PLAN
1/4" = 1'-0"
Existing High Vel. Flume Pipe
12" Plug Valve
8" Plug Valve
Space for backwater
Location of instrument house
13 - 1 3/4" x 1 3/8" grooves 4'-0" o.c.
DEBRIS BASIN
Recess into wall 3" x 4" deep
Removable conc. lid - cast in sections
50'-6 5/8" (50.51')
8'-0"
6'-2"
1'-4"
11'-0"
ELEVATION
1/4" = 1'-0"
71'-0 5/8" (71.01')
Flume slope 2.3%
slope 1%
52'-0 5/8" (52.81')
14'-0"
5'-0"
TYPICAL FLUME SECTION B-B
1/2" = 1'-0"
Horiz. steel - 3-1/2" ϕ at 12"
Vert. steel - 1/2" ϕ at 9"
10'-0"
1 3/4" x 1 3/8" grooves
Slab steel 18" both ways 1/2" ϕ
1/2" ϕ at 12"
Wall 2" above ground lev.
SECTION A-A
1/2" = 1'-0"
12" I.D. x 0'-9" std. wt. pipe nipple
Groove for Victaulic couplings
Slab center steel 1/2" ϕ at 18" both ways - 3" clear
1/2" ϕ at 9"
1/2" ϕ at 18"
1/2" ϕ at 18" both ways
15'-2"
SECTION E-E
1/2" = 1'-0"
2" above ground lev.
Bracket extend length of wall
4" C ϕ @ 6"
12" discharge
4" flow sub. in pipe trench
Weld for 2"-3"
Victaulic Coupling
12" x 10" concentric reducing nipple
Pump
10" suction
Vert. - 1/2" ϕ at 12"
Horiz. - 1/2" ϕ at 12"
5'-2"
SECTION D-D
1/2" = 1'-0"
DEBRIS BASIN
STORAGE TANK
3" pipe line for 3" Irrig. gate valve
slope 3" to outlet
Existing ground level
1/2" ϕ at 12" ϕ 4" horiz. at center bend to top at outside
1/2" ϕ at 6" ϕ 4" horiz. at center bend to top at outside
STORAGE TANK
850 cu. ft. capacity
6" x 18" conc. beam
8" opening for 8" Irrig. gate valve
Vert. steel 1/2" ϕ at 9"
Horiz. steel 1/2" ϕ at 18"
1/2" ϕ at 18" both ways
Vert. - 1/2" ϕ at 9"
Horiz. - 1/2" ϕ at 12"
Floor center steel 1/2" ϕ at 18" both ways
14'-0"
SECTION C-C
1/2" = 1'-0"
Bracket to support removable conduit
slope 2" to outlet
4 - 1/2" ϕ as shown in the side walls
STORAGE TANK
Wall 2" above ground level
Pump
Victaulic coupling
Floor center steel 1/2" ϕ at 18" both ways
10'-0"
"Stitted bet. pole"
4" C ϕ 3.4 lbs
Weld reinforcing bars to channel
Detail showing channel imbedded flush with top of flume walls for bolting on super-structure -
1/4 size
Notes - Leave 1'-0" x 1'-0" x 1'-0" recess below bottom of all Irrig. gates -
After pipe line installed fill in recess flush with bottom of gate opening -
All reinforcing steel should lap 12" at corners where possible -
6" x 18" conc. beam
SECTION F-F
1" = 1'-0"
CLOSED CIRCUIT MODEL BASIN
COOPERATIVE LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA - CALIF.
U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
H.H. BENNETT - CHIEF
Stepanek, Lowry, Parker
Vela A. Vampa
7-11-36
P-170