CI Pipeline Description

Below is a step-by-step description of a CI pipeline for the software being developed.

1. Code Commit: Code changes are committed to the version control system, which triggers the CI pipeline.
2. Code Build: The CI system retrieves the code from the version control and builds it. The code is compiled, and executable files are created.
3. Code Test: Automated tests are run on the newly built code to check for any issues. These tests include unit tests, integration tests, and functional tests.
4. Code Analysis: The pipeline can be configured to run static code analysis tools like linters and formatters on the code to check for issues like syntax errors or coding standard violations.
5. Code Deployment: If the tests and code analysis pass, the code is deployed to a staging environment for further testing.
6. Staging Test: A test team conducts further testing on the staging environment, to ensure the code meets requirements and that there are no issues.
7. Production Deployment: If the staging tests are successful, the code is deployed to a production environment.
8. Continuous Monitoring: The pipeline can be configured to continuously monitor the production environment to check for issues and errors.