ARTS & EVENTS DISTRICT II

TRANSMITTAL OF ADDENDUM

****

INSTRUCTIONS:

Acknowledge reeeipt of Addenda in Proposal, on outer envelope of bid AND **WITH THE FORM BELOW FAXED TO (972) 450-7096** upon receipt.

****

Addendum Acknowledgment FAX to (972) 450-7096

I Acknowledge the receipt of Addendum No. 1

Town of: **ADDISON, TEXAS**

Project Name: **02-47 Addison Arts and Events District**

By Facsimile Transmission on this date: October 22, 2002

Contractor's Signaturc

Company Name

E-Mail Address:

"PLEASE SIGN & FAX THIS PAGE BACK TO TOWN OF ADDISON"
(as verification that you reeeived this Fax)
972-450-7096

Total Number of Pages: 49

DOCUMENT 00902

ADDENDUM NO. 2

DATE: October 22, 2002

TO: PROSPECTIVE BIDDERS

FROM: SASAKI ASSOCIATES, INC.
64 Pleasant Street
Watertown, Massachusetts 02172

PROJECT: ADDISON ARTS & EVENTS DISTRICT
Addison, Texas

This Addendum forms part of and modifies Bidding and Contract Documents dated September 30, 2002. Acknowledge receipt of this Addendum in writing in space provided on Document "PROPOSAL FORM".

This Addendum consists of twelve (12) pages plus attachments consisting of revised Project Manual Table of Contents; revised Proposal Form; list of Pre-Bid Conference attendees; revised Document 00015, List of Drawings; one newly issued Specifications Section 02782, Brick Pavers; one newly issued Specification Section 01500, Temporary Facilities and Controls; and two Appendix B attachments.

Where any original item called for in the Project Manual or indicated on the Drawings is supplemented hereby, the supplemental requirements shall be considered as added thereto.

Where any original item is amended, voided, or superseded hereby, the other provisions of such items not specifically amended, voided, or superseded shall remain in effect.

Prebid Conference

1. A pre-bid conference was held at the Addison Town Hall on Tuesday, October 8, 2002. A copy of the list of attendees is attached to this Addendum.

Table of Contents

1. The Table of Contents (pages TC-1 through 4) is revised. A copy of the Table of Contents, marked "Rev. October 21, 2002", is attached to and made part of this Addendum.

BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT

Advertisement for Bids

1. Paragraph 1., bid opening date has been changed from "October 22, 2002" to "November 5, 2002". Bid opening time of 2:00p.m. remains unchanged.

2. Paragraph 8., add the following sentence: "For information on electrical or mechanical work to be performed, call Keith Gassman at Campos Engineering (214) 696-6291.

Instructions to Bidders

1. Modify Paragraph S as follows: Increase the amount of Daily Value from $1,000.00 to $3,000.00. Increase the total incentive payment not to exceed amount from $100,000.00 to $180,000.00.

2. Modify Paragraph T as follows: (i) Increase the incentive payment Daily Value amount from $1,000.00 to $3,000.00; (ii) Amend the first sentence of the fifth paragraph to read as follows: "Should the Contractor fail to finally complete the Contract on or before expiration of the Allowable Contract Time, as adjusted in accordance with the provisions above, the Town shall deduct from the moneys due the Contractor an amount equal to one-third of the Daily Value as shown in Provision "S" (or $1,000.00) above for each calendar day final completion exceeds the Allowable Contract Time.".

Proposal Form

1. Proposal Form (Pages 1 through 4) is replaced. A copy of the new Proposal Form is attached to and made part of this Addendum.

Document 00510 - Agreement

1. Standard Form of Agreement Between Owner and Contractor - AIA Document A101/CMa (As Amended): Modify Paragraph 7.4.1 as follows: (i) Increase the incentive payment Daily Value amount from $1,000.00 to $3,000.00 (first sentence of the first paragraph); (ii) Amend the first sentence of the fifth paragraph to read as follows: "Should the Contractor fail to finally complete the Contract on or before expiration of the Allowable Contract Time, as adjusted, the Town shall deduct from the moneys due the Contractor an amount equal to one-third of the Daily Value as shown in Provision "S" of the Instructions to Bidders (such amount being $1,000.00) for each calendar day final completion exceeds the Allowable Contract Time.".

Document 00015 - List of Drawings

1. Document 00015, List of Drawings (pages 00015 -1 through 3) is revised. A copy of the revised Document, marked "Rev. October 21, 2002", is attached to and made part of this Addendum.

SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

Section 01330 - Submittals

1. Page 01330-7, subparagraph 1.12B.2., change the words "REVIEWED AS NOTED" to 'REVIEWED AS NOTED, PROCEED".

Section 01500 – Temporary Facilities and Controls

1. Section 01500, Temporary Facilities and Controls (pages 01500-1 through 9) is issued. A copy of this newly issued section, marked "Iss. October 21, 2002", is attached to and made part of this Addendum.

DIVISION 2 – SITE CONSTRUCTION

Section 02510 – Water System

1. Page 02510 - 6, delete subparagraph 2.07B.1., and replace with the following:

   "1. Double check valve backflow prevention assembly equal to Hersey Model No. 2 Double Check Valve Backflow Prevention Assembly."

2. Page 02510 - 7, Paragraph 2.10A., add the following after A.7:

   "Contractor shall also provide and install copper tracer wire in addition to, and in the same locations as, detector tape."

3. Page 02510 - 8, delete Paragraph 2.12C., and replace with the following:

   "C. Vault chambers shall be precast concrete with extension for aluminum hatchway. Hatchway shall be spring assisted with ¼ in. thick aluminum diamond plate cover and ¼ in. thick extruded aluminum frame. Hatch shall be furnished with 316 stainless steel snap lock and hinges."

4. Page 02510 - 8, Paragraph 2.13 A., add the following sentence: "All hydrants shall be provided with optional screw-on vacuum breaker."

Section 02782 – Brick Pavers

1. Section 02782, Brick Pavers (pages 02782-1 through 9) is issued. A copy of this newly issued section, marked "Iss. October 21, 2002", is attached to and made part of this Addendum.

Section 02815 – Fountains

1. Page 02815 – 7, paragraph 2.06A, last paragraph, revise rating for electrical control panel for fountain equipment to "NEMA 3R enclosure construction".

Section 02930 – Trees, Plants and Ground Covers

1. Page 02930-10, adds Paragraph 2.16. as follows:

"2.16 STEEL EDGING

A. Steel edging shall be Border Concepts Edging, "Border Guard", manufactured by Border Concepts, Inc., P.O. Box 471185, Charlotte, NC 28247 or approved equal. Steel edging shall be shop fabricated, 3/16 in. thick x 4 in. deep, primed and painted black. Edging shall be furnished in 16 ft. lengths.

   1. Steel edging shall have slotted holes for staking steel edging every 30 in. o.c.

   2. Steel stakes shall be 15 in. long, tapered.

   3. Provide manufacturer's end stake and splicer unit.

4. Provide manufacturer's standard touch-up paint for in field touch-up of scratched or marred areas."

2. Page 02930-13, add Paragraph 3.18. as follows:

"3.18 STEEL EDGING

A. Steel edging shall be installed at locations indicated on the Drawings. Where required, edging shall be cut square and accurately to required length.

1. Steel edging shall be securely staked in required position. Stakes shall be driven every 30 in. o.c. along length of edging.

2. Adjacent lengths of edging shall be spliced together with manufacturer's standard splicer unit.

3. Edging shall be set plumb and vertical at required line and grade. Straights sections shall not be wavy; curved sections shall be smooth and shall have no kinks or sharp bends."

DIVISION 9 - FINISHES

Section 09900 - Painting

1. Page 09900-2, Paragraph 1.06 is deleted.

DIVISION 13 – SPECIAL CONSTRUCTION

Section 13600 – Misting and Cooling System

1. Section 13600, Misting and Cooling System (pages 13600-1 through 5) is deleted in its entirety.

DIVISION 15 – MECHANICAL

Section 15060 – Piping and Accessories

1. Page 15060-2, Paragraph 2.1.C.1, delete all words after "wrought copper fittings".

Section 15440 – Plumbing Pumps

1. Page 15440-2, Paragraph 2.1.D, delete and replace with the following:

"D. Duplex pumps shall be operated by diaphragm actuated micro switches/level sensors designed for wet well applications. The pump manufacturer shall furnish magnetic starters, disconnect gasketed fiberglass switches, HOA selector switches and electric alternators all mounted in one gasketed fiberglass enclosure for wall mounting which meets NEMA 4X. Enclosure shall be provided with a single point to electrical connection. A separate high water alarm with a NEMA 4X enclosure shall be furnished with panel mounted alarm horn."

2. Page 15440-2, Paragraph 2.1.E, in line 4, insert "4X" in blank after "NEMA".

Section 15830 – Ventilation Fans and Equipment

1. Page 15830-2, Paragraph 2.3.A, delete and replace with the following:

   "A. Below grade ductwork shall be aluminized continuous welded seam helically corrugated steel pipe. The pipe shall be coated with a bituminous protective film coating equal to Cartex 485. Pipe shall be 16-gauge construction with 2-2/3 pitch x ½" deep corrugations. Pipe shall be fabricated in accordance with AASHTO Specification M36. Pipe shall be joined using coupling bands (with plugs and lugs) constructed of the same base metal and coating as the pipe. Between the corrugations, the band shall be flat to allow setting of two O-ring gaskets to be installed in the first corrugation of each pipe to be joined. O-rings shall conform to ASTM C361. The installed ductwork assembly shall be tested in accordance with SMACNA for Leakage Class 3. Pipe and coupling bands shall be Contech Construction Products or approved equal."

DIVISION 16 - ELECTRICAL

Section 16525 – Site Lighting

1. Page 16525-3, delete Paragraph 2.02H., and insert the following:

   "H. Garden Lights: shall be "Model PPL-2546/Brown Patina/35W t6MH/277V, manufactured by Teka Illumination, Templeton, CA 93465, or approved equal."

APPENDIX

Appendix B – Town of Addison Public Works Department General Construction Notes

1. Delete Drawing No. DDBP-AD regarding backflow preventer assembly.

2. Add Drawing Nos. FMC-AD8 and BP-AD (attached) for Town of Addison approved water meter with vault and backflow preventer with vault.

DRAWINGS

CIVIL

Drawing C0-0 – Sheet Index

1. Eliminate drawing numbers C7-15, L4-1 and L4-2.

Drawing C1-1 – Site Preparation/Demolition/Erosion Control Plan

1. Eliminate all haybales.

2. Extend silt fence along perimeter of Quorum Drive, Addison Circle Drive, and Addison Road.

Drawing C1-2 – Site Preparation/Demolition/Erosion Control Plan

1. Add note 16. "All salvaged items are to be delivered to the Town of Addison, Kellway Lift Station, 4245 Kellway Circle, Addison, Texas 75001".

2. Eliminate all haybales

3. Extend silt fence along perimeter of Quorum Drive, Addison Circle Drive and Addison Road.
4. Remove Pavilion building limit of work line.
5. Note existing building has been removed.
6. Note to remove cone for manhole to be abandoned.
7. Revise limit of work line, SE corner of project site.

Drawing C1-3 – Site Preparation/Demolition/Erosion Control Plan

1. Remove haybales from Legend.
2. Add notes regarding protection of storm drainage inlet structures.
3. Note cone to be removed for manhole to be abandoned.
4. Abandon additional manhole, cap and plug pipe on north side of it.
5. Extend limit of work to include area of water main extension to Broadway Street.

Drawing C2-1 – Materials Plan

1. Indicate paved areas to be constructed with 8" slab depth.
2. Add areas of reinforced earth.
3. Add revised paving symbols and symbol for 8" slab depth paving to Legend.
4. Revise Pergola section reference.
5. Changed symbols for brick and concrete paving.

Drawing C2-2 – Materials Plan

1. Indicate paved areas to be constructed with 8" slab depth.
2. Add areas of reinforced earth.
3. Revise limit of work at SE corner of project site, eliminate reconstruction of roadway and sidewalk pavement in this area.
4. Revise detail title for paving at Pavilion.
5. Changed symbols for brick and concrete paving.

Drawing C2-3 – Layout Plan

1. Add areas of reinforced earth with dimensions.
2. Add drawing reference for layout coordinates to corners of electrical room.

Drawing C2-4 – Layout Plan

1. Add areas of reinforced earth with dimensions.
2. Revise limit of work SE corner of project site, add detail reference.

Drawing C3-1 – Grading & Drainage Plan

1. Add invert elevation abbreviation to Legend.
2. Add 8" cleanout ports to Retention Fields 1 and 2.
3. Revise 6" cleanout ports to 10" and relocate to pipe ends for Retention Fields 1 and 2.
4. Add underdrain around electrical room, extend to storm drain line and indicate invert elevations.
5. Revise invert elevation of tree pit underdrain on Addison Circle Drive.
6. Revise invert elevation out, DMH 4A.
7. At DMH 4, revise invert elevation 628.86 reference to DMH 4A.
8. Add note and indication of electrical equipment mounted on fence panel.

Drawing C3-2 – Grading & Drainage Plan

1. Revise 36" RCP storm sewer from DMH 11 to connect to existing 60" RCP at SE corner of project site. Add note to protect existing curb and roadway for this work. Revise limit of work in this area.
2. Revise curb inlets 9 and 10 to 6' Rec. Inlet.
3. Revise R16 Inlet invert elevations.
4. Revise DMH 11 invert elevations for 24" RCP and invert out.
5. Revise R15 Inlet invert elevations.
6. Revise pipe between R13 and R15 inlets to 21".
7. Revise R14 Inlet invert elevations.
8. Revise R13 Inlet invert elevation out.
9. Add underdrain around fountain vault, extend to SMH 7 and add invert elevations.
10. Revise invert elevation at underdrain adjacent to Addison Circle Drive Sidewalk.
11. Revise 6" cleanout ports to 10" and relocate to pipe ends for Retention Field 3.
12. Add 8" cleanout ports to Retention Field 3.
13. Revise length of RCP from DMH 11 to connection at 60" storm sewer.
14. Revise slope of 30' length of storm drain pipe from DMH 11 to east.

15. Revise invert elevation of Wye connection immediately north of DMH 11.
16. Revise slope of 86' length of storm drain pipe from R12 to R14.
17. Revise invert elevations of underdrain near southwest corner of Pavilion building.
18. Add invert elevation abbreviation to Legend.

Drawing C4-1 – Utilities Plan

1. Revise water system main size and layout within project site.
2. Add water meter with vault and backflow preventer with vault on 8" water main.
3. Add curb valve boxes for drinking fountains.
4. Delete connection of 8" water main to existing main on Addison Circle Drive.
5. Revise yard hydrant connections to 8" water main.
6. Add/revise coordinates for water system layout.

Drawing C4-2 – Utilities Plan

1. Revise water system main size and layout within project site, including gate valves at tee connections.
2. Add water meter with vault and backflow preventer with vault on 8" water main.
3. Revise yard hydrant connections to 8" water main.
4. Add/revise coordinates for water system layout.
5. Revise slope and invert elevations of 6" sanitary sewer line.
6. Revise pipe routing for one yard hydrant connection to 8" water main.
7. Add note regarding 12" water main connection to existing 24" main on Quorum Drive.
8. Revise storm drainage outfall connection at SE corner of project site, including limit of work.
9. Add underdrain for fountain vault with connection to SMH 7.
10. Revise slope for 40' sewer pipe from SMH 7 to existing SMH.
11. Revise invert elevation at existing SMH, NE corner of project site.
12. Revise invert elevations and add invert elevation at SMH 7 for underdrain connection.
13. Revise slope on 155' of sewer pipe from SMH 6 to SMH 7.
14. Revise invert elevation at SMH 6.

15. Revise invert elevation at SMH 5.

16. Revise sewer pipe stub invert elevation at Pavilion building.

17. Revise slope of 270' sewer pipe from SMH 4 to SMH 5.

Drawing C4-3 – Utilities Plan

1. Extend 8" water line south to connection with existing 8" main on Broadway Street. Add gate valves.

2. Add fire hydrant on 8" water line extension.

3. Add note to repair asphalt pavement as required for water line construction.

Drawing C5-1 – Materials Plan Detail

1. Add expansion joint locations to pavement around Pavilion.

2. Revise detail reference for paving at Pavilion.

Drawing C5-4 – Paving and Layout Plan Detail

1. Add note regarding new brick paving at NE corner of Festival Way/Quorum Drive intersection.

Drawing C6-1 – Pergola Plan and Details

1. Detail 1: Add conduits to elevation and note regarding location of lighting and outlet conduits in columns.

2. Detail 5: Add note regarding vine planting pocket locations and dimensions, revise length of eyebolt.

3. Add note regarding elevation of existing limestone vs. bottom of Pergola column footings.

Drawing C6-2 – Pergola Elevations

1. Eliminate Note 2 (misting system eliminated).

Drawing C7-1 – Site Details

1. Detail 1: Add notes regarding contrasting color for handicap ramp and compliance with current accessibility standards. Correct detail reference for integral curb and gutter.

2. Detail 3: Revise reinforcing spacing to 18" o.c.

3. Detail 4: Revise reinforcing spacing to 18" o.c.

4. Detail 6: Revise reinforcing spacing to 18" o.c.

5. Detail 8: Revise reinforcing spacing to 18" o.c.

6. Detail 14: Revise curb reinforcing to include "L" bar and indicate bar sizes and spacing.

Drawing C7-2 – Site Details

1. Detail 1: Add crosspitch note, add expansion joint at curb, add dowels at curb.
2. Detail 2: Add crosspitch note.
3. Detail 6: Revise painted crosswalk to white thermoplastic lines.
4. Detail 9: Revise note regarding drywell dimensions and material.
5. Detail 13: Revise paving to full depth slab with doweled expansion joints.

Drawing C7-10 – Site Details – Fountain

1. Detail 6: Add note regarding extent of waterproofing.

Drawing C7-11 – Site Details - Stairs

1. Detail 1: Revise paving at top of stair.

Drawing C7-13 – Site Details - Stairs

1. Detail 4: Revise paving at top of stair.
2. Detail 7: Revise paving at top of stair.

Drawing C7-14 – Site Details – Electrical Room

1. Detail 1: Add reinforcing to pavement slab, revise wall footing to coordinate with Detail 3 on Drawing S1-1, add detail references.
2. Detail 2: Add note about extent of waterproofing.
3. Detail 4: Revise footing for wall between loading dock and door, revise detail reference.
4. Detail 5: Add details on Drawing C7-15, which has been eliminated.

Drawing C8-1 – Festival Way Profiles

1. Add stationing to plan view.
2. Revise profile to reflect changes to storm sewer outfall at SE corner of project site.
3. Revise extension of 12" water main and connection to existing 24" main on Quorum Drive.

Drawing C8-2 – Sewer Profile

1. Revise pipe slope and invert elevations.

Drawing C8-3 – Site Details – Roadway Paving

1. Detail 1: Eliminate hot poured rubber as joint sealing compound.
2. Detail 2: Revise detail from construction joint to undercut header section.

3. Eliminate hot poured rubber as joint sealing compound for sawed dummy joint.

Drawing C8-4 – Site Details - Water

1. Detail 4: Revise dimension of concrete pads at cover and pipe bedding, including notes.

2. Detail 5: Revise dimension from hydrant to valve box, height of hydrant above grade, and revise notes.

3. Add Detail 6 for typical drinking fountain supply pipe connection.

4. Delete typical hydrant layout plan diagrams.

Drawing C8-5 – Site Details – Water

1. Detail 1: Revised yard hydrant style and setting detail.

Drawing C8-7 – Site Details – Drainage

1. Detail 1: Add filter fabric

2. Revise Note #10 to eliminate polyethylene pipe.

Drawing C8-8 – Site Details – Drainage

1. Detail 2: Revise 6" cleanouts to 10" and revise dimension to end of pipe, add 8" cleanouts and dimension to end of pipe.

2. Detail 3: Revise section to indicate cleanout changes in Detail 2.

Drawing C8-9 – Layout Coordinate System Reference Plan

1. Add coordinate references for revisions described in this Addendum and shown on the Addendum Drawings.

STRUCTURAL

Drawing S1-1 - Structural Details

1. Detail 4: Add waterstops at footing, revise slopes to sump area, add note regarding lifting lugs, add reinforcing to Section A-A.

Drawing S1-3 - Structural Details

1. Detail 2: Add callouts to detail, indicate piers to extend to limestone.

LANDSCAPE

Drawing L1-1 – Planting Plan

1. Add steel edging to plant beds adjacent to Addison Circle Drive, east of the Pergola.

2. Add electrical equipment indication in same area, with detail reference.

3. Add note for steel edging around all vine planting pockets and add detail reference.

4. Add steel edging to groundcover planting bed southwest side of Main Stage/electrical room.

Drawing L1-2 – Planting Plan

1. Add steel edging to plant beds at garden spaces along Addison Circle Drive and at ground cover bed SE corner of The Bowl area.

2. Revise limit of work SE corner of project site and revise locations of loam and seed for disturbed areas.

Drawing L2-1 – Planting Details and Plant List

1. Plant List: Revise sizes for some plants.

2. Detail 7: Revise plant bed section to show low point adjacent to pavement edge.

Drawing L3-1 – Irrigation Plan

1. Add irrigation bubbler heads for street trees in grates on Addison Circle Drive. These bubbler heads were previously shown on Drawing L4-1, which has been eliminated.

2. Revise zone valve sequence.

Drawing L3-2 – Irrigation Plan

1. Add irrigation bubbler heads for street trees in grates on Addison Circle Drive. These bubbler heads were previously shown on Drawing L4-1, which has been eliminated.

2. Revise zone valve sequence.

3. Add irrigation spray heads to plant bed at NE corner of site, adjacent to handicap ramp and Pavilion building.

4. Revise schematic layout of irrigation equipment in fountain vault.

5. Note 48 station controller.

Drawing L4-1 – Irrigation Bubblers

1. Drawing has been eliminated – all tree bubblers for trees other than street trees have been deleted.

Drawing L4-2 – Irrigation Bubblers

1. Drawing has been eliminated – all tree bubblers for trees other than street trees have been deleted.

Drawing L5-1 – Irrigation Details and Legend

1. Delete bubbler head detail for trees in lawn/plant areas.

ELECTRICAL

Drawing E1-1 – Electrical Plan-West

1. Clarify note by symbol #32, which includes adding specification for the receptacles to be provided at the Kiosk locations.

Drawing E1-2 – Electrical Plan –East

1. Clarify Note by symbol #12 which includes adding specification for the receptacles to be provided at the Kiosk locations.

Drawing E2-2 – Electrical Large Scale Plans

1. Detail 07: Add note that all conduits serving light pole bases and Pergola columns are to be routed concealed.

MECHANICAL

Drawing M1-1 – Mechanical Plan

1. Detail 01: Add specification for exhaust fan EF-1 as part of note by symbol #1.

End of 00902

DOCUMENT 00010

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(AIA Document A101/CMa)

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(AIA Document A311/CM)
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Not Used.

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APPENDICES

Appendix A	Geotechnical Report
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Appendix C	Town of Addison, Public Works Department – Referenced Specifications

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DOCUMENT 00015

LIST OF DRAWINGS

PART 1 GENERAL

1.01 DRAWING LIST

A. List of Drawings for Addison Arts & Events District, Addison, Texas, SA 14516.00, Date of Issue 09/30/02, is as follows:

Drawing No.	Date of Issue	Rev. No.	Rev. Date	Drawing Title
GENERAL				
-		-	-	Cover Sheet
CO-0	09/30/02	1	10/21/02	Sheet Index
CO-1	09/30/02	-	-	Existing Condition Plan
C0-2	09/30/02	-	-	Existing Contours
CIVIL				
C1-1	09/30/02	1	10/21/02	Site Preparation/Demolition/ Erosion Control Plan
C1-2	09/30/02	1	10/21/02	Site Preparation/Demolition/ Erosion Control Plan
C1-3	09/30/02	1	10/21/02	Site Preparation/Demolition/ Erosion Control Plan
C2-1	09/30/02	1	10/21/02	Materials Plan
C2-2	09/30/02	1	10/21/02	Materials Plan
C2-3	09/30/02	1	10/21/02	Layout Plan
C2-4	09/30/02	1	10/21/02	Layout Plan
C3-1	09/30/02	1	10/21/02	Grading & Drainage Plan
C3-2	09/30/02	1	10/21/02	Grading & Drainage Plan
C4-1	09/30/02	1	10/21/02	Utilities Plan
C4-2	09/30/02	1	10/21/02	Utilities Plan
C4-3	09/30/02	1	10/21/02	Utilities Plan
C5-1	09/30/02	1	10/21/02	Materials Plan Detail
C5-2	09/30/02	-	-	Materials Plan Detail
C5-3	09/30/02	-	-	Paving and Layout Plan Detail
C5-4	09/30/02	1	10/21/02	Paving and Layout Plan Detail
C5-5	09/30/02	-	-	Grading Plan Detail
C5-6	09/30/02	-	-	Grading Plan Detail

Drawing	Date of	Rev.	Rev.	Drawing

No.	Issue	No.	Date	Title
C6-1	09/30/02	1	10/21/02	Pergola Plan & Details
C6-2	09/30/02	1	10/21/02	Pergola Elevations
C7-1	09/30/02	1	10/21/02	Site Details
C7-2	09/30/02	1	10/21/02	Site Details
C7-3	09/30/02	-	-	Site Details - Lighting
C7-4	09/30/02	-	-	Site Details – Cotton Belt Route
C7-5	09/30/02	-	-	Site Details - Fences
C7-6	09/30/02	-	-	Site Details – Upper Channel & Railing
C7-7	09/30/02	-	-	Site Details – Fountain Wall
C7-8	09/30/02	-	-	Site Details – Plaza Fountain Steps
C7-9	09/30/02	-	-	Site Details – Fountain Pylon
C7-10	09/30/02	1	10/21/02	Site Details - Fountain
C7-11	09/30/02	1	10/21/02	Site Details - Stairs
C7-12	09/30/02	-	-	Site Details - Stairs
C7-13	09/30/02	1	10/21/02	Site Details - Stairs
C7-14	09/30/02	1	10/21/02	Site Details – Electrical Room
C7-15	09/30/02	1	10/21/02	Deleted
C8-1	09/30/02	1	10/21/02	Festival Way Profiles
C8-2	09/30/02	1	10/21/02	Sewer Profile
C8-3	09/30/02	1	10/21/02	Site Details - Roadway Paving
C8-4	09/30/02	1	10/21/02	Site Details - Water
C8-5	09/30/02	1	10/21/02	Site Details – Water
C8-6	09/30/02	-	-	Site Details – Sanitary Sewer
C8-7	09/30/02	1	10/21/02	Site Details – Drainage
C8-8	09/30/02	1	10/21/02	Site Details – Drainage
C8-9	09/30/02	1	10/21/02	Layout Coordinate System Reference
STRUCTURAL				
S1-1	09/30/02	1	10/21/02	Structural Details
S1-2	09/30/02	-	-	Structural Details
S1-3	09/30/02	1	10/21/02	Structural Details
S1-4	09/30/02	-	- Details	Electrical Room Structural
LANDSCAPE				
L1-1	09/30/02	1	10/21/02	Planting Plan
L1-2	09/30/02	1	10/21/02	Planting Plan
L2-1	09/30/02	1	10/21/02	Planting Details & Plant List
L3-1	09/30/02	1	10/21/02	Irrigation Plan
L3-2	09/30/02	1	10/21/02	Irrigation Plan

Drawing No.	Date of Issue	Rev. No.	Rev. Date	Drawing Title
L4-1	09/30/02	1	10/21/02	Deleted
L4-2	09/30/02	1	10/21/02	Deleted
L5-1	09/30/02	1	10/21/02	Irrigation Details & Legend
ELECTRICAL				
E0-0	09/30/02	-	-	Electrical Abbreviations & Symbol Legend
E1-1	09/30/02	1	10/21/02	Electrical Plan – West
E1-2	09/30/02	1	10/21/02	Electrical Plan – East
E2-1	09/30/02	1	10/21/02	Single Line Diagrams and Details
E2-2	09/30/02	-	-	Electrical Large Scale Plans
E3-1	09/30/02	-	-	Electrical Panelboard Schedules
MECHANICAL				
M1-1	09/30/02	1	10/21/02	Mechanical Plan
FOUNTAIN				
F0-0	09/30/02	-	-	Fountain Legend & Abbreviations
F1-1	09/30/02	-	-	Water Garden Discharge, Fill & Filter Return Plan
F1-2	09/30/02	-	-	Water Garden Suction & Drain Plan
F1-3	09/30/02	-	-	Water Garden Electrical Plan
F1-4	09/30/02	-	-	Water Garden Fountain Details
F2-1	09/30/02	-	-	Plaza Fountain Discharge, Fill & Filter Return Plan
F2-2	09/30/02	-	-	Plaza Fountain Drainage and Air Vent Plan
F2-3	09/30/02	-	-	Plaza Fountain Pump Suctions Plan
F2-4	09/30/02	-	-	Plaza Fountain Electrical Plan
F2-5	09/30/02	-	-	Plaza Fountain Fountain Details
FE1-1	09/30/02	-	-	Water Garden & Plaza Fountain Electrical Diagram

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF DOCUMENT

PROPOSAL FORM

PROPOSAL OF _____
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

_____ $_____

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

_____ $_____

TOTAL BID (Standard Bid (A) + Time Bid (B))

_____ $_____

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within _____calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned _____%

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned _____%

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number _____ dated _____

Addendum Number _____ dated _____

Addendum Number _____ dated _____

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Legal Name of Corporation

State of Incorporation

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Seal of Corporation

Witness

Name of Witness – (typed or printed)

Street Address

City, State, Zip Code

Signature

Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

SECTION 01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.00 RELATED DOCUMENTS

A. The BIDDING REQUIREMENTS, CONTRACTING REQUIREMENTS and CONDITIONS OF THE CONTRACT, and applicable parts of DIVISION 1 - GENERAL REQUIREMENTS, as listed in the Table of Contents, shall be included in and made a part of this Section.

1.01 SUMMARY

A. This Section specifies construction facilities and temporary controls, including, but not limiting to:

1. Temporary utilities.
2. Temporary construction and support facilities.
3. Temporary signage.
4. Security and protection facilities.

B. Comply with requirements established by the Construction Manager and Owner.

1.02 RELATED REQUIREMENTS

A. Examine Contract Documents for requirements that affect the Work of this Section. Other Specification Sections that directly relate to Work of this Section include, but are not limited to:

1. Document 00510, AGREEMENT.
2. Document 00700, GENERAL CONDITIONS and Document 00810, SUPPLEMENTARY GENERAL CONDITIONS; Conditions of the Contract.
3. Section 01010, SUMMARY OF WORK; Description of work and work of separate contracts.
4. Section 01550, VEHICULAR ACCESS AND PARKING.
5. Section 01555, TRAFFIC CONTROL.

1.03 REFERENCES

A. Comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirements shall govern.

1. American National Standards Institute (ANSI):

A10	Safety Requirements for Construction and Demolition

2. National Electrical Contractors Association (NECA):

NJG-6	Temporary Job Utilities and Services

3. National Fire Protection Association (NFPA):

70	National Electrical Code
241	Building Construction and Demolition Operations

4. U.S. Department of Commerce (USDC):

PS 1	Plywood
PS 20	American Softwood Lumber Standard

1.04 SUBMITTALS

A. Schedule: Submit a schedule indicating implementation and termination of each temporary utility within fifteen days of date established for Commencement of the Work.

1.05 QUALITY ASSURANCE

A. Comply with requirements of authorities having jurisdiction, codes, utility companies, OSHA, and industry standards including, but not limited to:

1. NFPA 241.
2. NFPA 70.
3. ANSI A10.
4. NECA NJG-6.

B. Electric Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with NFPA 70.

C. Inspections: Arrange for authorities having jurisdiction to inspect and test temporary utilities prior to use. Obtain required certifications and permits.

1.06 PROJECT CONDITIONS

A. Temporary Utilities: At earliest feasible time, when acceptable to Owner, change from use of temporary service to use of permanent service.

B. Conditions of Use: Maintain temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload temporary facilities. Do not allow hazardous, dangerous, or unsanitary conditions to develop on site.

C. Comply with all requirements of local authorities having jurisdiction and the requirements established by the Owner and Construction Manager.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

A. Materials may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

B. Lumber and Plywood: Provide materials that conform to requirements as follows:

1. Signs and Directory Boards: Provide exterior grade, Medium Density Overlay (MDO) plywood, conforming to USDC PS1, of size and thickness indicated.

2. Fences, Vision Barriers, and Safety Barriers: Provide exterior grade, C-D veneered plywood.

2.02 TEMPORARY UTILITIES

A. Scope: Temporary utility work includes, but is not limited to:

1. Water service and distribution.

2. Electric power and light.

3. Telephone service.

B. Temporary Water Service and Distribution: Make arrangements with water service company. Provide water for construction purposes, including water for drinking and fire protection. Pay costs for installation, maintenance, removal, and service charges for water used. Install branch piping with taps located so water is available through hoses throughout construction. Protect piping and fittings against freezing.

1. Provide water for construction purposes, including water for drinking and fire protection.

2. Pay costs for installation, maintenance, removal, and service charges for water used. Install branch piping with taps located so water is available through hoses throughout construction.

3. Protect piping and fittings against freezing.

4. The Owner will pay costs for water used. All other costs to provide temporary water at site, including installation, maintenance, and service charges shall be borne by the Contractor. Where water is being wasted, in the opinion of the Owner, the Contractor will be required to provide and pay for the installation of a temporary water meter and pay all water costs thereafter.

C. Temporary Electric Power and Light: Make arrangements with the local electric company Provide electric service required for power and lighting. Pay costs for service and for power used.

1. Provide circuit and branch wiring, with area distribution boxes located so power and lighting is available throughout construction by use of construction-type power cords.

2. Provide adequate artificial lighting where natural light is not adequate for work, and for areas accessible to public.

3. Work shall meet applicable requirements of NFPA 70.

D. Temporary Telephone Service: Arrange with local telephone company to provide direct line telephone service at construction site for personnel and employees and for Architect and Owner's representative. Pay costs for installation, maintenance, and removal, and pay service charges for local calls. Toll charges shall be paid by party who places call. Service required shall include:

1. One direct line instrument in Field Office.

2. One direct line for facsimile (Fax) machine in field office.

3. One direct line instrument in Field Office of Project Representative for use by Project Representative and Architect's and consultants' on-site field personnel.

4. One direct line for facsimile (Fax) machine in Field Office of Project Representative for use by Project Representative and Architect's and consultants' on-site field personnel.

5. Other instruments at the option of the Contractor, or as required by regulations.

2.03 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES

A. Scope: Temporary construction and support facilities include, without limitation:

1. Temporary heat.

2. Field offices and storage sheds.

3. Sanitary facilities.

4. Temporary enclosures.

5. Construction aids.

7. Waste disposal services.

8. Water control.

9. Rodent and pest control.

10. Pollution and dust control.

B. Temporary Heat and Ventilation: Provide temporary heat and ventilation required to maintain adequate environmental conditions to facilitate progress of Work, to meet manufacturers' specified minimum installation conditions, and to protect materials and finishes from damage due to temperature and humidity.

1. Ventilate enclosed areas for curing of installed materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, and gases.

2. Portable heaters shall be standard approved units with controls.

3. Pay costs of installation, maintenance, operation, and removal, and fuel consumed.

C. Contractor's Field Offices and Sheds: Prior to installation of offices and sheds, consult with Architect and Owner on location, access, and related facilities. Provide field offices and sheds as follows:

1. Construction: Provide structurally sound, weathertight units, with floors raised above ground. At Contractor's option, portable or mobile buildings may be used. Mobile units, when used, shall be modified for office use.

2. Temperature and Moisture Transmission Resistance: Compatible with occupancy and storage requirements.

3. Contractor's Office and Facilities: Size units as required for general use and to provide space for project meetings. Provide dedicated space within trailer for Construction Manager/Architect.

4. Furnishings in Meeting Area: Provide conference table and chairs for at least twenty (20) people. Provide racks and files br Project Record Documents in, or adjacent to, the meeting area.

5. Other furnishings: Contractor's option.

6. Miscellaneous Items: Provide one 10 in. outdoor type thermometer.

7. Storage Sheds: Provide types and sizes required to meet requirements of various trades and to adequately store and handle products. Provide heating and ventilation necessary to comply with manufacturer's product data and with code requirements for products stored.

D. Project Meetings: Project meetings will be scheduled by the Construction Manager; location of meetings shall be as designated by the Construction Manager.

E. Sanitary Facilities: Portable sanitary facilities will be available on-site; coordinate with Construction Manager.

F. Temporary Enclosures: Provide temporary weathertight enclosures of exterior walls as Work progresses. Design and construct temporary enclosures to provide acceptable working conditions, to provide weather protection for materials, to allow effective temporary heating, and to prevent entry of unauthorized persons.

1. Provide temporary exterior doors with self-closing hardware and padlocks.

2. Design enclosures to be removable to allow handling of materials.

G. Construction Aids: Provide construction aids and equipment required by personnel to facilitate execution of the Work; scaffolds, staging, ladders, stairs, ramps, runways, platforms, railings, hoists, cranes, chutes, and other such facilities and equipment.

1. Refer to respective sections for particular requirements for each trade.

2. When permanent stair framing is in place, provide temporary treads, platforms, and railings, for use by construction personnel.

H. Waste Disposal: Maintain all areas under Contractor's control free of extraneous debris. Initiate and maintain a specific program to prevent accumulation of debris at construction site, storage and parking areas, or along access roads and haul routes. Coordinate with Construction Manager.

1. Provide containers for deposit of debris.

2. Prohibit overloading of trucks to prevent spillage on access and haul routes.

3. Provide periodic inspection of traffic areas to enforce requirements.

4. Schedule periodic collection and disposal of debris.

5. Provide additional collections and disposals of debris whenever the periodic schedule is inadequate to prevent accumulation.

I. Water Control: Provide methods to control surface water to prevent damage to Project, site, and adjoining properties. Control fill, grading, and ditching to direct surface drainage away from excavations, pits, tunnels, and other construction areas; and to direct drainage to proper runoff. Coordinate with Construction Manager.

1. Provide, operate, and maintain hydraulic equipment of adequate capacity to control surface and water.

2. Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to any portion of the site or to adjoining areas and properties.

3. Comply with the requirements specified in Section 01571, EROSION AND SEDIMENT CONTROL.

4. No discharge of contaminated water will be permitted until appropriate approvals and/or other means are established for proper collection and/or disposal of this water. If contaminated water is encountered, comply with the requirements regarding discharge of this material, including all coordination and cooperation required to accommodate this service. The Owner will employ a testing laboratory and associated services for testing of this material and subsequent collection and disposal if required by testing results.

J. Rodent and Pest Control: Provide rodent control as necessary to prevent infestation of construction and storage areas. Employ methods and use materials which will not adversely affect conditions at the site or on adjoining properties. Should rodentcides be considered necessary submit copies of proposed program to Owner and Architect. Use of rodentcide shall comply with manufacturer's published instructions and recommendations. Clearly indicate:

1. Area or areas to be treated.

2. Rodenticides to be used.

3. Manufacturer's printed instructions.

4. Pollution preventive measures to be employed.

K. Pollution Control: Provide methods, means, and facilities required to prevent contamination of soil, water, or atmosphere by the discharge of noxious substances from construction operations. Provide equipment and personnel, perform emergency measures required to contain any spillage and to remove contaminated soils or liquids. Coordinate with Construction Manager.

1. Excavate and legally dispose of any contaminated earth off-site, and replace with suitable compacted fill and topsoil.

2. Take special measures to prevent harmful substances from entering public waters.

3. Prevent disposal of wastes, effluents, chemicals, or other such substances adjacent to streams, or in sanitary or storm sewers.

4. Provide systems for control of atmospheric pollutants.

5. Prevent toxic concentrations of chemicals.

6. Prevent harmful dispersal of pollutants to atmosphere.

L. Dust Control: Provide positive methods and apply dust control materials to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into the atmosphere. Coordinate with Construction Manager.

2.04 TEMPORARY SIGNAGE

A. Scope: Temporary signage includes, but is not limited to:

1. Project identification signs.

2. Informational signs.

B. Project Identification Signs: Provide three project identification signs as specified herein in Bidding Requirements.

C. Informational Signs: Provide painted signs with painted lettering, or standard products. Erect at appropriate locations to provide required information.

1. Size of signs and lettering: as required by regulatory agencies, as directed by the Construction Manager, or as appropriate to usage.

2. Colors: as required by regulatory agencies, otherwise of uniform color throughout Project.

D. Sign Painter: Professional with minimum five years experience in type of work required.

E. Finishes, Painting: Adequate to resist weathering and fading for scheduled construction period.

F. Sign Structure and Framing: New or used, wood or metal, in sound condition structurally adequate to work and suitable for specified finish.

G. Sign Surfaces: As specified for project signs, herein.

H. Thickness: As required by standards to span framing members, to provide even, smooth surface without waves or buckles.

I. Rough Hardware: Galvanized steel or cadmium plated.

J. Paint: Exterior quality.

1. Colors for structure, framing, sign surfaces, and graphics: As selected by Construction Manager.

K. Coordinate with Construction Manager.

2.05 SECURITY AND PROTECTION FACILITIES

A. Scope: Security and protection facilities includes, but is not limited to:

1. Temporary fire protection.

2. Barricades, warning signs, lights.

3. Temporary flagmen and traffic control.

4. Temporary separation of access routes.

5. Temporary site control fence.

6. Security procedures.

B. Temporary Fire Protection: Provide and maintain suitable fire protection equipment and services. Establish procedures for fire protection for welding and other potentially hazardous construction operations. Ascertain and comply with requirements of Project insurance carrier, Town of Addison Fire Department and the Texas State Fire Marshal. Permanent fire protection system may be activated to meet these requirements. Replace fusible link heads and other expended or discharged components at time of Substantial Completion.

1. Locate temporary portable fire extinguishers in convenient locations, not less than one extinguisher per floor.

2. Store combustible materials in containers in fire-safe locations.

3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, and other access routes.

4. Coordinate with Construction Manager.

C. Barricades, Warning Signs, and Lights: Provide and maintain barricades, warning signs, warning lights, railings, walkways, and the like. Paint signs and barricades with appropriate colors, graphics, and warnings to inform public and job-site personnel of hazards.

1. Provide open fire lane maintained throughout the construction period to provide uninterrupted access to Project site; include lighting of access lane. Lane shall be

approved by the Construction Manager, Owner, and local fire chief.

2. Coordinate with Construction Manager.

D. Flagmen and Traffic Control: Provide temporary flagmen and traffic control as required by the Owner and/or by local authorities having jurisdiction.; Refer to Specifications Section 01555, TRAFFIC CONTROL. Coordinate with Construction Manager.

E. Construction Parking: As approved by Construction Manager; Refer to Section 01550, VEHICULAR ACCESS AND PARKING.

F. Temporary Site Control Fence: Prior to start of work at the Project site, install chain-link control fence with suitably locked entrance gates. Extent of fencing shall be appropriate as required for the phase of construction and shall be coordinated with, and approved by, the Construction Manager. Locate vehicular entrance gates in suitable relation to construction facilities; and to avoid interference with traffic on public thoroughfares.

1. Construct chain link fence in accordance with industry standards, and as shown on Drawings.

2. Unless otherwise indicated, fence height shall be 6 ft. minimum.

3. Obtain Owner and Architect approval of fencing and gate locations.

G. Security Procedures: Secure project against unauthorized entry at all times. Provide secure, locked, temporary entrances to prevent vandalism, theft, and similar violations of security. Coordinate with requirements of the Owner and the Construction Manager.

1. Storage: Provide secure, locked facilities for areas where materials and equipment are stored.

2. Comply with Owner's security program.

PART 3 EXECUTION

3.01 MAINTENANCE, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. Limit waste and abuse.

B. Maintenance: Maintain temporary facilities in operating condition; repair damages immediately upon discovery. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour per day basis.

C. Termination and Removal: Unless otherwise requested by Owner or Architect, remove each temporary facility when no longer useful, or when replaced by permanent facility. Clean and renovate permanent facilities that have been used during construction period.

END OF SECTION

SECTION 02782

BRICK PAVERS

PART 1 GENERAL

1.00 RELATED DOCUMENTS

A. The BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT and applicable parts of DIVISION 1 - GENERAL REQUIREMENTS, as listed in the Table of Contents, shall be included in and made a part of this Section.

1.01 WORK INCLUDED

A. Provide all equipment and materials and do all work necessary to furnish and install the brick pavers, as indicated on the Drawings and as specified.

B. Owner has approximately 650 square feet of Glen Gary Autumn Haze brick pavers available for the Contractor's use for work of this Section. They are currently in storage at the Service Center on Westgrove Drive in Addison. Contractor shall be responsible for hauling pavers from storage location to project site.

1.02 RELATED WORK

A. Examine Contract Documents for requirements that affect work of this Section. Other Specification Sections that directly relate to work of this Section include, but are not limited to:

1. Section 02300, EARTHWORK; Establishment of subgrade elevation.

2. Section 03300, CAST-IN-PLACE CONCRETE; Concrete base slab.

1.03 REFERENCES

A. Comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirement shall govern.

1. American Society for Testing and Materials (ASTM):

C 67	Sampling and Testing Brick and Structural Clay Tile
C 91	Masonry Cement
C 144	Aggregate for Masonry Mortar
C 150	Portland Cement
C 207	Hydrated Lime for Masonry Purposes
C 136	Sieve Analysis of Fine and Coarse Aggregates

C 144	Aggregate for Masonry Mortar
C 216	Facing Brick (Solid Masonry Units Made from Clay or Shale)
C 902	Pedestrian and Light Traffic Paving Brick
D 36	Softening Point of Bitumen (Ring-and-Ball Apparatus)
D 113	Ductility of Bituminous Materials
D 3381	Viscosity-Graded Asphalt Cement for Use in Pavement Construction.

1.04 SUBMITTALS

A. Samples: Furnish ten individual brick pavers as samples, showing extreme variations in color and texture.

B. Manufacturer's Product Data: Manufacturer's product data shall be submitted for the following items:

Brick paver
Soil separator
Latex polymer mortar additive
Mortar coloring additive
Neoprene-modified asphalt adhesive

C. Test Report: Submit reports from tests conforming to ASTM C 67 methods indicating:

1. Compressive strength, psi.
2. Absorption, 5 hr. submersion in cold water.
3. Absorption, 24 hr. submersion in cold water.
4. Maximum saturation coefficient.
5. Initial rate of absorption (suction).
6 Abrasion index.
7. Freeze-thaw.
8. Efflorescence.

1.05 SAMPLE PANELS

A. Construct two sample panels of brick paving on the specified base and setting methods before start of any brick paving.

1. Sample panels shall exhibit proposed color range, texture, bond, jointing, pattern, and workmanship.

2. Size of panels shall be 6 ft. x 6 ft., minimum.

B. Sample panels shall be inspected by the Architect. If the samples are not acceptable, construct additional panels at no cost to the Owner until acceptable panels are constructed. Accepted panesl shall become the standard for the entire job, and shall remain undisturbed until completion of all work.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Brick pavers shall be carefully packed by the supplier for shipment.

1. Waxed bricks shall have waxed surface protected with a paper separator or shall have waxed surfaces facing each other during delivery and storage.

B. Brick shall be stored off the ground and protected against staining and other damage.

1. Waxed bricks shall be stored protected from the sun.

C. Pavers damaged in any manner will be rejected and replaced with new materials at no additional cost to the Owner.

1.07 PROTECTION OF FINISHED SURFACES

A. Finished surfaces adjacent to the brick paving work shall be adequately protected from soiling, staining, and other damage during construction.

PART 2 PRODUCTS

2.01 CONCRETE BASE

A. Concrete base slab shall conform to Section 03300, CAST-IN-PLACE CONCRETE.

2.02 BRICK PAVERS

A. Brick pavers shall meet or exceed the requirements of ASTM C 902, Class SX, Abrasion Type I, Application PS.

B. Brick pavers shall be "Autumn Haze", Classic, actual 4 in. x 8 in. 2-1/4 in. size, manufactured by Glen-Gery Brick Corp., Reading, PA.

C. Brick shall conform to the following requirements:

1. Average absorption, 24 hr. cold-water absorption test = 4% or less.

2. Average compressive strength of not less than 10,500 psi for any five bricks tested.

3. Capable of withstanding at least the equivalent of 100 cycles of freeze-thaw conditions.

4. Permissible paver tolerances shall conform to ANSI/ASTM C 902.

5. Paver shall not vary from nominal dimensions by more than 1/8 in.

D. Color and texture shall match the sample at the office of the Architect, and shall be as approved by the Architect from samples submitted by the Contractor prior to delivery.

E. Brick shall be uniform in color, size, appearance, and dimensions, and shall have smooth regular edges where they are closely butted.

F. Brick shall have a temporary wax coating with a 130°F melting point to protect surface from latex-modified mortar.

2.03 BITUMINOUS SETTING BED

A. Asphalt cement to be used in the bituminous setting bed shall conform to ASTM D 3381. Viscosity grade shall be A.C. 10 or A.C. 20.

B. Fine aggregate to be used in the bituminous setting bed shall be clean, hard sand with durable particles and free from adherent coating, lumps of clay, alkali salts, and organic matter. Aggregate shall be uniformly graded from "coarse" to "fine" with 100% by weight passing the No. 4 sieve and shall meet the gradation requirements when tested in accordance with ASTM C 136.

C. Fine aggregate shall be dried and shall be combined with hot asphalt cement, and the mix shall be heated to approximately 300°F. at an asphalt plant. The approximate proportion of materials shall be 7% cement asphalt and 93% fine aggregate. Each ton of material shall be apportioned by weight in the approximate ratio of 145 lb. asphalt to 1,855 lb. sand. The Contractor shall determine the exact proportions to produce the best possible mixture for construction of the bituminous setting bed to meet specified requirements.

2.04 NEOPRENE-MODIFIED ASPHALT ADHESIVE

A. Neoprene modified asphalt adhesive shall meet the following requirements:

1. Mastic (asphalt adhesive):

a. Solids (base) content by volume = 75± 1%.

b. Weight = 8 to 8.5 lb./gal.

c. Solvent vehicle = Varsol (over 100°F. flash).

2. Base (2% neoprene, 10% fibers, 88% asphalt):

a. Melting point (ASTM D 36) = 200°F., minimum.

b. Penetration at 77°F. 100 gram load 5 second (0.1 mm) = 23 to 27.

c. Ductility (ASTM D 113 at 25°C, 5 cm/minute) = 125 cm, minimum.

2.05 CUT-BACK ASPHALT

A. Primer for concrete base slab beneath brick pavers subject to vehicular traffic shall be with rapid curing cut-back asphalt conforming to AASHTO M 81.

2.06 MORTAR SETTING BED

A. Setting bed mortar shall conform to ASTM C 270, Type S, except that latex polymer additive shall be mixed with the cementitious materials and aggregate in lieu of water.

1. Cement shall conform to ASTM C 150, Type I, complying with the staining requirements of ASTM C 91 for not more than 0.03% water soluble alkali. Furnish Type I, except Type III may be used for setting pavers in cold weather.

2. Sand shall conform to ASTM C 144.

3. Hydrated lime shall conform to ASTM C 207.

4. Latex polymer additive shall be equal to "Laticrete 3701" setting liquid, manufactured by Laticrete International, Inc., Woodbridge, CT 06525. Mix according to manufacturer's instructions.

2.07 BOND COAT

A. High strength bond coat between concrete base slab and setting bed mortar, and between setting bed mortar and brick paver shall be equal to "Laticrete 4237" mortar additive bond coat manufactured by Laticrete International, Inc., Woodbridge, CT 06525.

2.08 MORTAR GROUT FOR POINTING

A. Mortar grout for pointing of joints shall consist of one (1) part white Portland cement, two (2) parts sand, mortar coloring additive, gauged with latex polymer additive.

1. White Portland cement; ASTM C 150, complying with the staining requirements of ASTM C 91 for not more than 0.03% water soluble alkali. Furnish Type I, except Type III may be used for setting pavers in cold weather.

2. Color pigment shall not exceed 10% of the Portland cement in the mortar.

3. Latex polymer additive shall be equal to "Laticrete 3701", manufactured by Laticrete International, Inc., Woodbridge, CT 06525. Mix according to manufacturer's instructions.

4. Except as otherwise indicated, all other mortar grout materials shall be as specified in Paragraph 2.06, above.

B. Mortar grout shall contain a coloring additive. Color shall be approved by the Architect.

1. Coloring additive shall be equal to SGS Colors, manufactured by Solomon Grind Chem Service, Springfield, IL 62705.

2. Mortar coloring additive shall have mineral oxide pigment and shall be certified by the supplier to be resistant to alkali, light, and weather, and shall be of a chemical composition unaffected by cement and free of water and soluble salts.

3. Color shall match color of brick pavers.

2.09 SAND SETTING BED

A. Sand shall be a clean, sharp, natural sand conforming to ASTM C 33, except that the fineness modulus shall be 2.25 ± 0.10.

1. Gradation for setting bed sand shall be as follows:

Sieve Size	% Passing by Weight
3/8 in.	100
No. 4	95 - 100
No. 8	80 - 100
No. 16	50 - 85
No. 50	10 - 30
No. 100	5 - 15
No. 200	0 - 10

2.10 SAND JOINT FILLER

A. Gradation for joint filler sand shall be as follows:

Sieve Size	% Passing by Weight
No. 16	100
No. 200	10

1. Sand shall be supplied by a single source. Source of supply shall not be changed during course of project without written permission of the Architect.

2.11 EPOXY ADHESIVE

A. Epoxy adhesive for setting brick pavers on aluminum fountain vault cover shall be a two-component, 100% solids, moisture-insensitive, high-modulus, high strength, structural, epoxy paste adhesive conforming to ASTM C 881, similar to "Sikadur 31, Hi-Mod Gel", manufactured by Sika, Glendale Heights, IL 60139, or approved equal.

2.12 WATER

A. Water shall be potable and shall be free of injurious contaminants.

PART 3 EXECUTION

3.01 ACCEPTABILITY OF CONCRETE BASE

A. Contractor shall examine the concrete base slab to determine its adequacy to receive brick paving and setting bed. Concrete shall have fully cured. Evidence of inadequate base shall be brought to the immediate attention of the Architect.

B. Start of work of this Section shall constitute acceptance of concrete base slab.

3.02 CUT-BACK ASPHALT PRIME COAT

A. Cut-back asphalt shall be applied to concrete base slab at a rate sufficient to act as an adhesive between the concrete slab and the bituminous setting bed.

3.03 BITUMINOUS SETTING BED

A. Bituminous setting bed shall be installed over the fully cured concrete base. Control bars 3/4 in. deep shall be placed directly over the base. If grades must be adjusted, wood chocks under depth control bars shall be set to proper grade. Set two bars parallel to each other to serve as guides for the striking board. The depth control bars must be set carefully to bring the pavers, when laid, to proper grade.

B. While still hot (not less than 250°F.) some of the bituminous bed material shall be placed between the parallel depth control bars. This bed shall be pulled with the striking board over the control bars several times. After each passage, low porous spots shall be showered with fresh bituminous material to produce a smooth, firm, and even setting bed. As soon as this initial panel is completed, advance the first bar to the next position in readiness for striking the next panel. After the depth control bars and wood chocks have been removed, carefully fill any depressions that remain.

C. The setting bed shall be rolled with a power roller to a nominal depth of 3/4 in., while still hot. The thickness shall be adjusted so that when the bricks are placed and rolled, the top surface of the pavers will be at the required finished grade.

D. A coating of neoprene-modified asphalt adhesive shall be applied by mopping, squeegeeing, or troweling over the top surface of the bituminous setting bed so as to provide a bond under the pavers.

1. If adhesive is trowel-applied, trowel shall be serrated type with serrations not to exceed 1/16 in.

3.04 SETTING BRICK PAVERS (BITUMINOUS SETTING BED)

A. Brick pavers shall be on a bituminous setting bed over a prepared concrete base. All setting shall be done by competent masons under adequate supervision.

B. Brick pavers with chips, cracks, stains, or other defects which might be visible in the finished work shall not be used.

C. After the modified asphalt adhesive is applied, carefully place the pavers by hand in straight courses with hand tight joints and uniform top surface.

D. Brick pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Brick pavers shall be neatly cut and fitted at all perimeters and closures to fit neatly and closely, with joints uniform in thickness. Pavers shall be cut with a water-cooled, cut-off wheel masonry saw using a diamond blade.

3.05 JOINT TREATMENT (BITUMINOUS SETTING BED)

A. Joints between pavers shall be hand tight and shall be uniform in thickness. Joint thickness shall not exceed 1/4 in.

B. Joint filler shall be swept dry into the joints between pavers until the joints are completely filled. Surface shall be swept clean. Swept surface shall than be thoroughly dampened with a low-volume fine spray of water.

3.06 SETTING BRICK PAVERS (MORTAR SETTING BED)

A. Brick pavers shall be set on a mortar setting bed over a prepared concrete base slab. All setting shall be done by competent masons under adequate supervision.

B. Brick pavers with chips, cracks, stains, or other defects which might be visible in the finished work shall not be used.

C. Bond coat shall be applied to concrete base slab using flat trowel. Thickness of bond coat shall be approximately 1/16 in.

D. Mortar bed shall be spread evenly over the troweled bond coat. Mortar setting shall be 3/4 in. thick, minimum. Bond coat shall be applied to mortar bed using flat trowel to thickness of 1/16 in.

E. Before setting, the back of each brick shall be dampened and shall receive a slurry of mortar to ensure maximum contact with mortar bed. Each piece shall be carefully bedded in a full bed of mortar and tapped home to a full and solid bearing. Particular care shall be exercised to equalize bed and joint openings and eliminate the need for redressing of exposed surfaces.

F. Brick pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Brick pavers shall be neatly cut and fitted at all perimeters and closures to fit neatly and closely, with joints uniform in thickness. Pavers shall be cut with a water-cooled, cut-off wheel masonry saw using a diamond blade.

G. Exposed surfaces shall be kept free from mortar at all times. Excess mortar shall be immediately removed before latex modified mortar can set.

3.07 JOINT TREATMENT (MORTAR SETTING BED)

A. Brick joints shall be uniform in thickness. All joints except expansion joints shall be 3/8 in. thick. Expansion joints shall be 1/2 in. thick.

B. All joints, except expansion joints, shall be completely filled with mortar, then raked out to a depth of not less than 3/4 in. Raked joints shall be brushed clean and pointed with mortar grout to a flat cut joint.

1. Mortar grout between brick shall be uniform in appearance, texture, and color.

2. After initial set of grout, joints shall be finished by tooling with a rounded, non-staining jointer to produce a glassy-hard polished, slightly, concave joint, free of drying cracks.

C. Brick paving shall be kept damp by intermittent spraying for three days, minimum, to effectively cure the joints.

3.08 SAND SETTING BED

A. Sand shall be spread over concrete base slab as a setting bed for pavers. Sand shall be spread and leveled to required slope and grade. Minimum thickness of sand shall be 1 in. after leveling. Bed shall not be compacted until pavers are installed.

B. Surface tolerance shall be within 1/4 in. of required grade as measured with a 10 ft. straightedge in both the transverse and longitudinal directions.

3.09 SETTING BRICK PAVERS (SAND SETTING BED)

A. Setting bed shall be protected from damage prior to setting pavers.

B. Setting shall be done by competent workmen under adequate supervision, and in accordance with manufacturer's recommendations. Pavers shall be placed on the setting bed, to true line and plane and in required position.

C. Pavers with chips, cracks, or other structural or aesthetic defects shall not be used.

D. Pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Pavers shall be tightly butted. Joints between pavers shall be uniform and shall not exceed 1/8 in.

E. After a sufficient area of pavers has been installed, bricks shall be set to their final level in accordance with brick manufacturer's printed instructions. After setting brick in setting bed, joints of pavers shall be filled by sweeping sand into the joints. When joints are filled, paver surfaces shall be misted with a fine spray of water to settle joint material. After joint material has dried, repeat joint filling and sweeping process.

F. Where required, pavers shall be accurately cut with a masonry or concrete saw. Cut edges shall be plumb and straight. Scoring and breaking will not be acceptable.

3.10 SETTING BRICK PAVERS (EPOXY SETTING BED)

A. Brick pavers shall be set on aluminum fountain vault hatch cover in accordance with epoxy adhesive manufacturer's printed instructions.

B. Pavers shall be set in the pattern detailed on the Drawings. Pavers shall be tightly butted. Joints between pavers shall be uniform and shall not exceed 1/8 in.

C. Where required, pavers shall be accurately cut with a masonry or concrete saw. Cut edges shall be plumb and straight. Scoring and breaking will not be acceptable.

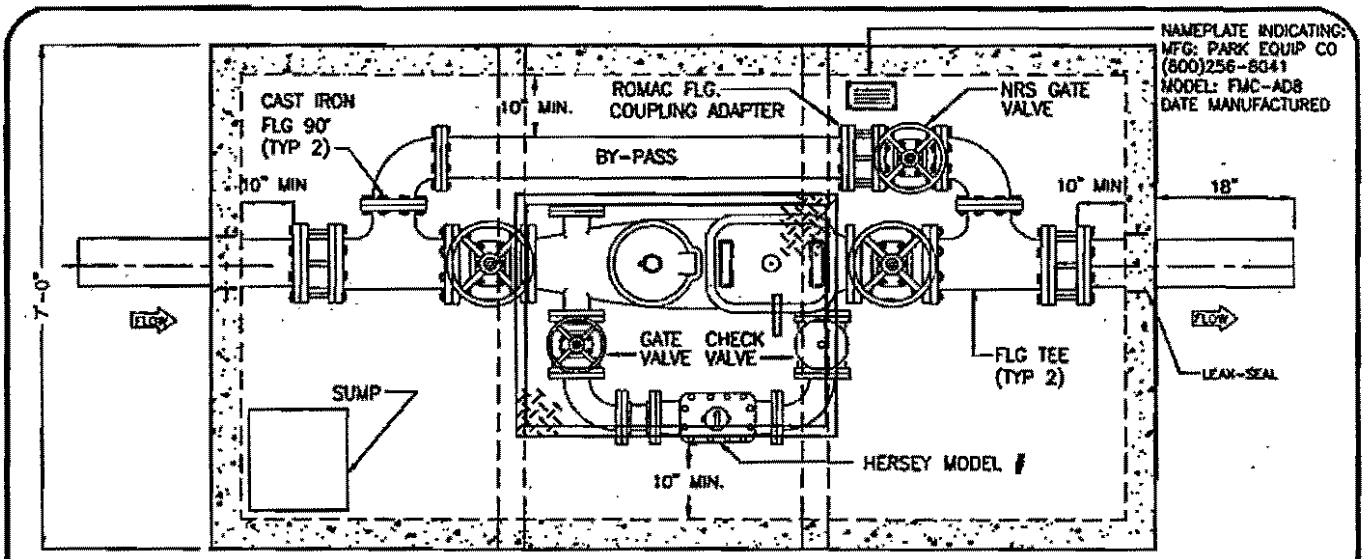
3.11 CLEANING AND PROTECTION OF BRICK SURFACES

A. After completion of brick paving, surfaces shall be carefully cleaned, removing all dirt, excess sand, filler, and stains.

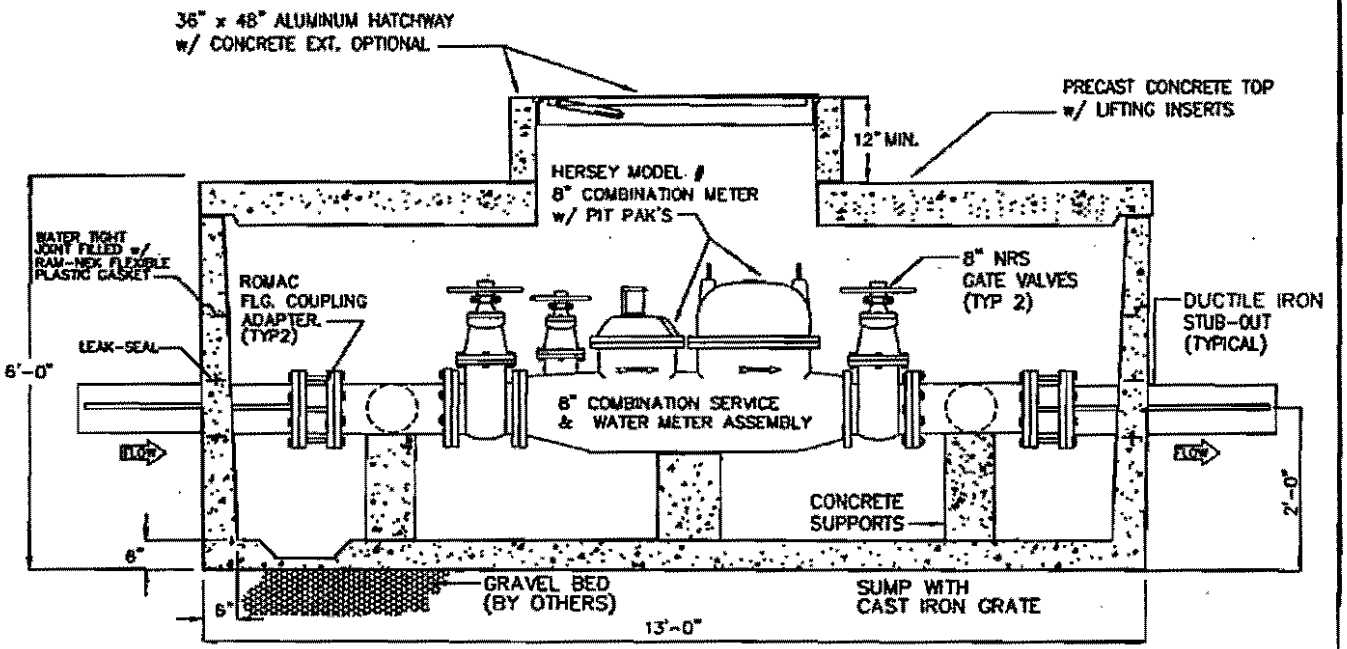
B. Completed brick surfaces shall be thoroughly cleaned of wax coating using a steam jenny or other method approved by the Architect.

1. Steam jenny shall have a capacity of 150 gal. per hour at 120 psi and 325^{O}F. coil temperature.

END OF SECTION



PLAN VIEW



ELEVATION

Specifications

CONCRETE : Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction of floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

STEEL COVER: SPRING ASSISTED ALUM. 36" X 48" HATCHWAY.

Engineering Data

Field excavation and preparation shall be completed prior to delivery of assembly. Use dimensional data as shown. Pipe, valves and fittings of the assembly are approved by one or more of the following associations:

AWWA UL FM

PROJECT :

CUSTOMER :

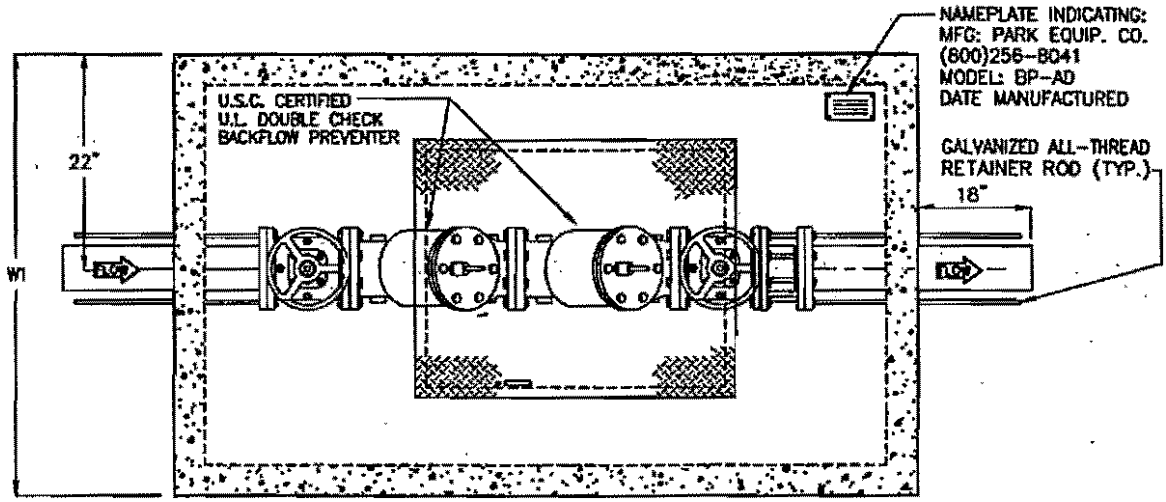
ENGINEER :

PARK EQUIPMENT COMPANY " Expect the Best "

TOWN OF ADDISON

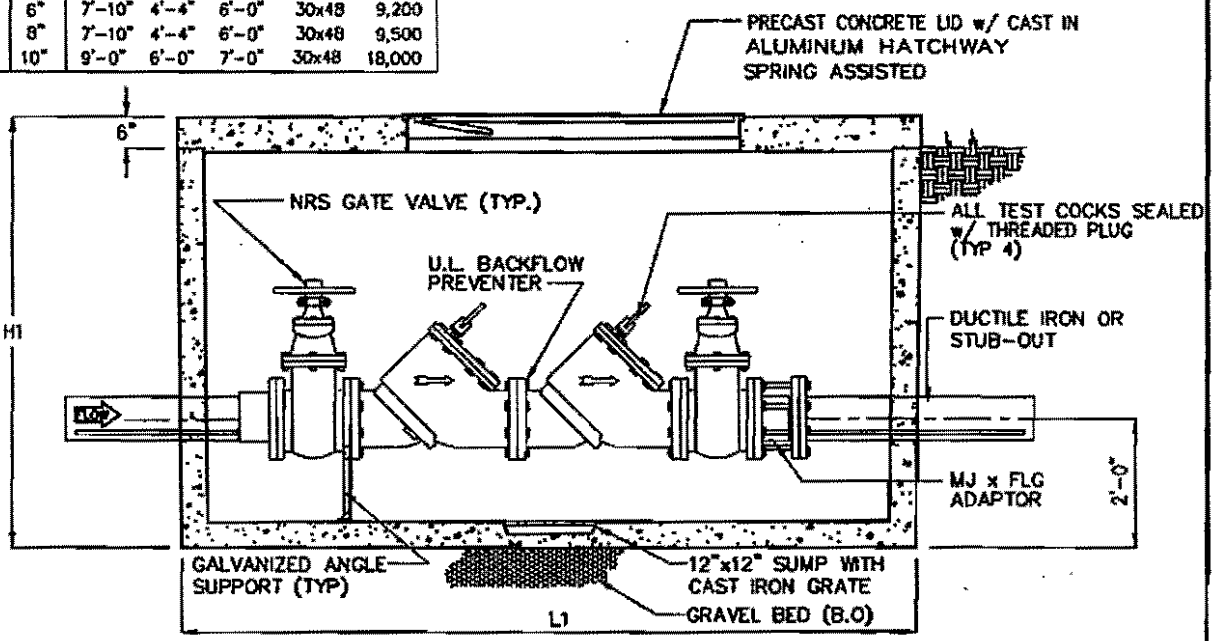
8" FIRE/DOM. COMBINATION WATER METER VAULT ASSEMBLY w/ BY PASS

SCALE	NONE	DWG. NO.	REV.
DATE	1/99	FMC-AD8	A



PLAN VIEW

MODEL	SIZE	L1	W1	H1	HATCHWAY	WEIGHT LBS
BP-AD3	3"	6'-0"	3'-6"	4'-6"	24x30	4,500
BP-AD4	4"	6'-0"	3'-6"	4'-6"	24x30	4,500
BP-AD6	6"	7'-10"	4'-4"	6'-0"	30x48	9,200
BP-AD8	8"	7'-10"	4'-4"	6'-0"	30x48	9,500
BP-AD10	10"	9'-0"	6'-0"	7'-0"	30x48	18,000



ELEVATION

Specifications

CONCRETE : Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

HATCHWAY: 1/4" Aluminum diamond plate cover, with 1/4" extruded aluminum frame. Hatch to be furnished with 316 Stainless Steel snap lock & hinges.

Engineering Data

The backflow assembly shall be factory assembled in vault & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

AWWA UL UPC FM

PROJECT :

CUSTOMER :

ENGINEER :

PARK EQUIPMENT COMPANY

WATS 800-256-8041

TOWN OF ADDISON

3" THRU 10" DOUBLE CHECK BACKFLOW PREVENTER ASSEMBLY

SCALE	NONE	DWG. NO.	REV.
DATE	8/97	BP-AD	A

Addison Arts & Events District
Pre-Bid Conference
October 8, 2002

Name	Company	Phone	Fax
Orang Mapes	TRI-DAL EXCAVATION	817.481.2886	817 461 0825
JANET LEE	TRI-SCAPE	817-481-2886	817-481-0825
SLADE STRICKLAND	TOWN OF ADDISON	972-450-2869	972-450-2837
Steve CHUTCHIAN	TOWN OF ADDISON	972 450-2886	
LUKE JALBERT	TOWN OF ADDISON	972-450-2860	
Glen Nichols	American Civil Constructors	817-481-6668	817-488-2509
Jim Pierce	Town of Addison	972-450-2879	972-450-2837
MATT SHOLK	WB KIBLER Co	214-358-4601	214-956-7473
JEFF WILT	TERRA MAT	972-488-8800	9/488-8080
HONG LEE	AVI CONTRACTORS	817.926.4377	817.926.4387
LORA HINCHCLIFF	LIVING EARTH TECHNOLOGY CO.	214.673.3341	972.869.9498
CARMEN MORAN	TOWN OF ADDISON	972.450-798	972-450-7043
Jim Duffy	James F. Duffy	972.241.2716	972.406.1146

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 2 has been incorporated in the contract and if accepted becomes part of the contract.

BY:_____ Date:_____

DOCUMENT 00902

ADDENDUM NO. 2

DATE: October 18, 2002

TO: PROSPECTIVE BIDDERS

FROM: SASAKI ASSOCIATES, INC.
64 Pleasant Street
Watertown, Massachusetts 02172

PROJECT: ADDISON ARTS & EVENTS DISTRICT
Addison, Texas

This Addendum forms part of and modifies Bidding and Contract Documents dated September 30, 2002. Acknowledge receipt of this Addendum in writing in space provided on Document "PROPOSAL FORM".

This Addendum consists of ten (10) pages plus attachments consisting of revised Project Manual Table of Contents; revised Proposal Form; list of Pre-Bid Conference attendees; revised Document 00015, List of Drawings; and one newly issued Specifications Section 02782, Brick Pavers.

Where any original item called for in the Project Manual or indicated on the Drawings is supplemented hereby, the supplemental requirements shall be considered as added thereto.

Where any original item is amended, voided, or superseded hereby, the other provisions of such items not specifically amended, voided, or superseded shall remain in effect.

Prebid Conference

1. A prebid conference was held at the Addison Town Hall on Tuesday, October 8, 2002. A copy of the list of attendees is attached to this Addendum.

Table of Contents

1. The Table of Contents (pages TC-1 through 4) is revised. A copy of the Table of Contents, marked "Rev. October 18, 2002", is attached to and made part of this Addendum.

BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT

Advertisement for Bids

1. Paragraph 1., bid opening date has been changed from "October 22, 2002" to "November 5, 2002". Bid opening time of 2:00p.m. remains unchanged.

2. Paragraph 8., add the following sentence: "For information on electrical or mechanical work to be performed, call Keith Gassman at Campos Engineering (214) 696-6291.

Instructions to Bidders

1. Modify Paragraph S as follows: Increase the amount of Daily Value from $1,000.00 to $3,000.00. Increase the total incentive payment not to exceed amount from $100,000 to $180,000.00.

2. Modify Paragraph T as follows: (i) Increase the incentive payment Daily Value amount from $1,000.00 to $3,000.00; (ii) Amend the first sentence of the fifth paragraph to read as follows: "Should the Contractor fail to finally complete the Contract on or before expiration of the Allowable Contract Time, as adjusted in accordance with the provisions above, the Town shall deduct from the moneys due the Contractor an amount equal to one-third of the Daily Value as shown in Provision "S" (or $1,000.00) above for each calendar day final completion exceeds the Allowable Contract Time.".

Proposal Form

1. Proposal Form (Pages 1 through 4) is replaced. A copy of the new Proposal Form is attached to and made part of this Addendum.

Document 00510 - Agreement

1. Standard Form of Agreement Between Owner and Contractor - AIA Document A101/CMa (As Amended): Modify Paragraph 7.4.1 as follows: (i) Increase the incentive payment Daily Value amount from $1,000.00 to $3,000.00 (first sentence of the first paragraph); (ii) Amend the first sentence of the fifth paragraph to read as follows: "Should the Contractor fail to finally complete the Contract on or before expiration of the Allowable Contract Time, as adjusted, the Town shall deduct from the moneys due the Contractor an amount equal to one-third of the Daily Value as shown in Provision "S" of the Instructions to Bidders (such amount being $1,000.00) for each calendar day final completion exceeds the Allowable Contract Time.".

Document 00015 - List of Drawings

1. Document 00015, List of Drawings (pages 00015 -1 through 3) is revised. A copy of the revised Document, marked "Rev. October 18, 2002", is attached to and made part of this Addendum.

SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

Section 01330 - Submittals

1. Page 01330-7, subparagraph 1.12B.2., change the words "REVIEWED AS NOTED" to 'REVIEWED AS NOTED, PROCEED".

DIVISION 2 – SITE CONSTRUCTION

Section 02510 – Water System

1. Page 02510 - 6, delete subparagraph 2.07B.1., and replace with the following:

   "1. Double check valve backflow prevention assembly equal to Hersey Model No. 2 Double Check Valve Backflow Prevention Assembly."

DON'T DELETE, BUT ADD

2. Page 02510 - 7, delete Paragraph 2.10A, and replace with the following:

"A. Detector wire for identification of water main locations shall be copper wire."

3. Page 02510 - 8, delete Paragraph 2.12C., and replace with the following:

"C. Vault chambers shall have precast concrete lid with cast in ¼ in. aluminum diamond plate cover, with ¼ in. extruded aluminum frame. Hatch shall be furnished with 316 stainless steel snap lock and hinges."

Section 02782 – Brick Pavers

1. Section 02782, Brick Pavers (pages 02782-1 through 9) is issued. A copy of this newly issued section, marked "Iss. October 18, 2002", is attached to and made part of this Addendum.

Section 02815 – Fountains

1. Page 02815 – 7, paragraph 2.06A, last paragraph, revise rating for electrical control panel for fountain equipment to "NEMA 3R enclosure construction".

Section 02930 – Trees, Plants and Ground Covers

1. Page 02930-10, add Paragraph 2.16. as follows:

"2.16 STEEL EDGING

A. Steel edging shall be Border Concepts Edging, "Border Guard", manufactured by Border Concepts, Inc., P.O. Box 471185, Charlotte, NC 28247 or approved equal. Steel edging shall be shop fabricated, 3/16 in. thick x 4 in. deep, primed and painted black. Edging shall be furnished in 16 ft. lengths.

1. Steel edging shall have slotted holes for staking steel edging every 30 in. o.c.

2. Steel stakes shall be 15 in. long, tapered.

3. Provide manufacturer's end stake and splicer unit.

4. Provide manufacturer's standard touch-up paint for in field touch-up of scratched or marred areas."

2. Page 02930-13, add Paragraph 3.18. as follows:

"3.18 STEEL EDGING

A. Steel edging shall be installed at locations indicated on the Drawings. Where required, edging shall be cut square and accurately to required length.

1. Steel edging shall be securely staked in required position. Stakes shall be driven every 30 in. o.c. along length of edging.

2. Adjacent lengths of edging shall be spliced together with manufacturer's standard splicer unit.

3. Edging shall be set plumb and vertical at required line and grade. Straights sections shall not be wavy; curved sections shall be smooth and shall have no kinks or sharp bends."

DIVISION 9 - FINISHES

Section 09900 - Painting

1. Page 09900-2, Paragraph 1.06 is deleted.

DIVISION 13 – SPECIAL CONSTRUCTION

Section 13600 – Misting and Cooling System

1. Section 13600, Misting and Cooling System (pages 13600-1 through 5) is deleted in its entirety.

Division 16 - ELECTRICAL

Section 16525 – Site Lighting

1. Page 16525-3, delete Paragraph 2.02H., and insert the following:

   "H. Garden Lights: shall be "Model PPL-2546/Brown Patina/35W t-6MH/277V, manufactured by Teka Illumination, Templeton, CA 93465, or approved equal."

APPENDIX

Appendix B – Town of Addison Public Works Department General Construction Notes

1. Delete Drawing No. DDBP-AD regarding backflow preventer assembly.
2. Add Drawing Nos. FMC-AD8 and BP-AD (attached) for Town of Addison approved water meter with vault and backflow preventer with vault.

DRAWINGS

CIVIL

Drawing C1-1 – Site Preparation/Demolition/Erosion Control Plan

1. Eliminate all haybales. — INCLUDE PROVISION FOR PROTECTING ALL INLETS WITH GEO-TECH FABRIC & 12"+ ROCK ALONG LENGTH OF INLET.
2. Extend silt fence along perimeter of Quorum Drive, Addison Circle Drive, and Addison Road.

Drawing C1-2 – Site Preparation/Demolition/Erosion Control Plan

1. Add note 16. "All salvaged items are to be delivered to the Town of Addison, Kellway Lift Station, 4245 Kellway Circle, Addison, Texas 75001".
2. Eliminate all haybales
3. Extend silt fence along perimeter of Quorum Drive, Addison Circle Drive and Addison Road.
4. Remove Pavilion building limit of work line.
5. Note existing building has been removed.

6. Note to remove cone for manhole to be abandoned.
7. Revise limit of work line, SE corner of project site.

Drawing C1-3 – Site Preparation/Demolition/Erosion Control Plan

1. Remove haybales from Legend.
2. Note cone to be removed for manhole to be abandoned.
3. Abandon additional manhole, cap and plug pipe on north side of it.

Drawing C2-1 – Materials Plan

1. Indicate paved areas to be constructed with 8" slab depth.
2. Add areas of reinforced earth.
3. Add paving symbols to Legend.

Drawing C2-2 – Materials Plan

1. Indicate paved areas to be constructed with 8" slab depth.
2. Add areas of reinforced earth.
3. Revise limit of work at SE corner of project site, eliminate reconstruction of roadway and sidewalk pavement in this area.
4. Revise Pergola section reference.

Drawing C2-3 – Layout Plan

1. Add areas of reinforced earth with dimensions.
2. Add layout coordinates to corners of electrical room. — DO NOT FIND COORDINATES ON PLAN SHEET

Drawing C2-4 – Layout Plan

1. Add areas of reinforced earth with dimensions.
2. Revise limit of work SE corner of project site, add detail reference.

Drawing C3-1 – Grading & Drainage Plan

1. Add invert elevation abbreviation to Legend.
2. Add 8" cleanout ports to Retention Fields 1 and 2.
3. Revise 6" cleanout ports to 10" and relocate to pipe ends for Retention Fields 1 and 2.

4. Add underdrain around electrical room, extend to storm drain line and indicate invert elevations.
5. Revise invert elevation of tree pit underdrain on Addison Circle Drive.
6. Revise invert elevation out, DMH 4A. → INVERT ELEVATION (OUT) IS STILL TOO HIGH! ON DMH 4
7. At DMH 4, revise invert elevation 628.86 reference to DMH 4A.

Drawing C3-2 – Grading & Drainage Plan

1. Revise 36" RCP storm sewer from DMH 11 to connect to existing 60" RCP at SE corner of project site. Add note to protect existing curb and roadway for this work.
2. Revise curb inlets 9 and 10 to 6' Rec. Inlet.
3. Revise R16 Inlet invert elevations.
4. Revise DMH 11 invert elevations for 24" RCP and invert out.
5. Revise R15 Inlet invert elevations.
6. Revise pipe between R13 and R15 inlets to 21".
7. Revise R14 Inlet invert elevations.
8. Revise R13 Inlet invert elevation out.
9. Add underdrain around fountain vault, extend to SMH 7 and add invert elevations. — RELOCATE UNDER DRAIN & TIE INTO R-14 - TYPE B
10. Revise invert elevation at underdrain adjacent to Addison Circle Drive Sidewalk.
11. Revise 6" cleanout ports to 10" and relocatee to pipe ends for Retention Field 3.

Drawing C4-1 – Utilities Plan

1. Revise water system main size and layout within project site.
2. Add water meter with vault and backflow preventer with vault on 8" water main.
3. Revise pipe connections for drinking fountains.
4. Delete connection of 8" water main to existing main on Addison Circle Drive.
5. Revise yard hydrant connections to 8" water main.
6. Add/revise coordinates for water system layout. — NOT SHOWN ON SHEET

Drawing C4-2 – Utilities Plan

1. Revise water system main size and layout within project site.
2. Add water meter with vault and backflow preventer with vault on 8" water main. AT 8" VALVE ON EACH SIDE OF TEE, AT VAULT LOCATION ON EAST END.
3. Revise yard hydrant connections to 8" water main.
4. Add/revise coordinates for water system layout. — NOT SHOWN ON SHEET

5. Revise slope and invert elevations of 6" sanitary sewer line.
6. Revise pipe size for yard hydrant connections.
7. Add note regarding 12" water main connection to existing 24" main on Quorum Drive.
8. Revise storm drainage outfall connection at SE corner of project site, including limit of work.

Drawing C4-3 – Utilities Plan

1. Extend 8" water line south to connection with existing 8" main on Broadway Street. Add gate valves.
2. Add fire hydrant on 8" water line extension.
3. Add note to repair asphalt pavement as required for water line construction.

Drawing C5-1 – Materials Plan Detail

1. Add expansion joint locations to pavement around Pavilion.
2. Revise detail reference for paving at Pavilion.

Drawing C5-4 – Paving and Layout Plan Detail

1. Add note regarding new brick paving at NE corner of Festival Way/Quorum Drive intersection.

Drawing C6-1 – Pergola Plan and Details

1. Detail 1: Add conduits to elevation and note regarding location of lighting and outlet conduits in columns.
2. Detail 5: Add note regarding vine planting pocket locations and dimensions, revise length of eye bolt.

~~3. CREDIT AT PLAN SHEET~~ 3. SPECIFY LEAN CONCRETE ON PLAN

Drawing C6-2 – Pergola Elevations

1. Eliminate Note 2 (misting system eliminated).

Drawing C7-1 – Site Details

1. Detail 1: Add notes regarding contrasting color for handicap ramp and compliance with current accessibility standards.
2. Detail 3: Revise reinforcing spacing to 18" o.c.
3. Detail 4: Revise reinforcing spacing to 18" o.c.
4. Detail 6: Revise reinforcing spacing to 18" o.c.
5. Detail 8: Revise reinforcing spacing to 18" o.c.
6. Detail 14: Revise curb reinforcing to include "L" bar.

Drawing C7-2 – Site Details

1. Detail 1: Add crosspitch note, add expansion joint at curb, add dowels at curb.
2. Detail 2: Add crosspitch note.
3. Detail 6: Revise painted crosswalk to white thermoplastic lines.
4. Detail 9: Revise note regarding drywell dimensions and material.
5. Detail 13: Revise paving to full depth slab with doweled expansion joints. – MISSPECIED EXPANSION"

Drawing C7-11 – Site Details - Stairs

1. Detail 1: Revise paving at top of stair.

Drawing C7-13 – Site Details - Stairs

1. Detail 4: Revise paving at top of stair.
2. Detail 7: Revise paving at top of stair.

Drawing C7-14 – Site Details – Electrical Room

1. Detail 1: Add reinforcing to pavement slab, revise wall footing to coordinate with Detail 3 on Drawing S1-1, add detail references.
2. Detail 2: Add note about extent of waterproofing. – ADD SIMILAR NOTE TO FOUNTAIN VAULT
3. Detail 4: Revise footing for wall between loading dock and door, revise detail reference.
4. Detail 5: Add details on Drawing C7-15, which has been eliminated. FROM

Drawing C8-1 – Festival Way Profiles

1. Add stationing to plan view.
2. Revise profile to reflect changes to storm sewer outfall at SE corner of project site.
3. Revise yard hydrant connections to water supply system.
4. Revise extension of 12" water main and connection to existing 24" main on Quorum Drive.

Drawing C8-2 – Sewer Profile

1. Revise pipe slope and invert elevations.

Drawing C8-3 – Site Details – Roadway Paving

1. Detail 1: Eliminate hot poured rubber as joint sealing compound.
2. Detail 2: Revise detail from construction joint to undercut header section.
3. Eliminate hot poured rubber as joint sealing compound for sawed dummy joint.

Drawing C8-4 – Site Details - Water

1. Detail 4: Revise dimension of concrete pads at cover and pipe bedding, including notes.
2. Detail 5: Revise dimension from hydrant to valve box, height of hydrant above grade, and revise notes.
3. Add Detail 6 for typical drinking fountain supply pipe connection.
4. Delete typical hydrant layout plan diagrams.

Drawing C8-5 – Site Details – Water

1. Detail 1: Revised yard hydrant style and setting detail. — VACCUM BREAKER STILL REQUIRED

Drawing C8-7 – Site Details – Drainage

1. Detail 1: Add filter fabric
2. Revise Note #10 to eliminate polyethylene pipe.

Drawing C8-8 – Site Details – Drainage

1. Detail 2: Revise 6" cleanouts to 10" and revise dimension to end of pipe, add 8" cleanouts and dimension to end of pipe. MOVE ALL CLEANOUTS TO EQUAL DIST. OF END OF PIPE
2. Detail 3: Revise section to indicate cleanout changes in Detail 2. FROM END OF PIPE TO ℄ OF CLEANOUT @ AT 1'-0"

LANDSCAPE

Drawing L1-1 – Planting Plan

1. Add steel edging to plant beds adjacent to Addison Circle Drive, east of the Pergola.
2. Add electrical equipment indication in same area, with detail reference.
3. Add note for steel edging around all vine planting pockets and add detail reference.
4. Add steel edging to groundcover planting bed southwest side of Main Stage/electrical room.

Drawing L1-2 – Planting Plan

1. Add steel edging to plant beds at garden spaces along Addison Circle Drive and at ground cover bed SE corner of The Bowl area.
2. Revise limit of work SE corner of project site and revise locations of loam and seed for disturbed areas.

Drawing L2-1 – Planting Details and Plant List

1. Plant List: Revise sizes for some plants.
2. Detail 7: Revise plant bed section to show low point adjacent to pavement edge.

Drawing L3-1 – Irrigation Plan

1. Add irrigation bubbler heads for street trees in grates on Addison Circle Drive. These bubbler heads were previously shown on Drawing L4-1, which has been eliminated.

2. Revise zone valve sequence.

Drawing L3-2 – Irrigation Plan

1. Add irrigation bubbler heads for street trees in grates on Addison Circle Drive. These bubbler heads were previously shown on Drawing L4-1, which has been eliminated.

2. Revise zone valve sequence.

3. Add irrigation spray heads to plant bed at NE corner of site, adjacent to handicap ramp and Pavilion building.

4. Revise schematic layout of irrigation equipment in fountain vault.

5. Note 48 station controller.

Drawing L4-1 – Irrigation Bubblers

1. Drawing has been eliminated – all tree bubblers for trees other than street trees have been deleted.

Drawing L4-2 – Irrigation Bubblers

1. Drawing has been eliminated – all tree bubblers for trees other than street trees have been deleted.

Drawing L5-1 – Irrigation Details and Legend

1. Delete bubbler head detail for trees in lawn/plant areas.

STRUCTURAL

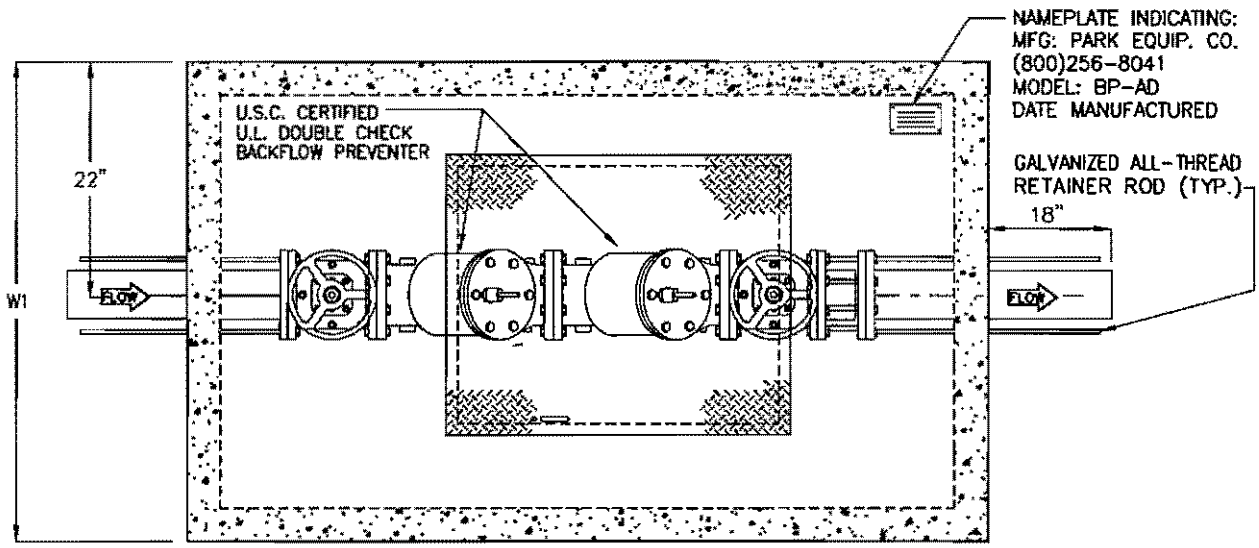
Drawing S1-1 - Structural Details

1. Detail 4: Add waterstops at footing, revise slopes to sump area, add note regarding lifting lugs, add reinforcing to Section A-A.

Drawing S1-3 - Structural Details

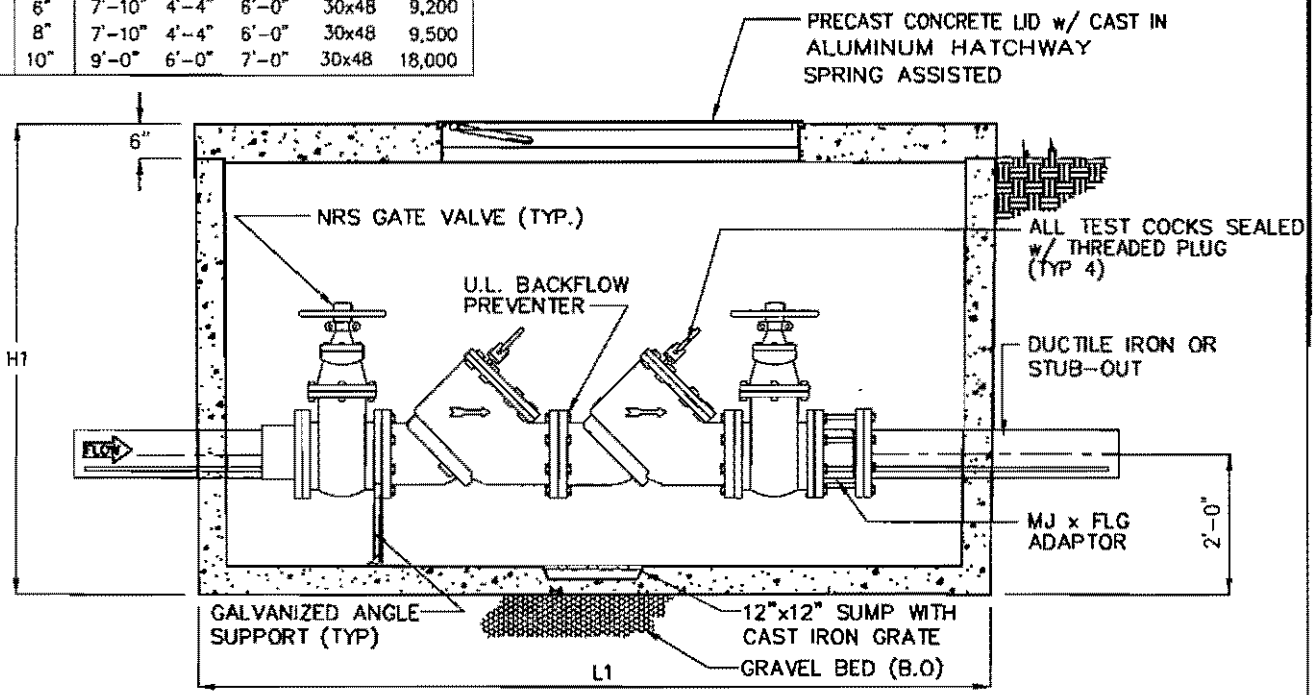
1. Detail 2: Add callouts to detail, indicate piers to extend to limestone.

END OF ADDENDUM



PLAN VIEW

MODEL	SIZE	L1	W1	H1	HATCHWAY	WEIGHT LBS
BP-AD3	3"	6'-0"	3'-6"	4'-6"	24x30	4,500
BP-AD4	4"	6'-0"	3'-6"	4'-6"	24x30	4,500
BP-AD6	6"	7'-10"	4'-4"	6'-0"	30x48	9,200
BP-AD8	8"	7'-10"	4'-4"	6'-0"	30x48	9,500
BP-AD10	10"	9'-0"	6'-0"	7'-0"	30x48	18,000



ELEVATION

Specifications

CONCRETE : Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

HATCHWAY: 1/4" Aluminum diamond plate cover, with 1/4" extruded aluminum frame. Hatch to be furnished with 316 Stainless Steel snap lock & hinges.

Engineering Data

The backflow assembly shall be factory assembled in vault & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

AWWA UL UPC FM

PROJECT :

CUSTOMER :

ENGINEER :

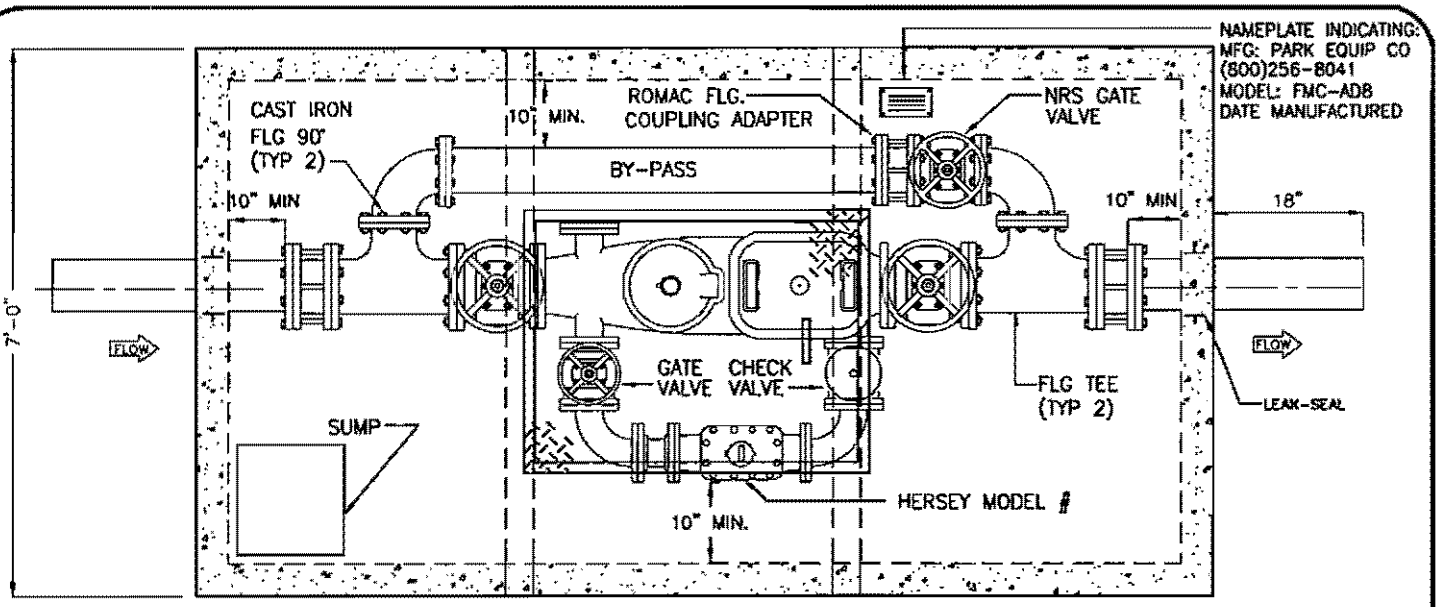
PARK EQUIPMENT COMPANY

WATS 800-256-8041

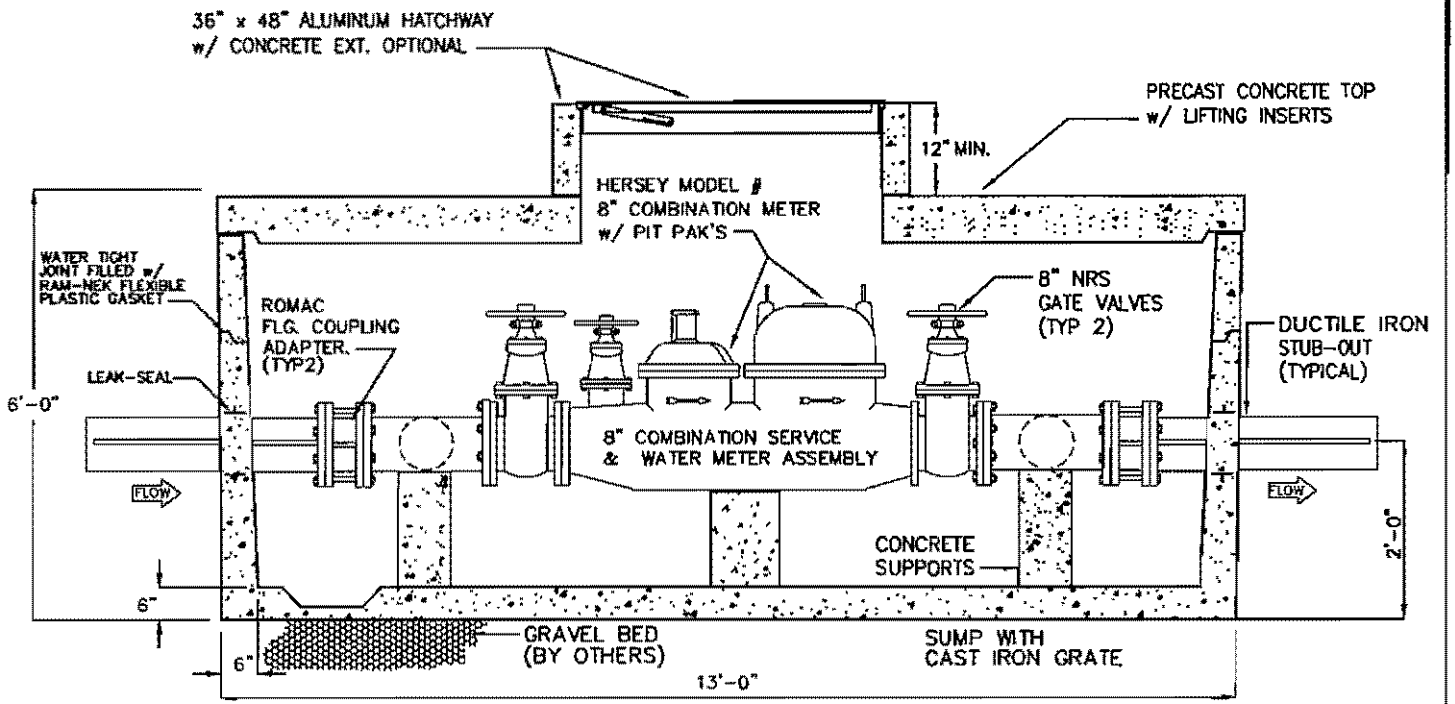
TOWN OF ADDISON

3" THRU 10" DOUBLE CHECK BACKFLOW PREVENTER ASSEMBLY

SCALE	NONE	DWG. NO.	REV.
DATE	8/97	BP-AD	A



PLAN VIEW



ELEVATION

Specifications

CONCRETE : Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

STEEL COVER: SPRING ASSISTED ALUM. 36" X 48" HATCHWAY.

Engineering Data

Field excavation and preparation shall be completed prior to delivery of assembly. Use dimensional data as shown. Pipe, valves and fittings of the assembly are approved by one or more of the following associations:

AWWA UL UPC FM

PROJECT :

CUSTOMER :

ENGINEER :

PARK EQUIPMENT COMPANY

" Expect the Best "

TOWN OF ADDISON

8" FIRE/DOM. COMBINATION WATER METER VAULT ASSEMBLY w/ BY PASS

SCALE	NONE	DWG. NO.	REV.
DATE	1/99	FMC-AD8	A

SECTION 02782

BRICK PAVERS ✓

PART 1 GENERAL

1.00 RELATED DOCUMENTS

A. The BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT and applicable parts of DIVISION 1 - GENERAL REQUIREMENTS, as listed in the Table of Contents, shall be included in and made a part of this Section.

1.01 WORK INCLUDED

A. Provide all equipment and materials and do all work necessary to furnish and install the brick pavers, as indicated on the Drawings and as specified.

B. Owner has approximately 650 square feet of Glen Gary Autumn Haze brick pavers available for the Contractor's use for work of this Section. They are currently in storage at the Service Center on Westover Drive in Addison. Contractor shall be responsible for hauling pavers from storage location to project site.

westgrove

1.02 RELATED WORK

A. Examine Contract Documents for requirements that affect work of this Section. Other Specification Sections that directly relate to work of this Section include, but are not limited to:

1. Section 02300, EARTHWORK; Establishment of subgrade elevation.

2. Section 03300, CAST-IN-PLACE CONCRETE; Concrete base slab.

1.03 REFERENCES

A. Comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirement shall govern.

1. American Society for Testing and Materials (ASTM):

C 67	Sampling and Testing Brick and Structural Clay Tile
C 91	Masonry Cement
C 144	Aggregate for Masonry Mortar
C 150	Portland Cement
C 207	Hydrated Lime for Masonry Purposes
C 136	Sieve Analysis of Fine and Coarse Aggregates
C 144	Aggregate for Masonry Mortar

C 216	Facing Brick (Solid Masonry Units Made from Clay or Shale)
C 902	Pedestrian and Light Traffic Paving Brick
D 36	Softening Point of Bitumen (Ring-and-Ball Apparatus)
D 113	Ductility of Bituminous Materials
D 3381	Viscosity-Graded Asphalt Cement for Use in Pavement Construction.

1.04 SUBMITTALS

A. Samples: Furnish ten individual brick pavers as samples, showing extreme variations in color and texture.

B. Manufacturer's Product Data: Manufacturer's product data shall be submitted for the following items:

Brick paver
Soil separator
Latex polymer mortar additive
Mortar coloring additive
Neoprene-modified asphalt adhesive

C. Test Report: Submit reports from tests conforming to ASTM C 67 methods indicating:

1. Compressive strength, psi.
2. Absorption, 5 hr. submersion in cold water.
3. Absorption, 24 hr. submersion in cold water.
4. Maximum saturation coefficient.
5. Initial rate of absorption (suction).
6 Abrasion index.
7. Freeze-thaw.
8. Efflorescence.

1.05 SAMPLE PANELS

A. Construct two sample panels of brick paving on the specified base and setting methods before start of any brick paving.

1. Sample panels shall exhibit proposed color range, texture, bond, jointing, pattern, and workmanship.
2. Size of panels shall be 6 ft. x 6 ft., minimum.

B. Sample panels shall be inspected by the Architect. If the samples are not acceptable, construct additional panels at no cost to the Owner until acceptable panels are constructed. Accepted panesl shall become the standard for the entire job, and shall remain undisturbed until completion of all work.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Brick pavers shall be carefully packed by the supplier for shipment.

1. Waxed bricks shall have waxed surface protected with a paper separator or shall have waxed surfaces facing each other during delivery and storage.

B. Brick shall be stored off the ground and protected against staining and other damage.

1. Waxed bricks shall be stored protected from the sun.

C. Pavers damaged in any manner will be rejected and replaced with new materials at no additional cost to the Owner.

1.07 PROTECTION OF FINISHED SURFACES

A. Finished surfaces adjacent to the brick paving work shall be adequately protected from soiling, staining, and other damage during construction.

PART 2 PRODUCTS

2.01 CONCRETE BASE

A. Concrete base slab shall conform to Section 03300, CAST-IN-PLACE CONCRETE.

2.02 BRICK PAVERS

A. Brick pavers shall meet or exceed the requirements of ASTM C 902, Class SX, Abrasion Type I, Application PS.

B. Brick pavers shall be "Autumn Haze", Classic, actual 4 in. x 8 in. 2-1/4 in. size, manufactured by Glen-Gery Brick Corp., Reading, PA.

C. Brick shall conform to the following requirements:

1. Average absorption, 24 hr. cold-water absorption test = 4% or less.

2. Average compressive strength of not less than 10,500 psi for any five bricks tested.

3. Capable of withstanding at least the equivalent of 100 cycles of freeze-thaw conditions.

4. Permissible paver tolerances shall conform to ANSI/ASTM C 902.

5. Paver shall not vary from nominal dimensions by more than 1/8 in.

D. Color and texture shall match the sample at the office of the Architect, and shall be as approved by the Architect from samples submitted by the Contractor prior to delivery.

E. Brick shall be uniform in color, size, appearance, and dimensions, and shall have smooth regular edges where they are closely butted.

F. Brick shall have a temporary wax coating with a 130°F melting point to protect surface from latex-modified mortar.

2.03 BITUMINOUS SETTING BED

A. Asphalt cement to be used in the bituminous setting bed shall conform to ASTM D 3381. Viscosity grade shall be A.C. 10 or A.C. 20.

B. Fine aggregate to be used in the bituminous setting bed shall be clean, hard sand with durable particles and free from adherent coating, lumps of clay, alkali salts, and organic matter. Aggregate shall be uniformly graded from "coarse" to "fine" with 100% by weight passing the No. 4 sieve and shall meet the gradation requirements when tested in accordance with ASTM C 136.

C. Fine aggregate shall be dried and shall be combined with hot asphalt cement, and the mix shall be heated to approximately 300°F. at an asphalt plant. The approximate proportion of materials shall be 7% cement asphalt and 93% fine aggregate. Each ton of material shall be apportioned by weight in the approximate ratio of 145 lb. asphalt to 1,855 lb. sand. The Contractor shall determine the exact proportions to produce the best possible mixture for construction of the bituminous setting bed to meet specified requirements.

2.04 NEOPRENE-MODIFIED ASPHALT ADHESIVE

A. Neoprene modified asphalt adhesive shall meet the following requirements:

1. Mastic (asphalt adhesive):

a. Solids (base) content by volume = 75± 1%.

b. Weight = 8 to 8.5 lb./gal.

c. Solvent vehicle = Varsol (over 100°F. flash).

2. Base (2% neoprene, 10% fibers, 88% asphalt):

a. Melting point (ASTM D 36) = 200°F., minimum.

b. Penetration at 77°F. 100 gram load 5 second (0.1 mm) = 23 to 27.

c. Ductility (ASTM D 113 at 25°C, 5 cm/minute) = 125 cm, minimum.

2.05 CUT-BACK ASPHALT

A. Primer for concrete base slab beneath brick pavers subject to vehicular traffic shall be with rapid curing cut-back asphalt conforming to AASHTO M 81.

2.06 MORTAR SETTING BED

A. Setting bed mortar shall conform to ASTM C 270, Type S, except that latex polymer additive shall be mixed with the cementitious materials and aggregate in lieu of water.

1. Cement shall conform to ASTM C 150, Type I, complying with the staining requirements of ASTM C 91 for not more than 0.03% water soluble alkali. Furnish Type I, except Type III may be used for setting pavers in cold weather.

2. Sand shall conform to ASTM C 144.

3. Hydrated lime shall conform to ASTM C 207.

4. Latex polymer additive shall be equal to "Laticrete 3701" setting liquid, manufactured by Laticrete International, Inc., Woodbridge, CT 06525. Mix according to manufacturer's instructions.

2.07 BOND COAT

A. High strength bond coat between concrete base slab and setting bed mortar, and between setting bed mortar and brick paver shall be equal to "Laticrete 4237" mortar additive bond coat manufactured by Laticrete International, Inc., Woodbridge, CT 06525.

2.08 MORTAR GROUT FOR POINTING

A. Mortar grout for pointing of joints shall consist of one (1) part white Portland cement, two (2) parts sand, mortar coloring additive, gauged with latex polymer additive.

1. White Portland cement; ASTM C 150, complying with the staining requirements of ASTM C 91 for not more than 0.03% water soluble alkali. Furnish Type I, except Type III may be used for setting pavers in cold weather.

2. Color pigment shall not exceed 10% of the Portland cement in the mortar.

3. Latex polymer additive shall be equal to "Laticrete 3701", manufactured by Laticrete International, Inc., Woodbridge, CT 06525. Mix according to manufacturer's instructions.

4. Except as otherwise indicated, all other mortar grout materials shall be as specified in Paragraph 2.06, above.

B. Mortar grout shall contain a coloring additive. Color shall be approved by the Architect.

1. Coloring additive shall be equal to SGS Colors, manufactured by Solomon Grind Chem Service, Springfield, IL 62705.

2. Mortar coloring additive shall have mineral oxide pigment and shall be certified by the supplier to be resistant to alkali, light, and weather, and shall be of a chemical composition unaffected by cement and free of water and soluble salts.

3. Color shall match color of brick pavers.

2.09 SAND SETTING BED

A. Sand shall be a clean, sharp, natural sand conforming to ASTM C 33, except that the fineness modulus shall be 2.25 ± 0.10.

1. Gradation for setting bed sand shall be as follows:

Sieve Size	% Passing by Weight
3/8 in.	100
No. 4	95 - 100
No. 8	80 - 100
No. 16	50 - 85
No. 50	10 - 30
No. 100	5 - 15
No. 200	0 - 10

2.10 SAND JOINT FILLER

A. Gradation for joint filler sand shall be as follows:

Sieve Size	% Passing by Weight
No. 16	100
No. 200	10

1. Sand shall be supplied by a single source. Source of supply shall not be changed during course of project without written permission of the Architect.

2.11 EPOXY ADHESIVE

A. Epoxy adhesive for setting brick pavers on aluminum fountain vault cover shall be a two-component, 100% solids, moisture-insensitive, high-modulus, high strength, structural, epoxy paste adhesive conforming to ASTM C 881, similar to "Sikadur 31, Hi-Mod Gel", manufactured by Sika, Glendale Heights, IL 60139, or approved equal.

2.12 WATER

A. Water shall be potable and shall be free of injurious contaminants.

PART 3 EXECUTION

3.01 ACCEPTABILITY OF CONCRETE BASE

A. Contractor shall examine the concrete base slab to determine its adequacy to receive brick paving and setting bed. Concrete shall have fully cured. Evidence of inadequate base shall be brought to the immediate attention of the Architect.

B. Start of work of this Section shall constitute acceptance of concrete base slab.

3.02 CUT-BACK ASPHALT PRIME COAT

A. Cut-back asphalt shall be applied to concrete base slab at a rate sufficient to act as an adhesive between the concrete slab and the bituminous setting bed.

3.03 BITUMINOUS SETTING BED

A. Bituminous setting bed shall be installed over the fully cured concrete base. Control bars 3/4 in. deep shall be placed directly over the base. If grades must be adjusted, wood chocks under depth control bars shall be set to proper grade. Set two bars parallel to each other to serve as guides for the striking board. The depth control bars must be set carefully to bring the pavers, when laid, to proper grade.

B. While still hot (not less than 250°F.) some of the bituminous bed material shall be placed between the parallel depth control bars. This bed shall be pulled with the striking board over the control bars several times. After each passage, low porous spots shall be showered with fresh bituminous material to produce a smooth, firm, and even setting bed. As soon as this initial panel is completed, advance the first bar to the next position in readiness for striking the next panel. After the depth control bars and wood chocks have been removed, carefully fill any depressions that remain.

C. The setting bed shall be rolled with a power roller to a nominal depth of 3/4 in., while still hot. The thickness shall be adjusted so that when the bricks are placed and rolled, the top surface of the pavers will be at the required finished grade.

D. A coating of neoprene-modified asphalt adhesive shall be applied by mopping, squeegeeing, or troweling over the top surface of the bituminous setting bed so as to provide a bond under the pavers.

1. If adhesive is trowel-applied, trowel shall be serrated type with serrations not to exceed 1/16 in.

3.04 SETTING BRICK PAVERS (BITUMINOUS SETTING BED)

A. Brick pavers shall be on a bituminous setting bed over a prepared concrete base. All setting shall be done by competent masons under adequate supervision.

B. Brick pavers with chips, cracks, stains, or other defects which might be visible in the finished work shall not be used.

C. After the modified asphalt adhesive is applied, carefully place the pavers by hand in straight courses with hand tight joints and uniform top surface.

D. Brick pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Brick pavers shall be neatly cut and fitted at all perimeters and closures to fit neatly and closely, with joints uniform in thickness. Pavers shall be cut with a water-cooled, cut-off wheel masonry saw using a diamond blade.

3.05 JOINT TREATMENT (BITUMINOUS SETTING BED)

A. Joints between pavers shall be hand tight and shall be uniform in thickness. Joint thickness shall not exceed 1/4 in.

B. Joint filler shall be swept dry into the joints between pavers until the joints are completely filled. Surface shall be swept clean. Swept surface shall than be thoroughly dampened with a low-volume fine spray of water.

3.06 SETTING BRICK PAVERS (MORTAR SETTING BED)

A. Brick pavers shall be set on a mortar setting bed over a prepared concrete base slab. All setting shall be done by competent masons under adequate supervision.

B. Brick pavers with chips, cracks, stains, or other defects which might be visible in the finished work shall not be used.

C. Bond coat shall be applied to concrete base slab using flat trowel. Thickness of bond coat shall be approximately 1/16 in.

D. Mortar bed shall be spread evenly over the troweled bond coat. Mortar setting shall be 3/4 in. thick, minimum. Bond coat shall be applied to mortar bed using flat trowel to thickness of 1/16 in.

E. Before setting, the back of each brick shall be dampened and shall receive a slurry of mortar to ensure maximum contact with mortar bed. Each piece shall be carefully bedded in a full bed of mortar and tapped home to a full and solid bearing. Particular care shall be exercised to equalize bed and joint openings and eliminate the need for redressing of exposed surfaces.

F. Brick pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Brick pavers shall be neatly cut and fitted at all perimeters and closures to fit neatly and closely, with joints uniform in thickness. Pavers shall be cut with a water-cooled, cut-off wheel masonry saw using a diamond blade.

G. Exposed surfaces shall be kept free from mortar at all times. Excess mortar shall be immediately removed before latex modified mortar can set.

3.07 JOINT TREATMENT (MORTAR SETTING BED)

A. Brick joints shall be uniform in thickness. All joints except expansion joints shall be 3/8 in. thick. Expansion joints shall be 1/2 in. thick.

B. All joints, except expansion joints, shall be completely filled with mortar, then raked out to a depth of not less than 3/4 in. Raked joints shall be brushed clean and pointed with mortar grout to a flat cut joint.

1. Mortar grout between brick shall be uniform in appearance, texture, and color.

2. After initial set of grout, joints shall be finished by tooling with a rounded, non-staining jointer to produce a glassy-hard polished, slightly, concave joint, free of drying cracks.

C. Brick paving shall be kept damp by intermittent spraying for three days, minimum, to effectively cure the joints.

3.08 SAND SETTING BED

A. Sand shall be spread over concrete base slab as a setting bed for pavers. Sand shall be spread and leveled to required slope and grade. Minimum thickness of sand shall be 1 in. after leveling. Bed shall not be compacted until pavers are installed.

B. Surface tolerance shall be within 1/4 in. of required grade as measured with a 10 ft. straightedge in both the transverse and longitudinal directions.

3.09 SETTING BRICK PAVERS (SAND SETTING BED)

A. Setting bed shall be protected from damage prior to setting pavers.

B. Setting shall be done by competent workmen under adequate supervision, and in accordance with manufacturer's recommendations. Pavers shall be placed on the setting bed, to true line and plane and in required position.

C. Pavers with chips, cracks, or other structural or aesthetic defects shall not be used.

D. Pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Pavers shall be tightly butted. Joints between pavers shall be uniform and shall not exceed 1/8 in.

E. After a sufficient area of pavers has been installed, bricks shall be set to their final level in accordance with brick manufacturer's printed instructions. After setting brick in setting bed, joints of pavers shall be filled by sweeping sand into the joints. When joints are filled, paver surfaces shall be misted with a fine spray of water to settle joint material. After joint material has dried, repeat joint filling and sweeping process.

F. Where required, pavers shall be accurately cut with a masonry or concrete saw. Cut edges shall be plumb and straight. Scoring and breaking will not be acceptable.

3.10 SETTING BRICK PAVERS (EPOXY SETTING BED)

A. Brick pavers shall be set on aluminum fountain vault hatch cover in accordance with epoxy adhesive manufacturer's printed instructions.

B. Pavers shall be set in the pattern detailed on the Drawings. Pavers shall be tightly butted. Joints between pavers shall be uniform and shall not exceed 1/8 in.

C. Where required, pavers shall be accurately cut with a masonry or concrete saw. Cut edges shall be plumb and straight. Scoring and breaking will not be acceptable.

3.11 CLEANING AND PROTECTION OF BRICK SURFACES

A. After completion of brick paving, surfaces shall be carefully cleaned, removing all dirt, excess sand, filler, and stains.

B. Completed brick surfaces shall be thoroughly cleaned of wax coating using a steam jenny or other method approved by the Architect.

1. Steam jenny shall have a capacity of 150 gal. per hour at 120 psi and 325^{O}F. coil temperature.

END OF SECTION

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Document 00510 Agreement
(AIA Document A101/CMa)

Document 00610 Performance Bond
(AIA Document A311/CM)
Document 00610 Labor and Material Payment Bond
(AIA Document 311/CM)

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LIST OF DRAWINGS

PART 1 GENERAL

1.01 DRAWING LIST

A. List of Drawings for Addison Arts & Events District, Addison, Texas, SA 14516.00, Date of Issue 09/30/02, is as follows:

Drawing No.	Date of Issue	Rev. No.	Rev. Date	Drawing Title
GENERAL				
-		-	-	Cover Sheet
CO-0	09/30/02			Sheet Index
CO-1	09/30/02			Existing Conditions
CIVIL				
C1-1	09/30/02	-	-	Site Demolition, Preparation and Erosion Control
C1-2	09/30/02	-	-	Site Demolition, Preparation and Erosion Control
C2-1	09/30/02	-	-	Layout and Materials Plan
C2-1	09/30/02	-	-	Layout and Materials Plan
C3-1	09/30/02	-	-	Grading & Drainage Plan
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C3-3	09/30/02	-	-	Grading & Drainage Plan
C4-1	09/30/02	-	-	Utilities Plan
C4-2	09/30/02	-	-	Utilities Plan
C4-3	09/30/02	-	-	Utilities Plan
C5-1	09/30/02	-	-	Fountain Layout & Materials Plan
C5-2	09/30/02	-	-	Fountain Layout & Materials Plan
C5-3	09/30/02	-	-	Fountain Paving Plan
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Drawing No.	Date of Issue	Rev. No.	Rev. Date	Drawing Title
CIVIL (continued)				
C7-4	09/30/02	-	-	Site Details
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C7-7	09/30/02	-	-	Site Details
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C7-11	09/30/02	-	-	Site Details
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L3-1	09/30/02	-	-	Planting and Irrigation Details

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF DOCUMENT

PROPOSAL FORM

PROPOSAL OF _____
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

_____ $_____

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

_____ $_____

TOTAL BID (Standard Bid (A) + Time Bid (B))

_____ $_____

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within _____calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned _____%

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned _____%

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number _____ dated _____

Addendum Number _____ dated _____

Addendum Number _____ dated _____

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Legal Name of Corporation

State of Incorporation

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Seal of Corporation

Witness

Name of Witness – (typed or printed)

Street Address

City, State, Zip Code

Signature

Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

DOCUMENT 00902

ADDENDUM NO. 2

DATE: October 18, 2002

TO: PROSPECTIVE BIDDERS

FROM: SASAKI ASSOCIATES, INC.
64 Pleasant Street
Watertown, Massachusetts 02172

PROJECT: ADDISON ARTS & EVENTS DISTRICT
Addison, Texas

This Addendum forms part of and modifies Bidding and Contract Documents dated September 30, 2002. Acknowledge receipt of this Addendum in writing in space provided on Document "PROPOSAL FORM".

This Addendum consists of ten (10) pages plus attachments consisting of revised Project Manual Table of Contents; revised Proposal Form; list of Pre-Bid Conference attendees; revised Document 00015, List of Drawings; and one newly issued Specifications Section 02782, Brick Pavers.

Where any original item called for in the Project Manual or indicated on the Drawings is supplemented hereby, the supplemental requirements shall be considered as added thereto.

Where any original item is amended, voided, or superseded hereby, the other provisions of such items not specifically amended, voided, or superseded shall remain in effect.

Prebid Conference

1. A prebid conference was held at the Addison Town Hall on Tuesday, October 8, 2002. A copy of the list of attendees is attached to this Addendum.

Table of Contents

1. The Table of Contents (pages TC-1 through 4) is revised. A copy of the Table of Contents, marked "Rev. October 18, 2002", is attached to and made part of this Addendum.

BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT

Advertisement for Bids

1. Paragraph 1., bid opening date has been changed from "October 22, 2002" to "November 5, 2002". Bid opening time of 2:00p.m. remains unchanged.

2. Paragraph 8., add the following sentence: "For information on electrical or mechanical work to be performed, call Keith Gassman at Campos Engineering (214) 696-6291.

Instructions to Bidders

1. Modify Paragraph S as follows: Increase the amount of Daily Value from $1,000.00 to $3,000.00. Increase the total incentive payment not to exceed amount from $100,000 to $180,000.0.

2. Modify Paragraph T as follows: (i) Increase the incentive payment Daily Value amount from $1,000.00 to $3,000.00; (ii) Amend the first sentence of the fifth paragraph to read as follows: "Should the Contractor fail to finally complete the Contract on or before expiration of the Allowable Contract Time, as adjusted in accordance with the provisions above, the Town shall deduct from the moneys due the Contractor an amount equal to one-third of the Daily Value as shown in Provision "S" (or $1,000.00) above for each calendar day final completion exceeds the Allowable Contract Time.".

Proposal Form

1. Proposal Form (Pages 1 through 4) is replaced. A copy of the new Proposal Form is attached to and made part of this Addendum.

Document 00510 - Agreement

1. Standard Form of Agreement Between Owner and Contractor - AIA Document A101/CMa (As Amended): Modify Paragraph 7.4.1 as follows: (i) Increase the incentive payment Daily Value amount from $1,000.00 to $3,000.00 (first sentence of the first paragraph); (ii) Amend the first sentence of the fifth paragraph to read as follows: "Should the Contractor fail to finally complete the Contract on or before expiration of the Allowable Contract Time, as adjusted, the Town shall deduct from the moneys due the Contractor an amount equal to one-third of the Daily Value as shown in Provision "S" of the Instructions to Bidders (such amount being $1,000.00) for each calendar day final completion exceeds the Allowable Contract Time.".

Document 00015 - List of Drawings

1. Document 00015, List of Drawings (pages 00015 -1 through 3) is revised. A copy of the revised Document, marked "Rev. October 18, 2002", is attached to and made part of this Addendum.

SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

Section 01330 - Submittals

1. Page 01330-7, subparagraph 1.12B.2., change the words "REVIEWED AS NOTED" to 'REVIEWED AS NOTED, PROCEED".

DIVISION 2 – SITE CONSTRUCTION

Section 02510 – Water System

1. Page 02510 - 6, delete subparagraph 2.07B.1., and replace with the following:

   "1. Double check valve backflow prevention assembly equal to Hersey Model No. 2 Double Check Valve Backflow Prevention Assembly."

2. Page 02510 - 7, delete Paragraph 2.10A., and replace with the following:

   "A. Detector wire for identification of water main locations shall be copper wire."

3. Page 02510 - 8, delete Paragraph 2.12C., and replace with the following:

   "C. Vault chambers shall have precast concrete lid with cast in ¼ in. aluminum diamond plate cover, with ¼ in. extruded aluminum frame. Hatch shall be furnished with 316 stainless steel snap lock and hinges."

Section 02782 – Brick Pavers

1. Section 02782, Brick Pavers (pages 02782-1 through 9) is issued. A copy of this newly issued section, marked "Iss. October 18, 2002", is attached to and made part of this Addendum.

Section 02815 – Fountains

1. Page 02815 – 7, paragraph 2.06A, last paragraph, revise rating for electrical control panel for fountain equipment to "NEMA 3R enclosure construction".

Section 02930 – Trees, Plants and Ground Covers

1. Page 02930-10, add Paragraph 2.16. as follows:

"2.16 STEEL EDGING

A. Steel edging shall be Border Concepts Edging, "Border Guard", manufactured by Border Concepts, Inc., P.O. Box 471185, Charlotte, NC 28247 or approved equal. Steel edging shall be shop fabricated, 3/16 in. thick x 4 in. deep, primed and painted black. Edging shall be furnished in 16 ft. lengths.

   1. Steel edging shall have slotted holes for staking steel edging every 30 in. o.c.

   2. Steel stakes shall be 15 in. long, tapered.

   3. Provide manufacturer's end stake and splicer unit.

   4. Provide manufacturer's standard touch-up paint for in field touch-up of scratched or marred areas."

2. Page 02930-13, add Paragraph 3.18. as follows:

"3.18 STEEL EDGING

A. Steel edging shall be installed at locations indicated on the Drawings. Where required, edging shall be cut square and accurately to required length.

   1. Steel edging shall be securely staked in required position. Stakes shall be driven every 30 in. o.c. along length of edging.

   2. Adjacent lengths of edging shall be spliced together with manufacturer's standard splicer unit.

   3. Edging shall be set plumb and vertical at required line and grade. Straights sections shall not be wavy; curved sections shall be smooth and shall have no kinks or sharp bends."

DIVISION 9 - FINISHES

Section 09900 - Painting

1. Page 09900-2, Paragraph 1.06 is deleted.

DIVISION 13 – SPECIAL CONSTRUCTION

Section 13600 – Misting and Cooling System

1. Section 13600, Misting and Cooling System (pages 13600-1 through 5) is deleted in its entirety.

Division 16 - ELECTRICAL

Section 16525 – Site Lighting

1. Page 16525-3, delete Paragraph 2.02H., and insert the following:

   "H. Garden Lights: shall be "Model PPL-2546/Brown Patina/35W t-6MH/277V, manufactured by Teka Illumination, Templeton, CA 93465, or approved equal."

APPENDIX

Appendix B – Town of Addison Public Works Department General Construction Notes

1. Delete Drawing No. DDBP-AD regarding backflow preventer assembly.

2. Add Drawing Nos. FMC-AD8 and BP-AD (attached) for Town of Addison approved water meter with vault and backflow preventer with vault.

DRAWINGS

CIVIL

Drawing C1-1 – Site Preparation/Demolition/Erosion Control Plan

1. Eliminate all haybales.

2. Extend silt fence along perimeter of Quorum Drive, Addison Circle Drive, and Addison Road.

Drawing C1-2 – Site Preparation/Demolition/Erosion Control Plan

1. Add note 16. "All salvaged items are to be delivered to the Town of Addison, Kellway Lift Station, 4245 Kellway Circle, Addison, Texas 75001".

2. Eliminate all haybales

3. Extend silt fence along perimeter of Quorum Drive, Addison Circle Drive and Addison Road.

4. Remove Pavilion building limit of work line.

5. Note existing building has been removed.

6. Note to remove cone for manhole to be abandoned.
7. Revise limit of work line, SE corner of project site.

Drawing C1-3 – Site Preparation/Demolition/Erosion Control Plan

1. Remove haybales from Legend.
2. Note cone to be removed for manhole to be abandoned.
3. Abandon additional manhole, cap and plug pipe on north side of it.

Drawing C2-1 – Materials Plan

1. Indicate paved areas to be constructed with 8" slab depth.
2. Add areas of reinforced earth.
3. Add paving symbols to Legend.

Drawing C2-2 – Materials Plan

1. Indicate paved areas to be constructed with 8" slab depth.
2. Add areas of reinforced earth.
3. Revise limit of work at SE corner of project site, eliminate reconstruction of roadway and sidewalk pavement in this area.
4. Revise Pergola section reference.

Drawing C2-3 – Layout Plan

1. Add areas of reinforced earth with dimensions.
2. Add layout coordinates to corners of electrical room.

Drawing C2-4 – Layout Plan

1. Add areas of reinforced earth with dimensions.
2. Revise limit of work SE corner of project site, add detail reference.

Drawing C3-1 – Grading & Drainage Plan

1. Add invert elevation abbreviation to Legend.
2. Add 8" cleanout ports to Retention Fields 1 and 2.
3. Revise 6" cleanout ports to 10" and relocate to pipe ends for Retention Fields 1 and 2.

4. Add underdrain around electrical room, extend to storm drain line and indicate invert elevations.
5. Revise invert elevation of tree pit underdrain on Addison Circle Drive.
6. Revise invert elevation out, DMH 4A.
7. At DMH 4, revise invert elevation 628.86 reference to DMH 4A.

Drawing C3-2 – Grading & Drainage Plan

1. Revise 36" RCP storm sewer from DMH 11 to connect to existing 60" RCP at SE corner of project site. Add note to protect existing curb and roadway for this work.
2. Revise curb inlets 9 and 10 to 6' Rec. Inlet.
3. Revise R16 Inlet invert elevations.
4. Revise DMH 11 invert elevations for 24" RCP and invert out.
5. Revise R15 Inlet invert elevations.
6. Revise pipe between R13 and R15 inlets to 21".
7. Revise R14 Inlet invert elevations.
8. Revise R13 Inlet invert elevation out.
9. Add underdrain around fountain vault, extend to SMH 7 and add invert elevations.
10. Revise invert elevation at underdrain adjacent to Addison Circle Drive Sidewalk.
11. Revise 6" cleanout ports to 10" and relocatee to pipe ends for Retention Field 3.

Drawing C4-1 – Utilities Plan

1. Revise water system main size and layout within project site.
2. Add water meter with vault and backflow preventer with vault on 8" water main.
3. Revise pipe connections for drinking fountains.
4. Delete connection of 8" water main to existing main on Addison Circle Drive.
5. Revise yard hydrant connections to 8" water main.
6. Add/revise coordinates for water system layout.

Drawing C4-2 – Utilities Plan

1. Revise water system main size and layout within project site.
2. Add water meter with vault and backflow preventer with vault on 8" water main.
3. Revise yard hydrant connections to 8" water main.
4. Add/revise coordinates for water system layout.

5. Revise slope and invert elevations of 6" sanitary sewer line.
6. Revise pipe size for yard hydrant connections.
7. Add note regarding 12" water main connection to existing 24" main on Quorum Drive.
8. Revise storm drainage outfall connection at SE corner of project site, including limit of work.

Drawing C4-3 – Utilities Plan

1. Extend 8" water line south to connection with existing 8" main on Broadway Street. Add gate valves.
2. Add fire hydrant on 8" water line extension.
3. Add note to repair asphalt pavement as required for water line construction.

Drawing C5-1 – Materials Plan Detail

1. Add expansion joint locations to pavement around Pavilion.
2. Revise detail reference for paving at Pavilion.

Drawing C5-4 – Paving and Layout Plan Detail

1. Add note regarding new brick paving at NE corner of Festival Way/Quorum Drive intersection.

Drawing C6-1 – Pergola Plan and Details

1. Detail 1: Add conduits to elevation and note regarding location of lighting and outlet conduits in columns.
2. Detail 5: Add note regarding vine planting pocket locations and dimensions, revise length of eye bolt.

Drawing C6-2 – Pergola Elevations

1. Eliminate Note 2 (misting system eliminated).

Drawing C7-1 – Site Details

1. Detail 1: Add notes regarding contrasting color for handicap ramp and compliance with current accessibility standards.
2. Detail 3: Revise reinforcing spacing to 18" o.c.
3. Detail 4: Revise reinforcing spacing to 18" o.c.
4. Detail 6: Revise reinforcing spacing to 18" o.c.
5. Detail 8: Revise reinforcing spacing to 18" o.c.
6. Detail 14: Revise curb reinforcing to include "L" bar.

Drawing C7-2 – Site Details

1. Detail 1: Add crosspitch note, add expansion joint at curb, add dowels at curb.
2. Detail 2: Add crosspitch note.
3. Detail 6: Revise painted crosswalk to white thermoplastic lines.
4. Detail 9: Revise note regarding drywell dimensions and material.
5. Detail 13: Revise paving to full depth slab with doweled expansion joints.

Drawing C7-11 – Site Details - Stairs

1. Detail 1: Revise paving at top of stair.

Drawing C7-13 – Site Details - Stairs

1. Detail 4: Revise paving at top of stair.
2. Detail 7: Revise paving at top of stair.

Drawing C7-14 – Site Details – Electrical Room

1. Detail 1: Add reinforcing to pavement slab, revise wall footing to coordinate with Detail 3 on Drawing S1-1, add detail references.
2. Detail 2: Add note about extent of waterproofing.
3. Detail 4: Revise footing for wall between loading dock and door, revise detail reference.
4. Detail 5: Add details on Drawing C7-15, which has been eliminated.

Drawing C8-1 – Festival Way Profiles

1. Add stationing to plan view.
2. Revise profile to reflect changes to storm sewer outfall at SE corner of project site.
3. Revise yard hydrant connections to water supply system.
4. Revise extension of 12" water main and connection to existing 24" main on Quorum Drive.

Drawing C8-2 – Sewer Profile

1. Revise pipe slope and invert elevations.

Drawing C8-3 – Site Details – Roadway Paving

1. Detail 1: Eliminate hot poured rubber as joint sealing compound.
2. Detail 2: Revise detail from construction joint to undercut header section.
3. Eliminate hot poured rubber as joint sealing compound for sawed dummy joint.

Drawing C8-4 – Site Details - Water

1. Detail 4: Revise dimension of concrete pads at cover and pipe bedding, including notes.
2. Detail 5: Revise dimension from hydrant to valve box, height of hydrant above grade, and revise notes.
3. Add Detail 6 for typical drinking fountain supply pipe connection.
4. Delete typical hydrant layout plan diagrams.

Drawing C8-5 – Site Details – Water

1. Detail 1: Revised yard hydrant style and setting detail.

Drawing C8-7 – Site Details – Drainage

1. Detail 1: Add filter fabric
2. Revise Note #10 to eliminate polyethylene pipe.

Drawing C8-8 – Site Details – Drainage

1. Detail 2: Revise 6" cleanouts to 10" and revise dimension to end of pipe, add 8" cleanouts and dimension to end of pipe.
2. Detail 3: Revise section to indicate cleanout changes in Detail 2.

LANDSCAPE

Drawing L1-1 – Planting Plan

1. Add steel edging to plant beds adjacent to Addison Circle Drive, east of the Pergola.
2. Add electrical equipment indication in same area, with detail reference.
3. Add note for steel edging around all vine planting pockets and add detail reference.
4. Add steel edging to groundcover planting bed southwest side of Main Stage/electrical room.

Drawing L1-2 – Planting Plan

1. Add steel edging to plant beds at garden spaces along Addison Circle Drive and at ground cover bed SE corner of The Bowl area.
2. Revise limit of work SE corner of project site and revise locations of loam and seed for disturbed areas.

Drawing L2-1 – Planting Details and Plant List

1. Plant List: Revise sizes for some plants.
2. Detail 7: Revise plant bed section to show low point adjacent to pavement edge.

Drawing L3-1 – Irrigation Plan

1. Add irrigation bubbler heads for street trees in grates on Addison Circle Drive. These bubbler heads were previously shown on Drawing L4-1, which has been eliminated.

2. Revise zone valve sequence.

Drawing L3-2 – Irrigation Plan

1. Add irrigation bubbler heads for street trees in grates on Addison Circle Drive. These bubbler heads were previously shown on Drawing L4-1, which has been eliminated.

2. Revise zone valve sequence.

3. Add irrigation spray heads to plant bed at NE corner of site, adjacent to handicap ramp and Pavilion building.

4. Revise schematic layout of irrigation equipment in fountain vault.

5. Note 48 station controller.

Drawing L4-1 – Irrigation Bubblers

1. Drawing has been eliminated – all tree bubblers for trees other than street trees have been deleted.

Drawing L4-2 – Irrigation Bubblers

1. Drawing has been eliminated – all tree bubblers for trees other than street trees have been deleted.

Drawing L5-1 – Irrigation Details and Legend

1. Delete bubbler head detail for trees in lawn/plant areas.

STRUCTURAL

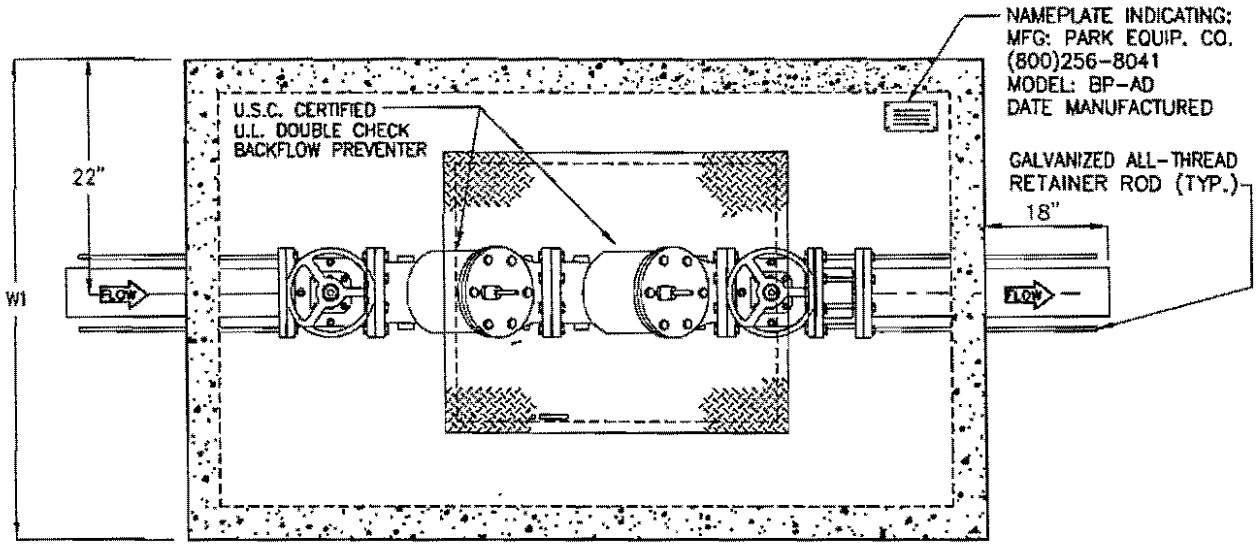
Drawing S1-1 - Structural Details

1. Detail 4: Add waterstops at footing, revise slopes to sump area, add note regarding lifting lugs, add reinforcing to Section A-A.

Drawing S1-3 - Structural Details

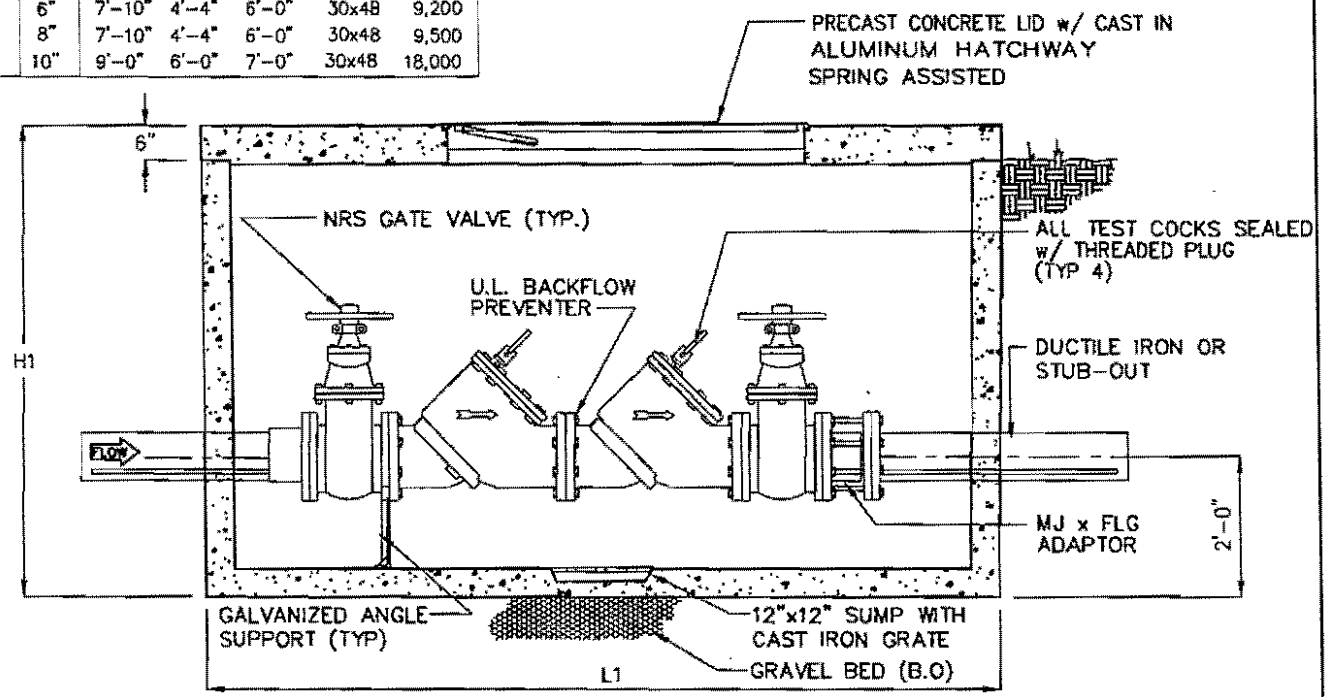
1. Detail 2: Add callouts to detail, indicate piers to extend to limestone.

END OF ADDENDUM



PLAN VIEW

MODEL	SIZE	L1	W1	H1	HATCHWAY	WEIGHT LBS
BP-AD3	3"	6'-0"	3'-6"	4'-6"	24x30	4,500
BP-AD4	4"	6'-0"	3'-6"	4'-6"	24x30	4,500
BP-AD6	6"	7'-10"	4'-4"	6'-0"	30x48	9,200
BP-AD8	8"	7'-10"	4'-4"	6'-0"	30x48	9,500
BP-AD10	10"	9'-0"	6'-0"	7'-0"	30x48	18,000



ELEVATION

Specifications

CONCRETE : Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

HATCHWAY: 1/4" Aluminum diamond plate cover, with 1/4" extruded aluminum frame. Hatch to be furnished with 316 Stainless Steel snap lock & hinges.

Engineering Data

The backflow assembly shall be factory assembled in vault & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

AWWA UL UPC FM

PROJECT :

CUSTOMER :

ENGINEER :

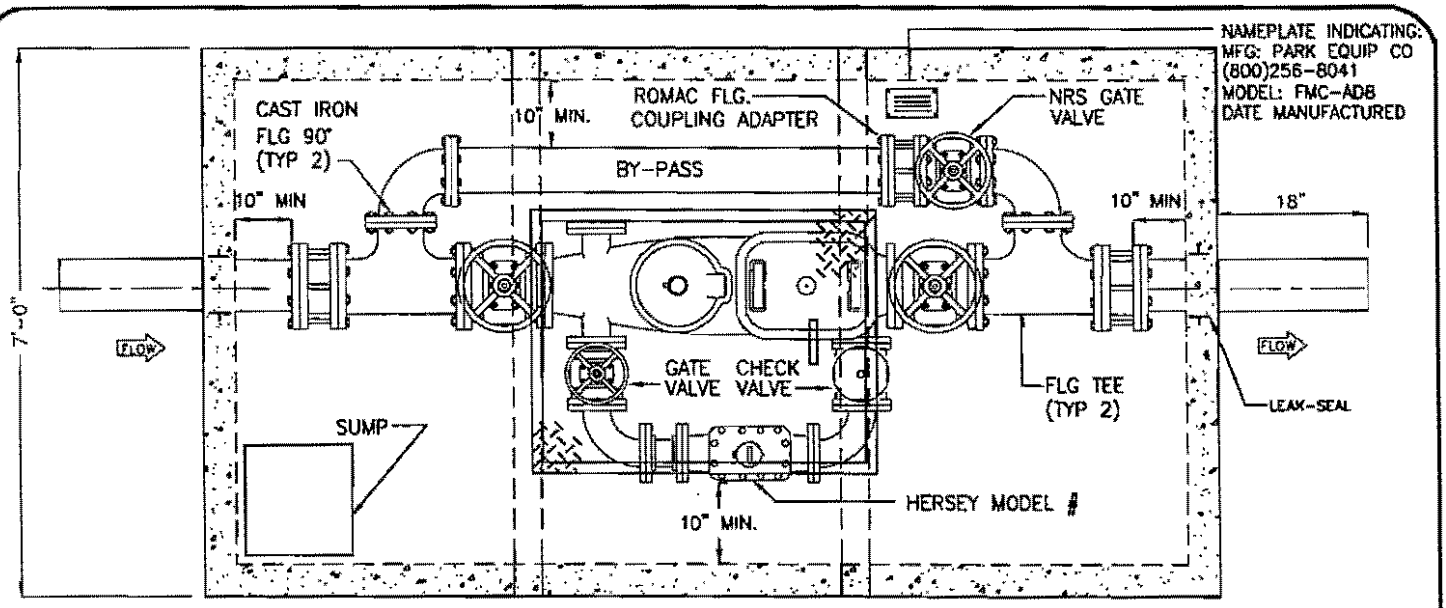
PARK EQUIPMENT COMPANY

WATS 800-256-8041

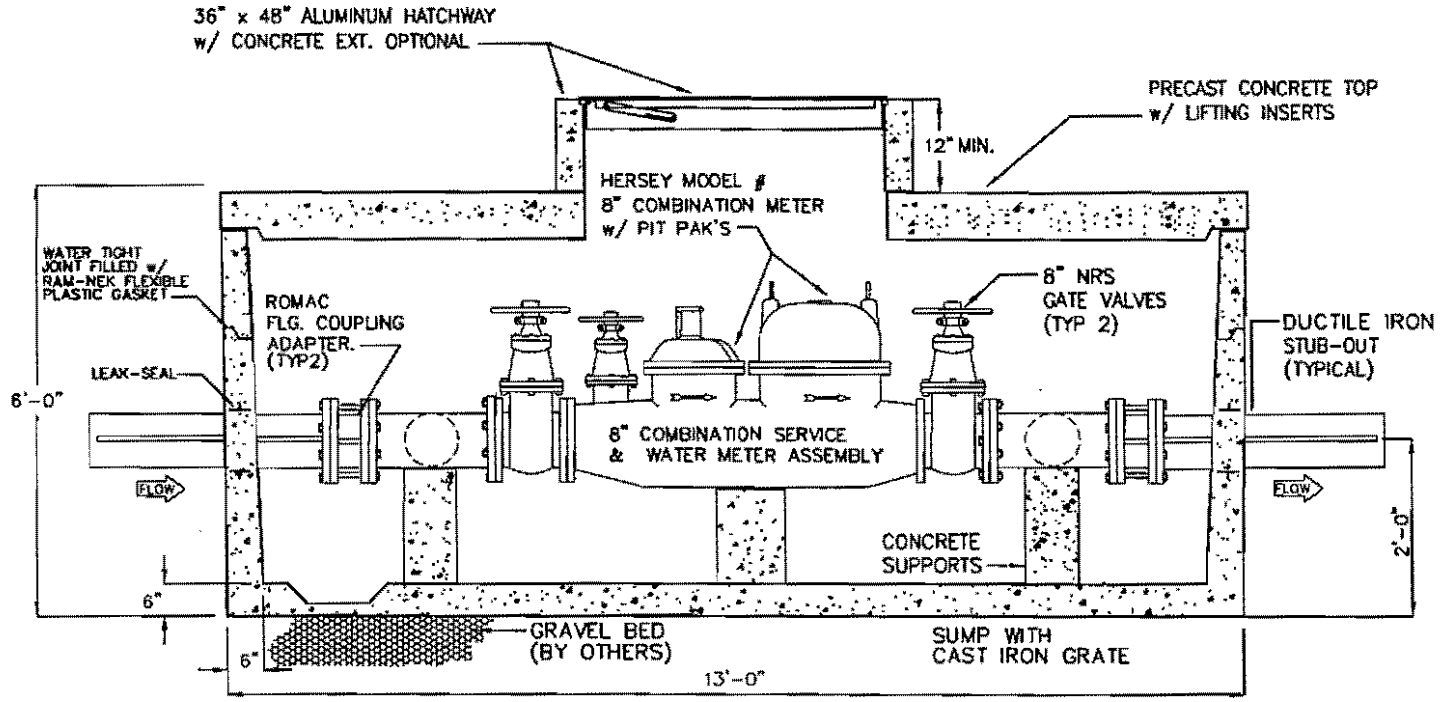
TOWN OF ADDISON

3" THRU 10" DOUBLE CHECK BACKFLOW PREVENTER ASSEMBLY

SCALE	NONE	DWG. NO.	REV.
DATE	8/97	BP-AD	A



PLAN VIEW



ELEVATION

Specifications

CONCRETE : Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

STEEL COVER: SPRING ASSISTED ALUM. 36" X 48" HATCHWAY.

Engineering Data

Field excavation and preparation shall be completed prior to delivery of assembly. Use dimensional data as shown. Pipe, valves and fittings of the assembly are approved by one or more of the following associations:

AWWA UL UPC FM

PROJECT :

CUSTOMER :

ENGINEER :

PARK EQUIPMENT COMPANY

" Expect the Best "

TOWN OF ADDISON

8" FIRE/DOM. COMBINATION WATER METER VAULT ASSEMBLY w/ BY PASS

SCALE	NONE	DWG. NO.	REV.
DATE	1/99	FMC-AD8	A

SECTION 02782

BRICK PAVERS

PART 1 GENERAL

1.00 RELATED DOCUMENTS

A. The BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT and applicable parts of DIVISION 1 - GENERAL REQUIREMENTS, as listed in the Table of Contents, shall be included in and made a part of this Section.

1.01 WORK INCLUDED

A. Provide all equipment and materials and do all work necessary to furnish and install the brick pavers, as indicated on the Drawings and as specified.

B. Owner has approximately 650 square feet of Glen Gary Autumn Haze brick pavers available for the Contractor's use for work of this Section. They are currently in storage at the Service Center on Westover Drive in Addison. Contractor shall be responsible for hauling pavers from storage location to project site.

1.02 RELATED WORK

A. Examine Contract Documents for requirements that affect work of this Section. Other Specification Sections that directly relate to work of this Section include, but are not limited to:

1. Section 02300, EARTHWORK; Establishment of subgrade elevation.

2. Section 03300, CAST-IN-PLACE CONCRETE; Concrete base slab.

1.03 REFERENCES

A. Comply with applicable requirements of the following standards. Where these standards conflict with other specified requirements, the most restrictive requirement shall govern.

1. American Society for Testing and Materials (ASTM):

C 67	Sampling and Testing Brick and Structural Clay Tile
C 91	Masonry Cement
C 144	Aggregate for Masonry Mortar
C 150	Portland Cement
C 207	Hydrated Lime for Masonry Purposes
C 136	Sieve Analysis of Fine and Coarse Aggregates
C 144	Aggregate for Masonry Mortar

C 216	Facing Brick (Solid Masonry Units Made from Clay or Shale)
C 902	Pedestrian and Light Traffic Paving Brick
D 36	Softening Point of Bitumen (Ring-and-Ball Apparatus)
D 113	Ductility of Bituminous Materials
D 3381	Viscosity-Graded Asphalt Cement for Use in Pavement Construction.

1.04 SUBMITTALS

A. Samples: Furnish ten individual brick pavers as samples, showing extreme variations in color and texture.

B. Manufacturer's Product Data: Manufacturer's product data shall be submitted for the following items:

Brick paver
Soil separator
Latex polymer mortar additive
Mortar coloring additive
Neoprene-modified asphalt adhesive

C. Test Report: Submit reports from tests conforming to ASTM C 67 methods indicating:

1. Compressive strength, psi.
2. Absorption, 5 hr. submersion in cold water.
3. Absorption, 24 hr. submersion in cold water.
4. Maximum saturation coefficient.
5. Initial rate of absorption (suction).
6 Abrasion index.
7. Freeze-thaw.
8. Efflorescence.

1.05 SAMPLE PANELS

A. Construct two sample panels of brick paving on the specified base and setting methods before start of any brick paving.

1. Sample panels shall exhibit proposed color range, texture, bond, jointing, pattern, and workmanship.
2. Size of panels shall be 6 ft. x 6 ft., minimum.

B. Sample panels shall be inspected by the Architect. If the samples are not acceptable, construct additional panels at no cost to the Owner until acceptable panels are constructed. Accepted panesl shall become the standard for the entire job, and shall remain undisturbed until completion of all work.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Brick pavers shall be carefully packed by the supplier for shipment.

1. Waxed bricks shall have waxed surface protected with a paper separator or shall have waxed surfaces facing each other during delivery and storage.

B. Brick shall be stored off the ground and protected against staining and other damage.

1. Waxed bricks shall be stored protected from the sun.

C. Pavers damaged in any manner will be rejected and replaced with new materials at no additional cost to the Owner.

1.07 PROTECTION OF FINISHED SURFACES

A. Finished surfaces adjacent to the brick paving work shall be adequately protected from soiling, staining, and other damage during construction.

PART 2 PRODUCTS

2.01 CONCRETE BASE

A. Concrete base slab shall conform to Section 03300, CAST-IN-PLACE CONCRETE.

2.02 BRICK PAVERS

A. Brick pavers shall meet or exceed the requirements of ASTM C 902, Class SX, Abrasion Type I, Application PS.

B. Brick pavers shall be "Autumn Haze", Classic, actual 4 in. x 8 in. 2-1/4 in. size, manufactured by Glen-Gery Brick Corp., Reading, PA.

C. Brick shall conform to the following requirements:

1. Average absorption, 24 hr. cold-water absorption test = 4% or less.

2. Average compressive strength of not less than 10,500 psi for any five bricks tested.

3. Capable of withstanding at least the equivalent of 100 cycles of freeze-thaw conditions.

4. Permissible paver tolerances shall conform to ANSI/ASTM C 902.

5. Paver shall not vary from nominal dimensions by more than 1/8 in.

D. Color and texture shall match the sample at the office of the Architect, and shall be as approved by the Architect from samples submitted by the Contractor prior to delivery.

E. Brick shall be uniform in color, size, appearance, and dimensions, and shall have smooth regular edges where they are closely butted.

F. Brick shall have a temporary wax coating with a 130°F melting point to protect surface from latex-modified mortar.

2.03 BITUMINOUS SETTING BED

A. Asphalt cement to be used in the bituminous setting bed shall conform to ASTM D 3381. Viscosity grade shall be A.C. 10 or A.C. 20.

B. Fine aggregate to be used in the bituminous setting bed shall be clean, hard sand with durable particles and free from adherent coating, lumps of clay, alkali salts, and organic matter. Aggregate shall be uniformly graded from "coarse" to "fine" with 100% by weight passing the No. 4 sieve and shall meet the gradation requirements when tested in accordance with ASTM C 136.

C. Fine aggregate shall be dried and shall be combined with hot asphalt cement, and the mix shall be heated to approximately 300°F. at an asphalt plant. The approximate proportion of materials shall be 7% cement asphalt and 93% fine aggregate. Each ton of material shall be apportioned by weight in the approximate ratio of 145 lb. asphalt to 1,855 lb. sand. The Contractor shall determine the exact proportions to produce the best possible mixture for construction of the bituminous setting bed to meet specified requirements.

2.04 NEOPRENE-MODIFIED ASPHALT ADHESIVE

A. Neoprene modified asphalt adhesive shall meet the following requirements:

1. Mastic (asphalt adhesive):

a. Solids (base) content by volume = 75± 1%.

b. Weight = 8 to 8.5 lb./gal.

c. Solvent vehicle = Varsol (over 100°F. flash).

2. Base (2% neoprene, 10% fibers, 88% asphalt):

a. Melting point (ASTM D 36) = 200°F., minimum.

b. Penetration at 77°F. 100 gram load 5 second (0.1 mm) = 23 to 27.

c. Ductility (ASTM D 113 at 25°C, 5 cm/minute) = 125 cm, minimum.

2.05 CUT-BACK ASPHALT

A. Primer for concrete base slab beneath brick pavers subject to vehicular traffic shall be with rapid curing cut-back asphalt conforming to AASHTO M 81.

2.06 MORTAR SETTING BED

A. Setting bed mortar shall conform to ASTM C 270, Type S, except that latex polymer additive shall be mixed with the cementitious materials and aggregate in lieu of water.

1. Cement shall conform to ASTM C 150, Type I, complying with the staining requirements of ASTM C 91 for not more than 0.03% water soluble alkali. Furnish Type I, except Type III may be used for setting pavers in cold weather.

2. Sand shall conform to ASTM C 144.

3. Hydrated lime shall conform to ASTM C 207.

4. Latex polymer additive shall be equal to "Laticrete 3701" setting liquid, manufactured by Laticrete International, Inc., Woodbridge, CT 06525. Mix according to manufacturer's instructions.

2.07 BOND COAT

A. High strength bond coat between concrete base slab and setting bed mortar, and between setting bed mortar and brick paver shall be equal to "Laticrete 4237" mortar additive bond coat manufactured by Laticrete International, Inc., Woodbridge, CT 06525.

2.08 MORTAR GROUT FOR POINTING

A. Mortar grout for pointing of joints shall consist of one (1) part white Portland cement, two (2) parts sand, mortar coloring additive, gauged with latex polymer additive.

1. White Portland cement; ASTM C 150, complying with the staining requirements of ASTM C 91 for not more than 0.03% water soluble alkali. Furnish Type I, except Type III may be used for setting pavers in cold weather.

2. Color pigment shall not exceed 10% of the Portland cement in the mortar.

3. Latex polymer additive shall be equal to "Laticrete 3701", manufactured by Laticrete International, Inc., Woodbridge, CT 06525. Mix according to manufacturer's instructions.

4. Except as otherwise indicated, all other mortar grout materials shall be as specified in Paragraph 2.06, above.

B. Mortar grout shall contain a coloring additive. Color shall be approved by the Architect.

1. Coloring additive shall be equal to SGS Colors, manufactured by Solomon Grind Chem Service, Springfield, IL 62705.

2. Mortar coloring additive shall have mineral oxide pigment and shall be certified by the supplier to be resistant to alkali, light, and weather, and shall be of a chemical composition unaffected by cement and free of water and soluble salts.

3. Color shall match color of brick pavers.

2.09 SAND SETTING BED

A. Sand shall be a clean, sharp, natural sand conforming to ASTM C 33, except that the fineness modulus shall be 2.25 ± 0.10.

1. Gradation for setting bed sand shall be as follows:

Sieve Size	% Passing by Weight
3/8 in.	100
No. 4	95 - 100
No. 8	80 - 100
No. 16	50 - 85
No. 50	10 - 30
No. 100	5 - 15
No. 200	0 - 10

2.10 SAND JOINT FILLER

A. Gradation for joint filler sand shall be as follows:

Sieve Size	% Passing by Weight
No. 16	100
No. 200	10

1. Sand shall be supplied by a single source. Source of supply shall not be changed during course of project without written permission of the Architect.

2.11 EPOXY ADHESIVE

A. Epoxy adhesive for setting brick pavers on aluminum fountain vault cover shall be a two-component, 100% solids, moisture-insensitive, high-modulus, high strength, structural, epoxy paste adhesive conforming to ASTM C 881, similar to "Sikadur 31, Hi-Mod Gel", manufactured by Sika, Glendale Heights, IL 60139, or approved equal.

2.12 WATER

A. Water shall be potable and shall be free of injurious contaminants.

PART 3 EXECUTION

3.01 ACCEPTABILITY OF CONCRETE BASE

A. Contractor shall examine the concrete base slab to determine its adequacy to receive brick paving and setting bed. Concrete shall have fully cured. Evidence of inadequate base shall be brought to the immediate attention of the Architect.

B. Start of work of this Section shall constitute acceptance of concrete base slab.

3.02 CUT-BACK ASPHALT PRIME COAT

A. Cut-back asphalt shall be applied to concrete base slab at a rate sufficient to act as an adhesive between the concrete slab and the bituminous setting bed.

3.03 BITUMINOUS SETTING BED

A. Bituminous setting bed shall be installed over the fully cured concrete base. Control bars 3/4 in. deep shall be placed directly over the base. If grades must be adjusted, wood chocks under depth control bars shall be set to proper grade. Set two bars parallel to each other to serve as guides for the striking board. The depth control bars must be set carefully to bring the pavers, when laid, to proper grade.

B. While still hot (not less than 250°F.) some of the bituminous bed material shall be placed between the parallel depth control bars. This bed shall be pulled with the striking board over the control bars several times. After each passage, low porous spots shall be showered with fresh bituminous material to produce a smooth, firm, and even setting bed. As soon as this initial panel is completed, advance the first bar to the next position in readiness for striking the next panel. After the depth control bars and wood chocks have been removed, carefully fill any depressions that remain.

C. The setting bed shall be rolled with a power roller to a nominal depth of 3/4 in., while still hot. The thickness shall be adjusted so that when the bricks are placed and rolled, the top surface of the pavers will be at the required finished grade.

D. A coating of neoprene-modified asphalt adhesive shall be applied by mopping, squeegeeing, or troweling over the top surface of the bituminous setting bed so as to provide a bond under the pavers.

1. If adhesive is trowel-applied, trowel shall be serrated type with serrations not to exceed 1/16 in.

3.04 SETTING BRICK PAVERS (BITUMINOUS SETTING BED)

A. Brick pavers shall be on a bituminous setting bed over a prepared concrete base. All setting shall be done by competent masons under adequate supervision.

B. Brick pavers with chips, cracks, stains, or other defects which might be visible in the finished work shall not be used.

C. After the modified asphalt adhesive is applied, carefully place the pavers by hand in straight courses with hand tight joints and uniform top surface.

D. Brick pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Brick pavers shall be neatly cut and fitted at all perimeters and closures to fit neatly and closely, with joints uniform in thickness. Pavers shall be cut with a water-cooled, cut-off wheel masonry saw using a diamond blade.

3.05 JOINT TREATMENT (BITUMINOUS SETTING BED)

A. Joints between pavers shall be hand tight and shall be uniform in thickness. Joint thickness shall not exceed 1/4 in.

B. Joint filler shall be swept dry into the joints between pavers until the joints are completely filled. Surface shall be swept clean. Swept surface shall than be thoroughly dampened with a low-volume fine spray of water.

3.06 SETTING BRICK PAVERS (MORTAR SETTING BED)

A. Brick pavers shall be set on a mortar setting bed over a prepared concrete base slab. All setting shall be done by competent masons under adequate supervision.

B. Brick pavers with chips, cracks, stains, or other defects which might be visible in the finished work shall not be used.

C. Bond coat shall be applied to concrete base slab using flat trowel. Thickness of bond coat shall be approximately 1/16 in.

D. Mortar bed shall be spread evenly over the troweled bond coat. Mortar setting shall be 3/4 in. thick, minimum. Bond coat shall be applied to mortar bed using flat trowel to thickness of 1/16 in.

E. Before setting, the back of each brick shall be dampened and shall receive a slurry of mortar to ensure maximum contact with mortar bed. Each piece shall be carefully bedded in a full bed of mortar and tapped home to a full and solid bearing. Particular care shall be exercised to equalize bed and joint openings and eliminate the need for redressing of exposed surfaces.

F. Brick pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Brick pavers shall be neatly cut and fitted at all perimeters and closures to fit neatly and closely, with joints uniform in thickness. Pavers shall be cut with a water-cooled, cut-off wheel masonry saw using a diamond blade.

G. Exposed surfaces shall be kept free from mortar at all times. Excess mortar shall be immediately removed before latex modified mortar can set.

3.07 JOINT TREATMENT (MORTAR SETTING BED)

A. Brick joints shall be uniform in thickness. All joints except expansion joints shall be 3/8 in. thick. Expansion joints shall be 1/2 in. thick.

B. All joints, except expansion joints, shall be completely filled with mortar, then raked out to a depth of not less than 3/4 in. Raked joints shall be brushed clean and pointed with mortar grout to a flat cut joint.

1. Mortar grout between brick shall be uniform in appearance, texture, and color.

2. After initial set of grout, joints shall be finished by tooling with a rounded, non-staining jointer to produce a glassy-hard polished, slightly, concave joint, free of drying cracks.

C. Brick paving shall be kept damp by intermittent spraying for three days, minimum, to effectively cure the joints.

3.08 SAND SETTING BED

A. Sand shall be spread over concrete base slab as a setting bed for pavers. Sand shall be spread and leveled to required slope and grade. Minimum thickness of sand shall be 1 in. after leveling. Bed shall not be compacted until pavers are installed.

B. Surface tolerance shall be within 1/4 in. of required grade as measured with a 10 ft. straightedge in both the transverse and longitudinal directions.

3.09 SETTING BRICK PAVERS (SAND SETTING BED)

A. Setting bed shall be protected from damage prior to setting pavers.

B. Setting shall be done by competent workmen under adequate supervision, and in accordance with manufacturer's recommendations. Pavers shall be placed on the setting bed, to true line and plane and in required position.

C. Pavers with chips, cracks, or other structural or aesthetic defects shall not be used.

D. Pavers shall be set true to the required lines and grades in the pattern detailed on the Drawings. Pavers shall be tightly butted. Joints between pavers shall be uniform and shall not exceed 1/8 in.

E. After a sufficient area of pavers has been installed, bricks shall be set to their final level in accordance with brick manufacturer's printed instructions. After setting brick in setting bed, joints of pavers shall be filled by sweeping sand into the joints. When joints are filled, paver surfaces shall be misted with a fine spray of water to settle joint material. After joint material has dried, repeat joint filling and sweeping process.

F. Where required, pavers shall be accurately cut with a masonry or concrete saw. Cut edges shall be plumb and straight. Scoring and breaking will not be acceptable.

3.10 SETTING BRICK PAVERS (EPOXY SETTING BED)

A. Brick pavers shall be set on aluminum fountain vault hatch cover in accordance with epoxy adhesive manufacturer's printed instructions.

B. Pavers shall be set in the pattern detailed on the Drawings. Pavers shall be tightly butted. Joints between pavers shall be uniform and shall not exceed 1/8 in.

C. Where required, pavers shall be accurately cut with a masonry or concrete saw. Cut edges shall be plumb and straight. Scoring and breaking will not be acceptable.

3.11 CLEANING AND PROTECTION OF BRICK SURFACES

A. After completion of brick paving, surfaces shall be carefully cleaned, removing all dirt, excess sand, filler, and stains.

B. Completed brick surfaces shall be thoroughly cleaned of wax coating using a steam jenny or other method approved by the Architect.

1. Steam jenny shall have a capacity of 150 gal. per hour at 120 psi and 325^{O}F. coil temperature.

END OF SECTION

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Instructions to Bidders
Proposal Form
Prevailing Wage Rates
Project Sign

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Document 00510 Agreement
(AIA Document A101/CMa)

Document 00610 Performance Bond
(AIA Document A311/CM)
Document 00610 Labor and Material Payment Bond
(AIA Document 311/CM)

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(AIA Document A201/CMa)

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Conditions

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LIST OF DRAWINGS

PART 1 GENERAL

1.01 DRAWING LIST

A. List of Drawings for Addison Arts & Events District, Addison, Texas, SA 14516.00, Date of Issue 09/30/02, is as follows:

Drawing No.	Date of Issue	Rev. No.	Rev. Date	Drawing Title
GENERAL				
-		-	-	Cover Sheet
CO-0	09/30/02			Sheet Index
CO-1	09/30/02			Existing Conditions
CIVIL				
C1-1	09/30/02	-	-	Site Demolition, Preparation and Erosion Control
C1-2	09/30/02	-	-	Site Demolition, Preparation and Erosion Control
C2-1	09/30/02	-	-	Layout and Materials Plan
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C3-1	09/30/02	-	-	Grading & Drainage Plan
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C4-1	09/30/02	-	-	Utilities Plan
C4-2	09/30/02	-	-	Utilities Plan
C4-3	09/30/02	-	-	Utilities Plan
C5-1	09/30/02	-	-	Fountain Layout & Materials Plan
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C7-2	09/30/02	-	-	Site Details
C7-3	09/30/02	-	-	Site Details

Drawing No.	Date of Issue	Rev. No.	Rev. Date	Drawing Title
CIVIL (continued)				
C7-4	09/30/02	-	-	Site Details
C7-5	09/30/02	-	-	Site Details
C7-6	09/30/02	-	-	Site Details
C7-7	09/30/02	-	-	Site Details
C7-8	09/30/02	-	-	Site Details
C7-9	09/30/02	-	-	Site Details
C7-10	09/30/02	-	-	Site Details
C7-11	09/30/02	-	-	Site Details
C7-12	09/30/02	-	-	Site Details
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M1-3	09/30/02	-	-	Mechanical/Electrical Plan
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FM-2	09/30/02	-	-	Fountain Details
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Not Used.

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Not Used.

END OF DOCUMENT

PROPOSAL FORM

PROPOSAL OF _____
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

_____ $_____

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

_____ $_____

TOTAL BID (Standard Bid (A) + Time Bid (B))

_____ $_____

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within _____calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned _____%

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned _____%

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number _____ dated _____

Addendum Number _____ dated _____

Addendum Number _____ dated _____

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Legal Name of Corporation

State of Incorporation

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Seal of Corporation

Witness

Name of Witness – (typed or printed)

Street Address

City, State, Zip Code

Signature

Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Addison Arts and Events District
BID NO 02-47

DUE: November 5, 2002

2:00 PM

BIDDER	SIGNED	Bid Bond	a1	a2	a3	(A)Standard Bid	calendar days	(B)calendar Days x 3000	Total (A+B)
Rebcon, Inc.	✓	✓	✓	✓	✓	6,884,000	270	810,000	7,694,000
American Civl Contructors	✓	✓	✓	✓	✓	6,847,580	270	810,000	7,657,580
Abstract Construction Co	✓	✓	✓	✓	✓	5,088,755	273	10,000	5,098,755
Ratcliff Constructors LP	✓	✓	✓	✓	✓	5,266,000	270	810,000	6,076,000
Tri Dal Ltd	✓	✓	✓	✓	✓	5,948,000	300	900,000	6,848,000
Joe Funk	✓	✓	✓	✓	✓	5,493,000	270	810,000	6,303,000
AUI	✓	✓	✓	✓	✓	5,713,000	257	771,000	6,484,000
Adolfson & Peterson	✓	✓	✓	✓	✓	6,347,000	280	— D —	6,347,000
Hisaw & Assts	✓	✓	✓	✓	✓	5,389,000	285	855,000	6,244,000
Cadence McShane	✓	✓	✓	✓	✓	5,450,000	230	690,000	6,140,000
WBKibler Construction Co	✓	✓	✓	✓	✓	5,718,805	210	630,000	6,348,805

$ 5,907,755

Minok Suh, Purchasing Coordinator

Corey Gayden, Witness

PROPOSAL FORM

PROPOSAL OF ABSTRACT CONSTRUCTION COMPANY
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A) = The sum of the base bid and any alternatives accepted.
Time Bid (B) = Number of calendar days bid below under Time of Completion x $1,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

FIVE MILLION, EIGHTY EIGHT THOUSAND SEVEN HUNDRED FIFTY FIVE DOLLARS $ 5,088,755

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $1,000.00)

Ten Thousand Dollars $ 10,000

TOTAL BID (Standard Bid (A) + Time Bid (B))

FIVE MILLION, NINETY EIGHT THOUSAND, SEVEN HUNDRED FIFTY FIVE DOLLARS $ 5,098,755

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 273 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10th) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 5 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 5 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated October 9, 2002

Addendum Number 2 dated October 22, 2002

Addendum Number 3 dated Oct. 31, 2002

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to retain the security of the next two lowest responsible bidders until the lowest responsible

bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Abstract Construction Company
Legal Name of Corporation

Texas
State of Incorporation

11157 Ables Lane
Street Address

Dallas, Texas 75229
City, State, Zip Code

Brad Westbrook
Name of Officer – (typed or printed)

Signature of Officer

Vice President
Title

November 5, 2002
Date

Seal of Corporation

Witness

Ruthie Georgios
Name of Witness – (typed or printed)

N/A
Street Address

City, State, Zip Code

Signature

Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

PROPOSAL FORM

PROPOSAL OF Rebcon, Inc.
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

Six Million Eight Hundred Eighty Four Thousand $ 6,884,000.00
and no/100 Dollars

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

Eight Hundred and Ten Thousand and no/100 Dollars $ 810,000.00

TOTAL BID (Standard Bid (A) + Time Bid (B))

Seven Million Six Hundred Ninety Four Thousand $ 7,694,000.00
and no/100 Dollars

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 270 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 25 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 10 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated OCTOBER 9, 2002

Addendum Number 2 dated OCTOBER 17, 2002

Addendum Number 3 dated OCTOBER 21, 2002

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

REBCON, INC.
Legal Name of Corporation

TEXAS
State of Incorporation

1868 W. NORTHWEST HWY
Street Address

DALLAS, TEXAS 75220
City, State, Zip Code

R.E. BURGETT
Name of Officer – (typed or printed)

Signature of Officer

PRESIDENT
Title

11-5-02
Date

Seal of Corporation

Witness

JOCELYN LIKE
Name of Witness – (typed or printed)

1868 W. NORTHWEST HWY
Street Address

DALLAS TX 75220
City, State, Zip Code

Signature

11-5-02
Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

TRANSMITTAL OF ADDENDUM

****

INSTRUCTIONS:

Acknowledge receipt of Addenda in Proposal, on outer envelope of bid AND WITH THE FORM BELOW FAXED TO (972) 450-7096 upon receipt.

****

Addendum Acknowledgment FAX to (972) 450-7096

I Acknowledge the receipt of Addendum No. 1

Town of: ADDISON, TEXAS

Project Name: **02-47 Addison Arts and Events District**

By Facsimile Transmission on this date: October 9, 2002

Jocelyn Dika
Contractor's Signature

REBCON, Inc.
Company Name

E-Mail Address: jocelyn@rebcon.com

"PLEASE SIGN & FAX THIS PAGE BACK TO TOWN OF ADDISON"
(as verification that you received this Fax)
972-450-7096

Total Number of Fax Pages: 2

TRANSMITTAL OF ADDENDUM

****

INSTRUCTIONS:

Acknowledge receipt of Addenda in Proposal, on outer envelope of bid AND WITH THE FORM BELOW FAXED TO (972) 450-7096 upon receipt.

****

Addendum Acknowledgment FAX to (972) 450-7096

I Acknowledge the receipt of Addendum No. 2

Town of: ADDISON, TEXAS

Project Name: **02-47 Addison Arts and Events District**

By Facsimile Transmission on this date: October 22, 2002

Jocelyn Dike — Contractor's Signature

REBCON, INC. — Company Name

E-Mail Address: jocelyn@rebcon.com

"PLEASE SIGN & FAX THIS PAGE BACK TO TOWN OF ADDISON"
(as verification that you received this Fax)
972-450-7096

Total Number of Pages: 49

TRANSMITTAL OF ADDENDUM

****

INSTRUCTIONS:

Acknowledge receipt of Addenda in Proposal, on outer envelope of bid AND **WITH THE FORM BELOW FAXED TO (972) 450-7096** upon receipt.

****

Addendum Acknowledgment FAX to (972) 450-7096

I Acknowledge the receipt of Addendum No. 3

Town of: ADDISON, TEXAS

Project Name: **02-47 Addison Arts and Events District**

By Facsimile Transmission on this date: October 31, 2002

Jocelyn Tiko — Contractor's Signature

REBCON, Inc. — Company Name

E-Mail Address: jocelyn@rebcon.com

Please check one:

✓ Will be participating in bid

___ Will NOT be participating in bid

"PLEASE SIGN & FAX THIS PAGE BACK TO TOWN OF ADDISON"
(as verification that you received this Fax)
972-450-7096

Total Number of Pages: 4

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 3 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/5/02

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 2 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/5/02

Bid 02-47
ADDISON ARTS AND EVENTS DISTRICT
ADDENDUM 1

Bid opening date has changed to Tuesday, November 5, 2002 at 2:00PM
Sealed bids will be accepted bythe Town of Addison, Purchasing Division, 5350 Belt Line Rd, Addison, TX.
Late bids will not be opened and returned.

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 1 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/5/02

PROPOSAL FORM

PROPOSAL OF American Civil Constructors, Inc.
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)
Six million Eight Hundred ~~Thousand Zero~~ Forty-seven thousand five hundred eighty 00 $6,847,580.00

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

Eight hundred ten thousand Zero 00 $810,000.00

TOTAL BID (Standard Bid (A) + Time Bid (B))
Seven million six hundred fifty-seven thousand five hundred eighty 00 $7,657,580.00

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 270 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned X 19 % GR

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 19 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated 10-9-02

Addendum Number 2 dated 10-22-02

Addendum Number 3 dated 10-31-02

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

CHRIS GRAEBER
VP/COO

Corporations only fill in the following:

American Civil Constructors Inc.
Legal Name of Corporation

Colorado
State of Incorporation

11601 W. Bellview Ave.
Street Address

Littleton, CO. 80120
City, State, Zip Code

CHRIS GRABER
Name of Officer – (typed or printed)

Signature of Officer

VICE PRESIDENT
Title

11/4/02
Date

Seal of Corporation

Witness

Glenn E. Nichols
Name of Witness – (typed or printed)

821 E. Southlake Blvd.
Street Address

Southlake, Tx. 76092
City, State, Zip Code

Glenn E Nichols
Signature

11-5-02
Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Bid 02-47
ADDISON ARTS AND EVENTS DISTRICT
ADDENDUM 1

Bid opening date has changed to Tuesday, November 5, 2002 at 2:00PM
Sealed bids will be accepted bythe Town of Addison, Purchasing Division, 5350 Belt Line Rd, Addison, TX.
Late bids will not be opened and returned.

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 1 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/5/02
CHRIS GREATOREX

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 2 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/6/07

CHRIS GRAFENBERG

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 3 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/5/02

CHRIS GRAEBER

PROPOSAL FORM

PROPOSAL OF Ratcliff Constructors, L.P.
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

Five million two hundred sixty six thousand $5,266,000.00

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

Eight hundred ten thousand $ 810,000.00

TOTAL BID (Standard Bid (A) + Time Bid (B))

Six million seventy six thousand $ 6,076,000.00

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 270 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 10 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 10 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated October 9, 2002

Addendum Number 2 dated October 22,2002

Addendum Number 3 dated October 31, 2002

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Legal Name of Corporation

State of Incorporation

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Seal of Corporation

Witness

Name of Witness – (typed or printed)

Street Address

City, State, Zip Code

Signature

Date

Bidders other than Corporations fill in the following:

Ratcliff Constructors,L.P.
Legal Name of Bidding Firm

11498 Luna Rd Ste 200
Street Address

Dallas Tx 75234
City, State, Zip Code

Max K. Young
Name of Officer – (typed or printed)

Signature of Officer

President
Title

November 5, 2002
Date

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 3 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11-5-02

Max K. Young

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 2 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11-05-02
Max K. Young

Bid 02-47
ADDISON ARTS AND EVENTS DISTRICT
ADDENDUM 1

Bid opening date has changed to Tuesday, November 5, 2002 at 2:00PM
Sealed bids will be accepted bythe Town of Addison, Purchasing Division, 5350 Belt Line Rd, Addison, TX.
Late bids will not be opened and returned.

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 1 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11-05-02
Max K. Young

PROPOSAL FORM

PROPOSAL OF TRI DAL, LTD.
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A) =	The sum of the base bid and any alternatives accepted.
Time Bid (B) =	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

FIVE MILLION NINE HUNDRED FORTY EIGHT THOUSAND —> $ 5,948,000.00

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

NINE HUNDRED THOUSAND ——— NO/00 $ 900,000.00

TOTAL BID (Standard Bid (A) + Time Bid (B))

SIX MILLION EIGHT HUNDRED FORTY EIGHT THOUSAND $ 6,848,000.00

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 300 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned fifteen %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned twenty-five

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number One dated October 9, 2002

Addendum Number Two dated October 22, 2002

Addendum Number Three dated October 31, 2002

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

N/A

Corporations only fill in the following:

Legal Name of Corporation

State of Incorporation

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Seal of Corporation

Witness

Name of Witness – (typed or printed)

Street Address

City, State, Zip Code

Signature

Date

Bidders other than Corporations fill in the following:

TRI DAL, LTD.
Legal Name of Bidding Firm

640 COMMERCE STREET
Street Address

SOUTHLAKE, TX 76092
City, State, Zip Code

RICK MULLER
Name of Officer – (typed or printed)

Signature of Officer

PRESIDENT
Title

November 5, 2002
Date

TRANSMITTAL OF ADDENDUM

****

INSTRUCTIONS:

Acknowledge receipt of Addenda in Proposal, on outer envelope of bid AND WITH THE FORM BELOW FAXED TO (972) 450-7096 upon receipt.

****

Addendum Acknowledgment FAX to (972) 450-7096

I Acknowledge the receipt of Addendum No. 1

Town of: ADDISON, TEXAS

Project Name: **02-47 Addison Arts and Events District**

By Facsimile Transmission on this date: October 9, 2002

Contractor's Signature

TRI Dal. Ltd.
Company Name

E-Mail Address: jim_sellers@tridal.com

"PLEASE SIGN & FAX THIS PAGE BACK TO TOWN OF ADDISON"
(as verification that you received this Fax)
972-450-7096

Total Number of Fax Pages: 2

TRANSMITTAL OF ADDENDUM

****

INSTRUCTIONS:

Acknowledge receipt of Addenda in Proposal, on outer envelope of bid AND WITH THE FORM BELOW FAXED TO (972) 450-7096 upon receipt.

****

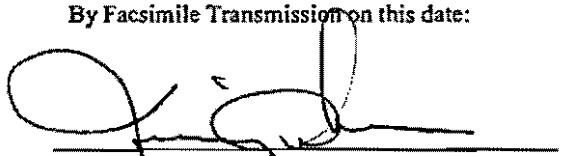
Addendum Acknowledgment FAX to (972) 450-7096

I Acknowledge the receipt of Addendum No. 2

Town of: ADDISON, TEXAS

Project Name: **02-47 Addison Arts and Events District**

By Facsimile Transmission on this date: October 22, 2002



Contractor's Signature

TRI DMC Ltd.

Company Name

E-Mail Address: JIM_Sellers@tridmc.com

"PLEASE SIGN & FAX THIS PAGE BACK TO TOWN OF ADDISON"
(as verification that you received this Fax)
972-450-7096

Total Number of Pages: 49

TRANSMITTAL OF ADDENDUM

****

INSTRUCTIONS:

Acknowledge receipt of Addenda in Proposal, on outer envelope of bid AND WITH THE FORM BELOW FAXED TO (972) 450-7096 upon receipt.

****

Addendum Acknowledgment FAX to (972) 450-7096

I Acknowledge the receipt of Addendum No. 3

Town of: ADDISON, TEXAS

Project Name: **02-47 Addison Arts and Events District**

By Facsimile Transmission on this date: October 31, 2002

Contractor's Signature

Tri Dac, Ltd.
Company Name

E-Mail Address: JIM_sellers@tridac.com

Please check one:

✓ Will be participating in bid

___ Will NOT be participating in bid

"PLEASE SIGN & FAX THIS PAGE BACK TO TOWN OF ADDISON"
(as verification that you received this Fax)
972-450-7096

Total Number of Pages: 4

PROPOSAL FORM

PROPOSAL OF JOE FUNK CONSTRUCTION ENGINEERS, INC.
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A) =	The sum of the base bid and any alternatives accepted.
Time Bid (B) =	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

Five Million Four Hundred Ninty three thousands 5,493,000

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

Eight Hundred ten thousand —— $ 810,000

TOTAL BID (Standard Bid (A) + Time Bid (B))

Six Million Three Hundred and three thousands 6,303,000

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 270 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 15 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 15 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number ONE (1) dated 10/09/02

Addendum Number TWO (2) dated 10/22/02

Addendum Number THREE (3) dated 10/31/02

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to retain the security of the next two lowest responsible bidders until the lowest responsible

bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

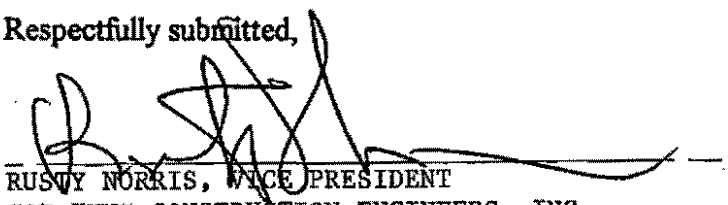
PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,



RUSTY NORRIS, VICE PRESIDENT
JOE FUNK CONSTRUCTION ENGINEERS, INC.

Corporations only fill in the following:

JOE FUNK CONSTRUCTION ENGINEERS, INC.
Legal Name of Corporation

TEXAS
State of Incorporation

11226 INDIAN TRAIL
Street Address

DALLAS, TEXAS 75229
City, State, Zip Code

RUSTY NORRIS
Name of Officer – (typed or printed)

Signature of Officer

VICE PRESIDENT
Title

NOVEMBER 5, 2002
Date

Seal of Corporation

Witness

REGINA R. JAMISON
Name of Witness – (typed or printed)

11226 INDIAN TRAIL
Street Address

DALLAS, TEXAS 75229
City, State, Zip Code

Regina R. Jamison
Signature

NOVEMBER 5, 2002
Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

PROPOSAL FORM

PROPOSAL OF AUI Contractors, L.P.
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

FIVE MILLION SEVEN HUNDRED THIRTEEN THOUSAND $5,713,000.00

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

SEVEN HUNDRED AND SEVENTY-ONE THOUSAND $771,000.00

TOTAL BID (Standard Bid (A) + Time Bid (B))

SIX MILLION FOUR HUNDRED EIGHTY-FOUR THOUSAND $6,484,000.00

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 257 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 9.32 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 7.25 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated 10/09/02

Addendum Number 2 dated 10/22/02

Addendum Number 3 dated 10/31/02

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Legal Name of Corporation

State of Incorporation

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Seal of Corporation

Witness

Jane Ratliff

Name of Witness – (typed or printed)

300 West Ramsey

Street Address

Fort Worth, TX 76110

City, State, Zip Code

Jane Ratliff

Signature

November 5, 2002

Date

Bidders other than Corporations fill in the following:

AUI Contractors, L.P.

Legal Name of Bidding Firm
By: AUI Management, LLC, General Partner

300 West Ramsey

Street Address

Fort Worth,TX 76110

City, State, Zip Code

B. Doug Alumbaugh

Name of Officer – (typed or printed)

Signature of Officer

Executive Vice President

Title

November 5,2002

Date

Bid 02-47
ADDISON ARTS AND EVENTS DISTRICT
ADDENDUM 1

Bid opening date has changed to Tuesday, November 5, 2002 at 2:00PM
Sealed bids will be accepted by the Town of Addison, Purchasing Division, 5350 Belt Line Rd, Addison, TX.
Late bids will not be opened and returned.

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 1 has been incorporated in the contract and if accepted becomes part of the contract.

AUI Contractors, L.P.

BY: _____ Date: 11/5/02

B. Doug Alumbaugh, Exec. Vice President

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 2 has been incorporated in the contract and if accepted becomes part of the contract.

AUI Contractors, L.P.

BY: _____ Date: 11/5/02

B. Doug Alumbaugh, Executive Vice President

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 3 has been incorporated in the contract and if accepted becomes part of the contract.

AUI Contractors, L.P.

BY: _____ Date: 11/5/02

B. Doug Allumbaugh, Exec. Vice President

PROPOSAL FORM

PROPOSAL OF Adolfson & Peterson Construction
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

Six Million Three Hundred Forty Seven _____ $ 6,347,000

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

Ø _____ $ 0

TOTAL BID (Standard Bid (A) + Time Bid (B))

$ 6,347,000

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 280 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 8 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 5 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated 10/07/02

Addendum Number 2 dated 10/22/02

Addendum Number 3 dated 10/31/02

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Adolfson & Peterson Const.
Legal Name of Corporation

Minnesota
State of Incorporation

3330 Earhart Drive #200
Street Address

Carrollton, TX 75006
City, State, Zip Code

Greg Lebkowsky
Name of Officer – (typed or printed)

Signature of Officer

V.P. Dir. of Operations
Title

11/05/02
Date

Seal of Corporation

Witness

Tamara Hodges
Name of Witness – (typed or printed)

3330 Earhart Drive #200
Street Address

Carrollton, TX 75006
City, State, Zip Code

Tamara Hodges
Signature

11/05/02
Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Bid 02-47
ADDISON ARTS AND EVENTS DISTRICT
ADDENDUM 1

Bid opening date has changed to Tuesday, November 5, 2002 at 2:00PM
Sealed bids will be accepted bythe Town of Addison, Purchasing Division, 5350 Belt Line Rd, Addison, TX.
Late bids will not be opened and returned.

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 1 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 10/5/02

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 2 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/5/02

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 3 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/5/02

PROPOSAL FORM

PROPOSAL OF Hisaw & Associates General Contractors, Inc.
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

Five Million Three Hundred Eighty Nine Thousand $5,389,000.00

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

Eight Hundred Fifty-Five and no/100--- $855,000.00

TOTAL BID (Standard Bid (A) + Time Bid (B))

Six Million Two Hundred Forty Four Thousand $6,244,000.00

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 285 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 10 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 10 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated _____

Addendum Number 2 dated 10/21/02

Addendum Number 3 dated 10/31/02

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Hisaw & Associates General Contractors, Inc.
Legal Name of Corporation

Texas
State of Incorporation

3116 Kellway Drive, #116
Street Address

Carrollton, Texas 75006
City, State, Zip Code

Richard L. Hisaw
Name of Officer – (typed or printed)

Signature of Officer

President
Title

November 5, 2002
Date

Seal of Corporation

Witness

William Morgan
Name of Witness – (typed or printed)

3116 Kellway Drive, #116
Street Address

Carrollton, Texas 75006
City, State, Zip Code

Signature

November 5, 2002
Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

PROPOSAL FORM

PROPOSAL OF Cadence McShane Corporation
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the **STANDARD BID** (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

Five Million Four Hundred Fifty Thousand Dollars $ 5,450,000

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

Six Hundred Ninety Thousand Dollars $ 690,000

TOTAL BID (Standard Bid (A) + Time Bid (B))

Six Million One Hundred Forty Thousand Dollars $ 6,140,000

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 230 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 7 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 5 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated 10/09/02

Addendum Number 2 dated 10/22/02

Addendum Number 3 dated 10/31/02

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Cadence McShane Corporation
Legal Name of Corporation

Texas
State of Incorporation

14860 Montfort Drive, Suite 270
Street Address

Dallas, Texas 75254
City, State, Zip Code

Neal L. Harper
Name of Officer – (typed or printed)

Signature of Officer

President
Title

11/05/02
Date

Seal of Corporation

Witness

Patty R. Boren
Name of Witness – (typed or printed)

14860 Montfort Drive, Suite 270
Street Address

Dallas, Texas 75254
City, State, Zip Code

Signature

11/05/02
Date

Bidders other than Corporations fill in the following:

Legal Name of Bidding Firm

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Bid 02-47
ADDISON ARTS AND EVENTS DISTRICT
ADDENDUM 1

Bid opening date has changed to Tuesday, November 5, 2002 at 2:00PM
Sealed bids will be accepted bythe Town of Addison, Purchasing Division, 5350 Belt Line Rd, Addison, TX.
Late bids will not be opened and returned.

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 1 has been incorporated in the contract and if accepted becomes part of the contract.

BY: Neal Harper Date: 11/05/02

Neal L. Harper, President

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 2 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/05/02

Neal L. Harper, President

END OF ADDENDUM

The undersigned bidder hereby certifies that the Addendum No. 3 has been incorporated in the contract and if accepted becomes part of the contract.

BY: _____ Date: 11/05/02

Neal L. Harper, President

PROPOSAL FORM

PROPOSAL OF W.B. Kibler Construction
(Name of Bidder)

PROPOSAL FOR THE CONSTRUCTION OF THE ADDISON ARTS & EVENTS DISTRICT IMPROVEMENTS –ADDISON, TEXAS

The Honorable Mayor and City Council
Town of Addison
Addison, Texas

The undersigned hereby proposes to furnish all supervision, labor, material, equipment, tools and necessary accessories for the construction of improvements to the Addison Arts & Events District, as set forth for the project in the Drawings, Project Manual and Addenda as prepared by Sasaki Associates Inc., dated September 30, 2002, Architect's Project Number 14516.00.

The undersigned hereby proposes to furnish all of the above for the STANDARD BID (lump sum BASE BID) amount set forth below. Total Bid for purpose of this Proposal consist of two parts whereby:

Standard Bid (A)	=	The sum of the base bid and any alternatives accepted.
Time Bid (B)	=	Number of calendar days bid below under Time of Completion x $3,000.

The undersigned hereby proposes the following:

STANDARD BID (A)

Five Million, Seven Hundred Eighteen Thousand $ 5,718,805.00
Eight Hundred and Five Dollars

TIME BID (B) (Number Calendar Days Bid Below under Time of Completion X $3,000.00)

Six Hundred Thirty Thousand Dollars $ 630,000.00

TOTAL BID (Standard Bid (A) + Time Bid (B))

Six Million, Three Hundred Thirty-Eight $ 6,348,805.00
Thousand, Eight Hundred and Five Dollars

NOTE: Amounts shall be shown in both words and figures. In case of discrepancies, the amount in words shall govern.

TIME OF COMPLETION: The undersigned agrees to commence work under this Contract within ten (10) days after the issuance of the "Notice to Proceed" from the Owner and to fully and finally complete such work within 210 calendar days from date of such notice. *[The undersigned to fill in the number of calendar days.]* Time to complete the contract shall begin on the tenth (10^{th}) day after the issuance of the "Notice to Proceed".

LIQUIDATED DAMAGES: The undersigned agrees to fully complete the project within the time stated in the TIME OF COMPLETION paragraph above. In the event the undersigned fails to fully and finally complete the project within the number of calendar days set forth above under TIME OF COMPLETION, the undersigned agrees to pay as liquidated damages for such delay and not as a penalty, the sum of $1,000.00 for each consecutive calendar day thereafter that the project is not fully and finally completed.

EXTRA WORK

Should any change in the work or extra work be ordered, the following applicable percentage shall be added to the material and labor costs to cover overhead and profit. It is understood the terms "overhead" and "profit" are defined in the General and Supplementary Conditions.

Allowance to Contractor for overhead and profit for extra work performed by the Contractor and supervised by the undersigned 5 %

Allowance to Contractor for overhead and profit for extra work performed by a Subcontractor and supervised by the undersigned 10 %

ADDENDA: The undersigned hereby acknowledges receipt of the following addenda to the Drawings and Specifications, all of the provisions and requirements of which addenda have been taken into consideration in the preparation of this Proposal.

Addendum Number 1 dated October 9TH, 2002

Addendum Number 2 dated October 22ND, 2002

Addendum Number 3 dated October 31ST, 2002

BID SECURITY: Bid security must accompany each proposal. Bid security shall be made to the Town of Addison, Texas in the amount of five percent (5%) of the proposal sum. Security shall be either a certified check, cashier's check or bid bond by a surety licensed in Texas and satisfactory to Town.

The successful bidder's security will be retained until he has signed the contract, payment and performance bonds have been executed, and such other documents or information as the Owner may require has been submitted to the Owner. The Owner reserves the right to

retain the security of the next two lowest responsible bidders until the lowest responsible bidder enters into a contract or until forty-five (45) days after bid opening, whichever comes first. All other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a contract, the Owner will retain its bid security as liquidated damages, but not as a penalty.

SALES TAX EXEMPTION: The contractor shall pay all applicable consumer, use and other similar taxes required by law. The Owner, being a municipal government, qualifies for certain tax exemptions.

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND: The undersigned agrees within ten (10) days after the Contract is executed, to deliver to the Owner a Performance Bond and a Labor and Material Payment Bond as required by the Specifications or other documents in connection with this matter.

CONTRACT: The undersigned agrees that upon notice of acceptance of the Bid, he will execute the specified Contract within ten (10) days from notice of acceptance.

INSURANCE: The undersigned agrees within ten (10) days after the Contract is executed, and before any work begins on the project site, to deliver to the Owner the certificates of insurance and any original insurance policies required in the Project Manual.

ACKNOWLEDGEMENTS: The undersigned hereby declares, warrants and represents that the facts stated herein and the information given by it in connection with its bid proposal are true and correct in all respects, that the bidder has visited the Project site, has had sufficient time to make all tests and investigations, has carefully examined and understands the Plans, Specifications (Project Manual) and Contract Documents and bidding documents, is financially solvent, is familiar with all of the laws and regulations applicable to the Work, is and has become familiar with all conditions to arrive at an intelligent estimate of the cost of performing the Work, and agrees to do the Work for the sums and within the time set forth in this Proposal.

Respectfully submitted,

Corporations only fill in the following:

Legal Name of Corporation

State of Incorporation

Street Address

City, State, Zip Code

Name of Officer – (typed or printed)

Signature of Officer

Title

Date

Seal of Corporation

Witness

Name of Witness – (typed or printed)

Street Address

City, State, Zip Code

Signature

Date

Bidders other than Corporations fill in the following:

W,B. Kibler Construction
Legal Name of Bidding Firm

9722 Abernathy
Street Address

Dallas, TX 75220
City, State, Zip Code

Ed Portier
Name of Officer – (typed or printed)

Ed Portier
Signature of Officer

President
Title

November 5, 2002
Date

transmittal

to	Town of Addison Public Works Department 16801 Westgrove Drive P.O. Box 9010 Addison, TX 75001-9010	**date**	October 14, 2002
		project name	Addison Arts & Events District
		project no.	14516.00
attn	Jim Pierce	**from**	David Clough

we are sending you via ☒ overnight courier ☐ courier ☐ us mail ☐ other

SASAKI

Sasaki Associates Inc.
64 Pleasant Street
Watertown Massachusetts
02472 USA

t 617 926 3300
f 617 924 2748

description	quantity	dated
Information on fountain systems from Georgia Fountain	1	10/9/02

Steve – for your file
Jim

these are transmitt

☒ for your informatio ☒ for review and comment

☐ barrowed materials returned ☐ as requested ☐ for approval ☐ other

Jim,

I'm enclosing a copy of information regarding fountain operating and maintenance requirements and costs that I just received from Georgia Fountain. Also included are their calculations for the two systems that we requested for our files. Please review this and let me know if you would still like me to set up a conference call with them to discuss pump motors and other questions you raised at our meeting last Monday.

dc\g:\14516.00\projmgmt\transmittals\t-jp14oct02.doc

copy to Slade Strickland, Jim Duffy, Carmen Moron (with enclosure)

J. Piera

GEFCO

SASAKI ASSOCIATES, INC
Date 10/10/02
Project Name Addison
Project No. 14516.00
File Code
T.M.

D. Clough
C. Baker
T. Chang

GEORGIA FOUNTAIN COMPANY, INC.

FAX TRANSMISSION SHEET

FROM: STEVE A. MATONAK, SR.

Date: 10/9/02
Company: SASAKI ASSOC. INC
Deliver to: DAVID CLOUGH (617) 926-3300
Address Fax No.: (617) 924-2798

Total number of pages: 32 **(including cover sheet)**

Comments: RE: ADDISON ALTS COSTING

DAVID - HERE IS THE INFO THAT YOU REQUEST FROM CINDY.

IF YOU CAN GIVE ME A FAX # FOR KEITH GASSMAN & COMPOSE ENGR I WILL SEND THIS PACKAGE OUT TO HIM. SOME THE SHEETS ARE HAND COPIES AND I COULDN'T EMAIL THEM.

SORRY THIS TOOK A WHILE BUT I HAD TO TYPE UP THE CALC. CAUSE YOU PROBABLY COULD NOT READ MY SCRATCH NOTES.

SM

Please Note our New Address Effective Immediately

Georgia Fountain Company, Inc.
2513 Royal Place
Tucker, GA 30084

If you did not receive all pages noted above or if you had any problems receiving this transmission, please call (770) 934-3297.
Our fax Number is (770) 934-8770

RECEIVED
OCT - 8 2002
SASAKI ASSOCIATES

GEORGIA FOUNTAIN COMPANY, INC.
2513 Royal Place
Tucker, Georgia 30084

Telephone 770-934-3297
Fax 770-934-8771
Email gefco@aol.com

October 9, 2002

Mr. David Clough
Sasaki Associates, Inc.
64 Pleasant Street
Watertown, MA 02472

RE: ADDISON ARTS CENTER

Dear David:

We are pleased to offer you our revised quotation for the aforementioned project you are currently working on. We would like to point out that the quotation is for the latest design dated 9/30/02.

The amount of water for the current design will require approximately 5,100 gallons of water for the Plaza Interactive system and 40,000 gallons of water for the Water Garden Pool system every time the pools needs to be filled after the system is drained. The treated fountain water in both systems need to be drained through a 4" sanitary sewer line. An incoming cold water supply line of 1-1/2" at 50 psi maximum is required to the pump room to initially fill the fountains and to add additional water lost to evaporation or carried away in wet clothing from people participating in the system.

Below are the budget numbers for the mechanical and electrical equipment cost associated with the fountain system. You will still need to provide a cost for the piping and conduit installation, fountain lighting, pylon troughs, concrete, waterproofing and any finishes, such as, pre-cast coping, granite or stone. I also was able to get in contact with someone locally in Atlanta who was helpful in giving me a breakout cost for an outside source, like his firm, to maintain the fountain systems similar to Addison's design. He told me that the fountain would require him to be on site at least once a week to monitor the system and once a month to vacuum the entire pool floors. He also supplied me with a cost for the amount of chemicals that would be required to operate the system.

Quotation (Fountain Equipment)_____	$170,610.00
Budget (Weekly Fountain Maintenance from Outside Source)___	$ 21,600.00 year
Budget (Monthly Chemical Cost for Bromine and Muratic Acid)__	$ 6,000.00 year
One Day Job Site Visit_____	$ 850.00/day plus expenses

This quotation does not include the following:

- Installation and installation materials such as piping, electrical conduits, concrete materials, waterproofing, finishes or labor for the respective trades involved.
- No concrete work, no earthwork and/or no waterproofing work of any type.
- No union work of any type.
- Applicable local, state and federal taxes.
- Professional engineer stamped drawings.
- Pool Lighting Fixtures for both fountain systems.
- (3) Pylon Water Troughs for Water Garden system

Included in this proposal are the following:

- All fountain equipment per the attached material list.
- (3) Three operation and maintenance manuals, additional copies are $75.00 each.
- Piping diagram, pool equipment installation details and wiring diagrams (available 4-6 weeks after receipt of order).
- (3) Three submittal drawings include; (3) prints.

Mr. David Clough
Sasaki Associates, Inc.
- page 2 -

The terms for this proposal are as follows:

- 25% deposit with purchase order. 2% discount 10 day, net 30 days on remainder.
- Freight allowed to job site.
- Delivery based on receipt of approved shop drawings or waiver letter.
- 2 to 4 weeks for embedded fountain items.
- 6 to 8 weeks for balance of fountain items and pumping systems.
- Quotations are valid until December 31, 2002.

Thank you for this opportunity.

Sincerely,

Steve A. Matonak, Sr.
Design Engineer
Georgia Fountain Company, Inc.

SAM/lm

Enclosure

GEORGIA FOUNTAIN COMPANY, INC.
2513 Royal Place
Tucker, Georgia 30084

Telephone 770-934-3297
Fax 770-934-8770
email gefco@aol.com

October 3, 2002

Mr. David Clough
Sasaki Associates, Inc.
64 Pleasant Street
Watertown, MA 02472

RE: ADDISON ARTS CENETR - FOUNTAIN MAINTENANCE

Dear David:

Here is some information with regards to fountain maintenance for the water features designed at the aforementioned project as you requested in an email sent last week on October 3, 2002. The following is a brief description of the maintenance involved and how it affects the water features as currently designed.

Once a fountain has begun the initial start-up, maintenance will need to be done on a periodic basis. This maintenance schedule varies from water feature to water feature. For the first two weeks of operation, a maintenance worker must take at least 45 -60 minutes a day and examine the pumping system of each water feature. This would include both looking at and recording the following information:

Maintenance problems	Approximate Time
Debris in the basket strainer of the Aeration Display Pump	5 minutes
Debris in the basket strainer of the Mist Display Pump	5 minutes
Debris in the basket strainer of the Plaza Filter Pump	5 minutes
Debris in the basket strainer of the Garden Display Pump	5 minutes
Debris in the basket strainer of the Garden Filter Pump	5 minutes
Water pressure on the four filter units	10 minutes
Trash, floating debris in pool and emptying skimmer baskets	15 minutes
Check level of bromine and acid at chemical system	10 minutes

The readings should be noted on a log and only cleaned when necessary as directed by the Operation and Maintenance Manuals. If the pump basket strainers, when checked, has little debris accumulated then note this on the log and do not clean. When checking the basket strainers again for the next day, only note if more debris is trapped or note and clean when the baskets becomes clogged. After the first two weeks of operation, the maintenance log should be reviewed and then a time set to determine future maintenance schedules. The basket strainers may only have to be cleaned once a week while the filters might have to be cleaned twice a week. The chemicals levels may be done once every two weeks or once a week in the summer.

The debris in the basket strainers of the display and filter pumps are where the 1/8" or larger items are trapped such as leaves, twigs, rocks, coins, straws, etc. The filter units will trap the smaller particles down to 5 microns. Most of the water traveling up to the pool eyeball fittings or Mist Jets are 100% filtered. Smaller particles less than a 1/8" that move directly through the display pumps will pass through the 2" Aeration Jets, 1/2" Stream Jets and ballast pool fittings. These particles when floating in the water will produce the cloudy effect. The filtration is needed to achieve the crystal clear water. The trash and debris floating on the pool surface should get collected in the skimmer fittings, however, some of the debris will eventually become water logged and will drop to the pond. The vacuum system would enable the maintenance worker to collect the debris off the pond floor leaving a clean surface. The chemical system will help combat algae that will eventually grow within the water and pool surfaces. The chemical system will also help control bacteria with in the pool water. Other item to keep watch over is burned out lamps in the light fixtures.

The Plaza Fountain is a water features that has been designed to be interactive or people participatory and therefore, has been designed like a swimming pool. Currently, no specific codes with regards to these interactive fountains have been written, but in the meantime, the system designed around swimming pool codes should been sufficient. This is required to insure the safety, health and well being of people participating in the water feature. In short, the water in the entire system is filtered once every two hours and monitored continuously for pH level and

treated with chemicals to eliminate bacteria from bather load, similar to community swimming pool applications. The pipes must be sized so that the velocity of the water traveling trough that line should be at or below 6 ft./second for suction and 10 ft./second on discharge. Also, all of the pool filters and chemical systems must be NSF Approved. NSF stands for National Sanitation Foundation and is a testing organization for commercial use equipment. An Emergency Stop Switch has also been designed to be located near the plaza to halt the spray jets and program if an emergency arises without someone having to go directly into the pump room to disable the fountain system.

The 15 HP Plaza Aeration pump, 3 HP Plaza Mist pump, 3 HP Plaza Filter pump, 100 and 150 GPM Cartridge Filters, Bromine Feeder and pH/ORP Controllers unit are all NSF Listed and Approved. The entire collection of water in the system is being filtered once every 50 minutes; the norm for a standard fountain is once every 120 minutes. All of the suction and discharge lines are sized to allow a velocity flow at 6 ft. /second. The pH/ORP Controller will continually read the amount of bromine residue and the actual pH level in the water system. When the Bromine level drops, a solenoid will open up allowing Bromine into the system by injecting it directly into a filter discharge line. The reason that Bromine is suggested to be used is that it is safer on pipes and fittings within the pool and also tends to stay in the water longer where Chlorine evaporates quickly. With the increase of Bromine in the water, the pH level will begin to increase because of the caustic properties of Bromine. When the pH level increase above the 7.2 to 7.6 range, then the unit will activate a pump and inject muratic acid directly into the filter return line. Please see the attached Fountain Water Treatment information that is included as a general guideline with every Operation and Maintenance Manual that we send out after completing a project.

If you need further assistance, please feel free to call me at my office.

Sincerely,

Steve A. Matonak, Sr.
Design Engineer
Georgia Fountain Company

GEORGIA FOUNTAIN COMPANY, INC.
2513 Royal Place
Tucker, Georgia 30084

Telephone 770-934-3297
Fax 770-934-8770
Email gafco@aol.com

October 3, 2002

Mr. David Clough
Sasaki Associates, Inc.
64 Pleasant Street
Watertown, MA 02472

RE: ADDISON ARTS CENTER – Electrical Operating Costs

Dear David:

The electrical calculations are broken out separately for the two different water features, the Plaza Interactive and the Water Garden Pool system. I had to make an assumption on the operating times for the fountains and lights, as well as the possible cost per KWH that the Power Company might charge. Pending on the electrical consumption usage, the power company normally discounts the cost after a certain KWH is met. The calculations are as follows:

ASSUMPTIONS MADE FOR THE FOUNTAINS

The fountains will be activated each morning and operate continuously until the evening when the system will be turned off. The lights will operate only during the night time hours. The assumed times are as follows:

The Fountain Pumps operate from 7:00 AM until 12:00 PM for a total of 17 Hours per day.
The Fountain Lights operate from 6:00 PM until 12:00 PM for a total of 5 Hours per day.

The cost that the Power Company will charge the Town per KWH is based on 9 cents per KWH

The constant in order to convert pump HP over to wattage - multiply HP x 0.7457 KWH/HP

15 HP x 0.7457 KWH/HP = 11.19 KWH
3 HP x 0.7457 KWH/HP = 2.24 KWH

PLAZA INTERACTIVE FOUNTAIN

15 HP Aeration Jet Display Pump	- 11.19 KWH x 17 H/day	= 190.23 KWH/day
3 HP Misting Jet Display Pump	- 2.24 KWH x 17 H/day	= 38.08 KWH/day
3 HP Filtration Pump	- 2.24 KWH x 17 H/day	= 38.08 KWH/day
	Total Pump Operation each day	= 266.39 KWH/day
(46) 70 watt Plaza Light Fixtures	- 3.22 KWH x 5 H/day	= 16.10 KWH/day
	Total Light Operation each day	= 16.10 KWH/day

Total KWH used per day for the fountain system:

Total Pump Operation each day	= 266.39 KWH/day
Total Light Operation each day	= 16.10 KWH/day
Total KW Consumed	= 282.49 KWH/day

Cost per day to operate fountain system – 282.49 KWH/day x 0.09 cents/KWH
Cost = $25.42 per day to operate Plaza Fountain system

WATER GARDEN POOL FOUNTAIN

15 HP Aeration Jet Display Pump	- 11.19 KWH x 17 H/day	=	190.23 KWH/day
3 HP Filtration Pump	- 2.24 KWH x 17 H/day	=	38.08 KWH/day
Total Pump Operation each day		=	228.31 KWH/day

(34) 75 watt Upper Pool Light	- 2.55 KWH x 5 H/day	=	12.75 KWH/day
(12) 300 watt Lower Pool Lights	- 3.60 KWH x 5 H/day	=	18.00 KWH/day
(3) 300 watt Pylon Light Fixtures	- 0.90 KWH x 5 H/day	=	4.50 KWH/day
Total Light Operation each day		=	35.25 KWH/day

Total KWH used per day for the fountain system:

Total Pump Operation each day	= 228.31 KWH/day
Total Light Operation each day	= 35.25 KWH/day
Total KW Consumed	= 263.56 KWH/day

Cost per day to operate fountain system = 263.56 KWH/day x 0.09 cents/KWH

Cost = **$23.72 per day to operate Water Garden Fountain system**

If you need further assistance, please feel free to call me at my office.

Sincerely,

Steve A. Matonak, Sr.
Design Engineer
Georgia Fountain Company

ADDISON ARTS CENTER (D)

September 20, 2002

Design Statement for: Addison Arts Center

The equipment and the material specified in this section shall be installed by the contractor in accordance with the fountain manufacturer's recommendation to form two complete and separate fountain pumping systems to produce the desired effects in the design statement below.

PLAZA FOUNTAIN INTERACTIVE AERATION AND MIST JET FEATURES

The Plaza Fountain Interactive system will consist of a bi-level pool. The main portion of the feature will consist of an elevated "Zero Depth" dry plaza while the smaller portion of the system will consist of a standard water depth lower pool. Separating the upper dry plaza area and the lower pool will be a series of waterfall steps and a sloped paved area that will transition the elevation from zero depth plaza to the lower pool.

The water will be introduced into the zero depth dry plaza through (9) GEFCO Select #SE112-20 Water Level Independent Aeration Jets operating at a maximum spray height of 15'-0". The water from these nozzles will produce a highly frothy, white column of aerated water. Each nozzle shall be installed inside a GEFCO Select Custom Aeration Jet Sleeve Can located flush with the final plaza surface and located as shown on the drawings. Additional water will be introduced into the zero depth dry plaza through (24) GEFCO Select #SE1/2"G35W Mist Jets operating at a maximum spray height of 3'-6" and a spray diameter of 19'-0". The Mist jets will produce fine, heavy droplets of water in a full cone effect at a 35° degree angle. Each Mist Jet is to be installed inside a GEFCO Select Custom Mist Jet Sleeve Can located flush with the final plaza surface as shown on the Drawings.

The (9) Aeration Jet group and the (24) Mist Jet group are programmed to operate independently and/or as a group from each other. Each Aeration Jet of the group shall be individually valved and programmed to operate at three distinct spray heights (15'-0", 10'-0" and 5'-0" spray heights) and in the off position. The Aeration Jets within the group can be programmed to operate independently or in conjunction with the other jets in the group at any of the three or off spray heights. The Mist Jets, as a group, will be programmed to operate at either full, half reduced or off spray heights within the designed program. At times the water effects from both groups will be turned off.

An Anemometer will be installed on the plaza to monitor the wind speed and adjust the spray heights in half for the Aeration Jets and Mist Jets in order to contain the water within the wet area of the plaza during adverse wind conditions. During adverse wind conditions, both groups of jets will be reduced down to a minimum spray height just barely above the plaza.

The water from the Aeration and Mist Jets will fall back onto the zero depth dry plaza surface and flow toward the lower pool. The water will flow over the waterfall steps to the lower pool. The water will change its course as it flows down the sloped zero depth dry plaza surface due to the integration of stone block seat walls strategically located throughout the plaza.

Illumination for the Aeration and Mist Jets will consist of Fountain Plaza Uplight Fixtures spaced between the jets as indicated on the Drawings. The light fixtures are specified in Section 16525 – Site Lighting.

The display system for the (9) Aeration Jets will require a pump size of 15 Horsepower to operate the required aesthetics. The display system for the (24) Mist Jets will require a pump size of 3 Horsepower to operate the required aesthetics. The filter system for the pool will require a 3 Horsepower to operate the necessary filtration for the fountain system. The15 HP Aeration Jet display pump will deliver 650 GPM at 70 TDH. The 3 HP Mist Jet display pump will

deliver 120 GPM at 55 TDH. The 3 HP filter pump will deliver 100 GPM at 50 TDH. The filters for the Mist Pump and filter systems are equipped with replaceable cartridge elements that can be switched out manually.

The 15 HP and 3 HP display pumps, 3 HP filter pump, (2) 100 GPM sq.ft. Mist cartridge filters, 150 GPM sq.ft. cartridge filter, valves, brominator, pH/ORP Erosion Controller, variable frequency motor drives, ionization unit and control panel shall be installed in a fountain equipment vault located below the lower pool water level and adjacent the zero depth dry fountain plaza as indicated on the Drawings.

WATER GARDEN RECTANGULAR STREAM JET POOL FEATURE

The Water Garden Fountains will consist of three separate, 8'-0" wide by varying length upper pools. The upper pools will be positioned above a lower pool. A fountain pylon will be located at the end of each upper pool.

The water will be piped into the pylon and introduced into each upper pool through a stainless steel sump with a 12" wide weir slot as indicated on the Drawings. The water will sheet into each rectangular pool. Additional water will be introduced into each upper pool through a total of (48) GEFCO Select #SE105-05 Stream Jets located along the side walls of the pools operating at a maximum spray height of 4'-0" and a spray throw of 4'-0" toward the center of the pool. Each Stream Jet is to be installed inside a GEFCO Select Custom Wall Mounted Stream Jet Sleeve Can located flush with the pool wall as shown on the Drawings. The top of the Sleeve Can will consist of a 3/4" jet opening to allow the water to spray outward.

The water from each source, including additional ballast water required will produce a 1-1/4" water depth over the weir edge for each upper pool, dropping into the lower pool. A 1-1/4" water depth is based on a flow calculation of 55 gallons per minute per linear foot of weir edge.

An Anemometer will be installed adjacent to the Water Garden to monitor the wind speed and adjust the spray heights in half for all of the Stream Jets and pylon weirs in order to contain the water within the pool areas during adverse wind conditions. During adverse wind conditions, the water supply systems will be turned off until the wind speed subsides.

Illumination for the three Water Garden Upper Channels will consist overall of Water Garden Channel Light Fixtures spaced equally between the Stream Jets and alternating on opposite sides of the wall. Illumination for the Water Garden Lower Pool will consist of Water Garden Pool Light Fixtures spaced along the pool wall as indicated on the Drawings. Both of these light fixtures are specified in Section 16525 – Site Lighting.

The display system for the Pylon Weirs and Stream Jets will require a pump size of 15 Horsepower to operate the required aesthetics. The filter system for the pool will require a 3 Horsepower to operate the necessary filtration for the fountain system. The 15 HP display pump will deliver 550 GPM at 60 TDH. The 3 HP filter pump will deliver 100 GPM at 50 TDH. The filters for the system are equipped with replaceable cartridge elements that can be switched out manually.

The 15 HP display pump, 3 HP filter pump, 150 GPM sq.ft. cartridge filter, valves, brominator, pH/ORP Erosion Controller, variable frequency motor drives, ionization unit and control panel shall be installed in the fountain equipment vault as indicated on the Drawings.

The electrical control pane for the fountain equipment shall be no less than a UL Listed assembly with industrial application rating, NEMA 1 enclosure construction, containing all required disconnects, starters, relays, timing devices, control switches and all indicating pilot lights for local and/or remote automatic operation, pre-wired to field terminals. The UL Listed assembly shall contain all additionally required protection per 2002 NEC section 680.

CALCULATIONS FOR ENGINEERING

PLAZA FOUNTAIN INTERACTIVE AERATION AND MIST JET FEATURES

Aeration Jet calculations

The plaza will consist of a (9) #SE112-20 Aeration Jets mounted in stainless steel cans recessed below the dry plaza surface operating at a maximum spray height of 15'-0" total.

A 2" Aeration Jet operating at 15'-0" Spray Height requires 66 GPM at 48 FH.

66 GPM/jet x 9 jets = 594 GPM

Total Gallons per Minute required for the (9) Aeration Jets is 594 GPM

TOTAL GALLONS FOR THE SYSTEM

Aeration Jet System	-	594 GPM at 48 FH
Total	-	594 GPM at 48 FH
		+10 % + 20 FH
		654 GPM at 68 FH

AERATION JET DISPLAY PUMP SELECTION

The desired pump needed to operate the required aesthetics is

650 GPM at 70 TDH.

Flooded Suction; 15 HP; 1750 RPM; 208 V; 3 phase.
5" Suction and 4" Discharge.

Misting Jet calculations

The pool will consist of a (24) SE1/2"G-35W Misting Jets mounted in a stainless steel can recessed below the dry plaza surface operating at a maximum spray height of 3'-6" and a spray diameter of 19'-0".

A 1/2" Misting Jet operating at 3'-6" Spray Height requires 4.2 GPM at 35 FH.

4.2 GPM/jet x 24 jets = 100.8 GPM

Total Gallons per minute required for the (24) Misting Jets is 101 GPM

TOTAL GALLONS FOR THE SYSTEM

Misting Jet System	-	101 GPM at 35 FH
Total	-	101 GPM at 35 FH
		+10 % + 20 FH
		120 GPM at 55 FH

MISTING JET DISPLAY PUMP SELECTION

The desired pump needed to operate the required aesthetics is

120 GPM at 55 TDH.

Flooded Suction; 3 HP; 3450 RPM; 208 V; 3 phase.
2-1/2" Suction and 2" Discharge.

Recommended Filtration is (2) 100 GPM Cartridge Filters in order to have 100% filtered water delivered to the (24) Mist Jets.

Filtration calculations

Lower Reflecting Pool Area
Lower Pond - 32 Ft. x 13 Ft.
- Area = 416 Ft^2
Total Lower Pool Area = 416 Ft^2

Total Volume of water in System

Note: The majority of the lower pool floor is 16" deep at the center. The pool floor slopes to 0" deep toward the outer sloped edges.

Lower Pool Area- 416 Ft^2 x 1.33 Ft deep = 554 Ft^3

Total Volume in System = 545 Ft^3

Total Volume in System = 554 Ft^3 x 7.48 Gallons/ ft^3
= 4,144 Gallons of water in the lower pool.
655 Gallons of water in Aeration Jet System
120 Gallons of water in Misting Jet System
+ 100 Gallons of water in Filter System
5,019 Gallons of Water in System

5,019 Gallons ÷ 120 minutes = 41.83 GPM for a 2 hour turn over rate.

Recommended Filtration is (1) 150 GPM Cartridge Filter.

Shutdown calculations

Total Water in Motion from nn Plaza Level from Filtration, Aeration and Mist Jets =
655 Gallons of water in Aeration Jet System
120 Gallons of water in Misting Jet System
+ 100 Gallons of water in Filter System
875 Gallons of Water in System

Total Volume in System = 875 Gallons ÷ 7.48 Gallons/ ft^3
= 117 Ft^3

Lower Pool Area = 416 Ft^2

Shutdown Gain = Volume of Water in Plaza ÷ Lower Pool Area

= 117 Ft^3 ÷ 416 Ft^2
= 0.281 Ft x 12 in/Ft
Shutdown Rise = 3-3/8" Water Level Rise in Lower Pool

WATER GARDEN FOUNTAIN FEATURES

Pool #1 calculations

The plaza will consist of a (1) 12" wide Spillway and (24) Stream Jets operating at 4'-0" maximum spray height and spray throw in to the long pool.

A 12" Spillway operating at 1" water depth requires 43 GPM per Foot of Weir.

43 GPM/Ft x 1 Ft of Weir = 43 GPM

A 1/2" NPT Stream Jet with a 3/8" orifice operating at 4'-0" maximum Spray Height and 4'-0" Spray Throw requires 5 GPM at 7 FH.

5 GPM/jet x 24 jets = 120 GPM

Total Gallons per Minute required for Pool #1

120 GPM for the (24) Stream Jets
+43 GPM for the Waterfall
163 GPM

Pool #2 calculations

The plaza will consist of a (1) 12" wide Spillway and (16) Stream Jets operating at 4'-0" maximum spray height and spray throw in to the long pool.

A 12" Spillway operating at 1" water depth requires 43 GPM per Foot of Weir.

43 GPM/Ft x 1 Ft of Weir = 43 GPM

A 1/2" NPT Stream Jet with a 3/8" orifice operating at 4'-0" maximum Spray Height and 4'-0" Spray Throw requires 5 GPM at 7 FH.

5 GPM/jet x 16 jets = 80 GPM

Additional Ballast added to the pool = 40 GPM

Total Gallons per Minute required for Pool #2

80 GPM for the (16) Stream Jets
40 GPM for Added Ballast Water
+43 GPM for the Waterfall
163 GPM

Pool #3 calculations

The plaza will consist of a (1) 12" wide Spillway and (8) Stream Jets operating at 4'-0" maximum spray height and spray throw in to the long pool.

A 12" Spillway operating at 1" water depth requires 43 GPM per Foot of Weir.

43 GPM/Ft x 1 Ft of Weir = 43 GPM

A 1/2" NPT Stream Jet with a 3/8" orifice operating at 4'-0" maximum Spray Height and 4'-0" Spray Throw requires 5 GPM at 7 FH.

5 GPM/jet x 16 jets = 80 GPM

Additional Ballast added to the pool = 80 GPM

Total Gallons per Minute required for Pool #3

40 GPM for the (8) Stream Jets
80 GPM for Added Ballast Water
+43 GPM for the Waterfall
163 GPM

TOTAL GALLONS FOR THE SYSTEM

All Three Pool Systems - 163 GPM at 7 FH for Pool #1 System
163 GPM at 7 FH for Pool #2 System
+163 GPM at 7 FH for Pool #3 System
Total - 489 GPM at 7 FH
+10 % + 50 FH
550 GPM at 60 FH

WATERFALL AND STREAM JET DISPLAY PUMP SELECTION

The desired pump needed to operate the required aesthetics is

550 GPM at 60 TDH.

Flooded Suction; 15 HP; 1750 RPM; 208 V; 3 phase.
5" Suction and 4" Discharge.

Filtration calculations

Upper Pool#1 Area - 8 Ft x 124 Ft
- Area = 992 Ft^2
Total Upper Pool#1 Area = 992 Ft^2

Upper Pool#2 Area - 8 Ft x 84 Ft
- Area = 672 Ft^2
Total Upper Pool#2 Area = 672 Ft^2

Upper Pool#3 Area - 8 Ft x 44 Ft
- Area = 352 Ft^2
Total Upper Pool#3 Area = 352 Ft^2

Lower Pool Area - 10 Ft x 220 Ft
- Area = 2,200 Ft^2
Total Upper Pool#1 Area = 2,200 Ft^2

Total Volume of water in System

Note: The majority of the Upper Pool floors are 12" deep and the Lower Pool floor is 18" deep.

Upper Pool#1 Area- 992 Ft^2 x 1.0 Ft deep = 992 Ft^3
Upper Pool#2 Area- 672 Ft^2 x 1.0 Ft deep = 672 Ft^3
Upper Pool#3 Area- 352 Ft^2 x 1.0 Ft deep = 352 Ft^3
Lower Pool Area- 2,200 Ft^2 x 1.5 Ft deep = +3,300 Ft^3
Total Volume in System = 5,316 Ft^3

Total Volume in System = 5,316 Ft^3 x 7.48 Gallons/ ft^3
= 39,764 Gallons of water in the entire System.

39,764 Gallons ÷ 480 minutes = 82.84 GPM for an 8 hour turn over rate.

Recommended Filtration is (1) 150 GPM Cartridge Filter.

Shutdown calculations

Each long Upper Pool will create a 1-1/4" flow of water over the 3'-0" Wide Weir edge toward the common Lower Pool, however, the longer Upper Pools will back-up more water creating a deeper flow.

Upper Pool#1 Area- 992 Ft² x 0.167 Ft deep = 166 Ft³
Upper Pool#2 Area- 672 Ft² x 0.125 Ft deep = 84 Ft³
Upper Pool#3 Area- 352 Ft² x 0.104 Ft deep = + 37 Ft³
Total Volume of water in all three Upper Pools= 287 Ft³

Lower Pool Area- 2,200 Ft²

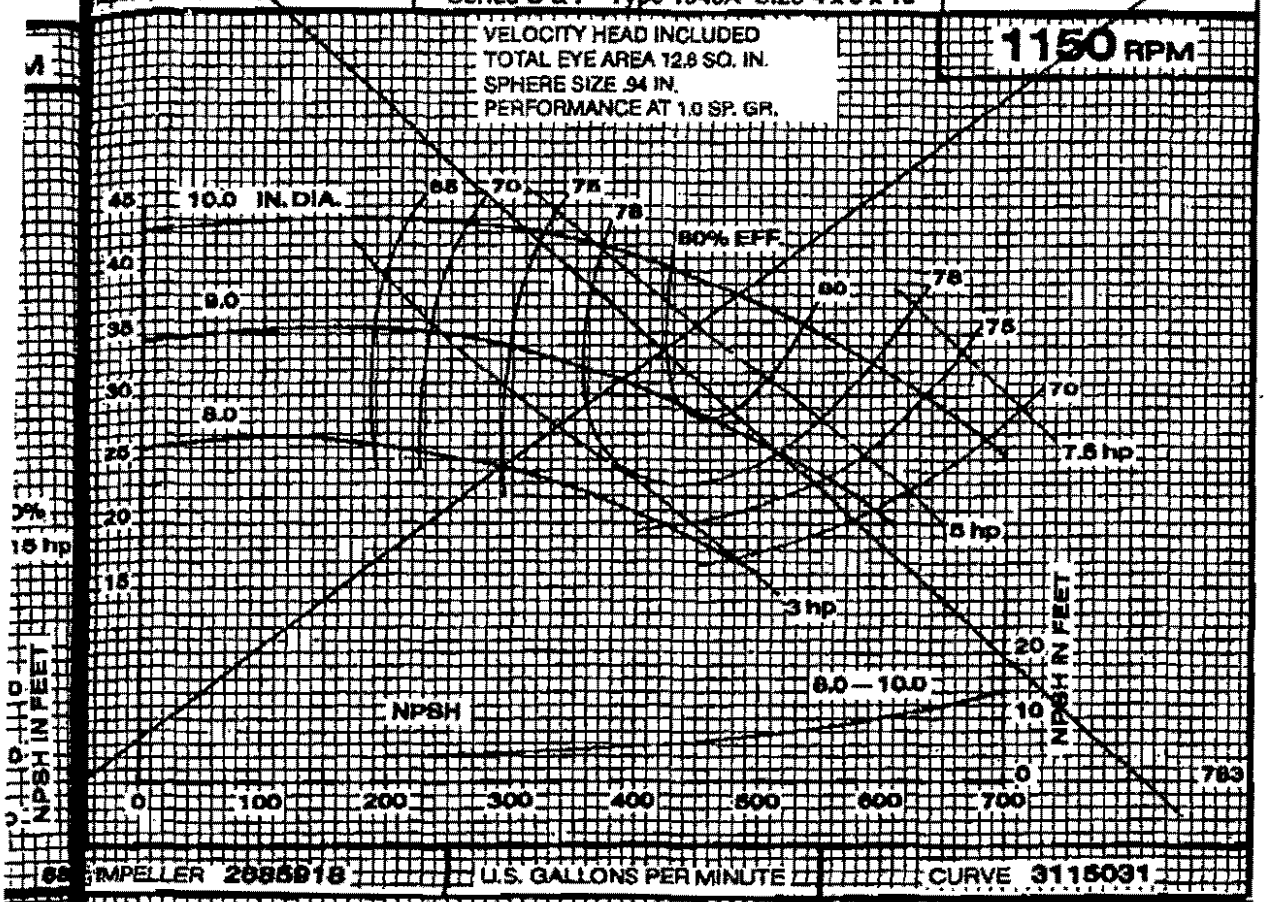
Shutdown Gain = Volume of Water in Pools + Lower Pool Area

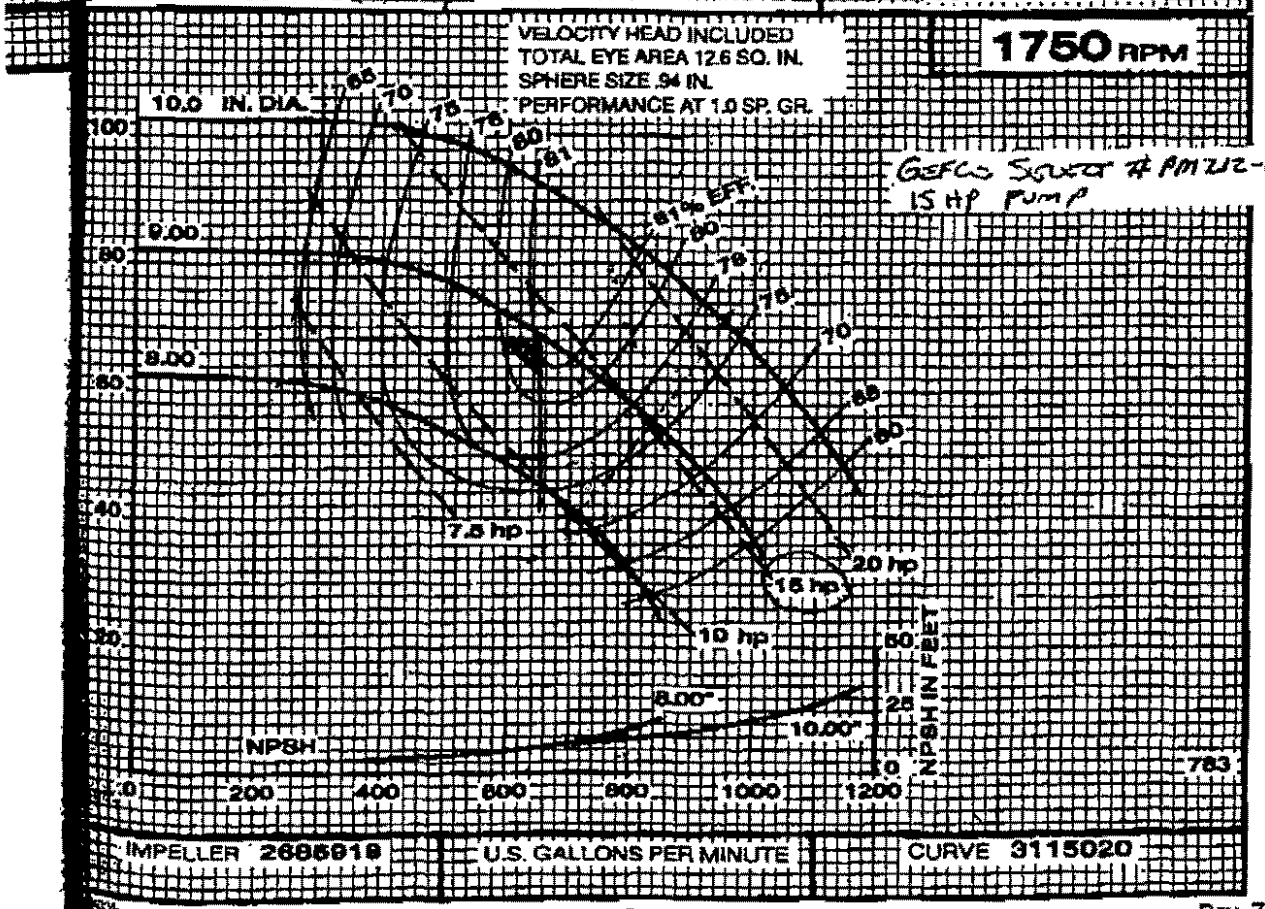
= 287 Ft³ ÷ 2,200 Ft²
= 0.13 Ft x 12 in/Ft
Shutdown Rise = 1-3/4" Water Level Rise in Lower Pool

erless Pump Company
apolis, IN 46207-7026

END SUCTION PUMPS
Series C & F Type 1040A Size 4 x 5 x 10

SECTION 2340





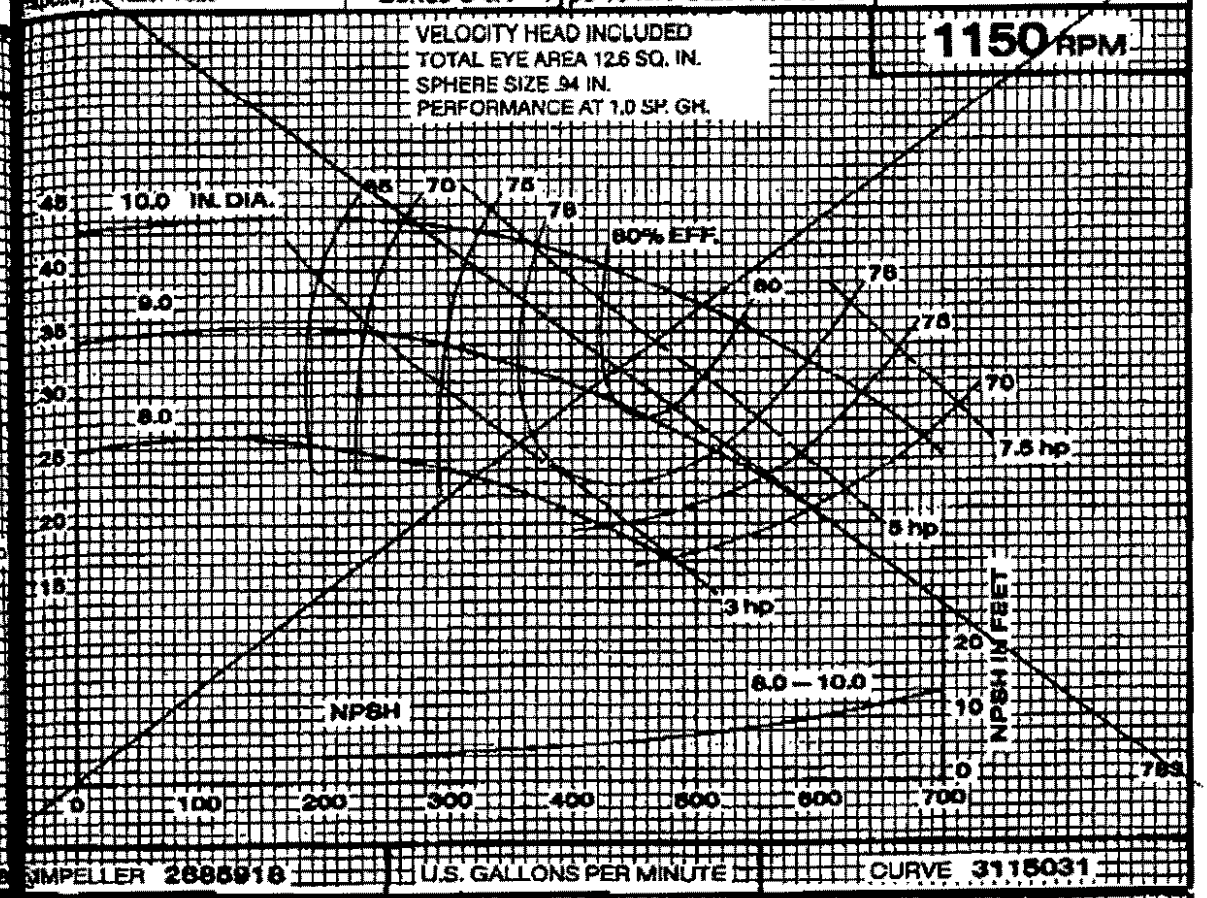
GEFCO Source # PM212-15
15 HP Pump

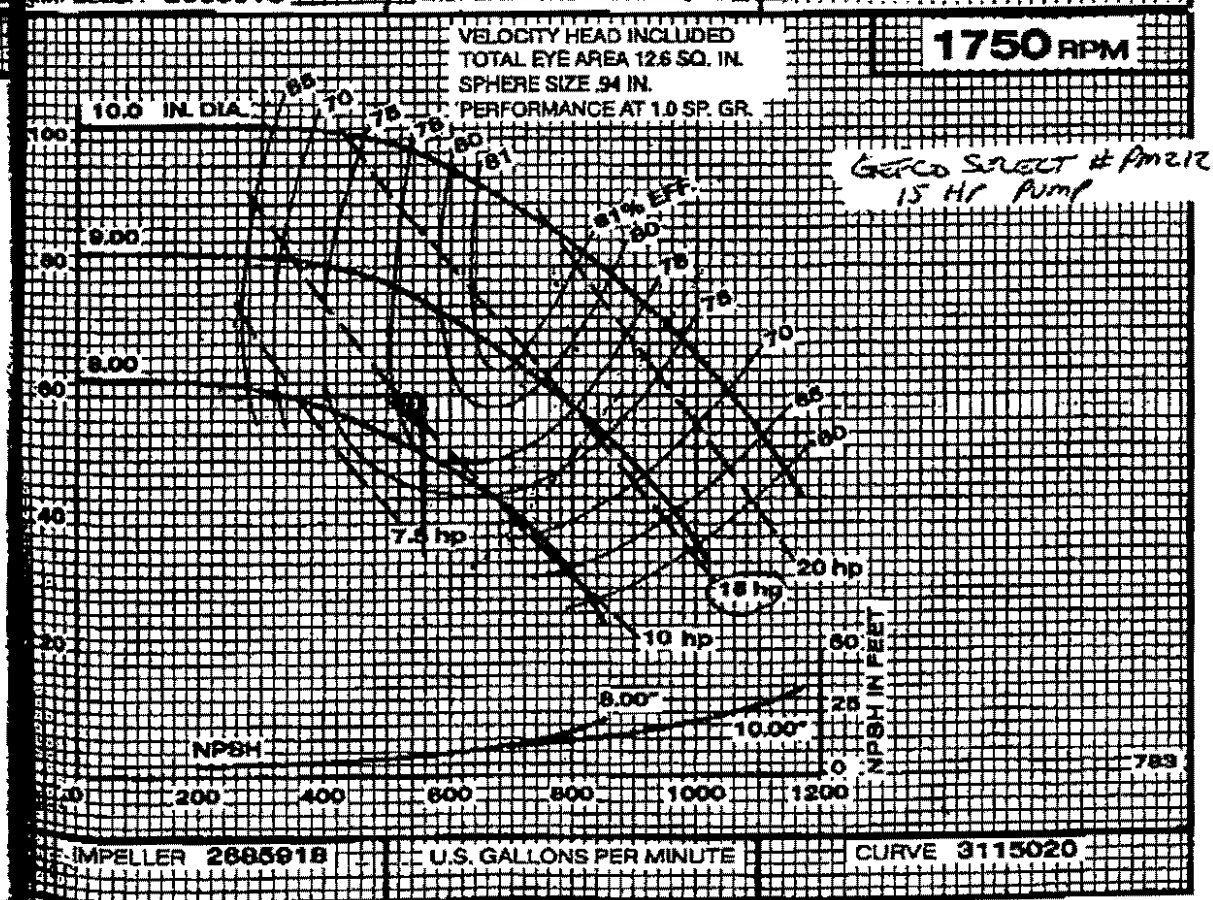
AERATION JET DISPLAY PLAZA FOUNTAIN PUMP

Peerless Pump Company
Indianapolis, IN 46207-7026

END SUCTION PUMPS
Series C & F Type 1040A Size 4 x 5 x 10

SECTION 2340





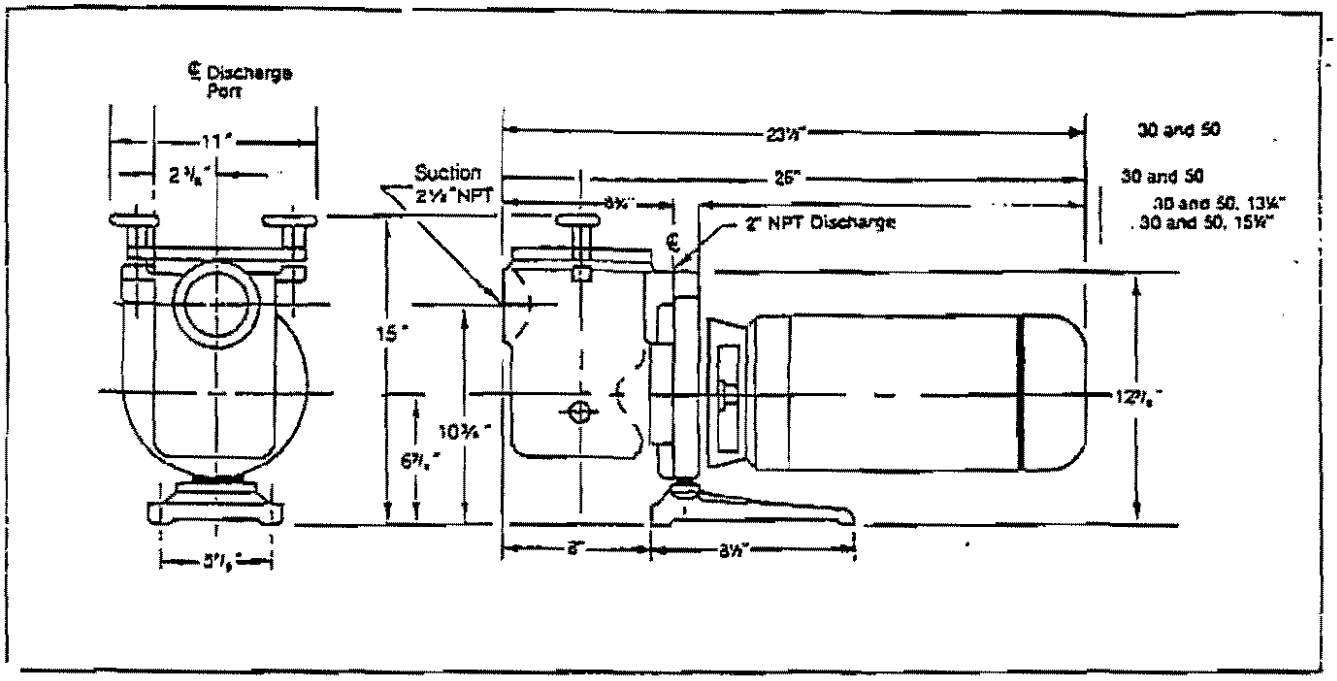
Gilco Select # PM212-15
15 Hr Pump

Rev. 7-5-91

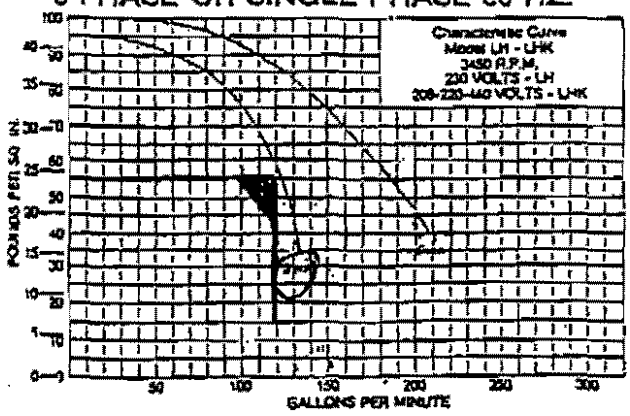
WATER GARDEN JET / WATERFALL PUMP

SELECT MODEL #
PM100-SERIES

SEMI-COMMERCIAL PUMPS



3 PHASE OR SINGLE PHASE 60 HZ.



PUMP MODEL NO.'S

THREE PHASE	SINGLE PHASE
#PM113 - 3 HP	#PM118 - 3 HP
#PM115 - 5 HP	#PM119 - 5 HP

- LUXURY-SIZED STRAINER BASKET: Made of perforated stainless steel stamped and welded, with bucket handle.
- CLOSED IMPELLER: For longer bearing life, pumps more water with less horsepower.
- SPECIAL MECHANICAL SEAL: Designed for longer life. Will operate up to 220 degrees F.
- AVAILABLE IN CAST IRON OR BRONZE.
- EASY TO SERVICE: Simply remove four bolts. No piping needs to be removed to service inside of this pump.
- ELECTRIC MOTOR: Nationally recognized, heavy duty ball bearing motors, in single phase, 230 volt, 60 cycle, 40 degree C. ambient. Three phase, 60/50 cycle, 220/208/440 volt, 3450 R.P.M.

Plaza Fountain Misting Jet Pump

Suitable for damp environment

SELECT MODEL #
PM100-SERIES

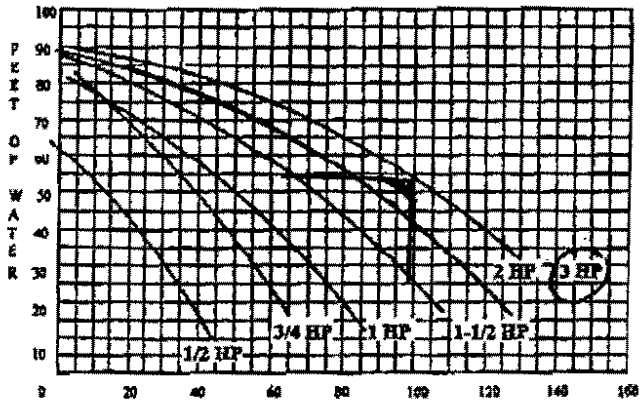
SMALL COMMERCIAL BRONZE PUMPS

The Small Commercial Bronze Pump has set the standard for fountain pumps since 1959. It is unequaled in dependability and performance. The unique qualities of the heavy bronze casting and design have the ability to withstand the elements, the stress of a long work day, and an unsurpassed quietness of operation. This allows you to use your fountain, without having to listen to it. Couple these features with the self-cleaning impeller and you have purchased a durable, uncomplaining workhorse.

- **FULL PERFORMANCE** range, 1/2 through 3 horsepower; from a small fountain to a 48,000 gallon swimming pool. Specifically designed for the back washing requirements of diatomaceous earth or sand filters and the flow demands of many spray effects.
- **COMMERCIAL GRADE**, full-56 frame electric motor. We use stainless steel shafts, heavy duty bearings, and automatic overload protection. Available in single-phase, three-phase, 50 and 60 Hz.
- **RAPID PRIMING** means less chance of seal burn out, and less waiting after cleaning the basket.
- **SELF-CLEANING**, balanced bronze impeller increases service life of the pump and the motor.
- **COMMERCIAL** size 6" strainer basket requires emptying less often than standard 4" and 5" strainers. Special high density polyethylene construction neither rusts nor gets brittle as other inexpensive substitutes can.
- **BRONZE CONSTRUCTION** offers the unequaled service life and operating quietness required of commercial and residential installations. No plastic to melt, warp, crack, and replace if the water level of the pool accidentally falls too low and the system loses prime.
- **ONE PIECE DESIGN** of the hair/lint pot and pump, offers quietness of operation, requires less space for installation, and is less time consuming for service.

- **UNDERWRITERS LABORATORY** is a consumer safety, product testing organization. The pump is tested and listed by Underwriters Laboratory.
- **NATIONAL SANITATION FOUNDATION** is a testing organization for commercial use equipment. The pump is tested and listed by the National Sanitation Foundation.
- **SUCTION** size is 2" pipe size, discharge is 1-1/2" pipe size. Lengths vary from 18" for 1/2 hp to 23" for 3 hp.

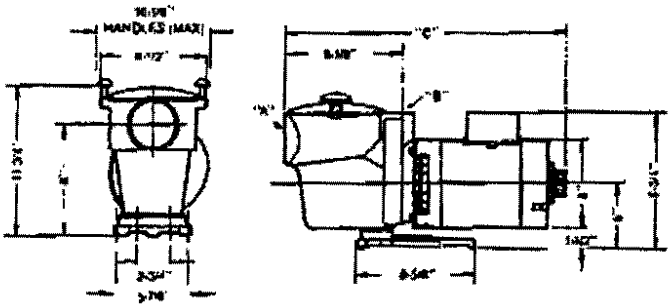
SINGLE OR 3 PHASE PHASE 60 HZ.



GALLONS PER MINUTE

PUMP MODEL NUMBERS

SINGLE PHASE	THREE PHASE
#PM103 - 1 HP	#PM108 - 3/4 HP
#PM104 -1-1/2 HP	#PM109 - 1 HP
#PM105 - 2 HP	#PM110 -1-1/2 HP
#PM106 - 3 HP	#PM111 - 2 HP
	#PM112 - 3 HP



MOUNTING HOLES

"A" SUCTION IS 2" NPT
"B" DISCHARGE IS 1-1/2" NPT
"C" LENGTHS VARY; 1/2 HP = 18", 3 HP = 23"

FILTER PUMP FOR BOTH PLAZA AND WATER GARDEN PONDS

600 Pumping Systems

Georgia Fountain Company, Inc.

Material List for: Addison Circle Arts (M)
Addison, TX
Two Separate Pumping Systems Operating from a Single Equipment Room
Lighting By Others

Job #: 1002-512 Date: October 8, 2002

Description:	Qty
PLAZA FOUNTAIN WATER FEATURE	
* GEFCO Select #SE112-20 Independent Aerating Jet: - made of bronze and brass. - 3/16" nozzle size. - 2" female N.P.T. connection. - with 2" ball valve, bronze, T x T.	9
* GEFCO Custom Flow Straightner: - made of copper tube construction.	9
* GEFCO Custom Aeration Jet Sleeve Can: - made of all stainless steel construction. - with 2" NPT bottom incoming water line and (1) 2" NPT bottom side drain line connections. - top of jet sleeve can to have perfotated openings.	9
* GEFCO Select #SE1/2"-G-35W Misting Jet: - made of single piece brass. - with 35 degree included angle. - 1/2" male N.P.T. connection. - with 1/2" ball valve, bronze, T x T.	24
* GEFCO Custom Flow Straightner: - made of copper tube construction.	24
* GEFCO Custom Mist Jet Sleeve Can: - made of all stainless steel construction. - with 1/2" NPT bottom incoming water line and (1) 1" NPT bottom side drain line connections. - top of jet sleeve can to have perfotated openings.	24
* GEFCO Select #SE137-20 Adjustment Flange: - cast bronze and stainless steel fitted. - 5 degree adjustable from vertical. - 2" male and female N.P.T. connections.	9
* GEFCO #PE100-1 Surface Skimmer: - hi-impact plastic body.	1

Georgia Fountain Company, Inc.

- plastic flap wier.
- removable plastic basket.
- brass faceplate with brass screws.
- 1-1/2" female N.P.T. connection.

* GEFCO #PE101 Vacuum Fitting: 1
- cast brass body with waterstop flange.
- chrome plated insert and brass removable plug.
- bonding screw.
- 2" female N.P.S. connection.

* GEFCO #PE102 Eyeball Fitting: 2
- cast brass body with waterstop flange.
- Chrome plated 1" orifice eyeball, insert, lock ring and guide bushing.
- bonding screw.
- 2" female N.P.S. connection.

* GEFCO Select #PE104-4 Main Pool Drain: 1
- cast bronze and brass.
- adjustable base with lock ring.
- bonding screw.
- plug made of brass with male threads, neoprene o-ring and cross handle.
- 4" N.P.T. female connection.

* GEFCO Select #PE105-4A Wall Niche Adjustable Overflow and Air Vents: 7
- made of cast bronze, brass tube and stainless steel fasteners.
- adjustable interior overflow weir edge.
- neoprene o-ring seal.
- 11.5 sq. in. open grating area.
- 3.75" x 9" rectangular face.
- 4" male connection.

* GEFCO #PE109-20P Slab Penetration: 2
- P.V.C. waterstop flange.
- 18" long.
- 2" diameter schedule 40 P.V.C. pipe.

* GEFCO #PE109-40P Slab Penetration: 8
- P.V.C. waterstop flange.
- 24" long.
- 4" diameter schedule 80 P.V.C. pipe.

* GEFCO #PE109-60P Slab Penetration: 2
- P.V.C. waterstop flange.
- 24" long.

- 6" diameter schedule 80 P.V.C. pipe.

* GEFCO #PE111 Maintenance Kit: 1
- 1 ea. debris leaf skimmer.
- 1 ea. vacuum head.
- 1 ea. 40' long leak proof plastic hose.
- 3 ea. cam-lock aluminum pole (4'-12').
- 1 ea. nylon bristle brush.
- 1 ea. vacuum hose adaptor.

* GEFCO #EE114A Anemometer: 1
- 3-cup design.
- made of sturdy cycolac plastic.
- 3/4" female N.P.T. connection.

* GEFCO Select #EE131B Dual Water Level Sensor: 1
- cast bronze, copper, brass, and stainless steel construction
- stainless steel cover plate
- perma magnet activated reed switch sensors.
- adjustability after installation.
- 12 VAC, 0.5 amp, non inductive.
- 3/4" NPT bottom connection.

* GEFCO Select #EE137-4 Junction Box Cord Seal: 47
- machined brass.
- compression type neoprene gland.
- U.L. Listed.
- for cable size 16/3.
- 1/2" conduit x 3/4" box entry connection.

* GEFCO Select #EE138-1 Submersible Deck Box: 1
- cast bronze body and cover plate.
- stainless steel cover screws.
- neoprene cover gasket.
- integral grout frame for flush installation.
- seperate grounding connection for each outlet.
- 42.72 cu. in. content.
- must use metallic conduit.
- 1 ea. 3/4" N.P.T. side tap connection.
- 1 ea. 1" N.P.T. side conduit connection.

* GEFCO Select #EE138-2 Submersible Deck Box: 4
- cast bronze body and cover plate.
- stainless steel cover screws.
- neoprene cover gasket.
- integral grout frame for flush installation.
- seperate grounding connection for each outlet.
- 42.72 cu. in. content.

Georgia Fountain Company, Inc.

- must use metallic conduit.
- 2 ea. 3/4" N.P.T. side tap connection.
- 1 ea. 1" N.P.T. side conduit connection.

* GEFCO Select #EE138-3 Submersible Deck Box: 6
- cast bronze body and cover plate.
- stainless steel cover screws.
- neoprene cover gasket.
- integral grout frame for flush installation.
- seperate grounding connection for each outlet.
- 42.72 cu. in. content.
- must use metallic conduit.
- 3 ea. 3/4" N.P.T. side tap connection.
- 1 ea. 1" N.P.T. side conduit connection.

* GEFCO Select #EE138-4 Submersible Deck Box: 5
- cast bronze body and cover plate.
- stainless steel cover screws.
- neoprene cover gasket.
- integral grout frame for flush installation.
- seperate grounding connection for each outlet.
- 42.72 cu. in. content.
- must use metallic conduit.
- 4 ea. 3/4" N.P.T. side tap connection.
- 1 ea. 1" N.P.T. side conduit connection.

* GEFCO #SK116 Pumping Skid: Display Pump is engineered, factory tested, and preassembled on a (2'-0" x 6'-0") pad. 1

* GEFCO Select #PM212-15 Display Pump: 1
- 15 Horsepower pump.
- bronze fitted cast iron construction.
- 5" suction.
- 4" discharge.
- 654 GPM at 70 FH.
- 208 Volts, 3 phase, 1750 RPM, 60 Hz.

- Suction assembly includes the following: 1
- 8" x 5" Eccentric Reducer, 125#.
- 8" Basket Strainer, 125#.
- 8" Butterfly Valve. gear handwheel operated.
- 8" Companion Flange, PVC.
- includes necessary flange gaskets, stainless steel studs and nuts.

- Discharge assembly includes the following: 1
- Discharge Manifold, PVC, Sch. 80 construction, 8" log with (1) 4" and (9) 2" lines

Georgia Fountain Company, Inc.

- (1) 4" Pressure sustaining valve (750).
  - hydraulically-operated pilot controlled diaphragm-type.
  - (3) pressure relief pilot control.
  - auxialiary check valves.
  - cast iron body and cover.
  - brass and bronze trim.
  - cast bronze and stainless steel pilot control system.
- (9) 2" Solenoid operated valve, (793-01).
  - single seated, hydraulically-operated pilot controlled diaphragm-type.
  - (3) pressure reducing valve.
  - (3) solenoid shut-off valve.
  - single pressure adjustment screw.
  - cast iron body and cover.
  - brass, bronze, or stainless steel trim.
  - bronze pilot control.
  - stainless steel pilot control trim.
- includes necessary flange gaskets, stainless steel studs and nuts.

* GEFCO #SK103-200 Pumping Skid: Mist Filter Pump and filtration is engineered, factory tested and pre-assembled on a (4'-0" x 5'-0") pad. 1

* GEFCO Select #PM113 Filter Pump: 1
- 3 Horsepower pump.
  - all cast bronze construction.
  - integral basket strainer.
  - 2-1/2" suction.
  - 2" discharge.
  - 120 GPM at 55 FH.
  - 208 V., 3 phase, 3450 RPM, 60 Hz.

- Suction assembly includes the following: 1
  - 4" x 2-1/2" Eccentric Reducer, 125#.
  - 4" Butterfly Valve, 10 position operated.
  - 4" Companion Flange, PVC.
  - includes necessary flange gaskets, stainless steel studs and nuts.

- Filter discharge assembly includes the following: 1
  - 2" x 1-1/2" adapter, PVC, S x MT.
  - (2) 2" Check Valve, swing type, bronze, T x T.
  - (2) 2" Ball Valve, bronze, T x T.

* GEFCO Select #PM900-100C Cartridge Filter Assembly: 2
- 100 sq.ft. Cartridge filter.

- made of cycolac construction.
- with 100 sq.ft. replacement cartridge filter.

* GEFCO #SK103-150 Pumping Skid: Filter Pump and filtration is engineered, factory tested and pre-assembled on a (4'-0" x 6'-0") pad. 1

* GEFCO Select #PM112 Filter Pump: 1
- 3 Horsepower pump.
- all cast bronze construction.
- integral basket strainer.
- 2" suction.
- 1-1/2" discharge.
-100 GPM at 55 FH.
- 208 V., 3 phase, 3450 RPM, 60 Hz.
- (1) 3" Ball Valve, PVC, S x S.
- (2) 2" Ball Valve, bronze, T x T.

- Filter discharge assembly includes the following: 2
- 2" x 1-1/2" adapter, PVC, S x MT.
- (1) 2" Check Valve, swing type, bronze, T x T.
- (1) 2" Ball Valve, bronze, T x T.

* GEFCO Select #PM900-150C Cartridge Filter Assembly: 1
- 150 sq.ft. Cartridge filter.
- made of cycolac construction.
- with 150 sq.ft. replacement cartridge filter.

* GEFCO #PM800-15 Water Control Manifold: 1
- Automatic Fill/Level Control Manifold.
- miscellaneous copper tube and fittings.
- 1" solenoid valve, 120 V., 1 phase
- (2) 1" ball valves, bronze.
- 1.5" ball valve, bronze.
- 1.5" backflow preventor, bronze.
- 1/2" water hammer arrestor.
- 3/4" hose bibb, bronze.

* GEFCO Select #PM1725 Brominator with Flow Indicator: 1
- made of all cycolac plastic.
- with automatic dial feed.
- 1-1/2" N.P.T. connection.
- Bromine Not included.

* GEFCO Select #PM1750 pH/ORP Erosion Controller: 1
- with 24" square mounting board and required components.
- Brominator, high capacity, side - line type with ball valves and by pass. Chemical feed system to include 24 volt solenoid valve for automation of bromine feeder, automatic chemical injection

pump for heavy duty crock acid storage.

WATER GARDEN AREA POOLS

* GEFCO Select #SE105-05 Stream Jet: - machined brass base and nozzle. - 10 degree adjustable from vertical. - 3/8" orifice size. - 1/2" female N.P.T. connection. - with 1/2" ball valve, bronze, T x T.	48
* GEFCO Custom Angle Wall Stream Jet Sleeve Can: - made of all stainless steel construction. - cans to be angled 45 degrees in order to be mounted flush with vertical side walls. - with 1/2" NPT bottom incoming water line and (1) 1" NPT bottom side drain line connections. - top of jet sleeve can to have stream jet opening.	48
* GEFCO #PE100-1 Surface Skimmer: - hi-impact plastic body. - plastic flap wier. - removable plastic basket. - brass faceplate with brass screws. - 1-1/2" female N.P.T. connection.	4
* GEFCO #PE101 Vacuum Fitting: - cast brass body with waterstop flange. - chrome plated insert and brass removable plug. - bonding screw. - 2" female N.P.S. connection.	9
* GEFCO #PE102 Eyeball Fitting: - cast brass body with waterstop flange. - Chrome plated 1" orifice eyeball, insert, lock ring and guide bushing. - bonding screw. - 2" female N.P.S. connection.	5
* GEFCO Select #PE104-4 Main Pool Drain: - cast bronze and brass. - adjustable base with lock ring. - bonding screw. - plug made of brass with male threads, neoprene o-ring and cross handle. - 4" N.P.T. female connection.	5
* GEFCO Select #PE105-4A Wall Niche Adjustable Overflow:	2

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- made of cast bronze, brass tube and stainless steel fasteners.
- adjustable interior overflow weir edge.
- neoprene o-ring seal.
- 11.5 sq. in. open grating area.
- 3.75" x 9" rectangular face.
- 4" male connection.

* GEFCO #PE107 Sump for ballast pools: 3
- hi-impact cycolac plastic body.
- 8" diameter anti-vortex plate.
- 2" N.P.T. female bottom and side connections.

* GEFCO #PE108-6-2B Sump: 2
- A.B.S. plastic body with waterstop flange.
- 24" x 24" stainless steel anti-vortex plate.
- 6" and 2" P.V.C. Bottom connections.

* GEFCO #PE108E 12" sq. Anti-Vortex Plate: 3
- 12" x 12" stainless steel anti-vortex plate.

* GEFCO #PE109-07P Slab Penetration: 24
- P.V.C. waterstop flange.
- 18" long.
- 3/4" diameter schedule 40 P.V.C. pipe.

* GEFCO #PE109-20 Upper Pool Spillway Slab Penetration: 3
- brass waterstop flange.
- bonding screw.
- 18" long.
- 2" diameter copper tube.

* GEFCO #EE114A Anemometer: 1
- 3-cup design.
- made of sturdy cycolac plastic.
- 3/4" female N.P.T. connection.

* GEFCO Select #EE131B Dual Water Level Sensor: 1
- cast bronze, copper, brass, and stainless steel construction
- stainless steel cover plate
- perma magnet activated reed switch sensors.
- adjustability after installation.
- 12 VAC, 0.5 amp, non inductive.
- 3/4" NPT bottom connection.

* GEFCO Select #EE137-4 Junction Box Cord Seal: 45
- machined brass.
- compression type neoprene gland.

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- U.L. Listed.
- for cable size 16/3.
- 1/2" conduit x 3/4" box entry connection.

* GEFCO Select #EE138-2 Submersible Deck Box: 6
- cast bronze body and cover plate.
- stainless steel cover screws.
- neoprene cover gasket.
- integral grout frame for flush installation.
- seperate grounding connection for each outlet.
- 42.72 cu. in. content.
- must use metallic conduit.
- 2 ea. 3/4" N.P.T. side tap connection.
- 1 ea. 1" N.P.T. side conduit connection.

* GEFCO Select #EE138-3 Submersible Deck Box: 3
- cast bronze body and cover plate.
- stainless steel cover screws.
- neoprene cover gasket.
- integral grout frame for flush installation.
- seperate grounding connection for each outlet.
- 42.72 cu. in. content.
- must use metallic conduit.
- 3 ea. 3/4" N.P.T. side tap connection.
- 1 ea. 1" N.P.T. side conduit connection.

* GEFCO Select #EE138-4 Submersible Deck Box: 6
- cast bronze body and cover plate.
- stainless steel cover screws.
- neoprene cover gasket.
- integral grout frame for flush installation.
- seperate grounding connection for each outlet.
- 42.72 cu. in. content.
- must use metallic conduit.
- 4 ea. 3/4" N.P.T. side tap connection.
- 1 ea. 1" N.P.T. side conduit connection.

* GEFCO #SK115 Pumping Skid: Display Pump is engineered, factory tested, and preassembled on a (2'-0" x 4'-0") pad. 1

* GEFCO Select #PM212-15 Display Pump: 1
- 15 Horsepower pump.
- bronze fitted cast iron construction.
- 5" suction.
- 4" discharge.
- 550 GPM at 60 FH.
- 208 Volts, 3 phase, 1750 RPM, 60 Hz.

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- Suction assembly includes the following: 1
  - 8" x 5" Eccentric Reducer, 125#.
  - 8" Basket Strainer, 125#.
  - 8" Butterfly Valve, gear handwheel operated.
  - 8" Companion Flange, PVC.
  - includes necessary flange gaskets, stainless steel studs and nuts.

- Discharge assembly includes the following: 1
  - Discharge Manifold, PVC, Sch. 80 construction, 6" log with (3) 3" and (5) 2" lines
  - 4" Service Check Valve, flanged.
  - (3) 3" Butterfly Valve, infinite position.
  - (5) 2" Ball Valve, bronze, T x T.
  - (3) 3" Companion Flange, PVC.
  - includes necessary flange gaskets, stainless steel studs and nuts.

* GEFCO #SK103-100 Pumping Skid: Filter Pump and filtration is engineered, factory tested and pre-assembled on a (4'-0" x 6'-0") pad. 1

* GEFCO Select #PM112 Filter Pump: 1
  - 3 Horsepower pump.
  - all cast bronze construction.
  - integral basket strainer.
  - 2" suction.
  - 1 1/2" discharge.
  - 100 GPM at 40 FH.
  - 208 V., 3 phase, 3450 RPM, 60 Hz.
  - (4) 2" Ball Valve, bronze, T x T.
  - (3) 2" Check Valve, bronze, T x T.

- Filter discharge assembly includes the following: 1
  - 2" x 1-1/2" adapter, PVC, S x MT.
  - (1) 2" Check Valve, bronze, T x T.
  - (3) 2" Ball Valve, PVC, S x S.

* GEFCO Select #PM900-150 Cartridge Filter Assembly: 1
  - 150 sq.ft. Cartridge filter.
  - made of cycolac construction.
  - with (1) 150 sq.ft. replacement cartridge filter.

* GEFCO #PM800-15 Water Control Manifold: 1
  - Automatic Fill/Level Control Manifold.
  - miscellaneous copper tube and fittings.
  - 1" solenoid valve, 120 V., 1 phase
  - (2) 1" ball valves, bronze.
  - 1.5" ball valve, bronze.

- 1.5" backflow preventor, bronze.
- 1/2" water hammer arrestor.
- 3/4" hose bibb, bronze.

* GEFCO Select #PM1725 Brominator with Flow Indicator: 1
- made of all cycolac plastic.
- with automatic dial feed.
- 1-1/2" N.P.T. connection.
- Bromine Not included.

* GEFCO Select #PM1750 pH/ORP Erosion Controller: 1
- with 24" square mounting board and required components.
- Brominator, high capacity, side - line type with ball valves and by pass. Chemical feed system to include 24 volt solenoid valve for automation of bromine feeder, automatic chemical injection pump for heavy duty crock acid storage.

* GEFCO Custom Control Panel: U.L. Listed and Labeled; 1
Includes the following:

- NEMA 1 Steel Enclosure: (Sized for application) 1
  - flush mounted door; gasketted.
  - 135 Deg. opening; bonded to mounting plate.
  - phosphated steel construction.
  - ANSI 61 gray acrylic enamel finish.
  - internal mounting plate.

- Main Power Disconnect: 1
  - 120/208V AC; 3 PHASE.
  - rated at 225 Amps.
  - door mounted interlocking red handle.
  - padlock capable device.
  - door mounted label: MAIN POWER DISCONNECT

- Magnetic Motor Starter: PLAZA FOUNTAIN JET PUMP: 1
  - main contacts rated at 15 HP, 208V AC, 3 phase.
  - 1 set N.O. & N.C. Aux. contacts min.
  - overload relay with adjustable trip range +/- 15%.
  - door mounted H-O-A selector switch.
  - door mounted blue indicator light.
  - door mounted label: PLAZA FOUNTAIN JET PUMP

- Magnetic Motor Starter: PLAZA FOUNTAIN MIST PUMP: 1
  - main contacts rated at 3 HP, 208V AC, 3 phase.
  - 1 set N.O. & N.C. Aux. contacts min.
  - overload relay with adjustable trip range +/- 15%.
  - door mounted H-O-A selector switch.
  - door mounted green indicator light.
  - door mounted label: PLAZA FOUNTAIN MIST PUMP

Georgia Fountain Company, Inc.

- Magnetic Motor Starter: PLAZA FOUNTAIN FILTER PUMP: 1
  - main contacts rated at 3 HP, 208V AC, 3 phase.
  - 1 set N.O. & N.C. Aux. contacts min.
  - overload relay with adjustable trip range +/- 15%.
  - door mounted H-O-A selector switch.
  - door mounted green indicator light.
  - door mounted label: PLAZA FOUNTAIN FILTER PUMP

- Magnetic Motor Starter: WATER GARDEN FOUNTAIN JET PUMP: 1
  - main contacts rated at 15 HP, 208V AC, 3 phase.
  - 1 set N.O. & N.C. Aux. contacts min.
  - overload relay with adjustable trip range +/- 15%.
  - door mounted H-O-A selector switch.
  - door mounted blue indicator light.
  - door mounted label: WATER GARDEN FOUNTAIN JET PUMP

- Magnetic Motor Starter: WATER GARDEN FOUNTAIN FILTER PUMP: 1
  - main contacts rated at 3 HP, 208V AC, 3 phase.
  - 1 set N.O. & N.C. Aux. contacts min.
  - overload relay with adjustable trip range +/- 15%.
  - door mounted H-O-A selector switch.
  - door mounted green indicator light.
  - door mounted label: WATER GARDEN FOUNTAIN FILTER PUMP

- Panel Board and Circuit Breakers: 1
  - 120/240V AC 3 pole, 3 Phase, 12 Space.
  - equipped with circuit breakers:
    - 4 ea. 1 pole CB 15A (for controls).
    - 2 ea. 2 pole CB 15A (for controls).

- Control transformer circuit: 1
  - 208 V primary / 120 V secondary
  - 250 VA, fused primary and secondary
  - complete with GFCI protection switch
  - U.L. standard 508 circuit.

- Water Level Control Monitor: 2
  - solid state electronics.
  - 1 ea. red pilot light for filling.
  - 1 ea. red pilot light for low water shutdown.
  - 1 ea. green pilot light for normal level.
  - 1 ea. green pilot light for minimum level.
  - 1 ea. Aux. relay for solenoid valve.
  - 1 ea. Aux. relay for cut-off functions.
  - 4 ea. I.O. terminals for probe conn.
  - connected to U.L.508 control circuit.

- 24 HR Time Clock: PUMP AND LIGHTING OPERATION 2
  - 1 min. interval actuators.
  - 7 day skip-a-day feature.
  - 120V power supply.
  - 2 ea. SPDT contact set.
  - 2 channel digital operation.

* GEFCO #EE114B Wind Control Monitor Relay: 2
- wind control monitor relay (2 stages).
- solid state electronics.
- 2 ea. H-O-A switches.
- 2 ea. independant speed set dials.
- 2 ea. SPDT set relay contacts.
- 0-50 mV windspeed input.
- prewired to internal terminalstrip.

- All control panel components installed.
- All control panel components prewired to field terminals.
- Supplied with current flow schematics.

* GEFCO Select #PLC Fountain Programmer for (9) Aeration Jets and (1) Mist Pump Controls 1
- (1) PLC Programmable Controller
  - with 24 VDC inputs on master unit.
  - with 6 relay outputs on master unit.
  - master unit complete with battery back-up
  - communication shall be RS232 standard.
  - software shall be provided and pre-programmed as a complete running system.
  - 2 copies on 3-1/2" floppy disk or other transfer media shall be provided and contain the user interface.

* GEFCO Select Low Voltage Lighting Transformer: 1
- 5 KVA; dry type, floor mounted.
- 120 V primary, 16/32 V secondary, 1 phase.
- voltage reduction for Plaza lighting.

* GEFCO Select Emergency Stop Button: 1

* GEFCO Select Low Voltage Lighting Transformer: 1
- 5 KVA; dry type, floor mounted.
- 120 V primary, 16/32 V secondary, 1 phase.
- voltage reduction for Water Garden lighting.

* ABB #ACS401-601-122 Variable Frequency Drive: 1
- variable frequency drive motor for 15 HP Plaza Jet Pump.
- 208 volt. 3 phase motor.

Georgia Fountain Company, Inc.

* ABB #ACS401-600-422 Variable Frequency Drive: - variable frequency drive motor for 3 HP Plaza Mist Pump. - 208 volt. 3 phase motor.	1
* ABB #ACS401-601-122 Variable Frequency Drive: - variable frequency drive motor for 15 HP Water Garden Jet Pump. - 208 volt. 3 phase motor.	1

TRENCH SAFETY PLAN

SOUTH SIDE OF ADDISON CIRCLE
(ADDISON RD TO QUORUM)
ADDISON, TEXAS

TRENCH SAFETY PLAN

UTILITY LINES
SOUTH SIDE OF ADDISON CIRCLE
IN AND AROUND ADDISON RD TO QUORUM
ADDISON, TEXAS

FOR
THE CITY OF ADDISON, TEXAS

Note: 1. Soil information indicates that a stiff clay (Type "B" soil) to weathered and unweathered limestone will be found on the project site. The following applies:
H = ¼ on gray unweathered limestone.
H = 3/4 in stiff clay (Type "B" soil) and weathered limestone.
H = 1 or greater in Type "C" soil.

2. For the construction method of the horizontal bore, if desired, any view as Shown on this plan may be used for the "Bore Pit" and "Receiving Pit" if feasible, in respect to worker's safety and equipment limitations.

Trench Safety Plan	for: CALHAR CONSTRUCTION INC	Pg:1 of:5
Utility Lines South Side of Addison Circle Addison, Texas	Job No: 2216 Date : 16 Dec 2002 Scale : As shown Design: R.H.	Richard Halder P.E. Trench Safety Engineering 833 Rachelle Red Oak, Texas 75154 1-800-900-9775

GENERAL NOTES

1. For all excavations of trenches, which will exceed a depth of five feet, the Contractors trench safety procedures shall meet the current standards established by OSHA on excavations, trenching, and shoring, all of which are incorporated herein by reference.

2. If details shown are not feasible due to unanticipated conditions, the Contractor shall notify the Trench Safety Engineer for re-evaluation.

3. These drawings assume all excavated areas remain free of water seepage or intrusion. Excavations shall be inspected after every storm or other hazard-increasing occurrence to assure the continued safety of the trench. The Contractor shall seek guidance from the Trench Safety Engineer where needed.

4. When installing a support system, shoring will be applied by starting at the top of the trench excavation and working downward. All cross beams, trench jacks, etc., will be placed in a true horizontal position. Support system removal shall begin at the bottom and proceed upward, performed from outside the trench.

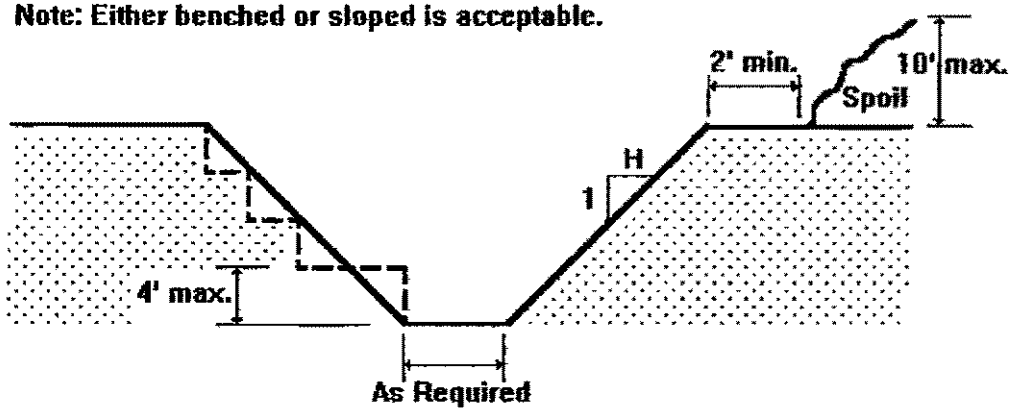
5. Materials used for sheeting, sheet piling, bracing, shoring, etc., shall be in good serviceable condition. Timbers used shall be sound and free from large or loose knots and shall be designed and installed so to be effective to the bottom of the excavation.

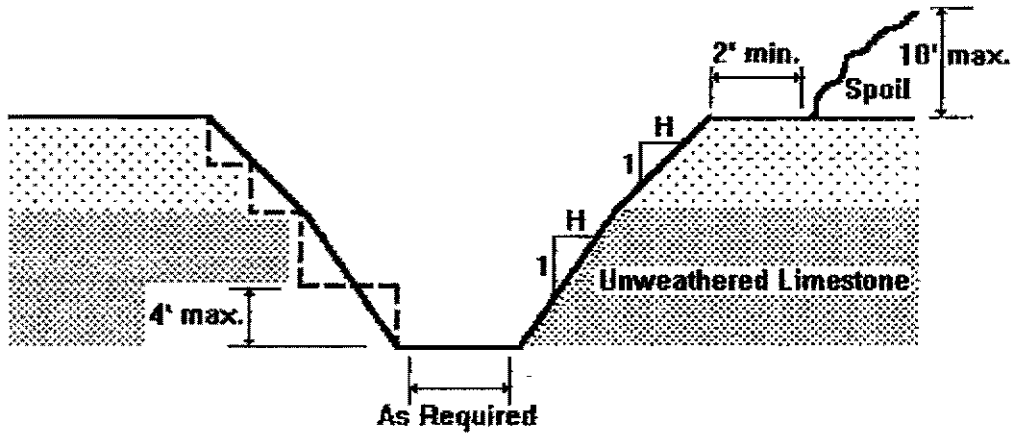
6. Alternate design for use of steeper slopes of the use of supporting systems, i.e., piling, cribbing, shoring, etc., may be submitted by the Contractor for evaluation by the Trench Safety Engineer.

7. Slopes shown shall be the maximum unless changed by the Trench Safety Engineer due to changing soil conditions. Slopes shown are for a short-term period. If excavations are open for more than 24 hours, the Trench Safety Engineer shall be contacted for evaluation.

8. Type "A" soil is a cohesive soil with an unconfined compressive strength greater than 3,000 psf. Type "B" soil is a cohesive soil with an unconfined compressive strength greater than 1,000 psf. and less than 3,000 psf. Type "C" soil is a cohesive soil with an unconfined compressive strength less than 1,000 psf. that is not flowing or submerged.

Note: Either benched or sloped is acceptable.





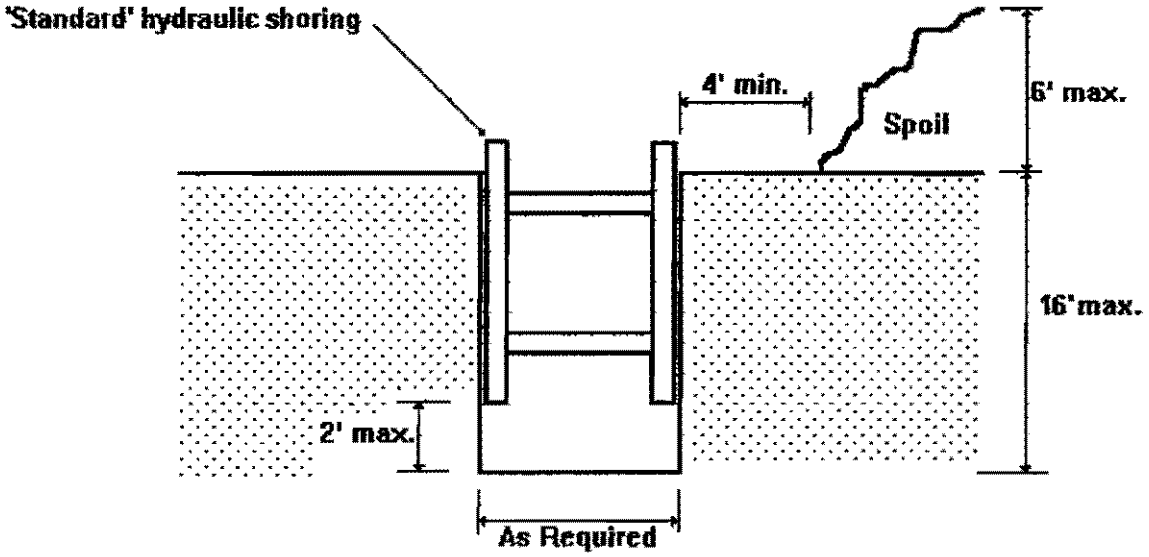
TYPICAL OPEN CUT CROSS SECTION
N.T.S.

Trench Safety Plan	for: CALHAR CONSTRUCTION INC	Pg:3 of:5
Utility Lines South Side of Addison Circle Addison, Texas	Job No: 2216 Date : 16 Dec 2002 Scale : As shown Design: R.H.	Richard Halder P.E. Trench Safety Engineering 833 Rachelle Red Oak, Texas 75154 1-800-900-9775

Spaced 6' to 8' o.c. in unweathered limestone.

Spaced 4' o.c. in stiff clay (Type "B" soil) and weathered limestone.

Spaced 4' o.c., in dry Type "C" soil sheeted with 3/4", 14-ply Finland Birch, or 1-1/8" CDX plywood, or approved equal.



The aluminum hydraulic shoring listed below are just three examples of trade names of 'standard' hydraulic shoring which are acceptable. The examples are with a width maximun of 55"

Speed Shore Hydraulic Shores, model No. V-7-55 or V-5-55, or V-3.5-55, or equal. Shores may be stacked.

GME Vertical Shores, model No. HVS-7-3455 or HVS-5-3455, or HVS-3.5-3455, or equal. Shores may be stacked.

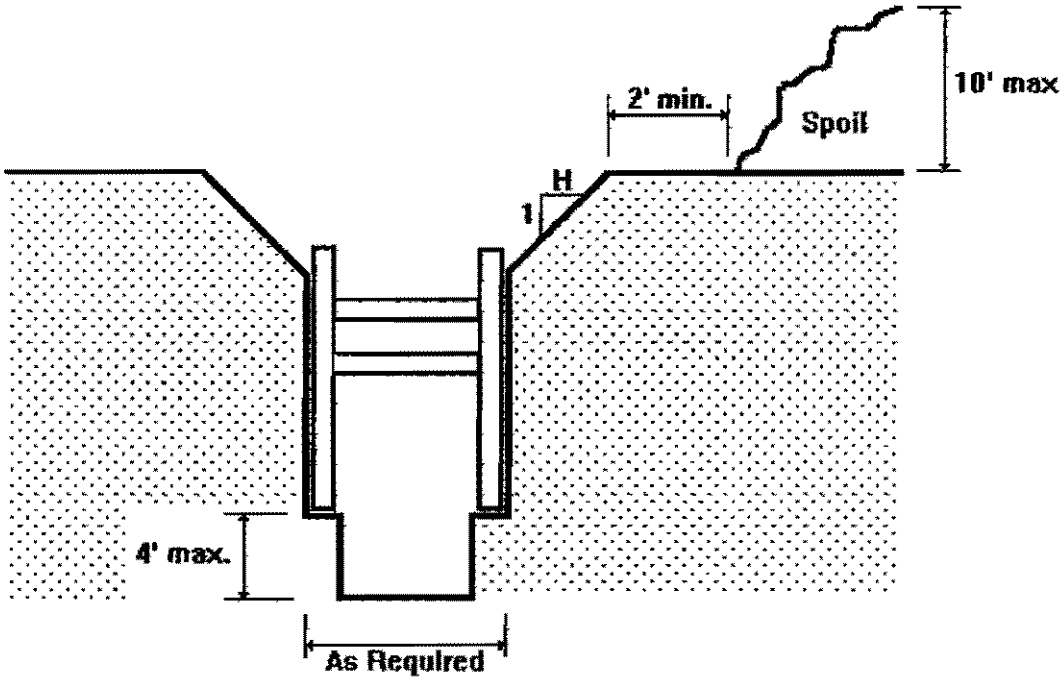
EFFICIENCY PRODUCTION, models No. 7X3455-S or 5X3455-S, or 3.5X3455-S, or equal. Shores may be stacked.

Also available are Speed Shore 'Heavy Duty' shores, which rails run in the 8', 12', and 16' range.

If sheeting is desired, 3/4", 14-ply Finland Birch, or 1-1/8" CDX plywood or equal, is acceptable.

ALTERNATE HYDRAULIC SHORING CROSS SECTION
N.T.S.

Trench Safety Plan	for: CALHAR CONSTRUCTION INC	Pg:4 of: 5
Utility Lines South Side of Addison Circle Addison, Texas	Job No: 2216 Date : 16 Dec 2002 Scale : As shown Design: R.H.	Richard Halder P.E. Trench Safety Engineering 833 Rachelle Red Oak, Texas 75154 1-800-900-9775



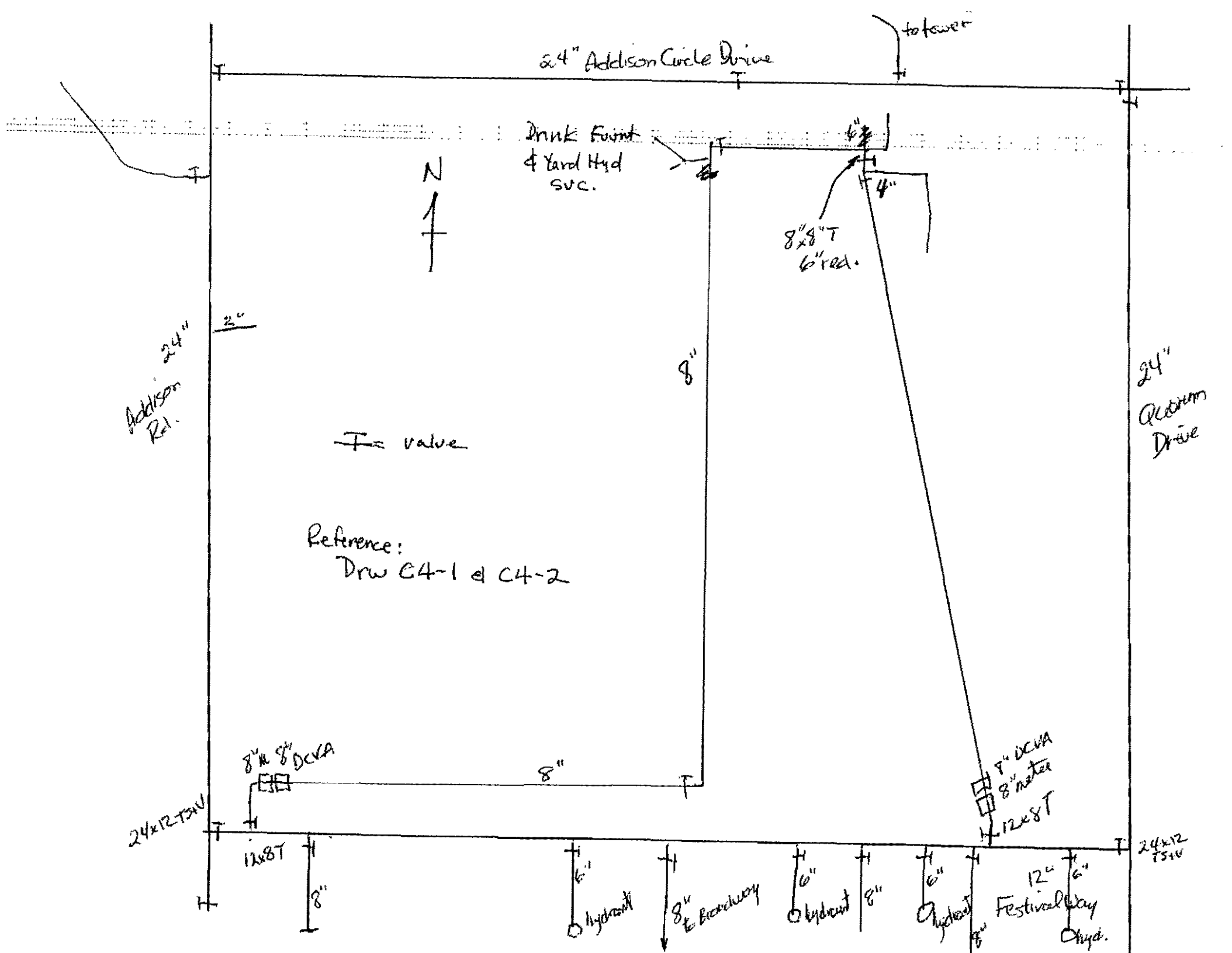
CROSS-SECTION
N.T.S.

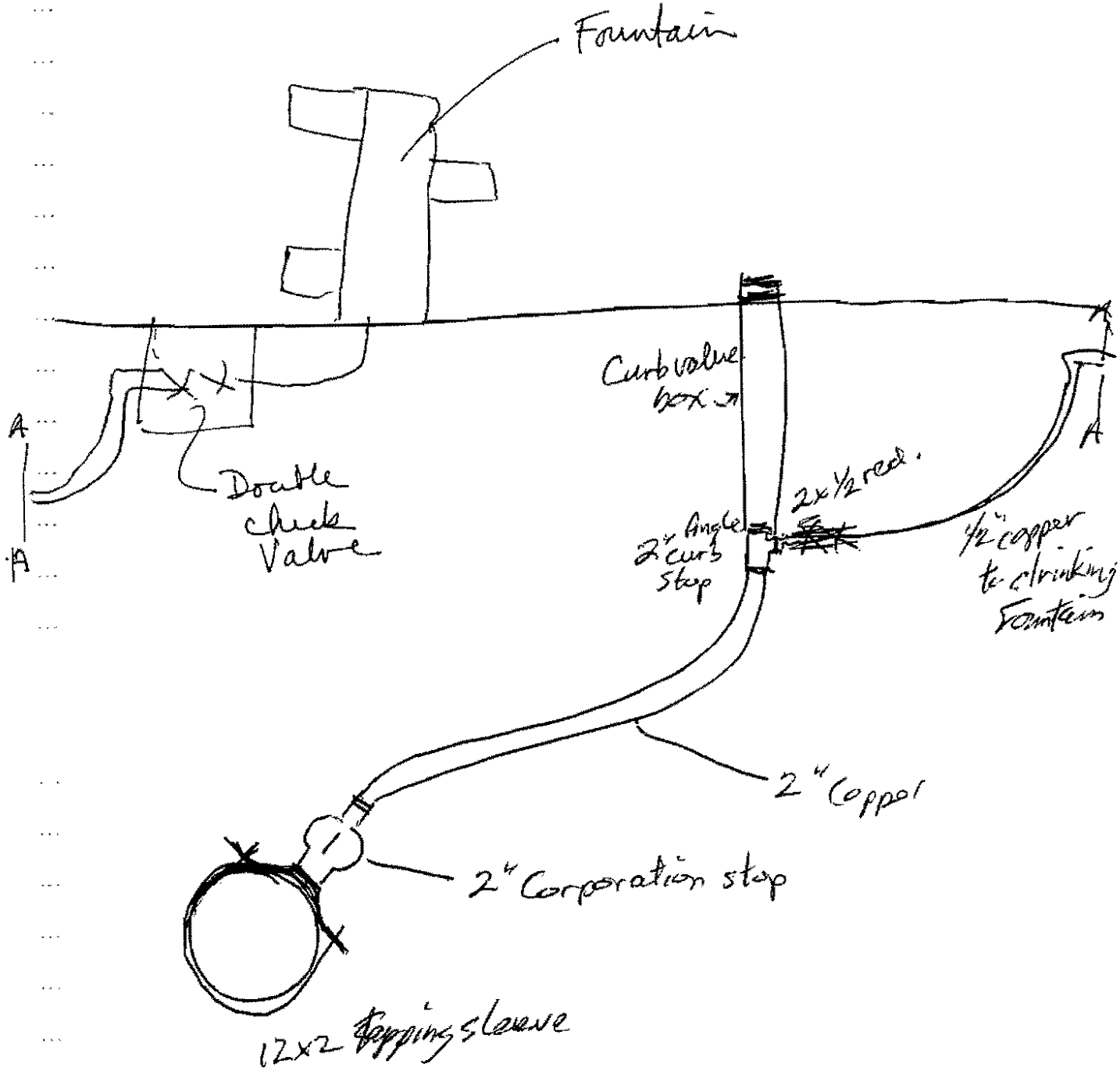
Trench Box/Shield sidewall capacity shall be equal or greater than **630psf.** This capacity is based on Type "B" soil, or better. If there are any changes in soil conditions, the Trench Safety Engineer shall be contacted for evaluation. Trench boxes may be stacked.

Trench box capacity of 630 psf refers to sidewall capacity of bottom box, in Type "B" soil, when boxes are stacked. If contractor requires "closed ends" for trench box, one acceptable method is by placing 3/4", or greater (or equal substitute), steel plate (width size may vary) against spreaders of trench box. Other methods may be used with approval of Trench Safety Engineer.

ALTERNATE TRENCH BOX CROSS SECTION
N.T.S.

Trench Safety Plan	for: CALHAR CONSTRUCTION INC	Pg:5 of: 5
Utility Lines South Side of Addison Circle Addison, Texas	Job No: 2216 Date : 16 Dec 2002 Scale : As shown Design: R.H.	Richard Halder P.E. Trench Safety Engineering 833 Rachelle Red Oak, Texas 75154 1-800-900-9775


24" Addison Circle Drive
to tower
Drink Fount & Yard Hyd svc.
6"
4"
8"x8"T
6" red.
N
24" Addison Rd.
2"
8"
24" Quorum Drive
T= valve
Reference:
Drw C4-1 & C4-2
8" x 8" DCVA
8"
24x12 TSV
12x8T
8"
6" Hydrant
8" E Broadway
6" Hydrant
8"
6" Hydrant
8"
12"
6"
Festival Way Hyd.
24x12 TSV
4" DCVA
8" meter
12x8T



Typical Drinking Fountain Connection

C4-1 & C4-2

Client: Addison

Project Name:

Job Number: _____ Engineer: _____

Date: 10-8-2002
G Murphy
J Beckwith

DESCRIPTION	+	H.I.	-	ELEV.	REMARKS
1 SSMH				625.84	
	4.26	630.10			
et North			5.99	624.11	Call = 624.14
2 60" RCP			9.05	621.05	Top of Rcp 60"

TOWN OF ADDISON
BUILDING INSPECTION DEPARTMENT
16801 Westgrove Drive
(972) 450-2880 Fax: (972) 450-2837
Post Office Box 9010 Addison, Texas 75001-9010

October 2, 2002

To: Files
From: Les Folse, Chief Plumbing Inspector
Subject: Approval of proposed ground hydrant special events district
Model: Zurn Z-1370 Ground Hydrant, encased, hose storage, non-freeze

Acceptance of the proposed ground hydrant will be approved when installed per the following:

- Meets Section 608.15.4.2 Hose connections of the 2000 International Plumbing Code, protected by an atmospheric-type or pressure-type vacuum breaker. A permanently attached hose connection vacuum breaker will not be allowed since device would be installed below grade.

- Meets manufactures installation recommendations.

SPECIFICATION SHEET

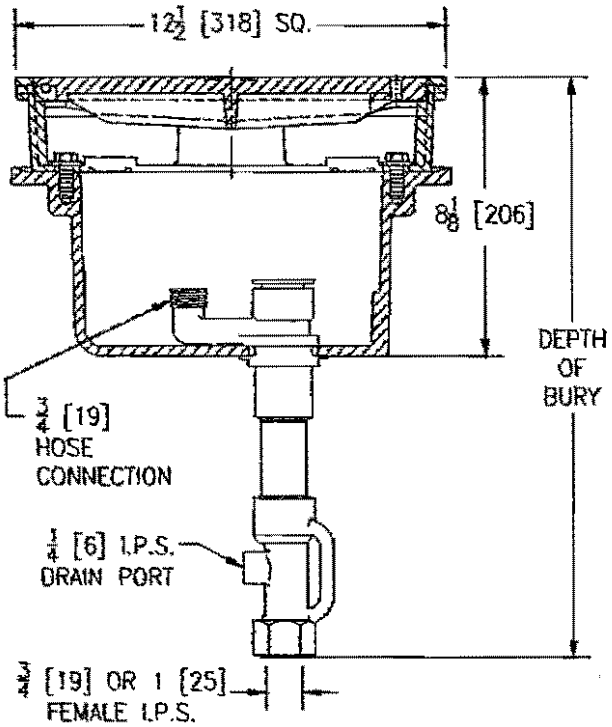
Z-1370

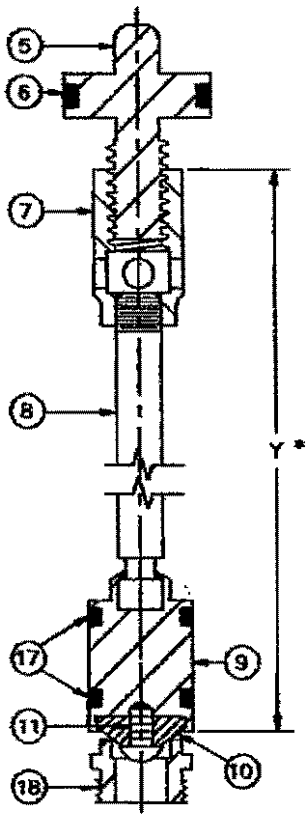
GROUND HYDRANT

Encased, Hose Storage, Non-Freeze

TAG _____

Dimensional Data (inches and [mm]) are Subject to Manufacturing Tolerances and Change Without Notice





INTERNAL PARTS

Depth of Bury Feet	Approx. Wt. Lbs. [kg]
2 [610]	81 [37]
3 [914]	85 [39]
4 [1219]	89 [40]
5 [1524]	93 [42]
6 [1829]	97 [44]
7 [2134]	101 [46]
8 [2438]	105 [48]
9 [2743]	109 [49]
10 [3048]	113 [51]

ENGINEERING SPECIFICATION: ZURN Z-1370 Encased, non-freeze ground hydrant, for flush with grade or finished floor installation. Complete with bronze casing, all bronze interior parts, bronze seat and replaceable seat washer, and non-turning operating rod with free-floating compression closure valve. Cast iron box provides hose storage and is complete with scoriated hinged cover with operating key lock. Hydrant is equipped with a tapped 1/4 [6] drain port in valve housing. (Hose should always be disconnected for storage.)

Note:

1. IMPORTANT Hydrant must be opened one turn to seal drain port during use.

PARTS LIST

Item	Name	Quan.
5	Operating Screw	1
6	O-Ring	1
7	Operating Coupling	1
8	Operating Rod	1
9	Washer Guide	1
10	Washer (neoprene)	1
11	Screw	1
17	O-Ring	2
18	Removable Seat	1

OPTIONS (Check/specify appropriate options)

SUFFIXES

____ -RK Hydrant Parts Repair Kit
____ -6 Polished Bronze Box
____ -7 Plain Bronze Box
____ -10 Polished Nickel Bronze Box
____ -14 "WATER" Cast on Cover
____ -17 1/4 [6] IP Drain Port in Box

*WHEN ORDERING REPLACEMENT PARTS SPECIFY Y DIM.

REV. D DATE: 7/12/00 C.N. NO. 85623

DWG. NO. 58880 PRODUCT NO. Z-1370

ZURN INDUSTRIES, INC. • SPECIFICATION DRAINAGE OPERATION • 1801 Pittsburgh Ave. • Erie, PA 16514
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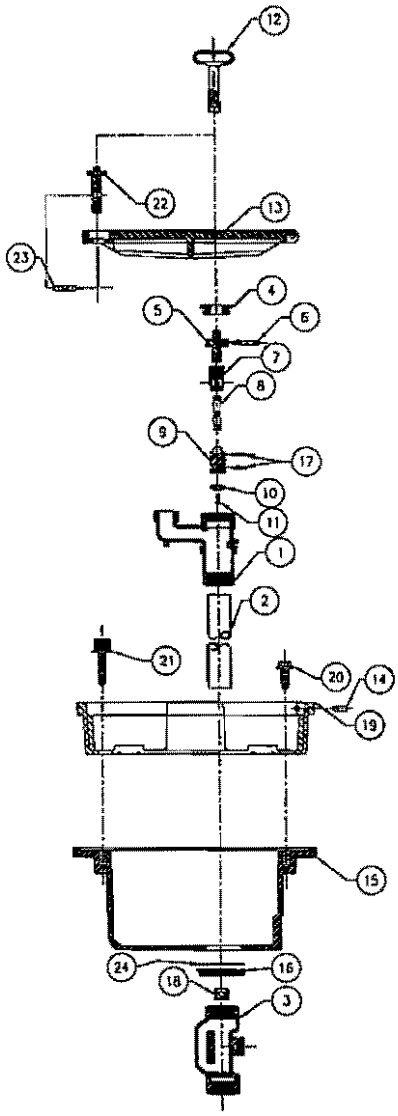
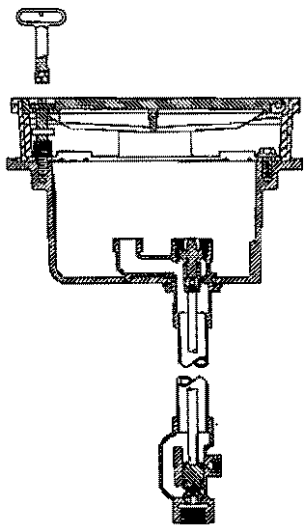
Ansi - A112.21.3M



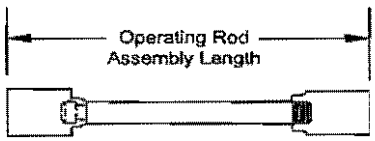


Z1370 Parts List

Item	Description	Qty.	Part No.
1	Head	1	25302
2	Casing	1	50270
3	Valve Housing	1	25324
4	Facenut	1	22156
*5	Operating Screw	1	25049
*6	O-Ring	1	23750
*7	Operating Coupling	1	25147
8	Operating Rod	1	33375
9	Washer Guide	1	25323
*10	Washer	1	23075
*11	Screw #10-24 N.C.	1	14853
*12	Key	1	59546
13	Hydrant Cover	1	61755
14	Hinge Pin	2	06567
15	Hydrant Body	1	32714
16	Locknut	1	25242
*17	O-Ring	2	23750
*18	Removable Seat	1	25262
19	Frame	1	56499
20	Cap Screw 3/8-16 N.C.	3	26050
21	Locking Coupling	1	56711
22	Locking Pin Screw	1	56712
23	Locking Pin	1	25513
24	Gasket	1	21425

*Items are available in -RK Repair Kit Option bag.

Operating Rod Assemblies



2' Bury	14-3/4"
3' Bury	26-3/4"
4' Bury	38-3/4"
5' Bury	50-3/4"
6' Bury	62-3/4"
7' Bury	74-3/4"
8' Bury	86-3/4"
9' Bury	98-3/4"
10' Bury	110-3/4"

ZURN

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