

UTILITY PRECAUTIONS

THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE, MUNICIPAL, AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION. HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

LEGEND:

TOP OF CURB ELEVATION = $TC = 82.50$
 CURB FLOWLINE ELEVATION = $FL = 81.82$
 EXISTING SPOT ELEVATION = $SS = 81.25$
 EXISTING CONTOUR ELEVATION = $CE = 82.0$
 PROPOSED SPOT ELEVATION = $PS = 82.50$
 PROPOSED CONTOUR ELEVATION = $PC = 82.0$
 PROPOSED OR EXISTING CONCRETE SURFACE = CS
 EXISTING FENCE LINE = FL

GENERAL NOTES:

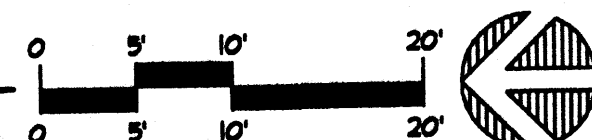
- NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.

APPROVALS	NAME	DATE
HYDROLOGY INSPECTOR		

NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PERFORMED UNDER SEPARATE PERMIT.

GRADING & DRAINAGE PLAN

SCALE: 1" = 10'

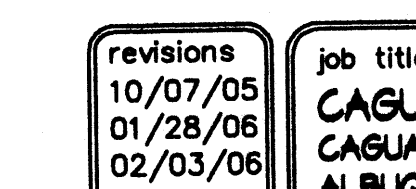


Worksheet	
Worksheet for Triangular Channel	
Project Description	Worksheet
Project File	C:\Users\m\m\cagua\to\m2
Worksheet	CAGUA CHANNEL
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth
Input Data	
Manning's Coefficient	0.013
Channel Slope	0.0000 %
Left Side Slope	3.000000 ft (H:V)
Right Side Slope	3.000000 ft (H:V)
Discharge	0.70 cfs
Results	
Depth	0.29 ft
Flow Area	0.26 ft²
Wetted Perimeter	1.85 ft
Top Width	1.75 ft
Critical Depth	0.32 ft
Critical Slope	0.004864 ft/ft
Velocity	2.74 ft/s
Velocity Head	0.12 ft
Specific Energy	0.41 ft
Froude Number	1.26
Flow is supercritical.	

Worksheet	
Worksheet for Circular Channel	
Project Description	Worksheet
Project File	C:\Users\m\m\cagua\to\m2
Worksheet	CAGUA 6 INCH
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Full Flow Capacity
Input Data	
Manning's Coefficient	0.010
Channel Slope	0.0000 %
Diameter	6.00 in
Results	
Depth	6.00 in
Discharge	1.22 cfs
Flow Area	0.35 ft²
Wetted Perimeter	2.09 ft
Top Width	0.00 ft
Critical Depth	0.52 ft
Percent Full	100.00
Critical Slope	0.000950 ft/ft
Velocity	3.49 ft/s
Velocity Head	0.19 ft
Specific Energy	FULL
Froude Number	FULL
Minimum Discharge	1.31 cfs
Full Flow Capacity	1.22 cfs
Full Flow Slope	0.000000 ft/ft

ONE PIPE HEADWALL DETAIL

N.T.S.



1. COMPACT BOTTOM OF EXCAVATION AND BACKFILL TO 90% ASTM D-1557.

2. USE GR. 60 REBAR

3. USE 4000 PSI PCC @ 28 DAYS.

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