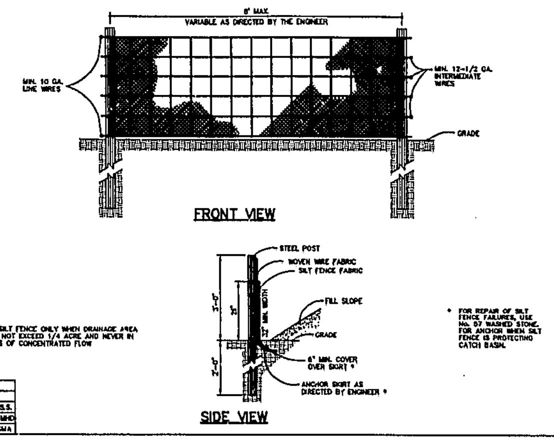


NOTE:

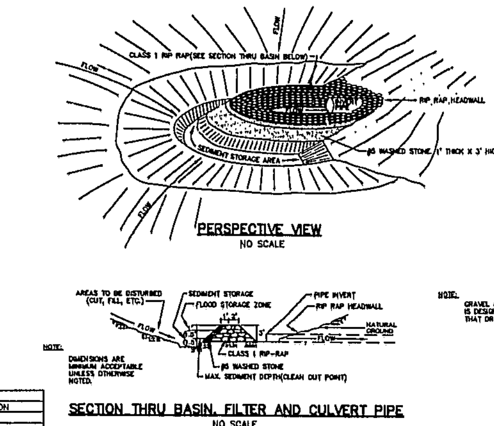
-USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW

* FOR REPAIR OF SILT FENCE FAILURES, USE No. 57 WASHED STONE. FOR ANCHOR WHEN SILT FENCE IS PROTECTING CATCH BASIN.

REVISIONS	
DATE	DESCRIPTION
10/86	NOTE ADDITION S.S.S.
10/88	DEL.PLN.VIEW NOTE S.VIEW MHD
1/93	NOTE ADDITION GMA

STANDARD TEMPORARY SILT FENCE

STD. No. 4.01



NOTE:

DIMENSIONS ARE MINIMUM ACCEPTABLE UNLESS OTHERWISE NOTED.

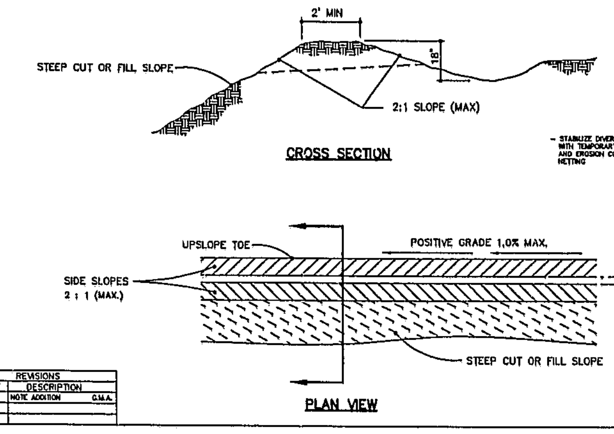
NOTE:

GRAVEL & RIP RAP FILTER BERM BASIN DETAIL IS DESIGNED TO PROTECT EXISTING PIPE INVERTS THAT DRAIN 10 ACRES OR LESS.

REVISIONS	
DATE	DESCRIPTION

GRAVEL & RIP RAP FILTER BERM BASIN (EXISTING PIPE INVERTS)

STD. No. 4.04

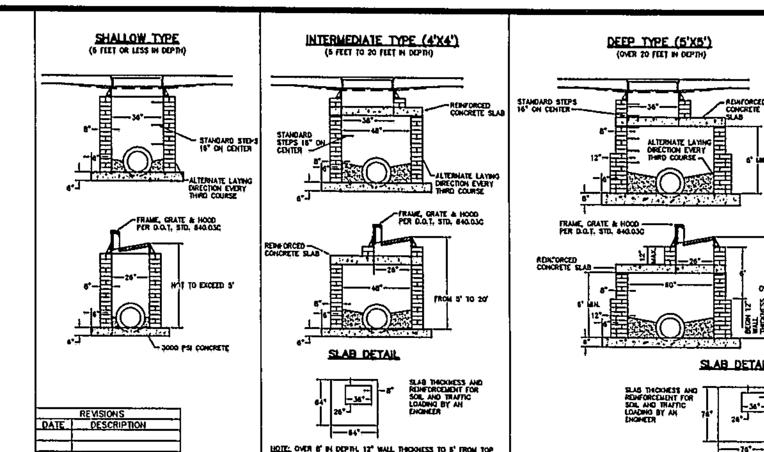


- STABILIZE DIVERSION DITCH WITH TEMPORARY SEEDING AND EROSION CONTROL NETTING

REVISIONS	
DATE	DESCRIPTION
1/93	NOTE ADDITION G.M.A.

DIVERSION DITCH

STD. No. 4.09



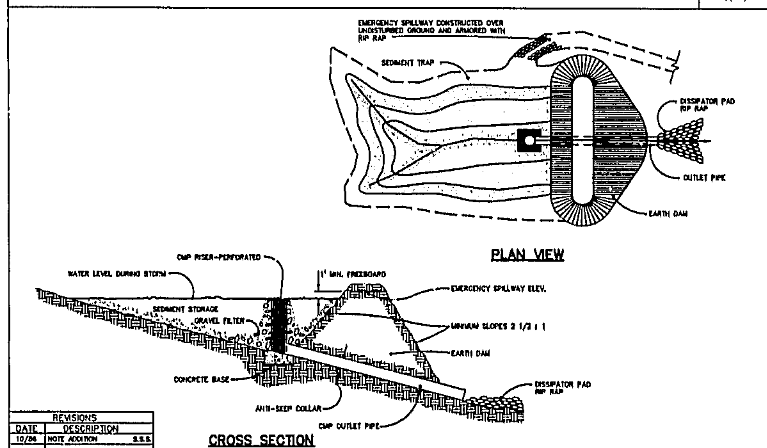
NOTE: OVER 8' IN DEPTH, 12" WALL THICKNESS TO 8' FROM TOP OF WALL AND 6" BOTTOM SLAB SHALL BE USED.

REVISIONS	
DATE	DESCRIPTION

SHEET 1 OF 2

CONCRETE BLOCK OR BRICK CATCH BASIN

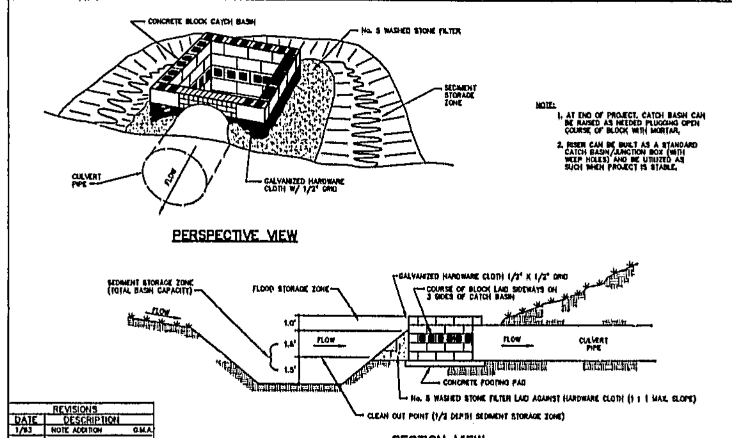
STD. No. 8.03



REVISIONS	
DATE	DESCRIPTION
10/86	NOTE ADDITION S.S.S.

STANDARD RISER-BARREL SEDIMENT BASIN

STD. No. 4.02



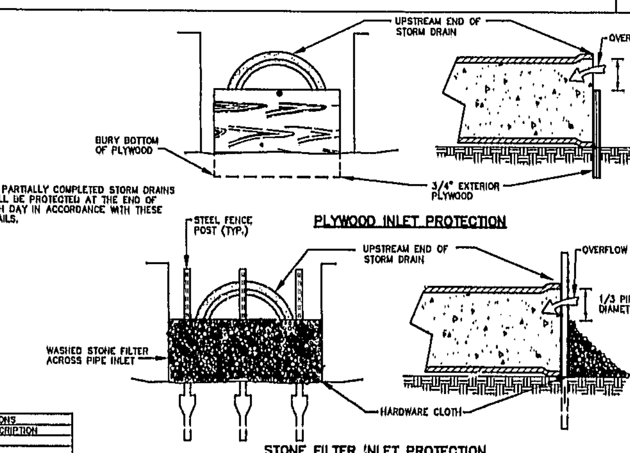
NOTE:

1. AT END OF PROJECT, CATCH BASIN CAN BE RAISED AS NEEDED PLUGGING OPEN COURSE OF BLOCK WITH MORTAR.
2. RISER CAN BE BUILT AS A STANDARD CATCH BASIN/JUNCTION BOX (WITH WEEP HOLES) AND BE UTILIZED AS SUCH WHEN PROJECT IS STABLE.

REVISIONS	
DATE	DESCRIPTION
1/93	NOTE ADDITION G.M.A.

CATCH BASIN RISER/FILTER

STD. No. 4.05

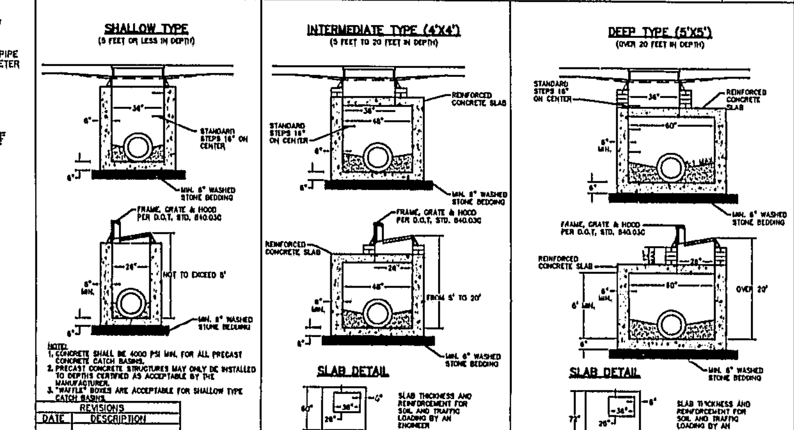


NOTE: ALL PARTIALLY COMPLETED STORM DRAINS SHALL BE PROTECTED AT THE END OF EACH DAY IN ACCORDANCE WITH THESE DETAILS.

REVISIONS	
DATE	DESCRIPTION

PIPE INLET PROTECTION (PLYWOOD AND STONE)

STD. No. 4.12



NOTE:

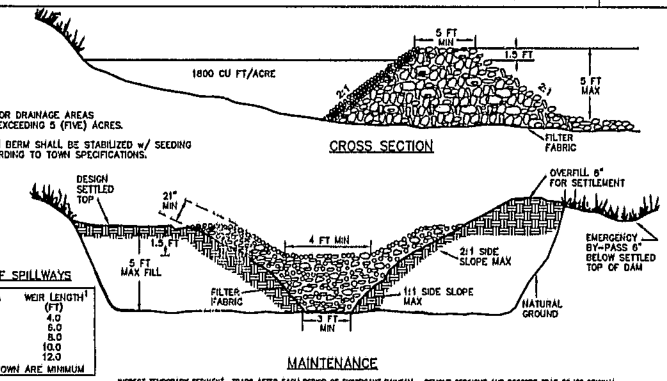
1. CONCRETE SHALL BE 4000 PSI MIN. FOR ALL PRECAST CONCRETE CATCH BASINS.
2. PRECAST CONCRETE STRUCTURES MAY ONLY BE INSTALLED TO DEPTHS CERTIFIED AS ACCEPTABLE BY THE MANUFACTURER.
3. "WAFFLE" BOXES ARE ACCEPTABLE FOR SHALLOW TYPE CATCH BASINS.

REVISIONS	
DATE	DESCRIPTION

SHEET 2 OF 2

PRECAST CONCRETE CATCH BASIN

STD. No. 8.03



NOTES:

1. USE FOR DRAINAGE AREAS NOT EXCEEDING 5 (FIVE) ACRES.
2. EARTH BERM SHALL BE STABILIZED w/ SEEDING ACCORDING TO TOWN SPECIFICATIONS.

DESIGN OF SPILLWAYS

DRAINAGE AREA (ACRES)	WEIR LENGTH[1] (FT)
1	4.0
2	6.0
3	8.0
4	10.0
5	12.0

[1] DIMENSIONS SHOWN ARE MINIMUM

MAINTENANCE

INSPECT TEMPORARY SEDIMENT TRAPS AFTER EACH PERIOD OF SIGNIFICANT RAINFALL. REMOVE SEDIMENT AND RESTORE TRAP TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN A DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING.

CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PIPING. PERIODICALLY CHECK THE DEPTH OF THE SPILLWAY TO ENSURE IT IS A MINIMUM OF 1.5 FT BELOW THE LOW POINT OF THE EMBANKMENT. IMMEDIATELY FILL ANY SETTLEMENT OF THE EMBANKMENT TO SLIGHTLY ABOVE DESIGN GRADE. ANY RIP RAP DISPLACED FROM THE SPILLWAY MUST BE REPLACED IMMEDIATELY.

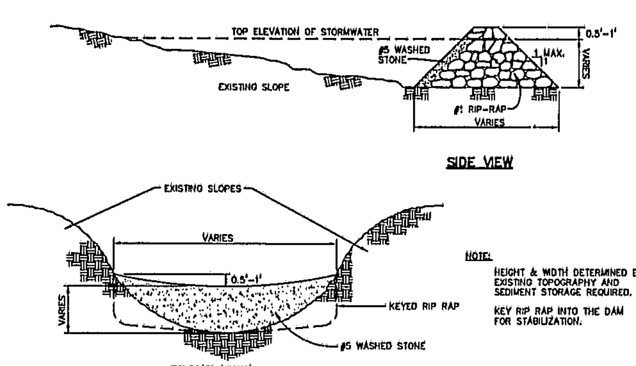
STABILIZE THE EMBANKMENT AND ALL DISTURBED AREAS ABOVE THE SEDIMENT POOL AND DOWNSTREAM FROM THE TRAP IMMEDIATELY AFTER CONSTRUCTION WITH SEEDING.

REVISIONS	
DATE	DESCRIPTION

SHEET 1 OF 2

GRAVEL & RIP RAP FILTER BASIN

STD. No. 4.03



NOTE:

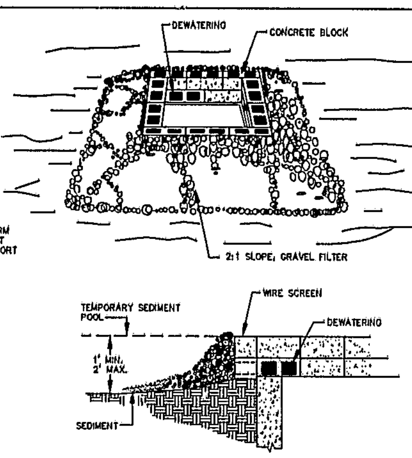
HEIGHT & WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.

KEY RIP RAP INTO THE DAM FOR STABILIZATION.

REVISIONS	
DATE	DESCRIPTION
10/86	NOTE ADDITION M.H.D.

CHECK DAM

STD. No. 4.06



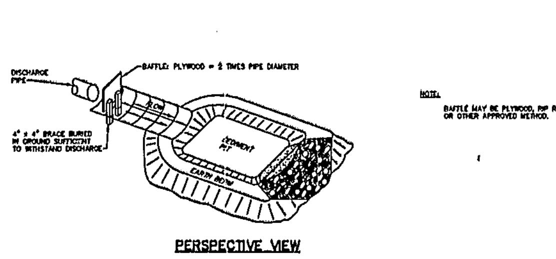
CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.
2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
3. USE CLEAN GRAVEL, 3/4- TO 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.

REVISIONS	
DATE	DESCRIPTION

BLOCK AND GRAVEL DROP INLET PROTECTION

STD. No. 4.13



NOTE:

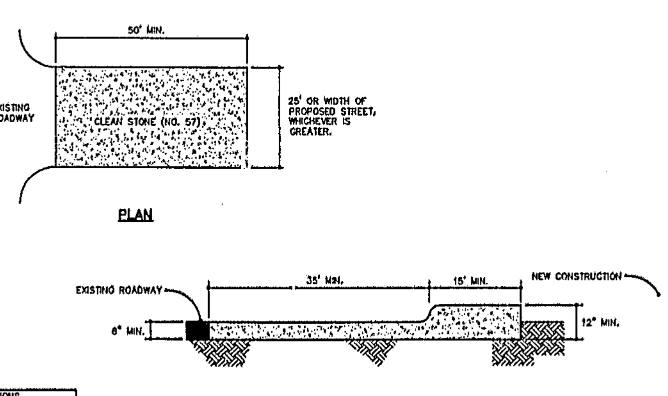
BAFFLE MAY BE PLYWOOD, RIP RAP DISSIPATOR OR OTHER APPROVED METHOD.

REVISIONS	
DATE	DESCRIPTION

SHEET 2 OF 2

GRAVEL & RIP RAP FILTER BASIN

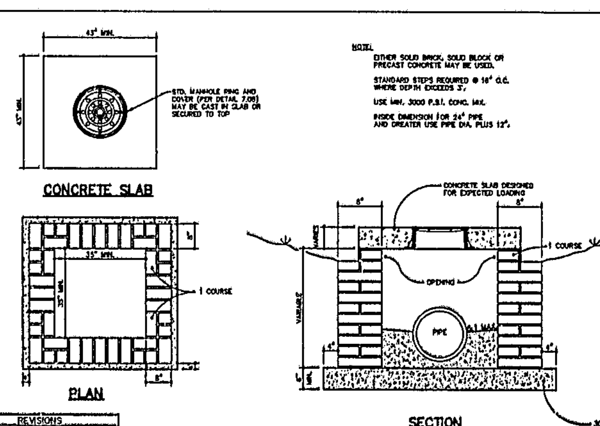
STD. No. 4.03



REVISIONS	
DATE	DESCRIPTION
10/86	STONE TYPE M.H.D.

CONSTRUCTION ENTRANCE

STD. No. 4.07



NOTE:

OTHER SOLID BRICK, SOLID BLOCK OR PRECAST CONCRETE MAY BE USED.

STANDARD STEPS REQUIRED @ 16" O.C. WHERE DEPTH EXCEEDS 3'.

USE MIN. 3000 P.S.I. CONC. MIX.

INSIDE DIMENSION FOR 24" PIPE AND GREATER USE PIPE DIA. PLUS 12".

REVISIONS	
DATE	DESCRIPTION
1/1/82	LOWERED TOP-1 COURSE BRICK
8/8/93	ADD MH RING

STANDARD YARD INLET WITH CONCRETE SLAB

STD. No. 8.01

SEEDBED PREPARATION

1) Chisel compacted areas and spread topsoil 3 inches deep over adverse soil conditions, if available.
2) Rip the entire area to 6 inches depth.
3) Remove all loose rock, roots and other obstructions leaving surfaces reasonably smooth and uniform.
4) Apply agricultural lime, fertilizer, and superphosphate uniformly and mix with soil (see below*).
5) Continue tillage until a well-pulverized, firm, reasonably uniform seedbed is prepared 4 to 6 inches deep.
6) Seed a freshly prepared seedbed and cover seed lightly with seeding equipment or cultipack after seeding.
7) Mulch immediately after seeding and anchor mulch.
8) Inspect all seeded areas and make necessary repairs or reseedings within the planting season, if possible. If stand should be over 60% damaged, reestablish following original lime, fertilizer and seeding rates.
9) Consult Conservation Inspector on maintenance treatment and fertilization after permanent cover is established.

* Apply: Agricultural Limestone - 2 Tons/Acre (3 Ton per Acre on clay soils)
Fertilizer - 1,000 lbs./acre - 10-10-10
Superphosphate - 500 lbs./acre - 20%
Mulch - 2 Tons/Acre - small grain straw
Anchor - Asphalt Emulsion @ 300 gal./acre

SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES, SLOPES (max. 3:1)

DATE	TYPE	PLANTING RATE
Aug 15 - Nov 1	Tall Fescue	300 lbs/acre
Nov 1 - Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1 - Apr 15	Tall Fescue	300 lbs/acre
Apr 15 - June 30	Hulled Common Bermudagrass	25 lbs/acre
July 15 - Aug 15	Tall Fescue and *** Browntop Millet *** or Sorghum-Sudan Hybrids	35 lbs/acre
	SLOPES (3:1 to 2:1)	
Mar 1 - June 1	Sericea Lespedeza (scarified) and	50 lbs/acre
Mar 1 - Apr 15	ADD Tall Fescue and	120 lbs/acre
Mar 1 - June 30	ADD Weeping Lovegrass or	10 lbs/acre
Mar 1 - June 30	ADD Hulled Common Bermudagrass	25 lbs/acre
June 1 - Sep 1	*** Tall Fescue and *** Browntop Millet *** or Sorghum-Sudan Hybrids	120 lbs/acre 35 lbs/acre 30 lbs/acre
Sep 1 - Mar 1	Sericea Lespedeza (unhulled-unscarified) and Tall Fescue	70 lbs/acre 120 lbs/acre
Nov 1 - Mar 1	ADD Abruzzi Rye	25 lbs/acre

Consult Erosion Control Engineer or Soil Conservation Service for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those which do well under local conditions; other seeding rate combinationsare possible.

*** Temporary - Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow over 12 inches in height before mowing, otherwise fescue may be shaded out.

CONSTRUCTION SEQUENCE

1) Obtain Grading Permit.
2) Install all erosion control measures as shown.
3) Obtain Certificate of Compliance through on-site inspection by Town Erosion Control Engineer.
4) Proceed with grading.
5) Clean sediment basins when half full.
6) Seed and mulch denuded area within 30 days after finished grades are established.
7) Maintain soil erosion control measures until permanent ground cover is established.
8) Request final approval by Town Erosion Control Engineer.
9) Remove soil erosion control measures and stabilize these areas.

APPROVED
TER 5/31/98
TM 6-1-98

WITHERS & RAVENEL Engineering & Surveying, Inc.
111 MacKenan Drive • Cary, N.C. 27511
919-469-3340 FAX 919-467-6008

Revisions			
No.	Description	Date	By

DANBURRY SUBDIVISION
PHASES IX-XII

EROSION CONTROL AND STORM DRAINAGE DETAILS

Designer W&R	Scale NTS
Drawn By GAS	Date 8/22/97
Checked By JEC	Job No. 97155

CAD File SHT10.DWG

Sheet No. 10 of .

K:\DANBURY\97155\SHT10 Thu May 28 08:34:07 1998 WITHERS & RAVENEL , ENGINEERING & SURVEYING, INC.