

#### GRADING/DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING LOT 10, BLOCK41, BELAIR SUBDIVISION (4011 MENAUL BOULEVARD N.E.) ARE CONTAINED HEREON:

#### EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 0.172 ACRES MORE OR LESS, AND IS LOCATED EAST OF THE INTERSECTION OF MENAUL BLVD. N.E. AND MORNINGSIDE DRIVE N.E., ON THE NORTH SIDE OF MENAUL BLVD. N.E. THE SITE IN ITS EXISTING CONDITION IS FULLY DEVELOPED WITH AN EXISTING 4570 SQ. FT. BUILDING AND ASSOCIATED PARKING AREAS. ACCORDING TO THE FLOOD INSURANCE RATE MAPS, PANEL 0351E, DATED NOVEMBER 19, 2003, THIS SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE.

#### PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/DRAINAGE PLAN, THE PROPOSED DEVELOPMENT WILL CONSIST OF AN 820 SQ. FT. GARAGE ADDITION AT THE REAR OF THE EXISTING BUILDING. HISTORICALLY THE RUN-OFF ENTERS THE EXISTING 16' FOOT PUBLIC ALLEY AND TRAVELS WEST TOWARDS MORNINGSIDE DR. N.E. THE ALLEY CONSISTS OF ASPHALT MILLINGS THAT THE CITY STREET MAINTENANCE DEPARTMENT HAS PLACED THERE. THE ASPHALT AND CONCRETE ON WHICH THE PROPOSED GARAGE IS GOING TO BE BUILT ON HAS BEEN REMOVED. THE CALCULATIONS, WHICH APPEAR HEREON, ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRES AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2 WAS USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME GENERATED.

PROJECT AREA = 0.172 ac. STORAGE ADDITION FOR 4011 MENAUL BLVD. N.E. ZONE 2

PRECIPITATION: 360 = 2.35 in. 1440 = 2.75 in. 10day = 3.95 in.

**EXCESS PRECIPITATION:** PEAK DISCHARGE:

TREATMENT A 0.53 in. 1.56 cfs/ac. TREATMENT B 0.78 in. 2.28 cfs/ac. TREATMENT C 1.13 in. 3.14 cfs/ac. TREATMENT D 2.12 in. 4.70 cfs/ac.

**EXISTING CONDITIONS:** PROPOSED CONDITIONS: AREA TREATMENT A 0 ac.

0 ac. TREATMENT B 0 ac. 0 ac. TREATMENT C 0.029 ac. 0.019 ac. TREATMENT D 0.143 ac. 0.153 ac.

# EXISTING EXCESS PRECIPITATION:

Weighted E = (0.53)x(0.00) + (0.78)x(0.00) + (1.13)x(0.03) + (2.12)x(0.14)/0.17 ac. = 1.95 in.

### V100-360 = (1.95)x(0.17)/12 = 0.027994 ac-ft = 1219 CF EXISTING PEAK DISCHARGE:

 $Q100 = (1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (0.03) + (4.70) \times (0.14) = 0.76 CFS$ PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.53)x(0.00) + (0.78)x(0.00) + (1.13)x(0.02) + (2.12)x(0.15)/0.17 ac. V100-360 = (2.01)x(0.17)/12.0 = 0.028819 ac-ft = 1255 CF

V100-1440 = (0.03)+(0.15)x(2.75-2.35)/12 = 0.033919 ac-ft = 1478 CF

V100-10day = (0.03)+(0.15)x(3.95-2.35)/12 = 0.049219 ac-ft = 2144 CF PROPOSED PEAK DISCHARGE:

 $Q100 = (1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (0.02) + (4.70) \times (0.15) = 0.78 \text{ CFS}$ INCREASE 0.78 CFS - 0.76 CFS = 0.02 CFS

## EROSION CONTROL MEASURES

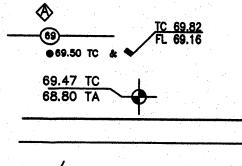
- 1. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION, HE SHALL ASSURE THAT THE FOLLOWING MEASURES ARE
  - A) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.
  - B) ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.
- 2. THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

# NOTE TO CONTRACTOR

- 1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
- 2. All work detailed in this plan to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction.
- 3. Two working days prior to any excavation, contractor must contact line locating Services for locating existing utilities (260-1990).
- 4. Prior to construction, the contractor shall excavate and verify the horizonal and vertical location of all construction. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- 5. Backfill compaction shall be according to residential use.
- 6. All work on this project shall be performed in accordance with applicable Federal, State and local laws, rules and regulations concerning construction safty and health.

# SYMBOL LEGEND

PROPOSED LANDSCAPE AREA PROPOSED CONTOUR EXISTING SPOT ELEVATION DESIGNED SPOT ELEVATION

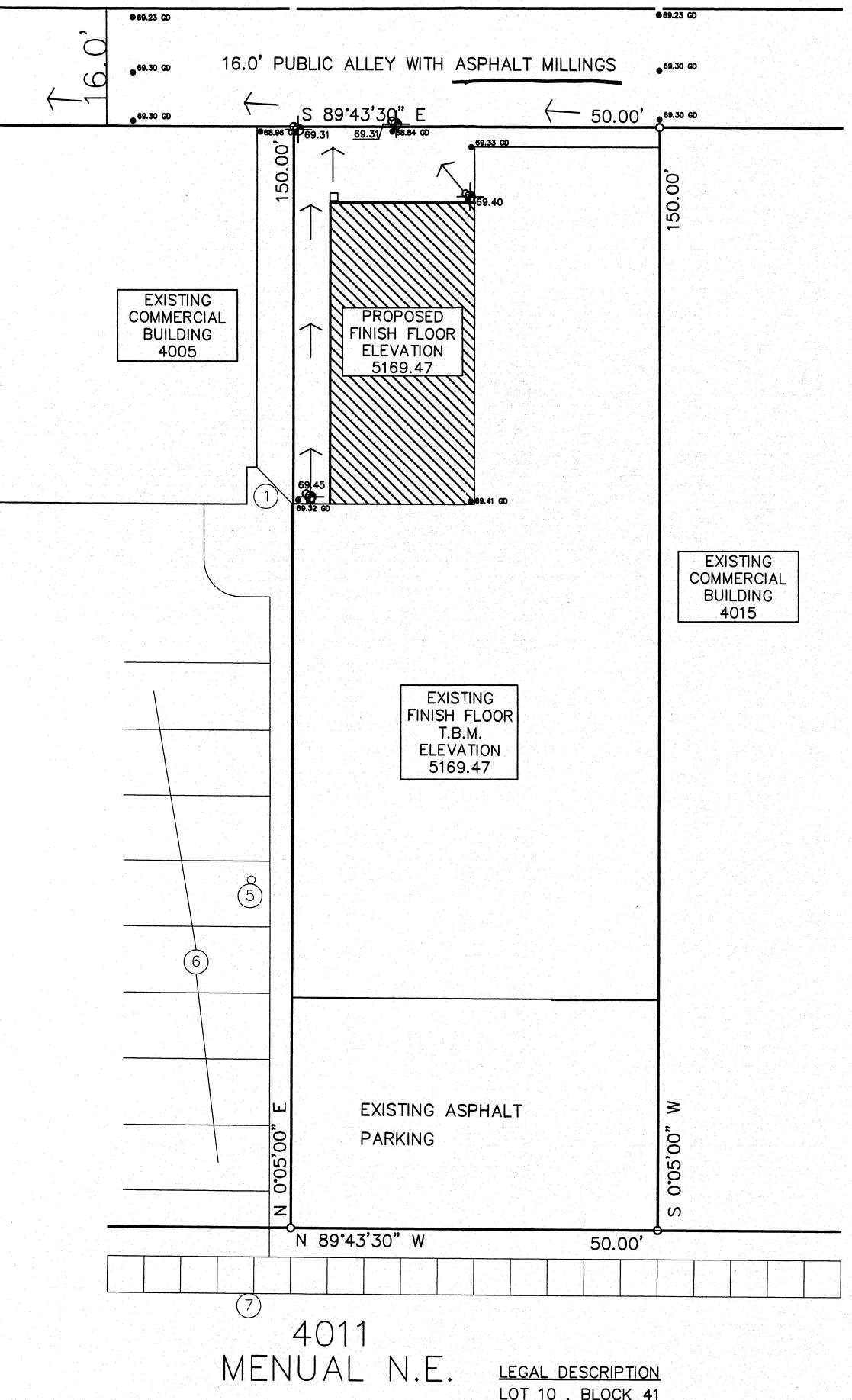


FLOW DIRECTION DOWN SPOUT

PROPERTY LINE

EASEMENT LINE

ABBREVIATION LEGEND TOP OF CON. PAD - TCP TOP OF CURB TOP OF ASPHALT - TA FLOWLINE - FL - TW TOP OF WALL TOP OF SIDEWALK - TSW



LOT 10 , BLOCK 41 BEL AIR SUBDIVISION BERNALILLO COUNTY ALBUQUERQUE, NEW MEXICO

BENCHMARK:

GRADING/DRAINAGE PLAN

A.S.C. MONUMENT USED 10-H17 LOCATED AT THE MEDIAN OF MORNINGSIDE AND MENAUL

3 1/4" ALUMN. CAP SET FLUSH WITH THE CONCRETE

**ELEVATION: 5164.085** TBM: EXISTING FINISH FLOOR OF EXISTING BUILDING AS SHOWN ON PLAN DRAWING

ADDITION VD. N. E. ARAGE UL BL PROPOSED GA

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JANUARY 2005

REVISIONS

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DRAINAGE

GRADING

