

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 1-316-268-4555
 City of Wichita Sewer 1-316-268-4073
 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
 Westar 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 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 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 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 Water Distribution Division shall field locate water valve 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 field grades.
- The Contractor shall notify the consultant engineer and Tom Mason with the City at 316-268-4574 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 is impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer, Brian Coon 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 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 U.S.G.S. Datum (NAVD 88).
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.

- A portion of excess excavated material shall be mounded around manholes which extend more than one (1) foot above the existing ground. Such mound shall be constructed with new development a six (6) foot diameter flat top with 4 to 1 side slopes down to the original ground. The elevation of the flat top of the mound shall be 0.4 foot below the top to the manhole.
- Geotechnical report available upon request.
- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- Contractor shall provide positive drainage away from all manhole covers.
- City maintenance of storm sewer ends at right-of-way or easement line.
- Any sidewalk, drive approach, 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.
- The inspecting firm shall submit to the City Stormwater Maintenance Division a digital copy of the CCTV inspection of the conduits and structures following construction. The digital file formation shall be compatible with the City input template. A copy of the template is available upon request at 316-268-4090.
- All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on-site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Site Restoration".
- All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the engineer.
 Seed: Kansas Premium Fescue Blend: 8 lbs./1000 sq. ft.
 Mulch: Prairie Hay: 2 tons/acre
 Fertilizer: 12-24-12: 850 lbs./acre
 All costs associated with seeding, mulching, and fertilizing shall be included in bid item "Seeding". All seeding operations shall conform to City of Wichita Standard Specifications.
- The Contractor shall not begin work on the project until the Project Inspector is assigned and on site. Any work completed without inspection will be required to be uncovered for inspection at the Contractor's expense.

Benchmarks

Chiseled Square Cut Top of Curb south side of west end of first median along Village Circle west of Ridge Road.
 ELEV.=1336.89 N.A.V.D. 88
 Platted N.G.V.D. 29 Datum.
 The conversion from NGVD to get to NAVD on this site is done by adding 0.45 feet to NGVD.

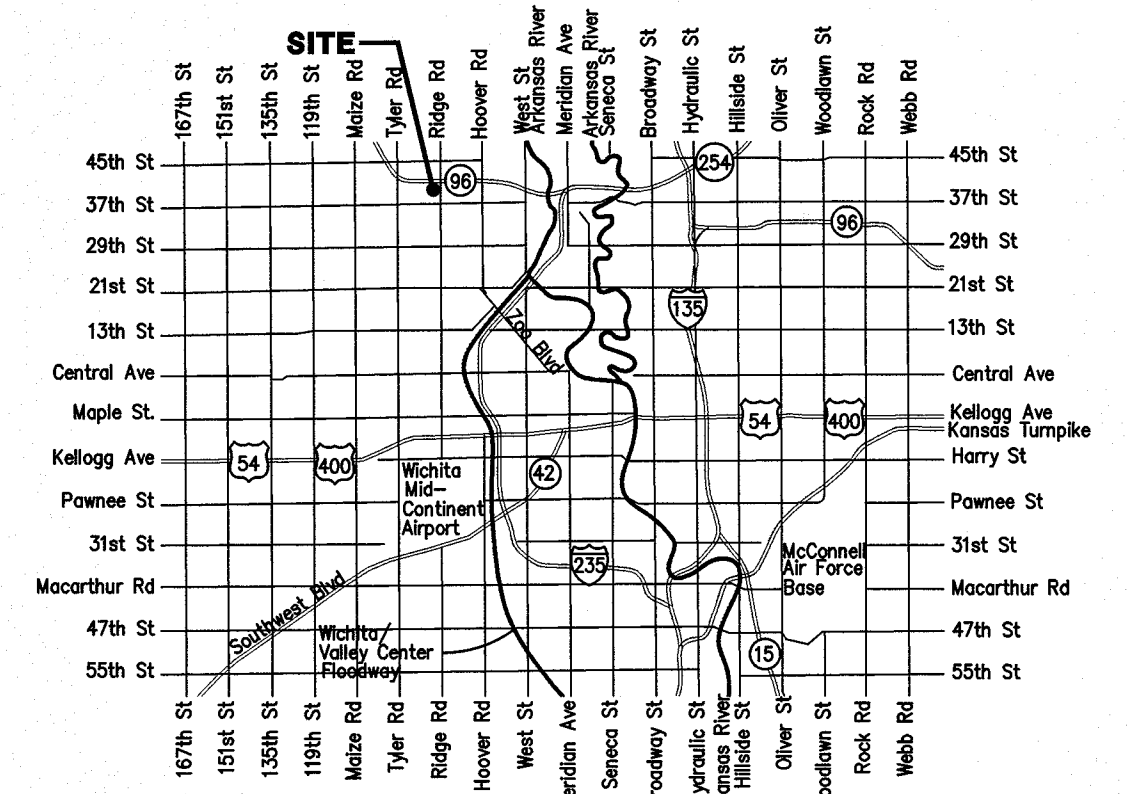
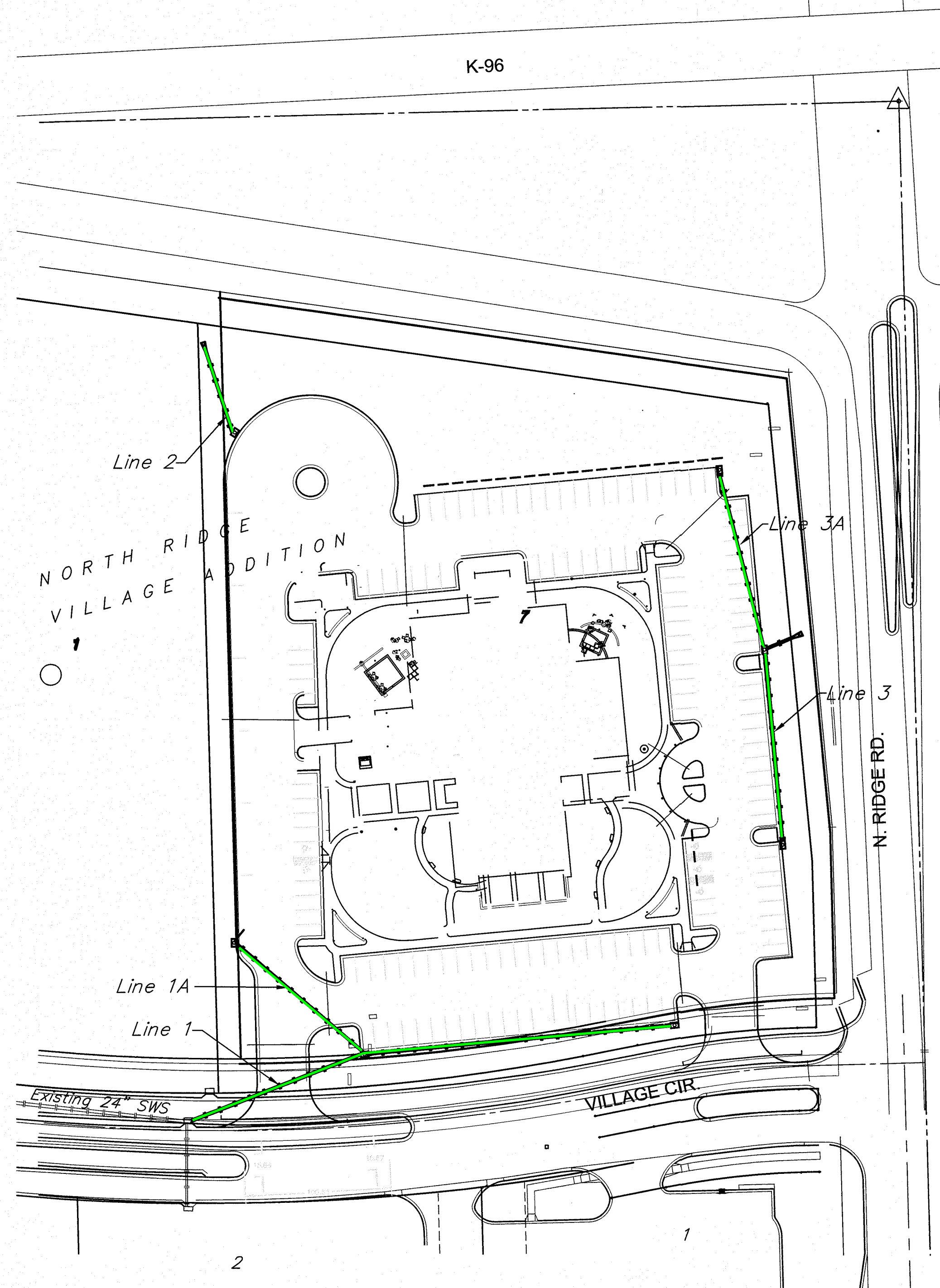
AS BUILT PLANS
 Contractor: Mies
 Inspector: Fred Smith, Baughman Co
 pdf's by: KEK, 9/8/15

STORM WATER SEWER IMPROVEMENT to serve

NORTH RIDGE VILLAGE ADDITION

CITY OF WICHITA, KANSAS

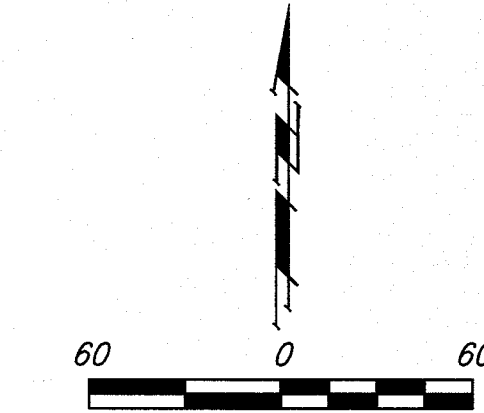
Gary Janzen, P.E. City Engineer
 Project Number
 0293 PPD (607861)



Vicinity Map

Stormwater Certification:
 New Development
 These construction plans were prepared in accordance with the current Stormwater Management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual.
 Disturbed Area = 4.5 ac.
 Water Quality Treatment: sump inlet Snout
 Downstream Channel Protection: Not required on this project.
 The BMPs used for this development is silt fence, construction entrance.

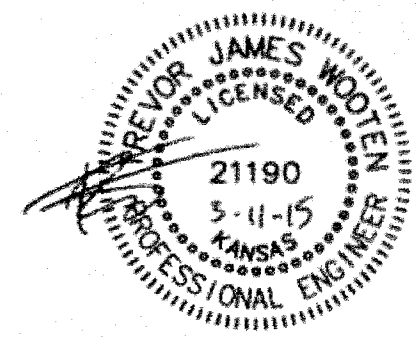
APPROVED AS NOTED
 BY WICHITA PUBLIC WORKS ENGINEERING
 AND STORMWATER DIVISION
 Engineering *Julianne Kellman 3-12-15*
 Stormwater *Jim Handberg 3/12/15*
 NOTE TO CONTRACTORS
 Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer in the state of Kansas. No work shall be performed 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 current City of Wichita Specifications and Standards and Special Provisions (on file and available at Wichita.gov).
 An approved copy of these plans signed by City staff are required on-site.



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Std. Type 1 Curb Inlet Detail	6
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*Erosion Control Details available at City of Wichita web site at
<http://www.wichita.gov/Government/Departments/PWU/Pages/Regulations.aspx>

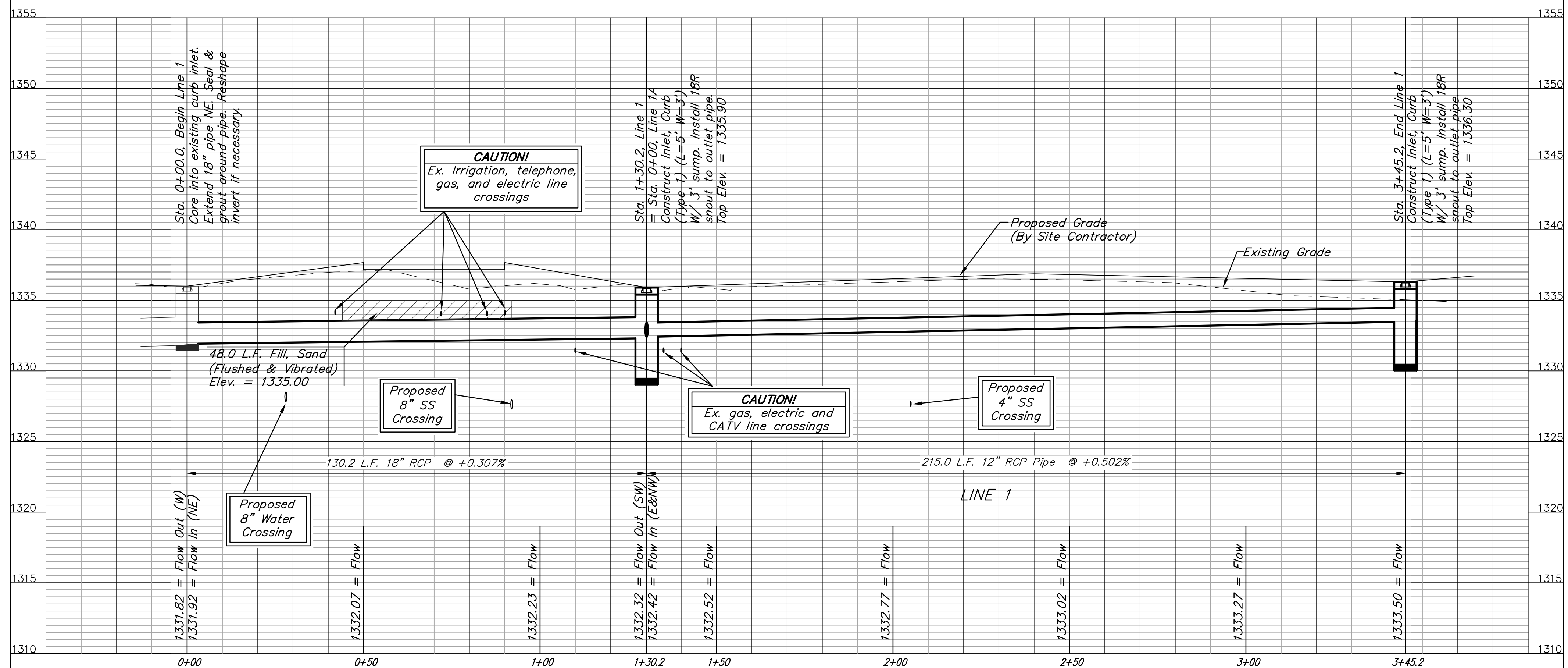
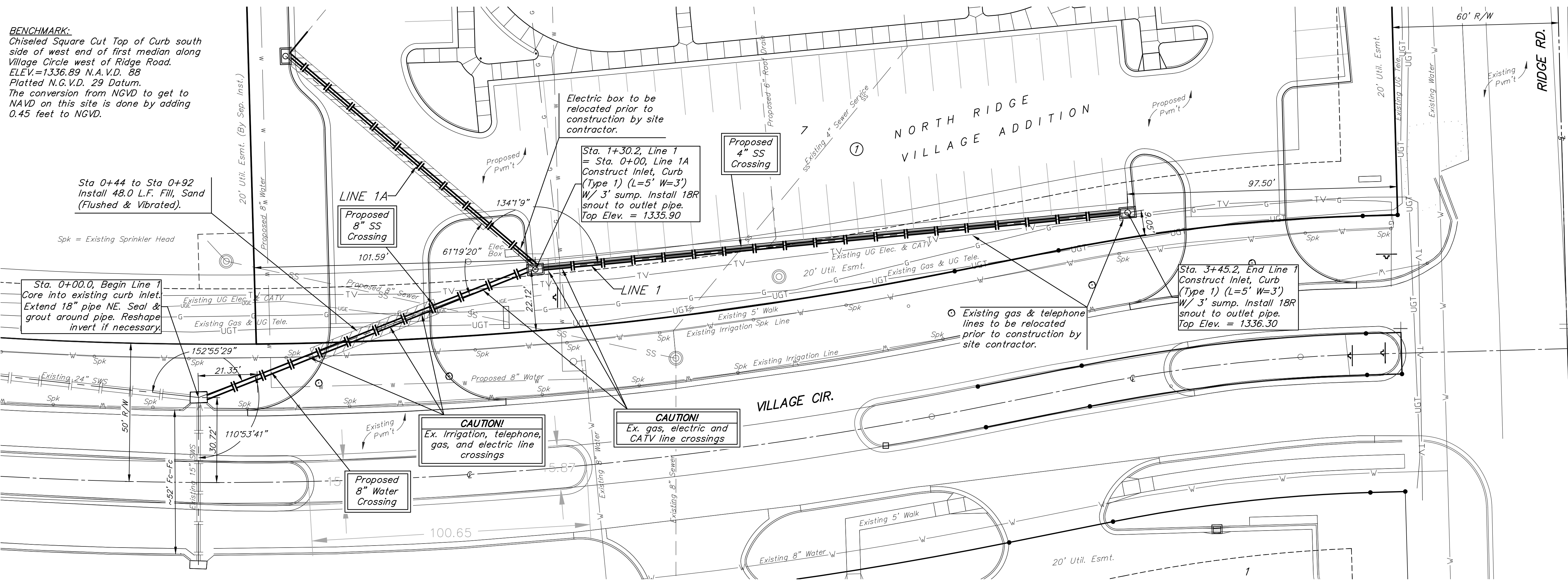


March 2015



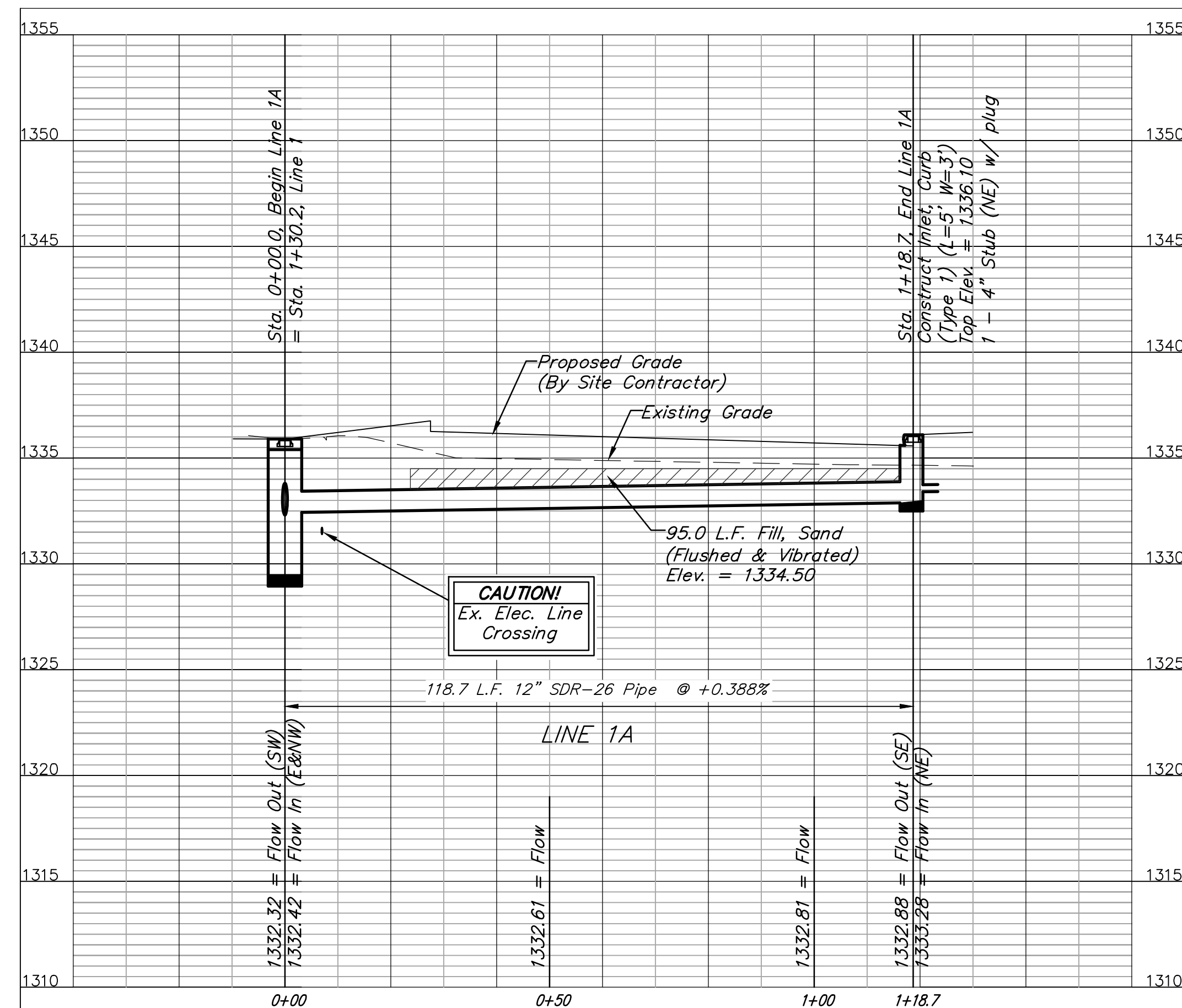
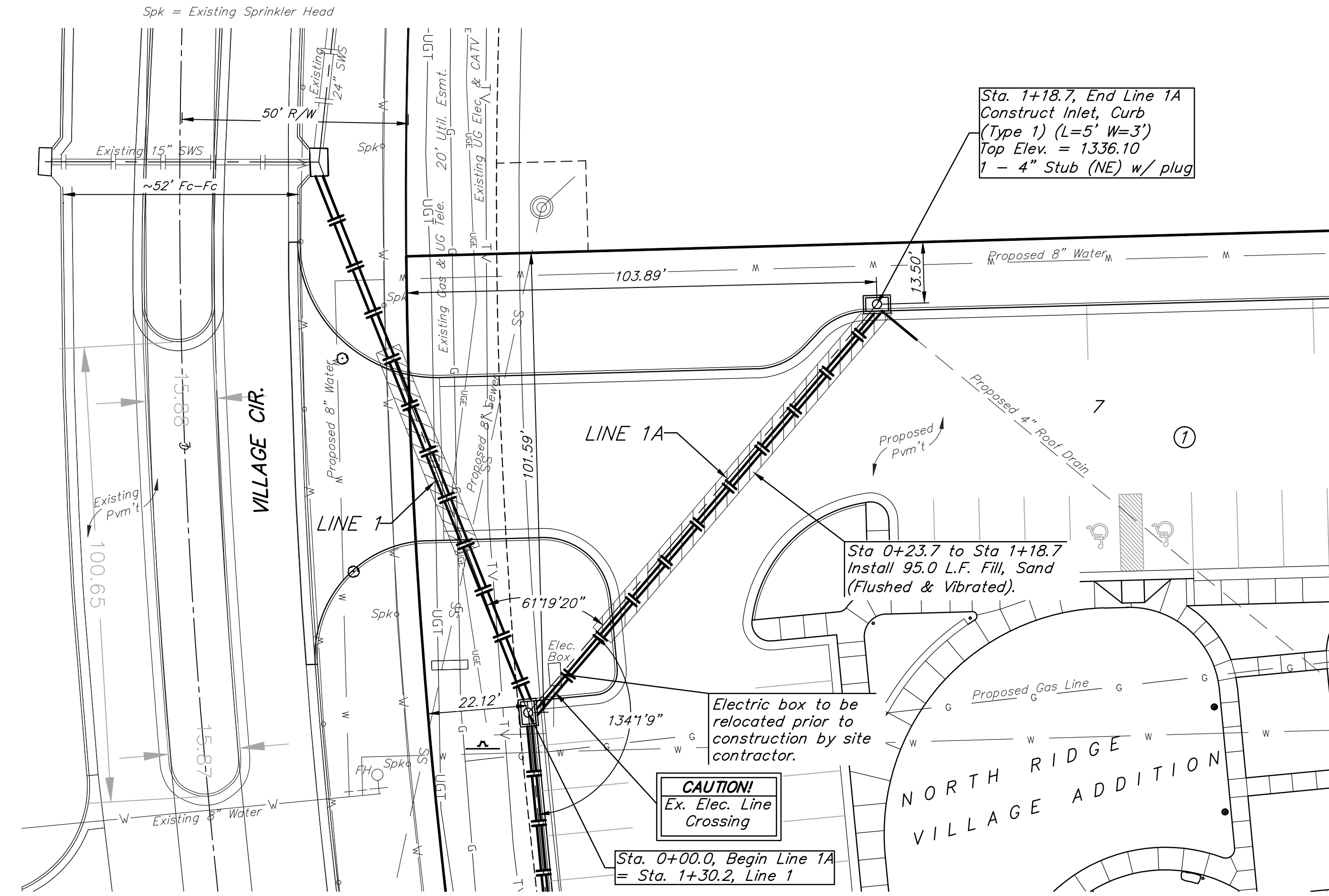
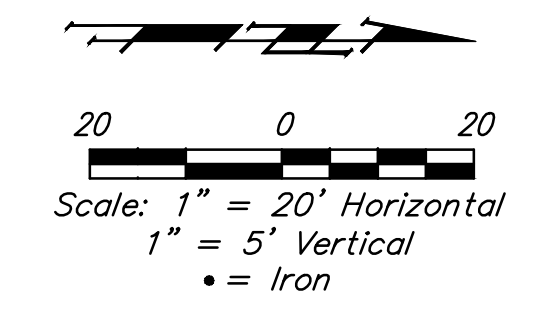
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

BENCHMARK:
Chiseled Square Cut Top of Curb south side of west end of first median along Village Circle west of Ridge Road.
ELEV.=1336.89 N.A.V.D. 88
Platted N.G.V.D. 29 Datum.
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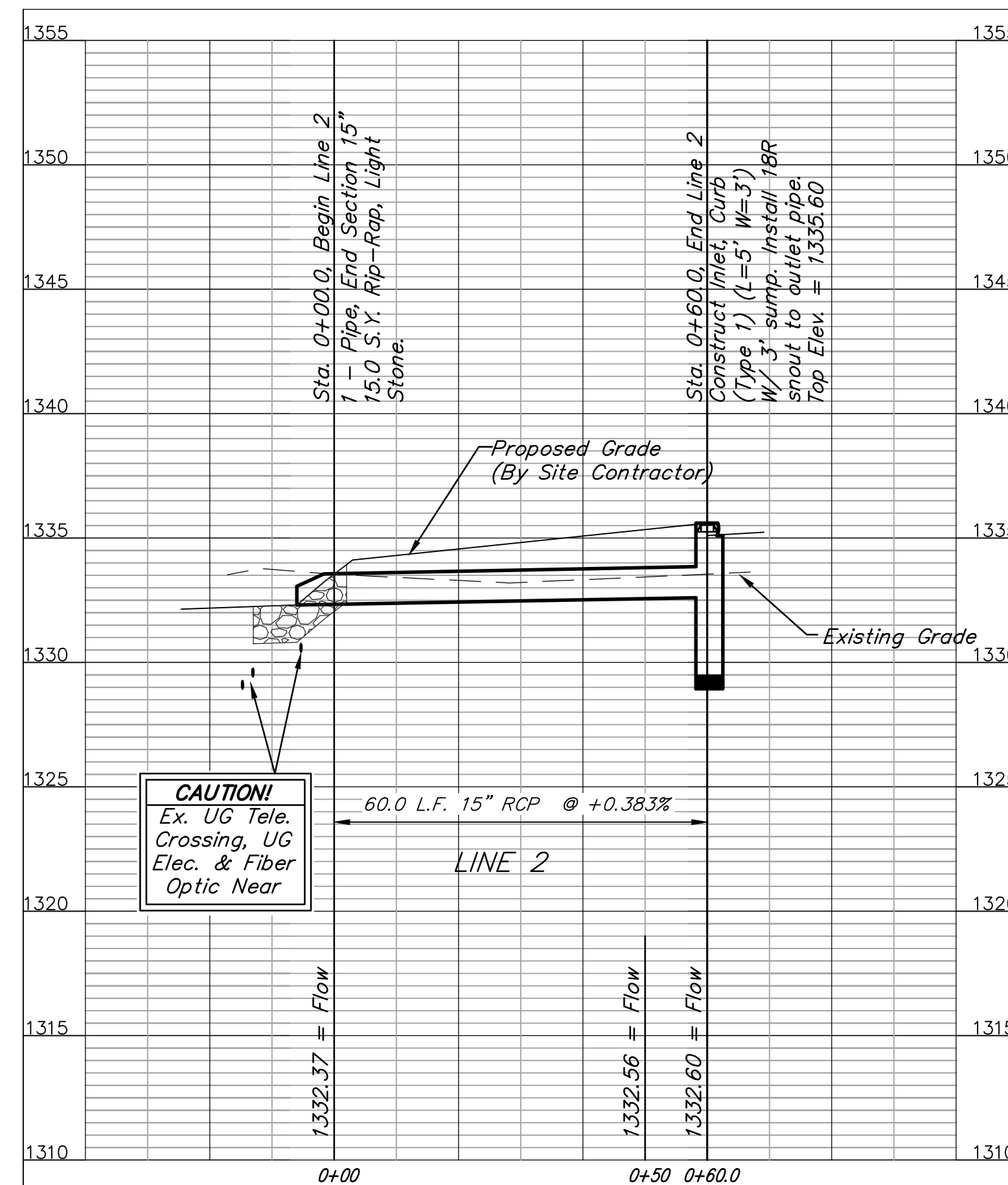
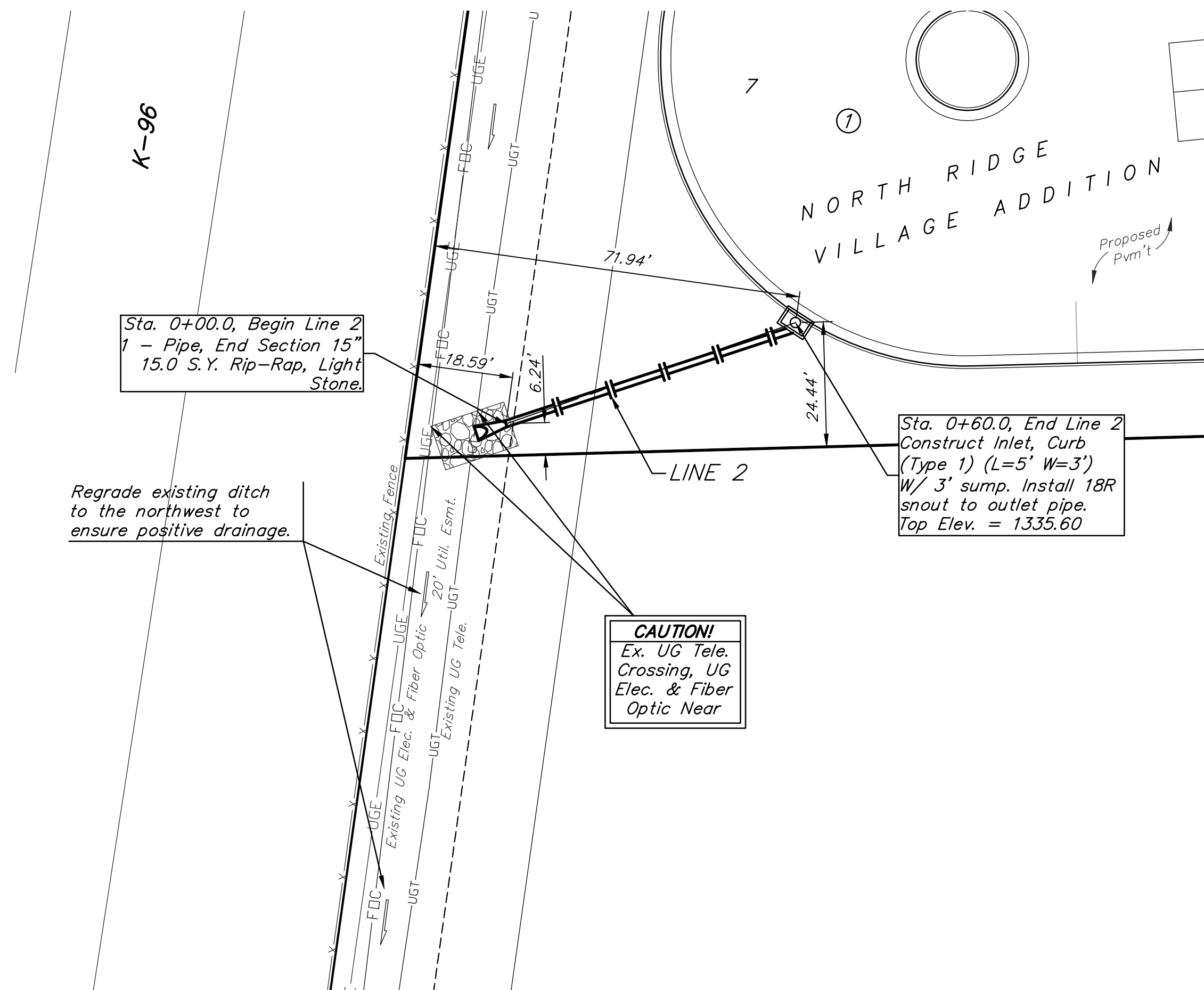
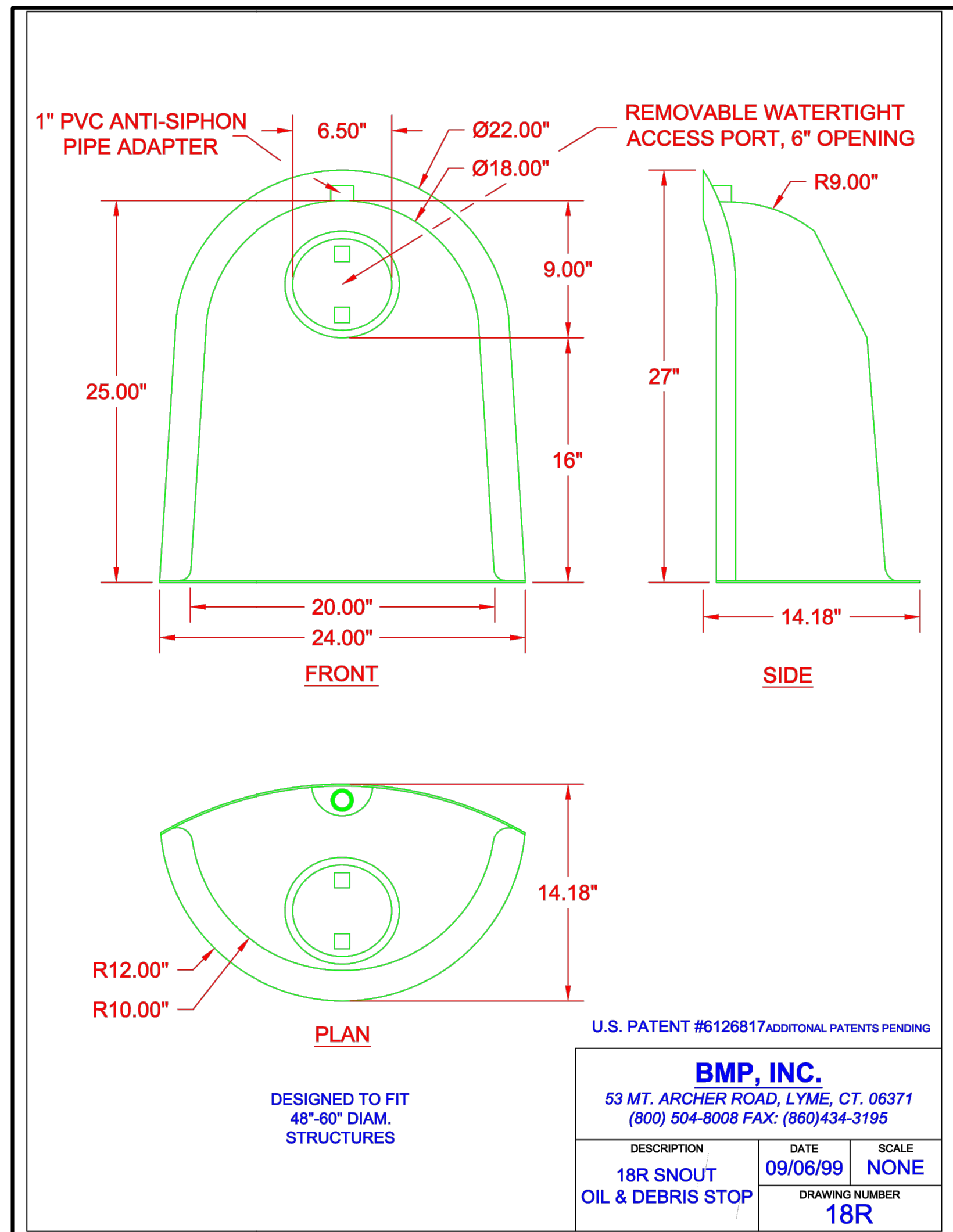
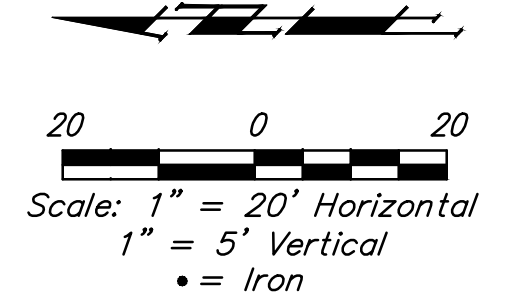
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	LINE 1	
STORM WATER SEWER IMPROVEMENTS		
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PROJECT NUMBER 0293 PPD (607861)	DESIGN TJW	DRAWN TMS
REVISIONS:	APPROVED	DATE 03/15
	SCALE Noted	
	SHEET	2 OF 15

BENCHMARK:
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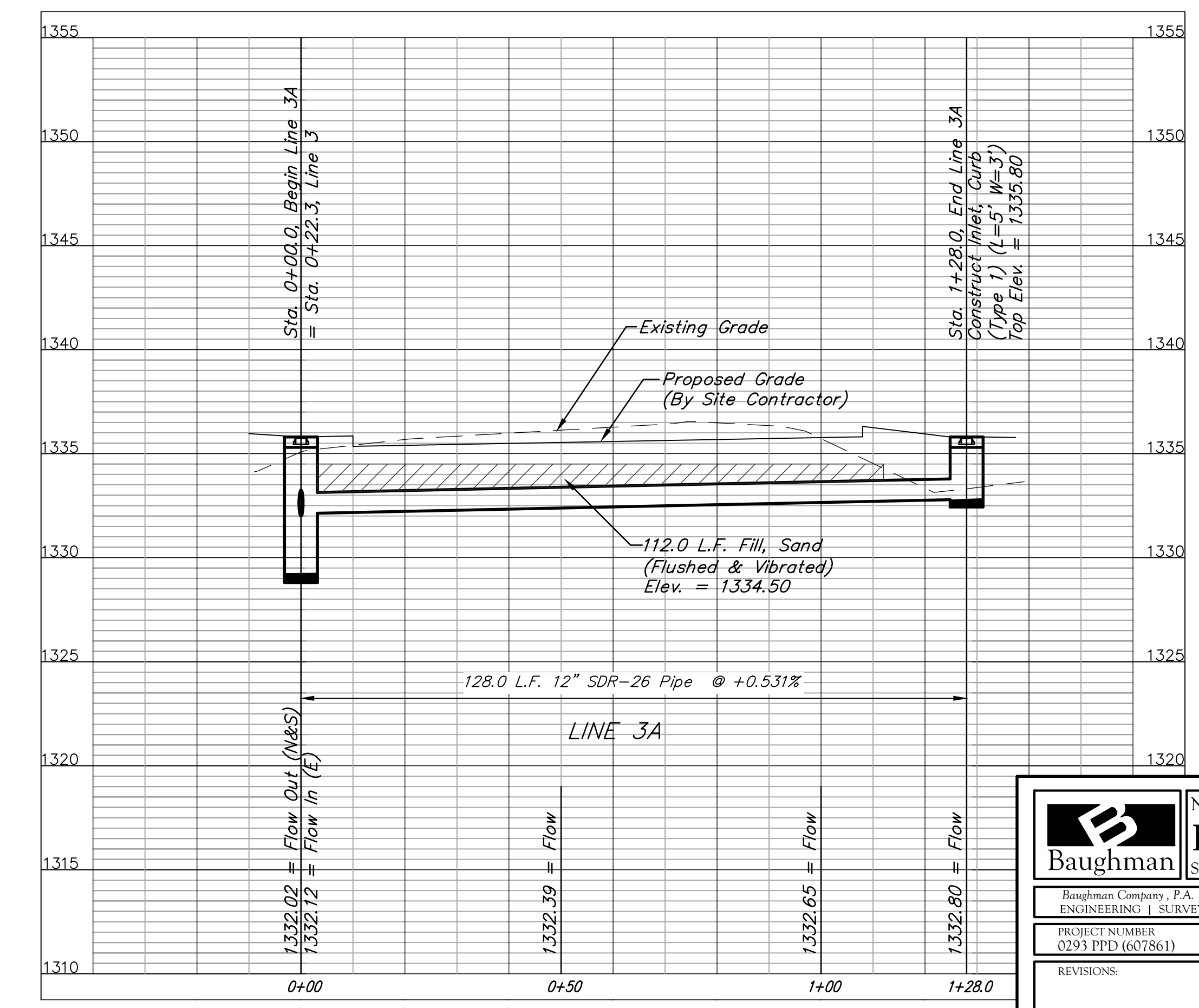
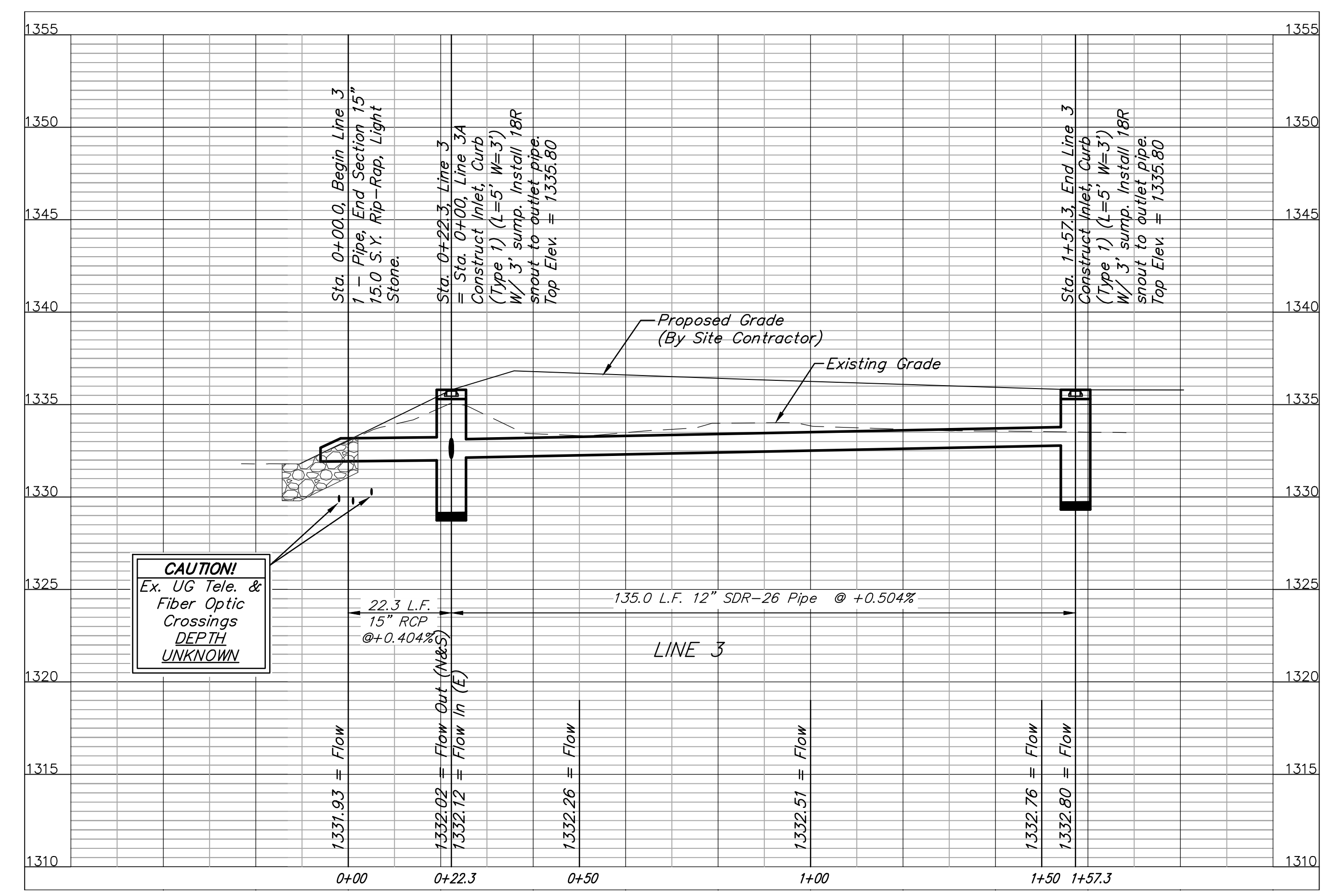
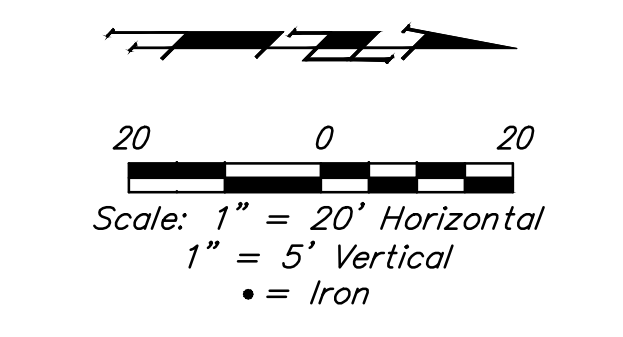
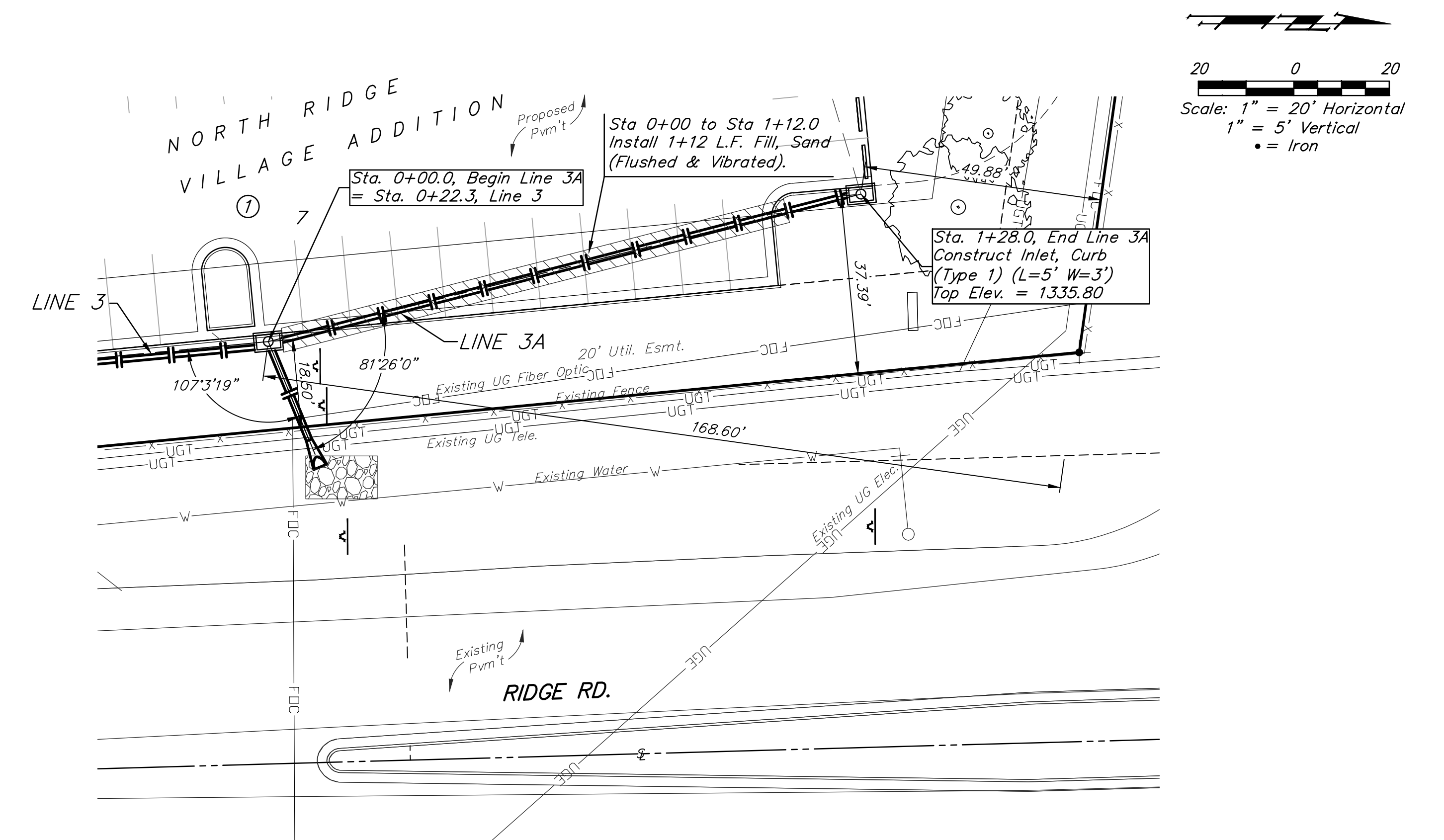
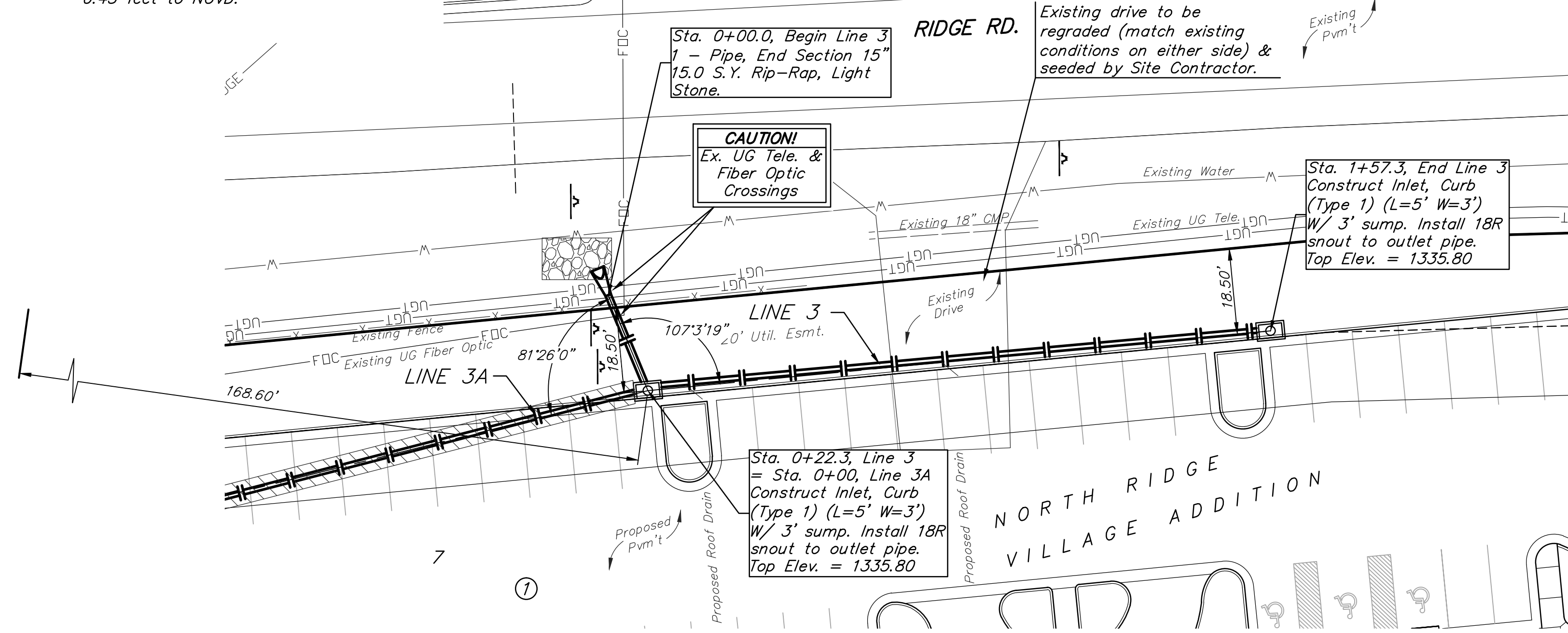
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PROJECT NUMBER 0293 PPD (607861)	DESIGN TJW	DRAWN TMS
REVISIONS:	APPROVED DATE 03/15	SCALE Noted SHEET 3 OF 15
<small>Plans SWS.dwg</small>		<small>14-09-E128</small>

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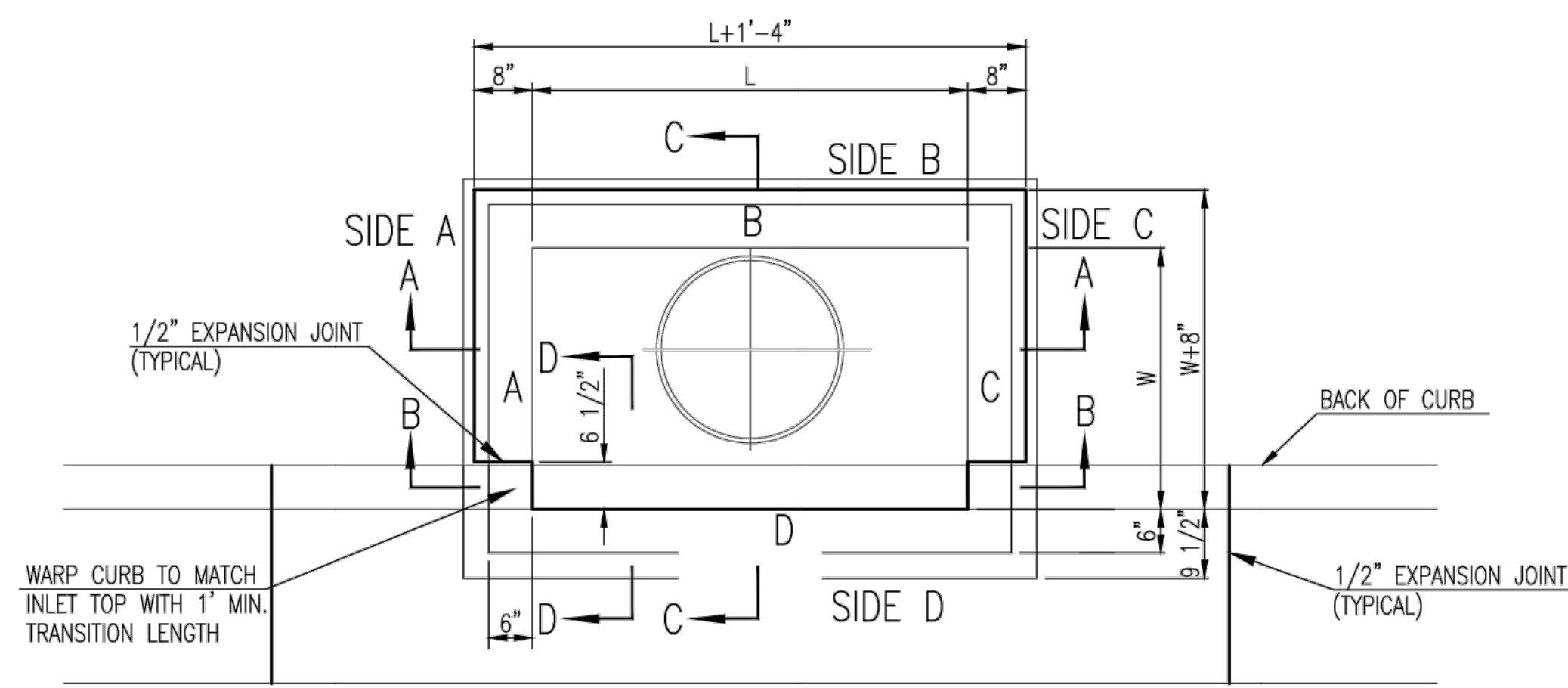


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PROJECT NUMBER 0293 PPD (607861)	DESIGN TJW	DRAWN TMS
REVISIONS:	APPROVED DATE 03/15	SCALE Noted SHEET
		4 OF 15
Plans SWS.dwg		14-09-E128

BENCHMARK:
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		NORTH RIDGE VILLAGE ADDITION	
		LINES 3 & 3A STORM WATER SEWER IMPROVEMENTS	
<small>Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-2771 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>			
PROJECT NUMBER 0293 PPD (607861)	DESIGN TJW	DRAWN TMS	
REVISIONS:	APPROVED DATE 03/15	SCALE Noted	SHEET 5 OF 15
<small>Plans SWS.dwg</small>		<small>14-09-E128</small>	



TOP VIEW

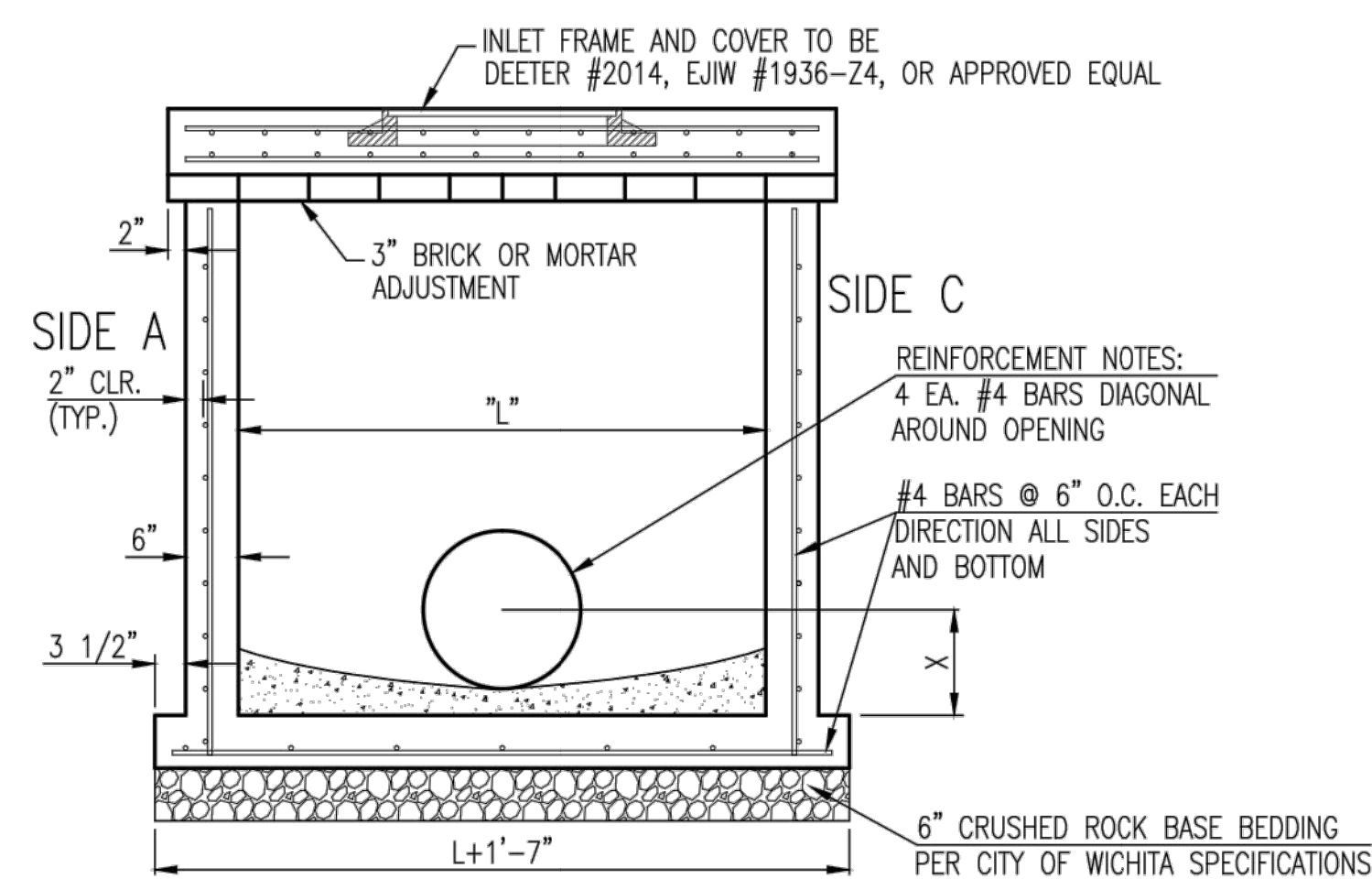
BAR SCHEDULE		
INLET OPENING	B1 BARS	SPACING
5'-0"	#4	4"
10'-0"	#6	3.5"

PRECAST CURB INLET WIDTHS			
W	PRE-CAST TOP SIZE		PIPE DIA.**
	WIDTH	LENGTH	
3'-0"	W+8"	L+1'-4"	21" & SMALLER
4'-0"	W+8"	L+1'-4"	24" & 30"
5'-0"	W+8"	L+1'-4"	36" & 42"
6'-0"	W+8"	L+1'-4"	48" & 54"
7'-0"	W+8"	L+1'-4"	60" & 66"

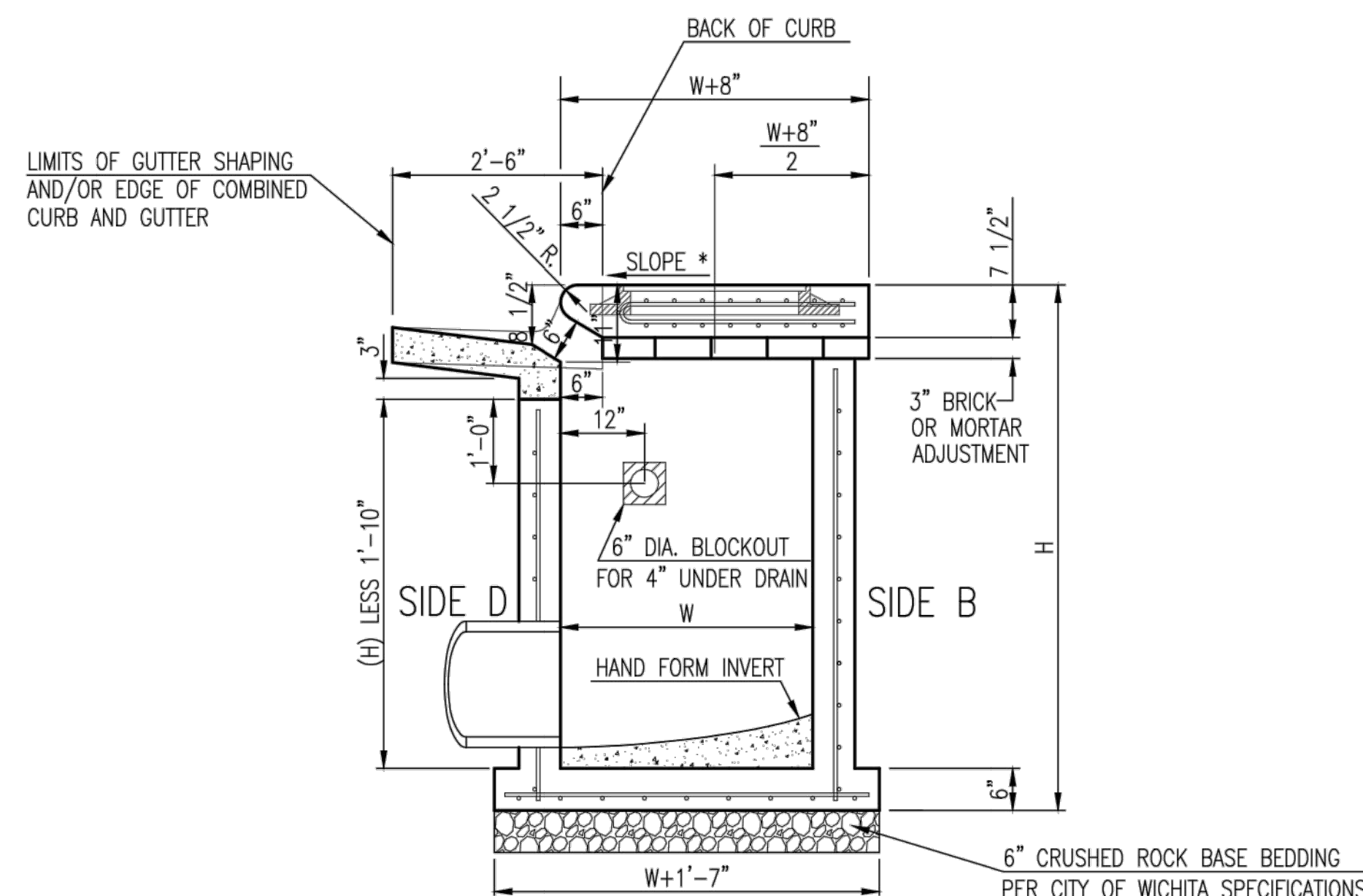
** FOR PIPES PERPENDICULAR TO INLET WALL

GENERAL NOTES

1. CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
2. CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN W=5'-0" AND H=7'-0" OR LESS.
3. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
4. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
5. INLET FRAME AND COVER TO BE DEETER #2014, EJIW #1936 Z4, OR APPROVED EQUAL, SEE SW-303.
6. CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.

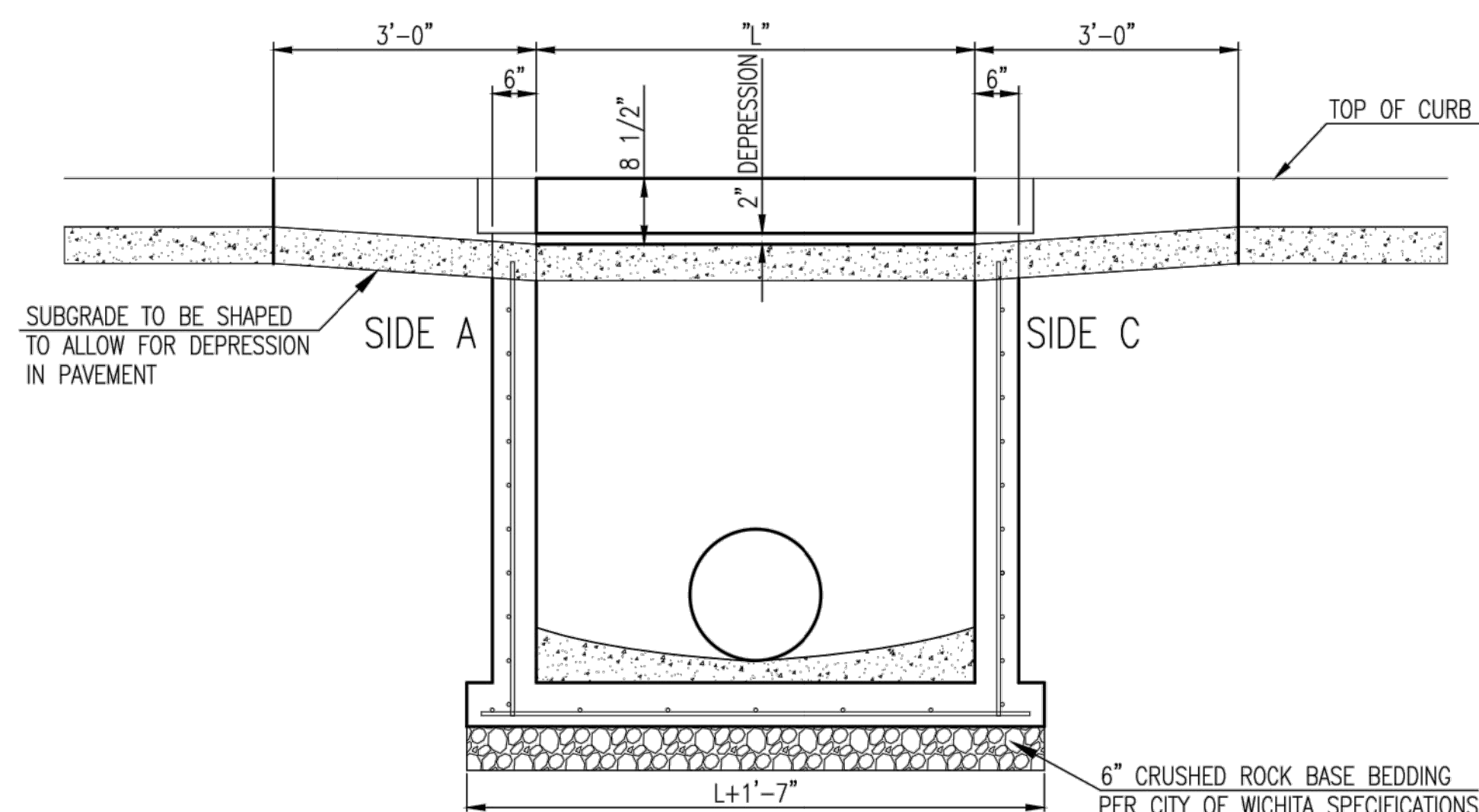
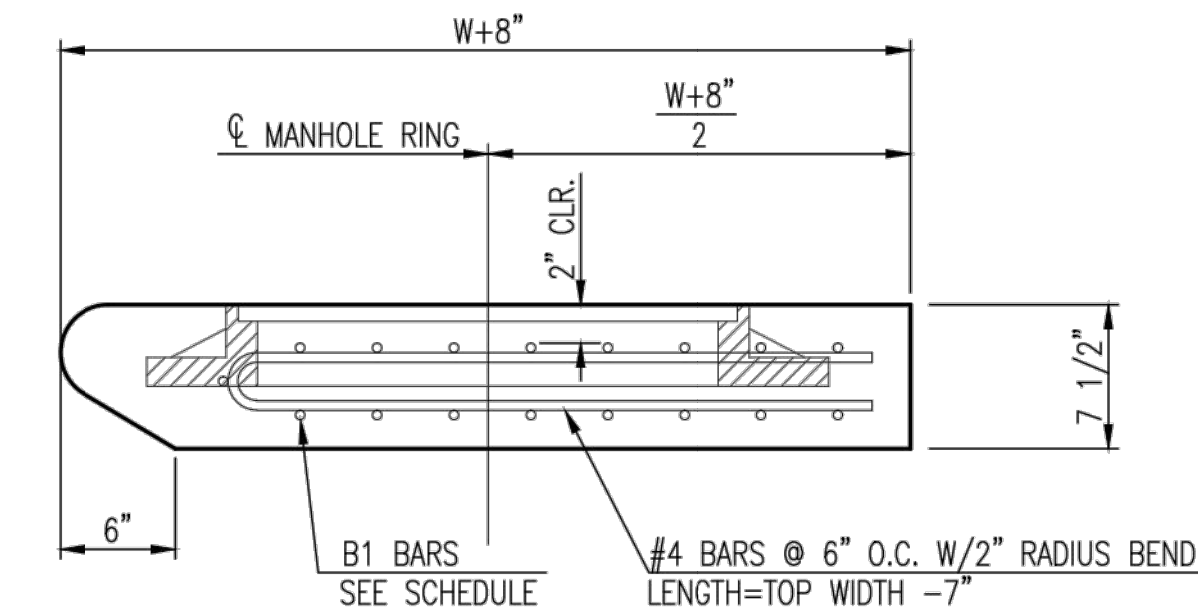


SECTION "A-A"

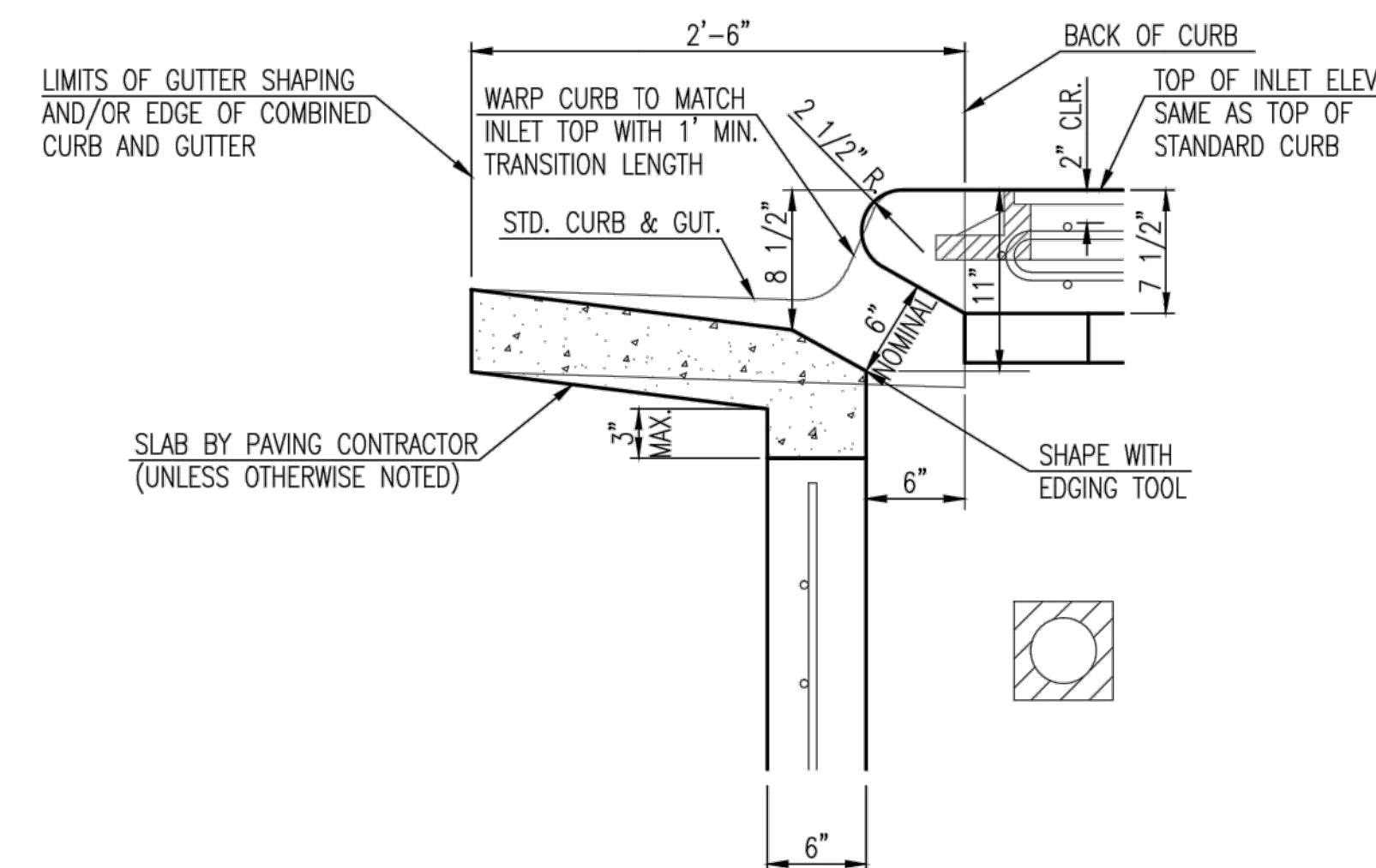


SECTION "C-C"

NOTES:
* SLOPE OF INLET TOP TO MATCH SIDEWALK OR PARKING SLOPES WITHIN LIMITS INDICATED.



SECTION "B-B"



SECTION "D-D"



STANDARD TYPE 1
CURB INLET
5'-0" OR 10'-0" OPENING

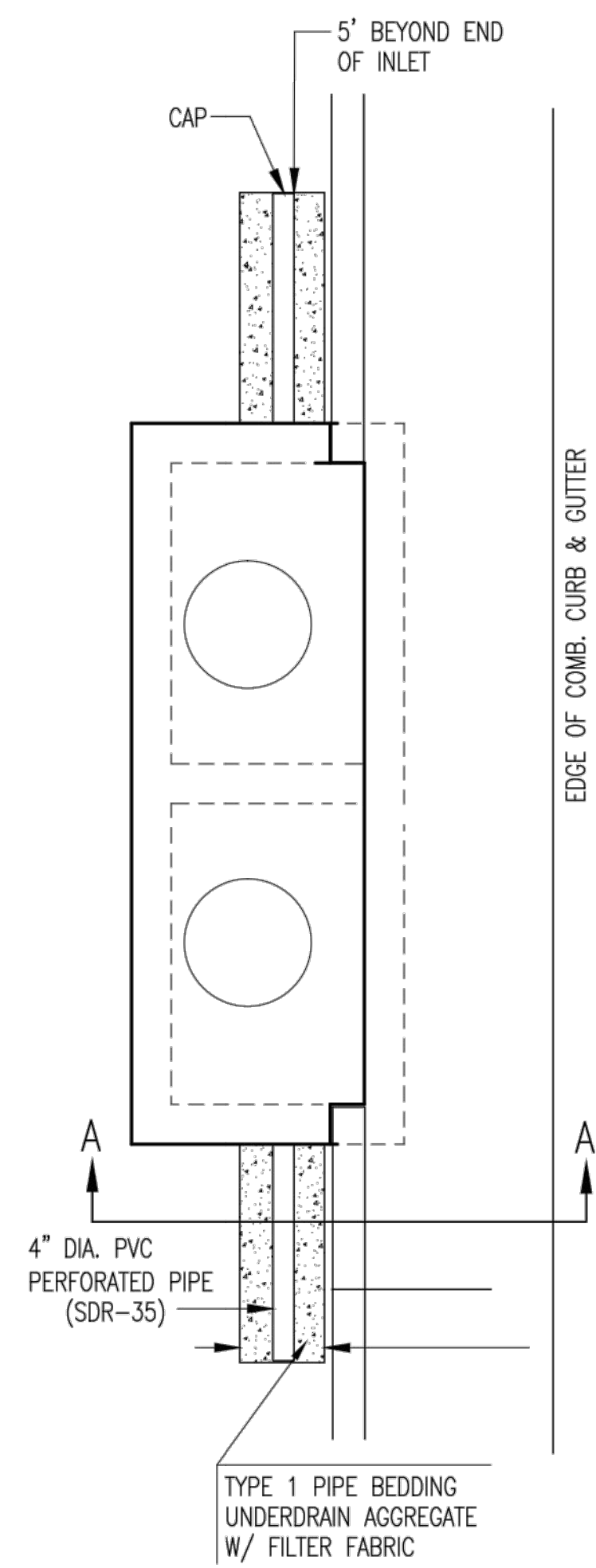
CITY ENGINEER
Gary Janzen, P.E.

PROJECT NUMBER 0293 PPD	OCA NUMBER (607861)	DATE 03/15
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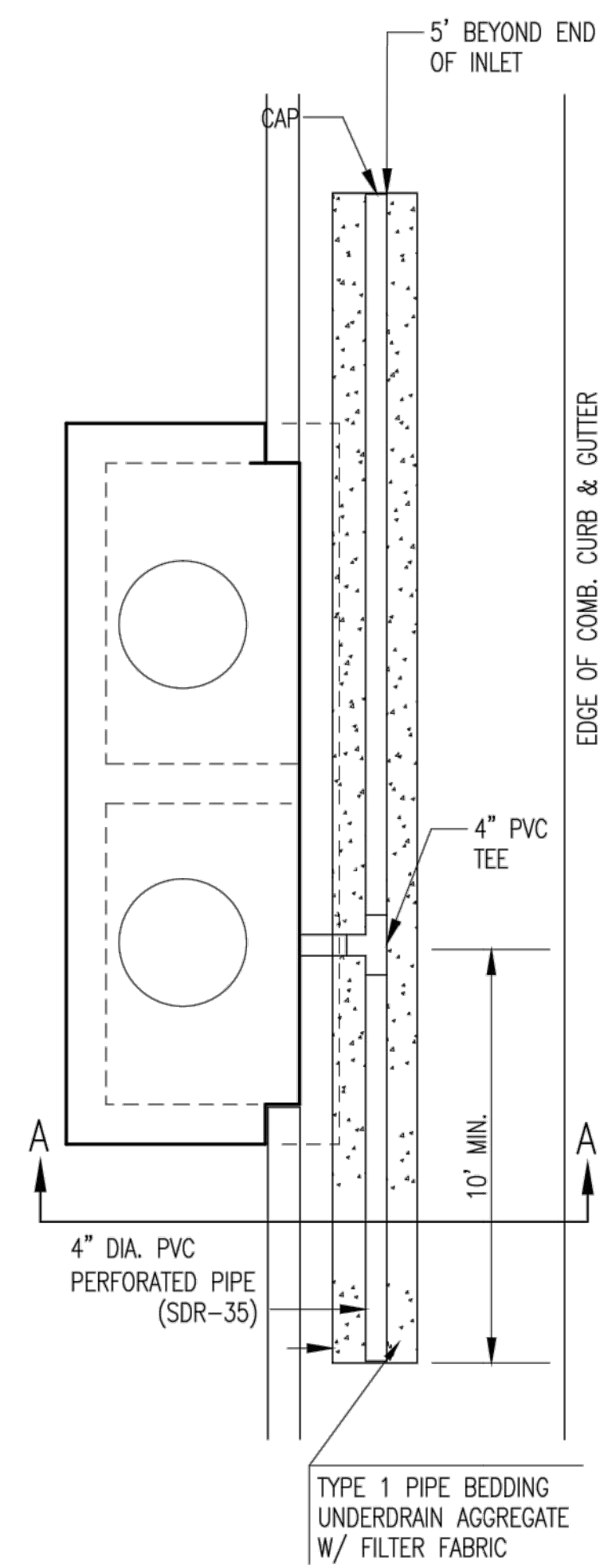
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

DESIGN Staff	DRAWN Staff
SHEET 6 of 15	

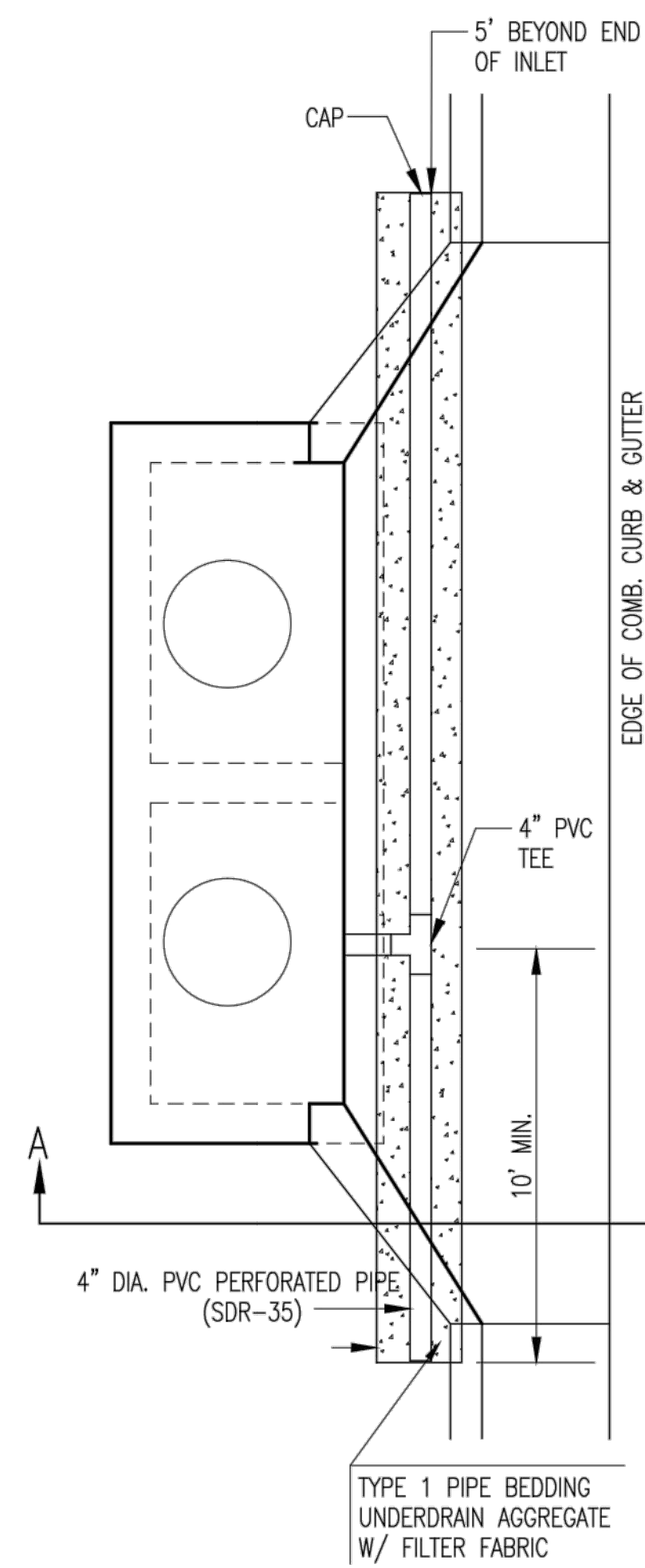
PAVEMENT UNDERDRAIN SHALL BE INSTALLED ON ALL CURB INLETS.



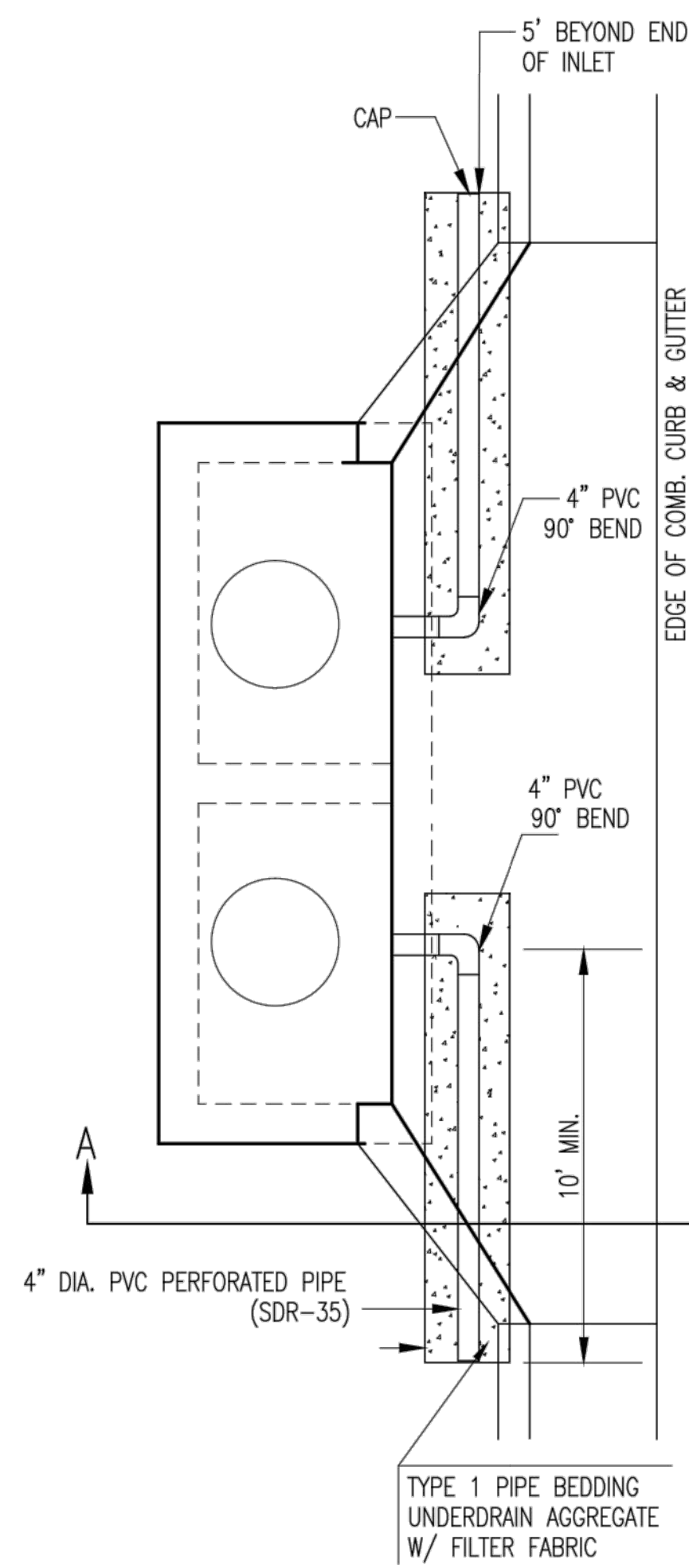
TYPE 1
OPTION 1



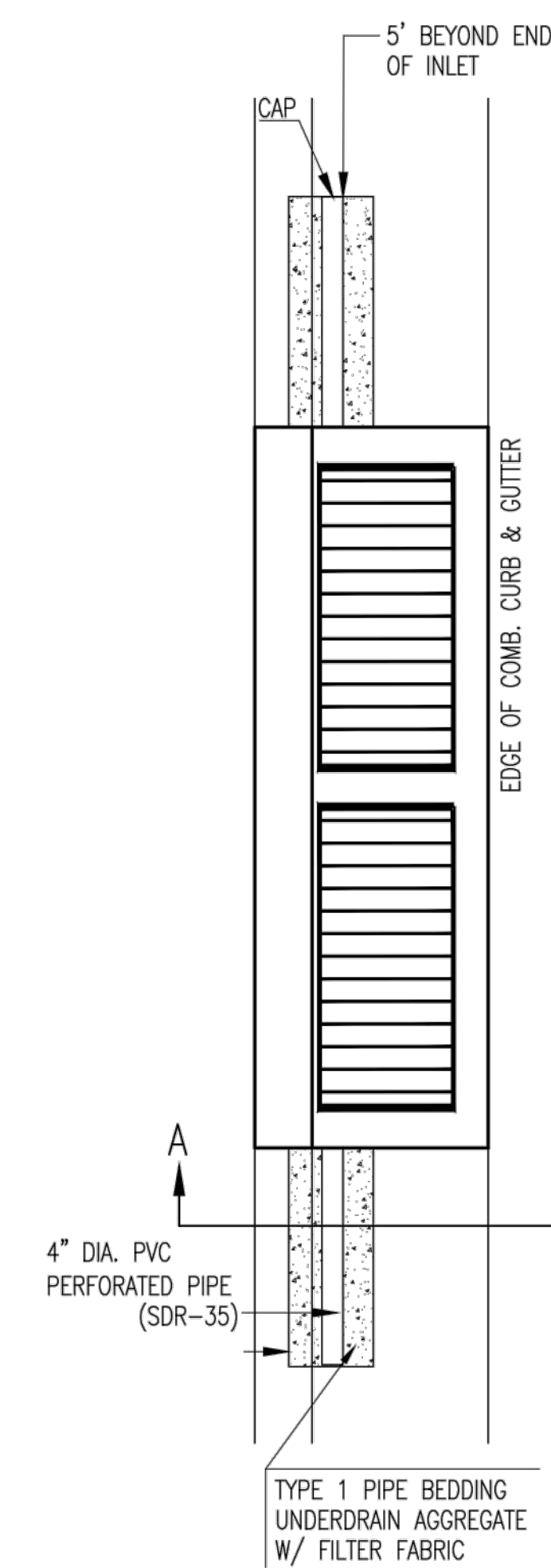
TYPE 1
OPTION 2



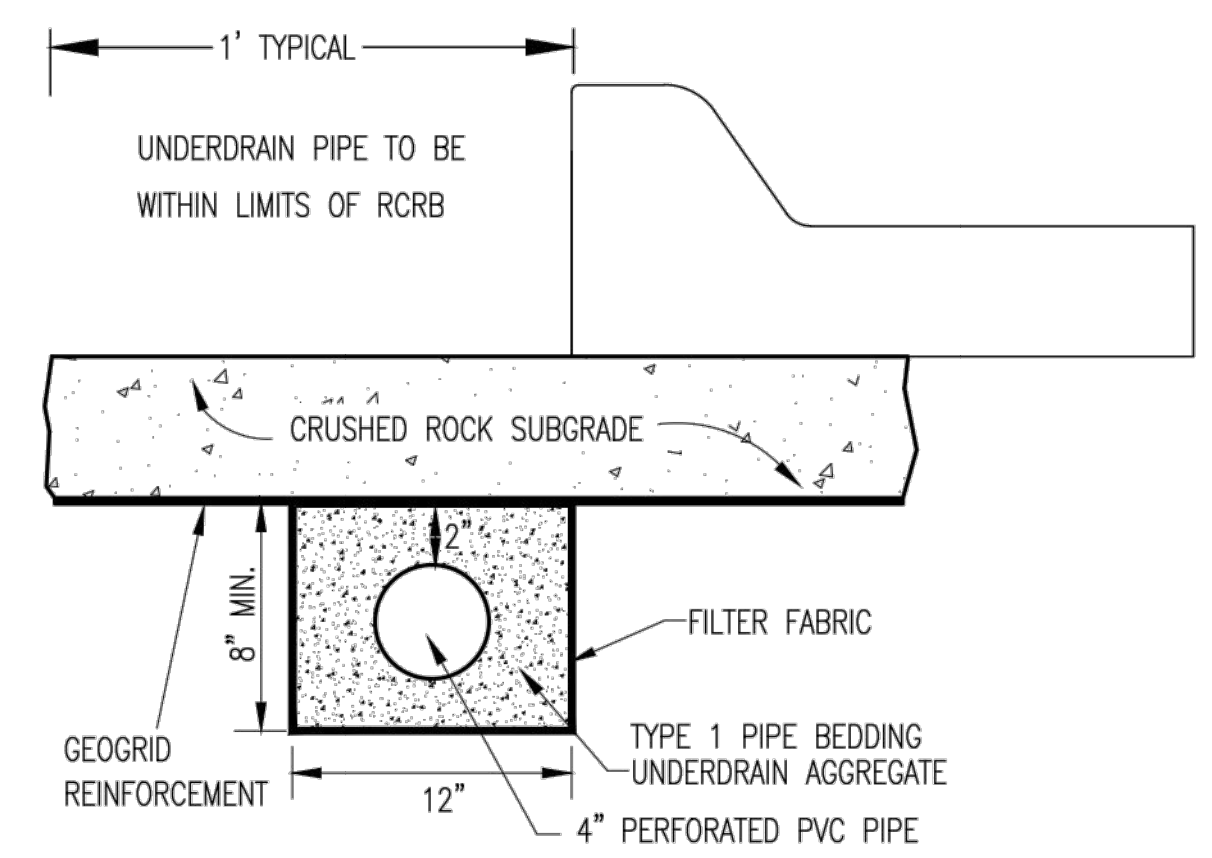
TYPE 1-A INLET
OPTION 1



TYPE 1-A INLET
OPTION 2



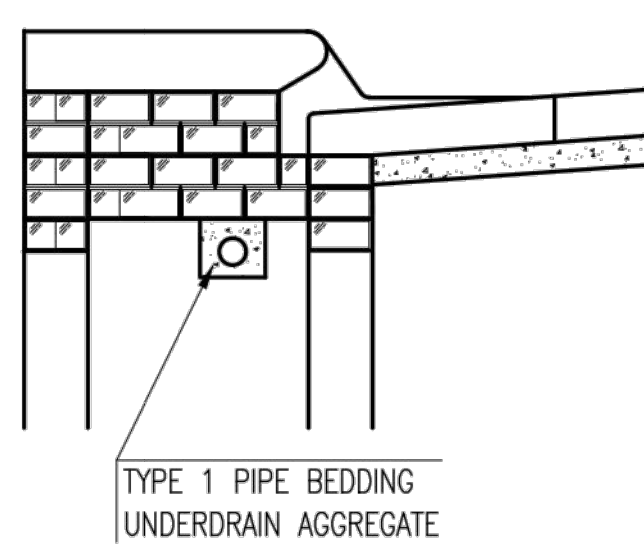
TYPE 2



SECTION A-A (TYPICAL)

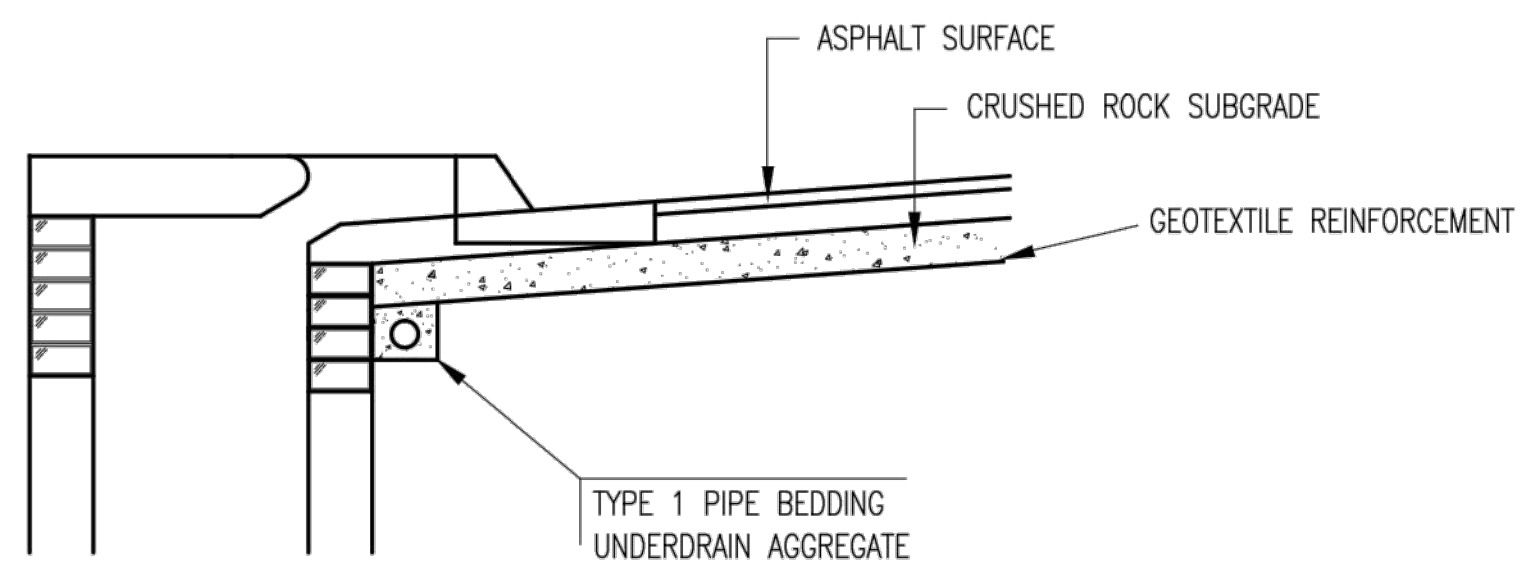
GENERAL NOTES

- PAVEMENT CONTRACTOR WILL BE REQUIRED TO INSTALL SDR 35, 4" PERFORATED DRAIN PIPE AND TEE AS INDICATED IN THE DETAILS.
- WHEN SWS CONSTRUCTED BY SEPARATE PROJECT, SWS CONTRACTOR SHALL INSTALL SDR 35, 4" DRAIN PIPE STUB ONLY THROUGH WALLS OF CURB INLETS AND CAP TO ALLOW FUTURE CONNECTION OF TEE AND ADDITIONAL DRAIN PIPE BY OTHERS.
- UNDERDRAIN PIPE SHALL BE PAID AS A MEASURED QUANTITY BY THE LINEAL FOOT.



(MIN. 16 PERFORATIONS PER LIN. FT. @ 1/4" DIA.)
PERFORATIONS TO BE ON BOTTOM HALF

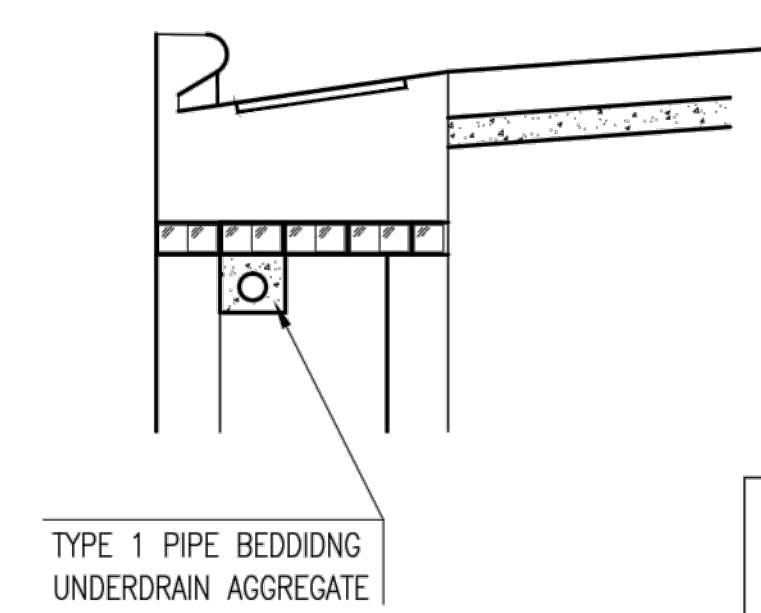
SECTION A-A



SECTION A-A

PAVEMENT UNDERDRAIN DETAIL

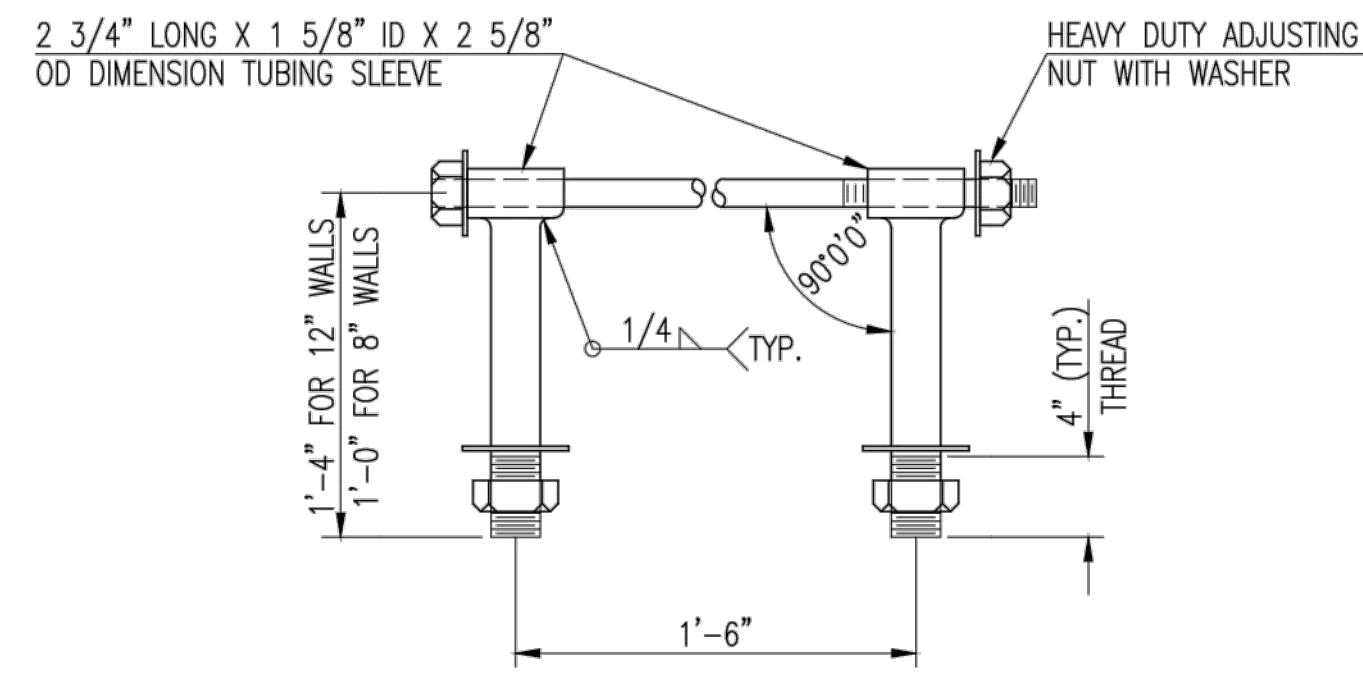
BID ITEM TO BE PROVIDED PER 4" PERFORATED UNDERDRAIN PIPE.



SECTION A-A

CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

CURB INLET PAVEMENT UNDERDRAIN DETAIL		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER 0293 PPD	OCA NUMBER (607861)	DATE 03/15
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 7 of 15

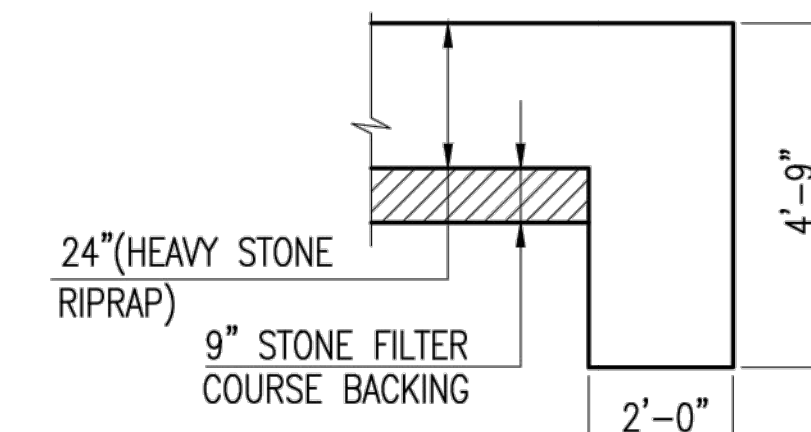


HEAVY DUTY (H.D.) COUPLER

NO SCALE

NOTES

1. BOLTS TO BE A-36 1 1/2" DIAMETER.
2. BOLTS, NUTS, WASHERS AND SLEEVES TO BE ZINC PLATED.
3. WASHERS TO BE 3 1/2" O.D. X 7 GAUGE.
4. SHIP WITH NUTS AND WASHERS PLACED ON BOLTS.



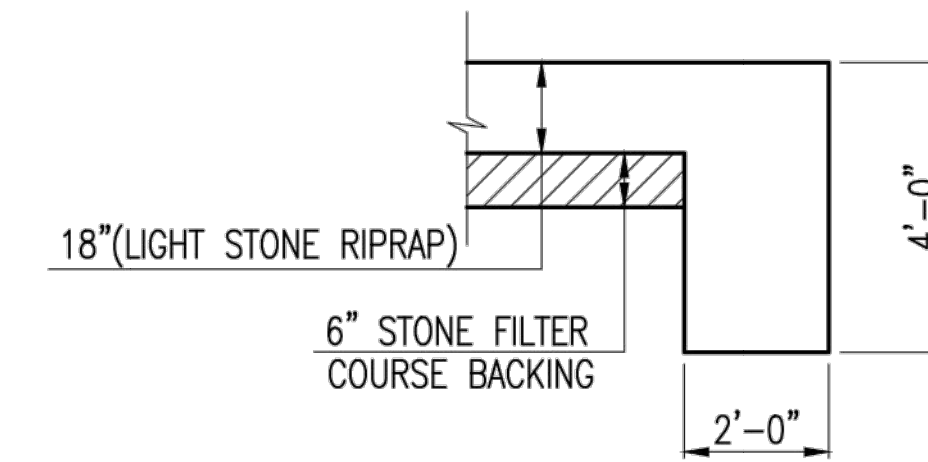
TYPICAL SECTION THRU TOEWALL

NO SCALE

NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED, UNLESS INDICATED OTHERWISE.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED, UNLESS INDICATED OTHERWISE. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

HEAVY STONE RIPRAP DETAILS



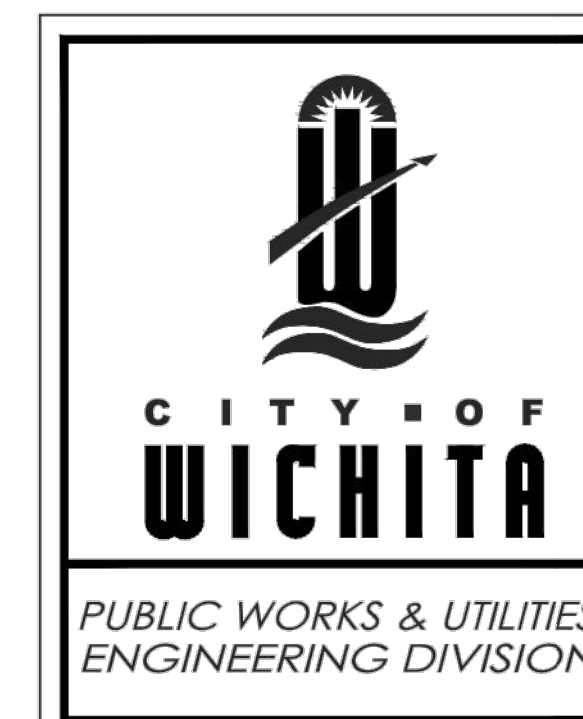
TYPICAL SECTION THRU TOEWALL

NO SCALE

NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED, UNLESS INDICATED OTHERWISE.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED, UNLESS INDICATED OTHERWISE. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.

LIGHT STONE RIPRAP DETAILS



**MISCELLANEOUS
DETAILS
(STORM SEWER)**

CITY ENGINEER

Gary Janzen, P.E.

City Engineer

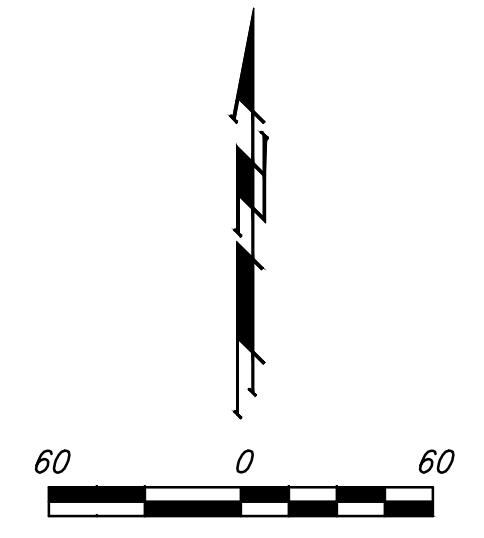
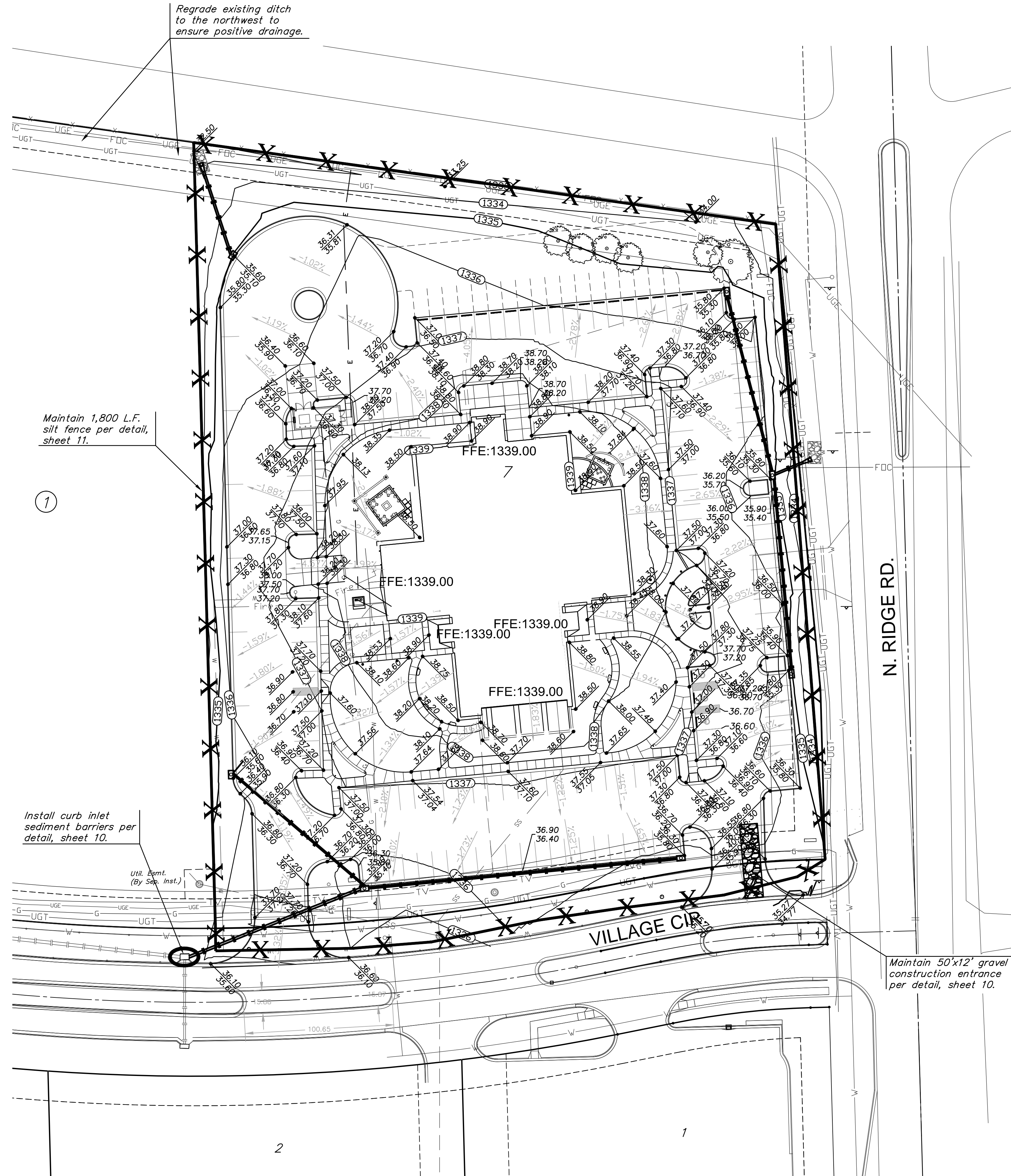
PROJECT NUMBER	OCA NUMBER	DATE
0293 PPD	(607861)	03/15

CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501	DESIGN	DRAWN
	Staff	Staff
		SHEET
		8 of 15

EROSION CONTROL PLAN LEGEND
(Installation Details Found in the SWP2 Plan)

	- DROP INLET PROTECTION
	- CURB INLET PROTECTION
	- DITCH CHECKS
	- SILT FENCING
	- CUT-OFF TRENCH
	- BACK OF CURB PROTECTION
	- EROSION CONTROL MAT
	- TEMPORARY DITCH

NO SCALE



EROSION CONTROL MEASURE	INSTALL	MAINTAIN	REMOVE
BACK OF CURB PROTECTION (LF)	0	0	0
CONSTRUCTION ENTRANCE (EA)	0	1	0
CURB INLET BARRIER (EA)	1	0	0
DITCH CHECK (EA)	0	0	0
DROP INLET PROTECTION (EA)	0	0	0
EROSION CONTROL (LS)	0	0	0
EROSION CONTROL BERM (LF)	0	0	0
SILT FENCE (LF)	0	1,800	0
EROSION CONTROL MAT (SY)	0	0	0

QUANTITIES ARE FOR INFORMATION ONLY! CONTRACTOR SHALL VERIFY QUANTITIES PER FINAL BID QUANTITY SHEET.

* ALL EXISTING BMPs INCLUDING CONSTRUCTION ENTRANCE, SEDIMENT BARRIERS, SILT FENCE, CUT-OFF TRENCH, AND EROSION CONTROL MAT SHALL BE MAINTAINED AND REPAIRED IF NECESSARY. REPLACEMENT OR REMOVAL OF EROSION CONTROL MEASURES TO BE PAID FOR BY L.S. BID ITEM "MAINTAIN EXISTING EROSION CONTROL BMPs"

	NORTH RIDGE VILLAGE ADDITION GRADING PLAN & EROSION CONTROL PLAN SWS IMPROVEMENTS	
	<small>Baughman Company, P.A. 315 Ellis St., Wichita, KS 67211 P 316-262-2771 F 316-262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE</small>	
PROJECT NUMBER 0293 PPD (607861)	DESIGN TJW	DRAWN TMS
REVISIONS:	APPROVED DATE 03/15	SCALE Noted SHEET 9 OF 15
<small>Plans SWS.dwg</small>		<small>14-09-E128</small>

