OUR LADY OF THE PRESENTATION CHURCH -SCHOOL ADDITION AND RENOVATION

ESTIMATED QUANTIT	IES		
ITEM	UNITS	PLAN	AS-BUILT
STREET AND STORM			
Grading 187(C), 9(F)*	Cu. Yds.	178(C)	
Asphalt Pavement	Sq. Yds.	824	
Alternate Pavement Area	Sq. Yds.	83	
CG-1 Curb	Lin. Ft.	243	
Alternate CG-1 Curb	Lin. Ft.	85	
24" DIA Nyloplast Grated Inlet	Ea.	6	
24"X24" Nyloplast Junction Box	Ea.	1	
15" HDPE	Lin. Ft.	453	
Concrete Sidewalk	Sq.Ft.	438	
Retaining Wall	Lin. Ft.	93	
6" Fire line	Lin. Ft.	25	
Gas Line	Lin. Ft.	150	
Gate Single Rail	Ea.	1	
Pavement Removal	Sq. Yds.	950	
Curb Removal	Lin. Ft.	158	
Retaining Wall Removal	Lin. Ft.	44	

* No shrimkage or swell calculated for earthwork quantities.



UTILITIES INVOLVED

Kansas City Power & Light	471-0060
Southwestern Bell Telephone	
KPL Gas Service Company	221-2200
Public Works	969-1800
American Cablevision	231-1444
Water Pollution Control Dept.	513-0303
Missouri One-Call System	1-800-DIG-RITE
City Planning & Development	969-1600
Fire Department	969-1300

UTILITIES:

THE INFORMATION CONCERNING LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON WHICH ARE NOT VISIBLE FROM THE SURFACE, HAS BEEN TAKEN FROM THE RECORDS AND FIELD LOCATIONS OF THE VARIOUS UTILITY COMPANIES AND HAS NOT BEEN FIELD VERIFIED BY THIS COMPANY. THESE LOCATIONS ARE NOT TO BE CONSTRUED AS ACCURATE OR EXACT. CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS AND ELEVATIONS. IF A MAJOR DISCREPANCY IS ENCOUNTERED. NOTIFY ENGINEER. CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

FINAL DEVELOPMENT PLANS



LOCATION MAP SECTION 6, TOWNSHIP 47, RANGE 31

STANDARD LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
SANITARY SEWER	—— S ——	— S —	CATCH BASIN OR INLET		
SHRUB		more	ELECTRIC CABLE	E E	E E _
SPAN GUY	\longrightarrow	$- \bigstar -$	FENCE	××	—×—-×-
STORM SEWER	— ST —	— ST —	FIRE HYDRANT	$\check{\bullet}$	Y
STREET LIGHT POLE	+	-ф-	GAS MAIN	GG	GG_
STREET SIGN	-	∇	GAS OR WATER METER	[W][W]	GG-
STUMP		$\overline{\mathcal{A}}$	GAS OR WATER VALVE	W	G _
TELEPHONE DUCT	TT	_TT_	GUY ANCHOR		
TELEPHONE OR POWER	P_ _ P	$-^{\intercal} - ^{\intercal} -$	MANHOLE	0	0
TELEPHONE POLE		-0-	POWER POLE		-[]-
TELEPHONE POLE WITH PO	OWER	-0-		-0-	-0-
TRAFFIC SIGNAL	K	×			
TREE	(C)				
WATER MAIN	—— W ——	—— W ——			



SHEET INDEX:

- C001 COVER SHEET
- C002 GENERAL NOTES
- CO03 DEMOLITION PLAN
- C004 DIMENSION PLAN AND EROSION CONTROL PLAN C005 UTILITY PLAN
- COOS OTILITY PLAN COO6 GRADING PLAN
- COO7 STORM LINE A PLAN AND PROFILE
- C008 DETAILS
- C009 DETAILS
- C010 DRAINAGE AREA MAP



COVER SHEET



<u>G</u> E	<u>ene</u>
1.	Refe (D&
2.	All the
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4.	No
5.	The reco The con
6.	Clea perf and
7.	All v owr
8.	The con eros
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15.	Th Le Sp
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17.	Cc pr
18.	Re co at
19.	Th po

TRAL NOTES

fer to the current version of the City of Lee's Summit Design and Construction £C) Manual not the 2004 KCMO APWA, for construction of these plans.

workmanship and materials shall be subject to the inspection and approval of Engineering Department of the City of Lee's Summit, Missouri.

eal foot measurements shown on these plans are horizontal measurements, t slope measurements. All payments shall be made on horizontal easurements.

Geological Investigation was performed on this project.

e Utility locations shown on these plans are taken from Utility Company cords and are approximate only. They do not constitute actual field locations. e Contractor shall verify the location and depth of all utilities prior to nstruction.

earing and Grubbing operations and disposal of all debris therefrom shall be rformed by the contractor in strict accordance with all state and local codes d ordinances.

waste material shall be disposed of at a location to be selected by the oner or his authorized representative, such location to be on the site.

e Contractor shall control the erosion and siltation during all phases of nstruction, he shall keep the streets clean of mud and debris and follow the psion control plan prepared by the design engineer.

existing manholes, catch basins, utility valves and meter pits to be adjusted rebuilt to grade as required.

bgrade soil for all concrete structures, regardless of the type or location, all be firm, dense and thoroughly compacted and consolidated; shall be free om muck and mud; and shall be sufficiently stable to remain firm and intact der the feet of the workman or machinery engaged in subgrade, laying nforcing steel, and depositing concrete thereon. In all cases where subsoil is acky or works into mud or muck during such operation, a seal course of either ncrete or rock shall be placed below subgrade to provide a firm base for orking and for placing the floor slab.

A minimum horizontal distance of ten (10') shall be maintained between barallel water and sanitary sewer lines. At any point where sanitary sewer lines ross water main, the sanitary sewer shall be constructed of cast iron pipe or hipe encased in concrete for a distance of ten feet (10') in each direction from he crossing unless the water is a minimum of eighteen inches (18") above the op of the sanitary sewer line.

Contractor shall provide testing and inspection per ECTION 2200 - PAVING, CITY OF LEE'S SUMMIT, MISSOURI STANDARD PECIFICATIONS

evelopment plans are approved initially for one (1) year, after which they utomatically become void and must be updated and approved by the City ingineer before any construction will be permitted.

The City of Lee's Summit plan review is only for general conformance with the City of ee's Summit Design Criteria and the City Code. The City is not responsible for the ccuracy and adequacy of the design, or dimensions and elevations which shall be onfirmed and correlated at the job site. The City of Lee's Summit through approval f this document assumes no responsibility other than as stated above for the ompleteness and/or accuracy of this document.

The Contractor shall have one (1) signed copy of the plans (approved by the City of ee's Summit) and one (1) copy of the appropriate Construction Standards and pecifications at the job site at all times.

onstruction of the improvements shown or implied by this set of drawings shall not e initiated or any part thereof undertaken until the City Engineer is notified of such ntent and all required and properly executed bonds and permit fees are received and pproved by the City Engineer.

ontractor shall not be allowed to work on Saturdays, Sundays, or Holidays without rior approval of the City Engineer.

elocation of any water line, sewer line or service line thereof required for the onstruction of this project shall be the responsibility of the contractor and shall be this expense.

he Contractor shall install and properly maintain a mechanical plug at all connection oints with existing lines until such time that the new line is tested and approved.

¥Ĕ in Blue Ained on AND THE SIGNA CERTIFICATION 로뛷 °4/26/19 engineers planners City, Kansas 66109 U 11010 ATION PARISH **VELOPMENT PLANS** ON AND RENOVA PRESENTATION **MISSO** \succ INT COU KSON DITIC -TIMM(\frown DE ADI OF SU FINAL HOO] LAD EES SCJ 0 X-REF NO. 19-102 BASE DRAWING NO. 19-102 FINAL PLAN DATE MARCH 15, 2019 JOB NO. 19-102 C002

GENERAL NOTES



SITE DEMOLITION NOTES

 ALL ONSITE STRUCTURES, BEING REMOVED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT AND STATE REGULATIONS
 CONTRACTOR RESPONSIBLE FOR VERIFYING THAT ALL UTILITIES HAVE BEEN DISCONNECTED PER THE INDIVIDUAL UTILITY COMPANY'S CRITERIA. ALL UTILITY PIPES TO BE ABANDONED SHALL BE PLUGGED PER STATE REGULATIONS
 ALL ONSITE DEMOLISHED MATERIAL SHALL BE REMOVED AND DISPOSED OF PER STATE AND LOCAL REQUIREMENTS.

4. CONTRACTOR SHALL INSTALL A CONSTRUCTION FENCE AROUND THE PERIMETER OF THE SITE DURING DEMOLISHING ACTIVITIES.

UTILITY NOTES

1. CONTRACTOR TO COORDINATE WITH GAS COMPANY AND CITY FOR RELOCATION OF SERVICE.

2. CONTRACTOR TO REMOVE EXISTING WATER SERVICE CONNECTIONS PER CITY REQUIREMENTS.

GENERAL DEMOLITION NOTES

CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, UNDERGROUND STORAGE TANKS AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED. SEE THE OWNER'S/DEVELOPER'S SITE WORK SPECIFICATIONS. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS, WHETHER SHOWN OR NOT SHOWN AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL INSPECT AND TEST AS NECESSARY FOR ASBESTOS MATERIALS. REMOVAL OF ASBESTOS MATERIAL WILL MEET ALL LOCAL GOVERNING REQUIREMENTS.

EROSION CONTROL NOTES

CONTRACTOR TO SURROUND EXCAVATED STOCKPILES OF DIRT AND ROCK WITH WATTLES FOR CONTAINMENT AS NECESSARY TO PREVENT SILT FROM RUNNING ON PAVEMENT SURFACE.

CONTRACTOR TO COMPACT SUBGRADE, INSTALL GEOGRID AND INSTALL AGGREGATE BASE AS SOON AS POSSIBLE TO CONTAIN EXCAVATED DIRT WITHIN EXCAVATED AREAS.

INSTALL SILT FENCE AND INLET PROTECTION AROUND THE EXISTING CURB INLET WHEN EXCAVATION IN THAT AREA COMMENCES,

JOB NO. 19–102

C003

UTILITY NOTES:

1. CONSTRUCTION SHALL NOT START ON ANY PUBLIC WATER OR SANITARY SEWER SYSTEM UNTIL WRITTEN APPROVAL OR PERMITS HAVE BEEN RECEIVED FROM THE ENGINEER.

2. ALL UTILITY AND STORM SEWER TRENCHES CONSTRUCTED UNDER AREAS THAT RECEIVE PAVING SHALL BE BACKFILLED TO 18 INCHES ABOVE THE TOP OF THE PIPE WITH SELECT GRANULAR MATERIAL PLACED ON EIGHT-INCH LIFTS, AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY.

3. CONTRACTOR SHALL NOT OPEN, TURN OFF, INTERFERE WITH, OR ATTACH ANY PIPE OR HOSE TO OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCE OF ANY SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE LIABILITY OF THE CONTRACTOR. HG ENGINEERING AND OWNER ARE TO BE HELD HARMLESS.

4. DISINFECTION AND PRESSURE TESTING OF WATER LINES SHALL BE PERFORMED AND PAID FOR WATER DEPARTMENT 24 HOURS MINIMUM, PRIOR TO ANY TESTING.

5. ALL WATER AND SANITARY SEWER SYSTEMS THAT ARE TO BE PUBLIC LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS PREVIOUSLY APPROVED BY THE CITY OF LEES SUMMIT AND THE STATE OF MISSOURI AND SHALL BE INSPECTED BY THE CITY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THIS INSPECTION OCCURS.

6. LOCATIONS SHOWN FOR PROPOSED WATER AND GAS LINES ARE APPROXIMATE. VARIATIONS MAY BE MADE, WITH APPROVAL OF THE ENGINEER, TO AVOID CONFLICTS.

7. CONTRACTOR TO INSTALL TRACING TAPE ALONG ALL NON-METALLIC WATER MAINS AND SERVICE LINES PER SPECIFICATIONS.

8. CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF NEW UTILITIES.

WATER LINES SHALL HAVE A MINIMUM COVER OF 42 INCHES. ALL VALVES 9. ON MAINS AND FIRE HYDRANT LEADS SHALL BE WITH VALVE BOX ASSEMBLIES. THE SIZE OF VALVE BOX ASSEMBLY TO BE INSTALLED IS DETERMINED BY THE TYPE AND SIZE OF VALVE. VALVE BOX CAPS SHALL HAVE THE WORD "WATER".

10. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SANITARY SEWER LINES. WHEN IT IS NECESSARY FOR ANY WATER LINE TO CROSS A SANITARY SEWER LINE, THE SEWER LINE SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE AT LEAST 10 FEET EITHER SIDE OF THE WATER LINE UNLESS THE WATER LINE IS AT LEAST 2 FEET CLEAR DISTANCE ABOVE THE SANITARY SEWER LINE.

UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

C005

SCALE IN FEET

°4/26/19

DSUI engineer planner

GENERAL NOTES

INFORMATION PERTAINING TO UNDER GROUND UTILITIES WAS AVAILABLE RECORDS AND FIELD LOCATIONS WHEN POSSIBLE, MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF A BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS IN MACHINE TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIC OR 24", WHICH EVER IS LESS, CONTACT THE ENGINEER AND TH DEVELOPER PRIOR TO PROCEEDING WITH CONSTRUCTION.

ALL STRUCTURES LOCATED WITHIN RIGHT OF WAY OR OTHERW THESE PLANS SHALL BE CONSTRUCTED PER HIGHWAY DEPARTM STRUCTURE(S) ARE NOT PROTOTYPICAL OR CONSTRUCTION CA CONTRACTOR SHALL SUBMIT SHOP DRAWING TO HG CONSULT, APPROVAL.

CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OR RE UNDERGROUND UTILITIES SHOWN OR NOT SHOWN AT NO ADDI OWNER.

CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES (EXISTING UTILITY LINE AS REQUIRED BY CUT AND FILL AT NO A THE OWNER.

CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE DESIGN A OF SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION TO MEET OSHA, FEDERAL, STATE AND LOCAL REGULATIONS PL INSTALLATION OF THE WORK INDICATED ON THESE DRAWINGS. ALL DISTURBED AREAS AND SLOPES SHALL BE GRADED SMOOTH SOIL APPLIED. THE AREA SHALL BE SEEDED AND WATERED UN GROWTH HAS BEEN ESTABLISHED.

STORM DRAIN PIPE BEDDING SHALL BE INSTALLED PER APWA, 1 SEE EROSION CONTROL PLAN FOR RIP RAP PAD SIZES.

ELEVATIONS ARE CALLED OUT TO TOP OF CURB, TOP OF PAVE STRUCTURE, UNLESS OTHERWISE NOTED.

PARKING LOT GRADING SHALL BE PERFORMED TO ROUTE STOR DIRECTED TO THE STORM COLLECTION SYSTEM.

ALL CURB SHALL BE CG-1.

ENSURE THAT FILL MATERIAL IS FREE OF BRUSH, RUBBISH, ROC BUILDING DEBRIS, AND OTHER MATERIALS INAPPROPRIATE FOR STABLE FILLS.

DO NOT INCORPORATE FROZEN MATERIAL OR SOFT, MUCK, OR COMPRESSIBLE MATERIALS INTO FILL SLOPES.

PERMANENTLY STABILIZE ALL GRADED AREAS AFTER FINAL GRA ON EACH AREA OF THE GRADING PLAN. APPLY TEMPORARY ST MEASURES ON ALL GRADED AREAS WHEN WORK IS TO BE INTER (SEE EROSION CONTROL PLAN(S).

CONTRACTOR SHALL MATCH TOP OF PROPOSED DRAINAGE STR PROPOSED GRADES. IF A DISCREPANCY OCCURS BETWEEN PRO PROPOSED STRUCTURE TOPS, THE GRADING SHALL GOVERN. IS MORE THAN 4 INCHES THE CONTRACTOR SHALL CONTACT TH RECORD.

ALL UTILITIES, INCLUDING STORM SEWER, SHOWN WITHIN PUB RIGHT OF WAYS SHALL BE CONSTRUCTED TO THE GOVERNING SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE CONSTRUCT OR THE GOVERNING AGENCY'S SPECIFICATIONS, WHICHEVER IS THERE IS A QUESTION AS TO WHICH SPECIFICATIONS SHOULD CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD.

ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO RE TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMO OFF SITE. UNLESS OTHERWISE NOTED. ANY BURNING ON SITE TO LOCAL ORDINANCES AND/OR THE OWNER/DEVELOPERS STA SPECIFICATIONS.

ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.

CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION SHALL CONTACT UTILITY LOCATING COMPANY (STATE ONE CAI LOCATE ALL UTILITIES PRIOR TO GRADING START.

SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL INSTALLED.

AFTER PERMITS HAVE BEEN OBTAINED AND EROSION CONTROL INSTALLED, THE CONTRACTOR SHALL GRADE BUILDING PAD & 1/2" OF SUBGRADE.

OBTAINED FROM BUT THE CONTRACTOR ALL EXISTING UTILITIES ADVANCE OF FIED ON THESE PLANS HE OWNER/	GRADING NOTES: 1. EARTHWORK UNDER THE BUILDING SHALL COMPLY WITH THE PROJECT ARCHITECTURAL PLANS. OTHER FILL MATERIAL SHALL BE MADE IN LIFTS NOT TO EXCEED EIGHT INCHES DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. FILL MATERIAL MAY INCLUDE ROCK FROM ON-SITE EXCAVATION IF CAREFULLY PLACED SO THAT LARGE STONES ARE WELL DISTRIBUTED AND VOIDS ARE COMPLETELY FILLED WITH SMALLER STONES, EARTH, SAND OR GRAVEL TO FURNISH A SOLID EMBANKMENT. NO ROCK LARGER THAN THREE INCHES IN ANY DIMENSION NOR ANY SHALE SHALL BE PLACED IN THE TOP 12 INCHES OF EMBANKMENT	NO. BY CK/APP		1 SPW RKS IS A COPY AND MAY CONTAIN AT SHALL NOT APPLY TO ANY COPIES
WISE NOTED ON THE MENT STANDARDS. IF ANNOT BE ACHIEVED , FOR REVIEW AND	2. AREAS THAT ARE TO BE CUT TO SUBGRADE LEVELS SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS.			ule INK, the plan 0 nthis documen
EMOVAL OF EXISTING ITIONAL COST TO THE	3. IN ALL AREAS OF EXCAVATION, IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED. A QUALIFIED GEOTECHNICAL ENGINEER SHALL RECOMMEND TO THE OWNER THE METHODS OF UNDERCUTTING AND REPLACEMENT OF PROPERLY COMPACTED, APPROVED FILL MATERIAL. ALL PROOF ROLLING AND UNDERCUTTING			the signature in B Fication contained
ON ADJUSTING ADDITIONAL COST TO AND IMPLEMENTATION	 4. CONTRACTOR SHALL USE SILT FENCE OR OTHER MEANS OF CONTROLLING EROSION ALONG THE EDGE OF THE PROPERTY OR OTHER BOTTOM OF SLOPE LOCATIONS. 	NOISI		blue ink seal and 1 erations. The cert
MEASURES REQUIRED URSUANT TO THE 5. H AND (4") OF TOP ITIL HARDY GRASS	5. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS.	DATE REV		IF This is not a e unauthorized alt
SECTION 2100.	6. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.		OF MOS	MO E-26440
EMENT, OR TOP OF	7. IT IS NOT THE DUTY OF THE ENGINEER OR THE OWNER TO REVIEW THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE AT ANY TIME DURING CONSTRUCTION.	K	Kerne form	VIN STERRETT,
	8. THE SITEWORK FOR THIS PROJECT SHALL MEET OR EXCEED STANDARD SITEWORK SPECIFICATIONS.	in the second se	4/26/19	R. KE
CKS, LOGS, STUMPS, R CONSTRUCTING	9. PIPE LENGTHS ARE CENTER TO CENTER OF STRUCTURE OR TO END OF END SECTIONS.		+	0109
RHIGHLY	10. HANDICAP STALLS SHALL MEET ADA REQUIREMENTS AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION AT THE BUILDING ENTRY AND ACCESSIBLE PARKING STALLS. SLOPES EXCEEDING 2.0% WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.		SU	/, Kansas 66 E-1736 (KS.)
ADING IS COMPLETED ABILIZATION RRUPTED OR DELAYED	11. CONTRACTOR TO ADJUST DEPTHS OF EXISTING SERVICE LINES AS NECESSARY			Kansas Cit
RUCTURES WITH OPOSED GRADES AND IF THE DISCREPANCY HE ENGINEER OF				reet, Suite 210, cense no. E201000
BLIC EASEMENTS OR AGENCY'S ED TO THE CLIENT'S S MORE STRINGENT, IF APPLY THE				11010 Haskell St CORPORATE LI
EMAIN. ALL FENCING, IVED & DISPOSED OF E SHALL BE SUBJECT ANDARDS AND		SN	ION ARISH	
MEET HEAVY DUTY		ILA	AT NP/	DURI
UNDERGROUND N. CONTRACTOR LLL SYSTEM) AND		ENTP	RENOV	LY - MISSC
MEASURES HAVE BEEN		M	ND I	NUO
- MEASURES APRONS TO 0" TO -		FINAL DEVELOP	SCHOOL ADDITION AN OUR LADY OF THE PRES	LEES SUMMIT- JACKSON C
			X-REF NO.	
	C 20° 30° 40°	19–1	DRAWING NO. DATE	Y PLAN
	GDADING DI ANI		MARCH 15, 20 JOB NO. 19–102	19
	UNADINU FLAN			6

													4		
	EXIS DEPTH	STA E STA 2+30 TING WATE UNKNOWI	2+50 & ST XISTING SA DEPTH UI LINE A- RLINE N, F.V.	A 2+65 LIN NITARY STU NKNOWN, F	E A JBS .V.	STA 2+73.51, STORM LINE A	24" DIA NYLOPLAST, A-4	HZU VEHICLE LUAU GRATE INLET Top: 991.75 OM	POSED GRA	STA 3+37.17, STORM LINE	24" DIA NYLÓPLAST, A-5	GRATE INLET Top: 992.40	STA 3+81.52, STORM LINE	 24" DIA NYLOPLAST, A-6 H20 VEHICLE LOAD GRATE INLET 	/ Top: 992.40
		144 15" HE @ 1.00 STA 1 EXIST F/L 9	.02 LF DPE Pipe 5% Slope +81.00 LIN ING SANITA 85.80	E A RY SEWER	STORA	F/L OUT (E): 988.19	F/L IN (W): 988.24	6 15" @ 1.	3.65 LF HDPE Pipe .08% Slope	F/L OUT (E): 988.93	F/LIN (NW): 989.02	44.35 L 15" HDPE F @ 1.09% SI	E/L OUT (SE): 989.51	F/L IN (NW): 989.57	15
1+6	50 1+	-80 2+	-00 2+	-20 2+	-40 2+	60	2+	80 3+	-00 3+	-20	3+40	3+60	3+8	80 4	4+(

DETAIL SHEET

PRE-DEVELOPMENT

				S	STOR	M SEW	ER	CA	LC	ULAT	IONS																		
						PRESE	ENTAT	ION (CHURC	CH																			
	SEWEI	R LOCATION	TRIBUT	FARY ARE	A (AC.)		TIME	OF FL	OW			100	YEAR DES	SIGN					CURB INLE	ĒT					PIPE	DESIGN			
STORM	FROM	то	AR	EA		COMPOSITE			I				F [cfs]		In Pipe	By Pass	GUTTER	GUTTER	lalat	INLET	INLET	Pipe	Pipe	Dino	Rough	Design	Depth	Full	Full
SEVVER	STRUCTUR	RESTRUCTURE	DESIGN	IATION	TOTAL		Ti 🗌	Tt	Тс	[in/hr]	AREA		By Pass	TOTAL	Downstream	Out	SLOPE	CAPACITY	Longth	CAPACITY	CAPACITY	Size	Slope	Tupe	Coeff	Velocity	(inchoc)	Velocity	Flow
NO.	NO.	NO.	ACR	ES		COEFFICIENT				⊥ [100]	ୁ [100]	(Cfs)	In (cfs)	ୁ[100]	[cfs]	[cfs]	[%]	[cfs]	Length	[cfs]	80% [cfs]	[in]	[%]	туре	[MANNG]	[fps]	Q[100]	[fps]	[cfs]
1	DI 1H	DI 1G	7	0.61	0.61	0.89			5.0	10.32	6.39	0.0	1.8	4.6	4.6	0.0	SUMP	-	24" dia	4.6	3.7	15"	3.01	HDPE	0.012	10.28	8.3	9.9	7.2
1	DI 1G	DI 1F	6	0.12	0.73	0.88			5.0	10.32	1.36	4.6	0.0	7.8	7.2	0.6	SUMP	-	24" dia	4.6	3.7	15"	1.06	HDPE	0.012	5.8	15.0	5.8	7.2
1	DI 1F	DI 1E	5	0.11	0.84	0.92			5.0	10.32	1.31	7.8	0.0	9.1	7.2	1.9	SUMP	-	24" dia	4.6	3.7	15"	1.09	HDPE	0.012	5.8	15.0	5.8	7.2
1	DI 1E	DI 1D	4	0.19	1.03	0.73			5.0	10.32	1.79	9.1	0.0	10.9	7.2	3.7	SUMP	-	24" dia	4.6	3.7	15"	1.08	HDPE	0.012	5.8	15.0	5.8	7.2
1	DI 1D	DI 1C	3	0.21	1.24	0.76			5.0	10.32	1.81	10.9	0.0	12.7	7.2	5.5	SUMP	-	24" dia	4.6	3.7	15"	1.06	HDPE	0.012	5. <mark>8</mark>	15.0	5.8	7.2
1	DI 1C	DI 1B	2	0.57	1.81	0.75			5.0	10.32	4.80	12.7	0.0	17.5	7.2	10.3	SUMP	-	24" dia	4.6	3.7	15"	1.13	HDPE	0.012	5.8	15.0	5.8	7.2
1	DI 1B	CB 1A	1	1.25	3.06	0.85			5.0	10.32	12.48	17.5	0.0	30.0	7.2	22.8	SUMP	-	5'	16.3	13.0	15"	1.18	HDPE	0.012	5.8	15.0	5.8	7.2

POST-DEVELOPMENT

DRAINAGE AREA MAP

DATE REVISION NO. BY CK/APP		IF THIS IS NOT A BLUE INK SEAL AND THE SIGNATURE IN BLUE INK, THE PLAN IS A COPY AND MAY CONTAIN UNAUTHORIZED ALTERATIONS. THE CERTIFICATION CONTAINED ON THIS DOCUMENT SHALL NOT APPLY TO ANY COPIES
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FINAL DEVELOPMENT PLANS	OUR LADY OF PRESENTATION CHURCH - ADDITION AND RENOVATION	LEES SUMMIT- JACKSON COUNTY - MISSOURI
19–1	X-REF NO. 19–102 BASE DRAWING NO. 02 PRELIMINARY DATE MARCH 4, 2019 JOB NO.	PLAN
	19–102	