

GENERAL NOTES

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:
Kansas One-Call 687-2470
The Contractor must notify the following in case of an emergency:
AT&T 1-800-246-8464
Black Hills Energy 1-800-694-8989
City of Wichita Water & Sewer 1-316-219-8921
City of Wichita Stormwater 1-316-268-4090
City of Wichita Traffic 1-316-268-4034
Cox Communications 1-888-249-3530
Kansas Gas Service 1-888-482-4950
Energy 1-800-544-4857
- Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain will require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits will require additional archaeological investigations unless buried in a previously approved borrow location.
- Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the City Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.
- The Engineering Division shall field locate water valves one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match final grades by the contractor.
- The Contractor shall notify the inspecting engineer and Tom Mason at 316-268-4574 with the City of Wichita with the anticipated construction start date and notify them of project completion. Staking and inspection for this project will be the responsibility of the Contractor.
- If traffic will be impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer, Mike Armour at traffic@wichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractors responsibility.
- All elevations shown are NAVD 88.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.
- Any sidewalk, drive approach, curb, or street pavement removed to construct project must have a pavement cut permit and be replaced by the City contractor. Permits can be obtained by calling 316-268-4501 or 316-268-4480.

- All applicable fees (tap, equity, in lieu of & main benefit) must be paid before any connections can be made on this project. Quotes can be obtained on fees by calling 316-268-4555.
- City maintenance of water mains ends at right-of-way or easement line or within two feet of vault.
- Opening and closing of water valves shall be done slowly to prevent damage to the water distribution system from water hammer. All valves closed by the contractor must be reopened as new construction permits. The project inspector must ascertain that any valve closed by the Contractor is reopened. The contractor will be permitted to operate water valves only when the project inspector assigned to the project is present.
- The Contractor shall lay a Tracer Wire and Set Test Stations along all water pipe installed in accordance with City Specifications and Tracer Wire Detail on detail sheet WL-101, cost is subsidiary to pipe installation.
- The contractor shall provide materials for temporary blowoff of waterlines. Connections to the existing waterline(s) shall be made with clean, swabbed pipe and flushed upon completion of tie-ins.
- Requests for short term water interruptions shall be made to the City Water Distribution Division and will be subject to their approval. The Contractor shall give written notice to any property owner, business, and/or tenants that will have water service interrupted at least 5 days in advance. Such notifications should indicate the time and date that the water will be turned off and when the service will be restored. No business, property owner, and/or tenants shall be without water service for more than 8 hours. Proposed tie in locations which will affect water service to property owners shall be preformed during non-peak hours.
- The Contractor must schedule the connections to the existing main with the City such that there is a minimum disruption of service. Connections shall be made during periods of low water usage. The Contractor shall submit his proposed schedule for completing work for City approval at least 10 days prior to beginning construction.
- Deflections at pipe joint or couplings shall not exceed the pipe manufacturers recommended maximum. Where deflections are greater than the maximum allowed, the contractor shall utilize fittings.
- Any existing joint exposed during excavation shall be replaced if within four feet of proposed joint.
- Valves 12 inch and larger are to be operated by the City Water Distribution Division, 48 hours of advance notice is required with the water Dispatch at 316-291-8921.
- All wet taps shall be installed by the City of Wichita. The Contractor will reimburse the City for tapping fees prior to tap being made. Unless noted on plans.
- The Contractor shall protect from damage and support existing utilities through construction as approved by the utility owner and the Engineer at the contractors expense.
- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- Wichita Fire Department inspections may be scheduled by calling 316-268-4441.

LEGAL DESCRIPTION

Lot 5, except the south 75 ft. thereof, & Lot 6, Block 1, Estancia Plaza Commercial Addition, an Addition to Wichita, Sedgwick County, Kansas.

CONTROL

Datum BM:
Chiseled " " on top end of RCP End Section near NE Cor. of Lot 2, Block 1, Estancia Commercial Addition.
Elev. = 1331.08 NAVD 88

BM 1:
Chiseled " " on top end of RCP End Section near SE Cor. MKOMS Property.
Elev. = 1331.67 NAVD 88

BM 2:
Chiseled " " on top of east end of curb inlet near NW Cor. MKOMS Property.
Elev. = 1333.22 NAVD 88

Horizontal Control:
Kansas State Plane Coordinate System--South Zone Coordinates.

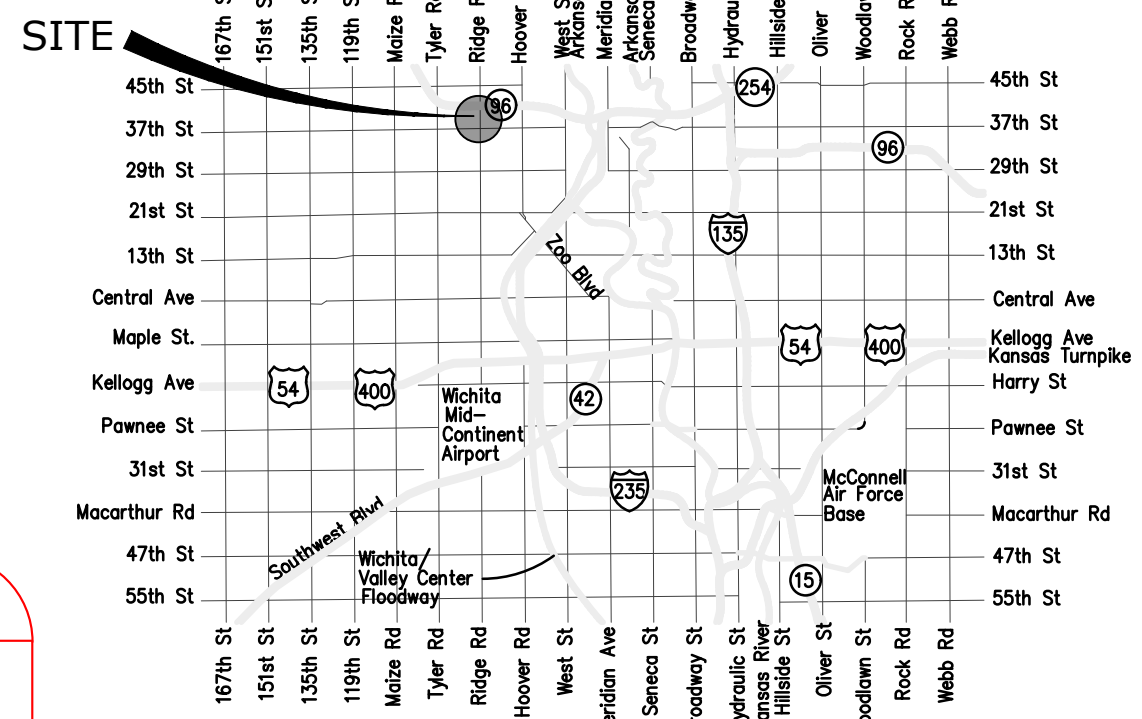
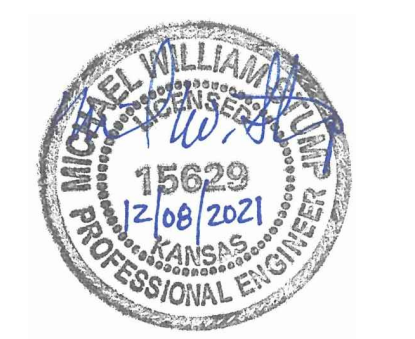
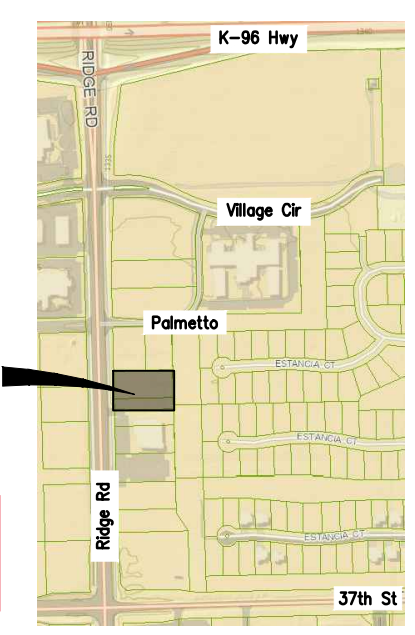
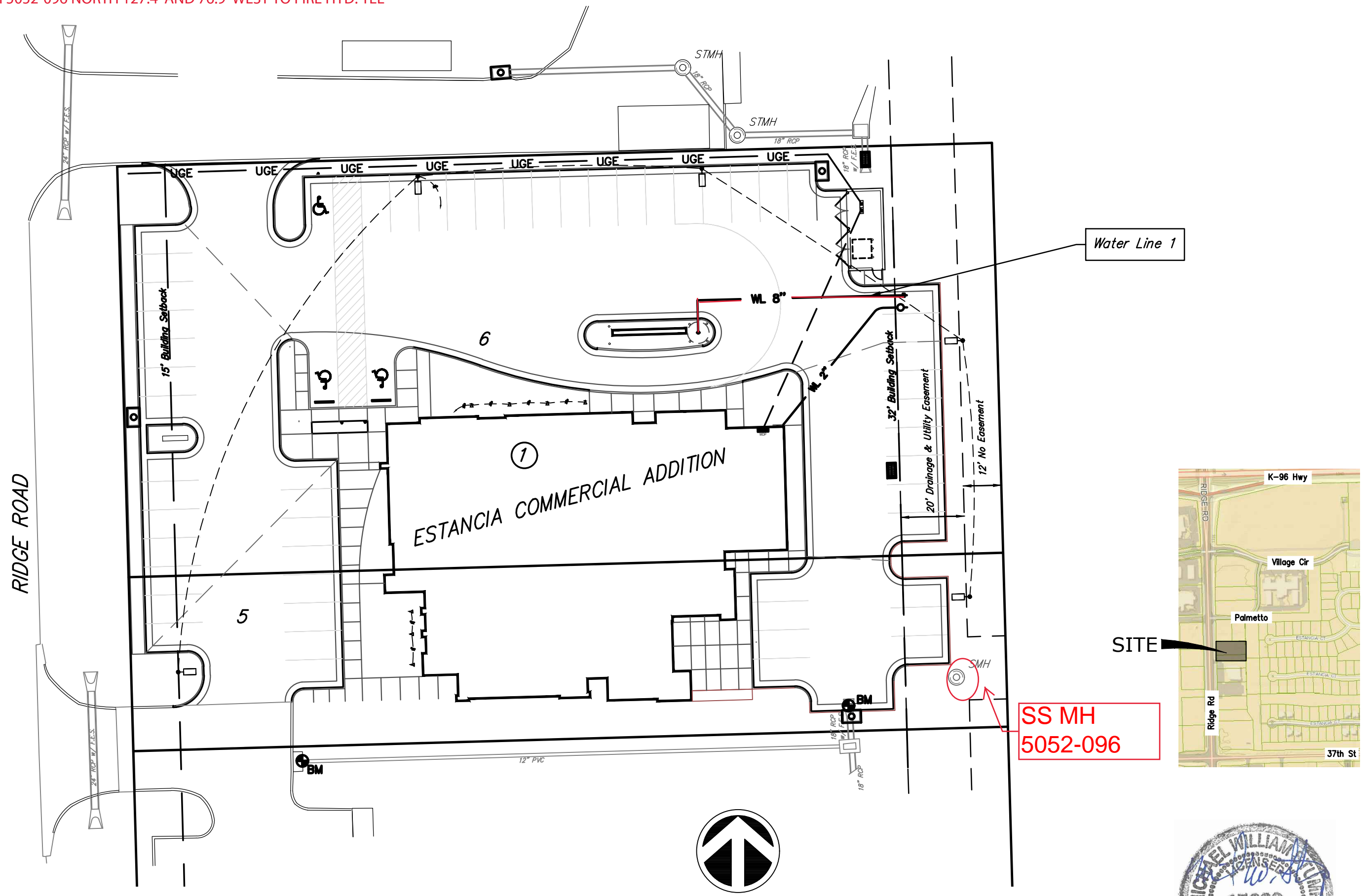
WATER DISTRIBUTION SYSTEM to serve ESTANCIA COMMERCIAL ADDITION 3934 NORTH RIDGE ROAD CITY OF WICHITA, KANSAS

MUELLER (STORZ) FIRE HYD.
SIP TEE
AMERICAN DICL
SIP MJ ACC. PACK
PRO-TRACE WIRE
SANDERSON PIPE C-90

Gary Janzen, P.E. City Engineer
Project Number
2021-036064 PPW (183021)

- FROM SS MH 5052-096 NORTH 127.4' AND 12' WEST TO TAPPING VALVE
- FROM SS MH 5052-096 NORTH 127.4 AND 101'2" WEST TO SLEEVE
- FROM SS MH 5052-096 NORTH 127.4 AND 77.9' WEST & 1' SOUTH TO FIRE HYD. VALVE
- FROM SS MH 5052-096 NORTH 127.4' AND 77.9' WEST & 9.2' SOUTH TO FIRE HYD.
- FROM SS MH 5052-096 NORTH 127.4' AND 76.9' WEST TO FIRE HYD. TEE

AS BUILTS	
Contractor: Ewertz Excavation 1/06/2022	Project Inspector: Larry Gann KEMILLER ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242



VICINITY MAP

APPROVED AS NOTED
BY WICHITA PUBLIC WORKS
ENGINEERING DIVISION
& BY WICHITA FIRE DEPARTMENT

Engineering Ben Ferason - 12/06/2021
Utilities Greg Lolley - 12/06/2021
Fire Dept. Jose Ocadiz - 12/06/2021

NOTE TO CONTRACTORS
Public Property:
Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection is to be in accordance with the City of Wichita standard construction engineering practices and certified by a Professional Engineer Licensed in the state of Kansas. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the City or Wichita Specifications and Standards and Special Provision (on file and available in the City Engineer's Office) or on the City's Website.

Private Property:
Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All material and construction practices for the fire protection line shall comply with the fire codes as adopted by the City of Wichita (available from the City of Wichita Fire Department). The Contractor shall not commence work without notification and approval of the Wichita Fire Department. Inspection of the fire protection line is to be provided by a licensed Engineering Firm under contract with the Owner/Developer and the Fire Department. The contractor shall not start work until the project inspector is assigned to the project and present on the site. Any work done without inspection will be required to be uncovered for inspection.

An approved copy of these plans signed by City staff are required on-site.

OCTOBER 2021

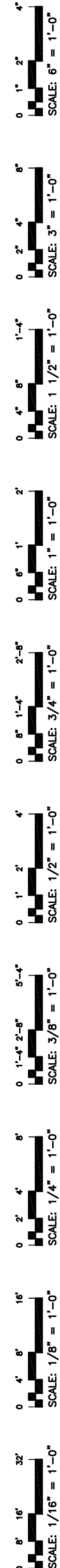
PREPARED BY



CIVIL ENGINEERS | LAND SURVEYORS | LANDSCAPE ARCHITECTS
800 EAST 1st ST., STE 240 | WICHITA, KANSAS | P. 316.722.4472
SE Project No: 21.W023

SHEET INDEX

- 1 | TITLE SHEET
- 2 | SITE/GRADING PLAN
- 3 | PLAN & PROFILE
- 4 | STANDARD WATER ASSY DETAIL (WL-101)
- 5 | EROSION CONTROL PLAN
- 6 | COPY OF PLAT
- | DETAILS/SPEC/EROSION CONTROL (available on the City's Website)



LEGAL DESCRIPTION

Lot 5, except the south 75 ft. thereof, & Lot 6, Block 1, Estancia Plaza Commercial Addition, an Addition to Wichita, Sedgewick County, Kansas.

CONTROL

Datum BM: Chiseled "I" on top of RCP End Section near NE Cor. of Lot 2, Block 1, Estancia Commercial Addition. Elev. = 1331.08

BM 1: Chiseled "I" on top of RCP End Section near SE Cor. MKOMS Property. Elev. = 1331.67

BM 2: Chiseled "I" on top of east end of curb inlet near NW Cor. MKOMS Property.

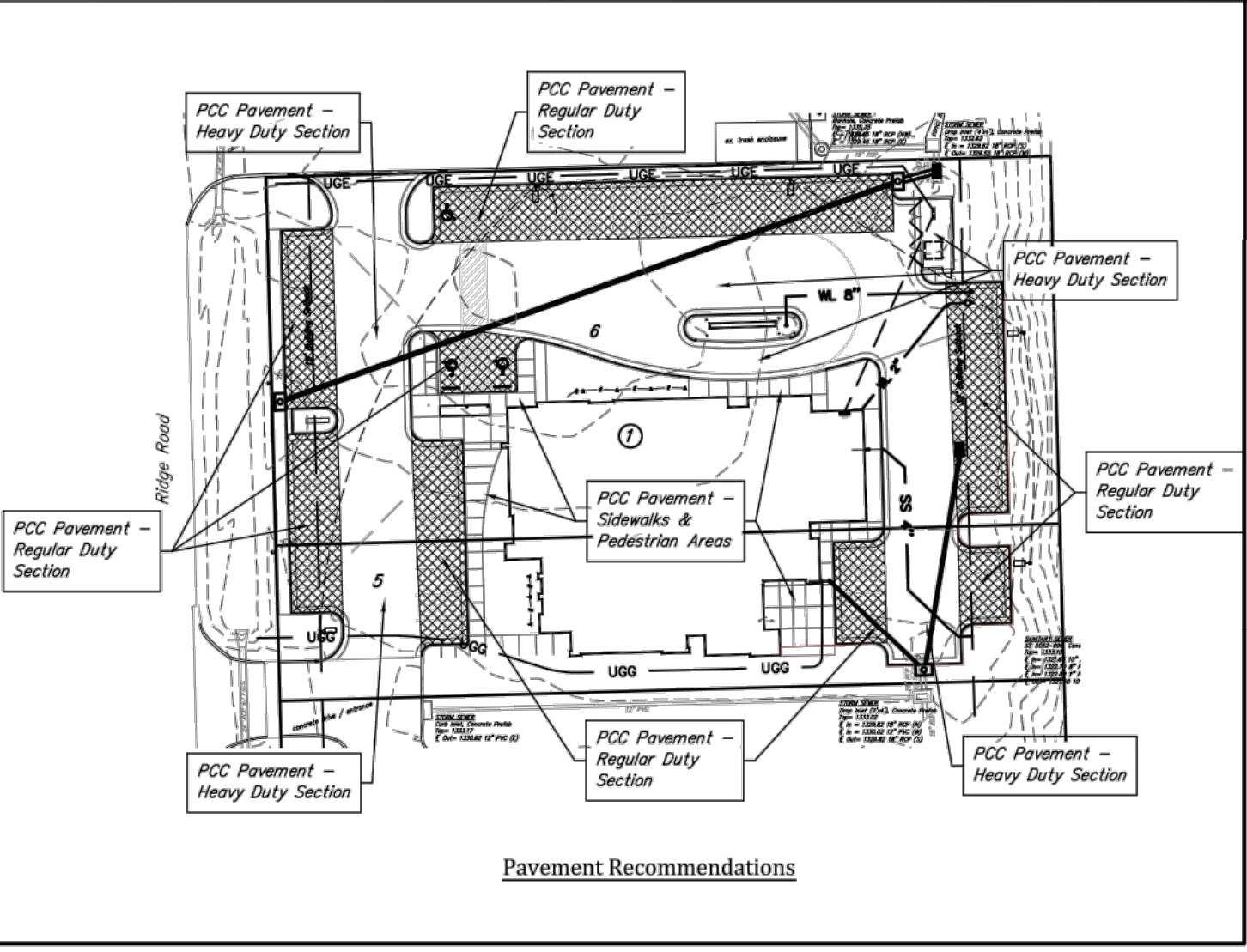
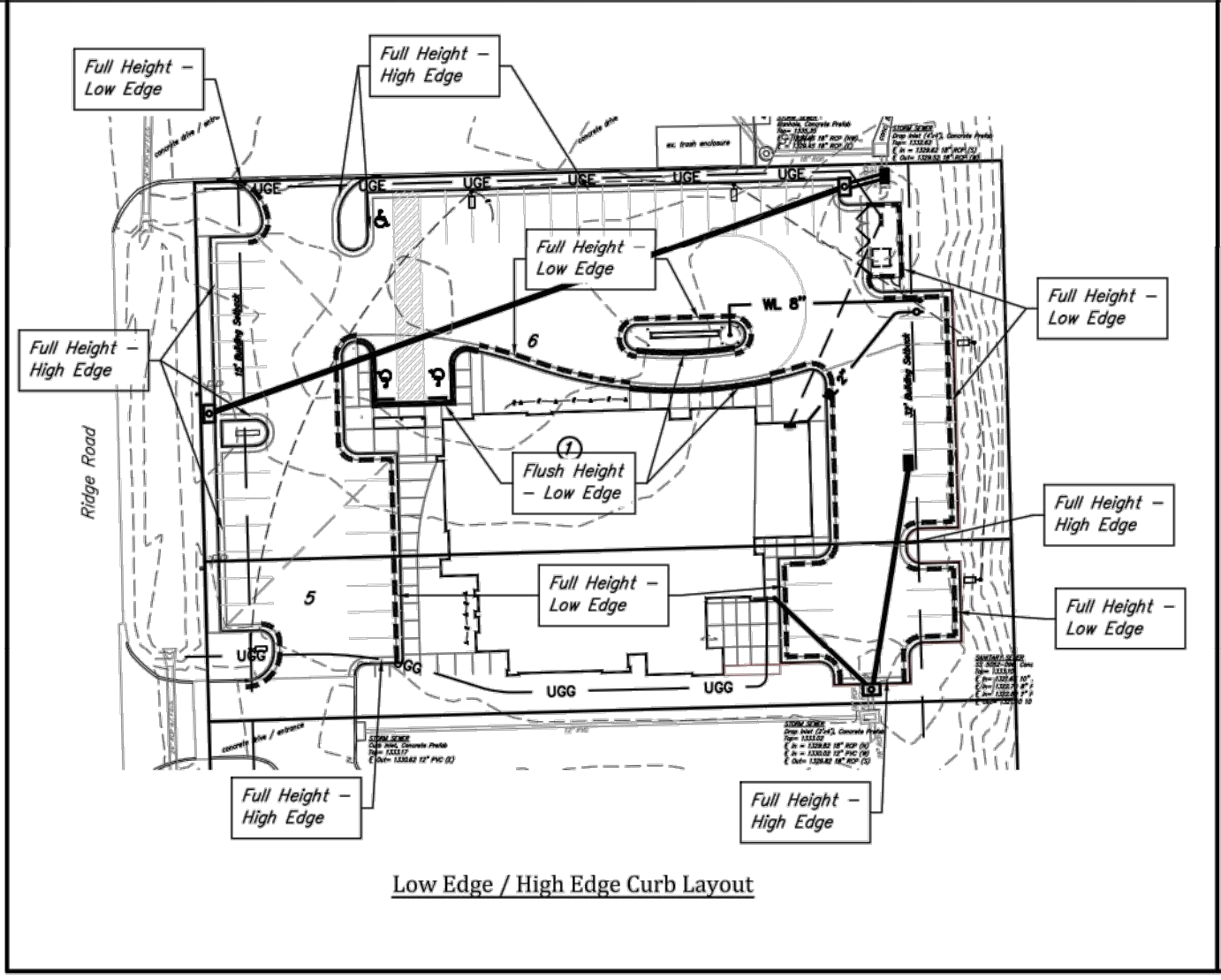
Horizontal Control: Kansas State Plane Coordinate System-South Zone Coordinates.

UTILITY & EMERGENCY CONTACT INFORMATION

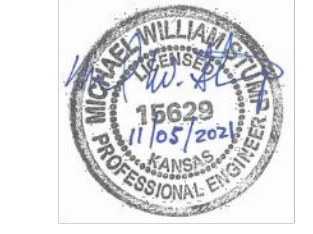
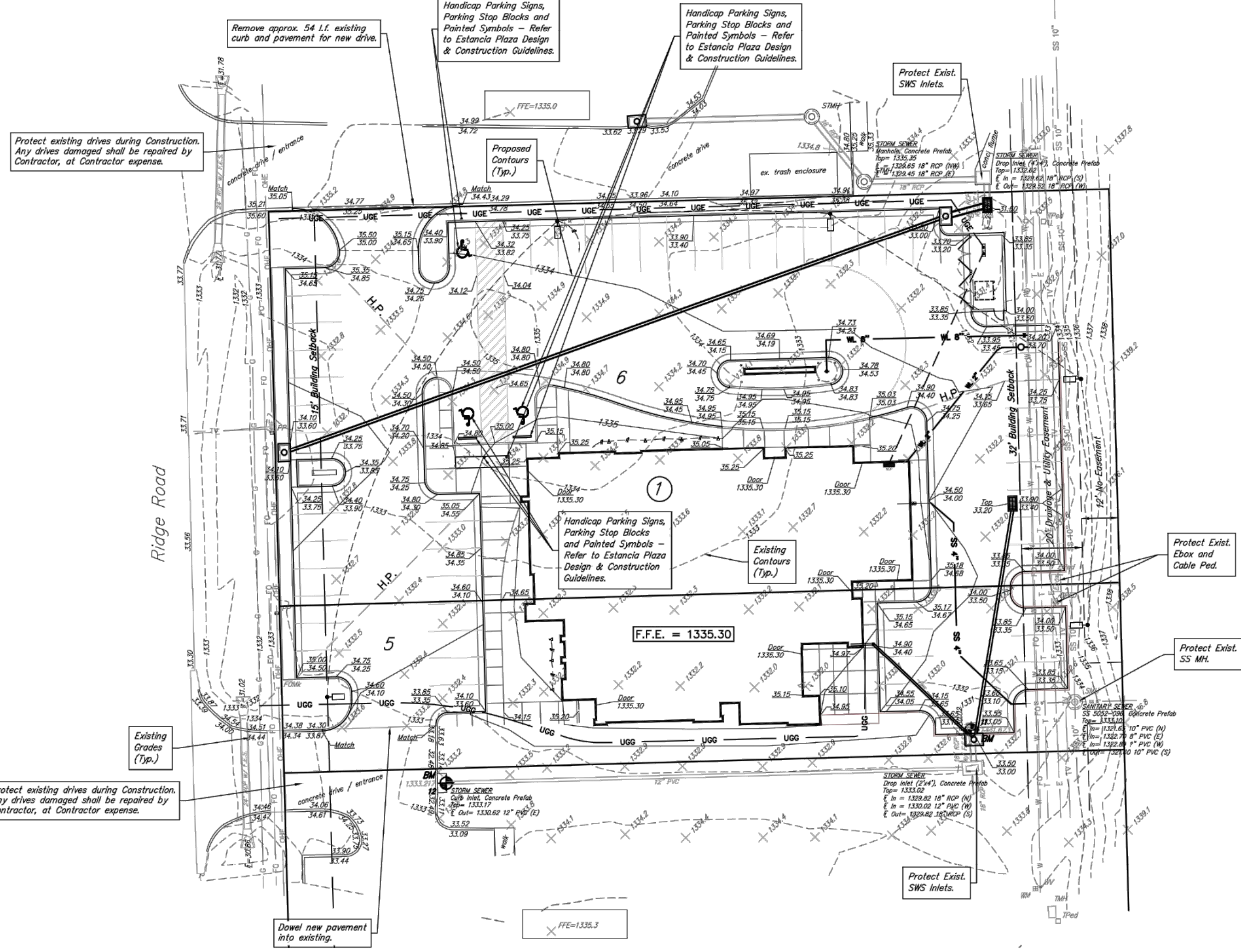
Electric	Every	383-8650
Water	City of Wichita Water Department	268-4563
Sanitary Sewer	City of Wichita Sewer Maintenance	268-4024
Storm Sewer	City of Wichita Storm Sewer Maint.	268-6000
Traffic	City of Wichita Traffic Maintenance	268-4034
Gas	Kansas Gas Service	1-888-482-4850
	Black Hills Energy	1-800-303-0357
Communications	AT&T	268-2759
	Cox Communications	262-4270
Emergency	Police Department	911
	Fire Department	911
	Ambulance	911

GENERAL NOTES

- The contractor shall comply with all applicable safety regulations. All construction shall be completed following current City of Wichita Standard Specifications and Provisions.
- Contractor will be required to contact the Kansas One-Call system a minimum of seventy-two (72) hours prior to any excavation to request local utility companies to locate any existing utilities within the project area.
Kansas One-Call 811
- The buried utilities as located on the plans are approximate locations only. It should be noted that other buried lines may exist which are not shown on these plans. The contractor shall have all buried lines located and flagged in the field prior to commencing work. The Contractor shall exercise extreme caution during trenching operations to avoid damaging these lines. Any lines damaged shall be replaced or repaired immediately as directed by the engineer at the contractor's expense.
- Existing utilities and their locations, as shown on the plans, represent the best information obtainable for design. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Where the improvements cross existing public or private utilities which are not specified as to be adjusted by others, the Contractor shall provide the material and means to protect and support said utilities during construction to the satisfaction of the Engineer.
- Rubble from the removal of miscellaneous structures including any trees removed, tree trimmings, and excess excavation which is to be wasted shall be disposed of on sites to be provided by the contractor. These sites shall be approved by the Engineer as to suitability, appearance and location. Locations that to the opinion of the Engineer, will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a floodplain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved disposal location. Debris from pre-construction cleaning and inspection can be disposed of as directed by the City of Augusta. Sediment/solids/slabs from pipe cleaning operations to be disposed of on sites provided by the contractor.
- Removal of existing concrete, pavement, curb and gutter, brick, sidewalk, etc. shall be subsidiary to project.
- The Contractor shall avoid removal or trimming of any trees or shrubs where possible. Where the removal or trimming appears to be unavoidable, the Contractor shall coordinate such work with the Owner. Costs for tree/shrub removal and trimming regardless of size shall be considered subsidiary to the project.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.
- The Contractor shall be responsible for preserving property lines. The contractor will be required to re-establish any property lines which are damaged or destroyed by the construction operations. Survey lines shall be re-established by a licensed land surveyor in accordance with state laws. Prior to start of construction the Contractor shall flag and reference all property corners that may be disturbed by construction operations, and verify these in the field in the presence of the engineer and the contractor's surveyor. After construction and before the final inspection, a letter signed and sealed by the licensed land surveyor certifying replacement of all disturbed property corners shall be submitted to the engineer.
- At a minimum, one lane traffic shall be maintained at all times in the immediate area of construction. Immediate area of construction is defined as the block in which construction activities are occurring. Traffic is to be maintained using flagging operations as necessary. The Contractor shall utilize barricades, signs, guards, and flagmen in accordance with the latest version of the Manual on Uniform Traffic Control Devices (MUTCD). Subsidiary to project.
- The Contractor shall contain construction operations to permit local and emergency traffic through and across construction at all times. The Contractor shall erect warning signs, flashing lights, and/or barricades in compliance with the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) to ensure safety as directed in the general conditions. The Contractor shall limit the extent of trench to remain open overnight and weekends to less than fifty (50) feet.
- All elevations shown NAVD 88.
- Prior to construction, the Contractor shall re-establish control points and benchmarks and verify their accuracy.
- Easements and right-of-way provided by the Owner for the project are shown in the construction documents. The Contractor shall be responsible for the acquisition of any additional temporary easements or right-of-way that he desires to use in completing the work.
- All trenching and backfilling shall be Type I or Type II unless noted otherwise in the construction documents.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.
- All grassed areas disturbed by construction of the proposed improvements shall be replanted with grass and fertilized in accordance with the project specifications. Existing grassed areas disturbed by construction shall be replanted with the same type of grass as was removed. All costs for seeding and fertilizing shall be considered subsidiary to "Site Clearing and Restoration."
- The Contractor shall seed all areas disturbed by construction activities with temporary rye grass. Rye grass seed shall be planted at a minimum rate of six (6) pounds per one thousand (1,000) square feet. This temporary seeding may be omitted only if other seeding is required in accordance with general note no. 18 above. Temporary seeding or permanent seeding/soiling shall be applied within 14 days after the area has been disturbed. All costs for temporary rye grass seeding shall be considered subsidiary to "Site Clearing and Restoration."
- Any sidewalk, drive approach, curb, or street pavement, etc. damaged and/or removed to construct project must be replaced in accordance with project specifications.
- The Contractor shall provide positive drainage away from all manhole covers.
- The Contractor shall restore all ditches, swales, road shoulders, and banks to their original slopes and grades. Where existing entrance pipe, drainage pipe, signs, fences, etc. conflict with the proposed work herein, they shall be removed and replaced or reset unless otherwise noted on the plans. The replacement of all the aforementioned items, including seeding, fertilizer, and mulching shall be considered subsidiary to project.
- The Contractor shall not start work on the project until the project inspector is assigned and is present on the site. Any work done without inspection will be required to be uncovered for inspection at the Contractor's expense.
- The Contractor is responsible for providing erosion control as needed regardless of what the construction documents show. The Contractor shall meet the City of Wichita's erosion and sediment control BMP requirements.
- The Contractor shall obtain all necessary permits prior to beginning construction on the project.
- Excess material generated by the re-grading of the site shall be used for site fills and wasted as approved by the Owner. Borrow, if required, shall be from an approved off-site source.
- All open excavations shall be protected with safety fence.
- Positive drainage on the site is required throughout the project duration.
- The Contractor shall apply necessary moisture to the construction area and temporary haul roads to prevent the spread of dust.
- All handicap striping & signage shall be placed in accordance with latest MUTCD Standards.
- All concrete placed shall have a minimum compressive strength of 4,000 psi after 28 days. All reinforcing steel shall be grade 60.
- Concrete mix designs shall be submitted to the Owner for approval.
- Expansion joints in concrete shall be installed per Specifications and at deflections.



Refer to Sheet C4.0 for Site Improvement Details: PCC Pavement Design Recommendations, Curb & Outer Details and Monolithic Pavement Detail, Neenah Curb Drain.



SHEET



For Information Only

DATE: FOOTINGS & FOUNDATIONS PERMIT NOVEMBER 8, 2021



alloy architecture.com
163 S. ROCK ISLAND, SUITE 200
WICHITA, KS 67202
P: 316.684.1111

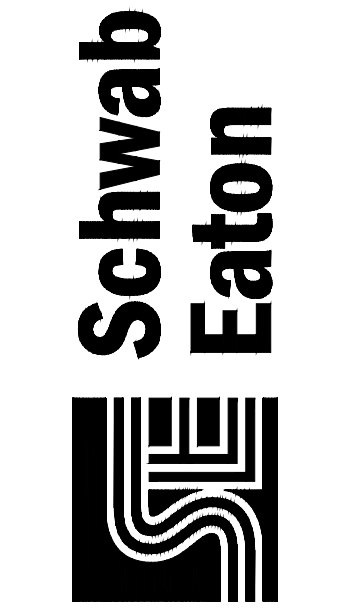
PROJECT NUMBER
20132

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Aloy Architecture

MID KANSAS
Oral & Maxillofacial Surgery
N. Ridge Rd. & W 27th St. N.
Wichita, Kansas

C1.0



WATER DISTRIBUTION SYSTEM
to serve
ESTANCIA COMMERCIAL ADDITION
2021-036064 PPW (183021)

Revisions:

Date:
Oct. 2021
SE Project No:
21.W023
Drawn By:
MWS
Checked By:
MWS

Sheet Name:
Site Grading Plan
(Information Only)

Sheet No:

02

CONTROL

Datum BM:
Chiseled " " on top end of RCP End Section near
NE Cor. of Lot 2, Block 1, Estancia Commercial
Addition.
Elev. = 1331.08 NAVD 88

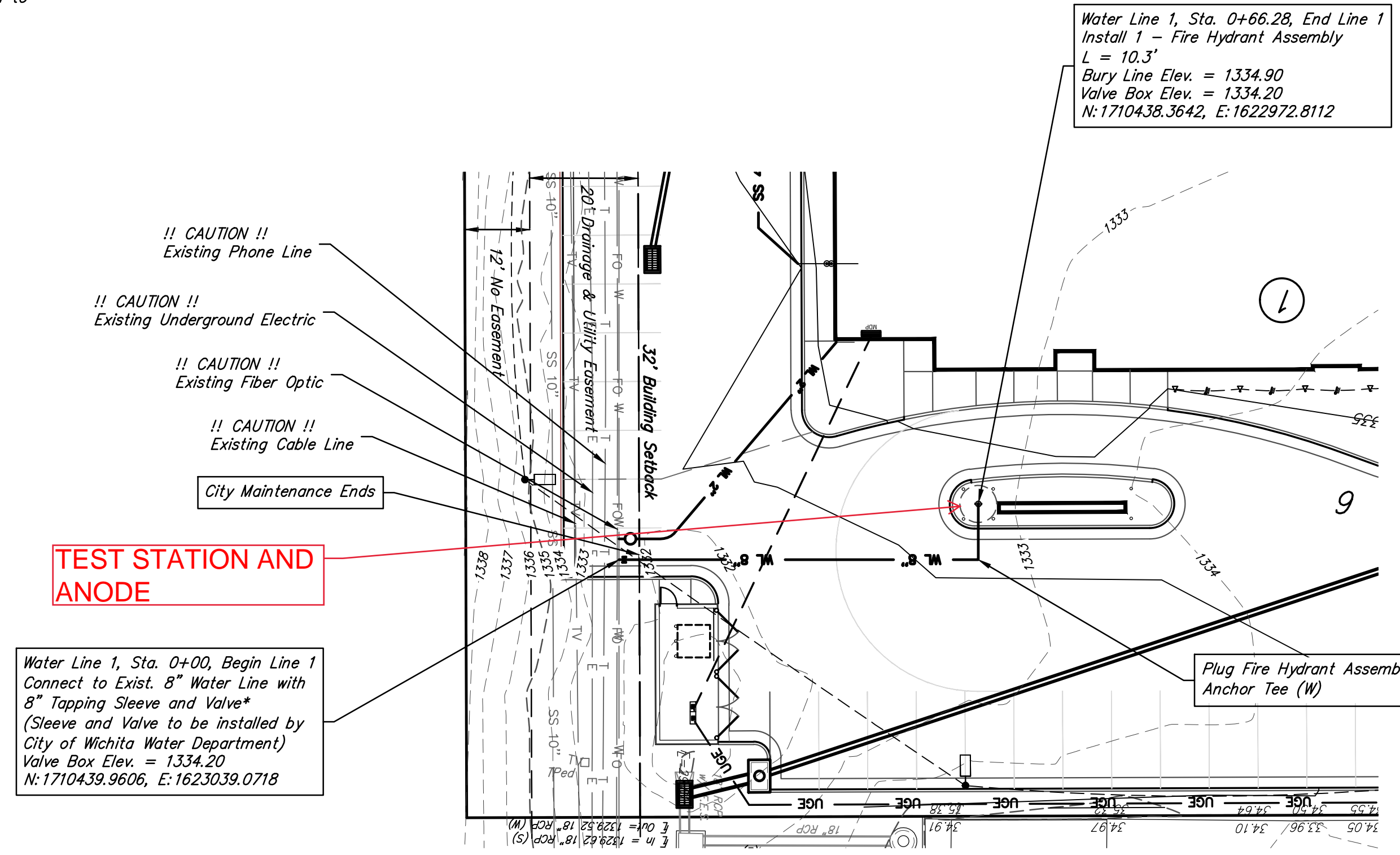
BM 1:
Chiseled " " on top end of RCP End Section near
SE Cor. MKOMS Property.
Elev. = 1331.67 NAVD 88

BM 2:
Chiseled " " on top of east end of curb inlet
near NW Cor. MKOMS Property.
Elev. = 1333.22 NAVD 88

Horizontal Control:
Kansas State Plane Coordinate System—South Zone
Coordinates.

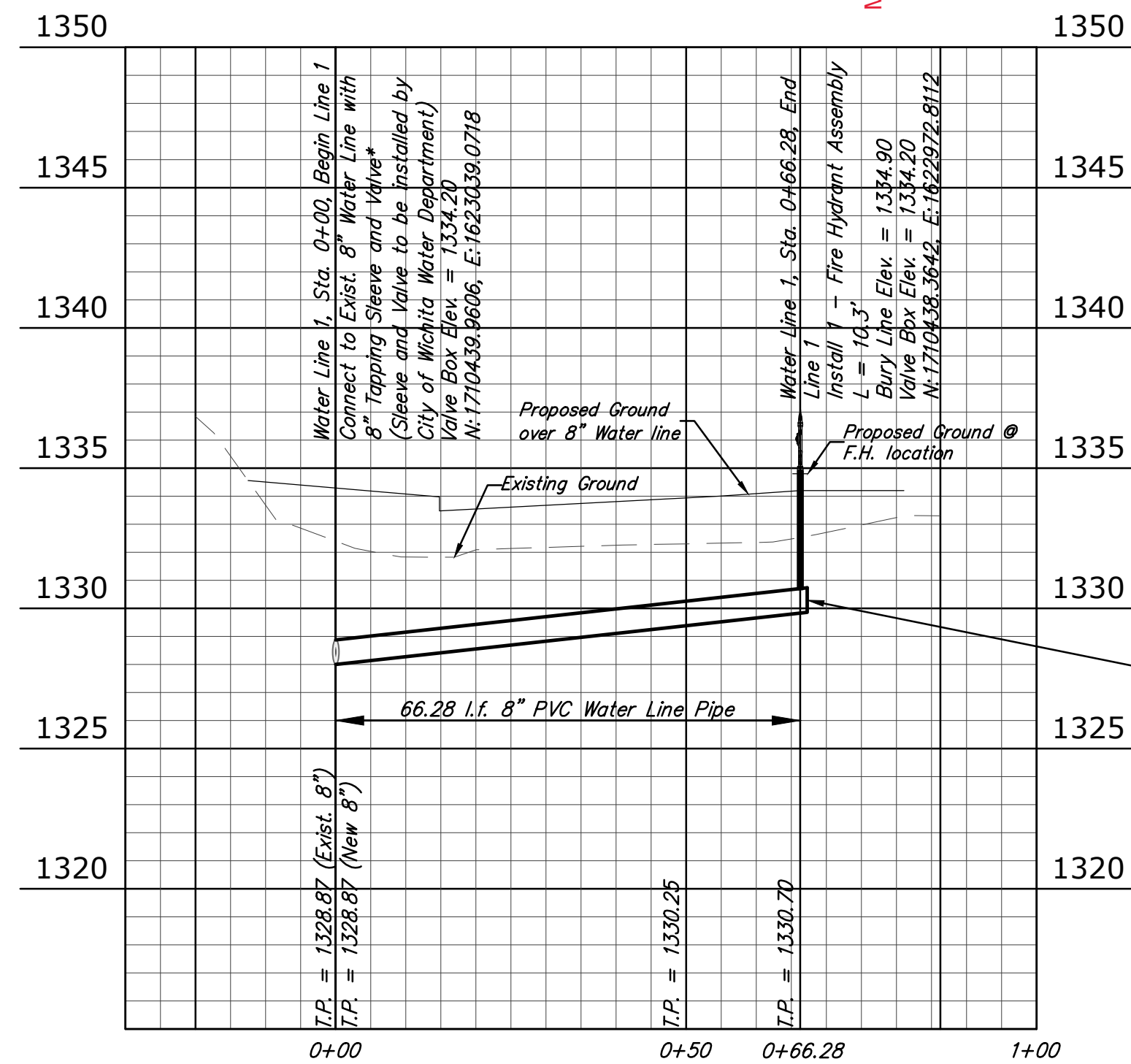
LEGAL DESCRIPTION

Lot 5, except the south 75 ft. thereof, & Lot 6, Block 1,
Estancia Plaza Commercial Addition, an Addition to
Wichita, Sedgwick County, Kansas.



Water Line 1 - Plan

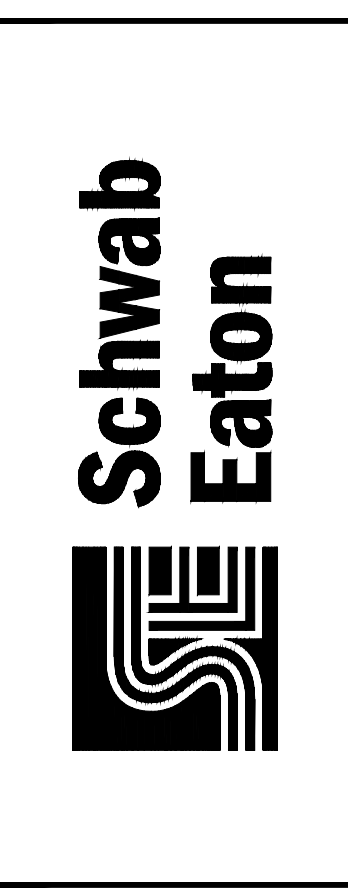
Water Line 1 - Profile



AS BUILTS

Contractor: Ewertz Excavation	Project Inspector: Larry Gann
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KEMILLER ENGINEERING PA
117 E. Lewis, Wichita, KS 67202 (316)264-0242



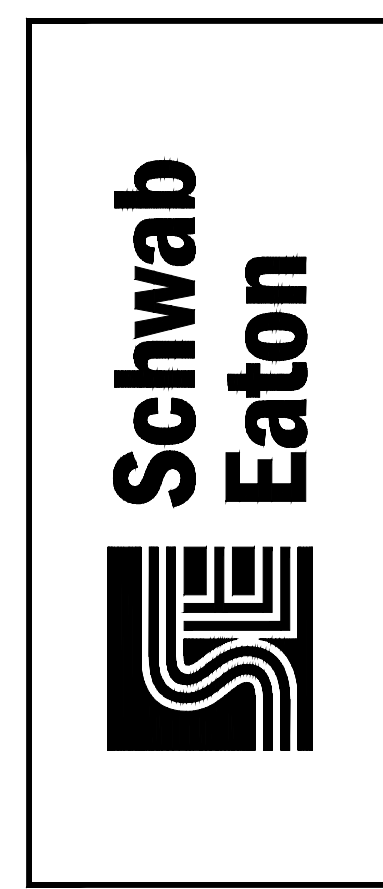
WATER DISTRIBUTION SYSTEM
to serve
ESTANCIA COMMERCIAL ADDITION
2021-036064 PPW (183021)

Revisions:

Date:	Oct. 2021
SE Project No:	21.W023
Drawn By:	MWS
Checked By:	MWS

Sheet Name:
SWS Plan / Profiles

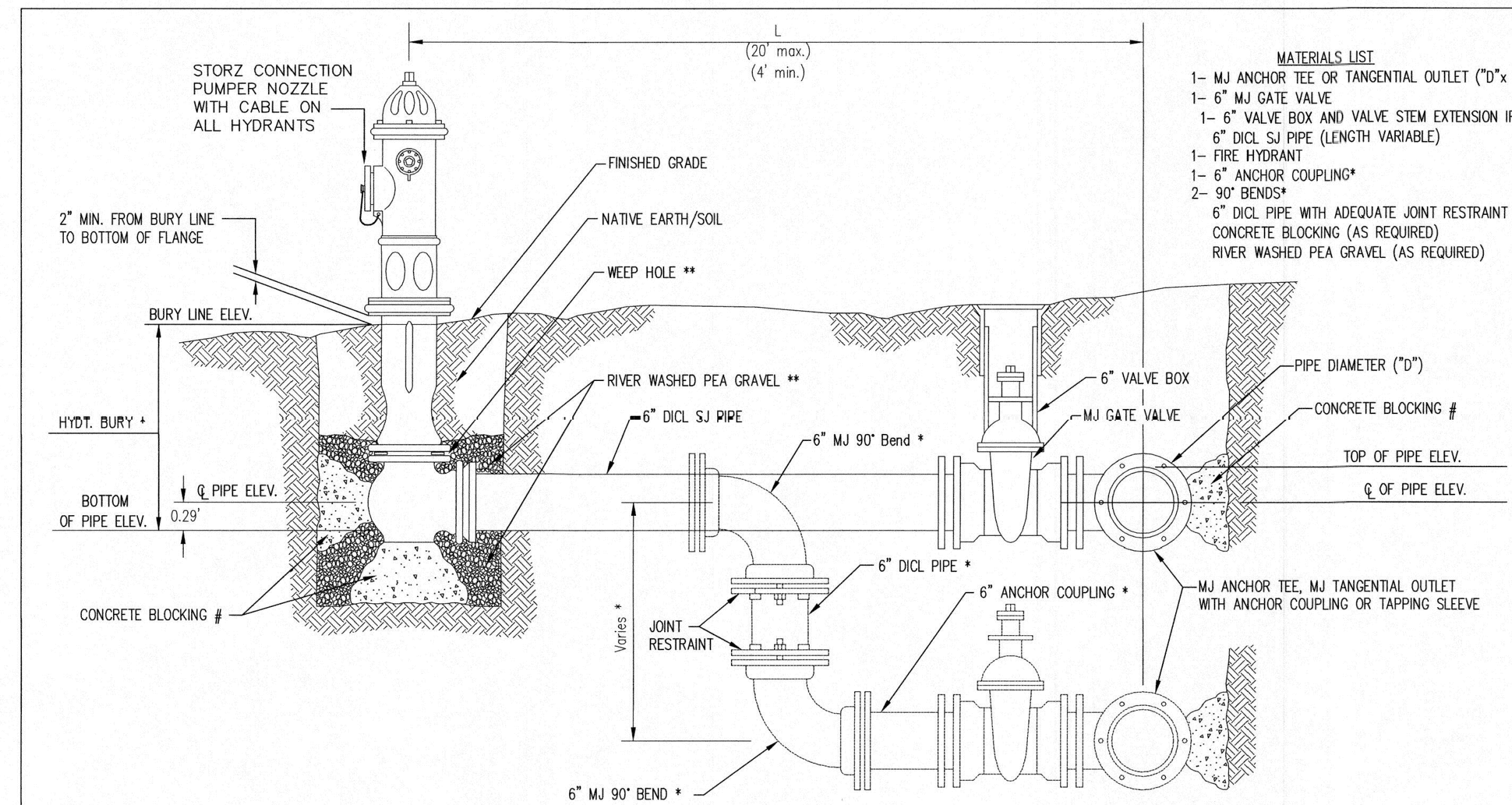
Sheet No:
03



WATER DISTRIBUTION SYSTEM
 to serve
ESTANCIA COMMERCIAL ADDITION
 2021-036064 PPW (183021)

Revisions:
 Date: Oct. 2021
 SE Project No: 21.W023
 Drawn By: MWS
 Checked By: MWS

Sheet Name: Water Details
 Sheet No: **04**



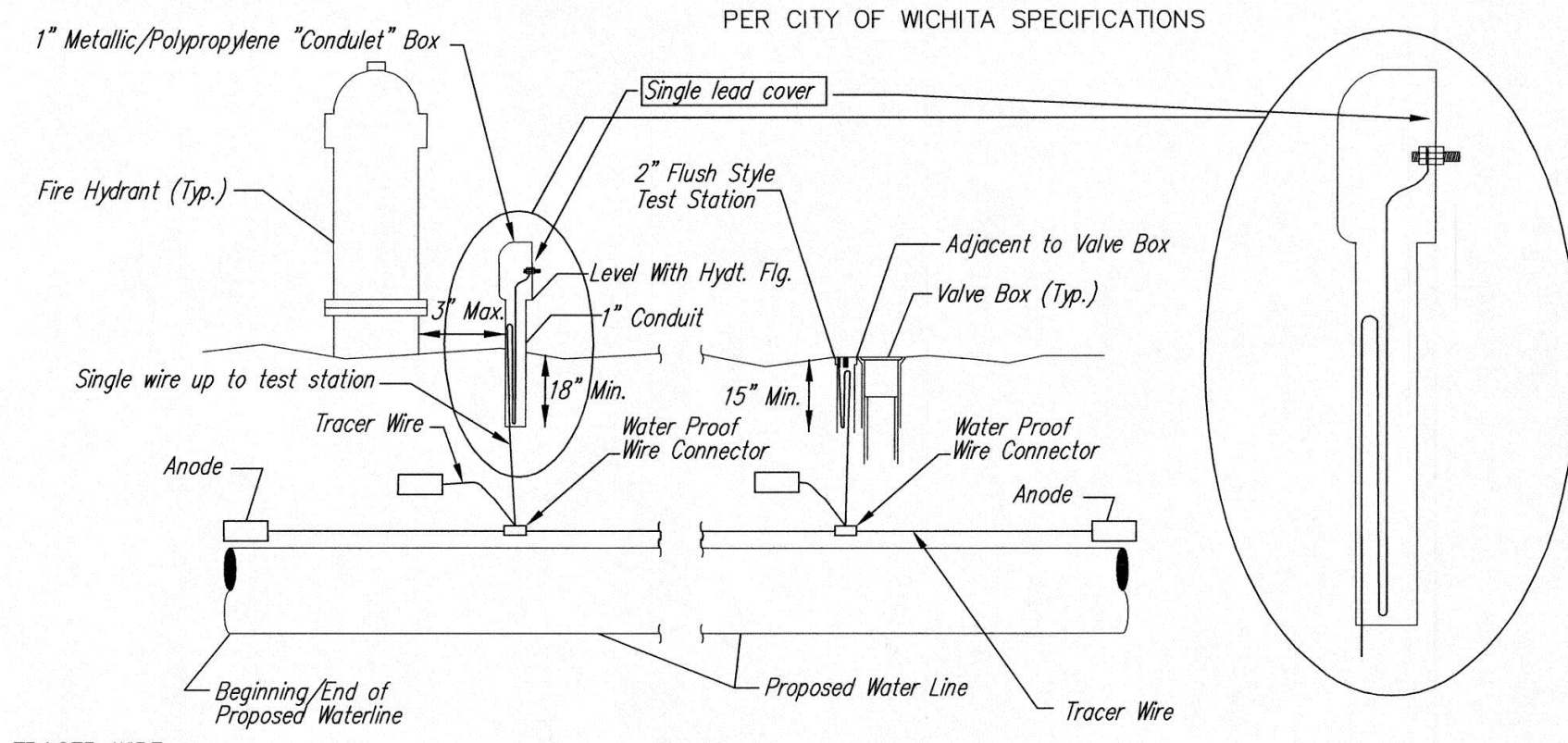
- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET (10" x 6")
 - 1- 6" MJ GATE VALVE
 - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
 - 6" DI CL SJ PIPE (LENGTH VARIABLE)
 - 1- FIRE HYDRANT
 - 1- 6" ANCHOR COUPLING*
 - 2- 90° BENDS*
 - 6" DI CL PIPE WITH ADEQUATE JOINT RESTRAINT *
 - CONCRETE BLOCKING (AS REQUIRED)
 - RIVER WASHED PEA GRAVEL (AS REQUIRED)

* IF THE REQUIRED HYDRANT BURY IS IN EXCESS OF 5', BUT LESS THAN 7', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY. IF THE REQUIRED HYDRANT BURY IS GREATER THAN 7', CONTRACTOR SHALL USE 5' HYDRANT BURY, 2-MJ 90° BENDS, 6" ANCHOR COUPLING AND 6" DI CL PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGALUGS, OR SIMILAR RESTRAINT BETWEEN 90° BENDS TO SECURE ALL FITTINGS DURING TESTING AND OPERATION. THE CONTRACTOR SHALL PROVIDE A VALVE STEM EXTENSION PER DETAIL THIS SHEET.

** CAUTION: WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES. PLACE 1 CUBIC FOOT OF RIVER WASHED PEA GRAVEL AROUND EACH WEEP HOLE.

CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.

FIRE HYDRANT ASSEMBLY
PER CITY OF WICHITA SPECIFICATIONS



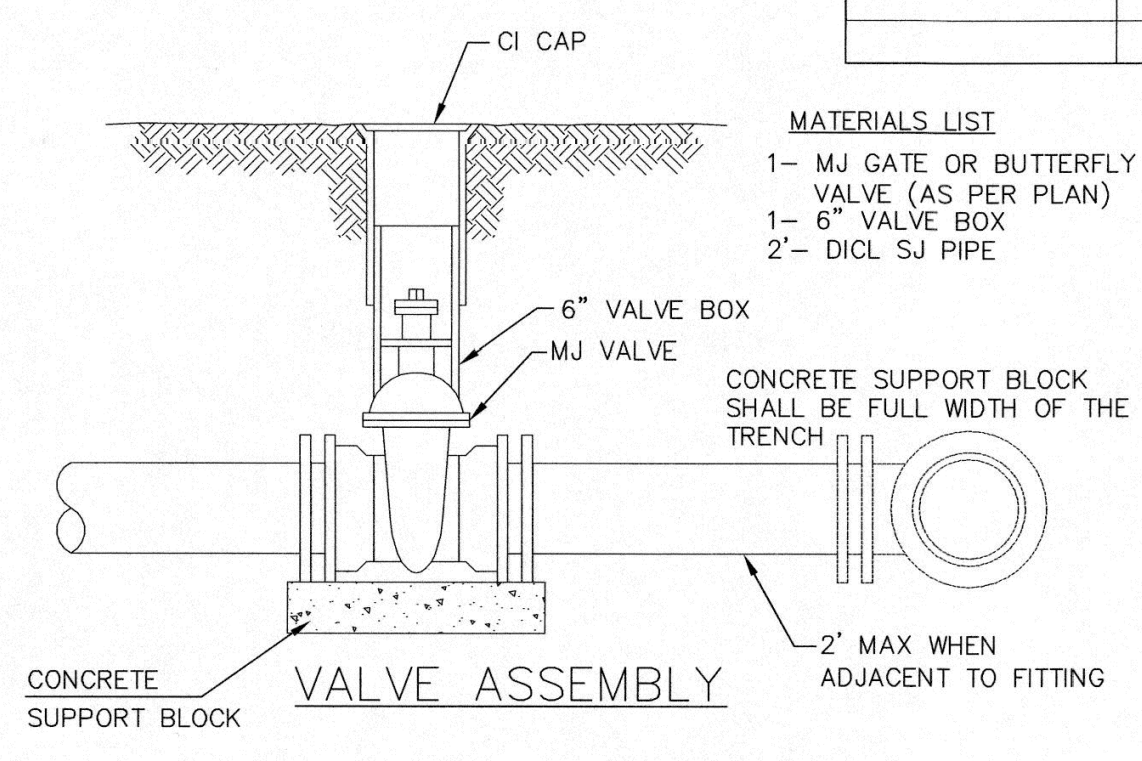
TRACER WIRE
Conductive type pipe locator/tracer wire shall be install to locate all waterline pipe regardless of pipe material. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. A waterproof connector shall be used at splice locations. A complete list of approved tracer wire and waterproof connectors can be found on the City of Wichita's website at www.wichita.gov.

WIRE
The tracer wire shall be Blue No. 12 AWG CCS with 45 mil HDPE insulation. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. Wire connectors shall be installed per manufacturer recommendations. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

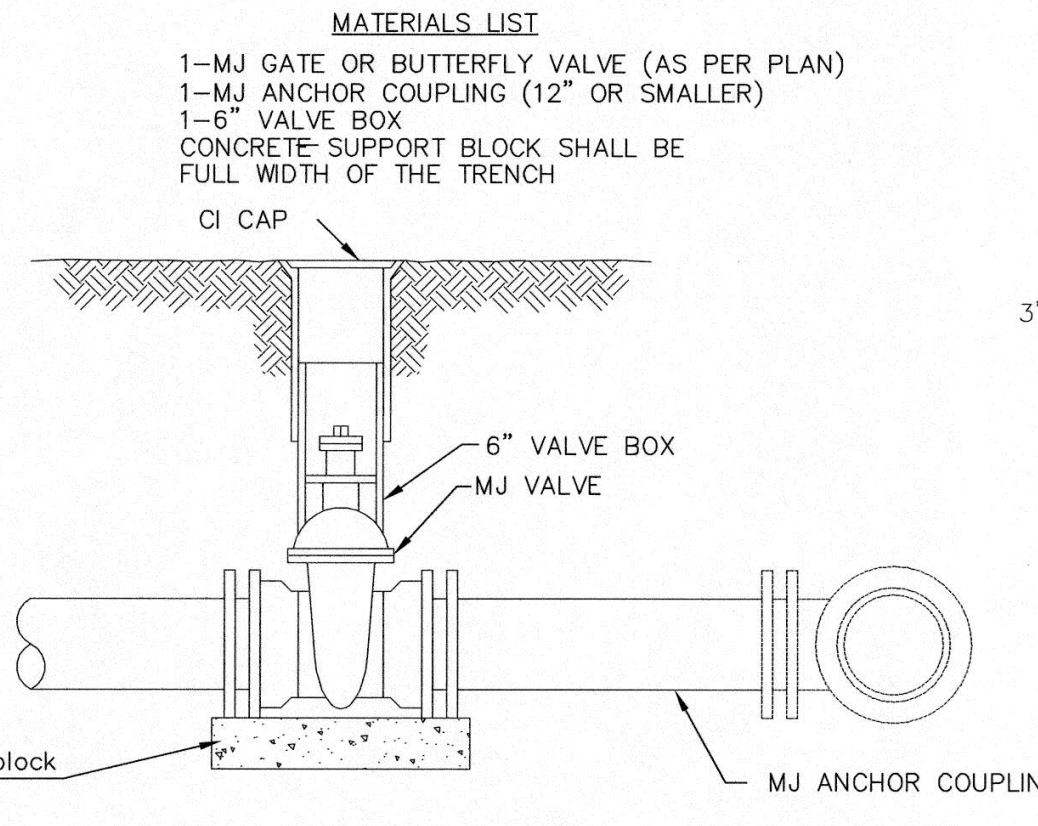
TEST STATIONS
The test station for fire hydrant application shall be a 1" "conduit" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "conduit" style test station shall be attached to a 1" rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. The test station for valve applications shall be a 2" flush style test station with wire connector on lid. Model # T2PH7B1LP Handley Industries or CD14*TP SnakePit as manufactured by Copperhead Industries or approved equal. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be install to allow 12" of wire within the test station. The location of all test stations shall be recorded, and shown in the as-built drawings. Flush style test stations shall not be installed in pavement or sidewalk unless approved by the Engineer. Contractor shall extend tracer wire & move flush mount test station to nearest location out of pavement or sidewalk.

ANODES
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.

TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION



- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- MJ ANCHOR COUPLING (12" OR SMALLER)
 - 1- 6" VALVE BOX
 - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH



ANCHORED VALVE ASSEMBLY

- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- MJ ANCHOR COUPLING (12" OR SMALLER)
 - 1- 6" VALVE BOX
 - 20' OF PIPE (BID WITH PIPE)
 - 2 - #6 REINF. BARS
 - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

Notes:

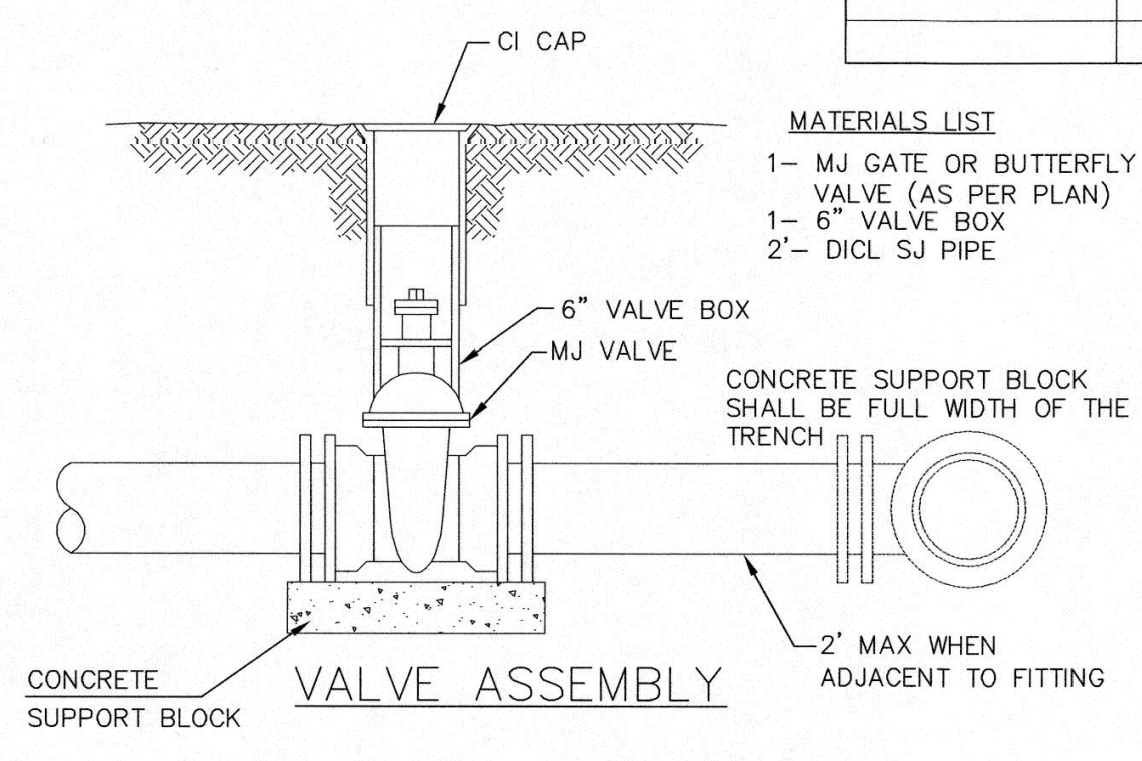
1. Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
2. The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.
3. All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

VALVE	THRUST AT 150 #/in ²
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

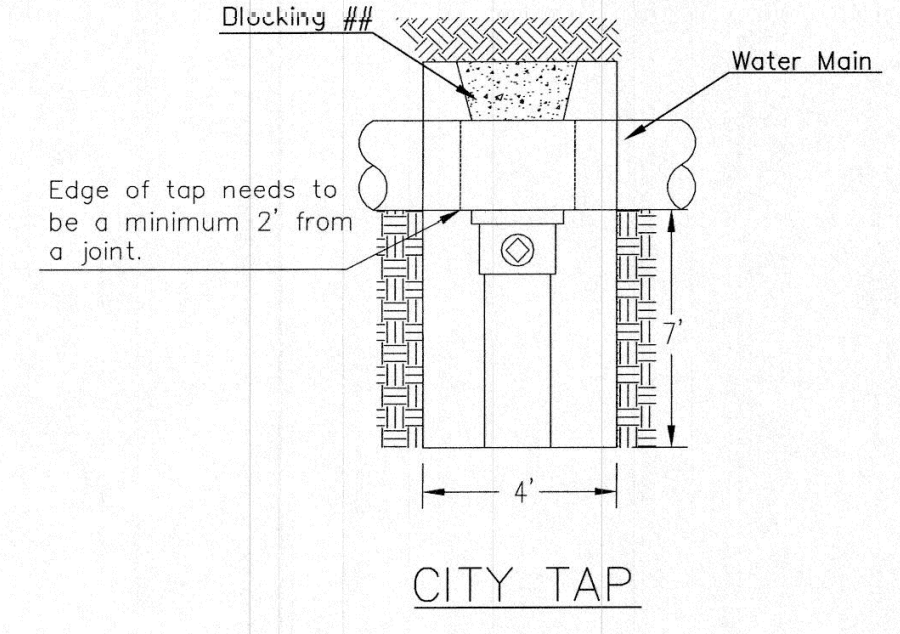
ANCHORED VALVE ASSEMBLY, SPECIAL

FIRE HYDRANTS REQUIRED

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
Sta. 0+66.28, Line 1	1334.90	1330.70	5'	

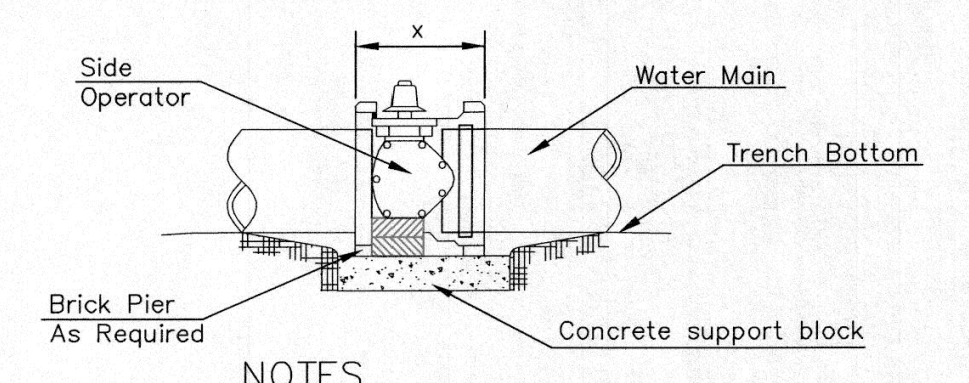


- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- 6" VALVE BOX
 - 2- DI CL SJ PIPE



PROTECTIVE FILL DETAIL

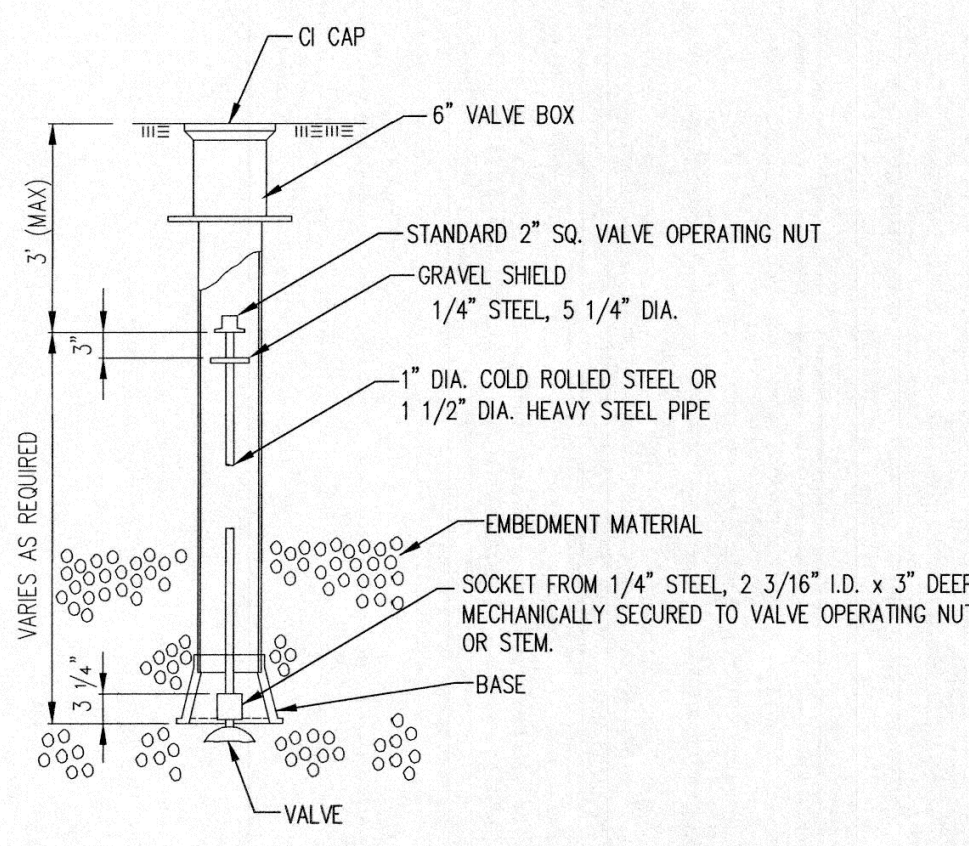
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3". (COST SUBSIDIARY TO PIPE INSTALLATION)



NOTES

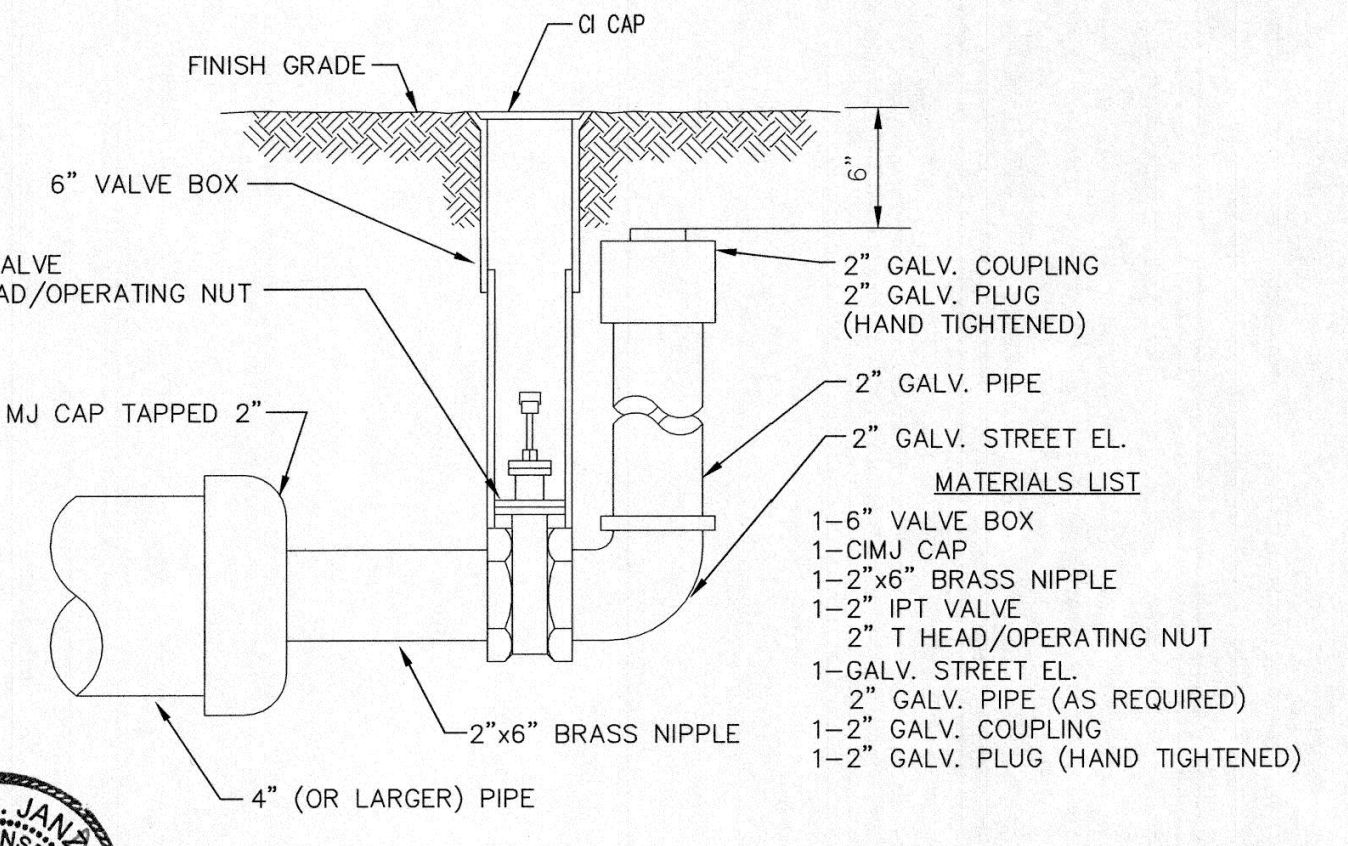
1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
3. Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



VALVE STEM EXTENSION DETAIL

NOTE: ONE VALVE STEM EXTENSION FOR EACH VALVE BURIED GREATER THAN 5'.



2" BLOWOFF ASSEMBLY

- MATERIALS LIST**
- 1- 6" VALVE BOX
 - 1- CI MJ CAP
 - 1- 2"x6" BRASS NIPPLE
 - 1- 2" IPT VALVE
 - 2" T HEAD/OPERATING NUT
 - 1- GALV. STREET EL.
 - 2" GALV. PIPE (AS REQUIRED)
 - 1- 2" GALV. COUPLING
 - 1- 2" GALV. PLUG (HAND TIGHTENED)

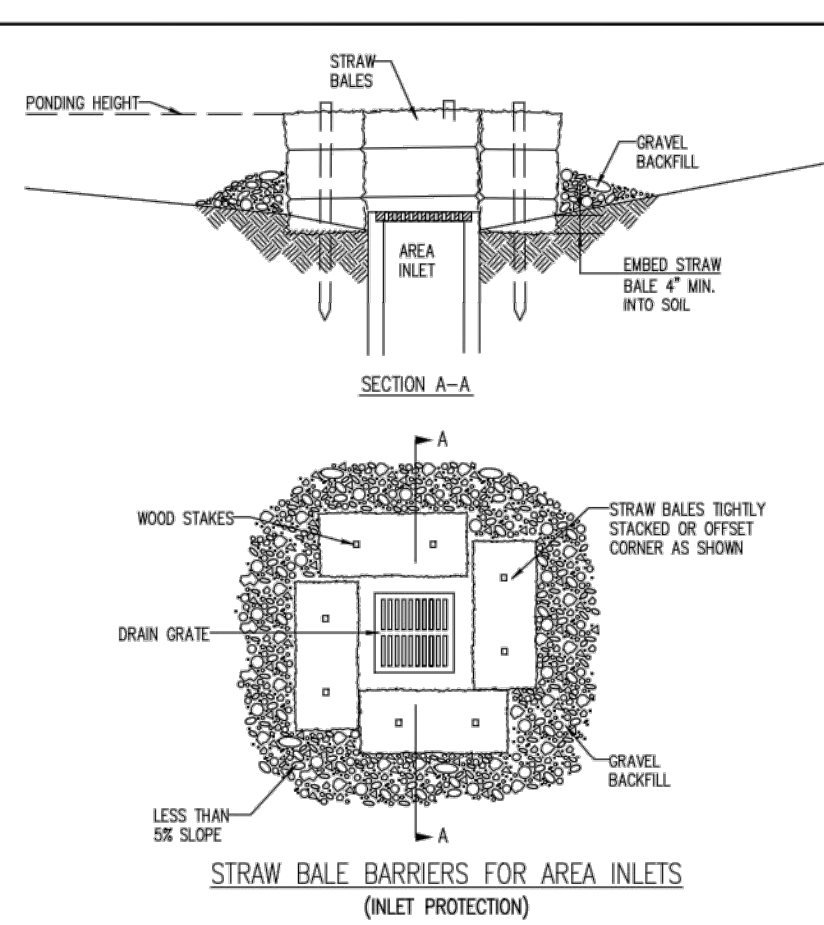
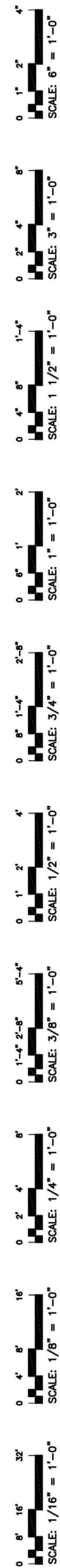


STANDARD WATER ASSEMBLY DETAIL
 CITY ENGINEER
GARY JANZEN, P.E.
 PROJECT NUMBER OCA NUMBER DATE
 CITY ENGINEER'S OFFICE
 CITY HALL - SEVENTH FLOOR
 455 NORTH MAIN STREET
 WICHITA, KANSAS 67202-1620
 (316) 268-4501

REVISED: OCTOBER 2016

SHEET

WL-101



MATERIAL SPECIFICATION:
BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, DRY STRAW, PRAIRIE HAY, OR BROMIGRASS THAT IS FREE OF ENCLOSED NODULES BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE EASILY.

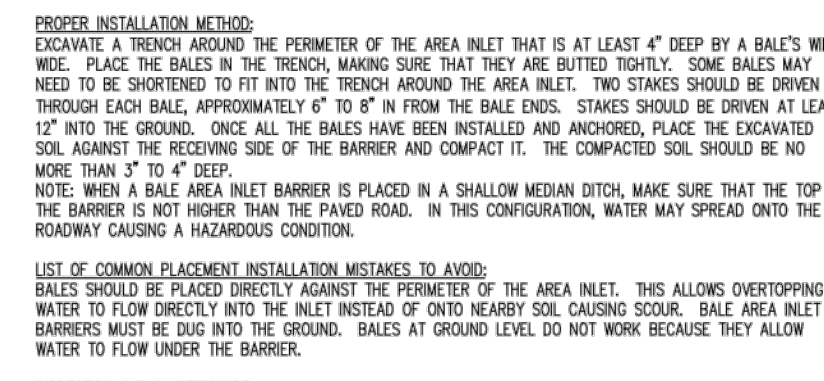
PLACEMENT:
BALE AREA INLET BARRIERS SHOULD BE PLACED DIRECTLY AROUND THE PERIMETER OF A DRAIN TILE. WHEN A BALE AREA INLET BARRIER IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS GRADUALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHODS:
EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A BALE'S WIDTH WIDE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TOGETHER. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH AROUND THE AREA INLET. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE RECEIVING SIDE OF THE BARRIER AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.

NOTE: WHEN A BALE AREA INLET BARRIER IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
BALES SHOULD BE PLACED DIRECTLY AGAINST THE PERIMETER OF THE AREA INLET. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR. BALE AREA INLET BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:
BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:
• DOES WATER FLOW UNDER THE AREA INLET BARRIER?
• DOES WATER FLOW THROUGH SPACES BETWEEN BALES?
• ARE ANY BALES DISLOOSED?
• ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
• DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



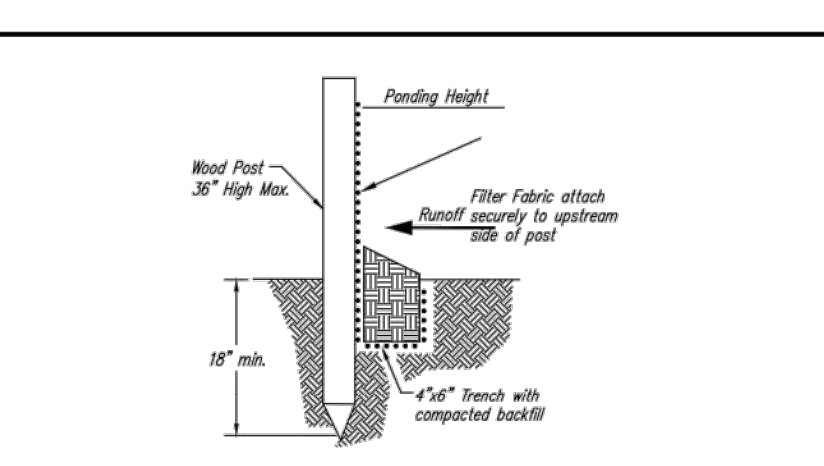
Material Specification:
Silt fence fabric should conform to the ASTM D2085 96 all fence specification. The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long. Silt fence fabric should be attached to the wooden posts with staples, wire, zip ties, or nails.

Placement:
A slope barrier should be used at the toe of a slope that does not exist. The slope barrier should be placed on nearly level ground 5' to 10' away from the toe of a slope. The barrier is placed away from the toe of the slope to provide adequate storage for settling out sediment. When practicable, silt fence slope barriers should be placed along contours to avoid a concentration of flow. Silt fence slope barriers can also be placed along right-of-way fence lines to keep sediment from crossing into adjacent property. When placed in this manner, the slope barrier will not likely follow contours.

Proper Installation Methods:
Excavate a trench the length of the planned slope barrier that is 6" deep by 4" wide. Make sure that the trench is excavated along a single contour. When practicable, slope barriers should be placed along contours to avoid a concentration of flow. Place the roll on the upslope side of the trench. Place the edge of the fabric in the trench starting at the top upslope edge. Line up three sides of the trench with the fabric. Backfill over the fabric in the trench with the excavated soil and compact. After filling the trench, approximately 24" to 36" of silt fence fabric should remain exposed. Lay the exposed silt fence upslope of the trench to clear an area for driving in the posts. Just downslope of the trench, drive posts into the ground to a depth of at least 18". Place posts no more than 4' apart. Attach the silt fence to the anchored post with staples, wire, zip ties, or nails.

List of common placement/Installation mistakes to avoid:
When practicable, do not place silt fence slope barriers across contours. Slope barriers should be placed along contours to avoid a concentration of flow. When the flow concentrates, it overtopps the barrier and the silt fence slope barrier quickly deteriorates. Do not place silt fence posts on the upslope side of the silt fence fabric. In this configuration, the force of the water is not restricted by the posts, but only by the staples (wire, zip ties, nails, etc.). The silt fence will rip and fail. Do not place silt fence fabric in areas with shallow soils underlain by rock. If the barrier is not sufficiently anchored, it will wash out. Silt fence slope barriers must be dug into the ground—silt fence at ground level does not work because water will flow underneath.

Inspection and Maintenance:
Silt fence slope barriers should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:
• Are there any points along the slope barrier where water is concentrating?
• Does water flow under the slope barrier?
• Do the silt fences sag excessively?
• Has the silt fence torn or become detached from the posts?
• Does sediment need to be removed from behind the slope barrier?



NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

4" PERFORATED PIPE W/ GRAVEL

SECTION C-C

4" PERFORATED PVC PIPE

2X4 CENTERED IN DRAIN TILE (TO PREVENT DRAIN TILE FROM ENTERING INLET)

BACK OF CURB

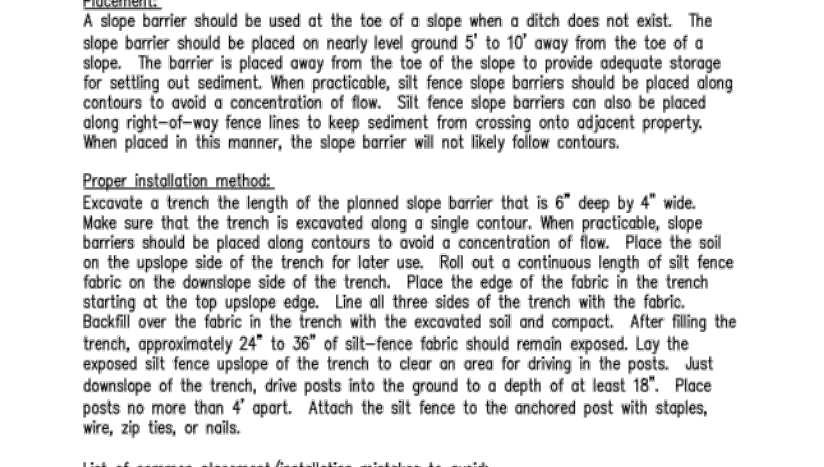
2" (BOTH SIDES)

FLOW

CAP AT EACH END (2 TYP.)

COARSE GRAVEL INSIDE DRAIN TILE

2X4 CENTERED IN DRAIN TILE (LENGTH VARIES - SEE TABLE)



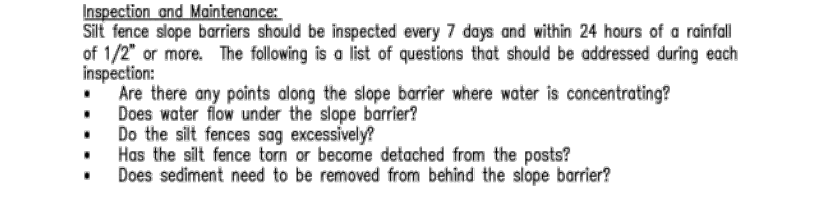
GENERAL NOTES

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.

4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.



Notes:

1. Begin at the location where the wattle is to be installed by excavating a 2-3" deep x 9" wide trench along the contour of the slope. Excavated soil should be placed up-slope from the anchor trench.

2. Place the wattle in the trench so that it conforms to the soil surface. Compact soil from the excavated trench against the wattle on the uphill side. Adjacent wattles should be placed together tightly and overlap at least 2".

3. Secure the wattle with 24" stakes every 3-4' and with a stake on each end. Stakes should be driven through the middle of the wattle leaving at least 2-3" of stake extending down the wattle. Stakes should be driven perpendicular to slope face.

4. Short sections at the ends of barriers shall be turned up-slope.

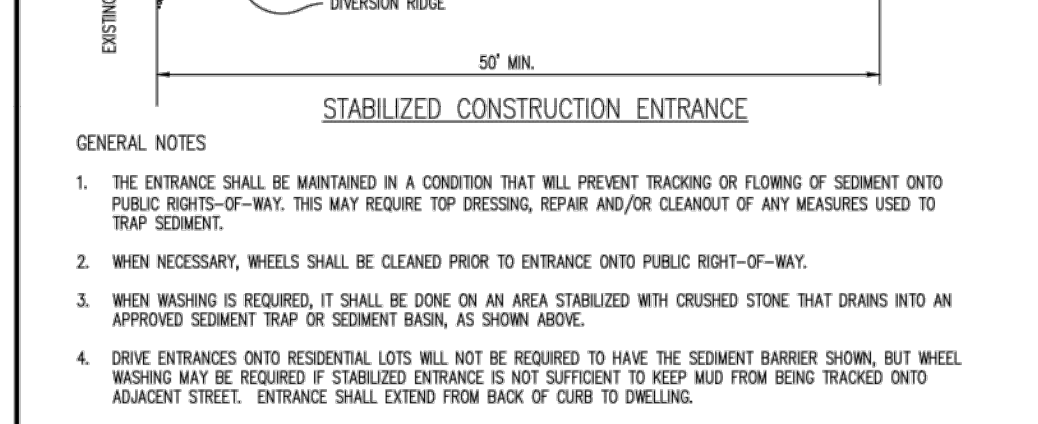
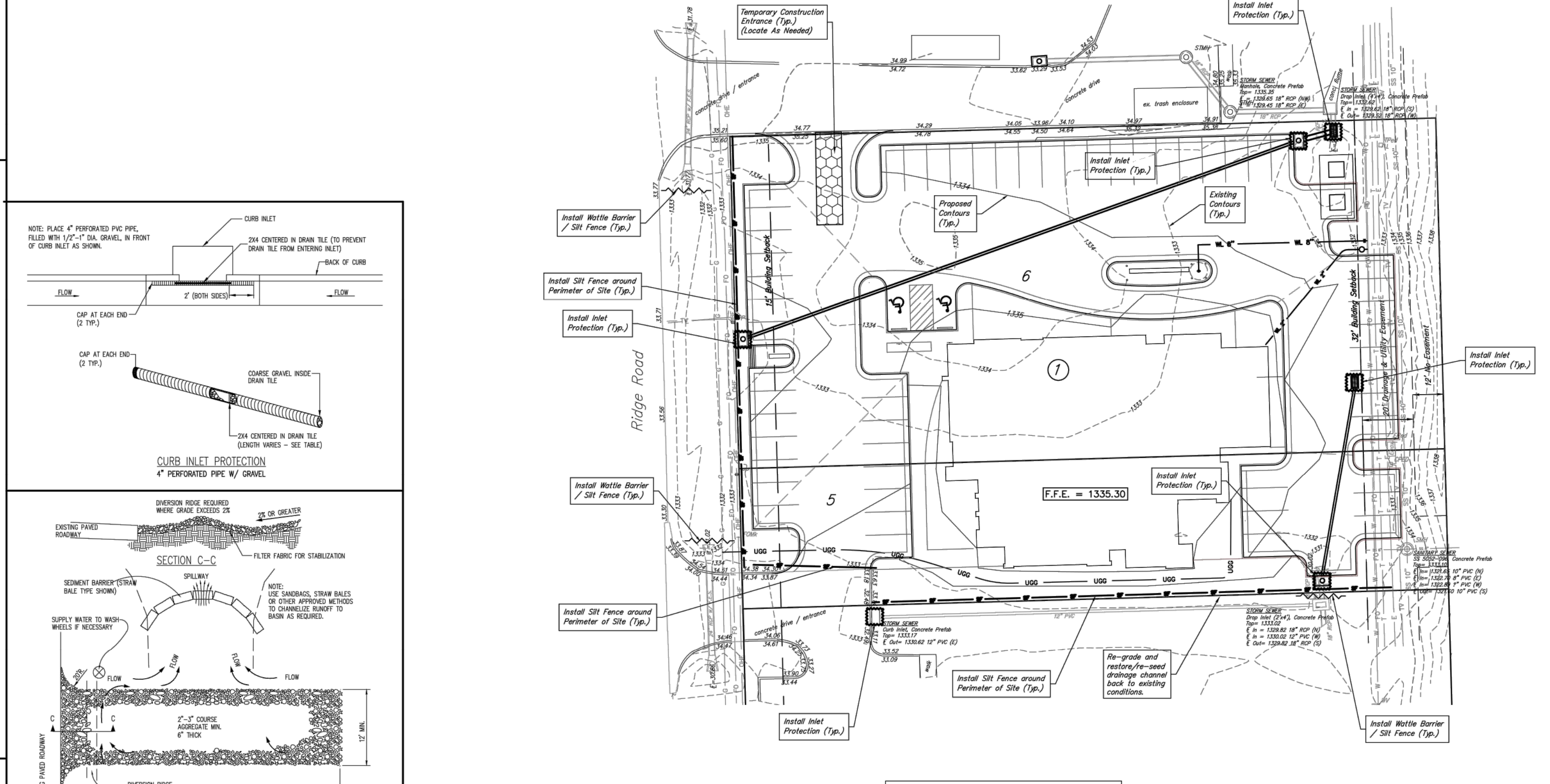
GENERAL NOTES

- The contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions in bid document.
- Contractor will be required to contact the Kansas One-Call system a minimum of seventy-two (72) hours prior to any excavation to request local utility companies to locate any existing utilities within the project area.
Kansas One-Call 811
- The buried utilities as located on the plans are approximate locations only. It should be noted that other buried lines may exist which are not shown on these plans. The contractor shall have all buried lines located and flagged in the field prior to commencing work. The Contractor shall exercise extreme caution during trenching operations to avoid damaging these lines. Any lines discovered shall be repaired or replaced immediately as directed by the engineer at the contractor's expense.
- Existing utilities and their locations, as shown on the plans, represent the best information obtainable for design. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- The Contractor shall avoid removal or trimming of any trees or shrubs where possible. Where the removal or trimming appears to be unavoidable, the Contractor shall coordinate such work with the Owner. Costs for tree/shrub removal and trimming regardless of size shall be considered subsidiary to the project.
- The Contractor shall be responsible for preserving property lines. The contractor will be required to re-establish any property lines which are damaged or destroyed by the construction operations. Such lines shall be re-established by a licensed land surveyor in accordance with state laws. Prior to start of construction the Contractor shall flag and reference all property corners that may be disturbed by construction operations, and verify these in the field in the presence of the engineer and the contractor's surveyor. After construction and before the final inspection, a letter signed and sealed by the licensed land surveyor certifying replacement of all disturbed property corners shall be submitted to the engineer.
- At a minimum, one lane traffic shall be maintained at all times in the immediate area of construction. Immediate area of construction is defined as the block in which construction activities are occurring. Traffic is to be maintained using flagging operations as necessary. The Contractor shall utilize barricades, signs, guards, and flagmen in accordance with the latest version of the Manual on Uniform Traffic Control Devices (MUTCD). Subsidiary to project.

- The Contractor shall contain construction operations to permit local and emergency traffic through and across construction at all times. The Contractor shall erect warning signs, flashing lights and/or barricades in compliance with the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) to ensure safety as directed in the general conditions. The Contractor shall limit the extent of trench to remain open overnight and weekends to less than fifty (50) feet.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.
- All grassed areas disturbed by construction of the proposed improvements shall be replanted with grass and fertilized in accordance with the project specifications. Existing grassed areas disturbed by construction shall be replanted with the same type of grass as was removed. All costs for seeding and fertilizing shall be considered subsidiary to project.
- The Contractor shall seed all areas disturbed by construction activities with temporary rye grass. Rye grass seed shall be planted at a minimum rate of six (6) pounds per one thousand (1,000) square feet. This temporary seeding may be omitted only if other seeding is required. Temporary seeding or permanent seeding/sodding shall be applied within 14 days after the area has been disturbed. All costs for temporary rye grass seeding shall be considered subsidiary to "Site Clearing and Restoration."
- The Contractor shall restore all ditches, swales, road shoulders, and banks to their original slopes and grades. Where existing entrance pipes, drainage pipes, signs, fences, etc. conflict with the proposed work herein, they shall be removed and replaced or reset unless otherwise noted on the plans. The replacement of all aforementioned items, including seeding, fertilizer, and mulching shall be considered subsidiary to project.
- The Contractor shall not start work on the project until the project inspector is assigned and is present on the site. Any work done without inspection will be required to be uncovered for inspection at the Contractor's expense.
- The Contractor is responsible for providing erosion control as needed regardless of what the construction documents show. The Contractor shall meet the City of Wichita erosion and sediment control BMP requirements.
- The Contractor shall obtain all necessary permits prior to beginning construction on the project.
- Excess material generated by the re-grading of the site shall be used for site fills and wasted as approved by the Owner. Borrow, if required, shall be from an approved off-site source.
- All open excavations shall be protected with safety fences.
- The Contractor shall apply necessary moisture to the construction area and temporary haul roads to prevent the spread of dust.

BMP NOTES

- Contractor will be required to comply with the Erosion Control plan and Stormwater Pollution Prevention Plan (SWPPP) as filed with the Office of Water (OW) and detailed in the project plans. BMPs shall be maintained by the Contractor during construction. The Contractor will be responsible for maintaining records of the required inspections and maintenance per the SWPPP submitted with the MDC.
- Erosion control measures shall be maintained regularly. Inspections shall be made at least bi-weekly, and within 24 hours of a 1/2" or greater storm event. Any damage to the erosion control measures shall be repaired by the contractor within 7 days.
- Deposits of silt shall be removed as necessary to maintain the proper function of the erosion control measures.
- Silt fence locations shown on this sheet are recommendations. Typically, silt fence shall be placed down-slope from areas of soil disturbance to intercept soil loss from the disturbed area. Also, silt fence shall be placed down-slope from stockpiled excavated material.
- Contractor shall install silt fence, or other approved measures around all inlets.
- Contractor is to install and maintain BMPs as necessary to prevent erosion.
- Upon completion of construction, the Contractor shall remove all construction debris and restore the project area to a condition comparable to existing. Disturbed areas outside pavements shall be seeded to Owner's Specifications. Seeding to include top soil preparation, seeding and mulching.
- All areas disturbed by construction activities shall be restored by seeding and mulching, using Owner Approved Seed. Street Right-of-Way shall be restored with City Approved Seed.



DATE:
DESIGN DEVELOPMENT
PROGRESS SET
08.11.2021



alloy architecture.com
163 S. ROCK ISLAND, SUITE 200
WICHITA, KS 67202
P: 316.634.1111

PROJECT NUMBER
20132

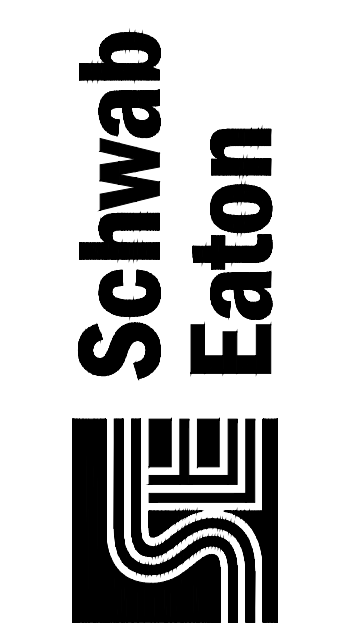
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MID KANSAS
Oral & Maxillofacial Surgery
N. Ridge Rd. & W 27th St. N.
Wichita, Kansas

SHEET

C3.0
Schwab Eaton



WATER DISTRIBUTION SYSTEM
to serve
ESTANCIA COMMERCIAL ADDITION
2021-036064 PPW (183021)

Revisions:

Date:	Oct. 2021
SE Project No:	21.W023
Drawn By:	MWS
Checked By:	MWS

Sheet Name:
Site Erosion Control Plan
(Information Only)

Sheet No:
05

For Information Only



