



Solutia Inc.
300 Birmingham Highway
Anniston, Alabama 36201
Tel 256-231-8447



March 30, 1999

Mr. Wm. Gerald Hardy, Chief
Hazardous Waste Branch
Land Division
Alabama Department of Environmental Management
1751 Cong. W. L. Dickinson Drive
Montgomery, AL 36130-1463

**Re: Supplemental Interim Measures Report
Solutia Inc. Anniston, AL Facility
EPA ID No. ALD 004 019 048**

Dear Mr. Hardy:

Attached is a report on the Supplemental Interim Measures which were constructed on the north side of the Solutia Anniston Facility in 1998. The report satisfies the requirements of condition III.F.3.b of the Part B Permit and is submitted in fulfillment of those requirements.

Please call if you have any questions about the report.

Sincerely,

SOLUTIA INC

Alan G. Faust
Manager of Remedial Projects

***SUPPLEMENTAL INTERIM
MEASURES REPORT***

***SOLUTIA FACILITY
ANNISTON, ALABAMA***

Submitted By:

***Solutia Inc.
300 Birmingham Highway
Anniston, Alabama***

March 30, 1999

1. INTRODUCTION

This supplemental Interim Measures Report has been prepared pursuant to the requirements of Condition III.F.3.b of the Alabama Hazardous Wastes Management and Minimization Act (AHWMMA) Post Closure Permit for the Solutia Facility (the facility) located in Anniston, Alabama (RCRA Permit # ALD 004 019 048). It summarizes the details of supplemental Interim Measures which were constructed at the facility in the period between August 15, 1998 and December 31, 1998. These measures were proposed by Solutia to minimize the potential for constituents to migrate from the facility in the future and were determined to be appropriate by the Alabama Department of Environmental Management (ADEM) in a letter dated March 11, 1997. The details of the supplemental Interim Measures were provided in a Work Plan, which was approved by ADEM in a letter dated September 10, 1998.

The Interim Measures described in that Work Plan supplement measures which were constructed by Solutia in 1997 and which were described in an Interim Measures report submitted to ADEM on March 31, 1998. In summary, the supplemental measures described in this report were designed to contain soils and sediments downgradient of the West End Landfill. They include the following major elements:

- a soil cover constructed on Solutia-owned property in those areas where testing has shown the surficial soils to be affected;
- a stormwater management system in which stormwater flowing under the railroad tracks is collected and conveyed in a 42 inch diameter HDPE pipe to an existing culvert which runs along the north side of West Tenth Street. During periods of high precipitation, stormwater is stored in a small retention pond constructed in the northeast portion of the Solutia-owned property.

Each of these elements is discussed in the following sections of this report.

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2.

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DESCRIPTION OF WORK

2.1. Overview

The primary goal of the supplemental Interim Measures described in this supplemental report is to contain soils and sediments on property owned by Solutia downgradient of the West End Landfill. Those areas that may have acted as potential sources of constituents and the mechanisms which could transport these materials offsite were identified by an extensive soil and sediment sampling program conducted between 1995 and 1997. Previous sampling efforts demonstrated that the primary transport mechanism for sediments was surface water and, in particular, stormwater flows that exceeded the capacity of the culvert systems in the drainage ways north and east of the Solutia plant. Because the affected soils and sediments are generally confined to the near-ditch areas of the drainage ways, the implementation of a comprehensive stormwater management system and the isolation and containment of soils provided the best means of achieving the primary goal of the Interim Measures program. This program is based on the requirement that areas in which affected soils and sediments have been identified will be isolated and contained with appropriate covers to prevent offsite migration.

Details of the actions designed to fulfill this goal are provided in the following sections, while the final design drawings are included in Attachment 1. The as-built topography is shown on drawings included in Attachment 2. It is noted that the drawings presented in these attachments include details of construction undertaken on the West End Landfill and on the East Side at the former location of the Bethel Missionary Baptist Church. Neither of these efforts forms a part of the supplemental Interim Measures described herein. The work on the landfill represents maintenance activities and consisted of the repair of a small area of the cover and the rehabilitation of the slope drainage system. The cover constructed on the East Side represented the completion of one of the Interim Measures constructed in 1997. Because the new Bethel Missionary Baptist Church was not

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completed until January 1998, the soil cover in this area could not be completed until the 1998 construction season.

2.2 Soil Cover

A cover was constructed on Solutia-owned property north of the railroad tracks. The objective of the cover is to isolate and contain potentially affected surficial soils and control stormwater drainage through this area. A large number of soil and sediment samples from within the area have been analyzed for PCBs. The extent of the cover was selected to include all of the sample locations on Solutia-owned property where PCB concentrations exceeded the screening level.

The entire area within the cover limits shown on Figure G-1 of Attachment 1 was cleared, with the exception of established mature trees. A 6-oz weight, continuous filament, needle punched, non-woven geotextile was installed in cleared areas to define the boundary between the cover and the former soil surface. Over the geotextile, a minimum of 14 inches of soil cover was placed and a vegetative cover was established by hydroseeding the cover soils. The existing drainage ditch was covered by the same textile and backfilled with as much as 3 to 5 feet of clean fill. A 40 mil HDPE geomembrane liner was then placed over the ditch area on Solutia-owned property and covered by the 14 in. thick soil cover. In those areas where the cover abuts property not owned by Solutia, a drainage swale was constructed near the edge of the cover to prevent runoff from Solutia's property from entering the adjacent properties.

The covered area is presently fenced and this fence will be maintained by Solutia as part of the normal Operations and Maintenance activities for this area. Further, no construction activities which involve excavation will be permitted without the prior approval of Solutia and warning signs will be fastened to the fence at 200 foot intervals.

The soil cover was constructed as shown on the original design drawings submitted with

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the Supplemental Interim Measures Work plan with the exception that the grading plan in one area was revised to permit burial of concrete rubble removed from beneath the footprint of the berm. The design grades were increased in this area.

2.3 Stormwater Management

As shown on Figures G-2 and G-3 of Attachment 1, stormwater runoff entering the site from the culvert under the railway tracks flows into a 7 ft. diameter drop manhole structure (the Primary Inlet). From there, the flow is directed into a 42 in. diameter welded HDPE pipeline to the corner of West Tenth Street and Parkwin Avenue, where it transitions into a 3 ft. x 6 ft. box culvert through a manhole structure. Flow from this new culvert is directed into an existing 2 ft. x 5 ft. culvert that runs along the north side of Tenth Street, under Clydesdale Avenue, and which discharges into a tributary of Snow Creek east of Clydesdale Avenue and north of the railroad tracks.

A low berm was constructed along West Tenth Street, Parkwin Avenue, and Duncan Avenue to create an impoundment, as shown on the drawings included in Attachment 1. This impoundment will collect stormwater runoff from the covered area, as well as the overflow from a manhole structure within the berm near the corner of West Tenth Street and Parkwin Avenue (the Secondary Inlet structure shown on the design plans included in Attachment 1). A perimeter ditch running along the outside of the berm along its northern and western sides conveys stormwater runoff from adjacent properties to a 30 in. x 54 in. sewer running eastwards under West Tenth Street. The berm is equipped with an emergency spillway on the north side which allows for stormwater release into the storm sewer system in the event of major storms which exceed the 100-year, 24-hour design storm.

With three exceptions, the stormwater management system was constructed as shown on the design drawings included in the approved Interim Measures Work Plan. The exceptions consist of the following:

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- In the original design, stormwater exiting from the culvert under the railroad tracks flowed into a 36 in. diameter welded HDPE pipe connected to the existing culvert with a flexible coupling. From there, the flow was to have been conveyed to the 42 in. pipe by a series of bends and manholes. Immediately prior to construction, it was discovered that this arrangement would have required the relocation of an old, but active, cast iron water supply main. Because of concerns about the integrity of the main, it was decided to revise this design. As constructed, stormwater from the culvert flows in the ditch that existed along the north side of the tracks until it enters Solutia-owned property, where it flows into the Primary Inlet. In order to prevent downstream migration of sediments in this ditch, it was first lined with HDPE and then with a proprietary concrete lining system sold under the trade name of Armorform. Details of the lining system are shown on Figures G-11 and G-12 of Attachment 1.
- The alignment of the 42 inch diameter HDPE pipe was revised in the vicinity of the intersection of Duncan Avenue and West Ninth Street. The original alignment would have resulted in one section of the pipe being located on property not owned or controlled by Solutia. The revised route keeps the pipeline either on Solutia-owned property or within the right-of way- of Duncan Avenue.
- Storm Manhole 1 located at the transition from the 42 inch diameter pipeline to the 3 ft x 6 ft. box culvert was designed to be a 9 ft. diameter pressure manhole. Because of production delays, a square pressure manhole of equivalent capacity was substituted.

ADEM was notified of the first two changes by letter (with revised drawings attached) dated July 21, 1998 and acknowledged the changes in their letter of August 13, 1998. The third change was not considered to be major enough to warrant ADEM' prior approval.

3.

SOIL CONSOLIDATION

3.1. Completed Projects

In a letter dated July 12, 1998, Solutia proposed to consolidate limited quantities of excavated soil beneath the covers to be constructed on the North Side and at the former location of the Bethel Missionary Baptist Church. The soil was to be excavated from certain off-site residential and commercial properties where previous testing identified small areas of impacted surface soils with PCB concentrations well below 50 ppm and generally below 15 ppm. This proposal was approved by ADEM in a letter dated August 19, 1998.

Soil excavated from the following properties was consolidated under the indicated areas of the cover:

- Soil excavated from a property at 705 Clydesdale Avenue was consolidated under the cover at the former location of the Bethel Missionary Baptist Church. The soil was placed within the footprint of the demolished structure and was covered with a geotextile fabric and at least 14 inches of clean soil.
- Soil excavated from properties at 721 Zinn Parkway, 1100 Pine Grove Road, and 1215 West Tenth Street was consolidated under the cover on the North Side. The soil was placed on the western side of Bancroft Road, in the vicinity of layout point No. 25 shown on Figure G-2 of Attachment 1. Some soil excavated from property at 901 Clydesdale Avenue was also consolidated in this location, while the rest of it was placed under the cover constructed in this area in 1997.

The locations of the consolidated soil are also shown on the as-built drawings included in Attachment 2.

3.2. Ongoing and Future Projects

Soil is either currently being excavated, or will be excavated, from the following areas:

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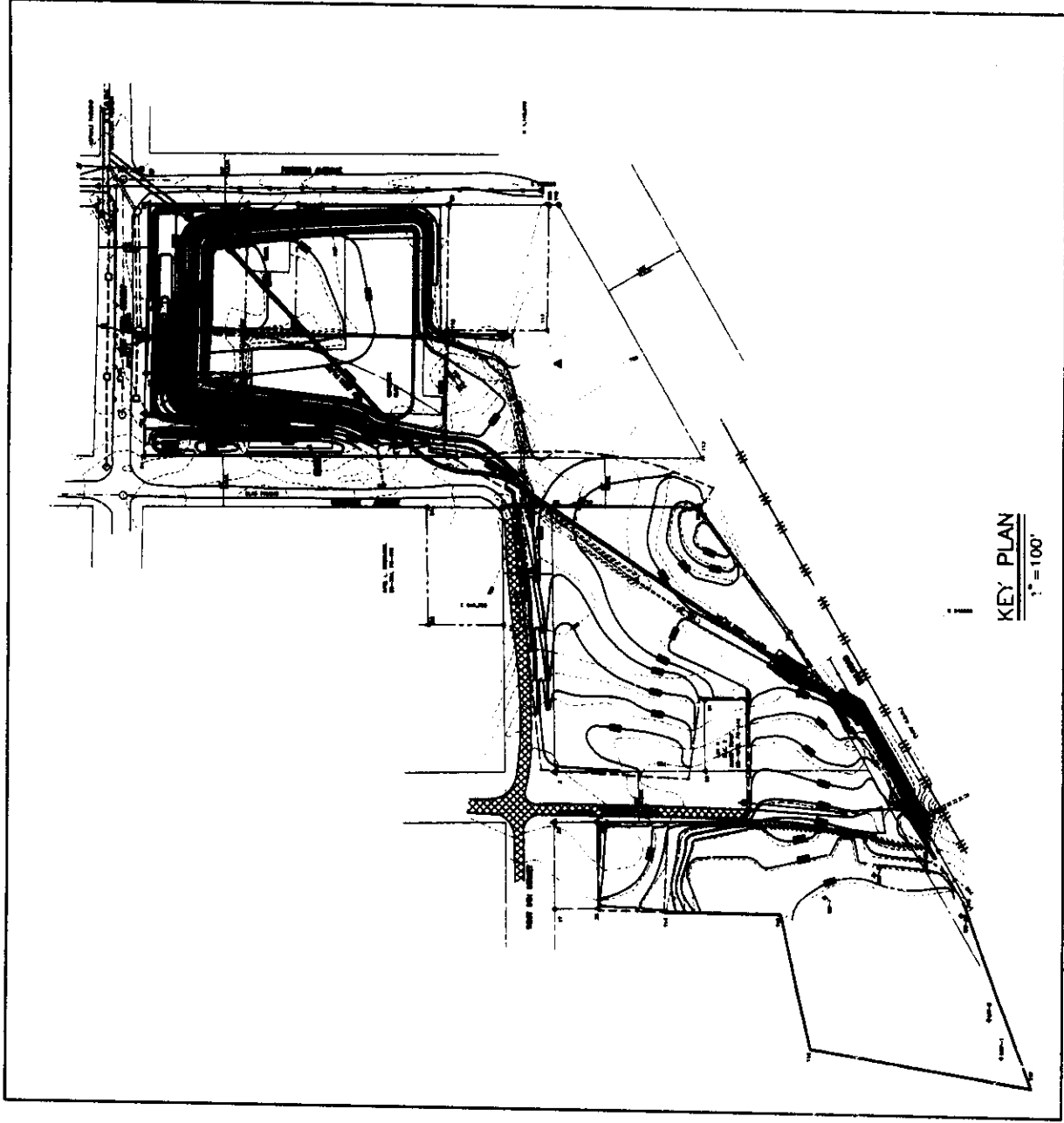
- Properties at 903 and 929 Clydesdale Avenue. The soil will be consolidated under the North Side cover on the western side of Bancroft Avenue, in the vicinity of layout point No. 25.
- Soil will be excavated from both the western and eastern sides of the First Avenue right-of-way (on the western side of the Solutia facility) and will be consolidated under the soil cover that was constructed around the West End Landfill.

4.

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REPAIRS AND MODIFICATIONS TO GROUNDWATER INSTALLATIONS

Six monitoring wells and/or piezometers were modified prior to constructing the Supplemental Interim Measures. Details of the modifications were the same as those used during construction of the Interim Measures in 1997 and were approved by ADEM. A minor permit modification has been requested to include the new well elevations and any other changes in the facility Part B Permit.



KEY PLAN
1"=100'

GENERAL NOTES

SURVEY AND MAPPING

- EXISTING TOPOGRAPHIC FEATURES, BOUNDARY INFORMATION AND EXISTING UTILITY LOCATIONS TAKEN FROM A TOPOGRAPHIC MAP PREPARED BY ALMON ASSOCIATES, INC. - DATED 12/3/97, JOB NO. 96-088.09
- TOPOGRAPHIC BENCH MARK MP/3 ELEVATION 729.33 CHISELED SQUARE IN S/W CORNER OF OVERHEAD SIGNAL ON RAILROAD 200' WEST OF CLOSURE CROSSING.

ALABAMA STATE SPECIFICATIONS

- ANY REFERENCE TO ALABAMA DOT STANDARD SPECIFICATIONS IS LIMITED IN SCOPE TO TECHNICAL ENGINEERING AND CONSTRUCTION WORK. MATERIALS, DETAILS, PROCEDURES, ETC. ALL REFERENCES TO THE ALABAMA DOT OR ADMINISTRATIVE OFFICERS OR EMPLOYEES THEREOF ARE NULL AND VOID WITH RESPECT TO LEGAL OR CONTRACTUAL RESPONSIBILITIES.
- FOR CLARIFICATION, WHERE THE STATE OF ALABAMA OR THE ALABAMA DOT OR ADMINISTRATIVE OFFICERS OR EMPLOYEES THEREOF ARE NAMED IN THE STANDARD SPECIFICATIONS, SUCH REFERENCES SHALL BE TAKEN TO MEAN EITHER ENGINEER OR OWNER.
- CONTRACTOR SHALL OBTAIN MATERIALS TO BE INCORPORATED INTO THE WORK FROM ALABAMA DOT APPROVED SOURCES WHERE ALABAMA DOT MATERIALS ARE SHOWN ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL OBTAIN AND SUBMIT A MANUFACTURER'S MATERIAL CERTIFICATION TO THE ENGINEER FOR EACH MATERIAL ITEM, AS SPECIFIED. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES OF THE GENERAL REQUIREMENTS, INDICATING THAT THE RESPECTIVE ITEM MEETS THE APPLICABLE ALABAMA DOT OR SPECIAL SPECIFICATIONS INCLUDED IN THIS CONTRACT.
- THE CONTRACTOR IS ADVISED THAT THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT FOR INDIVIDUAL ALABAMA DOT ITEM NUMBERS DOES NOT REFLECT THE OWNER'S METHOD OF MEASUREMENT AND/OR BASIS OF PAYMENT.

GENERAL UTILITIES

- PLANS SHOW APPROXIMATE LOCATIONS OF KNOWN UTILITIES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR HAVING ALL UTILITIES WITHIN THE LIMITS OF WORK STAKED PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES TO REMAIN IN SERVICE PRIOR TO THE START OF CONSTRUCTION. THE ALABAMA LINE LOCATION CENTER TO BE NOTIFIED 72 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION (1-800-282-8825).
- THE CONTRACTOR SHALL COORDINATE ALL WORK AFFECTING UTILITIES WITH THE OWNER AND CONSTRUCTION MANAGER, AND WITH THE RESPECTIVE UTILITY OWNER. ALL DETAILS OF CONSTRUCTION AND/OR RELOCATION OF AFFECTED UTILITIES SHALL BE APPROVED BY THE OWNER AND OTHER APPROVING AGENCIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL DAMAGES TO EXISTING UTILITIES AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR TO COORDINATE WITH OWNER'S REPRESENTATIVE EXISTING UTILITIES TO REMAIN IN SERVICE AND EXISTING UTILITIES SCHEDULED FOR ABANDONMENT. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR ABANDONMENT/REMOVAL PROCEDURES OF EXISTING UTILITIES, STRUCTURES AND ROADWAYS.

GRAVING

- AREAS TO BE FILLED SHALL BE CLEARED OF VEGETATION, UTILITY POLES, FENCES AND ANY OTHER OBSTACLES. MATERIALS COORDINATE DISPOSAL WITH CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL COORDINATE WITH SOLUTIA FOR THE REMOVAL AND/OR PROTECTION OF EXISTING TREES WITHIN THE COVER LIMITS. ALL FILLS SHALL BE COMPACTED AS SPECIFIED TO REDUCE EROSION, SLURRING, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.
- ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS UNLESS A GREATER THICKNESS IS ALLOWED BY THE ENGINEER, UPON DEMONSTRATION BY THE CONTRACTOR THAT THE MATERIALS AND COMPACTIVE EFFORT ARE ADEQUATE TO OBTAIN THE REQUIRED DENSITY.
- WHERE COVER MATERIAL IS PLACED OVER EXISTING PAVED AREAS OR CONCRETE PAVES, THE CONTRACTOR SHALL BREAK THE EXISTING PAVEMENT ON A 10' HORIZONTAL GRID. THE HOLES SHALL PENETRATE INTO THE EXISTING SUBGRADE GRANULAR COURSE.
- MINIMUM ALLOWABLE SLOPE OF COVER MATERIAL 1:1 TO 3:1 FOR THE FILL MATERIAL TO BE ADEQUATELY MAINTAINED ON LINER.
- BERM IS TO BE PLACED ON NATIVE SOIL AND IN ACCORDANCE WITH SPECIFICATION 02297.
- WHERE THE PROPOSED BERM IS LOCATED OVER AN EXISTING CONCRETE SLAB, THE CONTRACTOR SHALL REMOVE A 10' WIDE STRIP OF CONCRETE AND BASE MATERIAL TO NATIVE SOIL. KEY BERM MATERIAL INTO THE REMOVED PORTION OF THE SLAB. MATERIALS REMOVED SHALL BE DEPOSED ON SITE AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE.
- THE WORKING AREA OF THE BORROW PIT SHALL NOT EXCEED 5 ACRES.

EROSION CONTROL

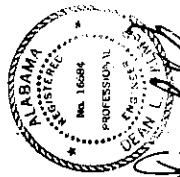
- SOIL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED PRIOR TO DISTURBANCE AND MAINTAINED DURING CONSTRUCTION AND REMOVED, REGRADED, SEEDING AND MULCHED (WHERE NECESSARY) UPON COMPLETION OF CONSTRUCTION. PERIMETER SHALES SHALL BE CONSTRUCTED PRIOR TO EARTHWORK ACTIVITIES. STONE CHECK DAMS SHALL REMAIN IN PLACE UPON COMPLETION OF CONSTRUCTION.
- AN ADEQUATE RESERVE OF EROSION CONTROL MATERIALS SHALL BE ON SITE AT ALL TIMES FOR EMERGENCY OR ROUTINE REPLACEMENT AND SHALL INCLUDE MATERIALS TO REPAIR SILT FENCES, HAYBALES, MULCH AND OTHER DEVICES USED TO STABILIZE THE SITE.
- THE AREAS OF CONSTRUCTION SHALL REMAIN IN STABLE CONDITION AT THE CLOSE OF EACH CONSTRUCTION DAY. EROSION CONTROL FACILITIES SHALL BE MONITORED AT THIS TIME, ANY MAINTAINED, REPAIRED OR REPLACED AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
- TEMPORARY EROSION CONTROL STRUCTURES TO BE CLEANED WHEN THEY REACH 50% CAPACITY AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE WITH OWNER'S REPRESENTATIVE FOR DISPOSAL OF MATERIAL PRIOR TO RESEEDING BOTTOM OF BASIN. CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT.
- THE LOCATION OF EXISTING SPRINGS OR GROUNDWATER SEEPAGE WHICH ARE NOT CONTROLLED BY THE STORMWATER SYSTEM AND SITE GRADING SHOWN ON THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
- SILT FENCES SHALL BE INSTALLED AT TOES OF SLOPES IN DRAINAGE ALONG PROPERTY LINE AND AT OTHER LOCATIONS NEEDED TO PREVENT AND CONTROL EROSION OF THE SITT DURING CONSTRUCTION AS SHOWN OR DIRECTED BY THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVELLED PUBLIC THOROUGHFARE(S) CAUSED BY HIS OPERATIONS BY WASHING ALL VEHICLE WHEELS IN A STABILIZED CONSTRUCTION ENTRANCE AND BY WASHING ALL VEHICLE WHEELS IN A SAFE DISPOSAL AREA. THE CONTRACTOR SHALL REMOVE IMMEDIATELY ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) CAUSED BY HIS OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL MATERIALS DEPOSITED ONTO TRAVELLED PUBLIC THOROUGHFARE(S) CAUSED BY HIS OPERATIONS. WASHING OF VEHICLE WHEELS IS MANDATORY. THIS APPLIES TO THE NORTHSIDE, WESTSIDE LANDFILL, AND BETHEL CHURCH PROPERTIES AS WELL AS THE BORROW PIT AREA.
- ON-SITE SOIL STOCKPILE AREAS SHOULD NOT BE LOCATED WITHIN 50 FEET OF A CATCH BASIN OR INLET. STOCKPILE AREAS TO BE SURROUNDED WITH SILT FENCE, OR OTHER EROSION CONTROL MEASURES AS ORDERED BY THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL HAVE A WATER TRUCK OR OTHER ACCEPTABLE ALTERNATIVE DEDICATED TO CONTROLLING DUST AVAILABLE AT ALL TIMES.
- THE CONTRACTOR SHALL DRAPE FILTER FABRIC OVER THE INSIDE OF THE PERIMETER FENCE FOR DUST CONTROL.

GENERAL

- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE, COUNTY, AND CITY PERMITS ASSOCIATED WITH CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO ROAD CUT PERMITS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE CONCERNING WHAT PERMITS WILL BE REQUIRED PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL/PROTECTION PLAN FOR THE WORK. THE PLAN SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL. THE PLAN SHALL BE PRESENT AT THE BORROW PIT ENTRANCE/EXIT DURING PERIODS WHEN COVER SOIL IS BEING HAULED FROM THE AREA.
- THE CONTRACTOR SHALL MAINTAIN VEHICLE ACCESS AT ALL TIMES TO ANNISTON FROM WORKS LOCATED AT THE SOUTHERN END OF PARKWAY AVENUE.
- THE CONTRACTOR SHALL MAINTAIN ALL PERIMETER FENCING TO THE MAXIMUM EXTENT POSSIBLE THROUGHOUT CONSTRUCTION. WHERE FENCING IS REQUIRED TO BE TEMPORARILY TAKEN DOWN TO ACCOMMODATE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN AND SECURE THE OPENING ON A NIGHTLY BASIS.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. IMPROVEMENTS IN THE SCALE MAY BE INTRODUCED BY ANY WORKS. USE THE GRAPHIC SCALE BAR AT THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON TO REPRODUCE OR TRANSMIT THE CONTENTS OF THIS DOCUMENT WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER.



SOLUTIA INC.
NORTHSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

GENERAL

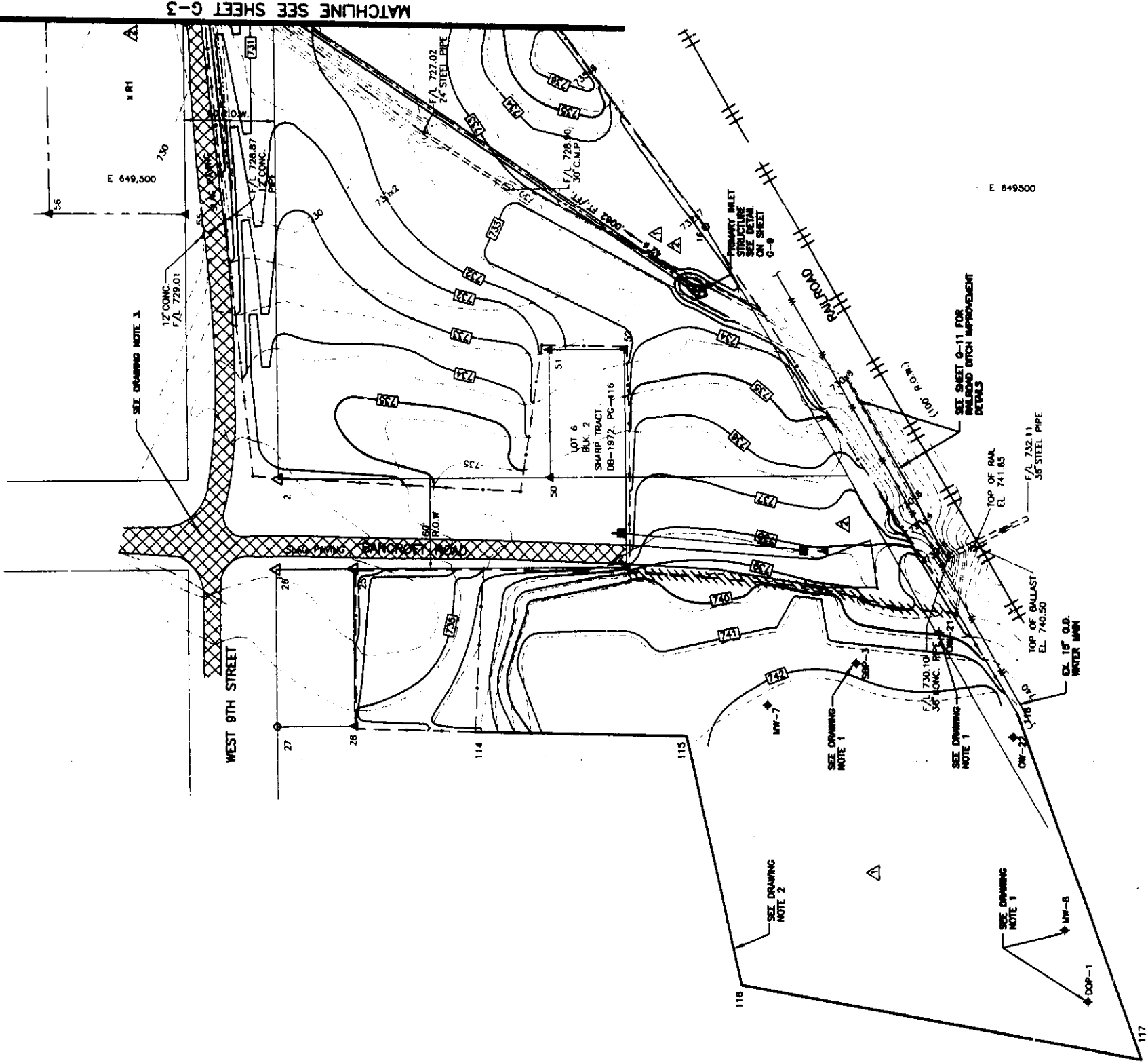
PLAN, NOTES & LEGEND

IN CHARGE OF	FILE NO.	2800.037-006
DESIGNED BY	CHECKED BY	DATE
		G-1

NO.	DATE	REVISION
3	8/21/98	REVISED GRADING IN NORTHWEST CORNER OF BERM
2	6/25/98	REVISED PER ADDENDUM NO. 2
1	5/11/98	REVISED PER ADDENDUM NO. 1
0	4/13/98	ISSUED FOR CONSTRUCTION
		INIT.



OPEL L. BRECHER
DB-754, PG-472



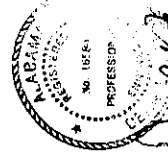
PT.NO.	NORTHING	EASTING	DESCRIPTOR
2	1147960.144	649299.339	REBAR FOUND
9	1147964.152	649614.891	REBAR FOUND
10	1148024.090	649613.711	COTTON PICKER SPINDLE
16	1147678.435	649470.670	I.P.F.
25	1147910.075	649240.814	REBAR FOUND
26	1147961.127	649239.567	REBAR FOUND
27	1147959.645	649135.705	I.P.F.
28	1147908.590	649136.954	REBAR SET
41	1148513.458	649965.645	REBAR FOUND
50	1147780.860	649303.422	REBAR SET
51	1147781.931	649387.915	REBAR SET
52	1147731.922	649389.055	REBAR SET
53	1147730.091	649244.563	REBAR SET
54	1148114.084	649612.664	REBAR SET
55	1148022.312	649612.664	REBAR SET
56	1148112.306	649612.664	REBAR SET
57	1147787.668	649612.664	REBAR SET
84	1148453.083	649612.664	REBAR SET
89	1148089.973	649612.664	REBAR FOUND
94	1148453.775	649612.664	REBAR SET
95	1148449.592	649612.664	REBAR SET
96	1148332.619	649612.664	REBAR SET
97	1148452.426	649612.664	REBAR SET
98	1148332.434	649612.664	REBAR SET
99	1148088.796	649612.664	I.P.F.
105	1148329.528	649612.664	REBAR SET
106	1148269.601	649612.664	REBAR SET
107	1148331.963	649612.664	REBAR SET
108	1148271.809	649612.664	REBAR SET
109	1147969.979	649612.664	I.P.F.
110	1147958.130	649974.955	CPS IN PAVEMENT
111	1147972.062	649975.076	CPS IN PAVEMENT
112	1148092.055	649824.970	REBAR SET
113	1147784.684	649823.753	REBAR SET
114	1147829.210	649676.165	REBAR SET
115	1147689.474	649134.396	COORD. PT. GRADING LIMIT
116	1147652.754	649134.151	COORD. PT. GRADING LIMIT
117	1147389.867	648970.517	COORD. PT. GRADING LIMIT
118	1147471.947	649152.987	COORD. PT. GRADING LIMIT
PC1	1148001.226	649637.696	PC - CURVE 1
PI1	1148027.511	649655.010	PI - CURVE 1
R1	1148058.985	649550.010	RADIUS - CURVE 1
PT1	1148058.985	649655.010	PT - CURVE 1
PC2	1148058.985	649655.010	PC - CURVE 2
PI2	1148104.245	649655.010	PI - CURVE 2
R2	1148058.985	649655.010	RADIUS - CURVE 2
PT2	1148135.322	649760.010	PT - CURVE 2
-	1147682.407	649687.914	CENT. - PRIMARY I.S.
-	1148351.285	649916.587	CENT. - SECONDARY I.S.
-	1148402.080	649954.913	CENT. STORM MH 1

DRAWING NOTES

- CONTRACTOR SHALL PROTECT EXISTING MONITORING WELLS FROM DAMAGE AND CONSTRUCT MONITORING WELL PROTECTION IN ACCORDANCE WITH THE DETAIL ON SHEET G-6.
- CONTRACTOR SHALL EXTEND COVER TO APPROXIMATE LIMIT AS SHOWN. COORDINATE WITH OWNER'S REPRESENTATIVE.
- NO CONSTRUCTION TRAFFIC ALLOWED, ON SHARED PORTIONS OF WEST 9TH STREET AND BANCROFT ROAD.
- CONTRACTOR TO RELOCATE FENCE TO LOCATIONS SHOWN ON PLANS IF ANY FENCE IS REMOVED FOR CONSTRUCTION.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. MEASUREMENTS IN THE FIELD SHALL BE MADE TO THE CENTERLINE OF THE ROAD OR RAILROAD. THE ACTUAL SCALE OF THIS DRAWING IS THE ACTUAL SCALE OF THE DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.



NO.	DATE	REVISION	INT.
3	8/21/98	REVISED STRUCTURE COORDINATES	
2	8/25/98	REVISED PER ADDENDUM NO. 2	
1	5/11/98	REVISED PER ADDENDUM NO. 1	
0	4/13/98	ISSUED FOR CONSTRUCTION	

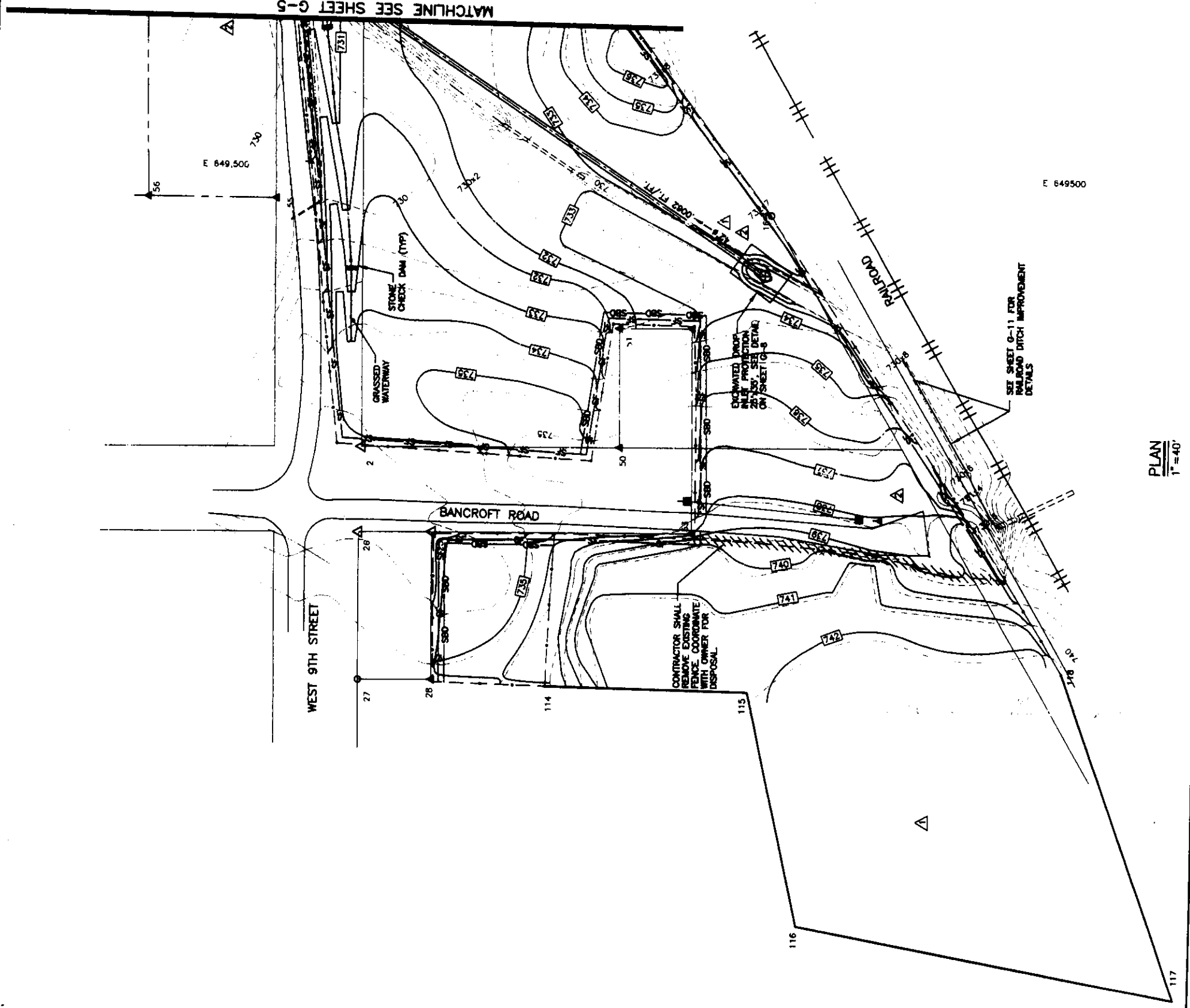


SOLUTIA INC.
NORTHSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

GENERAL

GRADING PLAN

IN CHARGE OF	FILE NO.	G-2
DESIGNED BY	2800.037-007	
CHECKED BY	DATE	



PLAN
1"=40'

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. IMPROVEMENTS IN THE SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACTUAL SCALE OF THE WORK. THE ACTUAL SCALE OF THIS DRAWING IS 1"=40'.

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS ACTING UNDER THE AUTHORITY OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.



David L. Baker, 5/11/98

NO.	DATE	REVISION	INIT.
2	6/25/98	REVISED PER ADDENDUM NO. 2	
1	5/11/98	REVISED PER ADDENDUM NO. 1	
0	4/13/98	ISSUED FOR CONSTRUCTION	

1"=40'
0 40 80



SOLUTIA INC.
NORTHSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

GENERAL
EROSION & SEDIMENT
CONTROL PLAN

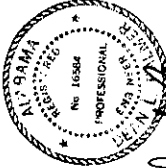
IN CHARGE OF	FILE NO.	26300.037-008	G-4
DESIGNED BY TJS	CHECKED BY AUC	DATE	MAY 11, 1998
DRAWN BY KTR			

DRAWING NOTES

1. CONTRACTOR SHALL PROTECT PERFORMED CONCRETE ROSE WITH FILTER FABRIC. DRAPED OVER THE OUTSIDE AND PROBABLY ATTACHED. THE FILTER FABRIC SHALL BE REMOVED AFTER COMPLETION OF CONSTRUCTION ACTIVITIES & SITE VEGETATION HAS BEEN RE-ESTABLISHED.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. ANY CHANGES TO THE SCALE MAY BE INTRODUCED BY ANY DRAWING. THE GRAPHIC SCALE BAR ABOVE USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.

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PLAN
1"=40'

NO.	DATE	REVISION
2	8/21/98	REVISED GRADING IN NORTHWEST CORNER OF BEIRN
1	5/11/98	REVISED PER ADDENDUM NO. 1
0	4/13/98	ISSUED FOR CONSTRUCTION

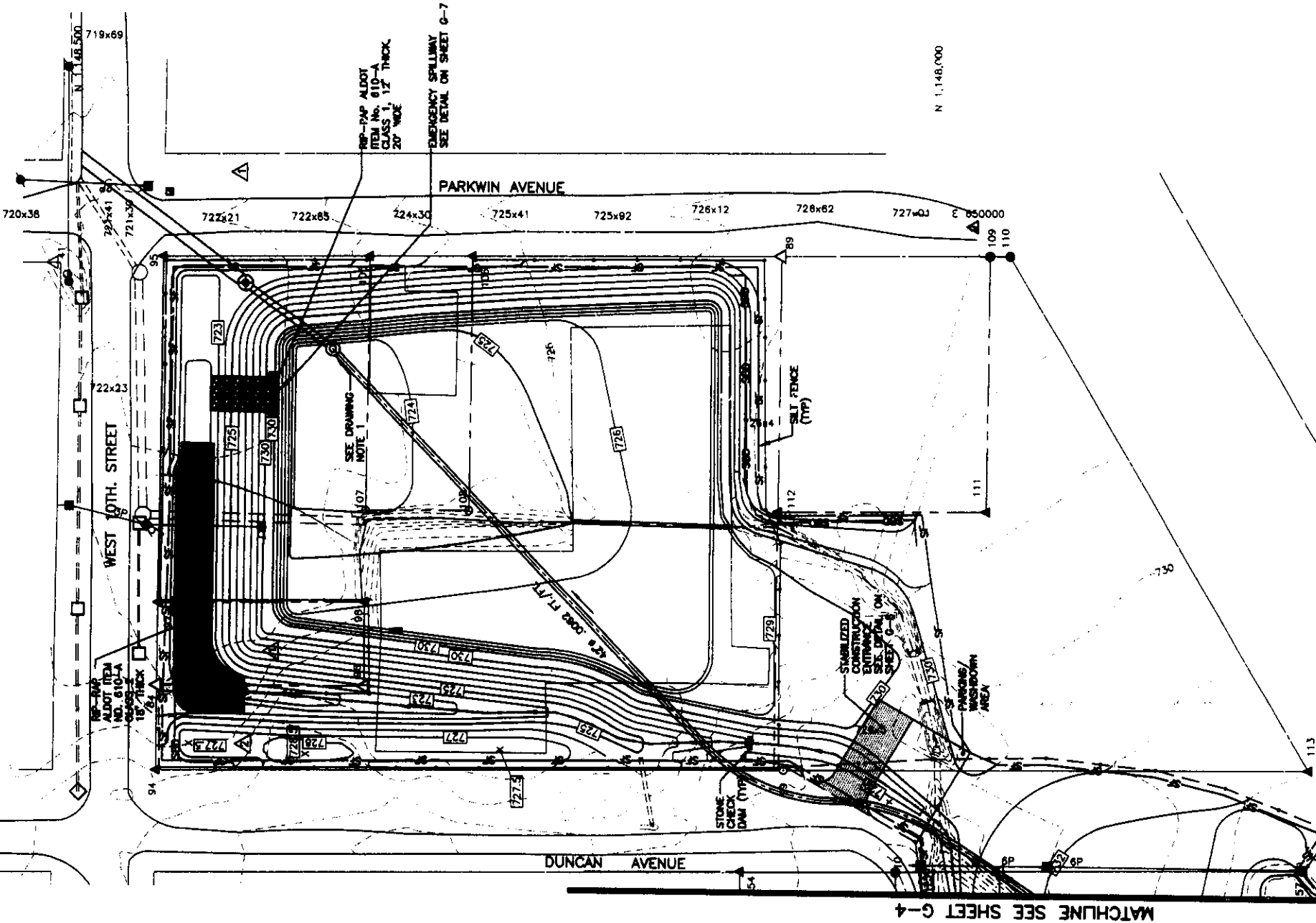
1"=40'
0 40 80



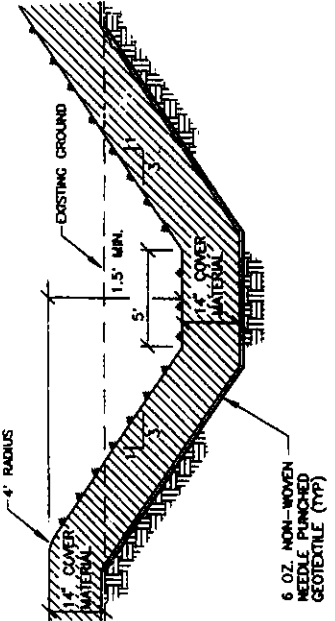
SOLUTIA INC.
NORTHSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

GENERAL
EROSION & SEDIMENT
CONTROL PLAN

IN CHARGE OF	FILE NO.	2600.037-010	G-5
DESIGNED BY	CHECKED BY	DATE	MAY 11, 1998
DRAWN BY	KER		

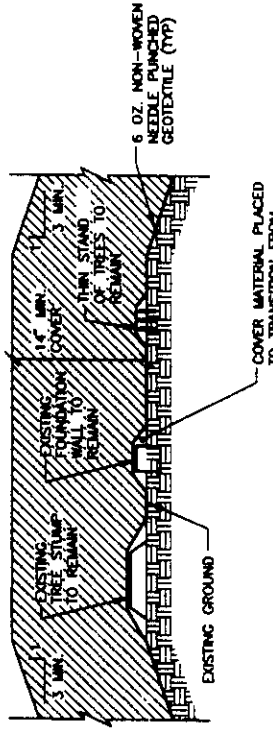


MATCHLINE SEE SHEET G-4



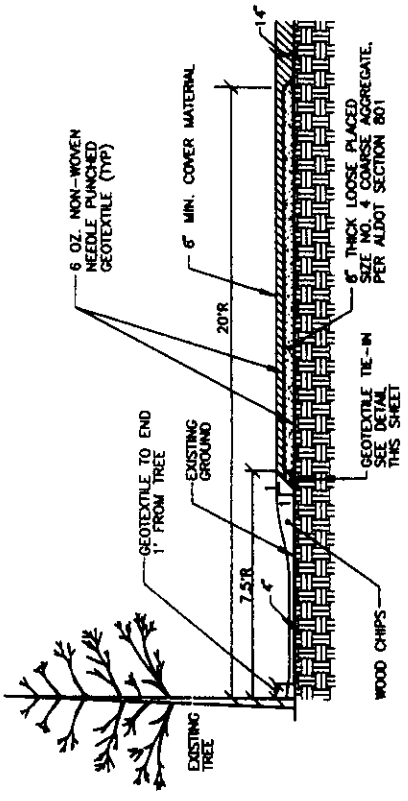
- NOTES:
1. SIDE SLOPES ADJACENT TO BERM SHALL BE 1V TO 4H.

TYPICAL GRASSED SWALE DETAIL
NOT TO SCALE

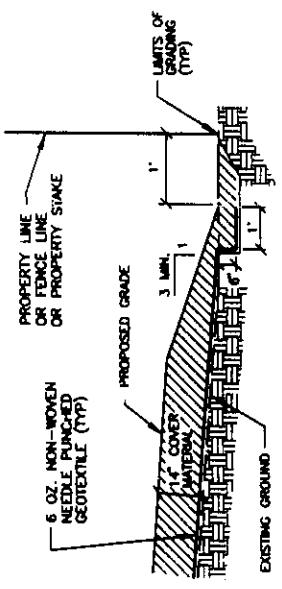


COVER DETAIL
NOT TO SCALE

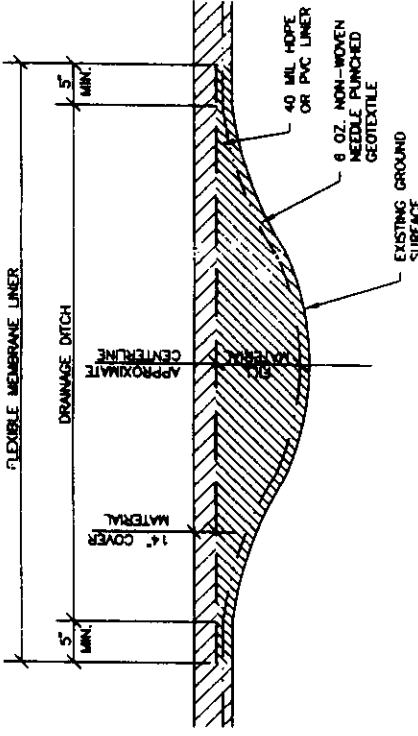
- NOTES:
1. GEOTEXTILE SEAMS SHALL BE OVERLAPPED A MINIMUM OF 24 INCHES.



COVER TREATMENT AT TREES TO REMAIN
NOT TO SCALE

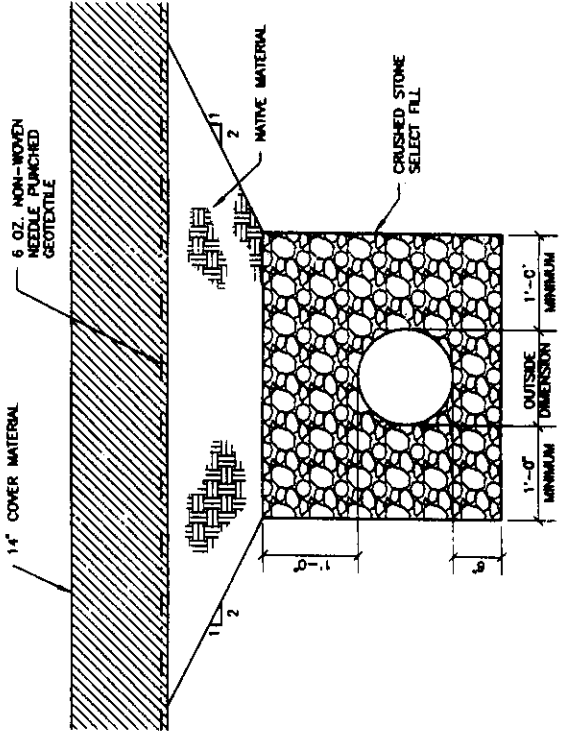


TYPICAL COVER MATERIAL & GEOTEXTILE TIE-IN DETAIL
NOT TO SCALE

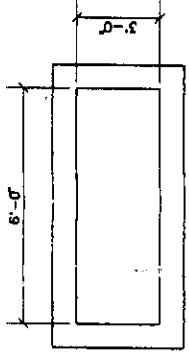


CHANNEL FILL / TYPICAL SECTION
NOT TO SCALE

- NOTES:
1. GEOMEMBRANE LINER PANELS SHALL BE OVERLAPPED A MINIMUM OF 36 INCHES IN THE DOWN STREAM DIRECTION.



STORM SEWER TRENCH DETAIL
NOT TO SCALE

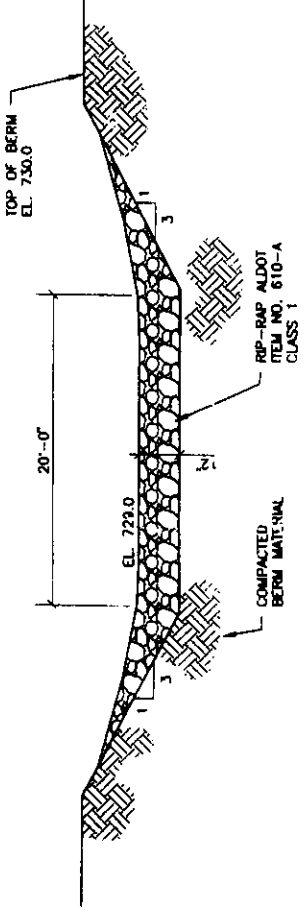


SPECIFICATIONS

CONCRETE
ENTRANKED AIR
STEEL
DESIGN LOADING

- NOTES:
1. 4000 PSI @ 28 DAYS
58-0K
ASTM A496-A615
GRADE 60-60 KSI
ASHTO HS-20-44
WITH 30% IMPACT AND
EQUVALENT SOIL PRESSURE
OF 130 (PSF). FLATATION
FORCES NOT ACCOUNTED FOR
 2. REINFORCED STEEL CONFORMS TO
LATEST ASTM A185 SPECIFICATION
0.12 SQ. IN./LINEAL FT. AND
0.12 SQ. IN. (BOTH WAYS) IN BASE SLAB.
CONCRETE COMPRESSIVE STRENGTH
4000 PSI MINIMUM.
 3. DESIGN SPECIFICATIONS CONFORM TO
LATEST ASTM C880-91 SPEC. FOR PRECAST
REINFORCED CONCRETE.

BOX CULVERT
NOT TO SCALE



EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

THIS DRAWING WAS PREPARED AT
THE SCALE INDICATED IN THE TITLE
BLOCK. DIMENSIONS IN THE SEARED
SCALE MAY BE INTRODUCED BY ANY
DIMENSIONS ARE INTRODUCED BY ANY
SCALE. THE SCALE SHALL BE
IN THE TITLE BLOCK. THE DRAWING
THE ACTUAL SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR
ANY PERSON, UNLESS ACTING UNDER
THE DIRECTION OF A LICENSED ENG-
NEER, TO ALTER THIS DOCUMENT.



Alan L. Parker 6/29/98

NO.	DATE	REVISION	INIT.
1	5/11/98	REVISED PER ADDENDUM NO. 1	ALP
0	4/13/98	ISSUED FOR CONSTRUCTION	ALP

NOT TO SCALE

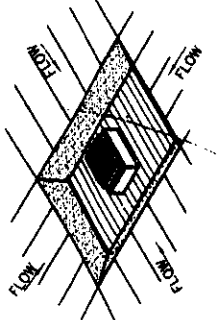


SOLUTIA INC.
NORTHSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

GENERAL

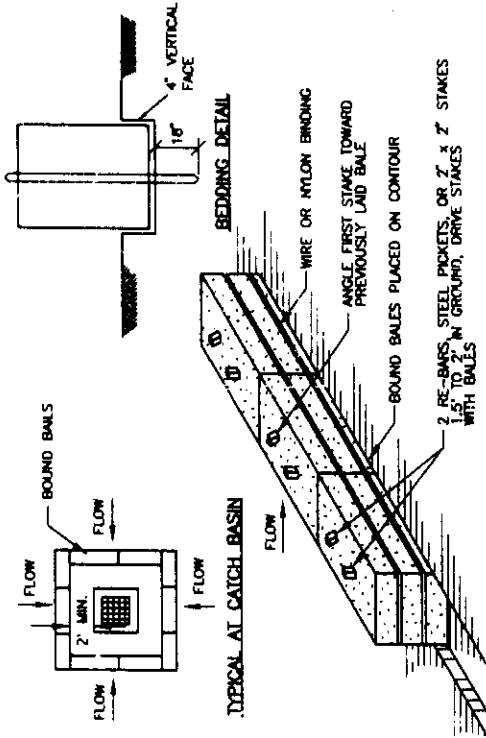
MISCELLANEOUS DETAILS

IN CHARGE OF	FILE NO.	G-7
DESIGNED BY T.S. CHECKED BY A.C.	2800.037-011	
DRAWN BY KFR/JMA	DATE	MAY 11, 1998



1. WOMEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOMEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH: ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SALT FENCE.
4. FENCE TO BE ALIGNED ALONG CONTOUR AS CLOSELY AS POSSIBLE.

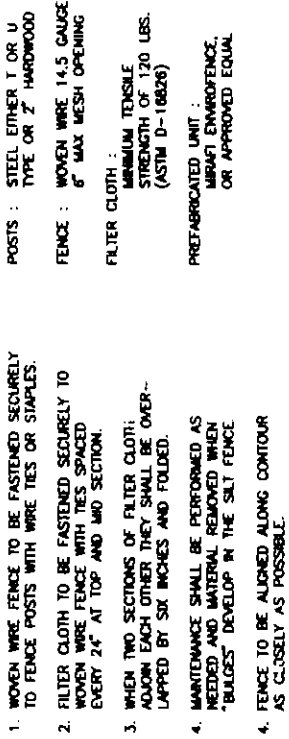
NOT TO SCALE



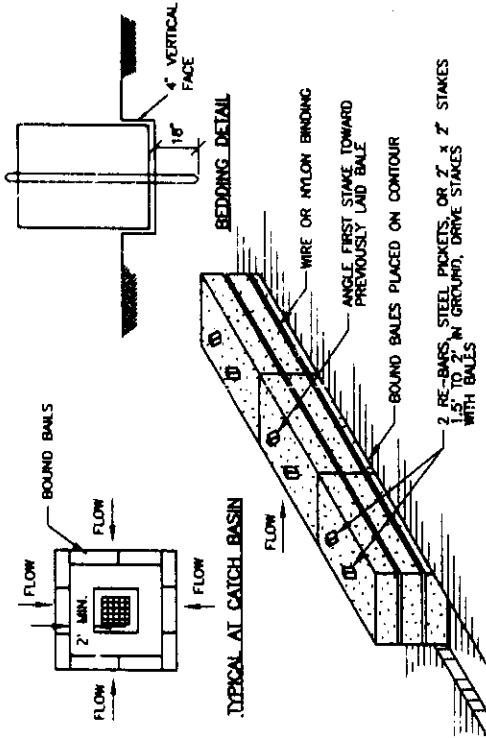
NOT TO SCALE

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH-AS REQUIRED, BUT NOT LESS THAN 50 FEET
3. THICKNESS - NOT LESS THAN SIX(6) INCHES
4. WIDTH-TWELVE(12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR OVERFLOED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SKILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEARED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. THE CONTRACTOR IS NOTIFIED THAT IN WET WEATHER, OR MUDDY CONDITIONS, WASHING VEHICLE WHEELS IS MANDATORY.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH DAY.

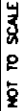


NOT TO SCALE



NOT TO SCALE

1. BALES SHALL BE PLACED PRIOR TO CONSTRUCTION AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ADJUTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY Laid BALE AT AN ANGLE TO FORCE THE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. UPON COMPLETION OF CONSTRUCTION AND STABILIZATION OF ALL DISTURBED AREAS, SITUATION CONTROL MEASURES ARE TO BE REMOVED.



1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRABES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.

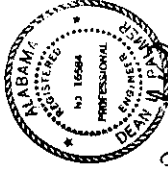
NOT TO SCALE

SOLUTIA INC.
NORTHSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

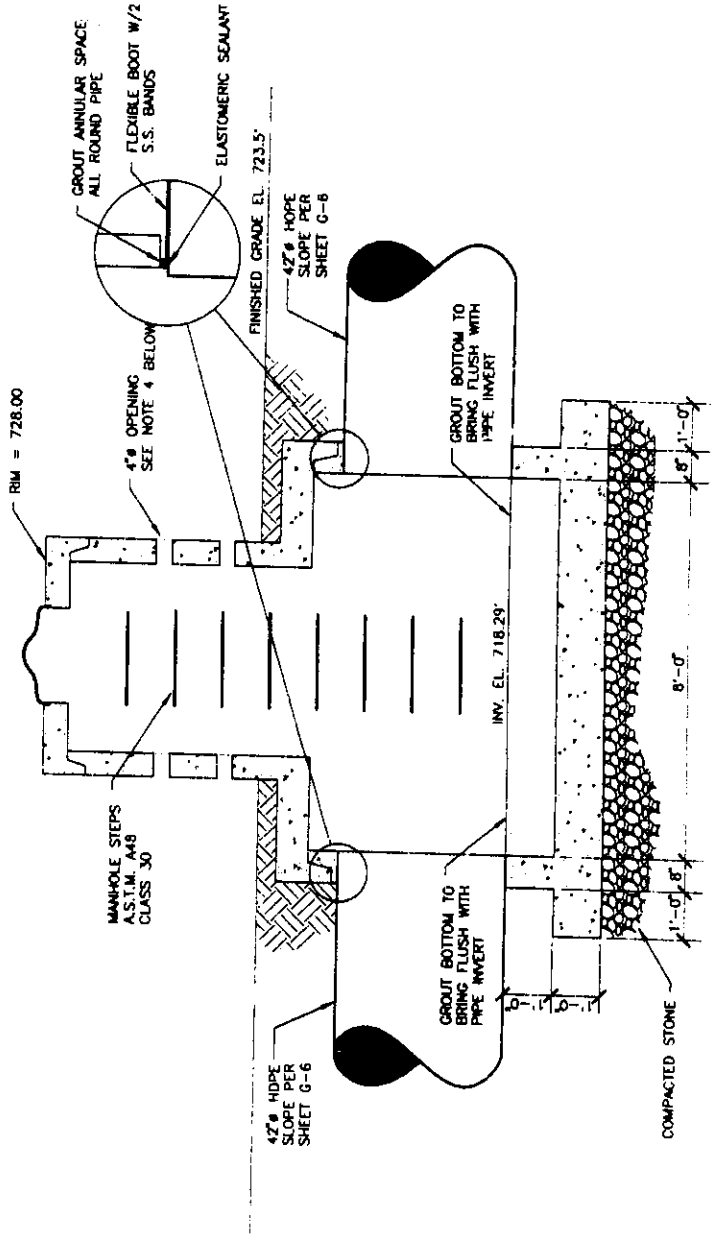
MISCELLANEOUS DETAILS

FILE NO.	2600.037-012
DATE	MAY 11, 1968
IN CHARGE OF	<i>Walter L. Johnson</i>
DESIGNED BY	TJS
CHECKED BY	AJC
DRAWN BY	KFR/JMA

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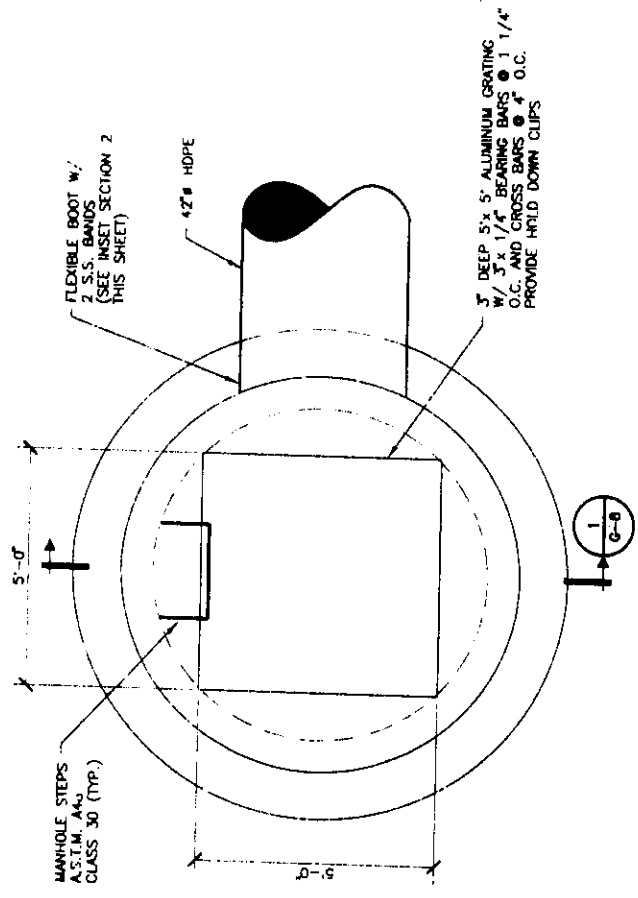


Dean Fisher 6/29/98



SECTION 1/2-1-0'

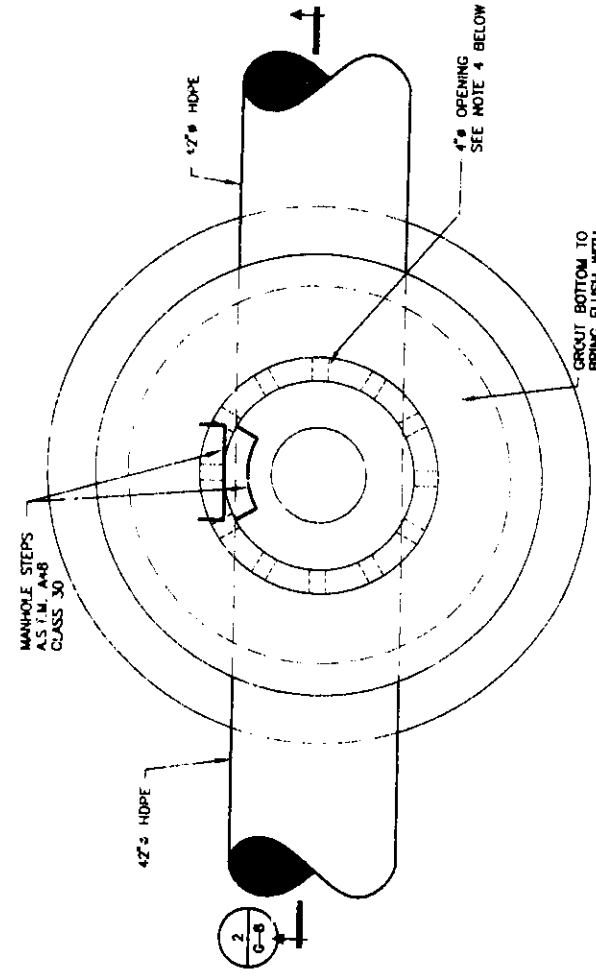
SECTION 2/2-1-0'



PRIMARY INLET STRUCTURE 1/2-1-0'

- SPECIFICATIONS**
- CONCRETE 4000 PSI • 28 DAYS
 - ENTRAINED AIR 5% - 8%
 - STEEL ASTM A496-A615
 - DESIGN LOADING GRADE 60-60 KSI
 - ASHOTO HS-20-44
 - WITH 30K IMPACT AND EQUIVALENT SOIL PRESSURE OF 130 (PSF) FLATATION FORCES NOT ACCOUNTED FOR
 - DESIGN SPECIFICATIONS CONFORM TO LATEST ASTM C890-91 SPEC. FOR PRECAST REINFORCED CONCRETE.

- NOTES:**
- REINFORCED STEEL CONFORMS TO LATEST ASTM A165 SPECIFICATION 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) IN BASE SLAB.
 - CONCRETE COMPRESSIVE STRENGTH 4000 PSI MINIMUM.
 - DESIGN SPECIFICATIONS CONFORM TO LATEST ASTM C890-91 SPEC. FOR PRECAST REINFORCED CONCRETE.

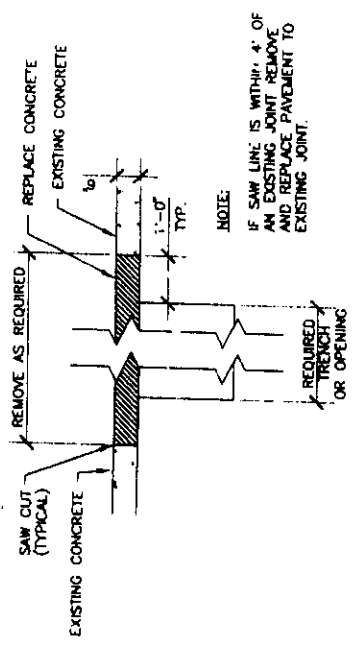


PERFORATED SECONDARY INLET STRUCTURE 1/2-1-0'

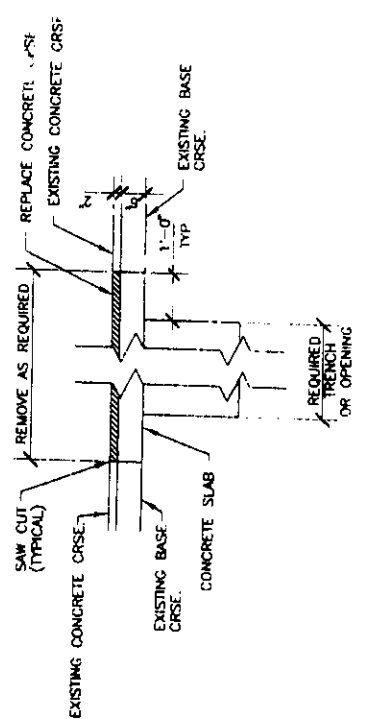
- SPECIFICATIONS**
- CONCRETE 4000 PSI • 28 DAYS
 - ENTRAINED AIR 5% - 8%
 - STEEL ASTM A496-A615
 - DESIGN LOADING GRADE 60-60 KSI
 - ASHOTO HS-20-44
 - WITH 30K IMPACT AND EQUIVALENT SOIL PRESSURE OF 130 (PSF) FLATATION FORCES NOT ACCOUNTED FOR
 - DESIGN SPECIFICATIONS CONFORM TO LATEST ASTM C890-91 SPEC. FOR PRECAST REINFORCED CONCRETE.

- NOTES:**
- REINFORCED STEEL CONFORMS TO LATEST ASTM A165 SPECIFICATION 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) IN BASE SLAB.
 - CONCRETE COMPRESSIVE STRENGTH 4000 PSI MINIMUM.
 - DESIGN SPECIFICATIONS CONFORM TO LATEST ASTM C890-91 SPEC. FOR PRECAST REINFORCED CONCRETE.
 - PROVIDE 4\"/>

RIGID PAVEMENT DETAIL 1/2-1-0'



FLEXIBLE PAVEMENT DETAIL 1/2-1-0'



NO.	DATE	REVISION
2	6/25/98	REVISED PER ADDENDUM NO. 2
1	5/11/98	REVISED PER ADDENDUM NO. 1
0	4/13/98	ISSUED FOR CONSTRUCTION
INIT.		

SCALE AS SHOWN



SOLUTIA INC.
NORTHSIDE PROPERTIES CLCSURE DESIGN
ANNISTON ALABAMA

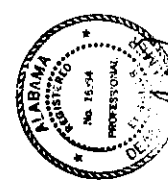
GENERAL

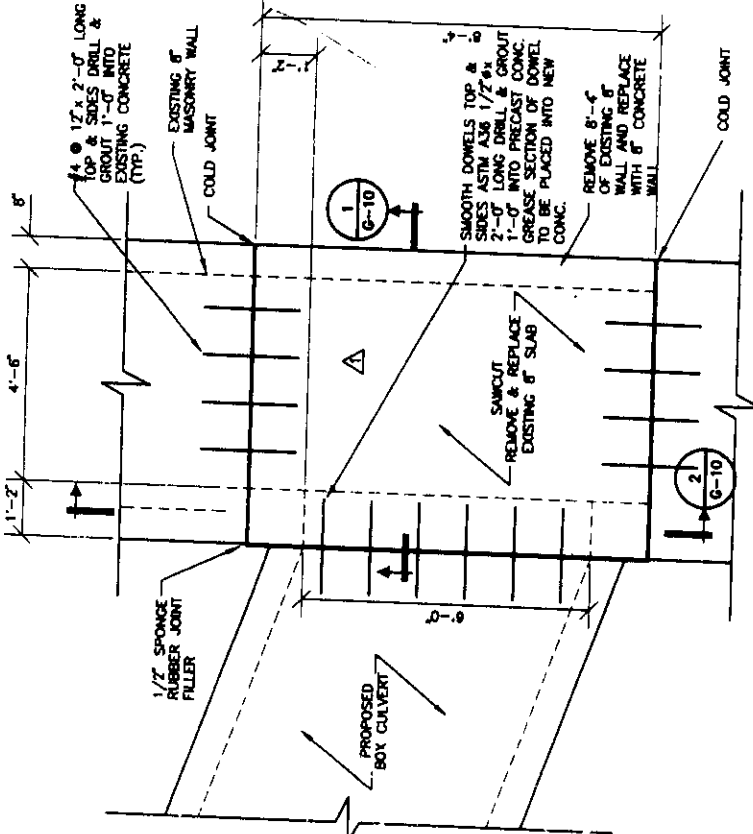
MISCELLANEOUS DETAILS

IN CHARGE OF	FILE NO.	2600.037-014	G-9
DESIGNED BY	CHECKED BY	DATE	

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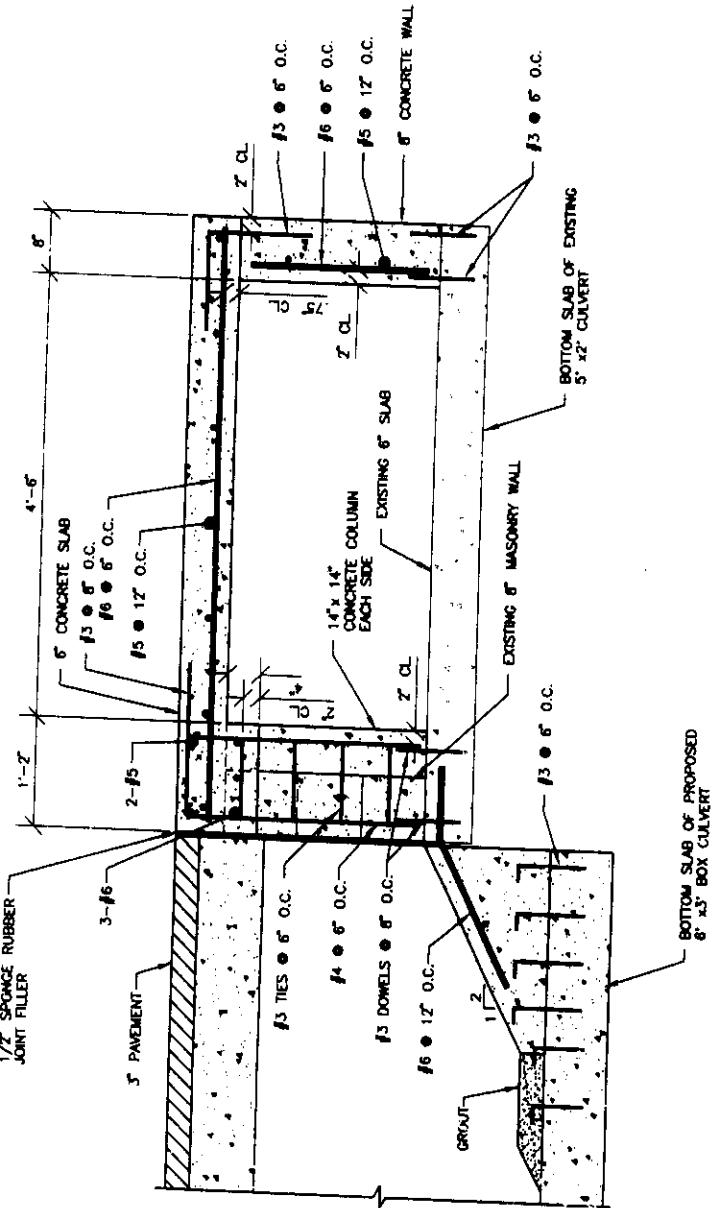
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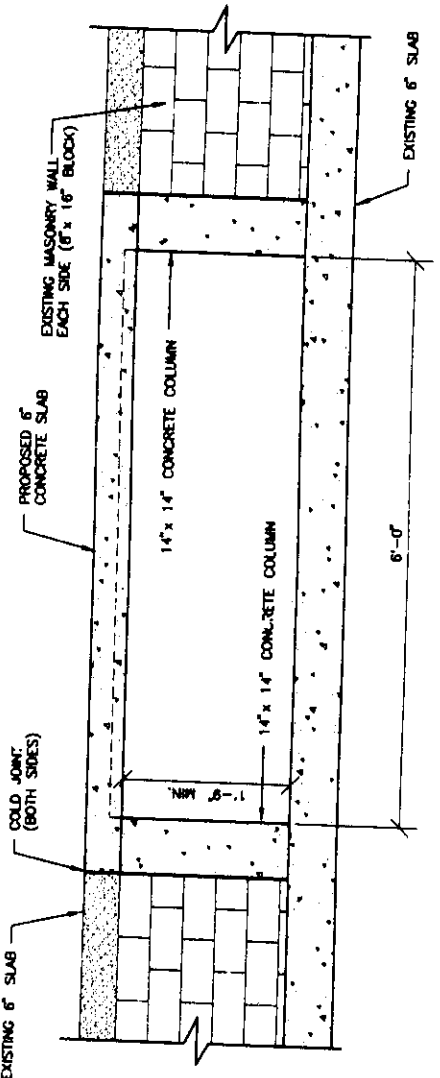
BOX CULVERT JUNCTION PLAN

1/2"=1'-0"



SECTION 1

1/2"=1'-0"



SECTION 2

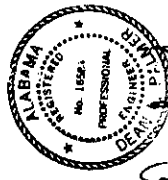
1/2"=1'-0"

SPECIFICATIONS:

- CONCRETE WORK SHALL FOLLOW ACI 301 CONCRETE REINFORCING AND ACCESSORIES SHALL FOLLOW ACI 315.
- CONCRETE
4,000 PSI @ 28 DAYS
5% - 7%
ASTM A 615, GRADE 60
ANSI/ASTM A 185
- ENTRAINED AIR
STEEL - DEFORMED BARS
STEEL - WELDED WIRE MESH
- NOTES:
- CHAMFER EXPOSED CORNERS OF CONCRETE 3/4 INCH.
 - CAST IN PLACE CONCRETE COVER FOR REINFORCING UNLESS OTHERWISE NOTED (UON). ON DETAILS SHALL CONFORM TO THE FOLLOWING:
 - CONCRETE AGAINST EARTH 3 INCHES
 - CONCRETE TANKS 2 INCHES
 - CONCRETE EXPOSED TO EARTH OR WEATHER #8 BAR & LARGER 2 INCHES
 - #5 BAR & SMALLER 1 1/2 INCHES
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER BEAMS, COLUMNS 2 INCHES
 - HOLD REINFORCING BARS AT CORRECT DISTANCE FROM FORMS AND EARTH WITH CHAIRS, SPACERS, AND TIES. (PLASTIC TIP LEGS AT EXPOSED CONCRETE)
 - IN ANY APPROVED CONSTRUCTION JOINT PROVIDE A SHEAR KEY 1 1/2 INCHES DEEP x 1/3 THE JOINT WIDTH. ALSO PROVIDE A TENSION CLASS "B" LAP OF REINFORCING.
 - SLAB, BEAM, AND JOIST TOP REINFORCING CONTINUOUS OVER A SUPPORT SHALL EXTEND TO THE 1/3 POINT OF THE CLEAR SPAN. SLAB, BEAM, AND JOIST TOP REINFORCING AT A DISCONTINUOUS END SHALL TERMINATE IN A STANDARD 90 DEGREE HOOK INTO SUPPORTING BEAMS AND WALLS.
 - CONCRETE BEAMS SHALL BE MONOLITHIC WITH SLABS.
 - MINIMUM DOWELS FROM CONCRETE WALLS TO TOP OF CONCRETE SLAB SHALL BE, UON.
 - #4 @ 16 INCH IN THE DIRECTION OF MAIN SLAB REINFORCING.
 - #3 @ 16 INCH IN THE DIRECTION OF TEMPERATURE REINFORCING.
 - EXTEND TO DOWELS TO THE 1/4 POINT OF SLAB SPAN.
 - AT CONCRETE BEAMS PROVIDE A MINIMUM OF 2-#4 TOP (STIRRUP SUPPORT) BARS LAPPED 18 INCHES WITH TOP NEGATIVE REINFORCING BAR UON.
 - CONCRETE BEAMS WITH TOP BARS WHERE NO STIRRUPS ARE CALLED FOR SHALL HAVE #3 STIRRUPS AT 12 INCHES.
 - NO LAPS OF BOTTOM BARS PERMITTED IN STRUCTURAL SLABS.
 - WHERE MAIN SLAB REINFORCING IS PARALLEL TO A BEAM, ADD 1-#3 x 6 FOOT AT 18 INCH O.C. OVER BEAM.
 - GROUT FOR DOWELS EUCO NON-SHRINK GROUT AS MANUFACTURED BY EUCO CHEMICAL COMPANY OR EQUAL.

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SCALE AS SHOWN

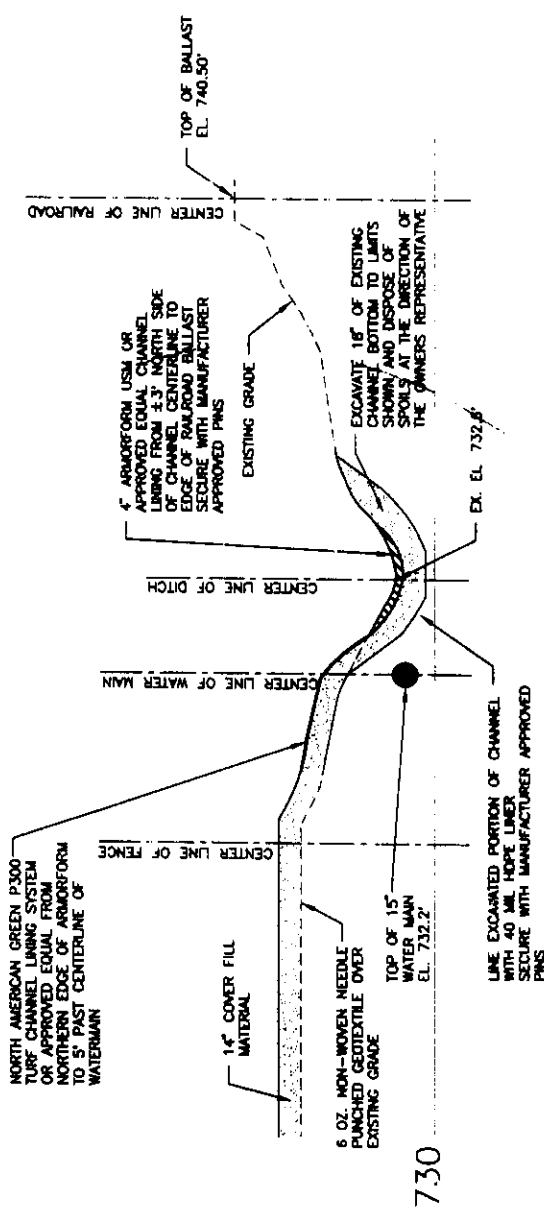


SOLLITA INC.
NORTHSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

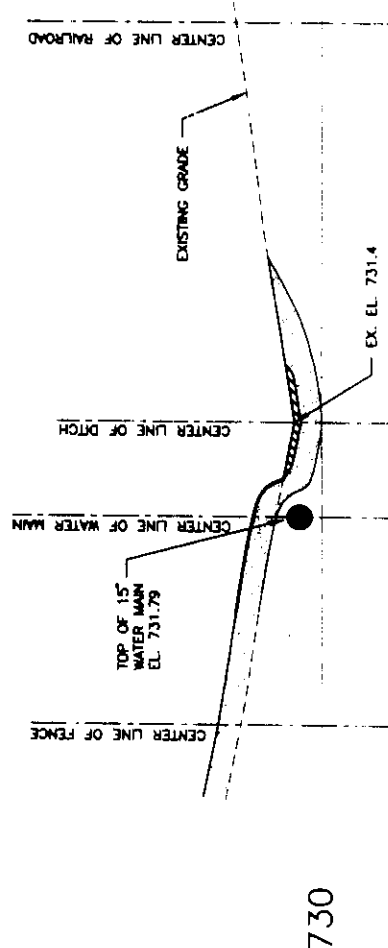
GENERAL

MISCELLANEOUS DETAILS

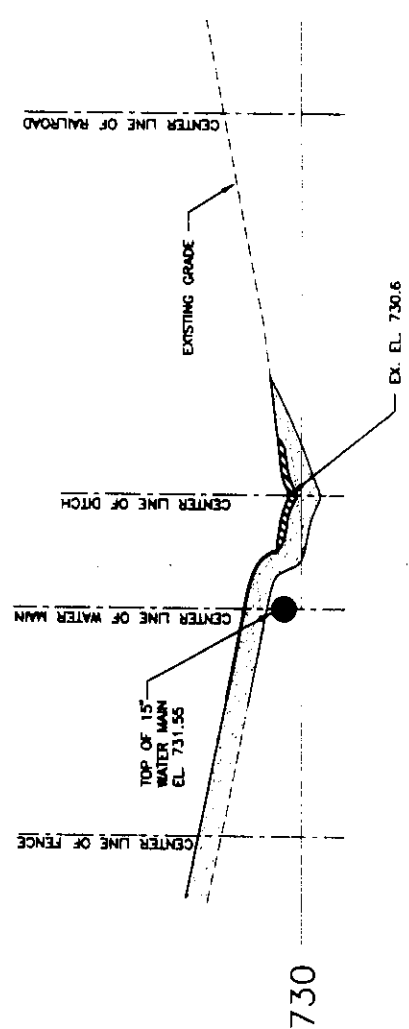
IN CHARGE OF	FILE NO.	2600.037-016
DESIGNED BY	CHECKED BY	AJC



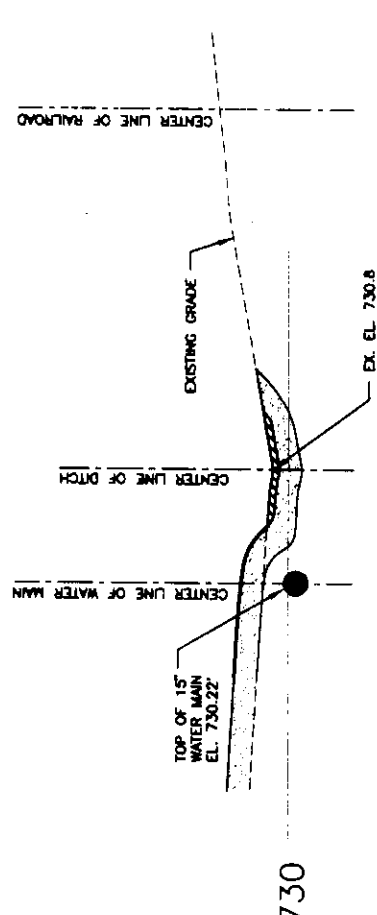
SECTION 1
1'-3'-0"



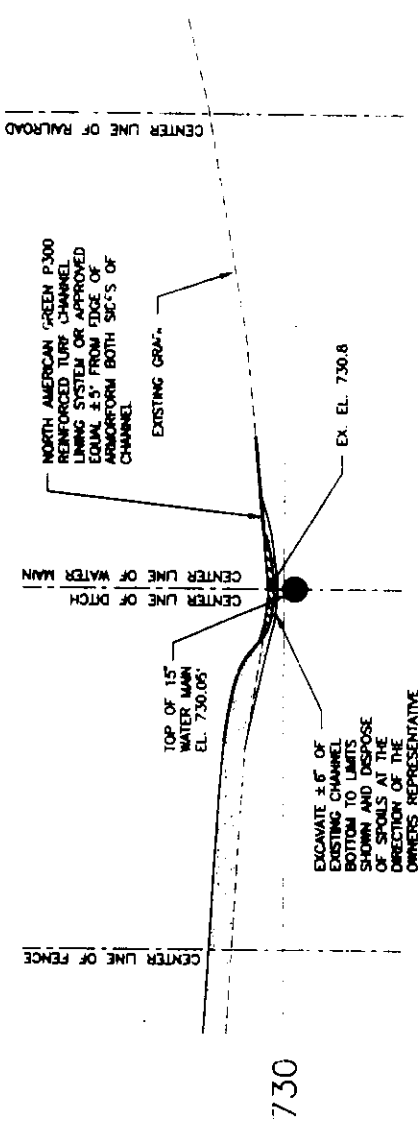
SECTION 2
1'-3'-0"



SECTION 3
1'-3'-0"



SECTION 4
1'-3'-0"



SECTION 5
1'-3'-0"

GENERAL NOTES:
1. NOTES ON SECTION 1 TYPICAL OF ALL SECTIONS EXCEPT WHERE NOTED.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INTRODUCTION IN THE EXISTING SCALE MAY BE INTRODUCED WHEN THE ACTUAL SCALE OF THIS DRAWING IS DETERMINED.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.



DESIGNED BY: JMA
CHECKED BY: JMA
DATE: JUNE 25, 1998

NO.	DATE	REVISION	INIT.
0	6/25/98	ISSUED FOR CONSTRUCTION	JMA

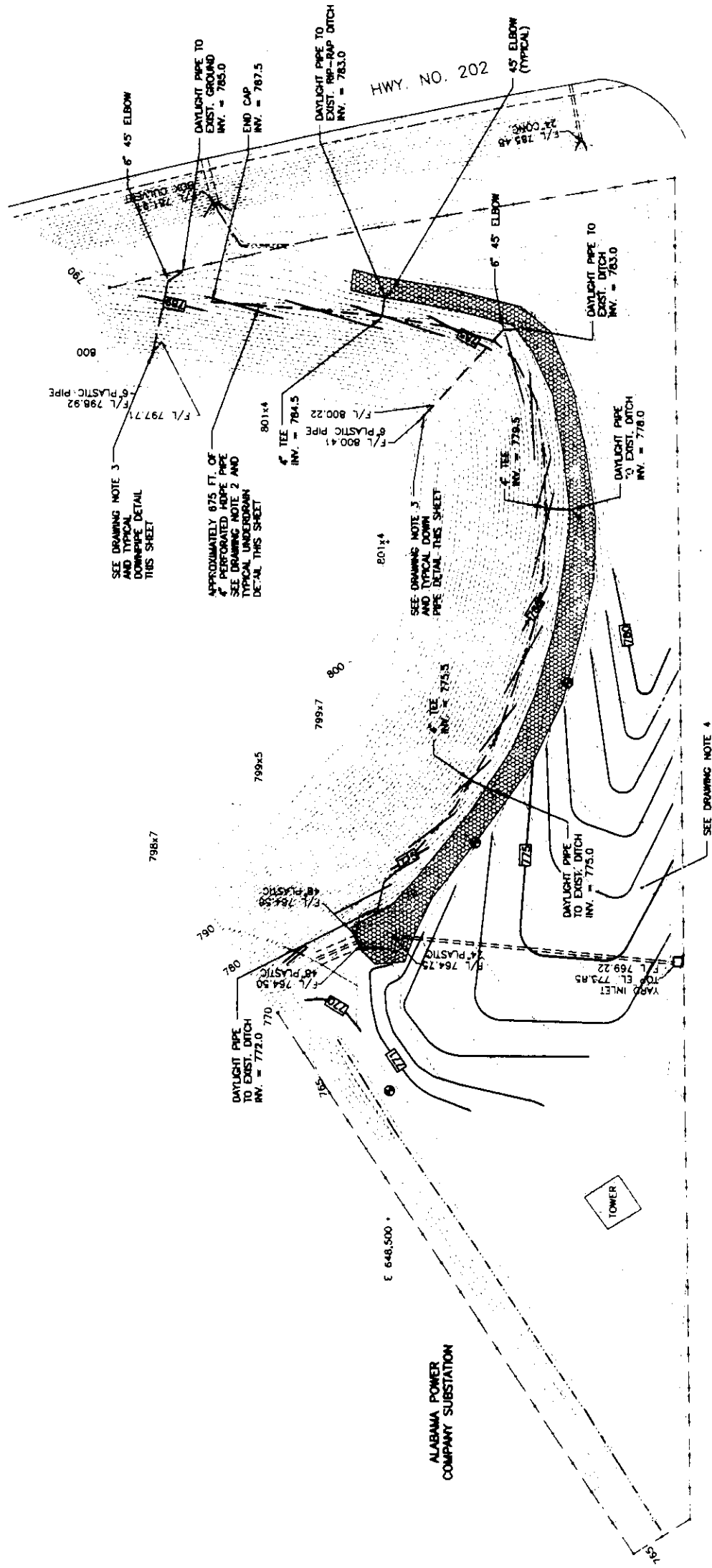
SCALE AS SHOWN



SOLITA INC.
NORTHSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

RAILROAD DITCH IMPROVEMENTS CROSS SECTIONS

FILE NO. 2600.037.019
G-12

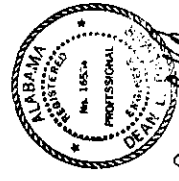


DRAWING NOTES:

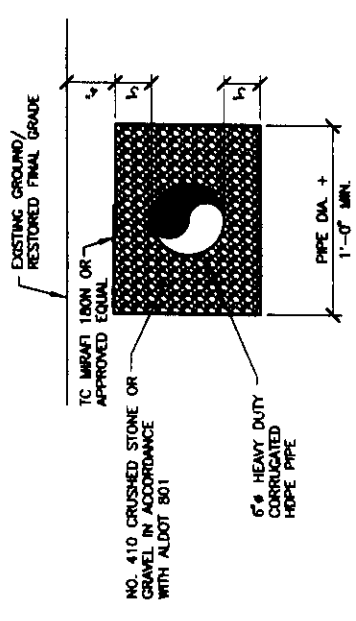
1. THE CONTRACTOR SHALL TAKE EXTREME CAUTION WHEN DIGGING, WORKING OR INSTALLING PROPOSED MATERIALS ON THE LANDFILL. THE LANDFILL COVER IS ASSUMED TO BE PER THE DETAIL ON THIS SHEET. ANY DAMAGE TO THE COMPOSITE, GEOTEXTILE OR GEOMEMBRANE SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO OWNER.
2. CONTRACTOR SHALL REMOVE 6" OF EXISTING SOIL PRIOR TO INSTALLING 4" PENETRATED HOPE PIPE. SEE TYPICAL UNDERDRAIN DETAIL THIS SHEET.
3. CONTRACTOR SHALL REMOVE AND DISPOSED OFFSITE ANY REMAINING PIECES OF EXISTING 6" PLASTIC PIPE AND INSTALL NEW 6" HOPE.
4. CONTRACTOR SHALL THOROUGHLY DSC EXISTING GROUND WHERE NEW FILL IS PROPOSED TO BE PLACED.
5. ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SEEDED PER SPECIFICATION 02503 UNLESS SHOWN OTHERWISE.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. IMPROVISES IN THE STUDIED SCALE MAY BE INTRODUCED WHEN US DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.



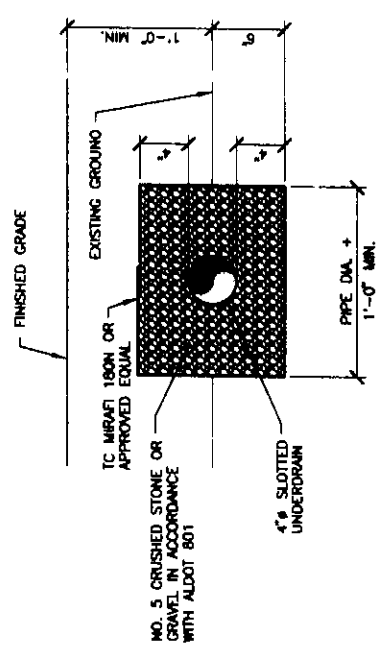
Dean Faber 6/29/98



TYPICAL DOWNPIPE DETAIL

NOTE:

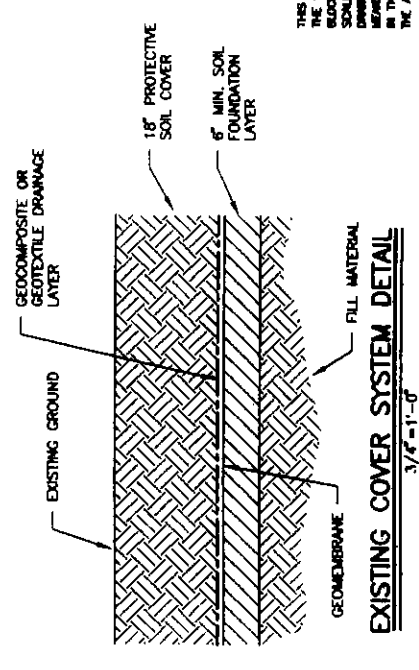
1. CONTRACTOR MAY ENCOUNTER EXISTING GEOCOMPOSITE, GEOTEXTILE OR GEOMEMBRANE AND SHALL TAKE EXTREME CAUTION WHEN INSTALLING UNDERDRAIN PIPING.



TYPICAL UNDERDRAIN DETAIL

NOTE:

1. CONTRACTOR MAY ENCOUNTER EXISTING GEOMEMBRANE, GEOTEXTILE, OR GEOMEMBRANE AND SHALL TAKE EXTREME CAUTION WHEN INSTALLING UNDERDRAIN PIPING.



EXISTING COVER SYSTEM DETAIL
 $\frac{3}{4} \times 1.1 - \sigma'$

NOTES:

1. COVER SYSTEM DETAIL TAKEN FROM A DRAWING PREPARED BY GOLDER ASSOCIATES, TITLED "TYPICAL CROSS SECTIONS AND COVER SYSTEM DETAILS, DATED 4/95, LAST REVERSED AND IS ASSUMED TO HAVE BEEN INSTALLED IN ACCORDANCE WITH THE ABOVE DETAIL. ACTUAL CONDITIONS MAY VARY."

0	4/13/98	ISSUED FOR CONSTRUCTION	
NO.	DATE	REVISION	INT.

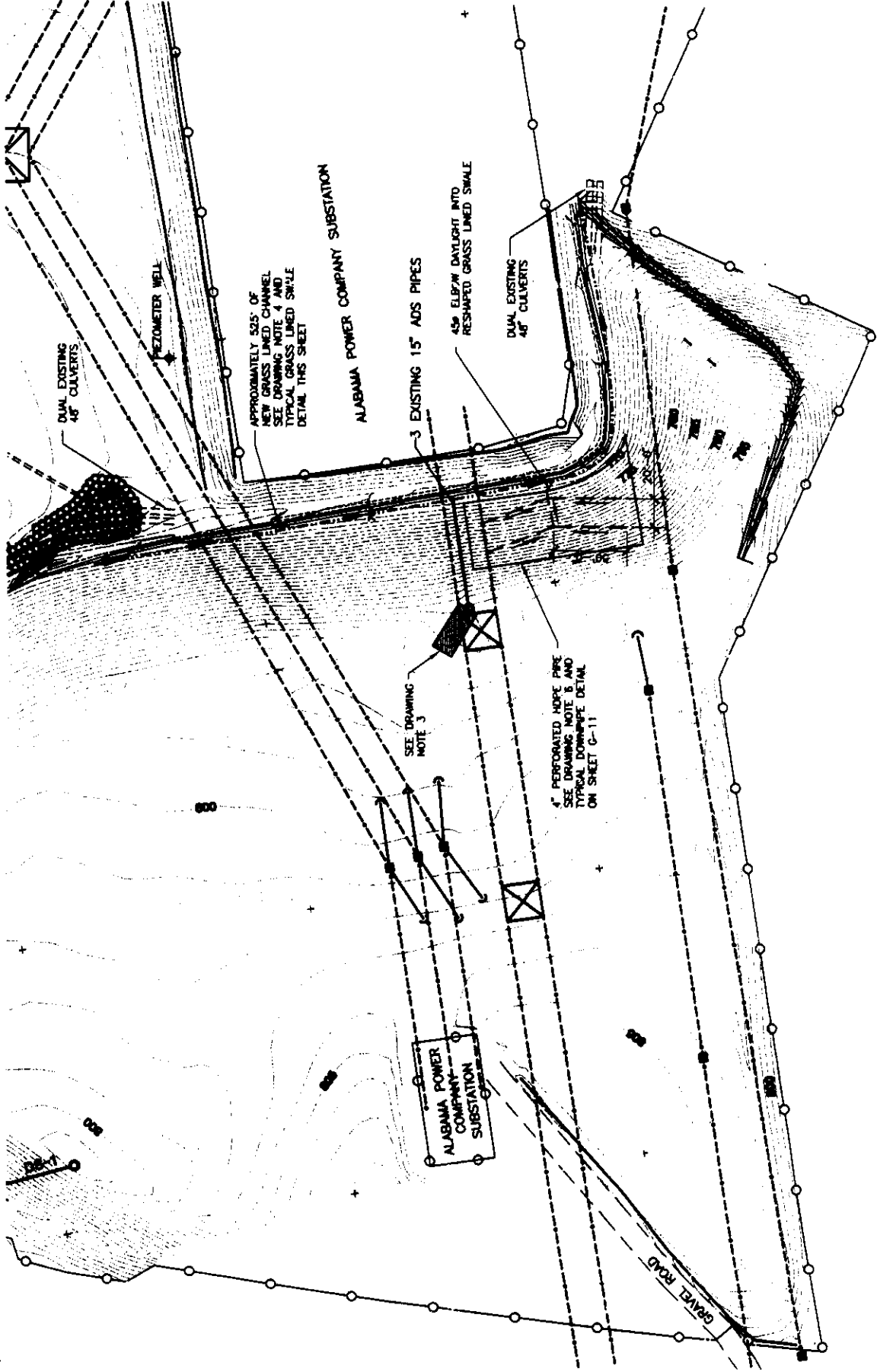


SOLUTIA INC.
WESTSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

GENERAL

GRADING PLAN

IN CHARGE OF <i>[Signature]</i>	FILE NO.	G-13
DESIGNED BY <i>[Signature]</i>	2600.037-015	
CHECKED BY <i>[Signature]</i>	DATE	
FORWORN BY KTR/JMA	MAY 11, 1988	

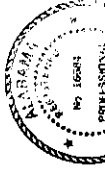


DRAWING NOTES:

- EXISTING SITE INFORMATION WAS TAKEN FROM A DRAWING ENTITLED RETROFITTED SURFACE WATER MANAGEMENT SYSTEM PLAN, BY GOLDER ASSOCIATES, DATED 3/97.
- THE CONTRACTOR SHALL TAKE EXTREME CAUTION WHEN DIGGING, WORKING OR INSTALLING PROPOSED MATERIALS ON THE LANDFILL. THE LANDFILL COVER IS ASSUMED TO BE PER THE DETAIL ON SHEET G-13. ANY DAMAGE TO THE GEOSYNTHETIC, GEOTEXTILE OR GEOMEMBRANE SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO OWNER.
- THE CONTRACTOR SHALL THOROUGHLY DISC AREA TO DEPTH NO MORE THAN 4\"/>
- THE CONTRACTOR SHALL FIRST REMOVE ANY EXISTING RPP-RAP IN THE SWALE AND DISPOSE OF IN A SITE TO BE DETERMINED BY THE OWNER. THE CONTRACTOR SHALL THEN RESHAPE THE CHANNEL TO THE CROSS-SECTION DIMENSIONS SHOWN ON THE TYPICAL GRASS LINED SWALE DETAIL ON THIS SHEET. BACKFILLING ANY ERODED AREAS OUTSIDE THE LIMITS OF THE NEW SWALE.
- THE CONTRACTOR SHALL BE AWARE THE OWNER IS PERFORMING SOME REMEDIAL WORK IN THIS AREA. THE (3) EXISTING 15\"/>
- THE CONTRACTOR SHALL REMOVE EXISTING COVER MATERIAL EXPOSING GEOTEXTILE FABRIC IN AREA SHOWN (APPROX. 5000 SF). THE CONTRACTOR SHALL INSTALL PERFORATED HOPE PIPE PER THE TYPICAL SLOPE PIPE DETAIL ON THIS SHEET. THE CONTRACTOR SHALL THEN RESTORE EXISTING COVER MATERIAL MAKING SURE TO BLEND INTO SURROUNDING AREA NOT DISTURBED. ALL DISTURBED AREAS SHALL BE SEED PER SPECIFICATION 02503.

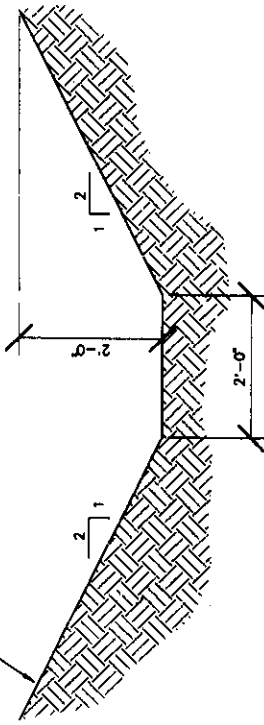
THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. DIMENSIONS IN THE SLOPED SCALE MAY BE INTRODUCED WHEN DIMENSIONS ARE INDICATED IN ANY VIEW. THE CONTRACTOR SHALL USE THE SCALE IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.



Alan L. Palmer 6/10/98

LANDLOCK TRM ALSO EROSION CONTROL BLANKET OR APPROVED EQUAL



**EROSION CONTROL DETAIL
FOR GRASS LINED DITCH**

3/2'-1'-0"

NOTES:

SWALE SHALL BE SHAPED TO THE DIMENSIONS ABOVE AND SEED PER SPECIFICATION 02503 PRIOR TO PLACEMENT OF TURF REINFORCEMENT MAT (TRM) OR AS MANUFACTURED BY SYNTHETIC INDUSTRIES OR APPROVED EQUAL

NO.	DATE	ISSUED FOR CONSTRUCTION	REVISION
0	4/13/98	ISSUED FOR CONSTRUCTION	
			INT.

1"=50'
50 0 50 100

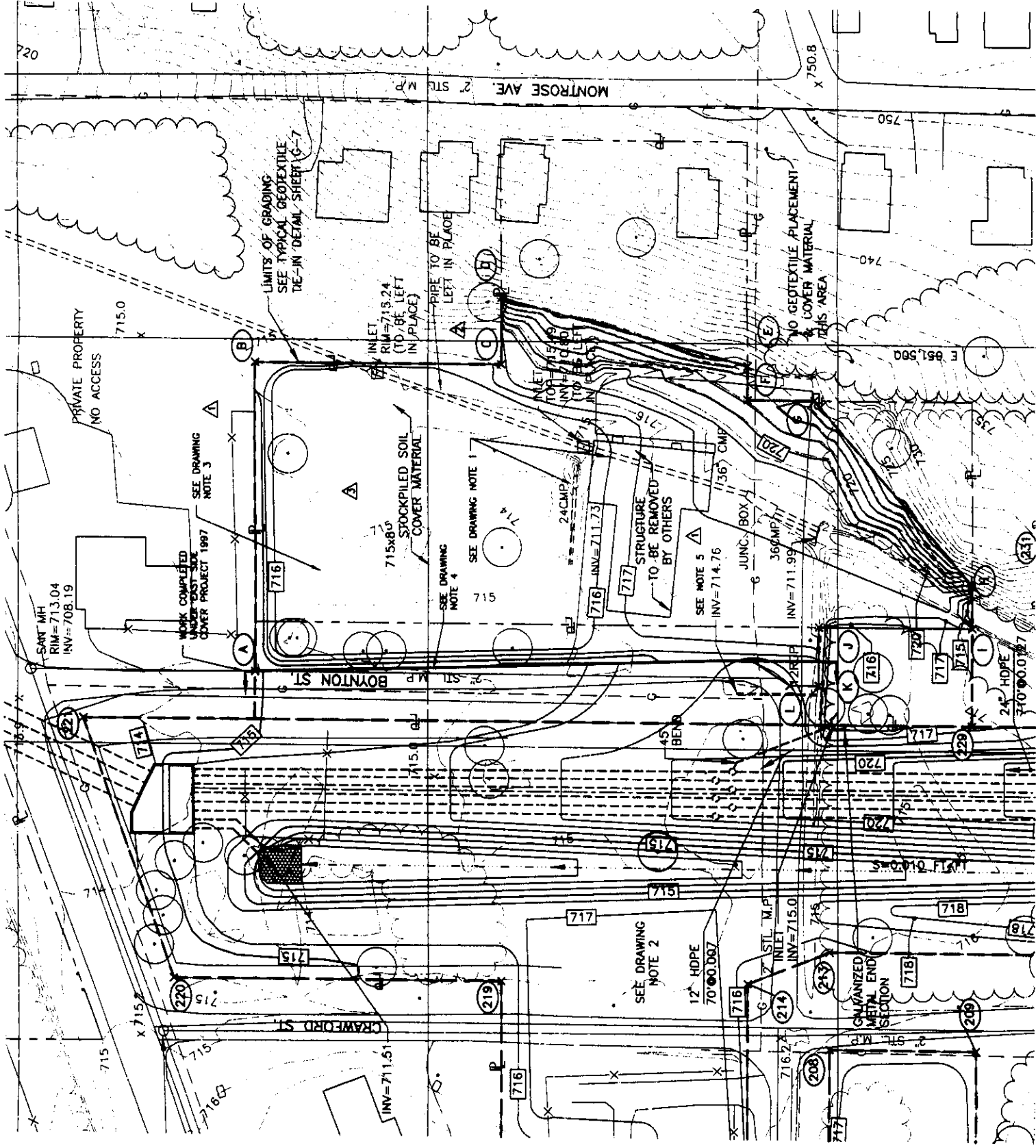


SOLUTA INC.
WESTSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

GENERAL

PLAN & DETAILS

IN CHARGE OF	FILE NO.	G-14
DESIGNED BY	2600.037-018	
CHECKED BY	DATE	
DRAWN BY	MAY 11, 1998	



DRAWING NOTES

1. ASHCON AND PLUG EXISTING 24 INCH AND 36 INCH CMPs AND INLET STRUCTURES AS APPLICABLE. REMOVE INLET STRUCTURE TOPS AND DISPOSE PER OWNERS REPRESENTATIVE'S DIRECTION. PIPE ENDS SHALL BE BULK-HEADED AND FILLED WITH CONCRETE PER OWNERS REPRESENTATIVE'S DIRECTION.
2. NOT IN CONTRACT. COVER COMPLETED IN THIS AREA UNDER THE DCC PROJECT.
3. COVER DETAIL PER SHEET G-7.
4. FEATHER OUT COVER SOILS TO MEET EXISTING GRADES AT BOYNTON STREET AND PROPERTY BOUNDARIES. SEE TYPICAL COVER MATERIAL AND GEOTEXTILE TIE-IN DETAIL ON SHEET G-7.
5. AREA CAPPED WITH SOIL TO BE REVEGETATED PER SPECIFICATION 02503.

PT. NO.	NORTHING	EASTING	DESCRIPTOR
A	1148105.11	651265.81	LIMITS OF GRADING COORDINATES
B	1148105.11	651485.81	LIMITS OF GRADING COORDINATES
C	1147955.11	651485.81	LIMITS OF GRADING COORDINATES
D	1147955.11	651527.37	LIMITS OF GRADING COORDINATES
E	1147805.11	651486.41	LIMITS OF GRADING COORDINATES
F	1147805.48	651485.81	LIMITS OF GRADING COORDINATES
G	1147704.47	651485.81	LIMITS OF GRADING COORDINATES
H	1147667.61	651352.86	LIMITS OF GRADING COORDINATES
I	1147667.61	651325.81	LIMITS OF GRADING COORDINATES
J	1147661.88	651325.81	LIMITS OF GRADING COORDINATES
K	1147761.88	651289.88	LIMITS OF GRADING COORDINATES
L	1147779.48	651289.88	LIMITS OF GRADING COORDINATES

NO.	DATE	REVISION
3	8/05/98	REVISED PER ADDENDUM NO. 3
2	6/25/98	REVISED PER ADDENDUM NO. 2
1	5/11/98	REVISED PER ADDENDUM NO. 1
0	4/13/98	ISSUED FOR CONSTRUCTION
NO.	DATE	REVISION

1" = 40'



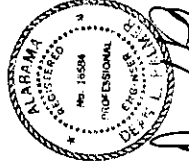
SOLITA INC.
EASTSIDE PROPERTIES CLOSURE DESIGN
ANNISTON ALABAMA

GENERAL
BETHEL CHURCH PROPERTY
GRADING PLAN

IN CHARGE OF	FILE NO.	G-15
DESIGNED BY TJS	2600.037-017	
CHECKED BY AJC	DATE	

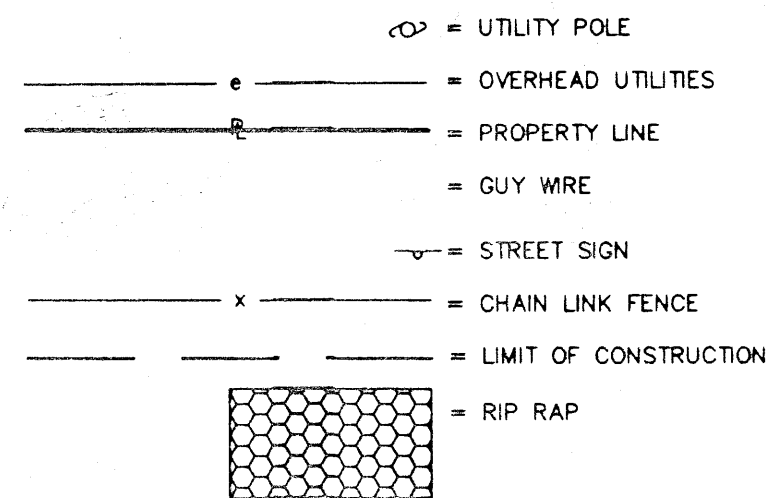
THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. ANY CHANGES TO THE SCALE MAY BE INTRODUCED WHEN THE SCALE IS CHANGED. THE SCALE IN THIS TITLE BLOCK IS THE SCALE OF THE ACTUAL SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.



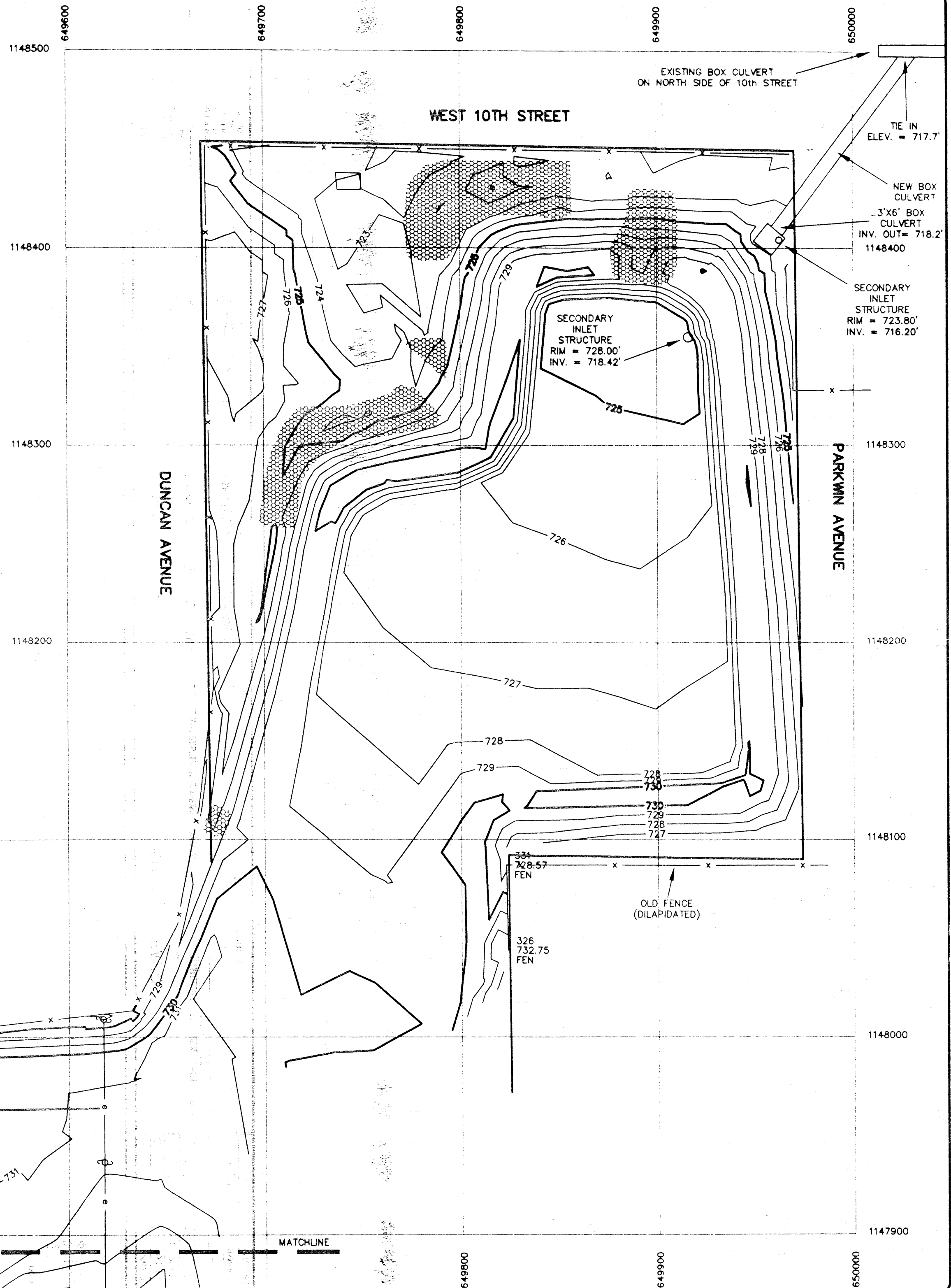
AS - BUILT SURVEY OF COVER SOIL
AT THE NORTHSIDE PROPERTY
OWNED BY
THE SOLUTIA CORPORATION
AS CONSTRUCTED BY
O'BRIEN & GERE TECHNICAL SERVICES, INC.

LEGEND:



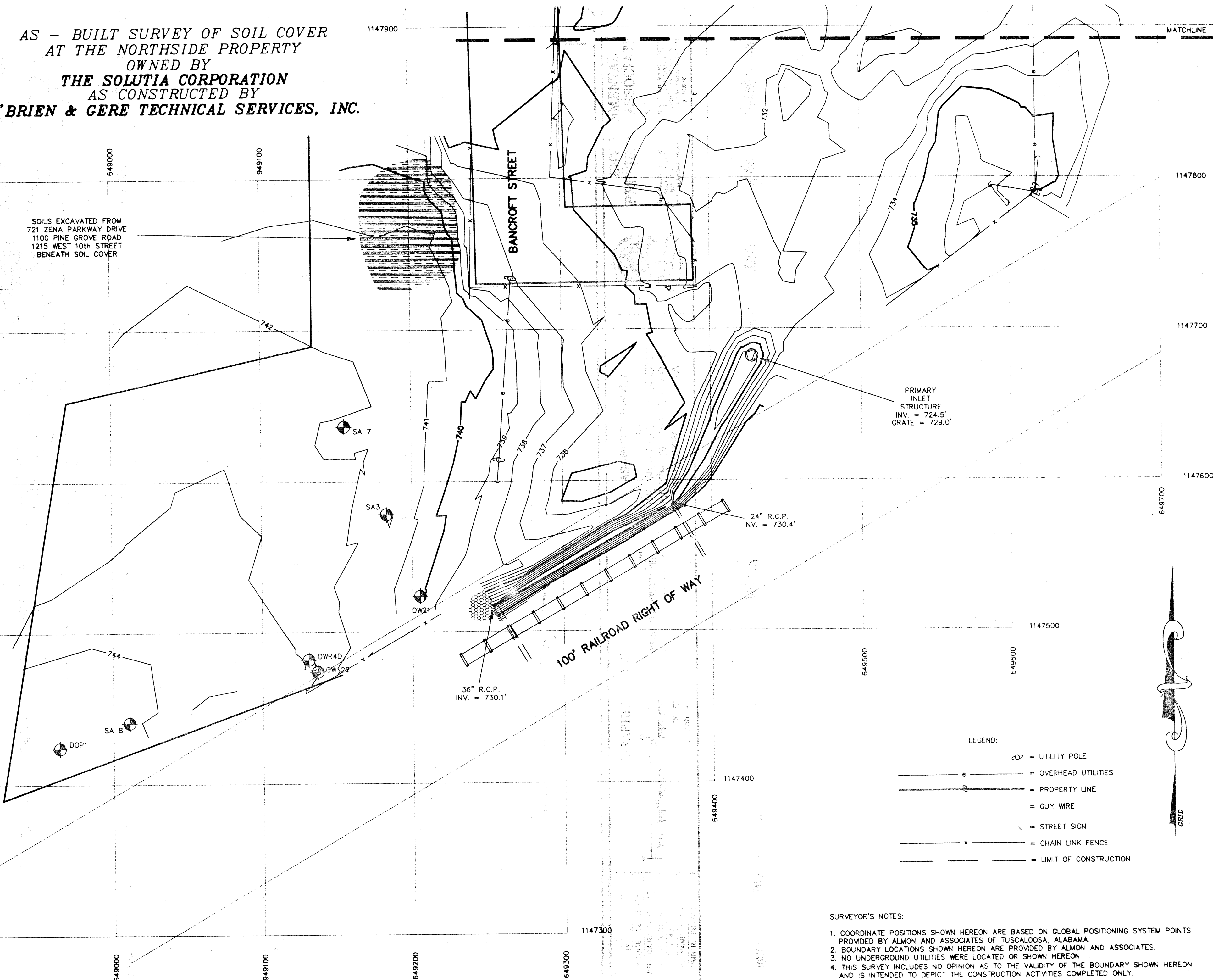
SURVEYOR'S NOTES:

1. COORDINATE POSITIONS SHOWN HEREON ARE BASED ON GLOBAL POSITIONING SYSTEM POINTS PROVIDED BY ALMON AND ASSOCIATES OF TUSCALOOSA, ALABAMA.
2. BOUNDARY LOCATIONS SHOWN HEREON ARE PROVIDED BY ALMON AND ASSOCIATES.
3. NO UNDERGROUND UTILITIES WERE LOCATED OR SHOWN HEREON.
4. THIS SURVEY INCLUDES NO OPINION AS TO THE VALIDITY OF THE BOUNDARY SHOWN HEREON AND IS INTENDED TO DEPICT THE CONSTRUCTION ACTIVITIES COMPLETED ONLY.



AS - BUILT SURVEY OF SOIL COVER
AT THE NORTHSIDE PROPERTY
OWNED BY
THE SOLUTIA CORPORATION
AS CONSTRUCTED BY
O'BRIEN & GERE TECHNICAL SERVICES, INC.

SOILS EXCAVATED FROM
721 ZENA PARKWAY DRIVE
1100 PINE GROVE ROAD
1215 WEST 10th STREET
BENEATH SOIL COVER



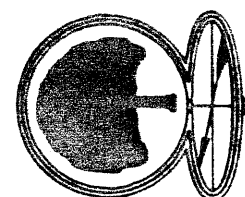
LEGEND:

- = UTILITY POLE
- = OVERHEAD UTILITIES
- = PROPERTY LINE
- = GUY WIRE
- = STREET SIGN
- = CHAIN LINK FENCE
- = LIMIT OF CONSTRUCTION

SURVEYOR'S NOTES:

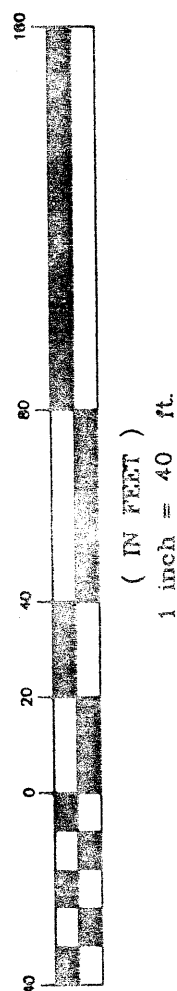
1. COORDINATE POSITIONS SHOWN HEREON ARE BASED ON GLOBAL POSITIONING SYSTEM POINTS PROVIDED BY ALMON AND ASSOCIATES OF TUSCALOOSA, ALABAMA.
2. BOUNDARY LOCATIONS SHOWN HEREON ARE PROVIDED BY ALMON AND ASSOCIATES.
3. NO UNDERGROUND UTILITIES WERE LOCATED OR SHOWN HEREON.
4. THIS SURVEY INCLUDES NO OPINION AS TO THE VALIDITY OF THE BOUNDARY SHOWN HEREON AND IS INTENDED TO DEPICT THE CONSTRUCTION ACTIVITIES COMPLETED ONLY.

**ENVIRONMENTAL
PRECISION ASSOCIATES
INC.**



AS-BUILT SURVEY
OF
THE NORTHSIDE PROPERTY
NORTH OF THE RAILROAD
ANNISTON, ALABAMA

GRAPHIC SCALE



DRAWN BY: W.H.S.

CHECKED BY: W.H.S.

SURVEY DATE: 12-05-98

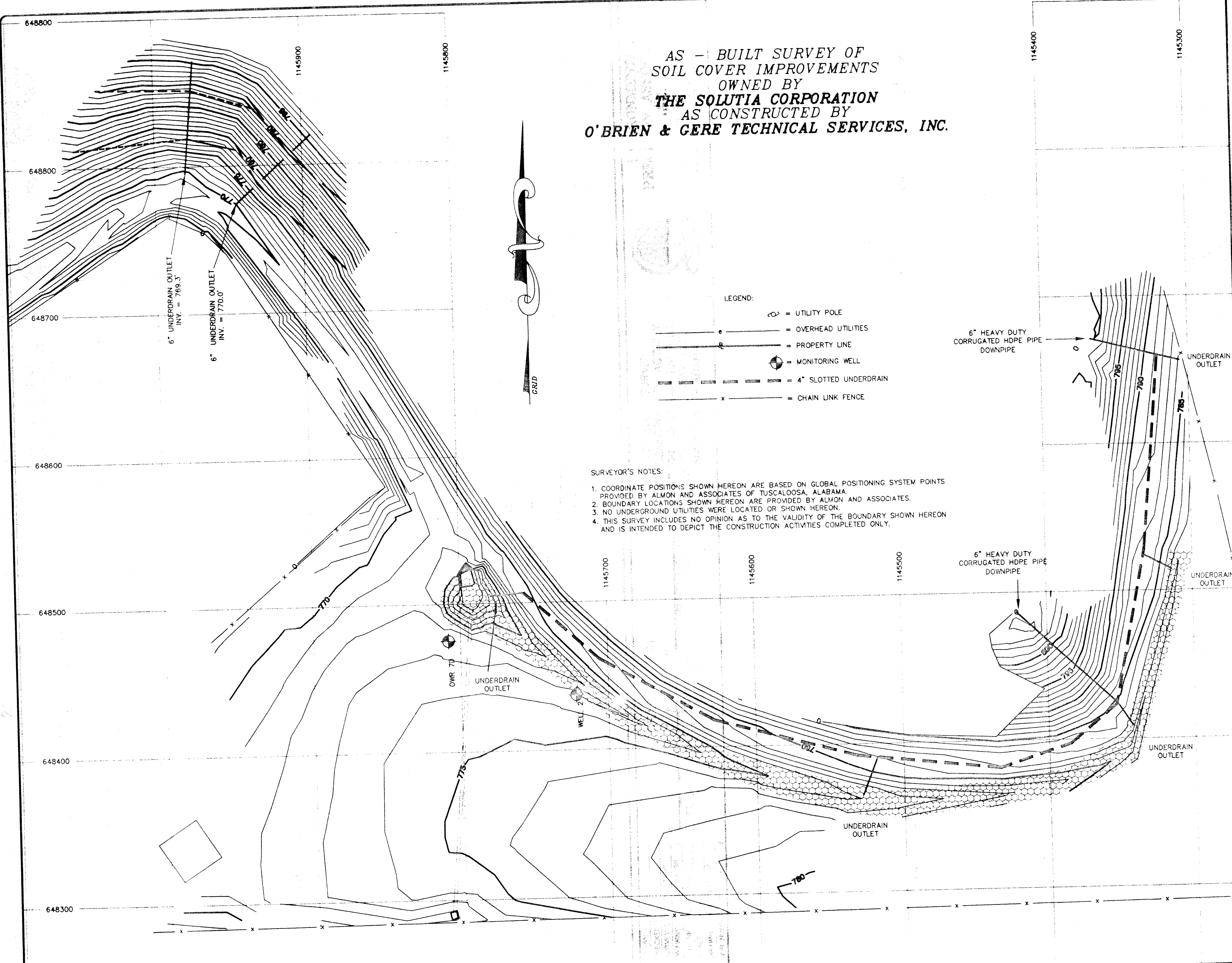
DRAWING DATE: 12-07-98

FLD. BK.: ELECTRONIC

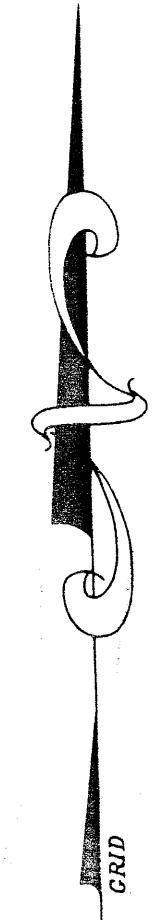
SCALE: 1" = 40'

DRAWING NAME: SONSASB

JOB NUMBER: 98-010P



AS - BUILT SURVEY OF
SOIL COVER IMPROVEMENTS
OWNED BY
THE SOLUTIA CORPORATION
AS CONSTRUCTED BY
O'BRIEN & GERE TECHNICAL SERVICES, INC.



- LEGEND:
- = UTILITY POLE
 - = OVERHEAD UTILITIES
 - = PROPERTY LINE
 - = MONITORING WELL
 -
 - = CHAIN LINK FENCE

- SURVEYOR'S NOTES:
1. COORDINATE POSITIONS SHOWN HEREON ARE BASED ON GLOBAL POSITIONING SYSTEM POINTS PROVIDED BY ALMON AND ASSOCIATES OF TUSCALOOSA, ALABAMA.
 2. BOUNDARY LOCATIONS SHOWN HEREON ARE PROVIDED BY ALMON AND ASSOCIATES.
 3. NO UNDERGROUND UTILITIES WERE LOCATED OR SHOWN HEREON.
 4. THIS SURVEY INCLUDES NO OPINION AS TO THE VALIDITY OF THE BOUNDARY SHOWN HEREON AND IS INTENDED TO DEPICT THE CONSTRUCTION ACTIVITIES COMPLETED ONLY.

**ENVIRONMENTAL
PRECISION ASSOCIATES
INC.**

ENVIRONMENTAL LAND AND CONSTRUCTION SURVEY SERVICES
105 PECAN STREET
P.O. BOX 514
TROY, ALABAMA 36061
TEL: (334) 870-8232
FAX: (334) 870-8232
PAGE: (601) 443-7243
Dg 012878

**AS-BUILT SURVEY
OF CONSTRUCTION ACTIVITY
AT THE WEST END LANDFILL
NORTH OF HIGHWAY #202
ANNISTON, ALABAMA**

GRAPHIC SCALE

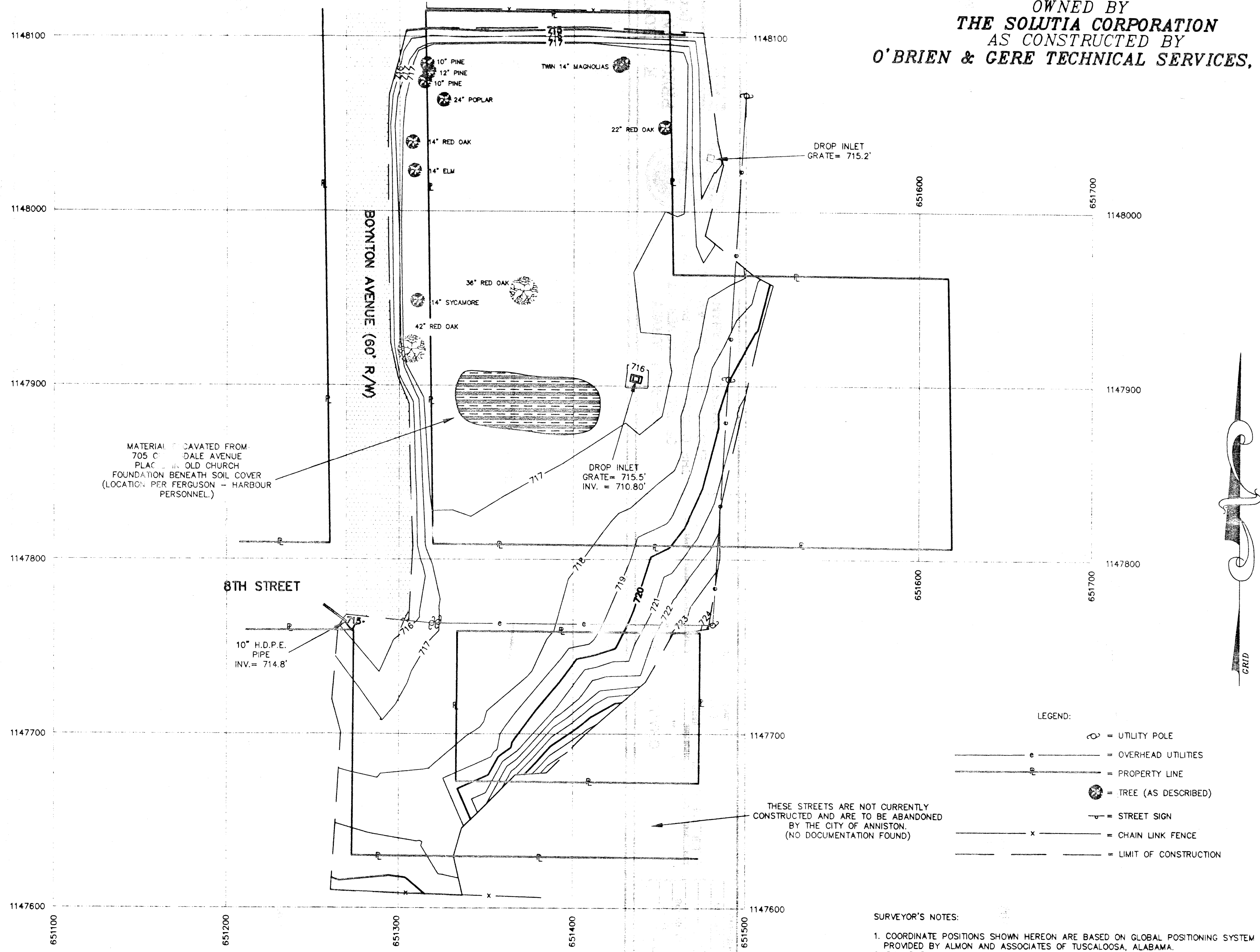
100
80
60
40
20
0
40

(IN FEET)

1 inch = 40 ft

DRAWN BY: W.H.S.	DRAWING NAME: SOWASB
CHECKED BY: W.H.S.	JOB NUMBER: 98P-010
SURVEY DATE: 11-23-98	
DRAWING DATE: 12-02-98	
FLD. BK.: ELECTRONIC	
SCALE: 1" = 40'	

AS - BUILT SURVEY OF THE SOIL COVER
AT THE BETHEL CHURCH PROPERTY
OWNED BY
THE SOLUTIA CORPORATION
AS CONSTRUCTED BY
O'BRIEN & GERE TECHNICAL SERVICES, INC.



- SURVEYOR'S NOTES:
1. COORDINATE POSITIONS SHOWN HEREON ARE BASED ON GLOBAL POSITIONING SYSTEM POINTS PROVIDED BY ALMON AND ASSOCIATES OF TUSCALOOSA, ALABAMA.
 2. BOUNDARY LOCATIONS SHOWN HEREON ARE PROVIDED BY ALMON AND ASSOCIATES.
 3. NO UNDERGROUND UTILITIES WERE LOCATED OR SHOWN HEREON.
 4. THIS SURVEY INCLUDES NO OPINION AS TO THE VALIDITY OF THE BOUNDARY SHOWN HEREON AND IS INTENDED TO DEPICT THE CONSTRUCTION ACTIVITIES COMPLETED ONLY.
 5. REVISIONS PER GOLDER ASSOCIATES COMPLETED ON MARCH 21, 1999.

ENVIRONMENTAL
PRECISION ASSOCIATES
INC.

ENVIRONMENTAL LAND AND CONSTRUCTION SURVEYING
106 PECAN STREET
P.O. BOX 594
ANNISTON, ALABAMA 36801
TEL: (205) 938-0000
FAX: (205) 938-0000
E-MAIL: info@precisionassoc.com

AS-BUILT SURVEY
OF THE SOIL COVER AT
THE BETHEL CHURCH PROPERTY
EAST OF BOYNTON, AVENUE
ANNISTON, ALABAMA

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft

DRAWN BY: W.H.S.
CHECKED BY: W.H.S.
SURVEY DATE: 11-23-98
DRAWING DATE: 12-02-98
FLD. BK.: ELECTRONIC
SCALE: 1" = 40'
DRAWING NAME: SOB/CASB
JOB NUMBER: 98P-010