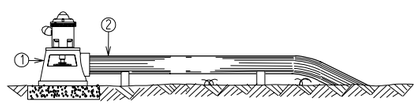
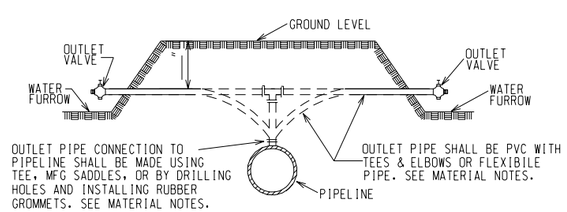
LEGEND

PUMP..... ☒
PIPELINE, MAIN (M) & SUBMAIN (SM) M# or SM#
LATERAL, L..... L#
VALVES:
SHUTOFF..... ⧖
THRUST BLOCK..... ■



1. PUMP AND MOTOR_____GPM AT _____FT.TDH
2. PUMP DISCHARGE PIPE: DIAMETER_____ INCHES
- ◯ AIR-RELEASE VALVE: TYPE_____ DIAMETER_____ INCHES
- ◯ CHECK VALVE ◯ LOW PRESSURE DRAIN
- ◯ PRESSURE GAGE
- ◯ FLOW METER
- ◯ PRESSURE RELEASE VALVE: DIA.____INCHES; PRESSURE SET AT_____PSI
- ◯ SOURCE OF WATER:_____

PUMP SCHEMATIC



TYPICAL- VALVE DETAIL

NOTE: Outlet valves installed at each water furrow. Water furrow may be on one or both sides of pipeline.

GENERAL NOTES

1. INSTALLATION AND MATERIALS SHALL MEET THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) CONSERVATION PRACTICE STANDARDS AND SPECIFICATIONS IRRIGATION SYSTEM, SUBIRRIGATION CODE 754 AND IRRIGATION WATER CONVEYANCE, _____, UNDERGROUND, PLASTIC PIPELINE, CODE 430 _____. ANY PLAN MODIFICATION SHALL BE CLEARLY INDICATED ON THIS DRAWING AND SHALL BE APPROVED BY THE NRCS PRIOR TO INSTALLATION.
2. THE INSTALLER SHALL CERTIFY THAT HIS/HER INSTALLATION COMPLIES WITH THE STANDARDS AND SPECIFICATIONS LISTED ABOVE AND AS SPECIFIED ON THESE PLANS. THE CERTIFICATION SHALL IDENTIFY THE MANUFACTURER AND MARKINGS OF THE PIPE USED. THE INSTALLER (WHEN OTHER THAN THE OWNER) SHALL FURNISH A WRITTEN GUARANTEE TO THE OWNER THAT PROTECTS THE OWNER AGAINST DEFECTIVE WORKMANSHIP AND MATERIALS FOR NOT LESS THAN ONE YEAR. COPIES SHALL BE PROVIDED FOR NRCS RECORDS.
3. ALL PERMITS NEEDED TO INSTALL AND OPERATE THIS SYSTEM SHALL BE THE RESPONSIBILITY OF THE OWNER.
4. THE IRRIGATION SYSTEM SHALL BE OPERATED IN ACCORDANCE WITH THE IRRIGATION WATER MANAGEMENT PLAN.

MATERIAL NOTES

1. PIPE MATERIAL- MAINS AND SUBMAINS

NOM PIPE SIZE,IN	PIP OR IPS	SDR NO.	MATERIAL (PVC 1120,ETC)	PRESSURE RATING PSI	INSIDE DIAM. IN	LENGTH FT

2. APPURTENANCES (THRUST BLOCKS, VALVES, ETC.)

TYPE	SIZE	QUANTITY	LOCATION

CONSTRUCTION NOTES

1. SEE CONSERVATION PRACTICE STANDARD CODE 430 SPECIFICATIONS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
2. DEPTH OF COVER FOR PIPELINE - MAINS AND SUBMAINS
   DIAMETER, IN. ----- ----- ----- ----- ----- ----- -----
   DEPTH OF COVER, IN ----- ----- ----- ----- ----- ----- -----
3. PRESSURE RELIEF VALVES SHALL BE SET TO OPEN AT A PRESSURE NOT GREATER THAN 5 PSI ABOVE THE PRESSURE RATING OF THE PIPE. PRESSURE RELIEF VALVES SHALL BE MARKED AT THE PRESSURE THEY START TO OPEN. ADJUSTABLE VALVES SHALL BE SEALED OR OTHERWISE ALTERED TO PREVENT CHANGING THE PRESSURE MARKED ON THE VALVE.
4. PLASTIC PIPE EXPOSED TO DIRECT SUNLIGHT SHALL BE MADE OF ULTRAVIOLET RESISTANCE MATERIALS OR PROTECTED BY COATING OR SHIELDING.
5. PIPELINES CROSSING ROADS, CANALS, ETC., SHALL BE PROTECTED AND/OR SUPPORTED.
6. AIR-RELEASE VALVES SHALL BE INSTALLED ON ALL SUMMITS, WHICH ARE NOT PERMANENTLY AND ADEQUATELY VENTED TO THE ATMOSPHERE, AND ALL SUMMITS ENCOUNTERED DURING CONSTRUCTION ALTHOUGH NOT SHOWN ON THE DRAWINGS. AIR-RELEASE VALVES AT SUMMITS SHOWN ON THE DRAWINGS MAY BE ELIMINATED WHEN TRENCH CONSTRUCTION REMOVES THE SUMMIT.
7. JOINTS AND CONNECTIONS SHALL BE INSTALLED IN CONFORMANCE WITH CONSERVATION PRACTICE STANDARD, IRRIGATION WATER CONVEYANCE, CODE 430.
8. PUMP, POWER UNIT, FILTER, CHEMICAL INJECTORS AND OTHER APPURTENANCES SHALL BE INSTALLED ON A FIRM BASE AND IN PROPER ALIGNMENT. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION AND ALL PERTINENT SAFETY CODES.
9. THE IRRIGATION SYSTEM SHALL BE TESTED FOR DESIGN OPERATING PRESSURES, DISCHARGE RATES, LEAKAGE AND PROPER FUNCTIONING. DURING THE INITIAL START UP, THE PIPELINES AND LATERALS SHALL BE FLUSHED FOR SUFFICIENT TIME TO REMOVE ANY SEDIMENT OR FOREIGN MATERIAL PRIOR TO THE PLACEMENT OF END PLUGS OR CLOSURE OF FLUSH VALVES.

OPERATION NOTES

1. SYSTEM DESIGN CAPACITY SHALL BE BASED ON_____GPM/ACRE.
   FIELD NO.: ----- ----- ----- ----- ----- ----- ----- -----
   ACRES: ----- ----- ----- ----- ----- ----- ----- -----
   GPM: ----- ----- ----- ----- ----- ----- ----- -----
2. ADJUST OUTLET VALVES SO THAT WATER IN ALL THE WATER FURROWS REACHES THE
3. REMARKS:
   DISTANT END AT THE SAME TIME. OPEN ALL VALVES BEFORE STARTING THE PUMP.

CONSTRUCTION CHECK

DATE INSTALLED:_____CONTRACTOR: _____

FINAL CONSTRUCTION CHECK BY:_____DATE:_____

THIS PRACTICE MEETS NRCS PRACTICE STANDARDS AND SPECIFICATIONS.

CERTIFIED BY:_____ DATE:_____
(SIGNATURE)

REVISIONS		
DATE	APPROVED	TITLE

Designed	
Drawn	
Checked	
Approved	
Date	

NRCS
NATURAL RESOURCES CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

File No.

Drawing No.

Sheet of

SUBIRRIGATION SYSTEM PLAN	
STANDARD DWG. NO. FL- 754	
DATE 12/02	SHEET OF