

REQUEST FOR BIDS

HIDALGO COUNTY (PRECINCT No. 2) “PURCHASE OF BOX CULVERTS FOR MINNESOTA DRAIN PROJECT”

DRAFT

Contact Person:

Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department
2812 S. Business Hwy 281 – New Administration Building
Edinburg, Texas 78539



956 318-2626

Form HCPD-03

1. Sealed bids will be received for **HIDALGO COUNTY PRECINCT No. 2 – “PURCHASE OF BOX CULVERTS FOR MINNESOTA DRAIN PROJECT”** in accordance with the specifications attached as Exhibit "A" hereto. Bids should address all specifications set forth. Bidders may suggest substitutions of features which they feel would be in the best interest of Hidalgo County ("County"). Strong rationale must be presented for any deviation from the specifications. Hidalgo County reserves the right to reject the deviation and its effect on the overall bid.
2. One (1) original and Three (3) copies of all bids are required with the bidders name and return address clearly typed/printed on upper left hand corner and the proper notation clearly typed/printed on the lower left hand corner of the envelope and/or package: **BID-2012-196-00-00-CGA - HIDALGO COUNTY PRECINCT No. 2 – “PURCHASE OF BOX CULVERTS FOR MINNESOTA DRAIN PROJECT”** and in County's Purchasing Department, 2812 S. Business 281, New Administration Building, Edinburg, Texas, **on or before 9:30 a.m., WEDNESDAY, _____, 2012. NO FACSIMILES OR LATE ARRIVALS WILL BE ACCEPTED. ANY RFB RECEIVED AFTER THAT TIME WILL NOT BE OPENED AND WILL BE RETURNED. OVERNIGHT MAIL MUST ALSO BE PROPERLY LABELED ON THE OUTSIDE OF EXPRESS ENVELOPE OR PACKAGE WITH REFERENCE TO REQUEST FOR BIDS-2012-196-00-00-CGA- HIDALGO COUNTY PRECINCT No. 2 – “PURCHASE OF BOX CULVERTS FOR MINNESOTA DRAIN PROJECT”**. Hidalgo County reserves the right to refuse and reject any/all RFB and to waive any/all formalities or technicalities, or to accept the RFB considered the best and most advantageous to Hidalgo County.
3. Hidalgo County reserves the right to: A. separate and accept, or eliminate any item(s) listed under this bid that it deems necessary to accommodate budgetary and/or operational requirements; B. reject any or all bids submitted and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best bid for approval; and C. award the bid to one bidder or to multiple bidders if the County determines it is in its best interest to do so.”
4. The Bidder shall not substitute items named in the bid without the express written consent of Hidalgo County. Failure of the delivered item(s) to perform as specified or failure to meet the stated delivery schedule shall release Hidalgo County from all obligations to the contracting party with regard to the item(s) in question. In such event, County may elect to award the contract to the next-lowest responsible bidder, or to reject all bids and re-advertise.
5. For work to be performed at a County owned or operated location, each bidder shall, in its sole discretion, visit the job site before preparing the bid and thoroughly familiarize himself/herself with existing conditions. Bidder should take field dimensions and note all circumstances which affect the dollar amount of the bid.
6. Descriptive specifications are referenced in this document to indicate the general kind and quality of equipment desired by Hidalgo County. Due to various styles and models

of equipment, bidders are required to include illustrations, specifications, explanation of warranties, and service data with their bid including catalogue numbers and any necessary references.

7. No bid may be withdrawn within thirty (30) days from the scheduled time to open bids.
8. Proposed prices are to remain firm for a minimum of ninety (90) days after bid opening.
9. Any interpretations, amendments, corrections or changes to this bid document must be in a written addendum and signed by the County Judge or his designee. Addenda will be mailed to all who are known to have received a copy of the Request for Bids. Bidders shall acknowledge receipt of all addenda as a part of their bid.
10. County reserves the right to accept or reject any or all bids.
11. Costs are to be net F.O.B., County Prepaid.
12. County is exempt from Federal Excise Tax, State Tax and Local Tax. Do Not include tax in cost figure. If it is determined that tax was included in the cost figures it will not be included in the tabulation of any awards. Tax exemption certificates will be furnished upon request.
13. Funds for this procurement have been provided through the County budget for this fiscal year only. County, on an annual basis, has the right to reconsider a contract during the budget process for ensuing years if financial resources of County are insufficient to meet the liabilities of said contract. The award of a bid or contract hereunder will not be construed to create a debt of the County which is payable out of funds beyond the current fiscal year.
14. Upon award and prior to execution of a contract, Sole Proprietorships are required to submit a copy of their social security cards to the Hidalgo County Auditor's Office in order to establish an account with the County. All awarded vendors must submit a completed W-9 and a copy of their Federal ID Number Certificate.
15. DELIVERY INSTRUCTIONS: (IF APPLICABLE)
 - . No deliveries accepted after 3:00 P.M., Monday-Friday.
 - . At least seventy two (72) hours prior notice of delivery must be given to Martha L. Salazar, Purchasing Agent before delivery will be accepted.
 - . If you need additional information call the office listed below:

Hidalgo County Purchasing Department
Martha L. Salazar, Purchasing Agent
(956) 318-2626

16. BILLING AND PAYMENT INSTRUCTIONS:

- . Invoices must include:
 - a) Name and address of successful bidder
 - b) Name and address of receiving department or official
 - c) Purchase Order Number or Contract Number (if any)
 - d) Notation - **HIDALGO COUNTY PRECINCT No. 2 – “PURCHASE OF BOX CULVERTS FOR MINNESOTA DRAIN PROJECT”**.
Descriptive information as to the items or services delivered, including product code, item number, quantity, etc.
- . Discount payments will be considered when offered.
- . Contact person for Billing and Payment questions:

Hidalgo County Precinct No. 2
Attn: Yolanda Cisneros
300 W. Hall Acres Suite G
Pharr, TX 78577

17. Schedule of Events

Bid Opening, 9:30 AM	_____	, 2012
Award of Contract	_____	, 2012
Commence Work or Deliver Products	_____	, 2012

18. Bid or Performance Bond and Debarment Certification; Payment Under Contract:

- . If the contract proposed is for the construction of public works or is for a contract for goods & services exceeding \$100,000, all bidders shall furnish a good and sufficient bid bond in the amount of five percent of the total contract price. A bid bond must be executed with a surety company authorized to do business in Texas. All bidders are also required to furnish a certification or acknowledgment stating that the contractor or vendor is free from suspension or debarment pursuant to federal regulation 45CFR Part 76.

- . Together with the signing of a contract or issuance of a purchase order following the acceptance of a bid, and prior to commencement of the actual work, the bidder shall furnish a performance bond to the County for the full amount of the contract, if that contract exceeds \$50,000.

- . If the contract is for \$50,000 or less, no money will be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County, and, if applicable, the receipt by County of satisfactory evidence that all subcontractors and material men have been paid.

- . If a contract is for the construction, alteration or repair of public buildings or public works, the contractor *shall* provide a payment bond for a contract in excess of Twenty Five Thousand Dollars (\$25,000.00), as required by Tex. Govt. Code Ch. 2253.

. For requirements contracts, bond requirements are determined by applying the proposed unit price to the estimated quantities included in the specifications.

19. Ethical Standards:

. It shall be a breach of ethics to offer, give or agree to give any elected official, department head or employee, or former elected official, department head or employee, of the County, or for any elected official, department head or employee or former elected official, department head or employee of the County, to solicit, demand, accept or agree to accept from another person, entity or organization, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore pending before any department or agency of the County.

. It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for the County, or any person associated therewith, as an inducement for the award of a subcontract or order.

. No public official shall have an interest in a contract awarded hereunder except in accordance with Tex. Loc. Govt. Code Chapter 171.

20. Disclosure of Conflict of Interest

. Effective January 1, 2006, Chapter 176 of the Texas Local Government

Code requires that any vendor, person, consultant or contractor considering doing business with Hidalgo County ("the County") to disclose in the Conflict of Interest Questionnaire (the "CIQ") attached as Exhibit D, the vendor, person, consultant or contractor's affiliation or business relationship that might cause a conflict of interest with the County. By law, the CIQ must be filed with the Hidalgo County Clerk's Office no later than the seventh business day after the date the person becomes aware of facts that require that statement to be filed. The disclosure requirement applies to a person or business who contracts or seeks to contract with Hidalgo County for the sale or purchase of property, goods or service. Any purchase order or contract resulting from this process shall be considered null and void if the successful bidder fails to comply with Texas Local Government Code Chapter 176. Vendors, consultants, contractors

and others who desire to conduct business with Hidalgo County are encouraged to refer to Texas Local Government Code Chapter 176 for the details of this law. An offense under Texas Local Government Code Chapter 176 is a Class C Misdemeanor.

Please Submit completed CIQ forms to the Hidalgo County Clerk's Office located at 100 N. Closner, Edinburg, Texas 78539-Hidalgo County Courthouse

COMPLETION AND SUBMISSION OF FORM CIQ IS THE SOLE RESPONSIBILITY OF THE PROSPECTIVE BIDDER.

21. If, during the life of any contract or bid awarded, the successful bidder's net prices generally available to other customers for items awarded herein are reduced below the contracted price, it is understood and agreed that the benefits of such reduction shall be extended to County.
22. Bids, and all goods and services provided thereunder, shall comply with all federal, state and local laws concerning this type(s) of goods and/or services.
23. Minimum Standards For Responsible Prospective Bidders: A prospective bidder must affirmatively demonstrate bidder's responsibility. A prospective bidder, by submitting a bid, represents to County that it meets the following requirements:
 - . Possess or is able to obtain adequate financial resources as required to perform under the bid;
 - . Be able to comply with the required or proposed delivery schedule;
 - . Have a satisfactory record of performance;
 - . Have a satisfactory record of integrity and ethics;
 - . Be otherwise qualified and eligible to receive an award.
24. Successful bidder will pay or cause to be paid, without cost or expenses to County, all FICA, FUTA/SUTA and Federal Income Withholding Taxes of all employees, and all wages and benefits as required by Federal or State law. Successful bidder's officers, agents and/or employees will not be entitled to any benefits of an employee or elected official of County, including, but not limited to, benefits associated with County's civil service system.
25. Any contract award to a successful bidder will be in effect until (a) the contract expires, (b) delivery and acceptance of products, and/or performance of services ordered, or (c) terminated by County with thirty day's written notice prior to cancellation.
26. County reserves the right to enforce performance of any contract awarded hereunder in any manner prescribed by law or deemed to be in the best interest of the County in the event of breach or default by successful bidder; County reserves the right to terminate any contract immediately in the event a successful bidder fails to:
 - A. Meet schedules;

- B. Pay any required fees or taxes; or
- C. Otherwise perform in accordance with the specifications.

27. Successful bidder shall defend, indemnify and save harmless County and all its elected officials, officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful bidder, or of any agent, employee, subcontractor or supplier of successful bidder in the execution of, or performance under, any contract which may result from bid award or which arises from any event or casualty happening on or within County premises themselves or happening upon or in any halls, elevators, entrances, stairways or approaches of or to such County facilities. Successful bidder shall pay any judgment with costs which may be obtained against County growing out of such injury or damages, and shall, upon request, provide a defense to County by counsel reasonably acceptable to County. Successful bidder's indemnity hereunder shall include, but is not limited to, claims relating to patent, copyright or trademark infringement, and the like, arising out of the goods and services provided by successful bidder.
28. Successful bidder shall warrant that all items/services shall conform with the specifications and/or all warranties provided under the Uniform Commercial Code and be free from all defects in material, workmanship and the like. Items supplied under a contract pursuant to this Request for Bids shall be subject to County's approval. Items found to be defective or not meeting specifications shall be replaced by successful bidder within two business days at no expense to County. Items not picked up within one (1) week after notification shall be deemed a donation to County and may be used or disposed of at County's discretion and without waiver of any other rights of County as to the item's nonconformity.
29. This document and any disputes arising hereunder shall be governed and construed according to the laws of the State of Texas, and will be performable exclusively in Hidalgo County, Texas.
30. The successful bidder shall not assign, sell, transfer or convey its rights under any awarded contract, in whole or in part, without the prior written consent of County.

Bid
for
HIDALGO COUNTY
PRECINCT No. 2
“PURCHASE OF BOX CULVERTS FOR MINNESOTA DRAIN PROJECT”

BID NO.: 2012-196-00-00-CGA

To: Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department
2812 S. Business Hwy 281-New Administration Bldg.
Edinburg, Texas 78539

In accordance with the Specifications, and subject to all laws and regulations of the United States and state and local laws, the undersigned bidder proposes and commits to furnish all labor, equipment, material, software and services as set forth in the documents hereinbefore mentioned. The undersigned bidder further agrees, upon acceptance of its bid, to execute a contract and/or Purchase Order issued by Hidalgo County for performing and completing the work described in the Specifications within the time stated and for the prices proposed in the documents attached hereto and made a part hereof.

Bidder acknowledges receipt of all of the pages of the documents referenced in the Invitation to Bid Checklist presented in connection with this procurement. Bidder understands that Hidalgo County reserves the right to reject any or all bids and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best bid.

Bidder agrees that this bid shall be good and may not be withdrawn for a period of ninety (90) calendar days after the scheduled closing time for receiving bids, as contained in the Specifications.

Respectfully submitted,

Bidder: _____
Address: _____
By: _____
Printed Name: _____
Title: _____

EXHIBIT "A"

SPECIFICATIONS/REQUIREMENTS

**HIDALGO COUNTY
REQUEST FOR BIDS**

**"PURCHASE OF CONCRETE BOX CULVERTS"
RFB No. 2012-196-00-00-CGA**

(NIGP Codes: Culverts, Concrete-201-28)

EXHIBIT "A"

HIDALGO COUNTY "Purchase of Concrete Box Culverts"

BID NO: 2012-196-00-00-CGA

SPECIFICATIONS/REQUIREMENTS

OVERVIEW:

Hidalgo County Precinct No. 2 is requesting sealed bids for the purchase of concrete box culverts for the Minnesota Drain Project including, but not limited to, the following:

1. Concrete Box Culverts will be supplied and delivered from your plant to project location within Hidalgo County as requested by Precinct;
2. Delivery hours will be arranged with Precinct/requestor when purchasing Concrete Box Culverts;
3. Hidalgo County reserves the right to award to multiple vendors if the County determines it is in its best interest to do so.
4. HIDALGO COUNTY reserves the right to reject any or all bids submitted, if it is in the best interest to do so.
5. Insurance (requirements) certificates must be submitted to Hidalgo County Purchasing Department for approval prior to any services being performed which is applicable to the awarded bidder in accordance to Exhibit "C" attached.
6. The bidder(s) awarded the contract cannot engage the services of a subcontractor without prior written consent of Hidalgo County for retention of a subcontractor to perform services hereunder. The successful bidder(s) must present evidence that the proposed subcontractor possesses all the necessary licenses and permits to perform the services and that the subcontractor has obtained the required insurance coverages as outlined in Exhibit "C".
7. Hidalgo County may utilize State Awarded Contracts when it is in the County's best interest to do so.
8. Vendor(s) agrees that to the extent an item is unavailable from Vendor(s) own inventory, vendor(s) will be responsible for locating an alternative supplier and for providing the product to County for the bid price.

Market Volatility and Unit Price Adjustments:

Hidalgo County recognizes that during periods of national crisis and unstable economic conditions, unforeseen price increases might affect costs for goods and services contracted on an annual basis. The following procedure may be employed to mediate price volatility:

1. **Requesting Price Adjustment:** Upon written request of the Vendor to the County Purchasing Agent, the County may review evidence of prevailing industry-wide market conditions that warrant an adjustment in bid prices contained in the contract.
 - A Vendor must tie any price change clause to an industry-wide or otherwise nationally recognized index, or some other form of verifiable document. Such written request must be accompanied by a certified copy of the supplier's advisory or notification to the vendor of the price changes.
 - The Vendor must put the Purchasing Agent on the mailing lists for such publications so that the Purchasing Agent can monitor said changes. Such membership shall be at no cost to the County.
 - The County Purchasing Agent retains the right to determine whether or not such proposed price changes are in the best interest of the County.
 - No price escalation will be authorized in excess of the amount of the increase referred to in the supplier's notice.
 - The County may only grant a price increase if the evidence presented is deemed reliable. Should the County allow a price increase, the approved price change shall be honored for all orders received by the vendor or contractor after the effective date of such price change. Approved price changes are not applicable to orders already issued and in process at time of price change.
2. **Price Reduction:** Vendor shall notify the County at the time when the Vendor's costs for items and/or supplies reduce due to stabilization in the market at which time prices for items on this contract shall be reduced accordingly. Failure by the Vendor to notify the County of a decrease in costs for items and/or supplies for which the Vendor was granted a price adjustment, may result in immediate termination of this contract and the County shall not be obligated to pay the Vendor the difference between the contract price and the price adjustment.
3. **Timeframe for Adjusted Price Increases:** Price increases are only valid for the quarter in which they are requested and approved. Prices shall return to the original contract price at the beginning of the following quarter unless a Vendor notifies the County in writing within ten (10) days of expiration of the quarter in which the price increase is in effect, that it desires to have the price increase continue or that the Vendor is requesting a different price increase for the following quarter. Such request must be supplemented with sufficient justification to demonstrate that the price increase remains necessary. The County Purchasing Department shall have sole discretion whether to grant the price increase

extension. The County too, shall have discretion to unilaterally reduce, eliminate or extend a price adjustment to the Vendor at any time upon written notice from the County to the Vendor demonstrating justification for such reduction, elimination or extension of the price adjustment.

4. **Allowable Review Periods:** Price adjustment reviews may only be requested by the Vendor on a quarterly basis. However, the County may at its own discretion, conduct temporary price adjustment reviews at any time. The County Purchasing Agent and/or the County Auditor reserve the right to audit and/or examine any pertinent books, documents, papers, records or invoices relating directly to the contract transaction in question after reasonable notice and during normal business hours.
5. **Dollar Limit to Price Changes:** The total increase in contract price shall not exceed twenty-five percent (25%) of the original contract price during the contract term.

Additional Requirements and/ or Scope of Services:

- Refer to Attachment A-1-as referenced by project engineer.

ADDITIONAL INFORMATION:

All costs and expenses associated with the preparation and submission of bids shall be the responsibility of the bidder and no reimbursements for such charges or expenses shall be passed on to Hidalgo County.

Hidalgo County is requesting that any and all questions, inquires and clarifications regarding quotes, bids, proposals or statements of qualifications be addressed to Martha L. Salazar, CPPB, Purchasing Agent, 2812 South Business Hwy. 281, Edinburg, Tx 78539

ALL WRITTEN INQUIRIES WILL BE ACCEPTED VIA FACSIMILE (956) 292-7612 OR VIA E-MAIL: cris.villarreal@co.hidalgo.tx.us NO LATER THAN Monday, _____, 2012 by 5:00 P.M. Responses to said inquiries will be sent to all applicants via facsimile or via email by no later than Friday, _____, 2012 by 5:00 p.m.

Attachment A-1

ITEM 462

CONCRETE BOX CULVERTS AND SEWERS (MODIFIED)

462.1. Description. This Item shall govern for furnishing concrete box culverts in accordance with the details on the plans and this Item. Unless otherwise shown on the plans, the Contractor shall have the option of furnishing cast-in-place, precast (formed) or precast (machine-made) box culverts or sewers.

462.2. Materials. All materials shall conform to the pertinent requirements of the following 2004 Texas Standard Specifications items:

Item 420, "Concrete Structures"
Item 421, "Portland Cement Concrete"
Item 440, "Reinforcing Steel"
Item 464, "Reinforced Concrete Pipe"

Concrete for precast (machine-made) concrete boxes shall conform to ASTM C789 or C850.

When precast (machine-made) boxes are furnished and portland cement is partially replaced, blended or otherwise modified by a pozzolan, the pozzolan shall be fly ash conforming to the TxDOT Departmental Materials Specification D-9-8900, "Fly Ash". Copies of Departmental Materials Specifications are available from the Texas Department of Transportation, Division of Materials and Tests, 125 East 11th Street, Austin, Texas 78701-2483.

462.3. Types

Cast-in-place concrete boxes shall conform to the details shown on the plans and to the requirements of Item 420, "Concrete Structures".

Precast (formed) concrete boxes shall conform to the details shown on the plans and the requirements of Item 424, "Precast Concrete Structures (Fabrication)".

Precast (machine-made) concrete boxes shall conform to the requirements of ASTM C789 or C850, whichever is applicable.

462.4. Fabrication.

(1) General. All fabrication of concrete boxes including forming, casting and curing shall conform to the following requirements:

(a) Cast-in-place concrete boxes shall be produced in accordance with Item 420, "Concrete Structures".

(b) Precast (formed) concrete boxes shall be produced in accordance with Item 424, "Precast Concrete Structures (Fabrication)".

(c) Precast (machine-made) concrete boxes shall be produced by a process which will provide for uniform placement of the concrete in the forms and compaction by mechanical devices which will assure dense concrete. Concrete shall be mixed in a central batch plant or other approved batching facility from which the quality and uniformity of the concrete can be assured. Ready-mix concrete will not be acceptable for use in precast (machine-made) concrete boxes. Curing shall be in accordance with ASTM C789 or C850, whichever is applicable.

(2) Testing. Test specimens for testing of cast-in-place concrete boxes sections shall be in accordance with Item 421, "Portland Cement Concrete". Test specimens for precast (formed) concrete box sections shall be in accordance with TxDOT Test Method Tex 704-I. Test specimens for precast (machine-made) shall be test cylinders made at the same time and in the same manner as the box sections they represent.

For precast concrete boxes (machine-made), a minimum of four (4) test cylinders shall be made for each day's production run of each size and class of box section. Test cylinders for machine-made concrete boxes shall be cured in the same manner and for the same time as the boxes they represent.

Equipment required for testing concrete boxes produced in a precasting plant shall be furnished by the producer.

(3) Lifting Holes. For precast concrete boxes, not more than four (4) lifting holes may be provided in each section to facilitate handling. Lifting holes may be cast, cut into the fresh concrete after form removal, or drilled. Lifting holes shall be so sized as to provide for adequate lifting devices based on the size and weight of the box sections but shall not be larger than three (3) inches in diameter. Spalled areas around the holes shall be repaired.

(4) Marking. Precast concrete boxes produced in a precasting plant shall bear the following markings:

- (a) The name or trademark of the producer.
- (b) The date of manufacture.
- (c) The box size and height of fill.
- (d) When lifting holes are not provided, one end of each box section shall be clearly marked on the inside and outside walls to indicate the top or bottom as it will be installed.
- (e) When required under "Fabricating Tolerances", matchmarks shall be used for proper installation. Markings shall be indented into the box section or may be painted thereon with waterproof paint.

(5) Fabricating Tolerances. Tolerances for precast sections of either type shall conform to the following:

The inside vertical and horizontal dimensions shall not vary from plan requirements by more than 1/2 inch.

The horizontal or vertical plane at each end of the box section shall not vary from perpendicular by more than 1/2 inch, measured on the inside faces of the section.

The sides of a section at each end shall not vary from being perpendicular to the top and bottom by more than 1/2 inch when measured diagonally between opposite interior corners of the end section.

The thickness of walls and slabs shall not be less than that shown on the plans, except that an occasional deficiency not greater than 1/4 inch will be acceptable. If proper jointing is not affected, thicknesses in excess of plan requirements are acceptable.

The straightness of the tongue and groove, at the mating surface shall not vary by more than 1/4 inch.

Deviations from the above tolerances will be acceptable if the sections can be fitted at the plant or job site and it is demonstrated that an acceptable joint can be made. For this condition an acceptable joint is:

When two sections are fitted together on a flat surface, in proper alignment and in the position the sections will be installed, the joint opening at any point shall not exceed one (1) inch. Sections fitted together at the plant and accepted in this manner shall be matchmarked for installation.

(6) Defects and Repair. Fine cracks on the surface of the member which do not extend to the plane of the nearest reinforcement will not be cause for rejection unless the cracks are numerous and extensive. Cracks which extend into the plane of the reinforcing steel shall be repaired in an approved manner.

Small damaged or honeycombed areas which are purely surface in nature shall be repaired to the satisfaction of the Engineer. Excessive damage, honeycomb or cracking will be subject to structural review. Repairs shall be sound, properly finished and cured in conformance with the pertinent specifications. When fine cracks on the surface indicate poor curing practices, further production of precast sections shall be discontinued until corrections are made and proper curing provided.

(7) Storage and Shipment. Precast sections shall be stored on level blocking in a manner acceptable to the Engineer. No load shall be placed upon the sections until design strength is reached and curing completed. Shipment of sections may be made when the design strength and curing requirements have been met.

462.5. Construction Methods. Section Omitted Intentionally.

462.6. Measurement. This Item will be measured by the linear foot. Such measurement will be made between the ends of the culvert or sewer along the flow line.

This is a plans quantity measurement Item and the quantity to be paid for will be that quantity shown in the proposal.

462.7. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Concrete Box Culvert" of the size and type specified. This price shall be full compensation for furnishing and transporting sections; for concrete, reinforcing steel and all materials, labor and equipment, tools and incidentals necessary to complete the work.

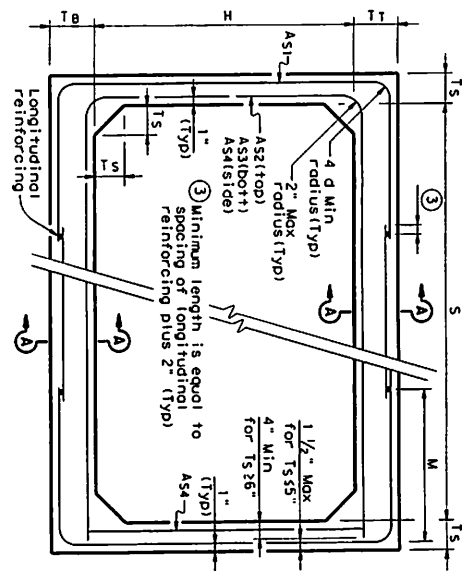
BOX DATA

SECTION DIMENSIONS				Fill Height (Min) (ft)	REINFORCING (in ² /ft ²)								Lift Weight (tons)
S (ft)	H (ft)	T ₁ (in)	T ₂ (in)		A _{S1}	A _{S2}	A _{S3}	A _{S4}	A _{S5}	A _{S6}	A _{S7}	A _{S8}	
7	4	8	8	<2	-	0.21	0.34	0.25	0.19	0.19	0.19	0.19	10.4
7	4	8	8	2<3	43	0.23	0.28	0.28	0.19	-	-	-	10.4
7	4	8	8	3-5	43	0.19	0.22	0.19	0.19	-	-	-	10.4
7	4	8	8	10	43	0.19	0.23	0.23	0.19	-	-	-	10.4
7	4	8	8	15	41	0.24	0.30	0.30	0.19	-	-	-	10.4
7	4	8	8	20	41	0.31	0.38	0.39	0.19	-	-	-	10.4
7	4	8	8	25	41	0.38	0.47	0.48	0.19	-	-	-	10.4
7	4	8	8	30	41	0.46	0.57	0.57	0.19	-	-	-	10.4
7	5	8	8	<2	-	0.19	0.36	0.27	0.19	0.19	0.19	0.19	11.2
7	5	8	8	2<3	47	0.21	0.31	0.31	0.19	-	-	-	11.2
7	5	8	8	3-5	43	0.19	0.24	0.21	0.19	-	-	-	11.2
7	5	8	8	10	43	0.19	0.25	0.26	0.19	-	-	-	11.2
7	5	8	8	15	41	0.21	0.32	0.33	0.19	-	-	-	11.2
7	5	8	8	20	41	0.27	0.41	0.42	0.19	-	-	-	11.2
7	5	8	8	25	41	0.33	0.51	0.52	0.19	-	-	-	11.2
7	5	8	8	30	41	0.40	0.61	0.62	0.19	-	-	-	11.2
7	6	8	8	<2	-	0.19	0.38	0.30	0.19	0.19	0.19	0.19	12.0
7	6	8	8	2<3	59	0.19	0.33	0.34	0.19	-	-	-	12.0
7	6	8	8	3-5	47	0.19	0.25	0.23	0.19	-	-	-	12.0
7	6	8	8	10	43	0.19	0.26	0.27	0.19	-	-	-	12.0
7	6	8	8	15	41	0.19	0.34	0.35	0.19	-	-	-	12.0
7	6	8	8	20	41	0.24	0.43	0.45	0.19	-	-	-	12.0
7	6	8	8	25	41	0.29	0.53	0.55	0.19	-	-	-	12.0
7	6	8	8	30	41	0.35	0.64	0.65	0.19	-	-	-	12.0
7	7	8	8	<2	-	0.19	0.40	0.33	0.19	0.19	0.19	0.19	12.8
7	7	8	8	2<3	59	0.19	0.36	0.37	0.19	-	-	-	12.8
7	7	8	8	3-5	59	0.19	0.27	0.25	0.19	-	-	-	12.8
7	7	8	8	10	47	0.19	0.27	0.29	0.19	-	-	-	12.8
7	7	8	8	15	43	0.19	0.35	0.37	0.19	-	-	-	12.8
7	7	8	8	20	43	0.22	0.44	0.46	0.19	-	-	-	12.8
7	7	8	8	25	43	0.27	0.54	0.57	0.19	-	-	-	12.8
7	7	8	8	30	41	0.32	0.65	0.67	0.19	-	-	-	12.8
7	3	8	8	<2	-	0.28	0.36	0.24	0.19	0.21	0.19	0.19	9.6
7	3	8	8	30	58	0.53	0.49	0.50	0.19	-	-	-	9.6

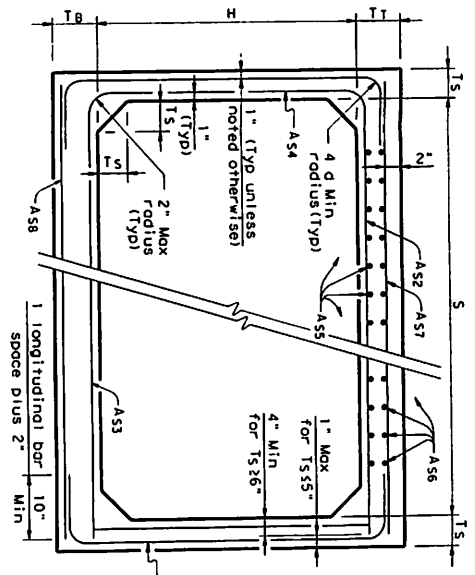
- ① For Box Length = 8'-0"
- ② A_{S1} thru A_{S4}, A_{S7} and A_{S8} are minimum required areas of reinforcement per linear foot of box length. A_{S5} and A_{S6} are minimum required areas of reinforcement per linear foot of box width.
- ③ These designs were created by TxDOT and are not shown in the ASTM Specifications.

DISCLAIMER:
 The use of this standard is governed by the Texas Engineering Practice Act. No warranty is made for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

LEVELS DISPLAYED	ACC:

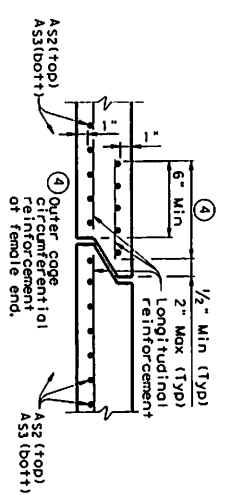


FILL HEIGHT 2 FT AND GREATER



FILL HEIGHT LESS THAN 2 FT

SECTION A-A
 (TOP AND BOTTOM SLAB JOINT REINFORCEMENT)



GENERAL NOTES:
 Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
 All concrete shall be Class "H" concrete with minimum compressive strength of 3000 psi.
 See SCP-101 standard sheet for miscellaneous details and notes not shown.
 In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Shop plans for alternate designs shall be submitted in accordance with Item "Precast Concrete Structures".

HL 93 LOADING

Texas Department of Transportation
 Bridge Division

SINGLE BOX CULVERTS
PRECAST
7'-0" SPAN

SCP-7

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