1. Pre-construction survey
Before construction commences, Williams performs conventional (civil), environmental and cultural surveys along the proposed pipeline segment and the corresponding work corridor. Utility lines, foreign line crossings, environmental features (wetlands and waterbodies), proposed pipeline centerline and work corridor limits are marked to prevent accidental damage from occurring during the course of pipeline construction and to provide clear guidance to facilitate the work.

2. Clearing and grading
The construction work corridor is cleared of vegetation and temporary erosion control measures are installed prior to any earth-moving activities. Upon completion of erosion control measure installation, the construction work corridor is graded in a manner that allows for a safe and efficient work corridor.

3. Trenching
Topsoil is removed in agricultural and residential areas and stockpiled separately within the construction work corridor. Backhoes and/or trenching machines are used to excavate the pipeline trench and the subsoil is temporarily stockpiled within the construction work corridor.

4. Pipe stringing and bending
Individual joints of pipe are strung along the construction work corridor and placed on temporary supports (pipe skids) adjacent to the excavated ditch and arranged so they are accessible to construction personnel. A mechanical pipe-bending machine bends individual joints of pipe to the desired angle at locations where there are significant changes in the natural ground contours or where the pipeline route changes direction.

5. Welding, pipe coating and weld inspection
Individual joints of pipe are strung along the construction work corridor and placed on temporary supports (pipe skids) adjacent to the excavated ditch and arranged so they are accessible to construction personnel. A mechanical pipe-bending machine bends individual joints of pipe to the desired angle at locations where there are significant changes in the natural ground contours or where the pipeline route changes direction.

6. Lowering pipe in and backfilling
The welded pipeline assembly is carefully lowered into the excavated trench utilizing side-boom tractors. After Survey verifies that the pipe has been installed to the proper depth, the trench is backfilled by first returning the previously excavated subsoil to the trench and then returning the topsoil to the upper layer of backfill. No foreign materials are allowed in the trench.

7. Testing
After backfilling, the pipe is filled with water and pressure tested. Tested water is obtained and disposed of in accordance with applicable regulations.

8. Restoration
Williams’ policy is to clean up and restore the work area as soon as possible. Disturbed areas are restored, as nearly as possible, to their original contours. Temporary environmental control measures are maintained until the area is restored, as closely as possible, to its original condition.