GENERAL PAVER NOTES

1. Reference Item 528. Landscape Pavers, of the Texas Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges 2024 for specifications, dimensions, volumes and measurements not shown.
   NOTE: Item 528 references several ASTM standard specifications required as part of this Item.
2. Locate and stake all underground conduits and utilities associated with but not limited to: CTMS, CTMS power supply, lighting, signal wires and detectors, gas, electrical, telephone, fiber optics, etc.
3. Locate and stake existing ground boxes, inlets, culverts, manholes, etc. within the project area with a 4' wooden stake, painted orange. Maintain the stakes in place for duration of construction period of the contract. Remove stakes when directed by Engineer.
4. Repair and/or replacement of any damaged underground conduits or utilities, structures, pavement, riprap, equipment, materials, slopes, vegetation, surfaces, etc. at no expense to the Department.

MATERIALS

1. Use "Class B" concrete for concrete edge for pavers shown in detail. Concrete edge is paid for separately under Item 432-7003 RIPRAP(CONC)(6 IN) CY.
2. Use cement treated base which meets the requirements of Item 276, Strength L. Cement treated base is subsidiary to Item 528.
3. Use bedding sand described in Item 528.2.1.2. Bedding sand is subsidiary to Item 528.
4. Use paver unit type and color type as shown. Submit sample units for approval by Engineer prior to construction with manufacturer's information certifying that paver units:
   a. Meet the requirements of Item 528.2.1.1. Pavers. including:
      1) Portland cements conform to ASTM C 150, C595/C595M, C1157/C1157M
      2) Fly ash conforms to ASTM C 618
      3) Aggregates conform to ASTM C 33 - 07
      4) Color pigments consisting of iron oxides and conform to ASTM C 979
   b. Are manufactured so all grey cement products are produced with a concrete mix design that contains a pigment loading that represents, by weight, 3% of the total cementitious weight of the batch. White cement products will contain sufficient pigment to achieve the specified color. Pigment dispensing will be accomplished by automated equipment designed to meter pigment granules accurately to the concrete mixer within +/- 1/2 ounce per 10 pounds of pigment.
   c. Are manufactured using accelerating plasticizer and an efflorescence reducer. Follow manufacturer's application rates, but in no case dose admixture less than 8 ounces per 100 pounds of cementitious material.
   d. Are manufactured by a standard process on equipment capable of creating a four color blend with a full range of colors to occur on each pallet.
5. Use joint sand described in Item 528.2.1.3. Joint sand is subsidiary to ITEM 528.

SUBMITTALS

1. The following submittals are required to ensure conformance with specifications:
   a. Certification from the manufacturer stating that the pavers have been tested and meet all the requirements of ASTM C 936.
   b. Mix design, including information indicating percentage of fly ash to be used as cementitious material = less than or equal to 20%.
   c. Current mill certificate from cement supplier for grey cement. Meets all requirements of ASTM C 150.
   d. Current mill certificate from cement supplier for white cement. Meets requirements of ASTM C 150, C595/C595M, C1157/C1157M.
   e. Material certification information for fly ash. Meets requirements of ASTM C 618.
   f. Current quality test reports and gradation results of stockpiles from aggregate supplier for sand and gravel products.
   g. Pigment suppliers information.
   h. Complete technical data for admixtures including information relating to percentage of total cementitious material in mix design and iron oxide additive.
   i. Technical data and specifications for equipment used in dispensing pigment to mixing equipment.

SUBMITTALS RECEIVED FROM CONTRACTOR?	
YES	NO

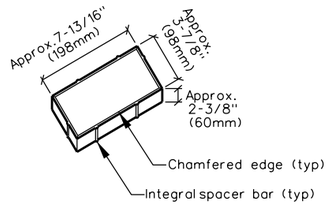
FOR ENGINEER'S USE TO ENSURE ALL SUBMITTALS ARE RECEIVED

CONSTRUCTION METHODS

1. Locate and stake all items and/or limits of pavers and related work in the field. Receive approval from Engineer prior to continuing.
2. Item 528.3.1.1, receive approval from Engineer before covering base material.
3. Provide a minimum 10'X10' (100SF) mock-up of pavers in place on site for approval by Engineer before continuing any additional paver work. Any additional work without approval is subject to removal by Contractor at own expense.
4. Maintain a straight joint line orientation both directions in pattern with no deviation more than 1/8 inch in a ten foot horizontal dimension.
5. Maintain vertical elevation of paver units with no surface elevation deviation greater than 3/8 inch under a ten foot straight edge.
6. Item 528.3.1.4, complete a minimum of two sweepings of joint sand, complete additional sweepings to fill the joints to the approval of the Engineer. Leave surplus sand on the surface during construction period. Sweep and clean all excess joint sand, soil, foreign material, and/or stains from pavers as directed by Engineer.
7. Immediately remove and replace paver units damaged during installation.

PAVER UNIT

**"Holland Stone"
as manufactured by
IPC Building Products, Sugar Land, Tx,
or
approved equal**



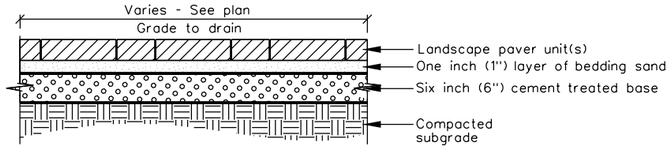
REQUIRED ITEMS:

- Item 432-7003 RIPRAP(CONC)(6 IN) CY
- Item 528-7001 LANDSCAPE PAVERS SY

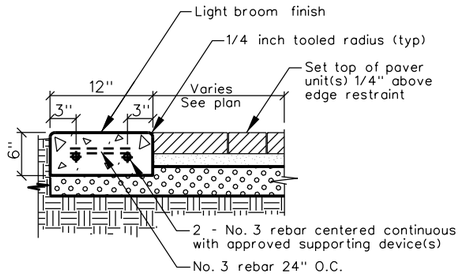
PAVER COLOR

**IPC Building Products "TxDOT HOUSTON DISTRICT GRP II BLEND"
or
approved equal**

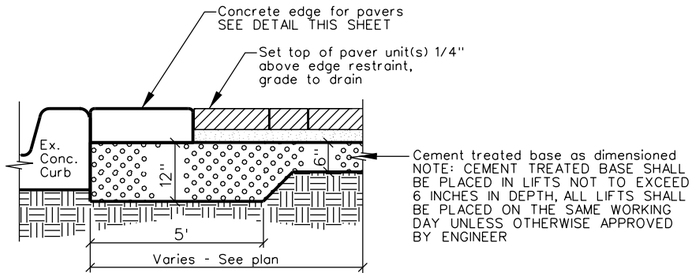
Color mix includes Houston District approved:
Green, charcoal, bronze and tan.
(Border stones and field stones are to be same color blend)



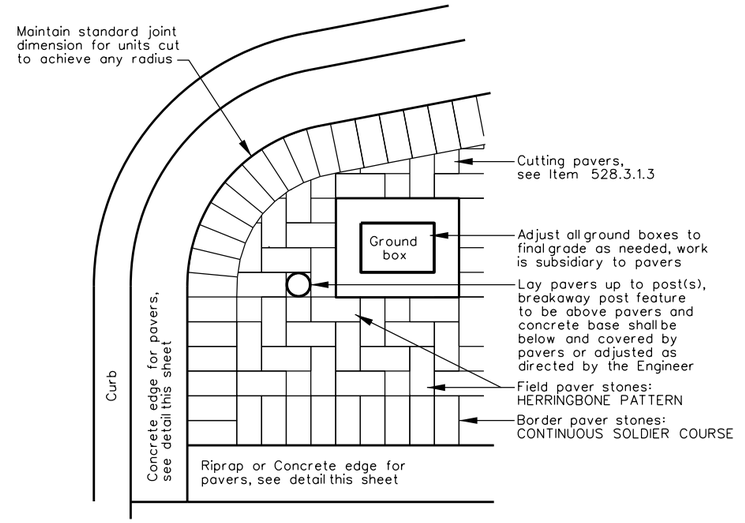
PAVERS ON PORTLAND CEMENT TREATED BASE



CL B CONCRETE EDGE FOR PAVERS



CEMENT TREATED BASE UNDER PAVERS AT EXISTING CONCRETE CURB



PAVER PATTERN LAYOUT

**Install In Herringbone Pattern With
Soldier Course Along Perimeter As Shown**

APPROVED EQUAL NOTE:
Reference to manufacturer's trade name or product is for the purpose of identificatin only, Contractor is permitted to furnish like materials of other manufacturers provided they are of equal quality and comply with specifications for this project. All materials for consideration as an "approved equal" must be submitted to the Engineer at the preconstruction meeting. Consideration for late submittals will only be for any materials, shown in plans, which become unavailable as required.

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Texas Department of Transportation

HOUSTON DISTRICT

LANDSCAPE PAVERS

SHEET 1 OF 1

Details not to scale

LP

REVISIONS
9/2024 UPDATED TO 2024 SPECS

FILE:	FED DIV	STATE	PROJECT NUMBER			SHEET
	6	TEXAS				
ORIGINAL:	DIST	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	12					

STD K-2