

* SDATES * SUSERNAMES * SFILELS DATE

FINAL PLAT OF RESUBDIVISION

BEING A RESUBDIVISION OF LOT 8 IN THE CORPORATE RESERVE OF ST. CHARLES, A SUBDIVISION OF PART OF THE SOUTHWEST OUARTER AND THE NORTHWEST OUARTER OF SECTION 29, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED, JANUARY 28, 2009 AS DOCUMENT NO. 2009K005931, ALL IN KANE COUNTY, ILLINOIS.

SURVEYOR'S CERTIFICATE	PLAN COMMISSION CERTIFICATE
STATE OF ILLINOIS)	CTATE OF LUMBAG .
COUNTY OF KANE) SS.	STATE OF ILLINOIS) CITY OF ST. CHARLES) SS.
"THIS IS TO CERTIFY THAT I. RUDY P. DIXON ILLINOIS LAND	CITY OF SI, CHARLES / SS.
SURVEYOR NO. 3832, HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING	"APPROVED THIS DAY OF, A.D. 20,
DESCRIBED PROPERTY:	CITY OF ST. CHARLES PLAN COMMISSION
LOT 8 IN THE CORPORATE RESERVE OF ST. CHARLES, BEING A	CHAIRMAN
SUBDIVISION OF PART OF THE SOUTHWEST QUARTER AND THE	
NORTHWEST QUARTER OF SECTION 29. TOWNSHIP 40 NORTH, RANGE 8	CERTIFICATE AS TO SPECIAL ASSESSMENTS
EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT	
THEREOF RECORDED, JANUARY 28, 2009 AS DOCUMENT NO.	STATE OF ILLINOIS)
2009K005931, ALL IN KANE COUNTY, ILLINOIS.	COUNTY OF KANE) SS.
	"I DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT OR UNPAID
"GIVEN UNDER MY HAND AND SEAL AT, ILLINOIS, THIS	CURRENT OR FORFEITED SPECIAL ASSESSMENTS OR ANY DEFERRED
DAY OF A.D. 20"	INSTALLMENTS THEREOF THAT HAVE NOT BEEN APPORTIONED AGAINST
ILLINOIS REGISTERED LAND SURVEYOR	THE TRACT OF LAND INCLUDED IN THE PLAT.
NO	
OWNER'S CERTIFICATE	COLLECTOR OF SPECIAL ASSESSMENTS
VIII SELECTION IN CONTRACTOR OF THE CONTRACTOR O	DATED AT ILLINOIS, THIS DAY OF
STATE OF ILLINOIS)	A.D. 20"
COUNTY OF KANE) SS.	······································
"THIS IS TO CERTIFY THAT THE UNDERSIGNED IS THE OWNER OF THE	DIRECTOR OF COMMUNITY DEVELOPMENT (OR DESIGNEE) CERTIFICATE
LAND DESCRIBED IN THE ANNEXED PLAT, AND THAT HE HAS CAUSED	
THE SAME TO BE SURVEYED AND SUBDIVIDED AS INDICATED THEREON.	STATE OF ILLINOIS)
FOR THE USES AND PURPOSES THEREIN SET FORTH, AND DOES HEREBY	COUNTY OF KANE) SS.
ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE	"I,, DO HEREBY CERTIFY THAT THE
THEREON INDICATED.	REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED. OR THE REQUIRED
ALSO, THIS IS TO CERTIFY THAT PROPERTY BEING, SUBDIVIDED	GUARANTEE BOND HAS BEEN POSTED FOR THE COMPLETION OF ALL
AFORESAID, AND TO THE BEST OF THE OWNER'S KNOWLEDGE AND	REQUIRED LAND IMPROVEMENTS.
BELIEF. SAID SUBDIVISION LIES ENTIRELY WITHIN THE LIMITS OF:	
ST. CHARLES COMMUNITY UNIT SCHOOL DISTRICT 303	
	DIRECTOR OF COMMUNITY DEVELOPMENT
	DATED AT, ILLINOIS, THIS DAY OF, A.D.
	20"
DATED THIS DAY OF A.D. 20"	CITY COUNCIL CERTIFICATE
AND 1110 AND 10	CITY COSTOLE CENTER CONTE
NOTARY CERTIFICATE	"APPROVED AND ACCEPTED THIS DAY OF, A.D.
	20"
STATE OF ILLINOIS)	
COUNTY OF KAME) SS.	CITY COUNCIL OF CITY OF
"I,, A NOTARY PUBLIC, IN AND FOR SAID COUNTY, IN	ST. CHARLES, ILLINOIS
THE STATE AFORESAID, DO HEREBY CERTIFY THAT	
PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES	
ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH OWNERS.	MAYOR
APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT	ATTEST:
THEY SIGNED AND DELIVERED THE ANNEXED PLAT AS THEIR OWN FREE	
AND VOLUNTARY ACT FOR THE USES AND PURPOSES THEREIN SET	
FORTH.	CITY CLERK
"GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS DAY OF	COPCIAL FLOOR HAZING ADEA CERTIFICATE
. A.D. 20, AT . ILLINOIS.	SPECIAL FLOOD HAZARD AREA CERTIFICATE
<i>n</i>	"THIS IS TO CERTIFY THAT THE PARCELS INCLUDED IN THIS RECORD
NOTARY PUBLIC	OF DEED ARE NOT LOCATED IN THE SPECIAL FLOOD HAZARD AREA
	IDENTIFIED FOR THE CITY OF ST. CHARLES, ILLINOIS BY THE FEDERAL
COUNTY CLERK CERTIFICATE	EMERGENCY MANAGEMENT AGENCY ON THE FLOOD INSURANCE RATE
	MAP. PANEL NO. 17089CO261H DATED AUGUST 3, 2009.
STATE OF ILLINOIS)	
COUNTY OF KAME) SS.	
	ILLINOIS REGISTERED LAND SURVEYOR NO. 3832
"I, COUNTY CLERK OF KANE COUNTY, ILLINOIS,	
DO HEREBY CERTIFY THAT THERE ARE NO DELINOUENT GENERAL	
TAXES, NO UNPAID FORFEITED TAXES AND NO REDEEMABLE TAX SALES	
AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT.	
AGAINST ANY OF THE LAMD INCLUDED IN THE ANNEXED PLAT. "I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN	
AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT. "I FURTHER CERTIFY THAT I MAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE ANNEXED PLAT.	
AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT. "I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE ANNEXED PLAT. "DIVEN UNDER MY HAND AND SEAL AT	
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AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT. "I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE ANNEXED PLAT. "GIVEN UNDER MY HAND AND SEAL AT	
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AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT. "I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE ANNEXED PLAT. "GIVEN UNDER MY HAND AND SEAL AT	
AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT. "I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE ANNEXED PLAT. "GIVEN UNDER MY HAND AND SEAL AT ILLINOIS, THIS DAY OF A.D. 20 "	
AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT. "I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE ANNEXED PLAT. "GIVEN UNDER MY HAND AND SEAL AT	

PLEASE RETURN THE RECORDED MYLAR TO: CITY OF ST. CHARLES 2. E. MAIN STREET ST. CHARLES, IL 601714





CUENT:
THE PAULS CORPORATION
270 SAINT PAUL ST.
DENVER, CO 80206

1		DSGN.	RPD	
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FINAL PLAT OF RESUBDIVISION ORPORATE

BEING A RESUBDIVISION OF LOT 8 IN THE CORPORATE RESERVE OF ST. CHARLES, A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER AND THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 4 ON NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED, JANUARY 28, 2009 AS DOCUMENT NO. 2009KOD9391, ALL IN KAME COUNTY, ILLINDIS.

PUBLIC UTILITY EASEMENT PROVISIONS

A PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY GRANTED TO THE CITY OF ST. CHARLES AND TO ALL PUBLIC UTILITY COMPANIES ANY KIND OPERATING UNDER FRANCHISE GRANTING THEM EASEMENT RIGHTS FROM SAID CITY OF ST. CHARLES, INCLUDING BUT NOT LIMITED TO, AMERITECH AND NICOR AND TO THEIR SUCCESSORS AND ASSIGNS(HEREIN COLLECTIVELY REFERRED TO AS "GRANTEES"). IN. UPON, ACROSS, OVER, UNDER, AND THROUGH THE AREAS SHOWN BY DASHED LINES AND LABELED "PUBLIC UTILITY EASEMENT" ON THE PLAT OF SUBDIVISION HEREON DRAWN FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, INSPECTING, OPERATING, REPLACING, RENEWING, ALTERING, ENLARGING, REMOVING, REPAIRING, CLEANING, AND MAINTAINING ABOVE GROUND AND UNDERGROUND ELECTRICAL SYSTEMS, CABLE TELEVISION, COMMUNICATION, GAS, TELEPHONE OF OTHER UTILITY LINES OR APPURTENANCES. SANITARY AND STORM SEWERS, DRAINAGE WAYS, STORM WATER DETENTION AND RETENTION, WATER MAINS AND ANY AND ALL MANHOLES, HYDRANTS, PIPES, CONNECTIONS, CATCH BASINS, BUFFALO BOXES AND WITHOUT LIMITATION, SUCH OTHER INSTALLATIONS AS MAY BE REQUIRED TO FURNISH PUBLIC UTILITY SERVICE TO ADJACENT AREAS TOGETHER WITH THE RIGHT OF ACCESS ACROSS THE REAL ESTATE PLATTED HEREIN FOR THE NECESSARY PERSONNEL AND EQUIPMENT TO MAKE ANY OR ALL OF THE ABOVE WORK. THE RIGHT IS ALSO HEREBY GRANTED TO SAID GRANTEES TO CUT DOWN, TRIM, OR REMOVE ANY TREES, SHRUBS, OR OTHER PLANTS THAT INTERFERE WITH THE OPERATION OF OR ACCESS TO SAID UTILITY INSTALLATIONS, WITHOUT LIMITATION, IN, ON, UPON OR ACROSS, UNDER, OR THROUGH SAID EASEMENTS. IN THE EVENT UTILITY MAINTENANCE IS PERFORMED WITHIN THE UTILITY EASEMENT, THE CITY OF ST. CHARLES WILL HAVE NO OBLIGATION WITH RESPECT TO SURFACE RESTORATION INCLUDING, BUT NOT LIMITED TO, THE RESTORATION, REPAIR, OR REPLACEMENT OF ANY LANDSCAPING PROVIDED, HOWEVER, THE GRANTEES SHALL BE OBLIGATED FOLLOWING ANY SUCH WORK, TO BACKFILL AND MOUND SO AS TO RETAIN SUITABLE DRAINAGE, REMOVE DEBRIS, AND LEAVE THE AREA IN GENERALLY CLEAN AND WORKMANLIKE CONDITION. NO PERMANENT BUILDINGS OR TREES SHALL BE PLACED ON SAID EASEMENTS, BUT THE EASEMENT AREAS MAY BE USED FOR GARDENS, SHRUBS, LANDSCAPING, PAVING, FENCES, SIDEWALKS, CURBING, AND OTHER PURPOSES THAT DO NOT INTERFERE WITH THE AFORESAID USES AND RIGHTS. WHERE AN EASEMENT IS USED FOR STORM OR SANITARY SEWERS, OTHER UTILITY INSTALLATIONS SHALL BE SUBJECT TO THE PRIOR APPROVAL OF SAID CITY OF ST. CHARLES SO AS NOT TO INTERFERE WITH THE GRAVITY FLOW IN SAID SEWER OR SEWERS. UTILITY INSTALLATIONS, OTHER THAN THOSE MANAGED BY THE CITY OF ST. CHARLES, SHALL BE SUBJECT TO THE APPROVAL OF THE CITY OF ST. CHARLES, AS TO DESIGN AND LOCATION, AND ALL OTHER INSTALLATIONS ARE SUBJECT TO THE ORDINANCES OF THE CITY OF

STORMWATER DETENTION EASEMENT PROVISIONS

A PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY GRANTED TO THE CITY OF ST. CHARLES AND TO THEIR SUCCESSORS AND ASSIGNS, IN, UPON, ACROSS, OVER, UNDER, AND THROUGH THE AREAS SHOWN BY DASHED LINES AND LABELED "STORMWATER DETENTION EASEMENT" ON THE PLAT OF SUBDIVISION HEREON DRAWN FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, INSPECTING, OPERATING, REPLACING, RENEWING, ALTERING, ENLARGING, REMOVING, REPAIRING, CLEANING, AND MAINTAINING STORM SEWERS, DRAINAGE WAYS, STORM WATER DETENTION AND RETENTION AND ANY AND ALL MANHOLES, PIPES, CONNECTIONS, CATCH BASINS, AND WITHOUT LIMITATION, SUCH OTHER INSTALLATIONS AS MAY BE REQUIRED TO FURNISH STORMWATER DETENTION. THE RIGHT OF ACCESS ACROSS THE REAL ESTATE PLATTED HEREIN FOR THE NECESSARY PERSONNEL AND EQUIPMENT TO MAKE ANY OR ALL OF THE ABOVE WORK. NO BUILDING SHALL BE PLACED ON SAID EASEMENT PREMISES WITHOUT PRIOR WRITTEN CONSENT FROM THE CITY OF ST. CHARLES. THE RESPONSIBILITY OF MAINTAINING THE DETENTION AREA EASEMENT SHALL BE BINDING ON THE HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS AND ASSIGNS OF THE LANDOWNERS. NO PERSON SHALL DESTROY OR MODIFY SLOPES OR OTHERWISE AFFECT THE DETENTION VOLUME WITHOUT HAVING FIRST RECEIVED WRITTEN APPROVAL FROM THE CITY OF ST. CHARLES. THE CITY SHALL HAVE THE RIGHT BUT NOT THE OBLIGATION TO RESTORE ANY DETENTION VOLUME LOST THROUGH UNAUTHORIZED ACTIVITIES.

PUBLIC UTILITY AND DRAINAGE EASEMENT PROVISIONS

A PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY GRANTED TO THE CITY OF ST. CHARLES AND TO ALL PUBLIC UTILITY COMPANIES O ANY KIND OPERATING UNDER FRANCHISE GRANTING THEM EASEMENT RIGHTS FROM SAID CITY OF ST. CHARLES, INCLUDING BUT NOT LIMITED TO, AMERITECH AND NICOR AND TO THEIR SUCCESSORS AND ASSIGNS (HEREIN COLLECTIVELY REFERRED TO AS "GRANTEES"). IN. UPON, ACROSS, OVER, UNDER, AND THROUGH THE AREAS SHOWN BY DASHED LINES AND LABELED "PUBLIC UTILITY AND DRAINAGE EASEMENT" ON THE PLAT OF SUBDIVISION HEREON DRAWN FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, INSPECTING, OPERATING, REPLACING, RENEWING, ALTERING, ENLARGING, REMOVING, REPAIRING. CLEANING, AND MAINTAINING ABOVE GROUND AND UNDERGROUND ELECTRICAL SYSTEMS, CABLE TELEVISION, COMMUNICATION, GAS, TELEPHONE OR OTHER UTILITY LINES OR APPURTENANCES. SANITARY AND STORM SEWERS, DRAINAGE WAYS, STORM WATER DETENTION AND RETENTION, WATER MAINS AND ANY AND ALL MANHOLES, HYDRANTS, PIPES, CONNECTIONS, CATCH RASINS, RIFFALO ROXES AND WITHOUT LIMITATION, SUCH OTHER INSTALLATIONS AS MAY BE REQUIRED TO FURNISH PUBLIC UTILITY SERVICE TO ADJACENT AREAS TOGETHER WITH THE RIGHT OF ACCESS ACROSS THE REAL ESTATE PLATTED HEREIN FOR THE NECESSARY PERSONNEL AND EQUIPMENT TO MAKE ANY OR ALL OF THE ABOVE WORK. THE PERMANENT NON-EXCLUSIVE EASEMENT IS HEREBY RESERVED FOR AND GRANTED TO THE CITY OF ST. CHARLES AND THE RESPECTIVE SUCCESSORS AND ASSIGNS FOR MAINTAINING THE UNINTERRUPTED AND UNIMPEDED CONVEYANCE, FLOW AND RUNOFF OF SURFACE STORM WATER ACROSS AND UPON THE AREAS DESIGNATED ON THIS PLAT AS DRAINAGE EASEMENT. THE RIGHT IS HEREBY GRANTED TO SAID GRANTEES TO CUT DOWN, TRIM, OR REMOVE ANY TREES, SHRUBS, OR OTHER PLANTS THAT INTERFERE WITH THE DRAINAGE WAYS AND OPERATION OF OR ACCESS TO SAID UTILITY INSTALLATIONS, WITHOUT LIMITATION, IN, ON, UPON OR ACROSS, UNDER, OR THROUGH SAID EASEMENTS.

NO PERMANENT BUILDINGS, TREES, GARDENS, SHRUBS, OR BERMING SHALL BE PLACED ON OR IN SAID EASEMENTS, BUT THE EASEMENT AREAS MAY BE USED FOR PAVING, FENCES, SIDEWALKS, AND OTHER PURPOSES THAT DO NOT INTERFERE WITH THE AFORESAID USES AND RIGHTS. WHERE AN EASEMENT IS USED FOR STORM OR SANITARY SEWERS, OTHER UTILITY INSTALLATIONS SHALL BE SUBJECT TO THE PRIOR APPROVAL OF SAID CITY OF ST. CHARLES SO AS NOT TO INTERFERE WITH THE GRAVITY FLOW IN SAID SEWER OR SEWERS. UTILITY INSTALLATIONS, OTHER THAN THOSE MANAGED BY THE CITY OF ST. CHARLES. SHALL BE SUBJECT TO THE APPROVAL OF THE CITY OF ST. CHARLES, AS TO DESIGN AND LOCATION, AND ALL OTHER INSTALLATIONS ARE SUBJECT TO THE ORDINANCES OF THE CITY OF ST. CHARLES.

FOLLOWING ANY WORK TO BE PERFORMED BY THE GRANTEES IN THE EXERCISE OF ITS EASEMENT RIGHTS GRANTED HEREIN, THE GRANTEES SHALL HAVE NO OBLIGATION WITH RESPECT TO SURFACE RESTORATION INCLUDING, BUT NOT LIMITED TO, THE RESTORATION, REPAIR, OR REPLACEMENT OF ANY LANDSCAPING PROVIDED. HOWEVER, THE GRANTEES SHALL BE OBLIGATED FOLLOWING ANY SUCH WORK, TO BACKFILL AND MOUND SO AS TO RETAIN SUITABLE DRAINAGE, REMOVE DEBRIS, AND LEAVE THE AREA IN GENERALLY CLEAN AND WORKMANLIKE CONDITION.

PERMANENT NON-EXCLUSIVE EASEMENTS ARE HEREBY RESERVED FOR AND GRANTED TO THE CITY OF ST. CHARLES. IN. UPON. ACROSS. OVER, UNDER AND THROUGH THE AREAS SHOWN BY DASHED LINES AND LABELED "PUBLIC ACCESS EASEMENT" ON THE PLAT OF SUDIVISION HEREON DRAWN, FOR THE PURPOSE OF ACCESS TO CITY OWNED UTILITIES AND OTHER GRANTED EASEMENTS, AS DEEMED NECESSARY BY THE CITY OF ST. CHARLES. THE RIGHT IS ALSO HEREBY GRANTED TO SAID CITY TO CUT DOWN, TRIM OR REMOVE ANY TREES, SHRUBS OR OTHER PLANTS THAT INTERFERE WITH THE OPERATION OF OR ACCESS TO SAID UTILITY OR EASEMENT. NO PERMANENT BUILDINGS SHALL BE PLACED IN SAID EASEMENT, BUT SAME MAY BE USED FOR SHRUBS, LANDSCAPING, AND OTHER PURPOSES THAT DO NOT THEN OR LATER INTERFERE WITH THE AFORESAID USES AND RIGHTS. (ORD, 2012-M-45 S2.)



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	AIO.	DATE			

SITE IMPROVEMENT PLANS FOR

CORPORATE RESERVE SUBDIVISION OF LOT 8

ST CHARLES, ILLINOIS

WBK PROJECT NO. 140256

PLAN LEGEND

EXISTING	LINETYPES	PROPOSED
	DRAIN TILE	
	STORM SEWER	
	SANITARY SEWER	
	WATER MAIN (W/ SIZE)	w
	PIPE TRENCH BACKFILL	
	GAS MAIN	
	TELEPHONE LINES	
—E——Е—	ELECTRIC LINE	—E——E—
-1-1-1-1-1-1	FENCE	-1-1-1-1-1-1-1
	RIGHT-OF-WAY	
777777777777777777777777777777777777777	EASEMENT	777777777777777777777777777777777777777
	PROPERTY LINE	
	SETBACK LINE	
	CENTERLINE	
680	CONTOUR	680
	GUARDRAIL	
0	SANITARY MANHOLE	⊕
•	STORM MANHOLE	●
0	CATCH BASIN	
	INLET	-
	SUMP STRUCTURE	€
α	FIRE HYDRANT	*
	PRESSURE CONNECTION	•
•	VALVE & VAULT, VALVE	0
▶	FLARED END SECTION	▶
¤	STREET LIGHT	**
Å	UTILITY POLE	*
🔆	CONTROL POINT	l
4	SIGN	
XXX.XX	SPOT ELEVATION	XXX.XX
	OVERLAND FLOW ROUTE	-
<u></u>	DRAINAGE SLOPE	-~>
<u>୍</u> ବର	TREE, EVERGREEN, SHRUB & PROPOSED	⊗
₩	TREE TO REMOVE	~

PERMITS

AGENCY	DATE	PERMIT #
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LOCATION MAP



CALL J.U.L.I.E. 1-800-892-0123 48 HOURS BEFORE YOU DIG CITY OF ST. CHARLES, KANE COUNTY SW 1/4 SECTION 29, T40N, RBE



WILLS BURKE KELSEY ASSOCIATES LTD.

116 WEST MAIN STREET, SUITE 201, ST. CHARLES, ILLINOIS 60174 P: 630.443.7755 F: 630.443.0533 WWW.WBKENGINEERING.COM

PROFESSIONAL DESIGN FIRM NO. 184-002097 EXPIRATION DATE: 04/30/2017

SHEET INDEX

#	TITLE	DESCRIPTION
1	CV1	COVER SHEET
2-4	GN1-GN3	GENERAL NOTES AND SPECIFICATIONS
5	EC1	EXISTING CONDITIONS AND DEMOLITION PLAN
6-7	GM1-GM2	GEOMETRIC PLAN
8	OV1	OVERALL UTILITY PLAN
9-12	GM1-GM2	UTILITY PLAN
13-16	GR1-GR4	GRADING AND DRAINAGE PLAN
17-23	PP1-PP7	PLAN AND PROFILES
24-26	LP1-LP3	LANDSCAPING PLAN
27-28	SW1-SW2	STORMWATER POLLUTION PREVENTION PLAN
29-30	SE1-SE2	SOIL EROSION SEDIMENTATION CONTROL PLAN
32-36	DT1-DT5	DETAILS

REVISIONS

ORIGINAL PLAN DATE: 10-08-2015				
#	SHEET #	DESCRIPTION	DATE	

CLIENT

CORPORATE RESERVE DEVELOPMENT PARTNERS, LLC 270 ST. PAUL STREET, #300

CIVIL ENGINEER



LANDSCAPE ARCHITECT



GENERAL NOTES

REFERENCED SPECIFICATIONS AND CO

- A. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), ADOPTED JANUARY 1, 2012 AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JANUARY 1, 2015 BY THE ILLINOIS DEPARTMENT OF PANSPORTATION AND ALL AMENDMENTS THERETO THE DESIGN MANUAL HIGH STANDARDS, AND THE CULVERT MANUAL, ALSO PREPARED BY THE ILLINOIS DEPARTMENT
- C. THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, 2014, 7TH EDITION, EXCEPT AS MODIFIED HEREIN OR BY ANY PUBLIC AGENCY PERMITS ISSUED FOR THIS WORK
- D. II I INOIS DESIGN STANDARDS FOR SEWAGE WORKS, LATEST VERSIONS
- E TECHNICAL DOLLOV STATEMENTS OF THE IEDA DIVISION OF DURI IC WATER SURDI IES AND
- TECHNICAL STANDARDS FOR WATER WORKS, BY THE GREAT LAKES UPPER MISSISSIP RIVER BOARD OF STATE SANITARY ENGINEERS (*10 STATES STANDARDS*), LATEST
- G. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST VERSION.
- H. THE AMERICANS WITH DISABILITIES ACT, THE ILLINOIS ACCESSIBILITY CODE AND THE FAIR HOUSING ACT. LATEST VERSIONS
- I. THE ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL. AND IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL. LATEST VERSIONS
- J. U.S. SOIL CONSERVATION SERVICE FIELD ENGINEERING HANDBOOK. LATEST VERSION
- K. ALL CODES AND ORDINANCES OF KANE COLINTY AND THE CITY OF ST. CHARLES
- L. ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
- M. THE CITED STANDARD SPECIFICATIONS, CODES AND PERMITS, WITH THESE THE CHELSTHAND SECURIONS, COLDER SHEET PRINTS WITH THESE CONSTRUCTION PLANS AND DETAILS, ARE ALL TO BE CONSIDERED PART OF THE WORK INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT B SPECIFICALLY NOTED BUT ARE CONSIDERED A PART OF THESE IMPROVEMENTS.
- N. CITY OF ST. CHARLES ENGINEERING DESIGN AND INSPECTION POLICY MANUAL. LATEST
- O. IN CASE OF CONFLICT. THE MORE RESTRICTIVE PROVISION SHALL APPLY.

2. UTILITY LOCATIONS

- A. TO THE BEST OF OUR KNOWLEDGE, EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS.
- B. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM OR ESTABLISH THE EXISTENCE OF ALL EXISTING LITH ITY EACH ITIES AND THEIR EXACT LOCATIONS, AND TO SAFELY ALL EARS ING UTILITY PACILITIES AND THEIR EARCH LOCATIONS, AND TO SAPELY SCHEDULE ALL UTILITY RELOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING LITH ITIES SHOWN ON THE DIAN THE CONTRACTOR SHALL CALL THE LE OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL JULLE. AT 800-882-0123 AND THE ACREV HAVING JURISDICTION OVER LOCAL WATER, SEWER AND ELECTRICAL SYSTEMS, FOR UTILITY LOCATIONS, FOR ADDITIONAL INFORMATION, THE AGENCIES LISTED ON THIS SHEET MAY BE CONTACTED.
- C. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER

3. UTILITY COORDINATION

- A. OWNER SHALL OBTAIN EASEMENTS AND PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE
- B. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NATURE AND STATUS OF ALL THE CONTRACTOR IS RESPONSIBLE FOR VEHINING THE NATURE AND STATUS OF ALL UTILITY RELOCATION WORK PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ENSURE THAT CONSTRUCTION OPERATIONS DO NOT INTERFERE WITH UTILITY FACILITIES AND RELOCATION WORK. THE SCHEDULE SHOULD REFLECT CONSTRUCTION SEQUENCING WHICH COORDINATES WITH ALL UTILITY ELOCATION WORK. THE CONTRACTOR SHALL BE REQUIRED TO AD JUST THE ORDER OF WORK FROM TIME TO TIME, TO COORDINATE SAME WITH UTILITY RELOCATION WORK, AND SHALL PREPARE REVISED SCHEDULE(S) IN COMPLIANCE THEREWITH AS DIRECTED BY THE
- C. THE OWNER, ENGINEER, ALL GOVERNING AGENCIES AND UTILITY COMPANIES SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY OPERATION PEOLIPING COOPERATION WITH OTHERS

4. COMMENCING CONSTRUCTION

A PRIOR TO COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR SHALL VERIEVAL PHICK I O COMMENCEMENT OF CONSTRUCTION THE CONTINACTION SHALL VEHIN' ALL DIMENSIONS AND CONDITIONS AT THE JOS STEE, IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEERS LINE AND GRADE STAKES, IF THERE ARE AND VISICEPEANORS WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS. SPECIFICATIONS AND/OR SPECIAL DETAILS. THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION EPON ANDION SPECIAL DETAILS, THE CONTROL FOR STALE SECURE WRITTEN INSTRUCTION THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND

- EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS. THE DECISION OF THE
- B. THE CONTRACTOR SHALL NOTIFY AS NECESSARY, ALL TESTING AGENCIES AS CONTRACTED BY THE COUNTY, TOWNSHIP OR OWNER, SUFFICIENTLY IN ADVANCE OF CONSTRUCTION. ALL MATERIAL TESTING SHALL BE THE RESPONSIBILITY AND EXPENSE OF THE CONTRACTOR. ALL TESTING AGENCIES SHALL MEET THE APPROVAL OF THE OWNER FAILURE OF CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH CONTRACTOR SUSPENDING OPERATIONS (PERTAINING TO TESTING) UNTIL TESTI OPERATIONS CAN BE COMPLETED. COST OF SUSPENSION OF WORK TO BE BORNE BY CONTRACTOR
- C. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN AND VEHICULAR ACCESS AT ALL TIMES. AT NO TIME SHALL ACCESS BE DENIED TO PROPERTIES SURROUNDING THE SITE
- D. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE DEVELOPER'S ENGINEER AT CONTRACTOR'S COS'
- E. ANY EXISTING SIGNS, LIGHT STANDARDS AND UTILITY POLES WHICH INTERESPE WITH ONSTRUCTION OPERATIONS AND NOT NOTED FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT HIS OWN EXPENSE AS SHOWN ON THE ENGINEERING PLANS OR AS DIRECTED BY THE DEVELOPER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET, SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.
- F. ITEMS SPECIFIED FOR REMOVAL, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC. SHALL BE LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMIT REQUIRED FOR SUCH DISPOSAL.
- G. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB.
- H. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DERRIS EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEAN-UP AS DIRECTED BY THE ENGINEER OR OWNER.
- ALL EXISTING LITH THES OF IMPROVEMENTS INCLUDING WALKS CLIPPS DAVEMENT AND ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT A PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS SPECIFICALLY NOTED ON THE DIANS

5 GENERAL EXCAVATION/LITH ITY NOTES

- A. COST FOR SHORING AND BRACING, SHEET PILING, UPRIGHTS, STRINGERS, CROSS BRACES, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- B. THE CONTRACTOR SHALL: PREVENT SURFACE WATER AND SUBSURFACE OR ROUNDWATER FROM FLOWING INTO EXCAVATIONS: REMOVE WATER TO PREVENT GROUNDWATER FROM FLOWING INTO EACHAVATIONS, REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS; PROVIDE AND MAINTAIN PUMPS, SUMPS, SUCTION AND DISCHARGE LINES AND OTHER DEWATERING SYSTEM COMPONENTS NECESSARY TO CONVEY WATER AWAY FROM EXCAVATIONS: CONVEY WATER REMOVED FROM EXCAVATIONS AND RAINWATER TO COLLECTING OR RUN-OFF WATER REMOVED FROM EXCAVATIONS AND RAINWATER TO COLLECTING OR RUN-OFF AREAS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION; PROVIDE AND MAINTAIN TEMPORARY DRAINAGE DITCHES AND OTHER DIVERSIONS OUTSIDE EXCAVATION LIMITS FOR EACH STRUCTURE. THE CONTRACTOR SHALL NOT USE TRENCH EXCAVATIONS AS TEMPORARY DRAINAGE DITCHES.
- C. IMMEDIATELY REPORT CONDITIONS THAT MAY CALISE LINSOLIND REARING TO THE OWNER. OR OWNER'S AGENT
- D. UNDERGROUND WORK SHALL INCLUDE TRENCHING, INSTALLATION OF PIPE, CASTINGS. STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST
- E. EXISTING DRAINAGE STRUCTURES AND SYSTEMS SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE, WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER. DRAINAGE STRUCTURES AND SYSTEMS THE PUNG OF THE CONTROL OF THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS EXPENSE. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE EVENT THAT SOFT MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNER'S AGENT IMMEDIATELY.
- G. TRENCH BACKFILL WILL BE REQUIRED FOR THE FULL TRENCH DEPTH WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, AND SIDEWALKS. THE TRENCH BACKFILL SHALL CONSIST OF GRANULAR MATERIAL MEETING SSRBC CA-7 GRADATION, UNLESS NOTED OTHERWISE. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH SSRBC SPECIFICATIONS. JETTING WITH WATER SHALL NOT BE
- H. THE CONTRACTOR SHALL INSTALL A 4" X 4" X 8" (NOMINAL) POST AT THE TERMINUS OF THE SANITARY AND WATER SERVICE, SANITARY AND STORM MANHOLES, CATCH BASINS, INLETS AND WATER VAULTS. THE POST SHALL EXTEND 4' ABOVE THE GROUND. THE TOP 12" OF THE POST SHALL BE PAINTED AS FOLLOWS: SANITARY - RED, WATERMAIN - BLUE, STORM
- ALL TOP OF FRAMES FOR STORM AND SANITARY SEWERS AND VALVE VAULT COVERS ARE TO BE ADJUSTED TO MEET FINAL FINISHED GRADE. THIS ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE CITY OF ST. CHARLES UPON FINAL

INSPECTION OF THE PROJECT.

- J. THE CONTRACTOR SHALL VERIFY THE SIZE AND INVERT ELEVATION OF ALL CONNECTIONS TO AVOID ANY CONFLICTS BEFORE STARTING WORK. NOTIFY OWNER OF ANY
- K. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE AGENCY HAVING JURISDICTION. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE COUNTY AND TOWNSHIP PRIOR TO INSTALLING PAVEMENT BASE, BINDER, SURFACE, AND PRIOR TO PLACING ANY CONCRETE AFTER FORMS HAVE BEEN SET
- L. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DERRIS

6 INDEMNIEICATION

- A HOLD HARMLESS: THE CONTRACTOR AS A CONDITION OF THE CONTRACT. HEREBY AGREES TO ASSUME THE ENTIRE RESPONSIBILITY AND LIBBLITY FOR, AND DEFENSE OF, AND TO PAY AND INDEMNIFY AND HOLD THE OWNER, THE ENGINEER, THE CITY, THEIR ENGINEERS, AGENTS AND EMPLOYEES HARMLESS FROM ALL CLAIMS FOR DAMAGES OR INJURY (OR DEATH RESULTING THEREFROM) TO ANY AND ALL PERSONS, INCLUDING EMPLOYEES OR AGENTS OR ANY PERSON OR FIRM WHO ENGAGES IN WORK LIPON THE PROJECT, ARISING OUT OF THE CONDUCT OF THE CONTRACTOR ARISING OUT OF THE PERFORMANCE OF THIS AGREEMENT OR ANY WORK RELEVANT THERETO, OR ARISING OUT OF ANY FEDERAL, STATE OR LOCAL STATUTE, RULE, REGULATION OR ORDINANCE, INCLUDING BUT NOT LIMITED TO THE PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS ACT (OSHA).
- B. ALL COSTS, FEES AND EXPENSES, INCLUDING, BY WAY OF EXAMPLE AND WITHOUT LIMITATION, REASONABLE ATTORNEY'S FEES, COURT COSTS, COURT REPORTER'S FEES, TRANSCRIPT COSTS, SUBPOENA FEES AND COSTS, WITNESS FEES, SERVICE COSTS, AND DOCUMENT REPRODUCTION COSTS INCURRED BY THE COUNTY AS A RESULT OF ANY CLAIMS FOR DAMAGE OR INJURY AS ENUMERATED ABOVE SHALL BE PAID BY THE CONTRACTOR.
- C. THE CONTRACTOR(S) SHALL NAME WILLS BURKE KELSEY ASSOC., LTD., CITY OF ST. CHARLES AND CONSULTANT DOING CONSTRUCTION OBSERVATION FOR THE CITY AS ADDITIONAL NAMED INSUREDS ON ALL LIABILITY INSURANCE POLICIES AND SHALL PROVIDE THE CITY AND WISK WITH CERTIFICATES OF INSURANCE PRIOR TO COMMENCEMENT OF ANY WORK

EARTHWORK NOTES

GENERAL

- A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.
- B. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION, AND PREVENT STORMWATER FROM RUNNING OFFSITE AND INTO OR STANDING IN EXCAVATED
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES". THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF EROSION CONTROL BARRIER FENCING ETC. TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC. SHALL OCCUR PRIOR TO ANY CONSTRUCTION ACTIVITIES
- D. EXCESS MATERIALS, IF NOT UTILIZED AS FILL SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND PROPERLY DISPOSED OF OFF-SITE BY THE CONTRACTOR AT A PREVIOUSLY APPROVED SITE
- E. GEOTEXTILE FABRIC, IF AUTHORIZED BY THE OWNER, SHALL BE "MIRAFI 160" OR EQUAL, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

2. TOPSOIL EXCAVATION INCLUDES:

- A EVOAVATION OF TOPSOIL AND OTHER STRUCTURALLY LINGUITABLE MATERIALS WITHIN EACHARTOR OF TOP SOIL AND OTHER STRUCTURALLY ORSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STRIPPING TOPSOIL OR FILLING AREAS.
- B. DI ACEMENT OF THE EXCAVATED MATERIAL IN OWNER DESIGNATED AREAS FOR FUTURE PLACEMENT OF THE EXCAVATED MATERIAL IN OWNER DESIGNATED AREAS FOR FUTURE. USE WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRUCTURA. FILL MATERIAL. PROVIDE NECESSARY AND APPROPRIATE EROSION CONTROL MEASURES.
- C. TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN. ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR PROPERLY DISPOSED OF OFF-SITE.
- D. FURNISH AND PLACE TOPSOIL SHALL INCLUDE HAULING AND SPREADING 6" OF APPROVED TOPSOIL OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEED
- E. NON-STRUCTURAL FILL AREAS SHALL BE COMPACTED AS PER (SSRBC) ARTICLE 205.06

3. EARTH EXCAVATION INCLUDES:

- EXCAVATION OF CLAY AND OTHER MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.
- PLACEMENT OF THE CLAY AND OTHER SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIAL SHALL BE PLACED

IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS. AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COI WATER CONTENT STALL BE AUDISTED IN ONDER TO ACTIVETY REQUIRED COMPACTION. STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, TO WITHIN SIX (6) INCHES OF THE PLAN FINISHED. GRADE ELEVATION, IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

- C. COMPACTION OF THE CLAY AND OTHER SUITABLE MATERIALS, SHALL BE ACCORDING TO (SSRBC) ARTICLE 205.06
- 4. UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS CONSULTANT WITH THE CONCURRENCE OF THE OWNER.

5 SUB-CRADE PREPARATION

- A. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL SATISFY HIMSELF THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS. UNLESS THE CONTRACTOR ADVISES THE ENGINEER IN WRITING PRIOR TO FINE GRADING FOR AGGREGATE BASE COURSE CONSTRUCTION, IT IS UNDERSTOOD THAT HE HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.
- B. PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND AGGREGATE BASE COURSE THE CONTRACTOR SHALL PROVIDE. AS A MINIMUM, A FULLY LOADED SIX-WHEEL TANDEN AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND AGGREGATE BASE MATERIAL. THE SUBGRADE MUST BE PROOF ROLLED AND INSPECTED FOR UNSUITABLE MATERIALS AND/OR EXCESSIVE MOVEMENT BY THE SOILS CONSULTANT AND THE CITY OF ST. CHARLES. IF UNSUITABLE SUBGRADE IS ENCOUNTERED, IT SHALL BE CORRECTED. THIS MAY INCLUDE ONE OR MORE OF THE FOLLOWING METHODS:

 - REMOVE AND REPLACE WITH STRUCTURAL CLAY FILL.
- REMOVE AND REPLACE WITH GRANULAR MATERIAL
- LISE OF GEOTEXTILE FARRIC MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE 1/4" TO 1/2", IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA
- C. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE GRADED TO WITHIN 0.04 FEET (1/2*) OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF CURB, SO AS TO INSURE THE PROPER THICKNESS OF PAVEMENT COURSES, NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATI
- D. PRIOR TO PLACEMENT OF THE AGGREGATE BASE COURSE, THE SUBGRADE MUST BE APPROVED BY THE SOILS CONSULTANT AND THE CITY OF ST. CHARLES ENGINEER
- ALL MATERIALS BEING UTILIZED FOR TOPSOIL OR UTILIZED IN LANDSCAPING PRACTICE SHALL BE CONSISTENT OF A NON-CONTAMINATED CONDITION AS SPECIFIED IN THE CCDD, TIER 1 CATEGORIZATION. ALL MATERIALS NOT MEETING THESE STANDARDS BUT DESIGNATED TO REMAIN ON SITE SHALL BE SPECIFICALLY NOTED AND SHOWN ON ALL AS-BUILT PLANS.

7. MISCELLANEOUS: THE CONTRACTOR SHALL

- A. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.
- B SCARIEY DISC AFRATE AND COMPACT TO THE DEGREE SPECIFIED THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL, IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.
- C. PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION

SUBDIVIS NOTES AND ERVE S GENERAL P RESION CORPORATE

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SIGNING AND PAVEMENT MARKINGS

- ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), AND THE CITY OF ST. CHARLES SPECIFICATIONS.
- 2. SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080 INCH THICK FLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE IN ACCORDANCE WITH (SSRBC) SECTION 720. LEGEND
- 3. POSTS: SIGN POSTS SHALL BE A HEAVY DUTY STEEL "U" SHAPED CHANNEL WEIGHING 3.0 POUNDS/FOOT SUCH AS A TYPE B METAL POST PER (SSRBC) SECTION 729 [OR: 2" PERFORATED STEEL TUBE PER (SSRBC) SECTION 7281
- 4. SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE ABOVE (SSRBC) SECTIONS AND IDOT STANDARD 728001 OR 729001
- 5. PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE ROADWAY LIMITS. SUCH AS STOP BAR LINES, CENTERLINES, CROSSWALKS AND DIRECTIONAL ARROWS SHALL BE REFLECTORIZED MOPLASTIC PER (SSRBC) SECTION 780
- 6. PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW WEAR" APPLICATION, SHALL BE PAINT IN ACCORDANCE TO (SSRBC) SECTION 78
- 7. COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH (MUTCD).
- 8. THERMOPLASTIC MARKINGS SHALL BE INSTALLED BETWEEN APRIL 15TH & NOVEMBER 1ST AND WHEN THE PAVEMENT TEMPERATURE IS 55° F AND RISING. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 50° F AND RISING

PAVING NOTES

- A. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION AND COMPACTION PLACEMENT OF SUB-BASE AND/OR BASE COURSE MATERIALS: PLACEMENT OF BITUMINOUS PACEMENT OF SUB-BASE ANDIOR BASE COURSE MATERIALS, PLACEMENT OF BITOMINOUS MATERIAL PRIME COAT; BITUMINOUS BINDER AND SURFACE COURSES; FORMING, FINISHING AND CURING CONCRETE PAVEMENT, CURBS AND WALKS; AND FINAL CLEAN-UP AND ALL
- B COMPACTION REQUIREMENT: PRIOR TO PLACEMENT OF THE HOT-MIX ASPHALT BASE COMPACTION REQUIREMENT: PRICK TO PLACEMENT OF THE HOT-MIX ASPHALI BASE COURSE, THE CONTRACTOR SHALL PROVIDE, AS A MINIMUM, A TANDEM AXLE TRUCK LOADED TO A MINIMUM GROSS WEIGHT OF 40,000 LBS. PROOF ROLLING PROCEDURES SHALL CONFORM TO (SSRBC) ARTICLE 351.10. IF UNSUITABLE SUB-BASE IS ENCOUNTERED IT SHALL BE CORRECTED BY REMOVING AND REPLACING WITH GRANULAR PGE MATERIAL AS SPECIFIED BY THE ENGINEER. HOT-MIX ASPHALT SHALL BE COMPACTED ACCORDING TO
- HOT-MIX ASPHALT SHALL BE PLACED ON A CLEAN DRY BASE. THE HOT-MIX ASPHALT BAS COURSE SHALL BE PLACED ACCORDING TO (SSRBC) ARTICLE 355.05. THE HOT-MIX ASPHALT BINDER COURSE, LEVELING BINDER, AND SURFACE COURSE SHALL BE PLACED ACCORDING TO (SSPRC) APTICLE 408.08
- D. THE HMA SHALL BE DELIVERED AT A TEMPERATURE OF 250°F AND 350°
- E. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF WARNING DEVICES AND THE SITE INSTALLATION SHALL CONFORM TO THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AND IN ACCORDANCE WITH THE CITY OF ST. CHARLES CODE.

2 CONCRETE WORK

- ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CLASS SI OR PV PER (SSRRC) SECTION 1020,04 WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE (SSRBC) SECTION 102039 WITH AIR ENTRAINMENT OF NOT LESS TRUN FIVE (5%) OR MORE THAN EIGHT (6%) PERCENT. CONCRETE SHALL BE A MINIMUM OF SIX (6) BAG MIX AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT FOURTEEN (14) DAYS. ALL CONCRETE SHALL BE BROOM FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.
- B CONCRETE CURR AND/OR COMBINATION CURR AND GUTTER SHALL BE OF THE TYPE CONCRETE CURB AND/OR COMBINATION CORD AND GOTTER SPALL BE OF THE TIPE SHOWN ON THE PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS-SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. 1" PREMOLDED FIBER EXPANSION JOINTS SHALL BE INSTALLED AT SIXTY (60) FOOT INTERVALS AND AT ALL PC'S PTS AND CURB RETURNS TWO #4 REBARS SHALL BE INTERVALS AND AT ALL POST, FIS AND CORR NEDWORD OF A REBURG STALL BE CONTINUOUSLY INSTALLED ALONG ALL CURB AND GUTTER. ALTERNATE ENDS OF THE DOWEL BARS SHALL BE GREASED AND FITTED WITH CAPS. SAWED FORMED CONTRACTION JOINTS SHALL BE PROVIDED AT NO GREATER THAN FIFTEEN (15) FOOT INTERVALS AND 2" IN DEPTH RETWEEN EXPANSION JOINTS AND AT ALL PC'S PT'S AND CURB RETURNS NO HONEY-COMBING OF THE CURB AND GUTTER WILL BE ACCEPTED
- C. CURBS SHALL BE DEPRESSED AT LOCATIONS WHERE PUBLIC WALKS/PEDESTRIAN PATHS INTERSECT CURB LINES, AT DRIVEWAY LOCATIONS, AND AT OTHER LOCATIONS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER OR CITY, FOR THE PURPOSE OF PROVIDING ACCESSIBILITY, (SEE CONSTRUCTION STANDARDS FOR DETAIL)
- D. THE CURRS SHALL BE BACKELLED ACCORDING TO (SSRBC) ARTICLE 606.13.
- E. CONCRETE SIDEWALK SHALL HAVE JOINTS SCORED AT 5 FOOT INTERVALS AND 1/2* PREMOLDED FIBER EXPANSION JOINTS AT 50 FOOT INTERVALS, AND ADJACENT TO CONCRETE CURRS DRIVEWAYS FOUNDATIONS ETC.
- F CONCRETE DRIVEWAY APRONS SHALL HAVE 6" X 6" NO. 6 WELDED WIRE MESH IN IALLI [COMMERCIAL] DRIVEWAYS, PROVIDE 1/2* PREMOLDED FIBER EXPANSION JOINT ADJACENT TO CURBS AND CONCRETE SIDEWALKS, PROVIDE SAWED OR FORMED CONTRACTION JOINT AT MID-POINT AND TEN (10) FOOT MAXIMUM.
- G CONCRETE CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH (SSPEC) METHOD A, B, OR C. TWO (2) COATS OF BOILED LINSEED OIL IN CONFORMANCE WITH (SSRBC) SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.

3 FLEXIBLE PAVEMENT

A THE PAVEMENT MATERIALS FOR HOT-MIX ASPHALT STREETS PARKING LOTS DRIVEWAYS. AND MULTI-USE PATHS SHALL BE AS DETAILED ON THE PLANS. THE HOT-MIX ASPHALT STREETS SHALL CONSIST OF AGGREGATE BASE COURSE, TYPE B, HOT-MIX ASPHALT BASE COURSE, IL-19.0, N50; HOT-MIX ASPHALT BINDER COURSE, IL-19, N50; AND HOT-MIX ASPHALT

- SURFACE, MIX "D", N50: OF THE THICKNESS AND MATERIALS SPECIFIED ON THE PLANS THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS
- B. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE HOT-MIX ASPHALT BASE COURSE IS PLACED. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.25 TO 0.50 GALLONS PER SQUARE YARD PRIOR TO PLACING THE HOT-MIX ASPHALT BASE COURSE. PRIME COAT MATERIALS SHALL BE BITUMINOUS M.C. - 30.
- C PRIOR TO PLACEMENT OF THE HOT-MIX ASPHALT RINDER COURSE AND THE HOT-MIX ASPHALT SURFACE COURSE THE RESPECTIVE HOT-MIX ASPHALT PAYEMENT, SHALL BE CLEANED TO THE SATISFACTION OF THE ENGINEER, AND PRIME COATED. ALL DAMAGED AREAS IN THE BINDER, BASE OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AND CITY PRIOR TO PLACING THE HOT-MIX ASPHALT SURFACE COURSE. THE CONTRACTOR SHALL DROVIDE WHATEVER EQUIDMENT AND MANDOWER NECES INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE ENGINEER OR CITY, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE HOT-MIX ASPHALT SURFACE COURSE THE PRIME COAT SHALL BE UNIFORMLY APPLIED TO THE HOT-MIX ASPHALT BASE COURSE AND THE HOT-MIX ASPHALT BINDER COURSE AT A RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD, PRIME COAT SHALL BE AS SPECIFIED IN (SSRBC) ARTICLE 406.02.
- COURSE TO WEATHER ONE (1) COMPLETE WINTER SEASON PRIOR TO THE INSTALLATION OF THE HOT-MIX ASPHALT SURFACE COURSE UNLESS OTHERWISE SPECIFIED BY THE CITY OF ST CHARLES
- E. DRIVEWAY SLOPES SHALL BE A MINIMUM OF TWO (2) AND NOT GREATER THAN EIGHT (8)
 PERCENT. DRIVEWAYS SHALL BE CONSTRUCTED SO AS NOT TO IMPEDE SURFACE DRAINAGE SYSTEM
- 4. ALL WATER, SANITARY, AND STORM SEWER SERVICES SHALL BE MARKED ON THE CURB WITH A W. S. ST DESDECTIVELY AS IDENTIFIED BY THE ENGINEEDING DESIGN AND INSPECTION MANUAL
- 5 TESTING AND FINAL ACCEPTANCE
 - THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM CONCRETE AND HMA PAVEMENT MATERIALS ESTABLISHED BY THE CITY OF ST. CHARLES.
 - B PRIOR TO PLACEMENT OF THE HOT-MIX ASPHALT SURFACE COURSE THE CONTRACTOR WHEN REQUIRED BY THE CITY OF ST. CHARLES, SHALL OBTAIN SPECIMENS OF THE HOT-MIX ASPHALT BINDER COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF
 - C. WHEN REQUIRED BY THE CITY OF ST. CHARLES. THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH HOT-MIX ASPHALT PAVEMENT STRUCTURE. WITH A CORE DRILL WHERE DIRECTED IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN NESS SHALL BE ADJUSTED FOR BY THE METHOD DESCRIBED IN (SSRBC), ARTICLE
 - D. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE

SANITARY SEWER NOTES

- SANITARY SEWER PIPE SHALL BE PVC (POLYVINYL CHLORIDE) PLASTIC PIPE CONFORMING TO
 ASTM D-3034 OR ASTM F679 WITH PUSH-ON JOINTS CONFORMING TO ASTM D-3212 AND A STANDARD DIMENSION RATIO (SDR) OF 26 EXCEPT WHERE NOTED.
- 2. SANITARY SEWER PIPE FOR SEWERS HAVING A FINISHED BURIED DEPTH TO INVERT GREATER THAN 20' SHALL BE PVC (POLYVINYL CHLORIDE) PLASTIC PIPE CONFORMING TO DR-18 AWWA
- A. ALL SANITARY SEWER FITTINGS SHALL BE PVC SDR 26 HEAVY WALL UNLESS PIPE IS C905.
- 3. NON-SHEAR COUPLINGS OR CITY OF ST. CHARLES APPROVED EQUAL SHALL BE USED WHEN CONNECTING SEWER PIPE OF DISSIMILAR MATERIALS
- 4. BEDDING: BEDDING SHALL BE COMPLETED PER THE CITY OF ST. CHARLES ENGINEERING DETAIL FOR PIPE BEDDING SHOWN ON DTS
- 5 ALL LINSUITABLE MATERIAL SHALL BE REMOVED BELOW THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED CA-7 VIRGIN CRUSHED LIMESTONS
- 8 ALL TRENCHES RENEATH DRODOSED OR EVISTING LITHITIES DAVEMENTS DOADWAYS SIDEWALKS, AND FOR A DISTANCE OF THREE (3) FEET ON EITHER SIDE OF SAME, ANDOOR WHERE SHOWN ON THE PLANS, SHALL BE BACKFILLED WITH SELECT GRANULAR BACKFILL (CA-7). VIRGIN CRUSHED LIMESTONE) AND THOROUGHLY MECHANICALLY COMPACTED IN 9" THICK (LOOSE MEASUREMENT) LAYERS. JETTING WITH WATER IS NOT PERMITTED.
- 7. ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN
- 8. ALL FLOOR DRAINS SHALL CONNECT TO THE SANITARY SEWER.
- 9. CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED
- 10. WATERMAINS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN

SPECIAL CIRCUMSTANCES AND THEN ONLY UNDER THE FOLLOWING RULES

- A PERMISSION SHALL BE OBTAINED FROM THE CITY OF ST. CHARLES IN WRITING PRIOR TO
- B. THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18" ABOVE THE TOP OF THE SEWER AND 18" HORIZONTALLY AWAY FROM THE EDGE OF THE SEWER.
- 12.MANHOLES: MANHOLES SHALL CONFORM TO THE CITY OF ST. CHARLES STANDARD
- 13. FRAMES AND LIDS: ALL SANITARY SEWER MANHOLE FRAMES AND LIDS SHALL BE NEENAH R-1713 UNLESS OTHERWISE NOTED ON THE PLANS. THE LIDS SHALL HAVE RECESSED (CONCEALED) PICK HOLE AND BE SELF SEALING WITH AN "O" RING GASKET. THE LIDS SHALL HAVE THE WORL

- A. BARREL SECTIONS SHALL BE SEALED USING TWO (2) BUTYL RUBBER STRIPS PER TONGUE AND GROOVE SECTION. THIS INCLUDED THE JOINT BETWEEN THE FRAME AND CONCRETE SECTION
- B. PER CITY OF ST. CHARLES STANDARD DETAILS INTERNAL CHIMNEY SEALS ARE TO BE USED. IN PAVED AREAS, MANUFACTURED BY "CRETEX" OR AN EQUAL APPROVED BY WORKS. EXTERNAL CHIMNEY SEALS ARE TO BE USED IN PARKWAY AREAS.
- FRAME ELEVATIONS. RINGS SHALL BE SEALED TOGETHER WITH MORTAR
- 15.DROP MANHOLE ASSEMBLIES: DROP MANHOLE ASSEMBLIES SHALL BE PROVIDED AT THE JUNCTION OF SANITARY SEWERS WHERE THE DIFFERENCE IN INVERT GRADES EXCEEDS ONE FEET (1). OR AS SHOWN ON THE PLANS, THE ENTIRE DROP ASSEMBLY SHALL BE CAST IN E MONOLITHICALLY WITH THE MANHOLE BARREL SECTION.
- 18 CLEANING: ALL MANHOLES AND DIDES SHALL BE THOROUGHLY CLEANED OF DIDT AND DERDIS AND ALL VISIBLE LEAKAGE ELIMINATED, BEFORE FINAL INSPECTION AND ACCEPTANCE
- 17. TESTING: DEFLECTION AND LEAKAGE TESTING WILL BE REQUIRED. THE PROCEDURE AND ALLOWABLE TESTING LIMITS SHALL BE AS SPECIFIED IN THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", OR CITY OF ST. CHARLES CODES.
- 18. TESTING THE ALIGNMENT/STRAIGHTNESS SHALL BE IN ACCORDANCE WITH THE CITY OF ST.
- 19.A CURRENT COLOR VIDEO RECORD AND A TYPE WRITTEN TRANSCRIPTION OF THE INTERNAL INSPECTION OF THE NEWLY CONSTRUCTED SEWER SYSTEM SHALL BE SUBMITTED PRIOR TO REFUNDING OF SITE IMPROVEMENT ESCROW RETENTION MONIES BY THE CITY OF ST. CHARLES CAMERA TO LOOK AT ALL SERVICES. THE SERVICE CONNECTIONS MUST BE NOTED IN THE TELEVISION REPORT. WHEN THE PROPOSED SANITARY SEWER SYSTEM IS TO CONNECT TO AN EXISTING SANITARY SEWER SYSTEM ABUTTING THE PROPERTY. THE EXISTING SEWER MUST ALSO BY TELEVISED AND REPORTED. THE CONTRACTOR SHALL COORDINATE THE TELEVISING OF EXISTING CONTIGUOUS SEWERS WITH THE CITY OF ST.CHARLES. ALL LINES SHALL BE FLUSHED AND CLEANED PRIOR TO VIDEOTAPING.
- 20.TEST RESULTS: IF THE SANITARY SEWER INSTALLATION FAILS TO MEET THE TEST REQUIREMENTS SPECIFIED, THE CONTRACTOR SHALL DETERMINE THE CAUSE OR CAUSES OF THE DEFECT AND REPAIR OR REPLACE ALL MATERIALS AND WORKMANSHIP AS MAY BE NECESSARY TO COMPLY WITH THE TEST REQUIREMENTS.
- 21.CERTIFICATION: CONTRACTOR SHALL SUBMIT CERTIFIED COPIES OF ALL REPORTS OF TESTS CONDUCTED BY AN INDEPENDENT LABORATORY BEFORE INSTALLATION OF PVC PLASTIC PIP TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD METHOD OF TEST FO "EXTERNAL LOADING PROPERTIES OF PLASTIC PIPE BY PARALLEL PLATE LOADING", ASTM STANDARDS D-2412 OR D-2241 AS APPROPRIATE FOR THE PIPE TO BE USED. TESTS SHALL ALSO BE CONDUCTED TO DEMONSTRATE JOINT PERFORMANCE AT 5% MAXIMUM DIAMETRIC DEFLECTION OF THE SPIGOT
- 22 RECORD DRAWINGS: THE CONTRACTOR SHALL PROVIDE ALL INFORMATION TO PREPARE RECORD DRAWNINGS; INCLUDING SERVICE STUDE LOCATIONS, TO THE ENGINEER WHO SHALL PREPARE RECORD DRAWNINGS AND SUBMIT TO APPROPRIATE PUBLIC AGENCIES. IF FINAL MEASUREMENTS INDICATE DEFICIENCIES, THE CONTRACTOR, AT HIS OWN COST, WILL ADDICATED TO THE CONTRACTOR, AT HIS OWN COST, WILL ADDICATED TO THE CONTRACTOR. MANHOLES AND/OR SEWERS TO PROPER FLEVATIONS AND OTHERWISE CORRECT THE

STORM SEWER NOTES

STORM SEWER PIPE: ALL STORM SEWER SMALER THAN 15 INCHES IN DIAMETER THAT WILL BE PUBLICLY OWNED AND MAINTAINED SHALL BE PVC PIPE, RIGID (MIN. SDR-28, PUSH-ON GASKET JOINTS). ALL STORM SEWER 15 INCHES AND GREATER SHALL BE RCP UNLESS OTHERWISE NOTED ON THE PLANS, IN ACCORDANCE WITH THE FOLLOWING:

PLAN CODE: MATERIAL

- TYPE 1, CLASS III PER SSRBC SECTION 505.

 USE CLASS IV PIPE FOR 12" TO 21". FOR ALL OTHER SIZES USE THE CHART CONTAINED IN SECTION 550 FOR TYPE 1 OR TYPE 2 CONSTRUCTION. PRECAST FLARED END SECTIONS MAY HAVE MASTIC
- 2. NON-SHEAR COUPLINGS OR APPROVED EQUAL BY THE CITY SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS.
- 3. BEDDING: BEDDING SHALL BE COMPLETED PER THE CITY OF ST. CHARLES ENGINEERING DETAIL FOR PIPE BEDDING SHOWN ON DT5.
- 4. CONSTRUCTION: ALL STORM SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT
- 5. COVER: THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE (1) FEET OF COVER OVER THE TOP OVER ANY PIPES WHICH HAVE LESS THAN (1') FEET OF COVER DURING CONSTRUCTION UNTIL THE AREA IS FINAL GRADED OR PAVED.
- 6. STRUCTURES: MANHOLES, CATCH BASINS AND INLETS SHALL CONFORM TO THE CITY OF ST. CHARLES STANDARD ENGINEERING DETAILS SHOWN ON DT3
- A CONCRETE BENCH TO DIRECT FLOWS SHALL BE CONSTRUCTED IN THE BOTTOM OF ALL INLETS
- THE FRAME, GRATE, AND/OR CLOSED LID SHALL BE CAST IRON OF THE STYLE SHOWN ON THE DIANS
- MANHOLE LIDS SHALL BE MACHINE SURFACED, NON-ROCKING DESIGN. THE CLOSED LIDS SHALL HAVE THE WORD "ST. CHARLES STORM" CAST ON THE LID. THE JOINTS BETWEEN CONCRETE SECTION ADJUSTING RINGS, AND FRAME SHALL BE SEALED WITH MASTIC COMPOUND.
- 7. CLEANING: THE STORM SEWER SYSTEM SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING
- 8 & CURRENT COLOR VIDEO RECORD AND & TYPE WRITTEN TRANSCRIPT OF THE INTERNAL

REFUNDING OF SITE IMPROVEMENT ESCROW RETENTION MONIES BY THE CITY OF ST. CHARLES. ALL PUBLIC MAINS SHALL BE VIDEOTAPED. THE CONTRACTOR MUST ROTATE THE LENS OF THE CAMERA TO LOOK AT ALL SERVICES. THE SERVICE CONNECTIONS MUST BE NOTED IN THE TELEVISION REPORT. WHEN THE PROPOSED SANITARY SEWER SYSTEM IS TO CONNECT TO AN SEWER SYSTEM ABUTTING THE PROPERTY, THE EXISTING SEWER MUST ALSO BY TELEVISED AND REPORTED. THE CONTRACTOR SHALL COORDINATE THE TELEVISING OF EXISTING CONTIGUOUS SEWERS WITH THE CITY OF ST.CHARLES. ALL LINES SHALL BE FLUSHED AND CLEANED PRIOR TO VIDEOTAPING.

9. ALL CONNECTIONS MADE TO THE EXISTING STORM SEWER NEED TO BE MADE BY A CORE AND

SOIL EROSION & SEDIMENTATION CONTROL SPECIFICATIONS 1 GENERAL

- A. THIS WORK SHALL BE PREFORMED IN ACCORDANCE WITH ALL APPLICABLE PROVISIONS OF THE CITY OF ST. CHARLES CODE, THE ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL, AND IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL. AND ANY OTHER APPLICABLE REGULATIONS OR AUTHORIZATIONS.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND INSTALLATION SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION
 UNTERANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
- C. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE LAND IS OTHERWISE DISTURBED ON THE SITE

- A. BEFORE STARTING CLEARING AND SITE GRADING WORK, SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND APPROVED BY THE CITY IF DIRECTED BY THE ENGINEER OR THE CITY THE CONTRACTOR SHALL INSTALL ADDITIONAL SILT FENCES WHERE REQUIRED.
- B. THE CONSTRUCTION ENTRANCE TO THE SITE SHALL BE STABILIZED PER THE SOIL EROSIO AND SEDIMENTATION CONTROL PLAN PRIOR TO ANY WORK ON THE SITE. THE ENTRANCE SHALL BE MONITORED PERIODICALLY FOR ITS EFFECTIVENESS TO COLLECT DIRT WHICH COULD LEAVE THE SITE VIA CONSTRUCTION VEHICLES. ANY DEFICIENCIES SHALL BE
- C. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH AND VEHICLE WASHDOWN FACILITIES, IF NECESSARY, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY OR AS DIRECTED BY THE ENGINEER OR CITY
- D. TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED UNDER THE PROVISIONS OF ARTICLE 201.05 OF THE STAN SPECIFICATIONS.
- E LIME DELINING SHALL BE DEDECOMED LINDED THE SLIDEDVISION OF AN ADDROVED LANDSCAPE ARCHITECT OR LICENSED ARBORIST AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION. ALL LIMBS. BRANCHES. AND OTHER DEBRIS RESULTING FROM THIS WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. ALL CUTS OVER ONE (1) INCH DIAMETER SHALL BE MADE FLUSH WITH THE NEXT LARGE BRANCH. WOUNDS OVER ONE (1) INCH DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT
- F. EROSION CONTROL BARRIER SHALL BE INSTALLED AND MAINTAINED AROUND INTAKE STRUCTURES (I.E., INLETS, CATCH BASINS, MANHOLES) AS SHOWN ON THE SOIL EROSION AND SEDIMENTATION CONTROL PLAN.
- CONTROL SHALL BE PROVIDED AROUND SUCH STOCKPILE. IF MORE THAN 14 DAYS, THEN IT IS REQUIRED. THAT THE STOCKPILE BE SEEDED SO AS TO MINIMIZE SOIL EROSION BY BOTH WIND AND WATER
- H. THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS NOT AT FINAL GRADE THAT WILL REMAIN UNDISTURBED FOR MORE THAN 14 DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM FROSION WITHIN 7 DAYS OF WORK STOPPAGE. TEMPORARY COVER SHALL BE MAINTAINED CONTINUOUSLY UNTIL PERMANENT

- A. THE TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE AND WORK EFFECTIVELY UNTIL ALL THE PERMANENT EROSION CONTROL ITEMS ARE FULLY
- B. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES EVERY 7 DAYS AND WITHIN 24 HOURS OF ANY STORM EVENT IN EXCESS OF 1/2 ". ANY DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY
- C. AT THE COMPLETION OF THE PROJECT, ALL STORM SEWER PIPES AND STRUCTURES SHALL BE CLEANED AND FREE OF DIRT AND DEBRIS. THE SEDIMENTATION SHALL BE REMOVED FROM THE STORM SEWER SYSTEM AND SHALL NOT BE WASHED OUT IN THE STORM SEWER SYSTEM

NOTES AND ICATIONS SUBDI ERVE S LOT 8 ORATE



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PROJECT NO. 140256 DATE : 10-08-2015 RAWING NO. 3 OF 3

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WATERMAIN NOTES

- PIPE MATERIALS: WATERMAINS SHALL BE CONSTRUCTED OF A BITUMINOUS COATED, CEMENT LINED DUCTILE IRON PIPE, CLASS 52, CONFORMING ANSI A-21.51 (AWWA C151). CEMENT MORTAR LINED DUCTILE IRON PIPE, CLASS 22, COND-OWNING ANSI-A2-153 (AWWA C153), CEMEN I MORTHAGE
 LINING SHALL CONFORM TO ANSI-A2-14 (AWWA C-104). THE JOINTS SHALL BE PUSH-ON
 COMPRESSION GASKET JOINTS. ALL DUCTILE IRON WATER MAIN AND FITTINGS SHALL BE
 PUCTHTHLEBE TUBE ENCASED. BRASS WEDGES ARE REQUIRED ON THE MAIN BELOW GRADE.
 WATERMAIN CALLED OUT AS HDPE WATERMAIN SHALL BE CONSTRUCTED OF A HIGH-PERFORMANCE HDPE PE4710 RESIN MATERIAL, WITH A DR OF 17, CONFORMING TO ASTM
- FITTINGS: ALL FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND MECHANICAL JOINTS CONFORMING TO ANSI AS21.10 (AWWA C-110).
- 3. JOINT RESTRAINT: ALL MECHANICAL JOINT FITTINGS SHALL HAVE RESTRAINING GLANDS INSTALLED. RESTRAINT DEVICE SHALL BE LINLELANGE BY FORD COMPANY OR MEGALLIG BY INSTALLED. RESITANTI DEVICE SHALL BE UNH-LANGE BY FORD COMPANY OR MEGAFLUE BY BEAR IRON, PUSH ONLY PIPE RESTRANT SHALL BE FIDE LOCK GASKETS BY US PIPE OR SERIES 1700 MEGA-LUG OR SERIES 1380 PIPE RESTRANT BY FORD. LENGTHS OF PIPE RESTRANT SHALL BE DETERMINED FROM MANUFACTURERS INSTALLATION SPECIFICATIONS (REFER TO WATERMANN RESTRANT) DETAIL).
- A WATER SERVICES: WATER SERVICE DIDE 3" IN DIAMETER SHALL BE DUCTUE IDON DIDE CEMENT LINED, CLASS 52, CONFORMING ANSI A-21.51 (AWWA C151).
- VALVES: GATE VALVES SHALL BE USED ON ALL WATERMAIN. 4" THROUGH 16" DIAMETER SHALL BE RIGHT-HAND CLOSING RESILIENT WEDGE GATE VALVES, CONFORMING TO AWWA STANDARD C-509 AS MANUFACTURED BY THE CLOW CORPORATION, WATEROUS COMPANY OR APPROVED
- 6. VALVE VAULTS: VALVE VAULTS SHALL BE PRECAST CONCRETE STRUCTURES PER THE CITY OF ST. CHARLES ENGINEERING DETAIL SHOWN ON DT2. THE FRAME AND LID SHALL BE NEENAH R-1713 OR FOLIAL WITH "ST CHARLES WATER" EMBOSSED ON THE LID.
- 7. FIRE HYDRANTS: FIRE HYDRANTS SHALL CONFORM TO AMERICAN WATER WORKS ASSOCIATION FIRE PTDRAWLS FIRE PTDRAWLS STALL COMPORED TO AMBRICAN WATER WORKS ASSOCIATION (AWAYA) STANDARD, NO. C-502, LATEST REVISION, AND SHALL BE A MODEL SHOWN ON THE PLANS AND APPROVED BY THE CITY OF ST. CHARLES. FIRE HYDRANTS SHALL BE INSTALLED WITH AN AUXILIARY VALVE AND TRENCH ADAPTER VALVE BOX. THE PUMPER CONNECTION SHALL FACE ROADWAY. HYDRANTS SHALL BE MUELLER SUPER CENTURION 200, WATEROUS PACER MODEL WB-67-250. OR CLOW MEDALLION. REFER TO DETAIL

PROVIDE AND INSTALL FOUR MEGALUG JOINT RESTRAINTS AT EACH JOINT FROM THE MAINLINE TEE TO THE AUXILIARY VALVE, AND BETWEEN THE AUXILIARY VALVE AND HYDRANT BARRE

ALL HYDRANTS SHALL HAVE 6" MECHANICAL JOINT CONNECTION 5-1/4" VALVE OPENING 5' ACLITIONIN'S PROFINED INCOMPAGE ON THE LATERAL, "HYDRAFIBIDER" VINCE CHEMINAL COURT OF THE AND THE ACCOUNT OF T

- 8. CORPORATION STOPS: CORPORATION STOPS SHALL BE COMPRESSION FITTINGS MUELLER B-25008-N (3/4*, 1*, 1-1/2*, 2*); FORD FB1000-4-Q-NL 1*; FORD FB1000-6-Q-NL 1-1/2*; FORD FB1000-7-Q-NL 2*; A.Y. McDONALD 74701-BQ (1*, 1-1/2*, 2*); OR Q SERIES BRASS.
- CURB STOPS: CURB STOPS SHALL BE COMPRESSION FITTINGS MUELLER B-25155-N (3/4", 1", 1-1/2", 2"); FORD B-44-444-Q-NL 1"; FORD B-44-686-Q-NL 1-1/2"; FORD B-44-777-Q-NL 2"; A.Y. McDONALD 76104-Q (1" 1-1/2" 2"): OR Q SERIES BRASS
- 10. CURB BOX: MINNEAPOLIS PATTERN, LID MARKED "WATER".
- 11.BUFFALO TYPE BOX: FOR 1" THRU 2", MUELLER H-10300 COPPER SERVICE, AND A.Y. McDONALD,
- 12 MAXIMUM DEFLECTION AT PIPE JOINTS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S
- 13.BEDDING: ALL WATERMAINS SHALL BE BEDDED ON 4" MIN. IDOT CA-7 VIRGIN CRUSHED LIMESTONE BEDDING PER THE CITY OF ST. CHARLES STANDARD DETAIL ON DTS
- 14. GRANULAR BEDDING MATERIAL OR GRANULAR BACKFILL MATERIAL SHALL BE CAREFULLY PLACED TO 12" OVER THE TOP OF THE PIPE BEFORE FINAL BACKFILLING AND COMPACTION.
- 15. A MINIMUM DEPTH OF COVER OF FIVE (5') FEET SHALL BE MAINTAINED OVER THE WATER LINES. THE MAXIMUM COVER SHALL BE TEN (10') FEET. VARIATIONS FROM THESE STANDARDS WILL PEOLIDE ADDROVAL OF ST CHARLES ENGINEERING DIVISION
- 16.PRE-CAST CONCRETE THRUST BLOCKING SHALL BE INSTALLED ON WATERMAINS AT ALL BENDS, OF 22 1/2° AND LARGER.
- 17 IEPA WATERMAIN PROTECTION
- A. HORIZONTAL SEPARATION
 - a. WATERMAINS SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER OR SEWER SERVICES CONNECTION
 - b. WATERMAINS MAY BE LAID CLOSER THAN TEN FEET TO A SEWER LINE WHEN:

 - LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN FEET;
 THE WATERMAIN INVERT IS AT LEAST 18 INCHES ABOVE THE CROWN OF THE SEWER: AND
 - THE WATERMAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
 - c. BOTH THE WATERMAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED WITH BOTH THE WALLEMANN AND DIVAIN OR SEVER SHALL BE CONSTRUCTED WITH PIPE EQUIVALENT TO WATERMAIN STANDARDS OF THE CONSTRUCTION WHEN IT IS IMPOSSIBLE TO MEET (a) OR (b) ABOVE. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.

- B. VERTICAL SEPARATION

 A WAITEMANN SHALL BE LAD 50 THAT ITS WHERE IS 18 INCHES ABOVE THE

 A WAITEMANN SHALL BE LAD 50 THAT ITS WHERE IS 18 INCHES ABOVE THE

 SEWERS, SANTARY SEWERS OR SEWERS SERVICE CONNECTIONS. THE

 VERTICAL SEPARATION SHALL BE MAINTANED FOR THAT PORTION OF THE

 WATEMANN LOCATE WHITH IS THE FET HORCOMPALLY OF ANY SEWER OR

 DIGNA CHOSSEO, A LENGTH OF WAITEMANN POES SHALL BE CENTRED OVER

 HE SEWER TO BE CROSSED WITH JOINTS COLDISTANCE FROM THE SEWER
 - - . IT IS IMPOSSIBLE TO ORTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (A) ABOVE; OR

 THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.
 - c. A VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER SEWER. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATERMAIN.
 - d. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN IS AT LEAST TEN FEET.
- 18.ALL WATERMAINS SHALL BE PRESSURE TESTED, FLUSHED AND DISINFECTED IN ACCORDANCE WITH AWWA C800 & C805, CITY OF ST. CHARLES ENGINEERING DESIGN & INSPECTION MANUAL AND STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS. ALLOWABLE LEAKAGE IS TO BE ONLY THAT WHICH IS PREDETERMINED BY THE STANDARD SPECIFICATIONS FOR SEWER AND WATERMAIN CONSTRUCTION IN ILLINOIS. AT NO TIME IS
- 19. ALL WATERMAIN THAT NEEDS TO BE SHUTDOWN FOR ANY REASON MUST BE COORDINATED WITH THE CITY OF ST. CHARLES WATER DIVISION 48 HOURS IN ADVANCE OF THE WORK

SUBDIVISION NOTES AND ERVE S LOT 8 GENERAL P CORPORATE

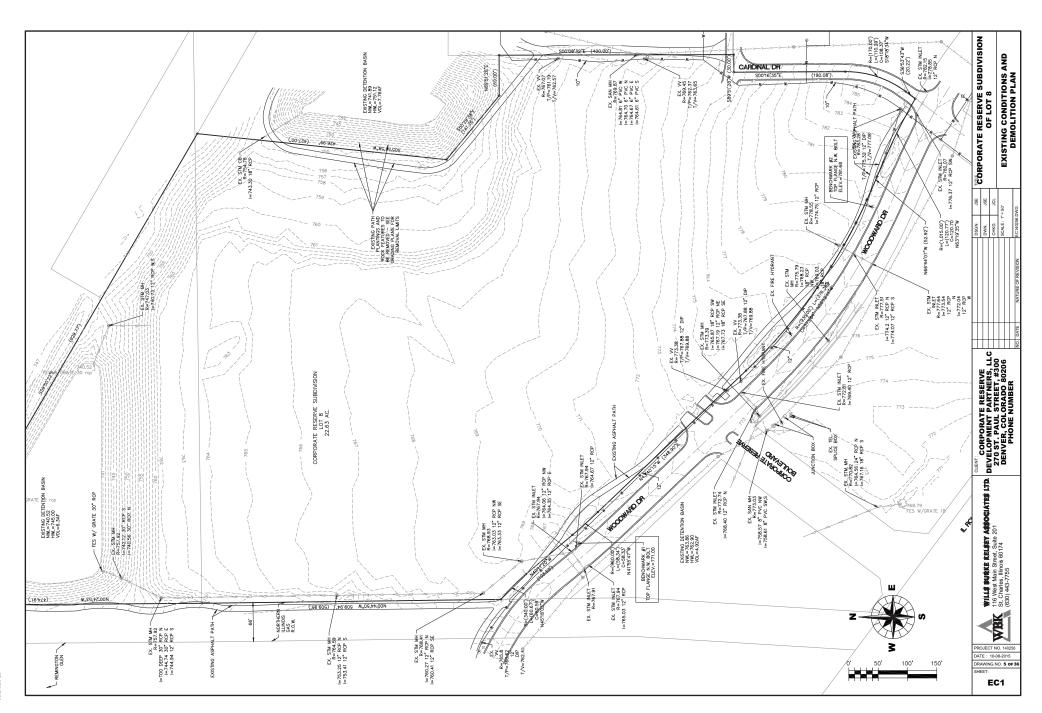
CORPORATE RESERVE
DEVELOPMENT PARTNERS, LLC
270 ST, PAUL STREET, #300
DENVER, COLORDO 8206
PHONE NUMBER

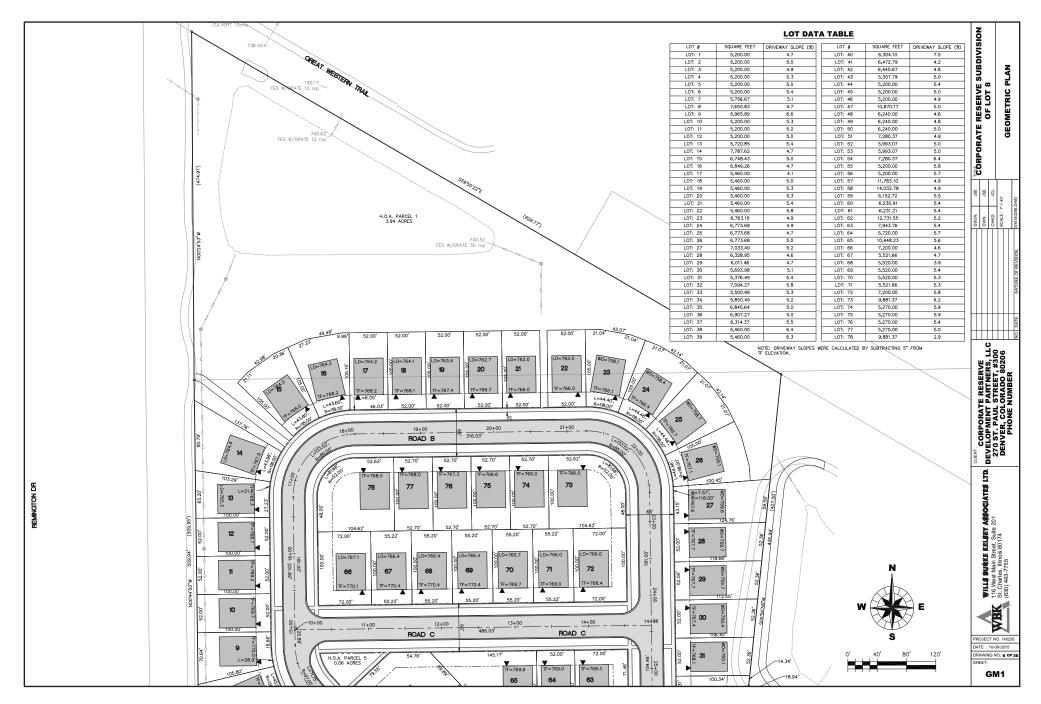
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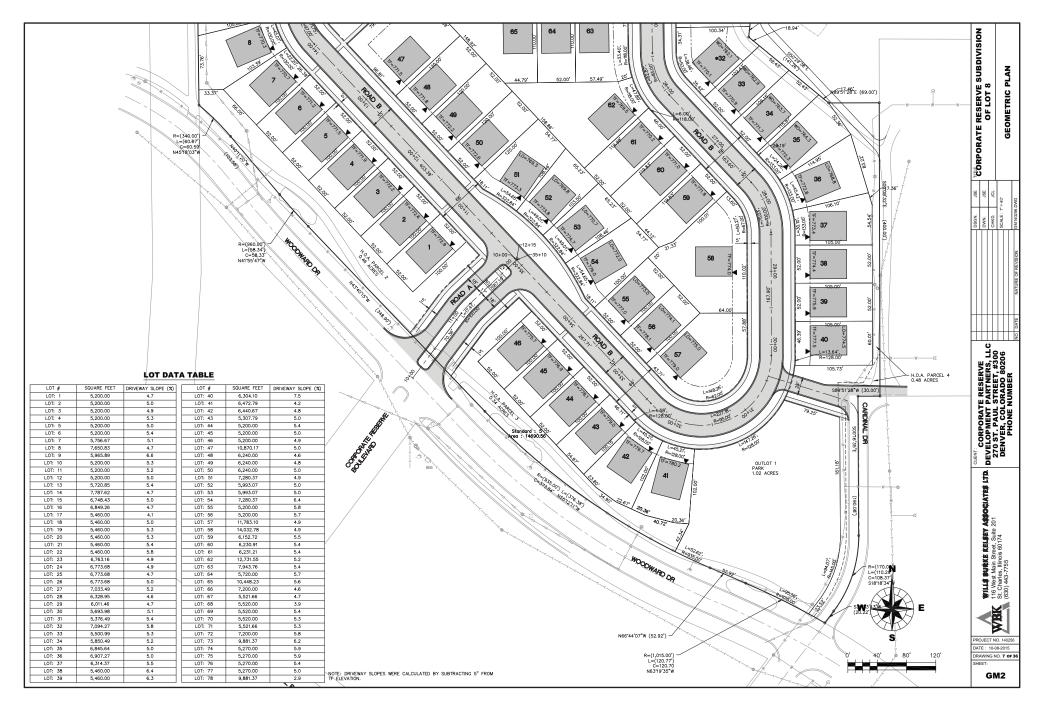


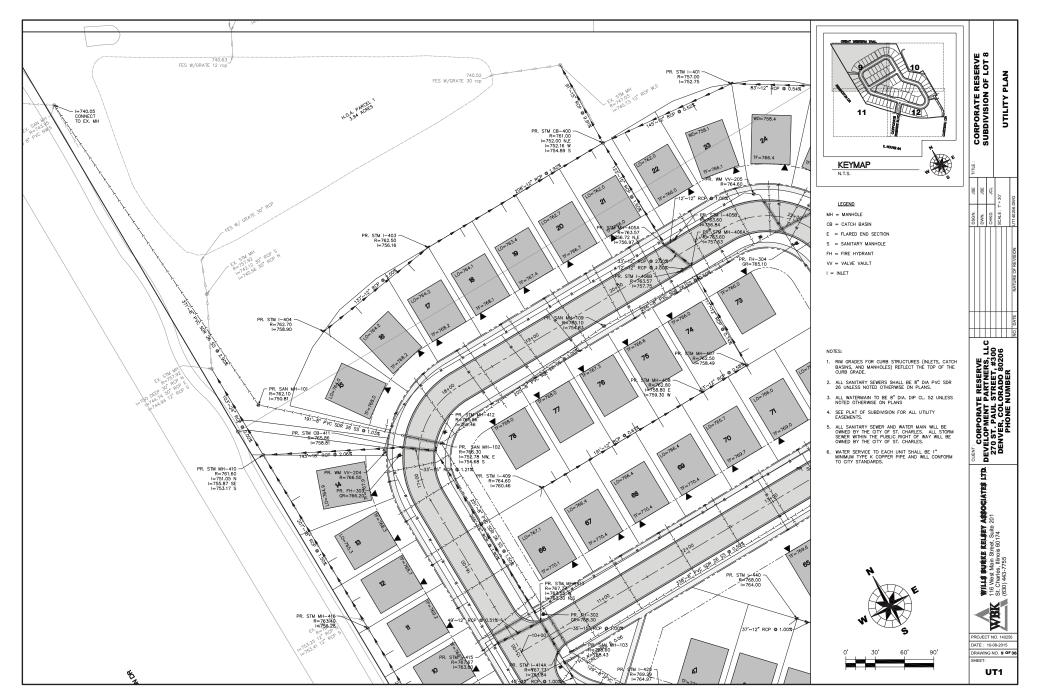
PROJECT NO. 140256 DATE: 10-08-2015 DRAWING NO. 4 OF 3

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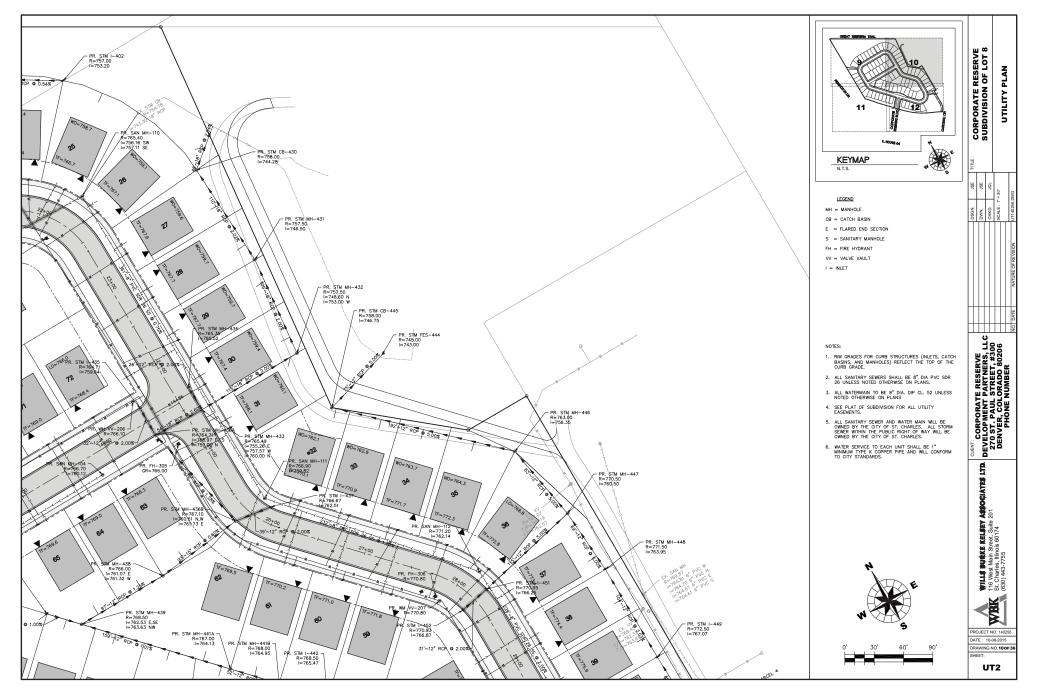




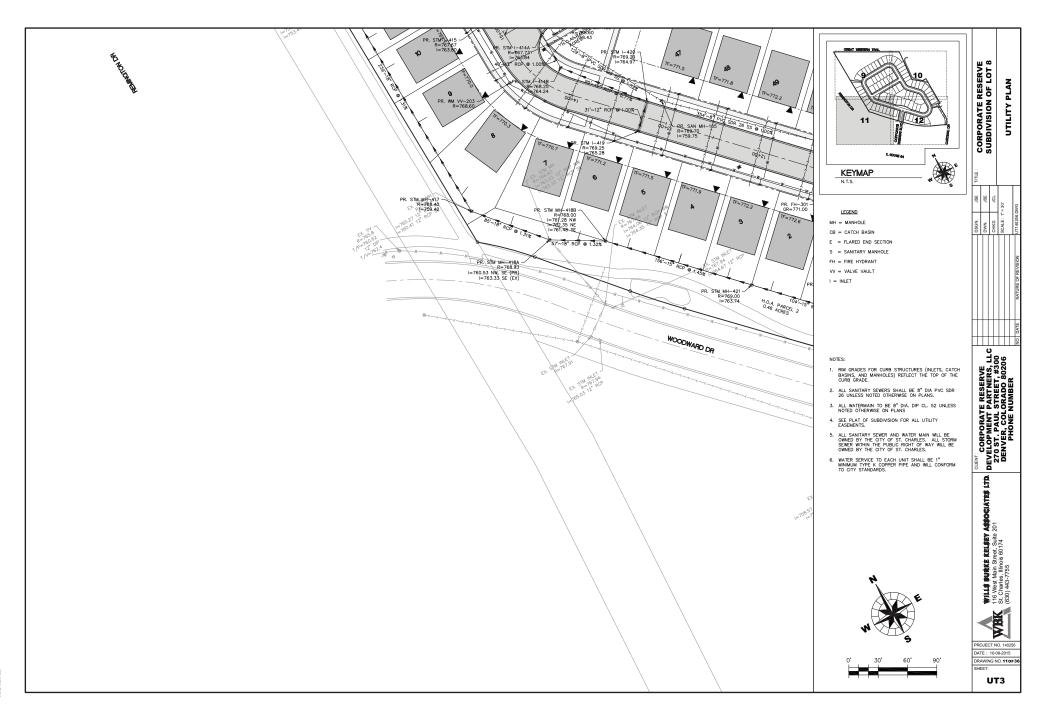




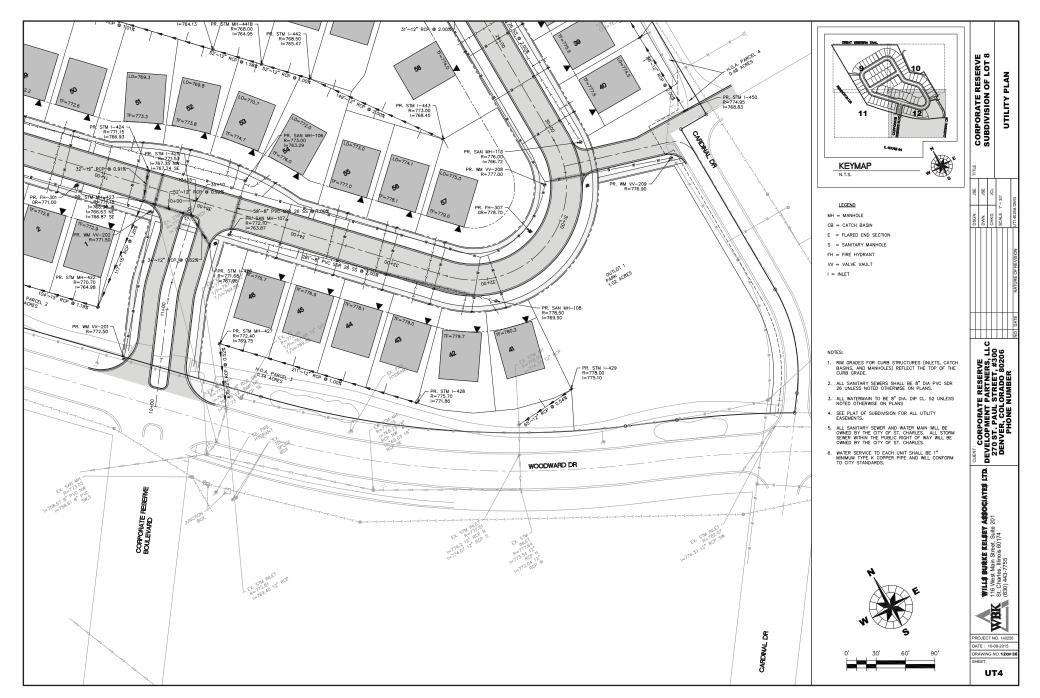
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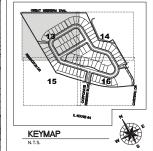


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- ALL UNPAYED AREAS WITHIN THE STREET RIGHT-OF-WAY SHALL BE SEEDED.
- REFER TO DETAIL SHEETS FOR TYPICAL PAVEMENT SECTION AND TYPICAL LOT GRADING.
- 3. MAXIMUM SIDE SLOPES OF DETENTION BASIN ARE 4:1.
- 4. SEE SHEET SP1 FOR SPECIFICATIONS.
- 6. FLOW DIRECTION →
- 7. SPOT GRADE × 741.68

ALL SPOT GRADES REPRESENT FINISHED GRADE, OR BACK OF CURB FINISHED GRADE UNLESS OTHERWISE NOTED.

- 9. FINISHED GRADE SHALL BE 4" BELOW TF UNLESS NOTED.
- 10. RESPREAD 6" TOPSOIL IN ALL DISTURBED GRASS AREAS.
- 11. APPROXIMATE DRIVEWAY LOCATION
- 12. FOR DEMOLITION OF EXISTING STRUCTURES SEE EC1.
- 13. GARAGE FLOOR IS 0.5' BELOW TF UNLESS NOTED.
- 14, ADDITIONAL MEASURES, INCLUDING THE INSTALLATION OF ADDITIONAL RETAINING MILLS, WILL DE TANDE THE PROPERTY IN THE AREAS BETWEEN THE PROPERTY OF THE AREAS BETWEEN THE PROPERTY OF THE AREAS BETWEEN THE PROPERTY OF THE AREAS OF THE AREA OF THE AR





CORPORATE RESERVE SUBDIVISION OF LOT 8

GRADING AND DRAINAGE PLAN

DSGN. DWN. CHKD. SCALE:

CORPORATE RESERVE
DEVELOP MENT PARTNERS, LLC
270 ST. PAUL STRET, #300
DENVER, COLORADO 80206
PHONE NUMBER

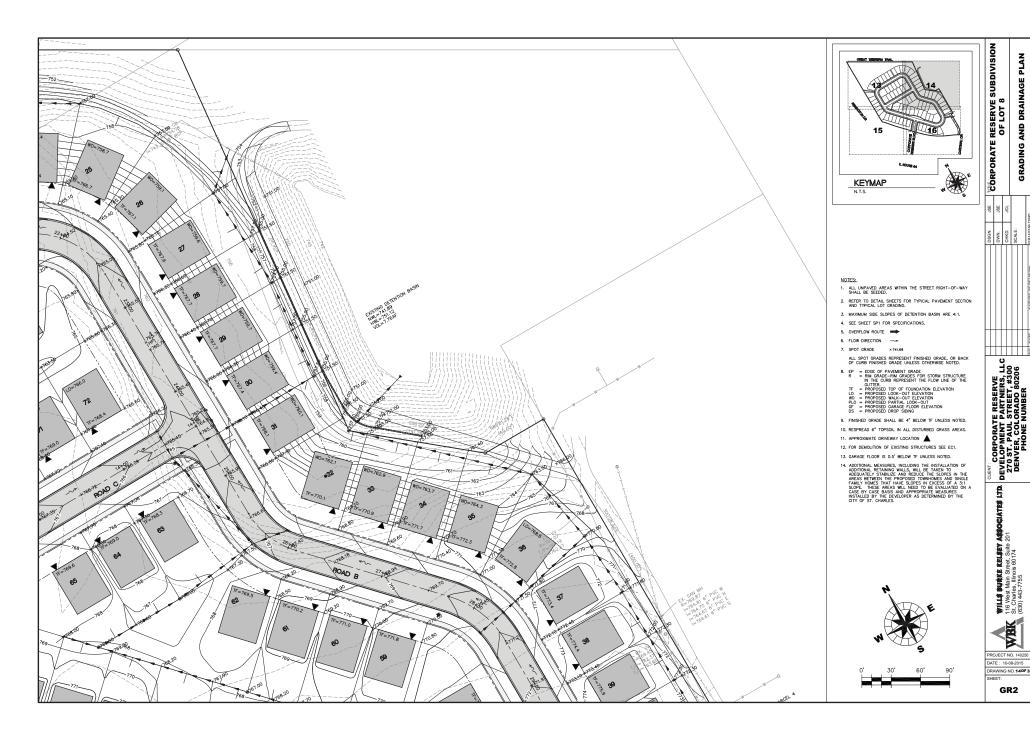
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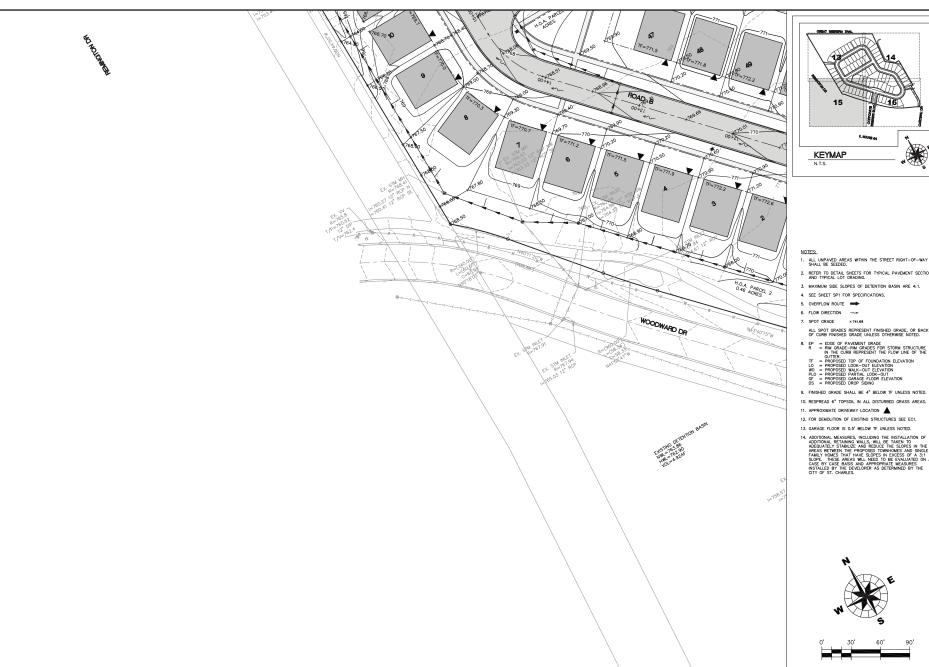
AssociAtes 1 201 WILL WERKE KELFFY 116 West Main Street, Suite St. Charles, Illinois 60174 (630) 443-7755



PROJECT NO. 140256 DATE: 10-08-2015 DRAWING NO. 130F3

GR1







- ALL UNPAYED AREAS WITHIN THE STREET RIGHT-OF-WAY SHALL BE SEEDED.
- REFER TO DETAIL SHEETS FOR TYPICAL PAVEMENT SECTION AND TYPICAL LOT GRADING.
- 3. MAXIMUM SIDE SLOPES OF DETENTION BASIN ARE 4:1.
- 4. SEE SHEET SP1 FOR SPECIFICATIONS.

- 7. SPOT GRADE × 741.68

ALL SPOT GRADES REPRESENT FINISHED GRADE, OR BACK OF CURB FINISHED GRADE UNLESS OTHERWISE NOTED.

- 9. FINISHED GRADE SHALL BE 4" BELOW TF UNLESS NOTED.
- 10. RESPREAD 6" TOPSOIL IN ALL DISTURBED GRASS AREAS.
- 11. APPROXIMATE DRIVEWAY LOCATION
- 12. FOR DEMOLITION OF EXISTING STRUCTURES SEE EC1.
- 13. GARAGE FLOOR IS 0.5' BELOW TF UNLESS NOTED.
- 14, ADDITIONAL MEASURES, INCLUDING THE INSTALLATION OF ADDITIONAL RETAINING WALLS, WILL DE INACIDERS IN THE AREAS BETWEEN THE PROPOSED TOWNHOMES AND SINGLE FAMILY HOMES THAT HAVE SLOPES IN EXCESS OF A STATE OF A STATE OF THE PROPOSED OF T





CÖRPORATE RESERVE SUBDIVISION OF LOT 8 GRADING AND DRAINAGE PLAN

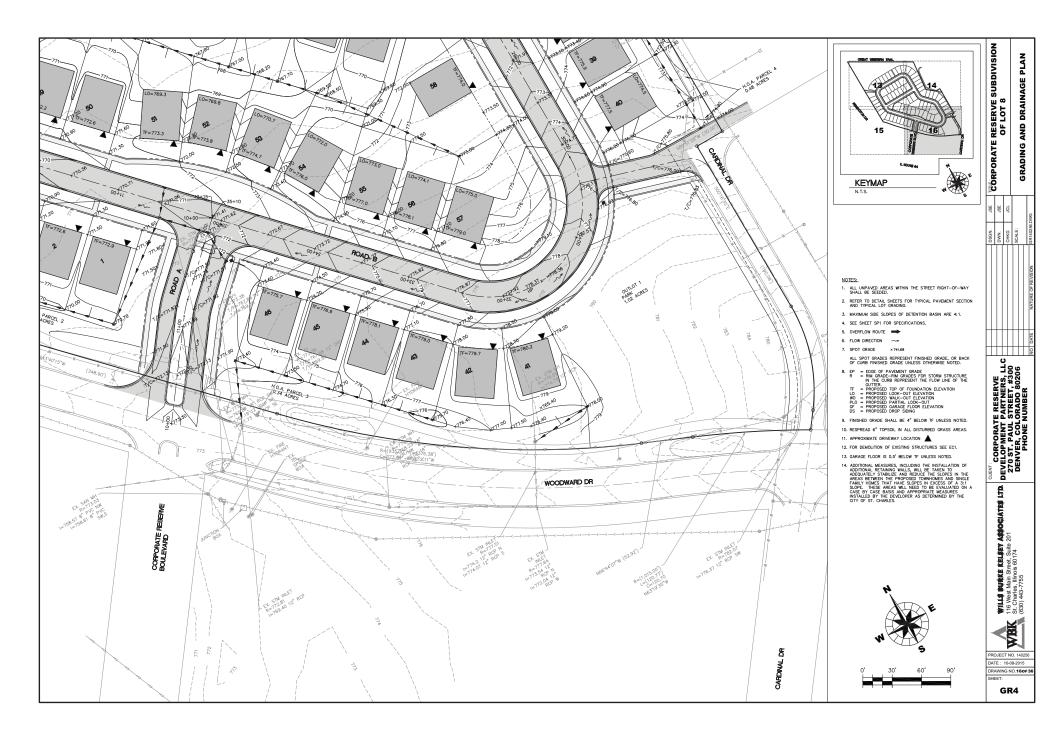
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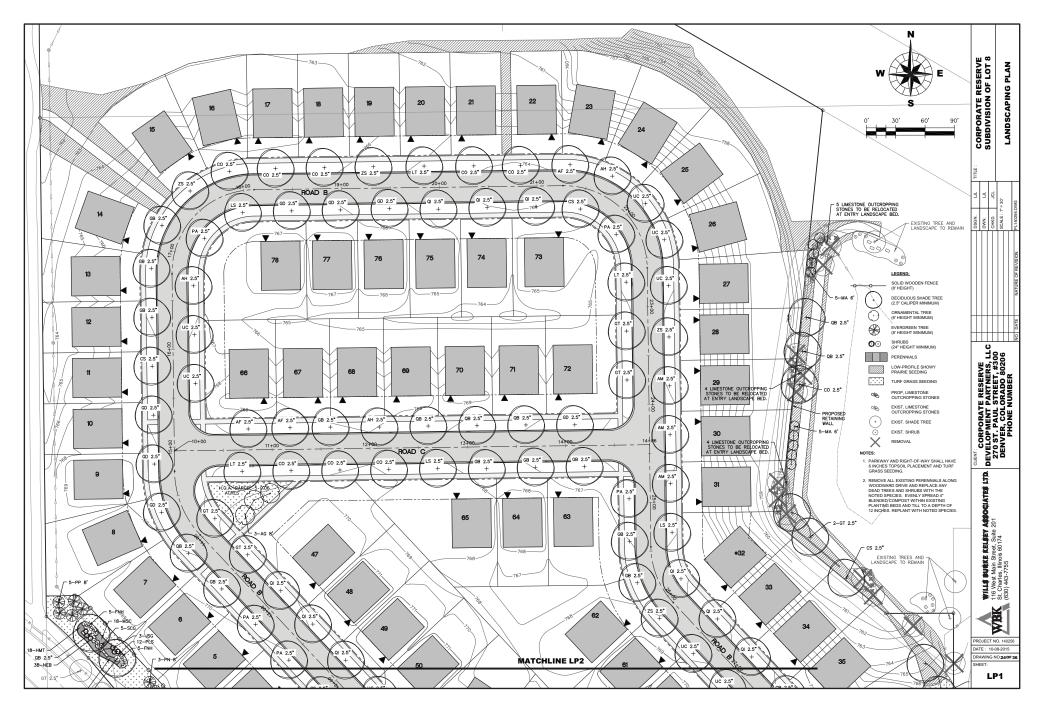
CORPORATE RESERVE
DEVELOP MENT PARTNERS, LLC
270 ST. PAUL STRET, #300
DENVER, COLORADO 80206
PHONE NUMBER

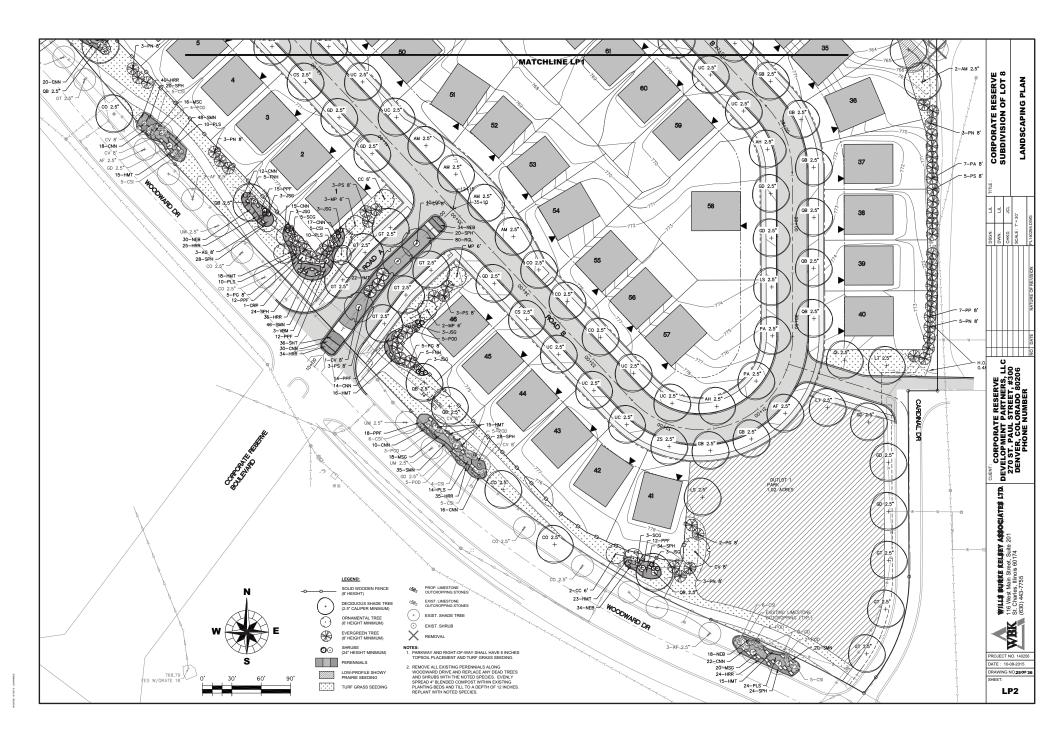
r AssociATES LTD. e 201 WILL WARKE KELGEY A 116 West Main Street, Suite 2 St. Charles, Illinois 60174 (630) 443-7755



PROJECT NO. 140256 DATE: 10-08-2015 DRAWING NO.150F3 GR3



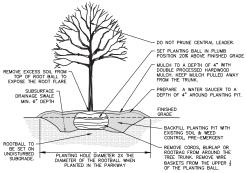




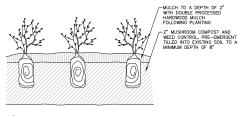
GENERAL NOTES

- STOCK.
- B. ALL PLANTS WILL BE HANDLED AND PLANTED IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICES AND PROFESSIONAL STANDARDS AS PUBLISHED BY THE ILLINOIS LANDSCAPE CONTRACTORS ASSOCIATION IN "A UNIFORM SET OF WORKMANSHIP STANDARDS IN LANDSCAPE SPECIFICATIONS."
- C. SPECIFIED VARIETIES OF ANY SPECIES SHALL BE SPECIMEN TYPE TREES AND SHALL BE FIRST CLASS REPRESENTATIVES OF THEIR NORMAL SPECIES AND VARIETIES. THEY SHALL HAVE WELL DEVELOPED ROOT AND BRANCH SYSTEMS. REASONABLY STRAIGHT STEMS. AND A WELL DEFINED SINGLE LEADER.
- D. TREES SHALL BE NURSERY GROWN WITH A GOOD COMPACT. FULLY DEVELOPED FIBROUS ROOT SYSTEM WHICH HAS BEEN DEVELOPED BY PROPER CULTURAL TREATMENT AND IS SUFFICIENT ENOUGH TO INSURE PLANT
- GROWIN.

 E TREES SHALL BE A MINIMUM TRUNK DUMETER OF THREE INCHES, CALPERED AT FOUR AND ONE-HALF FEET ABOVE THE HIGHEST GROUND LEVEL TREES SHALL BE NORTHERN NURSERY GROWN (HARDINESS ZONE S USDA MAP). TREES SHALL HAVE EBER THRASPLANTEN DATE SHAPE ANTINE NOT LESS THAN FOUR YEARS PRIOR TO PLANTING, ALL TREES SHALL BE TRAGED AND IDENTIFIED AS TO SPECIES, SIZE, AND PLACE OF ORIGIN. TAGS SHALL REAMAIN IF ALCE USIN INSPECTION AND PROFICALLY STIFL PUBLIC WORKS DEFORTMENT IS DONE BOTH AT THE NURSERY AND AT THE FINAL PHANTING SITE. ALL TREES SHALL BE BALLED AND BURLAPPED. ALL TREES SHALL WE STRAGET TRINKS AND GOOD BRECHONICHS DRANCHES SHALL BEEN SHALL BE THE ABOVE THE GROUND LEVEL, AND SHALL BE HIGH OUDLITY REPRESENTATIVES OF THEM SPECIES IN ALL REGARDS, NOLLDING GREENEN, SUMPLE CHAPT RES SHALL BE READED. STOOD IN THE NURSERY IN DELATION TO SINISHED CRADE BACKELL SHALL BE BLACK TORSOIL DRODERLY FERTILIZED WITH ORGANIC FERTILIZER AND SHALL BE THOROUGHLY WATERED WHEN THE HOLE IS TWO-THIRDS FULL OF TOPSOIL. ALL SPOILS SHALL BE REMOVED FROM THE SITE.
- F. AFTER WATERING, THE FILLING SHALL BE COMPLETED AND THE SOIL THOROUGHLY TAPPED. AFTER PLANTING, A FOUR NICH HARDWOOD BARK MULCH OR AN APPROVED EQUAL SHALL BE APPLIED OVER THE DISTURBED GROUN AND A SHALLOW WATERING BASIN PROVIDED ARROUND THE TREE.
- G. ALL DIGGING OF TREES IN THE NURSERY AND ALL PLANTING SHALL BE DONE DURING THE PROPER SEASON.
- H. ALL TREES SHALL BE MANITAINED UNTIL ESTABLISHED ALL TREES NOT IN A VIGOROUS GROWING CONDITION AFTER ONE GROWING SEASON SHALL BE REPLACED AT THE BEGINNING OF THE NEXT SUCCEEDING PLANTING SEASON.
- TREE PITS SHALL BE AT LEAST EIGHTEEN INCHES WIDER THAN THE DIAMETER OF THE BALL, HAVE VERTICAL SIDES AND A DEPTH OF AT LEAST TWENTY-FOUR INCHES BELOW FINISHED GRADE.
- J. ALL TREES SHALL BE WRAPPED WITHIN SEVENTY TWO HOURS AFTER PLANTING. TRUNKS OF THE TREES SHALL BE WRAPPED SPIRALLY FROM TOP TO BOTTOM WITH WATERPROOF CREPE PAPER AND SHALL BE SECURELY TIED WITH HEMP CORD AT TOP AND BOTTOM AND AT TWELVE-INCH INTERVALS ALONG THE TRUNK. THE WRAP SHALL COVER THE TRUNK FROM THE GROUND TO THE FIRST BRANCH AND SHALL BE NEAT AND SNUG



TREE PLANTING DETAIL





TYPICAL PLANT SPACING D=DIMENSION OF PLANT SPACING AS INDICATED ON THE PLANS AND THE SPECIAL PROVISIONS.

PERENNIAL PLANTING DETAIL

		LANDSCAPE P	LANTINGS		
QUANTITY	CODE	SCIENTIFIC NAME	COMMON NAME	TYPE	SIZE
		SHADE TI	REES		
5.0	AF	ACER FREEMANII 'JEFFERSRED'	AUTUMN BLAZE MAPLE	B&B	2.5" CALIPER
10.0	AM	ACER MIAYBEI 'MORTON'	STATE STREET MAPLE	B&B	2.5" CALIPER
5.0	AH	AESCULUS HIPPOCASTANUM	HORSE CHESTNUT	B&B	2.5" CALIPER
5.0	cs	CATALPA SPECIOSA	CATALPA TREE	B&B	2.5" CALIPER
15.0	co	CELTIS OCCIDENTALIS	HACKBERRY	B &B	2.5" CALIPER
15.0	GB	GINKGO BILOBA 'PRINCETON SENTRY'	MAIDENHAIR TREE	B&B	2.5" CALIPER
15.0	GT	GLEDITSIA TRIACANTHOS 'SKYLINE'	HONEYLOCUST	B&B	2.5" CALIPER
15.0	GD	GYMNOCLADUS DIOICUS 'ESPRESSO'	KENTUCKY COFFEE TREE	B&B	2.5" CALIPER
5.0	LS	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEETGUM	B&B	2.5" CALIPER
5.0	LT	LIRIODENDRON TULIPIFERA	TULIPTREE	B&B	2.5" CALIPER
5.0	PA	PLATANUS x ACERIFOLIA 'MORTON EUCLID'	OVATION PLANETREE	B&B	2.5" CALIPER
15.0	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	B&B	2.5" CALIPER
10.0	QI	QUERCUS IMBRICARIA	SHINGLE OAK	B & B	2.5" CALIPER
15.0	UC	ULMUS 'MORTON'	ACCOLADE ELM	B&B	2.5" CALIPER
5.0	ZS	ZELKOVA SERRATA	JAPANESE ZELKOVA	B&B	2.5" CALIPER
		ORNAMENTA	L TREES		
6.0	AG	AMELANCHIER x GRANDIFLORA 'AUTUMN BRILLIANCE	APPLE SERVICEBERRY	B & B	8' HEIGHT
3.0	cc	CERCIS CANADENSIS	EASTERN REDBUD	B&B	6' HEIGHT
4.0	CV	CRATAEGUS VIRIDIS 'WINTER KING'	GREEN HAWTHORN	B&B	8' HEIGHT
10.0	MA	MALUS 'ADIRONDACK'	ADIRONDACK CRABAPPLE	B&B	6' HEIGHT
6.0	MP	MALUS 'PRAIRIE FIRE'	CRABAPPLE	B&B	6' HEIGHT
		EVERGREEN	TREES		
12.0	PG	PICEA GLAUCA 'DENSATA'	BLACK HILLS SPRUCE	B & B	8" HEIGHT
5.0	PP	PICEA PUNGENS	COLORADO GREEN SPRUCE	B&B	8' HEIGHT
9.0	PN	PINUS NIGRA	AUSTRIAN PINE	B&B	8' HEIGHT
9.0	PS	PINUS STROBUS	EASTERN WHITE PINE	B&B	8" HEIGHT
209.0	TOTAL TR	EE PLANTING			
		SHRUE	3S		
5.0	CSI	CORNUS SERICEA 'INSANTI'	REDOSIER DOGWOOD	CONTAINER	24" HEIGHT
1.0	CRP	COTINUS COGGYGRIA 'ROYAL PURPLE'	PURPLE SMOKEBUSH	CONTAINER	36" HEIGHT
20.0	FNH	FORSYTHIA X INTERMEDIA 'NEW HAMPSHIRE GOLD'	NEW HAMPSHIRE GOLD FORSYTHIA	CONTAINER	24" HEIGHT
21.0	JSG	JUNIPERUS X PFITZERIANA 'SEA GREEN'	SEA GREEN JUNIPER	CONTAINER	24" HEIGHT
5.0	POD	PHYSOCARPUS OPULIFOLIUS 'DIABLO'	PURPLELEAF NINEBARK	CONTAINER	24" HEIGHT
80.0	RGL	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	CONTAINER	12" HEIGHT - 36" O.C.
15.0	SCG	SPIRAEA X CINEREA 'GREFSHEIM'	FIRST SNOW SPIREA	CONTAINER	24" HEIGHT
3.0	VBM	VIBURNUM DENTATUM 'BLUE MUFFIN'	BLUE MUFFIN VIBURNUM	CONTAINER	36" HEIGHT
150.0	TOTAL SH	IRUB PLANTING			
		PERENN	IALS		
174.0	CNN	CALAMINTHA NEPETA SPP. NEPETA	LESSER CALAMINTHA	CONTAINER	1 GALLON - 24" O.C.
142.0	HMT	HEMEROCALLIS 'MARY TODD'	MARY TODD	CONTAINER	1 GALLON - 24" O.C.
194.0	HRR	HEMEROCALLIS 'ROSY RETURNS'	ROSY RETURNS	CONTAINER	1 GALLON - 18" O.C.
72.0	MSG	MISCANTHUS SINENSIS 'GRACILLIMUS'	MAIDEN GRASS	CONTAINER	3 GALLON - 36" O.C.
154.0	NEB	NEPETA RACEMOSA 'EARLY BIRD'	EARLY BIRD CATMINT	CONTAINER	1 GALLON - 18" O.C.
83.0	PPF	PANICUM VIRGATUM 'PRAIRIE FIRE'	PRAIRIE FIRE SWITCH GRASS	CONTAINER	3 GALLON - 36" O.C.

RUSSIAN SAGE

PRAIRIE DROPSEED

MAY NIGHT SALVIA

CONTAINER 3 GALLON - 36" O.C.

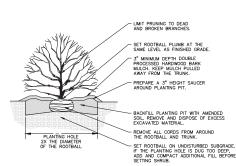
CONTAINER 1 GALLON - 24" O.C.

CONTAINER 1 GALLON - 18" O.C.

TURF GRASS SEEDING		
RATE (LBS/ACRE)	COMMON NAME	
60.0	PARK KENTUCKY BLUEGRASS	
60.0	DAWSON CREEPING RED FESCUE	
60.0	"FULTS" PUCCINELLIA DISTANS	
20.0	PENNFINE PERENNIAL RYEGRASS	
200.0	TOTAL RATE PER ACRE (LBS)	

CITY OF ST. CHARLES - LAN ORDINANCE CALCULATI	
DESCRIPTION	REQUIREMENT
TOTAL PUBLIC SITE AREA	481,903.4 SQFT
TOTAL IMPERVIOUS AREA	164,917.5 SQFT
PERCENTAGE OF IMPERVIOUS AREA	34.2%
TOTAL LANDSCAPE AREA	316,985.9 SQFT
PERCENTAGE OF LANDSCAPE AREA	65.8%
PARKWAY LANDSCAPE AREA	18,789.8 SQFT

TURF GRASS SEEDING				
RATE (LBS/ACRE)	SCIENTIFIC NAME	COMMON NAME		
1.000	AGROPYRON TRACHYCAULUM	SLENDER WHEAT GRASS		
3.000	ANDROPOGON SCOPARIUS	LITTLE BLUE STEM		
1.000	BOUTELOUA CURTIPENDULA	SIDE OATS GRAMA		
1.000	ELYMUS CANADENSIS	CANADA WILD RYE		
1.000	ELYMUS VIRGINICUS	VIRGINIA WILD RYE		
0.125	JUNCUS TENUIS	SLENDER PATH RUSH		
0.125	ASCLEPIAS TUBEROSA	BUTTERFLY WEED		
0.125	ASTER LAEVIS	SMOOTH BLUE ASTER		
0.250	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER		
0.250	CASSIA FASCICULATA*	PARTRIDGE PEA		
1.000	COREOPSIS LANCEOLATA	SAND COREOPSIS		
0.625	DESMANTHUS ILLINOENSIS	ILLINOIS BUNGLE FLOWER		
0.625	ECHINACEA PURPUREA	PURPLE CONEFLOWER		
0.250	HELIOPSIS HELIANTHOIDES	OX-EYE SUNFLOWER		
0.250	LIATRIS ASPERA	BUTTON BLAZING STAR		
0.125	LIATRIS SPICATA	SPIKED GAYFEATHER		
0.250	LUPINUS PERENNIS OCCIDENTALIS	LUPINE		
0.063	MONARDA FISTULOSA	WILD BERGAMOT		
0.188	PENSTEMON DIGITALIS	FOXGLOVE BEARDTOUNGE		
0.500	PETALOSTEMUM PURPUREUM	PURPLE PRAIRIE CLOVER		
0.063	PYCANANTHEMUM VIRGINIANUM	COMMON MOUNTAIN MINT		
0.625	RATIBIDA PINNATA	YELLOW CONEFLOWER		
0.750	RUDBECKIA HIRTA	BLACK-EYED SUSAN		
0.125	SOLIDAGO RIGIDA	STIFF GOLDENROD		
0.063	TRADESCANTIA OHIENSIS	OHIO SPIDERWORT		
0.125	VERBENA STRICTA	HOARY VERVAIN		
13.502	TOTAL RATE PER ACRE (LBS)	* INNOCULANT REQUIRED		



80.0 PLS PEROVSKIA ATRIPLICIFOLIA

1150.0 TOTAL PERENNIAL PLANTING

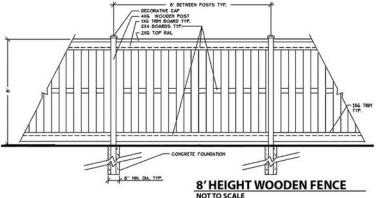
102.0

149.0

SPH SPOROBOLUS HETEROLEPIS

SMN SALVIA NEMEROSA 'MAY NIGHT





CORPORATE RESERVE
DEVELOPMENT PARTNERS, LLC
270 ST, PAUL STREET, #300
DENVER, COLORDO 8206
PHONE NUMBER MINTER WILLS BURKE III 116 West Main Stree St. Charles, Illinois ((630) 443-7755 PROJECT NO. 140256 DATE: 10-08-2015 DRAWING NO.260F3 LP3

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CORPORATE RESERVE SUBDIVISION OF LOT 8

LANDSCAPING

Traffic Impact Study Corporate Reserve Residential Development St Charles, Illinois



Prepared by



August 7, 2015

1.

Introduction

This report summarizes the methodologies, results and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Corporate Reserve residential development to be located north of Woodward Drive opposite Corporate Reserve Boulevard in St. Charles, Illinois. The site is undeveloped land and is bounded by undeveloped land/Great Western Trail to the north, Cardinal Drive with commercial/residential to the east, Woodward Drive to the south, and residential homes/Great Western Trail spur to the west.

The plans call for developing the site to provide approximately 78 single-family homes. Access to the development will primarily be served by a main/full access off Woodward Drive that will align with Corporate Reserve Boulevard, becoming the fourth/north leg of the existing T-intersection. A secondary access will be provided via Cardinal Drive.

The following sections of this report present the following.

- Existing roadway conditions including traffic volumes for the weekday morning and weekday evening peak hours
- A detailed description of the proposed development
- Vehicle trip generation for the proposed development
- Directional distribution of development-generated traffic
- Regional development growth in traffic for Year 2021 conditions
- Future transportation conditions including access to and from the development



Traffic capacity analyses were conducted for the weekday morning and weekday evening peak hours for the following two conditions.

- 1. Existing Condition Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
- 2. Future Condition This condition projects traffic to Year 2021, which includes buildout of the development plus five years. Included in the future condition are the existing traffic volumes increased by a regional growth percentage of six percent (or one percent per year), and the traffic estimated to be generated by the proposed subject development.

The purpose of this study was to examine existing traffic conditions, assess the impact that the proposed development would have on traffic conditions in the area and determine what geometric and traffic control improvements are necessary to accommodate the projected conditions.



2.

Existing Conditions

Transportation conditions in the vicinity of the site were inventoried to obtain a basis for projecting future conditions. Three components of existing conditions were considered:

- 1. The geographic location of the site
- 2. The characteristics of the adjacent roadway system, including lane geometry and intersection traffic controls
- 3. The weekday peak-hour traffic volumes at intersections in the vicinity of the proposed development site

Site Location

As noted previously, the proposed single-family home residential development will be located north of Woodward Drive opposite Corporate Reserve Boulevard in St. Charles, Illinois. The site is undeveloped land and is bounded by undeveloped land/Great Western Trail to the north, Cardinal Drive with commercial/residential to the east, Woodward Drive to the south, and residential homes/Great Western Trail spur to the west.

Figure 1 shows the site location with respect to the surrounding roadway system.

Figure 2 shows the concept site plan.





Figure 1 SITE LOCATION



Figure 2 CONCEPT SITE PLAN

Existing Roadway System Characteristics

The characteristics of the existing roadways that surround the proposed development are illustrated in **Figure 3** and described below.

Woodward Drive is an east-west collector roadway that is under the jurisdiction of the City of St. Charles and provides one lane in each direction. Sidewalk is provided on the south side of the roadway and a pedestrian/bicycle trail is located on the north side of the roadway. The posted speed limit is 30 mph in the vicinity of the site, and on-street parking is prohibited. Woodward Drive is under stop sign control at its western terminus with Peck Road.

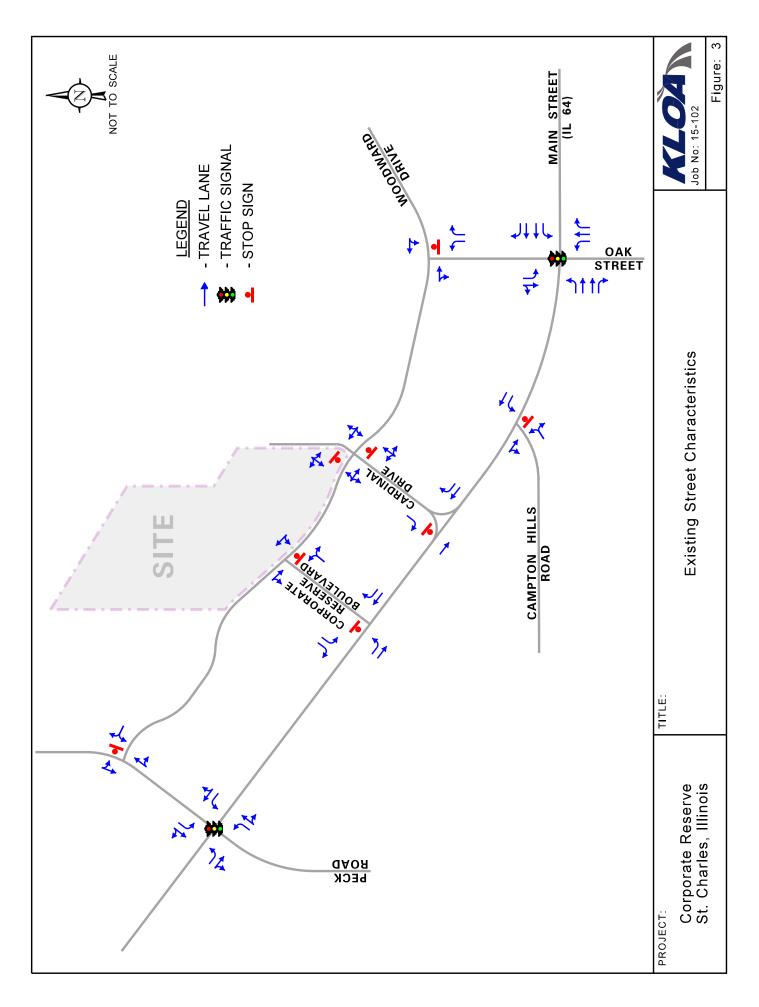
Corporate Reserve Boulevard extends from Main Street (IL Route 64) to Woodward Drive, providing one lane in each direction, separated by a landscaped median. The pavement width in each direction is approximately 22 feet wide; therefore, Corporate Reserve Boulevard could be striped to provide two, 11-foot lanes in each direction. At its southbound approach to Main Street, a separate left-turn lane and a right-turn lane are provided. Corporate Reserve Boulevard is under stop sign control at its northern terminus with Woodward Drive and its southern terminus with Main Street and parking is prohibited on both sides of the roadway. Corporate Reserve Boulevard is under the jurisdiction of the City of St. Charles.

Oak Street is a two-way collector roadway that is signalized at its intersection with Main Street. Oak Street is under stop sign control at its T-intersection with Woodward Drive, north of Main Street. Parking is prohibited on both sides of the roadway. Oak Street is under the jurisdiction of the City of St. Charles.

Cardinal Drive extends from Main Street to Woodward Drive, providing one lane in each direction. At its intersection with Main Street, Cardinal Drive is restricted to right-in/right-out only turning movements. Cardinal Drive is under stop sign control at its northern terminus with Woodward Drive and its southern terminus with Main Street and parking is prohibited on both sides of the roadway. Cardinal Drive is under the jurisdiction of the City of St. Charles. North of Woodward Drive, Cardinal Drive provides access to a commercial development and is a private roadway.

Peck Road is a two-way minor arterial roadway that provides one lane in each direction and is signalized at its intersection with Main Street. The posted speed limit is 35 mph, and parking is prohibited on both sides of the roadway. A pedestrian/bicycle trail is located on the west side of the roadway. Peck Road is under the jurisdiction of the City of St. Charles. According to the Illinois Department of Transportation's (IDOT) website, Peck Road carries an average daily traffic (ADT) volume of 4,350 vehicles.





Main Street (IL 64) is a two-way major arterial and is under the jurisdiction of IDOT. Parking is prohibited on both sides of the roadway, and the posted speed limit is 40 mph. At its signalized intersection with Peck Road to the east, Main Street widens to provide two through lanes in each direction. According to IDOT's website, Main Street carries an ADT volume of 22,400 vehicles in the vicinity of the site.

Existing Traffic Volumes

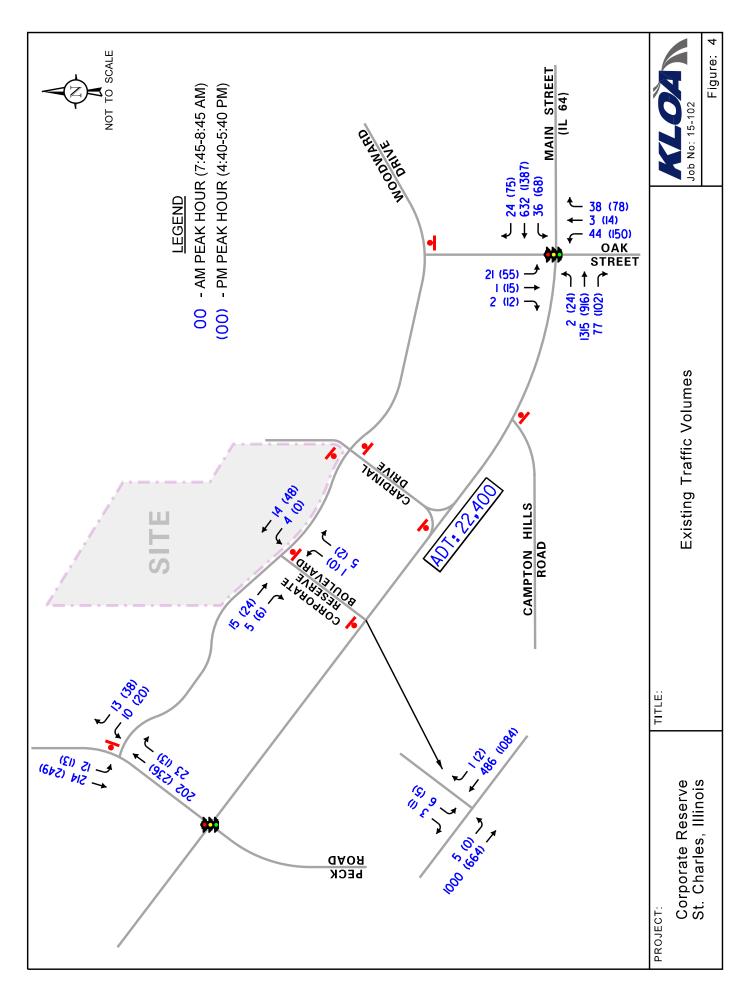
Manual turning movement traffic counts were conducted on Wednesday, May 6, 2015 during the morning (7:00 to 9:00 A.M.) and the evening (4:30 to 6:30 P.M.) at the following four intersections.

- Oak Street and Main Street
- Corporate Reserve Blvd and Main Street
- Corporate Reserve Blvd and Woodward Drive
- Peck Road and Woodward Drive

From the manual turning movement count data, it was determined that the weekday morning peak hour generally occurs between 7:45 and 8:45 A.M. and the weekday evening peak hour generally occurs between 4:40 and 5:40 P.M. These two respective peak hours will be used for the traffic capacity analyses and are presented later in this report. Pedestrian and bicycle activity was observed and was found to be very low at the study intersections.

The existing peak hour vehicle traffic volumes are shown in **Figure 4**.





3. Traffic Characteristics of the Proposed Development

To evaluate the impact of the subject development on the area roadway system, it was necessary to quantify the number of vehicle trips the overall site will generate during the weekday morning and weekday evening peak hours and then determine the directions from which this traffic will approach and depart the site.

Proposed Site and Development Plan

The plans call for developing the site to provide approximately 78 single-family homes. An approximate 1.0-acre park is proposed to be located in the southeast corner of the development.

Development Access

Access to the development will primarily be served by a main/full access off Woodward Drive. A secondary access will be provided via Cardinal Drive. The access drives are proposed as follows.

1. Main Access and Woodward Drive. This proposed full access roadway will align with Corporate Reserve Boulevard at its intersection with Woodward Drive becoming the fourth/north leg to this existing T-intersection. The main access will be an extension of Corporate Reserve Boulevard. The boulevard-type extension will provide one lane inbound and one lane outbound under stop sign control. No improvements are proposed or needed on Woodward Drive to provide this proposed access. A curb cut/apron already exists to allow this proposed extension of Corporate Reserve Boulevard north of Woodward Drive. The existing pedestrian/bicycle trail along Woodward Avenue will be located behind the outbound stop sign so that exiting vehicles will come to a complete stop prior to crossing the trail.



2. Access and Cardinal Drive. This access is proposed from Cardinal Drive and is considered a minor/secondary access to the development.

Pedestrian Accessibility

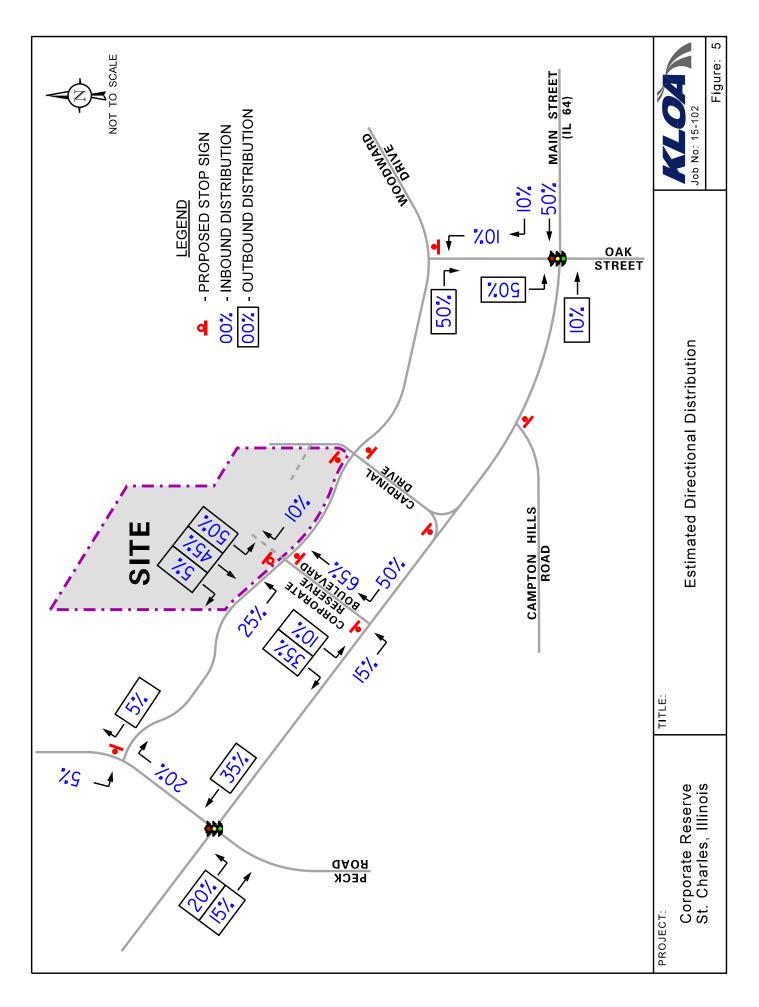
The development proposes continuous sidewalk on both sides of the roadways within the development. As noted, the Great Western Trail is located north of this development. In conjunction with the proposed development, trail connections will be provided that will connect the proposed residential development to the surrounding existing trail system. Further, the existing north-south trail that runs along the west side of the development will be extended south from Woodward Drive to Main Street (IL 64).

These improvements will provide more flexibility and connectivity to the existing trails.

Directional Distribution of Site Traffic

The directional distribution of how traffic will approach and depart the site was estimated based on a combination of existing travel patterns and the location of signalized intersections and the existing roadway characteristics surrounding the site. The estimated directional distribution for the proposed development was established and is illustrated in **Figure 5**.





Development Traffic Generation

The estimates of traffic to be generated by the development are based upon the proposed land use type and size. The volume of traffic generated was estimated using data published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition.

Table 1 tabulates the total trips anticipated from this proposed development for the weekday morning and weekday evening peak hours, in addition to weekday daily (two-way vehicle trips) upon total buildout of the development.

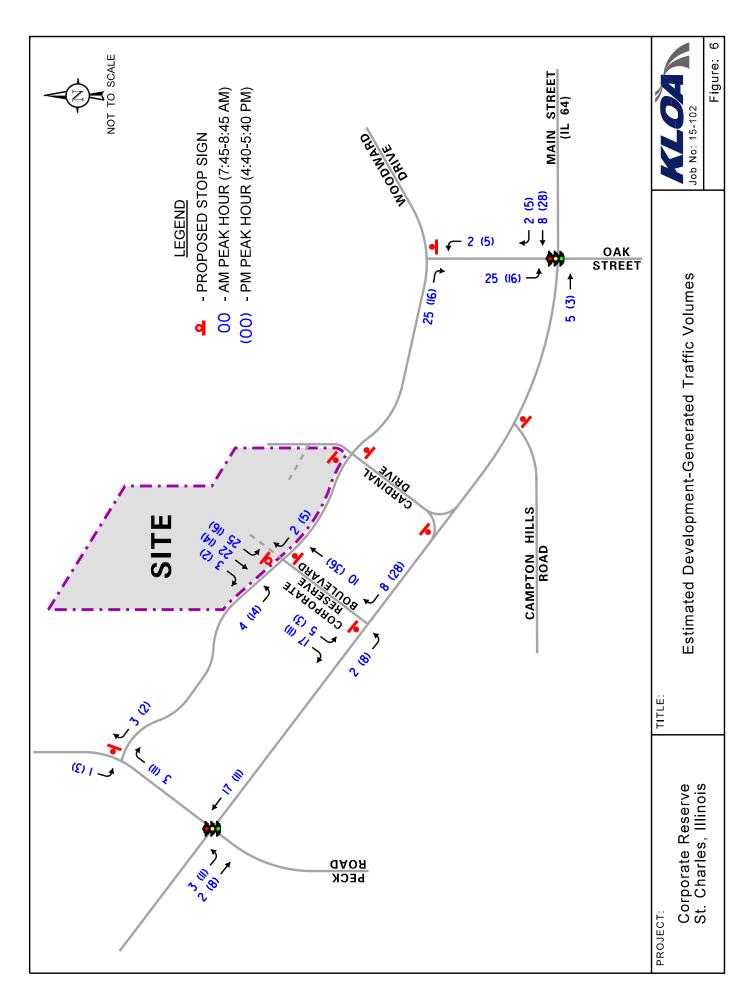
Table 1 ESTIMATED DEVELOPMENT-GENERATED TRAFFIC VOLUMES

ITE		Weekday A.M. Peak Hour			Weekday P.M. Peak Hour				
Land- Use Code	Type/Size	In	Out	Total		In	Out	Total	Daily Two-Way
210	Single-Family Homes – 78 units	16	50	66	_	55	32	87	865

Development Traffic Assignment

The peak hour traffic volumes projected to be generated by the proposed development (refer to Table 1) were assigned to the area roadways based on the directional distribution analysis (Figure 5) and the proposed access and are shown in **Figure 6.** As noted, the proposed access on Cardinal Drive is considered a secondary/minor access roadway to the proposed development. As such, all development-generated traffic was assigned to the main access in alignment with Corporate Reserve Boulevard to provide for a conservative analysis.





4.

Total Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes increased by a regional growth factor and the traffic estimated to be generated by the proposed subject development.

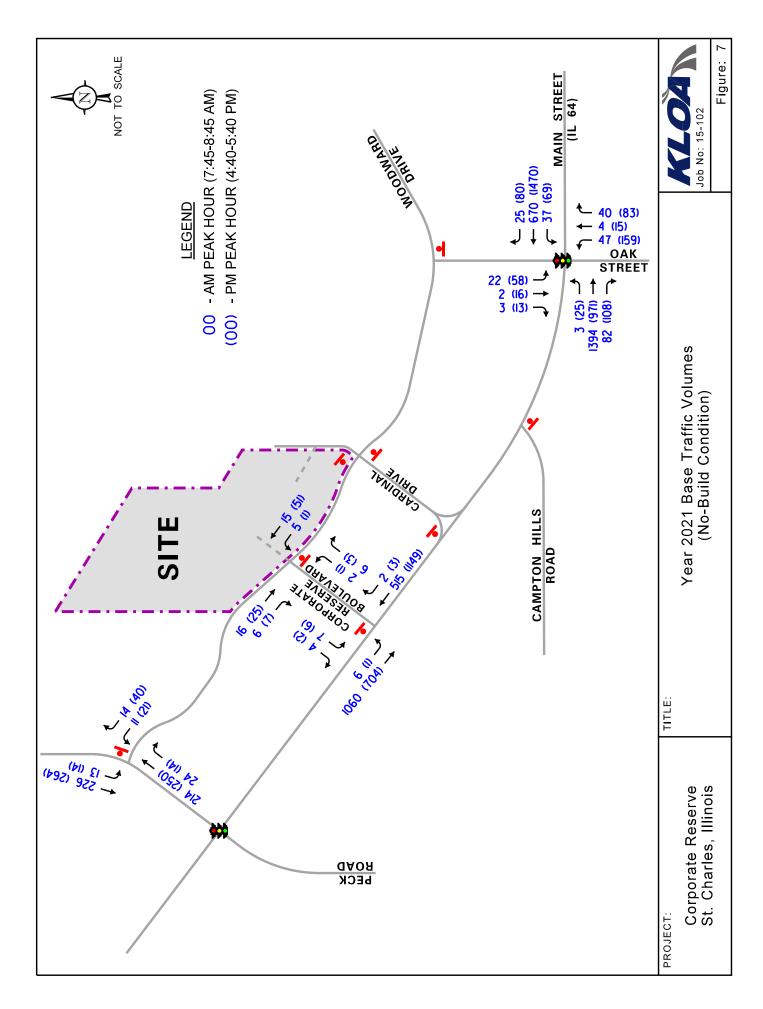
Year 2021 No-Build Traffic Volumes

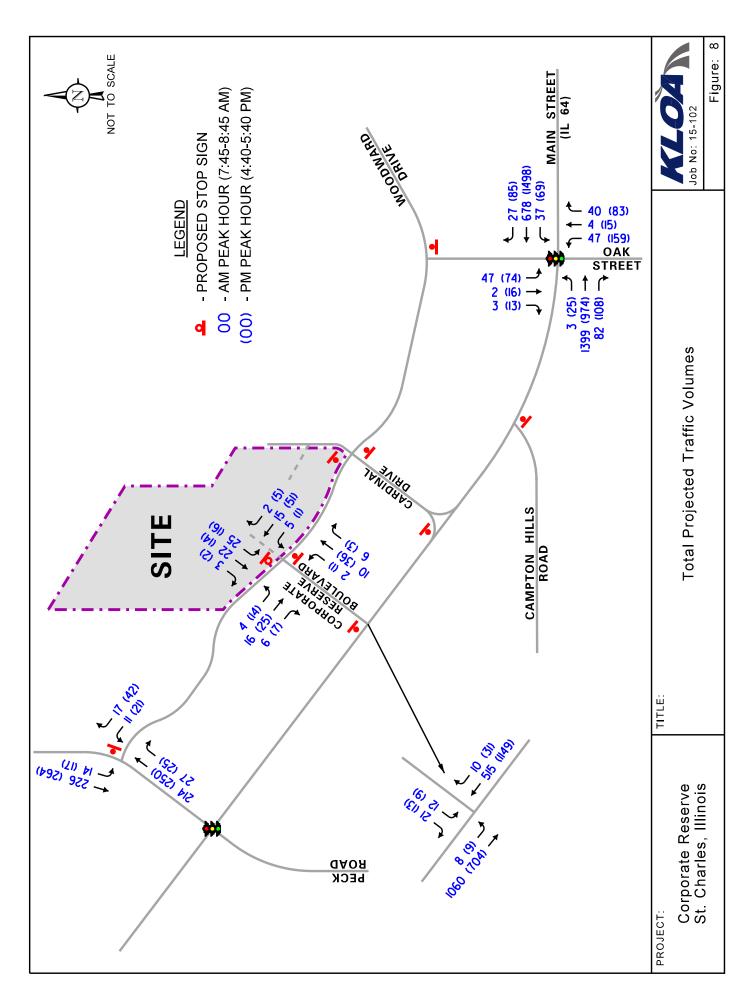
Based on the Chicago Metropolitan Agency for Planning (CMAP) year 2040 population and employment projections, the existing traffic volumes were increased by approximately one percent per year for six years (construction year plus five), to project the year 2021 conditions. **Figure 7** shows the Year 2021 base (no-build) traffic volumes.

Total Projected Traffic Volumes

Total projected traffic volumes include the Year 2021 base traffic volumes (Figure 7) and the estimated development-generated traffic volumes (Figure 6). **Figure 8** shows the total projected traffic volumes for Year 2021 conditions.







5. Traffic Analysis and Recommendations

Capacity analyses were performed for the key intersections included in the study area to determine the ability of the existing roadway system to accommodate existing and future traffic demands. Analyses were performed for the weekday morning and weekday evening peak hours for both existing and Year 2021 total traffic conditions.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 2010 and using HCS 2010 analysis software.

The analysis for the existing traffic-signal controlled intersection was accomplished using field observed signal timings and cycle lengths to determine the average overall vehicle delay, volume-to-capacity ratios, and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection.

Summaries of the traffic analysis results showing the LOS and overall intersection delay (measured in seconds) for both existing (Year 2015) and future (Year 2021) conditions are presented in **Table 2** and **Table 3**, respectively. A discussion of the intersections follows.



Table 2 CAPACITY ANALYSES RESULTS—EXISTING CONDITIONS

Intersection	Weekday A.M. Peak Hour LOS/Delay	Weekday P.M. Peak Hour LOS/Delay
Intersection	LOS/Delay	LOS/Delay
Oak St and Main St (IL 64) (signalized)	B – 16.9	C – 25.8
Corporate Reserve Blvd and Main St (stop sign)	EBL: A – 8.4 SBL: C – 20.1 SBR: B – 11.4	EBL: B – 10.9 SBL: C – 22.9 SBR: C – 19.9
Corporate Reserve Blvd and Woodward Dr (stop sign)	WBA: A – 7.3 NBA: A – 8.5	WBA: A – 7.3 NBA: A – 8.4
Peck Rd and Woodward Dr (stop sign)	WBA: B – 10.8 SBA/L: A – 7.7	WBA: B – 11.5 SBA/L: A – 7.8

LOS = Level of Service

Delay is measured in seconds.

For signalized intersections, the LOS/Delay represents the intersection as a whole.

EBL = Eastbound left-turn movement

SBL = Southbound left-turn movement

SBR = Southbound right-turn movement

 $NBA = Northbound \ approach$

WBA = Westbound approach

SBA/L = Southbound approach/left-turn movement delay (shared through/left-turn lane)



Table 3 CAPACITY ANALYSES RESULTS—FUTURE CONDITIONS

Intersection	Weekday A.M. Peak Hour LOS/Delay	Weekday P.M. Peak Hour LOS/Delay
Oak St and Main St (IL 64) (signalized)	B – 18.2	C – 27.2
Corporate Reserve Blvd and Main St (stop sign)	EBL: A – 8.5 SBL: C – 21.7 SBR: B – 11.9	EBL: B – 11.5 SBL: D – 25.2 SBR: C – 22.3
Corporate Reserve Blvd and Woodward Dr (stop sign)	EBA: A – 7.2 WBA: A – 7.3 NBA: A – 9.1 SBA: A – 9.4	EBA: A – 7.4 WBA: A – 7.3 NBA: B – 10.0 SBA: A – 9.9
Peck Rd and Woodward Dr (stop sign)	WBA: B – 10.9 SBA: A – 7.8	WBA: B – 10.9 SBA: A – 7.8

LOS = Level of Service

Delay is measured in seconds.

For signalized intersections, the LOS/Delay represents the intersection as a whole.

EBL = Eastbound left-turn movement

SBL = Southbound left-turn movement

SBR = Southbound right-turn movement

WBL = Westbound left-turn movement

NBA = Northbound approach

WBA = Westbound approach

EBA = Eastbound approach

SBA = Southbound approach



Discussion and Recommendations

The following summarizes traffic capacity analysis for the study intersections for both existing and projected future conditions.

Oak Street and Main Street (IL 64)

- The analyses were performed based on field observed cycle lengths. A limited amount of greentime is given to Oak Street, with a majority given to Main Street.
- The intersection will continue to operate at an above acceptable level of service for both the weekday morning and weekday evening peak hours for Year 2021 conditions. As such, the proposed development will have a limited impact on the operations at this signalized intersection during peak hour periods.
- Based on the traffic capacity and queuing analyses, no traffic signal or roadway improvements are needed or recommended at this intersection in conjunction with the proposed development.

Corporate Reserve Boulevard and Main Street

- The intersection will continue to operate at acceptable levels of service for both the weekday morning and weekday evening peak hours for Year 2021 conditions.
- Exiting vehicles from the development desiring to travel eastbound on Main Street will most likely use Woodward Drive to access the traffic signal on Oak Street.
- The proposed development will have a limited impact on the operations at this intersection during peak hour periods.
- A cursory review of the projected Year 2021 peak hour traffic volumes show that a traffic signal is not warranted at this intersection.



Corporate Reserve Boulevard/Main Access and Woodward Drive

- The proposed main/full access will align with the existing Corporate Reserve Boulevard becoming the fourth/north leg to this existing T-intersection.
- The main/full access will provide one inbound lane and one lane outbound under stop sign control.
- No improvements are planned or recommended to the existing Corporate Reserve Boulevard to the south or to Woodward Drive.
- The capacity analyses show that this intersection will continue to operate at acceptable levels of service with the addition of the proposed main/full access serving the proposed development.
- The existing pedestrian/bicycle trail along Woodward Avenue will be located behind the outbound stop sign so that exiting vehicles will come to a complete stop prior to crossing the trail.

Peck Road and Woodward Drive

- The capacity analyses show that this intersection will continue to operate at acceptable levels of service under future projected traffic conditions.
- No improvements are proposed or recommended at this intersection in conjunction with the proposed development.

Access and Cardinal Drive

This proposed access on Cardinal Drive will provide one lane in each direction and is considered a secondary/minor access to the development. No traffic control or roadway improvements are proposed or recommended on Cardinal Drive to accommodate this access.



6. Conclusion

The Corporate Reserve single-family home residential development is proposed to be located north of Woodward Drive opposite Corporate Reserve Boulevard in St. Charles, Illinois. The plans call for approximately 78 single-family homes. Access to the development will primarily be off of Woodward Drive in alignment with Corporate Reserve Boulevard, with a secondary access off of Cardinal Drive.

Traffic capacity analyses were conducted for both existing (Year 2015) and future (Year 2021) conditions for the weekday morning and weekday evening peak hour periods. The projected traffic volumes include the existing peak hour traffic volumes increased by a regional growth factor and the traffic estimated to be generated by the proposed residential development. No traffic control or geometric improvements are needed or recommended at the existing signalized intersection of Oak Street and Main Street (IL 64), Corporate Reserve Boulevard and Main Street, or Peck Road and Woodward Drive in conjunction with this proposed development.

The intersection of Corporate Reserve Boulevard and Woodward Drive will continue to operate at acceptable levels of service and delay with the addition of the fourth/north leg to the intersection, which will serve as the main access to the proposed development. The access will provide a boulevard style design with one lane inbound and one lane outbound separated by a landscaped median. The outbound lane will be under stop sign control. The stop sign will be located in front of the existing pedestrian/bicycle trail that traverses along the north side of Woodward Drive; therefore, all exiting vehicles will come to a stop before crossing the trail.

In conjunction with this development, pedestrian accessibility and mobility will be enhanced by providing connections between the proposed development and existing surrounding trails. In addition, the existing north-south trail that runs along the west side of the development will be extended south from Woodward Drive to Main Street (IL 64). Further, the development proposes continuous sidewalk on both sides of the roadways within the development.

