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Achieving Water Management B-Building Sumter County Jail





### WATER CONSERVATION AND CONTROL

FOR INMATE TOILET, URINAL, LAVATORY AND SHOWER UNITS

#### THE PROBLEM:

Prison and jail facilities around the country have a common security, expense, and maintenance issue - their plumbing fixtures. The toilets and lavatories in correctional institutions are an aspect of inmate activities that are "uncontrolled" - the result is high use and abuse of the fixtures leading to increased costs and reduced security.

### The most common issues for correctional plumbing fixtures are:

- Excessive toilet use: The industry average for toilet flushes per day can be upwards of 40. This leads to an enormous waste of water and large water and sewer charges.
- The over use of the plumbing fixtures leads to rapid wear and tear and increased maintenance costs mostly in diaphragms, replacement parts, and labor.
- Along with plumbing fixture abuse, the ability for in inmate to flush contraband leads to reduced facility control and security.
  This loss of control can result in potentially dangerous situations.
- Inmates can, through certain measures, flood cells and clog pipes (with clothing, bedding, etc.) which can lead to expensive, emergency repairs.

#### THE SOLUTION:

I-CON's plumbing system puts the control of the plumbing fixtures in the hands of those operating the facility and out of the hands of the inmates. The system replaces existing, "static" plumbing components with "controllable" components. By activating lavatories and toilets with electronic devices, rather than "standard" devices, the plumbing fixtures can be easily controlled. The heart of the plumbing system, the NEXUS® controller, is specifically designed for plumbing control and is protected by a water resistant, inner O-ring sealed, enclosure. I-CON's plumbing system is unique in the industry as it is the only system available that can easily and inexpensively be retrofitted to all types of existing plumbing fixtures with new installations also available.

### Benefits of the I-CON plumbing system include:

- Reduction of water and sewer expense. This is accomplished in two ways: First, the toilet flush is reduced from the existing 3.5
  or 5 gallon flush to a maximum of 1.6 gallons per flush a minimum of 50% reduction in consumption. Secondly, the system
  reduces the average number of flushes per day due to the programmed flush mechanism. Prison operators set the number
  of toilet flushes per hour/per fixture, which can reduce flushes by 25% or more. Water and sewer savings alone can pay for an
  I-CON plumbing system.
- Due to the elimination of metering diaphragms in both flush and lavatory valves, the cost of replacement parts, and associated labor are reduced as much as 80%.
- Flooding of cells or clogging of plumbing systems becomes much more difficult when the inmates cannot rapidly flush fixtures, therefore reducing expensive maintenance.
- 4. The security and safety of the facility is greatly enhanced when the inmates cannot use the plumbing to create trouble or flush contraband down the toilet.



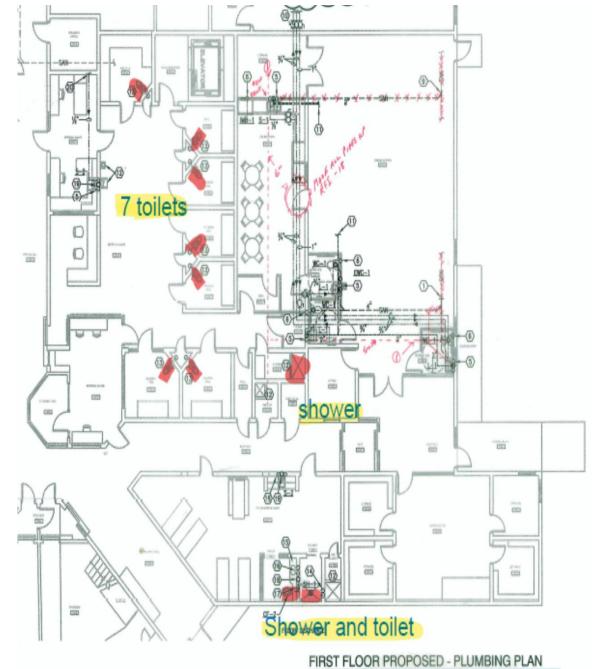




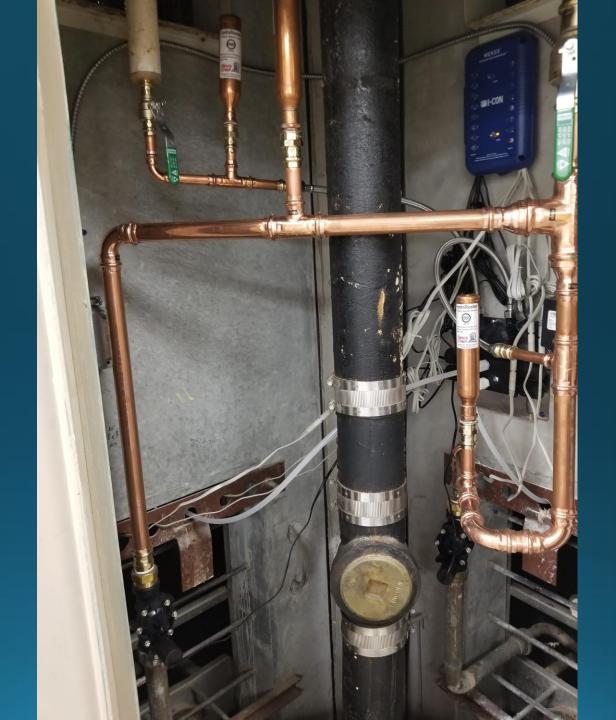


# B-Building Isolation Unit/ Lock-Down

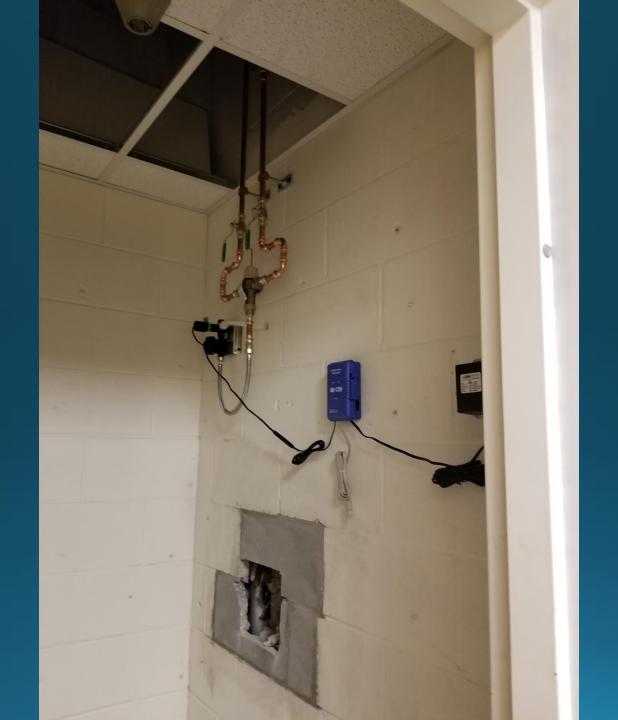
- •8-Toilets
- 2-Showers



## Plumbing Chase



Shower Installation



Sink Installation



### NEXUS® 8 I/O AC Communication-Capable Controller

- Standalone or communicating eight input / eight output controller used to control up to eight touch sensors and valves.
- Multiple controllers can be networked and linked into an I-CON ENVISAGE® powered computer system.
- Adjust runtimes and lockouts with a NEXUS® Time Adjuster or any ENVISAGE® product.



## ThankYou

### Questions?



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