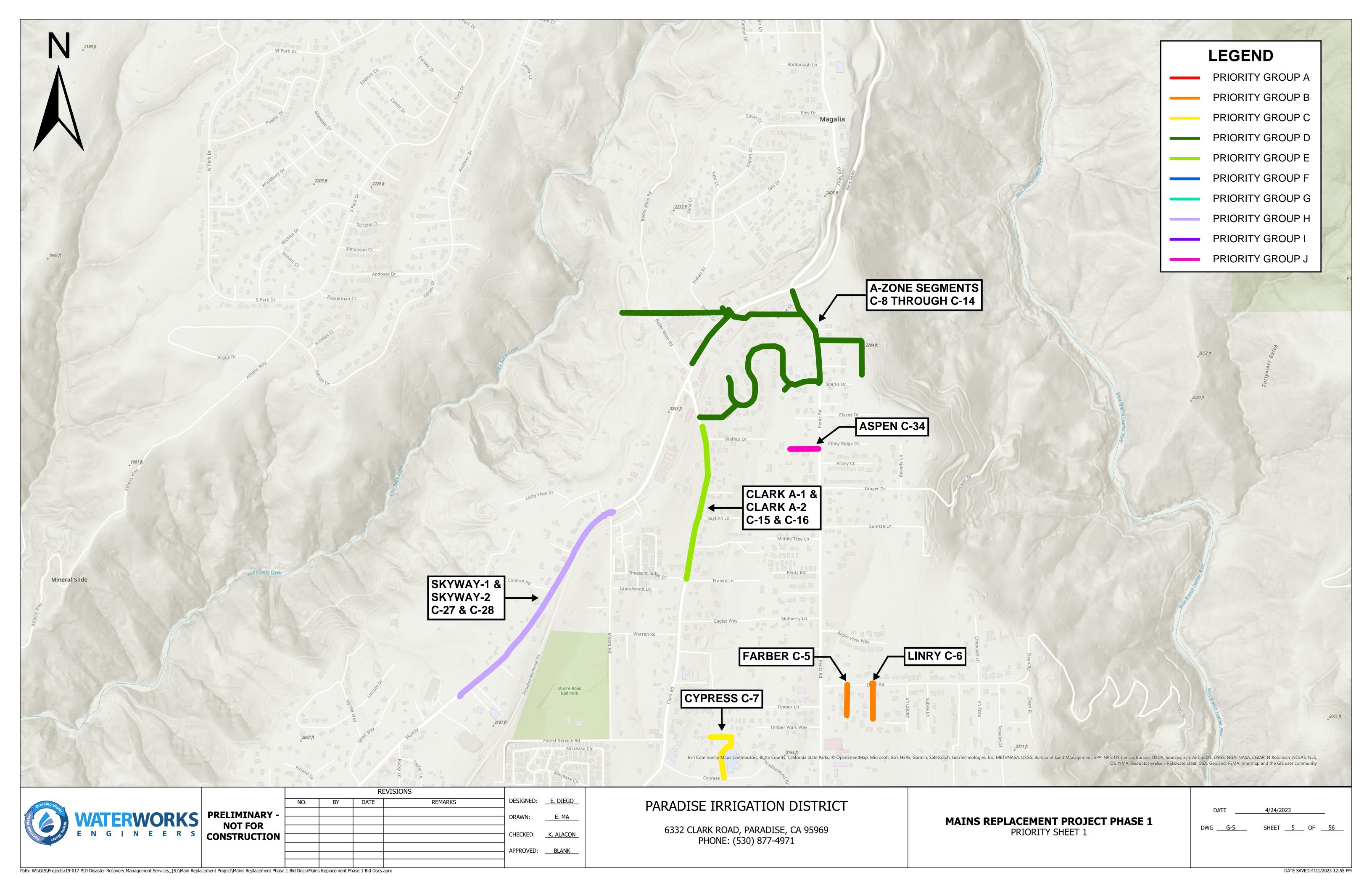
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ABBREVIATIONS

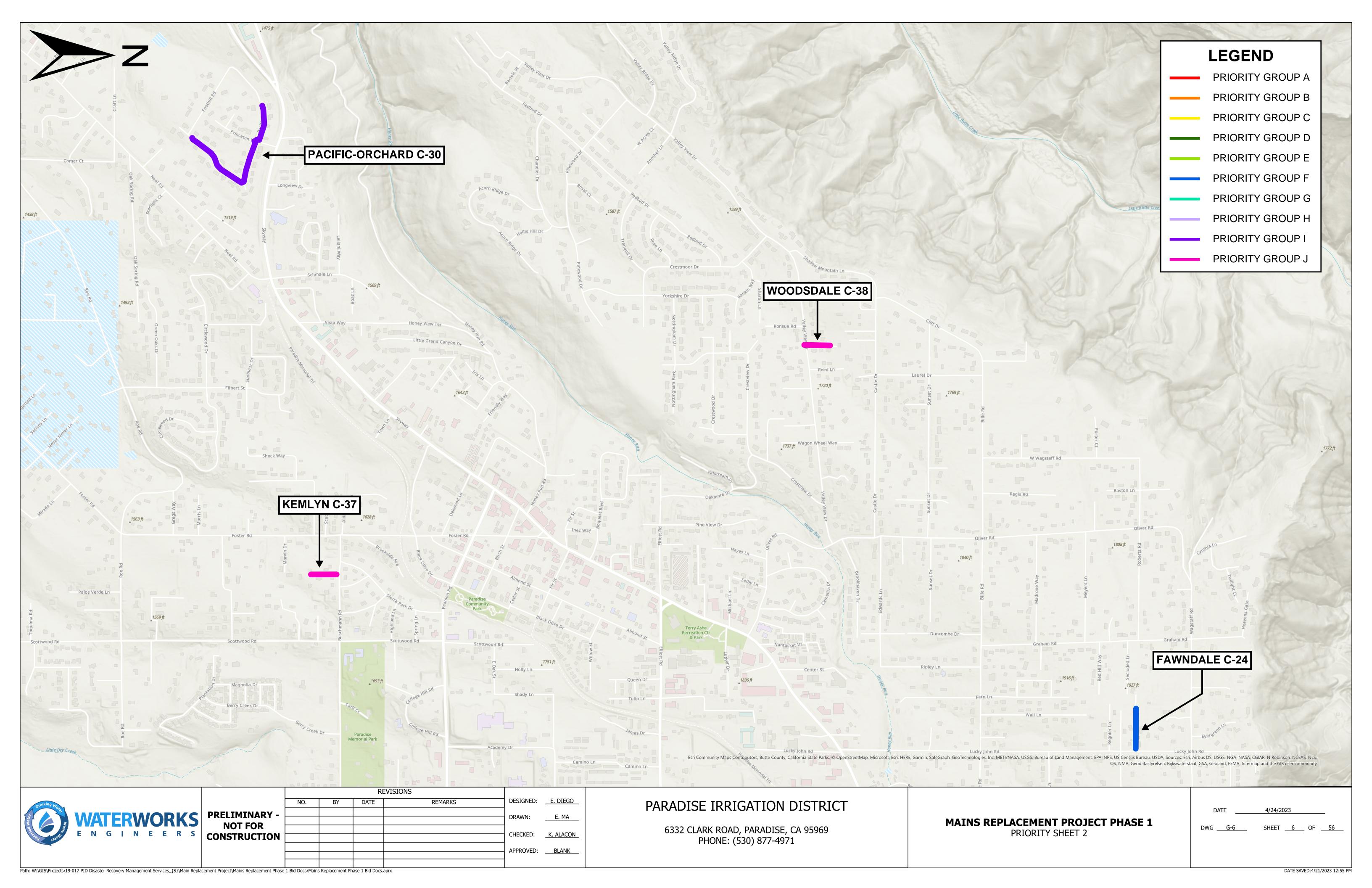
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DWG <u>G-3</u>	SHEET 3 OF	56

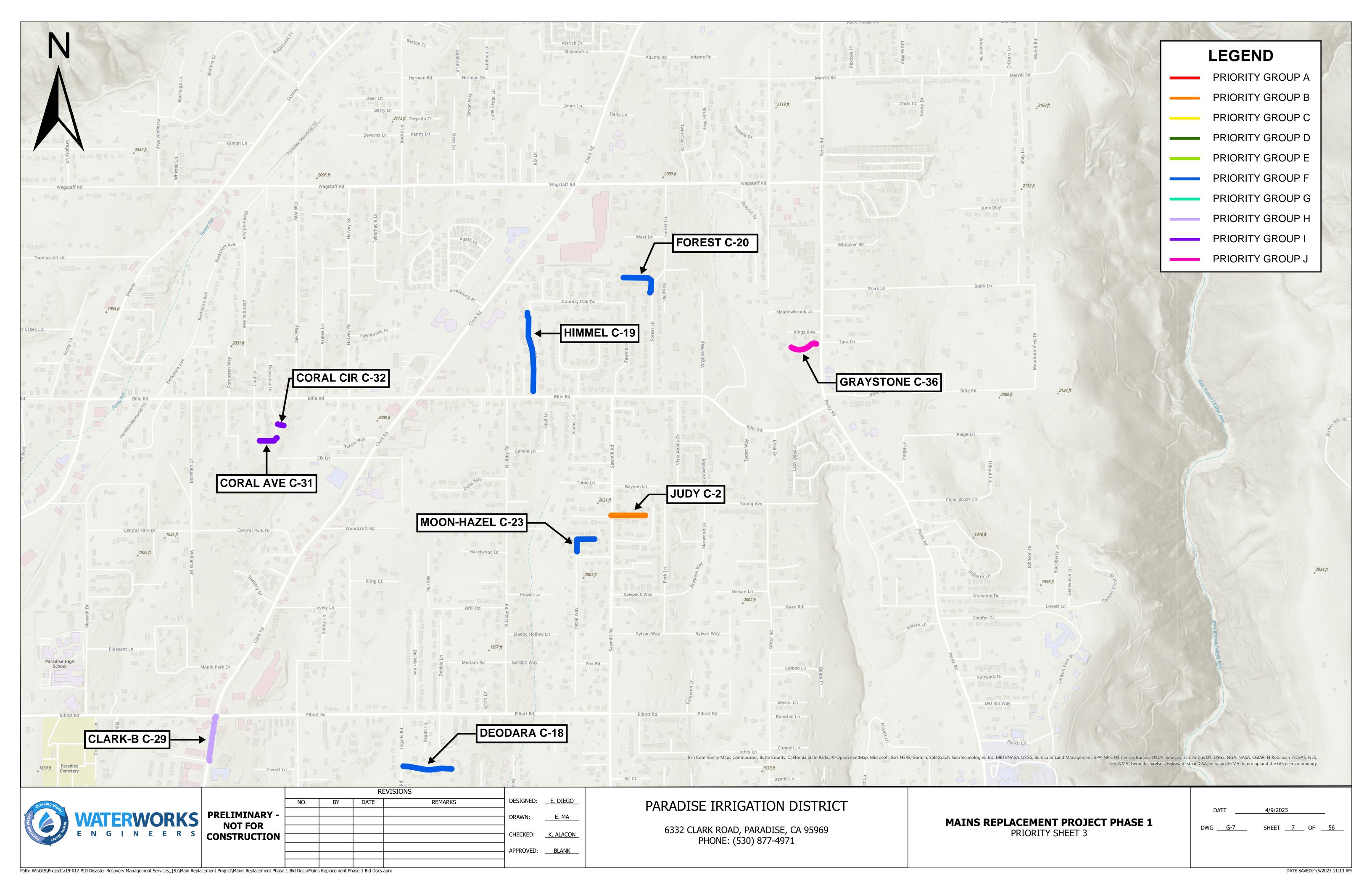
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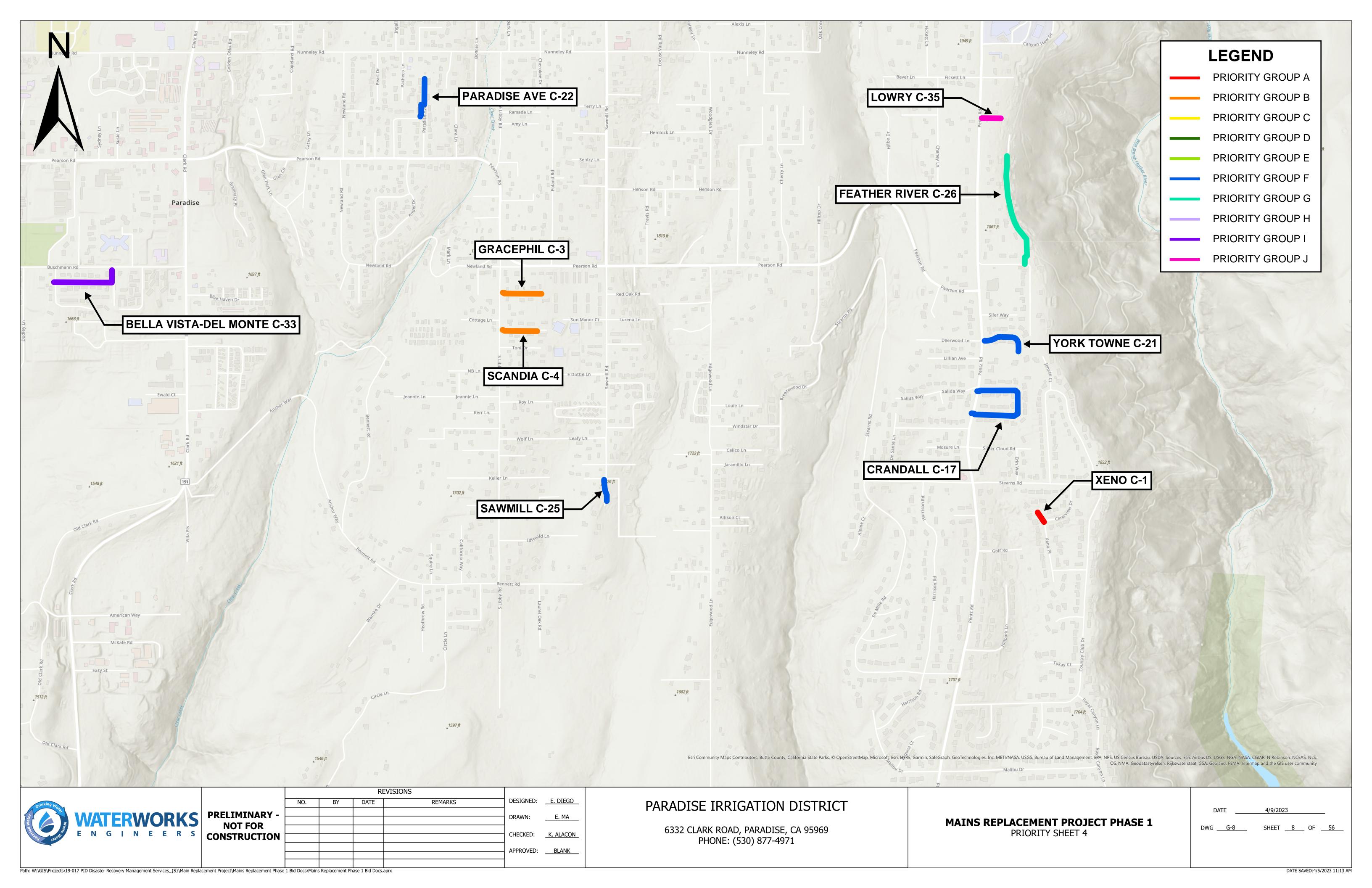
MINIMUM











LEGEND

Plan Sheet Symbols

New water main Existing water main to be abandoned or demolished Existing water main ----W-New service connection Existing service connection to be replaced or reconnected Existing service connection New gate valve Existing gate valve to be abandoned or demolished Existing gate valve Existing butterfly valve to be abandoned Existing butterfly valve New or salvaged 6" hydrant Existing 6" hydrant to be removed Existing 6" hydrant Existing 4" hydrant to be removed Existing 4" hydrant New CARV assembly Existing CARV assembly to be replaced or demolished **Existing CARV** New blow off valve assembly Existing blow off valve assembly to be replaced or demolished Existing blow off valve assembly Existing dunker valve to be demolished Existing dunker valve Meter to be installed or reconnected Meter to be relocated Existing meter TB Thrust block #### Parcel

Tie-In Details Symbols

W	New water main
W	Existing water main to be abandoned or demolished
W	Existing water main
	New gate valve
	Existing gate valve to be abandoned or demolished
	Existing gate valve
\odot	Existing butterfly valve to be abandoned
	Existing butterfly valve
-	New or salvaged 6" hydrant
-	Existing hydrant to be removed
	Existing hydrant
	New CARV assembly
	Existing CARV assembly to be replaced or demolished
	Existing CARV
	New blow off valve assembly
	Existing blow off valve assembly to be replaced or demolished
	Existing blow off valve assembly
\oplus	Existing dunker valve to be demolished
	Existing dunker valve
	Install thrust block
	Install reducer
****	Install coupling
	Install DIP tee
	Install cap/ plug for valve
	Install cap/ plug for abandoned pipe
	Install solid sleeve
*	Install DIP 45 degree elbow
CH	Install DIP 90 degree elbow turned down
	Install DIP tee branch turned down with 90 degree elbow
####	Parcel

BID DOCUMENTS

PRELIMINARY - NOT FOR CONSTRUCTION

NO. BY DATE REMARKS

DESIGNED: E. DIEGO

DRAWN: E. MA

CHECKED: K. ALACON

APPROVED: BLANK

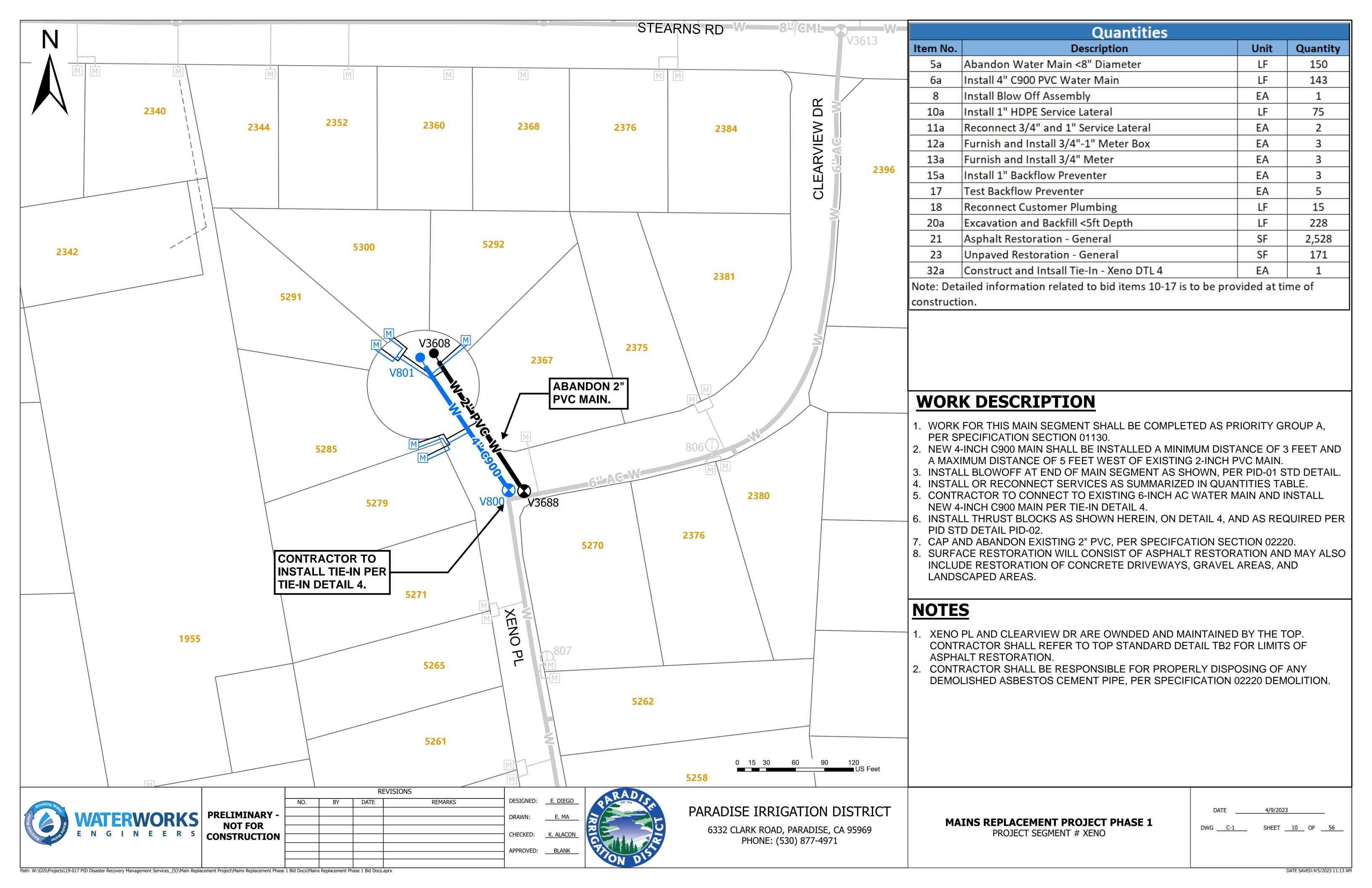
REVISIONS

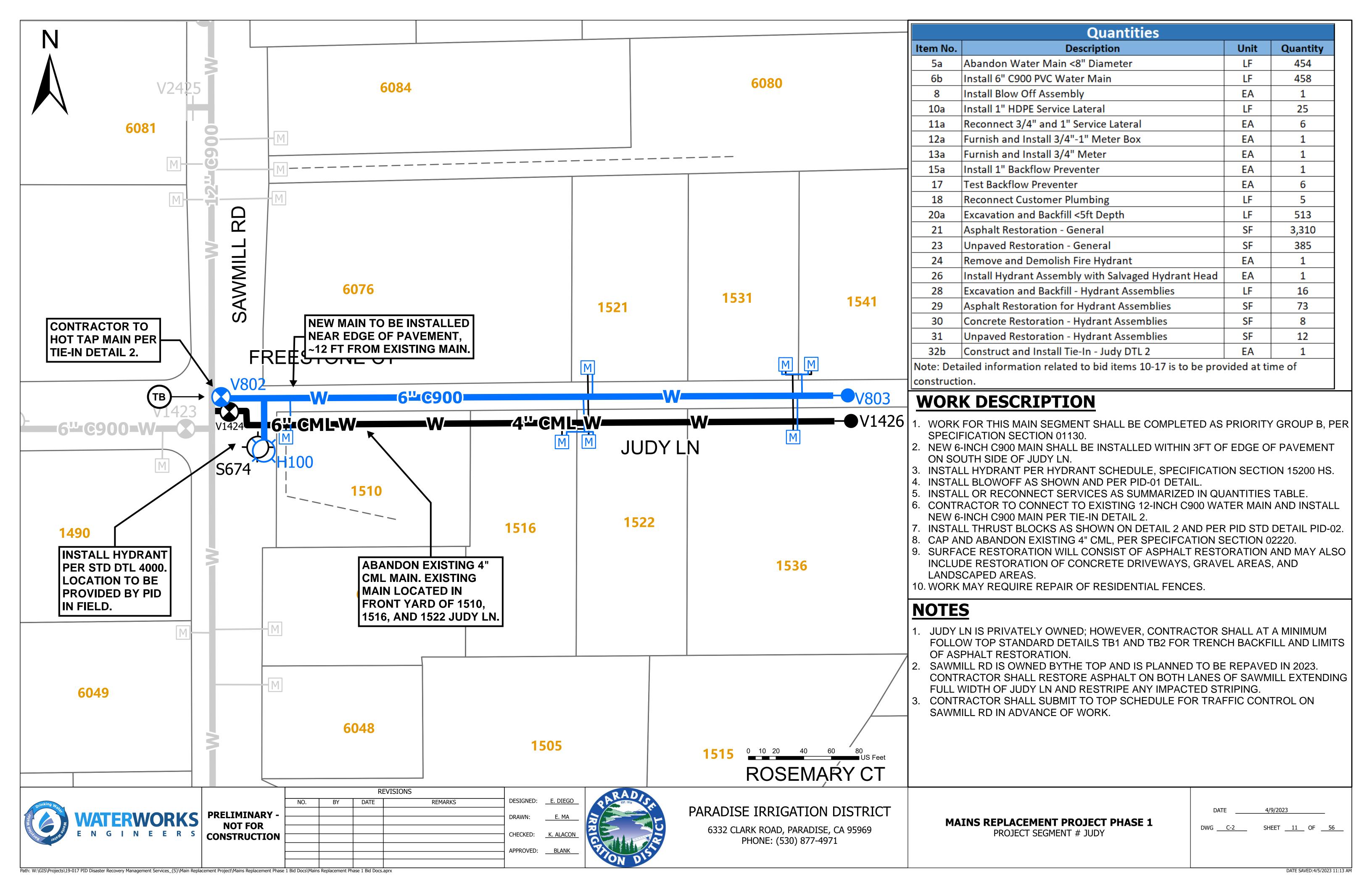
PARADISE IRRIGATION DISTRICT

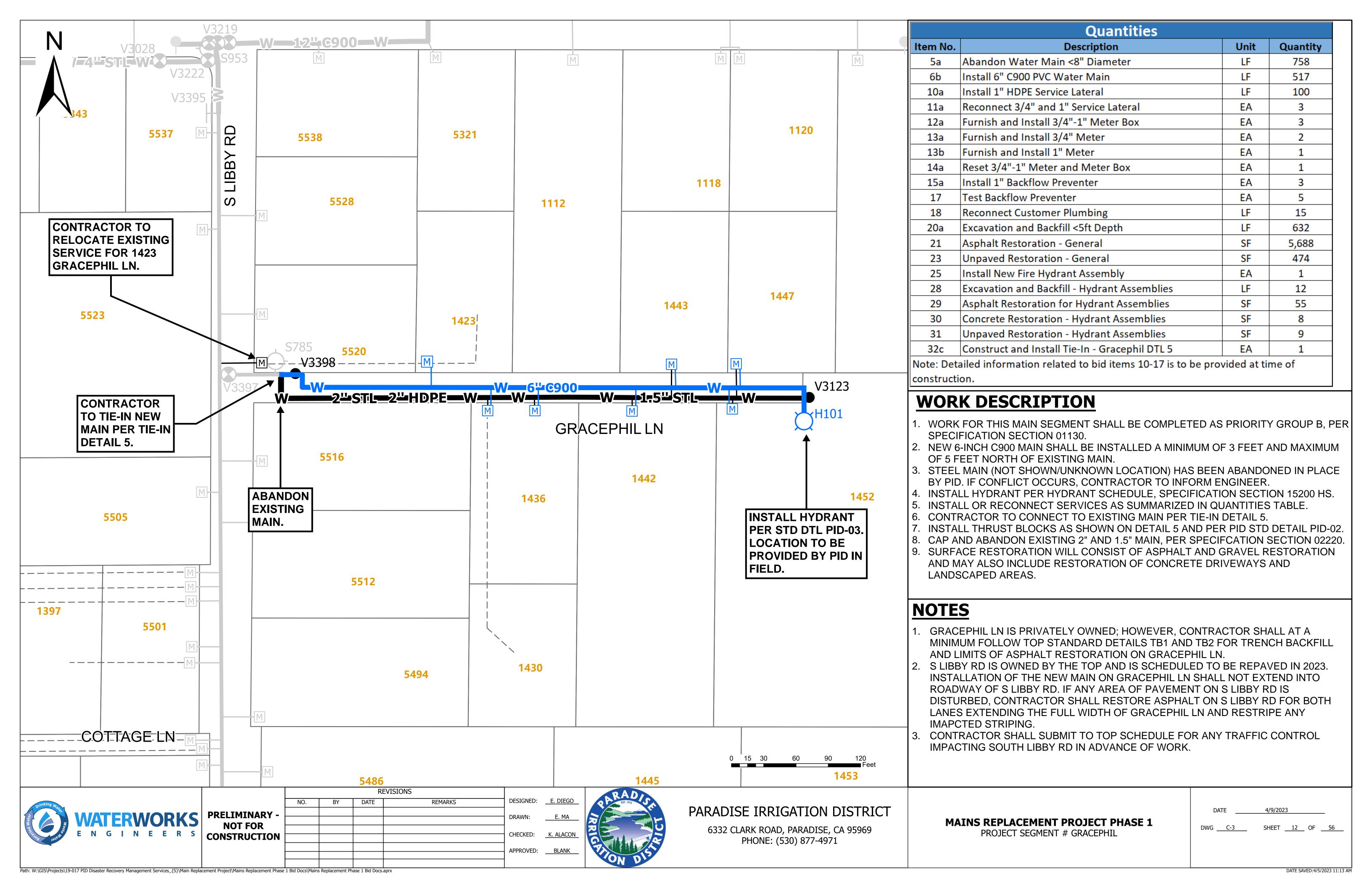
6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971 MAINS REPLACEMENT PROJECT PHASE 1
LEGEND

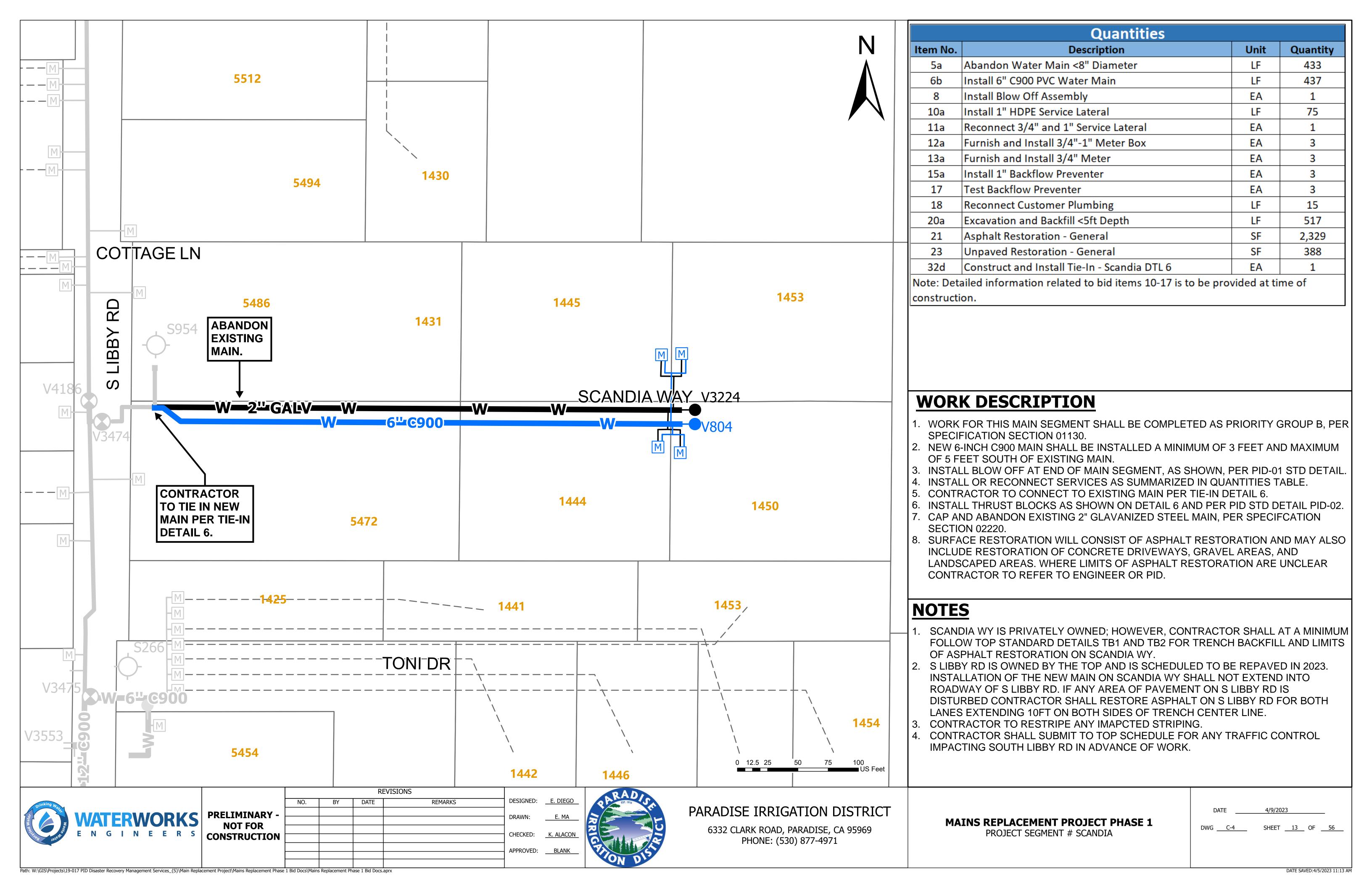
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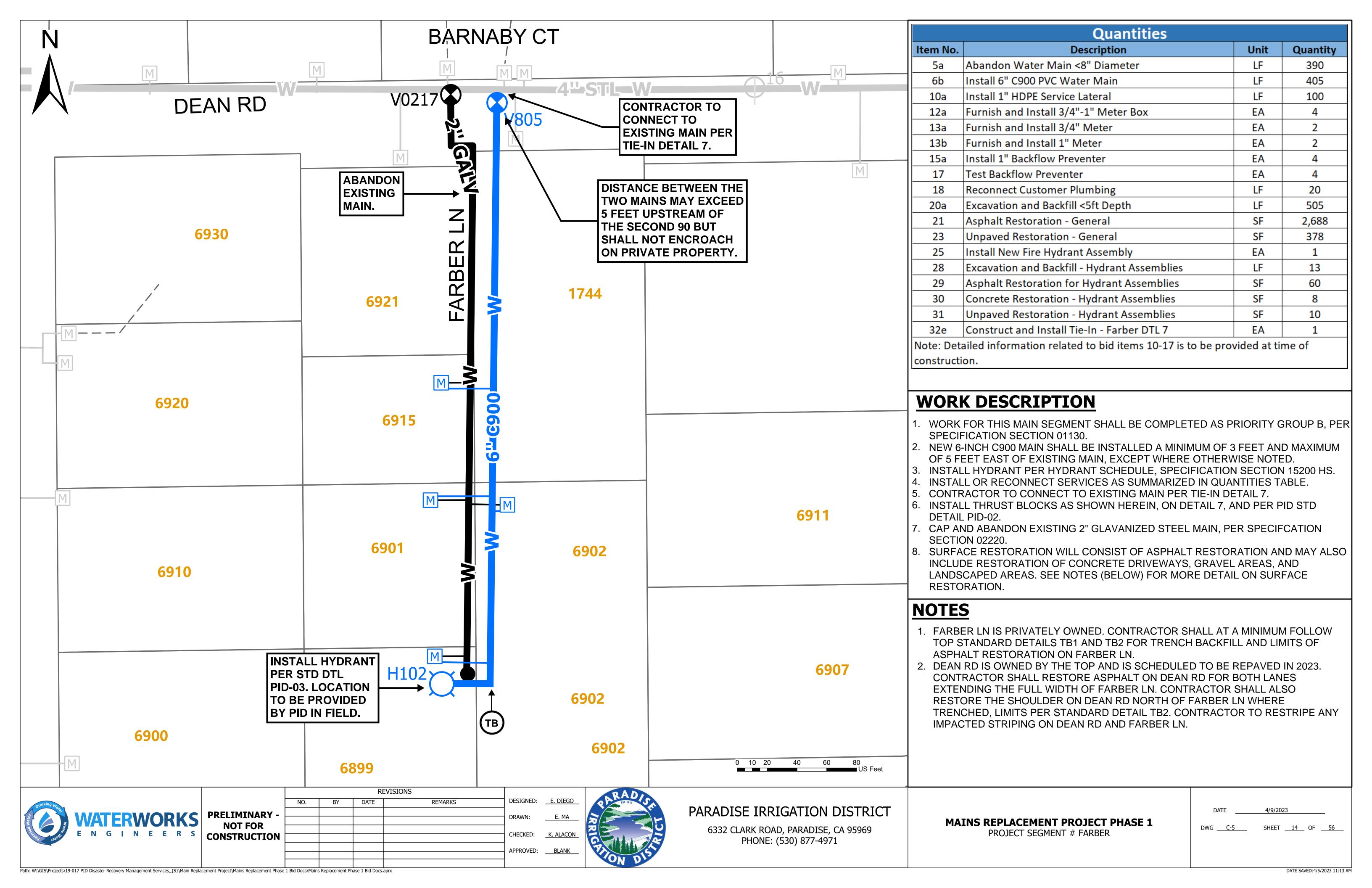
DWG <u>G-9</u> SHEET <u>9</u> OF <u>56</u>

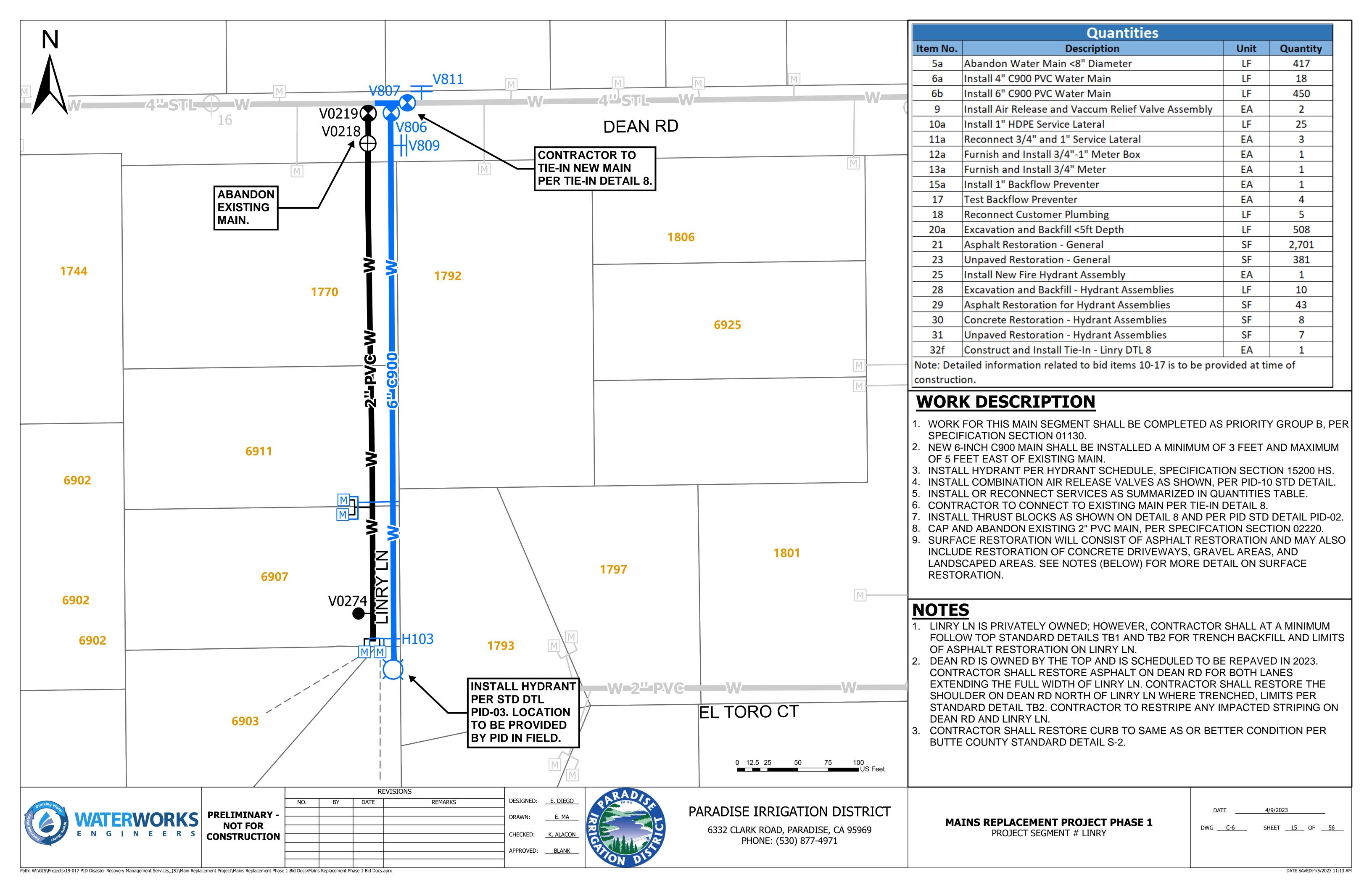


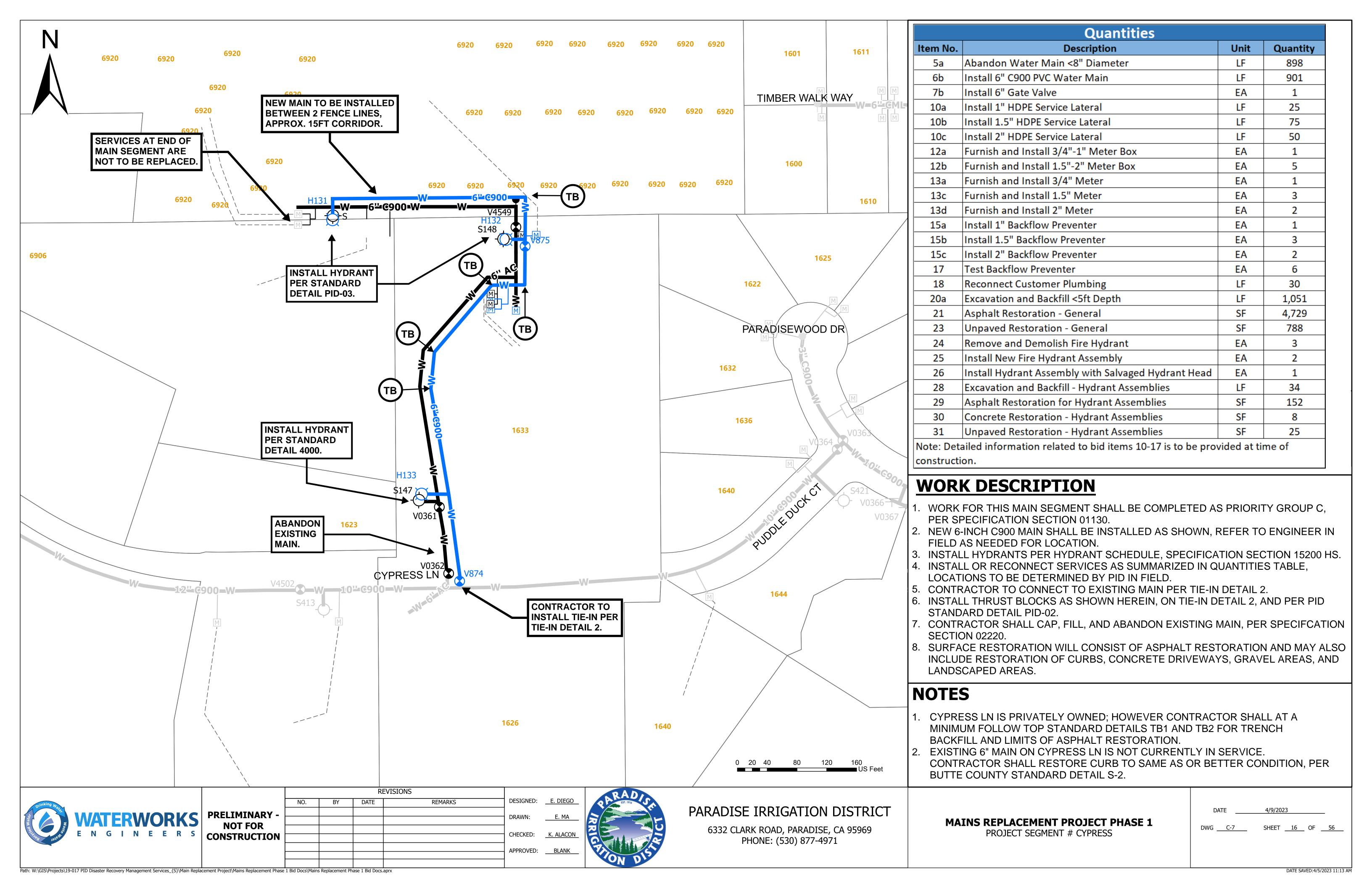


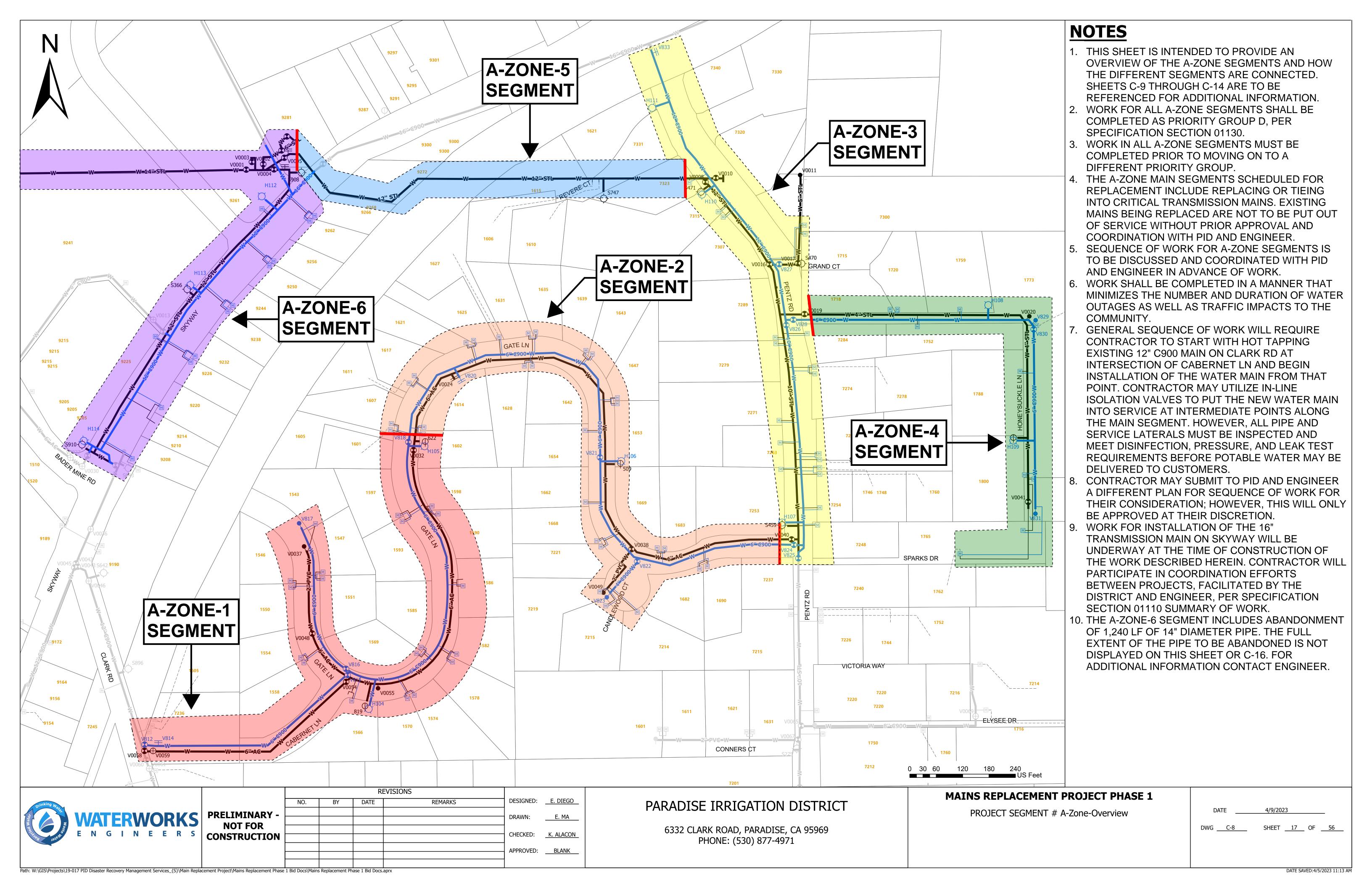


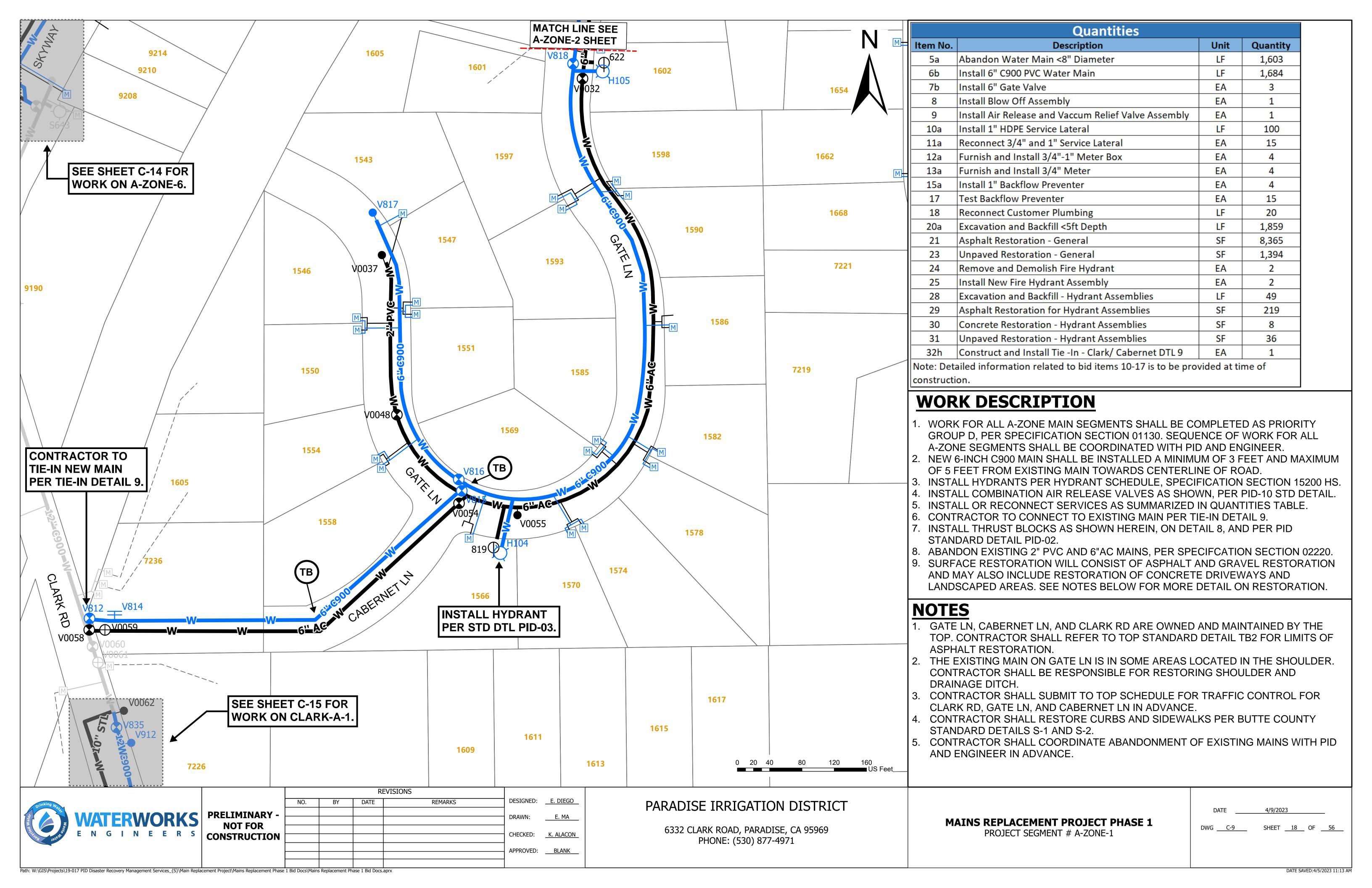


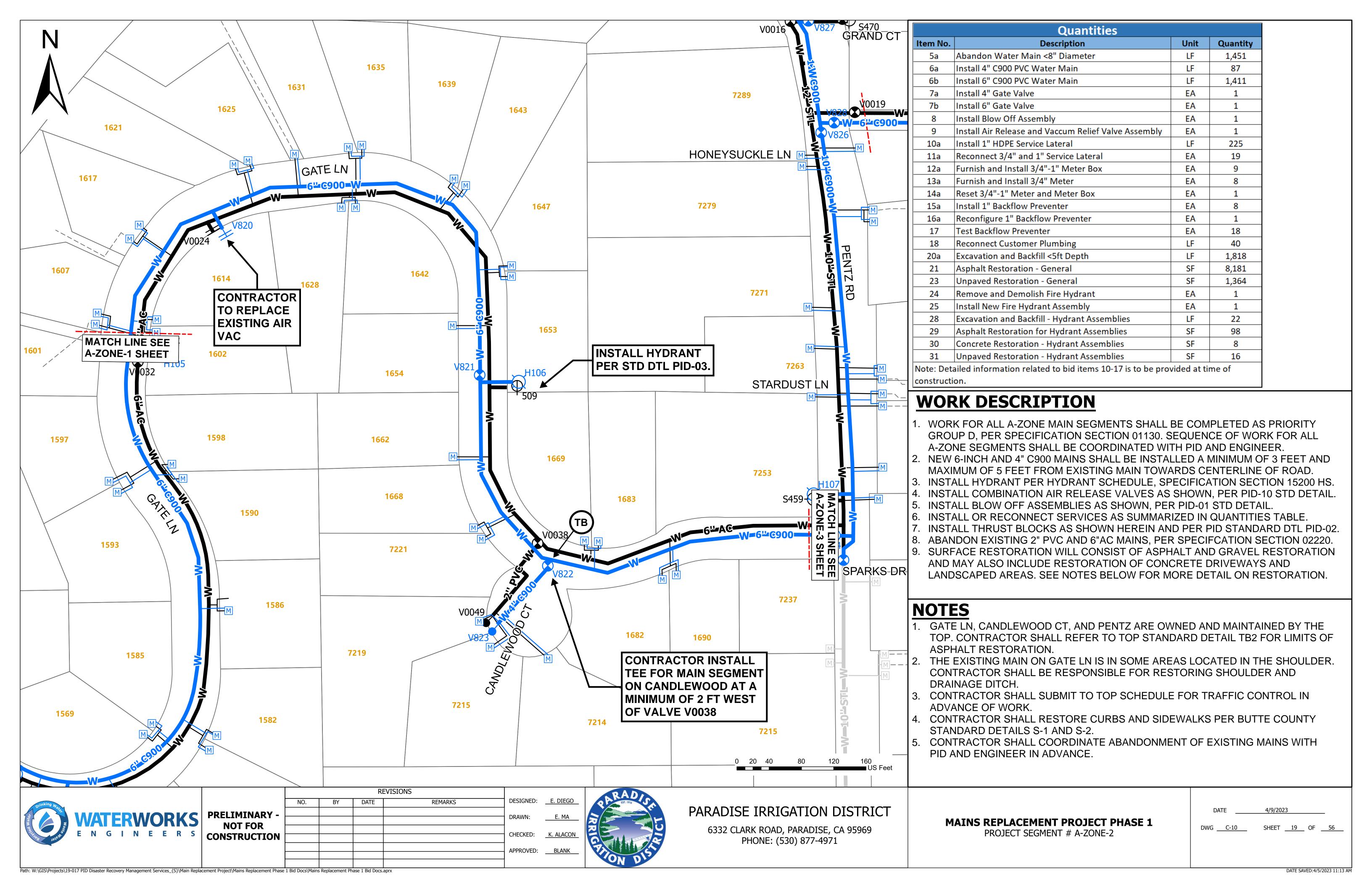


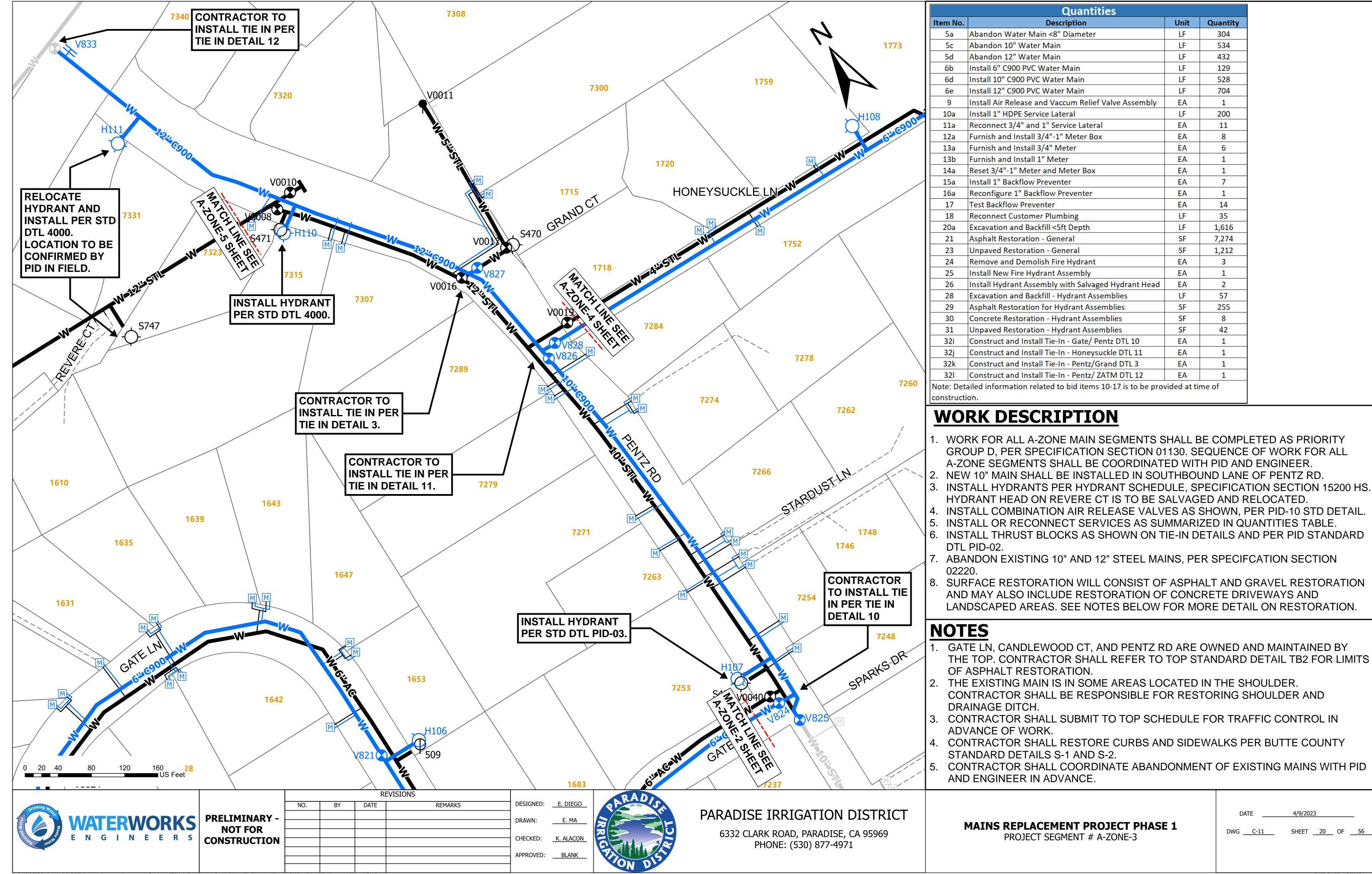


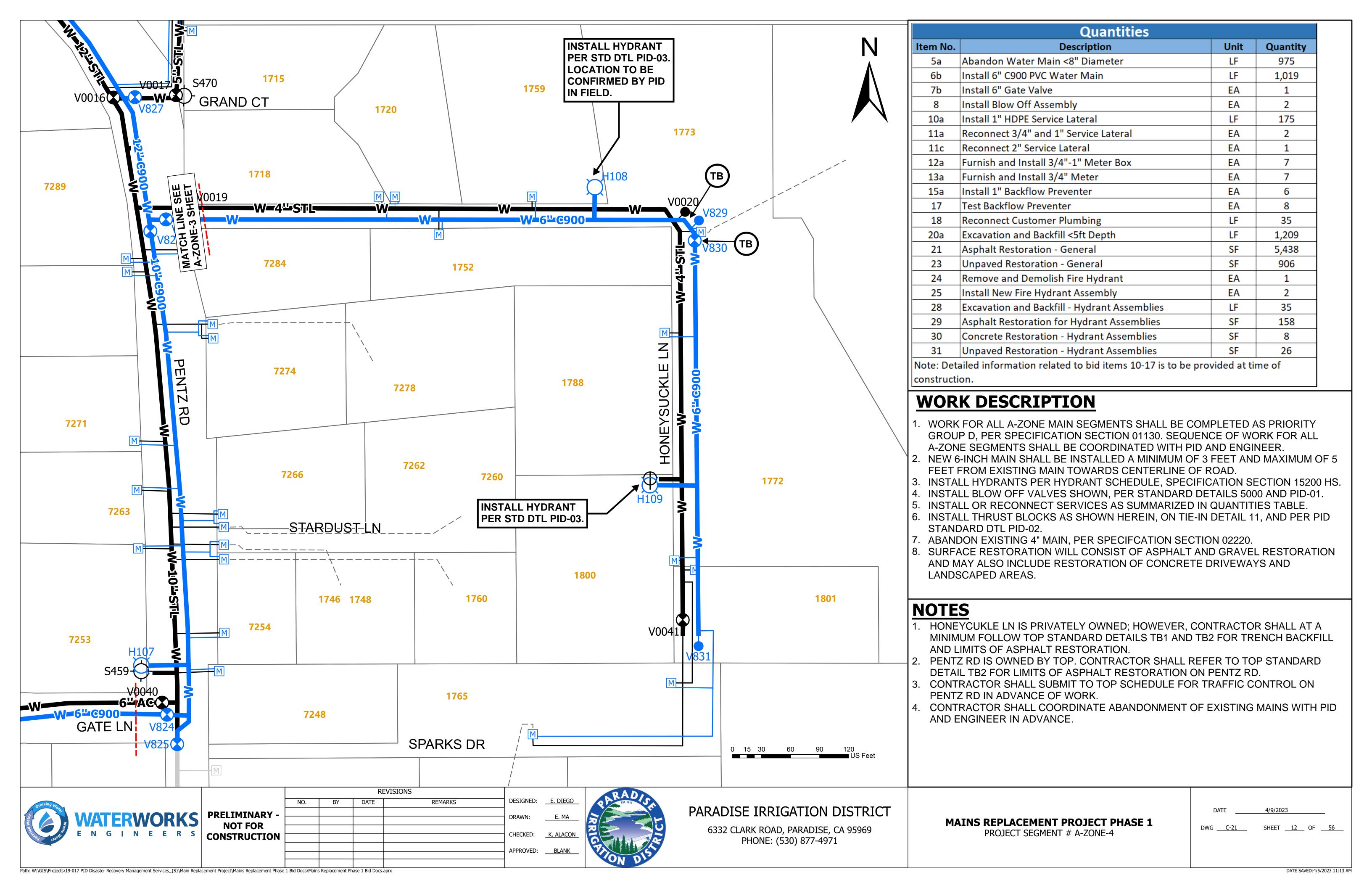


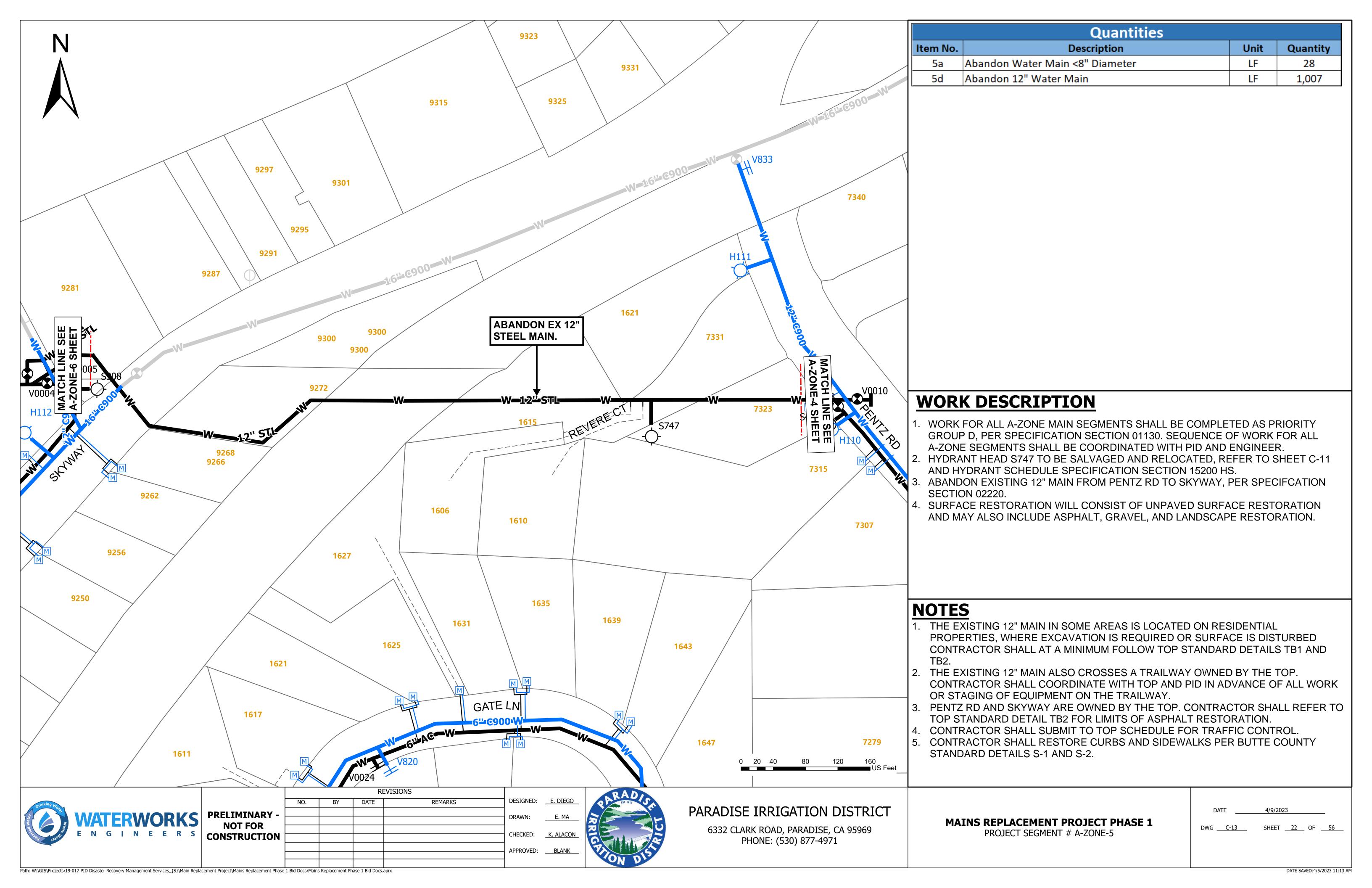


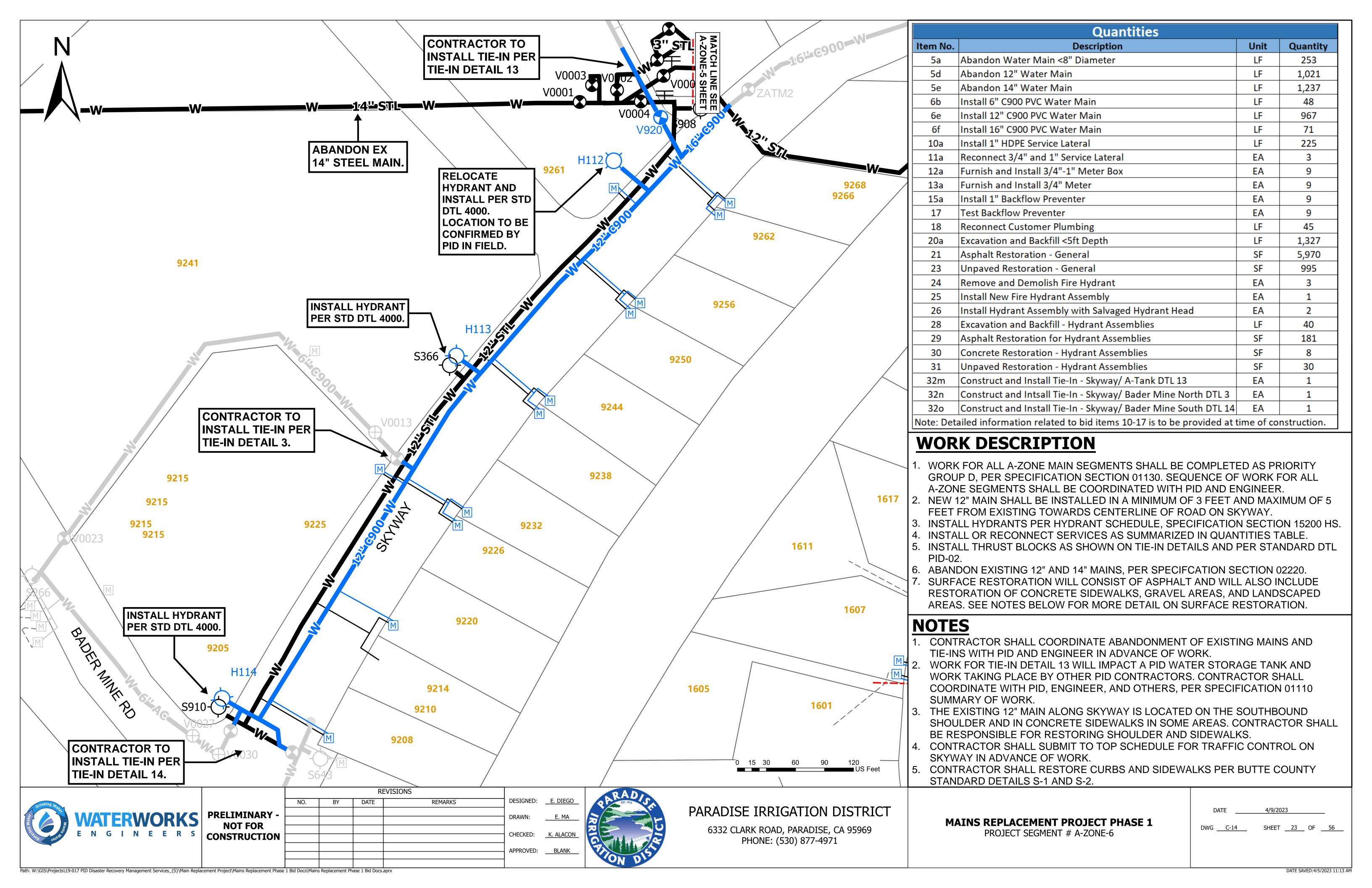


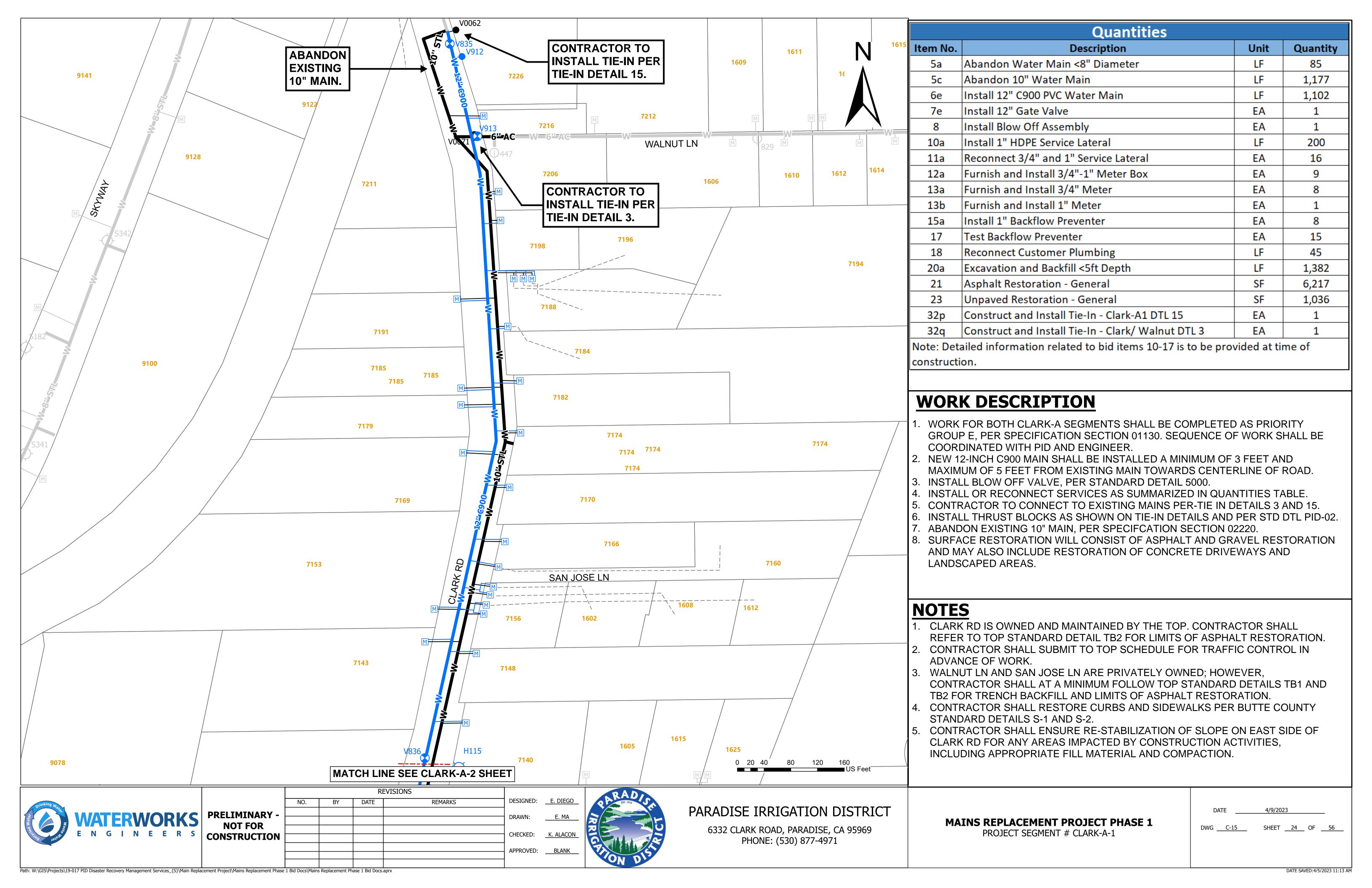


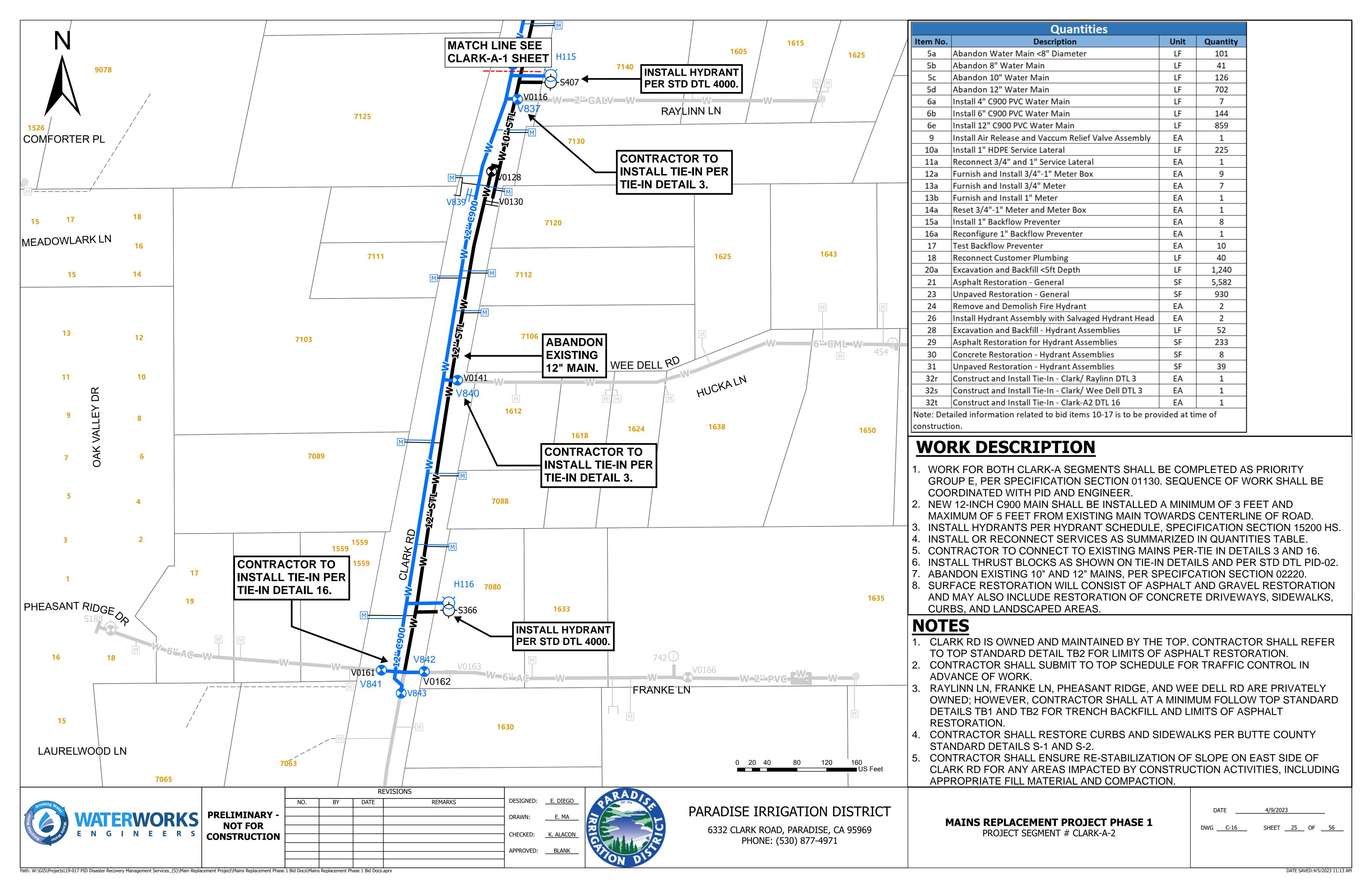


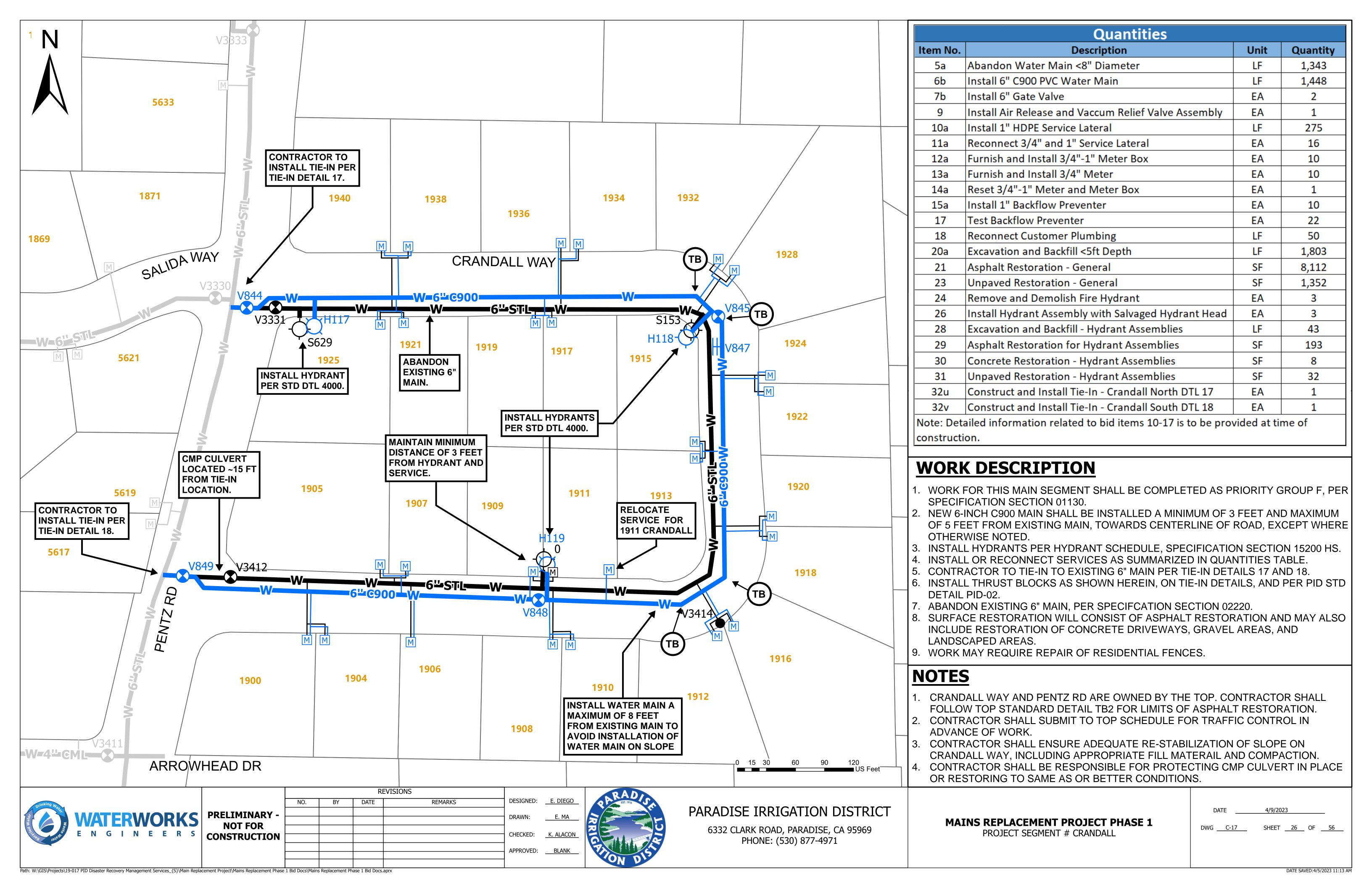


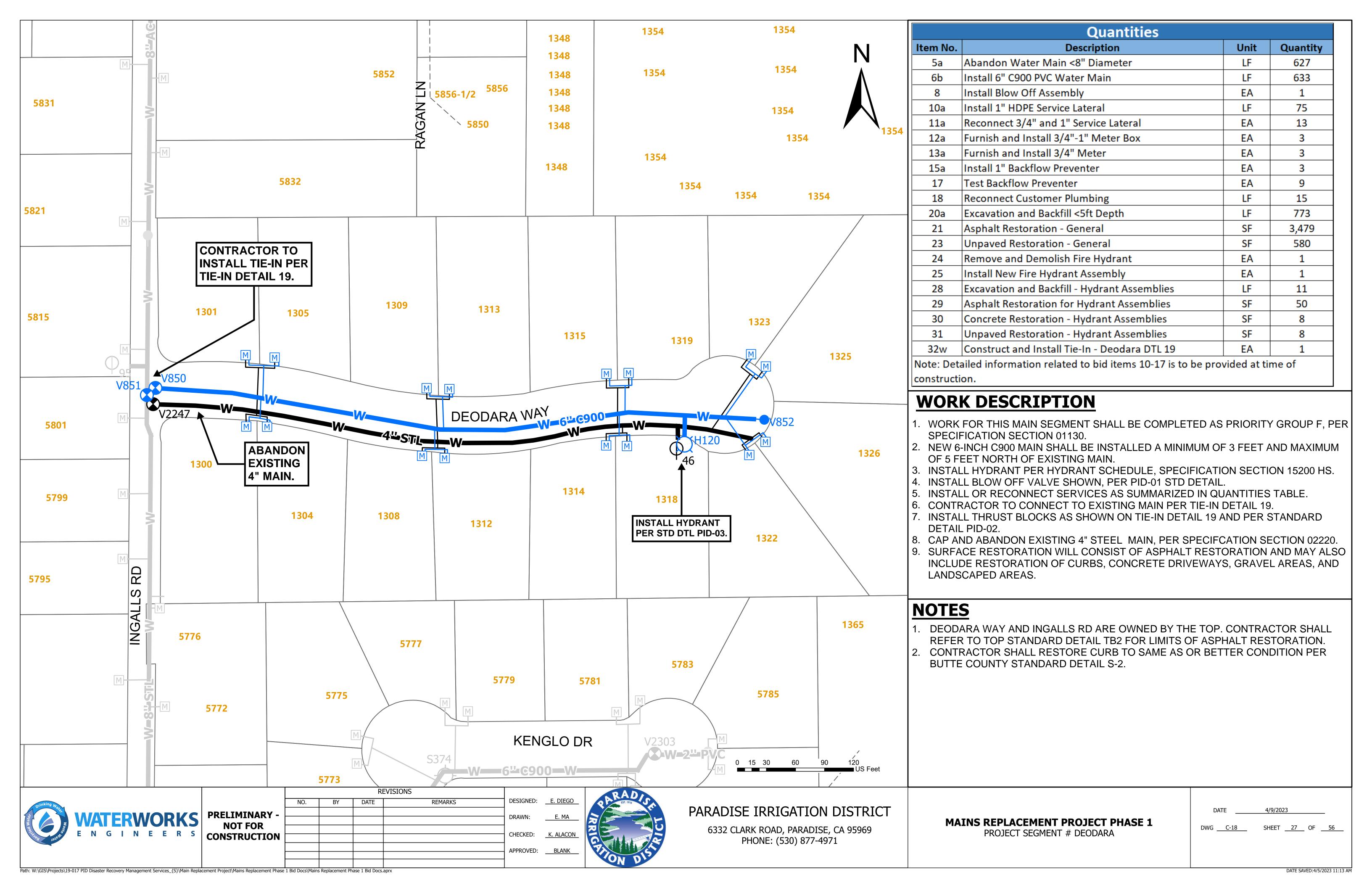


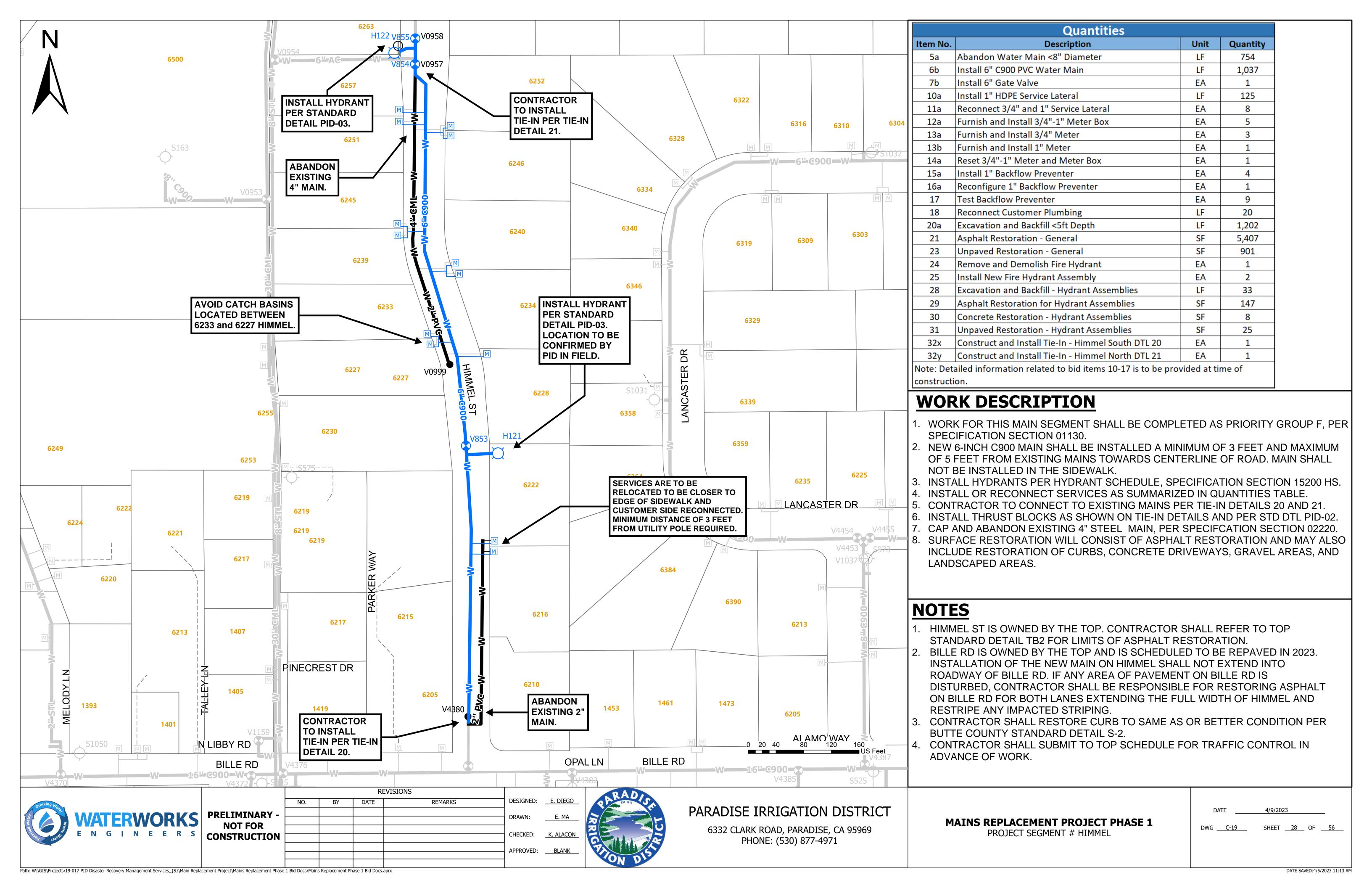


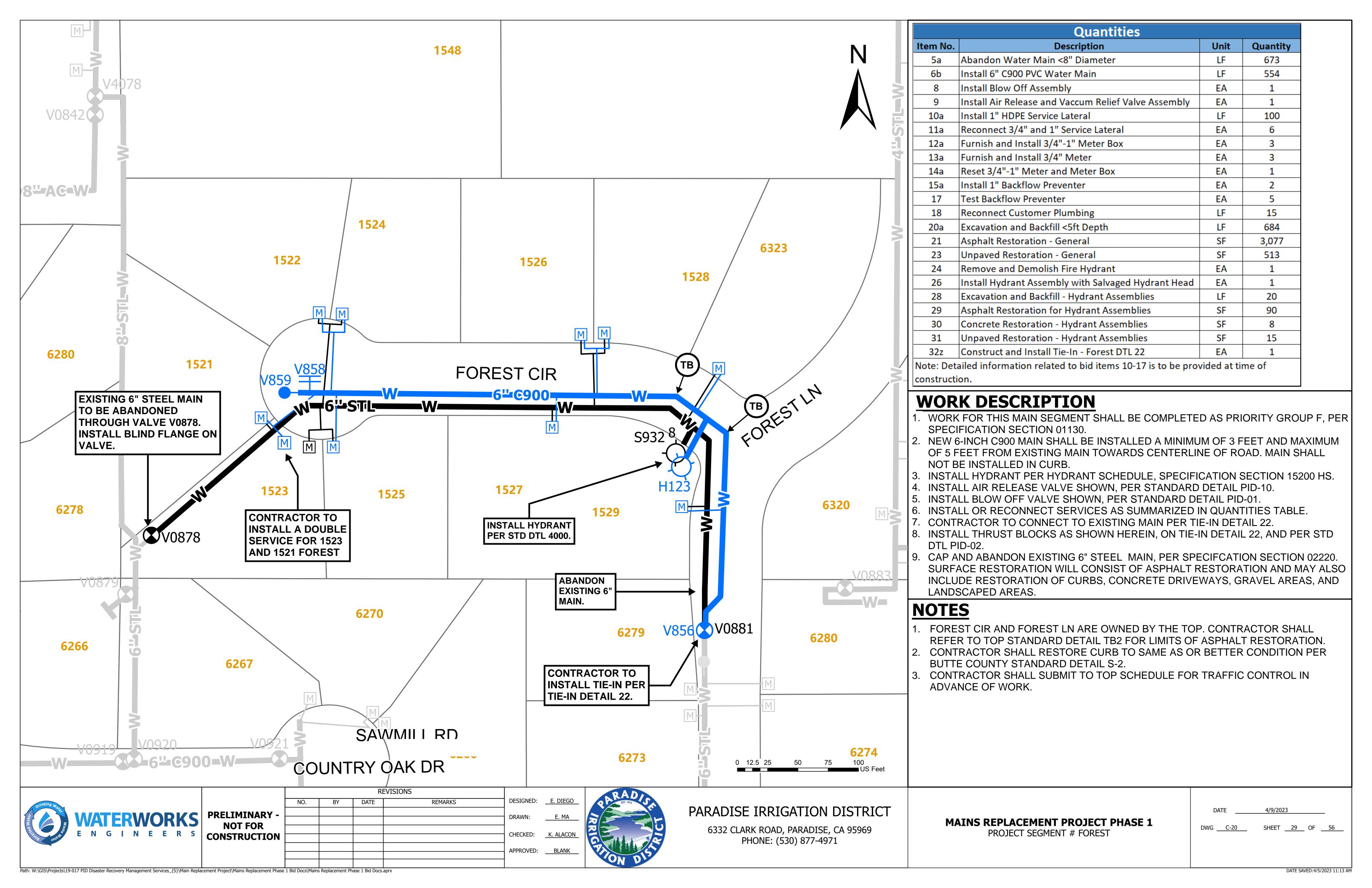


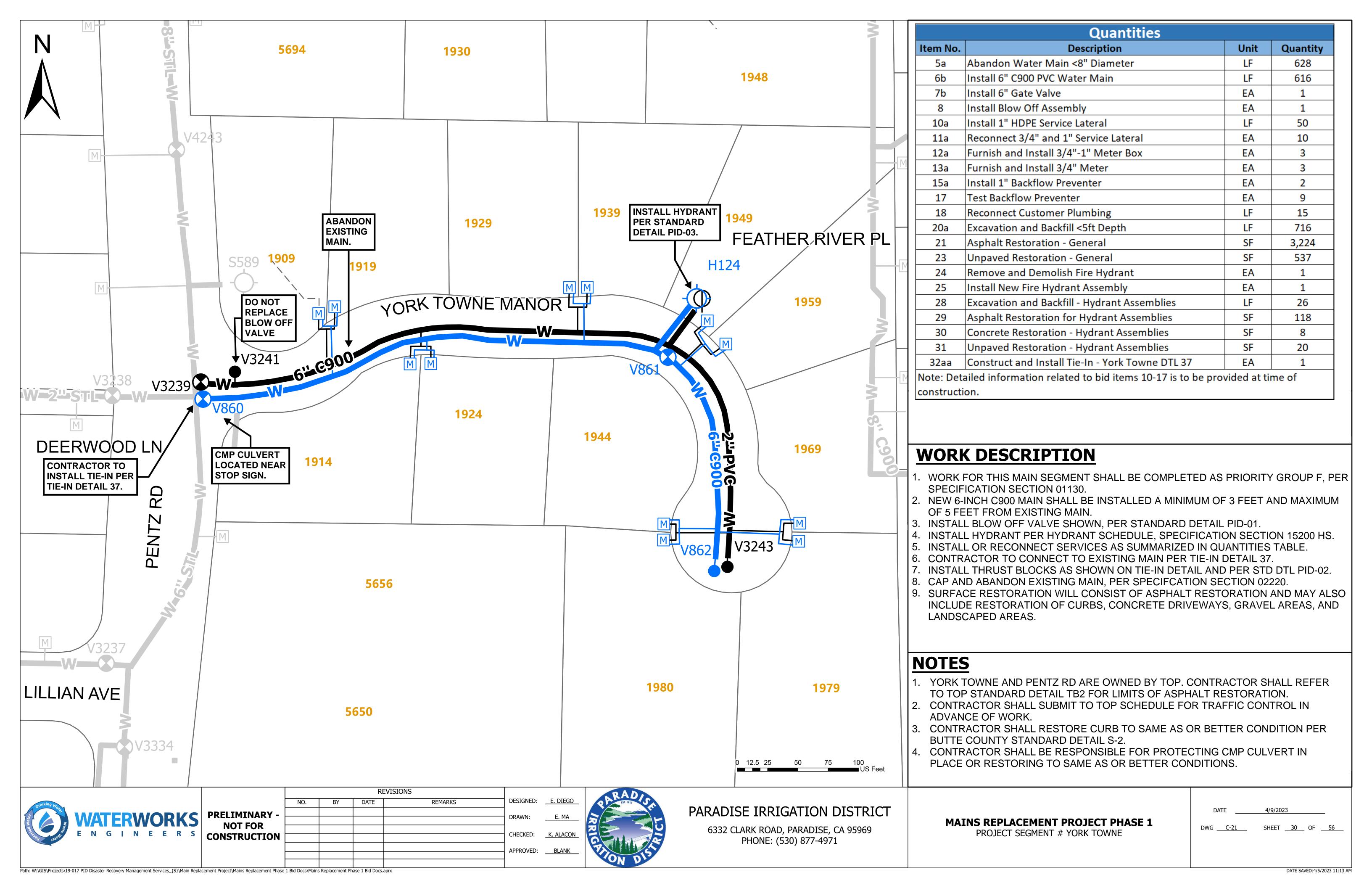


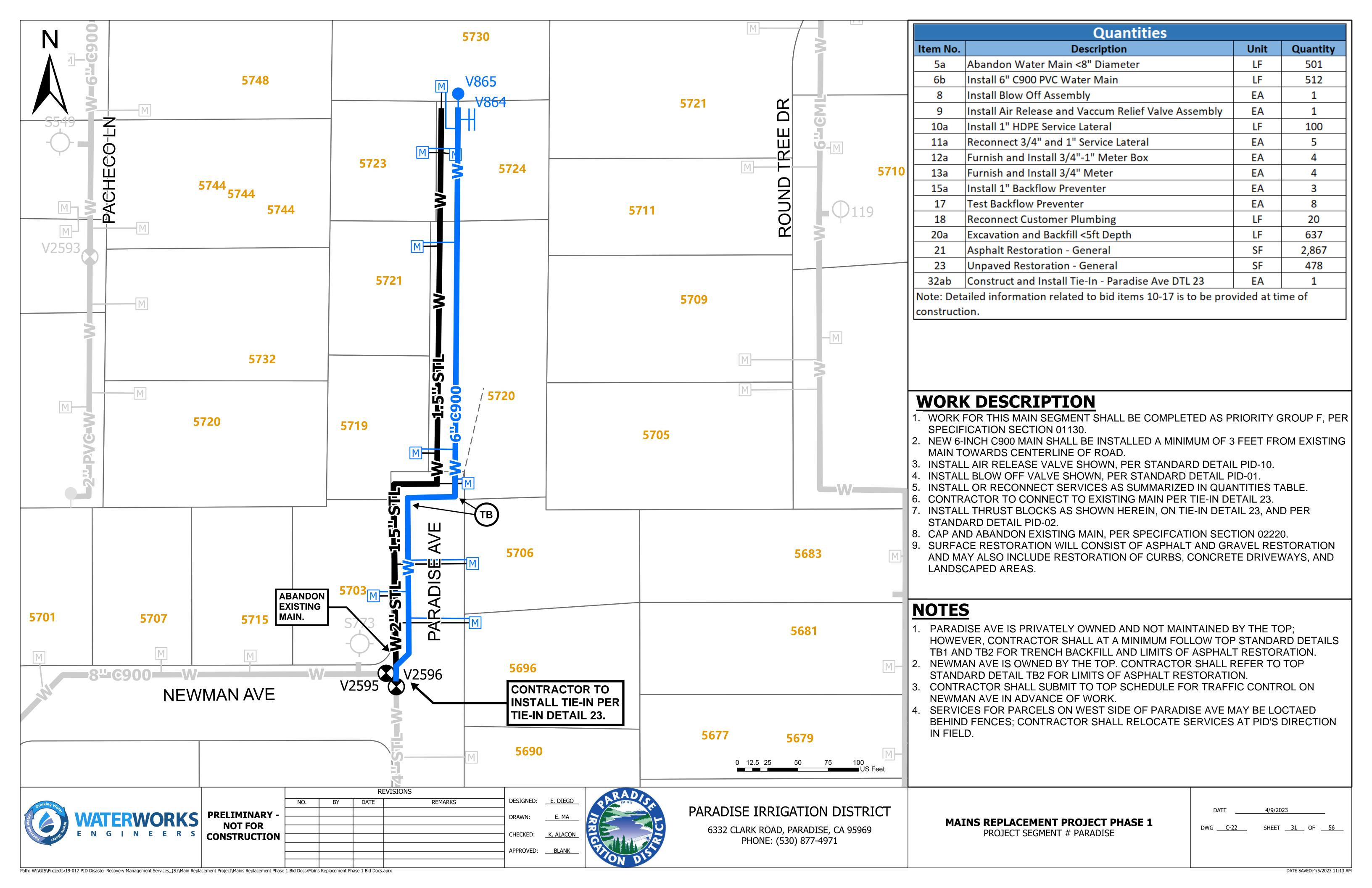


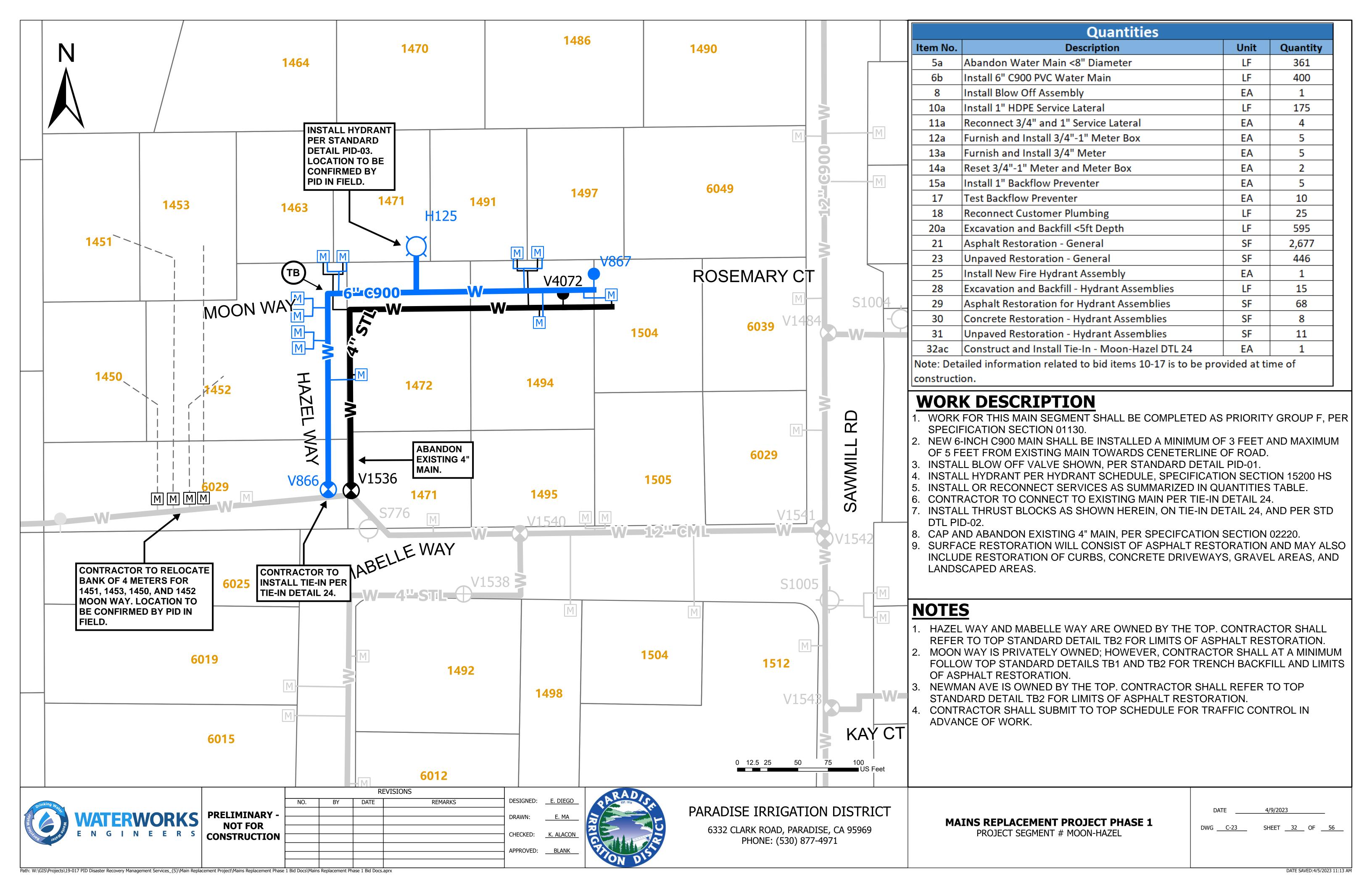


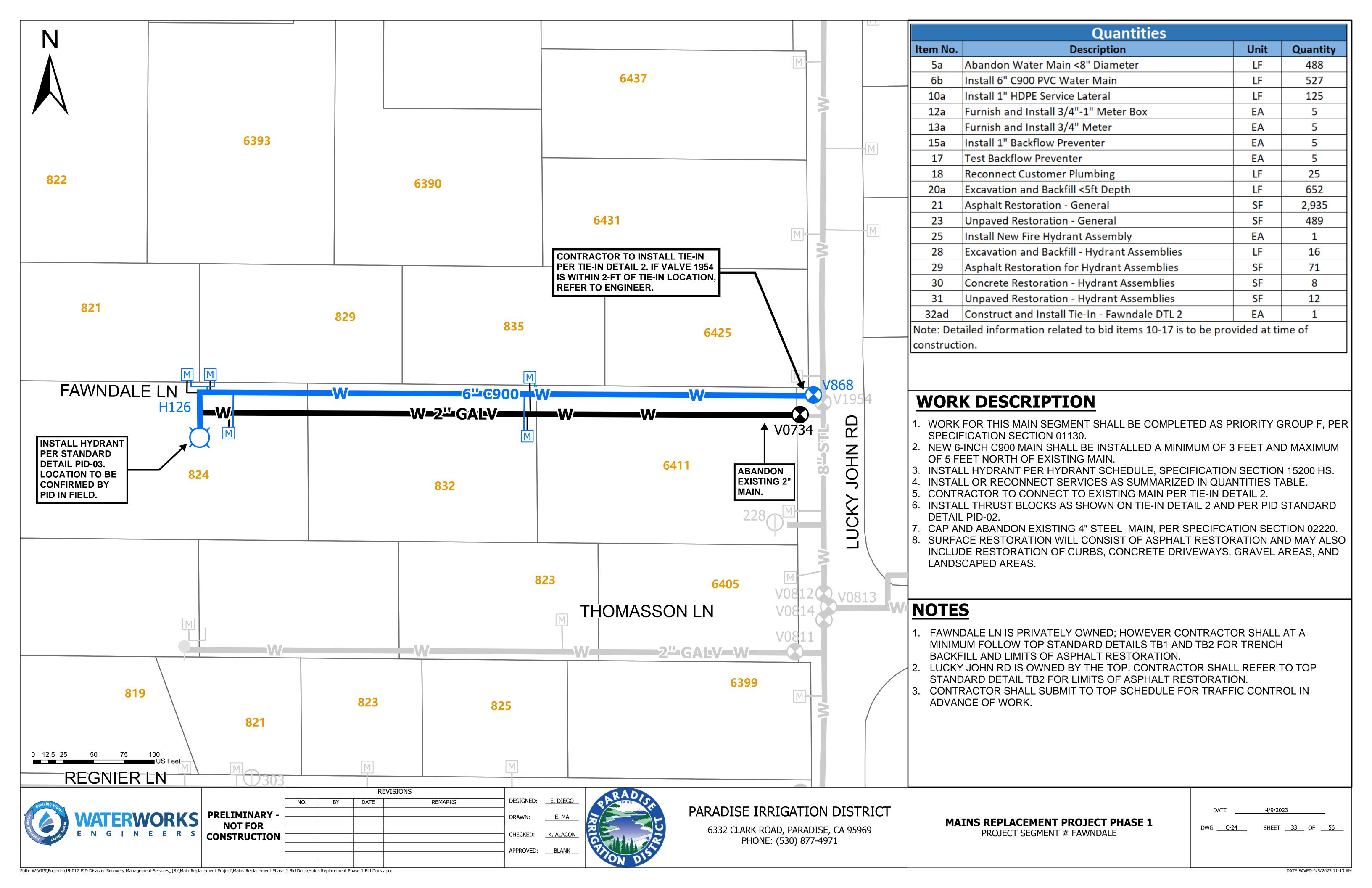


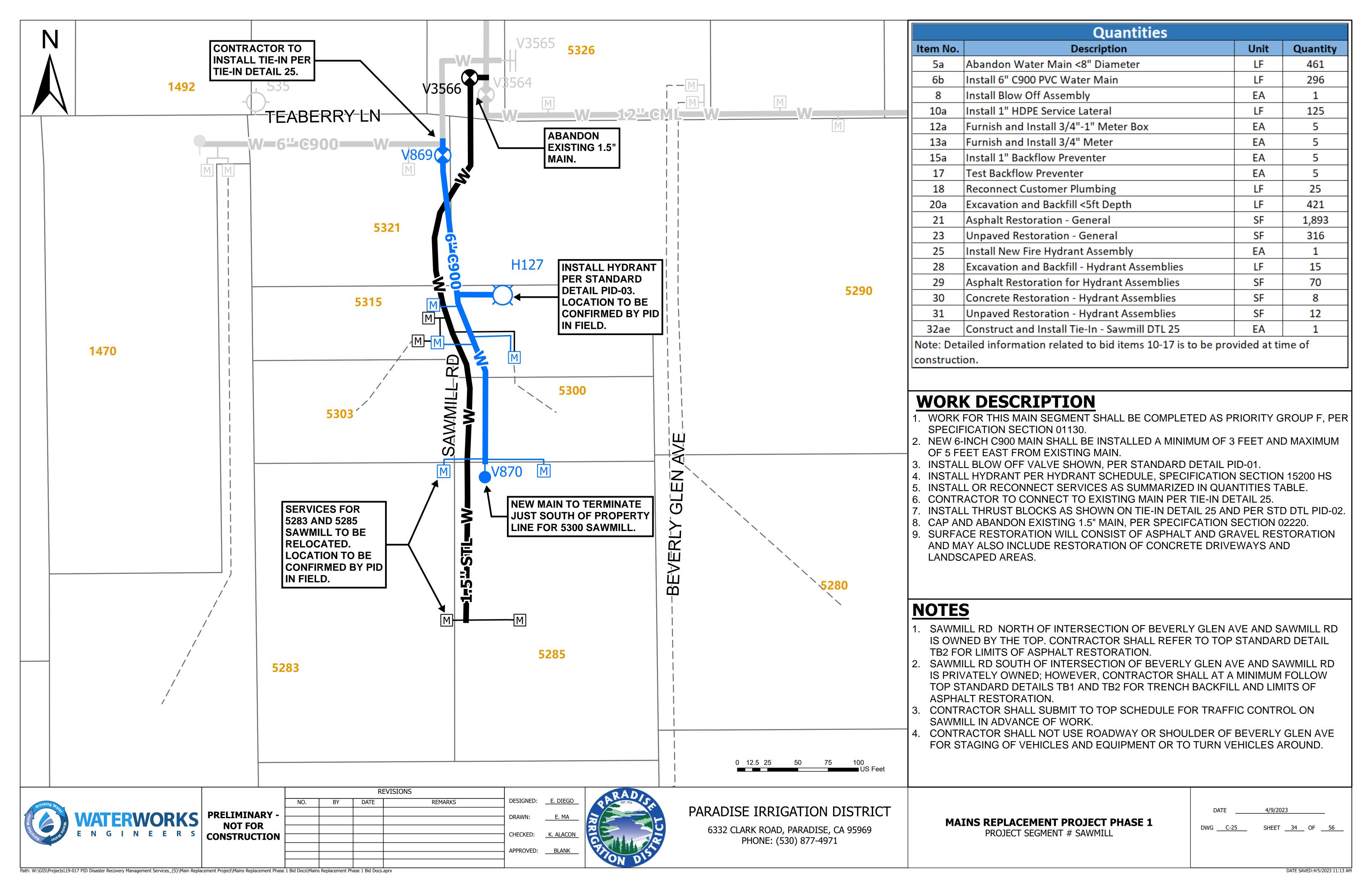


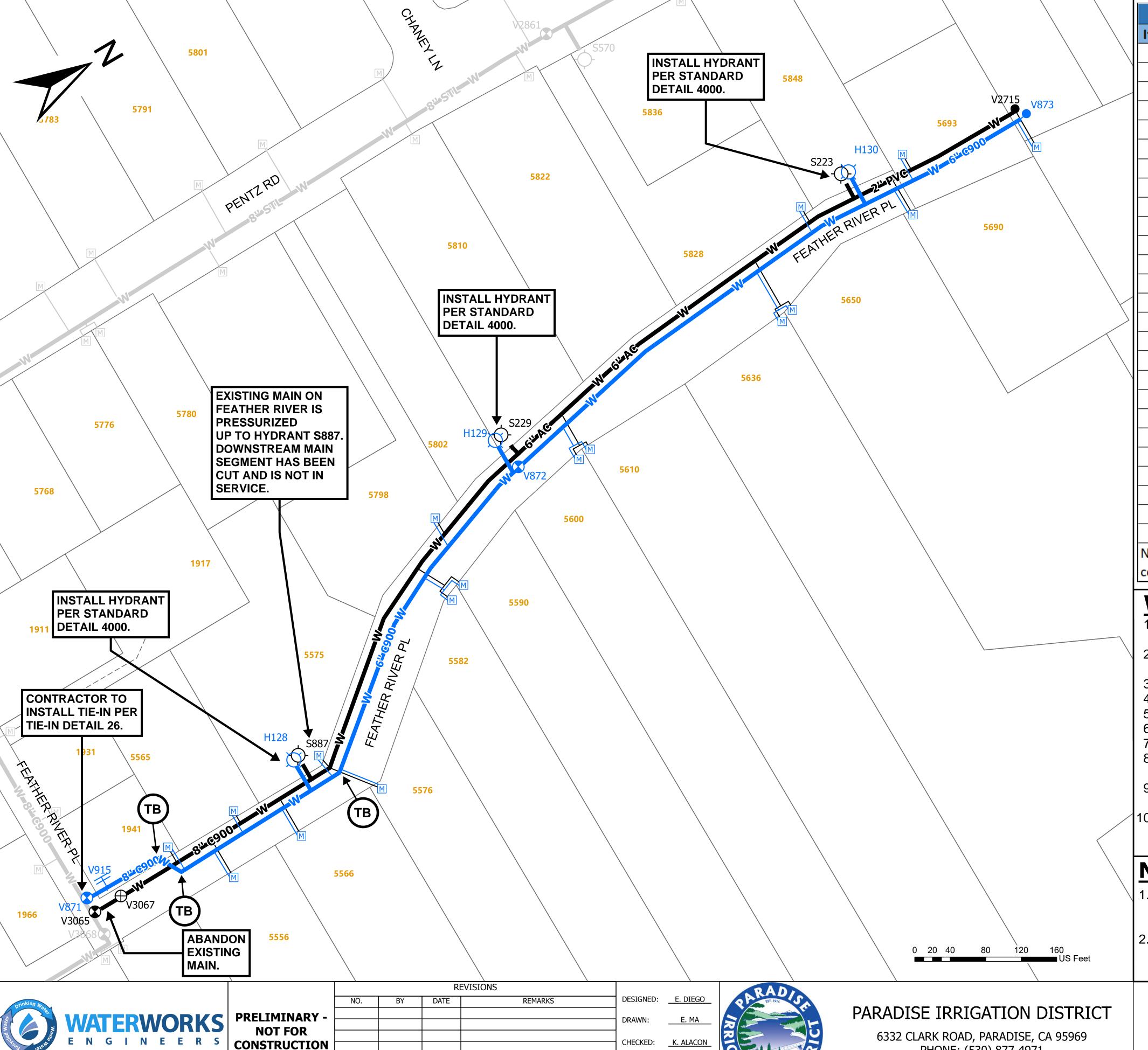












APPROVED:

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1		Quantities						
	Item No.	Description	Unit	Quantity				
	5a	Abandon Water Main <8" Diameter	LF	1,112				
	5b	Abandon 8" Water Main	LF	321				
1	6b	Install 6" C900 PVC Water Main	LF	1,231				
l	6c	Install 8" C900 PVC Water Main	LF	283				
l	7b	Install 6" Gate Valve	EA	1				
l	8	Install Blow Off Assembly	EA	1				
l	9	Install Air Release and Vaccum Relief Valve Assembly	EA	1				
l	10a	Install 1" HDPE Service Lateral	LF	275				
l	11a	Reconnect 3/4" and 1" Service Lateral	EA	6				
l	12a	Furnish and Install 3/4"-1" Meter Box	EA	11				
l	13a	Furnish and Install 3/4" Meter	EA	10				
l	13b	Furnish and Install 1" Meter	EA	1				
l	15a	Install 1" Backflow Preventer	EA	11				
1	16a	Reconfigure 1" Backflow Preventer	EA	1				
l	17	Test Backflow Preventer	EA	17				
l	18	Reconnect Customer Plumbing	LF	55				
l	20a	Excavation and Backfill <5ft Depth	LF	1,819				
١	21	Asphalt Restoration - General	SF	8,187				
l	23	Unpaved Restoration - General	SF	1,364				
l	24	Remove and Demolish Fire Hydrant	EA	3				
l	26	Install Hydrant Assembly with Salvaged Hydrant Head	EA	3				
	28	Excavation and Backfill - Hydrant Assemblies	LF	55				
l	29	Asphalt Restoration for Hydrant Assemblies	SF	247				
l	30	Concrete Restoration - Hydrant Assemblies	SF	8				
	31	Unpaved Restoration - Hydrant Assemblies	SF	41				
	32af	Construct and Install Tie-In - Feather River DTL 26	EA	1				
	Note: Detailed information related to bid items 10-17 is to be provided at time of							

construction.

WORK DESCRIPTION

- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP G, PER SPECIFICATION SECTION 01130.
- 2. NEW 8-INCH AND 6-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM OF 3 FEET AND MAXIMUM OF 5 FEET FROM EXISTING MAIN TOWARDS CENTERLINE OF ROAD.
- 3. INSTALL HYDRANTS PER HYDRANT SCHEDULE, SPECIFICATION SECTION 15200 HS.
- 4. INSTALL AIR RELEASE VALVE SHOWN, PER STANDARD DETAIL PID-10.
- 5. INSTALL BLOW OFF VALVE SHOWN, PER STANDARD DETAIL PID-01.
- 6. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 7. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 26.
- 8. INSTALL THRUST BLOCKS AS SHOWN HEREIN, ON TIE-IN DETAIL 22, AND PER STD DTL PID-02.
- 9. CONTRACTOR TO CAP, FILL AND ABANDON EXISTING 8-INCH, 6-INCH, AND 2-INCH MAIN SEGMENTS, PER SPECIFCATION SECTION 02220.
- 10. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CURBS, CONCRETE DRIVEWAYS, GRAVEL AREAS, AND LANDSCAPED AREAS.

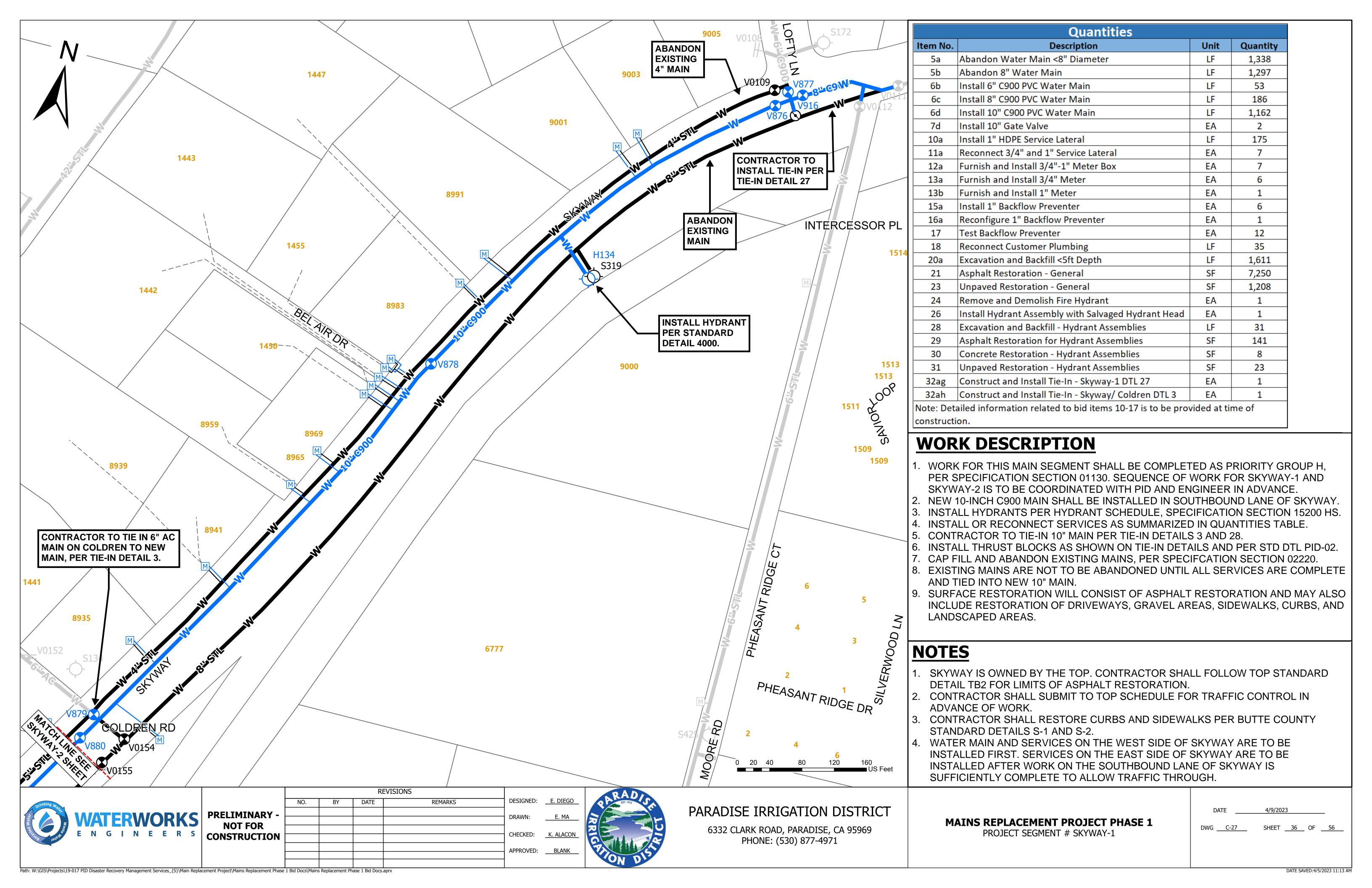
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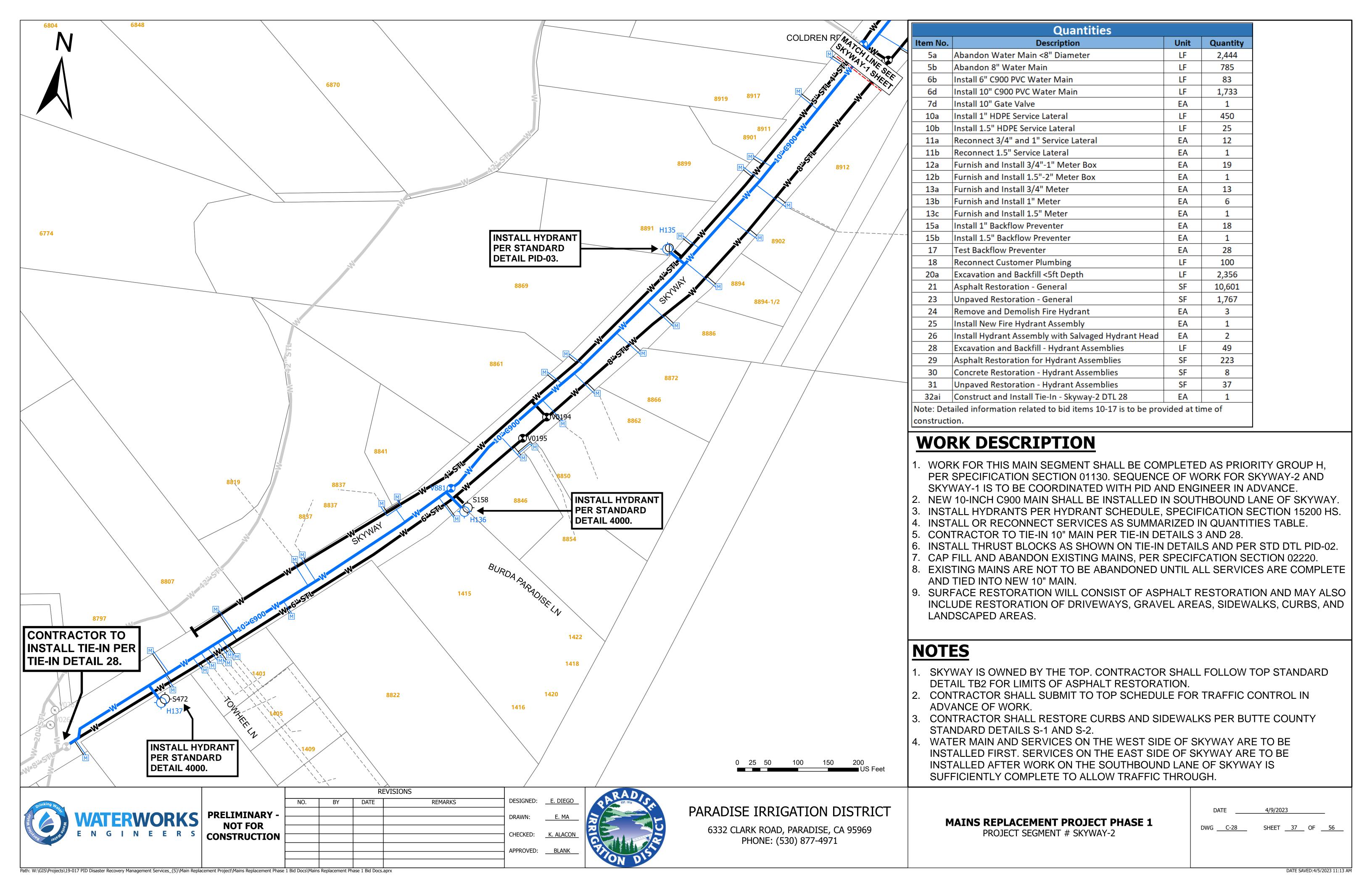
- FEATHER RIVER PL IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT A MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND LIMITS OF ASPHALT RESTORATION.
- 2. CONTRACTOR SHAL SUBMIT TO PID AND ENGINNER SCHEDULE FOR TRAFFIC CONTROL IN ADAVANCE OF WORK.

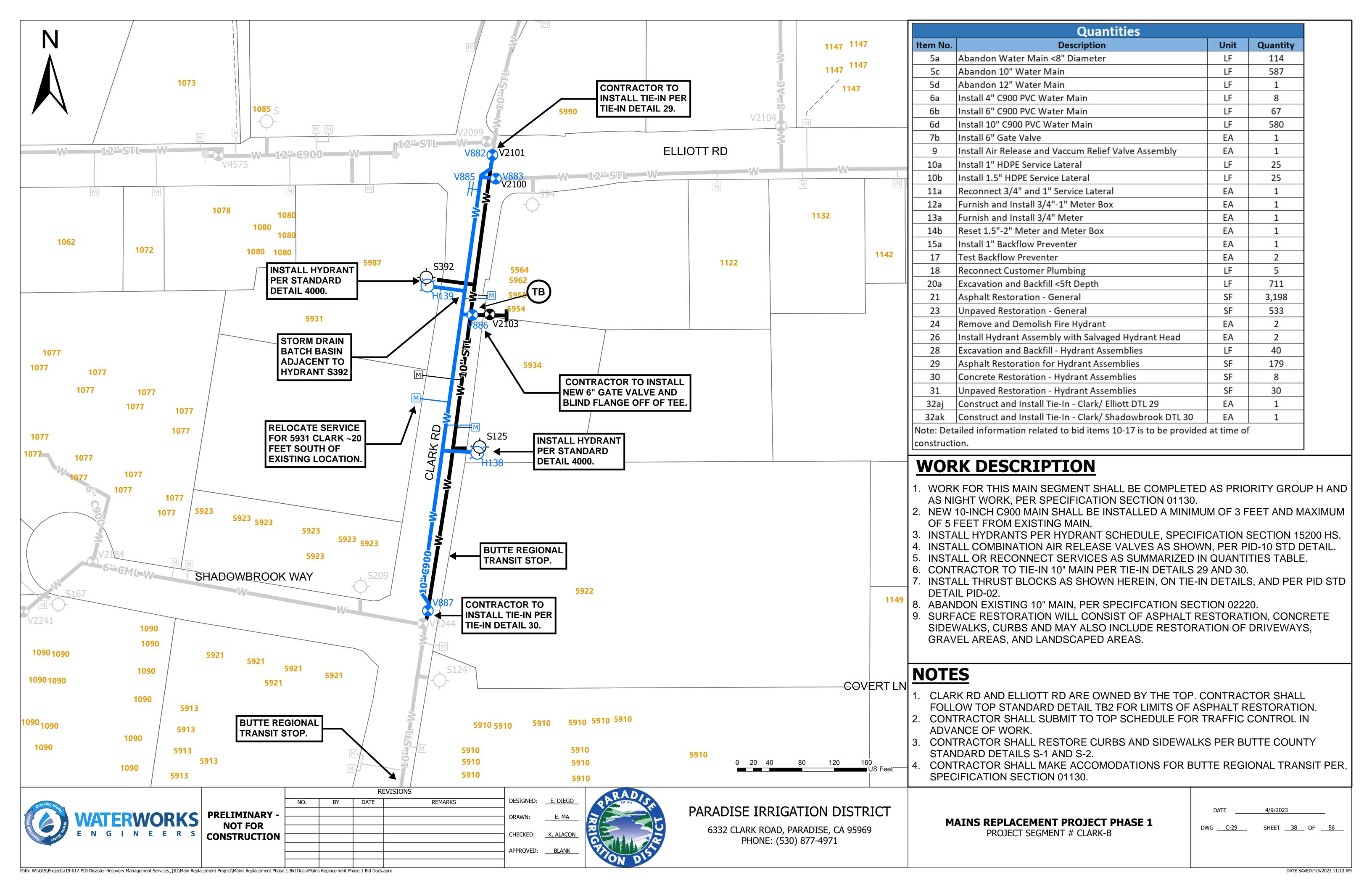
PARADISE IRRIGATION DISTRICT	
6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971	

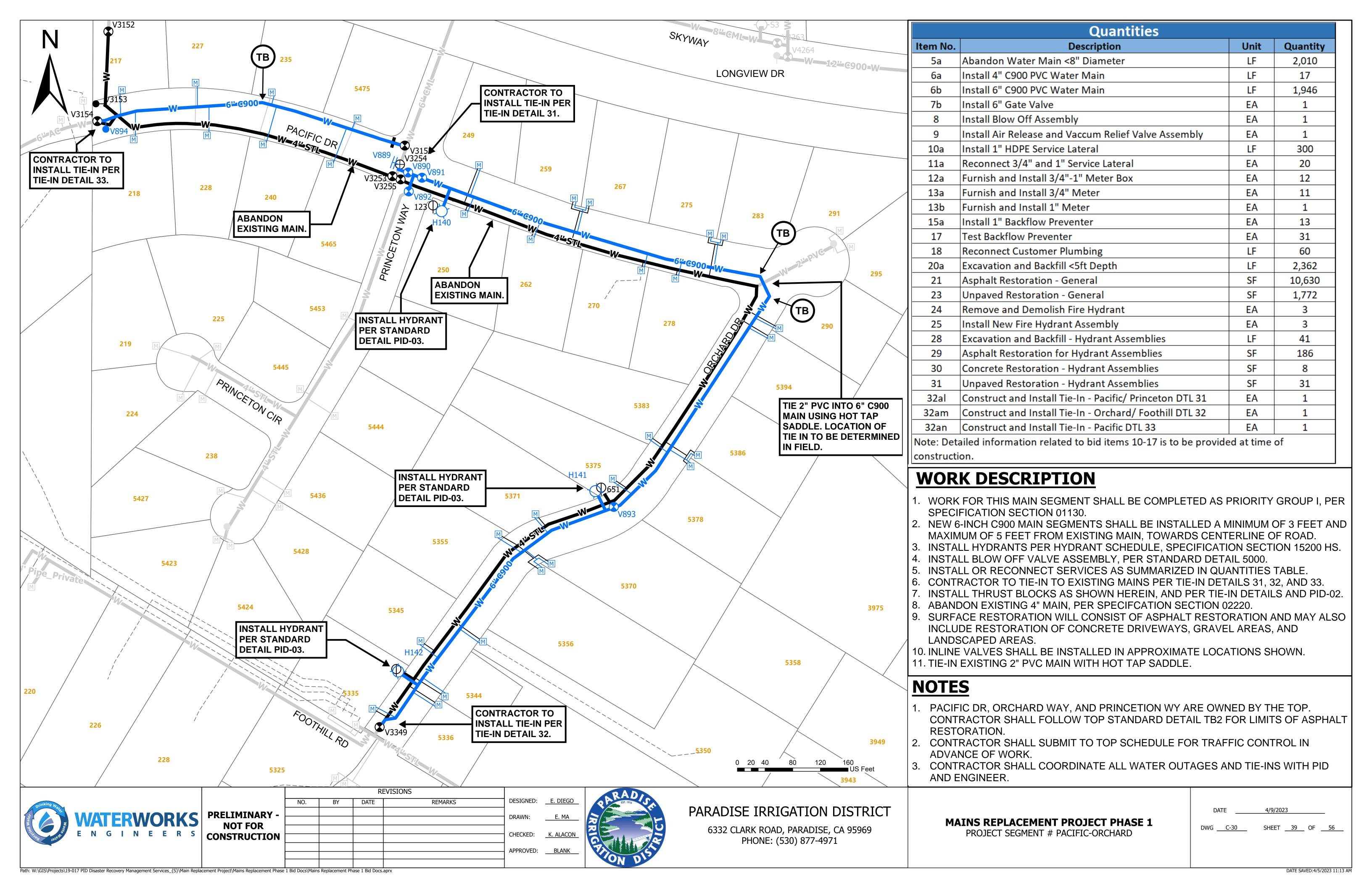
MAINS REPLACEMENT PROJECT PHASE 1 PROJECT SEGMENT # FEATHER RIVER

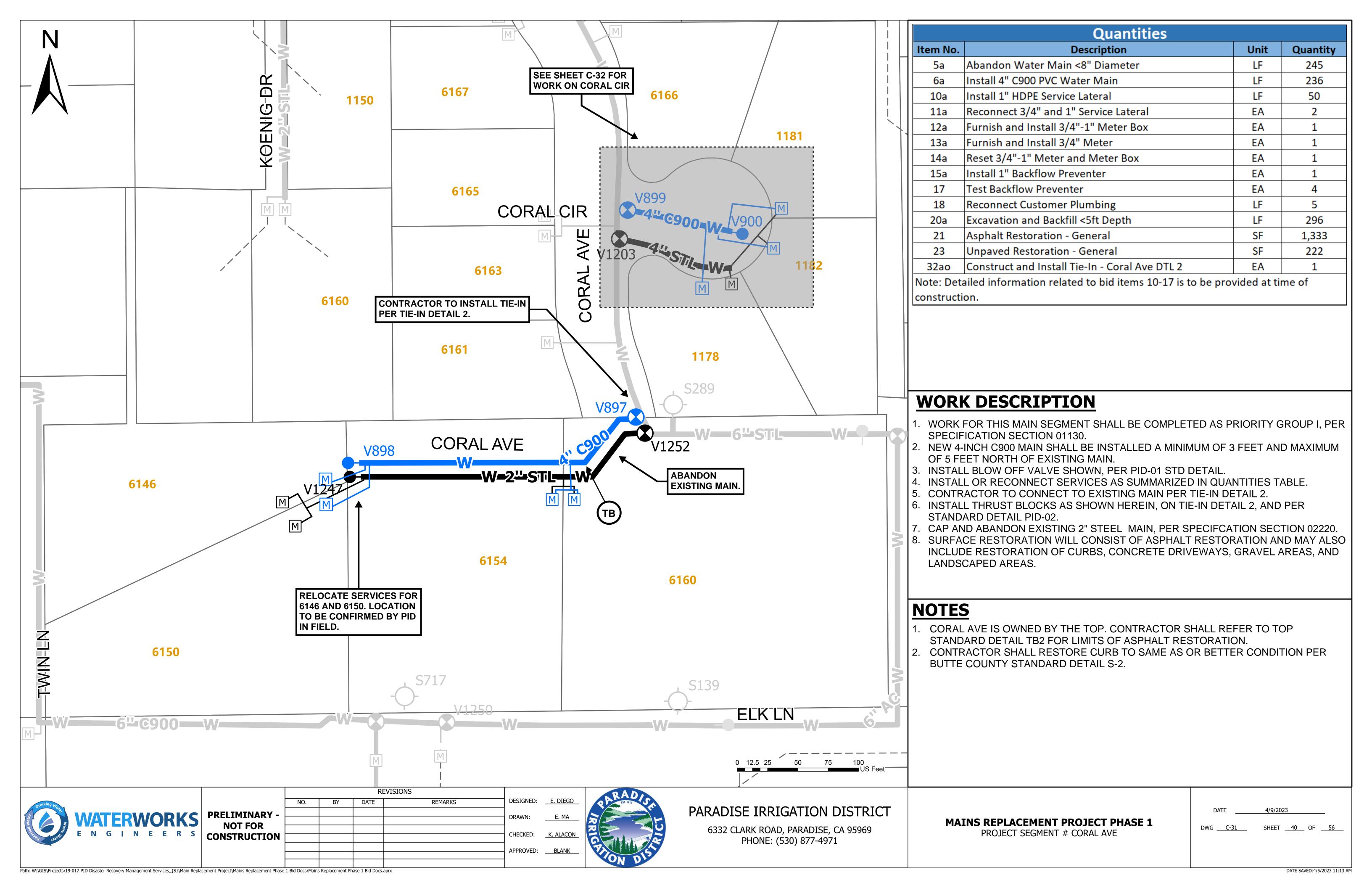
DWG <u>C-26</u> SHEET <u>35</u> OF <u>56</u>

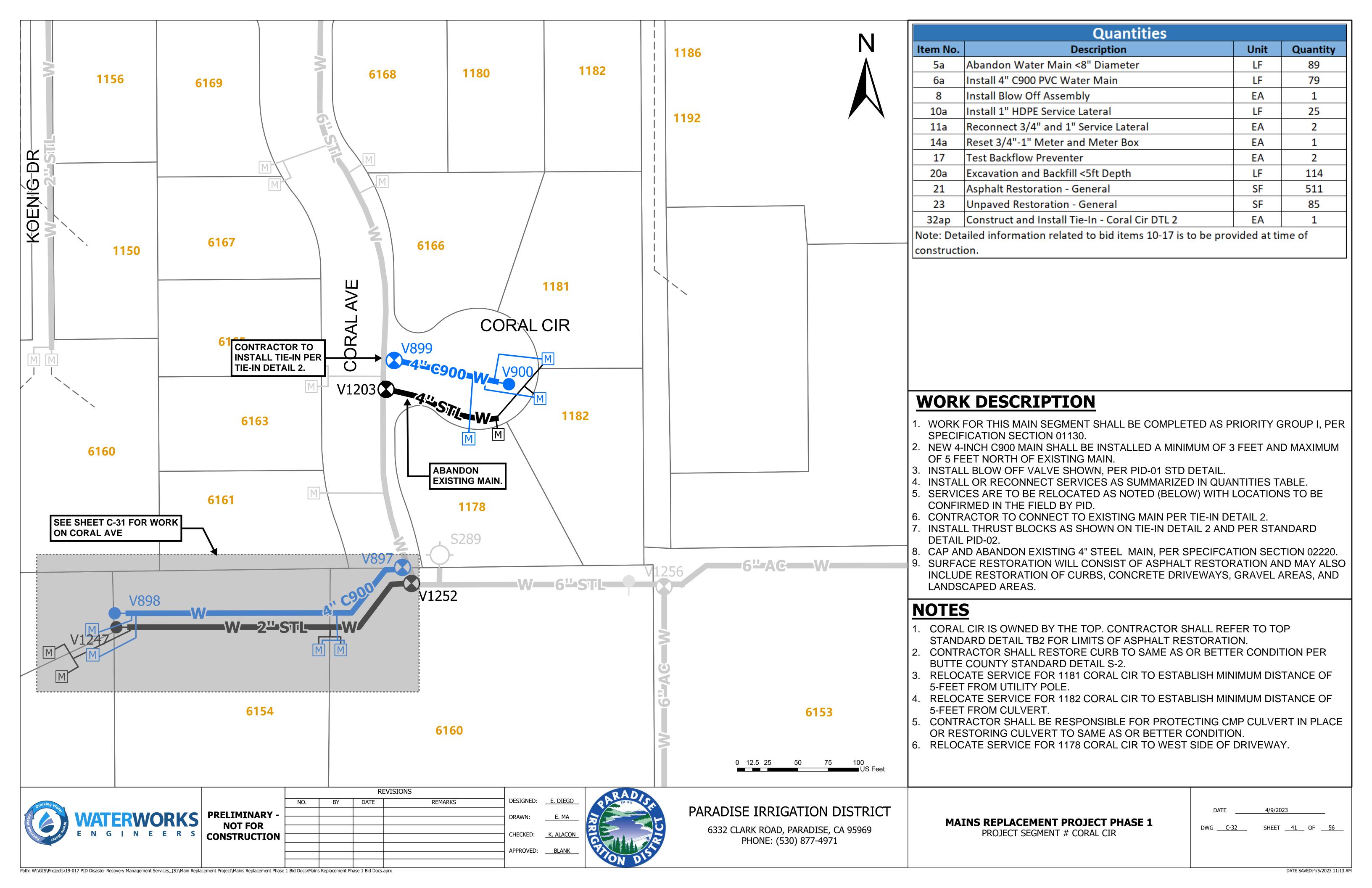


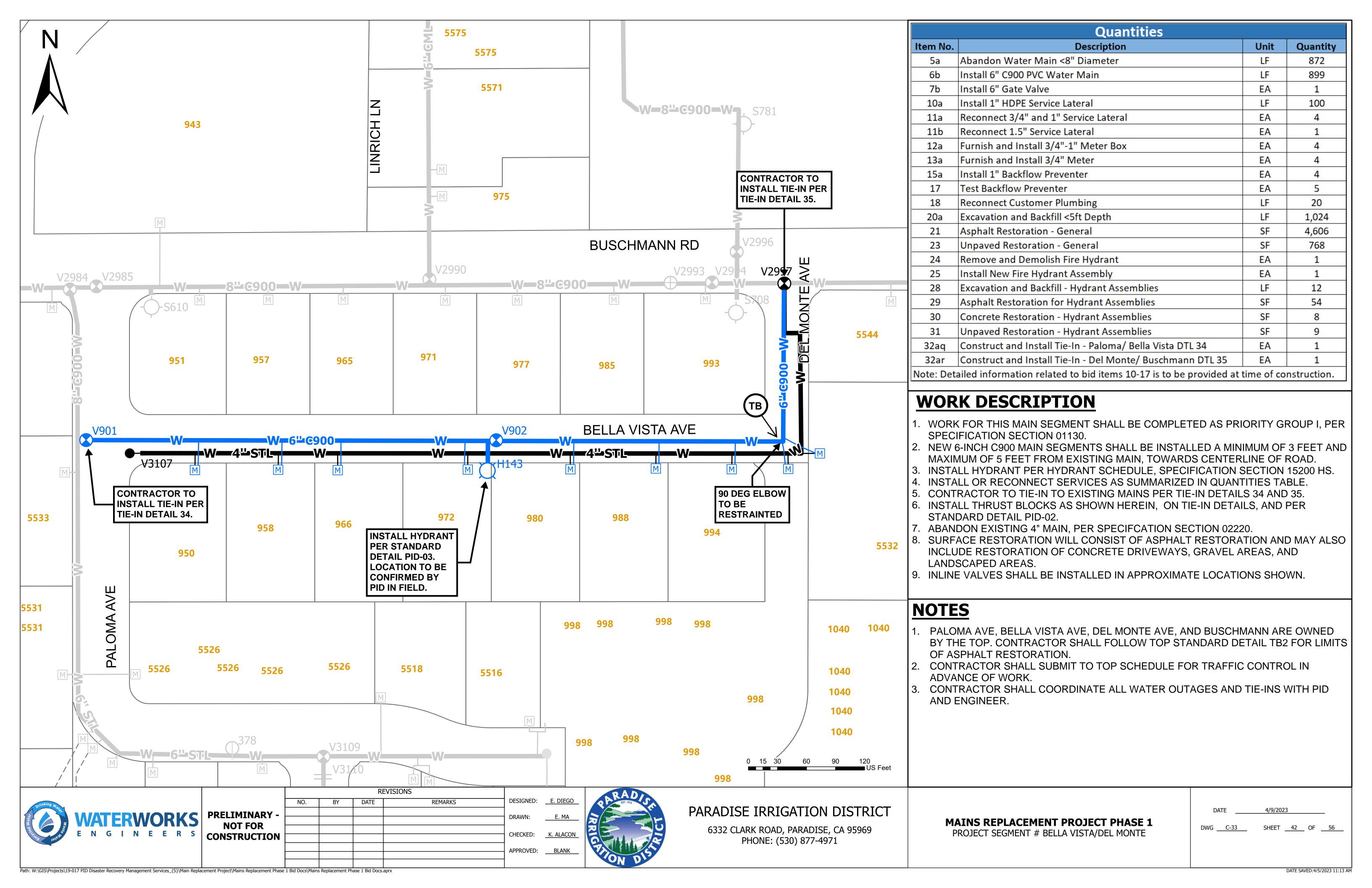


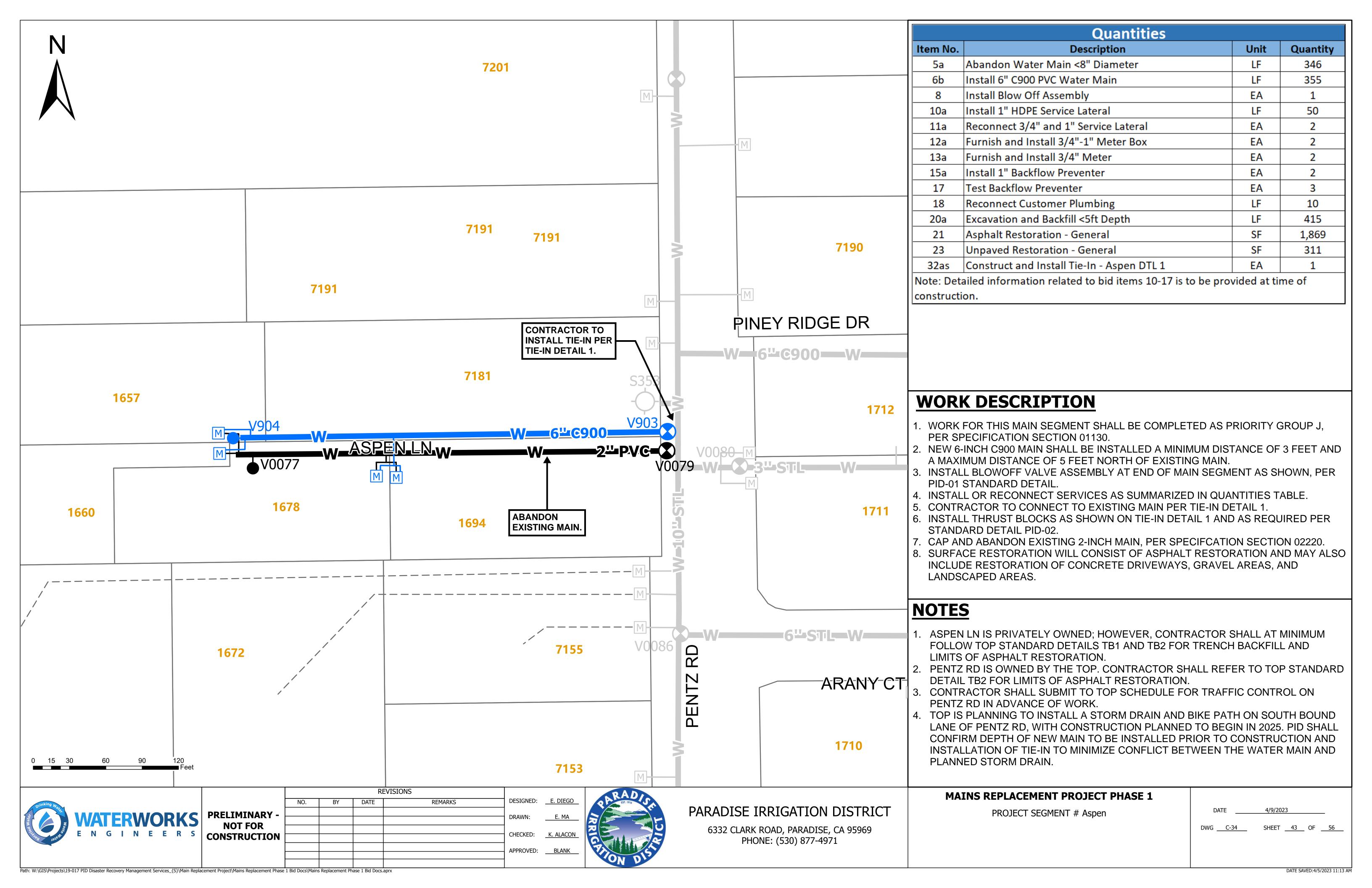


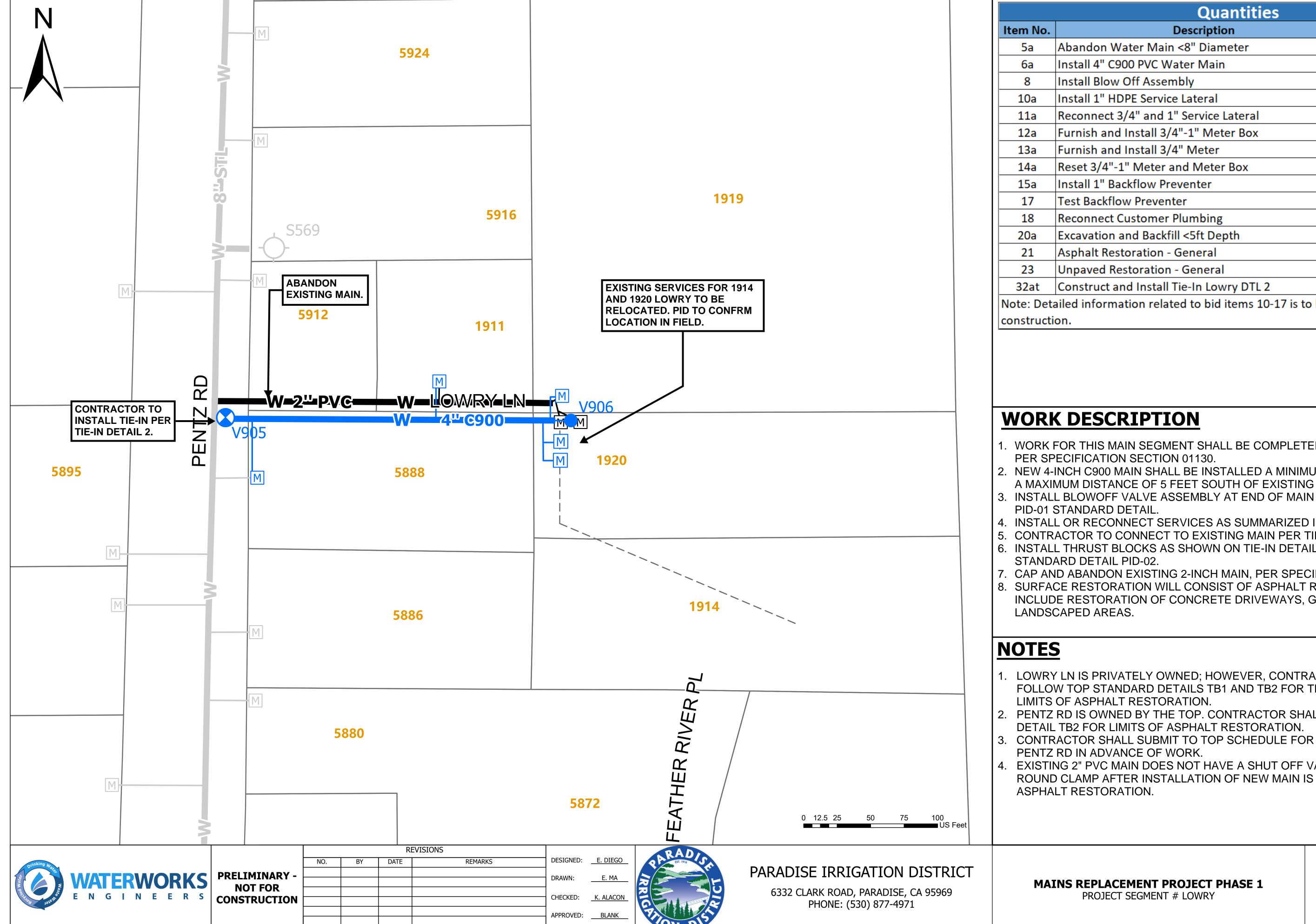








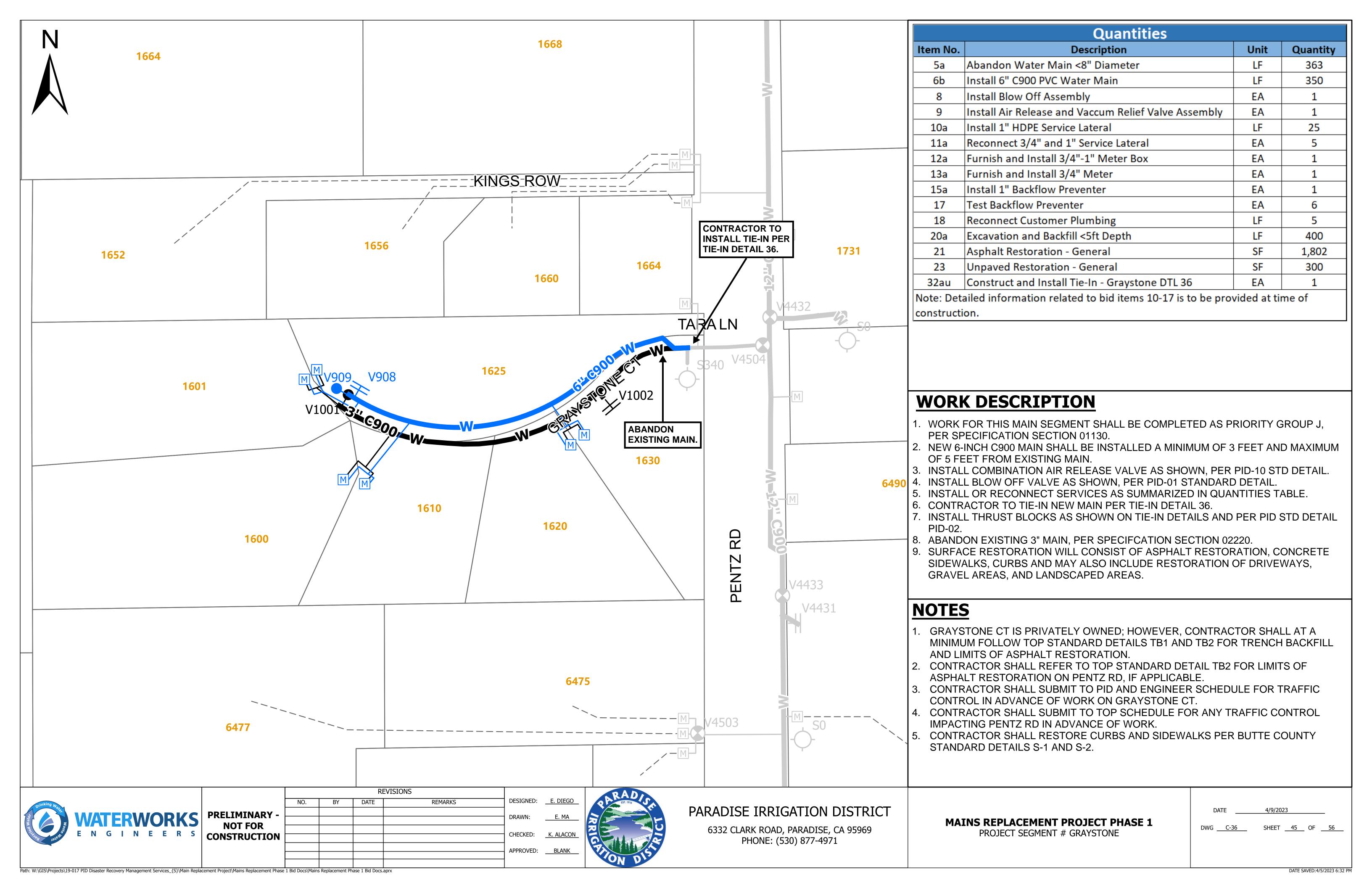


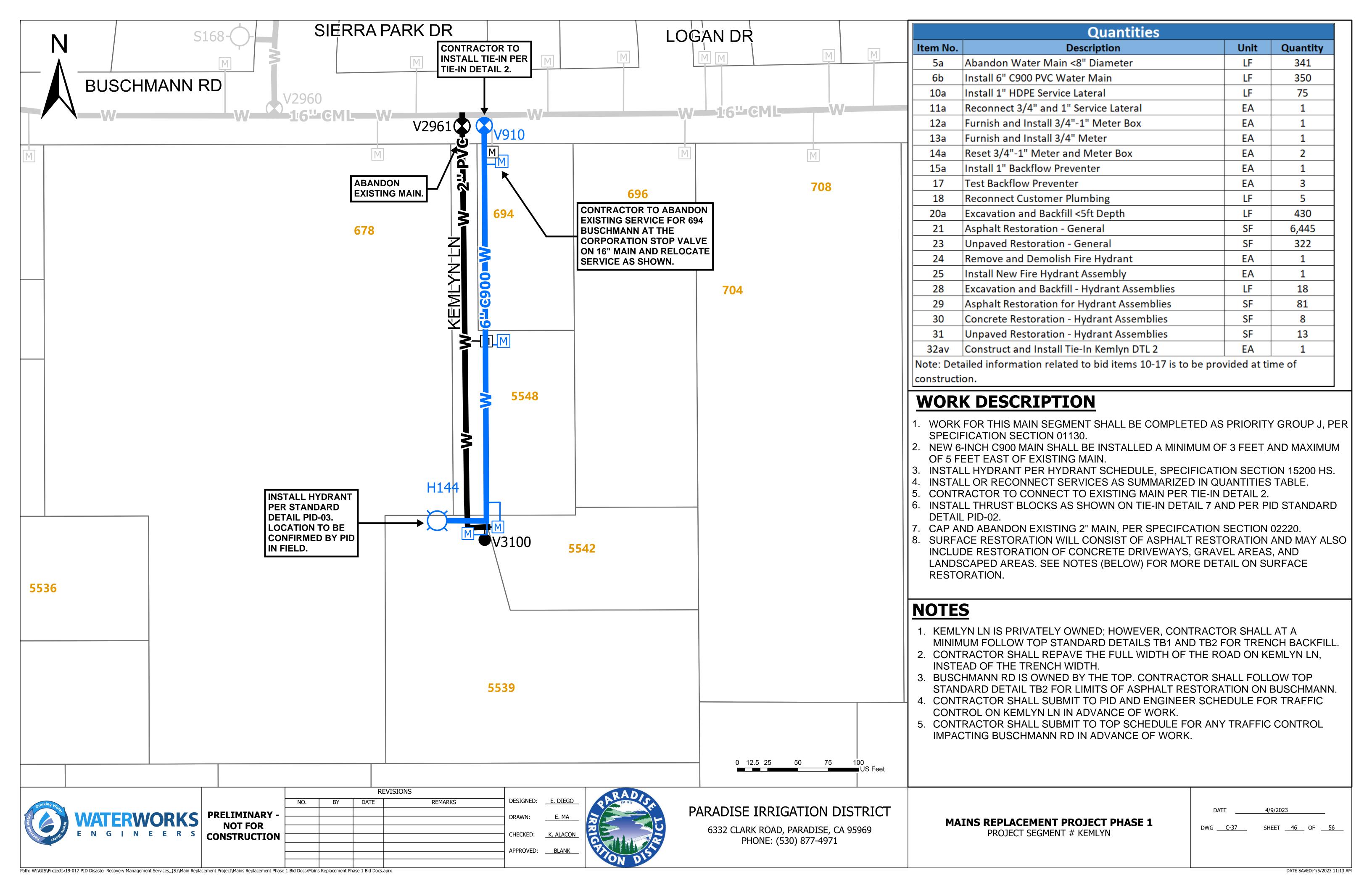


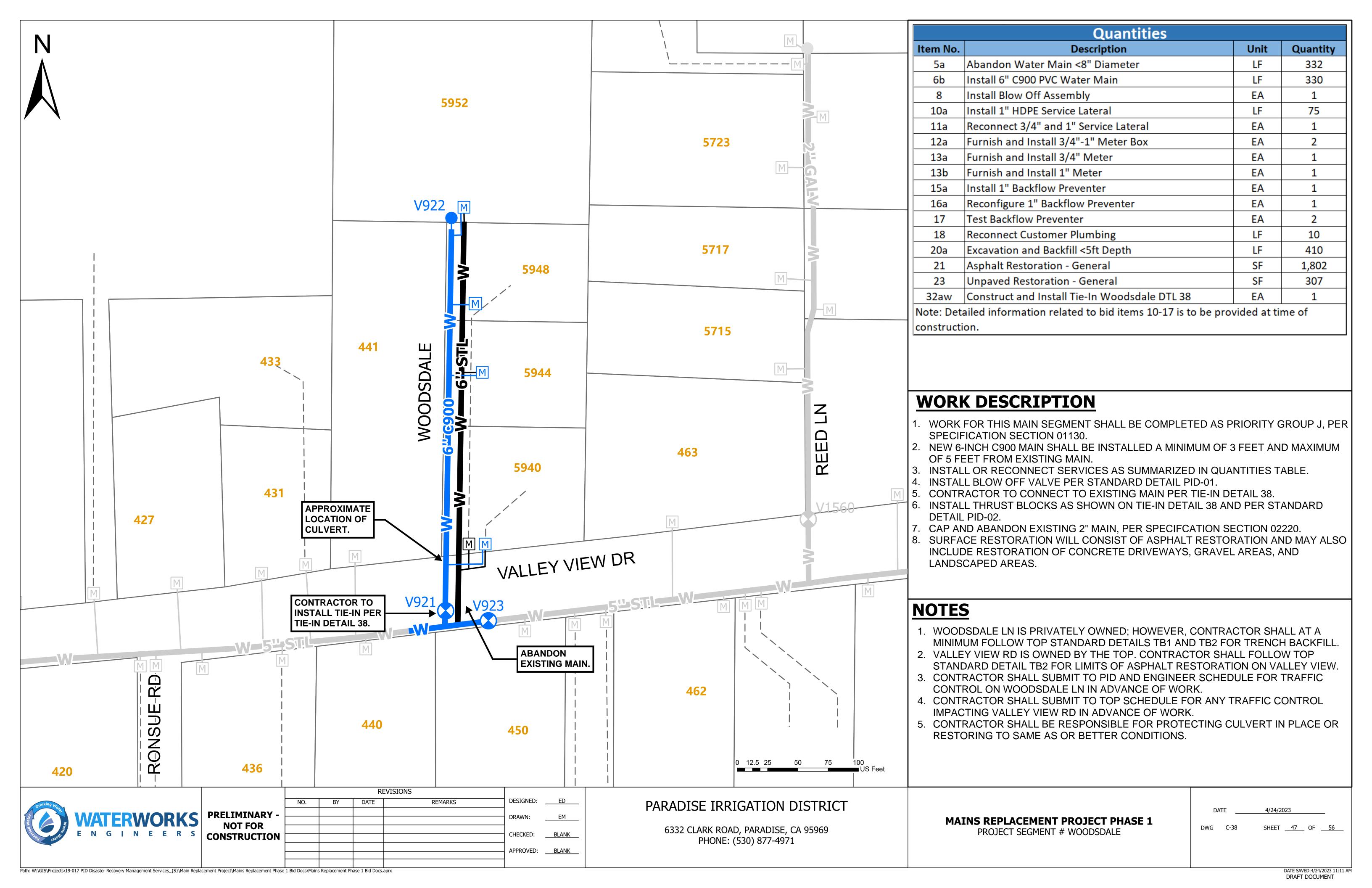
Unit Quantity 250 LF 237 LF EΑ LF 50 EΑ 3 EA EΑ EA EΑ EA LF 302 LF SF 1,360 227 SF EA

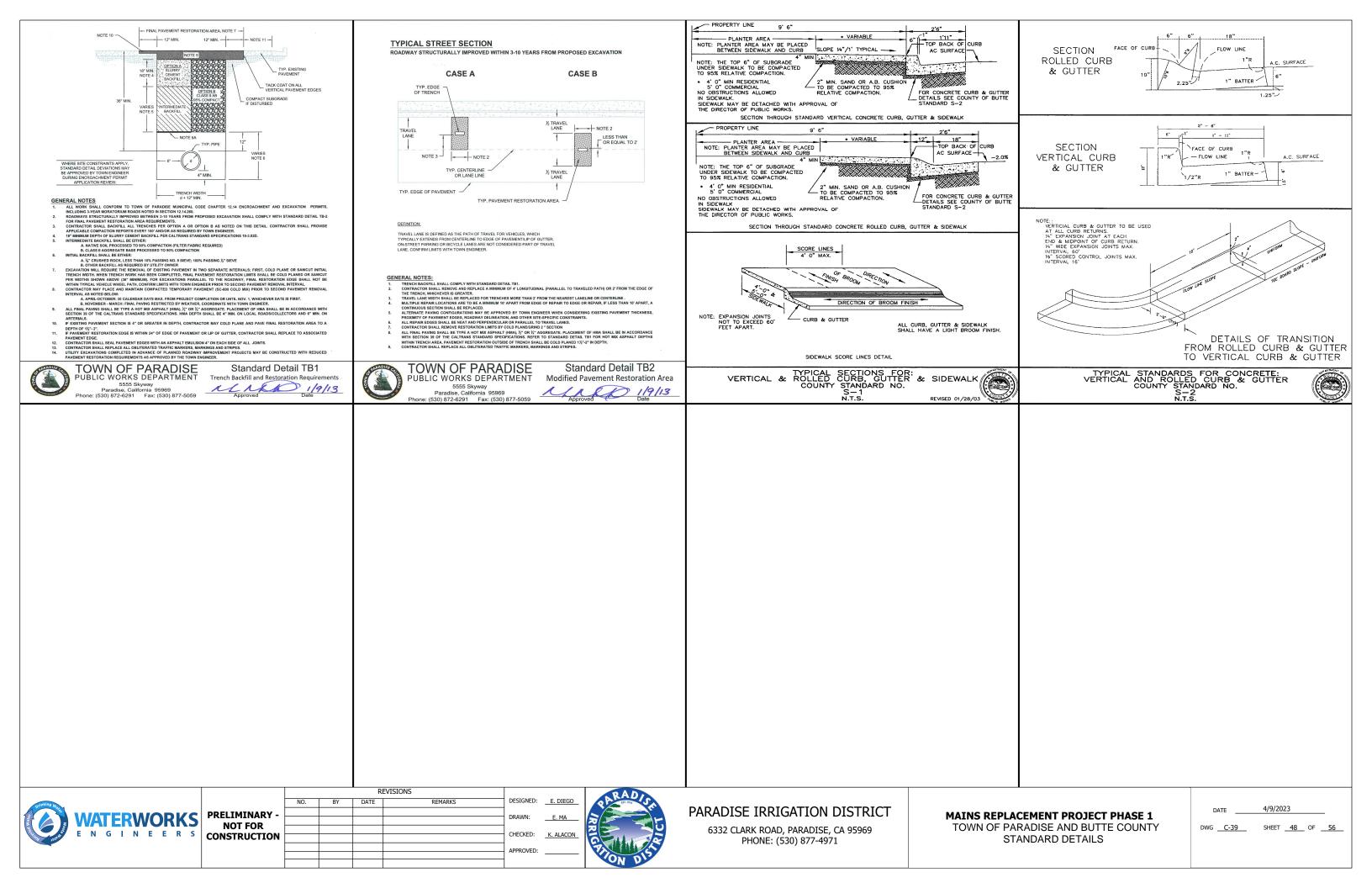
Note: Detailed information related to bid items 10-17 is to be provided at time of

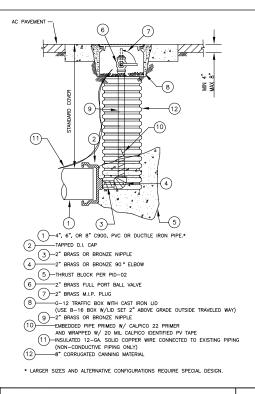
- 1. WORK FOR THIS MAIN SEGMENT SHALL BE COMPLETED AS PRIORITY GROUP J,
- 2. NEW 4-INCH C900 MAIN SHALL BE INSTALLED A MINIMUM DISTANCE OF 3 FEET AND A MAXIMUM DISTANCE OF 5 FEET SOUTH OF EXISTING MAIN.
- 3. INSTALL BLOWOFF VALVE ASSEMBLY AT END OF MAIN SEGMENT AS SHOWN, PER
- 4. INSTALL OR RECONNECT SERVICES AS SUMMARIZED IN QUANTITIES TABLE.
- 5. CONTRACTOR TO CONNECT TO EXISTING MAIN PER TIE-IN DETAIL 1.
- 6. INSTALL THRUST BLOCKS AS SHOWN ON TIE-IN DETAIL 2 AND AS REQUIRED PER
- 7. CAP AND ABANDON EXISTING 2-INCH MAIN, PER SPECIFCATION SECTION 02220.
- 8. SURFACE RESTORATION WILL CONSIST OF ASPHALT RESTORATION AND MAY ALSO INCLUDE RESTORATION OF CONCRETE DRIVEWAYS, GRAVEL AREAS, AND
- 1. LOWRY LN IS PRIVATELY OWNED; HOWEVER, CONTRACTOR SHALL AT MINIMUM FOLLOW TOP STANDARD DETAILS TB1 AND TB2 FOR TRENCH BACKFILL AND
- 2. PENTZ RD IS OWNED BY THE TOP. CONTRACTOR SHALL REFER TO TOP STANDARD
- 3. CONTRACTOR SHALL SUBMIT TO TOP SCHEDULE FOR TRAFFIC CONTROL ON
- 4. EXISTING 2" PVC MAIN DOES NOT HAVE A SHUT OFF VALVE, PID TO INSTALL FULL ROUND CLAMP AFTER INSTALLATION OF NEW MAIN IS COMPLETE AND BEFORE











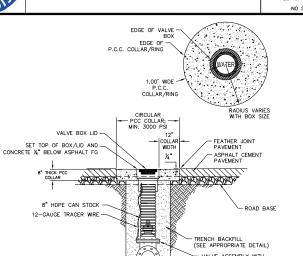


PARADISE IRRIGATION DISTRICT STANDARD DRAWING

PID-0SHEET 1 OF 1 CHECKEE

PERMANENT END OF LINE BLOW OFF

DATE FEBRUARY 2023 NO SCALE



- ALL VALVE BOXES WITHIN THE SCOPE OF THE PROJECT SHALL BE SET TO THE APPROPRIATE FINISH GRADE. SURROUNDING PAVEMENT SHALL BE RESTORED TO SAISTACTORY CONDITION.
 VALVE BOXES IN THE TRAVELED WAY (ASPHALT ROADWAY) SHALL BE SET IN A MINIMUM 3000 PSI PORTLAND CRENT CONCRETE RING. TOP OF BOX AND CONCRETE SHOULD BE FLUSH, AND BOTH BE SET X" BELOW ADJACENT ROADWAY ASPHALT FINISH GRADE. CONCRETE COLLARS SHALL BE BROON FINISHED.

 3. VALVE BOXES SHALL BE "CHRISTY GS" CONCRETE BOX WITH CAST IRON LID OR APPROVED EQUIAL UNLESS OTHERWISE SPECIFIED ON PLANS. ANY VARIATION SHALL BE APPROVED BY PARADISE IRRIGATION DISTRICT.

 4. CHRIST VALVE BOY, OWER OPPRATING NUIT TO INSIDE FREE VALVE DOY COPPED TO
- CENTER VALVE BOX OVER OPERATING NUT TO INSURE FREE VALVE OPERATION
- WATER VALVE BOXES THAT DIRECTLY SERVICE A FIRE HYDRANT SHALL HAVE LIDS LABELED "FIRE"; ALL OTHER LIDS SHALL BE LABELED "WATER".
- 6. CAN STOCK SHALL BE 8" SINGLE-WALLED CORRUGATED HDPE PIPE.

	PARADISE IRRIGATION DISTRICT STANDARD DRAWING	PID-04		
	VALVE BOX DETAIL	DRAWN BM DATI FEBRUAR	Y 2023	



PLAN

ELEVATION

THRUST BLOCK BEARING AREA BASED ON ALLOWABLE SOIL BEARING VALUE OF 2,000 psf PRESSURE AND 225 psi LINE PRESSURE WITH 30° COVER MINIMUM. FOR BEARING = 1000 psf, 2.0 X AREA SHOWN FOR BEARING = 500 psf, 4.0 X AREA SHOWN

PREDESIGNED THRUST RESTRAINTS ARE SUBJECT TO SITE SPECIFIC REVIEW.

ALL THRUST BLOCKS SHALL BE CLASS "B" CONCRETE AND PLACED AGAINST UNDISTURBED SOIL. DESIGN ENGINEER SHALL DETERMINE SIZES NOT SHOWN.

CONCRETE SHALL NOT EXTEND ONTO FLANGE OR ADJOINING PIPE.

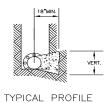
REINFORCING STEEL SHALL CONFORM TO ASTM A15 AND A305 INTERMEDIATE GRADE

ANCHOR STRAPS SHALL EXTEND TO NO LESS THAN 3/4 THE DEPTH OF THE THRUST BLOCK. ANCHO STRAPS SHALL BE EMBEDOED NOT LESS THAN 4" FROM EDGE OF THRUST BLOCK. ALL—THREAD STRASHALL BE BENT "SNUG" TO FITTING. 1/8"X2" STRAP SHALL BE TICHTENED TO HOLD ASSYSTRAGHT.

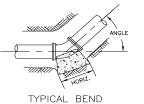
CONCRETE SHALL ACHIEVE "SET" TO PID INSPECTOR'S SATISFACTION PRIOR TO PLACING BACKFILL.

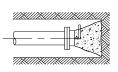
TEE ONLY

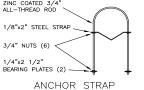
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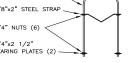
TEE WITH LINE VALVE(S)











EQUALS VERT SEE DETAIL ABOVE PLAN 典 4 DIA ELEVATION LINE VALVE VERTICAL BEND

MINIMUM SIZE OF THRUST BLOCK BEARING SURFACE

PIPE	11 1/4	BEND	22 1/2	BEND	45° E	BEND	90*	BEND	LINE VAL	VE, TEE END CAP	TEE WIT	H LINE	VALVES
SIZE	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	V1	V2
4"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-0"	2'-4"	1'-0"	1'-8"	1'-0"	1'-4"	1'-0"	1'-8"
6"	1'-0"	1'-0"	1'-6"	1'-0"	2'-0"	1'-6"	3'-6"	1'-6"	2'-6"	1'-6"	2'-0"	1'-6"	2'-6"
8"	1'-4"	1'-0"	2'-0"	1'-4"	2'-8"	2'-0"	4'-8"	2'-0"	3'-4"	2'-0"	2'-8"	2'-0"	3'-4"
10"	1'-8"	1'-3"	2'-6"	1'-8"	3'-4"	2'-6"	6'-0"	2'-6"	4'-2"	2'-6"	3'-4"	2'-6"	4'-2"
12"	2'-0"	1'-6"	3'-0"	2'-0"	4'-0"	3'-0"	7'-0"	3'-0"	5'-0"	3'-0"	4'-0"	3'-0"	5'-0"



PARADISE IRRIGATION DISTRICT STANDARD DRAWING

THRUST BLOCK DETAILS

PID-02SHEET 1 OF 1 CHECKEE DRAWN BM DATE FEBRUARY 2023

7" FROM BACK OF CURB TO ANGLE METER STOP

WITH CURB, GUTTER AND SIDEWALK

CASE 1

RAD/

PARADISE IRRIGATION DISTRICT PID-03SHEET 1 OF 1

EDGE OF PAVEMENT

(<u>a</u>)

CLEAR & LEVEL AREA

CASE 3

NO SIDEWALK OR SIDEWALK NOT ADJACENT TO CURB

`\ 3'-5'

FIRE HYDRANT INSTALLATION

STANDARD DRAWING

FEATHER JOIN PAVEMENT

-FLANGE TEE

SIDEWALK ADJACENT TO CURB

FOR THRUST BLOCKS SEE PID-02-

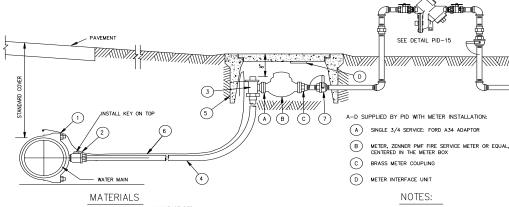
FOR HYDRANT LATERALS CONSTRUCTED ON EXISTING MAINS USE TAPPING SLEEVE IN PLACE OF TEE. SEE DIVISION X — CONTRACTOR CONSTRUCTED TAPS ON DISTRICT MAINS.

TRENCHING AND BACKFILL PER DISTRICT STANDARD. SEE SPEC DIVISION III – EARTHWORK.
MJ FITTINGS WITH GRIP RINGS SHALL BE USED. CONCRETE REQUIRED TO STABILIZE HYDRANT ASSY.
BAG OR WRAP ANY FLANGE OR BOLTED CONNECTION NEAR CONCRETE KICKER INSTALLATION.

HYDRANT LOCATION PLANS

CASE 2





1 - DOUBLE S.S. STRAP DUCTILE IRON ROMAC 202S SERVICE SADDLE W/ I.P. OUTLET 1 1/2" BRONZE BALLCORP STYLE CORPORATION STOP M.I.P. THREAD X COMPRESSION FB1100-4-Q FB1100-6-Q FB1100-7-Q W/PIPE LINER 1 1/2"

- BRONZE BALLCORP STYLE ANGLE METER STOP W/ LOCKWING (COMPRESSION TYPE) W/PIPE LINER

7 — BRASS LEAD-FREE BALL VALVE

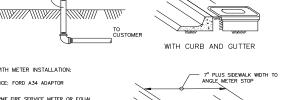
5 — CONCRETE METER BOX AND COMPOSITE CONCRETE LID JENSEN PRECAST

- 12 AWG SOLID COPPER WIRE W/ TYPE UF INSULATION ATTACHED AT 3 FT INTERVAL WITH A MININUM ONE FULL WRAP OF DUCT TAPE. ENSURE WIRE DOES NOT INTERFERE WITH OPERATION OF CORPORATION STOP. COVER ALL BARE WIRE CONNECTIONS WITH ELECTRICAL TAPE. ENSURE WIRE DOES NOT INTERFERE WITH OPERATION OF CORPORATION STOP.

HPC1730 METER BOX HPC1730-T22-L02 COVER

BA43-444W-Q BFA43-666W-Q BFA43-777W-Q

LFFBV-3C (SPECIFY 1", 1 1/2", 2")

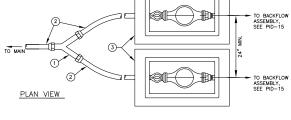


- SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN ${f 24}^{\rm w}$ OF VALVE, COUPLING, JOINT OR FITTING. TAPPED COUPLINGS ARE NOT PERMITTED.
- BOX COVER TO BE SET TO CONFORM TO PLANTER GRADE IN UNPAVED AREAS SURROUNDING GROUND SHALL DRAIN AWAY FROM BOX. IN UNTRAVELED AREAS WHERE DRAINAGE MOVES TOWARD BOX, TOP OF BOX SHALL BE SET 2" ABOVE SURROUNDING GRADE. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR CURB
- THE CORPORATION STOP TAP SHALL BE MADE AS SPECIFIED BY THE PIPE MANUFACTURER'S INSTALLATION GUIDE. ALL TAPS SHALL BE MADE WITH MACHINE GUIDE
- THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE THE STREET FROM THE WATER MAIN TO THE METER STOP. UNLESS APPROVED
- METER BOX SHALL BE SET BEHIND SIDEWALK WHERE SIDEWALK IS ADJACENT TO CURB HDPE TUBING SHALL NOT BE SPLICED.
- FOR MULTIPLE METER SERVICE INSTALLATION REFER TO STANDARD DRAWING PID-06



PARADISE IRRIGATION DISTRICT PID-05STANDARD DRAWING SHEET 1 OF POLYETHYLENE SERVICE LATERAL AND DATE FEBRUARY 2023 3/4" TO 2" METER INSTALLATION

2" X 1 1/2" X 1 1/2" WYE, 2" LINE 'A'



- MATERIALS
- 1 BRASS WYE FITTING (COMPRESSION TYPE
- HDPE TUBING (COPPER TUBING SIZE)
- CONCRETE METER BOX AND LID
- 4 METER (SUPPLIED BY DISTRICT), ZENNER PMF FIRE SERVICE METER OR EQUAL
- (5) METER COUPLER

MIN. MAIN PRESSURE A34 ADAPTER FOR 3/4" METERS 2" X 1" X 1" WYE, 1 1/2" LINE 'A' 60 PSI

- 1. SERVICE LINE SIZE BASED ON TWO METERS, 50' MAXIMUM LINE LENGTH TO METER AND MINIMAL ELEVATION DIFFERENCE BETWEEN METER AND MAIN. CONTACT DISTRICT REGARDING OTHER SITUATIONS.
- 2. SEE PID-05 FOR SPECIFICS ON ACCEPTABLE MATERIALS AND OTHER DETAILS.



PARADISE IRRIGATION DISTRICT STANDARD DRAWING

PID-06 SHEET 1 OF 1 DRAWN CHECKED BA

MULTIPLE METER SERVICE INSTALLATION

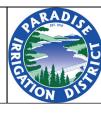
NO SCALE

DATE FEBRUARY 2023



PRELIMINARY -**NOT FOR CONSTRUCTION**

REVISIONS DATE DESIGNED: E. DIEGO CHECKED: K. ALACON APPROVED:



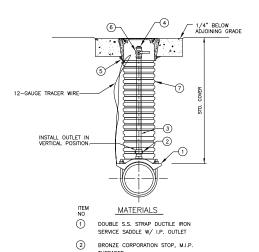
PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1

PARADISE IRRIGATION DISTRICT STANDARD DETAILS

4/9/2023 DATE DWG <u>C-40</u> SHEET <u>49</u> OF <u>56</u>



- HARD PIPE (BRASS
- BRASS M.I.P. PLUG
- G-12 TRAFFIC BOX W/ CAST IRON LID GRADE OUTSIDE TRAVELED WAY)
- BRASS FULL PORT BALL VALVE (W/ S.S. BALL) WATTS OR EQUAL
- 8" CORRUGATED CANNING MATERIAL

PARADISE IRRIGATION DISTRICT PID-09 STANDARD DRAWING SHEET 1 OF 1

MANUAL AIR VALVE ASSEMBLY

CHECKED BA DATE FEBRUARY 2023

PARADISE IRRIGATION DISTRICT STANDARD DRAWING

NO. 12 AWG SOLID COPPER WIRE W/TYPE UF INSULATION

AIR RELEASE & VACUUM RELIEF VALVE ASSEMBLY

CHECKED BA DATE FEBRUARY 2023 NO SCALE

PID-10

SHEET 1 OF 1

MATERIALS

DOUBLE S.S. STRAP DUCTILE IRON SERVICE SADDLE W/ I.P. OUTLET

1/2" DIA X 4" STAINLESS STEEL ANCHOR BOLT CAST IN SLAB WITH BRASS NUT

AIR AND VACUUM VALVE, BERMAD COMBINATION AIR VALVE OR EQUIVELENT

MALE ADAPTER AS REO'D -

ELBOW OR STREET ELBOW CONCRETE METER BOX

MIP X COMP CURB STOP VALVE

8-INCH CORRUGATED PLASTIC CAN STOCK

POLYETHYLENE TUBING

HARD PIPE (BRASS) 12 COMP X FIP 90 13 6" PVC SLEEVE

- BACKFLOW PREVENTION REQUIREMENTS APPLY AT EACH SERVICE CONNECTION. CONTACT PID FOR
 QUESTIONS REGARDING BACKFLOW PREVENTION INSTALLATION AND POLICY REQUIREMENTS.
 BACKFLOW PREVENTION ASSEMBLY SHALL BE A REDUCED PRESSURE PRINCIPLE (RP) ASSEMBLY
 CERTIFIED BY USC FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
 ASSEMBLY SHALL BE LOW LEAD IN COMPLANCE WITH NSF 61, WILLINS \$735LC.
 ASSEMBLY BACKFLOW PREVENTION ASSEMBLY SIDE OF BECKNEW PREVENTION
 ASSEMBLY BACKFLOW PREVENTION ASSEMBLY TEST COOKS SHALL BE USED FOR TEST PURPOSES
 PROCEPTION PRESONNED, ONLY.
- PERSONNEL ONLY. ND FITTINGS SHALL BE BRASS AND MECHANICALLY JOINED. UNIONS SHALL BE INSTALLED ON
- BY CERTIFIED PERSONNEL UNION STALL BE BRASS AND MECHANICALLY JOINED. UNIONS SHALL BE INSTALLED AND FITTINGS SHALL BE REASON AND MECHANICALLY JOINED. HINDINGS THAT IS SERVICE LINE SHALL BE ENCASED IN SCHEDULE 40 GALVANIZED PIPE WITH HIMMIMM ANNULAR SPACE, FROM THE METER BOX TO THE POINT WHERE THE PIPE LEAVES THE GROUND. UPON COMPLETON OF INSTALLATION AND PROPE TO RECEIVING SERVICE THE BACKFLOW PREVENTION ASSEMBLY MICHAEL OF ADMINISTRATION AND PROPERTY OF THE METER PROPERTY OF THE PROPERTY OF THE METER PROPERTY OF THE METER PROPERTY OF THE METER PROPERTY SHALL BE INSTALLED IN DIRECT ALLOWED FOR THE PROPERTY OF THE PROPERTY OF THE PERFONICULAR TO THE FLOW OF METER ORIENTATION IS ALL DAYS BE ALLOWED FOR PIGN APPROVAL BY PID. IF PERFENDICULAR CRIENTATION IS APPROVED SWING JOINT MAY BE USED, TITTINGS SHALL BE KEPT OF A MINIMAL OF THE PERFENDICULAR CRIENTATION IS APPROVED SWING JOINT MAY BE USED, TITTINGS SHALL BE KEPT OF A MINIMAL OF THE PERFENDICULAR CRIENTATION IS APPROVED SWING JOINT MAY BE USED, TITTINGS SHALL BE KEPT OF A MINIMAL OF THE PERFENDICULAR CRIENTATION IS APPROVED SWING JOINT MAY BE USED, TITTINGS SHALL BE KEPT OF A MINIMAL OF THE PERFENDICULAR CRIENTATION IS APPROVED SWING JOINT MAY BE USED. THAT NO BRACK PRESSURE IS

- THE CONTROLL OF THE CONTROLL OF THE CLOSE OF THE CONTROL OF THE CO

RP INSTALLATION FOR DOMESTIC CONNECTIONS UP TO 2"

DRAWN BM DATE FEBRUARY 2023 NO SCALE

PID-15

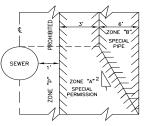
SHEET 1 OF 1

PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1

SITUATION: LOCATION OF NEW WATER LINES TO EXISTING SEWER LINES



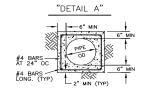
SEWER

PARALLEL CONSTRUCTION

PERPENDICULAR CROSSING

IF ANY WATER PIPELINES ARE TO BE CONSTRUCTED WITHIN ANY OF THE ABOVE INDICATED ZONES, SPECIAL CONSTRUCTION SHALL BE REQUIRED AS DESCRIBED BELOW

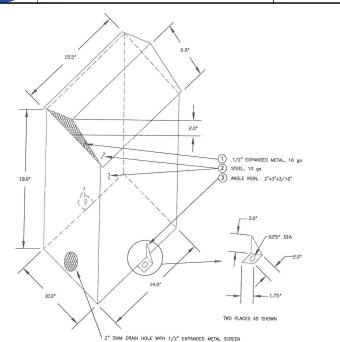
- DO NOT LOCATE ANY PARALLEL DOMESTIC WATER MAIN IN THIS AREA WITHOUT STATE AND LOCAL HEALTH DEPARTMENT APPROVAL.





PARADISE IRRIGATION DISTRICT PID-11STANDARD DRAWING STATE HEALTH DEPT. EXCEPTIONS TO BASIC SEPARATION STANDARDS FOR POTABLE WATER AND SEWER PIPELINES

DATE FEBRUARY 2023



A SIZE IS FOR 1" AND 2" VALVES. FOR LARGER VALVES FABRICATE COVER TO APPROPRIATE SIZE TO FIT.

B. PAINT COVER WITH ONE COAT OF FRIMER AND TWO COATS OF FINISH PAINT; (JOHN DEERE GREEN).

C. WELDED CONSTRUCTION SHALL BE USED. PARADISE IRRIGATION DISTRICT PID-12

AIR & VACUUM RELEASE VALVE

STANDARD DRAWING

SHEET 1 OF 1 CHECKED DATE JULY 2004

PARADISE IRRIGATION DISTRICT STANDARD DRAWING

(FOR DISTRICT OWNED BACKFLOW PREVENTION DEVICES)

PARADISE IRRIGATION DISTRICT

4/9/2023 DATE DWG <u>C-41</u> SHEET <u>50</u> OF <u>56</u>

WATERWORKS

REVISIONS DESIGNED: PRELIMINARY -**NOT FOR** E N G I N E E R S CONSTRUCTION CHECKED: K. ALACON APPROVED:

E. DIEGO

NICOTAP COPPER SLEEVE FOR #12-AWG SOLID WIRE (PART # TI-080X064-C) OPTIONAL SPLICE CONNECTION

NO PIPE JOINTS SHALL BE PERMITTED WITHIN ZONE D. IT IS THE INTENT OF THESE SPECIFICATIONS THAT NO JOINTS SHALL OCCUR WITHIN ZONE C. IF THAT CANNOT BE ACCOMPLISHED, THE NEW PIPELINE SHALL BE ENCASED IN CONCRETE FOR THE FULL LENGTH OF ZONE C. ENCASEMENT SHALL BE PER PID-11 "DETAIL A".

THE CONSTRUCTION CRITERIA APPLY TO HOUSE LATERALS THAT CROSS ABOVE A PRESSURE WATER MAIN BUT NOT TO THOSE HOUSE LATERALS THAT CROSS BELOW A PRESSURE WATER MAIN.

WATER MAINS SHALL NOT BE CONSTRUCTED LESS THAN 25 FEET HORIZONTALLY FROM SEPTIC TANKS, SEPTIC LEACH FIELDS OR GROUNDWATER RECHARGE SITES.

CASINGS OR TUNNELS FOR THE PASSAGE OF WATER AND SEWER LINES UNDER RAILROAD TRACKS, HIGHWAY OR OTHER STRUCTURES, SHALL BE SPECIALLY DESIGNED TO ELIMINATE ANY HAZARD OF CONTAMINATION OF THE WATER SYSTEM.

ALL D.I.P. MUST HAVE HOT DIP BITUMINOUS COATING AND ALL CLASS 200 PVC MUST MEET DR-14 PER AWWA C900 OR EQUIVALENT. SEWER FORCE MAINS SHALL NOT BE PERMITTED IN ZONES A THROUGH D

WHERE CROSSINGS ARE NOT PERPENDICULAR, HORIZONTAL SPACING REQUIREMENTS SHALL BE MEASURED ALONG A LINE PERPENDICULAR TO THE WATER MAIN.

PREFERRED SPLICE CONNECTION

BASIC SEPARATION STANDARDS

SITUATION:

ZONE "A"

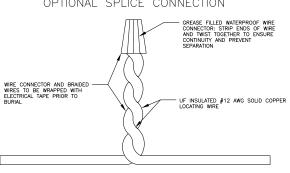
PARALLEL CONSTRUCTION

GENERAL NOTES

PARALLEL CONSTRUCTION: THE HORIZONTAL DISTANCE BETWEEN PRESSURE POTABLE WATER MAINS AND SANITARY SEWER LINES SHALL BE AT LEAST 25 FEET. PERPENDICULAR CONSTRUCTION (CROSSING): PRESSURE WATER MAINS SHALL BE AT LEAST ONE FOOT ABOVE SANITARY SEWER LINES WHERE THESE LINES MUST CROSS

WATER

PERPENDICULAR CROSSING



NOTES:

1. WIRE SHALL BE TAPED ALONG PIPE AT A MINIMUM OF EVERY 10 FEET.

2. WIRE SHALL BE LONG ENOUGH TO REACH THE TOP OF VALVE CANS.

3. WIRES SHALL BE CHECKED FOR CONTINUITY PRIOR TO BACKFILL.

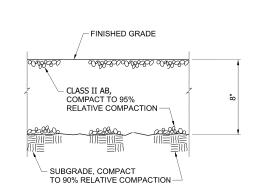
PARADISE IRRIGATION DISTRICT STANDARD DRAWING

PID-16 CHECKEI BA DRAWN BM

LOCATOR WIRE SPLICE DETAIL

CHECKED BA

STANDARD DETAILS



GRAVEL SURFACING

1000

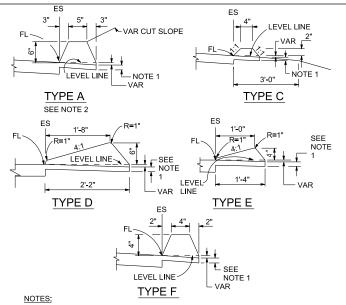
PIPE INSTALLATION CROSSING PIPE INSTALLATION CROSSING **UNDER EXISTING UTILITY** ABOVE EXISTING UTILITY BACKFILL AND SURFACE VARY BY LOCATION PIPE OD MATCH SURROUNDING CONDITIONS WITH A 6" MIN 6" MIN PIPE LOCATOR TAPE -SURFACE TREATMENT SHOWN ON SD TOP TB1. -PIPE LOCATOR PIPE BEDDING MATERIAL. SAND FILL FULL TRENCH I" THICK COMPRESSIBLE COMPACT JOINT FILLER MATERIAL — SUBGRADE TO 90% COMPACTION SUBGRADE TO 90% COMPACTION

NOTES:

- 1. PIPE BEDDING SHALL BE GRANULAR BEDDING FOR ALL DUCTILE IRON OR STEEL PIPE AND SAND FOR ALL OTHER PIPE. COMPACT TO 90% RELATIVE COMPACTION.
- 2. PROVIDE MINIMUM 3-FEET OF COVER OVER ALL BURIED PIPELINES, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- WHERE VERTICAL CLEARANCE IS LESS THEN 6 INCHES CONTACT ENGINEER.
 WHERE THE EXISTING UTILITY TO BE CROSSED IS OWNED AND MAINTAINED BY THE DISTRICT,
- BEDDING AND BACKFILL REQUIREMENTS OF THIS STANDARD DETAIL SHALL PREVAIL OVER OTHER STANDARD DETAILS.

VERTICAL PROXIMITY PIPE CROSSING

2055



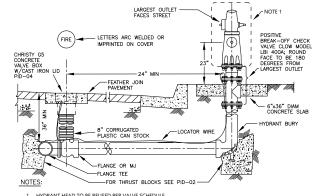
- 1. FOR AC SHOULDERS ONLY, EXTEND TOP LAYER OF AC PLACED ON THE SHOULDER UNDER DIKE WITH NO JOINT AT THE ES.
- TYPE A DIKE ONLY TO BE USED WHERE RESTRICTIVE SLOPE CONDITIONS DO NOT PROVIDE ENOUGH WIDTH TO USE TYPE D OR TYPE E DIKE.

DIKE QUANTITIES

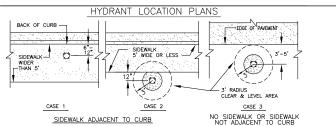
	CUBIC YARDS					
TYPE	PER LINEAR FOOT					
Α	0.0135					
C	0.0038					
D	0.0293					
Е	0.0130					
F	0.0066					
QUANTITIES BASED ON 5% CROSS SLOPE.						

TYPICAL AC DIKE

2760

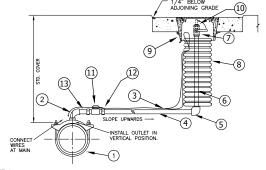


- HYDRANT HEAD TO BE REUSED PER VALVE SCHEDULE.
 HYDRANT LATERAL CONSISTING OF VALVES AND PINIG FROM THE NEW WATER MAIN UP TO THE BREAKAWAY VALVE. TO BE INSTALLED NEW AND DISTING HYDRANT LATERAL TO BE ABANDONED OR DEMOLISHED AS NEEDED.
 SINICIT TO PROVIDE DIRECTION IN RIELD FOR REUSING BREAKAWAY VALVE OR INSTALLING NEW.
 TRENCHING AND BACKFILL PER DISTINCT STANDARDS AND SPECIFICATIONS.
 MI FITINGS WITH GIRP RINGS SHALL BE USED. CONCRETE REQUIRED TO STABILIZE HYDRANT ASSEMBLY.
 BAG OR WARP ANY FLANCE OR BOLTED CONNECTION FEAR CONCRETE KICKER INSTALLATION.



FIRE HYDRANT INSTALLATION: REUSING HYDRANT HEAD

4000

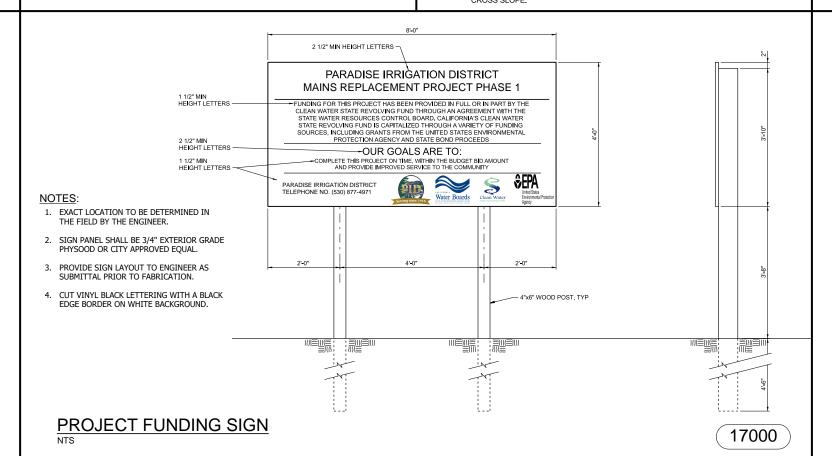


- DOUBLE S.S. STRAP DUCTILE IRON SERVICE SADDLE W/ I.P. OUTLET
- BRASS OR BRONZE STREET ELBOW
- NO. 12 AWG SOLID COPPER WIRE W/TYPE UF INSULATION
- POLYETHYLENE TUBING
- COMP X FIP 90
- HARD PIPE (BRASS)
- 7) 2" BRASS FULL PORT BALL
- (8) 8-INCH CORRUGATED PLASTIC CAN STOCK
- G-12 TRAFFIC BOX W/ CAST IRON LID. SET IN CONCRETE COLLAR (USE B-16 BOX W/LID SET 2" ABOVE GRADE OUTSIDE TRAVELED WAY)
- 2" BRASS M.I.P. PLUG
- MIP X COMP CURB STOP VALVE 2" BRASS COUPLER AS NEEDED
- 2" BRASS OR BRONZE NIPPLE

MANUAL AIR VALVE ASSEMBLY OUTSIDE

OF TRAVELED WAY

5000





REVISIONS DATE DESIGNED: PRELIMINARY -**NOT FOR** CHECKED: **CONSTRUCTION** K. ALACON APPROVED:

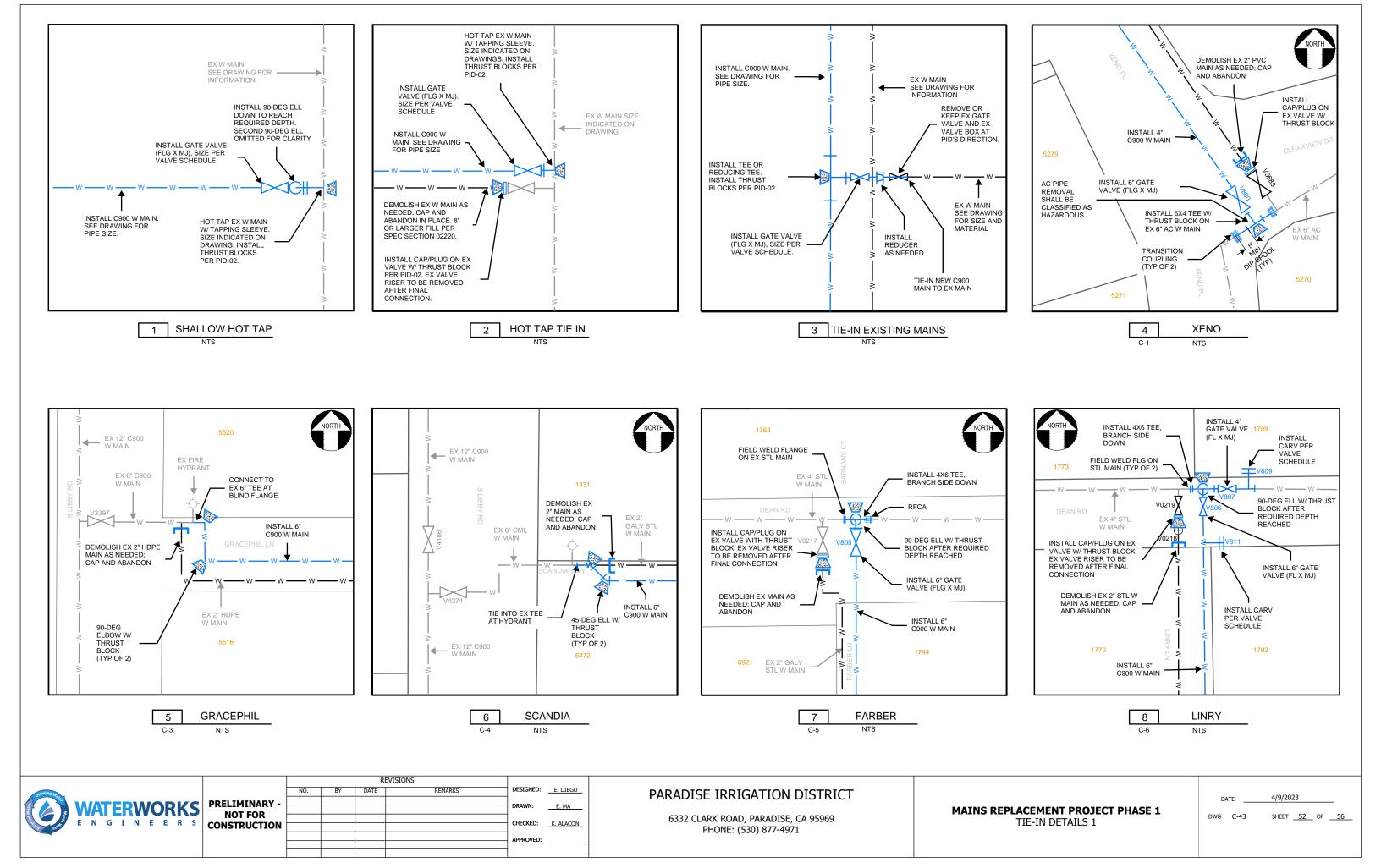


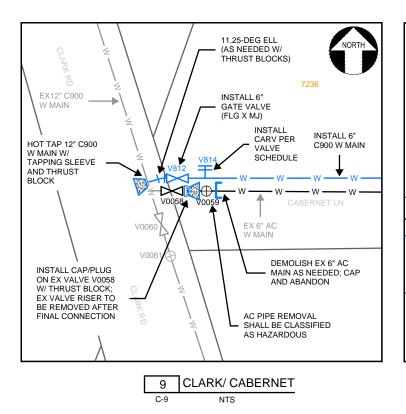
PARADISE IRRIGATION DISTRICT

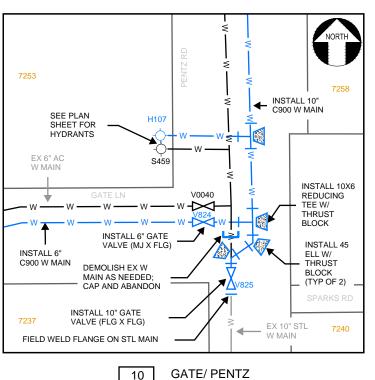
6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971

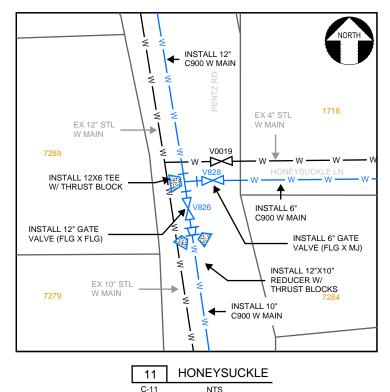
MAINS REPLACEMENT PROJECT PHASE 1 STANDARD DETAILS 1

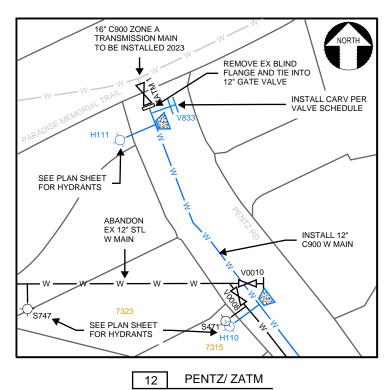
4/9/2023 DATE DWG <u>C-42</u> SHEET <u>51</u> OF <u>56</u>

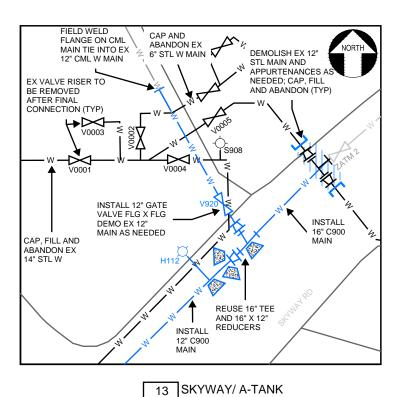


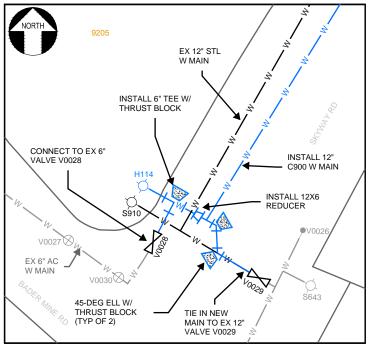




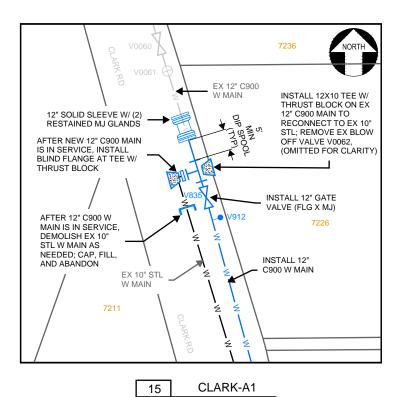


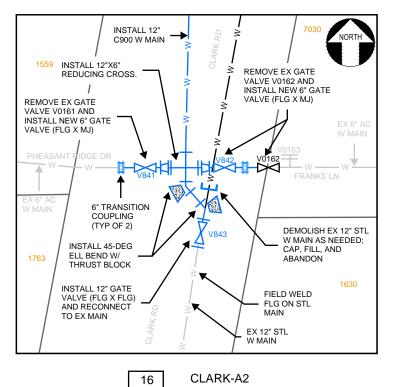






14 SKYWAY/ BADER MINE SOUTH







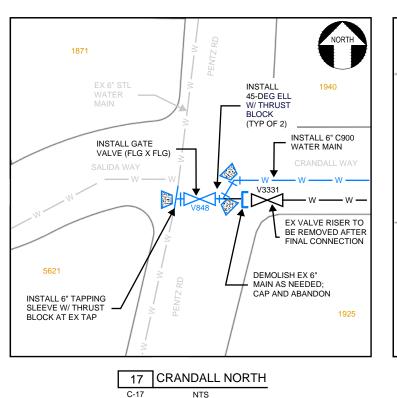
	NO.	BY	DATE	REMARKS	DESIGNED:	E. DIEGO
PRELIMINARY - NOT FOR					DRAWN:	E. MA
CONSTRUCTION					CHECKED:	K. ALACON
					APPROVED:	

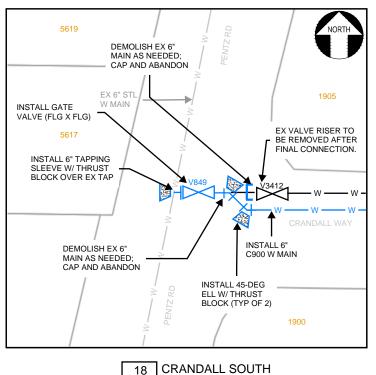
C-14

PARADISE IRRIGATION DISTRICT

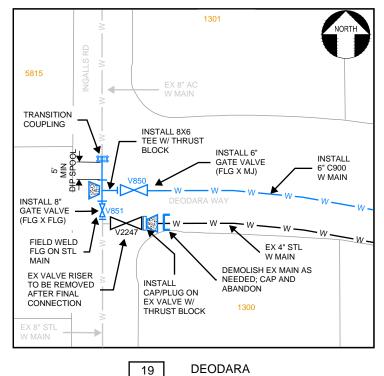
6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971 MAINS REPLACEMENT PROJECT PHASE 1
TIE-IN DETAILS 2

DA	ATE	4/9/2023		_
DWG	C-44	SHEET 53	OF	56

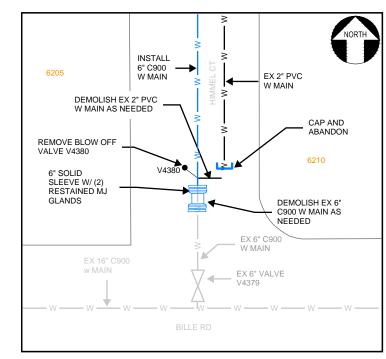




NTS



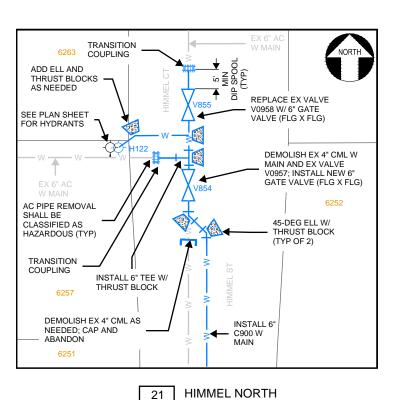
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HIMMEL SOUTH

NTS

20

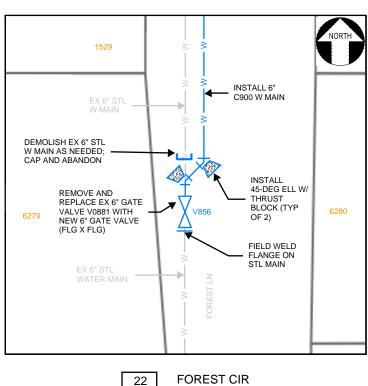


C-19

E N G I N E E R S

NOT FOR

CONSTRUCTION



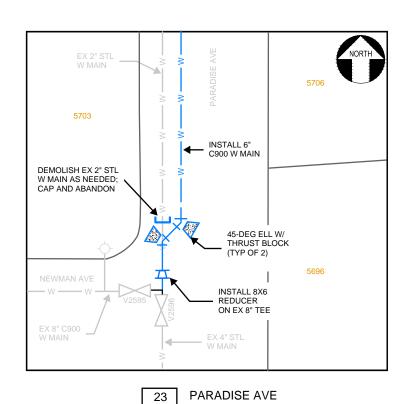
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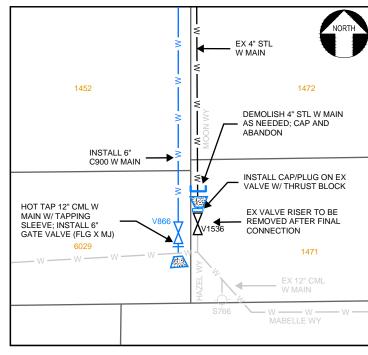
APPROVED:

K. ALACON

C-20



C-22



MOON-HAZEL

24

C-23

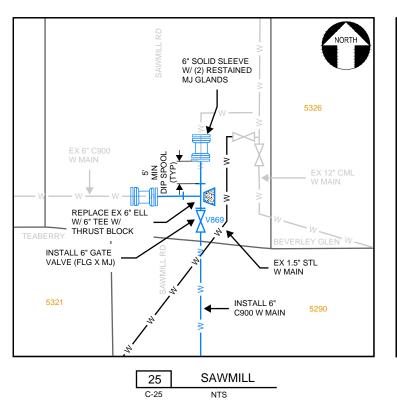
REVISIONS REMARKS DESIGNED: E. DIEGO PRELIMINARY -WATERWORKS

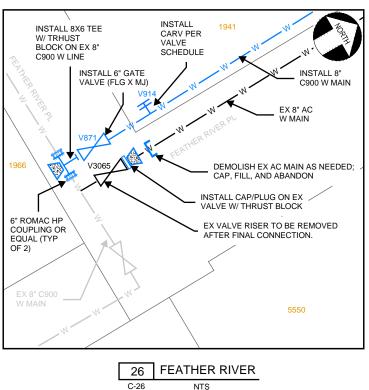
PARADISE IRRIGATION DISTRICT

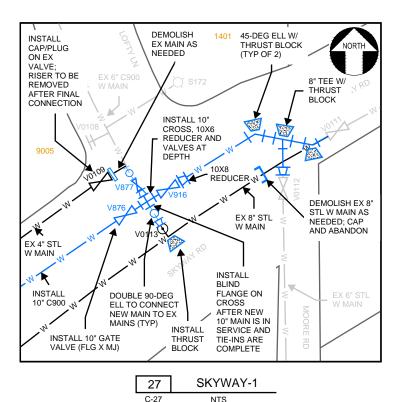
6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971

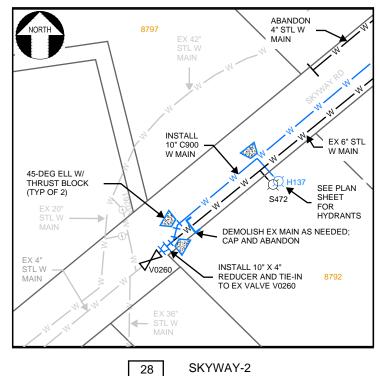
MAINS REPLACEMENT PROJECT PHASE 1 TIE-IN DETAILS 3

4/9/2023 DATE DWG C-45 SHEET <u>54</u> OF <u>56</u>

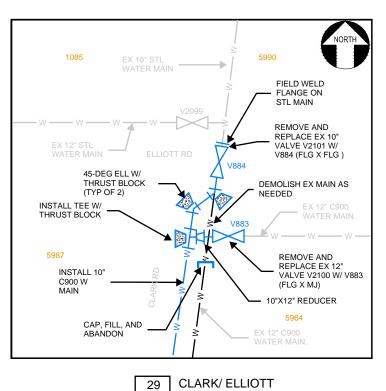




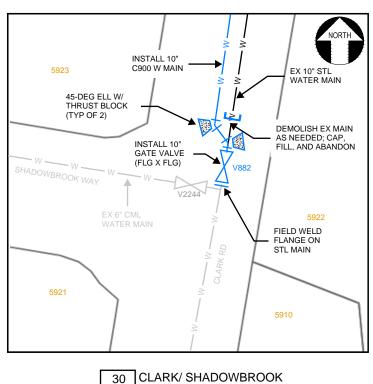


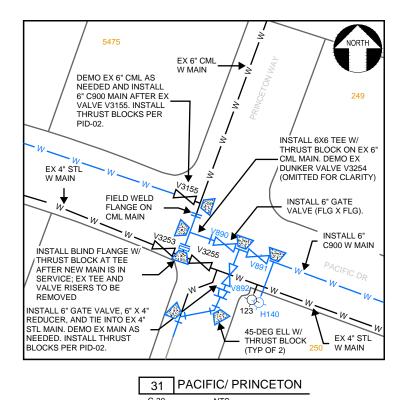


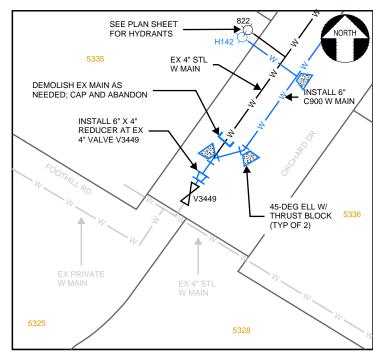
NTS



C-29







32 ORCHARD/ FOOTHILL



		NO.	BY	DATE	REMARKS	DESIGNED:	E. DIEGO
	PRELIMINARY - NOT FOR					DRAWN:	E. MA
(CONSTRUCTION					CHECKED:	K. ALACON
						APPROVED:	
						1	

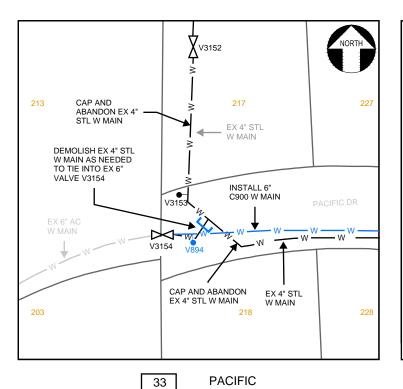
C-29

PARADISE IRRIGATION DISTRICT

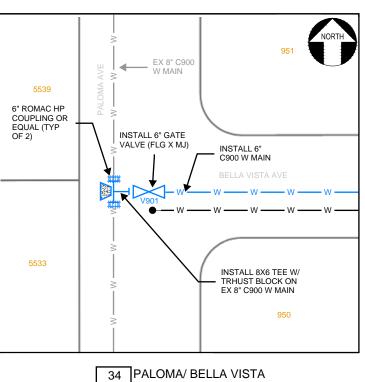
6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971 MAINS REPLACEMENT PROJECT PHASE 1
TIE-IN DETAILS 4

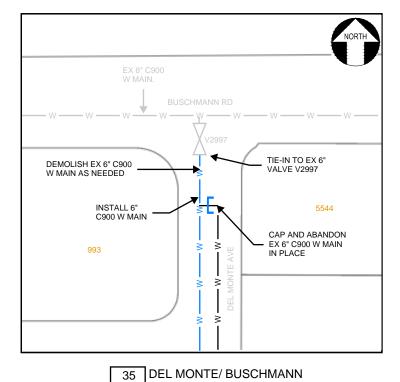
DATE 4/9/2023

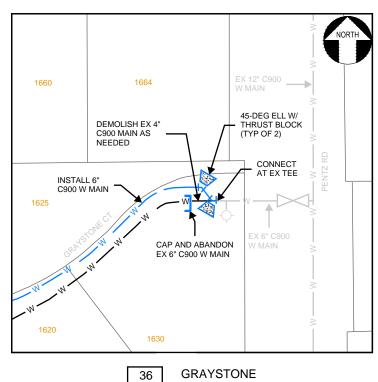
DWG C-46 SHEET 55 OF 56



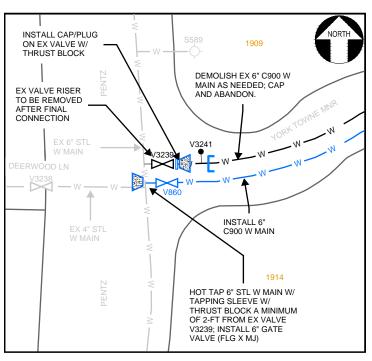
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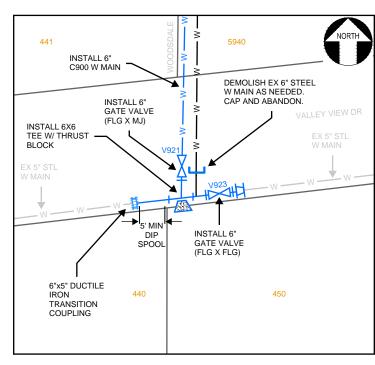






NTS





37 YORK TOWNE

38 WOODSDALE

WATERWORKS ENGINEERS

	NO.	BY	DATE	REMARKS	DESIGNED:	E. DIEGO
PRELIMINARY - NOT FOR					DRAWN:	E. MA
CONSTRUCTION					CHECKED:	K. ALACON
					APPROVED:	

PARADISE IRRIGATION DISTRICT

6332 CLARK ROAD, PARADISE, CA 95969 PHONE: (530) 877-4971

MAINS REPLACEMENT PROJECT PHASE 1
TIE-IN DETAILS 5

DATE 4/24/2023

DWG C-47 SHEET 56 OF 56