Use this section to specify requirements for cast iron medium duty slide gates. Normally, medium duty slide gates are designed for seating heads up to 6 m and unseating heads up to 3 m, and are fitted with manual operators. For applications with higher heads, refer to Section 11281 – Heavy Duty Slide Gates.

Carefully co-ordinate this section with Section 05505 – Metal Fabrications if used, particularly where they include similar items. Close attention to the scope, measurement and payment articles in Section 01280 Measurement Schedule is required, particularly in cases where the metal fabrications specified in this section are being paid for under a Lump Sum, and metal fabrications in Section 05505 – Metal Fabrications are being paid under a Unit Price per kilogram.

Edit this section to suit the Contract requirements.

| <u>Headi</u> | ng of Specification Text | Specification Note |
|--------------|---------------------------------|--|
| Part 1 | General | |
| 1.1 | References | |
| 1.2 | Submittals | |
| | [.5] | Include this clause for contracts or installations where it is determined that supervision and certification of the gate installation is required. Co-ordinate with clauses 1.3 and 3.1.1. |
| 1.3 | [Quality Control] | Include if required, and co-ordinate with clause 1.2.4 and 3.1.1. |
| 1.4 | Delivery, Storage, and Handling | |
| Part 2 | Products | |
| 2.1 | Materials | |
| | .2.1 | Review and modify as required to suit design requirements. Review manufacturers gate performance data and material specifications. |
| | .3 | Edit stem diameter as required. |
| | .4 | Determine the type of manual operator (e.g., geared, handwheel, or square operating nut with T-wrench) |

Heading of Specification Text

Specification Note

required for each installation and edit as required. Normally, the operator is sized such that the gate can be operated with a maximum pull of 111 N (25 lbs).

.6

Edit as required to meet AWWA C560 or AWWA C561 dependent on the type of gate selected, cast iron or steel. Edit and include where a Type E or F thimble is required. Indicate on the Drawings where wall thimbles are required including their lengths. Edit as required if a fabricated thimble (e.g. steel or stainless steel) is required and include material, coating if required, and fabrication requirements.

.8.2.1

SSPC-SP10 provides for a near white metal surface which is normally required for immersion service. Confirm this requirement in conjunction with clause 2.1.8.2.2.

.8.2.2

Amerlock 400 is the current paint standard for slide gates being supplied by Armtec. Confirm this in conjunction with clause 2.1.8.2.1. Do not use coal tar epoxy paints which are difficult to repair under moist and cold conditions.

Part 3 Execution

- 3.1 Installation and Assembly of Slide Gates
 - .1

Edit in conjunction with clauses 1.2.4 and 1.3.

3.2 Testing of Slide Gates

.2

Confirm need for wet testing, and if so, edit to include specific requirements (e.g. timing, sequence, temporary bulkheads, water levels, etc.) for wet testing. In general for minor structures (e.g. turnouts and drain inlets) on irrigation canals, wet testing of slide gates has not been required.

3.3 Repair of Damaged Coatings

CWMS Civil Works Master Specification

SECTION COVER SHEET

Section 11280 Medium Duty Slide Gates 2015

END OF COVER SHEET

Use this section to specify requirements for cast iron heavy duty slide gates. Normally, heavy duty slide gates are designed for seating heads up to 30.5 m and unseating heads up to 9.1 m. Electrically operated hoist operators are typically provided for the larger sized gates. For lower head applications (i.e. maximum seating heads of 6.1 m and unseating heads of 3 m), refer to Section 11280 – Medium Duty Slide Gates.

Edit this section to suit the Contract requirements.

| <u>Headi</u> | ng of Specification Text | Specification Note |
|--------------|---------------------------------|--|
| Part 1 | General | |
| 1.1 | References | |
| 1.2 | Submittals | |
| 1.3 | Quality Control | |
| 1.4 | Delivery, Storage, and Handling | |
| Part 2 | Products | |
| 2.1 | Materials | |
| | .2.1 | Review design requirements, edit manufacturer's names and models, and update materials as required to suit service conditions. |
| | .2.2 | Confirm minimum stem diameter. |
| | .2.6 | Edit as required, and co-ordinate with clause 2.2.6. |
| | [.3] | Normally, the operator is sized such that the gate can be operated with a maximum pull of 111 N (25 lbs). Coordinate with clause 2.3.5. |
| | [.4] | Include and edit as required. Confirm compatibility of actuators and controls with AENV's control systems. Coordinate with clause 2.3.6 and 3.2. |
| | [.5] | Include if required. These are normally an option that is built into the actuators. |

CWMS Civil Works Master Specification

Section 11281 Heavy Duty Slide Gates

2015

| Headi 2.2 | ng of Specification Text Shop Fabrication of Gates | Specification Note |
|--------------|--|---|
| | [.7] | Include if required and co-ordinate with clause 2.1.2.6. |
| 2.3 | Shop Applied Coatings | |
| | | |
| | .3.1 | SSPC-SP10 provides for a near white metal surface which is normally required for immersion service. Confirm this requirement in conjunction with clause 2.6.1.2.2. |
| | .3.2 | Review and edit as required. Amerlock 400 is the current paint standard for slide gates being supplied by Armtec. Do not use coal tar epoxy paints which are difficult to repair under moist and cold conditions. |
| | [.5] & [.6] | Include as required. |
| Part 3 | Execution | |
| 3.1 | Installation and Assembly of Slide Gates | |
| 3.2 | [Installation of the Electrical Lifts] | Include if required. |
| 3.3 | Start-up and Testing | |
| | .4 | Specify the procedure for wet testing the gate. |
| 3.4 | Repair of Damaged Coatings | |

END OF COVER SHEET

Section 11282 2015 Flap Gates

Use this section to specify requirements for light duty cast-iron flap gates.

Edit this section to suit the Contract requirements.

Heading of Specification Text

Specification Note

| D | 4 | \sim | 1 |
|----------|---|----------|---|
| Part | | Genera | ١ |
| 1 411 | | · ICHCIA | |

- 1.1 References
- 1.2 Submittals
- 1.3 Delivery, Storage, and Handling

Part 2 Products

- 2.1 Materials
 - .2.1 Review flap gate requirements. The gate models specified have a maximum 3 m seating head.
 - 2.2.1 SSPC-SP10 provides for a near white metal surface which is normally required for immersion service. Confirm this requirement in conjunction with clause 2.1.2.2.2.
 - 2.2.2 Amerlock 400 is the current paint standard for slide gates being supplied by Armtec. Confirm this in conjunction with clause 2.1.2.2.1. Do not use coal tar epoxy paints which are difficult to repair under moist and cold conditions.

Part 3 Execution

- 3.1 Installation and Assembly
- 3.2 Repair of Damaged Coatings

END OF COVER SHEET

CWMS Civil Works Master Specification