

Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS OFFICE OF THE SECRETARY

Bonifacio Drive, Port Area Manila



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DEPARTMENT ORDER)
NO. 193)
Series of 2024	*
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SUBJECT: DPWH Standard Specification for Item B.29 - Incremental Launching Method (ILM) Nose

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In order to ensure uniformity in the application/adoption of the Pay Item of Work to be used/adopted by those who are involved in the preparation of the Design Plans and Quantities, Program of Works (POW) and Approved Budget for the Contract (ABC) for infrastructures Project Nationwide, the attached **DPWH Standard Specification for Item B.29** - **Incremental Launching Method (ILM) Nose** is hereby prescribed for adoption in Government infrastructure projects that require the utilization of such on the Program of Works.

The Standard Specification shall form part of the DPWH Standard Specifications for Highways, Bridges and Airports, Volume II and is now included in the Project and Contract Management Application (PCMA).

This Order shall take effect immediately.

Department of Public Works and Highways Office of the Secretary

Secretary



DPWH Standard Specification for Item B.29 - Incremental Launching Method (ILM) Nose

B.29.1 Description

This Item shall consist of furnishing, fabricating and installing of Incremental Launching Method (ILM) Nose in accordance with this Specification and as shown on the Plans.

B.29.2 Material Requirements

B.29.2.1 Structural Steel

It shall conform to the applicable requirements of ASTM A709, Standard Specification for Structural Steel for Bridges or equivalent.

B.29.2.2 Bolts, Nuts and Washers

It shall conform to the applicable requirements of ASTM F3125, Standard Specification for High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength or equivalent.

B.29.2.3 Prestressing Steel Bar

It shall conform to the applicable requirements of high strength bar of Item 710, Reinforcing Steel and Wire Rope.

B.29.2.4 Lifting, Pushing and Pulling Jacks

Lifting, Pushing and Pulling Jacks shall be in accordance with the Manufacturer's recommendations, subject to the approval of the Engineer.

B.29.2.5 Temporary Bearing and Sliding Pad

It shall conform to the applicable requirements of Item 417, Bearing Devices.

B.29.2.6 Paint

It shall conform to applicable requirements of Item 709, Paints.

B.29.2.7 Non-Shrink Grout

It shall conform to applicable requirements of Item 727, Non-Shrink Grout.

B.29.3 Construction Requirements

B.29.3.1 General

Fabrication and installation of ILM Nose shall be as shown on the Plans or as approved by the Engineer.

B.29.3.2 Submittals

Prior to start of the fabrication and installation of ILM Nose, the Contractor shall submit to the Engineer for evaluation and approval of the following requirements, which shall include but not limited to:

- 1. Detailed fabrication procedure;
- 2. Methodology for Incremental Launching;
- 3. Required Testing Procedures;
- 4. Shop Drawings for each component;
- 5. Summary of Quantities with detailed calculations for each component; and,
- 6. Maintenance Requirements.

B.29.3.3 Fabrication

The fabrication of structural steel shall conform to Item 408, Steel Bridges and Item 409, Welded Structural Steel. Painting of structural steel, if required, shall conform to the applicable requirements of Item 411, Paint.

B.29.3.4 Installation

When connecting ILM Nose with first segment of PSC Box Girder, the lower part of the nose and the lower part of PSC Box Girder shall be on the exact same plane, and there must be no problem with the launching of PSC Box Girder in consideration of construction equipment and site conditions.

ILM Nose shall be clearly marked with their longitudinal and transverse axes, their types, numbers, and their intended locations in the works. The Contractor shall fix and bed all temporary bearings in accordance to the Plans.

Adjustment screws shall be installed on the bottom plate of the temporary bearing so that the bottom plate of the jack is exactly parallel to the bottom surface of the extruded upper structure. After installation, the gap between the concrete surface and the bottom plate shall be filled with a non-shrink grout, and the width between the fixing bolt and the launching jacks shall be accurately supported. During the connection, the ILM Nose and 1st segment should introduce the designed prestress to the prestressing steel bars tightly.

B.29.3.5 Commissioning

The Contractor shall perform the equipment installation and test run. Inspection of the following shall be conducted under the supervision of the Engineer:

- a) Electric control switch and synchronized hydraulic system to adjust the lifting jack;
- b) Stress relief valve of the lifting jack to the maximum load; and,
- c) Electric emergency cutting device.

B.29.4 Method of Measurement

All expenses incurred in the furnishing of ILM Nose shall be paid for in lump sum and/or linear meter.

B.29.5 Basis of Payment

All work performed and measured and as provided for in the Bill of Quantities shall be paid for at the Contract Unit Price for ILM Nose, which price and payments shall be full compensation for furnishing of all materials, labor, equipment, tools and incidentals necessary to complete the work prescribed in this Item including dismantling, removal and proper storage.

Payment shall be made under:

Pay Item Number	Description	Unit of Measurement
B.29 (1)	Incremental Launching Method (ILM) Nose	Lump Sum
B.29 (2)	Incremental Launching Method (ILM) Nose	Linear Meter