MEADOWBROOK CENTER

PREPAIRED FOR:

RISING PHOENIX DEVELOPMENT LLC
146 LONG ROAD
CHESTERFIELD, MO 63005
(636) 537-9004



CONSTRUCTION NOTES

The underground utilities shown herein were plotted from available information and do not necessarily reflect the actual existence, nonexistence, size, type, number, or location of these or other utilities. The general contractor shall be responsible for verifying the actual location of all underground utilities, shown or not shown, and said utilities shall be located in the field prior to any grading, excavation, or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act, Chapter 319, RSMo.

All construction and materials used shall conform to current City of Lake ST. Louis, MO, St. Charles County Dept. of Highways and Traffic, and latest St. Charles Dist. *2 Sanitary District stanards and construction specifications.

Consult Soils Engineer for soil compaction recommendations.

All utility relocations will be determined by the individual utility company.

No area shall be cleared without permission of the developer.

All grades shall be within 0.2 feet, plus or minus, of those shown on the grading plan.

All areas shall be allowed to drain. All low points shall be provided with temporary

All swales shall be sodded, unless otherwise noted on the plans.

No slape shall be steeper than 3 horizontal to 1 vertical.

Erosion and siltation control shall be installed prior to any grading and be maintained by the grading contractor throughout the project until acceptance of the work by the owner and/or controlling regulatory agency and adequate vegetative growth insures no further erosion of soil.

Additional siltation control devices may be required as directed by The City of Lake St. Lauis, MO.

Siltation fences shall be inspected periodically for damage and for the amount af sediment which has accumulated. Removal of sediment will be required when it reaches $\frac{1}{2}$ the height of the bales.

Straw bales shall be inspected periodically for deterioration. Bales which have rotted or failed shall be replaced. Removal of sediment will be required when it reaches $\frac{1}{2}$ the height of the bales.

If cut & fill operations occur during a season not favorable for immediate establishment of a permanent ground cover, a fast germinating annual such as rye grasses or sudan grasses shall be utilized to retard erosion.

A Geotechnical Engineer shall be employed by the owner and be on site during grading operations. All soils tests shall be verified by the Geotechnical Engineer concurrent with the grading and backfilling aperations. Grading shall comply with recommendations in the soils report by GEOTEST, INC. dated March 2000.

The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.

Parking on non-surfaced areas is prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions. Contractor shall keep road clear of mud and debris.

Undercutting for treatment of plastic clay conditions for foundations has not been considered in grading computations shown. Contact soils engineer if this condition exists.

All disturbed earth areas within City, County and State right-of-way shall be sodded. Blasting will require a permit from the City of LAKE ST. LOUIS

All trash and debris on site, either existing or from construction, must be removed and properly disposed of off-site.

ABBREVIATIONS

ADJUST TO GRADE

Al	AREA INLET
BF	BASEMENT FLOOR
Q.	CENTERLINE
CC	CONCRETE COLLAR
co	CLEAN OUT
CI	CURB INLET
CMP	CORRUGATED METAL PIPE
DCI	DOUBLE CURB INLET
ESMT	EASEMENT
EP	END OF PIPE
ED	ENERGY DISSIPATOR
EX	EXISTING
FF	FINISHED FLOOR
FH	FIRE HYDRANT
FE	FLARED END
E	FLOWLINE
2GISI	2 GRATE INLET WITH SIDE INTAKE
MH	MANHOLE
MAX	MAXIMUM
MIN	MINIMUM
N/F	NOW OR FORMERLY
PVC	POLYVINYLCHLORIDE (PLASTIC PIPE)
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OF WAY
STA	STATION
TBR	TO BE REMOVED
TBRBO	TO BE REMOVED BY OTHERS
TBR&R	TO BE REMOVED AND REPLACED
TF	TOP OF FOUNDATION
TYP	TYPICAL
UIP	USE IN PLACE
UP	UTILITY POLE
W	WIDE

SOILS ENGINEER NOTES

GeoTest, Inc. and the undersigned engineer have not prepared any part of these plans. The seal of the undersigned professional engineer has been affixed at the request of the City of Lake St. Louis and is a professional opinion to indicate that the undersigned has reviewed the grading plans and revisions through the date given below and that in my opinion the grading and improvements as shown on the plans are compatible with the soil and geologic conditions at the site as described in the geotechnical report for the project dated March 2000. Roads and building foundations may be supported on naturally occurring or fill soil slopes may be constructed as shown.

The above opinion is based on data from the geotechnical report(s) which were based on widely spaced explorations. Conditions may vary from those encountered in the explorations, or can change due to the construction activities or weather conditions. Therefore, the undersigned must be involved during the construction phase of this project in order to determine that subsurface conditions are as anticipated from the exploration data that recommendations relative to construction are implemented.

GeoTest, Inc. and the undersigned have no responsibility for services provided by others, except as they relate to the geotechnical aspects of the design. Services by others may include: establishment of grades , sewer plans and grades, drainage, boundary, and topographic surveys: all structural and electrical components; water, gas, electric and telephone services and distribution facilities; any and all other engineering plans, specicications, estimates, plats, reports, surveys; or other documents or instruments relating to or intended to be used for any part or parts of this project. Construction means and methods for implementation of the grading plan shall be left to the contractor with verficitaion by the geotechnical engineer in writing.

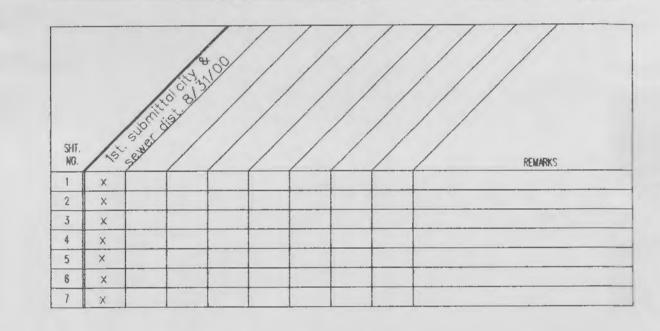
GEOTEST, INC.

LEGEND

——UC——	EXISTING UNDERGROUND CABLE T
——UT——	EXISTING UNDERGROUND TELEPHO
UE	EXISTING UNDERGROUND ELECTRIC
OU	EXISTING OVERHEAD UTILITY WIR
——G——	EXISTING GAS MAIN
w	EXISTING WATER MAIN
——F——	PROPOSED FORCE MAIN
F	EXISTING FORCE MAIN
,	BUILDING LINE
	FXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
- Eller	EXISTING CONTOUR
-520-	PROPOSED CONTOUR
320	EXISTING TREE LINE
~~~	PROPOSED TREE LINE
	SILTATION CONTROL
	EX HIGH WATER OR DITCH
13 1 - m	
*	GRADE BREAK
S. S.	SIGN
	SWALE SUFET FLOW
	DIRECTION OF SHEET FLOW
4	FIRE HYDRANT
	LIGHT STANDARD
<u>x</u>	VALVE
Δ	LATERAL
(n) vie	ADDRESS
12345)	TREE
Ŏ	
9	SANITARY SEWER DESIGNATOR

#### **REVISIONS**

STORM SEWER DESIGNATOR



### PROJECT INFORMATION

Rising Phoenix Development L.L.C.

146 LONG RD. CHESTERFIELD, MO 63005 PHONE: (636)537-9004 FAX: (636)530-1513

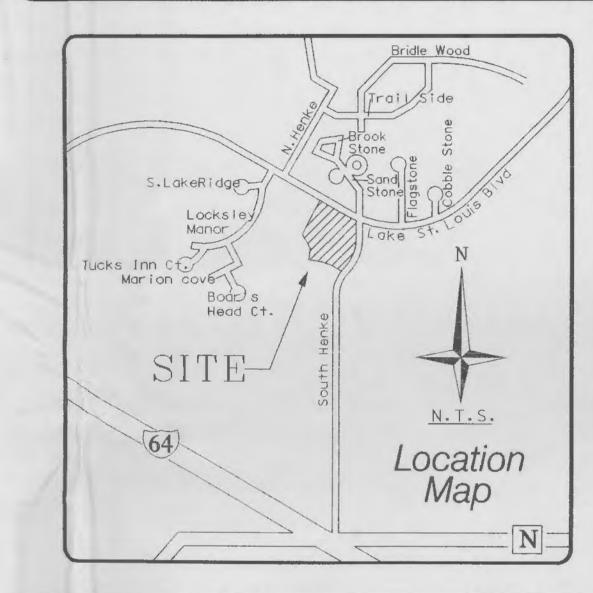
PREPARED BY:

#### VOLZ INCORPORATED

10849 INDIAN HEAD INDUSTRIAL BOULEVARD ST. LOUIS, MISSOURI 63132-1166 PHONE: (314) 426-6212 FAX: (314) 890-1250

WUNNENBERG'S MAP PAGE 37, GRID UU-TT-19 ZIP CODE: LAKE ST. LOUIS, MISSOURI MUNICIPALITY:

#### LOCATION MAP



#### INDEX

GENERAL INFORMATION	1
SITE PLAN	2
GRADING PLAN	3
SANITARY & STORM PROFILES	4
STORM PROFILES	5
DRAINAGE AREA MAP	6
CONSTRUCTION DETAILS	7
DETENTION STRUCTURE DETAILS	8

## BENCH MARKS

NAVD 88 Datum Benchmark: A 149 - Elevation = 630.08, Brass disk set in the Northwest wingwall of the Norfolk and Western railroad bridge over U.S. Highway 61, Business.

Site Benchmark: Elevation = 571.70, "O" in open on the fire hydrant located near the Southeast corner of this site.

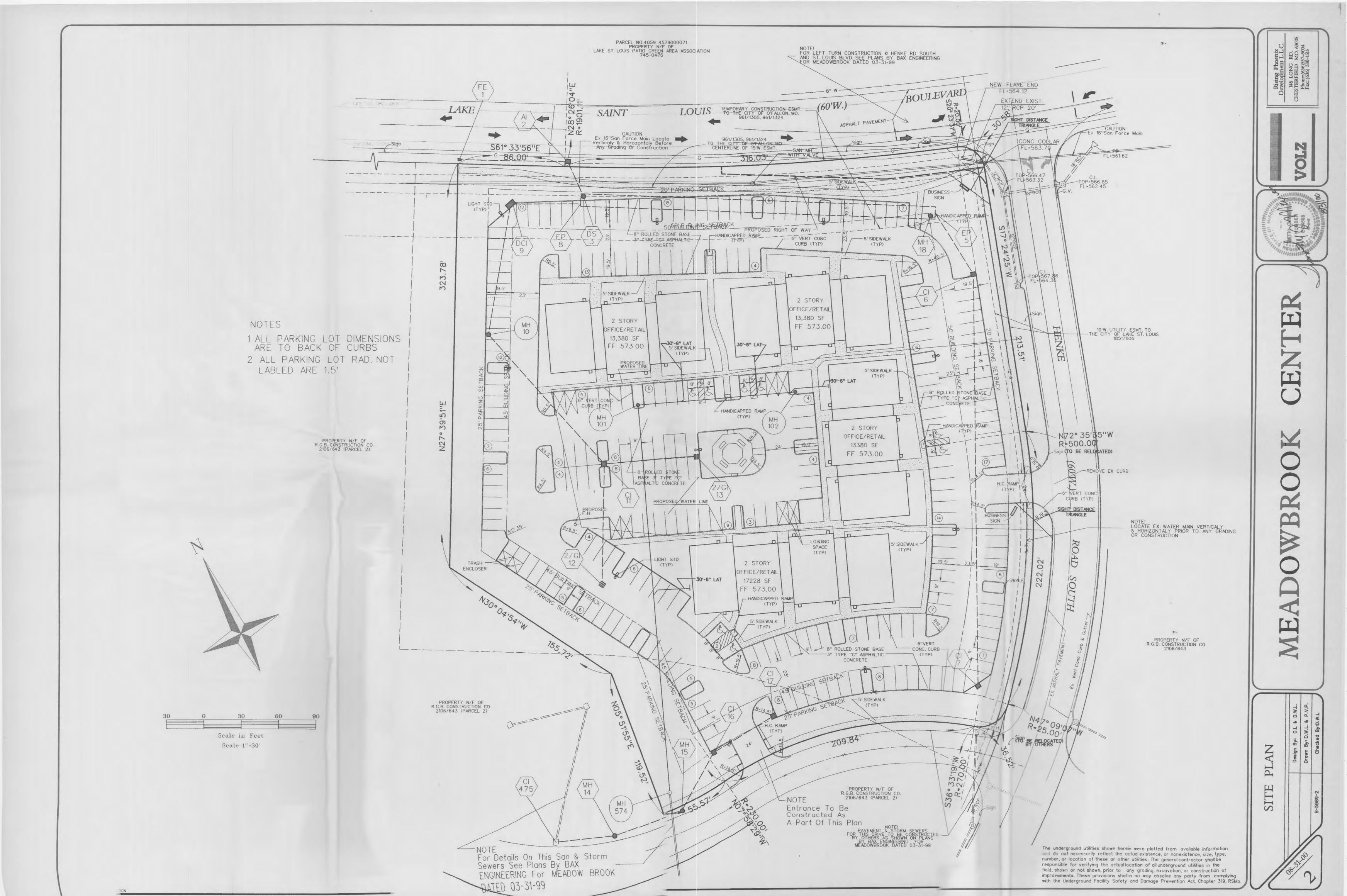


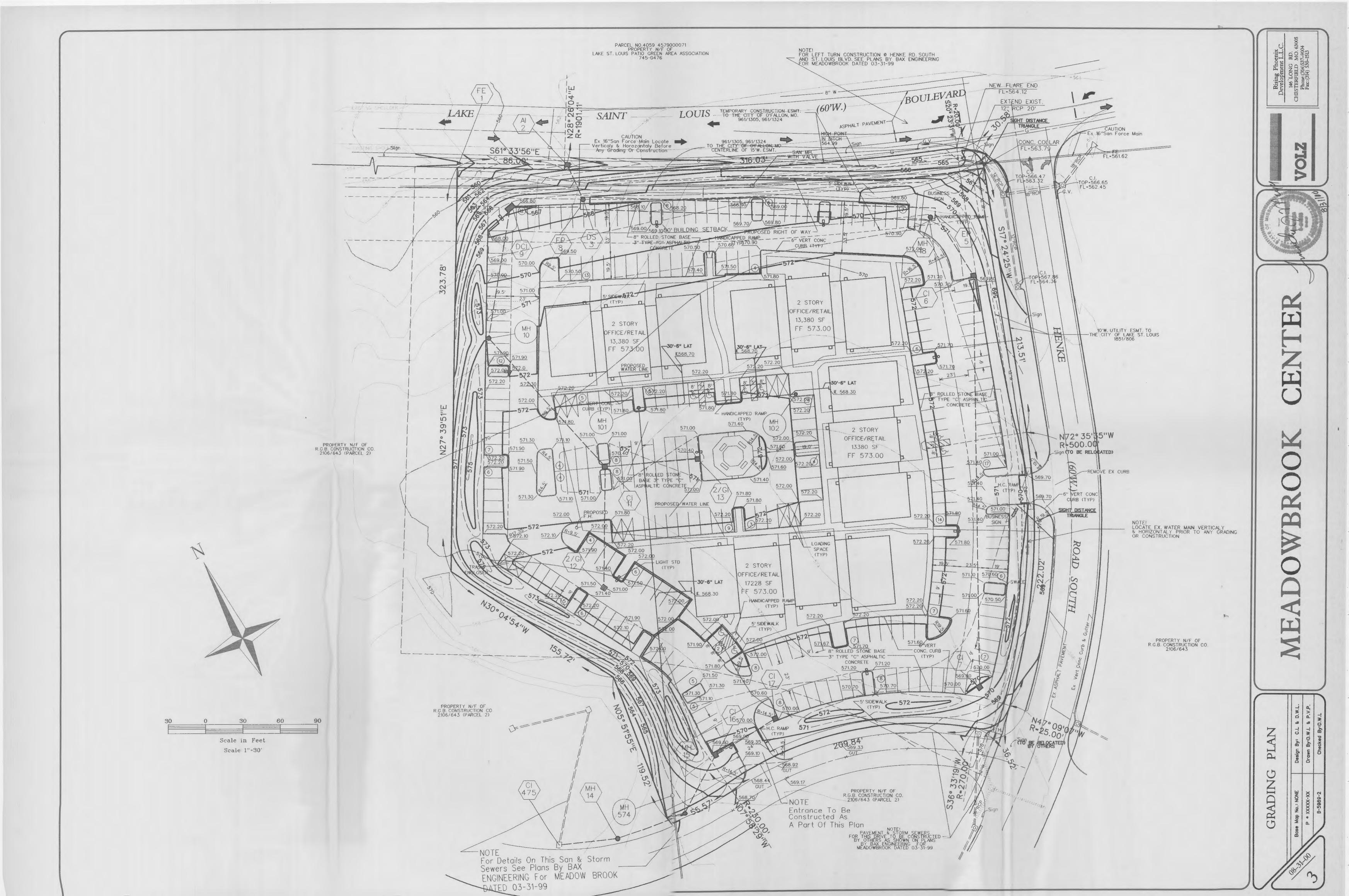


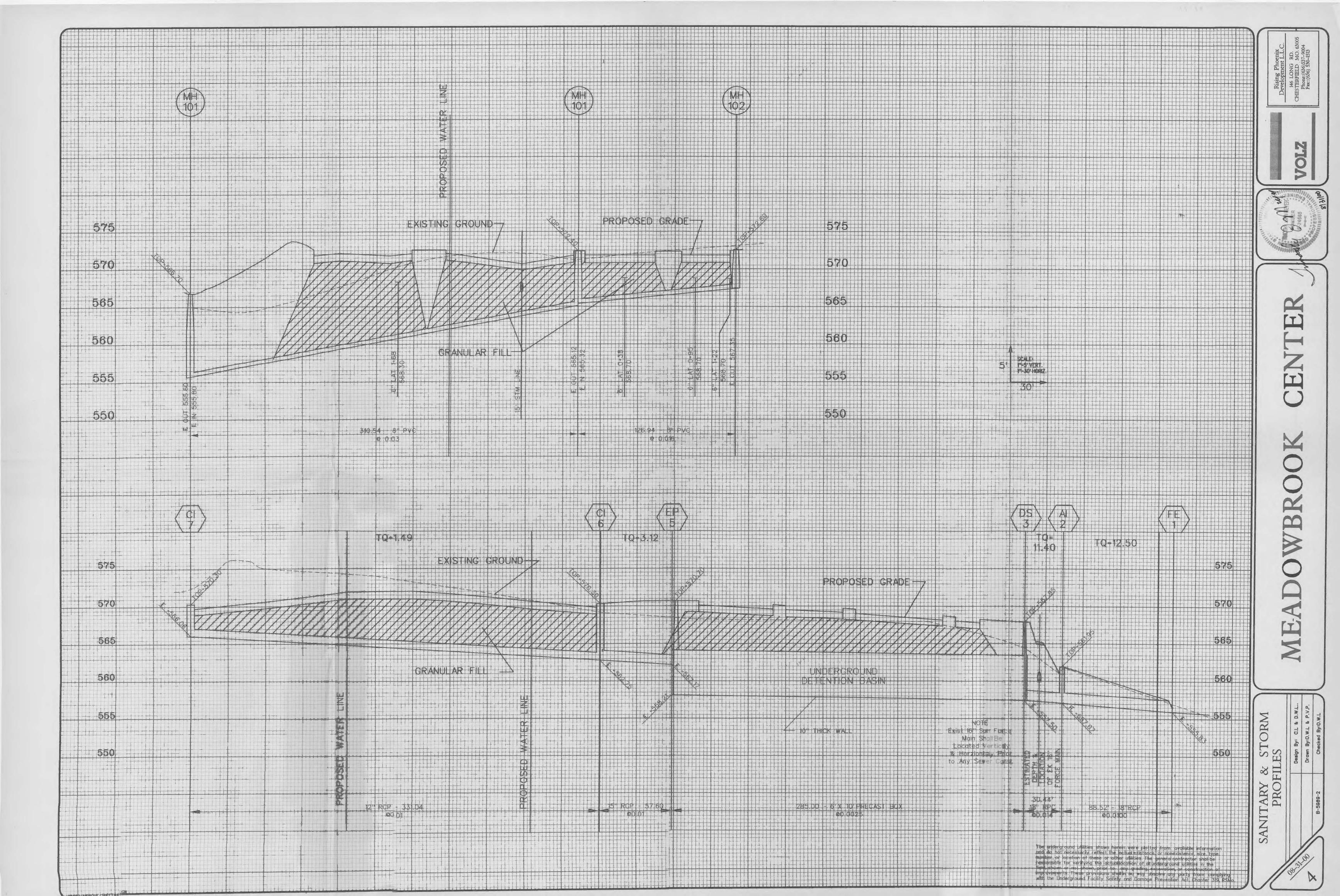


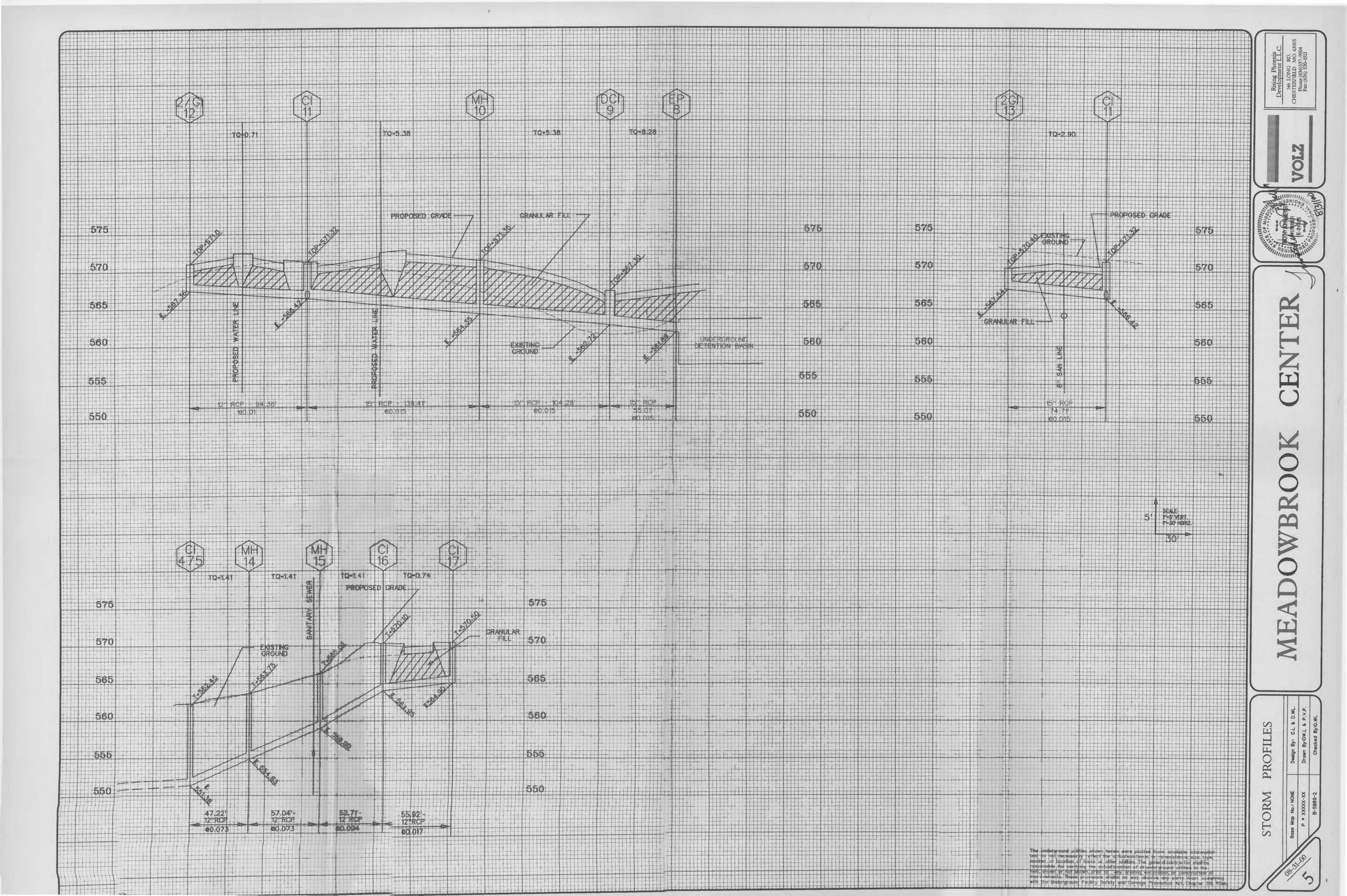
I

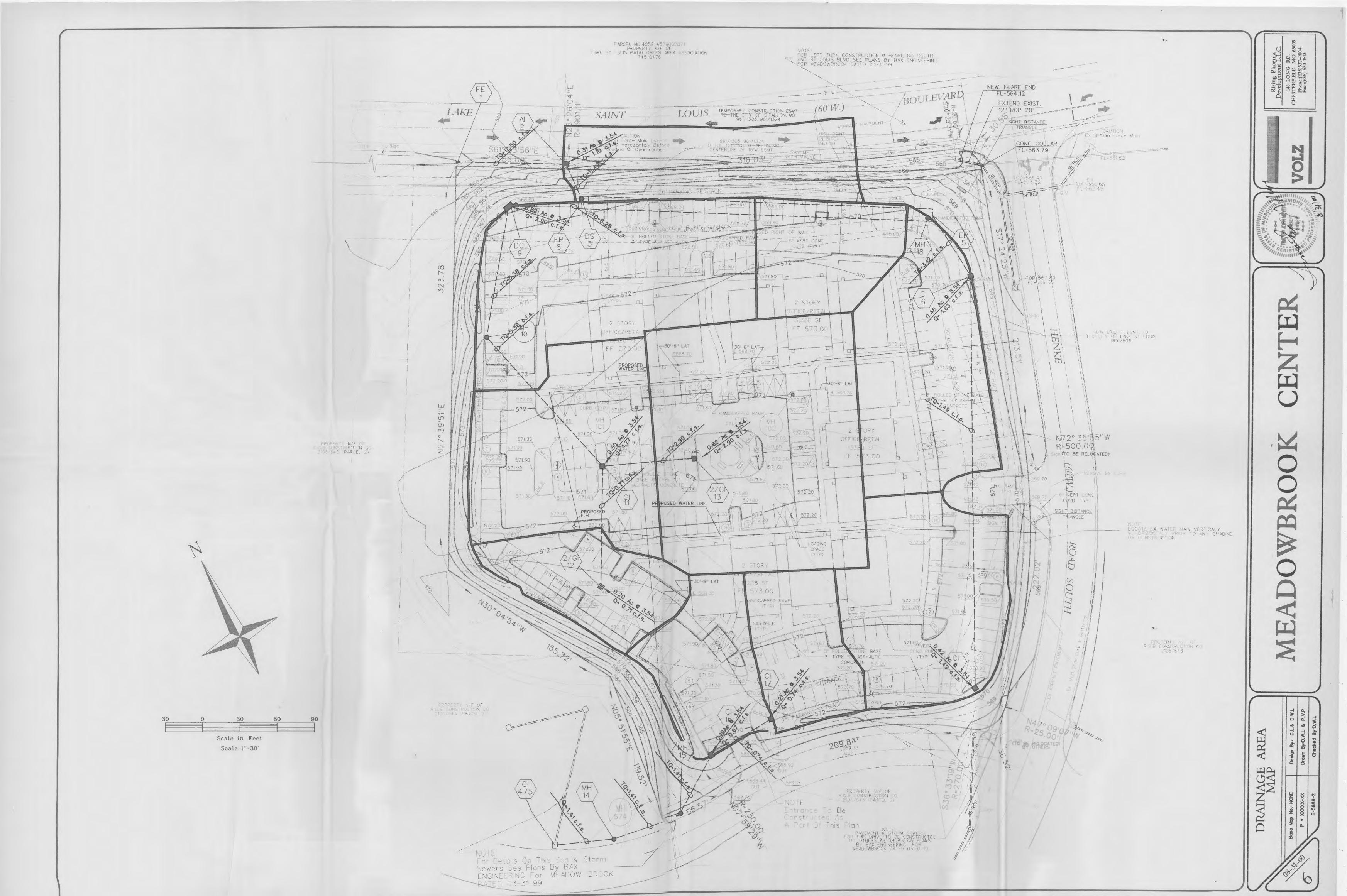
ORMATION

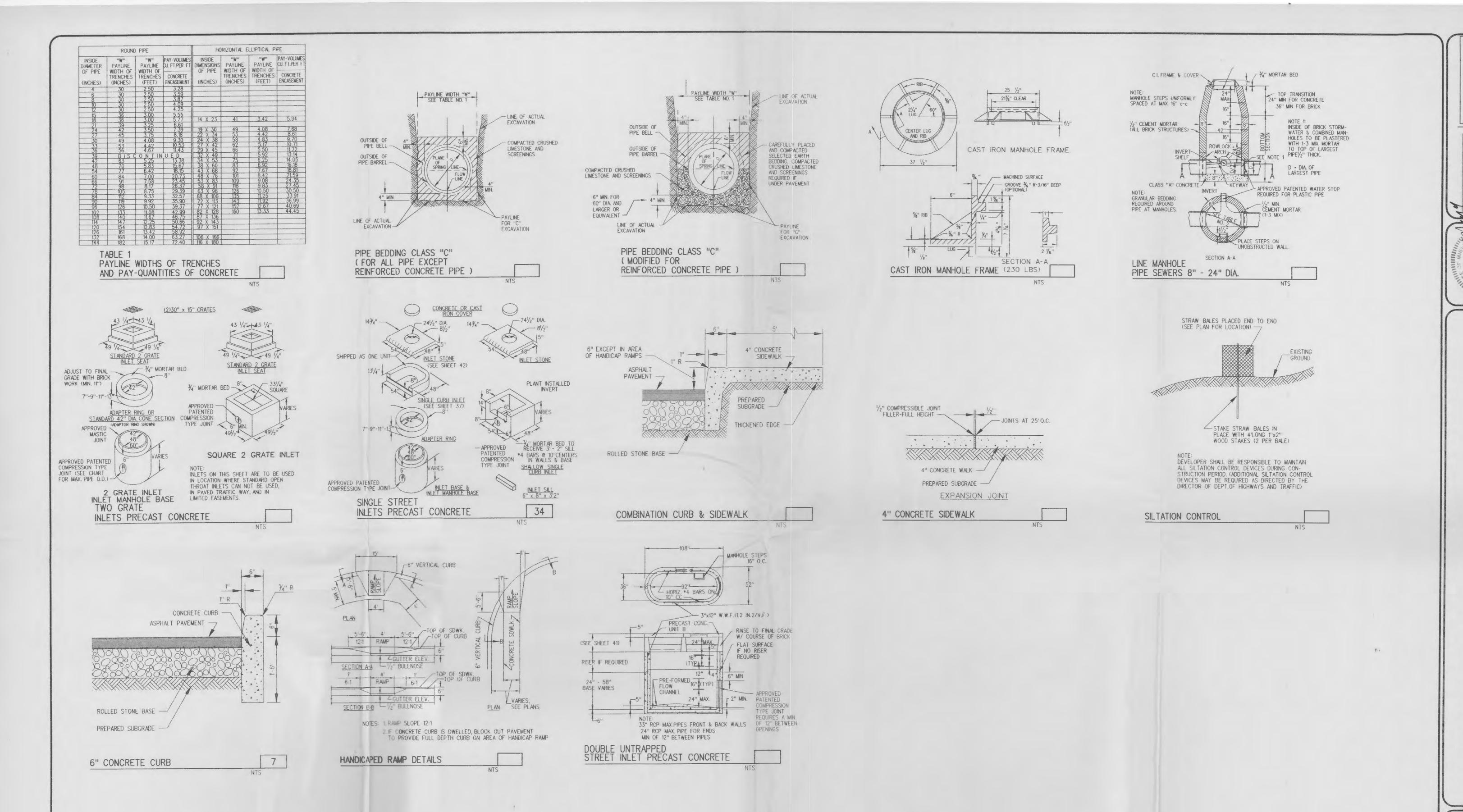








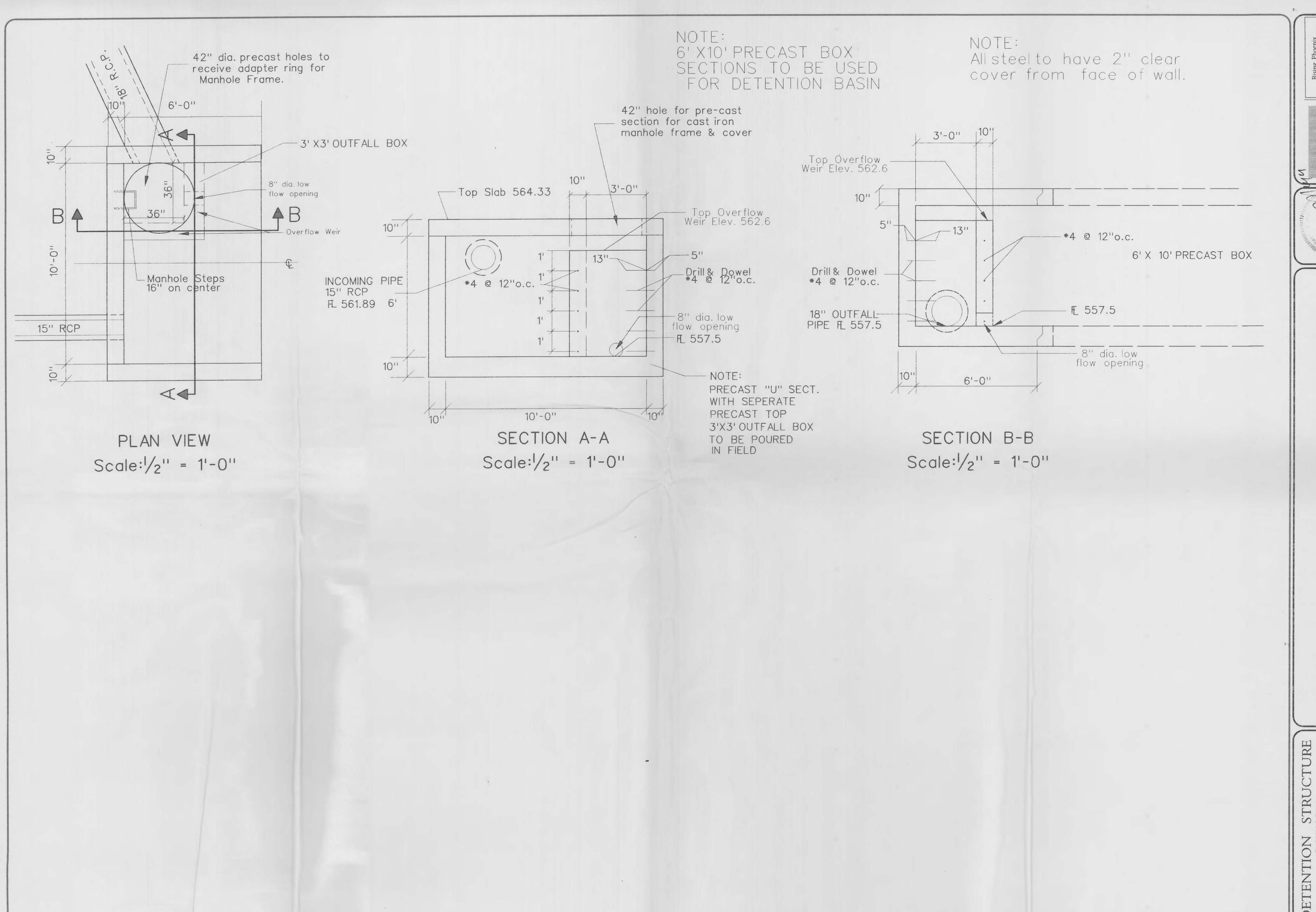




VOLZ

田

田



Rising Phoenix
Development L.L.C.
146 LONG RD.
CHESTERFIELD MO. 63005
Phone: (636) 530–1513
Fax:: (636) 530–1513



OK CENTER

Design By: CL & DWL

Drawn By: DWL

DETAILS

DETAILS