



MK	DATE	DESCRIPTION
EWK	RH	
JOB NUMBER: XX.XX		
DATE: JANUARY 25, 2003		
SHEET NO		

EXISTING ON-SITE CONDITIONS

SITE IS A PARTIALLY DEVELOPED TRACT, THE NORTHEASTERLY PORTION OF WHICH IS OCCUPIED BY AN EXISTING RETAIL STORE AND PARKING LOT. REMAINDER IS VACANT BUT HAS BEEN IN USE FOR A FAST-FOOD RESTAURANT (SINCE DEMOLISHED). CHARACTER OF SITE MAY BE BEST DESCRIBED AS WELL-COMPACTED BY VEHICULAR AND PAST CONSTRUCTION ACTIVITY. EXCEPTING THE EXTREME SOUTHEASTERLY CORNER OF THIS SITE, VEGETATION IS NEGLIGIBLE. THERE IS NO FORMAL LANDSCAPING ON THIS SITE. EXISTING SLOPE IS 2% FROM NORTHEAST TO SOUTHWEST CORNER. SURFACE TREATMENT BREAKDOWN IS 7% B, 79% C AND 14% D.

TOTAL AREA OF SITE: 2.54 ACRES.

PROPOSED DEVELOPMENT

SINGLE STORY PRIVATE SCHOOL BUILDING, ADJOINING PLAYGROUND, ASPHALT-SURFACED DRIVE AND PARKING AREAS WITH CONCRETE HEADER CURBING AS SHOWN, SIDEWALKS AND LANDSCAPE AREAS. EXISTING RETAIL BUILDING AND PARKING LOT TO NORTH OF IT IS TO REMAIN IN PLACE, UNALTERED.

OFFSITE FLOWS

RUNOFF FROM ADJOINING AREAS ENTERS SITE AS SHEET FLOWS. THERE ARE NO DISCERNIBLE ERODED FLOWLINES ONTO OR CROSSING THIS SITE. THE ONLY CONTRIBUTORY AREA CONSISTS OF A PORTION OF ADJOINING NORTHWEST PARCEL OCCUPIED BY AN AUTOMOTIVE REPAIR SHOP AND SURROUNDING PAVED AND COMPACTED AREA. THERE IS NO LANDSCAPING ON THIS SITE. SURFACE TREATMENT BREAKDOWN IS 48% C AND 54% D. CONTRIBUTORY AREA: 0.33 ACRE.

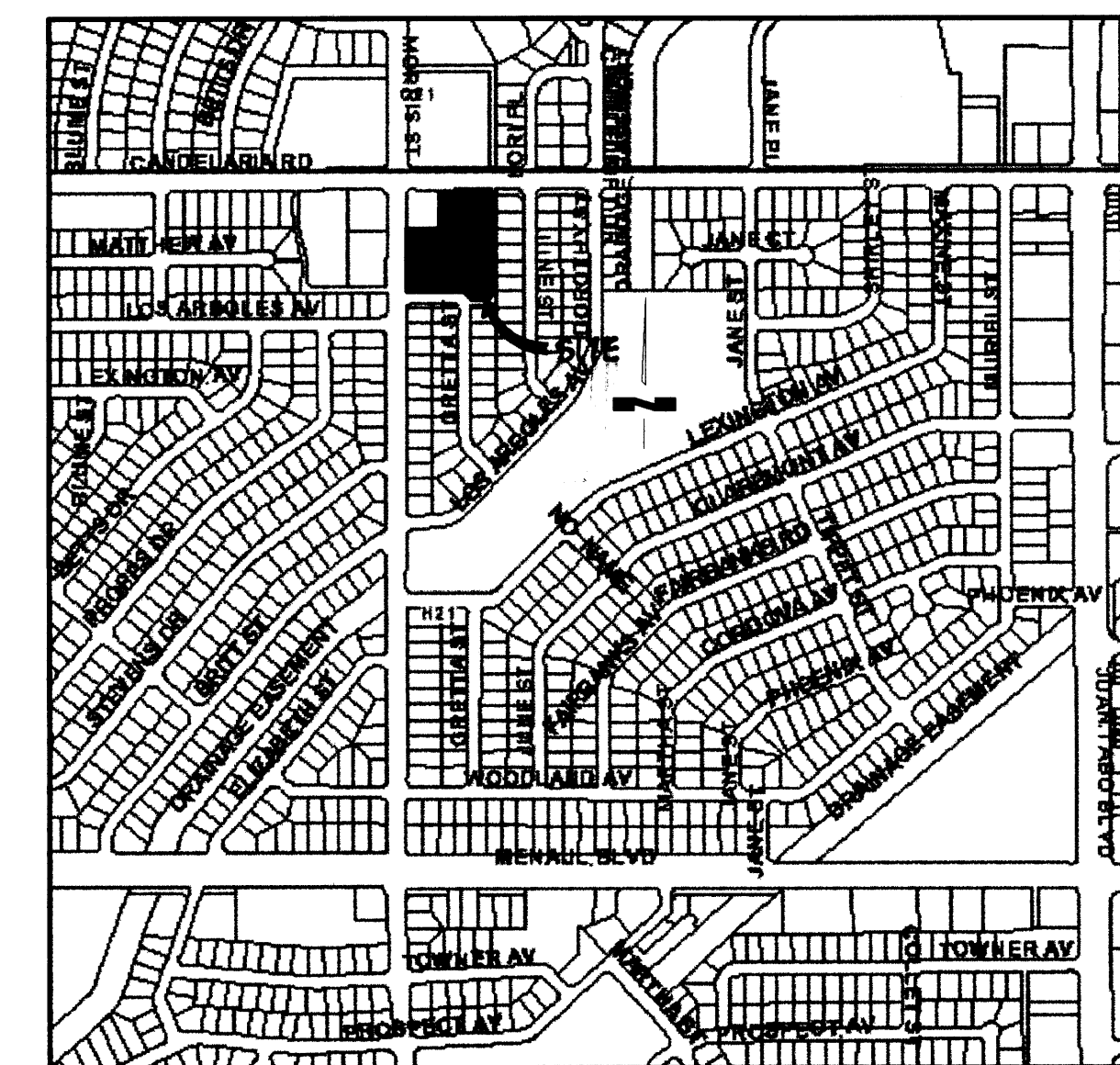
STORMWATER ROUTING

SITE IS TO BE GRADED TO DIRECT SURFACE WATERS TO THE SOUTHEASTERLY CORNER WITH FREE DISCHARGE INTO MORRIS STREET RIGHT-OF-WAY. FLOWS FOLLOW MORRIS SOUTH 1/4 MILE TO DRAIN INTO THE A.M.A.F.C.A. PIEDRA LISA ARROYO, A CONCRETE-LINED DRAINAGE CHANNEL.

DRAINAGE DATA

PRECIPITATION ZONE 4 ON-SITE CONDITIONS							
CONDITION	STORM RETURN PERIOD YEAR	TREATMENT TYPE	TREATMENT AREA (AC.)	EXCESS PRECIP. IN.	PEAK RUNOFF CFS/AC	RUNOFF VOLUME CU.FT.	RUNOFF RATE CFS
EXISTING	100	B	0.18	1.08	2.92	706	0.53
	100	C	2.01	1.46	3.73	10852	7.50
	100	D	0.35	2.84	5.25	3354	1.84
EXISTING	10	B	0.18	0.46	1.45	300	0.26
	10	C	2.01	0.73	2.26	5326	4.54
	10	D	0.35	1.69	3.57	2147	1.25
TOTAL	100		2.54			14712	9.87
	10		2.54			7773	6.05
DEVELOPED	100	B	0.59	1.08	2.92	2313	1.73
	100	C	0.54	1.46	3.73	2882	2.01
	100	D	1.41	2.84	5.25	13512	7.40
DEVELOPED	10	B	0.59	0.46	1.45	985	0.86
	10	C	0.54	0.73	2.26	1431	1.22
	10	D	1.41	1.69	3.57	8650	5.03
TOTAL	100		2.54			18887	11.14
	10		2.54			11086	7.11

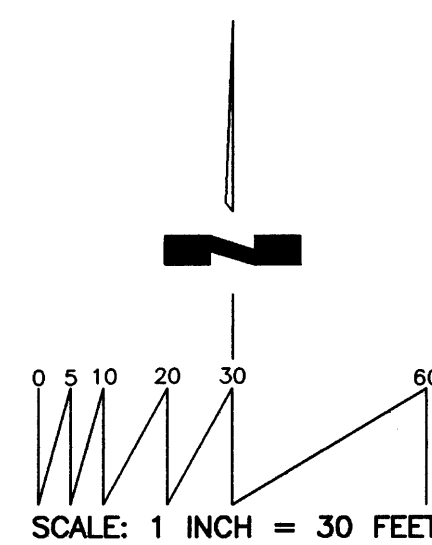
- NOTES
- A flow rate increase of 1.27 CFS and 1.06 CFS for the 100-year and 10-year storms, respectively, may be expected. The 6-hour runoff volumes will increase by 3975 cubic feet for the 100-year storm and 3293 cubic feet for the 10-year storm.
 - Runoff from this site discharges into Morris Street, NE. Street lies within Zone A-0, listed depth of 1 foot. Elevation of building pad required to be two feet (2') higher than highest adjacent flowline elevation on Morris St.
 - This site accepts all offsite flows contributory to it.



VICINITY MAP

NO SCALE

H-21



LEGEND

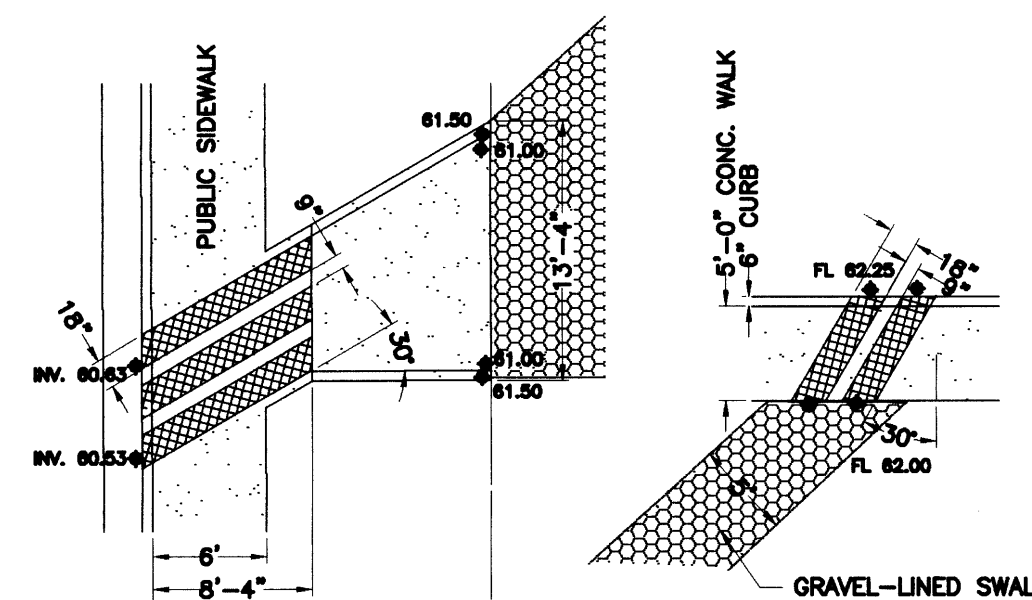
- 5565 EXISTING INDEX CONTOURS @ 5' INTERVALS
- EXISTING INTERMEDIATE CONTOURS @ 1' INTERVALS
- 65 PROPOSED CONTOURS @ 1.0' INTERVALS
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- FLOW LINE
- PROPOSED CONCRETE SURFACING
- PROPOSED BUILDINGS
- EXISTING CHAIN LINK FENCE
- PROPOSED RETAINING WALL
- PROPOSED CMU WALL
- PERIMETER CANALE LOCATIONS
- PLACE CONCRETE SPLASH BLOCK FLUSH TO GRADE AT LIP BENEATH ALL CANALES DRAINING TO NON-PAVED SURFACES
- GRAVEL LINING
- HOLD 5' WIDTH. SWALES MAY BE MEANDERED FOR SOFTER LANDSCAPING EFFECT.

BENCH MARK

ACS STA 14-121
SET ON SSW CURB RETURN, INTERSECTION OF CANDELARIA RD. AND MORRIS STREET, NE
ELEV. 5568.41

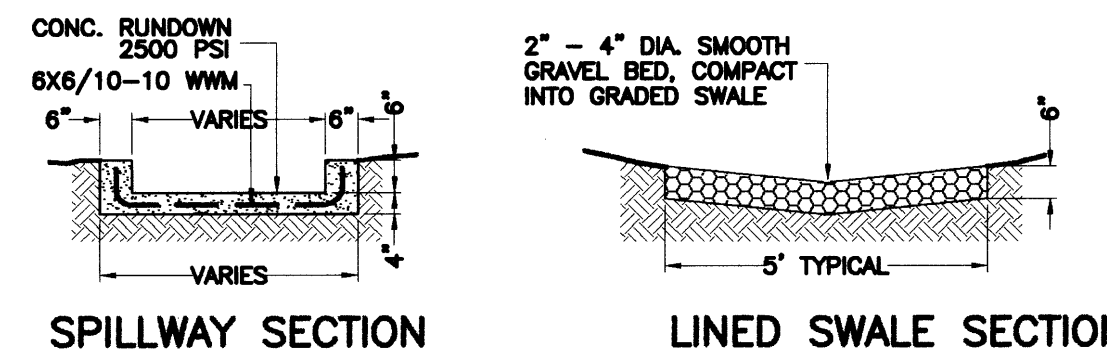
T.B.M.

MARK PAINTED ON TOP OF CURB, ADJ. TO NW PROPERTY CORNER, MORRIS ST.
ELEV. 5568.33



SIDEWALK CULVERT LAYOUTS

SCALE 1" = 10"

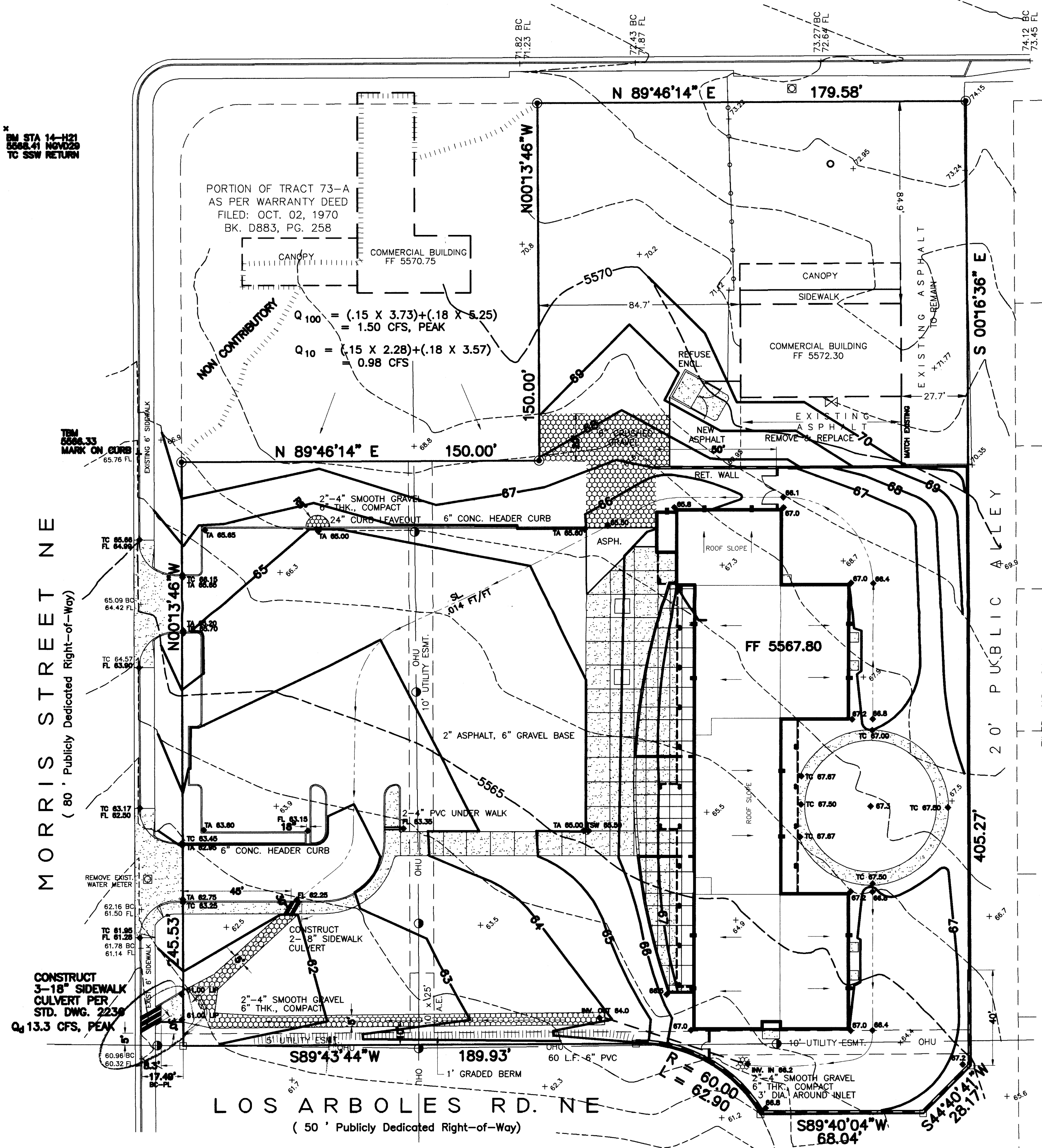


SPILLWAY SECTION

LINED SWALE SECTION

CANDELARIA ROAD NE

(93' Publicly Dedicated Right-of-Way)



NOTICE TO CONTRACTOR

PROPOSED CONTOURS SHOWN ARE TO FINISH SURFACES AND ARE PROVIDED FOR THE PURPOSE OF SHOWING FLOW ROUTING.

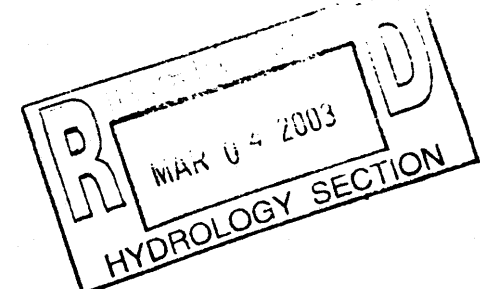
CONTRACTOR IS RESPONSIBLE FOR THE ABATEMENT OF SEDIMENT ONTO ADJOINING PUBLIC RIGHTS-OF-WAY DURING CONSTRUCTION AND FOR THE REMOVAL OF ANY SEDIMENT DEPOSITED IN PUBLIC RIGHT-OF-WAY.

CONTRACTOR SHALL OBTAIN A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO ANY GRADING OR CONSTRUCTION.

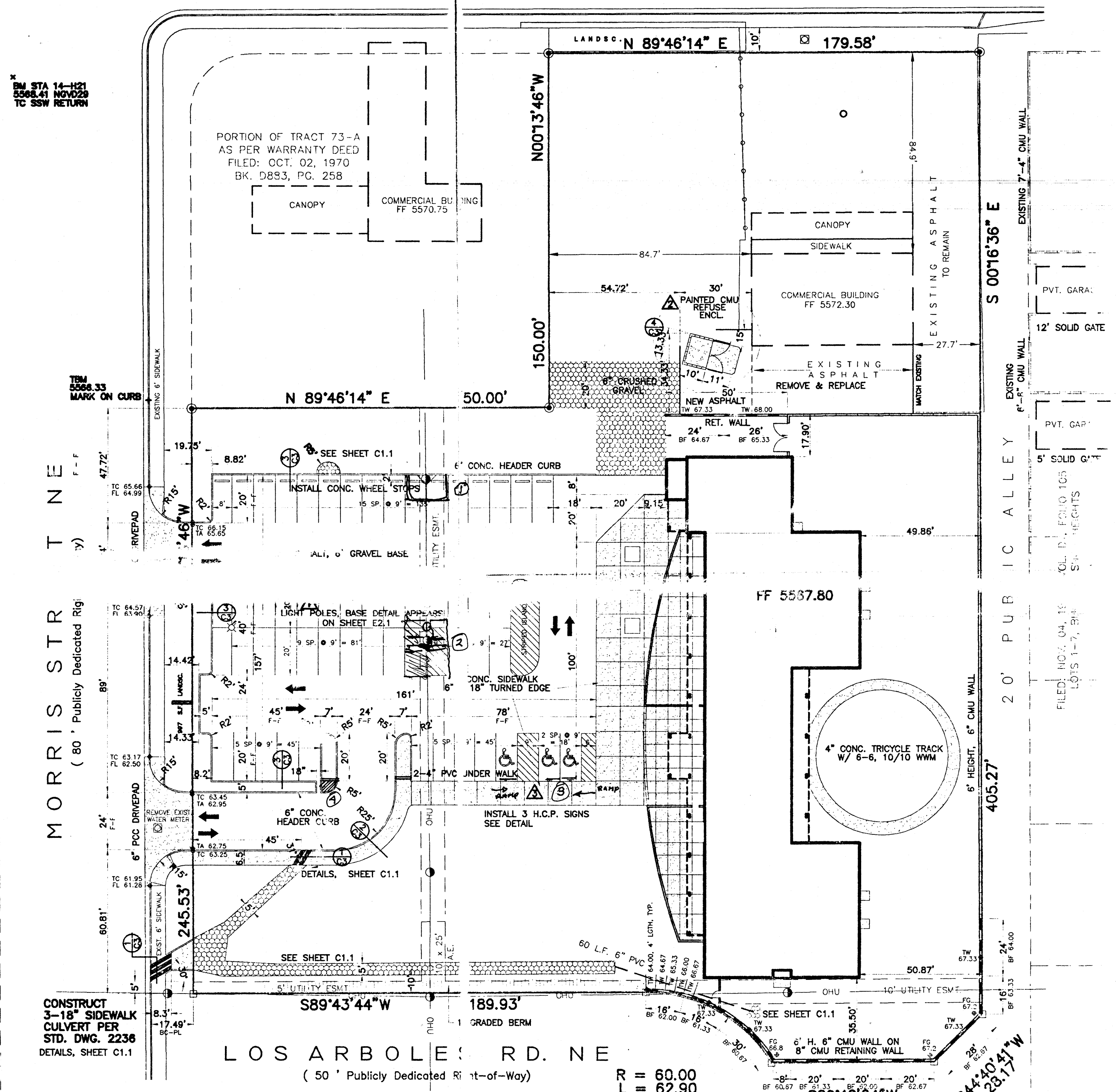
APPROVALS	NAME	DATE
TRAFFIC		
INSPECTOR		
A.C.E./FIELD		

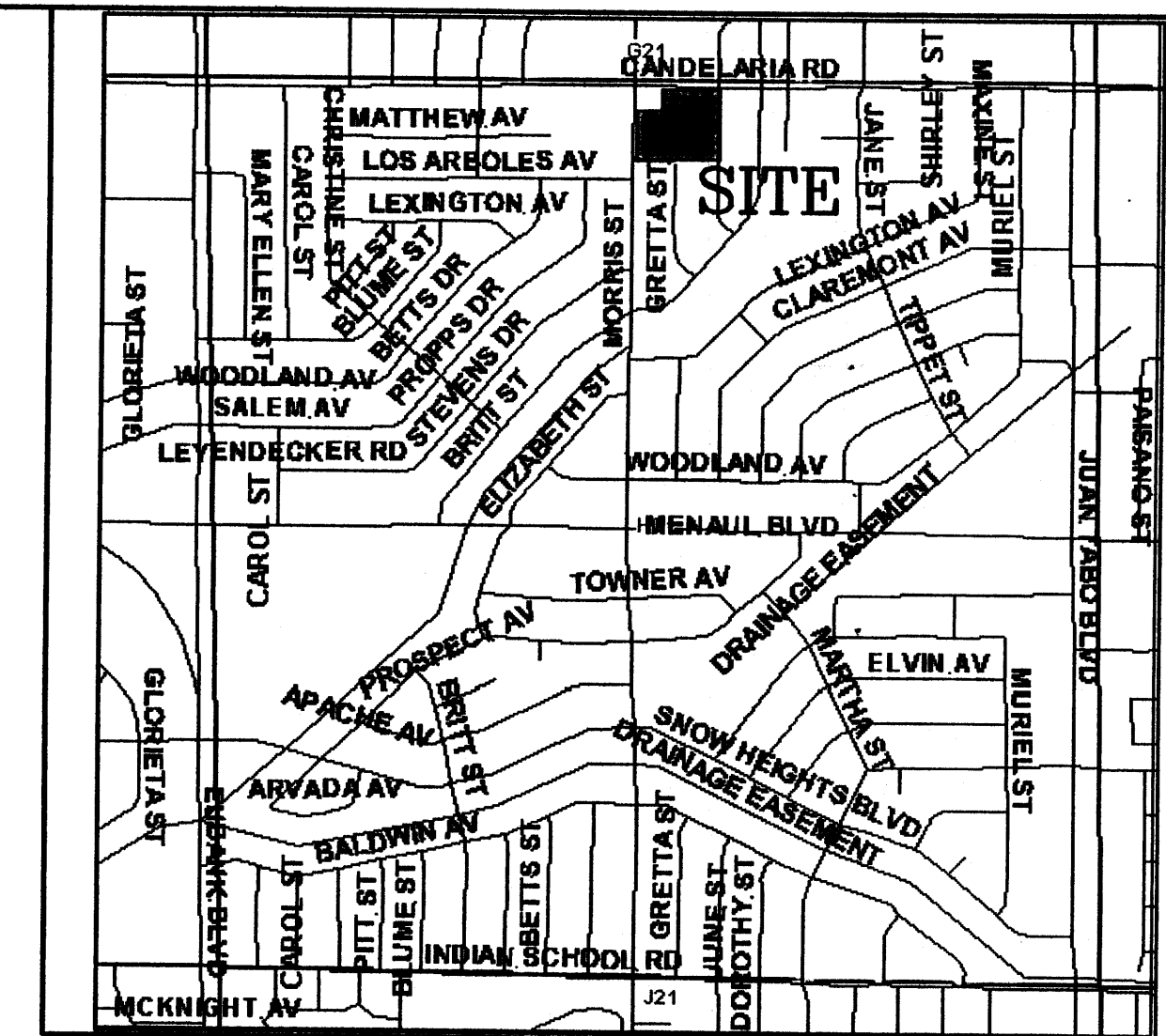
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION, AS AMENDED THROUGH UPDATE #5.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 280-1990 FOR LOCATION OF EXISTING UTILITIES.
- BACKFILL AND COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.

FILED: NOV. 04, 1953, VOL. D1, FOLIO 105
LOTS 1-7, BLK. 73, SNOW HEIGHTS



CANDELARIA ROAD NE
(93' Publicly Dedicated Right-of-Way)

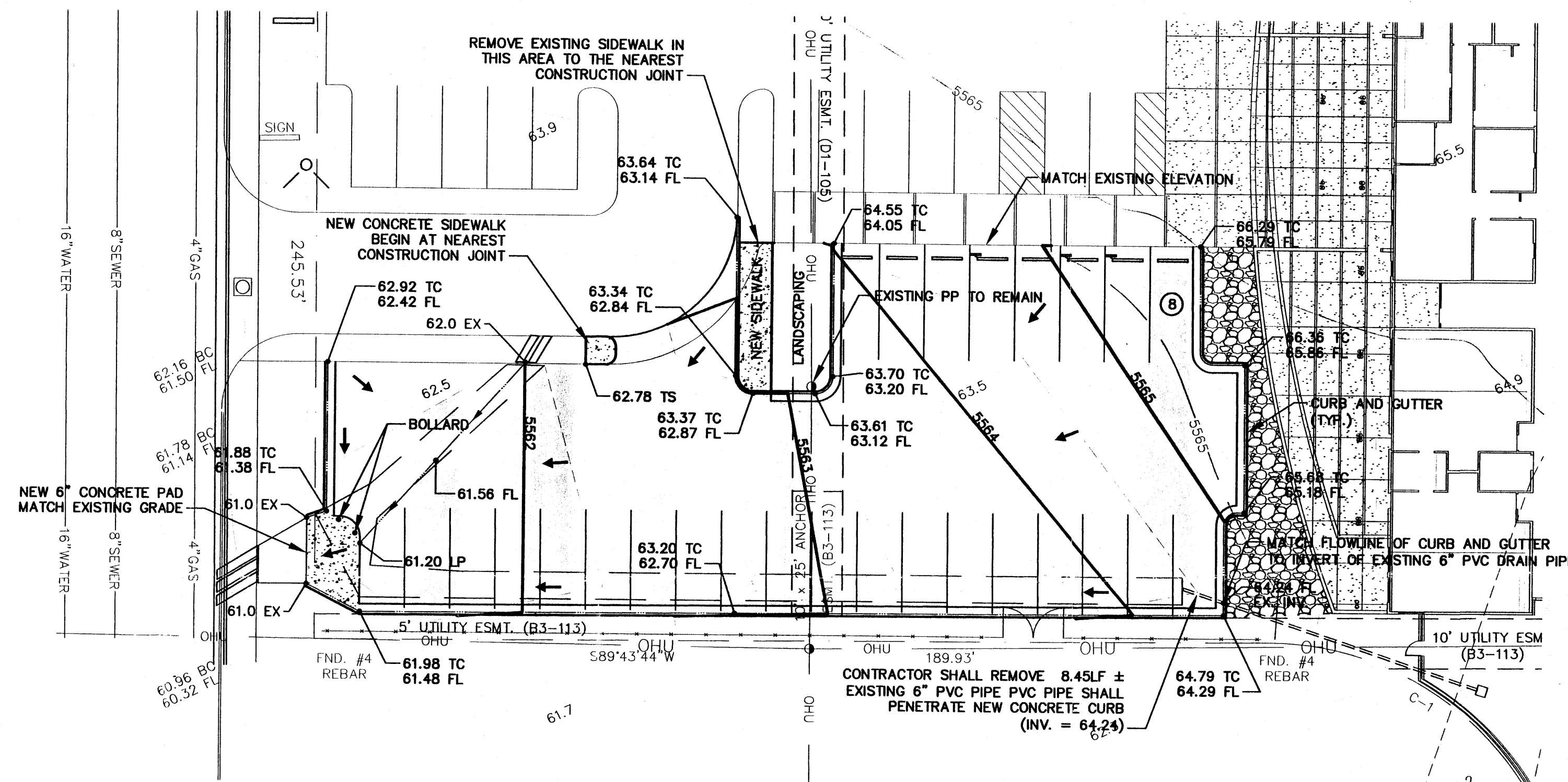




VICINITY MAP
ZONE ATLAS H-21
NOT TO SCALE

GENERAL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
2. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
3. CONTRACTOR SHALL OBTAIN A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO ANY GRADING OR CONSTRUCTION.
4. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OR EXISTING UTILITIES.
5. BACKFILL AND COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
7. ALL CONCRETE SHALL BE A MINIMUM OF 3000 P.S.I.
8. PROJECT BENCHMARK IS A STANDARD ACS 3/4" ALUMINUM CAP SET ON SOUTH SOUTHWEST CURB RETURN, INTERSECTION OF CANDELARIA RD. AND MORRIS STREET NE, ELEV = 5568.41 FEET
9. ALL EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM ASBUILT DRAWINGS PROVIDED BY OTHERS. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.



DRAINAGE DATA

HYDROLOGY

Precipitation Zone 4 - 100-year Storm P(360) = 2.90 in

Basin	Area (Ac)	Land Treatment Factors				Ew (in)	V(100) (af)	Q(100) (cfs)
		A	B	C	D			
Existing Conditions								
Site	2.54	0.00	0.59	0.54	1.41	2.03	0.429	11.14
Proposed Conditions								
Site	2.54	0.00	0.52	0.34	1.68	2.16	0.458	11.81

HYDROLOGY

Precipitation Zone 4 - 10-year Storm P(360) = 1.93 in

Basin	Area (Ac)	Land Treatment Factors				Ew (in)	V(100) (af)	Q(100) (cfs)
		A	B	C	D			
Existing Conditions								
Site	2.54	0.00	0.59	0.54	1.41	1.20	0.254	7.11
Proposed Conditions								
Site	2.54	0.00	0.52	0.34	1.68	1.31	0.277	7.52

NOTES:
A FLOW RATE INCREASE OF 0.47 CFS AND 0.41 CFS FOR THE 100-YEAR AND 10-YEAR RESPECTIVELY, MAY BE EXPECTED.

RUNOFF FROM THIS SITE DISCHARGES INTO MORRIS STREET, NE, WHICH LIES WITHIN ZONE A--D, LISTED DEPTH OF 1 FOOT.

OFFSITE FLOWS

THIS PROJECT SITE RECEIVES OFFSITE FLOWS FROM THE PHASE I PORTION OF THE PROJECT COMPLETED IN 2002. TO BE CONSISTENT WITH PREVIOUS HYDROLOGY STUDIES FOR THIS SITE, THE HYDROLOGY FROM THE PREVIOUSLY APPROVED GRADING AND DRAINAGE PLAN WILL BE CONSIDERED (SEE ATTACHED SUPPLEMENT INFORMATION).

EXISTING ON-SITE CONDITIONS

THE PROJECT SITE IS CURRENTLY UNDEVELOPED AND CONSISTS OF NATIVE GRASSES WITH SOME LANDSCAPING. THE EXISTING BUILDING AND PARKING LOT LOCATED IMMEDIATE NORTH OF THE PROJECT SITE WAS CONSTRUCTED IN 2002. THE PROJECT SITE SLOPES FROM EAST TO WEST AT APPROXIMATELY 2%. THE TOTAL AREA OF THE SITE IS 2.54 ACRES, WHICH INCLUDES THE PARKING LOT ADDITION OF 0.315 ACRES. THE LAND TREATMENTS ARE CATEGORIZED AS 0.59 B, 0.54 C, AND 1.41 D.

PROPOSED DEVELOPMENT

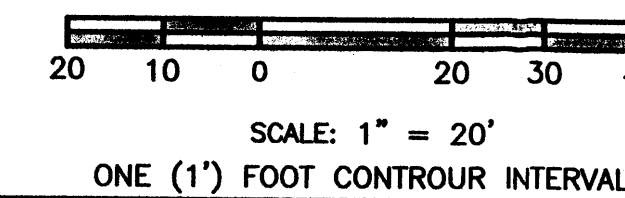
THE PROPOSED PROJECT WILL BE AN EXPANSION OF THE EXISTING PARKING LOT TO PROVIDE OVERFLOW PARKING FOR THE EXISTING DEVELOPMENT. THE TOTAL AREA OF THE PROPOSED IMPROVEMENTS ARE ESTIMATED AT 0.315 ACRES. THE PROPOSED PARKING LOT ADDITION WILL CONSIST OF A CONCRETE CURB AND GUTTER PERIMETER AND A NEW ASPHALT PAVED SURFACE. THE PARKING LOT AREA AS WELL AS RUNOFF DISCHARGING THROUGH THE EXISTING RIP RAP SWALES WILL DRAIN WEST TO THE EXISTING SIDEWALK CULVERT LOCATED AT MORRIS STREET NE. NEW SIDEWALK WILL BE ADDED AS REQUIRED. THE LAND TREATMENTS ARE CATEGORIZED AS 0.52 B, 0.34 C AND 1.68 D.

STORMWATER ROUTING

AS PREVIOUSLY MENTIONED, ALL SITE RUNOFF AS WELL AS CONTRIBUTING OFFSITE AREAS FROM PHASE I DISCHARGE THROUGH THE EXISTING SIDEWALK CULVERT AT MORRIS STREET. FROM THERE, THE STORMWATER FLOWS ARE ROUTED THROUGH THE MORRIS STREET RIGHT-OF-WAY SOUTH FROM 1/4 MILE TO THE PIEDRA LISA ARROYO, A CONCRETE LINED DRAINAGE CHANNEL.

LEGEND

● PP	EXISTING POWER POLE
□	EXISTING LIGHT POLE
OHU	EXISTING OVERHEAD UTILITY LINE
— GAS —	EXISTING GAS LINE
— X — X — X —	EXISTING FENCE LINE
— SEWER —	EXISTING SANITARY SEWER LINE
— WATER —	EXISTING WATER LINE
—	EXISTING CULVERT
~ 4500 ~	EXISTING INDEX CONTOUR
~ 4500 ~	EXISTING INTERMEDIATE CONTOUR
—	PROPOSED CURB AND GUTTER
→	PROPOSED FLOW ARROW
▭	PROPOSED ASPHALT PAVING
▭	PROPOSED CONCRETE SIDEWALK



Bernalillo NEW MEXICO

GRADING and DRAINAGE PLAN

SUNSET MESA SCHOOL



MILLER ENGINEERING CONSULTANTS
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Designed	Drawn	Checked	Sheet
VAM	GM	VAM	G-1
Job # E-05-036	File Grading Plan	Date June 2005	

