LEGEND

EXISTING	PROPOSED
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949.50 EX.	949.50
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DESCRIPTION CONSTRUCTION LIMITS PROPERTY LINE EASEMENT FENCE LIGHT POLE UNDERGROUND ELECTRIC LINE ELECTRICAL STRUCTURE UNDERGROUND - TELECOMMUNICATION LINE GAS LINE GAS METER - WATER LINE WATER STRUCTURE FIRE HYDRANT - SANITARY LINE SANITARY STRUCTURE SANITARY GREASE TRAP – STORM LINE STORM STRUCTURE ROOFDRAIN / UNDERDRAIN _ CONTOUR TOP OF CURB TOP OF PAVEMENT FINISHED GRADE SPOT ELEVATION GRADE SLOPE MAJOR FLOOD ROUTING P HIGH POINT SEEDING/LANDSCAPE AREA CONCRETE STRUCTURAL CONCRETE CONCRETE PAVEMENT ROCK AREA HEAVY DUTY ASPHALT PAVEMENT



WHATABURGER 300 CONCORD PLAZA DR. SAN ANTONIO, TX 78216 PHONE: (210) 476-6842 CONTACT: ALYSSIA LESTER EMAIL: alester@wbhq.com

SURVEYOR

YOUNG - HOBBS AND ASSOCIATES 1202 CROSSLAND AVE. CLARKSVILLE, TN 37040 PHONE: (931) 645-2524 CONTACT: DAVE R. HOBBS

WHATABURGER

204 SW M150 HWY LEE'S SUMMIT, MO 64801 JACKSON COUNTY PROTOTYPE 20-M FINAL DEVELOPMENT PLAN

VICINITY MAP

ENGINEER

ms consultants, inc. 2221 SCHROCK ROAD COLUMBUS, OHIO 43229 PHONE: (614) 898-7100 CONTACT: IAN AULTMAN EMAIL: iaultman@msconsultants.com

GEOTECHNICAL ENGINEER

TERRACON CONSULTANTS, INC. 4765 WEST JUNCTION STREET SPRINGFIELD, MISSOURI 65802 PHONE: (417) 864-5100 CONTACT: TY G. ALEXANDER, P.E.

BENCHMARK

TBM 1: 1/2 IRON NORTHING: 2822704.4825 EASTING: 978325.3390 ELEVATION = 1022.68

TBM 2: 1/2 IRON NORTHING: 2822484.7625 EASTING: 978055.2866 ELEVATION = 1019.71

BASIS OF BEARINGS: MO (C) STATE PLANE COORDINATE SYSTEM SPC (2402 MO C)

FLOOD INFORMATION

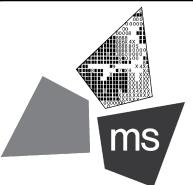
THIS PROPERTY IS LOCATED WITHIN AN AREA HAVING ZONE DESIGNATIONS OF "X" BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, ON FLOOD INSURANCE RATE MAP NO. 29095C0532G, WITH A MAP EFFECTIVE DATE OF JANUARY 20TH, 2017, IN JACKSON COUNTY, STATE OF MISSOURI, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED. REVISION/DATE/DESCRIPTION

SIR UPDATES	09/13/21
60% SET	01/24/22
PDP APPLICATION TO CITY	02/24/22
RESPONSE TO CITY COMMENTS I	03/29/22
FINAL DEVELOPMENT SET	06/29/22
RESPONSE TO FDP COMMENTS	08/30/22
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RESPONSE TO FDP COMMENTS IV	11/03/22

NOTICE

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ms consultants, inc. engineers, architects, planners 2221 Schrock Road Columbus, Ohio 43229-1547 phone 614.898.7100 fax 614.898.7570

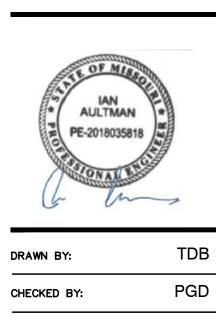
PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

COVER SHEET



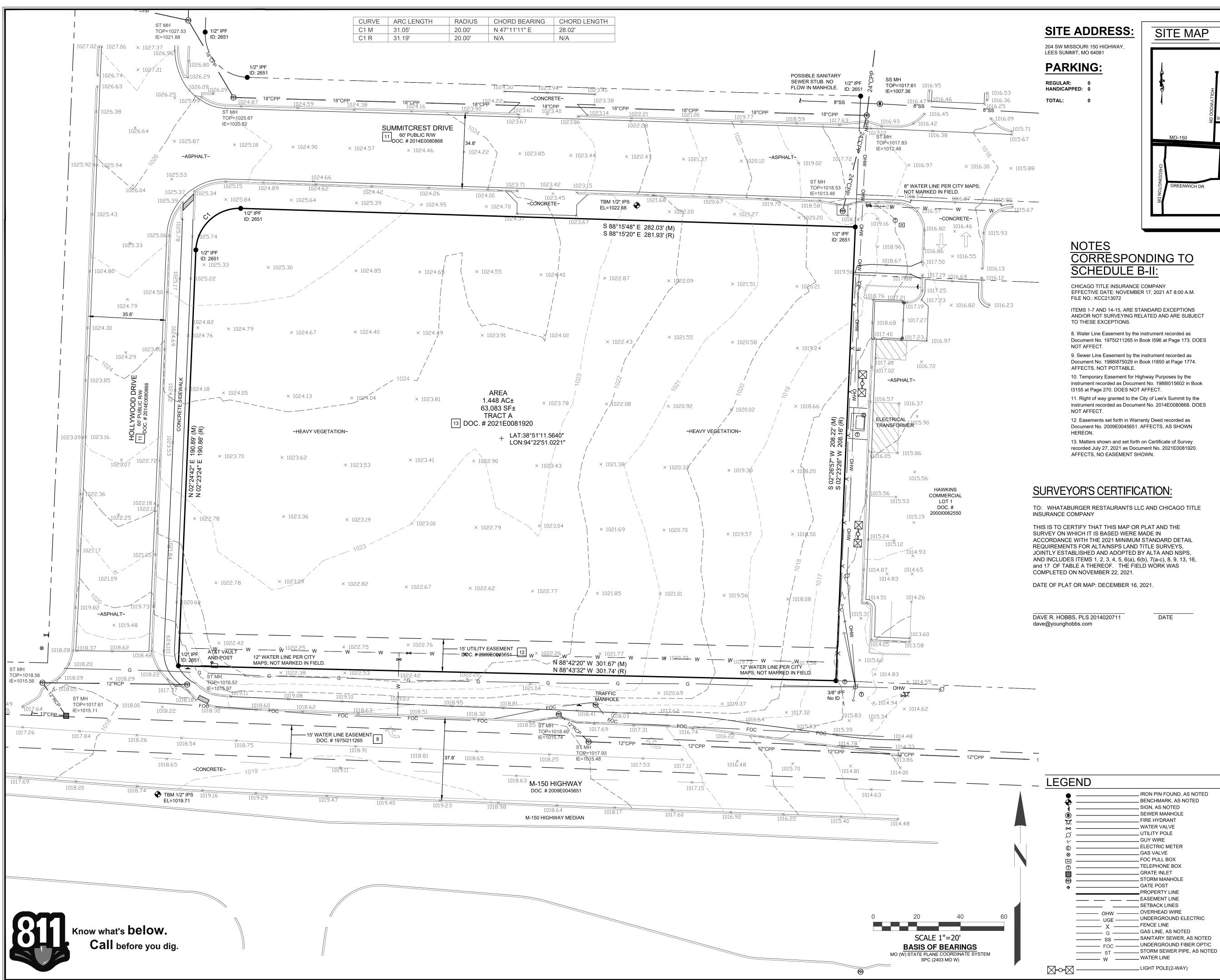
PROJECT NO: 40497-21

C-1.0

DRAWING

Know what's below. Call before you dig.

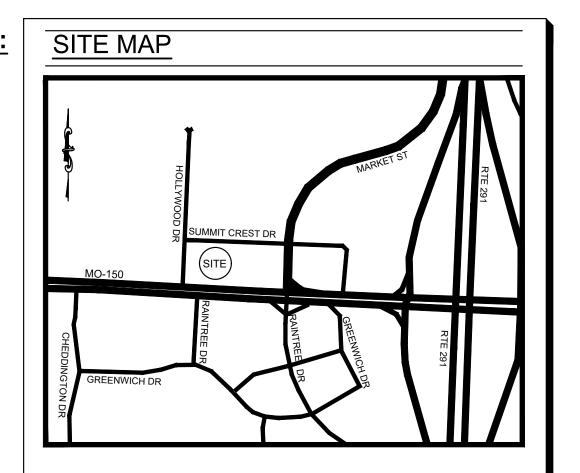
SHEET INDEX	
COVER SHEET	C-1.0
SURVEY	1 OF 1
SITE DEMOLITION PLAN	C-2.0
SITE DIMENSION PLAN	C-3.0
SITE ZONING PLAN	C-3.1
CONCRETE JOINTING PLAN	C-4.0
SITE GRADING PLAN	C-5.0
SITE DRAINAGE PLAN	C-5.1
STORM SEWER PLAN AND PROFILES	C-5.2
SITE UTILITY PLAN	C-6.0
SITE DETAILS	C-7.0
SITE DETAILS	C-7.1
SITE DETAILS	C-7.2
SITE DETAILS	C-7.3
DETENTION SYSTEM DETAILS	C-7.4
SITE DETAILS	C-7.5
SITE DETAILS	C-7.6
FIRE PROTECTION PLAN	C-8.0
SWPPP PHASE - PRE-CONSTRUCTION	C-9.0
SWPPP PHASE - DURING & POST CONSTRUCTION	C-9.1
SWPPP NOTES	C-10.0
SWPPP NOTES	C-10.1
SWPPP DETAILS	C-10.2
SWPPP DETAILS	C-10.3
LANDSCAPE PLAN	L-1.0
IRRIGATION PLAN	I-1.0



SITE ADDRESS:

204 SW MISSOURI 150 HIGHWAY,

0



NOTES **CORRESPONDING TO** SCHEDULE B-II:

CHICAGO TITLE INSURANCE COMPANY

- EFFECTIVE DATE: NOVEMBER 17, 2021 AT 8:00 A.M. FILE NO.: KCC213072
- ITEMS 1-7 AND 14-15, ARE STANDARD EXCEPTIONS AND/OR NOT SURVEYING RELATED AND ARE SUBJECT
- TO THESE EXCEPTIONS. 8. Water Line Easement by the instrument recorded as Document No. 1975I211265 in Book I596 at Page 173. DOES
- NOT AFFECT. 9. Sewer Line Easement by the instrument recorded as
- Document No. 1988/875029 in Book 11850 at Page 1774.
- AFFECTS, NOT POTTABLE. 10. Temporary Easement for Highway Purposes by the
- instrument recorded as Document No. 1988/015602 in Book I3155 at Page 270. DOES NOT AFFECT. 11. Right of way granted to the City of Lee's Summit by the
- instrument recorded as Document No. 2014E0080868. DOES NOT AFFECT.
- 12. Easements set forth in Warranty Deed recorded as Document No. 2009E0045651. AFFECTS, AS SHOWN HEREON.
- 13. Matters shown and set forth on Certificate of Survey recorded July 27, 2021 as Document No. 2021E0081920. AFFECTS, NO EASEMENT SHOWN.

SURVEYOR'S CERTIFICATION:

TO: WHATABURGER RESTAURANTS LLC AND CHICAGO TITLE

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(a), 6(b), 7(a-c), 8, 9, 13, 16, and 17 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON NOVEMBER 22, 2021.

DATE

_ IRON PIN FOUND, AS NOTED

_ BENCHMARK, AS NOTED

_SIGN, AS NOTED

_ SEWER MANHOLE

_ELECTRIC METER

_ FIRE HYDRANT

___ WATER VALVE

UTILITY POLE

__GUY WIRE

__GAS VALVE

__FOC PULL BOX

__ TELEPHONE BOX __ GRATE INLET

_ STORM MANHOLE

PROPERTY LINE

__ UNDERGROUND ELECTRIC

__GATE POST

___ FENCE LINE

______ SETBACK LINES ------ OHW ------- OVERHEAD WIRE

_____ GAS LINE, AS NOTED

_____ X ___

DATE OF PLAT OR MAP: DECEMBER 16, 2021.

TABLE A NOTES:

- ITEM 2: ADDRESS SHOWN IS PER TITLE COMMITMENT NO. KCC213072.
- THIS PROPERTY IS LOCATED WITHIN AN AREA ITEM 3: HAVING ZONE DESIGNATIONS OF "X" BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, ON FLOOD INSURANCE RATE MAP NO.29095C0532G, WITH A MAP REVISED DATE OF JANUARY 20, 2017, IN JACKSON COUNTY, STATE OF MISSOURI, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.
- ITEM 5: CONTOURS WERE DERIVED FROM RANDOM SHOTS AND CROSS SECTIONS AND ARE SHOWN AT ONE FOOT INTERVALS. ELEVATIONS SHOWN HEREON ARE BASED ON GPS OBSERVATIONS TOGETHER WITH AN OPUS SOLUTION, DATED 11/22/2021 (NAVD88,GEOID18).
- ITEM 6A: NO ZONING REPORT PROVIDED TO THIS SURVEYOR. THERE WAS NO EVIDENCE OF RECENT EARTH ITEM 16: MOVING, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
- THERE WAS NO EVIDENCE OF RECENT CHANGES IN ITEM 17: STREET RIGHT OF WAY LINES. THERE WAS NO EVIDENCE OF RECENT OR STREET SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

LAND DESCRIPTION AS SURVEYED

PART OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30, TOWNSHIP 47 NORTH, RANGE 31 WEST, OF THE FIFTH PRINCIPAL MERIDIAN, LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, DESCRIBED AS FOLLOWS:

BEING ALL OF TRACT "A", ON THE CERTIFICATE OF SURVEY, RECORDED JULY 27, 2021 AS DOCUMENT NO. 2021E0081920 IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ALSO DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2" IRON PIN FOUND (ID: 2651) AT THE RIGHT OF WAY LINE INTERSECTION OF 150 HIGHWAY AND HOLLYWOOD DRIVE; THENCE WITH THE EAST RIGHT OF WAY LINE OF SAID HOLLYWOOD DRIVE N 02°24'42" E A DISTANCE OF 190.89 FEET TO A 1/2" IRON PIN FOUND (ID: 2651); THENCE WITH THE RIGHT OF WAY LINE INTERSECTION OF SAID HOLLYWOOD DRIVE AND SUMMITCREST DRIVE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 31.05 FEET WITH A RADIUS OF 20.00 FEET WITH A CHORD BEARING OF N 47°11'11" E, WITH A CHORD LENGTH OF 28.02 FEET TO A 1/2" IRON PIN FOUND (ID: 2651); THENCE WITH THE SOUTH RIGHT OF WAY LINE OF SAID SUMMITCREST DRIVE S 88°15'48" E A DISTANCE OF 282.03 FEET TO A 1/2" IRON PIN FOUND (ID: 2651); THENCE LEAVING SAID RIGHT OF WAY LINE WITH THE WEST LINE OF HAWKINS COMMERCIAL LOT 1, RECORDED IN DOCUMENT NO. 2000I0062550 S 02°26'57" W A DISTANCE OF 208.22 FEET TO A 3/8" IRON PIN FOUND IN THE NORTH RIGHT OF WAY LINE OF SAID 150 HIGHWAY; THENCE WITH SAID NORTH RIGHT OF WAY LINE N 88°42'20" W A DISTANCE OF 301.67 FEET TO THE POINT OF BEGINNING, HAVING AN AREA OF 63,083 SQUARE FEET, 1.448 ACRES, MORE OR LESS.

SURVEY NOTES:

INFORMATION REGARDING THE PRESENCE, SIZE AND LOCATION OF UNDERGROUND UTILITIES IS SHOWN HEREON. THIS INFORMATION HAS BEEN SHOWN BASED ON THE LOCATION ABOVE GROUND APPURTENANCES, AVAILABLE DESIGN PLANS AND FLAGS AND PAINT PLACED BY THE UNDERGROUND PROTECTION SERVICE. NO CERTIFICATION IS MADE AS TO THE ACCURACY OF THOROUGHNESS OF THE INFORMATION CONCERNING UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON. (MISSOURI ONE CALL 1-800-DIG-RITE). THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A PRIVATE UTILITY LOCATE.

CONTACT PROPER AUTHORITIES BEFORE BUILDING NEAR UTILITY LINES, FOR EASEMENT WIDTH AND RESTRICTIONS. UTILITIES ARE APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO ANY CONSTRUCTION.

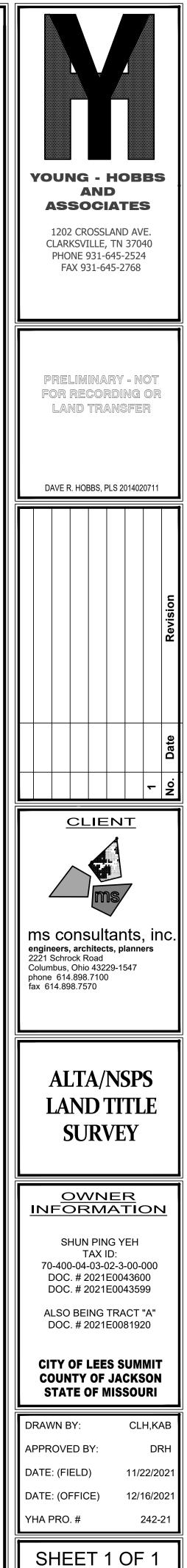
UNLESS STATED OTHERWISE, ANY MONUMENT REFERRED TO HEREIN AS AN "IRON PIN SET" IS A SET 5/8" DIAMETER REBAR, WITH AN YELLOW PLASTIC CAP STAMPED "YOUNG-HOBBS"

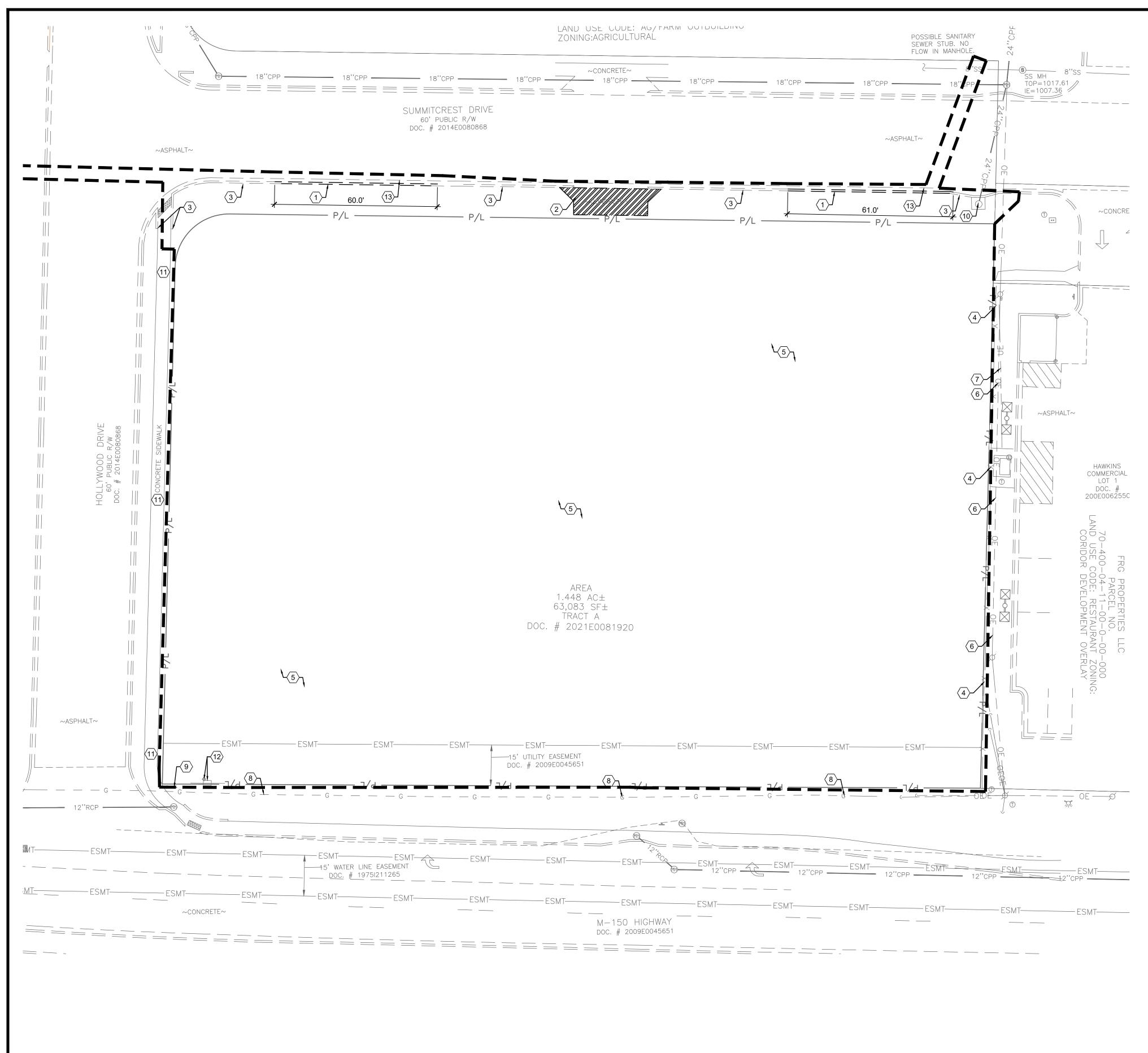
THIS SURVEY HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF THE PERSON OR ENTITIES NAMED HERON. NO EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE INFORMATION SHOWN HEREON IS TO BE EXTENDED TO ANY PERSONS OR ENTITIES OTHER THAN THOSE SHOWN HEREON.

THERE WERE NO BUILDINGS ON THE SUBJECT PROPERTY AT THE TIME OF THE SURVEY.

LIST OF ENCROACHMENTS: NONE, THE OWNERSHIP OF CURB, UTILITIES, FENCES, AND/OR PERIMETER WALLS SHOWN HEREON ARE NOT KNOWN AND THUS ARE NOT LISTED AS ENCROACHMENTS. CURB, UTILITIES, FENCES, AND/OR PERIMETER WALLS ARE SHOWN IN THEIR RELATIVE POSITION TO THE BOUNDARY.

I DO HEREBY STATE THAT THIS IS A TRUE, COMPLETE AND CORRECT SURVEY OF THE DESCRIBED REAL PROPERTY SITUATED IN THE COUNTY OF GREENE, MISSOURI AND THAT THIS SURVEY WAS EXECUTED IN ACCORDANCE WITH THE CURRENT MISSOURI MINIMUM STANDARDS FOR PROPERTY SURVEYS (URBAN SURVEY 1:20,000)





GENERAL NOTES:

- AVENUE CLARKSVILLE, TN 37040.
- TIMING.
- CONSTRUCTION ACTIVITIES.

KEYED NOTES:

- $\langle 1 \rangle$ EXISTING CURB TO BE REMOVED AND DISPOSED OF.
- $\langle 2 \rangle$ EXISTING CONCRETE TO BE REMOVED AND DISPOSED OF.
- $\langle 3 \rangle$ EXISTING CURB TO REMAIN.
- $\langle 4 \rangle$ EXISTING WOODEN FENCE TO REMAIN.
- $\langle 5 \rangle$ EXISTING VEGETATION TO BE REMOVED AND DISPOSED OF.
- $\langle 6 \rangle$
- $\langle 7 \rangle$
- $\langle 8 \rangle$ PROTECT EXISTING GAS LINE TO REMAIN DURING CONSTRUCTION.
- (9) EXISTING SIGN TO REMAIN.
- (10) EXISTING STORM MANHOLE TO REMAIN.
- (11) EXISTING CONCRETE SIDEWALK TO REMAIN.
- (12) EXISTING AT&T VAULT AND POST TO REMAIN.
- (13) EXISTING GUTTER TO REMAIN ALONG SUMMITCREST DRIVE.

LEGEND

EXISTING	DESCRIPTION
UE	UNDERGROUND ELECTRIC LI
	UNDERGROUND TELECOMMUNICATION LINE
G	GAS LINE
— — — SAN —	SANITARY SEWER
ST	STORM SEWER
	WATER MAIN
——— P/L ———	PROPERTY LINE
	CONSTRUCTION LIMITS
ESMT	EASEMENT
	CONCRETE REMOVAL
	STORM STRUCTURE
\bowtie	WATER STRUCTURE
$\sum_{i=1}^{N}$	FIRE HYDRANT
	LIGHT POLE
¤	TRAFFIC POLE
MH	TRAFFIC MANHOLE

A. ALL EXISTING CONDITIONS, TOPOGRAPHY, UTILITIES AND PROPERTY INFORMATION ARE TAKEN FROM A SURVEY OF LAND SITUATED IN THE CITY OF LEE'S SUMMIT, COUNTY OF JACKSON AND STATE OF MISSOURI, BY SURVEYOR: YOUNG-HOBBS AND ASSOCIATES, 1202 CROSSLAND

B. AT START OF PROJECT AND PRIOR TO DEMOLITION OF EXISTING CONDITIONS, CONTRACTOR SHALL BE IN CONTACT WITH ADJACENT PROPERTY OWNERS, CITY REPRESENTATIVE, UTILITY REPRESENTATIVES AND OWNER REPRESENTATIVE TO COORDINATE DEMOLITION

C. CONTRACTOR TO REMOVE AND DISPOSE OF ALL DEBRIS AND OTHER MATERIALS RESULTING FROM DEMOLITION AND CONSTRUCTION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL. STATE AND FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS. D. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION PHASES OF THIS PROJECT. CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR DAMAGE TO NEIGHBORING PROPERTIES OCCURRING AS A RESULT OF

E. ALL EXISTING UTILITIES ARE SHOWN HEREIN AS REFERENCE ONLY AND ARE BASED ON RECORD OF THE VARIOUS UTILITY COMPANIES, A FIELD SURVEY AND EXISTING PLANS. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS OF ALL UTILITIES PRIOR TO DEMOLITION ACTIVITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION.

. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 48 HOURS BEFORE CONSTRUCTION IS TO START, TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH) SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATION IS AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION.

G. CONTRACTOR SHALL CONFINE ALL STOCKPILING OF DEMOLITION MATERIALS TO WITHIN THE LIMITS OF THE SUBJECT PROPERTY.

H. CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PRIOR TO DEMOLITION. SEE SHEETS C-10.0 AND C-10.1 FOR NOTES AND DETAILS.

EXISTING OVERHEAD ELECTRIC LINE TO REMAIN DURING CONSTRUCTION.

EXISTING UNDERGROUND ELECTRIC LINE TO REMAIN DURING CONSTRUCTION.

RGROUND ELECTRIC LINE RGROUND

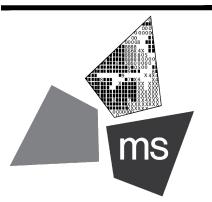
REVISION/DATE/DESCRIPTION

SIR UPDATES	09/13/21
60% SET	01/24/22
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ms consultants, inc. engineers, architects, planners 2221 Schrock Road Columbus, Ohio 43229-1547 phone 614.898.7100 fax 614.898.7570

PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

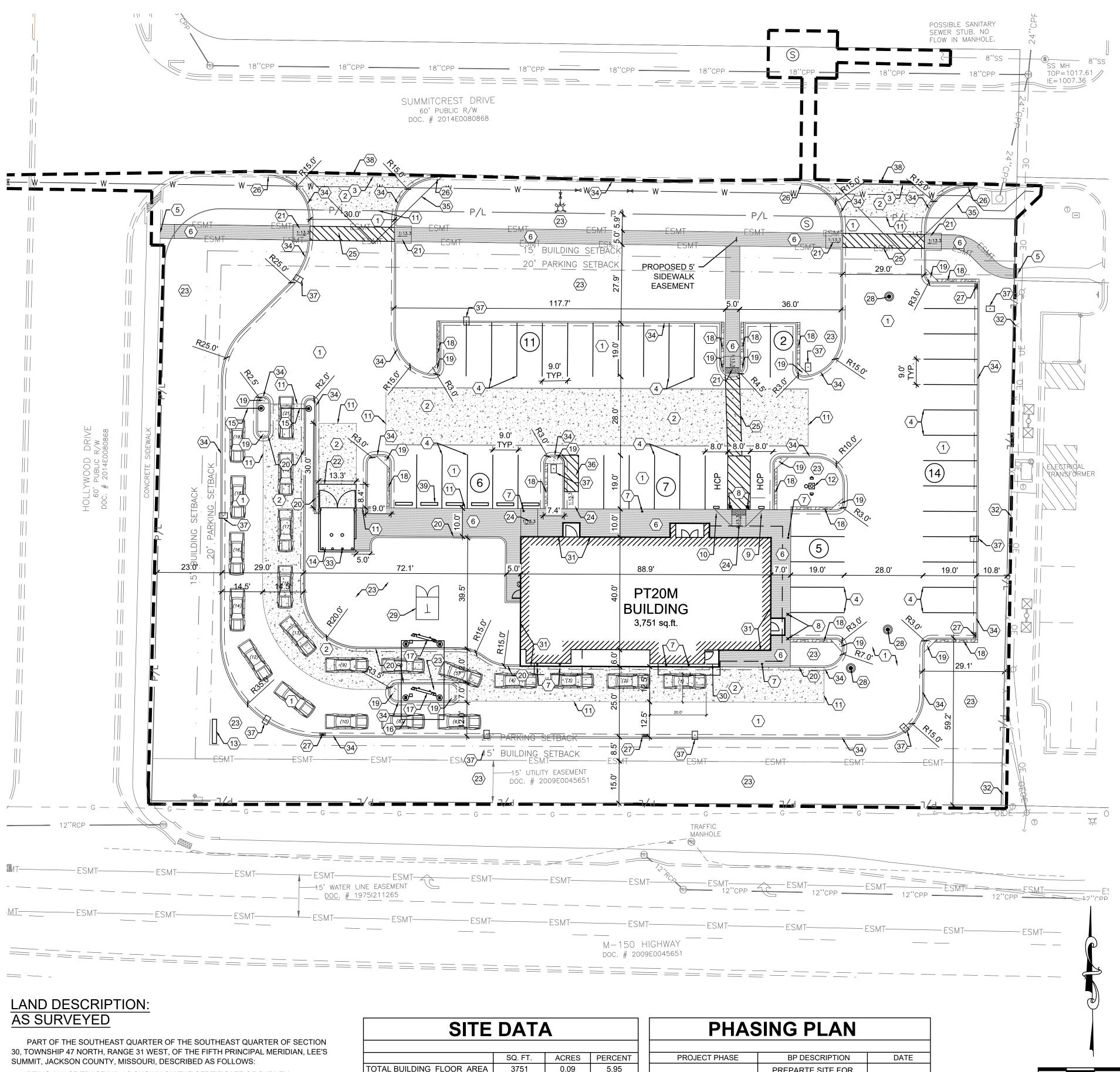
SITE DEMOLITION PLAN

AULTMAN PE-2018035818	7
DRAWN BY:	TDB

PGD CHECKED BY: 40497-21 PROJECT NO:

DRAWING

C-2.0



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SITE	DAT	4		PHAS	PHASING PLAN				
	SQ. FT.	ACRES	PERCENT	PROJECT PHASE	BP DESCRIPTION	DATE			
TOTAL BUILDING FLOOR AREA	3751	0.09	5.95		PREPARTE SITE FOR				
TOTAL SITE AREA	63083	1.45	100.0		CONSTRUCTION				
LIMITS OF DISTURBANCE	68942	1.58	109.2	A-PRE-CONSTRUCTION	INCLUDING ESTABLISHING	SEPTEMBER-22			
EXISTING PERVIOUS	62787	1.44	99.5		E&S PERIMETER				
EXISTING IMPERVIOUS	296	0.01	0.5		CONTROLS				
TOTAL PROPOSED PERVIOUS	24129	0.55	38.2		TOP SOIL STOCK PILE				
TOTAL PROPOSED IMPERVIOUS	38954	0.89 61.8			PROTECTION, SITE				
CURRENT ZONING IS CP-2 PLANN	ED COMMUN	ITY COMME	RCIAL ;	B-PHASE I CONSTRUCTION	CLEARING, TEMPORARY DECEMB	DECEMBER-22			
APPROVED BY CITY COUNCIL ON 05/31/22				SEEDING, GENERAL SITE PREP					
FLOOR AREA RATION = 0.059 SF					PREF				
				C-PHASE II CONSTRUCTION	CONSTRUCT BUILDING ASPHALT PAVING, STORM STRUCTURE INSTALLATIONS	DECEMBER-22 JANUARY-23			
				D-FINAL STABILIZATION	PERMANENT SEEDING	JUNE-23			

GENERAL NOTES:

- 37040.
- FOR ANY DAMAGE TO THEM DURING CONSTRUCTION. С.
- CONSTRUCTION PHASES OF THIS PROJECT.
- REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS AND ADDITIONAL INFORMATION. F.
- OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- BEEN PLANTED.
- DISCREPANCIES EXISTING BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL
- PREVAIL.

N

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KE	YED NOTES:
1	PROPOSED HEAVY DUTY ASPHALT PAVEMENT, SEE DETAIL ON SHEET C-7.0.
2	PROPOSED HEAVY DUTY CONCRETE PAVEMENT, SEE DETAIL ON SHEET C-7.0.
3	PROPOSED HEAVY DUTY CONCRETE PAVEMENT TO BE FLUSH WITH EXISTING
$\langle 4 \rangle$	PROPOSED PAINTED PARKING STRIPING (TYPICAL). ALL PARKING STRIPES ARE DETAILS OR SPECIFICATIONS.
5	CONNECT TO EXISTING SIDEWALK. SEE THE GRADING PLAN FOR MORE DETAIL
6	PROPOSED CONCRETE SIDEWALK. SEE DETAIL ON SHEET C-7.0.
$\langle 7 \rangle$	PROPOSED BOLLARD, TYP. OF 8. SEE ARCHITECTURAL AND STRUCTURAL PLAN
8	PROPOSED ILLUMINATED BOLLARD, TYP. OF 4. SEE ARCHITECTURAL AND STRU
(9)	GENERAL CONTRACTOR TO PROVIDE AND INSTALL (1) POLE-MOUNTED ADA PAR REQUIREMENTS, SEE DETAIL ON SHEET C-7.0.
(10)	GENERAL CONTRACTOR TO PROVIDE AND INSTALL (1) POLE-MOUNTED ADA PA CONTRACTOR TO MEET LOCAL REQUIREMENTS, SEE DETAIL ON SHEET C-7.0.
(11)	CONCRETE TO BE FLUSH WITH ADJACENT ASPHALT PAVEMENT. SEE DETAIL O
(12)	FLAGPOLE WITH GROUND-MOUNTED LIGHTS, UNITEDFLAG AND BANNER, GARR WITH 14 GAUGE ALUMINUM BALL FINIAL. INCLUDE ALUMINUM ROLLER AND SLEI AND HALYARDS. ENTIRE ASSEMBLY (INCLUDING FOUNDATION) TO CONFORM TO AND STRUCTURAL PLANS FOR DETAILS.
(13)	PROPOSED 35' HT POLE SIGN, CONTRACTOR TO COORDINATE WITH OWNER. SE
(14)	PROPOSED DUMPSTER ENCLOSURE AND CONCRETE PAD. SEE THE STRUCTUR
(15)	PROPOSED HEADACHE BAR. SEE ARCHITECTURAL PLANS FOR DETAILS.
(16)	PROPOSED MENU BOARD CANOPY. SEE ARCHITECTURAL PLANS FOR DETAILS.
(17)	PROPOSED EXTERIOR MENU BOARD. SEE ARCHITECTURAL PLANS FOR DETAILS
(18)	PROPOSED 1' WIDE CRUSHED GRANITE STRIP. SEE DETAIL ON SHEET L-1.0.
(19)	PROPOSED CONCRETE ISLAND NOSE. SEE DETAIL ON SHEET C-7.1.
20	PROPOSED 6" MONOLITHIC CURB. SEE DETAIL ON SHEET C-7.1.
21	PROPOSED ADA SIDEWALK RAMP. SEE DETAIL ON SHEETS C-7.0 & C-7.1.
22	CONCRETE DUMPSTER ENCLOSURE APRON. TRASH ENCLOSURE AREA SHALL I PORTLAND CEMENT CONCRETE APPROACH 30 FEET IN LENGTH, MEASURED FR IMPROVED WITH A MINIMUM 6" OF FULL DEPTH UNREINFORCED PORTLAND CEM BASE COURSE. SEE DETAIL ON SHEET C-7.0.
23	PROPOSED LANDSCAPE AREA. SEE LANDSCAPE PLAN ON SHEET L-1.
24	PROPOSED CURB RAMP. SEE DETAIL ON SHEET C-7.0.
25	PROPOSED SIDEWALK CROSSING. SEE DETAIL ON SHEET C-7.2.
26	CONNECT PROPOSED CURB TO EXISTING CURB (TRANSITION REQUIRED).
27	PROPOSED STORM INLET. SEE SHEETS C-5.0 AND C-7.5 FOR DETAILS.
28	PROPOSED STORM MANHOLE/JUNCTION BOX. SEE SHEETS C-5.0, C-7.5, AND C-
29	PROPOSED ELECTRIC TRANSFORMER. COORDINATE DETAILS AND LOCATION W
30	PROPOSED HAND RAIL. SEE ARCHITECTURAL SHEETS FOR DETAILS.
31	PROPOSED STRUCTURAL FOUNDATION.
32	EXISTING WOODEN FENCE TO REMAIN.
33	TRASH ENCLOSURE SHALL BE PROTECTED THROUGH INSTALLATION OF 4" BOL SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS.
34	TYPE CG-1 CURB AND GUTTER. SEE DETAIL ON SHEET C-7.1.
(35)	SITE TRIANGLE.
36	PROPOSED PARKING STRIPING. SEE DETAIL ON SHEET C-7.0.
37	PROPOSED LIGHT POLE AND FOUNDATION. SEE STRUCTURAL PLANS FOR DETA
33	EXISTING GUTTER LINE TO BE MAINTAINED.
39	PROPOSED PRE-CAST CONCRETE WHEEL STOP (TYP. OF 6). SEE DETAIL ON SH

						(3)	2	PROP	OSED	LIGHT PO	LE AND I	-OUNDA
						(38	}	EXIST	ING GL	JTTER LIN	IE TO BE	MAINTA
(0 1	0 2	20	30	40	(39	>	PROP	OSED	PRE-CAS		RETE WH
		SCALE	: 1"=2	20'								
EGEND										·		
FEATURE		DE	SCR	IPTION	I							
		CO	NCR	ETE S	IDEWALK						ESMT—	
		HE	AVY	DUTY	ASPHALT	PAVE	MEN	Т			ESMT—	
		HE	AVY	DUTY	CONCRE	TE PAV	ΈME	ENT	<u>E</u>)	KISTING	PRO	POSED
		- CC	NST	RUCTI	ON LIMITS	S						φ

BUILDING SETBACK LINE

A. ALL EXISTING CONDITIONS, TOPOGRAPHY, UTILITIES AND PROPERTY INFORMATION ARE TAKEN FROM A SURVEY OF LAND SITUATED IN THE CITY OF LEE'S SUMMIT, COUNTY OF JACKSON AND STATE OF MISSOURI, BY SURVEYOR: YOUNG-HOBBS AND ASSOCIATES, 1202 CROSSLAND AVENUE CLARKSVILLE, TN

B. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION, AND IS RESPONSIBLE

PROVIDE SMOOTH TRANSITION FROM NEWLY PAVED AREAS TO EXISTING PAVED AREAS AS NECESSARY. THE EXISTING EDGE OF PAVEMENT SHALL BE FREE OF ALL LOOSE DEBRIS AT ALL AREAS WHERE PROPOSED PAVEMENT MEETS EXISTING PAVEMENT. THE EDGE OF EXISTING ASPHALT PAVEMENT SHALL BE PROPERLY SEALED WITH A TACK COAT MATERIAL IN ALL AREAS WHERE NEW ASPHALT PAVEMENT IS INDICATED TO JOIN EXISTING. D. ALL DIMENSIONS TO FACE OF CURB AND/OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO ADJACENT PROPERTIES DURING THE

G. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY

H. ALL EXCAVATED AREAS TO BE SEEDED AND/OR SODDED AFTER FINISH GRADING UNLESS OTHERWISE NOTED. ALL NEWLY SEEDED/SODDED AREAS SHALL HAVE A MINIMUM OF 4" OF TOPSOIL. HOLD SOIL DOWN 1" FROM PAVEMENT ELEVATION. CONTRACTOR TO SUPPLY STRAW MULCH WHERE GRASS SEED HAS

I. ALL RADII ARE 3.0 FEET UNLESS OTHERWISE SHOWN. ALL RADII INDICATED ON PLANS SHALL BE CONSTRUCTED AS CIRCULAR ARCS. J. THERE ARE NO OIL AND GAS WELLS (ACTIVE/INACTIVE/CAPPED) PER THE MISSOURI DEPARTMENT OF NATURAL RESOURCES MAPPING. ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE

L. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

PAVEMENT TO BE FLUSH WITH EXISTING ASPHALT PAVEMENT.

NG (TYPICAL). ALL PARKING STRIPES ARE TO BE 4" PAINTED WHITE, UNLESS OTHERWISE NOTED ON THE PLANS,

EE THE GRADING PLAN FOR MORE DETAILS.

ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS.

TYP. OF 4. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS.

AND INSTALL (1) POLE-MOUNTED ADA PARKING SIGNS. SIGNS PROVIDED BY CONTRACTOR TO MEET LOCAL ET C-7.0.

AND INSTALL (1) POLE-MOUNTED ADA PARKING SIGN WITH "VAN ACCESSIBLE" SIGN. SIGNS PROVIDED BY

CENT ASPHALT PAVEMENT. SEE DETAIL ON SHEET C-7.1.

LIGHTS, UNITEDFLAG AND BANNER, GARRISON TYPE OR OWNER APPROVED EQUAL, 30' HIGH, 5" BUTT ALUMINUM AL. INCLUDE ALUMINUM ROLLER AND SLEEVE. HARDWARE TO INCLUDE STATIONARY STRUCK, NYLON FLAGSNAPS, INCLUDING FOUNDATION) TO CONFORM TO APPLICABLE CODES, INCLUDING WIND LOADS. SEE ARCHITECTURAL

ACTOR TO COORDINATE WITH OWNER. SEE ELECTRICAL PLANS AND SIGNAGE PACKAGE FOR DETAILS.

AND CONCRETE PAD. SEE THE STRUCTURAL AND ARCHITECTURAL SHEETS FOR DETAILS.

APRON. TRASH ENCLOSURE AREA SHALL BE IMPROVED WITH A PORTLAND CEMENT CONCRETE PAD AND ROACH 30 FEET IN LENGTH, MEASURED FROM THE ENCLOSURE OPENING. THE PAD AND APPROACH SHALL BE LL DEPTH UNREINFORCED PORTLAND CEMENT CONCRETE CONSTRUCTED ON A SUB-GRADE OF 4" OF GRANULAR ET C-7.0.

ION BOX. SEE SHEETS C-5.0, C-7.5, AND C-7.6 FOR DETAILS.

R. COORDINATE DETAILS AND LOCATION WITH UTILITY OWNER AND ELECTRICAL PLANS. SEE SHEET C-6.0.

ECTED THROUGH INSTALLATION OF 4" BOLLARDS (TYP. OF 4) ALONG THE REAR WALL OF THE TRASH ENCLOSURE. RAL PLANS FOR DETAILS. DETAIL ON SHEET C-7.1.

LIGHT POLE

FIRE HYDRANT

TION. SEE STRUCTURAL PLANS FOR DETAILS.

IEEL STOP (TYP. OF 6). SEE DETAIL ON SHEET C-7.3.

PARKING SETBACK LINE
GUTTER LINE
PROPOSED SIDEWALK EASEMENT
EXISTING EASEMENT

PARKING DATA				
	REQUIRED	PROVIDED		
TANDARD	53	43		
ANDICAP	3	2		
OTAL	56	45		
4 PARKING SPACE REQUIRED PER 1000 S.F. OF THE ROSS BUILDING FLOOR AREA (3,751 SF OF DINING AREA)				

**1 ADA SPACE PER 25 STANDARD SPACES **FEWER SPACES ALLOWABLE IF EVIDENCE OF SUCCESS ON SIMILAR PROJECTS CAN BE PROVIDED. *PARKING JUSTIFICATION WAS SUBMITTED TO THE CITY ON 03/29/22 AS PART OF THE PDP PROCESS.

REVISION/DATE/DESCRIPTION

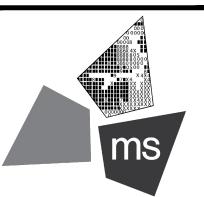
SIR UPDATES	09/13/21
60% SET	01/24/22
PDP APPLICATION TO CITY	02/24/22
RESPONSE TO CITY COMMENTS I	03/29/22
FINAL DEVELOPMENT SET	06/29/22
RESPONSE TO FDP COMMENTS	08/30/22
RESPONSE TO FDP COMMENTS II	09/29/22
RESPONSE TO FDP COMMENTS III	10/24/22
RESPONSE TO FDP COMMENTS IV	11/03/22

NOTICE

CALLY RESERVED.

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ms consultants, inc. engineers, architects, planners 2221 Schrock Road Columbus, Ohio 43229-1547 phone 614.898.7100 fax 614.898.7570

PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

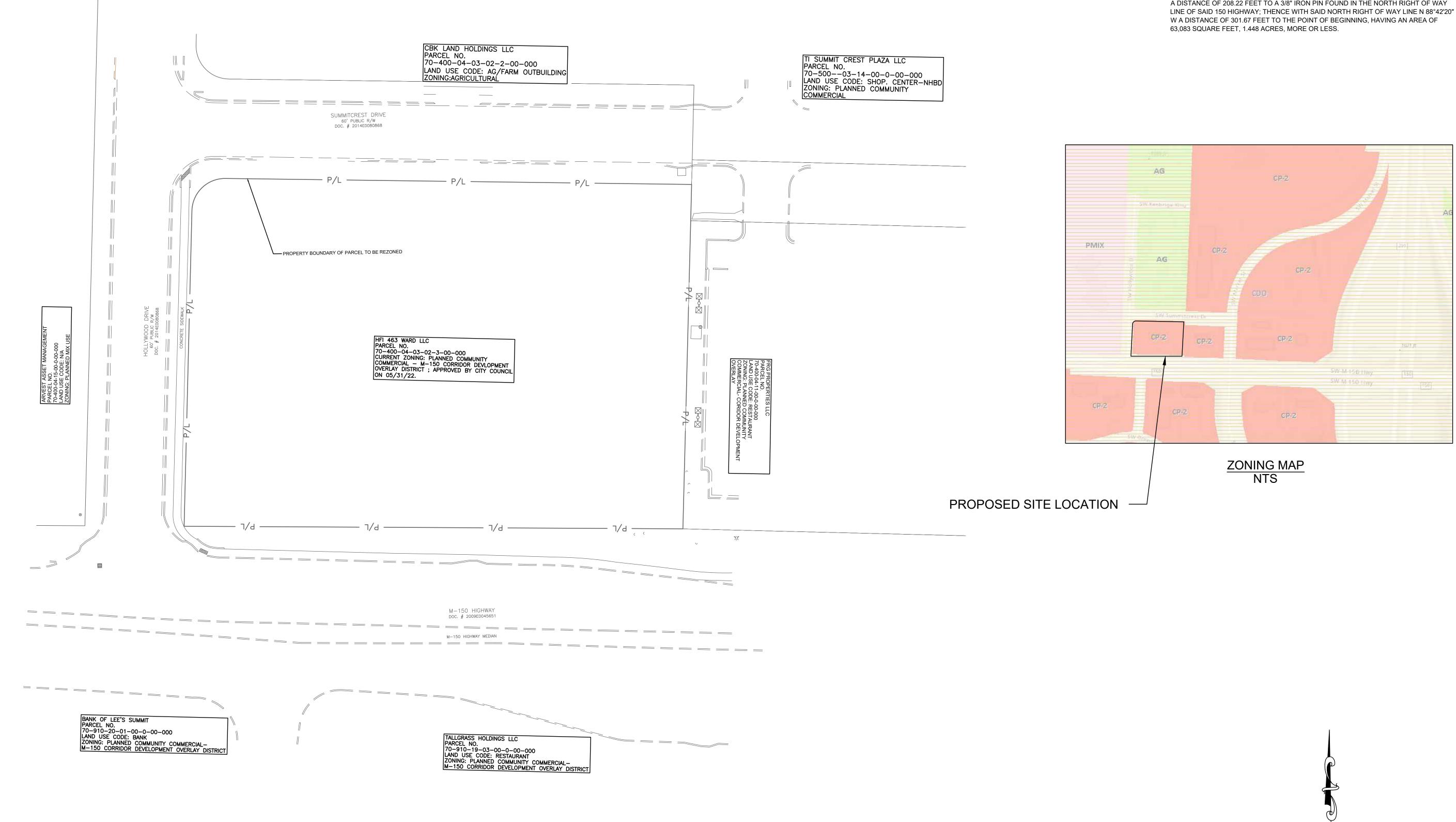
SITE DIMENSION PLAN

PE-2018035818	1
la m	7

CHECKED BY:	PGD
PROJECT NO:	40497-21

DRAWING

C-3.0



LAND DESCRIPTION: AS SURVEYED

PART OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30, TOWNSHIP 47 NORTH, RANGE 31 WEST, OF THE FIFTH PRINCIPAL MERIDIAN, LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, DESCRIBED AS FOLLOWS:

BEING ALL OF TRACT "A", AS SHOWN ON THE CERTIFICATE OF SURVEY, RECORDED JULY 27, 2021 AS DOCUMENT NO. 2021E0081920 IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ALSO DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2" IRON PIN FOUND (ID: 2651) AT THE RIGHT OF WAY LINE INTERSECTION OF 150 HIGHWAY AND HOLLYWOOD DRIVE; THENCE WITH THE EAST RIGHT OF WAY LINE OF SAID HOLLYWOOD DRIVE N 02°24'42" E A DISTANCE OF 190.89 FEET TO A 1/2" IRON PIN FOUND (ID: 2651); THENCE WITH THE RIGHT OF WAY LINE INTERSECTION OF SAID HOLLYWOOD DRIVE AND SUMMITCREST DRIVE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 31.05 FEET WITH A RADIUS OF 20.00 FEET WITH A CHORD BEARING OF N 47°11'11" E, WITH A CHORD LENGTH OF 28.02 FEET TO A 1/2" IRON PIN FOUND (ID: 2651); THENCE WITH THE SOUTH RIGHT OF WAY LINE OF SAID SUMMITCREST DRIVE S 88°15'48" E A DISTANCE OF 282.03 FEET TO A 1/2" IRON PIN FOUND (ID: 2651); THENCE LEAVING SAID RIGHT OF WAY LINE WITH THE WEST LINE OF HAWKINS COMMERCIAL LOT 1, RECORDED IN DOCUMENT NO. 200E006255 S 02°26'57" W A DISTANCE OF 208.22 FEET TO A 3/8" IRON PIN FOUND IN THE NORTH RIGHT OF WAY

NOTICE THIS ARCHITECTURAL AND ENGI-NEERING DRAWING IS GIVEN IN CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREE-MENT WITH THE ARCHITECT. NO OTHER USE, DISSEMINATION, OR DUPLICATION MAY BE MADE WITHOUT PRIOR WRITTEN CONSENT OF THE ARCHITECT. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFI-CALLY RESERVED. WHATABURGER ms consultants, inc. engineers, architects, planners 2221 Schrock Road Columbus, Ohio 43229-1547 phone 614.898.7100 fax 614.898.7570 PROJECT PROPOSED PT20M BUILDING 204 SW M150 HWY LEE'S SUMMIT, MO 64081 SHEET TITLE SITE ZONING PLAN E OF MI IAN AULTMAN PE-2018035818 TDB DRAWN BY:

PGD CHECKED BY: 40497-21 PROJECT NO:

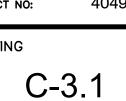
DRAWING

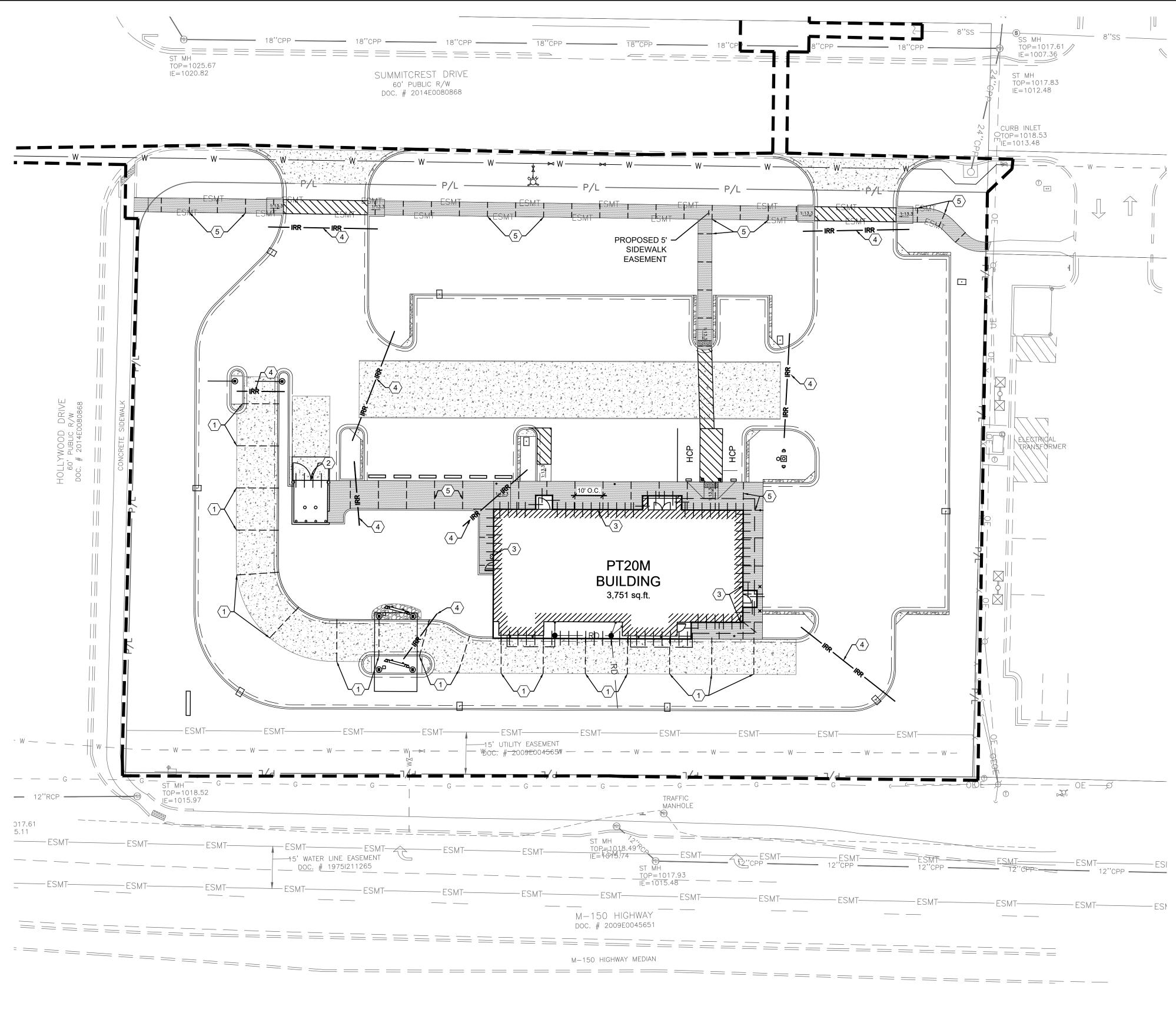
0 15 30 45 60

SCALE: 1"=30'

REVISION/DATE/DESCRIPTION

SIR UPDATES 09/13/21 60% SET 01/24/22 PDP APPLICATION 02/24/22 TO CITY RESPONSE TO CITY 03/29/22 COMMENTS I -INAL 06/29/22 DEVELOPMENT SET RESPONSE TO 08/30/22 FDP COMMENTS **RESPONSE TO** 09/29/22 FDP COMMENTS II RESPONSE TO 10/24/22 FDP COMMENTS III RESPONSE TO 11/03/22 FDP COMMENTS IV





REVISION/DATE/DESCRIPTION

GENERAL NOTES:

- A. PAVEMENT SPECIFICATION AND RECOMMENDATIONS TO BE TAKEN FROM GEOTECHNICAL REPORT.
- B. PORTLAND CEMENT CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- C. MAXIMUM CONTROL JOINT SPACING SHALL NOT EXCEED 15 FEET.
- D. EXPANSION JOINTS SHALL BE USED WHEREVER THE PAVEMENT WILL ABUT A STRUCTURAL ELEMENT SUBJECT TO DIFFERENT MAGNITUDE OF MOVEMENT (E.G., LIGHT POLES, RETAINING WALLS, EXISTING PAVEMENT, STAIRWAYS, ENTRYWAY PIERS, BUILDING WALLS, MANHOLES, ETC.)
- E. EXPANSION JOINTS SHALL BE SEALED PER DETAILS ON SHEET C-7.0 TO MINIMIZE MOISTURE INFILTRATION INTO SUBGRADE SOILS AND RESULTANT CONCRETE DETERIORATION AT THE JOINTS.
- F. SLEEVES SHOWN ARE FOR IRRIGATION ONLY. ADDITIONAL SLEEVES MAY BE REQUIRED FOR OTHER FRANCHISE UTILITIES. CONTRACTOR SHALL COORDINATE LOCATION AND SUPPLY ADDITIONAL SLEEVES REQUIRED FOR ELECTRICAL AND TELECOMMUNICATION SERVICES.
- G. ALL CONCRETE JOINTS SHALL RUN CONTINUOUSLY THROUGH CURBS.

KEYED NOTES:

(1) SAWED CONSTRUCTION JOINT REQUIRED, TYPICAL. SEE DET/	IL ON SHEET C-7.0 .
--	---------------------

- 2 DOWELED EXPANSION JOINT REQUIRED, TYPICAL. SEE DETAIL ON SHEET C-7.0.
- EXPANSION JOINT REQUIRED WHERE CONCRETE OR CURB ABUTS BUILDING FOUNDATION, STORM STRUCTURE, FLUME, OR SIDEWALK OPENING. SEE DETAIL ON SHEET C-7.0. $\langle 3 \rangle$
- $\langle 4 \rangle$ SCHEDULE 40 PVC IRRIGATION SLEEVE, SEE SHEET I-1.0 FOR MORE INFORMATION.
- $\langle 5 \rangle$ INSTALL CONTRACTION JOINTS 10' ON CENTER AS SHOWN ON DETAIL C ON SHEET C-7.0 (TYP).

LEGEND

DESCRIPTION

++++++++++++ EXPANSION JOINT

---- CONTRACTION JOINT

		. :		-
4.4.	2.1		2.7	۰.
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CONCRETE SIDEWALK HEAVY DUTY ASPHALT PAVEMENT

HEAVY DUTY CONCRETE PAVEMENT





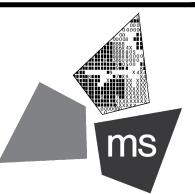
Call before you dig.

SIR UPDATES	09/13/21
60% SET	01/24/22
PDP APPLICATION TO CITY	02/24/22
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RESPONSE TO FDP COMMENTS IV	11/03/22

NOTICE

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ms consultants, inc. engineers, architects, planners 2221 Schrock Road Columbus, Ohio 43229-1547 phone 614.898.7100 fax 614.898.7570

PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

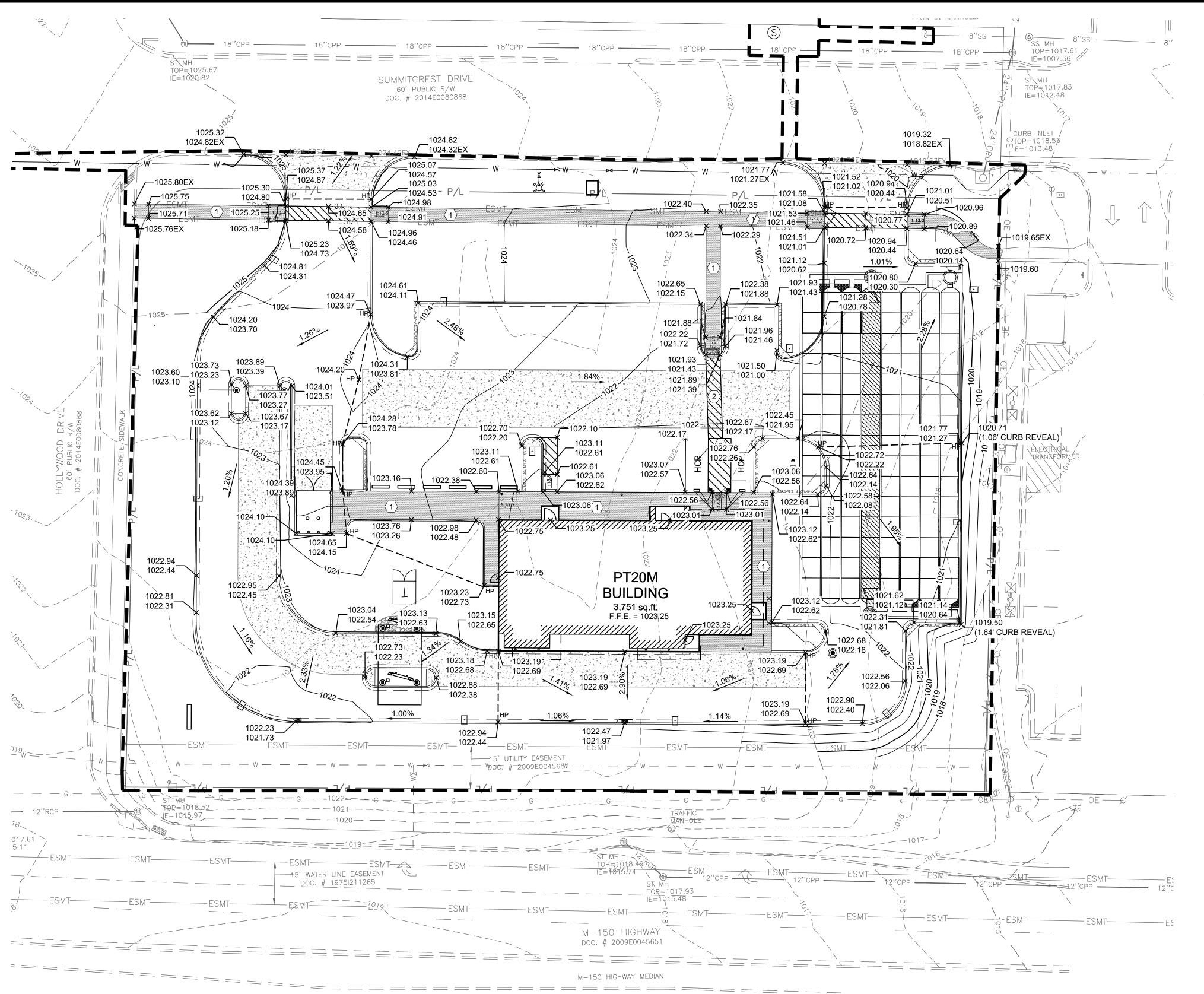
CONCRETE JOINTING PLAN

	STE C	FMIS	Sector	
	1		(E)	
PR		0180358	18	
W	55510			1
/	TUTT	ALL COLOR	55	

DRAWN BY:	TDB
CHECKED BY:	PGD
PROJECT NO:	40497-21

DRAWING

C-4.0



GENERAL NOTES:

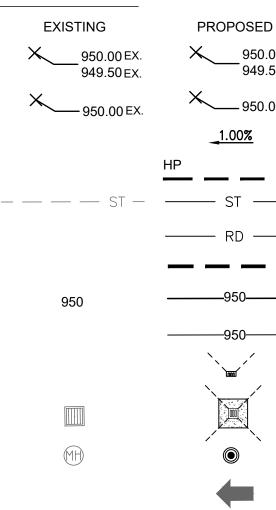
- CLARKSVILLE, TN 37040.
- CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.

- G PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION.
- H. ALL WORK SHALL BE PERFORMED FROM PRIVATE PROPERTY. ALL TRAFFIC LANES MUST REMAIN OPEN AT ALL TIMES.
- ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER OR CITY.
- PREMISES SHOWN ON PLAN.
- L. ALL STORM CONDUITS ARE ADS N-12 SMOOTH INTERIOR HDPE PIPE OR APPROVED EQUAL, UNLESS OTHERWISE NOTED.
- PREVAIL.

KEYED NOTES:

- (1) CONTRACTOR TO MAINTAIN 2.00% MAX CROSS SLOPE ON SIDEWALK.

LEGEND



A. ALL EXISTING CONDITIONS, TOPOGRAPHY, UTILITIES AND PROPERTY INFORMATION ARE TAKEN FROM A SURVEY OF LAND SITUATED IN THE CITY OF LEE'S SUMMIT, COUNTY OF JACKSON AND STATE OF MISSOURI, BY SURVEYOR: YOUNG-HOBBS AND ASSOCIATES, 1202 CROSSLAND AVENUE

B. ALL CONSTRUCTION METHODS AND MATERIAL MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY,

C. ALL PROPOSED SPOT ELEVATIONS SHOWN ARE TOP OF CURB AND FINAL GRADE ELEVATIONS UNLESS OTHERWISE NOTED.

D. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

E. CONTRACTOR TO VERIFY ALL EXISTING GRADES AND CONTACT ENGINEER PRIOR TO BEGINNING WORK IF DISCREPANCY IS FOUND. CONTRACTOR TO VERIFY ASSUMED FINISHED FLOOR ELEVATION PRIOR TO BEGINNING WORK. F. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT.

VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS TO NOT CAUSE DAMAGE.

THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 48 HOURS BEFORE CONSTRUCTION IS TO START, TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH) SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATION IS AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE

CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING UTILITIES DURING CONSTRUCTION AND ALL DAMAGE SHALL BE REPAIRED TO

J. CONTRACTOR SHALL INSTALL AND BACKFILL STRUCTURES AND TRENCHES PER DETAILS ON SHEET C-7.1.

K. ALL EXISTING UTILITIES ARE TAKEN FROM SURVEY AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND UTILITIES ADJACENT TO OR UPON

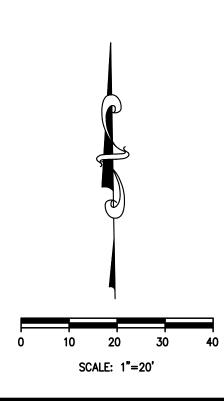
M. ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL. THE DESIGN AND CONSTRUCTION MANUAL SHALL

N. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

(2) CONTRACTOR TO MAINTAIN MAX 2.00% SLOPE IN ALL DIRECTIONS IN HANDICAP ACCESSIBLE AREA

)	DESCRIPTION
00 50	TOP OF CURB TOP OF PAVEMENT
00	FINISHED GRADE SPOT ELEVATION
	GRADE SLOPE
HP	HIGH POINT
	STORM MAIN
	ROOFDRAIN / UNDERDRAIN
—	CONSTRUCTION LIMITS
	MAJOR CONTOUR LINES
	MINOR CONTOUR LINES
	INLET
	CATCH BASIN
	STORM MANHOLE

MAJOR FLOOD ROUTING





REVISION/DATE/DESCRIPTION

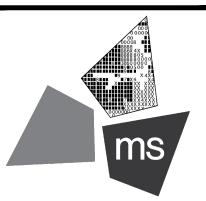
SIR UPDATES	09/13/21
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PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

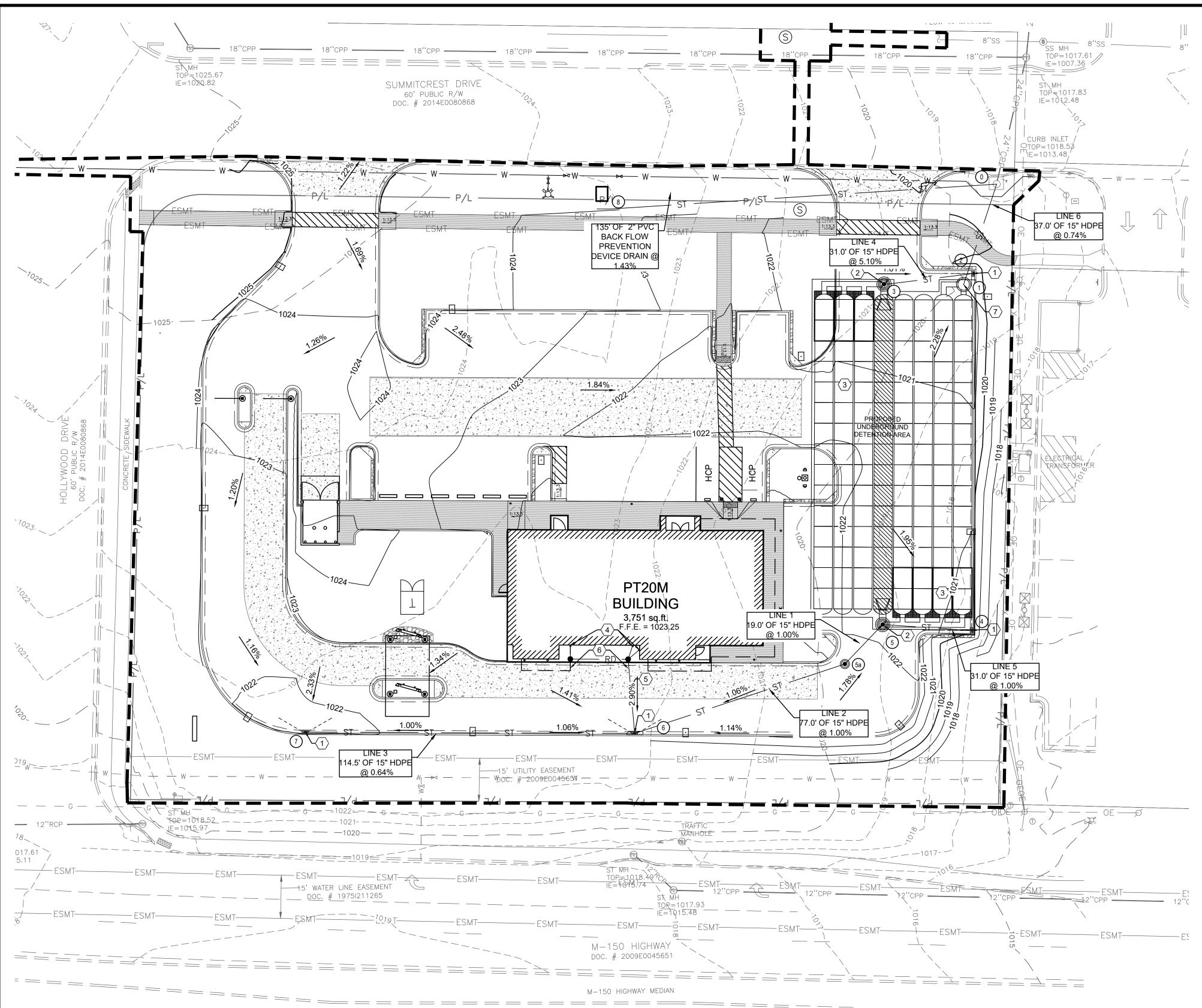
SITE GRADING PLAN

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PRO	PE-201		8 REB	
A	SION	ALE		
6		In	-	7

DRAWN BY:	TDB
CHECKED BY:	PGD
PROJECT NO:	40497-21

DRAWING

C-5.0



Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	length	1	EL Up	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)
1	Pipe - 13	2.73	15	Cir	18.974	1013.75	1013.94	1.001	1014.41	1014.60	0.14
2	Pipe - 10	2.80	15	Cir	76.924	1013.94	1014.71	1.001	1014.60	1015.38	0.15
3	Pipe - 9	1.96	15	Cir	114.529	1014.71	1015.85	0.995	1015.38	1016.41	n/a
4	Pipe - 12	2.71	15	Cir	31.102	1013.75	1015.34	5.112	1014.41	1016.00	0.26
5	Pipe - 14	1.02	15	Cir	30.930	1013.75	1014.06	1.002	1014.15	1014.46	n/a
6	Pipe - 11	0.19	15	Cir	36.725	1013.48	1013.75	0.735	1013.65	1013.92	0.06

GENERAL NOTES:

- CLARKSVILLE, TN 37040.
- Β.
- - VERIFY ASSUMED FINISHED FLOOR ELEVATION PRIOR TO BEGINNING WORK.

 - G. PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION.
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 - PREMISES SHOWN ON PLAN.
 - L. ALL STORM CONDUITS ARE ADS N-12 SMOOTH INTERIOR HDPE PIPE OR APPROVED EQUAL, UNLESS OTHERWISE NOTED.
 - PREVAIL.

KEYED NOTES:

- $\langle 2 \rangle$
- $\langle 3 \rangle$ SEE DETAILS ON SHEET C-7.5.
- 4 PROPOSED DOWNSPOUT COLLECTOR SYSTEM.
- 5 A MINIMUM SLOPE OF 1.00% ON ALL ROOF DRAIN PIPES.
- $\langle 6 \rangle$ PROPOSED STORM CLEANOUT. SEE DETAIL ON SHEET C-7.1 FOR DETAILS.
- $\langle 7 \rangle$ PROPOSED OUTLET CONTROL STRUCTURE. SEE DETAIL ON SHEET C-7.6 FOR DETAILS.

LEGEND

EXISTING	PROPOSE
950.00 EX. 949.50 EX.	×950. 949.
×950.00 EX.	×950.
	1.00%
	HP
— — — ST —	——————————————————————————————————————
	RD
950	950
	950
(MH)	۲
	-

DETENTION SUMMARY					
DESIGNED DETENTION VOLUME	<u>AS-BUILT</u> <u>DETENTION</u> <u>VOLUME</u>	REQUIRED DETENTION VOLUME			
20,540 CU.FT.		19,000 CU. FT.			

HGL Junct (ft)	Dns Line No.	Junction Type
1014.60	End	Manhole
1015.38	1	Curb-
1016.41 j	2	Curb-
1016.00	End	Curb-
1014.46 j	End	Curb-
1013.92	End	None

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E. CONTRACTOR TO VERIFY ALL EXISTING GRADES AND CONTACT ENGINEER PRIOR TO BEGINNING WORK IF DISCREPANCY IS FOUND. CONTRACTOR TO F. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT.

VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS TO NOT CAUSE DAMAGE. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 48 HOURS BEFORE CONSTRUCTION IS TO START, TO VERIFY IF ANY UTILITIES ARE

PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH) SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATION IS AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE

CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING UTILITIES DURING CONSTRUCTION AND ALL DAMAGE SHALL BE REPAIRED TO

J. CONTRACTOR SHALL INSTALL AND BACKFILL STRUCTURES AND TRENCHES PER DETAILS ON SHEET C-7.1.

K. ALL EXISTING UTILITIES ARE TAKEN FROM SURVEY AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND UTILITIES ADJACENT TO OR UPON

M. ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL

N. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

PROPOSED CURB INLET AND FINGER DRAIN. SEE DETAILS ON SHEETS C-7.1 AND C-7.5.

PROPOSED STORM MANHOLE/JUNCTION BOX. SEE DETAILS ON SHEET C-7.5 AND C-7.6.

PROPOSED UNDERGROUND DETENTION SYSTEM, ADS STORMTECH MC-3500 CHAMBER SYSTEM, 19665 CF.

6" STORM LINE FROM ROOF DRAIN TO CONNECT TO PROPOSED STORM SYSTEM. CONTRACTOR TO MAINTAIN

STORM STRUCTURE DATA

	DESCRIPTION
0 0	TOP OF CURB TOP OF PAVEMENT
0	FINISHED GRADE SPOT ELEVATION
	GRADE SLOPE
ΗP	HIGH POINT
	STORM MAIN
	ROOFDRAIN / UNDERDRAIN
	CONSTRUCTION LIMITS
	MAJOR CONTOUR LINES
	MINOR CONTOUR LINES
	INLET
	CATCH BASIN
	STORM MANHOLE
	MAJOR FLOOD ROUTING

- EXISTING STORM INLET RIM = 1018.53 EX: 24" INV. (NE) = 1013.48 PR: 15" INV (SW) = 1013.48 PR. 2" INV (W) = 1014.56
- PROPOSED OUTLET CONTROL STRUCTURE (1)(48" DIA. CONCRETE MANHOLE) RIM = 1020.30 PR: 15" INV = 1013.75
- PROPOSED 2'X3' CONCRETE CURB INLET RIM = 1020.16 2 PR: 15" INV OUT (W) = 1016.06
- 3 PROPOSED STORM MANHOLE (48" DIA. CONCRETE MANHOLE) RIM = 1020.54 PR: 15" INV IN (E) = 1015.75 PR: BOTTOM INV = 1013.75
- PROPOSED 2'X3' CONCRETE CURB INLET RIM = 1020.67 PR. 15" INV. OUT (W) = 1014.06
- PROPOSED STORM MANHOLE (5) (48" DIA. CONCRETE MANHOLE) RIM = 1021.58 PR: 15" INV IN (SW,E) = 1013.75 PR: BOTTOM INV = 1013.75
- 50 PROPOSED STORM MANHOLE (48" DIA. CONCRETE MANHOLE) RIM = 1022.40 PR: 15" INV OUT (NE) = 1013.94
- PR: 15" INV IN (SW) = 1014.14 6 PROPOSED 2'X3' CONCRETE CURB INLET RIM = 1021.98 PR: 15" INV OUT (NE) = 1014.91
- PR: 15" INV IN (W) = 1015.11 PROPOSED 2'X3' CONCRETE CURB INLET
- RIM = 1021.75 PR: 15" INV OUT (E) = 1015.85
- PROPOSED 2" BACKFLOW VAULT DRAIN RIM = 1021.75 PR: 2" INV (S) = 1015.89

10 20 30

SCALE: 1"=20'



REVISION/DATE/DESCRIPTION

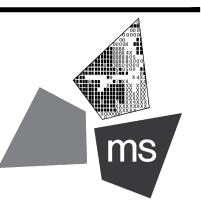
SIR UPDATES	09/13/21
60% SET	01/24/22
PDP APPLICATION TO CITY	02/24/22
RESPONSE TO CITY COMMENTS I	03/29/22
FINAL DEVELOPMENT SET	06/29/22
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RESPONSE TO FDP COMMENTS III	10/24/22
RESPONSE TO FDP COMMENTS IV	11/03/22

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PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

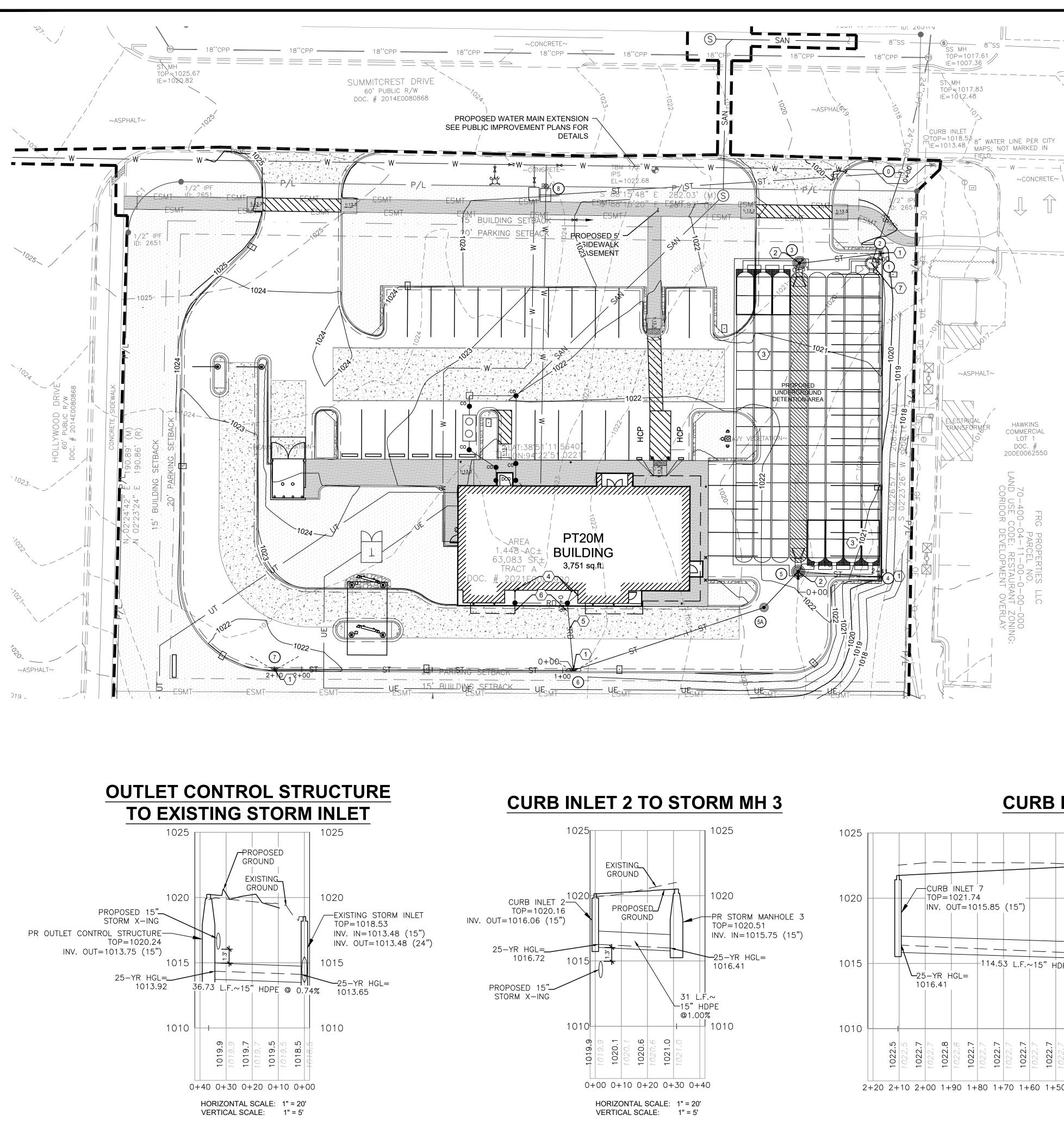
SITE DRAINAGE PLAN



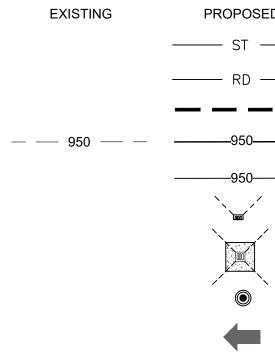
40497-21 PROJECT NO:

DRAWING

C-5.1



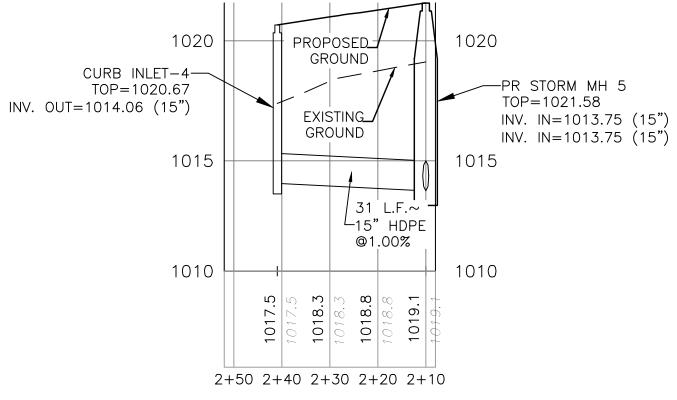
LEGEND



KEYED NOTES:

- $\langle 1 \rangle$ C-7.5. $\langle 2 \rangle$
- C-7.6.
- $\langle 3 \rangle$ CHAMBER SYSTEM, 19665 CF. SEE DETAILS ON SHEET C-7.5.
- $\langle 4 \rangle$ PROPOSED DOWNSPOUT COLLECTOR SYSTEM.
- $\langle 5 \rangle$ PIPES.
- $\langle 6 \rangle$ PROPOSED STORM CLEANOUT. SEE DETAIL ON SHEET C-7.1 FOR DETAILS.
- $\langle 7 \rangle$ PROPOSED OUTLET CONTROL STRUCTURE. SEE DETAIL ON SHEET C-7.6 FOR DETAILS.

CURB INLET-4 TO STORM MH-5



PROPOSED GROUND CURB INLET 6-TOP=1021.98 INV. IN=1015.11 (15") INV. IN=1016.00 (6") INV. OUT=1014.91 (15") -114.53 L.F.~15" HDPE @ 0.65%⁻ 25-YR HGL=_/ 1015.38 ဖ <u>ں</u> ပ ß M 0 တ 022. 022. 022 022 2+20 2+10 2+00 1+90 1+80 1+70 1+60 1+50 1+40 1+30 1+20 1+10 1+00 0+90 0+80 0+70 0+60 0+50 0+40 0+30 0+20 0+10 0+00 HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 5'

CURB INLET 7 TO STORM MH 5

STORM STRUCTURE DATA

EXISTING STORM INLET RIM = 1018.53

RIM = 1020.30

RIM = 1020.16

RIM = 1020.54

RIM = 1020.67

RIM = 1021.58

RIM = 1022.40

RIM = 1021.98

RIM = 1021.75

VAULT DRAIN

RIM = 1021.75

 $(\mathbf{3})$

(5)

(50)

 $\overline{(7)}$

(8)

EX: 24" INV. (NE) = 1013.48

PR: 15" INV (SW) = 1013.48

(48" DIA. CONCRETE MANHOLE)

(2) PROPOSED 2'X3' CONCRETE CURB INLET

PR: 15" INV OUT (W) = 1016.06

PROPOSED STORM MANHOLE

PR: 15" INV IN (E) = 1015.75

PR: BOTTOM INV = 1013.75

(48" DIA. CONCRETE MANHOLE)

PROPOSED 2'X3' CONCRETE CURB INLET

PR. 15" INV. OUT (W) = 1014.06

PROPOSED STORM MANHOLE

PR: 15" INV IN (SW,E) = 1013.75

PROPOSED STORM MANHOLE

PR: 15" INV OUT (NE) = 1013.94

PR: 15" INV OUT (NE) = 1014.91

PR: 15" INV IN (W) = 1015.11

PR: 15" INV OUT (E) = 1015.85

PROPOSED 2" BACKFLOW

PR: 2" INV (S) = 1015.89

PROPOSED 2'X3' CONCRETE CURB INLET

PROPOSED 2'X3' CONCRETE CURB INLET

PR: 15" INV IN (SW) = 1014.14

(48" DIA. CONCRETE MANHOLE)

PR: BOTTOM INV = 1013.75

(48" DIA. CONCRETE MANHOLE)

PROPOSED OUTLET CONTROL STRUCTURE

PR. 2" INV (W) = 1014.56

PR: 15" INV = 1013.75

D	DESCRIPTION
	STORM MAIN
	ROOFDRAIN / UNDERDRAIN
	CONSTRUCTION LIMITS
	MAJOR CONTOUR LINES
	MINOR CONTOUR LINES
	INLET
	CATCH BASIN
	STORM MANHOLE
	MAJOR FLOOD ROUTING

PROPOSED CURB INLET AND FINGER DRAIN. SEE DETAILS ON SHEETS C-7.1 AND

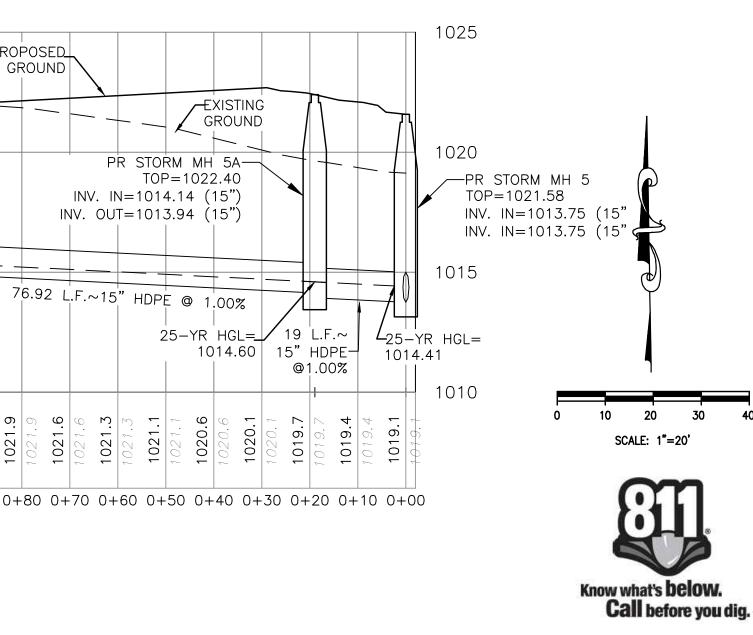
PROPOSED STORM MANHOLE/JUNCTION BOX. SEE DETAILS ON SHEET C-7.5 AND

PROPOSED UNDERGROUND DETENTION SYSTEM, ADS STORMTECH MC-3500

6" STORM LINE FROM ROOF DRAIN TO CONNECT TO PROPOSED STORM SYSTEM CONTRACTOR TO MAINTAIN A MINIMUM SLOPE OF 1.00% ON ALL ROOF DRAIN

HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 5'





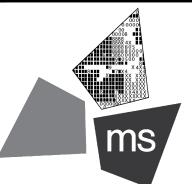
REVISION/DATE/DESCRI	PTION

SIR UPDATES	09/13/21
60% SET	01/24/22
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PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

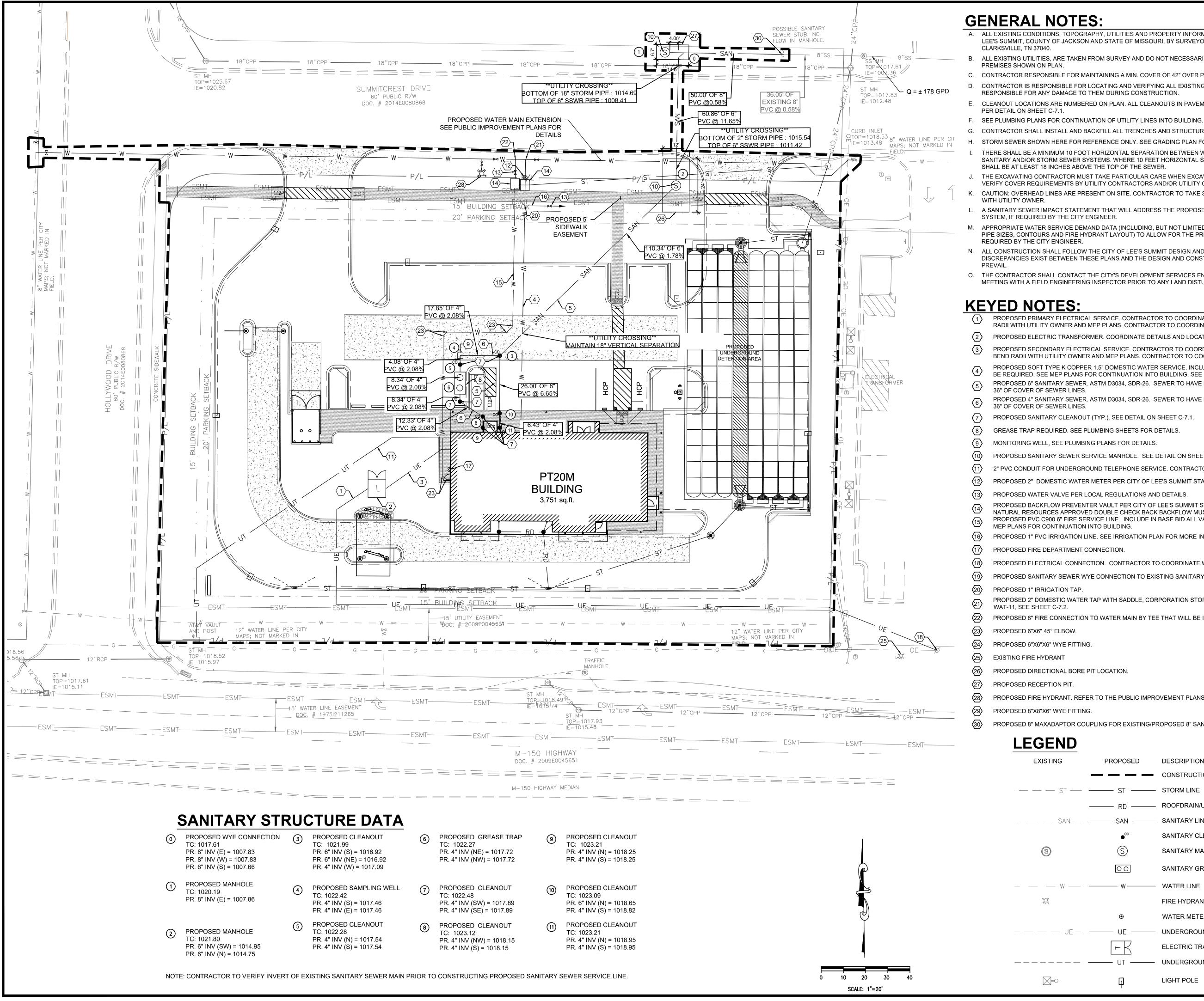
STORM SEWER PLAN AND PROFILE

IAN AULTMAN PE-2018035818	
DRAWN BY:	TDB
	_

PGD CHECKED BY: 40497-21 PROJECT NO:

DRAWING

C-5.2



- **GENERAL NOTES:**

- - SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

 - SYSTEM, IF REQUIRED BY THE CITY ENGINEER.
 - REQUIRED BY THE CITY ENGINEER.

KEYED NOTES:

- 36" OF COVER OF SEWER LINES. 36" OF COVER OF SEWER LINES. GREASE TRAP REQUIRED. SEE PLUMBING SHEETS FOR DETAILS. MONITORING WELL, SEE PLUMBING PLANS FOR DETAILS. MEP PLANS FOR CONTINUATION INTO BUILDING. PROPOSED FIRE DEPARTMENT CONNECTION.
- PROPOSED 1" IRRIGATION TAP.

- PROPOSED DIRECTIONAL BORE PIT LOCATION.
- PROPOSED RECEPTION PIT.

A. ALL EXISTING CONDITIONS, TOPOGRAPHY, UTILITIES AND PROPERTY INFORMATION ARE TAKEN FROM A SURVEY OF LAND SITUATED IN THE CITY OF LEE'S SUMMIT, COUNTY OF JACKSON AND STATE OF MISSOURI, BY SURVEYOR: YOUNG-HOBBS AND ASSOCIATES, 1202 CROSSLAND AVENUE

B. ALL EXISTING UTILITIES, ARE TAKEN FROM SURVEY AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND UTILITIES ADJACENT TO OR UPON

C. CONTRACTOR RESPONSIBLE FOR MAINTAINING A MIN. COVER OF 42" OVER PROPOSED WATER SERVICE. D. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION, AND IS

E. CLEANOUT LOCATIONS ARE NUMBERED ON PLAN. ALL CLEANOUTS IN PAVEMENT AREAS ARE TO BE H-20 RATED. CLEANOUTS SHALL BE INSTALLED

G. CONTRACTOR SHALL INSTALL AND BACKFILL ALL TRENCHES AND STRUCTURES PER DETAIL ON SHEET C-7.1

H. STORM SEWER SHOWN HERE FOR REFERENCE ONLY. SEE GRADING PLAN FOR DESIGN DATA

THERE SHALL BE A MINIMUM 10 FOOT HORIZONTAL SEPARATION BETWEEN WATER TAPS, WATER SERVICES, PRIVATE WATER SYSTEMS, AND ANY SANITARY AND/OR STORM SEWER SYSTEMS. WHERE 10 FEET HORIZONTAL SEPARATION CANNOT BE OBTAINED, THE BOTTOM OF THE WATER LINE

J. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS TO NOT CAUSE DAMAGE. CAUTION: OVERHEAD LINES ARE PRESENT ON SITE. CONTRACTOR TO TAKE SPECIAL CARE TO PREVENT DAMAGE TO THE LINES AND COORDINATE

L. A SANITARY SEWER IMPACT STATEMENT THAT WILL ADDRESS THE PROPOSED DISCHARGE INTO THE EXISTING SANITARY SEWER RECEIVING

M. APPROPRIATE WATER SERVICE DEMAND DATA (INCLUDING, BUT NOT LIMITED TO, PLANNED LAND USAGE, DENSITIES OF PROPOSED DEVELOPMENT, PIPE SIZES, CONTOURS AND FIRE HYDRANT LAYOUT) TO ALLOW FOR THE PRELIMINARY ANALYSIS OF THE DEMAND FOR WATER SERVICE IF

N. ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL

O. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

PROPOSED PRIMARY ELECTRICAL SERVICE. CONTRACTOR TO COORDINATE CONDUIT SIZE, NUMBER OF CONDUITS, CONNECTIONS, AND BEND RADII WITH UTILITY OWNER AND MEP PLANS. CONTRACTOR TO COORDINATE CONNECTION WITH UTILITY OWNER.

PROPOSED ELECTRIC TRANSFORMER. COORDINATE DETAILS AND LOCATION WITH UTILITY OWNER AND ELECTRICAL PLANS.

PROPOSED SECONDARY ELECTRICAL SERVICE. CONTRACTOR TO COORDINATE CONDUIT SIZE, NUMBER OF CONDUITS, CONNECTIONS, AND BEND RADII WITH UTILITY OWNER AND MEP PLANS. CONTRACTOR TO COORDINATE CONNECTION WITH UTILITY OWNER.

PROPOSED SOFT TYPE K COPPER 1.5" DOMESTIC WATER SERVICE. INCLUDE IN BASE BID ALL VALVES, PIPING, STRUCTURES, ETC. THAT WILL BE REQUIRED. SEE MEP PLANS FOR CONTINUATION INTO BUILDING. SEE DETAIL ON SHEET C-7.2. PROPOSED 6" SANITARY SEWER. ASTM D3034, SDR-26. SEWER TO HAVE MINIMUM SLOPE OF 1.00%. CONTRACTOR TO MAINTAIN A MINIMUM OF

PROPOSED 4" SANITARY SEWER. ASTM D3034, SDR-26. SEWER TO HAVE MINIMUM SLOPE OF 2.08%. CONTRACTOR TO MAINTAIN A MINIMUM OF

PROPOSED SANITARY CLEANOUT (TYP.). SEE DETAIL ON SHEET C-7.1.

PROPOSED SANITARY SEWER SERVICE MANHOLE. SEE DETAIL ON SHEET C-7.2.

2" PVC CONDUIT FOR UNDERGROUND TELEPHONE SERVICE. CONTRACTOR TO COORDINATE CONNECTION WITH UTILITY OWNER.

PROPOSED 2" DOMESTIC WATER METER PER CITY OF LEE'S SUMMIT STANDARD DRAWING WAT-11. SEE SHEET C-7.2.

PROPOSED WATER VALVE PER LOCAL REGULATIONS AND DETAILS.

PROPOSED BACKFLOW PREVENTER VAULT PER CITY OF LEE'S SUMMIT STANDARD DRAWING WAT-12. SEE SHEET C-7.2. A DEPARTMENT OF NATURAL RESOURCES APPROVED DOUBLE CHECK BACK BACKFLOW MUST BE USED. PROPOSED PVC C900 6" FIRE SERVICE LINE. INCLUDE IN BASE BID ALL VALVES, PIPING, STRUCTURES, ETC. THAT WILL BE REQUIRED. SEE

PROPOSED 1" PVC IRRIGATION LINE. SEE IRRIGATION PLAN FOR MORE INFORMATION.

PROPOSED ELECTRICAL CONNECTION. CONTRACTOR TO COORDINATE WITH UTILITY OWNER.

PROPOSED SANITARY SEWER WYE CONNECTION TO EXISTING SANITARY SEWER STUB. SEE DETAIL ON SHEET C-7.2.

PROPOSED 2" DOMESTIC WATER TAP WITH SADDLE, CORPORATION STOP, AND 1" METER PER CITY OF LEE'S SUMMIT STANDARD DRAWING

PROPOSED 6" FIRE CONNECTION TO WATER MAIN BY TEE THAT WILL BE INSTALLED WITH PUBLIC WATER MAIN EXTENSION.

PROPOSED FIRE HYDRANT. REFER TO THE PUBLIC IMPROVEMENT PLANS FOR MORE INFORMATION.

PROPOSED 8" MAXADAPTOR COUPLING FOR EXISTING/PROPOSED 8" SANITARY SEWER CONNECTION.

PROPOSED	DESCRIPTION
	CONSTRUCTION LIMITS
ST	STORM LINE
RD	ROOFDRAIN/UNDERDRAIN
SAN	SANITARY LINE
● ^{co}	SANITARY CLEANOUT
S	SANITARY MANHOLE
00	SANITARY GREASE TRAP
w	WATER LINE
	FIRE HYDRANT
$\boldsymbol{\Theta}$	WATER METER
UE	UNDERGROUND ELECTRIC LINE
Γ-K	ELECTRIC TRANSFORMER
UT	UNDERGROUND TELEPHONE LINE
Ū	



REVISION/DATE/DESCRIPTION

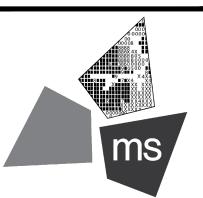
SIR UPDATES	09/13/21
60% SET	01/24/22
PDP APPLICATION TO CITY	02/24/22
RESPONSE TO CITY COMMENTS I	03/29/22
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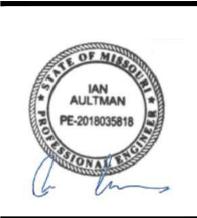
PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

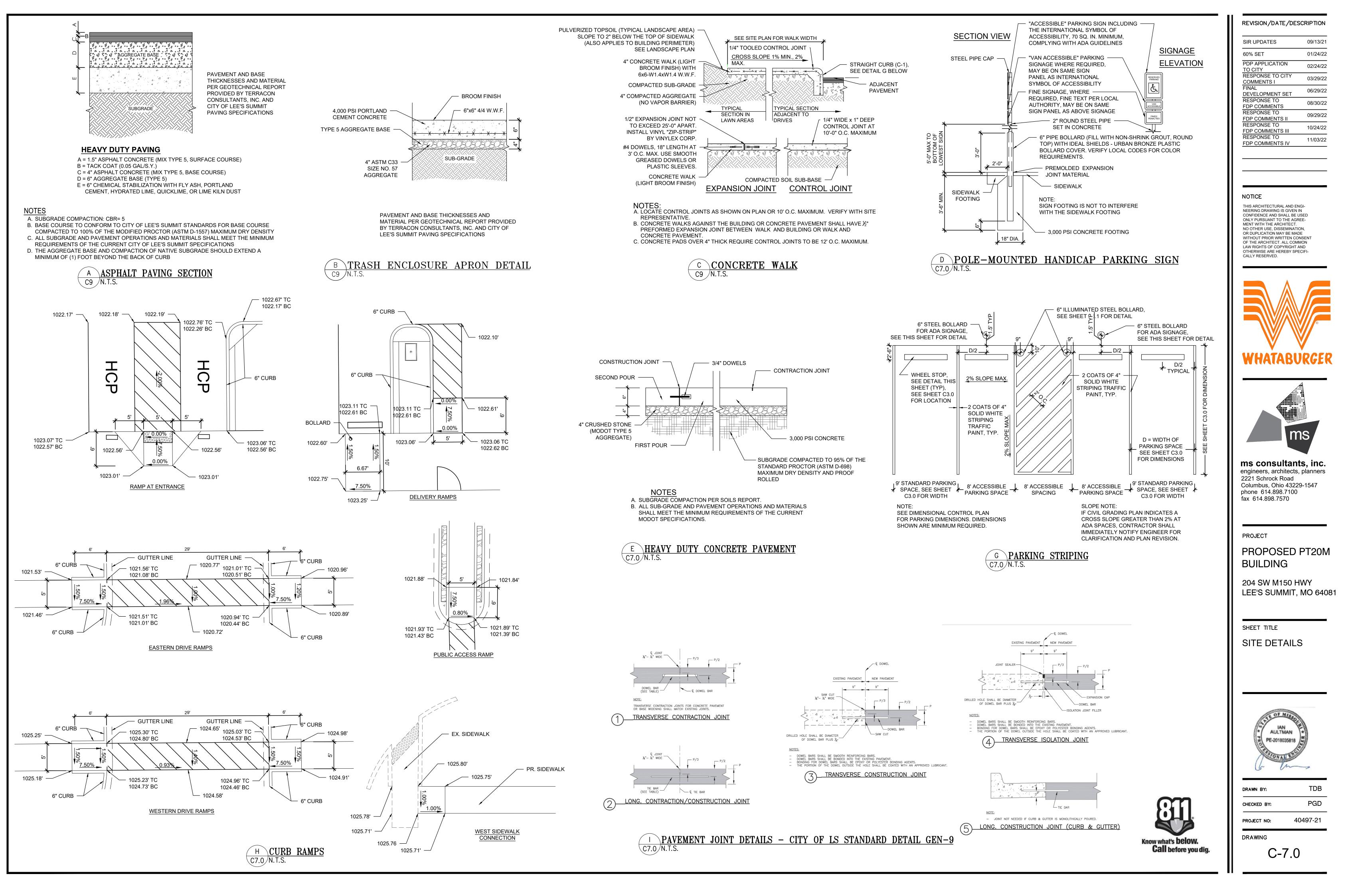
SITE UTILITY PLAN

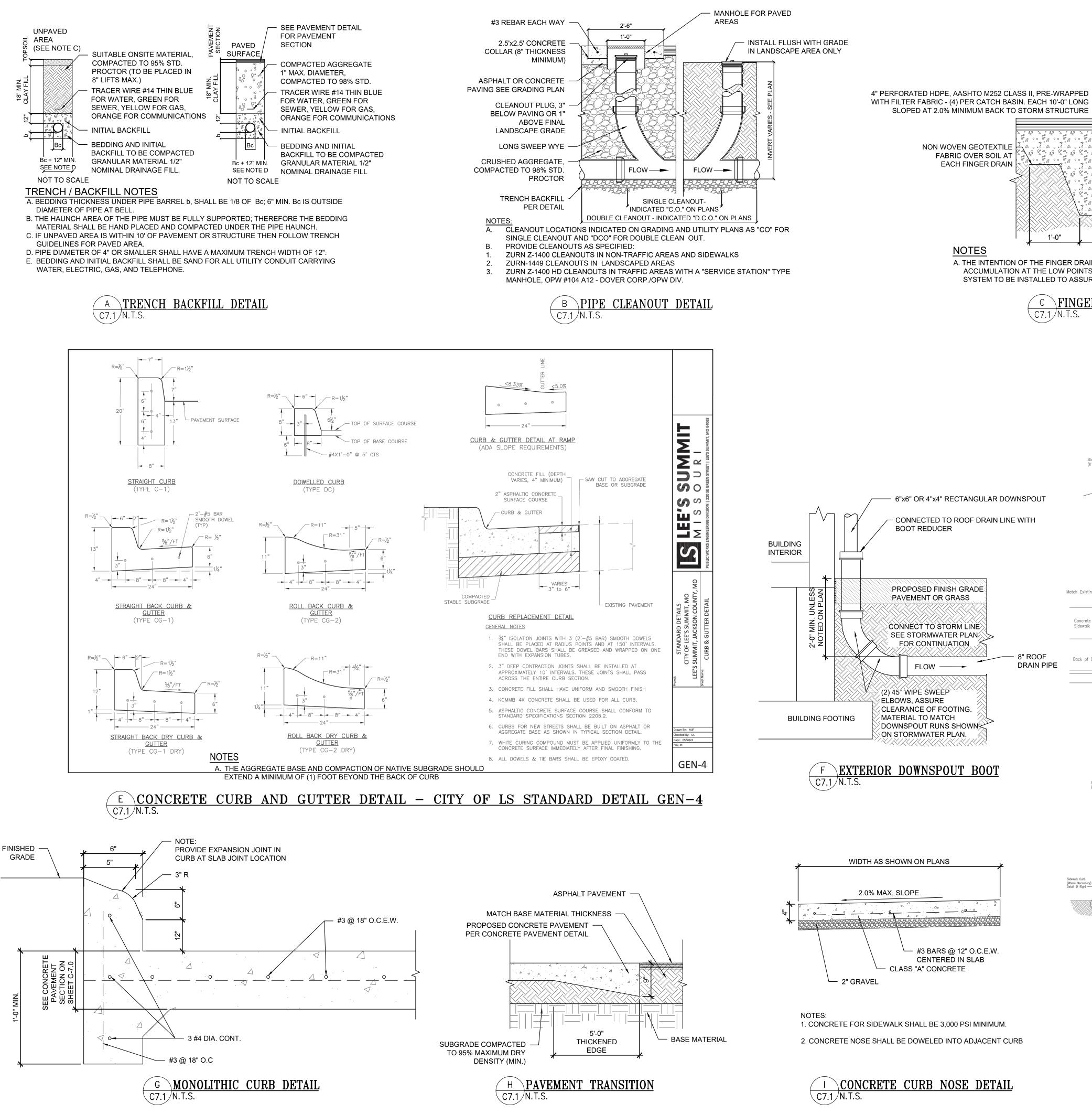


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CHECKED BY:	PGD
PROJECT NO:	40497-21

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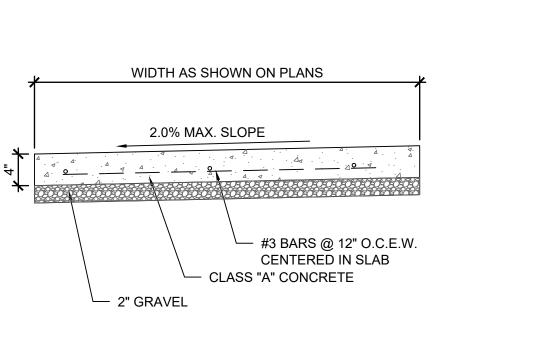
C-6.0

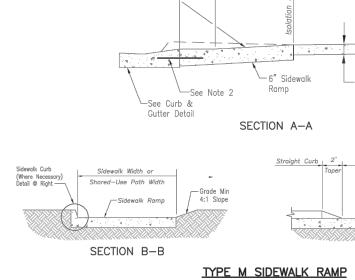




CONCRETE CURB NOSE DETAIL

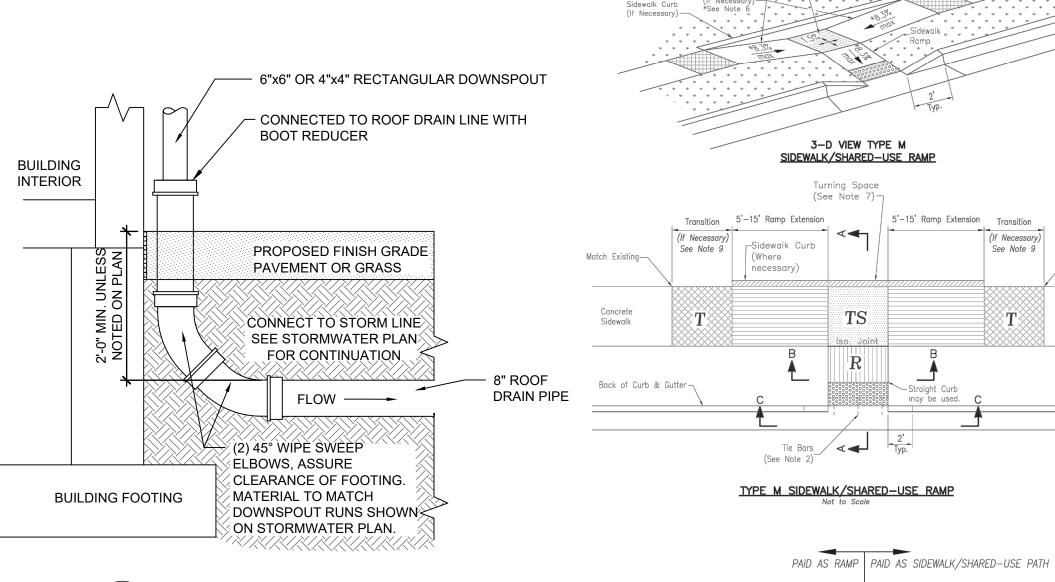
1. CONCRETE FOR SIDEWALK SHALL BE 3,000 PSI MINIMUM 2. CONCRETE NOSE SHALL BE DOWELED INTO ADJACENT CURB



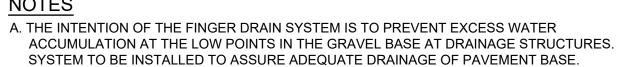


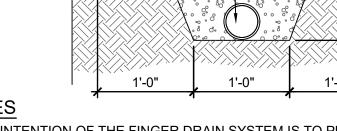
C7.1/N.T.S

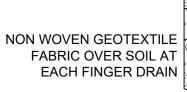
Ramp cross slope=2% Ma Ramp slope=8.33% Max.—

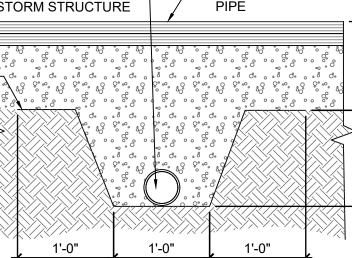










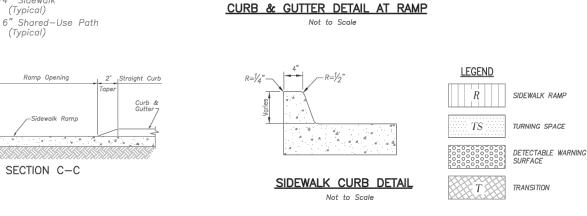


- PAVEMENT OVER COMPACTED

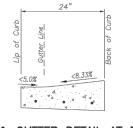
GRAVEL BASE - DO NOT CRUSH



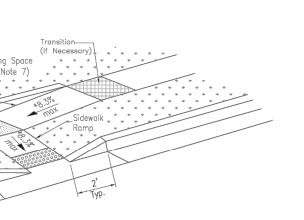
<u>RAMP RETROFIT DETAIL – CITY OF LS STANDARD DETAIL GEN-3A</u>







- 10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
- 9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
- MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB. 8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
- ADA MAXIMUM CROSS SLOPE = 2.0% *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 1 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%. . TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A
- 100' CENTERS MAX. 6. ADA MAXIMUM RAMP SLOPE = 8.33%
- 5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND
- 4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
- 2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION. 3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
- 1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING
- SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:



5'-15' Ramp Extension Transition

Straiaht Cu

TVD.

Turning Space

—4" Sidewalk

(Typical)

Ramp Opening

-Sidewalk Ramp

SECTION C-C

(5' Min. w/ curb)

TS

R

Ramp

Not to Scale

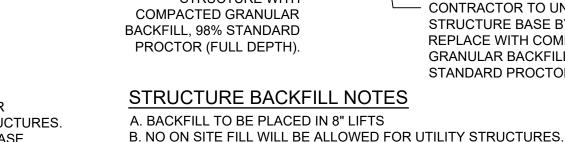
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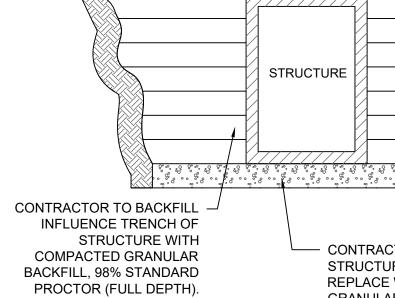
See Note 9

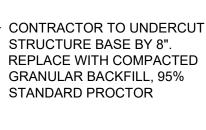
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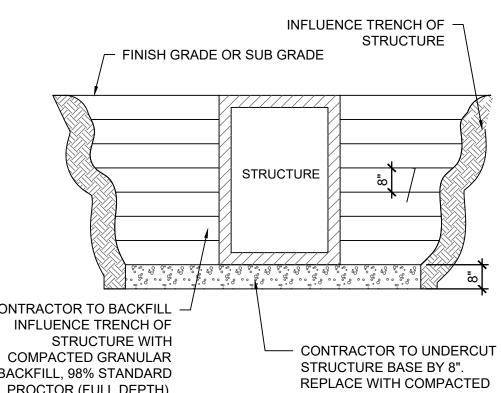
-Match Existing











<u>D STRUCTURE BACKFILL</u>

204 SW M150 HWY LEE'S SUMMIT, MO 64081 SHEET TITLE SITE DETAILS IAN AULTMAN PE-2018035818 TDB DRAWN BY: PGD CHECKED BY: 40497-21 PROJECT NO: DRAWING C-7.1

BUILDING

PROPOSED PT20M

PROJECT



Columbus, Ohio 43229-1547

2221 Schrock Road

phone 614.898.7100

fax 614.898.7570

WHATABURGER



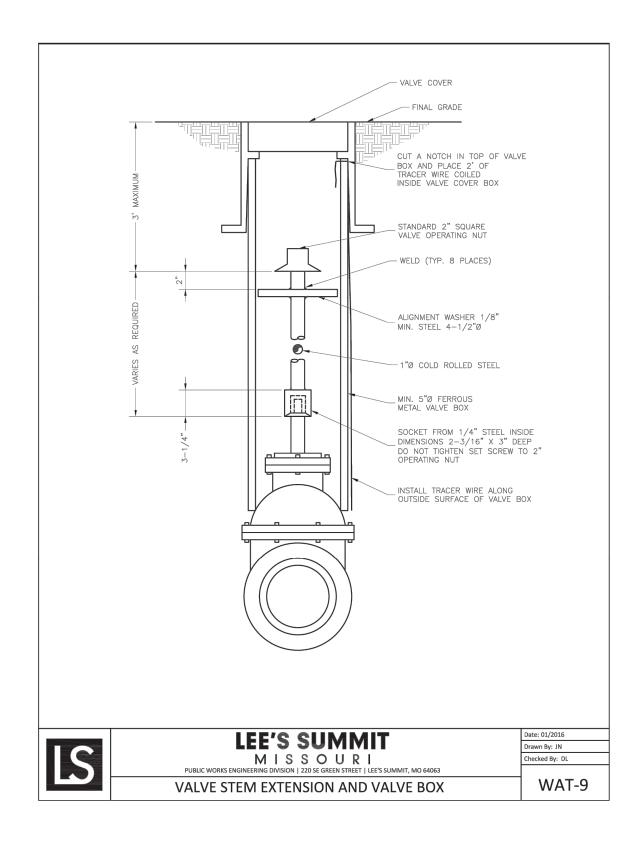
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OF THE ARCHITECT. ALL COMMON LAW RIGHTS OF COPYRIGHT AND

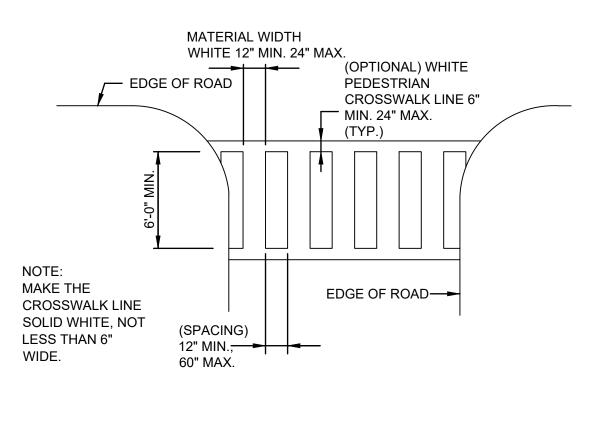
OTHERWISE ARE HEREBY SPECIFI-

SIR UPDATES	09/13/21
60% SET	01/24/22
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RESPONSE TO FDP COMMENTS III	10/24/22
RESPONSE TO FDP COMMENTS IV	11/03/22

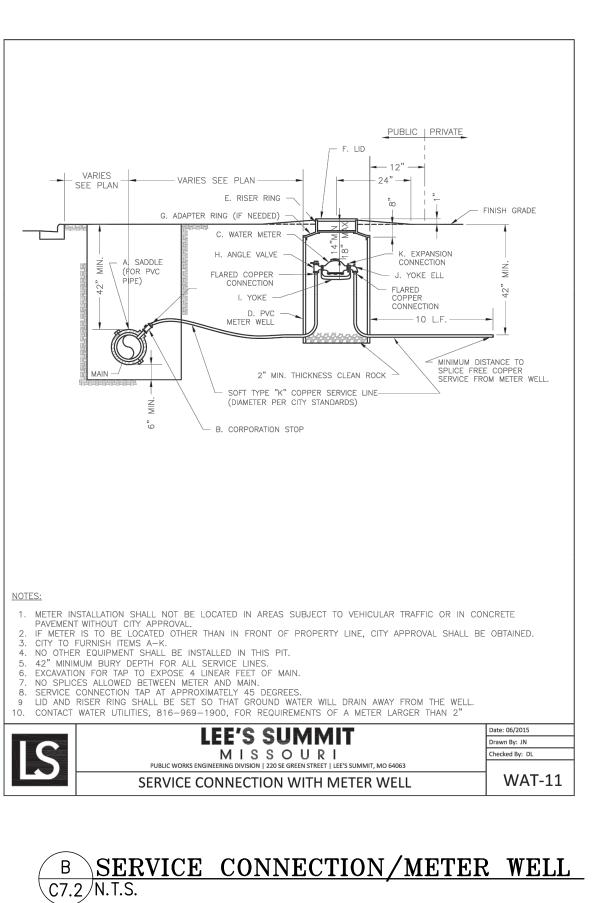
REVISION/DATE/DESCRIPTION



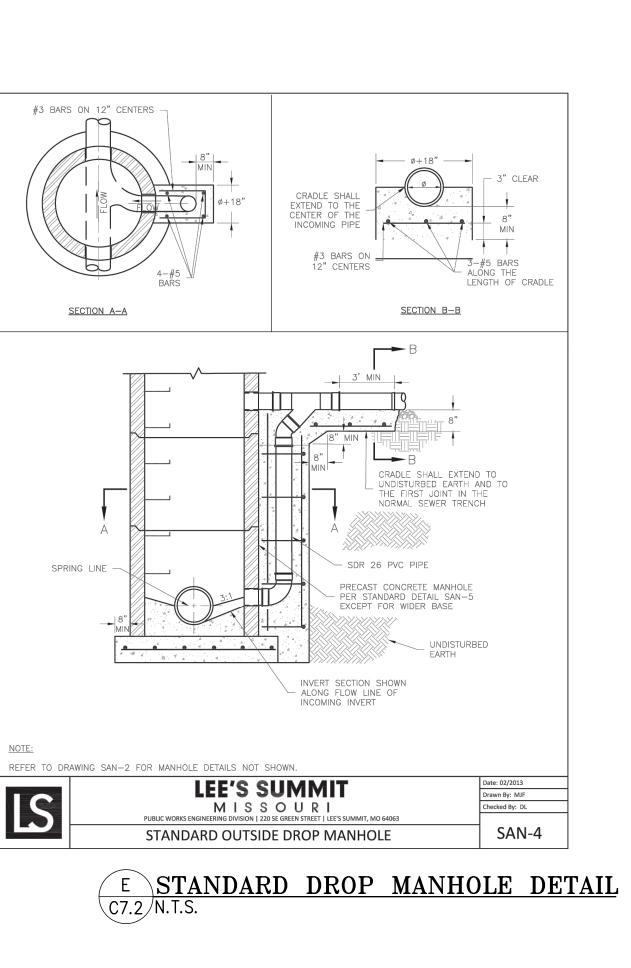


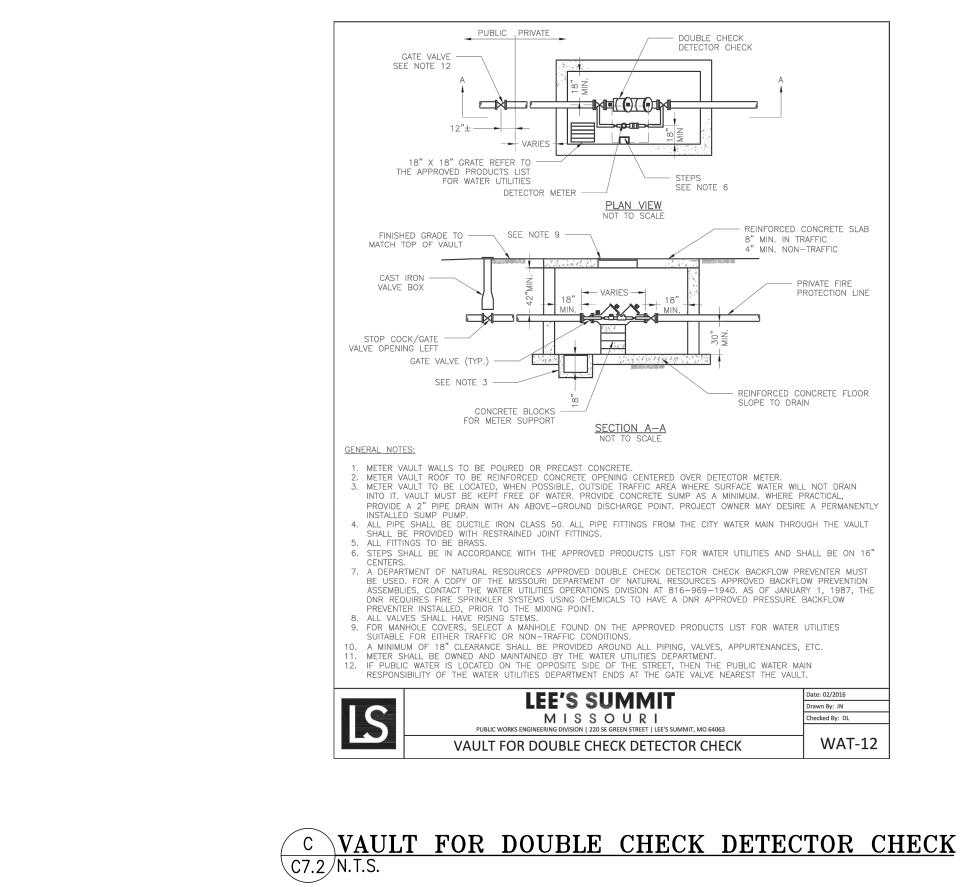


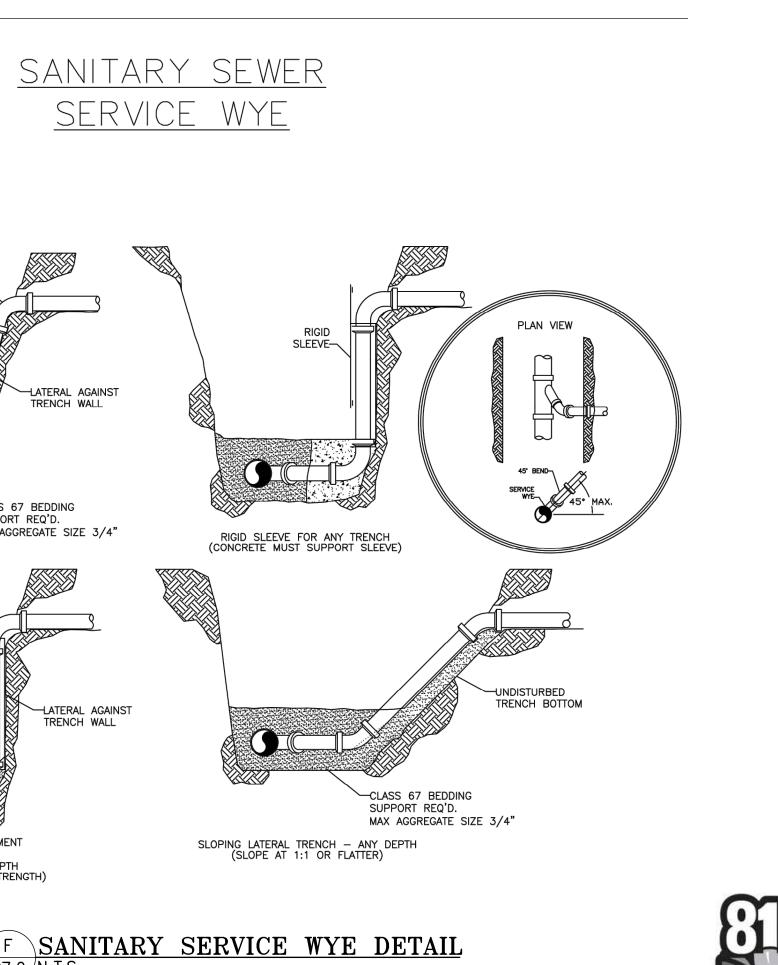
D SIDEWALK CROSSING DETAIL C7.2 N.T.S.

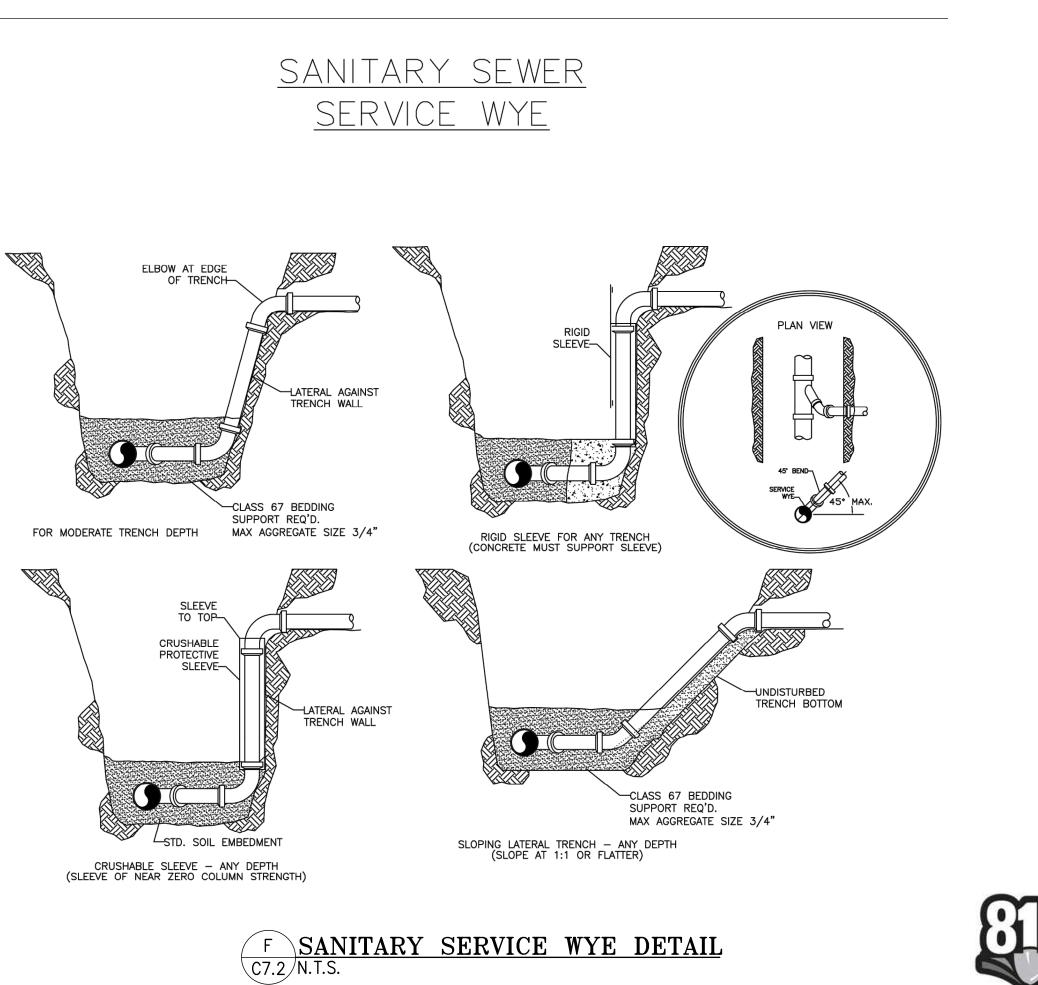


NOTES:









Know what's below . Call before you dig.

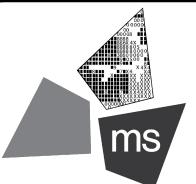
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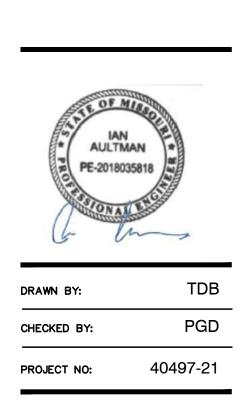
PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

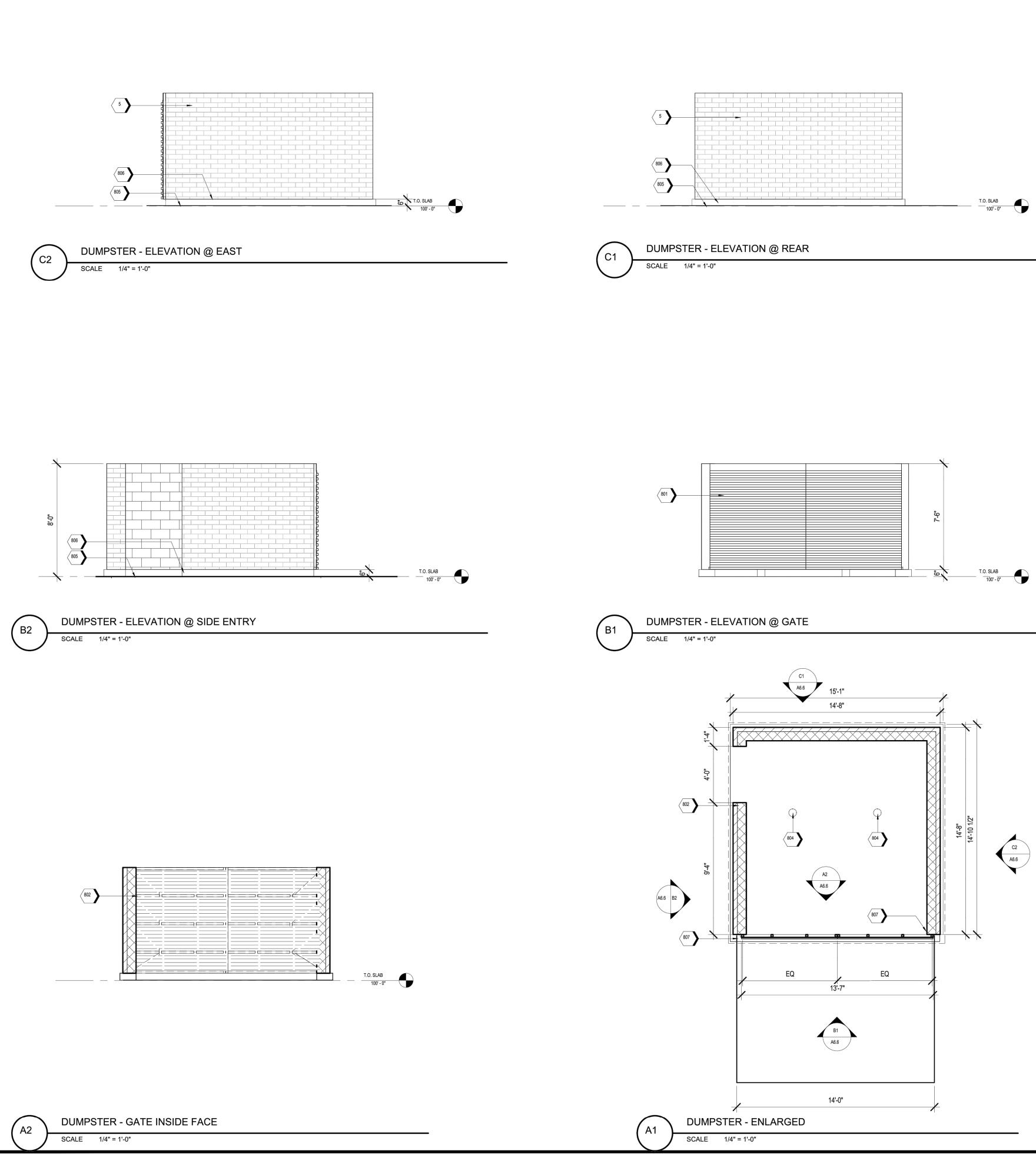
SHEET TITLE

SITE DETAILS



DRAWING

C-7.2



KEYNOTES

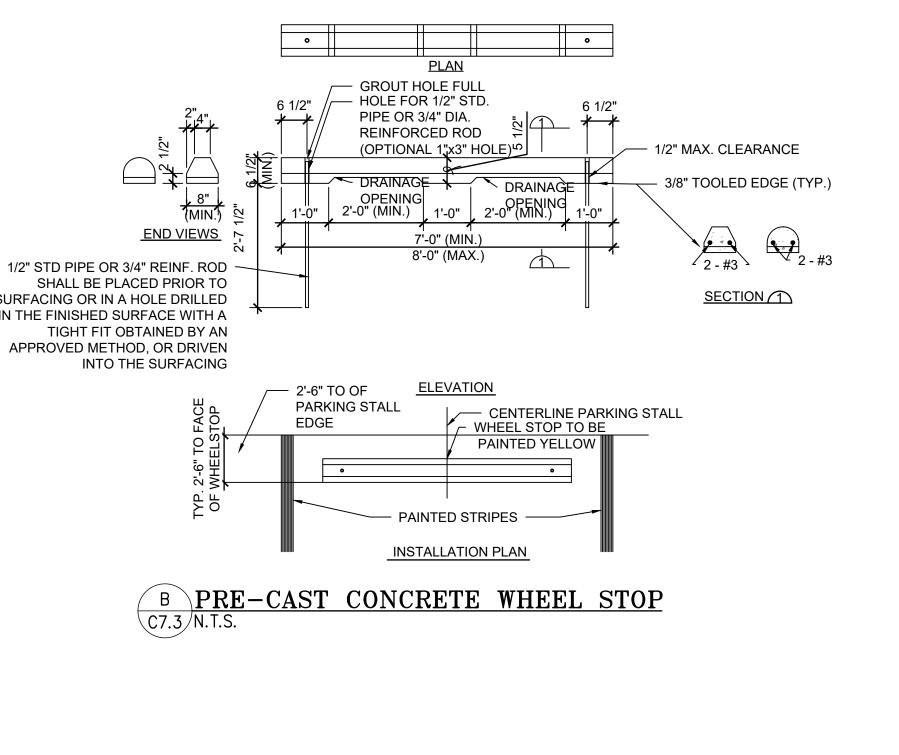
5 PAINTED CMU FOR WALLS OF ENCLOSURE.

801 PRE-FINISHED CORRUGATED METAL PANEL (MP-01) 802 STRUCTURAL STEEL, PAINT WELDED UNITS PT-5, RE: STRUCTURAL

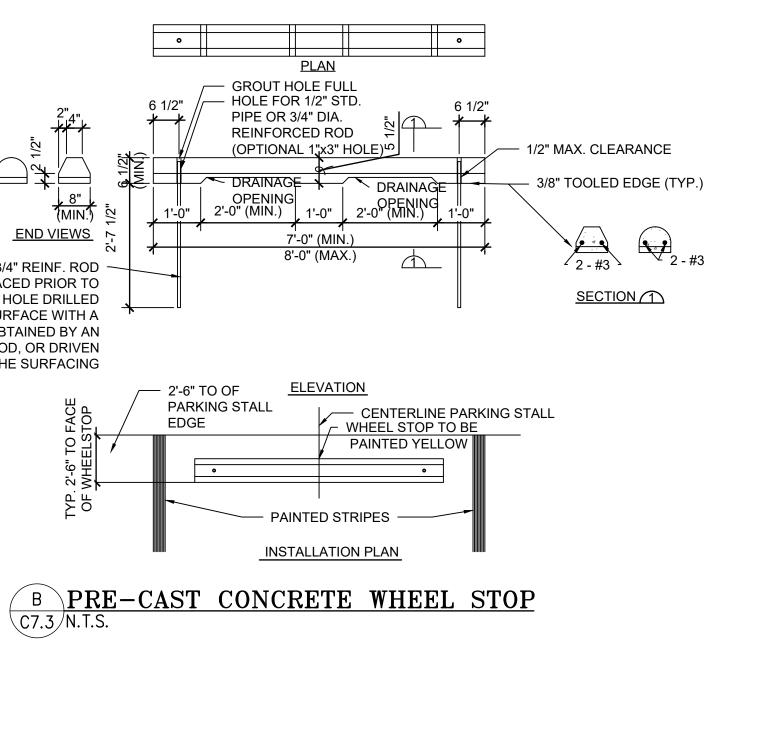
804 PIPE BOLLARDS: IDEAL SHIELD: URBAN BRONZE, PANTONE 2336 XGC. RE D3/S5.1

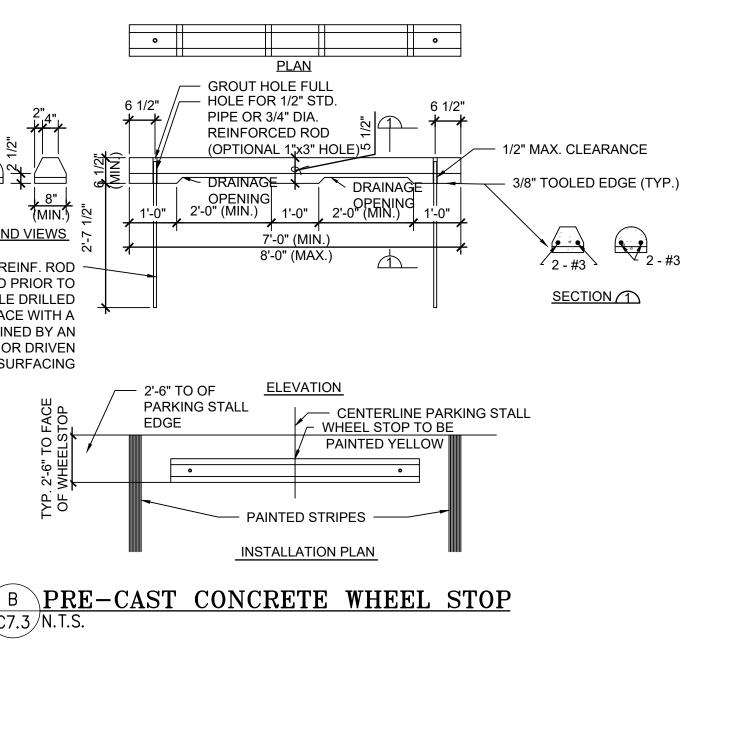
805 FINISHED PAVEMENT, RE: CIVIL 806 CONCRETE CURB, RE: STRUCTURAL

807 WELD ANGLE STOPS TO CORNER POST, PAINT PT-5



1/2" STD PIPE OR 3/4" REINF. ROD SHALL BE PLACED PRIOR TO SURFACING OR IN A HOLE DRILLED IN THE FINISHED SURFACE WITH A TIGHT FIT OBTAINED BY AN





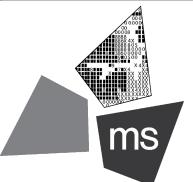
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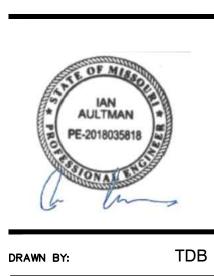
PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

SITE DETAILS



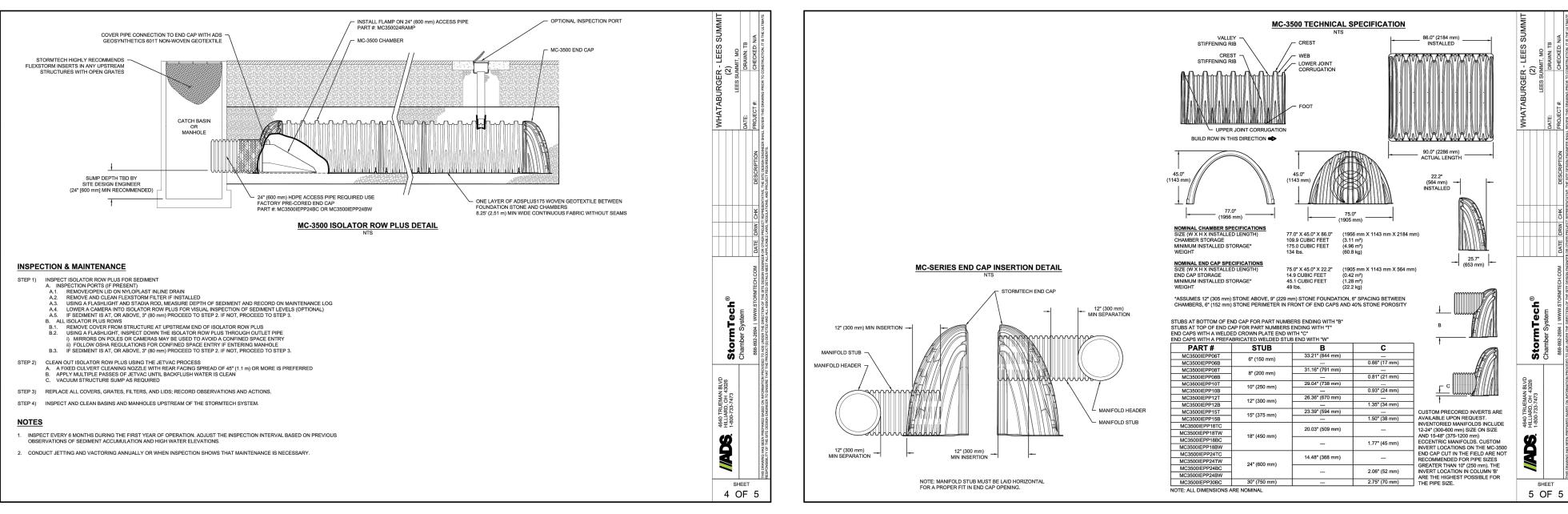
HECKED BY:	PGD
ROJECT NO:	40497-21

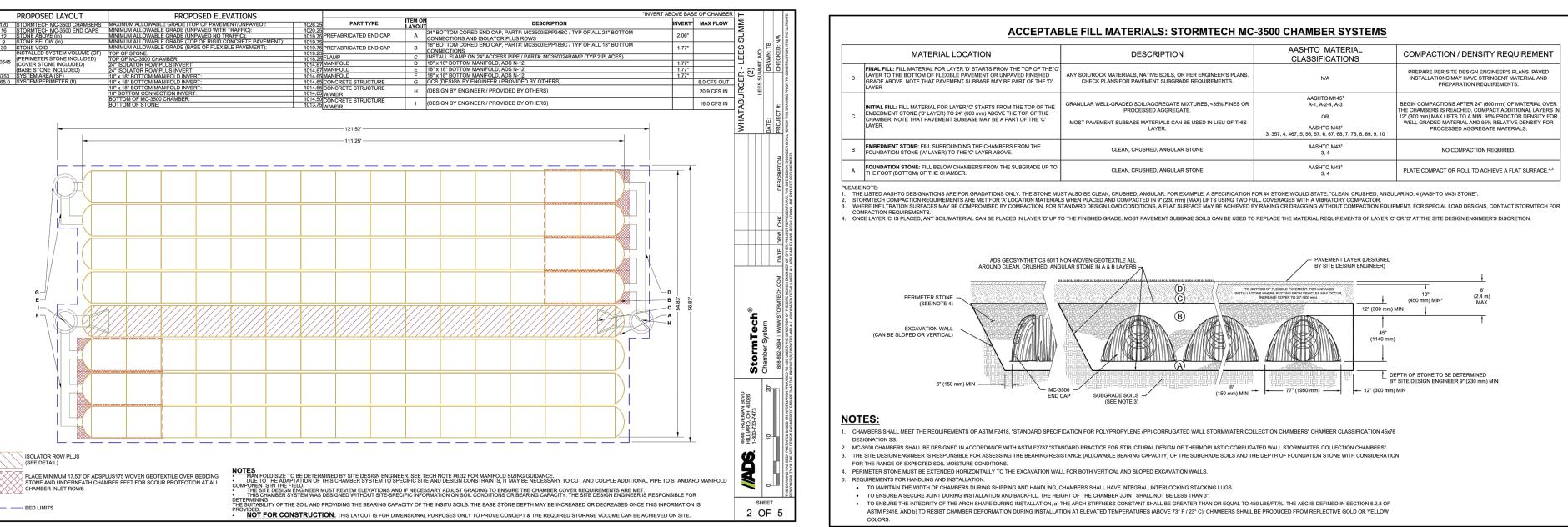
DRAWING

C-7.3



		PR 120 STO 16 STO
		12 STO 9 STO
JINEERED PRODUCT NAGER		30 STO INS
S SALES REP	FOR STORMTECH	²⁰⁵⁴⁵ (CC (BA
JJECT NO.	vanced Drainage Systems, Inc.	6753 SY3 365.0 SY3
WHATABURGER	<section-header><section-header><section-header><section-header><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></section-header></section-header></section-header></section-header>	
CHAMIDERS AND END CAPS SHALL BE PRODUCED AT AN ISO SUIT CERTIFIED MANUFACTURING FACILITE.	WARRANTY. CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.	



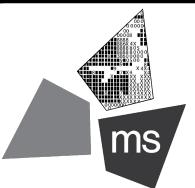


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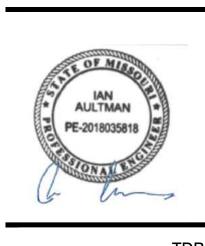
PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

DETENTION BASIN DETAILS



DRAWN BY:	TDB
CHECKED BY:	PGD
PROJECT NO:	40497-21

C-7.4

DRAWING



DESCRIPTION

ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.

GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.

MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.

CLEAN, CRUSHED, ANGULAR STONE

CLEAN, CRUSHED, ANGULAR STONE

AASHTO MATERIAL

CLASSIFICATIONS

N/A

AASHTO M145¹ A-1, A-2-4, A-3

OR

AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10

AASHTO M431 3, 4

AASHTO M431 3, 4

*TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 24" (600 mm).

6" (150 mm) MIN → (150 mm) MIN → (150 mm) → (150 m

1000000 (COCO

PAVEMENT LAYER (DESIGNED BY SITE DESIGN ENGINEER)

12" (300 mm) MIN

COMPACTION / DENSITY REQUIREMENT

BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER

NO COMPACTION REQUIRED.

PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.2,3

(2.4 m MAX

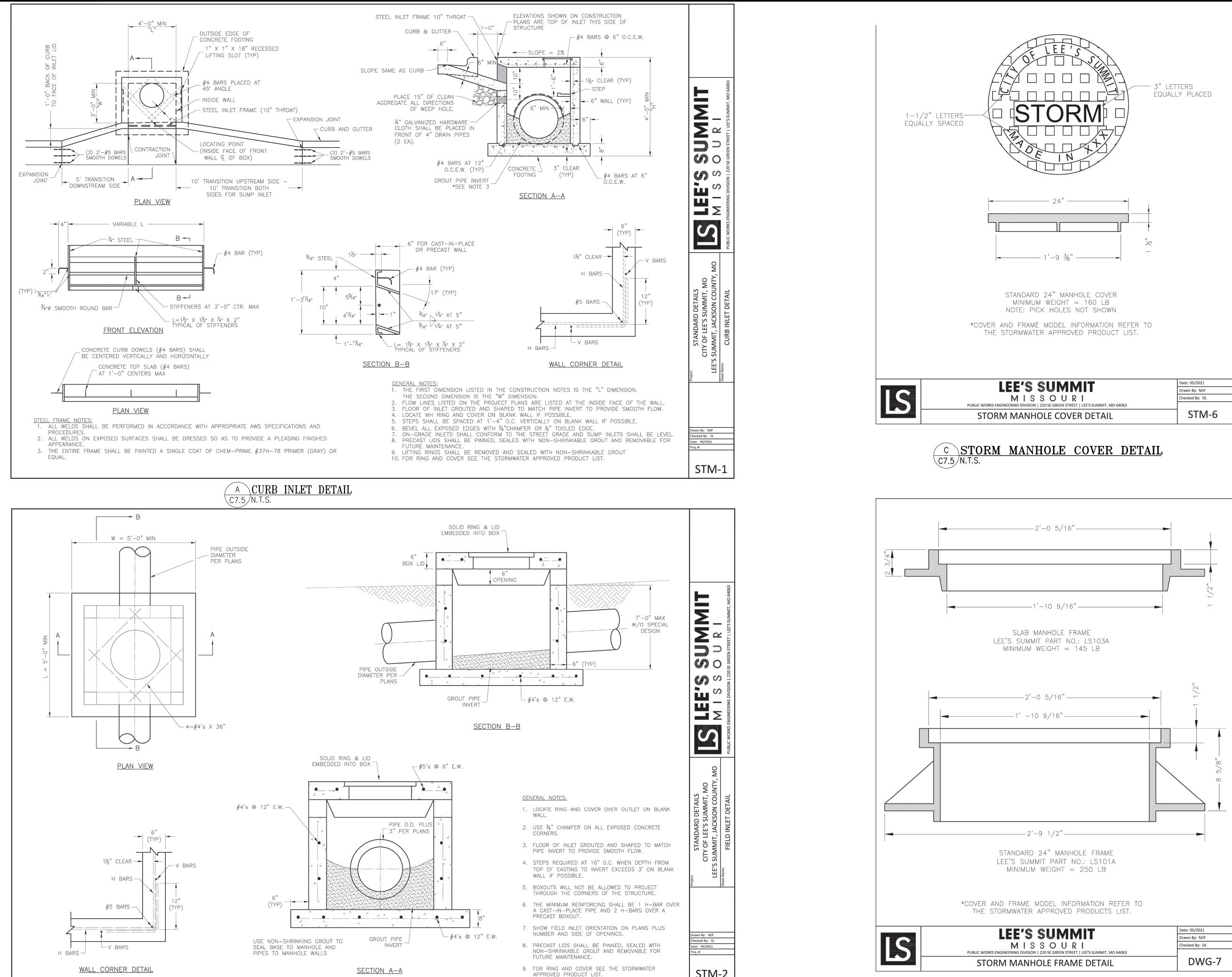
StormTec Chamber System

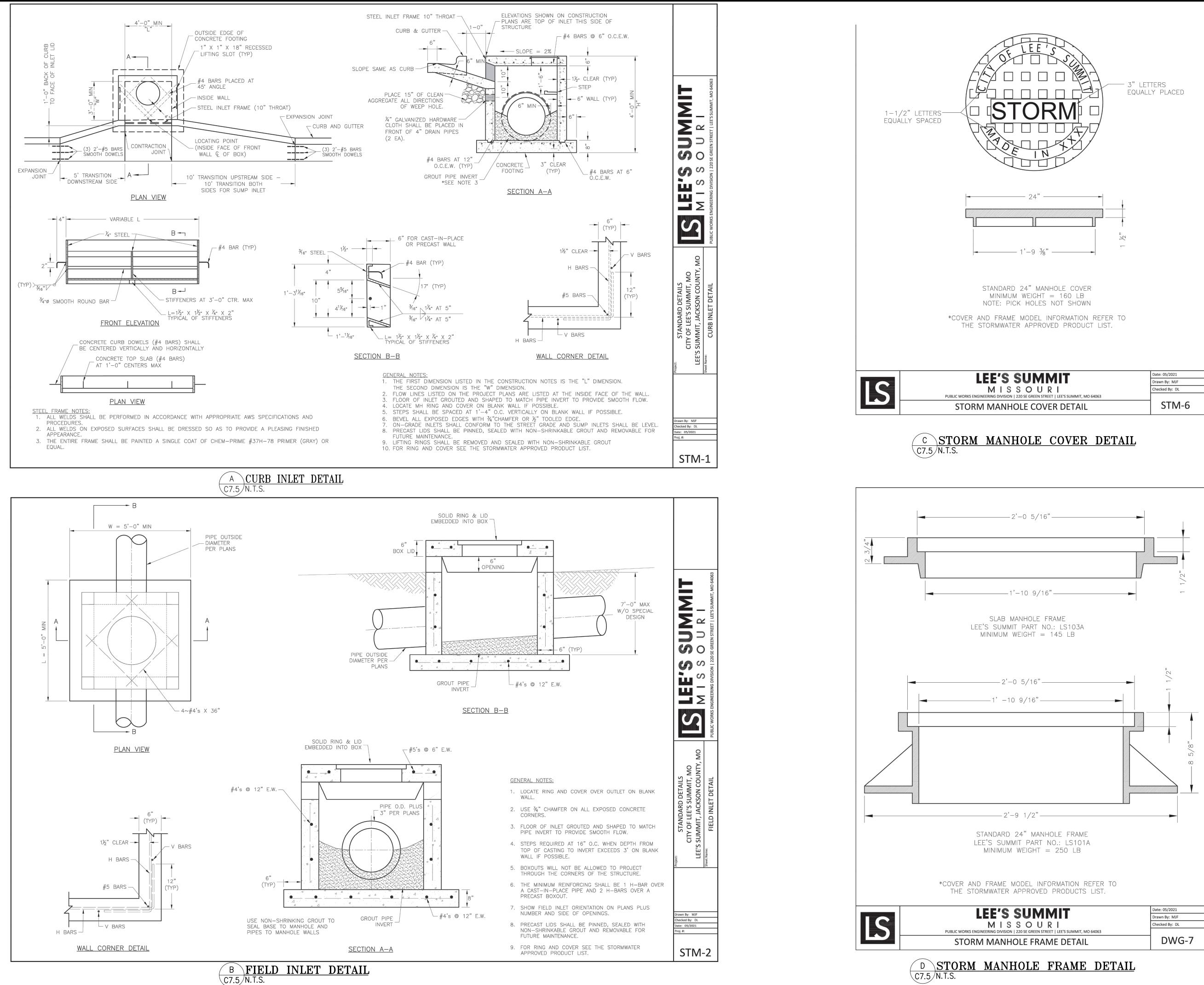
SHEET 3 OF 5

(450 mm) MIN*

DEPTH OF STONE TO BE DETERMINED BY SITE DESIGN ENGINEER 9" (230 mm) MIN

PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.







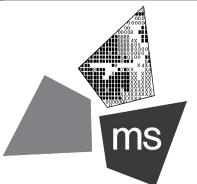
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PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

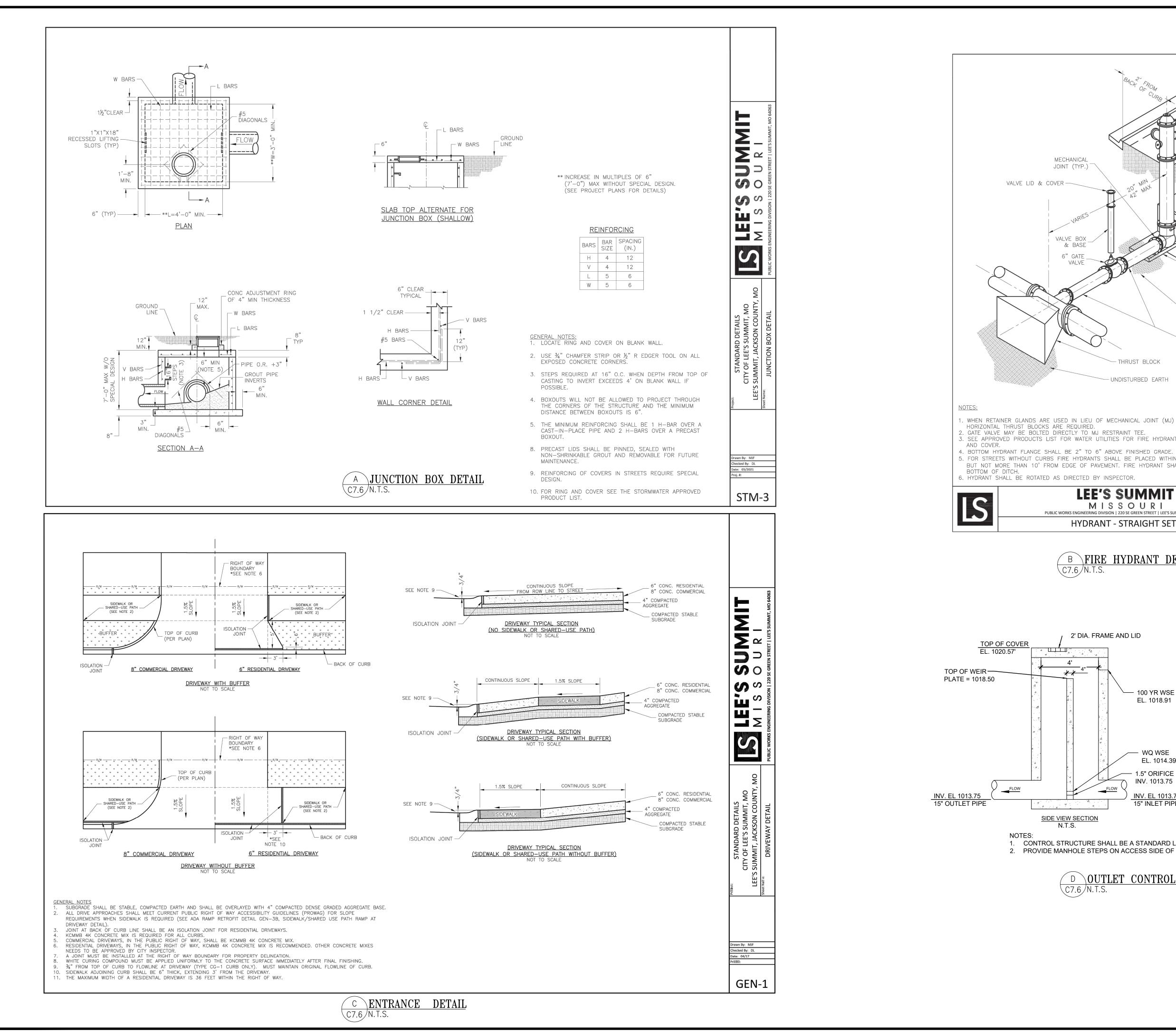
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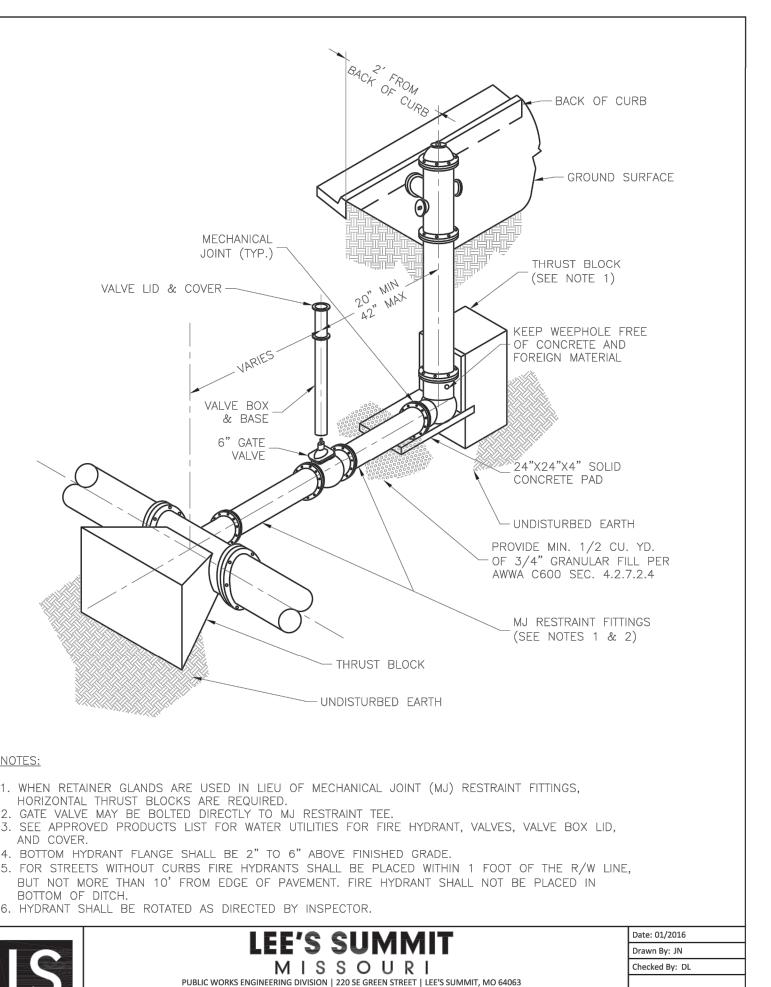
SITE DETAILS

ALLTE OF MISS IAN AULTMAN PE-2018035818 IN ALLEN	
DRAWN BY:	TDB
CHECKED BY:	PGD

40497-21 PROJECT NO: DRAWING

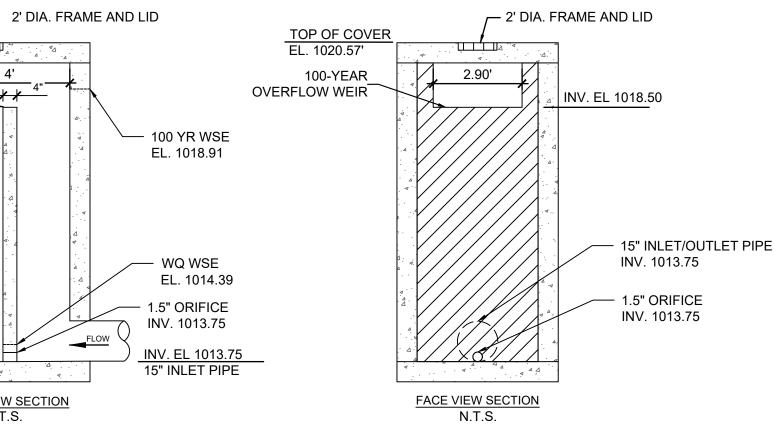
C-7.5





HYDRANT - STRAIGHT SET

B FIRE HYDRANT DETAIL C7.6 N.T.S.



WAT-7

1. CONTROL STRUCTURE SHALL BE A STANDARD LEE'S SUMMIT JUNCTION BOX, MODIFIED AS SHOWN. 2. PROVIDE MANHOLE STEPS ON ACCESS SIDE OF WEIR WALL.

D OUTLET CONTROL STRUCTURE C7.6 N.T.S.



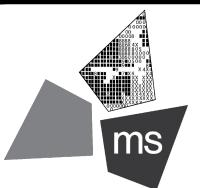
SIR UPDATES	09/13/2 ⁻
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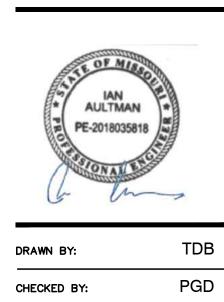
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204 SW M150 HWY LEE'S SUMMIT, MO 64081

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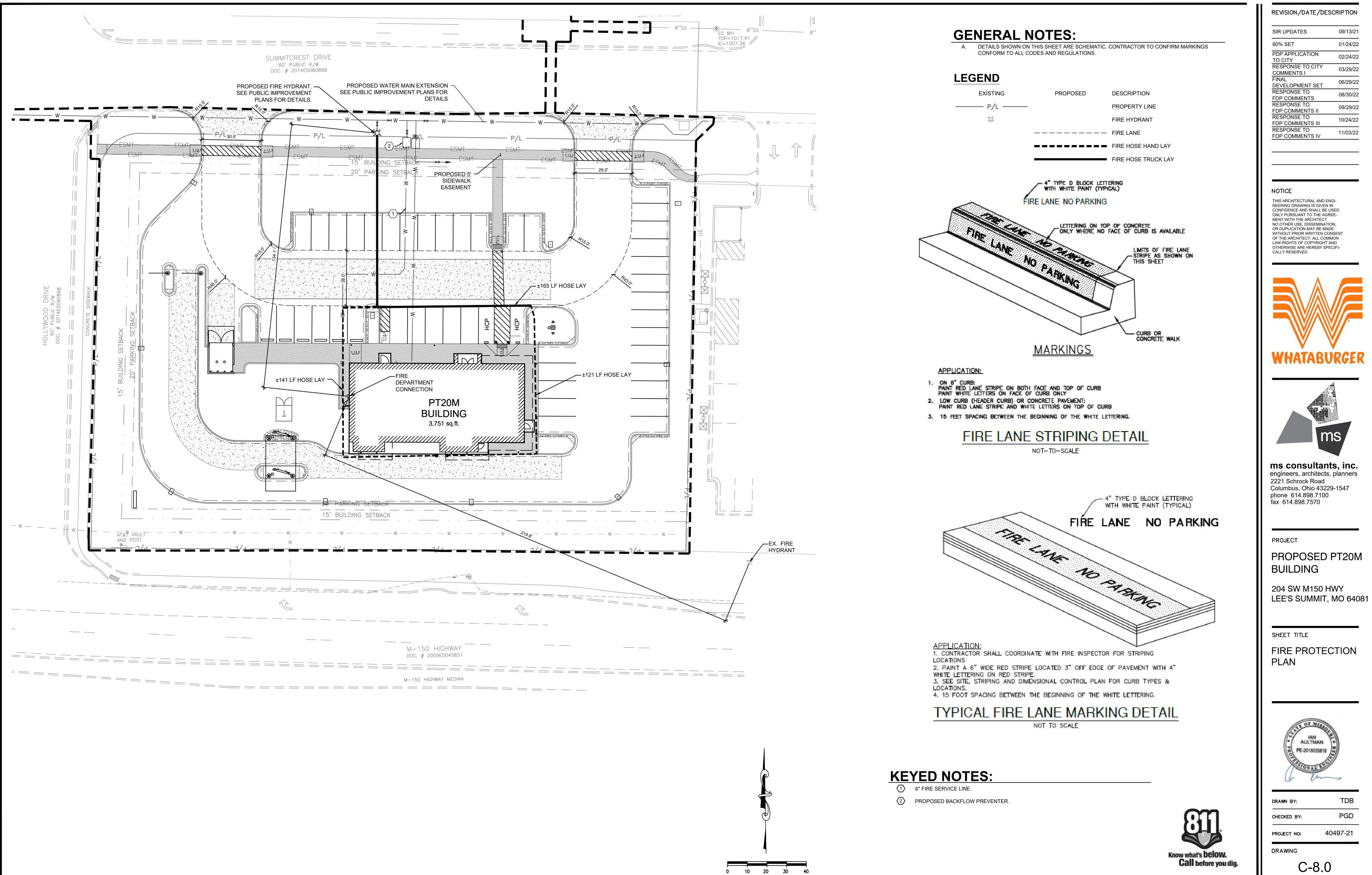
SITE DETAILS

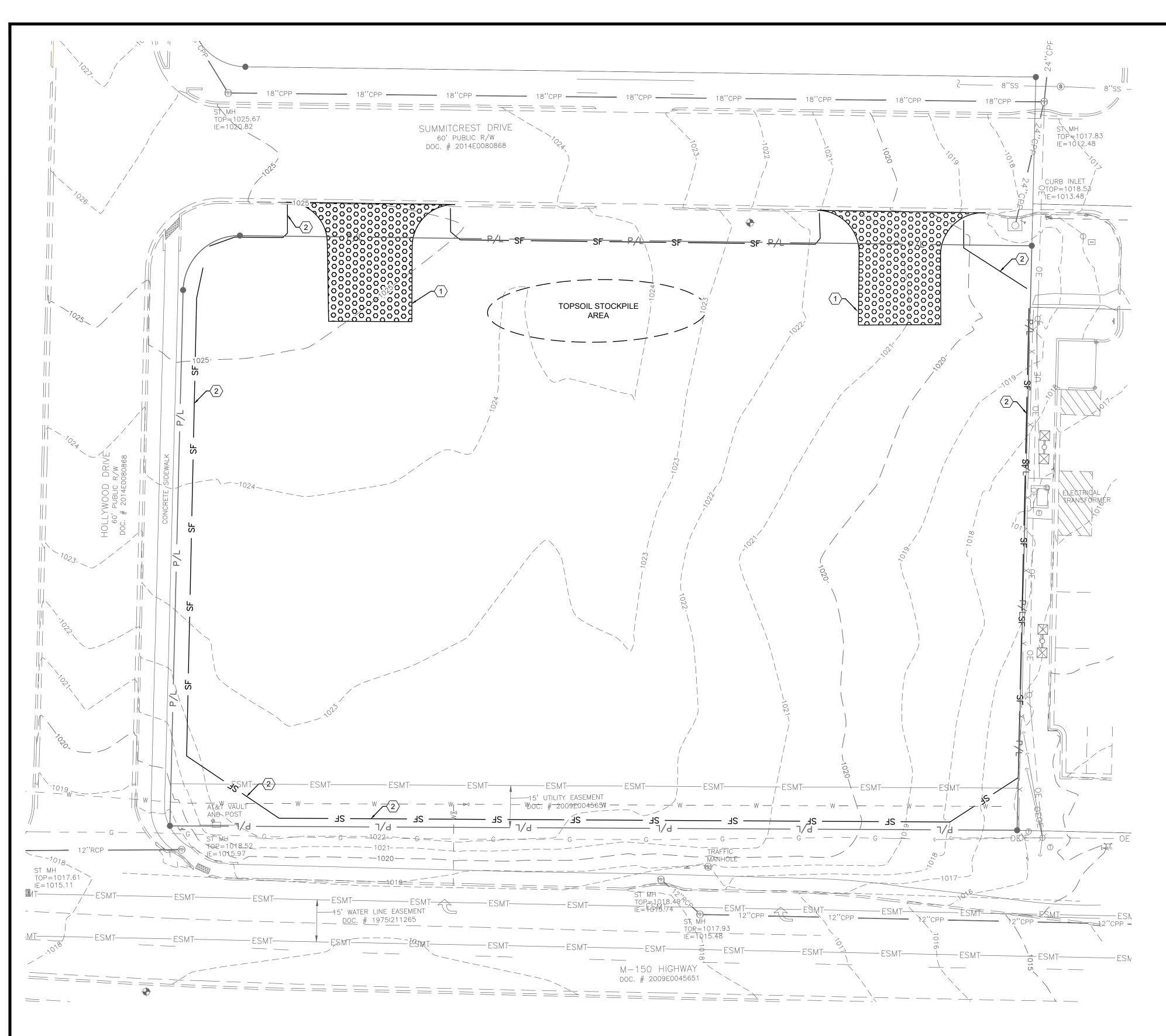


40497-21 PROJECT NO:

DRAWING

C-7.6





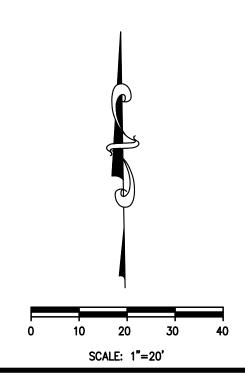


1. PRE-CONSTRUCTION MEETING 2. BEFORE ANY SITE GRADING ACTIVITIES BEGIN a. INSTALL PERIMETER SILT FENCES b. INSTALL INLET PROTECTING ON EXISTING INLETS c. CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCES

*ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.

*THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.





KEYED NOTES:

(1) CONSTRUCTION ENTRANCE. SEE DETAIL ON SHEET C-10.2. $\langle 2 \rangle$ TEMPORARY SILT FENCE, SEE DETAIL ON SHEET C-10.2.

CONSTRUCTION SEQUENCE THE ORDER OF MAJOR ACTIVITIES WILL BE AS FOLLOWS:

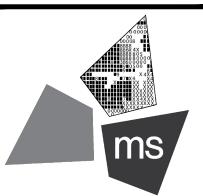
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PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

STORMWATER POLLUTION PREVENTION PLAN PRE CONSTRUCTION

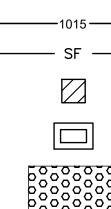


DRAWN BY:	TDB
CHECKED BY:	PGD
PROJECT NO:	40497-21

DRAWING

C-9.0

950



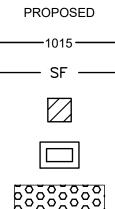
DESCRIPTION

INLET PROTECTION

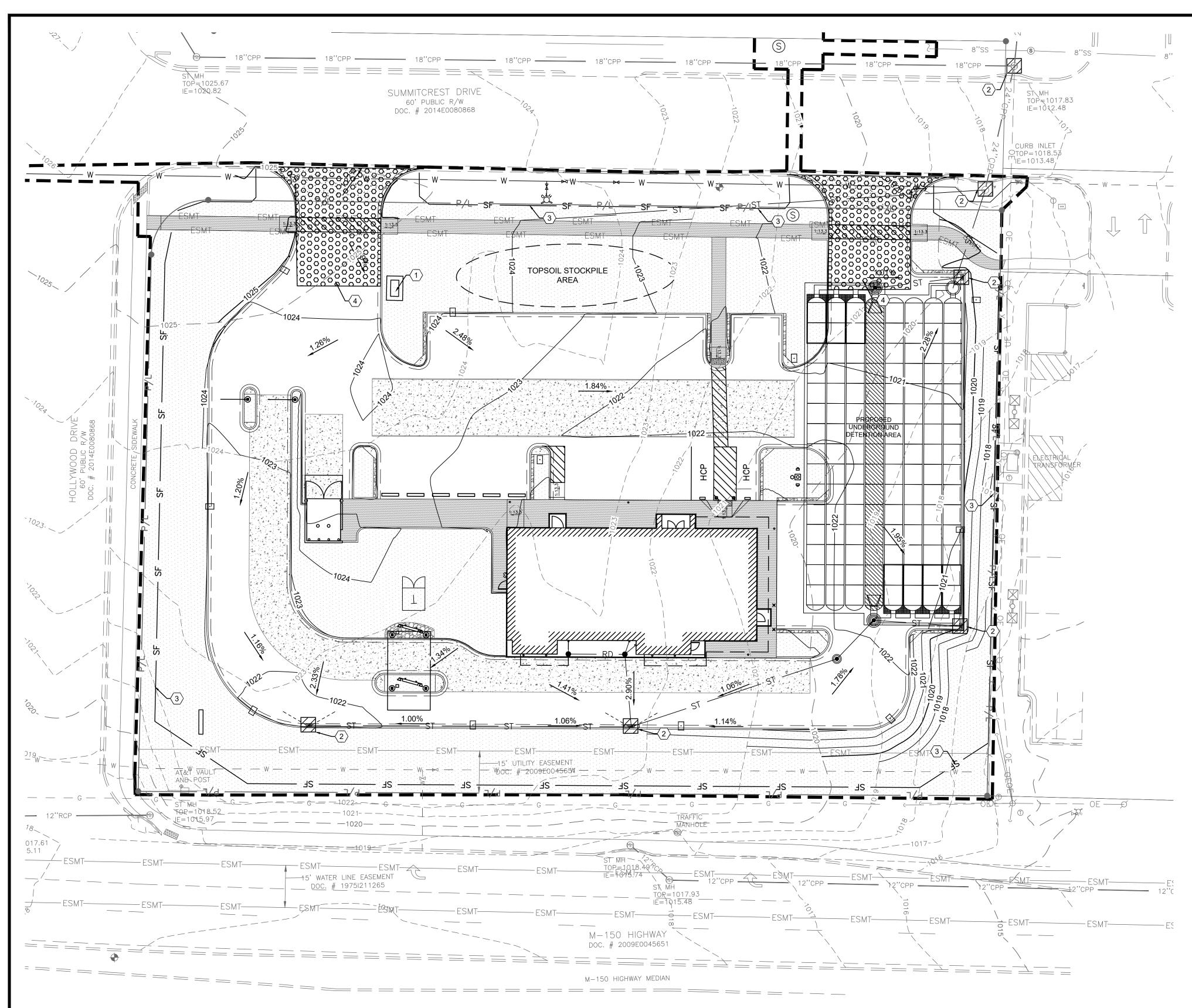
CONCRETE WASHOUT

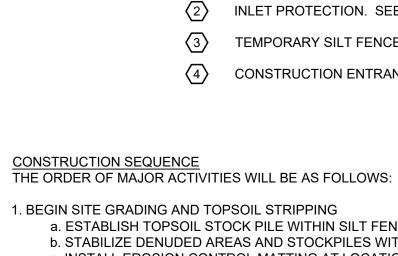
CONSTRUCTION ENTRANCE





1015 CONTOUR





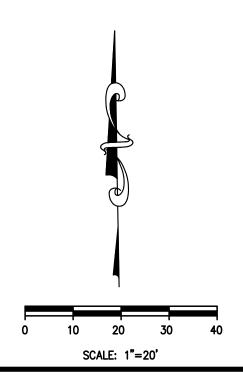
 $\langle 1 \rangle$

- a. ESTABLISH TOPSOIL STOCK PILE WITHIN SILT FENCE PERIMETER b. STABILIZE DENUDED AREAS AND STOCKPILES WITHIN 14 DAYS OF LAST CONSTRUCTION ACTIVITY IN THAT AREA c. INSTALL EROSION CONTROL MATTING AT LOCATIONS INDICATED ON PLAN 2. INSTALL UTILITIES, SANITARY SEWERS, WATER SERVICES, AND STORM SEWERS
- 3. BEGIN CONSTRUCTION OF BUILDING FOUNDATION AND STRUCTURE

MANUAL SHALL PREVAIL.

*THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.





KEYED NOTES:

CONCRETE WASHOUT, SEE DETAIL ON SHEET C-10.2. INLET PROTECTION. SEE DETAILS ON SHEET C-10.3.

TEMPORARY SILT FENCE. SEE DETAIL ON SHEET C-10.2.

CONSTRUCTION ENTRANCE. SEE DETAIL ON SHEET C-10.2.

4. INSTALL CURBS, PREPARE PAVEMENT SUBGRADE AND PROVIDE GOOD AGGREGATE BASE TO AREAS TO BE PAVED

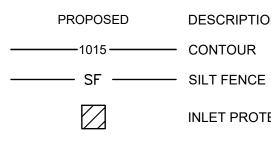
5. PAVE AREAS AND EXTERIOR BUILDING CONSTRUCTION

6. FINAL GRADING AND PERMANENT SEEDING OF NON-PAVED AREAS OF THE SITE WITHIN 7 DAYS OF FINISHING FINAL GRADE

7. ONCE 70% VEGETATIVE COVERAGE IS ACHIEVED, REMOVE EROSION PROTECTION

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EXISTING 950

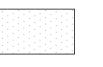


DESCRIPTION —1015 — CONTOUR

INLET PROTECTION

CONCRETE WASHOUT

CONSTRUCTION ENTRANCE



PERMANENT STABILIZATION AREA



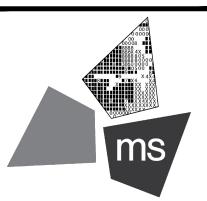
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RESPONSE TO FDP COMMENTS IV	11/03/22

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PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

STORMWATER POLLUTION PREVENTION PLAN DURING AND POST CONSTRUCTION



DRAWN BY:	TDB
CHECKED BY:	PGD
PROJECT NO:	40497-21

DRAWING

C-9.1

PROJECT NAME AND LOCATION WHATABURGER NWQ HWY 150 & HOLLYWOOD ST LEE'S SUMMIT, MO 64802		
OWNER NAME AND ADDRESS WHATABURGER 300 CONCORD PLAZA DR. SAN ANTONIO, TX 78216 PHONE: (210) 476-6842		OTHER SEDIMENT • TEMPORARY WILL BE LEFT • PERMANENT
CONTACT: CINDY ESPINOZA EMAIL: cespinoza@wbhq.com		1 YEAR OR AT • SEDIMENT CO
<u>SITE CONTACT</u> WHATABURGER 300 CONCORD PLAZA DR. SAN ANTONIO, TX 78216 PHONE: (210) 476-6842		ADDITIONAL BMP' OPEN BURNING: N AS TIRES, CARS, A RESTRICTED ARE
CONTACT: CINDY ESPINOZA EMAIL: cespinoza@wbhq.com		1. WITHIN CORF 2. WITHIN 1,000
GENERAL SCOPE OF PROJECT THIS PROJECT WILL CONSIST OF A RESTAURANT AND TH ASSOCIATED DRAINAGE FACILITIES AND OTHER MISCEL		3. WITHIN A ONE OUTSIDE THE RES
NATURE OF CONSTRUCTION ACTIVITY (CHECK ALL THAT SUBDIVISION		OFF THE PROPER ACTIVITIES: HEAT HEATING OR WAR LANDSCAPE WAS EPA), AND AGRICU
P.U.D OTHER		DUST CONTROL/S
SOIL TYPES		DISCHARGE TO W MUST BE OBSERV SHORT TERM FOR
CONSTRUCTION SITE ESTIMATES TOTAL SITE AREA: CONSTRUCTION SITE AREA TO BE DISTURBED: PERCENTAGE IMPERVIOUS AREA BEFORE CONSTRUCTION RUNOFF COEFFICIENT BEFORE CONSTRUCTION:	1.45 AC. 1.53 AC. 0.5%	AIR PERMITTING F ACTIVITIES ASSO CONCRETE BATCI SPECIFIC MISSOU
PERCENTAGE IMPERVIOUS AREA AFTER CONSTRUCTION RUNOFF COEFFICIENT AFTER CONSTRUCTION:	N: <u>61.8%</u>	THE CORRESPON EPA FOR ALL COM
RECEIVING WATERS LAKE WINNEBAGO		WASTE DISPOSAL BOUNDARIES DUP OF BY THE CONTR
CONSTRUCTION SEQUENCE THE ORDER OF MAJOR ACTIVITIES WILL BE AS FOLLOWS		AND CONSTRUCT OFFSITE VEHICLE
 PRE-CONSTRUCTION MEETING BEFORE AND SITE GRADING ACTIVITIES BEGIN a. INSTALL PERIMETER SILT FENCES 		ROADS SHALL BE CONTROL EROSIC CONTROL SEDIME
 b. INSTALL INLET PROTECTION ON EXISTING INLET c. CONSTRUCT TEMPORARY CONSTRUCTION ENT 3. BEGIN SITE GRADING AND TOPSOIL STRIPPING 		SANITARY WASTE
a. ESTABLISH TOPSOIL STOCKPILE WITHIN SILT FE	VITHIN 14 DAYS OF LAST CONSTRUCTION ACTIVITY IN THAT AREA	FERTILIZERS AND MANUFACTURER. SPECIFICATION O NOT ANTICIPATED
 INSTALL UTILITIES, SANITARY SEWERS, WATER SER BEGIN CONSTRUCTION OF BUILDING FOUNDATION A INSTALL CURPS, DREDARE DAVEMENT SUBCRADE A 		MAINTENANCE
8. PAVE AREAS AND EXTERIOR BUILDING CONSTRUCT		THE CONTRACTO THE REMOVAL OF
10. ONCE 70% VEGETATIVE COVERAGE IS ACHIEVED, R POTENTIAL SOURCES OF POLLUTION	EMOVE EROSION PROTECTION.	THE CONTRACTO AND FOLLOWING SHALL BE REQUIF
CONCRETE DETERGENTS		SWPPP AMENDME AND SEDIMENT C
WOOD FERTILIZERS PAINTS (ENAMEL AND LATEX)		A. PROJECT REV
CLEANING SOLVENTS PETROLEUM BASED PRODUCTS		B. PROVIDE ANDC. REVIEW STAE
EROSION AND SEDIMENT CONTROLS BMP DESCRIPTION:	CLEARING AND GRUBBING	CONTROLS A BARE SPOTS
MAINTENANCE AND INSPECTION: REFERENCE:	AS NEEDED TECHNICAL SPECIFICATION	D. ONCE HEALTI HEIGHT OF TH
BMP DESCRIPTION: MAINTENANCE AND INSPECTION: REFERENCE:	DUST CONTROL AS NEEDED E&S DETAILS	E. REVIEW STRU NECESSARY. NECESSARY.
BMP DESCRIPTION: MAINTENANCE AND INSPECTION: REFERENCE:	TEMPORARY SEEDING AND MULCHING WEEKLY AND AFTER HEAVY RAIN E&S DETAILS	F. AN INSPECTION OF 0.5 INCHE ANY AMENDM
BMP DESCRIPTION: MAINTENANCE AND INSPECTION: REFERENCE:	PERMANENT SEEDING AND MULCHING WEEKLY AND AFTER HEAVY RAIN E&S DETAILS	G. IF THE CONTE CONSTRUCTI BASIS AND CO DISCHARGE \
BMP DESCRIPTION: MAINTENANCE AND INSPECTION: REFERENCE:	CONSTRUCTION ENTRANCE AS NEEDED E&S DETAILS	INSPECTIONS QUALIFIED PERSO DISTURBED AREA STORAGE OF MAT
BMP DESCRIPTION: MAINTENANCE AND INSPECTION: REFERENCE:	ADS - ISOLATOR ROW AS NEEDED O&M MANUAL	POLLUTANTS ENT AND SEDIMENT C AND MAINTENANC OF WATER OR GR FOLLOWING THE I
BMP DESCRIPTION: MAINTENANCE AND INSPECTION:	TOPSOIL STOCKPILE AS NEEDED	ALLOWABLE NON ALLOWABLE NON
REFERENCE:	O&M MANUAL	THEM FROM BECO
POST CONSTRUCTION BMP'S		1. WATERS USE 2. WATER USED
OST CONSTRUCTION BMP'S GREEN SPACE		1. WATERS USE 2. WATER USED 3. POTABLE WA 4. ROUTINE EXT

AND EROSION CONTROL NOTES

EROSION CONTROLS WILL BE APPLIED PRIOR TO ONSET OF WINTER WEATHER FOR DISTURBED AREAS THAT FIDLE OVER WINTER.

EROSION CONTROLS WILL BE APPLIED WITHIN 7 DAYS FOR DISTURBED AREAS REMAINING DORMANT FOR OVER T FINAL GRADE.

CONTROL DEVICES WILL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED OVER 7 DAYS.

NO MATERIALS MAY BE BURNED WHICH CONTAIN RUBBER, GREASE, ASPHALT, OR PETROLEUM PRODUCTS SUCH AUTO PARTS, PLASTICS OR PLASTIC COATED WIRE. OPEN BURNING IS NOT ALLOWED IN RESTRICTED AREAS. EAS ARE DEFINED AS:

PORATION LIMITS

0 FEET OF A MUNICIPAL CORPORATION NE MILE ZONE OUTSIDE OF A CORPORATION OF 10,000 OR MORE

ESTRICTED AREA, NO OPEN BURNING CAN TAKE PLACE WITHIN 1,000 FEET OF AN INHABITED BUILDING LOCATED RTY WHERE THE FIRE IS SET. OPEN BURNING IS PERMISSIBLE IN A RESTRICTED AREA FOR THE FOLLOWING TING TAR, WELDING AND ACETYLENE TORCHES, SMUDGE POTS AND SIMILAR OCCUPATIONAL NEEDS, AND RMTH FOR OUTDOOR BARBEQUES. OUTSIDE OF RESTRICTED AREAS, OPEN BURNING IS PERMISSIBLE FOR STES (PLANT MATERIAL), LAND-CLEARING WASTES (PLANT MATERIAL, WITH PRIOR WRITTEN PERMISSION FROM CULTURAL WASTES (MATERIAL GENERATED BY CROP, HORTICULTURAL, OR LIVESTOCK PRODUCTION PRACTICES.

SUPPRESSANTS: DUST CONTROL IS REQUIRED TO PREVENT NUISANCE CONDITIONS. DUST CONTROLS MUST BE DANCE WITH MANUFACTURER'S SPECIFICATION AND NOT BE APPLIED IN A MANNER, WHICH WOULD RESULT IN A WATERS OF THE STATE. ISOLATION DISTANCES FROM BRIDGES, CATCH BASINS, AND OTHER DRAINAGE WAYS VED. APPLICATION (EXCLUDING WATER) MAY NOT OCCUR WHEN PRECIPITATION IS IMMINENT AS NOTED IN THE RECAST. USED OIL MAY NOT BE APPLIED FOR DUST CONTROL.

REQUIREMENTS: ALL CONTRACTORS AND SUB CONTRACTORS MUST BE MADE AWARE THAT CERTAIN CIATED WITH CONSTRUCTION WILL REQUIRE AIR PERMITS. ACTIVITIES INCLUDING BUT NOT LIMITED TO MOBILE CH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, LARGE GENERATORS, ETC., WILL REQUIRE URI EPA AIR PERMITS FOR INSTALLATION AND OPERATION. THESE ACTIVITIES MUST SEE AUTHORIZATION FROM NDING OF MISSOURI EPA. NOTIFICATION FOR RESTORATION AND DEMOLITION MUST BE SUBMITTED TO MISSOURI MMERCIAL SITES TO DETERMINE IF ASBESTOS CORRECTIVE ACTIONS ARE REQUIRED.

THE CONTRACTOR SHALL PROVIDE LITTER CONTROL AND COLLECTION OF MATERIALS WITHIN THE PROJECT RING CONSTRUCTION. ALL FERTILIZER, HYDROCARBON, OR OTHER CHEMICAL CONTAINERS SHALL BE DISPOSED FRACTOR IN ACCORDANCE WITH THE EPA'S STANDARD PRACTICES. NO SOLID MATERIAL INCLUDING BUILDING TION MATERIAL SHALL BE DISPOSED OF, DISCHARGED OR BURIED ONSITE.

TRACKING: LOADED HAUL TRUCKS SHALL BE COVERED WITH A TARPAULIN. EXCESS DIRT MATERIAL ON THE REMOVED IMMEDIATELY. HAULING ON UNPAVED SURFACES SHALL BE MONITORED TO MINIMIZE DUST AND ION. HAUL ROADS SHALL BE WATERED OR OTHER CONTROLS PROVIDED AS NECESSARY TO REDUCE DUST AND IENTS.

THE CONTRACTOR SHALL PROVIDE PORTABLE SANITARY WASTE FACILITIES. THESE FACILITIES SHALL BE EMPTIED BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR AS REQUIRED BY STATE REGULATIONS.

PESTICIDES: FERTILIZER SHALL BE APPLIED AT A RATE SPECIFIED BY THE SPECIFICATIONS OR THE THE APPLICATION OF FERTILIZERS SHALL BE ACCOMPLISHED IN A MANNER AS DESCRIBED BY THE OR MANUFACTURER TO ENSURE THE PROPER INSTALLATION AND TO AVOID OVER FERTILIZING. PESTICIDES ARE D FOR THIS PROJECT.

OR WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIRS OF EROSION AND SEDIMENT CONTROL DEVICES AND F THE EROSION AND SEDIMENT CONTROL DEVICES AFTER THE NOTICE OF TERMINATION IS EXECUTED.

OR SHALL REVIEW THE PROJECT AND ALL EROSION AND SEDIMENT CONTROLS ON A DAILY BASIS AND DURING RAINFALL EVENTS. AN INSPECTION FORM HAS BEEN PROVIDED IN THE SPECIFICATIONS. THE CONTRACTOR RED TO KEEP A LOG OF ALL THE DAILY INSPECTION REPORTS, GRADING AND STABILIZATION ACTIVITIES, AND IENTS AT THE SITE. THE FOLLOWING PRACTICES WILL BE IMPLEMENTED TO MAINTAIN AND MONITOR EROSION CONTROLS.

EVIEW ON A DAILY BASIS.

ID MAINTAIN RAIN GAUGES ONSITE (IF NOT AVAILABLE IN THE AREA) TO RECORD RAINFALL DATA DAILY.

BILIZATION PRACTICES AND CONTROLS ON A DAILY BASIS AND MAINTAIN AND REPAIR THESE MEASURES AND AS NECESSARY. TEMPORARY AND/OR PERMANENT SEEDING, MULCHING AND SODDING SHALL BE REPAIRED IN AND WASHOUTS, AND HEALTHY GROWTH ESTABLISHED.

THY GROWTH OF TURF IS ESTABLISHED, THE CONTRACTOR SHALL MAINTAIN THESE AREAS TO INSURE THE HE GRASS DOES NOT REACH MORE THAN 6 INCHES ABOVE THE ESTABLISHED GRADE.

RUCTURAL PRACTICES ON A DAILY BASIS AND MAINTAIN AND REPAIR THESE MEASURES AND CONTROLS AS 2. BUILT UP SEDIMENTS SHALL BE REMOVED FROM SILT FENCES AND FILTER CLOTH SHALL BE REPLACED AS AND WHEN THEY HAVE SERVED THEIR USEFULNESS.

ION AND MAINTENANCE REPORT SHALL BE COMPLETED WEEKLY AND WITHIN 24 HOURS OF A RAINFALL EVENT ES OR MORE. THE CONTRACTOR SHALL CREATE AN INSPECTION AND MAINTENANCE REPORT LOG AND NOTE MENTS TO THE SWPPP THAT OCCUR DURING CONSTRUCTION.

FRACTOR ELECTS TO APPLY FOR PERMITS FOR DISCHARGE OF STORMWATER FROM THE SITE DURING FION, ALL POINTS OF DISCHARGE OF STORMWATER RUNOFF FROM THE SITE SHALL BE INSPECTED ON A DAILY CONTROLS AND MEASURES REPAIRED AS NECESSARY TO MAINTAIN ACCEPTABLE WATER QUALITY AND VOLUMES IN ACCORDANCE WITH THE PERMIT.

ONNEL SHALL INSPECT ALL POINTS OF DISCHARGE, AS APPLICABLE, FROM THE PROJECT SITE AND ALL AS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN STABILIZED. DISTURBED AREAS AND AREAS USED FOR TERIALS EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR POTENTIAL FOR TERING THE STORMWATER MANAGEMENT SYSTEM. THE STORMWATER MANAGEMENT SYSTEM AND EROSION CONTROL MEASURES SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. INSPECTION ICE REPORTS SHALL BE COMPLETED AT LEAST EVERY WEEK AND FOLLOWING A RAINFALL EVENT OF 0.5 INCHES REATER (SEE ATTACHED FORM). THESE FORMS SHALL BE RETAINED FOR A PERIOD OF AT LEAST 3 YEARS DATE THE SITE IS FINALLY STABILIZED.

I-STORMWATER DISCHARGE MANAGEMENT

N-STORMWATER DISCHARGES AND THE MEASURES USED TO ELIMINATE OR REDUCE THEM AND TO PREVENT COMING CONTAMINATED MAY INCLUDE DEPENDING ON THE PERMIT:

ED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED

D TO CONTROL DUST

ATER INCLUDING UNCONTAMINATED WATER LINE FLUSHINGS TERNAL BUILDING WASH DOWN THAT DOES NOT USE DETERGENTS

WASH WATER WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS) MATERIAL HAS BEEN REMOVED) AND WHERE DETERGENTS ARE NOT USED

NATED AIR CONDITIONING OR COMPRESSOR CONDENSATE

NATED GROUND WATER OR SPRING WATER

8. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS 9. UNCONTAMINATED EXCAVATION DEWATERING

10. LANDSCAPE IRRIGATION

ESTABLISH PROPER EQUIPMENT/VEHICLE FUEL EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED AWAY FROM WATERCOURSES, DITCHES, OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL OIL STORAGE TANKS. THESE AREAS MUST BE INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A 0.5 INCH OR GREATER RAIN EVENT TO ENSURE THERE ARE NO EXPOSED MATERIALS WHICH WOULD CONTAMINATE STORM WATER. SPILL PREVENTION CONTROL PLAN

SITE OPERATORS MUST BE AWARE THAT SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) REQUIREMENTS APPLY. AN SPCC PLAN IS REQUIRED FOR SITES WITH ONE SINGLE ABOVEGROUND STORAGE OF 1,320 GALLONS OR MORE, OR 42,000 GALLONS OF UNDERGROUND STORAGE. SOILS THAT HAVE BEEN CONTAMINATED MUST BE DISPOSED OF IN ACCORDANCE WITH SECTION "CONTAMINATED SOILS" FOUND BELOW.

SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST, CAT LITTER OR OTHER ABSORBENT MATERIAL AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. SPILLS SHALL BE REPORTED TO THE EPA (1-913-281-0991). SPILLS OF 25 GALLONS OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO EPA (1-913-281-0991), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE DISCOVERY OF THE RELEASE. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATER OF THE STATE, MUST BE REPORTED TO THE EPA'S HOTLINE.

CONTAMINATED SOILS

IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC., ARE SPILLED, LEAKED, OR RELEASED ONTO THE SOIL, THE SOIL SHOULD BE DUG UP AND DISPOSED OF AT A LICENSED SANITARY LANDFILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). PLEASE BE AWARE THAT STORM WATER RUN OFF ASSOCIATED WITH CONTAMINATED SOILS ARE NOT BEING AUTHORIZED UNDER THE EPA'S GENERAL STORMWATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES. IN THE EVENT THERE ARE LARGE EXTENSIVE AREAS OF CONTAMINATED SOILS ADDITIONAL MEASURES ABOVE AND BEYOND THE CONDITIONS OF THE EPA'S GENERAL CONSTRUCTION STORMWATER PERMIT WILL BE REQUIRED. DEPENDING ON THE EXTENT OF CONTAMINATION, ADDITIONAL TREATMENT AND/OR COLLECTION AND DISPOSAL MAY BE REQUIRED. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONTAMINATED SOILS MUST BE AUTHORIZED UNDER AN ALTERNATE NPDES PERMIT.

REVISION/DATE/DESCRIPTION

09/13/21

01/24/22

02/24/22

03/29/22

06/29/22

08/30/22

09/29/22

10/24/22

11/03/22

SIR UPDATES

PDP APPLICATION

RESPONSE TO CITY

DEVELOPMENT SET

COMMENTS I

RESPONSE TO

FDP COMMENTS

RESPONSE TO

RESPONSE TO

NOTICE

DP COMMENTS I

FDP COMMENTS III RESPONSE TO

FDP COMMENTS IV

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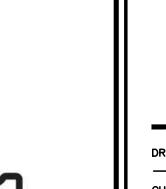
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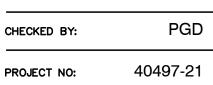
PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE SWPPP NOTES

ATE OF MI	SEQUENCES
	low El
PE-2018035	
C U	A CONTRACTOR
DRAWN BY:	TDB



DRAWING

C-10.0



TEMPORARY SEEDING

DESCRIPTION

TEMPORARY SEEDINGS ESTABLISH TEMPORARY COVER ON DISTURBED AREAS BY PLANTING APPROPRIATE RAPIDLY GROWING ANNUAL GRASSES OR SMALL GRAINS. TEMPORARY SEEDING PROVIDES EROSION CONTROL ON AREAS IN BETWEEN CONSTRUCTION OPERATIONS GRASSES, WHICH ARE QUICK GROWING, ARE SEEDED AND USUALLY MULCHED TO PROVIDE PROMPT, TEMPORARY SOIL STABILIZATION. IT EFFECTIVELY MINIMIZES THE AREA OF A CONSTRUCTION SITE PRONE TO EROSION AND SHOULD BE USED EVERYWHERE THE SEQUENCE OF CONSTRUCTION OPERATIONS ALLOWS VEGETATION TO BE ESTABLISHED.

SPECIFICATIONS FOR TEMPORARY SEEDING

TEMPORARY SEEDING SPECIES SELECTION						
SEEDING DATES	SEEDING DATES SPECIES LB/1000 SF					
MAR 1 TO AUG 15	OATS	3	128-4 BUSHEL			
	TALL FESCUE	1	40			
	ANNUAL RYEGRASS	1	40			
	PERENNIAL RYGRASS	1	40			
	TALL FESCUE	1	40			
	ANNUAL RYEGRASS	1	40			
	ANNUAL RYEGRASS	1.25	55			
	PERENNIAL RYEGRASS	3.25	142			
	CREEPING RED FESCUE	0.40	17			
	KENTUCKY BLUEGRASS	0.40	17			
	OATS	3	128-3 BUSHEL			
	TALL FESCUE	1	40			
	ANNUAL RYEGRASS	1	40			
AUG 16 TO NOV	RYE	3	112-3 BUSHEL			
	TALL FESCUE	1	40			
	ANNUAL RYEGRASS	1	40			
	WHEAT	3	120-2 BUSHEL			
	TALL FESCUE	1	40			
	ANNUAL RYEGRASS	1	40			
	PERENNIAL RYE	1	40			
	TALL FESCUE	1	40			
	ANNUAL RYEGRASS	1	40			
	ANNUAL RYEGRASS	1.25	40			
	PERENNIAL RYEGRASS	3.25	40			
	CREEPING RED FESCUE	0.40	40			
	KENTUCKY BLUEGRASS	0.40				
NOV 1 TO FEB 29 USE MULCH ONLY OR DORMANT SEEDING						

STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.

- TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 14 DAYS OR GREATER. THESE IDLE AREAS SHALL BE SEEDED WITHIN 7 DAYS AFTER GRADING.
- 3. THE SEEDBED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. TEMPORARY SEEDING SHOULD NOT BE POSTPONED IF IDEAL SEEDBED PREPARATION IS NOT POSSIBLE.
- 4. SOIL AMENDMENTS—TEMPORARY VEGETATION SEEDING RATES SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION, WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. BASE RATES FOR LIME AND FERTILIZER SHALL BE USED.
- SEEDING METHOD—SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE. SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

MULCHING TEMPORARY SEEDING:

- APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH. WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDINGS MADE DURING OPTIMUM SEEDING DATES ON FAVORABLE, VERY FLAT SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION.
- MATERIALS: 2.1. STRAW—IF STRAW IS USED, IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 LBS./ 1,000
- SQ. FT. (2-3 BALES) HYDROSEEDERS—IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2000 LBS./ AC. OR 46 LB./ 1,000-SQ.-FT. 2.2.
- OTHER—OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS 2.3. OR WOOD CHIPS APPLIED AT 6 TON/ AC.
- STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER. ANCHORING METHODS: 3.1. MECHANICAL—A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT LEFT TO A LENGTH OF APPROXIMATELY 6 INCHES.
- 3.2. MULCH NETTING—NETTING SHALL BE USED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
- SYNTHETIC BINDERS—SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TRACK OR EQUIVALENT MAY 3.3. BE USED AT RATES RECOMMENDED BY THE MANUFACTURER. WOOD-CELLULOSE FIBER—WOOD-CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WT. OF 750 LB./AC. THE 3.4.
- WOOD-CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB. / 100 GAL.

DUST CONTROL

DESCRIPTION

DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

SPECIFICATIONS FOR DUST CONTROL

- 1. VEGETATIVE COVER AND/MULCH APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 21 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
- WATERING SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS.
- SPRAY-ON ADHESIVES APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURER'S INSTRUCTIONS. STONE – GRADED ROADWAYS AND OTHER SUITABLE AREAS WILL BE STABILIZED USING CRUSHED STONE OR COARSE GRAVEL AS SOON AS PRACTICABLE AFTER REACHING AN INTERIM OR FINAL GRADE. CRUSHED STONE OR COARSE GRAVEL CAN BE USED AS A PERMANENT COVER TO PROVIDE CONTROL OF SOIL EMISSIONS.
- 5. BARRIERS EXISTING WINDBREAK VEGETATION SHALL BE MARKED AND PRESERVED. SNOW FENCING OR OTHER SUITABLE BARRIER MAY BE PLACED PERPENDICULAR TO PREVAILING AIR CURRENTS AT INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHT TO CONTROL AIR CURRENTS AND BLOWING SOIL.
- OPERATION AND MAINTENANCE WHEN TEMPORARY DUST CONTROL MEASURES ARE USED; REPETITIVE TREATMENT SHOULD BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL. STREET CLEANING - PAVED AREAS THAT HAVE ACCUMULATED SEDIMENT FROM CONSTRUCTION SHOULD BE CLEANED DAILY, OR AS NEEDED, UTILIZING A STREET SWEEPER OR BUCKET -TYPE END LOADER OR SCRAPER.

PERMANENT SEEDING

DESCRIPTION

PERENNIAL VEGETATION IS ESTABLISHED ON AREAS THAT WILL NOT BE RE-DISTURBED FOR PERIODS LONGER THAN 12 MONTHS. PERMANENT SEEDING INCLUDES SITE PREPARATION, SEEDBED PREPARATION, PLANTING SEED, MULCHING, IRRIGATION AND MAINTENANCE.

PERMANENT VEGETATION IS USED TO STABILIZE SOIL, REDUCE EROSION, PREVENT SEDIMENT POLLUTION, REDUCE RUNOFF BY PROMOTING INFILTRATION, AND PROVIDE STORMWATER QUALITY BENEFITS OFFERED BY DENSE GRASS COVER.

SPECIFICATION FOR PERMANENT SEEDING

SITE PREPARATION:

- 1. SUBSOILER, PLOW, OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. (MAXIMIZING INFILTRATION WILL HELP CONTROL BOTH RUNOFF RATE AND WATER QUALITY.) SUBSOILING SHOULD BE DONE WHEN THE SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING SHALL NOT BE DONE ON SLIP-PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION.
- THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING. TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION:

- TEST THE SOIL CONDITIONS FOR FEEDING BEFORE STARTING SEEDING AND MULCHING. LIME—AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST,
- LIME SHALL BE APPLIED AT THE RATE OF 100 POUNDS PER 1,000-SQ. FT. OR 2 TONS PER ACRE. FERTILIZER—FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. CONTRACTOR SHALL PERFORM LAB TESTING ON SOIL
- AND PROVIDE A CERTIFIED FERTILIZER RATIO FOR THE SITE SOILS AND SPECIFIED SEED MIX. 4. THE LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING-TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3 INCHES. ON SLOPING LAND, THE SOIL SHALL BE WORKED ON THE CONTOUR.

SEEDING DATES AND SOIL CONDITIONS:

SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THE ABOVE SPECIFIED DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. FOR WINTER SEEDING, SEE THE FOLLOWING SECTION ON DORMANT SEEDING.

DORMANT SEEDINGS:

SEEDINGS SHOULD NOT BE MADE FROM OCTOBER 1 THROUGH NOVEMBER 20. DURING THIS PERIOD, THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY WILL NOT BE ABLE TO SURVIVE THE WINTER.

- THE FOLLOWING METHODS MAY BE USED FOR "DORMANT SEEDING": 2.1. FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE
- SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING. FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, LIME AND FERTILIZE, APPLY THE 2.2. SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
- APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER (SLURRY MAY INCLUDE SEED 2.3. AND FERTILIZER) ON A FIRM, MOIST SEEDBED.
- WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING 2.4. OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE.

MULCHING:

MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. DORMANT SEEDING SHALL BE MULCHED. 100% OF THE GROUND SURFACE SHALL BE COVERED WITH AN APPROVED MATERIAL. 2. MATERIALS:

- 2.1. STRAW—IF STRAW IS USED IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS PER ACRE OR 90 POUNDS (TWO TO THREE BALES) PER 1,000-SQ. FT. THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY APPLIED SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000-SQ.-FT. SECTIONS AND SPREAD TWO 45-LB. BALES OF STRAW IN EACH SECTION.
- HYDROSEEDERS—IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE APPLIED AT 2,000 LB./AC. OR 46 LB./1,000 SQ. FT. 2.2. OTHER—OTHER ACCEPTABLE MULCHES INCLUDE ROLLED EROSION CONTROL MATTINGS OR BLANKETS APPLIED ACCORDING TO 2.3. MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS PER ACRE.
- STRAW AND MULCH ANCHORING METHODS-STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER: 3.1. MECHANICAL—A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 INCHES.
- MULCH NETTING—NETTING SHALL BE USED ACCORDING TO THE MANUFACTURER IS RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES. 3.3. ASPHALT EMULSION—ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURE OR AT THE RATE OF 160 GALLONS PER
- ACRE 3.4. SYNTHETIC BINDERS—SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUIVALENT MAY BE USED AT RATES SPECIFIED BY THE MANUFACTURER.
- 3.5. WOOD CELLULOSE FIBER—WOOD CELLULOSE FIBER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER WITH THE MIXTURE CONTAINING A MAXIMUM OF 50 POUNDS CELLULOSE PER 100 GALLONS OF WATER.

IRRIGATION:

PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY WEATHER OR ON ADVERSE SITE CONDITIONS. WHICH REQUIRE ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH. IRRIGATION RATES SHALL BE MONITORED TO PREVENT EROSION AND DAMAGE TO SEEDED AREAS FROM EXCESSIVE RUNOFF. CONTRACTOR SHALL MAINTAIN PERMANENT SEEDING FOR UP TO ONE YEAR FROM SUBSTANTIAL COMPLETION TO FIX, REPAIR, WATER, REFERTILIZE AND/OR RESEED GRASSED AREAS.

	SEEDING RATE		NOTES	
SEED MIX	LBS/ACRE	LBS/1,000 SF	NOTES	
	GEN	IERAL USE		
CREEPING RED FESCUE	20-40	½ - 1	FOR CLOSE MOWING AND FOR WATERWAYS WITH <2.0 FT/SEC	
DOMESTIC RYEGRASS	10-20	1⁄4-1⁄2	VELOCITY	
KENTUCKY BLUEGRASS	20-40	<i>1</i> ∕ ₂ −1		
TALL FESCUE	40-50	1-11⁄4		
TURF-TYPE (DWARF) FESCUE	90	21⁄4		
	STEEP BANK	S OR CUT SLOPES		
TALL FESCUE	40-50	1-11⁄4		
CROWN VETCH	10-20	1⁄4-1⁄2	DO NOT SEED LATER THAN	
TALL FESCUE	20-30	1⁄2-3⁄4	AUGUST	
FLAT PEA	20-25	1/2-3/4	DO NOT SEED LATER THAN	
TALL FESCUE	20-30	1/2-3/4	AUGUST	
	ROAD DITC	HES AND SWALES		
TALL FESCUE	40-50	1- ¹ 1⁄4		
TURF-TYPE (DWARF) FESCUE	90	21⁄4		
KENTUCKY BLUE GRASS	5	\mathcal{Y}_{10}		
LAWNS				
KENTUCKY BLUEGRASS	100-120	2		
PERENNIAL RYEGRASS		2		
KENTUCKY BLUEGRASS	100-120	2	FOR SHADED AREAS	
CREEPING RED FESCUE		1-1⁄2		

AREA REQUIRI

ANY AREA THAT \ OR MORE. ANY AREA WITHIN **RIPARIAN SETBAC**

ANY AREA AT FIN

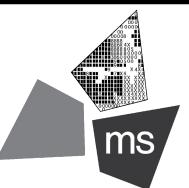
REVISION/DATE/DESCRIPTION

SIRL	IPDATES		09/13/21
60% \$	SET		01/24/22
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	ONSE TO		08/30/22
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	PONSE TO		10/24/22
	ONSE TO	IV	11/03/22

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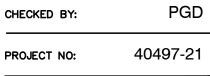
PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE SWPPP NOTES

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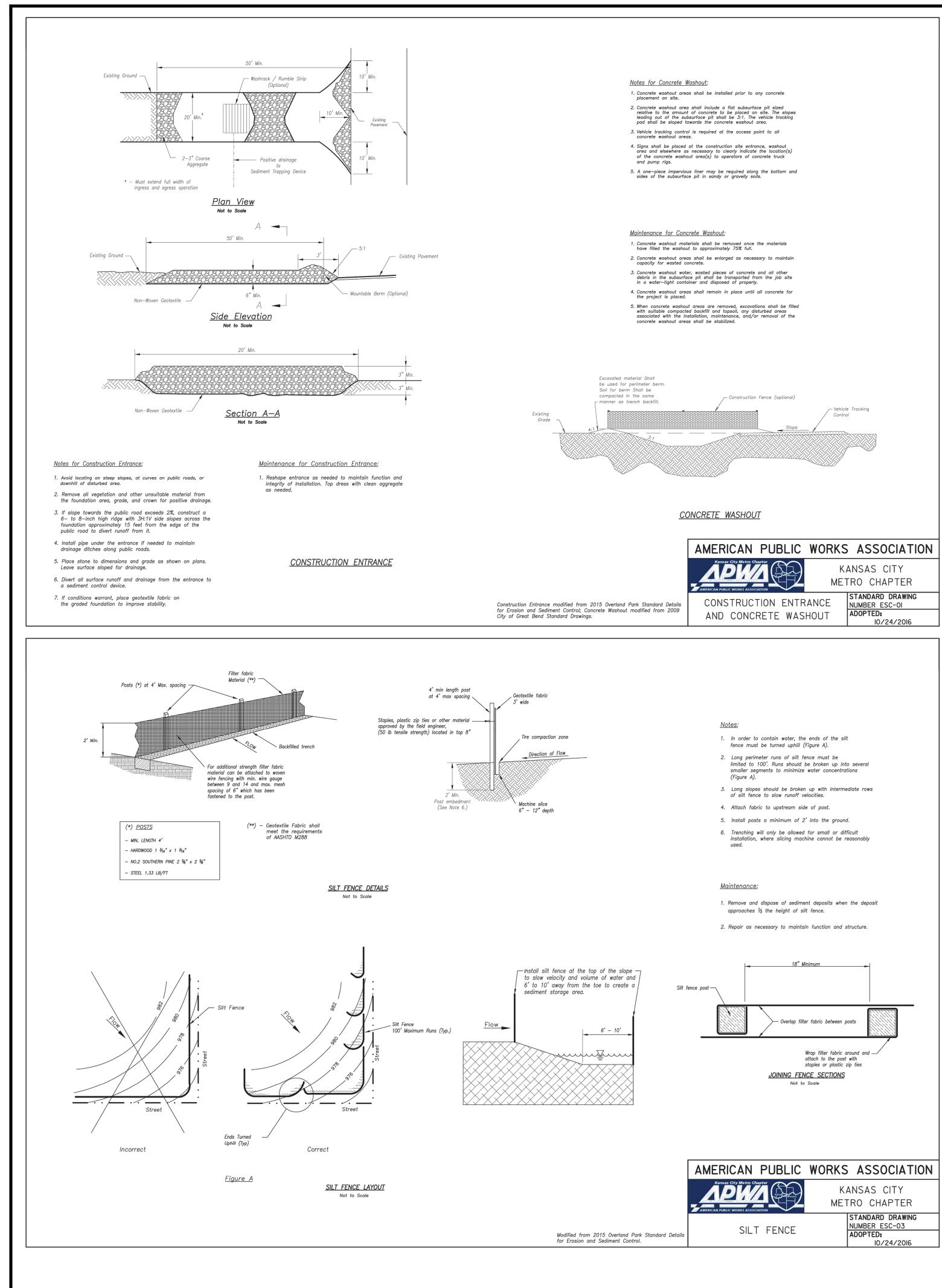


ING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
WILL LIE DORMANT FOR ONE YEAR	WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE.
N 50 FEET OF A STREAM OR A CK AREA AND AT FINAL GRADE.	WITHIN 2 DAYS OF REACHING FINAL GRADE.
IAL GRADE.	WITHIN 7 DAYS OF REACHING FINAL GRADE WITHIN THAT AREA.

TEMPORARY STABILIZATION

AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY DISTURBED AREA WITHIN 50 FEET OF A STREAM OR A RIPARIAN SETBACK AREA AND NOT AT FINAL GRADE.	WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE IF THAT AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS.
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREA, INCLUDING SOIL STOCKPILES THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR.	WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER.	PRIOR TO NOVEMBER 1.

NOTE: WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLOYED. THESE TECHNIQUES MAY INCLUDE MULCHING OR EROSION MATTING.



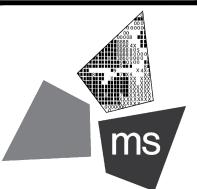
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PROJECT

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SHEET TITLE SWPPP DETAILS

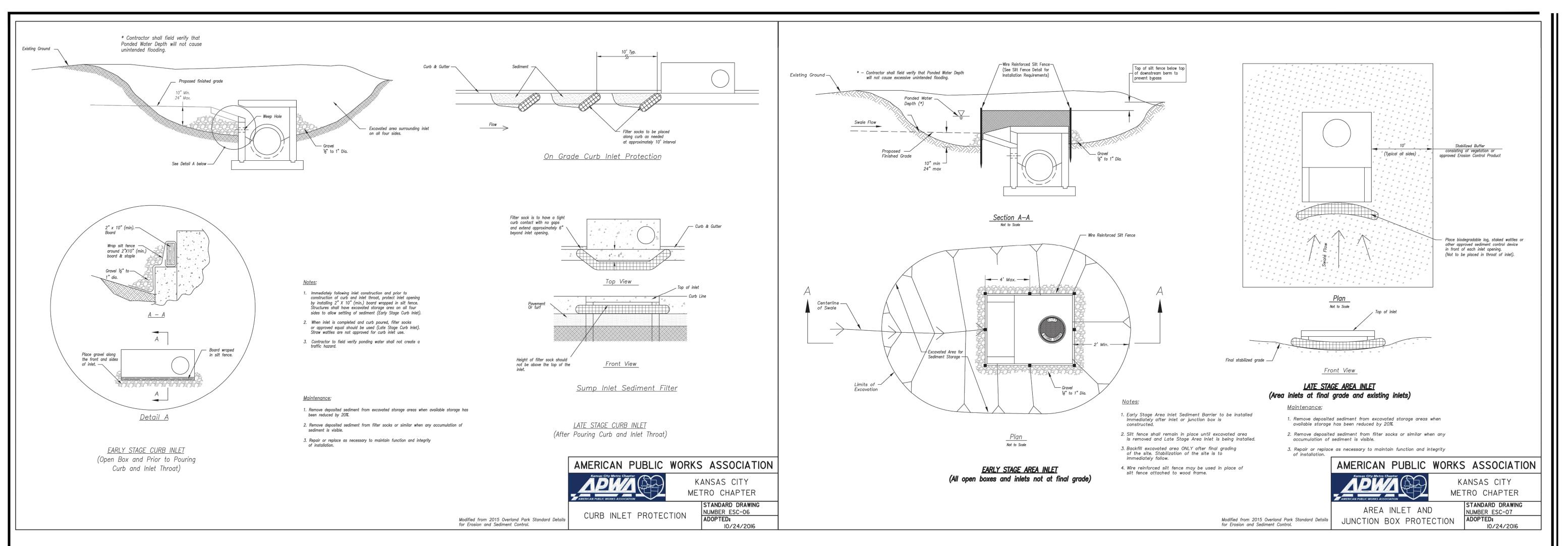
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PROJECT NO:	40497-21

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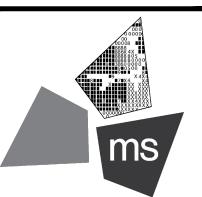
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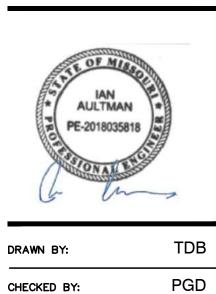
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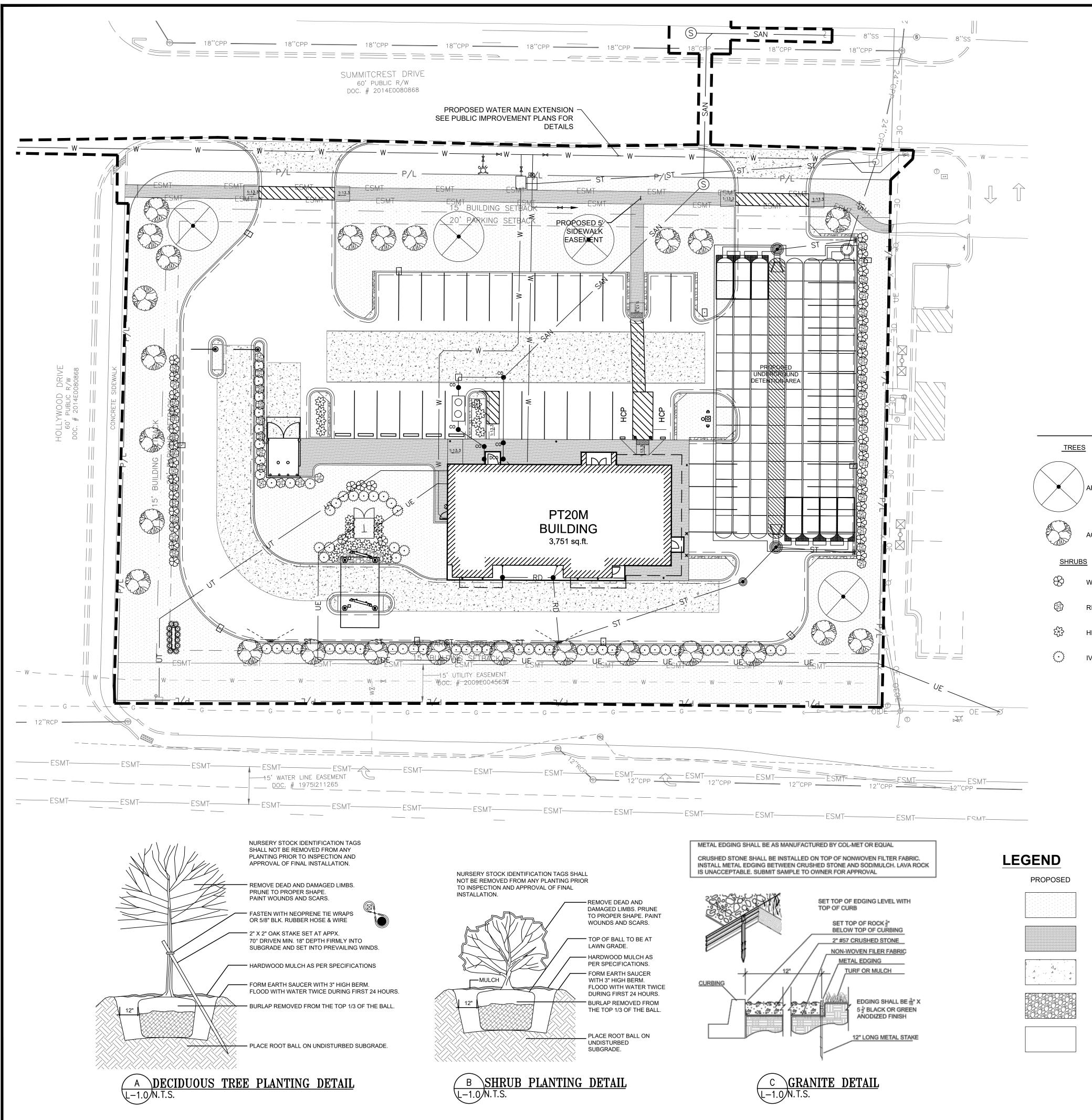
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C-10.3





GENERAL NOTES:

- ACCEPTANCE.
- R
- C. LANDSCAPE CONTRACTOR MUST COORDINATE WITH GENERAL CONTRACTOR AND OTHER SITE OPERATIONS.

- G.
- SHOULD BE FREE OF STONES GREATER THAN 2".
- NOTED.
- SPECIFIED RATE.
- AND LAWN AREAS.
- CONTRACTOR
- C-5.0.

	BOTANICAL NAME	COMMON NAME	TYPE	<u>QTY</u>	HEIGHT AT TIME OF PLANTING	APPROXIMATE MATURE HEIGHT (HXW)	<u>CONT</u>
AR	ACER RUBRUM	RED MAPLE	DECIDUOUS	4	3" CAL MEASURED AT A POINT 6" ABOVE THE GROUND OR TOP OF ROOT BALL, AT PLANTING.	(40' X 40')	B+B
AC	AMELANCHIER CANADENSIS	SERVICEBERRY	DECIDUOUS	25	3" CAL MEASURED AT A POINT 6" ABOVE THE GROUND OR TOP OF ROOT BALL, AT PLANTING.	(15' X 25')	B+B
	BOTANICAL NAME	COMMON NAME		<u>QTY</u>			
WF	WEIGELA FLORIDA 'ALEXANDRA'	WINE AND ROSES WEIGELA	DECIDUOUS	38	2 GAL	(4' X 4')	
RI	RHAPHIOLEPIS INDICA 'MAJESTIC BEAUTY'	MAJESTIC BEAUTY INDIAN HAWTHORN	EVERGREEN	44	2 GAL	(4' X 4')	
HP	HYDRANGEA PANICULATA 'LITTLE LIME'	LITTLE LIME HYDRANGEA	DECIDUOUS	22	2 GAL	(3' X 3')	
V	ILEX VOMITORIA 'NANA'	DWARF YAUPON	EVERGREEN	60	2 GAL	(4' X 5')	

DESCRIPTION

- GRASS/LANDSCAPED AREA TO BE IRRIGATED
- CONCRETE SIDEWALK
- HEAVY DUTY CONCRETE PAVEMEN

ROCK AREA

HEAVY DUTY ASPHALT PAVEMENT

A. ALL PLANT MATERIALS TO COMPLY WITH THE LATEST EDITION OF A.N.A. STANDARDS FOR NURSERY STOCK AND BE GUARANTEED UNTIL THE CERTIFICATE OF OCCUPANCY IS OBTAINED OR FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE, WHICHEVER IS GREATER. ANY PLANTINGS NEEDING REPLACEMENT WILL BE GUARANTEED FROM THE TIME OF REPLACEMENT IF AFTER FINAL

LANDSCAPE CONTRACTOR IS TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES AND RECEIVE APPROVAL FROM GENERAL CONTRACTOR OR SITE SUPERVISOR, IF NECESSARY, TO MAKE CHANGES IN PLANT LOCATIONS.

D. MINOR ADJUSTMENTS TO THE PLANT LOCATIONS ARE TO BE MADE IN THE CASE OF ANY CONFLICTS WITH PROPOSED UTILITIES. E. ALL PLANTING BEDS AND FREE STANDING TREES TO BE MULCHED WITH 4" OF SHREDDED HARDWOOD MULCH. BEDS ARE TO BE GRADED SMOOTH AND FREE OF SOIL CLODS AND STONES. ALL TREES TO BE STAKED AND WRAPPED WITH KRAFT TREE WRAP.

F. ALL PLANTS ARE TO BE REMOVED FROM CONTAINERS, CAGES AND NON-BIODEGRADABLE MATERIALS.

GENERAL CONTRACTOR IS RESPONSIBLE FOR FINISHED GRADES; LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND TO PROVIDE 4" OF AMENDED TOPSOIL FOR PLANTING BEDS.

H. ALL ORGANIC MATTER AND DEBRIS ARE TO BE REMOVED FROM THE SITE BY THE LANDSCAPE CONTRACTOR. LAWN AREAS AND BEDS I. PLANT QUANTITIES HAVE BEEN PROVIDED FOR CONVENIENCE ONLY; THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR HIS OWN

"TAKE OFFS". DRAWING PREVAILS OVER WRITTEN QUANTITIES. THE LANDSCAPE CONTRACTOR SHALL SUBMIT A ONE (1) YEAR MAINTENANCE CONTRACT FOR CONSIDERATION BY THE OWNER. CONTRACT SHALL BE SEPARATE FROM INSTALLATION CONTRACT.

K. PLANTING BEDS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE APPLIED AT PRODUCT SPECIFIED RATE UNLESS OTHERWISE

L. PLANTING SHALL BE FERTILIZED UPON INSTALLATION. RECOMMENDED FERTILIZER SHALL BE MIXED WITH BACKFILL AT PRODUCT

M. BED EDGE SHALL BE SMOOTH, CONSISTENT 4 1/2" DEEP AND HAND CUT, EDGES TO BE LOCATED BETWEEN ALL BEDS (INCLUDING TREES)

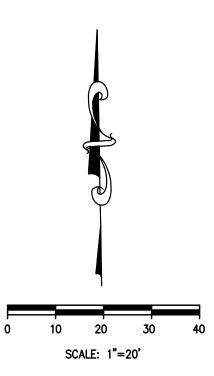
N. CONTRACTOR TO SEED ALL DISTURBED AREAS WITH A LOCALLY ADAPTIVE SEED MIX UNLESS OTHERWISE DIRECTED BY THE GENERAL

O. TOPSOIL SHALL BE BACK FILLED TO PROVIDE POSITIVE DRAINAGE OF ALL LANDSCAPE AREAS. SEE GRADING AND DRAINAGE PLAN SHEET

P. LANDSCAPING MATERIALS ARE REQUIRED TO PROVIDE FULL SCREENING AT THE TIME OF PLANTING.

Q. ALL OPEN AREAS NOT COVERED WITH OTHER MATERIALS SHALL BE COVERED WITH SOD.

PROPOSED PLANT SCHEDULE





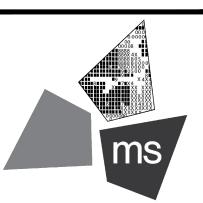
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PROJECT

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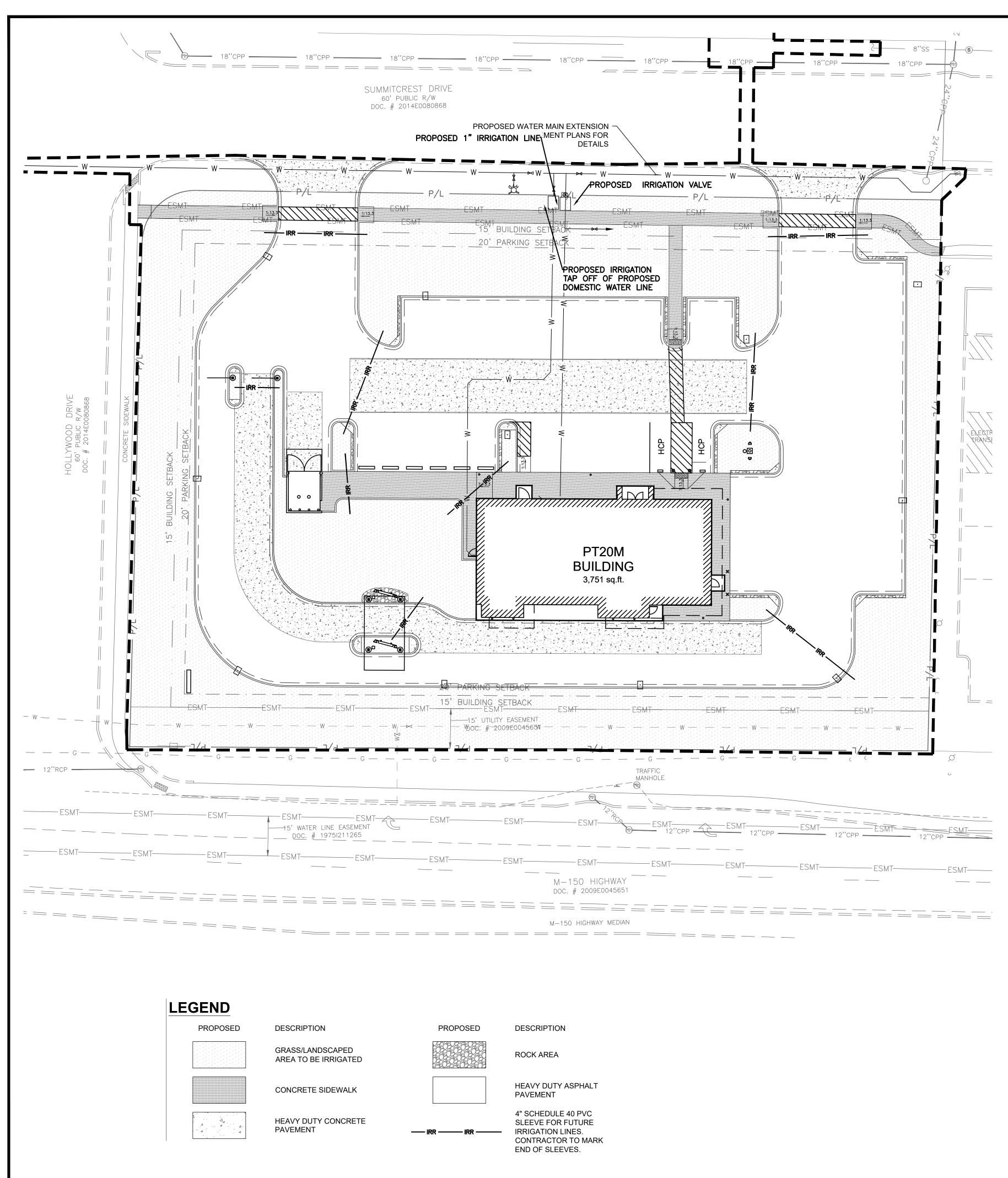
LANDSCAPE PLAN



DRAWN BY:	TDB
CHECKED BY:	PGD
PROJECT NO:	40497-21

DRAWING

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- SYSTEM SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE/IRRIGATION CONTRACTOR (CONTRACTOR).

- ADJUSTMENTS MADE TO THE FINAL LOCATION OF ALL EQUIPMENT.
- AFTER THE ACCEPTANCE OF THE SYSTEM BY THE OWNER.
- CONNECTION WAS NOT AVAILABLE PRIOR TO DESIGN.
- ISOLATION VALVES, AND MANUAL DRAIN VALVES ARE TO BE LOCATED AS NECESSARY TO COMPLETE THE SYSTEM.
- AND SHRUB SPRAY ZONES AND BE CAPABLE OF OPERATING MULTIPLE VALVES PER STATION.
- PLANTING OF FUTURE TREES AND SHRUBS.

PART 1 GENERAL

1.1 REFERENCES

- A. ASTM INTERNATIONAL: 1. ASTM B32 - STANDARD SPECIFICATION FOR SOLDER METAL
- 2. ASTM B42 STANDARD SPECIFICATION FOR SEAMLESS COPPER PIPE, STANDARD SIZES.
- 3. ASTM B88 STANDARD SPECIFICATION FOR SEAMLESS COPPER WATER TUBE 4. ASTM D2235 - STANDARD SPECIFICATION FOR SOLVENT CEMENT FOR
- ACRYLONITRILE-BUTADIENE-STYRENE (ABS) PLASTIC PIPE AND FITTINGS. 5. ASTM D2241 - STANDARD SPECIFICATION FOR POLYETHYLENE (PE) PLASTIC PIPE
- (SIDR-PR) BASED ON CONTROLLED INSIDE DIAMETER. 6. ASTM D2564 - STANDARD SPECIFICATION FOR SOLVENT CEMENTS FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPING SYSTEMS.
- B. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION:
- 1. NEMA 250 ENCLOSURES FOR ELECTRICAL EQUIPMENT (1000 VOLTS MAXIMUM). 1.2 SYSTEM DESCRIPTION
- C. HYBRID SOLID STATE CONTROLLED UNDERGROUND IRRIGATION SYSTEM, WITH PRESSURE BLOW-OUT DRAIN.
- D. SOURCE POWER: 120 VOLT.

1.3 SUBMITTALS

- A. SHOP DRAWINGS: INDICATE PIPING LAYOUT TO WATER SOURCE, LOCATION OF SLEEVES UNDER PAVEMENT, LOCATION AND COVERAGE OF SPRINKLER HEADS, COMPONENTS, PLANT AND LANDSCAPING FEATURES, SITE STRUCTURES, SCHEDULE OF OUTLETS AND FITTINGS TO BE USED.
- B. PRODUCT DATA: SUBMIT COMPONENT AND CONTROL SYSTEM AND WIRING DIAGRAMS. 1.4 CLOSEOUT SUBMITTALS
- A. PROJECT RECORD DOCUMENTS: RECORD ACTUAL LOCATIONS OF CONCEALED COMPONENTS BY NORTHING AND EASTING.
- B. OPERATION AND MAINTENANCE DATA TO OWNER:
- 1. SUBMIT INSTRUCTIONS FOR OPERATION AND MAINTENANCE OF SYSTEM AND CONTROLS, SEASONAL ACTIVATION AND SHUTDOWN, AND MANUFACTURER'S PARTS CATALOG.
- 2. SUBMIT SCHEDULE INDICATING LENGTH OF TIME EACH VALVE IS REQUIRED TO BE OPEN TO DELIVER DETERMINED AMOUNT OF WATER.
- 1.5 QUALITY ASSURANCE
- A. PERFORM WORK IN ACCORDANCE WITH MANUFACTURER'S STANDARDS. 1.6 COORDINATION
- A. COORDINATE THE WORK WITH SITE BACKFILLING, PAVING, LANDSCAPE GRADING AND DELIVERY OF PLANT LIFE.

PART 2 PRODUCTS

2.1 PIPE MATERIALS

- A. PVC PIPE: ASTM D2241, SDR 26; 160 PSI SOLVENT WELDED SOCKETS.
- B. HDPE PIPE: ASTM D-2239, SDR-15, 100 PSI.
- C. COPPER TUBING: ASTM B88 TYPE K.
- D. FITTINGS: TYPE AND STYLE OF CONNECTION TO MATCH PIPE.
- E. SOLVENT CEMENT: [ASTM D2564 FOR PVC PIPE AND FITTINGS] [ASTM D2235 FOR ABS PIPE AND FITTINGS].
- F. SLEEVE MATERIAL: PVC SCH 40.
- 2.2 OUTLETS
- A. OUTLETS: BRASS CONSTRUCTION.
- B. ROTARY TYPE SPRINKLER HEAD: POP-UP TYPE WITH SCREENS; FULLY ADJUSTABLE FOR FLOW AND PRESSURE; WITH LETTER OR SYMBOL DESIGNATING DEGREE OF ARC AND ARROW INDICATING CENTER OF SPRAY PATTERN.
- C. SPRAY TYPE SPRINKLER HEAD: POP-UP HEAD WITH FULL CIRCLE PATTERN. D. QUICK COUPLER: GALVANIZED.
- 2.3 MANUAL VALVES
- A. VALVES: HIGHLY CORROSION RESISTANT CONSTRUCTION (BRASS, STAINLESS STEEL, ETC.). ALL VALVES SHALL BE ACCESSIBLE FROM ABOVE THROUGH A VALVE BOX.
- B. BACKFLOW PREVENTERS: BRONZE BODY CONSTRUCTION, REDUCED PRESSURE TYPE OR AS DESIGNATED BY LOCAL PLUMBING CODE REQUIREMENTS.
- C. VALVE BOX AND COVER: HDPE RESIN THAT IS RESISTANT TO UV LIGHT, CORROSION MOISTURE, AND CHEMICALS.
- 2.4 CONTROLS AND CONTROL VALVES
- A. CONTROLLER: MUST WORK WITH MANUFACTURER FLOW SENSOR, RAIN SENSOR, AND ****** [OR] ******
- B. CONTROLLER: AUTOMATIC CONTROLLER, MICROPROCESSOR SOLID STATE CONTROL WITH VISIBLE READOUT DISPLAY, TEMPORARY OVERRIDE FEATURE TO BYPASS CYCLE FOR INCLEMENT WEATHER, PROGRAMMABLE FOR 7 DAYS IN QUARTER HOUR INCREMENTS, WITH AUTOMATIC START AND SHUTDOWN.
- C. CONTROLLER HOUSING: NEMA 250 TYPE 3R; WEATHERPROOF, WATERTIGHT, WITH LOCKABLE ACCESS DOOR.
- D. VALVES: HYDRAULIC; NORMALLY CLOSED, INCLUDING REQUIRED FITTINGS AND ACCESSORIES.
- E. WIRE CONDUCTORS: COPPER CONDUCTOR, DIRECT BURIAL TYPE.
- F. RAIN SENSORS: PER SELECTED MANUFACTURER.
- 2.5 ELECTRICAL CHARACTERISTICS AND COMPONENTS
- A. ELECTRICAL CHARACTERISTICS: 1. 120 VOLTS, SINGLE PHASE, 60 HZ.
- B. DISCONNECT SWITCH: FACTORY MOUNT DISCONNECT SWITCH IN CONTROL PANEL.

A. THE LANDSCAPE IRRIGATION SYSTEM SHALL IRRIGATE ALL PROPOSED LANDSCAPE AND GRASS AREAS ON THE PROPERTY. THE DESIGN, PERMITTING, AND INSTALLATION OF THE

B. THE CONTRACTOR IS TO INSTALL EQUIPMENT NECESSARY TO PROVIDE A COMPLETE, FUNCTIONAL SYSTEM THAT IS IN COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS. C. THE IRRIGATION CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE OWNER'S REPRESENTATIVE FOR APPROVAL, PRIOR TO CONSTRUCTION, WHICH WILL ILLUSTRATE TYPE OF HEADS, VALVES, CONTROLLER, PIPING AND ACCESSORIES. IRRIGATION HEADS, VALVES AND CONTROLLER ARE TO BE FROM A SINGLE MANUFACTURER. ALL EQUIPMENT MUST

HAVE A MANUFACTURERS FIVE YEAR WARRANTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND FIELD ADJUSTMENT OF THE ABOVE ITEMS. D. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNER THE FINAL LOCATION OF THE CONTROL PANEL(S). NO ADDITIONAL COSTS SHALL BE ALLOWED FOR ANY

E. THE IRRIGATION CONTRACTOR SHALL SUBMIT A WARRANTY POLICY TO THE OWNER WHICH SHALL COVER THE FUNCTION OF THE ENTIRE SYSTEM FOR A PERIOD OF ONE YEAR

CONTRACTOR WILL VERIFY STATIC PRESSURE AND VOLUME OF SITE WATER SUPPLY AND ADJUST ENTIRE IRRIGATION SYSTEM ACCORDINGLY. EACH ZONE OF IRRIGATION SYSTEM IS TO BE DESIGNED WITH A MINIMUM OPERATING PRESSURE OF 45 PSI. IF THE PRESSURE IS BELOW 45 PSI, A PROPERLY SIZED BOOSTER PUMP WILL BE REQUIRED. AS PART OF THE SHOP DRAWINGS, THE IRRIGATION CONTRACTOR WILL PROVIDE CALCULATIONS SHOWING PRESSURE LOSS FROM THE POINT OF CONNECTION TO THE FURTHEST HEAD (AND FOR THE FURTHEST HEAD ON THE LARGEST ZONE). ADJUST DESIGN TO MEET AVAILABLE PRESSURES AND VOLUMES. A CURRENT STATIC PRESSURE READING AT THE POINT OF

G. THE CONTRACTOR IS TO INSTALL ALL EQUIPMENT SUCH THAT THE BUILDING, PARKING AREAS, AND SIDEWALKS ARE NOT SPRAYED OR SUBJECT TO EXCESSIVE RUNOFF. FIELD ADJUSTMENTS MAY BE NECESSARY TO AVOID UNFORESEEN OBSTACLES AND SIMPLIFY INSTALLATION. IRRIGATION SYSTEM ACCESSORIES SUCH AS QUICK COUPLER VALVES,

H. THE IRRIGATION CONTROLLER IS TO BE A HYBRID SOLID STATE TYPE WITH PLASTIC LOCKABLE CABINET. CONTROLLER MUST HAVE DUAL PROGRAMMING FOR TURF SPRAY ZONES

PROVIDE DESIGNATED PVC SLEEVES FOR IRRIGATION PIPES AND WIRING THAT CROSSES UNDER WALKS, STREETS AND CONCRETE PADS. COMBINE PIPING WHENEVER POSSIBLE TO REDUCE QUANTITY OF SLEEVING MATERIALS. WHEN INSTALLING IRRIGATION PIPE ALONG CURBS OR IN ISLANDS, PLACE PIPE AS CLOSE TO CURB AS POSSIBLE TO ALLOW FOR

3.1 E	XAMINATION
A	. VERIFY LOCATION OF EXISTING UTILITIES.
E	. VERIFY REQUIRED UTILITIES ARE AVAILABLE, IN PROPER LOCATION, A READY FOR USE.
3.2 F	REPARATION
A	. ROUTE PIPING TO AVOID PLANTS, GROUND COVER, AND STRUCTURES.
E	. LAYOUT AND STAKE LOCATIONS OF SYSTEM COMPONENTS.
C	C. REVIEW LAYOUT REQUIREMENTS WITH OTHER AFFECTED WO COORDINATE LOCATIONS OF SLEEVES UNDER PAVING TO ACCOMMODA SYSTEM.
3.3 T	RENCHING
A	TRENCH SIZE: 1. MINIMUM COVER OVER INSTALLED SUPPLY PIPING: 18 INCHES. 2. MINIMUM COVER OVER INSTALLED BRANCH PIPING: 15 INCHES.
E	. TRENCH TO ACCOMMODATE GRADE CHANGES AND SLOPE TO DRAIN(S).
C	. MAINTAIN TRENCHES FREE OF DEBRIS, MATERIAL, OR OBSTRUCTIO DAMAGING TO PIPE.
3.4 II	ISTALLATION
A	. CONNECT TO UTILITIES.

- B. SET OUTLETS AND BOX COVERS AT FINISH GRADE ELEVATIONS.
- C. PROVIDE FOR THERMAL MOVEMENT OF COMPONENTS IN SYSTEM.
- D. SLOPE PIPING FOR SELF DRAINAGE TO DAYLIGHT.
- E. USE THREADED NIPPLES FOR RISERS TO EACH OUTLET.
- F. INSTALL CONTROL WIRING IN ACCORDANCE WITH MANUFACTURER'S
- RECOMMENDED INSTALLATION PRACTICES. PROVIDE 10 INCH EXPANSION COIL AT EACH CONTROL VALVE, AND AT 100 FT INTERVALS. BURY WIRE BESIDE PIPE. MARK VALVES WITH NEOPRENE VALVE MARKERS CONTAINING LOCKING DEVICE. SET VALVE MARKERS IN VALVE BOXES SET TO FINISH GRADE
- G. AFTER PIPING IS INSTALLED, BUT BEFORE OUTLETS ARE INSTALLED AND BACKFILLING COMMENCES, OPEN VALVES AND FLUSH SYSTEM WITH FULL HEAD OF WATER.

3.5 BACKFILLING

- A. BACKFILL WITH COMPACTED BACKFILL IN ACCORDANCE WITH DETAIL A ON SHEET C-7.1.
- B. INSTALL 3 INCH SAND BEDDING BELOW AND COVER OVER PIPING.
- C. PROTECT PIPING FROM DISPLACEMENT.
- 3.6 FIELD QUALITY CONTROL
- A. PRIOR TO BACKFILLING, TEST SYSTEM FOR LEAKAGE FOR WHOLE SYSTEM TO MAINTAIN 100 PSI PRESSURE FOR ONE HOUR.
- B. SYSTEM IS ACCEPTABLE WHEN NO LEAKAGE OR LOSS OF PRESSURE OCCURS DURING TEST PERIOD.
- C. PROVIDE ONE COMPLETE SPRING SEASON START-UP AND FALL SEASON SHUTDOWN. 3.7 ADJUSTING
- A. ADJUST CONTROL SYSTEM TO ACHIEVE TIME CYCLES REQUIRED
- B. ADJUST HEAD TYPES FOR FULL WATER COVERAGE AS DIRECTED BY OWNER'S REPRESENTATIVE.
- 3.8 DEMONSTRATION AND TRAINING
- A. INSTRUCT OWNER'S PERSONNEL IN OPERATION AND MAINTENANCE OF SYSTEM, INCLUDING ADJUSTING OF SPRINKLER HEADS. USE OPERATION AND MAINTENANCE MATERIAL AS BASIS FOR DEMONSTRATION.

SCALE: 1"=20'

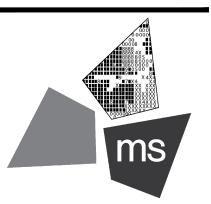
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SIR UPDATES	09/13/21
60% SET	01/24/22
PDP APPLICATION TO CITY	02/24/22
RESPONSE TO CITY COMMENTS I	03/29/22
FINAL DEVELOPMENT SET	06/29/22
RESPONSE TO FDP COMMENTS	08/30/22
RESPONSE TO FDP COMMENTS II	09/29/22
RESPONSE TO FDP COMMENTS III	10/24/22
RESPONSE TO FDP COMMENTS IV	11/03/22

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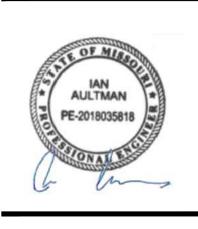
PROJECT

PROPOSED PT20M BUILDING

204 SW M150 HWY LEE'S SUMMIT, MO 64081

SHEET TITLE

IRRIGATION PLAN



RAWN BY:	TDB
HECKED BY:	PGD
ROJECT NO:	40497-21

DRAWING

I-1.C