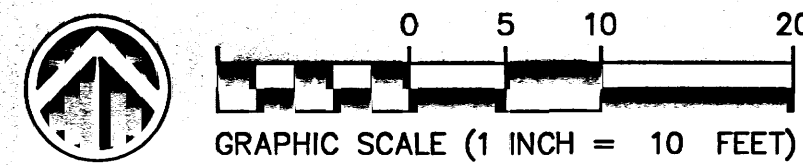
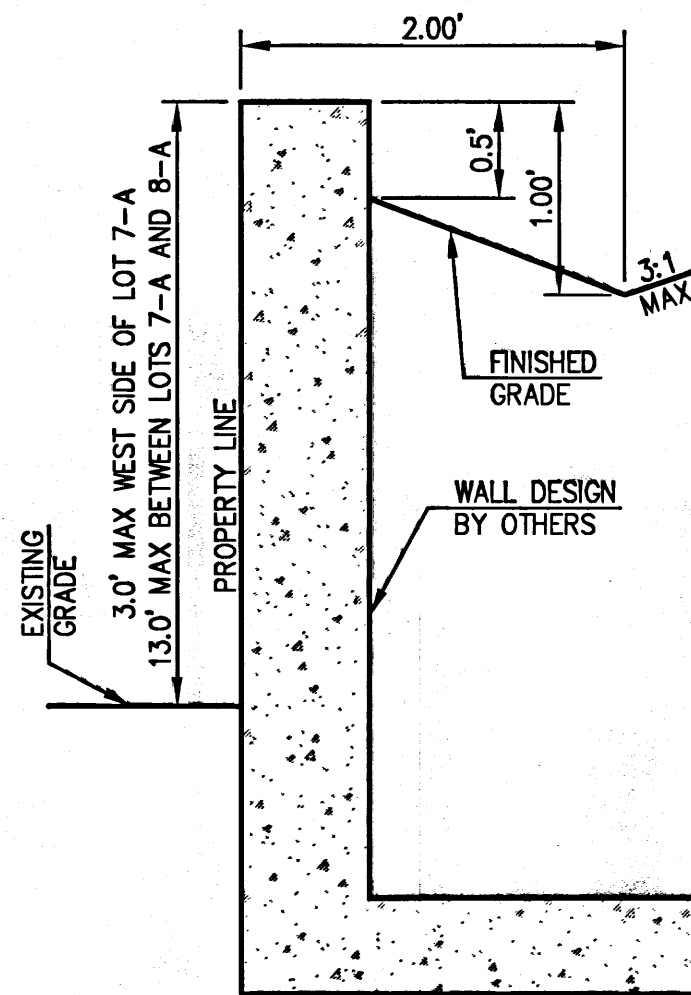


AS-BUILT CERTIFICATION

- KEYED NOTES**
- NEENAH FOUNDRY GRATE R-4999-AX, TYPE C GRATE OR APPROVED EQUAL. EAST DRAIN IS 24" AND WEST DRAIN IS 28".
 - 8" SDR35 PVC CONNECTING TRENCH DRAINS.
 - AREA DRAIN PER DETAIL 1. BOLT 2"x2" EXPANDED METAL PLATE TO SIDES OF INLET 1" BELOW GRATE. COVER EXPANDED METAL W/FILTER FABRIC. PLACE 6" OF 1.5" MIN ROCK OVER FILTER FABRIC.
 - 57.38LF 6" SDR35 PVC AT 8.50%.
 - AREA DRAIN WITH SUMP PUMP DRAIN TO YARD.
 - REMOVE SW TO NEAREST JOINT.
 - 10' DRIVEPAD PER DWG 2425. OFFSET SIDEWALK TO BACK OF RIGHT-OF-WAY. CONSTRUCT 4' SW ABOVE TRANSITION SLOPES PER DWG 2430.



NOTICE TO CONTRACTOR

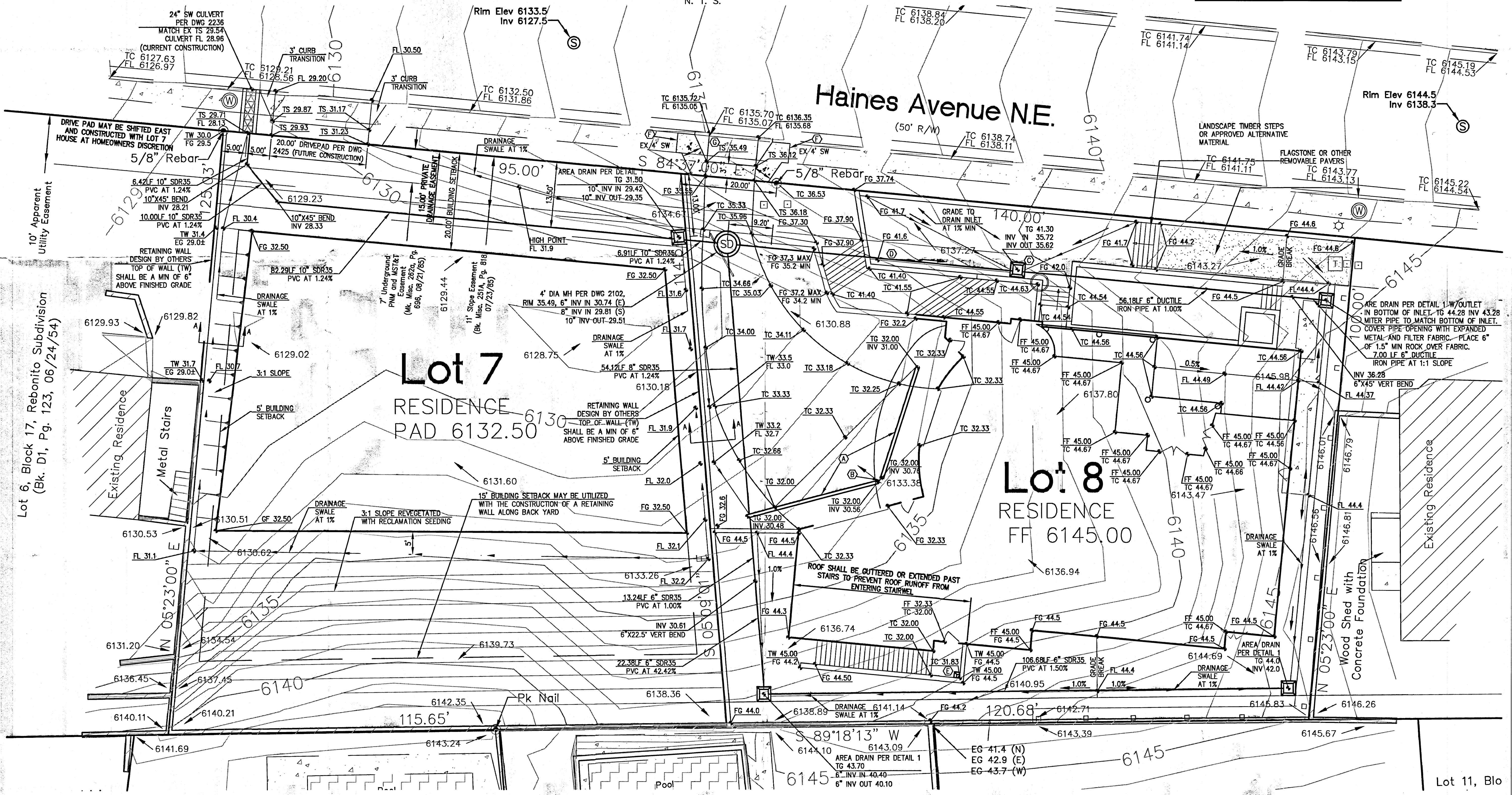
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED WITHIN THE CITY RIGHT-OF-WAY SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH C.O.A. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- 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 MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER SERVED.

SO-19 FORM

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ☐ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☒ BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
- ☒ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.
- ☐ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☒ IF CURB IS DEEPER FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.
- ☒ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED, INSPECTED AND APPROVED PRIOR TO FINAL ACCEPTANCE.

APPROVALS	ENGINEERS	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		



Benchmark

ACS MONUMENT "14-123" HAVING AN ELEVATION OF 6031.36 (NAVD 88)

LARRY READ & ASSOCIATES
Civil Engineers

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DRAINAGE PLAN

LOTS 7-A AND 8-A, BLOCK 17, REBONITO SUBDIVISION
13904 AND 13908 HAINES AVE. NE

GENERAL CONSTRUCTION NOTES

GENERAL

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS, INCLUDING A TOP SOIL DISTURBANCE PERMIT, PRIOR TO START OF CONSTRUCTION.

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

REFERENCES MADE TO STANDARD SPECIFICATIONS AND STANDARD DRAWINGS REFER TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION WITH ALL UPDATES.

THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THESE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS ARE DIFFERENT THAN SHOWN IN THE PLANS. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER IN A TIMELY MANNER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY, INCLUDING ENGINEERING DESIGN FEES.

EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. REPAIRS SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS SHALL BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.

EXISTING FENCING THAT IS NOT DESIGNATED FOR REMOVAL SHALL NOT BE DISTURBED. ANY FENCING THAT IS DISTURBED OR ALTERED BY THE CONTRACTOR SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IF THE CONTRACTOR DESIRES TO REMOVE FENCING TO ACCOMMODATE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN PERMISSION BEFORE THE FENCE IS REMOVED. CONTRACTOR SHALL RESTORE THE FENCE TO ITS ORIGINAL CONDITION AT THE EARLIEST OPPORTUNITY. WHILE ANY FENCING IS REMOVED, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURITY OF THE SITE UNTIL THE FENCE IS RESTORED.

WORK WITHIN ADJACENT RIGHT-OF-WAY

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WITHIN ADJACENT RIGHT-OF-WAYS OR WITHIN PROPERTY NOT OWNED BY THE OWNER OF THE PROJECT SITE, THE CONTRACTOR SHALL ASSURE THAT ALL PERMITS AND PERMISSIONS REQUIRED HAVE BEEN OBTAINED IN WRITING.

SURVEY MONUMENTS, PROPERTY CORNERS, BENCHMARKS

THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST SEVEN DAYS BEFORE BEGINNING ANY CONSTRUCTION ACTIVITY THAT COULD DAMAGE OR DISPLACE SURVEY MONUMENTS, PROPERTY CORNERS, OR PROJECT BENCHMARKS SO THESE ITEMS MAY BE RELOCATED.

ANY SURVEY MONUMENTS, PROPERTY CORNERS, OR BENCHMARKS THAT ARE NOT IDENTIFIED FOR RELOCATION ARE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE AND PROTECT. RELOCATION OR REPLACEMENT OF THESE ITEMS SHALL BE DONE BY THE OWNER'S SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

DIMENSIONS

ALL DIMENSIONS TO CURBS ARE TO THE FLOWLINE UNLESS OTHERWISE NOTED.

ALL STATIONING IS TO THE CENTERLINE OF THE RIGHT-OF-WAY UNLESS OTHERWISE NOTED.

ALL SLOPES AND GRADES ARE IN PERCENT UNLESS OTHERWISE NOTED.

CURB ELEVATIONS ARE SHOWN AT THE FLOW LINE UNLESS OTHERWISE NOTED. SEE THE DETAIL SHEET TO DETERMINE THE CURB HEIGHT ABOVE FLOW LINE.

SOILS

UNLESS OTHERWISE SPECIFIED, SUBGRADE, ENGINEERED FILL, AND STRUCTURAL FILL SHALL BE COMPACTED TO THE FOLLOWING SPECIFICATIONS OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

MATERIAL/LOCATION	PERCENT COMPACTION
STRUCTURAL FILL IN THE BUILDING AREA	95%
SUBBASE FOR SLAB SUPPORT	95%
MISCELLANEOUS BACKFILL BELOW STRUCTURAL FILL OR ROADWAY PAVEMENT	95%
MISCELLANEOUS BACKFILL BELOW UNPAVED, NON-BUILDING AREAS	90%
ROADWAY PAVEMENT SUBGRADE	95%
SIDEWALK SUBGRADE	90%
CURB AND GUTTER SUBGRADE	95%

PAVEMENT

WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT, CUT EXISTING PAVEMENT EDGE TO A NEAT, STRAIGHT LINE AS NECESSARY TO REMOVE ANY BROKEN OR CRACKED PAVEMENT AND MATCH NEW PAVEMENT ELEVATION TO EXISTING.

ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.

ALL WATER VALVE BOXES AND ELECTRICAL, TELEPHONE, TELEVISION, AND SEWER MANHOLES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINISHED GRADE BEFORE PAVING.

WHEN SIDEWALK OR CURB AND GUTTER IS REMOVED, IT SHALL BE REMOVED TO EXISTING CONSTRUCTION JOINTS. CUTTING OR BREAKING SHALL NOT BE ALLOWED.

UTILITIES

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY BASED ON THE INFORMATION PROVIDED TO THE ENGINEER BY OTHERS. THIS INFORMATION MAY BE INACCURATE OR INCOMPLETE. ADDITIONALLY, UNDERGROUND LINES MAY EXIST THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ACCORDANCE WITH CHAPTER 62, ARTICLE 14-1, THROUGH 14-8, NMSA 1978.

THE CONTRACTOR SHALL CONTACT THE STATEWIDE UTILITY LOCATOR SERVICE AT 1-800-321-2537 AT LEAST TWO WORKING DAYS BEFORE BEGINNING CONSTRUCTION. AFTER THE UTILITIES ARE SPOTTED, THE CONTRACTOR SHALL EXPOSE ALL PERTINENT UTILITIES TO VERIFY THEIR VERTICAL AND HORIZONTAL LOCATION. IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY.

THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UTILITIES, ABOVE OR BELOW GROUND. UTILITIES THAT ARE DAMAGED BY CARELESS CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

EXISTING VALVES SHALL ONLY BE OPERATED BY THE UTILITY COMPANY. CONTRACTOR SHALL NOTIFY THE UTILITY A MINIMUM OF TWO WORKING DAYS BEFORE ANY VALVE, NEW OR EXISTING, NEEDS TO BE OPERATED.

THE CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY INTERRUPTIONS WITH THE OWNER AND AFFECTED UTILITY COMPANY A MINIMUM OF THREE WORKING DAYS BEFORE THE INTERRUPTION.

THE CONTRACTOR SHALL MAINTAIN A RECORD DRAWING SET OF PLANS AND PROMPTLY LOCATE ALL UTILITIES, EXISTING OR NEW, IN THEIR CORRECT LOCATION, HORIZONTAL AND VERTICAL. THIS RECORD SET OF DRAWINGS SHALL BE MAINTAINED ON THE PROJECT SITE AND SHALL BE AVAILABLE TO THE OWNER AND ENGINEER AT ANY TIME DURING CONSTRUCTION.

EROSION CONTROL, ENVIRONMENTAL PROTECTION, AND STORM WATER POLLUTION PREVENTION PLAN

THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PREPARE ANY DUST CONTROL OR EROSION CONTROL PERMITS REQUIRED FROM THE REGULATORY AGENCIES.

THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITH THE PUBLIC RIGHT-OF-WAY OR ADJACENT PROPERTY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY BY CONSTRUCTION OF TEMPORARY EROSION CONTROL BERMS OR INSTALLING SILT FENCES AT THE PROPERTY LINES AND WETTING THE SOIL TO PREVENT IT FROM BLOWING.

WATERING, AS REQUIRED FOR CONSTRUCTION DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.

ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR IMPERVIOUS SURFACES SHALL BE REVEGETATED WITH RECLAMATION SEEDING.

THE CONTRACTOR SHALL PROPERLY HANDLE AND DISPOSE OF ALL ASPHALT REMOVED ON THE PROJECT BY HAULING IT TO AN APPROVED DISPOSAL SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEW MEXICO SOLID WASTE ACT.

ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.), GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC., SHALL BE APPROPRIATELY DISPOSED OF OFFSET AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINT, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO EMERGENCY RESPONSE AT 1-800-219-6157.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.

ACCESSIBLE FACILITIES

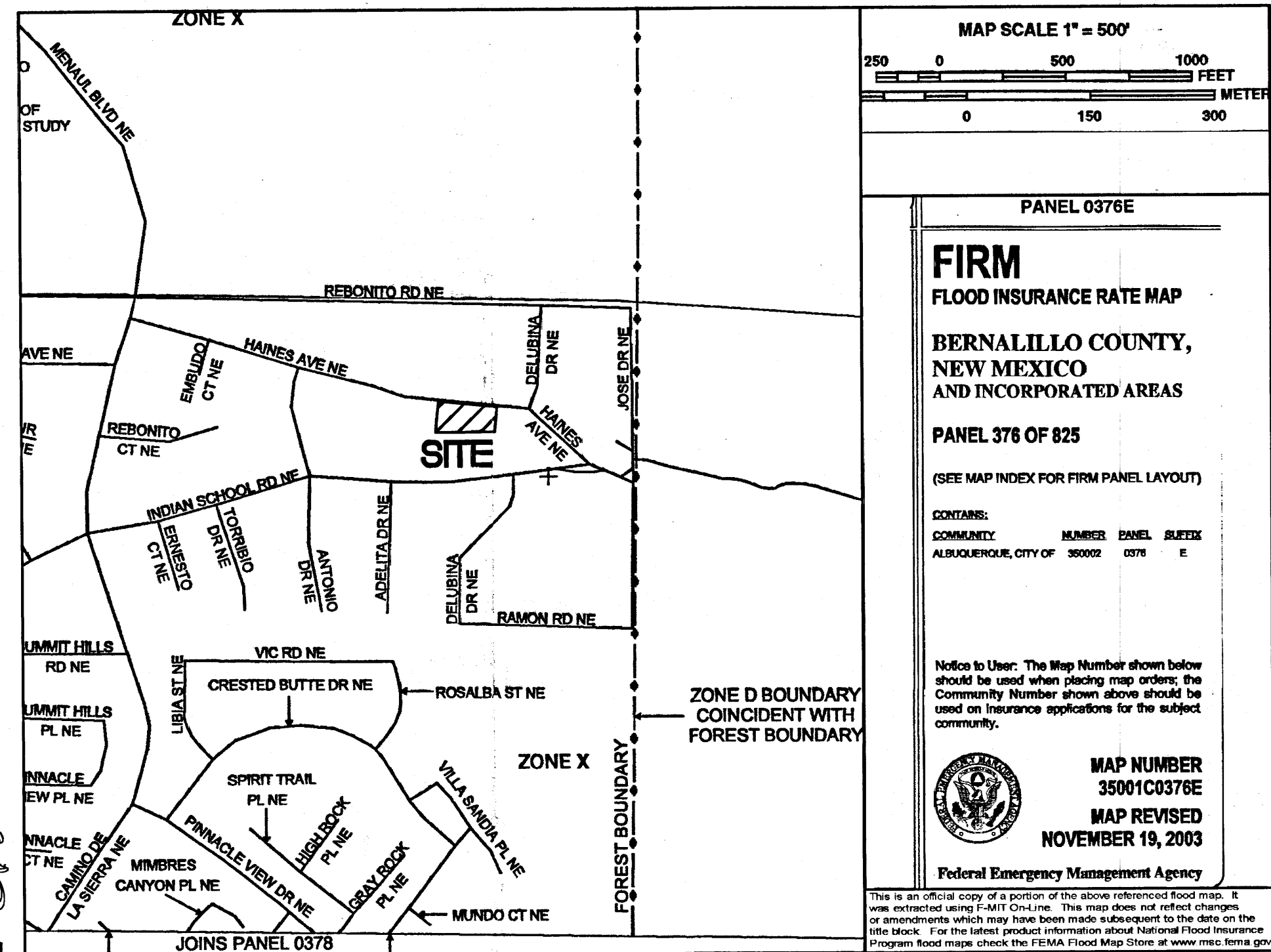
ALL SURFACES ALONG ACCESSIBLE ROUTES AND FOR HANDICAP RAMPS SHALL BE STABLE FIRM, SLIDE RESISTANT AND SHALL COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS, PARAGRAPH 4.5.

LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS, EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:20. CROSS SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:48. SLOPES IN ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND PASSENGER LOADING ZONES SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.

THE SITE SHALL COMPLY WITH ANSI A117.1-1992, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES".

TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TRAFFIC CONTROL PLANS. ALL SIGNS, BARRICADES, CHANNELIZATION DEVICES, SIGN FRAMES AND ERECTION OF SUCH DEVICES SHALL CONFORM TO THE REQUIREMENTS OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION. PRIOR TO CONSTRUCTION, TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE GOVERNING AUTHORITY.



VICINITY MAP J-23

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)
		A (%)	B (%)	C (%)	D (%)						
EXISTING CONDITIONS											
LOT 7	0.3139	100.00	0.00	0.00	0.00	0.80	0.02	912	0.02	912	0.69
LOT 8	0.2931	100.00	0.00	0.00	0.00	0.80	0.02	851	0.02	851	0.64
TOTAL	0.6070						0.04	1,763	0.04	1,763	1.34
PROPOSED CONDITIONS											
LOT 7	0.2880	0.00	12.00	12.00	76.00	2.31	0.06	2,416	0.11	4,840	1.38
LOT 8	0.3190	0.00	12.00	12.00	76.00	2.31	0.06	2,676	0.12	5,360	1.53
TOTAL	0.6070						0.12	5,093	0.23	10,200	2.91
EXCESS PRECIP. 0.8 1.08 1.46 2.64 E _i (in)											
PEAK DISCHARGE 2.2 2.92 3.73 5.25 Q _h (cfs)											
WEIGHTED E (in) = (E _a)(%A) + (E _b)(%B) + (E _c)(%C) + (E _d)(%D)											
V _{6hr} (acre-ft) = (WEIGHTED E)(AREA)/12											
V _{10day} (acre-ft) = V _{6hr} + (A _o)(P _{10day} - P _{6hr})/12											
Q (cfs) = (Q _n)(A _a) + (Q _n)(A _b) + (Q _n)(A _c) + (Q _n)(A _d)											
ZONE = 1											
P _{6hr} (in) = 2.90											
P _{24hr} (in) = 3.65											
P _{15day} (in) = 5.95											

DRAINAGE INFORMATION

LOCATION & DESCRIPTION

THE PROPOSED SITE IS COMPRISED OF TWO LOTS TOTALING 0.607 ACRES LOCATED JUST NORTH OF INDIAN SCHOOL ROAD AND WEST OF THE FOREST BOUNDARY, AS SEEN ON THE VICINITY MAP ON THIS SHEET. THE LOTS ARE UNDEVELOPED IN A RESIDENTIAL NEIGHBORHOOD WITH EVERYTHING DEVELOPED AROUND THESE TWO LOTS. THIS PLAN PROVIDES A FINISHED GRADE GRADING PLAN FOR LOT 8-A AND A ROUGH GRADING PLAN FOR LOT 7-A. THESE TWO LOTS WERE RECENTLY REPLATED TO ACCOMMODATE THE PROPOSED DEVELOPMENT ON LOT 8-A. THIS INCLUDING GRANTING A DRAINAGE EASEMENT ON LOT 7-A AND ADJUSTING THE LOT LINE BETWEEN THE TWO LOTS. LOT 7-A WILL BE DEVELOPED LATER BY THE CURRENT PROPERTY OWNER AND THEN SOLD AS A SEPARATE SINGLE FAMILY RESIDENCE.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0376E, DATED NOVEMBER 19, 2003 IS NOT WITHIN ANY DESIGNATED 100-YEAR FLOODPLAIN. A PORTION OF THIS PANEL WITH THE SITE DESIGNATED ON IT IS INCLUDED ON THIS SHEET.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

PRECIPITATION

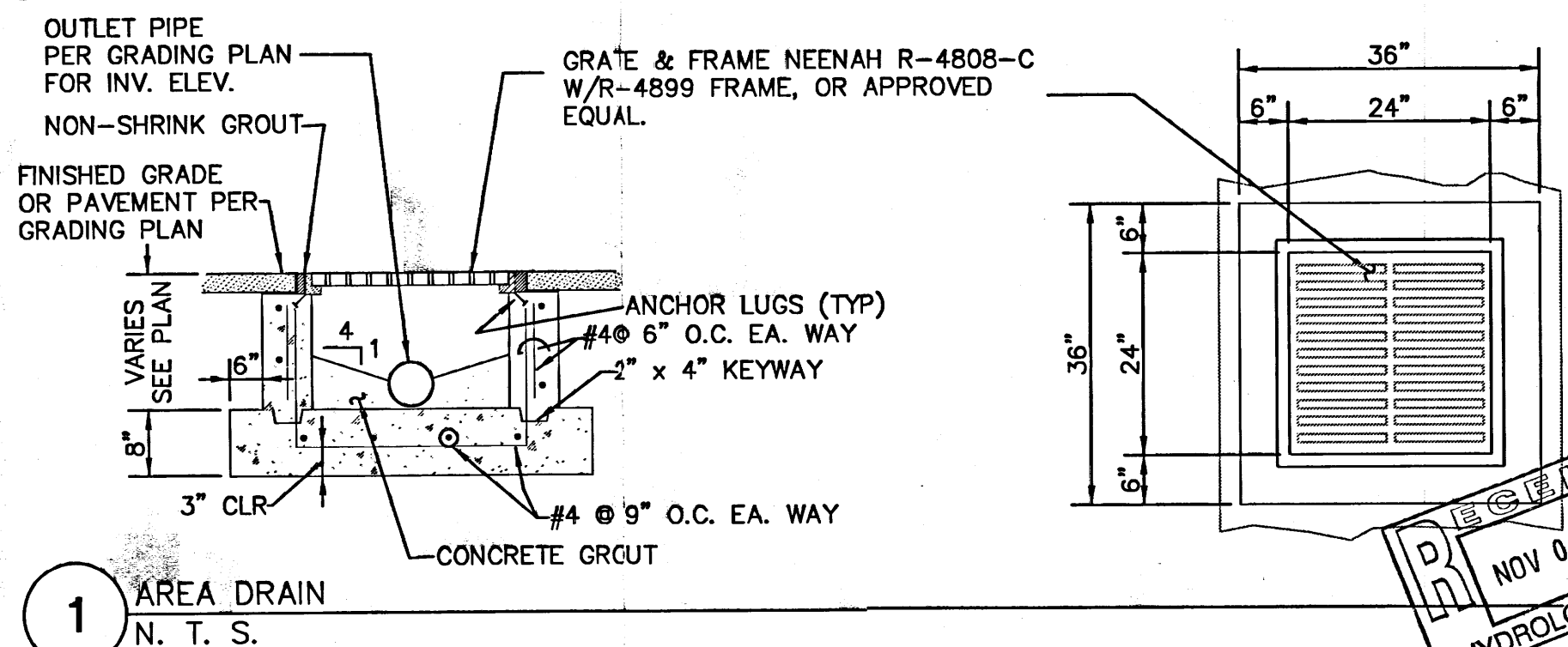
THE 100-YR, 6-HR AND 100-YR, 10 DAY DURATION STORM EVENTS WERE USED AS THE DESIGN STORMS FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 3 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE 6-HOUR, 24-HOUR, AND 10-DAY PRECIPITATION VALUES, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

EXISTING DRAINAGE

THE SITE IS UNDEVELOPED AS DESCRIBED ABOVE IN "LOCATION AND DESCRIPTION." THE LOTS ARE LOWER THAN THE ADJACENT STREET AND PROPERTIES. THE ONLY LOCATION TO SURFACE DRAIN THESE TWO LOTS IS AT THE NORTHWEST CORNER OF LOT 7-A. EVEN THIS LOCATION REQUIRES 2.6' OF FILL AND A DRAIN THROUGH A SIDEWALK CULVERT INTO THE STREET. THE PROPERTIES TO THE SOUTH, EAST, AND WEST, HAVE ALREADY BEEN CONSTRUCTED WITH RETAINING WALLS ABOVE THIS SITE. HAINES AVENUE IS A PAVED STREET WITH CURB AND GUTTER AND SIDEWALK TO THE NORTH. THEREFORE, THERE ARE NO OFFSITE DRAINAGE BASINS IMPACTING THESE LOTS.

DEVELOPED CONDITION

A PRIVATE STORM DRAIN SYSTEM WILL BE CONSTRUCTED ON LOT 8-A AND ACROSS LOT 7-A TO THE DISCHARGE POINT. A DRAINAGE EASEMENT HAS BEEN GRANTED ALONG THE FRONTAGE OF LOT 7-A TO ALLOW FOR THE CONSTRUCTION AND MAINTENANCE OF THIS FACILITY. THEREFORE, THESE TWO LOTS CAN BE DEVELOPED ACCORDING TO THIS PLAN AND DRAIN TO HAINES AVENUE WITH FREE DISCHARGE ACCORDING TO CITY POLICY.



ABBREVIATIONS

AD = AREA DRAIN
AIP = ABANDONED IN PLACE
BLDG = BUILDING
BM = BENCHMARK
CATV = CABLE TELEVISION LINE
CMP = CORRUGATED METAL PIPE
CO = CLEANOUT
COA = CITY OF ALBUQUERQUE
CONC = CONCRETE
CL = CENTERLINE
DIA = DIAMETER

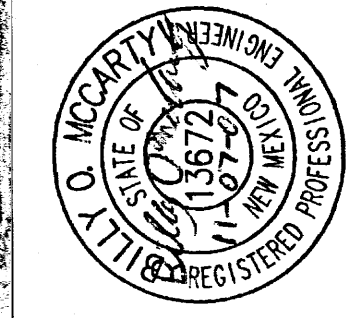
DTL = DETAIL
DWG = DRAWING
E = ELECTRIC LINE
ELEC. = ELECTRIC
ELEV = ELEVATION
EX = EXISTING
FF = FINISHED FLOOR ELEVATION
FG = PORTLAND CEMENT CONCRETE
FH = FIRE HYDRANT
FL = FLOW LINE
GM = GAS METER

GV = GATE VALVE
HI PT = HIGH POINT
INV = INVERT ELEVATION
LF = LINEAL FEET
MH = MANHOLE
NG = NATURAL GROUND
OE = OVERHEAD ELECTRIC LINE
PCC = PORTLAND CEMENT CONCRETE
PP = POWER POLE
PROP = PROPOSED
PVC = POLYVINYL CHLORIDE PIPE

RCP = REINFORCED CONCRETE PIPE
R/W = RIGHT-OF-WAY
SAS = SANITARY SEWER
SD = STORM DRAIN
STA = STATION
STD = STANDARD
SW = SIDEWALK
T = TELEPHONE
TA = TOP OF ASPHALT PAVEMENT
TAC = TOP OF ASPHALT CURB
TC = TOP OF CONCRETE SLAB (PAVEMENT)

TCC =
TG = TOP OF GRATE
TS = TOP OF SIDEWALK
TW = TOP OF WALL
TYP = TYPICAL
TB = TELEPHONE BOX
UE =
UT =
W = WATER
WM = WATER METER
WV = WATER VALVE

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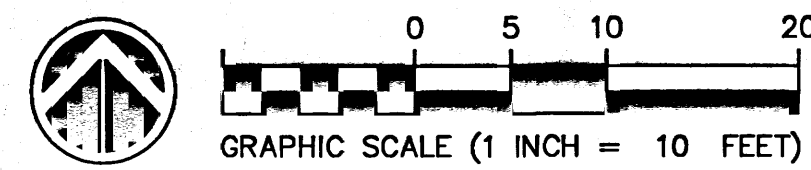
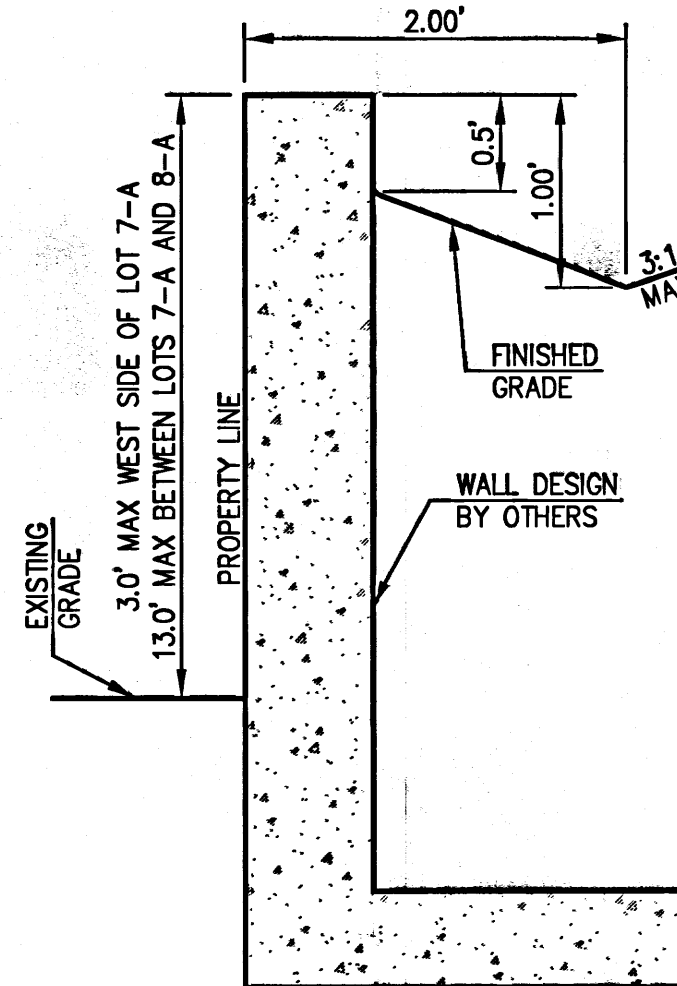
GENERAL NOTES
AND
DRAINAGE INFORMATION
LOTS 7-A AND 8-A, BLOCK 17, REBONITO SUBDIVISION
13904 AND 13908 HAINES AVE. NE

DRAWING NAME: RICK TERZING
SHEET 1 OF 2

AS-BUILT CERTIFICATION

KEYED NOTES

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- 57.36LF 6" SDR35 PVC AT 8.50%.
- AREA DRAIN WITH SUMP PUMP DRAIN TO YARD.
- REMOVE SW TO NEAREST JOINT.
- 10' DRIVEPAD PER DWG 2425. OFFSET SIDEWALK TO BACK OF RIGHT-OF-WAY. CONSTRUCT 4' SW ABOVE TRANSITION SLOPES PER DWG 2430.



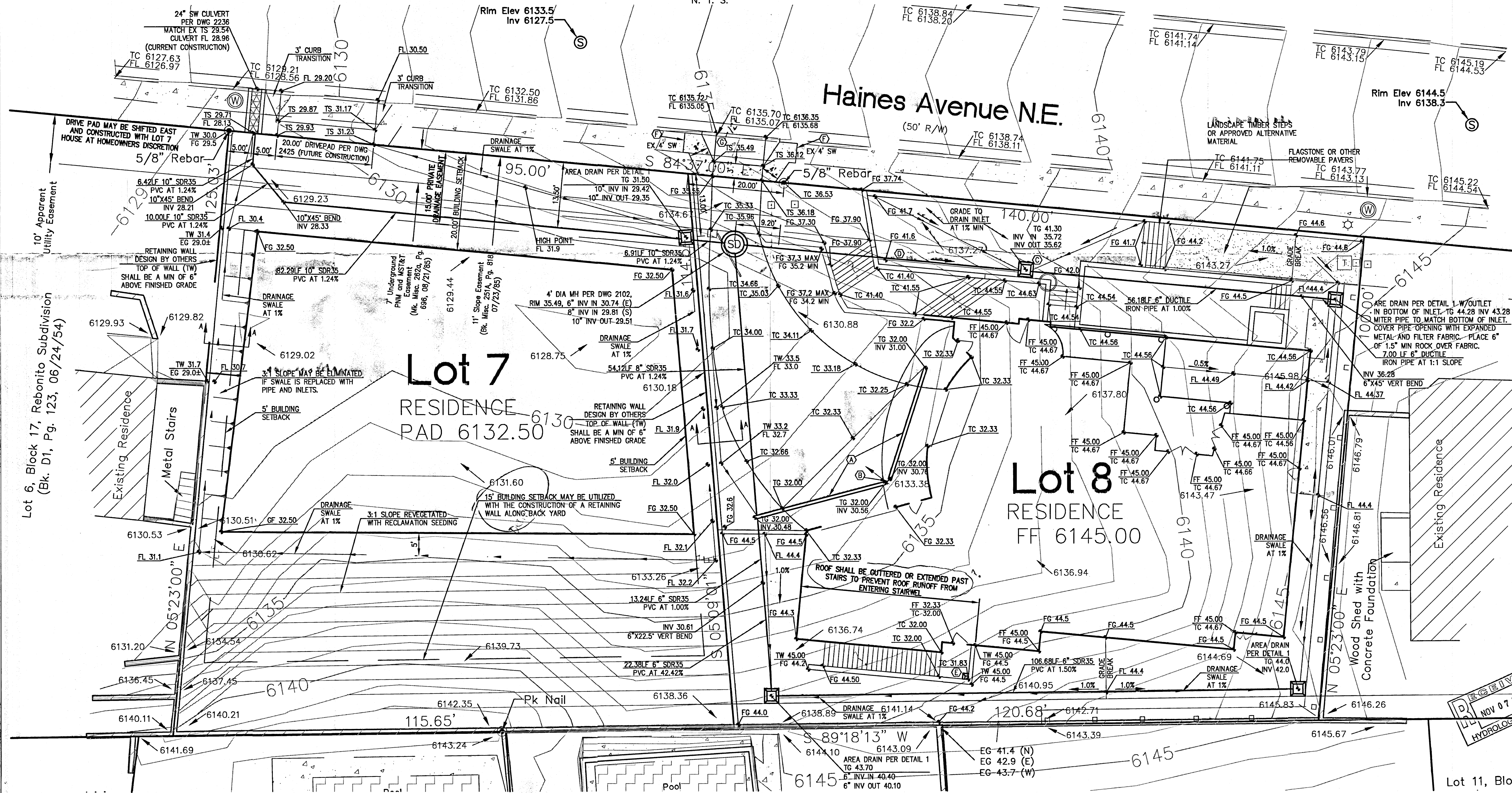
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ACS MONUMENT "14-23" HAVING AN ELEVATION OF 6051.36 (NAD 88)

LARRY READ & ASSOCIATES
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DRAINAGE PLAN

LOTS 7-A AND 8-A, BLOCK 17, REBONITO SUBDIVISION
13904 AND 13908 HAINES AVE, NE

DRAWING NAME: RICHTER2.DWG
SECTION: 2
SHEET: 2
DATE: NOV 07 2007
HYDROLOGIST

AS-BUILT CERTIFICATION

KEYED NOTES

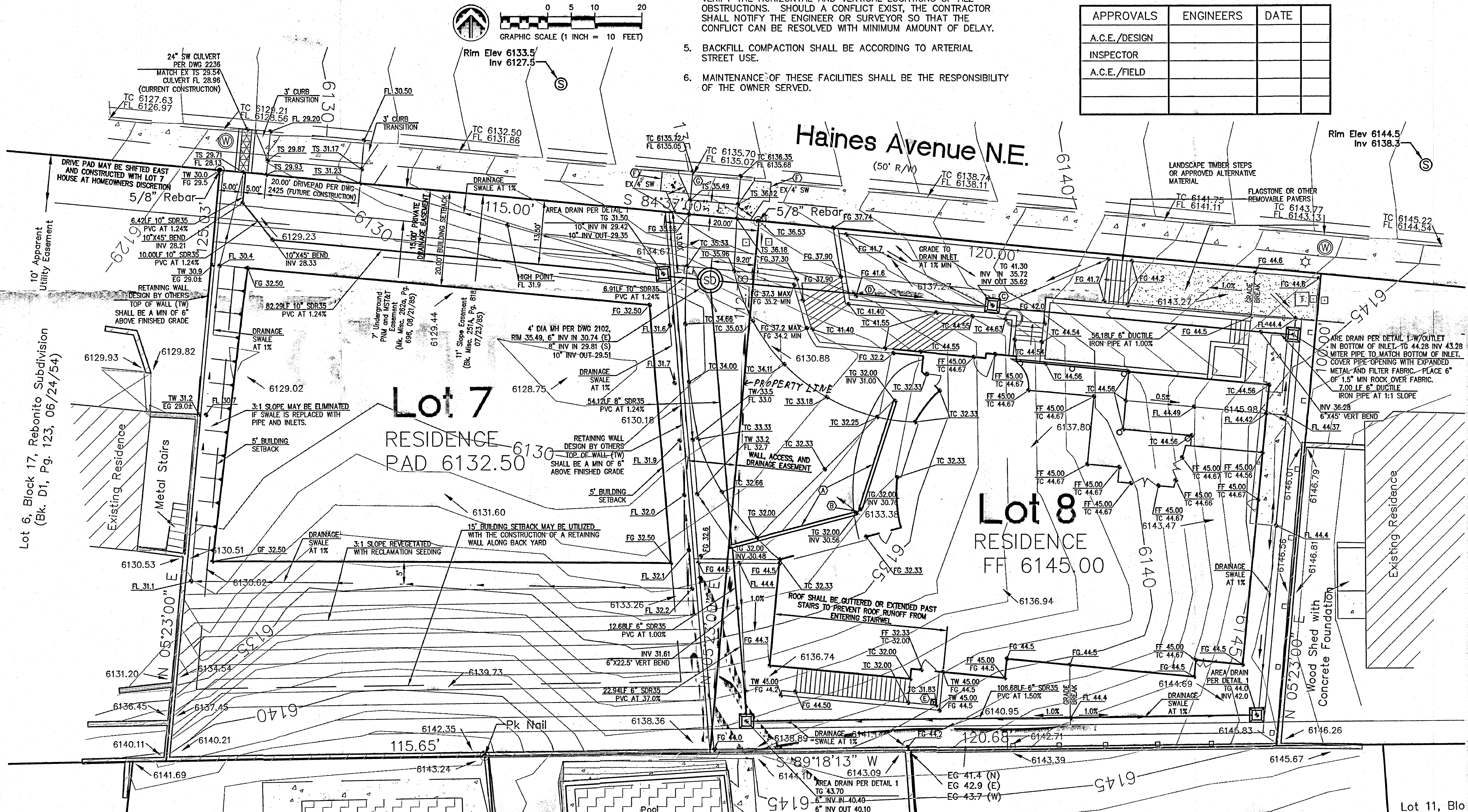
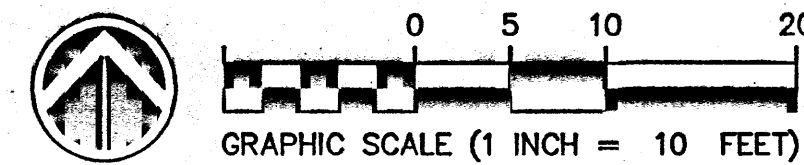
- A. NEENAH FOUNDRY GRADE R-4999-AX, TYPE C GRADE OR APPROVED EQUAL EAST DRAIN IS 24" AND WEST DRAIN IS 24"
- B. 8" SD335 PVC CONNECTING TRENCH DRAIN
- C. AREA DRAIN PER DETAIL 1. BOLT 2'X2" EXPANDED METAL PLATE TO SIDES OF IN 1" BELOW GRADE. COVER EXPANDED METAL PLATE WITH FABRIC. PLACE 6" OF 1.5" MI ROCK OVER FILTER FABRIC.
- D. 57.36LF 6" SD335 PVC AT 8.50%
- E. AREA DRAIN WITH SUMP PUMP DRAIN
- F. REMOVE SW TO NEAREST JOINT.
- G. 10' DRIVEPAD PER DWG 2425. OFFSET TO BACK OF SLOPE-OF-WAY. CONSTRUCT ABOVE TRANSITION SLOPES PER DWG 2425

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED WITHIN THE CITY RIGHT-OF-WAY SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH C.O.A. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986.
3. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990, FOR LOCATION OF EXISTING UTILITIES.
4. 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 MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER SERVED.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ☐ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☒ BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
- ☒ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.
- ☐ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☒ IF CURB IS DEPRESSED FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.
- ☒ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED, INSPECTED AND APPROVED PRIOR TO FINAL ACCEPTANCE.

APPROVALS	ENGINEERS	DATE	
A.C.E./DESIGN			
INSPECTOR			
A.C.E./FIELD			



Lot 6, Block 17, Rebonito Subdivision
(Bk. D1, Pg. 123, 06/24/54)

Benchmark

ICS MONUMENT "14-J23" HAVING AN
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RAWING NAME: RICHTER1.DWG	SHEET 2
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GENERAL CONSTRUCTION NOTES

GENERAL

CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS, INCLUDING A TOP SOIL DISTURBANCE PERMIT, PRIOR TO START OF CONSTRUCTION.

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

REFERENCES MADE TO STANDARD SPECIFICATIONS AND STANDARD DRAWINGS REFER TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION WITH ALL UPDATES.

THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THESE PLANS WHEN IT IS OBVIOUS THAT FIELD CONDITIONS ARE DIFFERENT THAN SHOWN IN THE PLANS. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE ENGINEER IN A TIMELY MANNER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY, INCLUDING ENGINEERING DESIGN FEES.

EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. REPAIRS SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS SHALL BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.

EXISTING FENCING THAT IS NOT DESIGNATED FOR REMOVAL SHALL NOT BE DISTURBED. ANY FENCING THAT IS DISTURBED OR ALTERED BY THE CONTRACTOR SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IF THE CONTRACTOR DESIRES TO REMOVE FENCING TO ACCOMMODATE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN PERMISSION BEFORE THE FENCE IS REMOVED. CONTRACTOR SHALL RESTORE THE FENCE TO ITS ORIGINAL CONDITION AT THE EARLIEST OPPORTUNITY. WHILE ANY FENCING IS REMOVED, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURITY OF THE SITE UNTIL THE FENCE IS RESTORED.

WORK WITHIN ADJACENT RIGHT-OF-WAY

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WITHIN ADJACENT RIGHT-OF-WAYS OR WITHIN PROPERTY NOT OWNED BY THE OWNER OF THE PROJECT SITE, THE CONTRACTOR SHALL ASSURE THAT ALL PERMITS AND PERMISSIONS REQUIRED HAVE BEEN OBTAINED IN WRITING.

SURVEY MONUMENTS, PROPERTY CORNERS, BENCHMARKS

THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST SEVEN DAYS BEFORE BEGINNING ANY CONSTRUCTION ACTIVITY THAT COULD DAMAGE OR DISPLACE SURVEY MONUMENTS, PROPERTY CORNERS, OR PROJECT BENCHMARKS SO THESE ITEMS MAY BE RELOCATED.

ANY SURVEY MONUMENTS, PROPERTY CORNERS, OR BENCHMARKS THAT ARE NOT IDENTIFIED FOR RELOCATION ARE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE AND PROTECT. RELOCATION OR REPLACEMENT OF THESE ITEMS SHALL BE DONE BY THE OWNER'S SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

DIMENSIONS

ALL DIMENSIONS TO CURBS ARE TO THE FLOWLINE UNLESS OTHERWISE NOTED.

ALL STATIONING IS TO THE CENTERLINE OF THE RIGHT-OF-WAY UNLESS OTHERWISE NOTED.

ALL SLOPES AND GRADES ARE IN PERCENT UNLESS OTHERWISE NOTED.

CURB ELEVATIONS ARE SHOWN AT THE FLOW LINE UNLESS OTHERWISE NOTED. SEE THE DETAIL SHEET TO DETERMINE THE CURB HEIGHT ABOVE FLOW LINE.

SOILS

UNLESS OTHERWISE SPECIFIED, SUBGRADE, ENGINEERED FILL, AND STRUCTURAL FILL SHALL BE COMPACTED TO THE FOLLOWING SPECIFICATIONS OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

MATERIAL LOCATION	PERCENT COMPACTION
STRUCTURAL FILL IN THE BUILDING AREA	95%
SUBBASE FOR SLAB SUPPORT	95%
MISCELLANEOUS BACKFILL BELOW STRUCTURAL FILL OR ROADWAY PAVEMENT	95%
MISCELLANEOUS BACKFILL BELOW UNPAVED, NON-BUILDING AREAS	90%
ROADWAY PAVEMENT SUBGRADE	95%
SIDEWALK SUBGRADE	90%
CURB AND GUTTER SUBGRADE	95%

PAVEMENT

WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT, CUT EXISTING PAVEMENT EDGE TO A NEAT, STRAIGHT LINE AS NECESSARY TO REMOVE ANY BROKEN OR CRACKED PAVEMENT AND MATCH NEW PAVEMENT ELEVATION TO EXISTING.

ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED AND APPROVED PRIOR TO PAVING.

ALL WATER VALVE BOXES AND ELECTRICAL, TELEPHONE, TELEVISION, AND SEWER MANHOLES IN THE CONSTRUCTION AREA SHALL BE ADJUSTED TO FINISHED GRADE BEFORE PAVING.

WHEN SIDEWALK OR CURB AND GUTTER IS REMOVED, IT SHALL BE REMOVED TO EXISTING CONSTRUCTION JOINTS. CUTTING OR BREAKING SHALL NOT BE ALLOWED.

UTILITIES

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY BASED ON THE INFORMATION PROVIDED TO THE ENGINEER BY OTHERS. THIS INFORMATION MAY BE INACCURATE OR INCOMPLETE. ADDITIONALLY, UNDERGROUND LINES MAY EXIST THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ACCORDANCE WITH CHAPTER 62, ARTICLE 14-1, THROUGH 14-8, NMSA 1978.

THE CONTRACTOR SHALL CONTACT THE STATEWIDE UTILITY LOCATOR SERVICE AT 1-800-321-2537 AT LEAST TWO WORKING DAYS BEFORE BEGINNING CONSTRUCTION. AFTER THE UTILITIES ARE SPOTTED, THE CONTRACTOR SHALL EXPOSE ALL PERTINENT UTILITIES TO VERIFY THEIR VERTICAL AND HORIZONTAL LOCATION. IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY.

THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UTILITIES, ABOVE OR BELOW GROUND. UTILITIES THAT ARE DAMAGED BY CARELESS CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

EXISTING VALVES SHALL ONLY BE OPERATED BY THE UTILITY COMPANY. CONTRACTOR SHALL NOTIFY THE UTILITY A MINIMUM OF TWO WORKING DAYS BEFORE ANY VALVE, NEW OR EXISTING, NEEDS TO BE OPERATED.

THE CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY INTERRUPTIONS WITH THE OWNER AND AFFECTED UTILITY COMPANY A MINIMUM OF THREE WORKING DAYS BEFORE THE INTERRUPTION.

THE CONTRACTOR SHALL MAINTAIN A RECORD DRAWING SET OF PLANS AND PROMPTLY LOCATE ALL UTILITIES, EXISTING OR NEW, IN THEIR CORRECT LOCATION, HORIZONTAL AND VERTICAL. THIS RECORD SET OF DRAWINGS SHALL BE MAINTAINED ON THE PROJECT SITE AND SHALL BE AVAILABLE TO THE OWNER AND ENGINEER AT ANY TIME DURING CONSTRUCTION.

EROSION CONTROL, ENVIRONMENTAL PROTECTION, AND STORM WATER POLLUTION PREVENTION PLAN

THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PREPARE ANY DUST CONTROL OR EROSION CONTROL PERMITS REQUIRED FROM THE REGULATORY AGENCIES.

THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITH THE PUBLIC RIGHT-OF-WAY OR ADJACENT PROPERTY TO KEEP IT FROM WASHING OFF THE PROJECT SITE.

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY BY CONSTRUCTION OF TEMPORARY EROSION CONTROL BERMS OR INSTALLING SILT FENCES AT THE PROPERTY LINES AND WETTING THE SOIL TO PREVENT IT FROM BLOWING.

WATERING, AS REQUIRED FOR CONSTRUCTION DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.

ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR IMPERVIOUS SURFACES SHALL BE REVEGETATED WITH RECLAMATION SEEDING.

THE CONTRACTOR SHALL PROPERLY HANDLE AND DISPOSE OF ALL ASPHALT REMOVED ON THE PROJECT BY HAULING IT TO AN APPROVED DISPOSAL SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEW MEXICO SOLID WASTE ACT.

ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.), GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC., SHALL BE APPROPRIATELY DISPOSED OF OFFSET AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINT, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO EMERGENCY RESPONSE AT 1-800-219-6157.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.

ACCESSIBLE FACILITIES

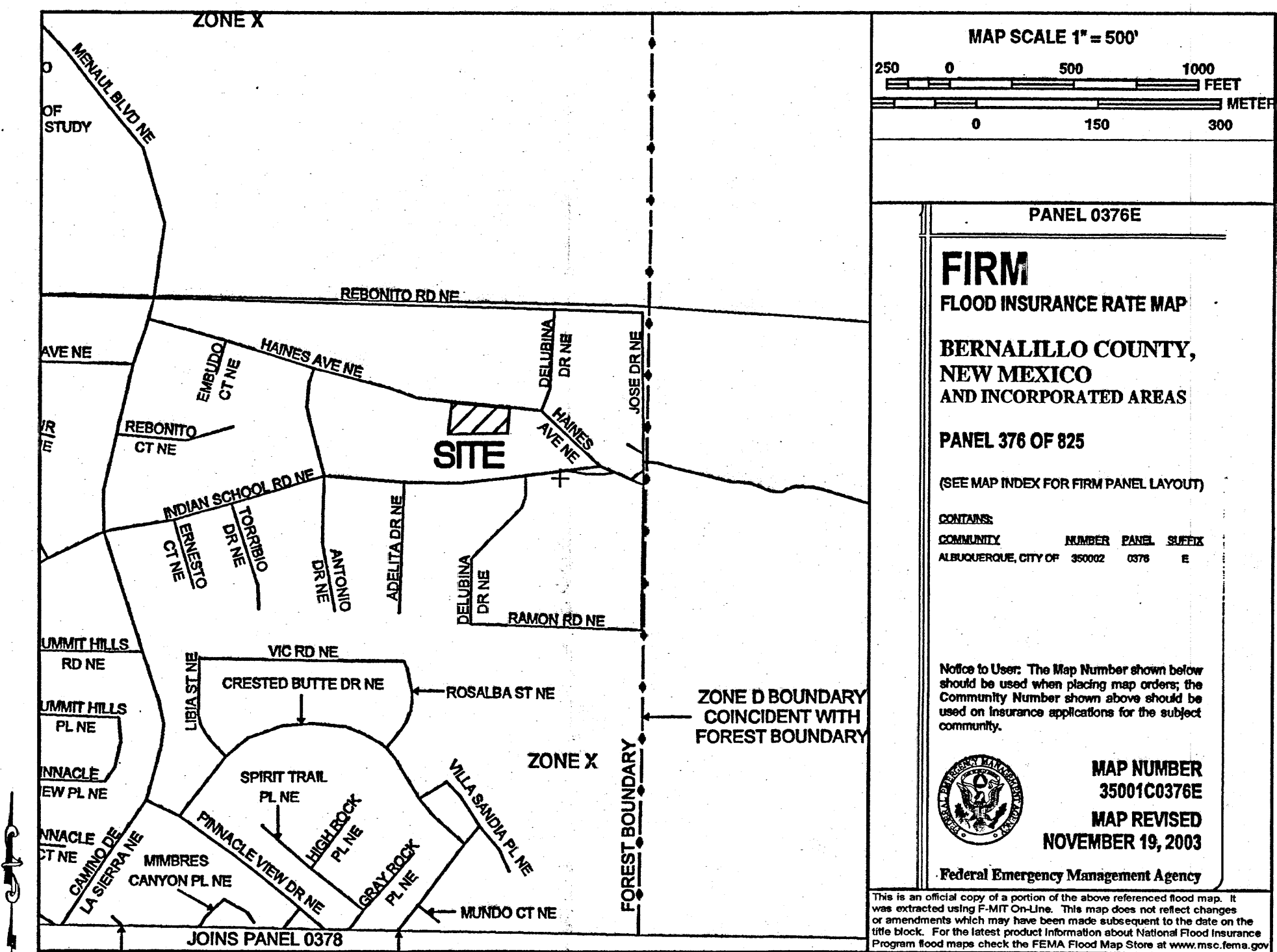
ALL SURFACES ALONG ACCESSIBLE ROUTES AND FOR HANDICAP RAMPS SHALL BE STABLE FIRM, SLIDE RESISTANT AND SHALL COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS, PARAGRAPH 4.5.

LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS, EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:20. CROSS SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:48. SLOPES IN ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND PASSENGER LOADING ZONES SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.

THE SITE SHALL COMPLY WITH ANSI A117.1-1992, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES".

TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TRAFFIC CONTROL PLANS. ALL SIGNS, BARRICADES, CHANNELIZATION DEVICES, SIGN FRAMES AND ERECTION OF SUCH DEVICES SHALL CONFORM TO THE REQUIREMENTS OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" LATEST EDITION. PRIOR TO CONSTRUCTION, TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE GOVERNING AUTHORITY.



VICINITY MAP J-23

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)
		A (%)	B (%)	C (%)	D (%)						
EXISTING CONDITIONS											
LOT 7	0.3139	100.00	0.00	0.00	0.00	0.80	0.02	912	0.02	912	0.69
LOT 8	0.2931	100.00	0.00	0.00	0.00	0.80	0.02	851	0.02	851	0.64
TOTAL	0.6070						0.04	1,763	0.04	1,763	1.34
PROPOSED CONDITIONS											
LOT 7	0.2880	0.00	12.00	12.00	76.00	2.31	0.06	2,416	0.11	4,840	1.38
LOT 8	0.3190	0.00	12.00	12.00	76.00	2.31	0.06	2,676	0.12	5,360	1.53
TOTAL	0.6070						0.12	5,093	0.23	10,200	2.91
EXCESS PRECIP.											
		0.8	1.08	1.46	2.64	Ei (in)					
PEAK DISCHARGE		2.2	2.92	3.73	5.25	Qm (cfs)					
WEIGHTED E (in) = (Ea)(%)A + (Eb)(%)B + (Ec)(%)C + (Ed)(%)D							ZONE = 4				
V6-hr (acre-ft) = (WEIGHTED E)(AREA)/12							P6-hr (in.) = 2.90				
V10-day (acre-ft) = V6-hr + (Aa)(P10-day - P6-hr)/12							P6-hr (in.) = 3.65				
Q (cfs) = (Qm)(Aa) + (Qm)(Ab) + (Qm)(Ac) + (Qm)(Ad)							P10-day (in.) = 5.95				

DRAINAGE INFORMATION

LOCATION & DESCRIPTION

THE PROPOSED SITE IS COMPRISED OF TWO LOTS TOTALING 0.607 ACRES LOCATED JUST NORTH OF INDIAN SCHOOL ROAD AND WEST OF THE FOREST BOUNDARY, AS SEEN ON THE VICINITY MAP ON THIS SHEET. THE LOTS ARE UNDEVELOPED IN A RESIDENTIAL NEIGHBORHOOD WITH EVERYTHING DEVELOPED AROUND THESE TWO LOTS. THIS PLAN PROVIDES A FINISHED GRADE GRADING PLAN FOR LOT 8 AND A ROUGH GRADING PLAN FOR LOT 7. ACCESS AND DRAINAGE EASEMENTS WILL BE DEDICATED AT THIS TIME ON LOT 7 TO PROVIDE FOR THE PLANNED DEVELOPMENT ON LOT 8. LOT 7 WILL BE DEVELOPED LATER BY THE CURRENT PROPERTY OWNER AND THEN SOLD AS A SEPARATE SINGLE FAMILY RESIDENCE.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0376E, DATED NOVEMBER 19, 2003 IS NOT WITHIN ANY DESIGNATED 100-YEAR FLOODPLAIN. A PORTION OF THIS PANEL WITH THE SITE DESIGNATED ON IT IS INCLUDED ON THIS SHEET.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

PRECIPITATION

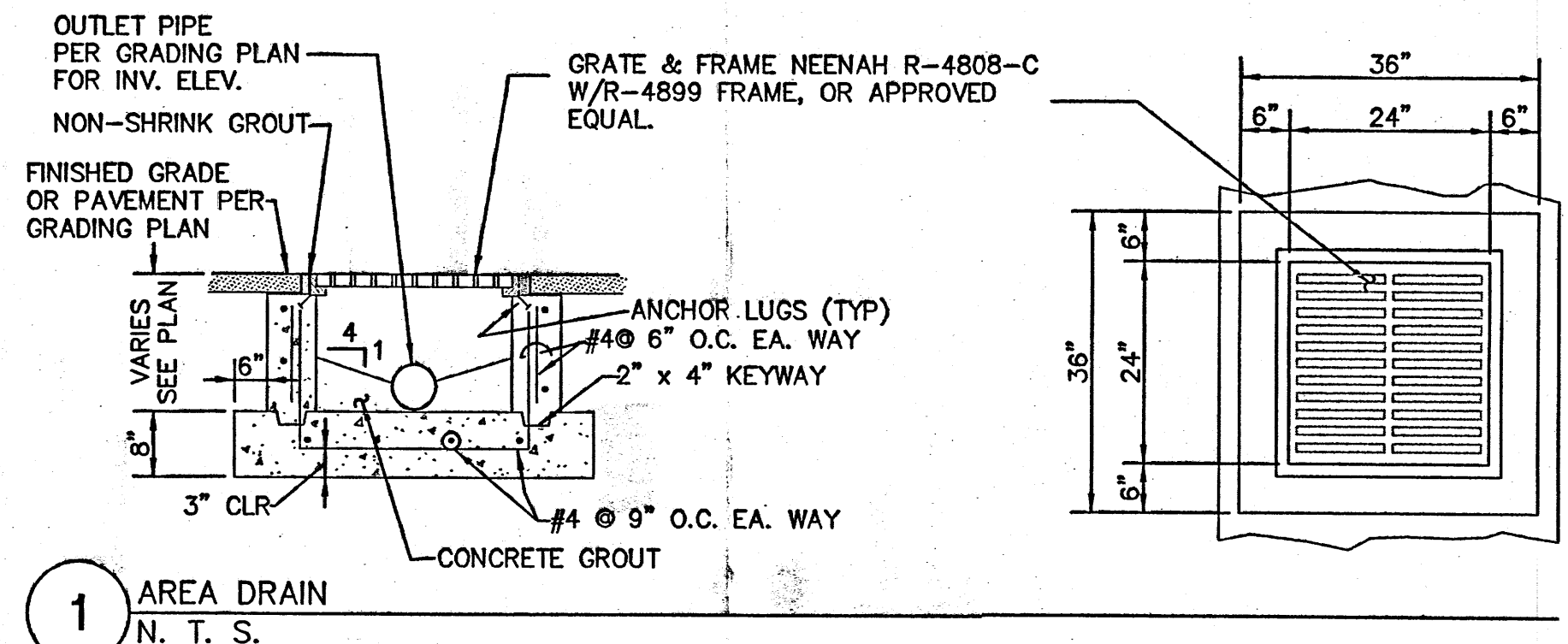
THE 100-YR, 6-HR AND 100-YR, 10 DAY DURATION STORM EVENTS WERE USED AS THE DESIGN STORMS FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 3 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE 6-HOUR, 24-HOUR, AND 10-DAY PRECIPITATION VALUES, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

EXISTING DRAINAGE

THE SITE IS UNDEVELOPED AS DESCRIBED ABOVE IN "LOCATION AND DESCRIPTION". THE LOTS ARE LOWER THAN THE ADJACENT STREET AND PROPERTIES. THE ONLY LOCATION TO SURFACE DRAIN THESE TWO LOTS IS AT THE NORTHWEST CORNER OF LOT 7. EVEN THIS LOCATION REQUIRES 2.6" OF FILL DRAIN THROUGH A SIDEWALK CULVERT INTO THE STREET. THE PROPERTIES TO THE SOUTH, EAST, AND WEST, HAVE ALREADY BEEN CONSTRUCTED WITH RETAINING WALLS ABOVE THIS SITE. HAINES AVENUE IS A PAVED STREET WITH CURB AND GUTTER AND SIDEWALK TO THE NORTH. THEREFORE, THERE ARE NO OFFSITE DRAINAGE BASINS IMPACTING THESE LOTS.

DEVELOPED CONDITION

A PRIVATE STORM DRAIN SYSTEM WILL BE CONSTRUCTED ON LOT 8 AND ACROSS LOT 7 TO THE DISCHARGE POINT. A DRAINAGE EASEMENT WILL BE GRANTED ALONG THE FRONTAGE OF LOT 7 TO ALLOW FOR THE CONSTRUCTION AND MAINTENANCE OF THIS FACILITY. A DRAINAGE AND ACCESS EASEMENT WILL ALSO BE GRANTED ALONG THE EAST SIDE OF LOT 7 TO ENABLE THE DRIVEWAY TO THE BASEMENT GARAGE ON LOT 8. THESE EASEMENTS WILL BE FILED UPON REVIEW AND APPROVAL BY THE CITY OF ALBUQUERQUE. THEREFORE, THESE TWO LOTS CAN BE DEVELOPED ACCORDING TO THIS PLAN AND DRAIN TO HAINES AVENUE WITH FREE DISCHARGE ACCORDING TO CITY POLICY.



ABBREVIATIONS

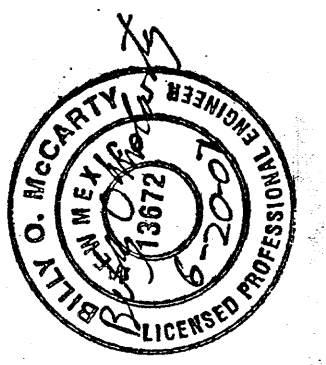
AD = AREA DRAIN	DTL = DETAIL
AIP = ABANDONED IN PLACE	DWG = DRAWING
BLDG = BUILDING	E = ELECTRIC LINE
BM = BENCHMARK	ELEC. = ELECTRIC
CATV = CABLE TELEVISION LINE	ELEV = ELEVATION
CMP = CORRUGATED METAL PIPE	EX = EXISTING
CO = CLEANOUT	FF = FINISHED FLOOR ELEVATION
COA = CITY OF ALBUQUERQUE	FG = FINISHED GRADE
CONC = CONCRETE	FH = FIRE HYDRANT
CL = CENTERLINE	FL = FLOW LINE
DIA = DIAMETER	GM = GAS METER

GV = GATE VALVE	RCP = REINFORCED CONCRETE PIPE
HI PT = HIGH POINT	R/W = RIGHT-OF-WAY
INV = INVERT ELEVATION	SAS = SANITARY SEWER
LF = LINEAL FEET	SD = STORM DRAIN
MH = MANHOLE	STA = STATION
NG = NATURAL GROUND	STD = STANDARD
OE = OVERHEAD ELECTRIC LINE	SW = SIDEWALK
PCC = PORTLAND CEMENT CONCRETE	T = TELEPHONE
PP = POWER POLE	TA = TOP OF ASPHALT PAVEMENT
PROP = PROPOSED	TAC = TOP OF ASPHALT CURB
PVC = POLYVINYL CHLORIDE PIPE	TC = TOP OF CONCRETE SLAB (PAVEMENT)

TCC =	TG = TOP OF GRATE
TS = TOP OF SIDEWALK	TW = TOP OF WALL
TYP = TYPICAL	TE = TELEPHONE BOX
UE =	UT =
W = WATER	WM = WATER METER
WV = WATER VALVE	

RECEIVED
JUN 20 2007
HYDROLOGY SECTION

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GENERAL NOTES
AND
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13904 AND 13908 HAINES AVE, NE

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1 OF 2