UO-1 THRU UO-19

X-1 THRU X-1A

X-2 THRU X-36

UTILITIES BY OTHERS

CROSS SECTIONS

CROSS SECTION SUMMARY

GENERAL NOTES:

2002 SPECIFICATIONS EFFECTIVE: 01-15-02

GRADE LINE: GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD $\underline{\mathbf{III}}$.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL

SHOULDER CONSTRUCTION:

ASPHALT AND EARTH SHOULDER CONSTRUCTION ON HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS IN PLANS AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED ON PLANS.

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC NOT SHOWN ON THE PLANS WILL BE PAID FOR AT THE CONTRACT PRICE FOR "TEMPORARY SHORING" OR "TEMPORARY SHORING-BARRIER SUPPORTED" DEPENDING UPON THE LOCATION OF THE SHORING.

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE :

<u>DUKE ENERGY CORPORATION, NORTH STATE COMMUNICATIONS, BELLSOUTH TELECOMMUNICATIONS, TIME WARNER, PIEDMONT NATURAL GAS, COLONIAL PIPELINE</u>

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

WHEELCHAIR RAMPS:

WHEELCHAIR RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. THE CONSTRUCTION OF ALL WHEELCHAIR RAMPS SHALL BE IN ACCORDANCE WITH DETAILS IN PLANS.

EFF. 01-15-02

ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January 15, 2002 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO. TITLE

DIVISION 2 - EARTHWORK

200.03 Method of Clearing - Method III225.02 Guide for Grading Subgrade - Secondary and Local

225.04 Method of Obtaining Superelevation - Two Lane Pavement

225.06 Method of Grading Sight Distance at Intersections

DIVISION 3 - PIPE CULVERTS

300.01 Method of Pipe Installation - Method 'A'

310.10 Driveway Pipe Construction

654.01 Pavement Repairs

DIVISION 5 - SUBGRADE, BASES AND SHOULDERS

560.01 Method of Shoulder Construction - High Side of Superelevated Curve - Method I

DIVISION 6 - ASPHALT BASES AND PAVEMENTS

DIVISION 8 - INCIDENTALS

815.03 Pipe Underdrain and Blind Drain

816.04 Markers for Drainage Structure and Concrete Pad

840.00 Concrete Base Pad for Drainage Structures

840.03 Frame, Grates and Hood - for Use on Standard Catch Basin

840.04 Concrete Catch Basin with Single and Multiple Pipes – 300mm thru 1200mm Pipe

840.05 Brick Catch Basin with Single and Multiple Pipes - 300mm thru 1200mm Pipe

840.14 Concrete Drop Inlet - 300mm thru 750mm Pipe

840.15 Brick Drop Inlet - 300mm thru 750mm Pipe

840.16 Drop Inlet Frame and Grates - for use with Std. Dwg.s 840.14 and 840.15

840.17 Concrete Median Drop Inlet Type 'A' - 300mm thru 1800mm Pipe

840.18 Concrete Median Drop Inlet Type 'B' - 300mm thru 900mm Pipe

840.19 Concrete Median Drop Inlet Type 'D' - 300mm thru 900mm Pipe

840.24 Frames and Narrow Slot Sag Grates

840.25 Anchorage for Frames - Brick or Concrete

840.26 Brick Median Drop Inlet Type 'A' - 300mm thru 1800mm Pipe

840.27 Brick Median Drop Inlet Type 'B' - 300mm thru 900mm Pipe

840.28 Brick Median Drop Inlet Type 'D' - 300mm thru 900mm Pipe

840.29 Frames and Narrow Slot Flat Grates

840.34 Traffic Bearing Junction Box - for Use with Pipes 1050mm and Under

840.35 Traffic Bearing Drop Inlet - for Cast Iron Double Frame and Grates

840.45 Precast Drainage Structure

840.46 Traffic Bearing Precast Drainage Structure

840.54 Manhole Frame and Cover

840.66 Drainage Structure Steps

840.71 Concrete and Brick Pipe Plug

640./1 Concrete and Brick Pipe Plu

840.72 Pipe Collar

842.01 Concrete and Brick Retaining Walls - with No Surcharge

846.01 Concrete Curb, Gutter and Curb & Gutter

848.01 Concrete Sidewalk

848.04 Street Turnout

850.01 Concrete Paved Ditches

852.01 Concrete Islands

852.05 Median Curb for Catch Basin - for Use with 450mm Curb and Gutter

852.06 Method for Placement of Drop Inlets in Concrete Islands

862.01 Guardrail Placement

866.01 Chain Link Fence – 1.2m, 1.5m and 1.8m High Fence

876.01 Rip Rap in Channels

876.02 Guide for Rip Rap at Pipe Outlets

876.04 Drainage Ditches with Class 'B' Rip Rap



SHEET NO.

/-A

PROJECT REFERENCE NO.

U-29I3B