"I CERTIFY THAT THIS PROJECT HAS BEEN CONSTRUCTED IN ACCORDANCE WITH DOUGLASVILLE– DOUGLAS CO. WATER AND SEWER AUTHORITY'S STANDARDS AND RULES AND REGULATIONS. I ALSO CERIFY THAT THIS PROJECT HAS BEEN BUILT AS SHOWN ON THE "AS–BUILT" DRAWINGS."

W. Wilbanks PE. 1/2/03

(OWNER/DEVELOPER)

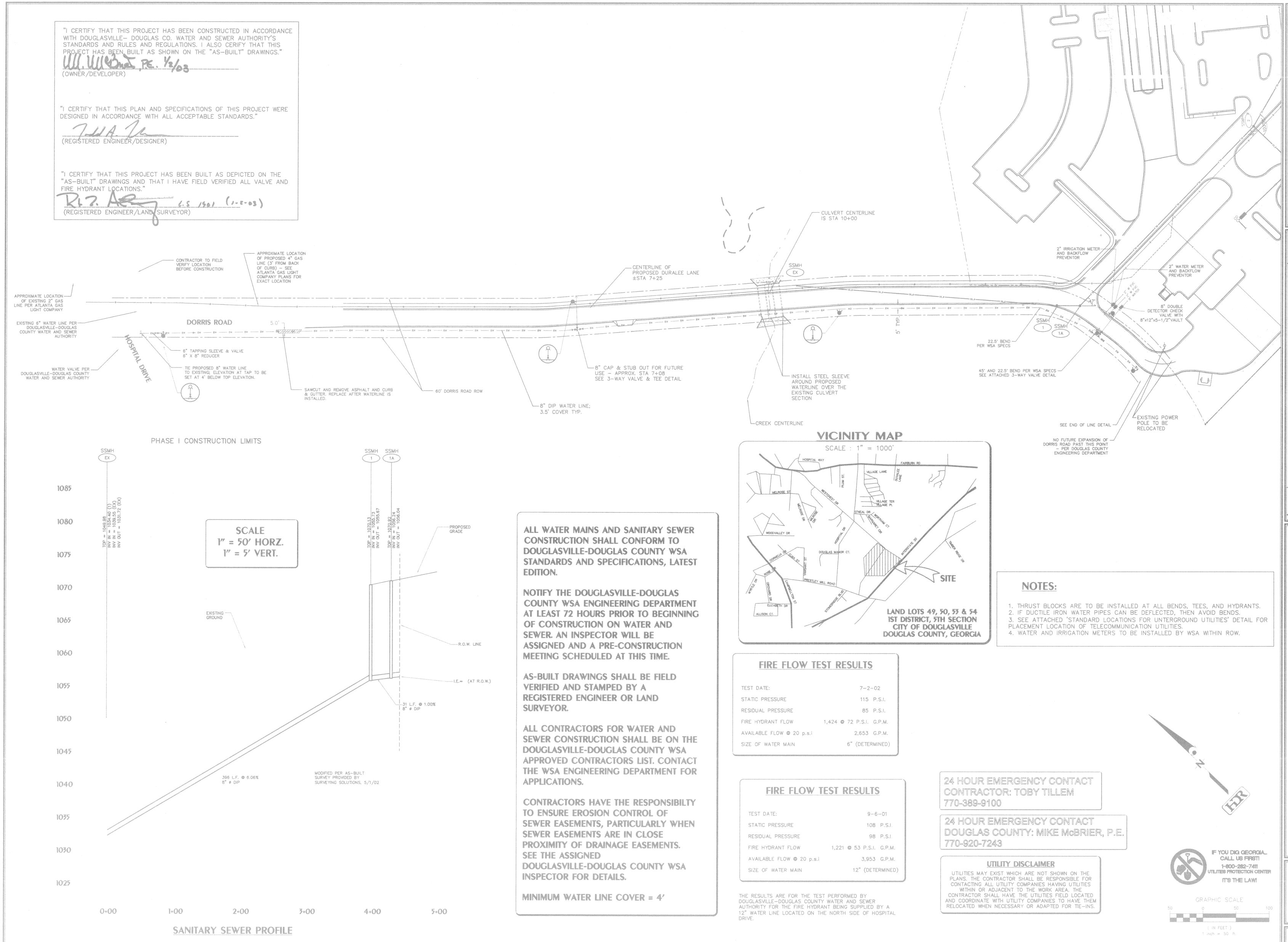
"I CERTIFY THAT THIS PLAN AND SPECIFICATIONS OF THIS PROJECT WERE DESIGNED IN ACCORDANCE WITH ALL ACCEPTABLE STANDARDS."

(REGISTERED ENGINEER/DESIGNER)

"I CERTIFY THAT THIS PROJECT HAS BEEN BUILT AS DEPICTED ON THE "AS–BUILT" DRAWINGS AND THAT I HAVE FIELD VERIFIED ALL VALVE AND FIRE HYDRANT LOCATIONS."

R.T.A. 6.5.1961 (1-8-03)

(REGISTERED ENGINEER/LAND SURVEYOR)



ALL WATER MAINS AND SANITARY SEWER CONSTRUCTION SHALL CONFORM TO DOUGLASVILLE-DOUGLAS COUNTY WSA STANDARDS AND SPECIFICATIONS, LATEST EDITION.

NOTIFY THE DOUGLASVILLE-DOUGLAS COUNTY WSA ENGINEERING DEPARTMENT AT LEAST 72 HOURS PRIOR TO BEGINNING OF CONSTRUCTION ON WATER AND SEWER. AN INSPECTOR WILL BE ASSIGNED AND A PRE-CONSTRUCTION MEETING SCHEDULED AT THIS TIME.

AS-BUILT DRAWINGS SHALL BE FIELD VERIFIED AND STAMPED BY A REGISTERED ENGINEER OR LAND SURVEYOR.

ALL CONTRACTORS FOR WATER AND SEWER CONSTRUCTION SHALL BE ON THE DOUGLASVILLE-DOUGLAS COUNTY WSA APPROVED CONTRACTORS LIST. CONTACT THE WSA ENGINEERING DEPARTMENT FOR APPLICATIONS.

CONTRACTORS HAVE THE RESPONSIBILTY TO ENSURE EROSION CONTROL OF SEWER EASEMENTS, PARTICULARLY WHEN SEWER EASEMENTS ARE IN CLOSE PROXIMITY OF DRAINAGE EASEMENTS. SEE THE ASSIGNED DOUGLASVILLE-DOUGLAS COUNTY WSA INSPECTOR FOR DETAILS.

MINIMUM WATER LINE COVER = 4'

FIRE FLOW TEST RESULTS

TEST DATE:	7–2–02
STATIC PRESSURE	115 P.S.I.
RESIDUAL PRESSURE	85 P.S.I.
FIRE HYDRANT FLOW	1,424 @ 72 P.S.I. G.P.M.
AVAILABLE FLOW @ 20 p.s.i	2,653 G.P.M.
SIZE OF WATER MAIN	6" (DETERMINED)

FIRE FLOW TEST RESULTS

TEST DATE:	9–6–01
STATIC PRESSURE	108 P.S.I
RESIDUAL PRESSURE	98 P.S.I
FIRE HYDRANT FLOW	1,221 @ 53 P.S.I. G.P.M.
AVAILABLE FLOW @ 20 p.s.i	3,953 G.P.M.
SIZE OF WATER MAIN	12" (DETERMINED)

THE RESULTS ARE FOR THE TEST PERFORMED BY DOUGLASVILLE–DOUGLAS COUNTY WATER AND SEWER AUTHORITY FOR THE FIRE HYDRANT BEING SUPPLIED BY A 12" WATER LINE LOCATED ON THE NORTH SIDE OF HOSPITAL DRIVE.

NOTES:

1. THRUST BLOCKS ARE TO BE INSTALLED AT ALL BENDS, TEES, AND HYDRANTS.
2. IF DUCTILE IRON WATER PIPES CAN BE DEFLECTED, THEN AVOID BENDS.
3. SEE ATTACHED 'STANDARD LOCATIONS FOR UNTERGROUND UTILITIES' DETAIL FOR PLACEMENT LOCATION OF TELECOMMUNICATION UTILITIES.
4. WATER AND IRRIGATION METERS TO BE INSTALLED BY WSA WITHIN ROW.

24 HOUR EMERGENCY CONTACT
CONTRACTOR: TOBY TILLEM
770-389-9100

24 HOUR EMERGENCY CONTACT
DOUGLAS COUNTY: MIKE McBRIER, P.E.
770-920-7243

UTILITY DISCLAIMER

UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL HAVE THE UTILITIES FIELD LOCATED AND COORDINATE WITH UTILITY COMPANIES TO HAVE THEM RELOCATED WHEN NECESSARY OR ADAPTED FOR TIE–INS.

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UTILITIES PROTECTION CENTER
IT'S THE LAW!

GRAPHIC SCALE
50 0 50 100
(IN FEET)
1 inch = 50 ft.

HDR/WLJorden, Inc.
200 NORTH COBB PARKWAY, SUITE 134
MARIETTA, GEORGIA 30062
(678) 784-4000
ENGINEERS · SURVEYORS · PLANNERS

DATE	DESCRIPTION	APPROVED BY	DRAWN BY
		DE	SM/DM

REVISIONS

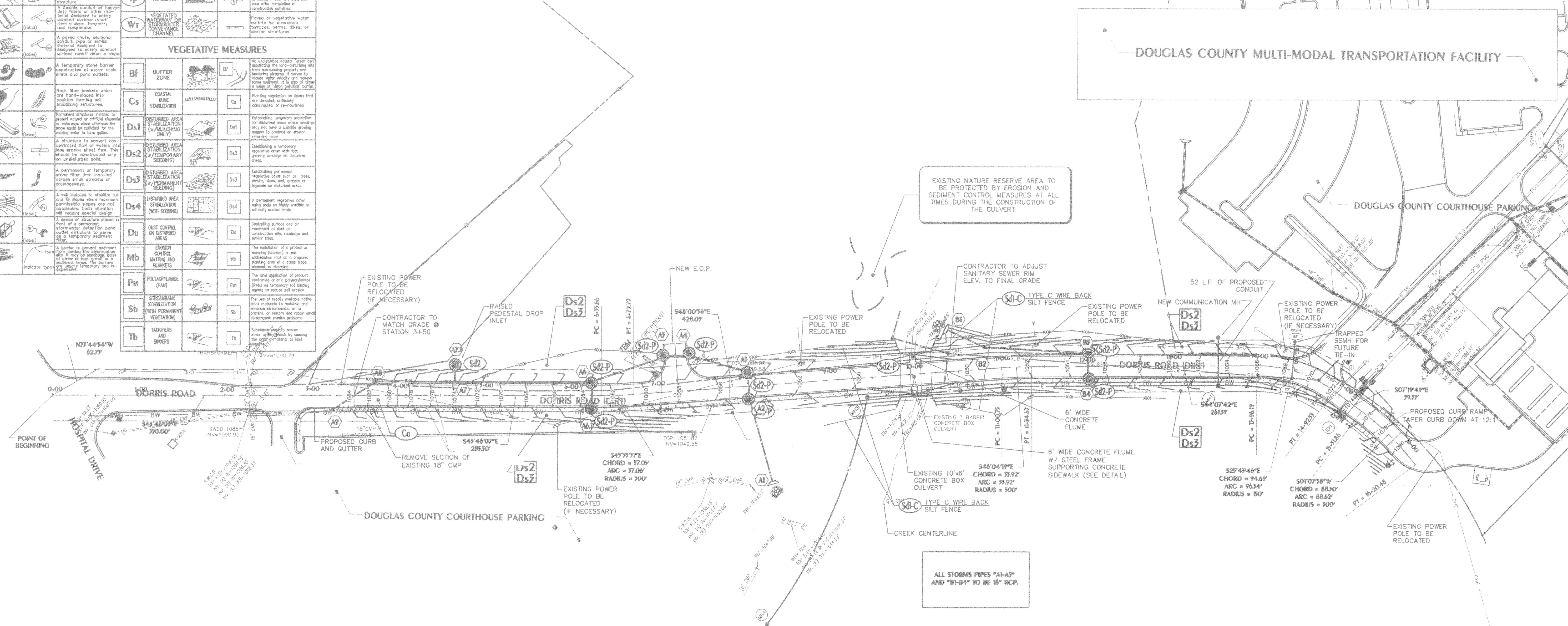
HDR FILE # 1030-02-D
DATE: 10-17-02

WATER AND SEWER AS-BUILT PLANS

DORRIS ROAD WATERLINE AND SEWER EXTENSION

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 22811 TODD A. KORN

SHEET C1.0



GEORGIA UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT		(label)	A crushed stone pad located at the construction exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION			A travelway constructed as part of a construction plan including access roads, sub-division roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent stucture is being constructed.
Di	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE		(label)	A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. Temporary. and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE		(label)	A paved chute, sectional conduit, pipe or similar material designed to designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE		(label)	Permanent structures installed to protect natural or artificial channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of waters into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainagewaya.
Re	RETAINING WALL		(label)	A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETROFITTING		(label)	A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER		(indicate type)	A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, gravel or a sediment fence. The barriers are usually temporary and inexpensive.

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sd2	SEDIMENT TRAP, TEMPORARY			An impounding area created by excavating around a storm drain inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	SEDIMENT BASIN, TEMPORARY			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out. The basin is usually temporary butmay be designed as a permanent pond or stormwater retention device.
Sr	TEMPORARY STREAM CROSSING		(label)	A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN INLET/OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tp	TOPSOILING			The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes, or similar structures.

VEGETATIVE MEASURES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		Bf	An undisturbed natural "green belt" separating the land-disturbing site from surrounding property and bordering streams. It serves to reduce water velocity and remove some sediment. It is also at times a noise or 'vision pollution' barrier.
Cs	COASTAL DUNE STABILIZATION		Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (w/MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (w/TEMPORARY SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (w/PERMANENT SEEDING)		Ds3	Establishing permanent vegetative cover such as trees, shrubs, vines, sod, grasses or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING)		Ds4	A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
Mb	EROSION CONTROL MATTING AND BLANKETS		Mb	The installation of a protective covering (blanket) or soil stabilization mat on a prepared planting area of a steep slope, channel, or shoreline.
Pm	POLYACRYLAMIDE (PAM)		Pm	The land application of product containing anionic polyacrylamide (PAM) as temporary soil binding agents to reduce soil erosion.
Sb	STREAMBANK STABILIZATION (WITH PERMANENT VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.
Tb	TACKIFIERS AND BINDERS		Tb	Substance used to anchor straw or hay mulch by causing the organic material to bind together.

EROSION CONTROL DISCLAIMER NOTE

THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS REFLECT GENERALLY ACCEPTED PRACTICES IN THE ATLANTA METROPOLITAN AREA. HDR/WLJORDEN, INC. DOES NOT GUARANTEE OR IMPLY THAT THESE MEASURES WILL ENSURE A LESS THAN 100 NTU INCREASE OVER THE TURBIDITY LEVELS IN THE RECEIVING STREAM IMMEDIATELY DOWNSTREAM OF THE PROJECT.

EROSION CONTROL NOTES

1. MAINTAIN CONSTRUCTION EXITS TO PREVENT TRACKING OF MUD INTO THE PUBLIC RIGHT-OF-WAY.
2. FAILURE TO MAINTAIN EROSION CONTROL MEASURES COULD RESULT IN FINES AND/OR JAIL TIME.
3. ADDITIONAL EROSION CONTROL MEASURES AS DEEMED BY JURISDICTIONAL INSPECTORS SHALL BE IMPLEMENTED IN A TIMELY FASHION.
4. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES IF FULL IMPLEMENTATION OF THE APPROVED MEASURES DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
5. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
6. ALL GRADED SLOPES 3:1 OR GREATER MUST BE HYDRA SEEDED AND COVERED WITH GDOT APPROVED WHEAT OR WOOD FIBER MATTING. IF NOT HYDRA SEEDED, GDOT APPROVED MATTING THAT HAS BEEN IMPREGNATED WITH SEED AND FERTILIZER MUST BE USED. ALL SLOPES MUST BE PROPERLY PROTECTED UNTIL A PERMANENT VEGETATIVE STAND IS ESTABLISHED.
7. ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED AS SOON AS FINAL GRADE IS ACHIEVED. ALSO, THESE DISTURBED AREAS MUST BE PROTECTED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
8. GDOT TYPE "C" SILT FENCE MUST BE INSTALLED WHERE SILT FENCING IS REQUIRED AND A DOUBLE ROW MUST BE INSTALLED BETWEEN THE LAND DISTURBING ACTIVITY AND STATE WATERS.

NOTE

CONTRACTOR RESPONSIBLE FOR ROADWAY GRADING AND CONSTRUCTION BETWEEN STATIONS 3+50 AND 13+00. CONTRACTOR RESPONSIBLE FOR ROADWAY CONSTRUCTION ONLY FROM STATIONS 13+00 TO 16+20.48, MASS GRADING WILL BE PERFORMED DURING THE MULTI-MODAL GRADING EFFORT (NIC). MINOR GRADING WILL BE REQUIRED TO ACHIEVE FINAL ROADWAY GRADES PAST STATION 13+00, BUT THE MAJOR EARTHWORK OPERATIONS TO BE COMPLETED BY OTHERS.

24 HOUR EMERGENCY CONTACT:
MIKE McBRIER 770-920-7243

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APPROVED BY	DE	PM	QA/QC	SM/DM	DRAWN BY	HDR FILE #	10138-008	DATE: 10-19-01

REVISIONS

DATE	DESCRIPTION
11/27/01	PLAN REVISION

DORRIS ROAD CONSTRUCTION DOCUMENTS
CITY OF DOUGLASVILLE

SITE & GRADING PLAN

GEORGIA REGISTERED NO. 25893 PROFESSIONAL ENGINEER TODD A. KORN

SHEET C3.0