STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES. WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM HANDRAILS AND POSTS SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB. THE METAL RAIL AND TOPS OF CONCRETE POSTS SHALL BE BUILT AT A SUITABLE ANGLE PRIOR TO PAINTING, ENSURING SUITABLE INSTALLATION.

HANDRAILS AND POSTS:
- Metal standards and edges of the concrete end posts for the metal rail shall be set similarly to the type of end posts used on the old concrete and shall be provided for metal rail and posts.
- Metal rail shall be built parallel to the grade of the curb. Metal rail shall be cut to the height of the curb.
- Metal rail shall be bolted to the curb at the specified locations.
- Metal rail shall be provided for metal rail and posts.

SPECIAL NOTES:
- Metal rails and handrails shall be built parallel to the grade of the curb.
- Metal rail shall be bolted to the curb at the specified locations.
- Metal rail shall be provided for metal rail and posts.

MATERIAL AND WORKMANSHIP:
- Except as otherwise specified on plans or in the specifications, all materials and workmanship shall be in accordance with the standard specifications for roads and structures of the N.C. Department of Transportation.
- Steel sheet piling for permanent or temporary applications shall not be used.
- Concrete:
  - Unless otherwise specified on plans, class A concrete shall be used. All concrete shall be placed with the embedment of reinforcement equal to or greater than the specified embedment.
  - Concrete shall be placed in an are that is free of foreign material.
  - Concrete shall be placed in an are that is free of foreign material.
- Structural steel:
  - At the contractor's option, he may substitute 1/2 times the thickness of the plate for the thickness of the plate. The substitution shall be made at the discretion of the engineer. The substitution shall be made at the discretion of the engineer.
  - Plate edges shall be formed to a radius of 1/8 inch, and the edges shall be rounded to a 1/8 radius with a finishing stroke of 1/16 inch.
  - Allowance for dead load deflection, settlement, and tops of curbs and sidewalks shall be rounded to a 1/4 inch radius unless otherwise required on plans.
  - Reinforcing steel shall be rounded with a finishing tool unless otherwise required.
  - All sharp edges and ends of shapes and plates shall be slightly rounded with a finishing tool.
  - Concrete shall be chamfered 3/4 inch with the following exceptions:
    - Electroslag welding will not be permitted.
    - Concrete chamfers shall be equal to 2 times the flange thickness. The size of fillet welds shall conform to these standards.