

October 22, 1997

Martin J. Chávez, Mayor

Michael Brewer  
CH2M HILL  
6001 Indian School Road NE  
Suite 350  
Albuquerque, NM 87110

**RE: LOVE RESERVOIR REPLACEMENT (J21-D25). DRAINAGE REPORT SUBMITTAL  
FOR BUILDING PERMIT AND WORK ORDER PERMIT APPROVALS. ENGINEER'S  
STAMP DATED OCTOBER 6, 1997..**

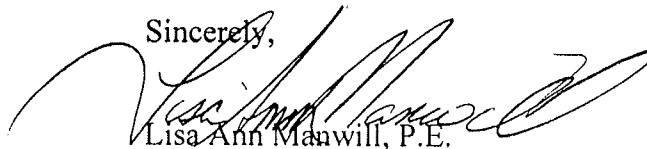
Dear Mr. Brewer:

Based on the information provided on your October 7, 1997 submittal, the above referenced project is acceptable for Building and Work Order Permits.

An Engineer's Certification for the entire project will be required prior to Release of Financial Guarantees.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,



Lisa Ann Manwill, P.E.  
Hydrology

c: Andrew Garcia  
File

Good for You, Albuquerque!







|                                                                                                                                                                            |                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
|                                                                                         | EXISTING STRUCTURE            |
|                                                                                         | CHAIN LINK FENCE              |
|                                                                                         | DEMOLITION (TO BE REMOVED)    |
|                                                                                         | PROPERTY LINE OR RIGHT-OF-WAY |
|                                                                                         | PROPOSED PIPE                 |
|                                                                                         | EXIST SANITARY SEWER          |
|                                                                                         | EXIST WATER LINE              |
|                                                                                         | EXIST GAS LINE                |
|                                                                                         | EXIST UNDERGROUND TELEPHONE   |
|                                                                                         | EXIST UNDERGROUND ELECTRIC    |
|                                                                                         | EXIST STORM SEWER             |
|                                                                                         | EXIST CABLE TELEVISION        |
|                                                                                         | EXISTING MANHOLE              |
|                                                                                         | NEW MANHOLE                   |
|                                                                                         | FIRE HYDRANT                  |
|  OR  | POWER POLE                    |
|                                                                                         | ANCHOR                        |
|  E                                                                                      | TREE (EVERGREEN)              |
|                                                                                         | TREE (DECIDUOUS)              |
|  DI                                                                                     | DROP INLET                    |
|                                                                                         | OVERHEAD POWER LINE           |

[illegible]

6001 Indian School Rd, N.E., SUITE 350  
Albuquerque, New Mexico 87110  
(505) 884-5600

CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DEVELOPMENT GROUP

TITLE: LOVE RESERVOIR REPLACEMENT  
SITE DEMOLITION PLAN

|                         |                        |             |             |
|-------------------------|------------------------|-------------|-------------|
| Design Review Committee | City Engineer Approval | Mo./Day/Yr. | Mo./Day/Yr. |
|-------------------------|------------------------|-------------|-------------|

CITY PROJECT NO. 5511 91

|              |             |    |
|--------------|-------------|----|
| Zone Map No. | SHEET       | OF |
| J-21         | DRAWING NO. |    |

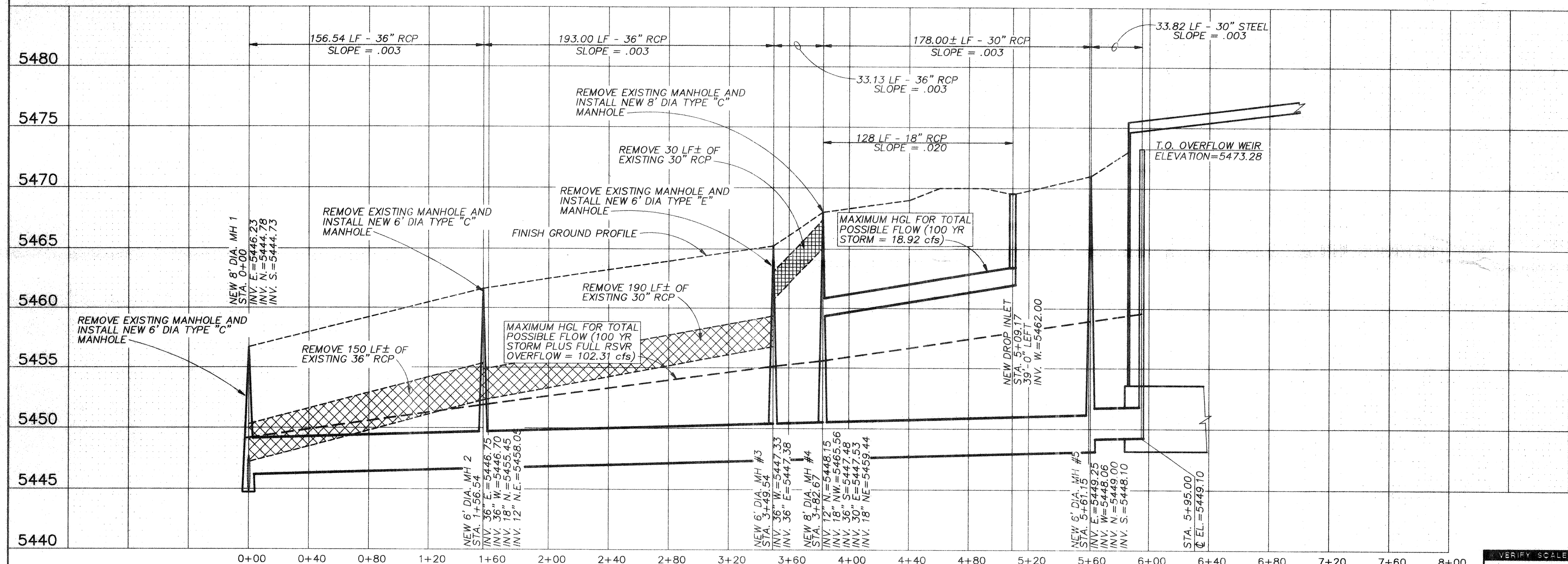
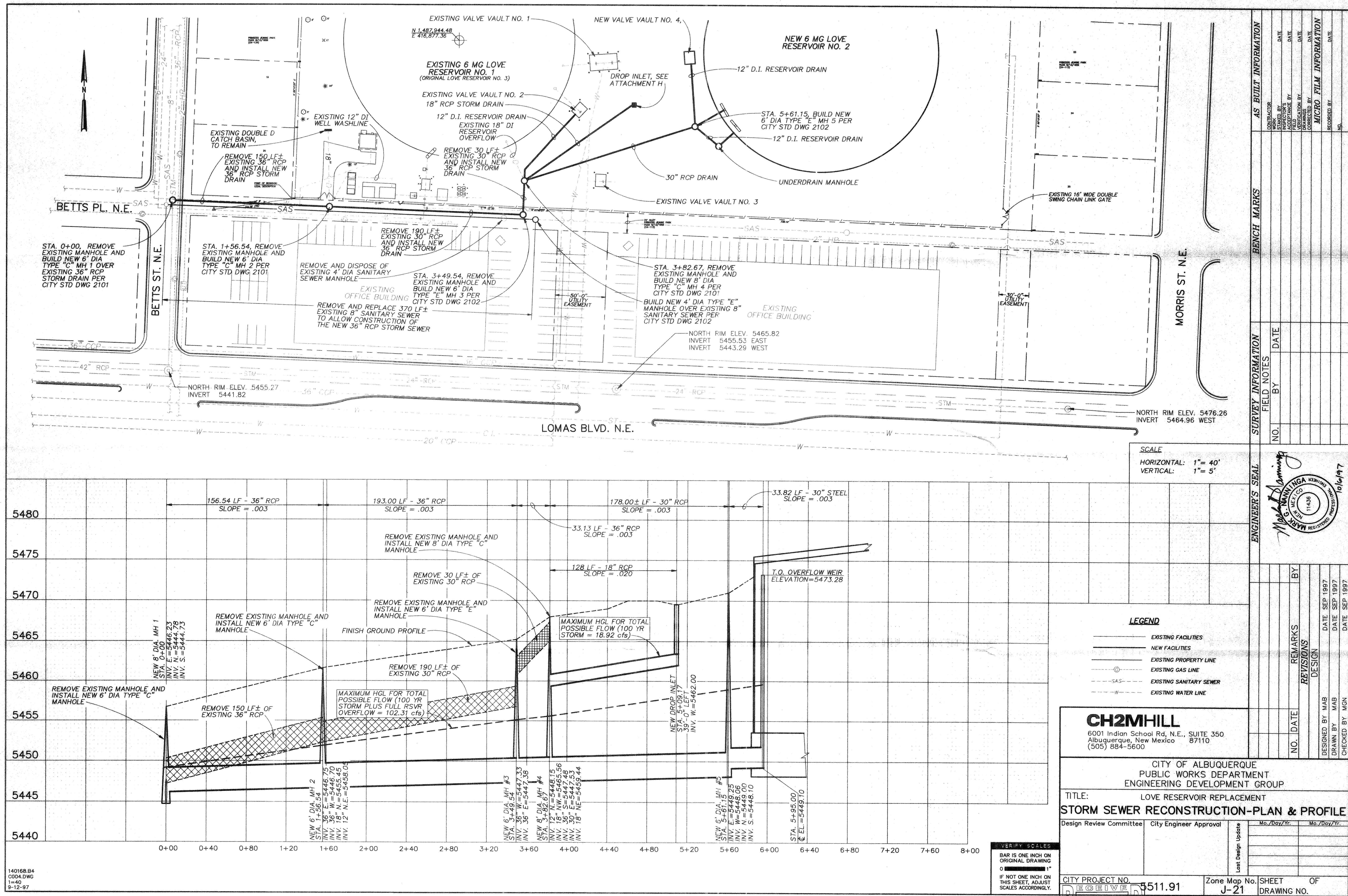
ATTACHMENT H

140168.B4  
ATTCHH.DWG  
1=50  
9-8-97

**VERIFY SCALES**  
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 ORIGINAL DRAWING  
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 IF NOT ONE INCH ON  
 THIS SHEET, ADJUST  
 SCALES ACCORDINGLY

RECEIVED  
OCT 07 1997  
HYDROLOGY SECTION





- LEGEND**
- EXISTING FACILITIES
  - NEW FACILITIES
  - EXISTING PROPERTY LINE
  - EXISTING GAS LINE
  - EXISTING SANITARY SEWER
  - EXISTING WATER LINE

**CH2MHILL**  
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CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DEVELOPMENT GROUP

TITLE: LOVE RESERVOIR REPLACEMENT  
**STORM SEWER RECONSTRUCTION-PLAN & PROFILE**

Design Review Committee City Engineer Approval

REVISIONS

| NO. | DATE     | REMARKS | BY  |
|-----|----------|---------|-----|
| 1   | SEP 1997 | DESIGN  | MAB |
| 2   | SEP 1997 | DESIGN  | MAB |
| 3   | SEP 1997 | DESIGN  | MGN |

CITY PROJECT NO. 5511.91 Zone Map No. J-21 SHEET OF DRAWING NO. ATTACHMENT E

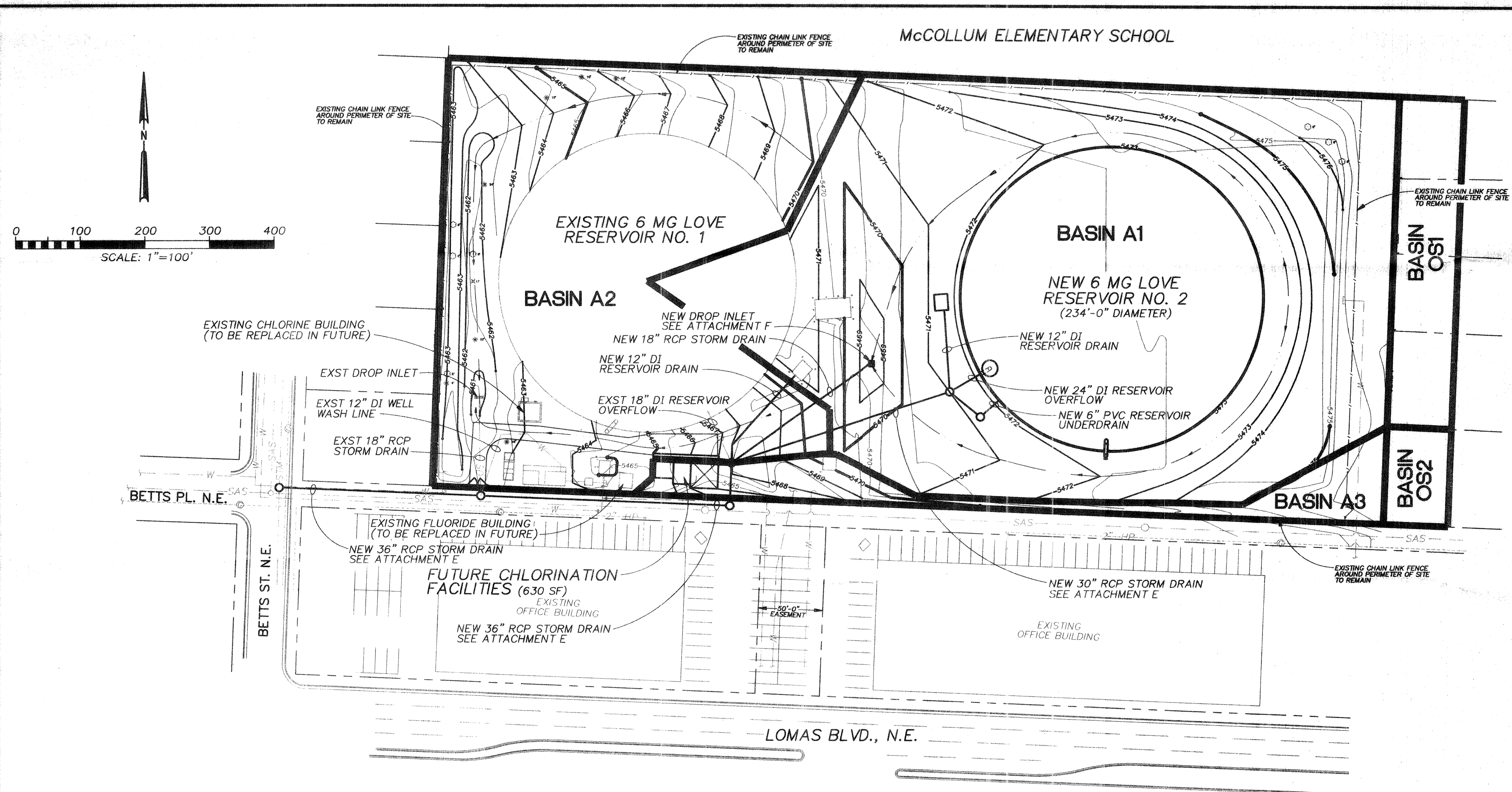
OCT 07 1997

HYDROLOGY SECTION









### SITE RUNOFF SUMMARY

- RUNOFF FLOWS FROM THE ONSITE BASIN A1 AND THE OFFSITE BASIN OS1 WILL DRAIN TO THE NEW DROP INLET STRUCTURE LOCATED NEAR THE CENTER OF THE SITE. THE RUNOFF FLOW FROM THESE AREAS, (18.92 cfs (100 YEAR) AND 11.91 cfs (10 YEAR)), WILL BE COLLECTED AT THE NEW DROP INLET STRUCTURE AND CARRIED OFFSITE TO THE EXISTING 36-INCH RCP STORM DRAIN ON BETTS STREET, N.E..
- RUNOFF FLOWS FROM THE ONSITE BASIN A2 WILL DRAIN TO THE EXISTING DROP INLET STRUCTURE NEAR THE S.W. CORNER OF THE SITE. THE RUNOFF FLOW FROM THIS AREA, (8.79 cfs (100 YEAR) AND 5.71 cfs (10 YEAR)), WILL BE COLLECTED AT THE EXISTING DROP INLET STRUCTURE AND CARRIED TO THE EXISTING 36-INCH RCP STORM DRAIN ON BETTS STREET, N.E..
- RUNOFF FLOWS FROM THE ONSITE BASIN A3 AND THE OFFSITE BASIN OS2 WILL DRAIN OFF THE SITE INTO THE EXISTING ALLEY ADJACENT TO THE SOUTH SIDE OF THE SITE. THE RUNOFF FLOW FROM THESE AREAS, TOTALLING 2.36 cfs (100 YEAR) AND 1.42 cfs (10 YEAR), WILL FLOW WEST IN THE ALLEY TO BETTS STREET, N.E. AND THEN SOUTH ALONG BETTS STREET TO LOMAS BLVD..
- THE EXISTING 30 AND 36-INCH RCP STORM DRAIN, LOCATED IN THE ALLEY ALONG THE SOUTH SIDE OF THE SITE, WILL BE RECONSTRUCTED FROM BETTS STREET EAST TO THE END OF THE LINE IN ORDER TO ACCOMMODATE THE NEW RESERVOIR OVERFLOW AND DRAIN PIPING.

### LEGEND

- BASIN BOUNDARY
- - - PROPERTY LINE
- 5474— NEW GRADING CONTOUR
- 5474— EXISTING CONTOUR
- SAS — NEW DRAIN PIPING
- - - SAS - EXISTING UTILITIES

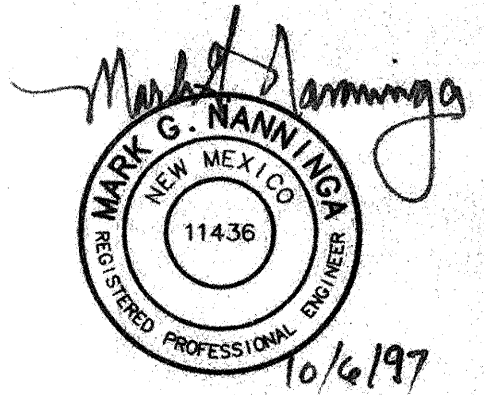
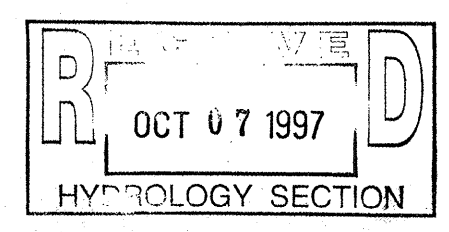
RUNOFF CALCULATION SUMMARY TABLE

| BASIN DESIGNATION | TREATMENT CLASSIFICATION | AREA OF BASIN (ACRES) | "C" FACTOR<br>10 YR/100 YR<br>(SEE NOTE 1) | "R" (INCHES)<br>10 YR/100 YR<br>(SEE NOTE 2) | Tc (MINUTES) | "I" (IN/HR)<br>10 YR/100 YR<br>(SEE NOTE 3) | Q (10 YEAR) | Q (100 YEAR) |
|-------------------|--------------------------|-----------------------|--------------------------------------------|----------------------------------------------|--------------|---------------------------------------------|-------------|--------------|
| <b>OFFSITE</b>    |                          |                       |                                            |                                              |              |                                             |             |              |
| OS1               | B                        | .48                   | 0.38/0.52                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | .70         | 1.40         |
| OS1               | D                        | .65                   | 0.93/0.94                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 2.32        | 3.43         |
| TOTAL OS1         |                          | 1.13                  |                                            |                                              |              |                                             | 3.02        | 4.83         |
| OS2               | B                        | .20                   | 0.38/0.52                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 0.29        | 0.58         |
| OS2               | D                        | .14                   | 0.93/0.94                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 0.50        | 0.74         |
| TOTAL OS2         |                          | .34                   |                                            |                                              |              |                                             | 0.79        | 1.32         |
| <b>ONSITE</b>     |                          |                       |                                            |                                              |              |                                             |             |              |
| A1                | B                        | 0.06                  | 0.38/0.52                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 0.09        | 0.26         |
| A1                | C                        | 2.27                  | 0.59/0.66                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 5.13        | 8.40         |
| A1                | D                        | 1.03                  | 0.93/0.94                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 3.67        | 5.43         |
| TOTAL A1          |                          | 3.36                  |                                            |                                              |              |                                             | 8.89        | 14.09        |
| A2                | B                        | 0.07                  | 0.38/0.52                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 0.10        | 0.20         |
| A2                | C                        | 0.81                  | 0.59/0.66                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 1.83        | 3.00         |
| A2                | D                        | 1.06                  | 0.93/0.94                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 3.78        | 5.59         |
| TOTAL A2          |                          | 1.94                  |                                            |                                              |              |                                             | 5.71        | 8.79         |
| A3                | B                        | 0.06                  | 0.38/0.52                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 0.09        | 0.18         |
| A3                | C                        | 0.22                  | 0.59/0.66                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 0.50        | 0.81         |
| A3                | D                        | 0.01                  | 0.93/0.94                                  | 1.93/2.90                                    | 12           | 3.83/5.61                                   | 0.04        | 0.05         |
| TOTAL A3          |                          | 0.29                  |                                            |                                              |              |                                             | 0.63        | 1.04         |

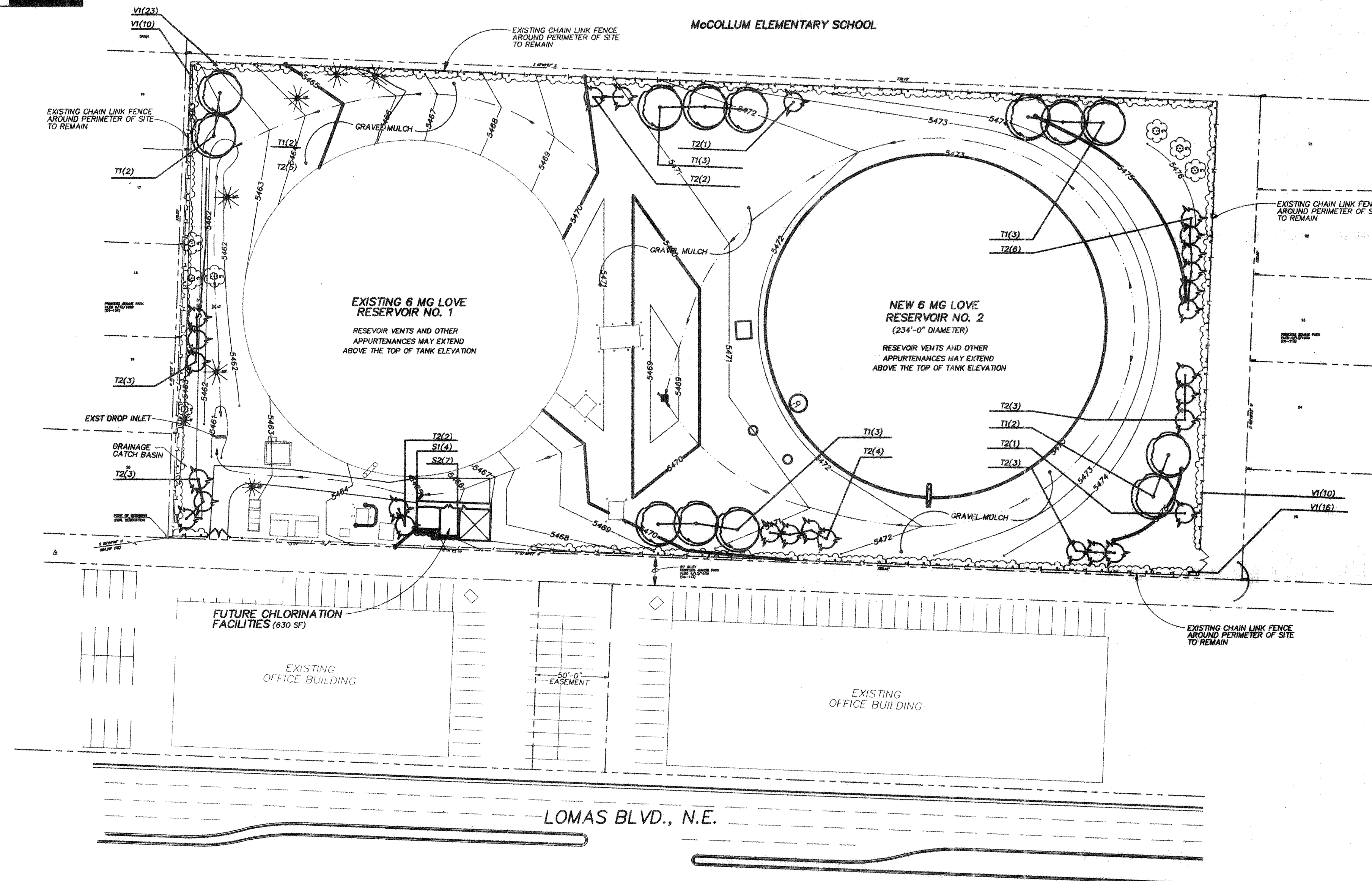
### NOTES:

- RATIONAL METHOD COEFFICIENT "C" FROM TABLE A-11, DPM SECTION 22.2.
- DEPTH (INCHES) "R" AT 100 YEAR STORM FROM TABLE A-2, DPM SECTION 22.2.
- PEAK INTENSITY (IN/HR) "I" FROM TABLE A-10, DPM SECTION 22.2.

SITE DRAINAGE BASINS, PROPOSED IMPROVEMENTS AND RUNOFF FLOW SUMMARY







LANDSCAPE AREA  
REQUIREMENT:

LANDSCAPED AREA REQUIREMENT - 24,237 SQUARE FEET  
LANDSCAPED AREA PROVIDED - 33160 SQUARE FEET

| Symbol | Common Name / Scientific Name                                       | Size      | Container | Quantity | Unit | Remark |
|--------|---------------------------------------------------------------------|-----------|-----------|----------|------|--------|
| T1     | Chinese Pistache / <i>Pistacia chinenses</i>                        | 2.5" Cal. | 24"Box    | 13       | Each |        |
|        | Honey Locust / <i>Gleditsia triacanthos</i>                         |           |           |          |      |        |
| T2     | Heitz's Columnaris / <i>Juniperus chinensis</i> 'Heizii Columnaris' | 2" Cal.   | 15 Gal.   | 28       | Each |        |
|        | Keteleer Juniper / <i>Juniperus chinensis</i> 'Keteleeri'           |           |           |          |      |        |
| V1     | Boston Ivy / <i>Parthenocissus tricuspidata</i>                     | 1' Height | 1 Gal.    | 59       | Each |        |
|        | Woodbine / <i>Parthenocissus inserta</i>                            |           |           |          |      |        |
| S1     | Cranberry Cotoneaster / <i>Cotoneaster apiculatus</i>               | 1' Height | 1 Gal.    | 4        | Each |        |
|        | Dwarf Butterflybush / <i>Buddleia davidii</i> nanhoensis            |           |           |          |      |        |
| S2     | Blue Mist / <i>Caryopteris x clandonensis</i>                       | 1' Height | 1 Gal.    | 7        | Each |        |
|        | Hummingbird Trumpet / <i>Anisacanthus thunbergii</i>                |           |           |          |      |        |

HYDROLOGY SECTION

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