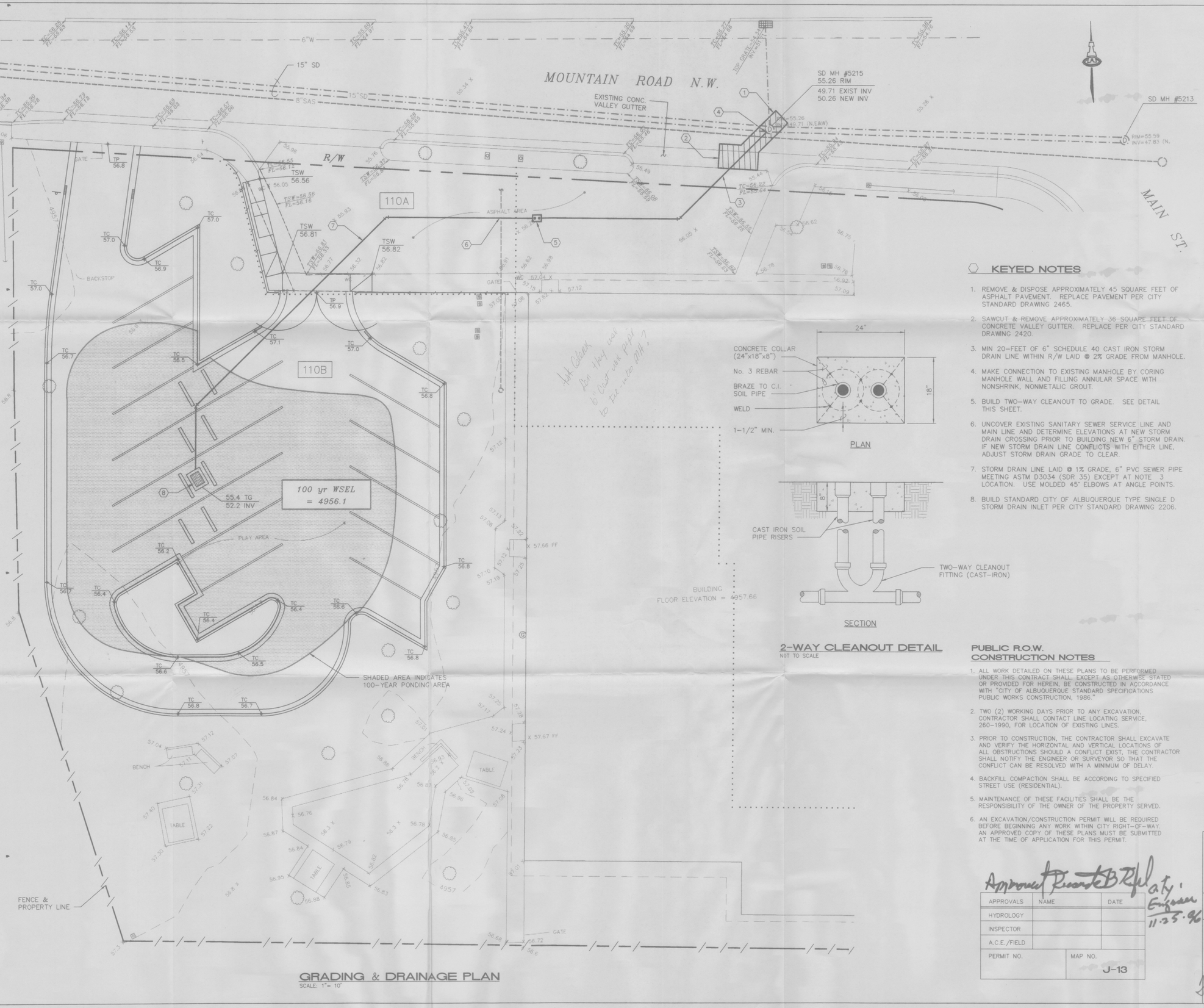

GRADING & DRAINAGE PLAN
SCALE: 1"= 10'

2-WAY CLEANOUT DETAIL
NOT TO SCALE

KEYED NOTES

1. REMOVE & DISPOSE APPROXIMATELY 45 SQUARE FEET OF ASPHALT PAVEMENT. REPLACE PAVEMENT PER CITY STANDARD DRAWING 2465.
2. SAWCUT & REMOVE APPROXIMATELY 36 SQUARE FEET OF CONCRETE VALLEY GUTTER. REPLACE PER CITY STANDARD DRAWING 2420.
3. MIN 20-FEET OF 6" SCHEDULE 40 CAST IRON STORM DRAIN LINE WITHIN R/W LAID @ 2% GRADE FROM MANHOLE.
4. MAKE CONNECTION TO EXISTING MANHOLE BY CORING MANHOLE WALL AND FILLING ANNULAR SPACE WITH NONSHRINK, NONMETALIC GROUT.
5. BUILD TWO-WAY CLEANOUT TO GRADE. SEE DETAIL THIS SHEET.
6. UNCOVER EXISTING SANITARY SEWER SERVICE LINE AND MAIN LINE AND DETERMINE ELEVATIONS AT NEW STORM DRAIN CROSSING PRIOR TO BUILDING NEW 6" STORM DRAIN. IF NEW STORM DRAIN LINE CONFLICTS WITH EITHER LINE, ADJUST STORM DRAIN GRADE TO CLEAR.
7. STORM DRAIN LINE LAID @ 1% GRADE, 6" PVC SEWER PIPE MEETING ASTM D3034 (SDR 35) EXCEPT AT NOTE 3 LOCATION. USE MOLDED 45° ELBOWS AT ANGLE POINTS.
8. BUILD STANDARD CITY OF ALBUQUERQUE TYPE SINGLE D STORM DRAIN INLET PER CITY STANDARD DRAWING 2206.

PUBLIC R.O.W. CONSTRUCTION NOTES

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS PUBLIC WORKS CONSTRUCTION, 1986."
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE, 260-1990, FOR LOCATION OF EXISTING LINES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
4. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE (RESIDENTIAL).
5. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
6. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.

Approved Ricardo B. Rel... City Engineer 11-25-96

APPROVALS	NAME	DATE
HYDROLOGY		
INSPECTOR		
A.C.E./FIELD		
PERMIT NO.	MAP NO. J-13	

GENERAL INFORMATION

1. Legal Description: Lots 3 and 4, Block 'B', John M. Moore Realty Company's Third Addition and Tracts 240A and 240B, MRGCD Map No. 38.
2. Permanent Bench Mark: ACS Monument "5-J13", Elev. = 4957.87.
3. Temporary Bench Mark: Finish Floor of existing building at doorway 58' south of northwest building corner. Elev. = 4957.66.
4. Area: 1.04 acres.
5. Surveys: Aldrich Land Surveying, August 1996.
6. Flood Hazard Statement: Per FIRM Panel 28, the site is not within a Flood Hazard Zone.
7. Soils: Per the SCS Soil Survey Map of Bernalillo County (Panel 30) the site soils are classified as Agua Soil Series, Hydrologic Soil Group B.
8. Existing Site Use: The existing site has a multipurpose building for youth activities with parking, landscaping, and play areas.
9. Proposed Development: A new 9,500 square foot, 19-space parking lot is proposed.

EXISTING DRAINAGE CONDITIONS

The site drains to the adjoining streets, Mountain Road to the north and Main Street to the east. Existing runoff is analyzed for two Drainage Basins, 10 and 20 (See Sheet 1). Site is located within Precipitation Zone 2.

Basin 10 Calculations
A_A = 0, A_B = 0.28 ac, AC = 0.14 ac, AD = 0.20 ac
Q_{100} = 0.28(2.28) + 0.14(3.14) + 0.20(4.70) = 2.0 cfs
Q_{10} = 0.28(0.95) + 0.14(1.71) + 0.20(3.14) = 1.1 cfs

Basin 20 Calculations
A_A = 0, A_B = 0.06 ac, AC = 0, AD = 0.36 ac
Q_{100} = 0.06(2.28) + 0.36(4.70) = 1.8 cfs
Q_{10} = 0.06(0.95) + 0.36(3.14) = 1.2 cfs

PROPOSED DRAINAGE CONCEPT

The new parking lot will be constructed to drain to a centrally located drainage inlet. The inlet will connect to the existing City Storm Drain System located in Mountain Road with a 6-inch diameter drain line which will limit the drainage outfall rate.

Basin 110A is the developed portion of Basin 10 which flows directly to Mountain Road. Basin 110B is the developed portion of Basin 10 which drains to the Parking Lot drainage inlet.

Basin 110A Calculations
A_A = A_B = A_C = 0, A_D = 0.04 ac
Q_{100} = 0.04(4.70) = 0.2 cfs
Q_{10} = 0.04(3.14) = 0.1 cfs

Basin 110B Calculations
A_A = 0, A_B = 0.09 ac, A_C = 0.13 ac, A_D = 0.36 ac
Q_{100} = 0.09(2.28) + 0.13(3.14) + 0.36(4.70) = 2.3 cfs
Q_{10} = 0.09(0.95) + 0.13(1.71) + 0.36(3.14) = 1.4 cfs
From Supplemental Calculations:
Q_{100} to City Storm Drain = 1.2 cfs

Q100 Runoff Summary:
Basin 110A = 0.2 cfs
Basin 110B (to City SD) = 1.2 cfs
Total 1.4 cfs

Therefore site runoff will be decreased by
2.0 − 1.4 = 0.6 cfs

LEGEND

TC	TOP OF CURB ELEV.
TP	TOP OF PAVEMENT ELEV.
TSW	TOP OF SIDEWALK ELEV.
TG	TOP OF GRATE ELEV.
INV	INVERT ELEVATION
WSEL	WATER SURFACE ELEV.
TC=56.22	EXISTING ELEVATION
.....	DRAINAGE BASIN BOUNDARY
110A	DRAINAGE BASIN No.

PARKING LOT IMPROVEMENTS FOR THE OLDTOWN BOYS & GIRLS CLUB

GRADING & DRAINAGE PLAN

RECEIVED MAR 03 1997 HYDROLOGY SECTION

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NEW MEXICO NO. 3894 THOMAS O. ISAACSON 11-20-96

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

915GRD.DWGdlv | 11/20/96

SHEET 2 OF 6