

PLOT SCILE

PLOT DATE

COMM NO.



7101 College Blvd., Suite 400 Overland Park, Kansas 66210 p. (913) 663-1900 f. (913) 663-1633
BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.

**CONSTRUCTION SET** 



PROJECT TITLE



VAL 400



SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369 www.sfcs.com

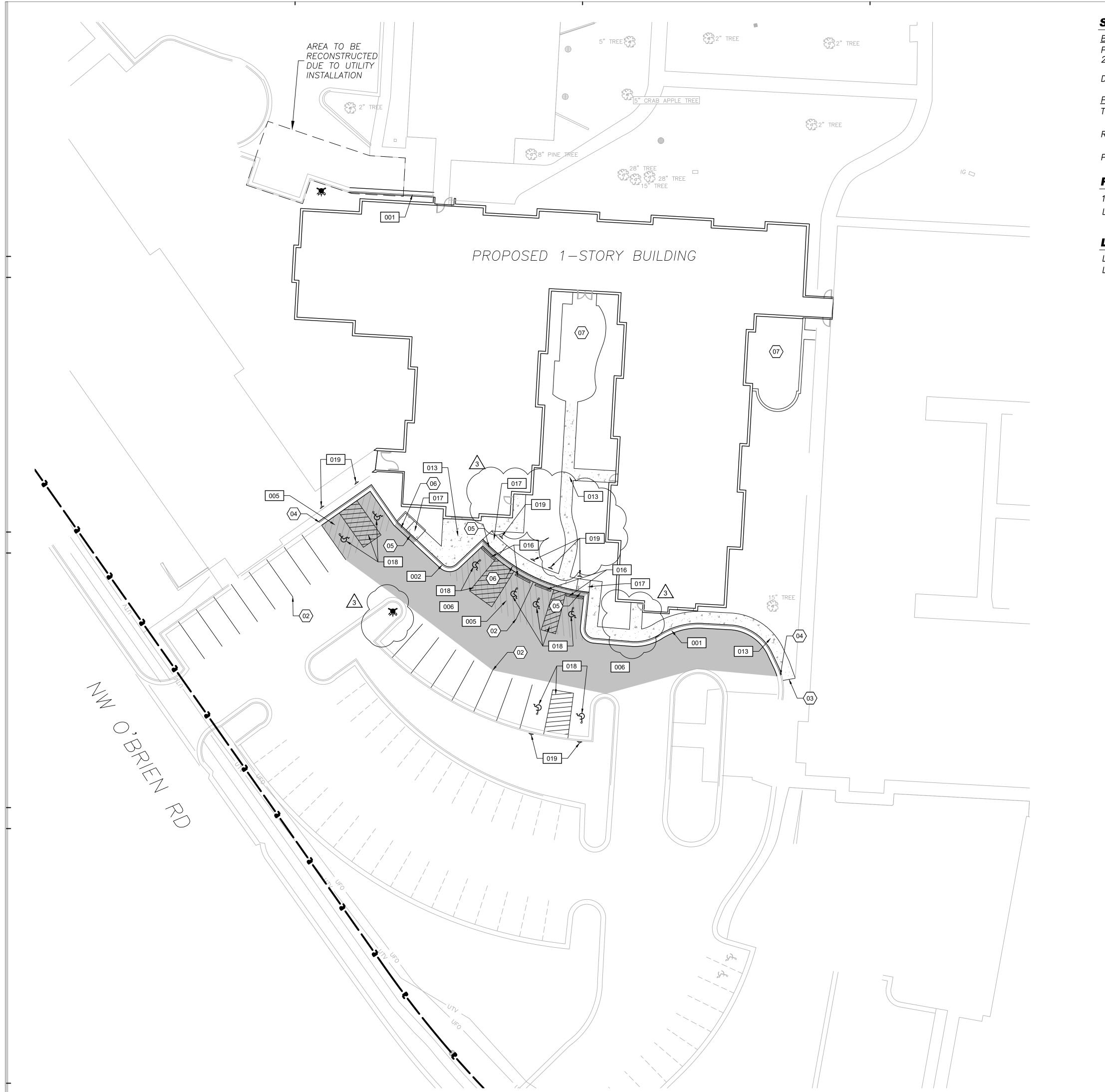
PROJECT DESIG	NER	:	DAS	
PROJECT ARCHI	TECT	:	DAS	
PROJECT ENGIN	EER	:	ERB	
DRAWN BY		:	SKT	
CHECKED BY		:	ERB	
APPROVED BY		:		
NO.	REVISION	DE	ESCRIPTION	DATE

1	ADDENDUM #1	09/27/2018
2	LANDSCAPE PLAN	10/10/2018
3	ADDENDUM #3	10/26/2018

DRAWING TITLE

DEMOLITION PLAN

COMM. NO.	DATE
17106.00	SEPTEMBER 14, 2018
DRAWING	SHEET
C1.0	01 11



PLOT SCALE

PLOT DATE

COMM NO.

#### SITE DATA

<u>BUILDING</u>

PROPOSED BUILDING 25 UNITS

19,920 SF

66

0.99 AC

DISTURBED AREA

PARKING STALLS

TOTAL PARKING STALLS

REQUIRED ADA STALLS

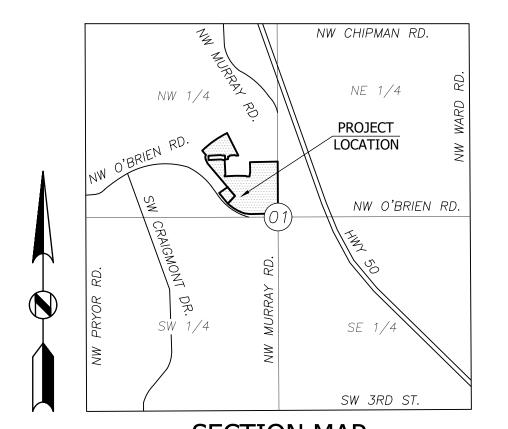
PROPOSED ADA STALLS 10

### PROJECT ADDRESS

1706 NW O'BRIEN ROAD LEE'S SUMMIT, MO 64081

#### **LEGAL DESCRIPTION**

LOT F OF REPLAT OF JOHN KNOX RETIREMENT VILLAGE — 12TH PLAT & LOTS 34 AND 35 OF HIGHWAY MANOR



SECTION MAP SECTION 01-T47N-R32W

## **DETAILS**

SEE CONSTRUCTION DETAILS - SHEETS C6.0

TYPE "B" CONCRETE CURB & GUTTER TYPE "B-DRY" CONCRETE CURB & GUTTER

MEDIUM DUTY ASPHALT PAVEMENT 005 HEAVY DUTY ASPHALT PAVEMENT 006

CONCRETE SIDEWALK SECTION SIDEWALK RAMP

(ADA) HANDICAP PARKING STRIPING

(ADÁ) HANDICAP PARKING SIGNAGE CONCRETE WHEEL STOP

## **CONSTRUCTION NOTES**

LEAD FREE, WATER-BORNE EMULSION BASED WHITE TRAFFIC PAINT FOR PARKING LOT STRIPING

CONNECT TO EXISTING SIDEWALK
CONNECT TO EXISTING CURB

TRANSITION CURB & GUTTER. REFER TO GRADING PLAN ZERO-HEIGHT CURB & GUTTER. REFER TO GRADING PLAN PATIO. REFER TO ARCHITECTURAL PLAN

# **LEGEND**

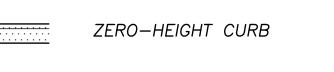




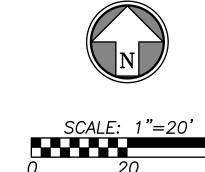








TRANSITION CURB



# Civil Engineering • Surveying • Utilities

7101 College Blvd., Suite 400 Overland Park, Kansas 66210 p. (913) 663-1900 f. (913) 663-1633 BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.



PROJECT TITLE



VAL 400



704.372.7327 • Fax 704.372.7369

www.sfcs.com

DAS PROJECT DESIGNER DAS PROJECT ARCHITECT PROJECT ENGINEER

	·==· ·	
DRAWN BY	: SKT	
CHECKED BY	: ERB	
APPROVED BY	;	
NO.	REVISION DESCRIPTION D	ATE

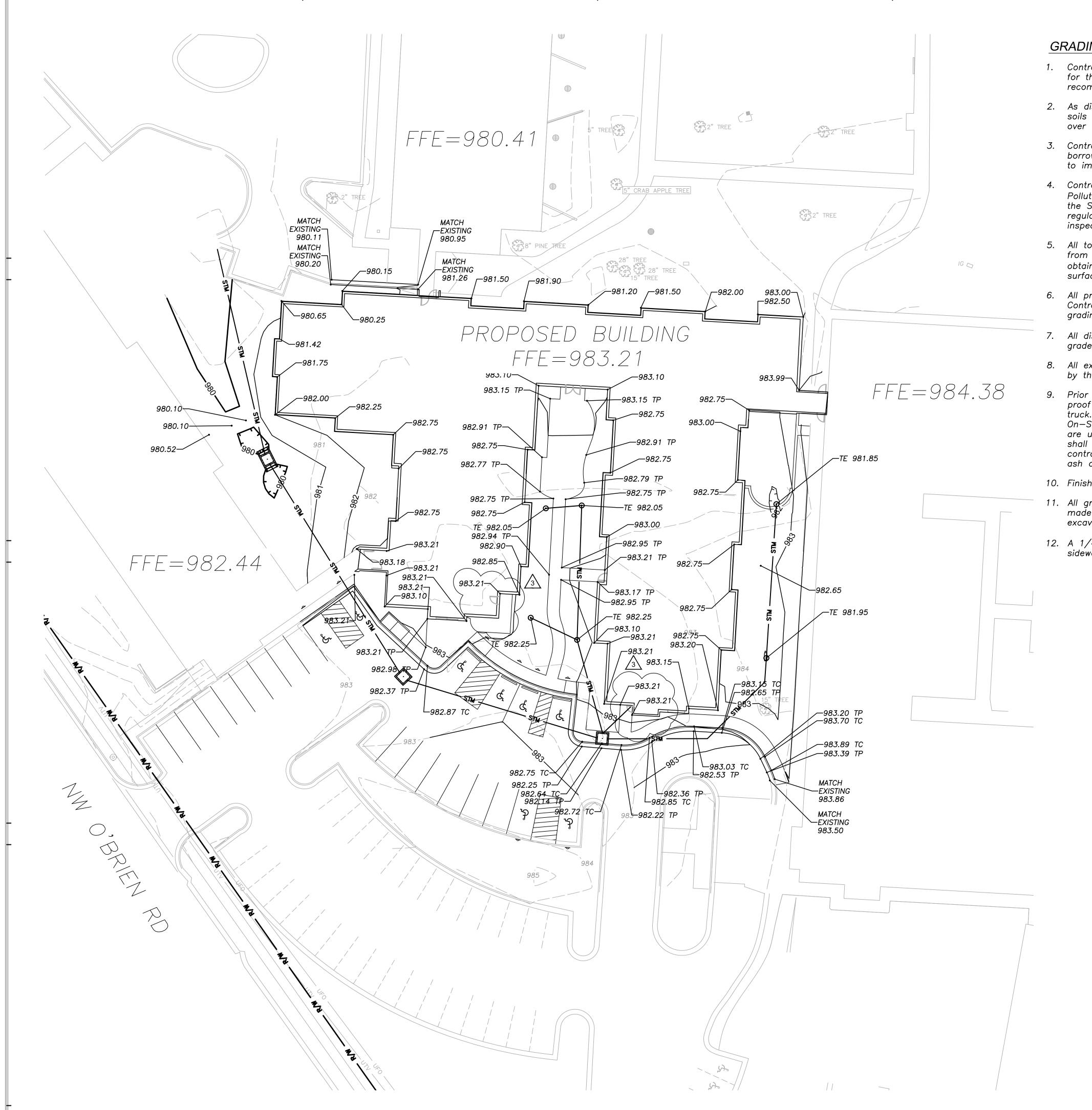
NO.	REVISION DESCRIPTION	DATE			
1	ADDENDUM #1				
2	LANDSCAPE PLAN	10/10/2018			
3	ADDENDUM #3	10/26/2018			

DRAWING TITLE

SITE PLAN

	COMM. NO.	DATE
	17106.00	SEPTEMBER 14, 2018
	DRAWING	SHEET
,	C2.0	02 <sub>of</sub> 14





PLOT SCALE

PLOT DATE

COMM NO.

#### GRADING NOTES

- Contractor shall obtain a copy of the <u>Geotechnical Engineering Report</u> prepared for the project and satisfy himself as to the existing conditions and recommendations contained in the report.
- 2. As discussed in the Geotechnical Report, over excavation of existing unsuitable soils will be required under building and pavement areas. Contractor shall perform over excavation of unsuitable soils as a part of this work.
- 3. Contractor shall obtain soils suitable as structural fill from off—site sources. All borrow materials must be tested and approved by the Geotechnical Engineer prior to importing the soils to the project site.
- 4. Contractor shall operate under the terms and permits included in the Stormwater Pollution Prevention Plan (SWPPP) prepared for this project and permitted through the State of Missouri. Contractor shall employ a qualified person to conduct regular inspections of the site erosion control measures and document such inspections in the SWPPP document maintained by the Contractor.
- 5. All topsoil, vegetation, root structures, and deleterious materials shall be stripped from the ground surface prior to the placement of embankments. Contractor shall obtain the On—site geotechnical representative's acceptance of the existing ground surface materials and the proposed fill material prior to the placement of fill.
- 6. All proposed contour lines and spot elevations shown are finish ground elevations. Contractor shall account for pavement depths, building pads, topsoil, etc when grading the site.
- 7. All disturbed areas that are not to be paved (green spaces) shall be finish graded with a minimum of six inches of topsoil.
- 8. All excavation and embankments shall comply with the recommendations provided by the Geotechnical Engineer.
- 9. Prior to placing any concrete or asphalt pavement the contractor shall perform a proof roll of the pavement sub—grade with a fully loaded tandem axle dump truck. The proof roll shall be conducted in the presence of the Engineer and the On—Site Geotechnical Representative. Areas that display rutting or pumping that are unsatisfactory to the Engineer shall be re—worked and a follow—up proof roll shall be conducted prior to acceptance of the sub—grade for paving. The contractor may, at its own expense, stabilize the sub—grade using Class C fly ash or quicklime.
- 10. Finished grades shall not be steeper than 3:1.
- 11. All grading work shall be considered unclassified. No additional payments shall be made for rock excavation. Contractor shall satisfy himself as to any rock excavation required to accomplish the improvements shown hereon.
- 12. A 1/4" per foot maximum cross slope shall be maintained on all pedestrian sidewalks and paths.

### LEGEND

980—	FINISH GRADE 5' CONTOURS
980	FINISH GRADE 1' CONTOURS
980	EXISTING GRADE 5' CONTOURS
	EXISTING GRADE 1' CONTOURS
	RIGHT-OF-WAY LINE
——————————————————————————————————————	PROPOSED STORM SEWER MAIN

XXXX.XX		FINISHED GRADE ELEVATION
XXXX.XX	ΤE	TOP OF STRUCTURE ELEVATION
XXXX.XX	TP	TOP OF PAVEMENT ELEVATION
XXXX XX	TC.	TOP OF CURB FLEVATION



7101 College Blvd., Suite 400 Overland Park, Kansas 66210 p. (913) 663-1900 f. (913) 663-1633 BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.

CONSTRUCTION SET

OF MISS

ERIC
BYRD
10/26/2018
NUMBER
PE-2018013633

PROJECT TITLE



VAL 400

SFCS

SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369 www.sfcs.com

PROJECT DESIG	NER	:	DAS	
PROJECT ARCHI	TECT	:	DAS	
PROJECT ENGIN	EER	:	ERB	
DRAWN BY		:	SKT	
CHECKED BY		:	ERB	
APPROVED BY		:		
NO.	REVISION	DI	ESCRIPTION	DATE
1	ADDE	ND	DUM #1	09/27/2018
2	LANDSO	CAF	PE PLAN	10/10/2018

DRAWING TITLE

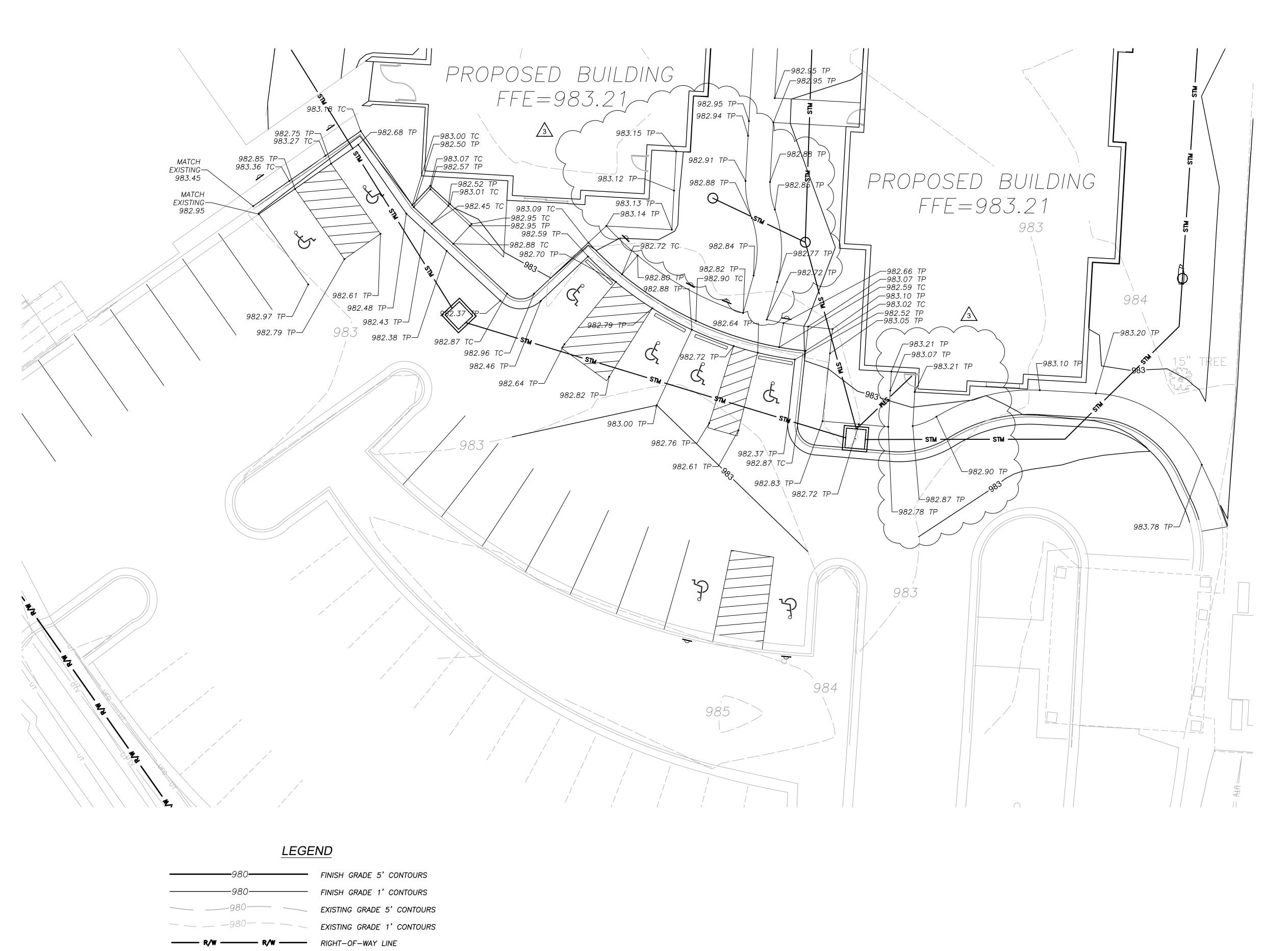
GRADING PLAN

ADDENDUM #3

10/26/2018

COMM. NO.	DATE
17106.00	SEPTEMBER 14, 2018
DRAWING	SHEET
C3.0	04 14

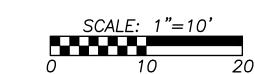




PROPOSED STORM SEWER MAIN

FINISHED GRADE ELEVATION TOP OF STRUCTURE ELEVATION TOP OF PAVEMENT ELEVATION XXXX.XXXXXX.XX XXXX.XX TP TC XXXX.XX TOP OF CURB ELEVATION





# Civil Engineering • Surveying • Utilities

7101 College Blvd., Suite 400 Overland Park, Kansas 66210 p. (913) 663-1900 f. (913) 663-1633 BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.



PROJECT TITLE



VAL 400

STCS Architecture Engineering Planning Interiors

SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369 www.sfcs.com

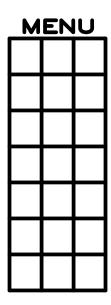
PROJECT DESIGN	NER	:	DAS	
PROJECT ARCHIT	TECT	:	DAS	
PROJECT ENGINE	EER	:	ERB	
DRAWN BY		:	SKT	
CHECKED BY		:	ERB	
APPROVED BY		:		
NO.	REVISION	DE	ESCRIPTION	DATE
4	1005		// 4	00/07/0040

	NO.	REVISION DESCRIPTION	DATE
	1	ADDENDUM #1	09/27/2018
	2	LANDSCAPE PLAN	10/10/2018
	3	ADDENDUM #3	10/26/2018
- 11	1		

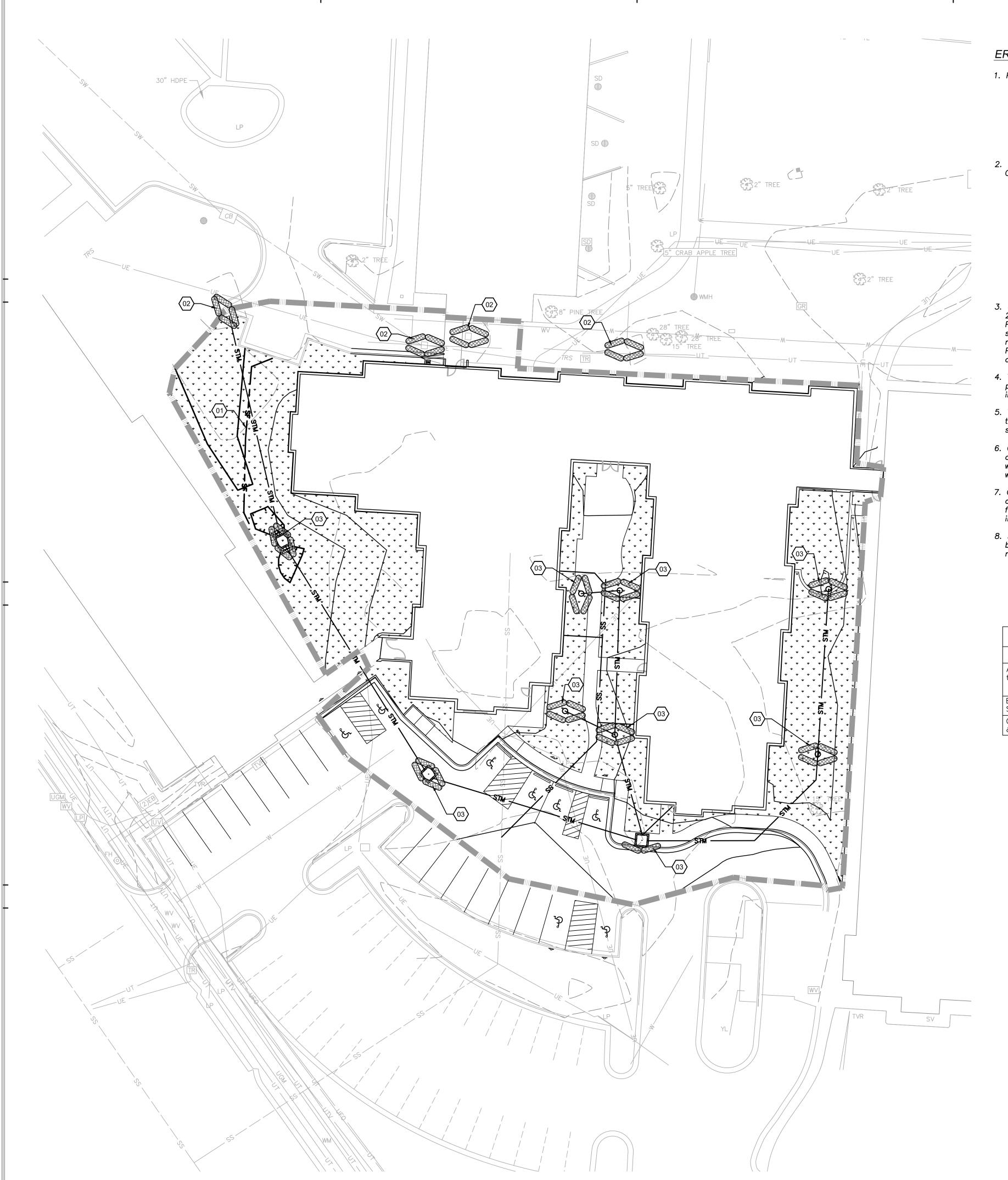
DRAWING TITLE

DETAILED GRADING PLAN

	COMM. NO.	DATE
	17106.00	SEPTEMBER 14, 2018
	DRAWING	SHEET
_	C3.1	05_ of14







PLOT SCALE

PLOT DATE

COMM NO.

#### EROSION AND SEDIMENT CONTROL GENERAL NOTES

1. Prior to Land Disturbance activities, the contractor shall:

satisfactory inspection.

- Delineate the outer limits of any natural stream corridor designated with construction fencing.
  Construct a stabilized entrance/parking/delivery area.
- Install perimeter controls and request the inspection of the pre—construction erosion and sediment control measures
  designated on the approved erosion and sediment control plan. Land disturbance work shall not proceed until there is a
- Identify the limits of construction on the ground with easily recognizable indications such as construction staking, construction fencing, and placement of physical barriers or other means acceptable to the City inspector and in conformance with the erosion and sediment control plan.
- 2. The contractor shall comply with all requirements of the Missouri Water Pollution Control and NPDES Stormwater Runoff from Construction Sites General Permit, KC—APWA Specifications Section 2150, including but not limited to:
   The contractor shall seed, mulch, or otherwise stabilize any disturbed area where the land disturbance activity has ceased
  - for more than 14 days.
     The contractor shall perform inspections of erosion and sediment control measures at the following minimum intervals:
  - o During active construction phases at least once per week
  - o During periods of inactivity at least once per 14 days o After each rainfall event of ½ inch or more within 24 hours of the rain event
  - •The contractor shall maintain an inspection log including the inspector's name, date of inspection, observations as to the effectiveness of the erosion and sediment control measures, actions necessary to correct deficiencies, when the deficiencies were corrected, and the signature of the person performing the inspection. The inspection log shall be available for review by the regulatory authority.
  - The contractor shall have the erosion and sediment control plan routinely updated to show all changes and amendments to the plan. A copy of the erosion and sediment control plan shall be kept on site and made available for review by the regulatory authority.
- 3. Unless otherwise noted in the plans, all seeding must conform to Division II—Construction and Materials Specification—Section 2150 published by the Kansas City Metropolitan Chapter of the American Public Works Association dated May 21, 2008. Permanent seeding shall be installed after completion of final grading except when seeding will occur outside of the acceptable seeding season as specified in Section 2150. When temporary seeding is installed, permanent seeding shall be installed at the next seeding season. Temporary seeding shall not be used as a stabilization measure for a period exceeding 12 months. The Permit will not be closed until permanent seeding has been established to a minimum of 70% density over the entire disturbed area.
- 4. The contractor shall maintain installed erosion and sediment control devices in a manner that preserves their effectiveness for preventing sediment from leaving the site or entering a sensitive area such as a natural stream corridor, areas of the site intended to be left undisturbed, a storm sewer, or an on-site drainage channel.
- 5. The contractor is responsible for providing erosion and sediment control for the duration of a project. If the City determines that the BMPs in place do not provide adequate erosion and sediment control at any time during the project, the contractor shall install additional or alternate measures that provide effective control.
- 6. Concrete wash or rinse water from concrete mixing equipment, tools and/or ready—mix trucks, tools, etc. may not be discharged into or be allowed to run directly into any existing water body or storm inlet. One or more locations for concrete wash out will be designated on site, such that discharges during concrete washout will be contained in a small area where waste concrete can solidify in place.
- 7. Chemicals or materials capable of causing pollution may only be stored onsite in their original container. Materials stored outside must be in closed and sealed water—proof containers and located outside of drainage ways or areas subject to flooding. Locks and other means to prevent or reduce vandalism shall be used. Spills will be reported as required by law and immediate actions taken to contain them.
- 8. Silt fences and erosion control BMPs which are shown along the back of curb must be installed within two weeks of curb backfill and prior to placement of base asphalt. Exact locations of these erosion control methods may be field adjusted to minimize conflicts with utility construction; however, anticipated disturbance by utility construction shall not delay installation.

EROSION/SEDIMENT CONTROL STAGING CHART					
Project Stage	BMP Plan Ref No.	BMP Description	Remove after stage:	Notes:	
A — Place BMP's Prior to Land Disturbance.	<b>(</b> 01 <b>)</b>	Perimeter Silt Fence	С	Place as shown on plan.	
	<b>(02)</b>	Existing Inlet Protection	С	Place as shown on plan.	
B — After Utility Storm Sewer Construction	<b>(03)</b>	Storm Inlet Protection	С	Place as shown on plan.	
C — Final Grading, Paving & Landscaping	(04)	Final Seeding, Sod and Landscaping	N/A	Silt fencing & inlet protect may be removed once seed & sodded areas are established on 80% of site.	



• SEE CONSTRUCTION DETAIL SHEET FOR THE FOLLOWING

FILTER FABRIC SILT FENCE ROCK BAG DROP INLET BARRIER

#### **LEGEND**

——— 934 ———	PROPOSED CONTOUR
934	EXISTING CONTOUR
——————————————————————————————————————	SEDIMENT FENCE
	DISTURBED AREA (0.99 AC)





FINAL SEEDING (SOD &/OR LANDSCAPING)







7101 College Blvd., Suite 400 Overland Park, Kansas 66210 p. (913) 663-1900 f. (913) 663-1633 BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.

CONSTRUCTION SET

OF MISS

ERIC
BYRD
10/26/2018
NUMBER
PE-2018013633

PROJECT TITLE



VAL 400

SFC S Architecture Engineering Planning Interiors

SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369 www.sfcs.com

ı	PROJECT DESIG	NER	:	DAS	
	PROJECT ARCHITECT		:	DAS	
	PROJECT ENGIN	EER	:	ERB	
	DRAWN BY		:	SKT	
	CHECKED BY		:	ERB	
	APPROVED BY		:		
	NO.	REVISION	DE	ESCRIPTION	DATE

NO.	REVISION DESCRIPTION	DAT
1	ADDENDUM #1	09/27/201
2	LANDSCAPE PLAN	10/10/201
3	ADDENDUM #3	10/26/201

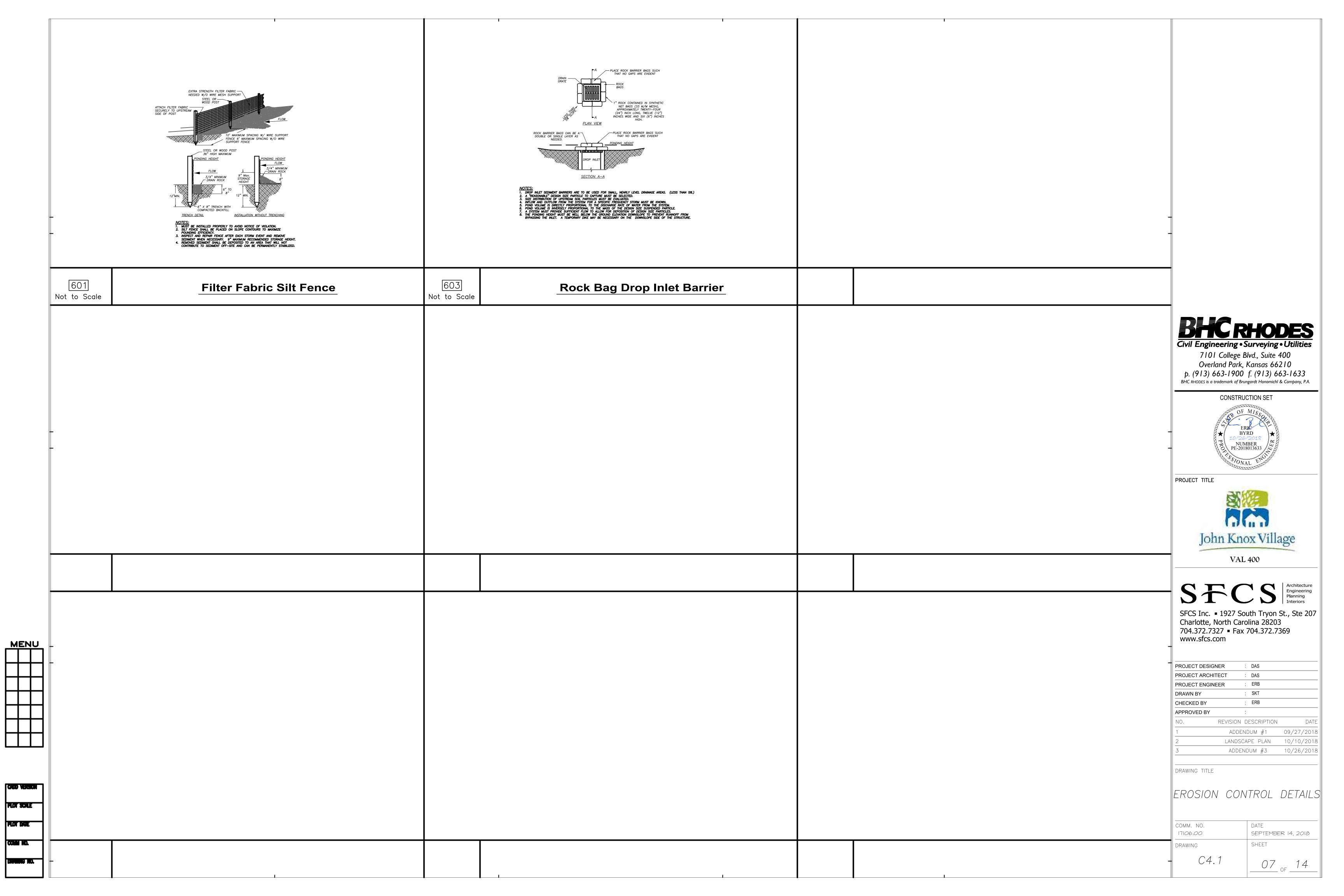
DRAWING TITLE

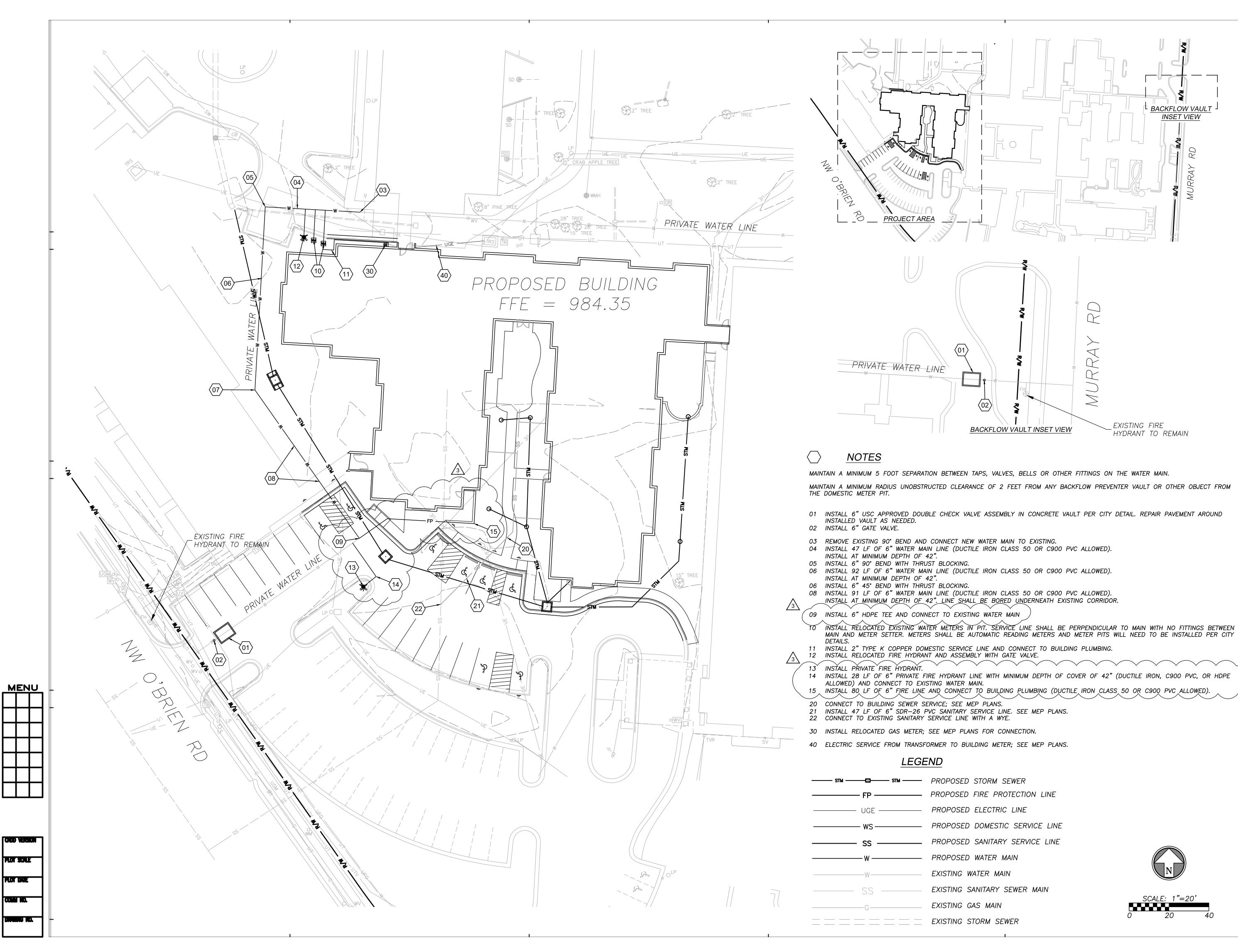
EROSION CONTROL

	COMM. NO.	DATE
_	17106.00	SEPTEMBER 14, 2018
40	DRAWING	SHEET

C4.0

\_\_\_\_06\_ of \_\_14





BHC RHODES

Civil Engineering • Surveying • Utilities

7101 College Blvd., Suite 400 Overland Park, Kansas 66210 p. (913) 663-1900 f. (913) 663-1633 BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.

CONSTRUCTION SET

OF MISSOUR

ERIC
BYRD
10/26/2018
NUMBER
PE-2018013633

PROJECT TITLE



VAL 400

SFC:

www.sfcs.com

SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369

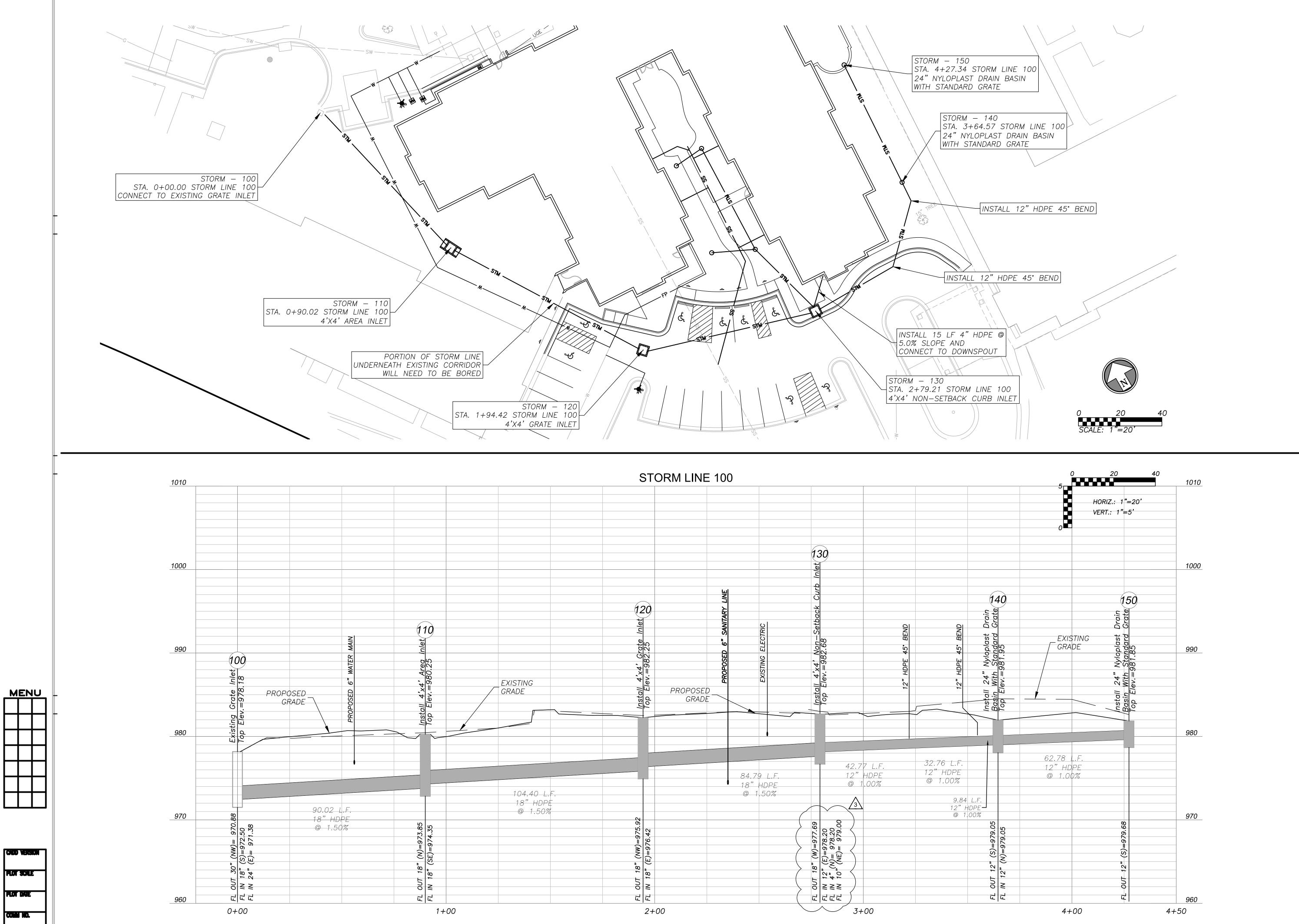
PROJECT DESIGNER	: DAS	
PROJECT ARCHITECT	: DAS	
PROJECT ENGINEER	: ERB	
DRAWN BY	: SKT	
CHECKED BY	: ERB	
APPROVED BY	:	

NO.	REVISION DESCRIPTION	DAT
1	ADDENDUM #1	09/27/201
2	LANDSCAPE PLAN	10/10/201
3	ADDENDUM #3	10/26/201

DRAWING TITLE

UTILITY PLAN

COMM. NO.	DATE
17106.00	SEPTEMBER 14, 2018
DRAWING	SHEET
C5.0	08 14



PLOT SCALE

PLOT DATE

COMM NO.

Civil Engineering • Surveying • Utilities

7101 College Blvd., Suite 400 Overland Park, Kansas 66210 p. (913) 663-1900 f. (913) 663-1633
BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.

**CONSTRUCTION SET** 

PROJECT TITLE



VAL 400

SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369 www.sfcs.com

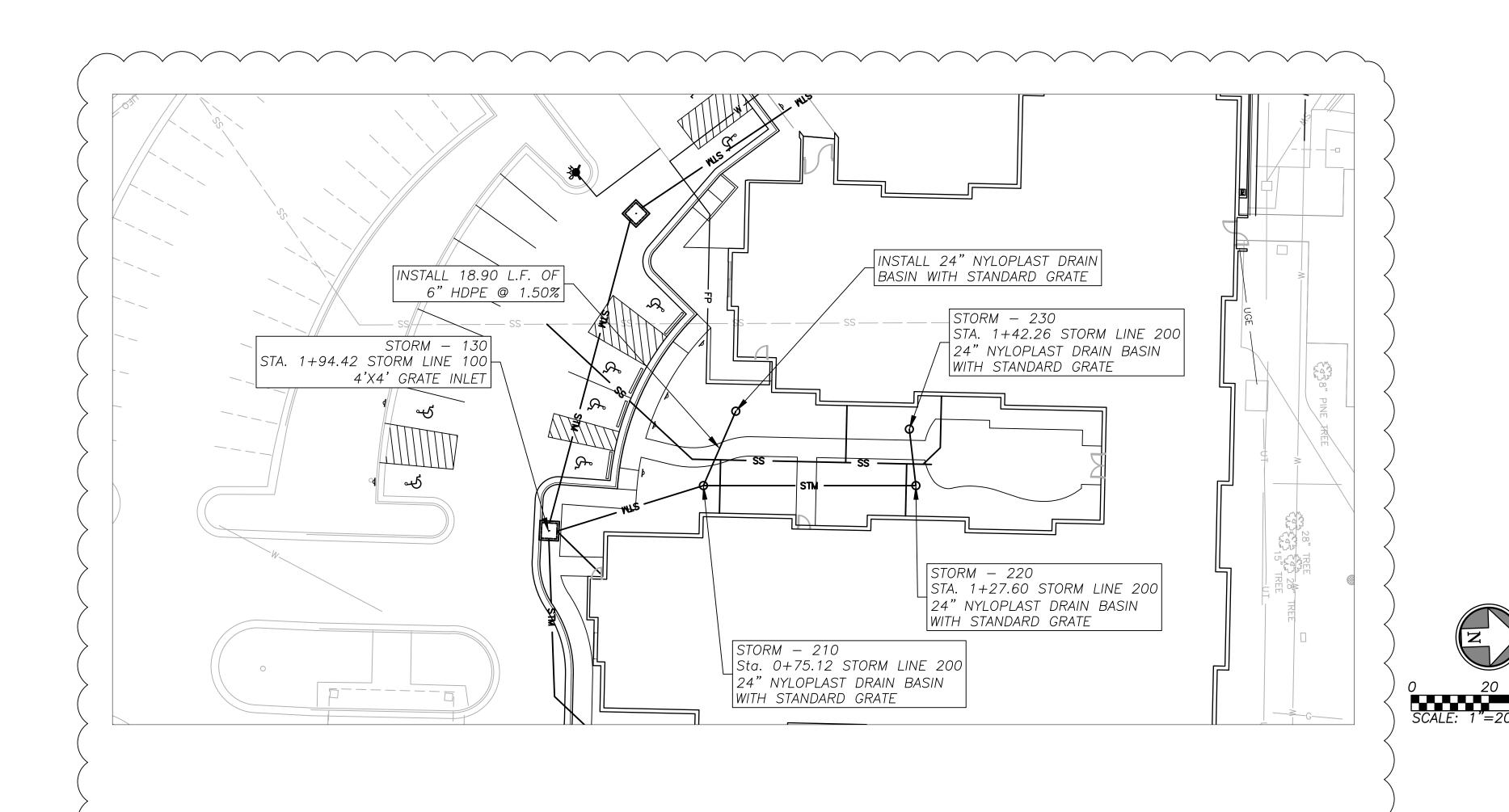
1	PROJECT DESIGN	NER	:	DAS	
	PROJECT ARCHIT	ГЕСТ	:	DAS	
	PROJECT ENGINE	EER	:	ERB	
	DRAWN BY		:	SKT	
	CHECKED BY		:	ERB	
	APPROVED BY		:		
	NO.	REVISION	DE	ESCRIPTION	DATE

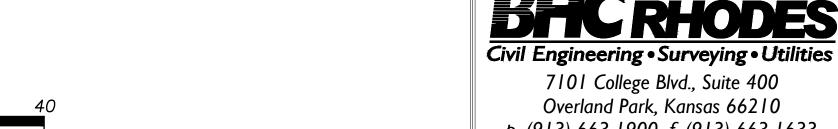
NO.	REVISION DESCRIPTION	DAT
1	ADDENDUM #1	09/27/201
2	LANDSCAPE PLAN	10/10/201
3	ADDENDUM #3	10/26/201

DRAWING TITLE

STORM PLAN AND PROFILE

COMM. NO. 17106.00	DATE SEPTEMBER 14, 2018
DRAWING	SHEET
C5.1	09 <sub>of</sub> 14





Overland Park, Kansas 66210
p. (913) 663-1900 f. (913) 663-1633
BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.



PROJECT TITLE



VAL 400

SFCS

SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369 www.sfcs.com

PROJECT DESIG	INER	:	DAS	
PROJECT ARCHITECT		:	DAS	
PROJECT ENGIN	IEER	:	ERB	
DRAWN BY		:	SKT	
CHECKED BY		:	ERB	
APPROVED BY		:		
NO.	REVISION	DI	ESCRIPTION	DATE
1	ADDE	ND	UM #1	09/27/2018
2	LANDSCAPE PLAN 10/10/2018			

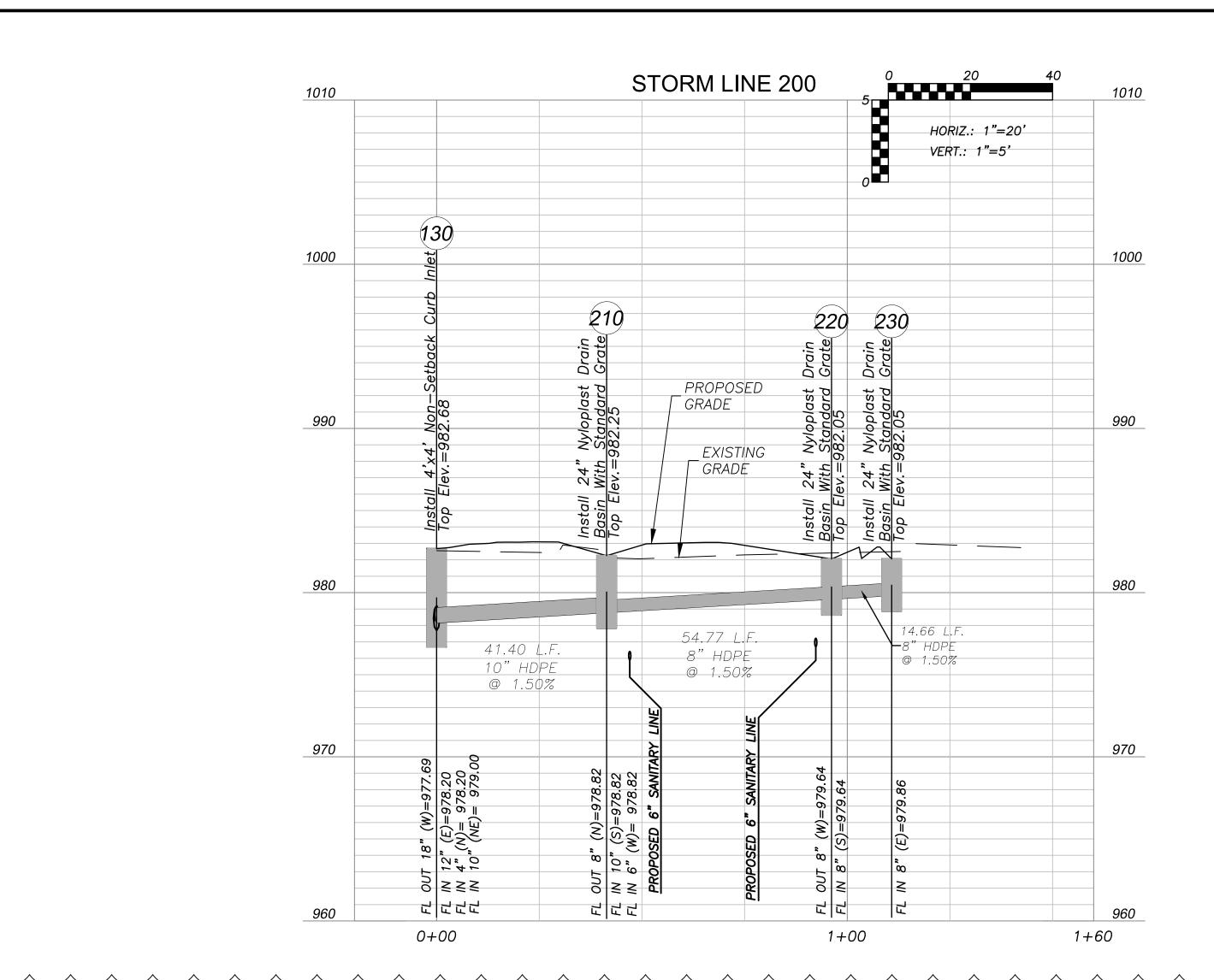
DRAWING TITLE

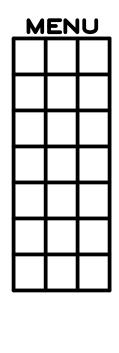
STORM PLAN AND PROFILE 2

ADDENDUM #3

10/26/2018

COMM. NO. 17106.00	DATE SEPTEMBER 14, 2018
DRAWING	SHEET
C5.2	



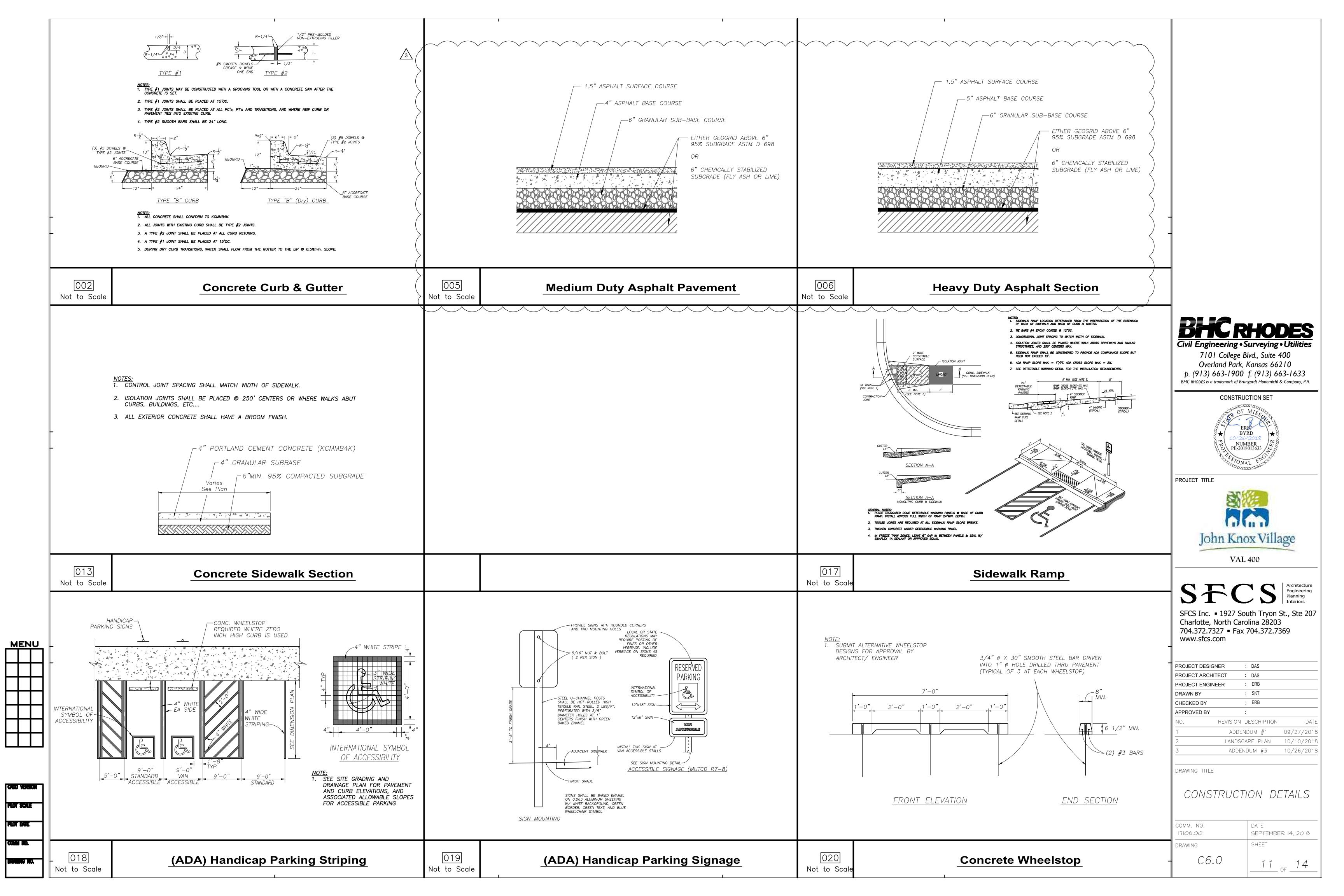


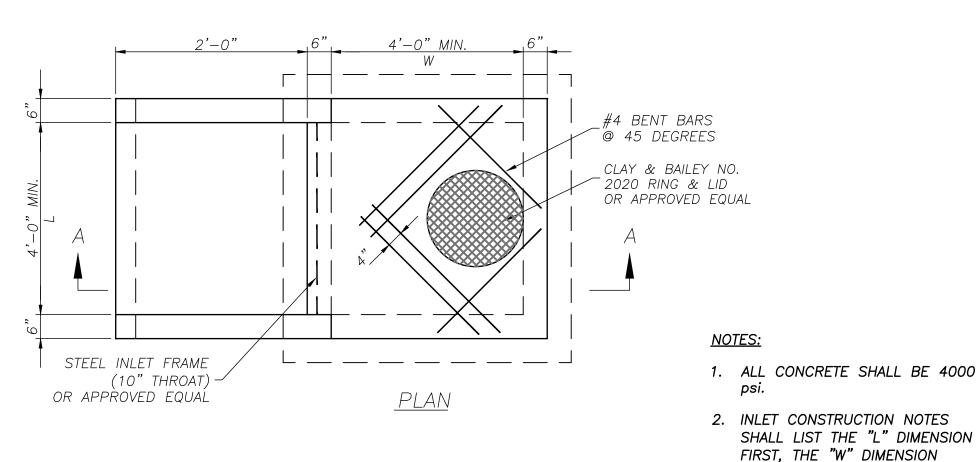
CADD VERSION

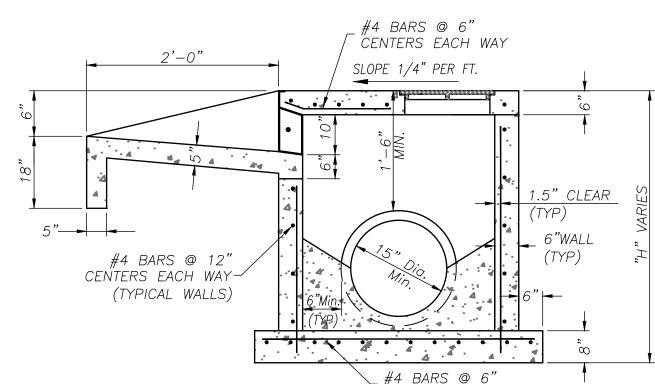
PLOT SCALE

PLOT DATE

COMM NO.







# CENTERS EACH WAY

**Area Inlet** 

Not to Scale

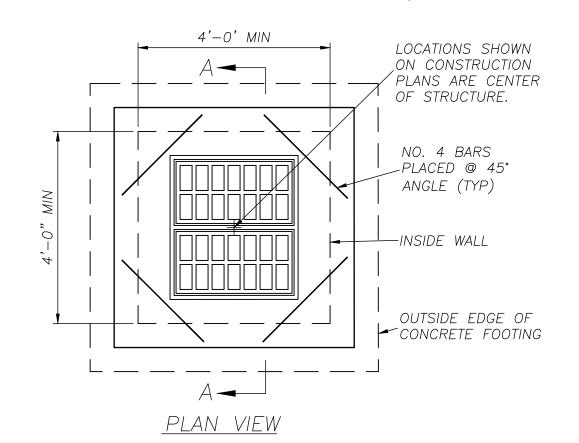
1. ALL CONCRETE SHALL BE 4000 PSI.

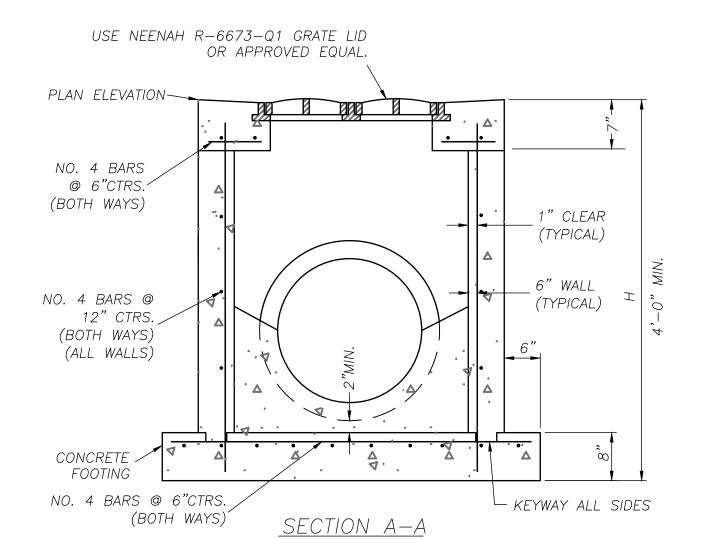
SPACINGS NOT TO EXCEED 4'-0".

- 2. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
- 3. FLOOR OF INLET SHALL BE SHAPED WITH NON-REINFORCED CONCRETE INVERT TO PROVIDE SMOOTH FLOW.
- 4. EXPANSION JOINTS SHALL BE EITHER HOT OR COLD POURED JOINT
- SEALING COMPOUND, OR PREMOLDED EXPANSION JOINT FILLER. 5. STEEL INLET FRAME SPACERS SHALL BE PLACED AT EQUAL
- 6. BEVEL ALL EXPOSED EDGES WITH TRIANGULAR MOLDING.
- 7. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF  $\pm 1/8$ " SHALL BE PERMITTED.
- 8. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
- 9. ALL DOWELS SHALL BE ACCURATELY PLACED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF BOTTOM SLAB CONCRETE. STICKING OF DOWELS INTO FRESH OR PARTIALLY HARDENED CONCRETE WILL NOT BE ACCEPTABLE.
- 10. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.
- 11. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.
- 12. THE BOTTOM SLAB SHALL BE AT LEAST 24 HOURS OLD BEFORE PLACING SIDEWALL CONCRETE. ALL SIDEWALL FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS AFTER SIDEWALLS ARE POURED BEFORE REMOVAL, AND AFTER REMOVAL SHALL BE IMMEDIATELY TREATED WITH MEMBRANE CURING COMPOUND.
- 13. RCP CONNECTIONS TO PRECAST STRUCTURES SHALL HAVE A MINIMUM OF 6" OF CONCRETE AROUND THE ENTIRE PIPE WITHIN 2' OF THE STRUCTURE.
- 14. THE CONCRETE THICKNESS AND REINFORCEMENT SHOWN IS FOR BOXES WITH ("L"+"H") AND ("W"+"H") LESS THAN OR EQUAL TO 20. FOR BOXES WITH EITHER OF THÉSE CALCULATIONS GREATER THAN 20, A SPECIAL DESIGN IS REQUIRED.

GATE VALVE (TYP.)

¾" CLEAN ROCK LINED \_





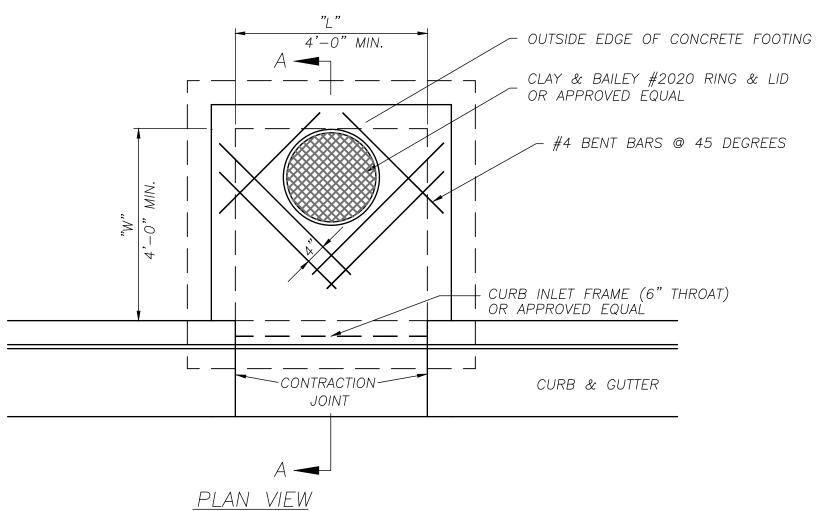
#### **Grate Inlet**

Not to Scale

and dep deep dep -

CONCRETE BLOCKS FOR METER SUPPORT

- REINFORCED CONCRETE FLOOR SLOPE TO DRAIN



1. ALL CONCRETE SHALL BE 4000 PSI.

NOTES:

2. INLET CONSTRUCTION NOTES SHALL LIST THE "L" DIMENSION FIRST, THE "W" DIMENSION SECOND, AND THE "H" DIMENSION THIRD.

SECOND, AND THE "H" DIMENSION

3. FLOOR OF INLET SHALL HAVE A

SHAPED CONCRETE INVERT TO

4. THE MINIMUM DIMENSION BETWEEN TOP OF PIPE AND TOP OF BOX

SHALL BE 1'-6" (TYPICAL ALL

WALLS)

PROVIDE FOR SMOOTH FLOW.

- 3. FLOOR OF INLET SHALL HAVE A SHAPED CONCRETE INVERT TO PROVIDE FOR SMOOTH FLOW.
- 4. THE MINIMUM DIMENSION BETWEEN TOP OF PIPE AND TOP OF BOX SHALL BE 1'-6" (TYPICAL ALL WALLS)
- 5. ALL INGRADE INLETS SHALL CONFORM TO STREET GRADE. ALL INLETS IN SUMP SHALL BE LEVEL. BEVEL ALL EXPOSED EDGES WITH 3/4" TRIANGULAR MOLDING.
- 6. THE THROAT AND TRANSITION ARE SUBSIDIARY TO THE STRUCTURE.

# - DOUBLE CHECK DETECTOR ASSEMBLY PUBLIC R/W OR EASEMENT PRIVATE PROPERTY GATE VALVE -18" X 18" GRATE REFER TO THE APPROVED -PRODUCTS LIST FOR WATER UTILITIES DETECTOR METER -- STEPS SEE NOTE 5 REINFORCED CONCRETE SLAB SEE NOTE 8 ---FINISHED GRADE TO 8" MIN. IN TRAFFIC MATCH TOP OF VAULT VALVE BOX . PRIVATE FIRE PROTECTION LINE GATE VALVE ---

- GENERAL NOTES: 1. METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE. METER VAULT ROOF TO BE REINFORCED CONCRETE WITH OPENING CENTERED
- OVER DETECTOR METER. REINFORCED WALLS AND SLABS ARE TO BE DESIGNED BY THE OWNER'S ENGINEER OR PRECAST ENGINEER. 2. METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA AND WHERE SURFACE WATER WILL NOT DRAIN INTO IT. PROVIDE CONCRETE
- SUMP TO DRAIN TO AN ABOVE GROUND DISCHARGE POINT. 3. ALL PIPE AND FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS. 4. ALL FITTINGS FOR THE DETECTOR METER TO BE BRASS.
- 5. STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16" CENTERS. 6. A DEPARTMENT OF NATURAL RESOURCES APPROVED DOUBLE CHECK DETECTOR ASSEMBLY BACKFLOW PREVENTER MUST BE USED. FOR A COPY OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES APPROVED BACKFLOW PREVENTION ASSEMBLIES, CONTACT WATER UTILITIES AT
- 816-969-1900. 7. ALL VALVES SHALL HAVE RISING STEMS. 8. MANHOLE COVER SHALL BE A BILCO K-1 MODEL UNLESS IN A VEHICLE TRAFFIC AREA. SEE THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR TRAFFIC CONDITIONS. THE COVER SHALL HAVE A 1-3/4" Ø HOLE
- DRILLED FOR A TOUCH/READ DEVICE. 9. A MINIMUM OF 18" CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING, VALVES, APPURTENANCES, ETC. 10. CONTACT PUBLIC WORKS ENGINEERING FOR VAULTS THAT INCLUDE A FIRE
- DEPARTMENT CONNECTION OR A 3" OR LARGER METER.

11. TRAFFIC-RATED MANHOLE COVER SHALL BE A CLAY & BAILEY MODEL 2002 OR 2007.

# Civil Engineering • Surveying • Utilities

7101 College Blvd., Suite 400 Overland Park, Kansas 66210 р. (913) 663-1900 f. (913) 663-1633 BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.

CONSTRUCTION SET



PROJECT TITLE



VAL 400

SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369 www.sfcs.com

PROJECT DESIG	SNER	:	DAS	
PROJECT ARCH	PROJECT ARCHITECT		DAS	
PROJECT ENGIN	IEER	:	ERB	
DRAWN BY		:	SKT	
CHECKED BY		:	ERB	
APPROVED BY		:		
NO.	REVISION	DE	ESCRIPTION	DATE

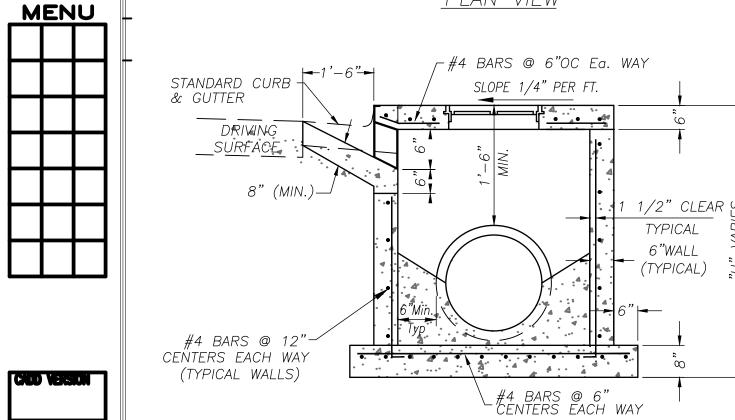
ADDENDUM #1 09/27/2018 LANDSCAPE PLAN 10/10/2018 ADDENDUM #3 10/26/2018

DRAWING TITLE

WAT-12

UTILITY DETAILS

	 СОММ. NO. 171 <i>06.00</i>	DATE SEPTEMBER 14, 2018
	DRAWING	SHEET
_	C6.1	12 , 14

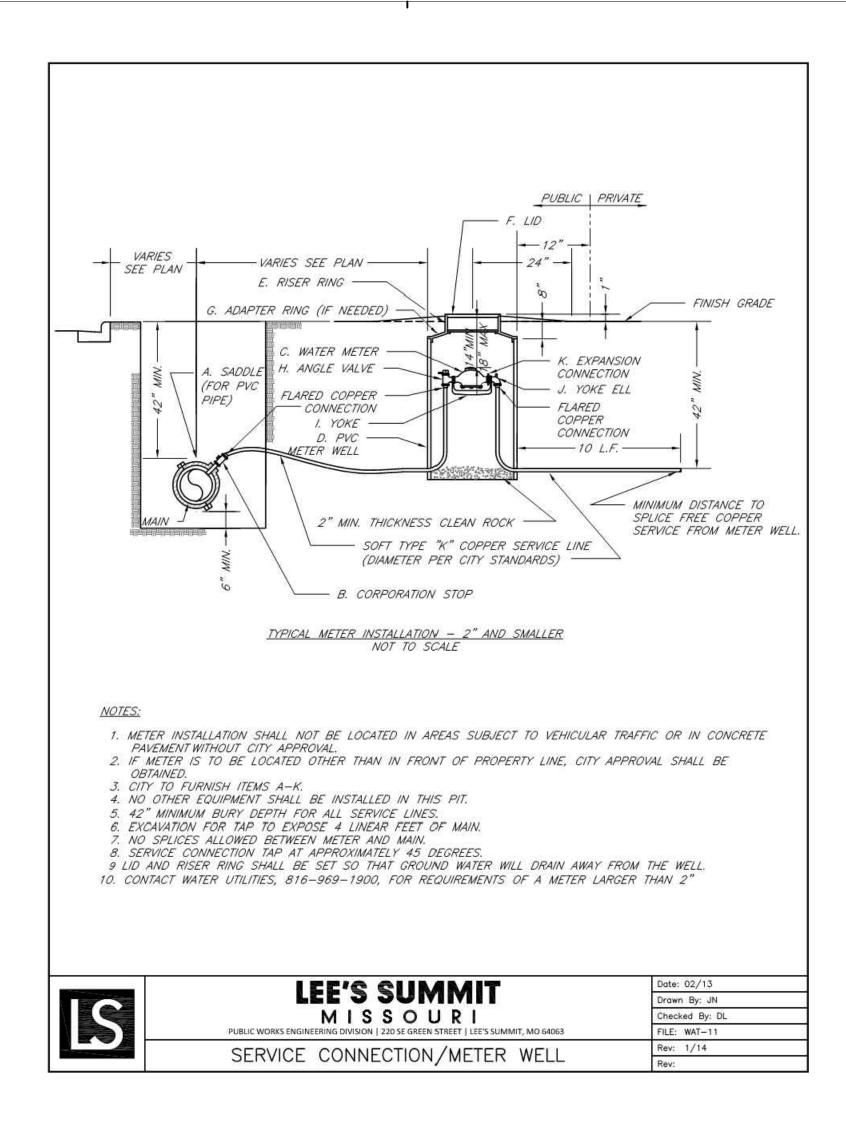


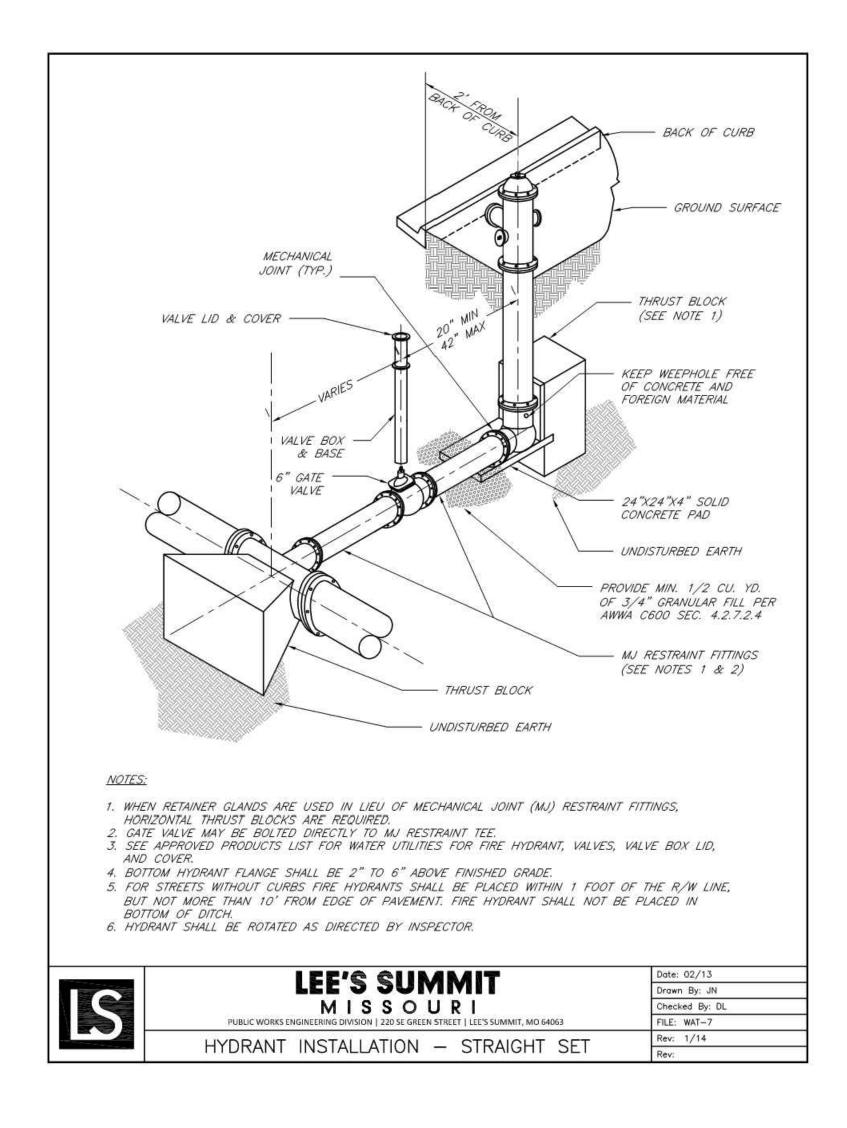
# Non-Setback Curb Inlet

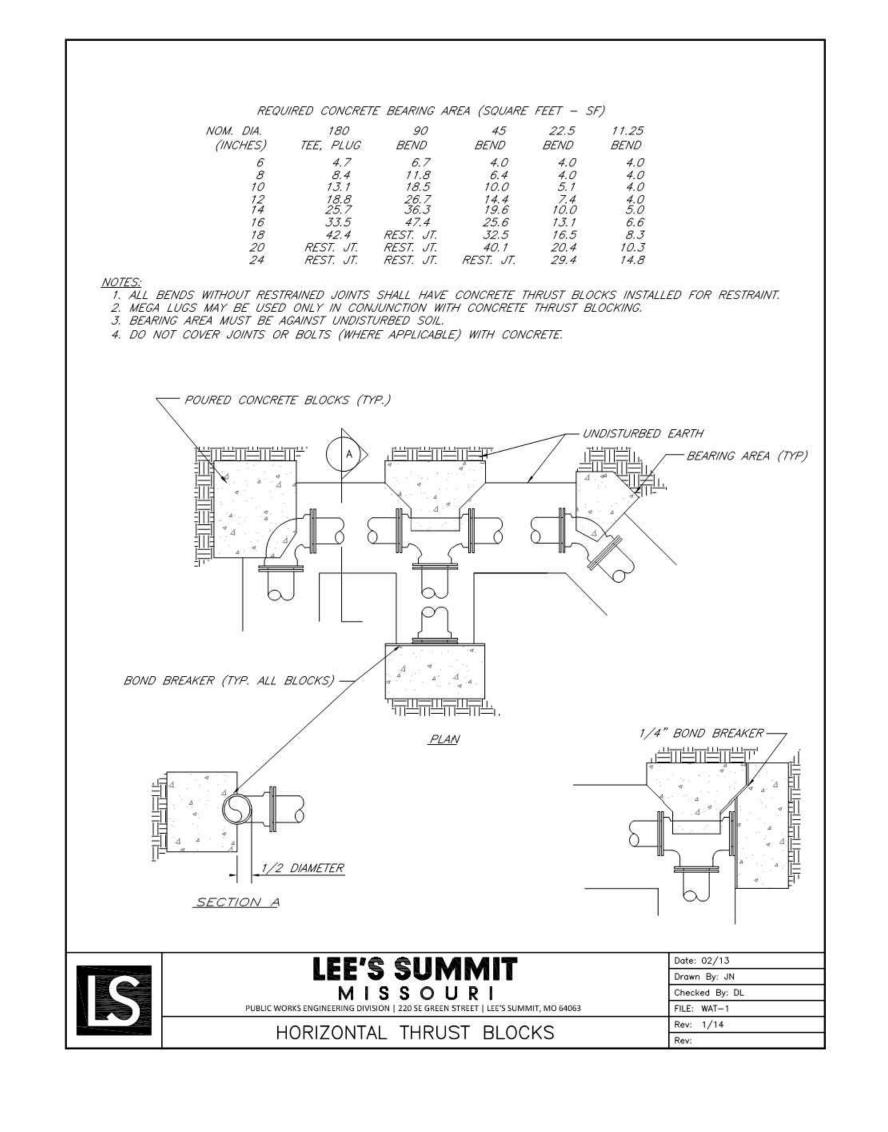
Not to Scale

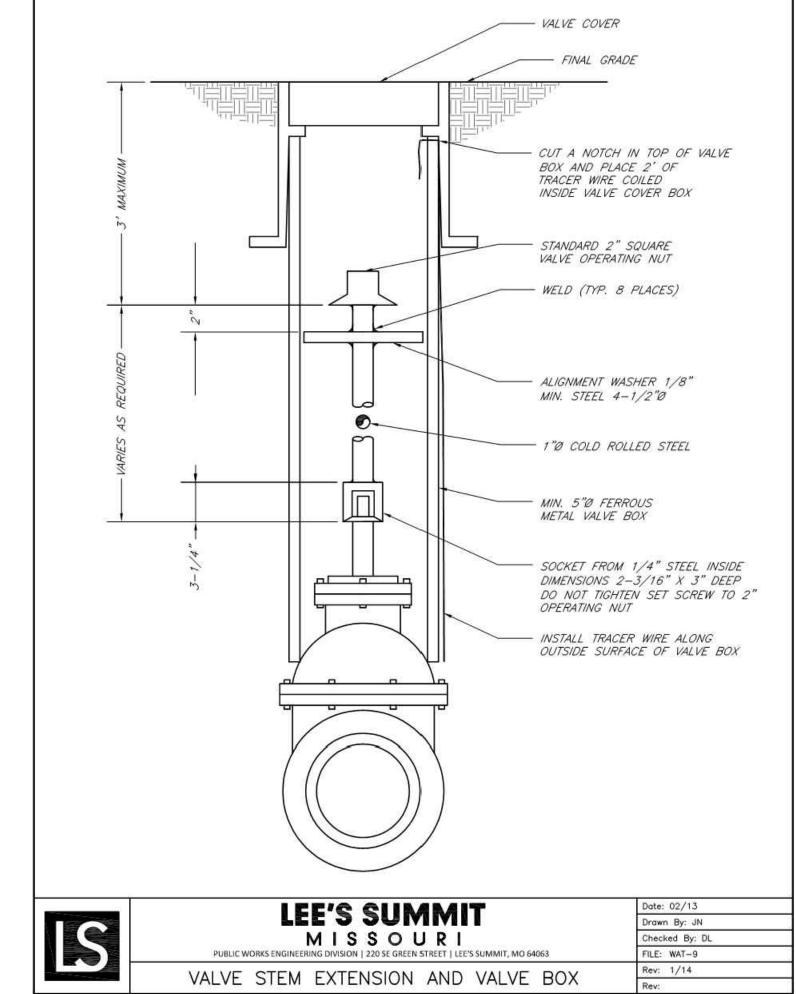
SECTION A-A

PLOT SCALE PLOT DATE COMM NO.







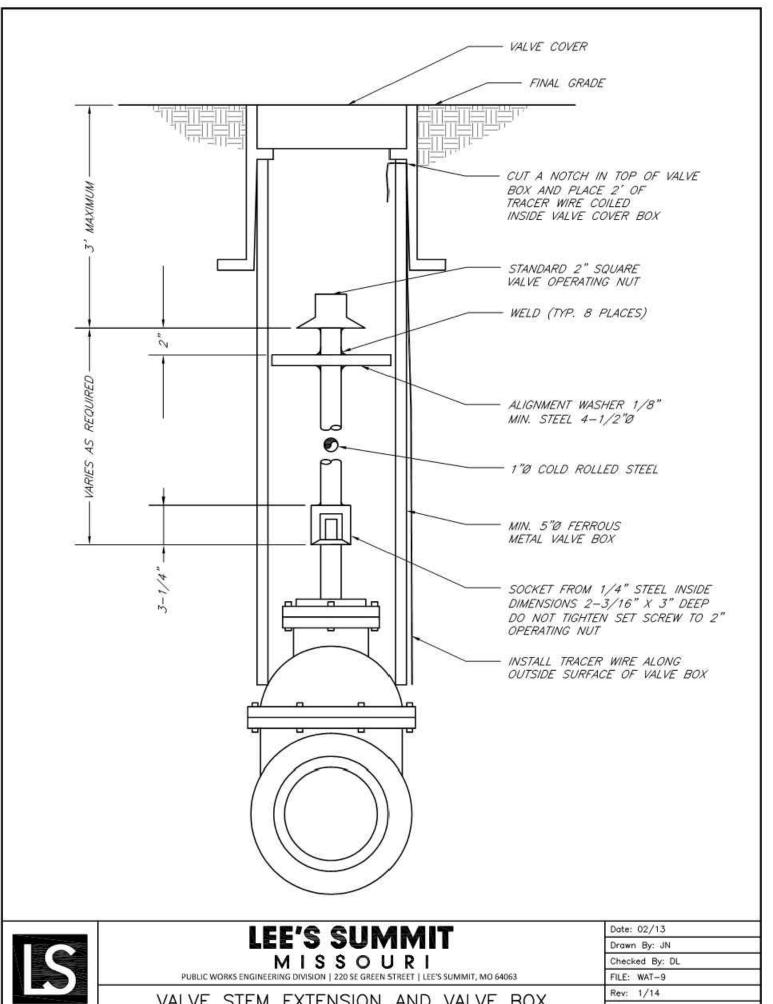


**COD VEISION** 

PLOT SCALE

PLOT DATE

COMM NO.





7101 College Blvd., Suite 400 Overland Park, Kansas 66210 p. (913) 663-1900 f. (913) 663-1633 BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.



PROJECT TITLE



**VAL 400** 

STCS Architecture Engineering Planning Interiors

SFCS Inc. • 1927 South Tryon St., Ste 207 Charlotte, North Carolina 28203 704.372.7327 • Fax 704.372.7369 www.sfcs.com

PROJECT DES	PROJECT DESIGNER		DAS	
PROJECT ARC	PROJECT ARCHITECT		DAS	
PROJECT ENG	PROJECT ENGINEER		ERB	
DRAWN BY		:	SKT	
CHECKED BY		:	ERB	
APPROVED BY		:		
NO.	REVISION	D	ESCRIPTION	DATE
1	ADDENDUM #1 09/27/2018			
2	LANDSCAPE PLAN 10/10/2018			
3	ADDE	ND	UM #3	10/26/2018

DRAWING TITLE

UTILITY DETAILS 2

	COMM. NO.	DATE
	17106.00	SEPTEMBER 14, 2018
	DRAWING	SHEET
_	C6.2	13 of 14



### PLANT SCHEDULE

I LANT OOTIL	DOLL				
TREES	QTY	BOTANICAL NAME / COMMON NAME	CONT	CAL	
	3	Acer rubrum 'Franksred' TM / Red Sunset Maple	B & B	2"Cal	
SHRUBS	QTY	BOTANICAL NAME / COMMON NAME	CONT.	<u>HEIGHT</u>	
	14	Azalea Kurume Hybrid `Coral Bells` / Kurume Azalea	5 gal	2` height	
(+)	9	Hydrangea macrophylla `Nikko Blue` / Nikko Blue Hydrangea	5 gal	2` height	
$\otimes$	6	Hydrangea paniculata `Limelight` TM / Tree Form Limelight Hydrangea	7 gal		
	7	Rosa x `Knockout` TM / Rose	5 gal	2` height	
	24	Spiraea betulifolia / Birch Leaf Spirea	5 gal	2` height	
	29	Spiraea japonica `Goldmound` / Spirea	5 gal	12"-18" H	
EVERGREEN SHRUB	QTY	BOTANICAL NAME / COMMON NAME	CONT.	<u>HEIGHT</u>	
$\odot$	28	Berberis thunbergii `Crimson Pygmy` / Crimson Pygmy Barberry	5 gal	2` height	
MANAGE EN CONTRACTOR OF THE STATE OF THE STA	20	Buxus microphylla `Winter Gem` / Globe Winter Gem Boxwood	5 gal	2` height	
$\bigcirc$	24	Ilex crenata `Hetzi / Hetzii Japanese Holly	5 gal	3` Ht.	
•	5	Juniperus chinensis `Blue Point` / Blue Point Juniper	7 gal	4` Ht.	
<del>+</del> +	8	Juniperus chinensis 'Spartan' / Spartan Juniper	5 gal	6` Ht	
$\bigcirc$	18	Juniperus sabina `Monard` / Monard Juniper	5 gal	12"	
PERENNIALS	QTY	BOTANICAL NAME / COMMON NAME	CONT.	<u>HEIGHT</u>	
$\odot$	28	Hosta x `Patriot` / Plantain Lily	3 gal	12"-18" H	
SHRUB AREAS	<u>QTY</u>	BOTANICAL NAME / COMMON NAME	CONT		SPACING
	982	Annual Planting Bed PLANT MATERIAL TO CHANGE SEASONALLY.	flat		6" o.c.
GROUND COVERS	<u>QTY</u>	BOTANICAL NAME / COMMON NAME	CONT		SPACING
\(\psi\) \(\	10,105 sf	Festuca arundinacea `Watersaver Blend` / Watersaving Blend of Tall Fescue	sod		
<u>MULCH</u>	<u>QTY</u>	BOTANICAL NAME / COMMON NAME	<u>DEPTH</u>		
	47 cy	Double Ground Hardwood Mulch	1" - 3" de	ер	

#### SITE DATA

	Quantity	Required	Existing	Provided	Total
Site Area	46,171.00				
Open Space Req					
2 shrubs /5,000 SF of					
ttl lot area		18.47	0	192	192
1 tree /5,000 SF of					
Indscp area	16,690.76	3.34	1	3	4
Island/Interior					
Landscape					
parking area >10					
spaces	5,487.75				
5% of parking area		274.39	0	414.39	

IRRIGATION PLAN TO BE PROVIDED AS DESIGN-BUILD

- 1. IRRIGATION PLAN TO NOT INTERFERE WITH ANY
- 2. IRRIGATION SYSTEM DESIGN TO BE BASED ON AVAILABLE PSI- TO BE DETERMINED BUT NOT TO EXCEED 45 PSI.
- RESPONSIBLE FOR ELECTRICAL POWER SERVICE TO THE CONTROLLER AND SHALL MAKE ALL HOOK-UPS FROM THE ELECTRICAL SERVICE TO THE AUTOMATIC CONTROLLER. ALL EXPOSED LOW VOLTAGE WIRE SHALL BE ENCLOSED IN A CONDUIT.
- IRRIGATION CONTROLLER.
- 7. IRRIGATION CONTROLLER AND RAIN SENSOR SHALL BE LOCATED IN OWNER APPROVED





## GENERAL IRRIGATION NOTES

- PROPOSED IMPROVEMENTS SHOW WITHIN PLANS.
- 3. THE MECHANICAL CONTRACTOR SHALL BE
- 4. PLACE VALVE BOXES 12" MINIMUM FROM AND PARALLEL TO CURBS AND WALKS, GROUPED VALVES TO BE EQUALLY SPACED.
- 5. INSTALL ALL MAINLINES TO SLOPE AT 1% MINIMUM TO DRAIN VALVES LOCATED AT LOW POINTS OF MAIN SYSTEM.
- 6. GENERAL CONTRACTOR SHALL PROVIDE 110V, NON-INTERRUPTED ELECTRICAL SERVICE FOR THE
- LOCATIONS.



#### COMM. NO. DATE 17106.00 SEPTEMBER 14, 2018 SHEET DRAWING

L1.0

Civil Engineering • Surveying • Utilities 7101 College Blvd., Suite 400 Overland Park, Kansas 66210

p. (913) 663-1900 f. (913) 663-1633 BHC RHODES is a trademark of Brungardt Honomichl & Company, P.A.

**CONSTRUCTION SET** 

John Knox Village

**VAL 400** 

SFCS Inc. • 1927 South Tryon St., Ste 207

DAS

DAS

ERB

SKT

ERB

09/27/2018

10/10/2018

10/26/2018

REVISION DESCRIPTION

ADDENDUM #1

LANDSCAPE PLAN

ADDENDUM #3

LANDSCAPE PLAN

Charlotte, North Carolina 28203

www.sfcs.com

PROJECT DESIGNER

PROJECT ARCHITECT

PROJECT ENGINEER

DRAWN BY

CHECKED BY

APPROVED BY

DRAWING TITLE

704.372.7327 • Fax 704.372.7369

PROJECT TITLE

#### GENERAL LANDSCAPE NOTES

MENU

COD VEISION

PLOT SCILE

PLOT DATE

COMM NO.

- THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL FINAL GRADE WITH THE LANDSCAPE ARCHITECT AND OR DESIGN TEAM PRIOR TO COMPLETION.
- 2. LOCATION AND PLACEMENT OF ALL PLANT MATERIAL SHALL 8. BE COORDINATE WITH THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 3. LOCATION OF ALL UTILITIES ARE APPROXIMATE, THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION OPERATIONS.
- 4. REFER TO CIVIL DRAWINGS FOR ALL GRADING AND BERMING, EROSION CONTROL, STORM DRAINAGE, UTILITIES AND SITE LAYOUT.
- 5. THE CONTRACTOR SHALL ARRANGE AND CONDUCT A PRE-CONSTRUCTION MEETING ONSITE WITH LANDSCAPE ARCHITECT PRIOR TO WORK.
- 6. PLANT QUANTITIES ARE FOR INFORMATION ONLY DRAWING SHALL PREVAIL IF CONFLICT OCCURS. CONTRACTOR IS RESPONSIBLE FOR CALCULATING OWN QUANTITIES AND BID ACCORDINGLY.

- 7. THE CONTRACTOR IS TO NOTIFY LANDSCAPE ARCHITECT AFTER STAKING IS COMPLETE AND BEFORE PLANT PITS ARE EXCAVATE.
- TREE LOCATIONS IN AREAS ADJACENT TO DRIVES, WALKS, WALLS AND LIGHT FIXTURES MAY BE FIELD ADJUSTED AS APPROVED BY LANDSCAPE ARCHITECT.
- 9. THE CONTRACTOR SHALL REPORT SUBSURFACE SOIL OR DRAINAGE PROBLEMS TO THE LANDSCAPE ARCHITECT.
- 10. THE PLAN IS SUBJECT TO CHANGES BASED ON PLANT SIZE AND MATERIAL AVAILABILITY. ALL CHANGES OR SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF LEES SUMMIT, MISSOURI AND THE LANDSCAPE ARCHITECT.
- 11. ALUMINUM LANDSCAPE EDGING TO BE USED ON ALL LANDSCAPE BEDS ABUTTING TURF AREAS AS NOTED ON LANDSCAPE PLANS.

12. LANDSCAPE CONTRACTOR IS TO BE RESPONSIBLE FOR WATERING ALL PLANT MATERIAL UNTIL THE TIME THAT A PERMANENT WATER SOURCE IS READY.

LANDSCAPE PLAN

- 13. THE CONTRACTOR SHALL SHOW PROOF OF PROCUREMENT, SOURCES, QUANTITIES AND VARIETIES FOR ALL SHRUBS, PERENNIALS ORNAMENTAL GRASSES AND ANNUALS WITHIN 21 DAYS FOLLOWING THE AWARD OF THE CONTRACT.
- 14. CONTRACTOR SHALL PROVIDE FULL MAINTENANCE FOR NEWLY LANDSCAPED AREAS FOR A PERIOD OF 30 DAYS AFTER THE DATE OF FINAL ACCEPTANCE. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVE-COLORED, VIABLE TURF AND LANDSCAPED AREA MUST BE ESTABLISHED. THE LANDSCAPED AREAS SHALL BE FREE OF WEEDS, OPEN JOINTS, BARE AREAS AND SURFACE IRREGULARITIES.
- 15. LANDSCAPE CONTRACTOR SHALL PROVIDE ROCK MULCH SAMPLE TO OWNER FOR APPROVAL.

## LEGEND

STM	PROPOSED STORM SEWER
<b>–</b> 51m	PROPOSED STORM SEWER
—— FP ——	PROPOSED FIRE PROTECTION LINE
	PROPOSED ELECTRIC LINE
WS	PROPOSED DOMESTIC SERVICE LI
	PROPOSED SANITARY SERVICE LIN
w	PROPOSED WATER MAIN
	EXISTING WATER MAIN
	EXISTING SANITARY SEWER MAIN
G	EXISTING GAS MAIN
	EXISTING STORM SEWER
	LIMITS OF DISTURBANCE

