

### **Proposal**

Date:	10/8/2025

**To:** City North Richland Hills

ATTN: Michael Wilson

-	
4000	
16111	

Installation of new pump room design. See attached drawing.

#### **Cost Breakdown:**

	NRH2O Pump Room Changes					
<u>WBS</u>	<u>Description</u>	<u>QTY</u>	<u>UoM</u>	Price Per	1	Total Costs
Plumbing	Plumbing pipe changes per MR-2 on 4 Pumps	LS		\$ -	\$	259,908.82
	Relocate 75HP Pump to Track 1 Booster 2					
	Relocate 75HP Pump to Track 2 Booster 2					
	F&I Grundfos 125 HP Pump to Track 1 Booster 1					
	F&I Grundfos 125 HP Pump to Track 2 Booster 1					
	Titan Check Valves - 4					
Electrical	Rewire Switchgear and Pumps as Required per MR-2	LS			\$	125,544.23
	F&I 2 125 HP VFD					
	Relocate 75HP VFD's per MR-2					
	F&I Breakers for 2 125 HP Motors					
	F&I New Conduit and Wire from Switchgear to 125 HP VFD's and 75 HP VFD's					
	F&I New Conduit and Wire from VFD's Mentioned Above to Motors					
	Programming of VFD's to Parameters Provided on MR-2					
Demo	2 30HP and VFDs Pumps from Pump Room	LS				INCLUDED
GC's	Bonding				\$	6,809.44
	GL Insurance				\$	3,191.00
	OCP & Builders Risk Insurance				\$	1,695.00
	Temp Toilet				\$	525.00
	PM Labor				\$	3,848.80
	Super Labor				\$	7,306.73
	Fuel				\$	426.00
	Dumpster (2)				\$	3,000.00
				Overhead (5%)	\$	20,547.25
				Profit (5%)	\$	20,547.25
			Total		\$	453,349,52



Date: October 06, 2025

To: CGC General Contractors

Project: NRH20

Project Address: 9001 BLVD 26 North Richland Hills, TX 76180

### Change Order Request # 005 REV 1

inCon-trol Water Systems is pleased to provide the following change order for the NRH20 project at 9001 BLVD 26 North Richland Hills, TX 76180

#### **Change Order Scope of Work:**

- Install plumbing per revised drawing MR-2 on 4 pumps
  - Relocate 75HP Pump to Track#1 Booster#2
  - Relocate 75HP Pump to Track#2 Booster#2
  - Furnish & Install(F&I) Grundfos 125HP Pump to Track#1 Booster#1
  - o Furnish & Install Grundfos 125HP Pump to Track#2 Booster#1
  - Check valves should be installed in mechanical space as there is a drain line on the manifold to allow for winterization.
     Installing the check valves in the baffle tank area as indicated on the plan will require each check valve to be removed for winterization/drainage of the associated discharge line.
  - o Titan CV90-DI with NSF rated coating Check valves included in lieu of Flomatic(not manufactured in 12")
- Rewire Switchgear and pumps as required per revised layout drawing MR-2
  - F&I 2 EA 125 HP Variable Frequency Drive(VFD)
  - o Relocate 75HP VFDs as indicated on MR-2
  - F&I breakers for 2 EA 125HP Motors
  - F&I new conduit and wire from switchgear to 2 EA 125HP VFDs and 2 EA 75HP VFDs
  - o F&I new conduit and wire from VFDs mentioned above to corresponding motors
  - o 1 day programming of VFDs to parameters provided on MR-2
- Remove (2) 30HP pumps from pump room (location designated by ownership).
- Permits excluded.

Plumbing Sub-Total:\$259,908.82 Electrical Sub-Total:\$125,544.23 TOTAL: \$385,453.05

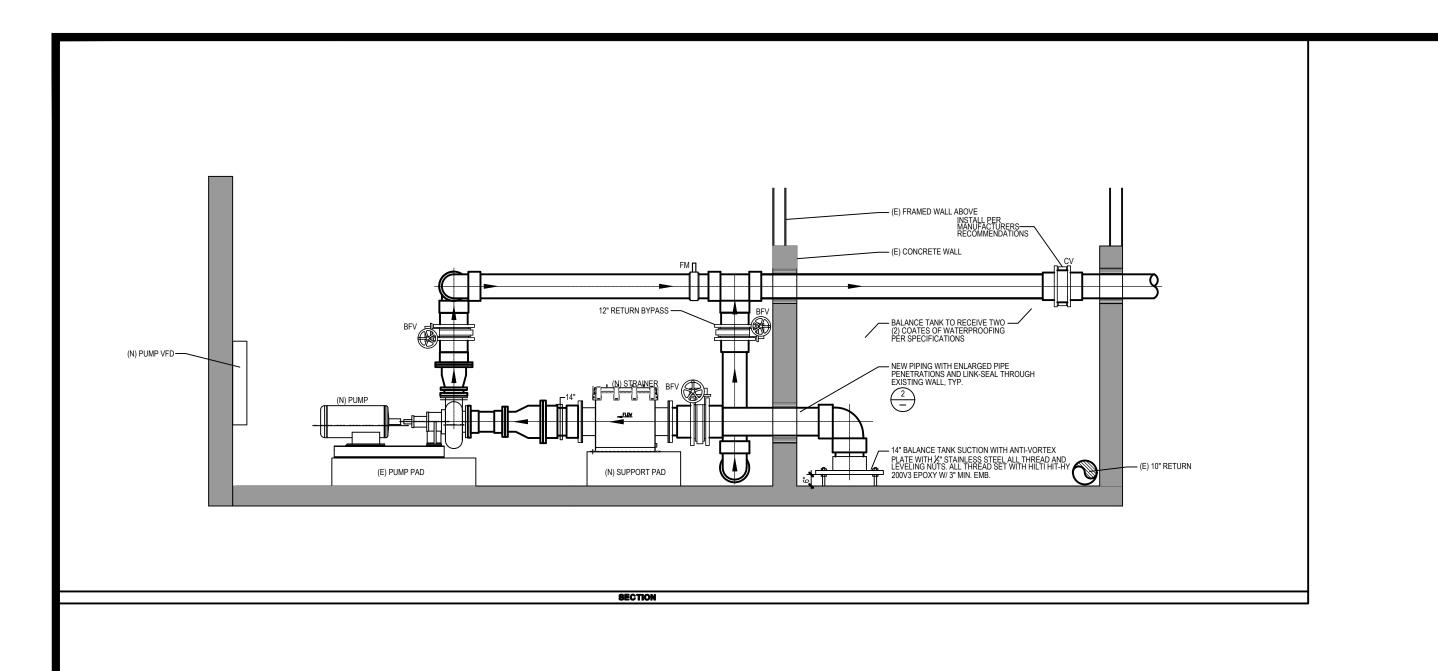
incon-troi coi	nstruction, LLC:	Customer:	
Name:	Chris Yonts	Name:	
Signature:		Signature:	
Title:	Project Manager	Title:	
Date:	October 06, 2025	Date:	

410 Interchange, McKinney, TX 75071

tel 214.733.8828 • fax 214.544.9555

www.incontrolwatersystems.com

Initial: Customer \_\_\_\_\_ inCon-trol Construction, LLC \_\_\_\_\_



# GENERAL NOTES

- 1. THE PIPING SYSTEM SHALL HAVE DIRECTION OF FLOW ARROWS INDICATED ON THE PIPES.
- PUBLIC POOLS SHALL HAVE A FLOW DIAGRAM OF THE POOL'S PIPING SYSTEM WITH OPERATION INSTRUCTIONS.
- 3. THE FLOW DIAGRAM AND INSTRUCTIONS SHALL BE AVAILABLE ON THE PREMISES AT ALL TIME
- 4. ALL MECHANICAL ROOM FLOORS SHALL BE SLOPED A MIN |" PER FOOT TO A DRAIN PER CBC 3122B. SEE ARCHITECTURAL SHEETS FOR SPOT ELEVATIONS AND SLOPES.
- 5. ALL BELOW GRADE POOL PIPING SHALL BE SCHEDULE 40 PVC AND ALL ABOVE GRADE POOL PIPING SHALL BE SCHEDULE 80 PVC.

## LEGEND

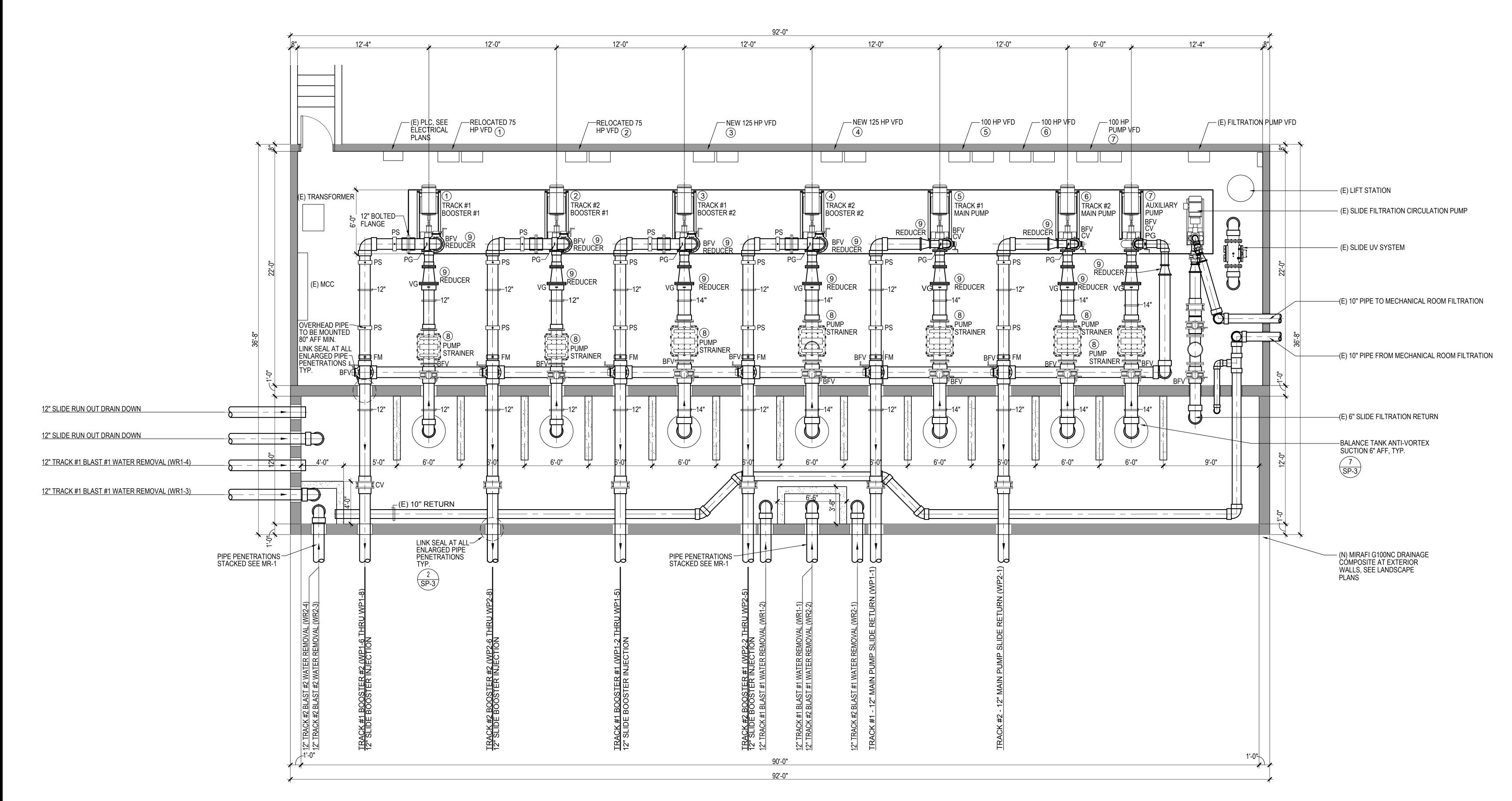
- PG/VG = VACUUM / PRESSURE GAUGE

  PS = PIPE SUPPORT

  SP-3
- BFV = BUTTERFLY VALVE
- S CV = CHECK VALVE

### **EQUIPMENT LIST**

- TRACK #1 BOOSTER PUMP #2: 'PACO' #8012-3; TYPE 'LF' SPLIT-CASE END SUCTION PUMP; 1780 RPM, 460V, 3PH; 75HP; RATED AT 1,800 GPM @ 93 FT. TDH; 84% EFFICIENT; PREMIUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. ONE (1) TOTAL. PROVIDE WITH PENTAIR ACCUDRIVE #AD750X-4603-N4X VARIABLE SPEED DRIVE, ONE (1) TOTAL; 25.6" x 9.5" x 10.3" DEEP. COORDINATE MOUNTING LOCATION TO MAINTAIN REQUIRED CLEARANCES, 460V 3PH.
- TRACK #2 BOOSTER PUMP #2: 'PACO' #8012-3; TYPE 'LF' SPLIT-CASE END SUCTION PUMP; 1780 RPM, 460V, 3PH; 75HP; RATED AT 1,800 GPM @ 93 FT. TDH; 84% EFFICIENT; PREMIUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. ONE (1) TOTAL. PROVIDE WITH PENTAIR ACCUDRIVE #AD750X-4603-N4X VARIABLE SPEED DRIVE, ONE (1) TOTAL; 25.6" x 9.5" x 10.3" DEEP. COORDINATE MOUNTING LOCATION TO MAINTAIN REQUIRED CLEARANCES, 460V 3PH.
- TRACK #1 BOOSTER PUMP #1: 'PACO' #8012-3; TYPE 'LF' SPLIT-CASE END SUCTION PUMP; 1780 RPM, 460V, 3PH; 125HP; RATED AT 2,300 GPM @ 138 FT. TDH; 85% EFFICIENT; PREMIUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. ONE (1) TOTAL. PROVIDE WITH ACCUDRIVE #AD1250X-4603-N4X VARIABLE SPEED DRIVE MODEL, ONE (1) TOTAL; 25.6" x 9.5" x 10.3" DEEP. COORDINATE MOUNTING LOCATION TO MAINTAIN REQUIRED CLEARANCES, 460V 3PH.
- TRACK #2 BOOSTER PUMP #1: 'PACO' #8012-3; TYPE 'LF' SPLIT-CASE END SUCTION PUMP; 1780 RPM, 460V, 3PH; 125HP; RATED AT 2,300 GPM @ 138 FT. TDH; 85% EFFICIENT; PREMIUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. ONE (1) TOTAL. PROVIDE WITH ACCUDRIVE #AD125X-4603-N4X VARIABLE SPEED DRIVE MODEL, ONE (1) TOTAL; 25.6" x 9.5" x 10.3" DEEP. COORDINATE MOUNTING LOCATION TO MAINTAIN REQUIRED CLEARANCES, 460V 3PH.
- TRACK #1 MAIN PUMP: 'PACO' #8012-3; TYPE 'LF' SPLIT-CASE END SUCTION PUMP; 1780 RPM, 460V, 3PH; 100HP; RATED AT 2,300 GPM @ 112 FT. TDH; 84% EFFICIENT; PREMIUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. ONE (1) TOTAL. PROVIDE WITH PENTAIR ACCUDRIVE #ADC10X-4603-N4X VARIABLE SPEED DRIVE, ONE (1) TOTAL; 25.6" x 9.5" x 10.3" DEEP. COORDINATE MOUNTING LOCATION TO MAINTAIN REQUIRED CLEARANCES, 460V 3PH.
- TRACK #2 MAIN PUMP: 'PACO' #8012-3; TYPE 'LF' SPLIT-CASE END SUCTION PUMP; 1780 RPM, 460V, 3PH; 100HP; RATED AT 2,300 GPM @ 112 FT. TDH; 84% EFFICIENT; PREMIUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. ONE (1) TOTAL. PROVIDE WITH PENTAIR ACCUDRIVE #ADC10X-4603-N4X VARIABLE SPEED DRIVE, ONE (1) TOTAL; 25.6" x 9.5" x 10.3" DEEP. COORDINATE MOUNTING LOCATION TO MAINTAIN REQUIRED CLEARANCES, 460V 3PH.
- AUXILIARY PUMP: 'PACO' #8012-3; TYPE 'LF' SPLIT-CASE END SUCTION PUMP; 1780 RPM, 460V, 3PH; 100HP; RATED AT 2,300 GPM @ 112 FT. TDH; 84% EFFICIENT; PREMIUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. ONE (1) TOTAL. PROVIDE PROVIDE WITH PENTAIR ACCUDRIVE #ADC10X-4603-N4X VARIABLE SPEED DRIVE, ONE (1) TOTAL; 25.6" x 9.5" x 10.3" DEEP. COORDINATE MOUNTING LOCATION TO MAINTAIN REQUIRED CLEARANCES, 460V 3PH.
- 8 SLIDE PUMP STRAINERS: EVOQUA 'PRO-STRAINER' STAINLESS STEEL STRAINERS: #P41414SC, FIVE (5) TOTAL, #P31212SC, TWO (2) TOTAL, EACH STRAINER SHALL BE PROVIDED WITH TWO (2) SETS OF STAINLESS STEEL STRAINER BASKETS AND CONCRETE HOUSEKEEPING PAD.
- 9 REDUCER: 14"X10" SCH 80 PVC CONCENTRIC REDUCER WITH FLANGED CONNECTIONS, FIVE (5) TOTAL. 12"X10" PVC CONCENTRIC REDUCER WITH FLANGED CONNECTIONS, TWO (2) TOTAL. 8"X12" SCH 80 PVC CONCENTRIC REDUCER WITH FLANGED CONNECTIONS, FIVE (5) TOTAL.





CITY OF NORTH RICHLAND HILLS



These drawings and specifications are the property and copyright of Aquatic Desig Group, Inc. and shall not be used on any other work except by agreement with Aquatic Design Group, Inc. Written dimensions shall take preference over scale dimensions and shall be verified on the job site. Any discrepancy shall be brought if the notice of Aquatic Design Group, Inc. prior to the commencement of any work.

Limit to the continencement of a

120 SLIDE REPLACEM

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REVISIO	NS	
NO.	DATE	DESCRIPTION
Δ1	8-20-25	PUMP/PLUMBING MODIFICATIONS

1,000

DRAWING TITLE

MECHANICAL

ROOM ADG /

OWNER

REVISION

PROPOSAL

PROJECT NO. 2022.162

DRAWN BY KK

CHECKED BY AP

DATE 05/03/2024

DRAWING NO.

MR-2