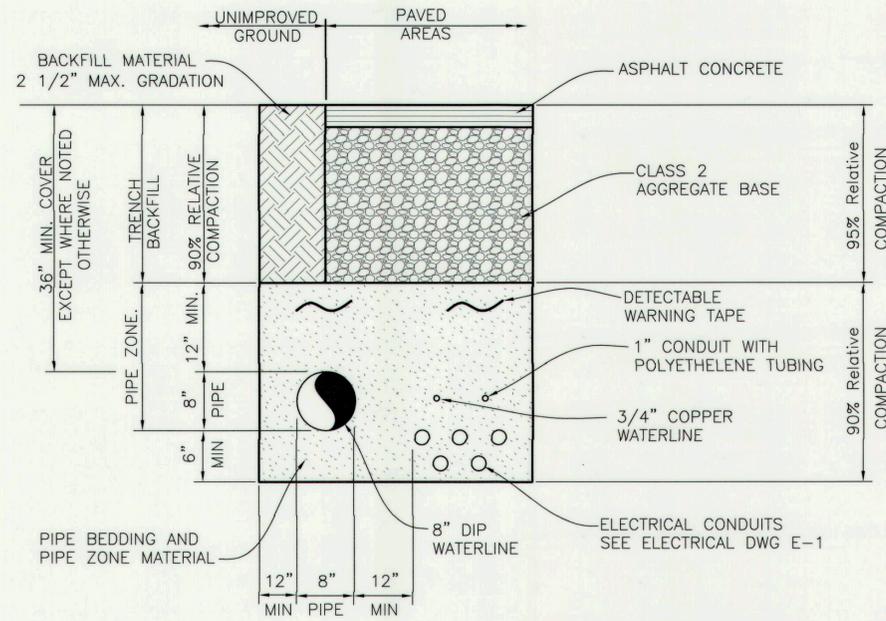


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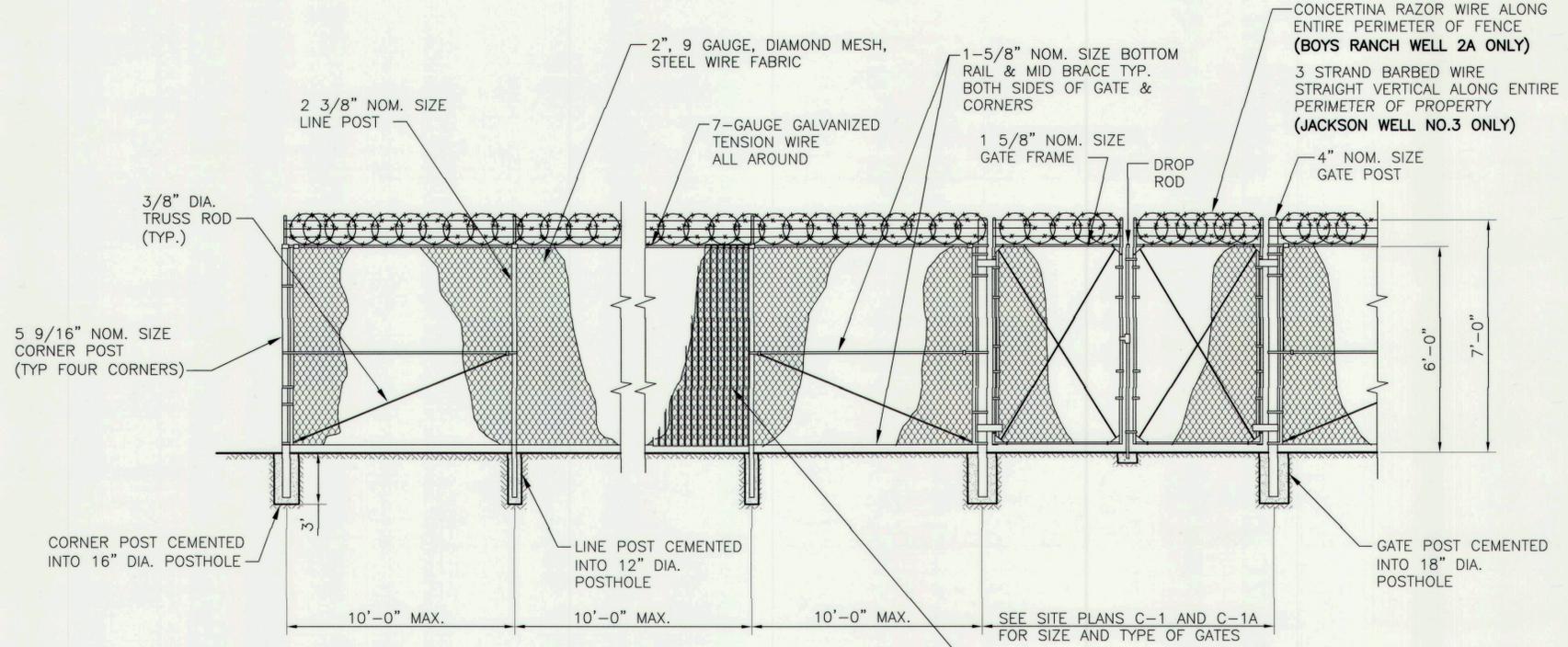
**COMMON TRENCH DETAIL** (A) (C-1)  
NOT TO SCALE

REQUIRED BEARING AREAS IN SQ. FT.							
INSTALLATION	TYPE FITTING	PIPE SIZES					
		4"	6"	8"	10"	12"	14"
	90° ELL	2	4	7	12	16	26
	45° BEND	1	2	4	6	10	15
	22½° BEND	1	1	2	3	5	8
	11¼° BEND						
	TEE	2	3	5	8	12	19
	DEAD END	2	3	5	8	12	19

**NOTES**

- AREAS GIVEN ARE FOR CLASS 150 PIPE AT TEST PRESSURE OF 150 P.S.I. IN SOIL W/1,500 P.S.F. BEARING CAPACITY. INSTALLATIONS USING DIFFERENT DATA SHALL ADJUST AREAS SUBJECT TO ENGINEERS APPROVAL.
- BLOCKING TO BE POURED AGAINST UNDISTURBED SOIL.
- THRUST BLOCKS ARE TO BE FREE, SEPARATE, & INDEPENDENT OF ADJACENT OR NEARBY THRUST BLOCKS.

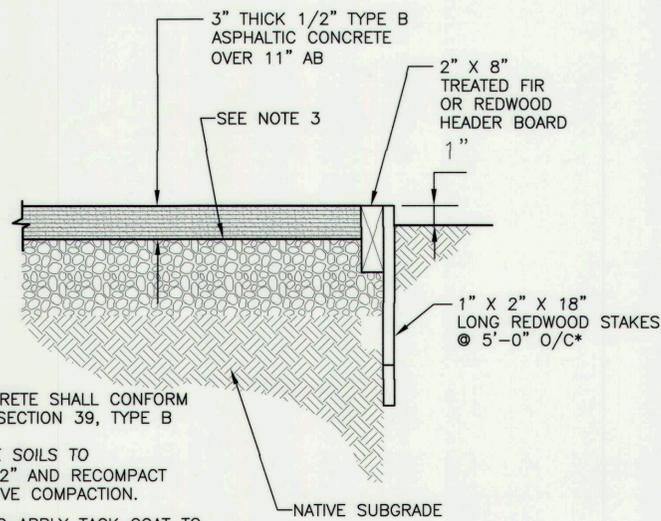
**HORIZONTAL THRUST BLOCK 4"-14" DETAIL** (B) (VAR)  
NOT TO SCALE



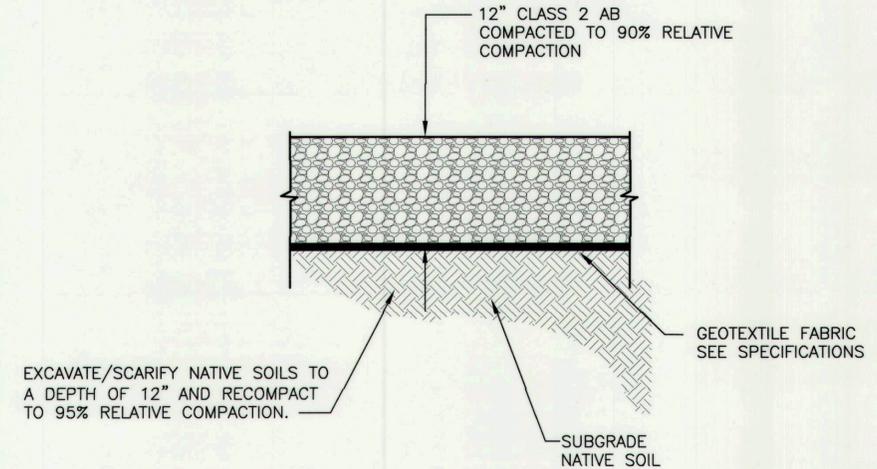
**FENCE** (C) (C-1)  
N.T.S.

**NOTES:**

- ASPHALT CONCRETE SHALL CONFORM TO CALTRANS SECTION 39, TYPE B
- SCARIFY NATIVE SOILS TO A DEPTH OF 12" AND RECOMPACT TO 95% RELATIVE COMPACTION.
- CONTRACTOR TO APPLY TACK COAT TO ALL EDGES.



**PAVEMENT DETAIL** (D) (C-1)  
N.T.S.



**ALL WEATHER ACCESS ROAD** (E) (C-1)  
N.T.S.



CIVIL DETAILS  
Boys Ranch Well #2A and Jackson Well #3 Well Pump Stations  
City of Morgan Hill  
Morgan Hill, California

**LUHOORFF & SCALMANINI CONSULTING ENGINEERS**  
500 FIRST STREET  
WOODLAND, CALIFORNIA  
PHONE: (530) 661-0109

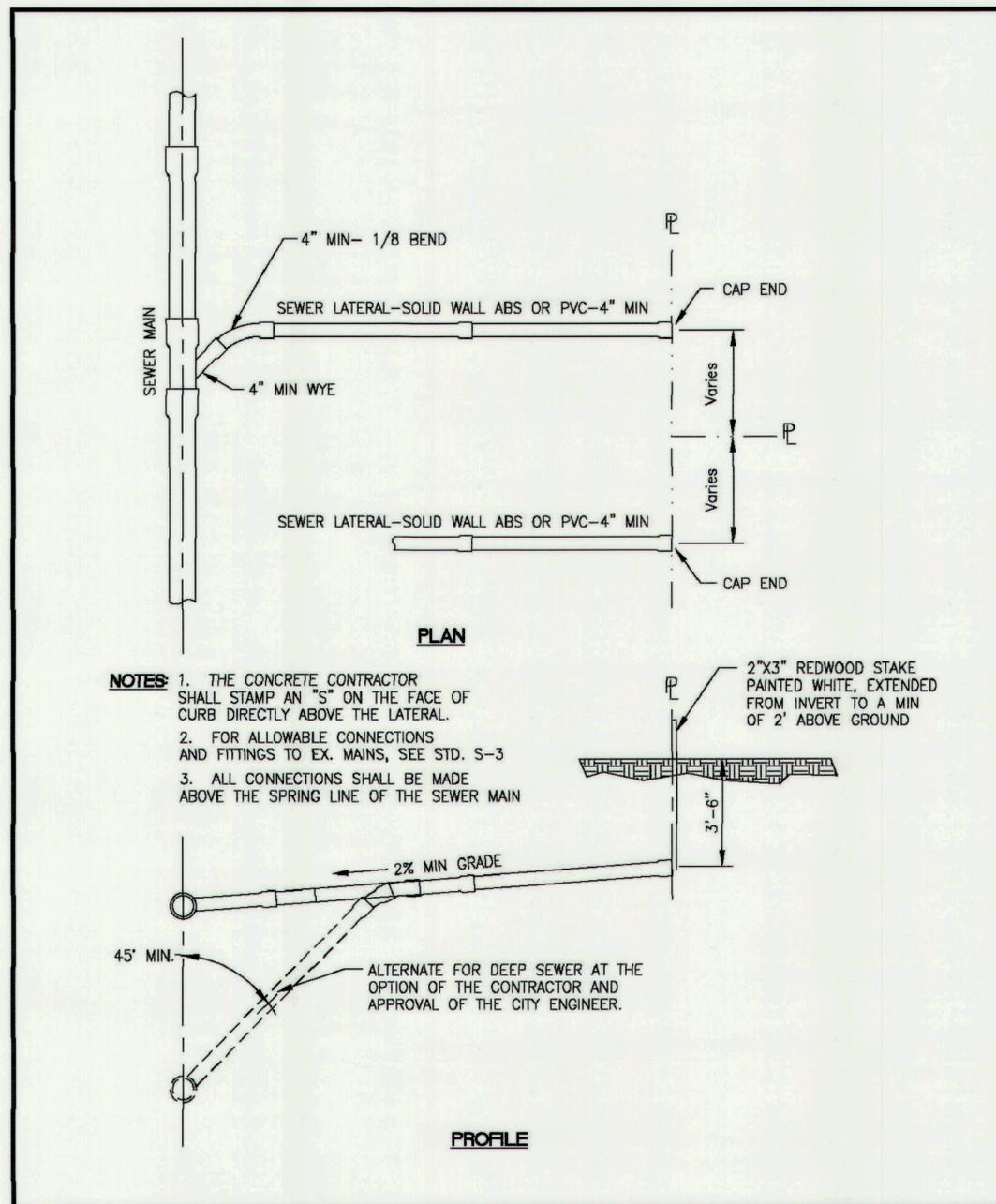
NO.	DATE	REVISION

DATE: MARCH 2017  
JOB NO.: 15-3-053  
DESIGN BY: JMC  
DRAWN BY: DWT  
CHECKED BY: JDF  
FILE: C-3.dwg

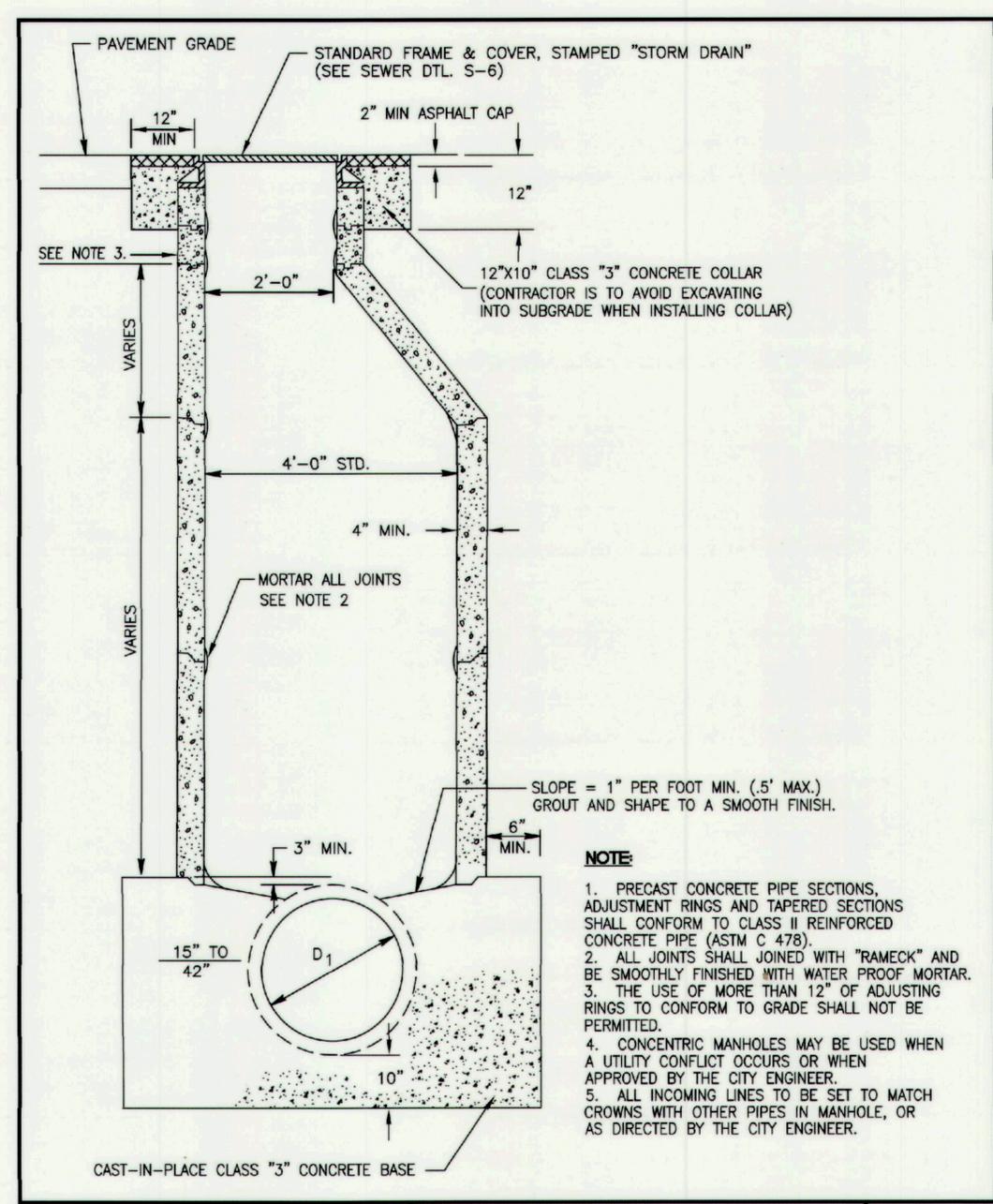
**SHEET:**

**C-3**

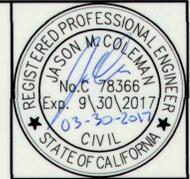
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<b>City of Morgan Hill</b> Public Works Department		DRAWING NO.
CITY ENGINEER	4/1/96 DATE	3/15/07 REVISED
SEWER LATERAL		S-2



<b>City of Morgan Hill</b> Public Works Department		DRAWING NO.
CITY ENGINEER	4/1/96 DATE	3/15/07 REVISED
STORM DRAIN MANHOLE PIPE SIZES 15" TO 42"		SD-1



STANDARD DETAILS  
Boys Ranch Well #2A and Jackson Well #3 Well Pump Stations  
City of Morgan Hill  
Morgan Hill, California

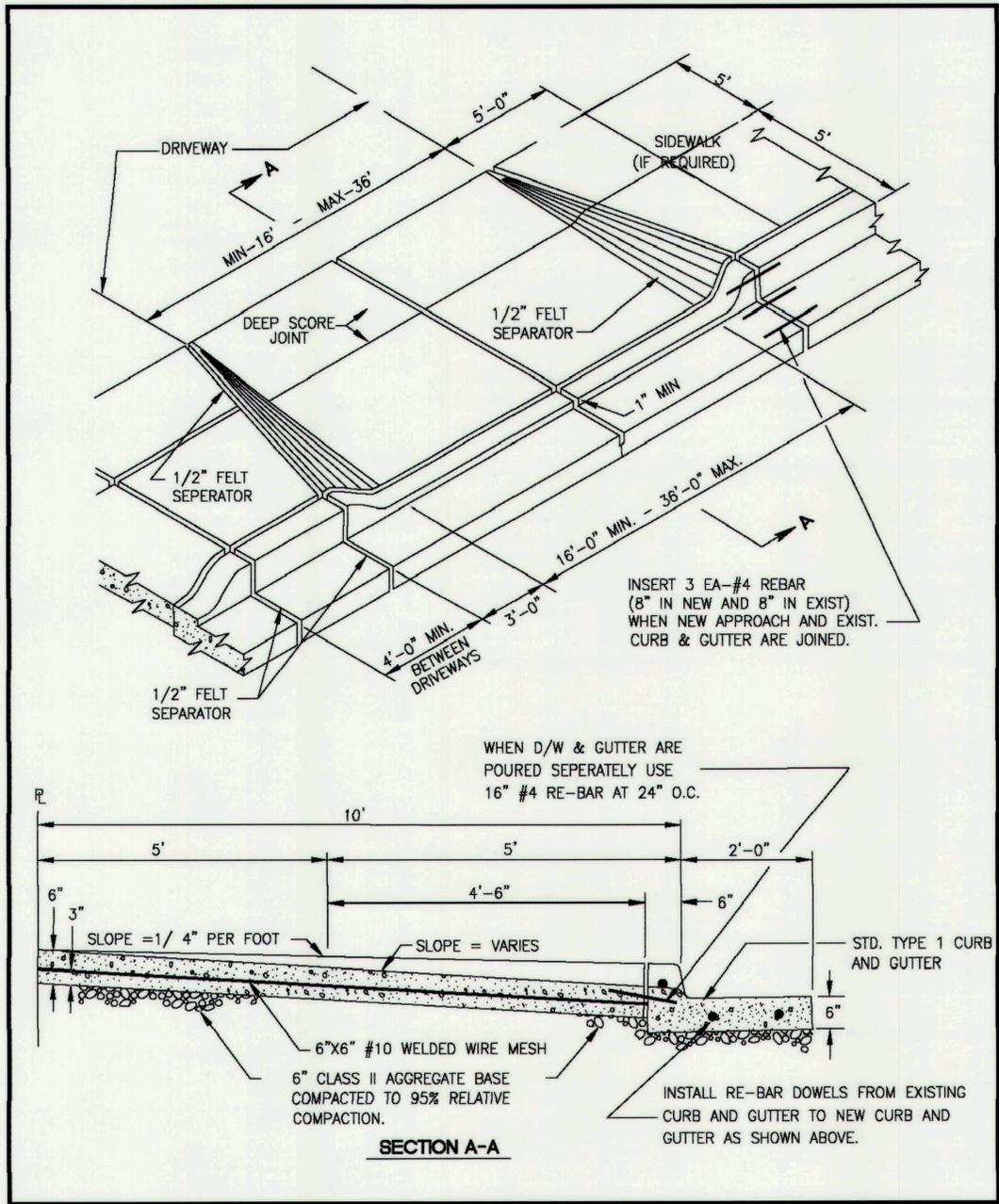
**LUHDOFF & SCALMANINI**  
CONSULTING ENGINEERS  
500 FIRST STREET  
WOODLAND, CALIFORNIA  
PHONE: (530) 661-0109

NO.	DATE	REVISIONS

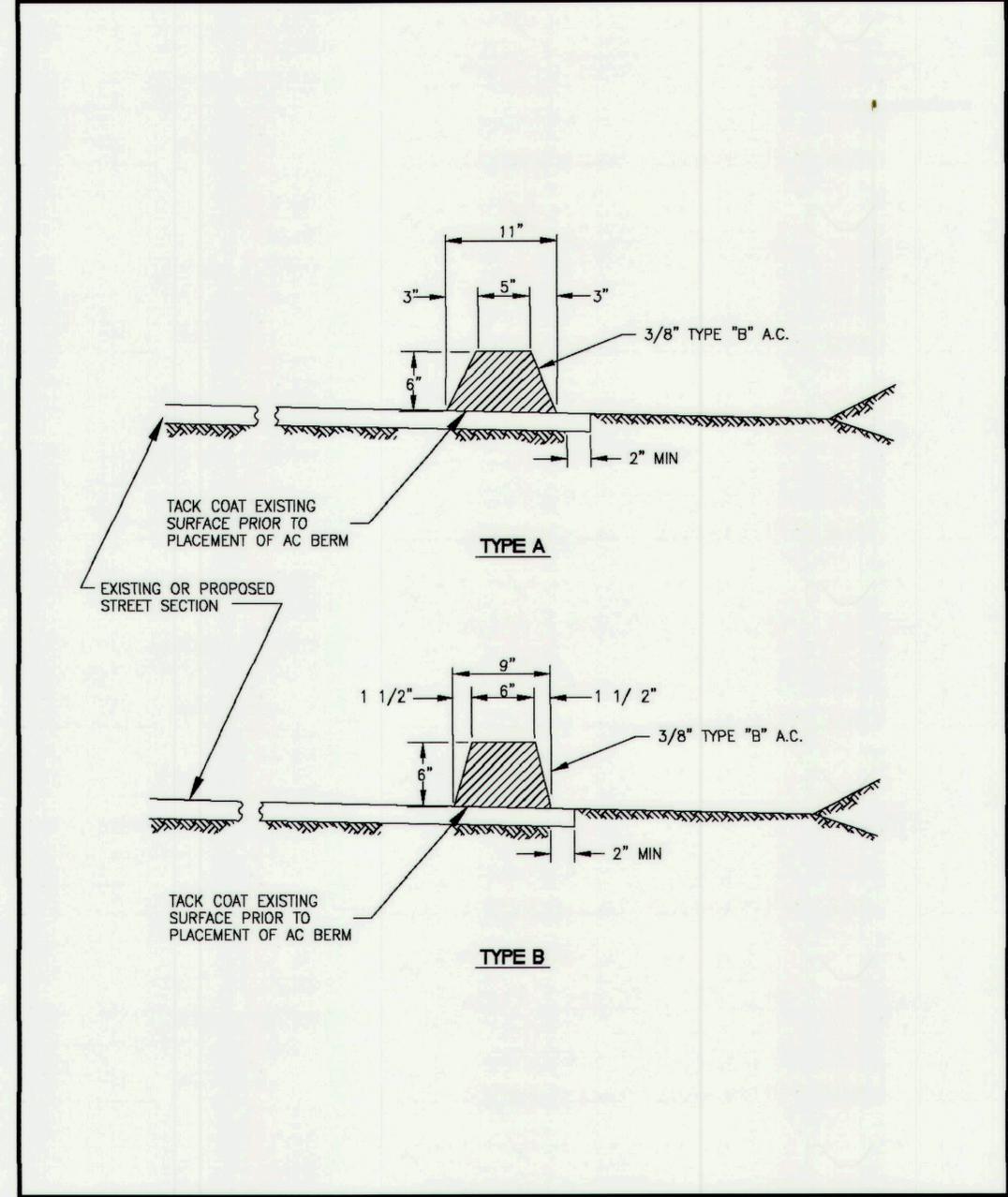
DATE: MARCH 2017
JOB NO.: 15-3-053
DESIGN BY: JMC
DRAWN BY: DWT
CHECKED BY: JDF
FILE: C-4.dwg

SHEET:  
**C-4**

CAD FILE: G:/Projects/City of Morgan Hill/15-3-053/Pump Station/C-5.dwg CFG FILE: LSCE2500.PCP\_MRG DATE: 03-16-17 9:29am



<p><b>City of Morgan Hill</b> Public Works Department</p> <p><i>Jin Oakcraft</i> CITY ENGINEER</p>	4/1/96	3/15/07	<p><b>INDUSTRIAL DRIVEWAY APPROACH COMMERCIAL SIDEWALK</b></p> <p>DRAWING NO. A-10</p>
	DATE	REVISED	



<p><b>City of Morgan Hill</b> Public Works Department</p> <p><i>Jin Oakcraft</i> CITY ENGINEER</p>	4/1/96		<p><b>ASPHALT CONCRETE BERM</b></p> <p>DRAWING NO. A-25</p>
	DATE	REVISED	



STANDARD DETAILS II  
Boys Ranch Well #2A and Jackson Well #3 Well Pump Stations  
City of Morgan Hill  
Morgan Hill, California

**L** LUDHORFF & SCALMANINI  
CONSULTING ENGINEERS  
500 FIRST STREET  
WOODLAND, CALIFORNIA  
PHONE: (530) 661-0109

NO.	DATE	REVISIONS	REVISION

DATE: MARCH 2017  
JOB NO.: 15-3-053  
DESIGN BY: JMC  
DRAWN BY: DWT  
CHECKED BY: JDF  
FILE: C-5.dwg

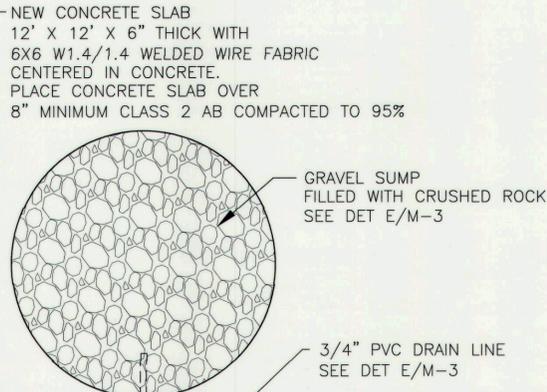
SHEET:  
**C-5**

**SCHEDULE OF MATERIALS**

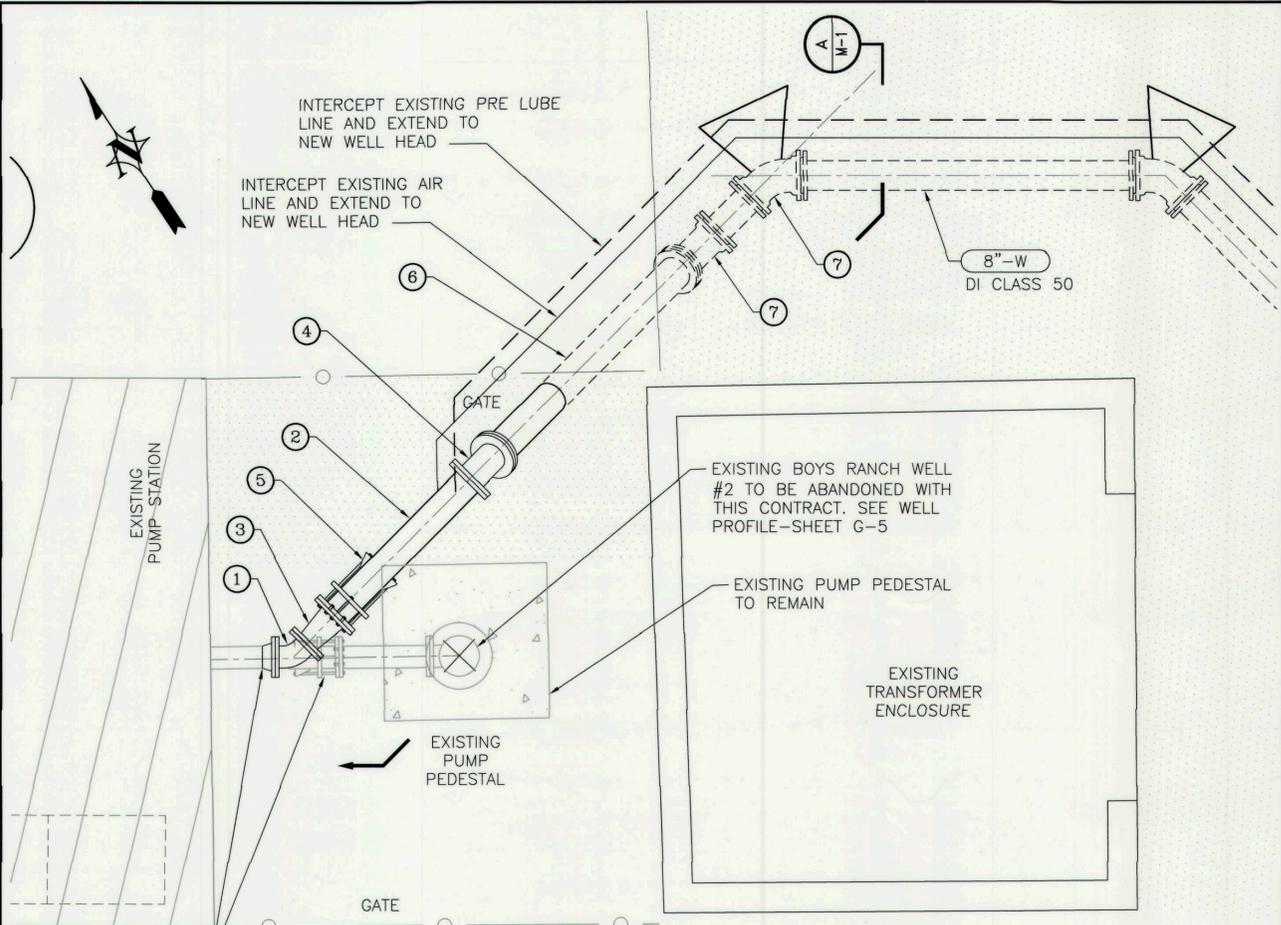
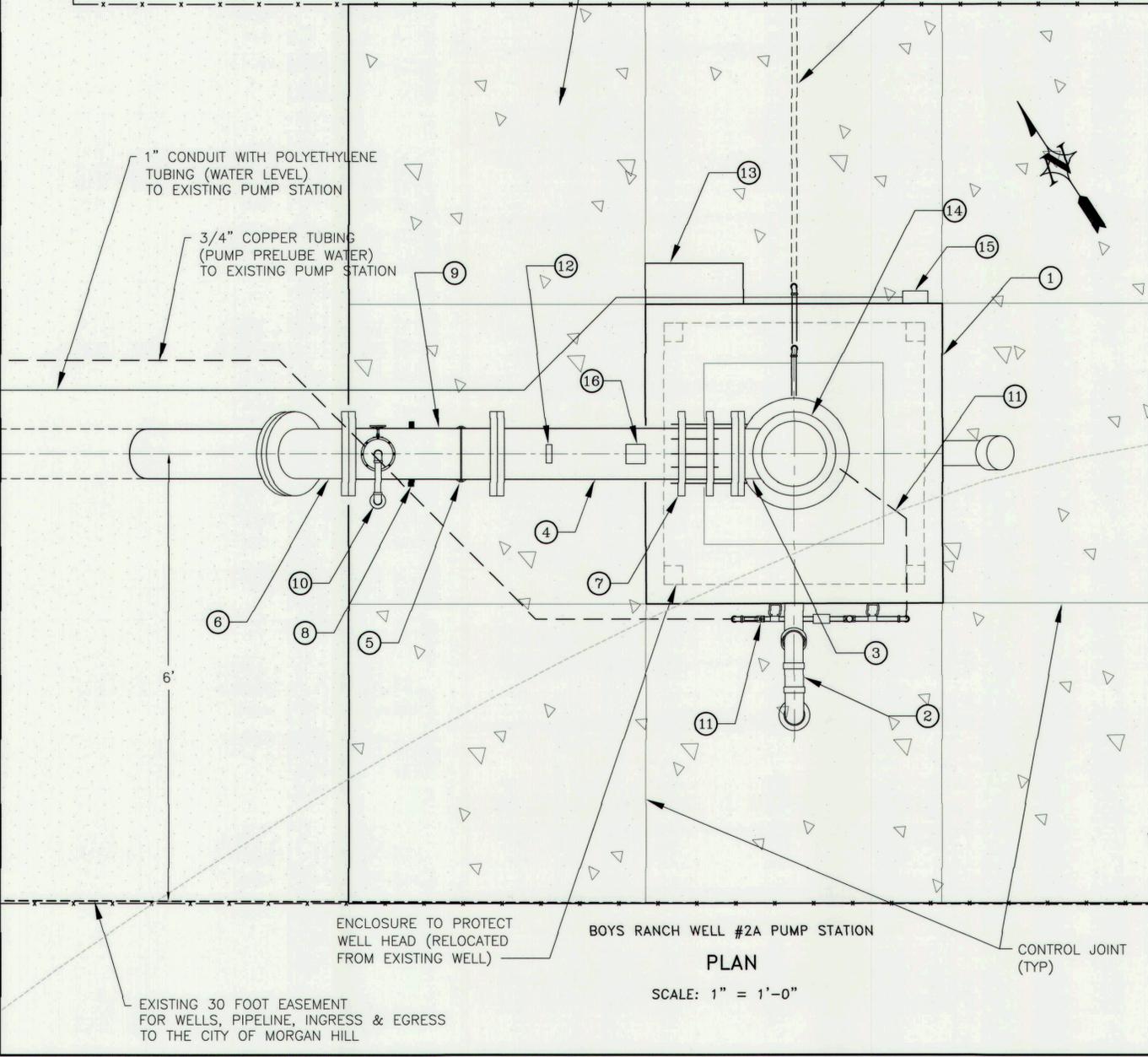
- ① 4' X 4' CONCRETE PEDESTAL, DETAIL A/M-2
- ② 3" CASING VENT, DETAIL B/M-2
- ③ 8" FLANGED, FABRICATED STEEL DISCHARGE HEAD
- ④ 8" X 3'-4" DI SPOOL, FL X PE
- ⑤ 8" ADJUSTABLE PIPE SUPPORT, SEE DET C/M-3
- ⑥ 8" DI 45° ELBOW FL X FL
- ⑦ 8" FLANGED DISMANTLING JOINT, WITH TIE-RODS, DRESSER STYLE 131 OR EQUAL.
- ⑧ TWO, 1/4" THREADED TAPS DIAMETRICALLY OPPOSED W/PLUGS
- ⑨ 8" X 2'-0" DI SPOOL, FL X FL
- ⑩ 2" AIR RELEASE VACUUM VALVE ASSEMBLY, DETAIL B/M-3
- ⑪ WATER LUBE CONNECTION AT WELL, SEE DET E/M-3
- ⑫ 1" HALF COUPLER WITH PRESSURE GAUGE, DETAIL A/M-3
- ⑬ NEW TERMINATION PANEL FOR WELL PUMP POWER CABLE (SEE ELECTRICAL DRAWINGS)
- ⑭ NEW 125 HP VERTICAL TURBINE WELL PUMP (SEE SPECIFICATION 15130)
- ⑮ DOWNHOLE WATER LEVEL ASSEMBLY, SEE DET B/M-4
- ⑯ HIGH PRESSURE SHUT-OFF SWITCH, SEE ELECTRICAL DWGS

**NOTES:**

- 1. THE ELEVATION (CENTERLINE) OF THE STATION PIPING SHALL BE DETERMINED BY THE DIMENSIONS OF THE PUMP DISCHARGE HEAD THAT IS PROVIDED BY THE PUMP MANUFACTURER.
- 2. ALL ABOVE GROUND STEEL PIPES, FITTINGS AND FLANGES SHALL BE LINED AND COATED 12 TO 15 MIL THICKNESS WITH FUSION BONDED EPOXY COATING CONFORMING TO AWWA STANDARD C213. SEE SPECIFICATIONS.



CAD FILE: G:/Projects/City of Morgan Hill/15-3-053/Pump Station/M-1.dwg CFG FILE: LSCE2500.PCP\_MRG DATE: 03-16-17 10:21am

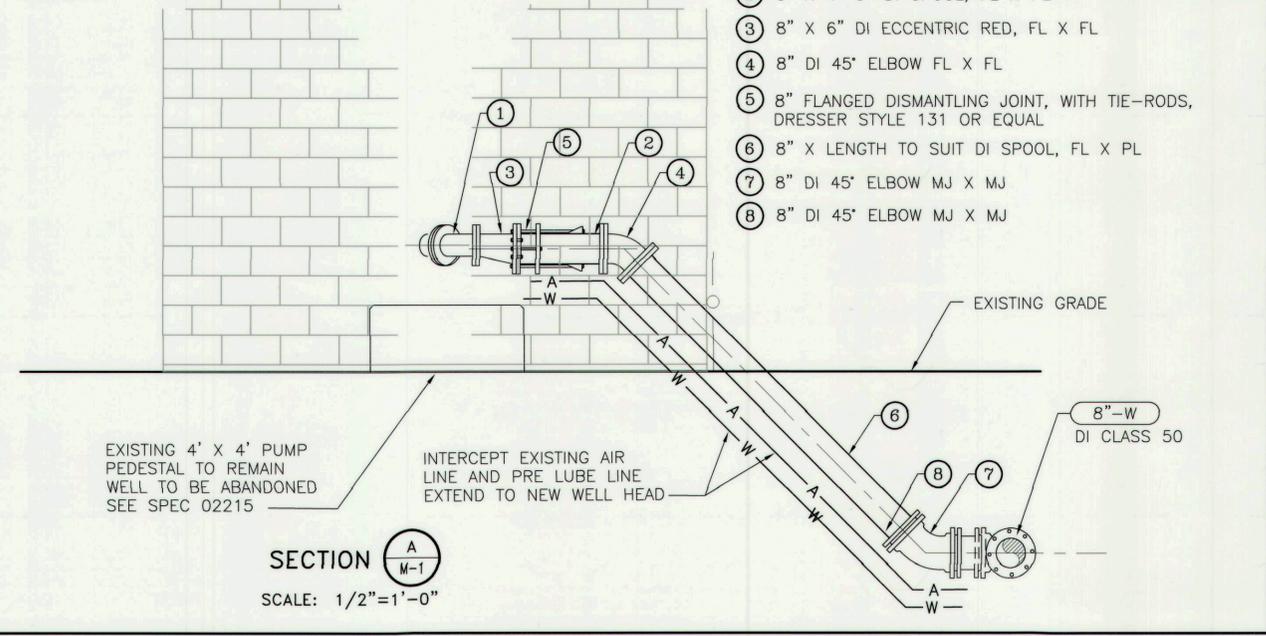


**NOTE:**

REMOVE AND DISPOSE OF EXISTING PIPE/MATERIAL AS DIRECTED BY THE CITY.

**SCHEDULE OF MATERIALS**

- ① 6" DI 45° ELBOW FL X FL
- ② 8" X 4'-3" DI SPOOL, FL X PE
- ③ 8" X 6" DI ECCENTRIC RED, FL X FL
- ④ 8" DI 45° ELBOW FL X FL
- ⑤ 8" FLANGED DISMANTLING JOINT, WITH TIE-RODS, DRESSER STYLE 131 OR EQUAL
- ⑥ 8" X LENGTH TO SUIT DI SPOOL, FL X PL
- ⑦ 8" DI 45° ELBOW MJ X MJ
- ⑧ 8" DI 45° ELBOW MJ X MJ



WELL #2A PUMP STATION PIPING  
Boys Ranch Well #2A and Jackson Well #3 Well Pump Stations  
City of Morgan Hill  
Morgan Hill, California

LUHDOFF & SCALMANINI  
CONSULTING ENGINEERS  
500 FIRST STREET  
WOODLAND, CALIFORNIA  
PHONE: (530) 661-0109

NO.	DATE	REVISIONS

DATE: MARCH 2017  
JOB NO.: 15-3-053  
DESIGN BY: JMC  
DRAWN BY: DWT  
CHECKED BY: JDF  
FILE: M-1.dwg

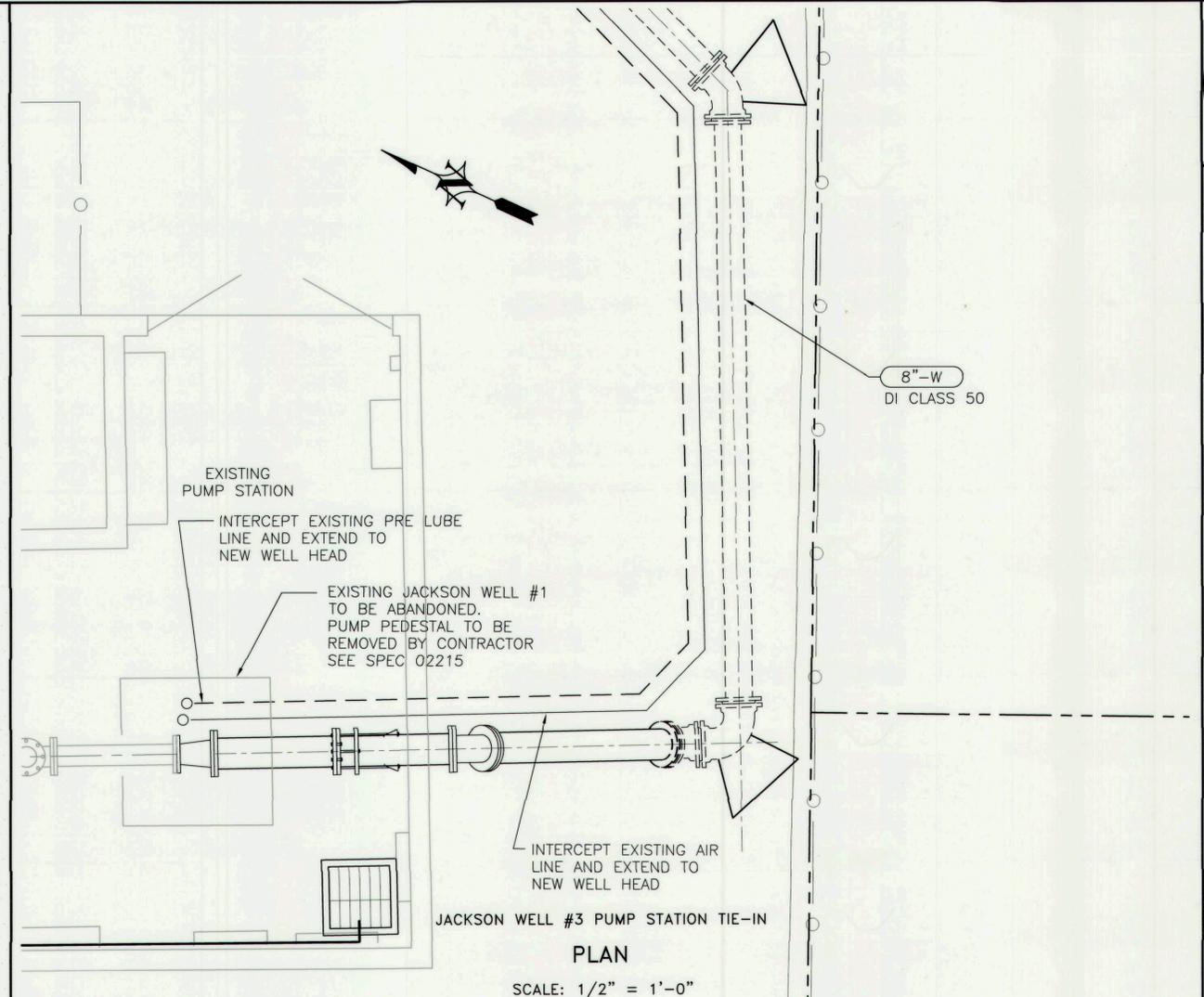
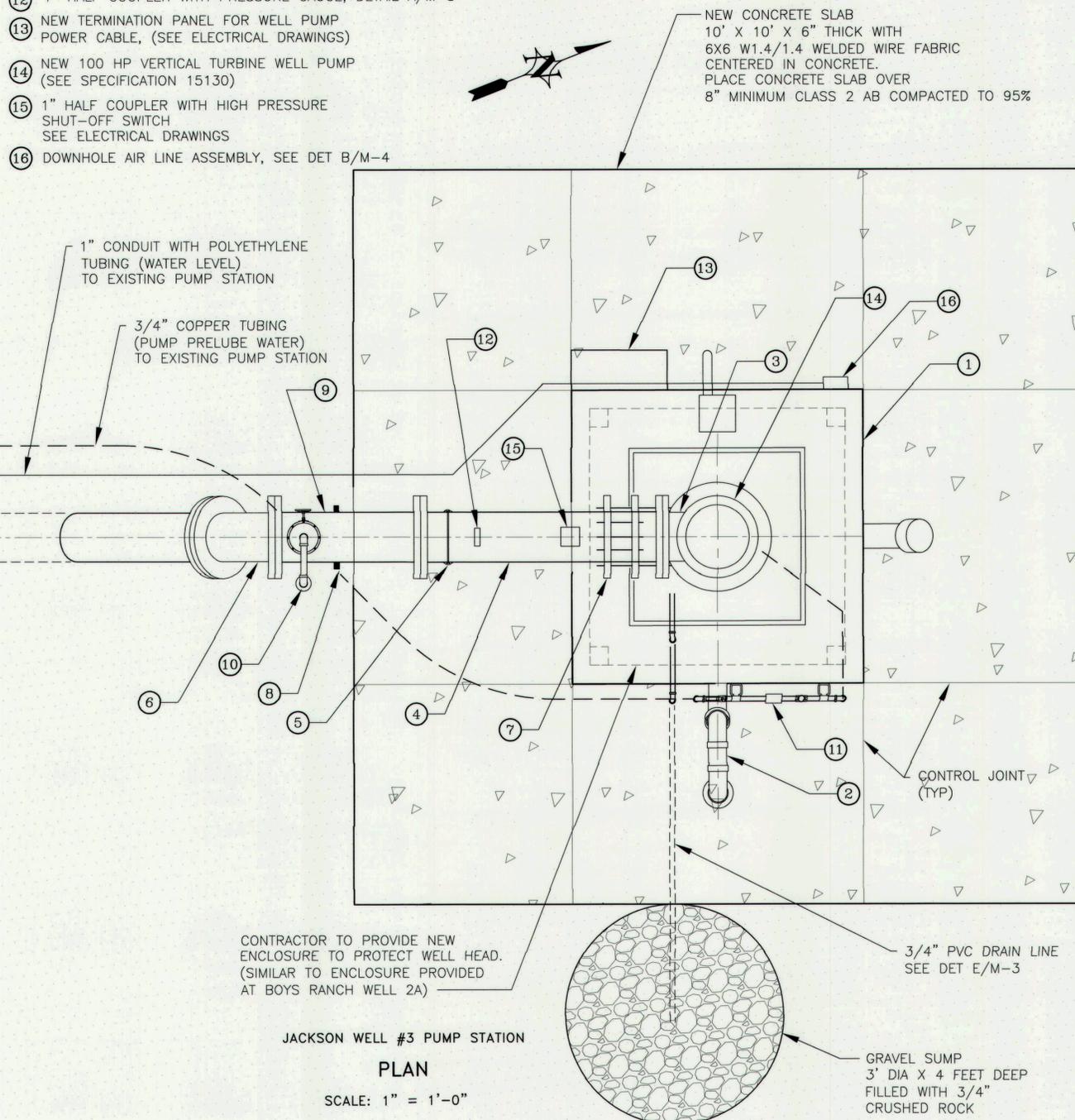
**SHEET:**  
**M-1**

**SCHEDULE OF MATERIALS**

- ① 4' X 4' CONCRETE PEDESTAL, DETAIL B/M-2
- ② 3" CASING VENT, DETAIL B/M-2
- ③ 8" FLANGED, FABRICATED STEEL DISCHARGE HEAD
- ④ 8" X 3'-4" DI SPOOL, FL X PE
- ⑤ 8" ADJUSTABLE PIPE SUPPORT, SEE DET C/M-3
- ⑥ 8" DI 45° ELBOW FL X FL
- ⑦ 8" FLANGED DISMANTLING JOINT, WITH TIE-RODS, DRESSER STYLE 131 OR EQUAL.
- ⑧ TWO, 1/4" THREADED TAPS DIAMETRICALLY OPPOSED W/PLUGS
- ⑨ 8" X 2'-0" DI SPOOL, FL X FL
- ⑩ 2" AIR RELEASE VACUUM VALVE ASSEMBLY, DETAIL B/M-3
- ⑪ WATER LUBE CONNECTION AT WELL, SEE DET E/M-3
- ⑫ 1" HALF COUPLER WITH PRESSURE GAUGE, DETAIL A/M-3
- ⑬ NEW TERMINATION PANEL FOR WELL PUMP POWER CABLE, (SEE ELECTRICAL DRAWINGS)
- ⑭ NEW 100 HP VERTICAL TURBINE WELL PUMP (SEE SPECIFICATION 15130)
- ⑮ 1" HALF COUPLER WITH HIGH PRESSURE SHUT-OFF SWITCH SEE ELECTRICAL DRAWINGS
- ⑯ DOWNHOLE AIR LINE ASSEMBLY, SEE DET B/M-4

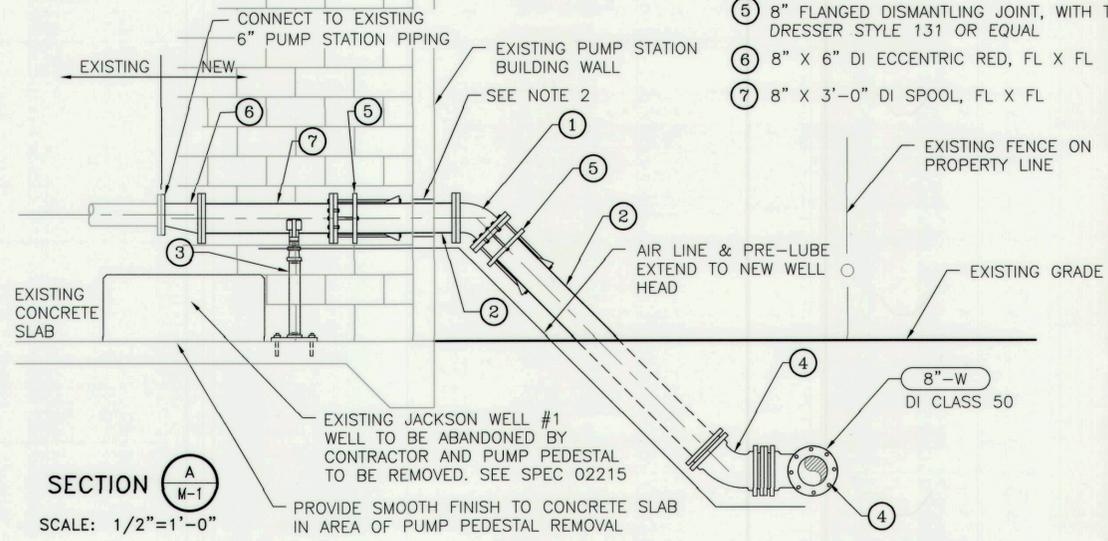
**NOTES:**

- 1. THE ELEVATION (CENTERLINE) OF THE STATION PIPING SHALL BE DETERMINED BY THE DIMENSIONS OF THE PUMP DISCHARGE HEAD THAT IS PROVIDED BY THE PUMP MANUFACTURER.
- 2. ALL ABOVE GROUND STEEL PIPES, FITTINGS AND FLANGES SHALL BE LINED AND COATED 12 TO 15 MIL THICKNESS WITH FUSION BONDED EPOXY COATING CONFORMING TO AWWA STANDARD C213. SEE SPECIFICATIONS.



**NOTES:**

- 1.) REMOVE AND DISPOSE OF EXISTING PIPE/MATERIAL AS DIRECTED BY THE CITY.
- 2.) THE 8" PIPE WALL PENETRATION SHALL BE A 15" DIAMETER HOLE. SEAL WITH CALPICO PIPE LINX, MODEL CSL 57, OR EQUAL.



**SCHEDULE OF MATERIALS**

- ① 8" DI 45° ELBOW FL X FL
- ② 8" X LENGTH TO SUIT DI SPOOL, FL X PE
- ③ 6" ADJUSTABLE PIPE SUPPORT
- ④ 8" DI 45° ELBOW MJ X MJ
- ⑤ 8" FLANGED DISMANTLING JOINT, WITH TIE-RODS, DRESSER STYLE 131 OR EQUAL
- ⑥ 8" X 6" DI ECCENTRIC RED, FL X FL
- ⑦ 8" X 3'-0" DI SPOOL, FL X FL



**JACKSON #3 PUMP STATION PIPING**  
Boys Ranch Well #2A and Jackson Well #3 Pump Stations  
City of Morgan Hill  
Morgan Hill, California

**LUHDOFF & SCALMANINI CONSULTING ENGINEERS**  
500 FIRST STREET  
WOODLAND, CALIFORNIA  
PHONE: (530) 661-0109

NO.	DATE	REVISIONS

DATE: MARCH 2017  
JOB NO.: 15-3-053  
DESIGN BY: JMC  
DRAWN BY: DWT  
CHECKED BY: JDF  
FILE: M-1A.dwg

**SHEET:**  
**M-1A**