



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 19, 2001

Chris Weiss, PE
C.L. Weiss Engineering, Inc.
PO Box 97
Sandia Park, NM 87047

**Re: Jefferson Commons – Lot 13A Grading and Drainage Plan
Engineer's Stamp dated 12-20-00, (F17/D61L)**

Dear Mr. Weiss,

Based on information contained in your submittal dated 12-21-00, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

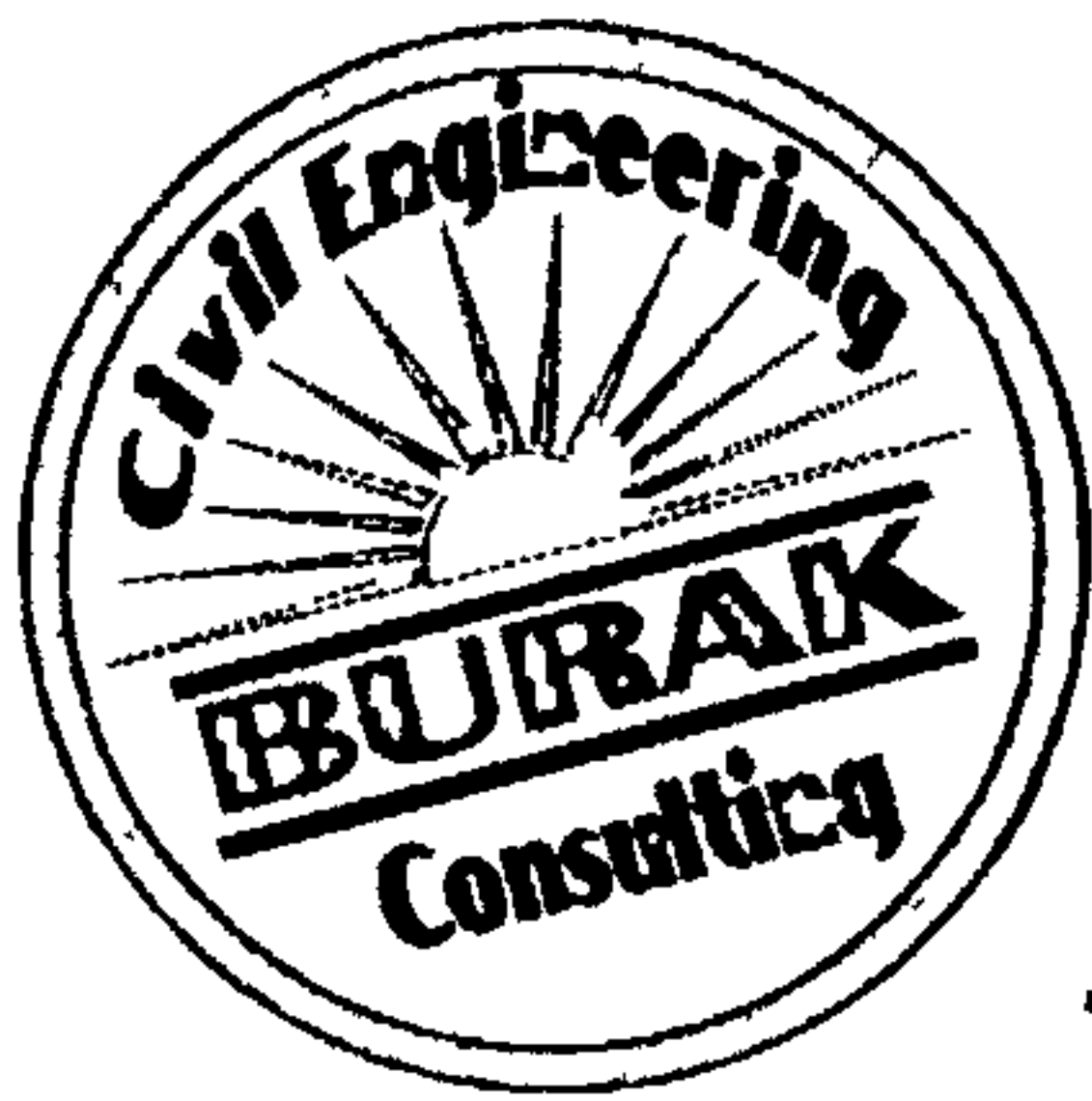
Also, prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham
Bradley L. Bingham, PE
Sr. Engineer, Hydrology

C: file



Mark H. Burak, P.E.

1512 Sagebrush Trail SE Albuquerque, NM 87123

(505) 296-0461

235-2256 cell

296-0467 fax

January 30, 2001

Loren Meinz, P.E.,
Head Hydrology Division
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87102

- **Case No:** F17-D061L
- **Submittal dated:** December 21, 2000 by CL Weiss
- **Project Title:** Jefferson Commons, Lot 13A Improvements
- **Location:** West of Jefferson and I-25
- **Approval Type:** Building Permit

- **Note:** *This submittal concerns the rehabilitation of the existing parking facility and surrounding sidewalks and landscaping.*

Dear Mr. Meinz:

Based on the submittal stamped December 20, 2000, the proposed grading and drainage plan does appear to be borderline sufficient and might be able to be approved for building permit at this time. However, for clarification, the following concerns may need to be addressed:

- ✕ The landscaped area referred to in item No.3 is not defined on the Plan.
- The discharge and pipe capacity for the 4-inch pvc pipe noted in item No.3 was not found on the Plan.
- No drainage calculations nor subbasin delineations nor flow data was found on the Plan.
- This whole parking area drains to a sump located at the bottom of a loading dock. This sump has a pump with a two-inch diameter force main. No calculations concerning the pumps and/or maximum ponding depth were noted on the Plan.

If you have any questions regarding this letter or need any clarification concerning the above project, please feel free to call me at 296-0461.

Sincerely,

Mark H. Burak, P.E.
Hydrology Consultant

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Jefferson Commons Lot 13A ZONE ATLAS / DRNG. FILE #: F-17-D61L

LEGAL DESCRIPTION: Lot 13A, Jefferson Commons Subdivision, Albuquerque, N.M.

CITY ADDRESS: NA

ENGINEERING FIRM: C. L. Weiss Engineering, Inc. CONTACT: Christopher L. Weiss

ADDRESS: P.O. Box 97, Sandia Park, NM 87047 PHONE: 281-1800

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR FIRM: George Chant & Associates CONTACT: George Chant

ADDRESS: P.O. Box 3529, Albuquerque, NM 87190 PHONE: 344-1633

PRE-DESIGN MEETING:

____ YES

☒ NO

____ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO F17-D61L

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT

☒ DRAINAGE PLAN

____ CONCEPTUAL GRADING & DRAINAGE PLAN

☒ GRADING PLAN

____ EROSION CONTROL PLAN

____ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT

____ PRELIMINARY PLAT

____ SITE DEVELOPMENT PLAN

____ FINAL PLAT

☒ BUILDING PERMIT

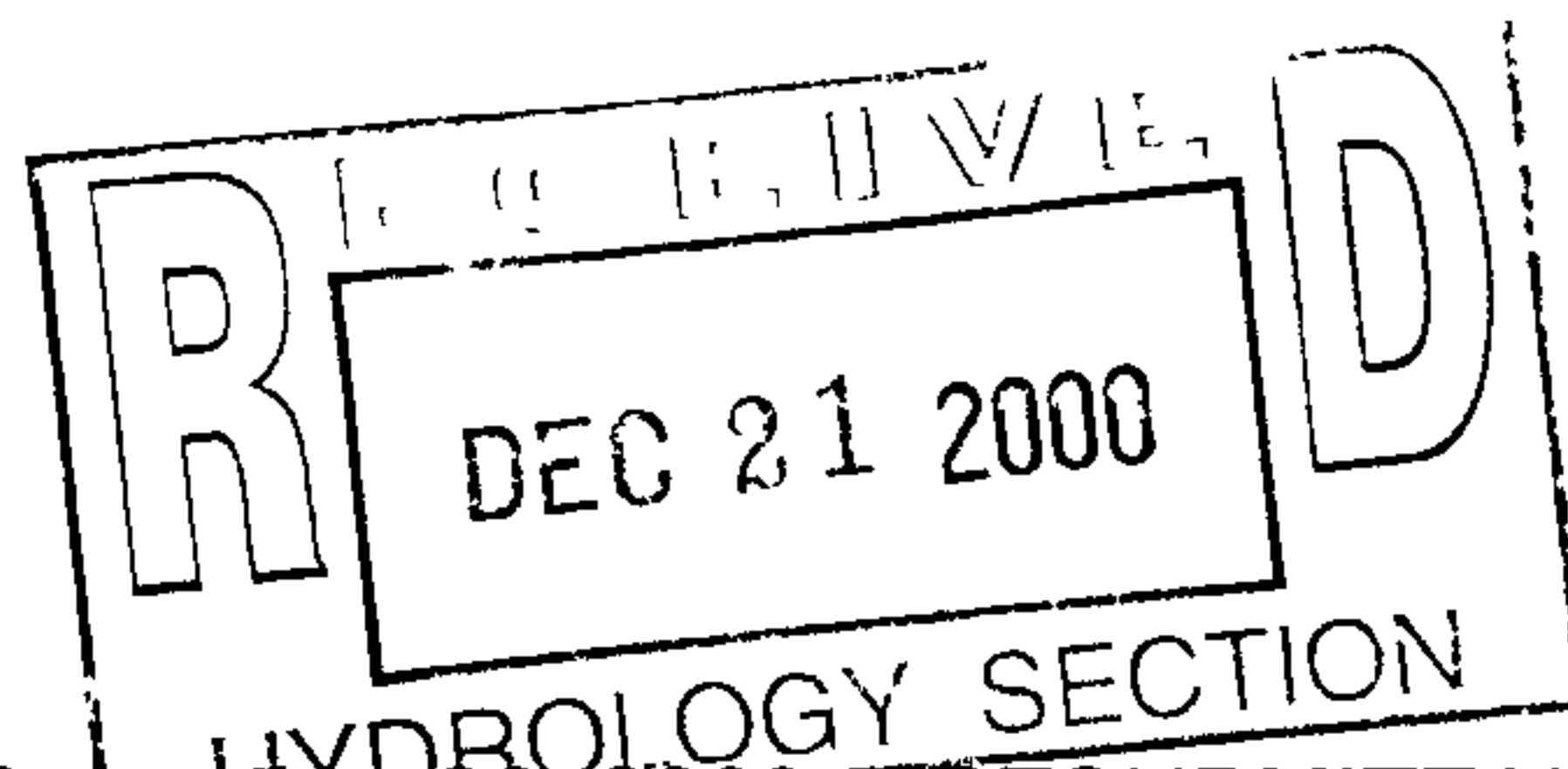
____ FOUNDATION PERMIT

____ CERT. OF OCCUPANCY

____ ROUGH GRADING PERMIT

____ GRADING / PAVING PERMIT

____ OTHER _____



DATE RESUBMITTED: December 20, 2000 - RESUBMITTAL

BY: C.L. Weiss Engineering, Inc.

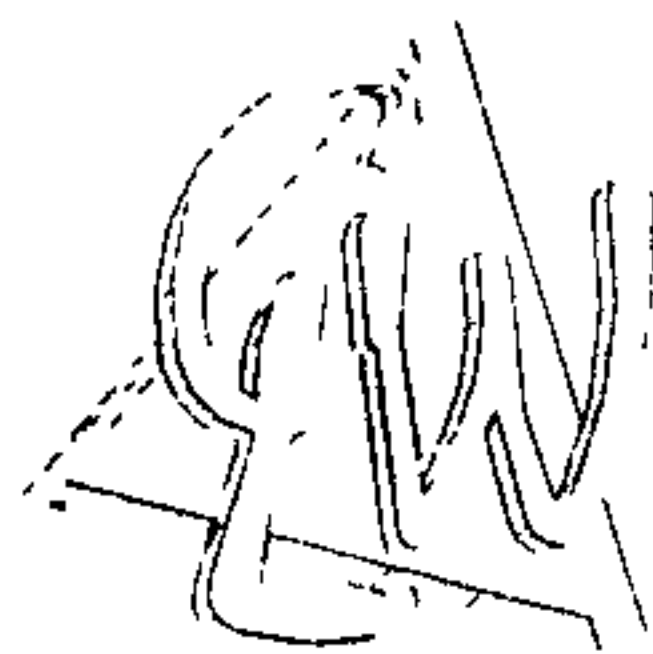
NOVEMBER 2, 2000

SUPPLEMENTAL CALCULATIONS

FOR

Lot 13A Jefferson Commons
Chant Associates

BY



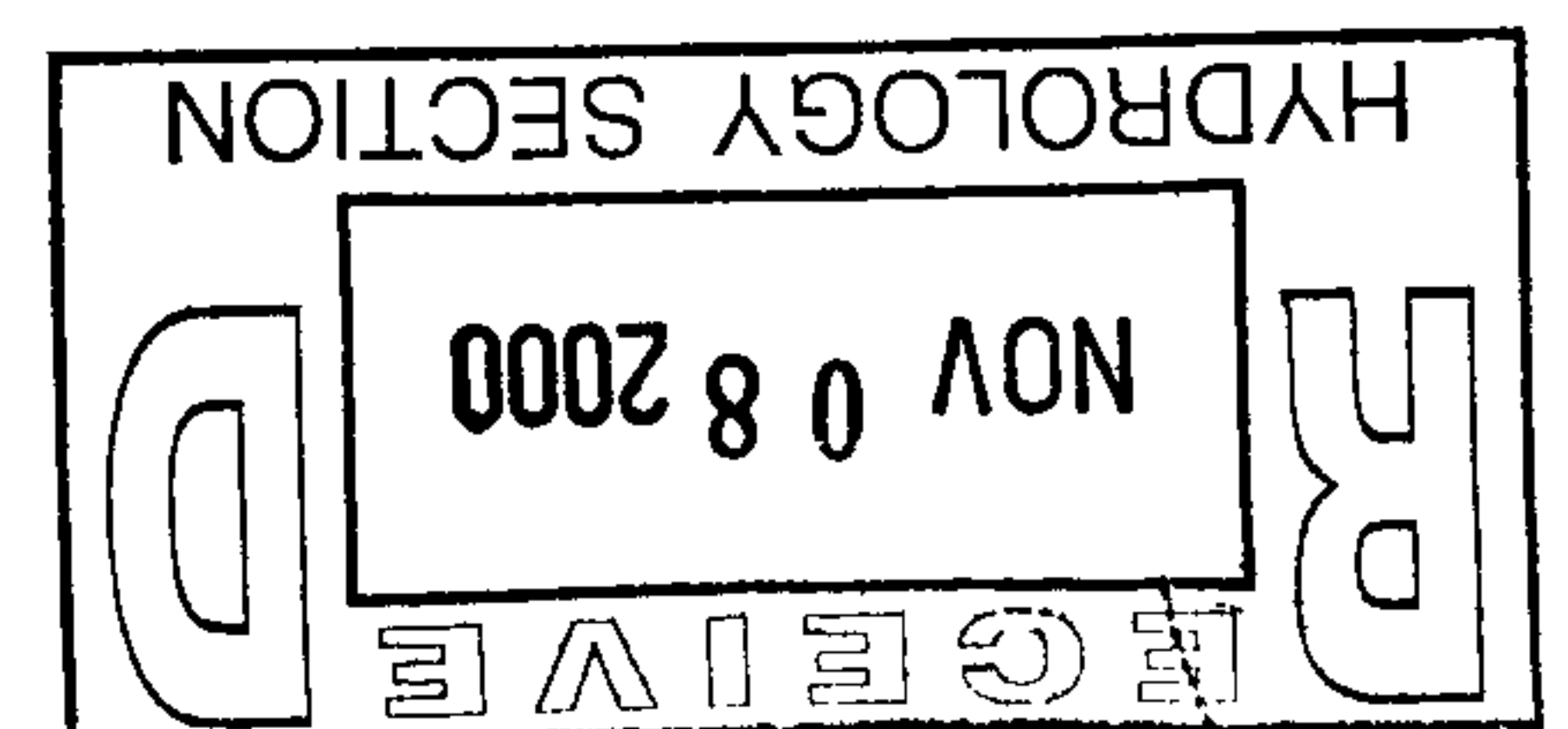
C.L. WEISS ENGINEERING, INC.

Post Office Box 97 * Sandia Park, NM 87047

Phone / Fax (505) 281-1800

1100 Alvarado Dr. NE * Albuquerque, NM 87110

Phone / Fax (505) 266-3444



SUB-BASIN 4 - FREE DISCHARGE TO MIDWAY PARK PLACE

Area of sub-basin flows = 30455 SF = 0.7 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 1.89 in

Sub-basin Volume of Runoff (see formula above)

V360 = 4802 CF

Sub-basin Peak Discharge Rate. (see formula above)

Qp = 3.0 cfs

| TREATMENT | |
|-----------|-----|
| A = | 0% |
| B = | 17% |
| C = | 0% |
| D = | 83% |

| SUB-BASIN | DISCHARGE | DESCRIPTION |
|--------------------------------------|-----------|-------------------------------------|
| Revised Discharge Rate-Sub-Basin 1 | 3.6 cfs | To storm drain inlet #1 |
| Revised Discharge Rate-Sub-Basin 2 | 1.5 cfs | To storm drain inlet #2 |
| Revised Discharge Rate-Sub-Basin 3 | 1.9 cfs | To storm drain inlet #3 |
| Revised Discharge Rate-Sub-Basin 4 | 3.0 cfs | Free Discharge to Midway Park Place |
| Total On-Site Revised Discharge Rate | 10.0 cfs | |

ALBUQUERQUE GRATE CAPACITY CALCULATIONS

using orifice equation $Q = CA * (2gh)^{0.5}$

| | | |
|-----------------|---|------|
| C | = | 0.6 |
| A | = | 4.80 |
| g | = | 32.2 |
| h | = | 0.5 |
| Q | = | 16.3 |
| Clogging Factor | = | 50% |
| Qclog | = | 8.2 |

Note. Area (A) at left, is based on the open area of a single COA Albuquerque Grate. Based on calculations shown, a single inlet with a head (h) of 0.5 ft will accept 16.3 cfs. If the inlet becomes 50% clogged, at an h = 0.5, the inlet will accept 8.2 cfs.

Note: The above calculations references 0.5' head. The following chart refers to head values from 0.1' to 1.0' for additional info.

| | | | |
|----------|---|------|-----|
| h = 0.1' | → | 7.3 | cfs |
| h = 0.2' | → | 10.3 | cfs |
| h = 0.3' | → | 12.7 | cfs |
| h = 0.4' | → | 14.6 | cfs |
| h = 0.5' | → | 16.3 | cfs |

| | | | |
|----------|---|------|-----|
| h = 0.6' | → | 17.9 | cfs |
| h = 0.7' | → | 19.3 | cfs |
| h = 0.8' | → | 20.7 | cfs |
| h = 0.9' | → | 21.9 | cfs |
| h = 1.0' | → | 23.1 | cfs |

SIDEWALK CULVERT CAPACITY

using orifice equation $Q = CA * (2gh)^{0.5}$

| | | |
|---|---|------|
| C | = | 0.6 |
| A | = | 1.17 |
| g | = | 32.2 |
| h | = | 0.5 |
| Q | = | 4.0 |

Note: Area (A) at left, is based on the open area of a 2' wide sidewalk culvert. Based on calculations shown, a single culvert with a head (h) of 0.5 ft will accept 4.0 cfs. Therefore, two 2' wide sidewalk culverts are required for the total flow of 7.0 cfs.

| | |
|--------------------|------------------------------------|
| Job Name | Jefferson Commons - Lots 13 and 14 |
| Client | Chant Associates |
| Date Prepared | 01-Nov-00 |
| Date Modified | November 01, 2000 |
| Precipitation Zone | 2 |

CALCULATIONS: Jefferson Commons - Lots 13 and 14 : November 01, 2000

Calculations are based on the Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE

| | | | | | |
|---------------|--------|----|---|--------|----|
| AREA OF SITE: | 101387 | SF | = | 2 3275 | Ac |
|---------------|--------|----|---|--------|----|

EXISTING FLOWS:

On-Site Existing Land Condition

| | | | |
|------------|---|--------|----|
| Area a | = | 0 | SF |
| Area b | = | 13537 | SF |
| Area c | = | 15225 | SF |
| Area d | = | 72625 | SF |
| Total Area | = | 101387 | SF |

REVISED FLOWS:

On-Site Revised Land Condition

| | | | |
|------------|---|--------|----|
| Area a | = | 0 | SF |
| Area b | = | 17673 | SF |
| Area c | = | 0 | SF |
| Area d | = | 83714 | SF |
| Total Area | = | 101387 | SF |

EXCESS PRECIPITATION:

| | |
|-------------|--------|
| Precip Zone | 2 |
| Ea | = 0.53 |
| Eb | = 0.78 |
| Ec | = 1.13 |
| Ed | = 2.12 |

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{E_a A_a + E_b A_b + E_c A_c + E_d A_d}{A_a + A_b + A_c + A_d}$$

| | | | | | |
|------------|---|----------|-----------|---|---------|
| Existing E | = | 1.79 in. | Revised E | = | 1.89 in |
|------------|---|----------|-----------|---|---------|

On-Site Volume of Runoff V360 = $E \cdot A / 12$

| | | | | | | | |
|---------------|---|-------|----|--------------|---|-------|----|
| Existing V360 | = | 15144 | CF | Revised V360 | = | 15938 | CF |
|---------------|---|-------|----|--------------|---|-------|----|

On-Site Peak Discharge Rate: $Q_p = Q_{pa} A_a + Q_{pb} A_b + Q_{pc} A_c + Q_{pd} A_d / 43.560$

For Precipitation Zone 2

| | | | | | |
|-----|---|------|-----|---|------|
| Qpa | = | 1.56 | Qpc | = | 3.14 |
| Qpb | = | 2.28 | Qpd | = | 4.70 |

| | | | | | | | |
|-------------|---|-----|-----|------------|---|------|-----|
| Existing Qp | = | 9.6 | CFS | Revised Qp | = | 10.0 | CFS |
|-------------|---|-----|-----|------------|---|------|-----|

SUB-BASIN 1 - TO STORM DRAIN INLET 1

| | | | | | |
|---------------------------|-------|----|---|-----|----|
| Area of sub-basin flows = | 36624 | SF | = | 0.8 | Ac |
|---------------------------|-------|----|---|-----|----|

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

| | | |
|------------|---|---------|
| Weighted E | = | 1.89 in |
|------------|---|---------|

Sub-basin Volume of Runoff (see formula above)

| | | | |
|------|---|------|----|
| V360 | = | 5775 | CF |
|------|---|------|----|

Sub-basin Peak Discharge Rate (see formula above)

| | | | |
|----|---|-----|-----|
| Qp | = | 3.6 | cfs |
|----|---|-----|-----|

| TREATMENT | |
|-----------|-----|
| A = | 0% |
| B = | 17% |
| C = | 0% |
| D = | 83% |

SUB-BASIN 2 - TO STORM DRAIN INLET 2

| | | | | | |
|---------------------------|-------|----|---|-----|----|
| Area of sub-basin flows = | 15237 | SF | = | 0.3 | Ac |
|---------------------------|-------|----|---|-----|----|

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

| | | |
|------------|---|----------|
| Weighted E | = | 1.89 in. |
|------------|---|----------|

Sub-basin Volume of Runoff (see formula above)

| | | | |
|------|---|------|----|
| V360 | = | 2403 | CF |
|------|---|------|----|

Sub-basin Peak Discharge Rate (see formula above)

| | | | |
|----|---|-----|-----|
| Qp | = | 1.5 | cfs |
|----|---|-----|-----|

| TREATMENT | |
|-----------|-----|
| A = | 0% |
| B = | 17% |
| C = | 0% |
| D = | 83% |

SUB-BASIN 3 - TO STORM DRAIN INLET 3

| | | | | | |
|---------------------------|-------|----|---|-----|----|
| Area of sub-basin flows = | 19084 | SF | = | 0.4 | Ac |
|---------------------------|-------|----|---|-----|----|

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

| | | |
|------------|---|---------|
| Weighted E | = | 1.89 in |
|------------|---|---------|

Sub-basin Volume of Runoff (see formula above)

| | | | |
|------|---|------|----|
| V360 | = | 3009 | CF |
|------|---|------|----|

Sub-basin Peak Discharge Rate (see formula above)

| | | | |
|----|---|-----|-----|
| Qp | = | 1.9 | cfs |
|----|---|-----|-----|

| TREATMENT | |
|-----------|-----|
| A = | 0% |
| B = | 17% |
| C = | 0% |
| D = | 83% |

KEY

OLD TRACT LINE

EXISTING EASEMENTS TO REMAIN
AND EASEMENTS CREATED BY THIS PLAT.

1" = 100'

SITE DISCHARGES DIRECTLY TO 10' WIDE DRAINAGE EASEMENT TO AMAFCA CHANNEL

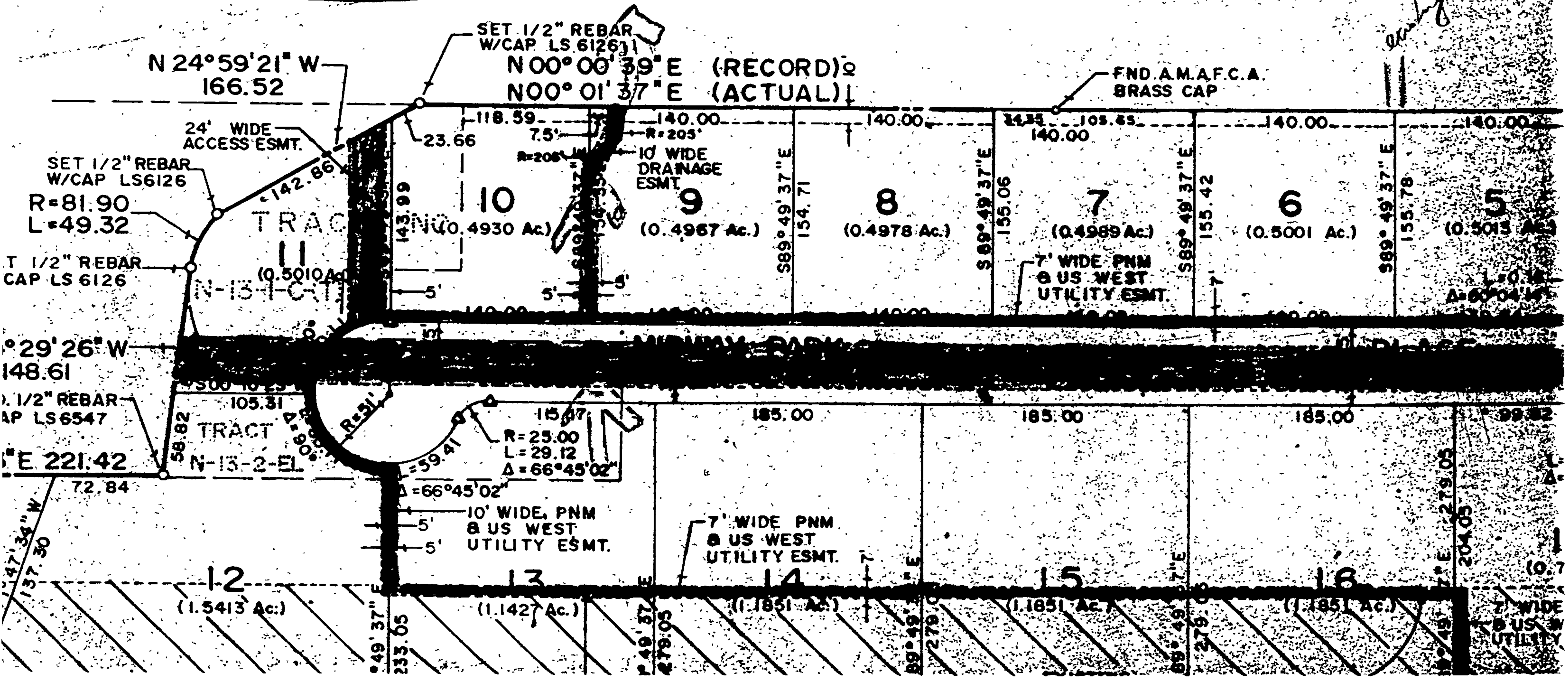
0 50' 100'

A.M.A.F.C.A.

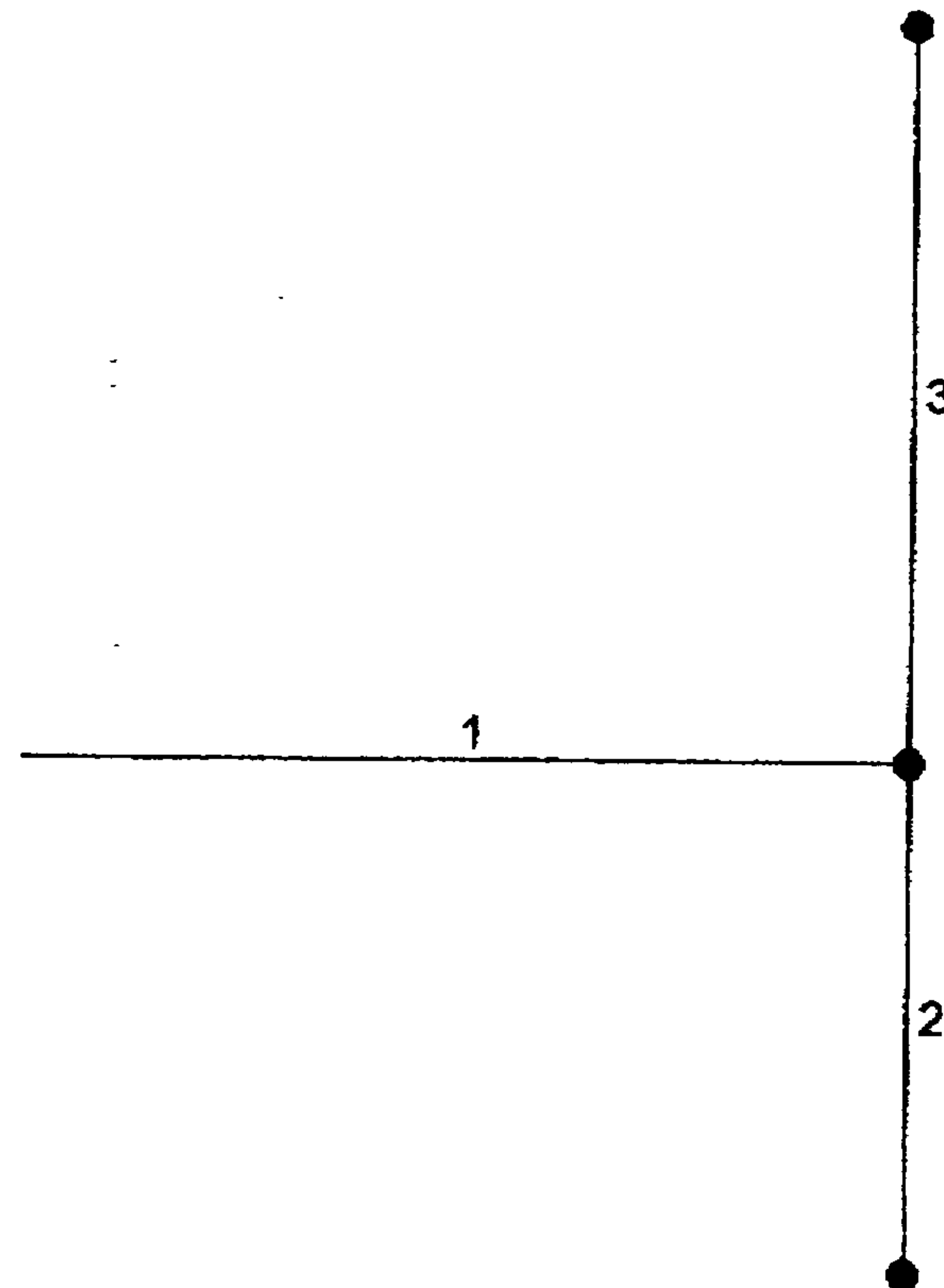
NORTH

DIVERSION

CHAN



Hydraflow Plan View



Project file: JC1314.stm

IDF file: Jcii.IDF

No. Lines: 3

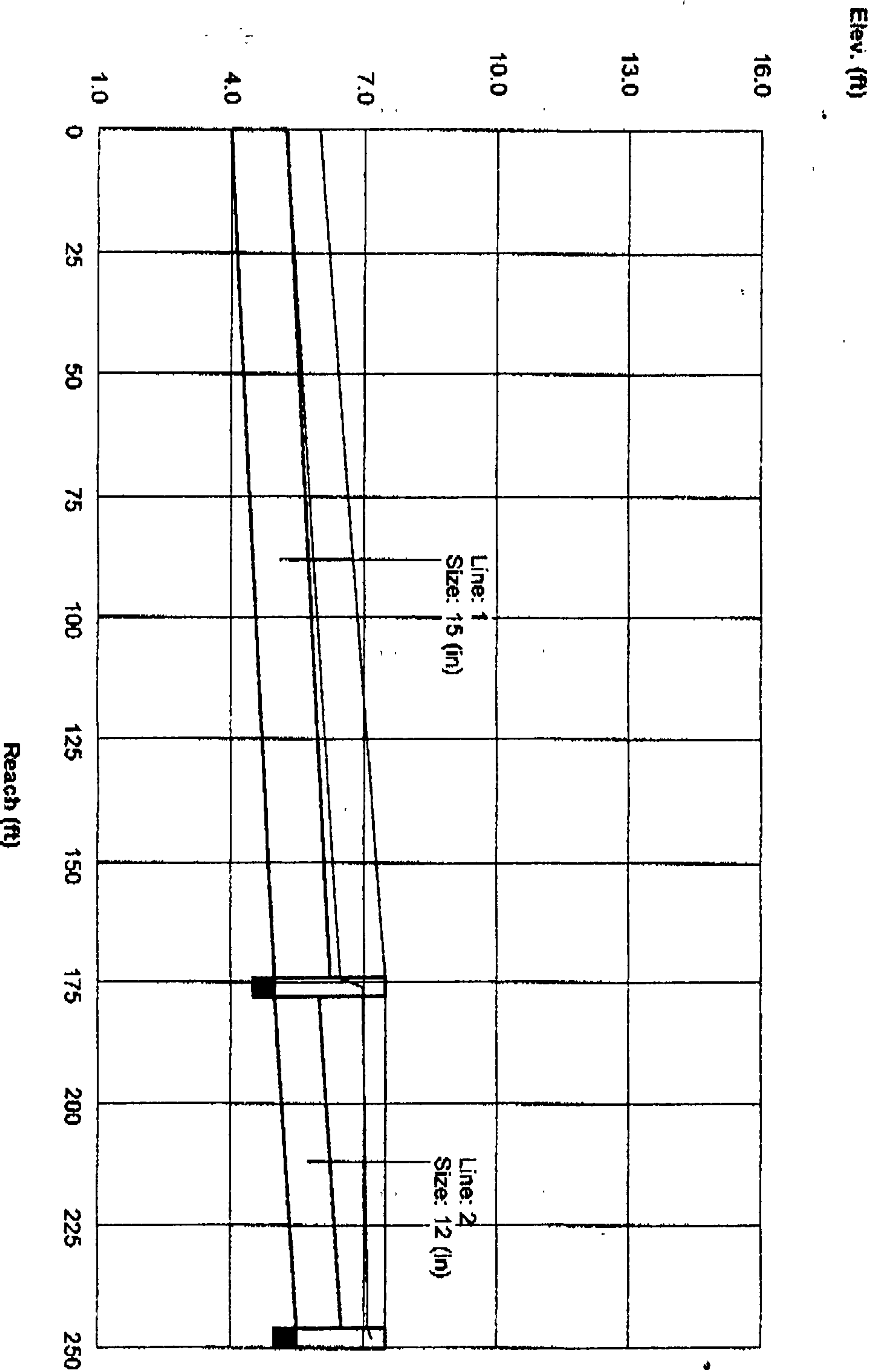
11-02-2000

Hydraflow Storm Sewer Tabulation

| Station | | Len (ft) | Drng Area | | Rnoff coeff (C) | Area x C | | Tc | | Rain (l) (in/hr) | Total flow (cfs) | Cap full (cfs) | Vel (ft/s) | Pipe | | Invert Elev | | HGL Elev | | Gmd / Rfm Elev | | Line ID |
|---|------------|-------------|--------------|---------------|-----------------------|----------|-------|----------------|----------------------|------------------------|------------------------|----------------------|---------------|--------------|--------------|--------------------------|------------|------------|------------|----------------------|------------|------------|
| Line | To Line | | Incr (ac) | Total (ac) | | Incr | Total | Inlet (min) | Syst (min) | | | | | Size (in) | Slope (%) | Up (ft) | Dn (ft) | Up (ft) | Dn (ft) | Up (ft) | Dn (ft) | |
| 1 | End | 176.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | 0.6 | 0.0 | 7.00 | 6.33 | 5.70 | 15 | 0.57 | 5.00 | 4.00 | 6.47 | 5.25 | 6.00 | 7.50 | Bldg line |
| 2 | 1 | 72.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 1.90 | 3.88 | 2.42 | 12 | 0.69 | 5.50 | 5.00 | 7.10 | 6.98 | 7.50 | 7.50 | South line |
| 3 | 1 | 104.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 3.60 | 5.82 | 2.93 | 15 | 0.48 | 5.50 | 5.00 | 7.17 | 6.98 | 7.50 | 7.50 | North Line |
| Project File: JC1314.stm | | | | | | | | | I-D-F File: Jc11.IDF | | | | | | | Total number of lines: 3 | | | | Run Date: 11-02-2000 | | |
| NOTES: Intensity = 80.06 / (Tc + 10.70) ^ 0.83; Return period = 100 Yrs ; Initial tailwater elevation = 5.25 (ft) | | | | | | | | | | | | | | | | | | | | | | |

Storm Sewer Profile

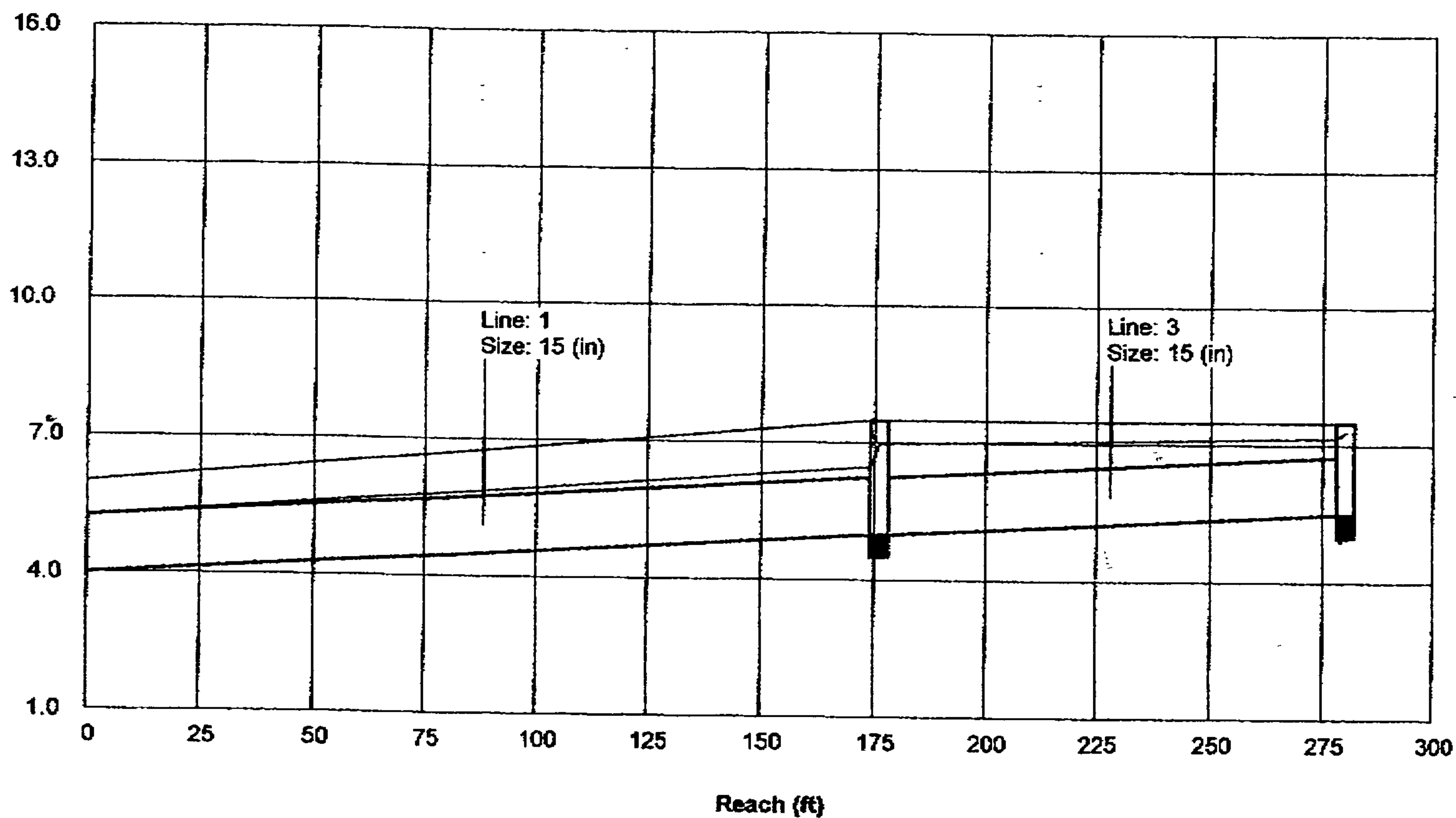
Proj. file: JC1314.slm



Storm Sewer Profile

Proj. file: JC1314.stm

Elev. (ft)





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 6, 2000

Chris Weiss, P.E.
C. L. Weiss Engineering Inc.
P.O. Box 97
Sandia Peak, NM 87047

RE: GRADING & DRAINAGE PLAN FOR JEFFERSON COMMONS LOT 13A TENANT
IMPROVEMENTS (F-17/ D061L) ENGINEER'S STAMP DATED NOVEMBER 3, 2000,
SUBMITTED FOR BUILDING PERMIT AND SO 19 APPROVALS

Dear Mr. Weiss,

Based upon the information provided in your November 8, 2000, submittal, the project, referred to above, is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

In addition, the submittal is approved for an SO 19 permit, which is required for construction within the city right-of-way.

Prior to release of the Certificate of Occupancy, an Engineer's Certification of the grading and drainage plan, per the DPM checklist, and a copy of the grading and drainage plan, with approval sign-off by the City's field inspector for the SO 19, will be required.

If you have any questions, please call me at 924-3988.

Sincerely,

Stuart Reeder, P.E.

Stuart Reeder, P.E.
Hydrology Division

xc: Pam Lujan, Permits w/attachment
Whitney Reiersen

✓ File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Jefferson Commons Lot 13A ZONE ATLAS / DRNG. FILE #: F-17-D61L

LEGAL DESCRIPTION: Lot 13A , Jefferson Commons Subdivision, Albuq. N.M.

CITY ADDRESS: NA

ENGINEERING FIRM: C. L. Weiss Engineering, Inc. CONTACT: Christopher L. Weiss

ADDRESS: P.O. Box 97, Sandia Park, NM 87047 PHONE: 281-1800

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR FIRM: George Chant & Associates CONTACT: George Chant

ADDRESS: P.O. Box 3529, Albuquerque, NM 87190 PHONE: 344-1633

PRE-DESIGN MEETING:

____ YES

☒ NO

____ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO F17-D61L

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT

☒ DRAINAGE PLAN

____ CONCEPTUAL GRADING & DRAINAGE PLAN

☒ GRADING PLAN

____ EROSION CONTROL PLAN

____ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT

____ PRELIMINARY PLAT

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____ FINAL PLAT

☒ BUILDING PERMIT

____ FOUNDATION PERMIT

____ CERT. OF OCCUPANCY

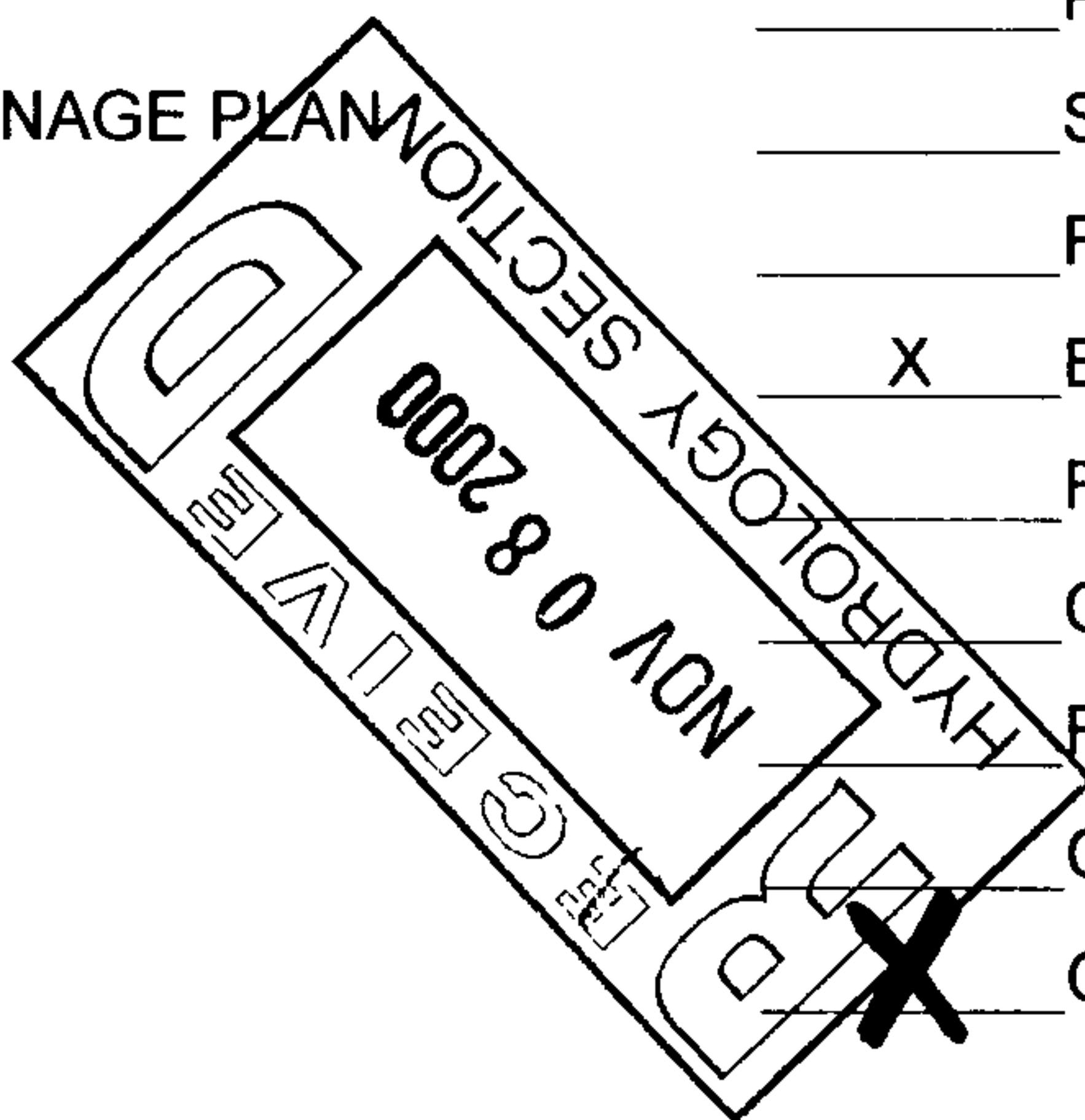
____ ROUGH GRADING PERMIT

____ GRADING / PAVING PERMIT

____ OTHER S.O. 19

DATE RESUBMITTED: November 2, 2000

BY: C.L. Weiss Engineering, Inc.





C.L. Weiss Engineering, Inc
Post Office Box 97
Sandia Park, N.M. 87047

Phone / Fax (505) 281-1800
Alvarado Office (505) 266-3444

December 20, 2000

Mr. Stuart Reeder, P.E.
City of Albuquerque Hydrology Division
PO Box 1293
Albuquerque, NM 87103

RE: REVISED DRAINAGE PLAN FOR JEFFERSON COMMONS LOT 13A
TENANT IMPROVEMENTS (F-17/D061L)

Dear Mr. Reeder,

Enclosed with this letter are two copies of the revised DG Plan for the above-mentioned site. You originally approved this project per your letter dated December 6, 2000. The revisions were made in response to architectural site plan changes and are as follows:

1. Extents of paving removal modified.
2. Existing dock area (southeast of existing building to remain).
3. Existing dock valley gutter / inlet / sump pump with existing discharge line to remain.
4. Proposed storm drain system eliminated.

Please don't hesitate to call me Chris Weiss, Project Engineer at 281-1800 if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan J. Bobrick".

Bryan J. Bobrick
C. L. Weiss, Engineering, Inc.

