
LEGEND

	PROPERTY LINE
	EXISTING BOUNDARY ADJACENT LINE
	EXISTING EASEMENT LINE
	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING SETBACK LINE
	EXISTING UNDERGROUND SANITARY LINE
	EXISTING UNDERGROUND STORM LINE
	EXISTING UNDERGROUND WATER LINE
	EXISTING UNDERGROUND GAS LINE
	FOUND CUT CROSS
	FOUND PK NAIL
	FOUND IRON ROD
	EXISTING MANHOLE/CATCH BASIN
	EXISTING HYDRANT AND SHUTOFF
	EXISTING LIGHT POLE
	EXISTING TELEPHONE RISER
	EXISTING SIGN
	EXISTING CONCRETE
	EXISTING ASPHALT

LEGAL DESCRIPTION PER WFG NATIONAL TITLE INSURANCE COMPANY, FORM NO. 3151900-A:

LOT 4 IN ZYLSTRA CENTER, BEING A SUBDIVISION OR PART OF THE SOUTHEAST 1/4 OF SECTION 29 AND PART OF THE NORTHEAST 1/4 OF SECTION 32, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE RECORDED PLAT THEREOF RECORDED APRIL 4, 2006 AS DOCUMENT 2006K035709 AND CERTIFICATE OF CORRECTION RECORDED JUNE 26, 2008 AS DOCUMENT 2008K053274, IN THE CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

FOR INFORMATIONAL PURPOSES ONLY, PROPERTY IS COMMONLY KNOWN AS: 131 SOUTH RANDALL ROAD, ST. CHARLES, ILLINOIS

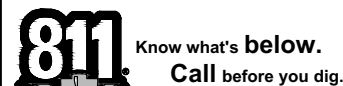
PIN: 09-32-230-009

LEGAL DESCRIPTION OF LAND COVERED BY THIS ALTA/ACSM LAND TITLE SURVEY:

THE SOUTH 1.00 ACRE OF LOT 4 IN ZYLSTRA CENTER, BEING A SUBDIVISION OR PART OF THE SOUTHEAST 1/4 OF SECTION 29 AND PART OF THE NORTHEAST 1/4 OF SECTION 32, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE RECORDED PLAT THEREOF RECORDED APRIL 4, 2006 AS DOCUMENT 2006K035709 AND CERTIFICATE OF CORRECTION RECORDED JUNE 26, 2008 AS DOCUMENT 2008K053274, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 4; THENCE S89°33'08"W ALONG THE SOUTH LINE OF SAID LOT 4 244.16 FEET TO THE WEST LINE OF SAID LOT 4; THENCE N00°26'52"E ALONG THE WEST LINE OF SAID LOT 4 179.39 FEET; THENCE N89°33'08"E 239.71 FEET TO THE EAST LINE OF SAID LOT 4; THENCE S03°46'41"E ALONG THE EAST LINE OF SAID LOT 4 53.28 FEET; THENCE S01°03'45"E ALONG SAID EAST LINE 126.21 FEET TO THE POINT OF BEGINNING, IN THE CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

THE SUBJECT PROPERTY CONTAINS 1.00 ACRE, OR 43,560 SQ. FT. OF LAND, MORE OR LESS.

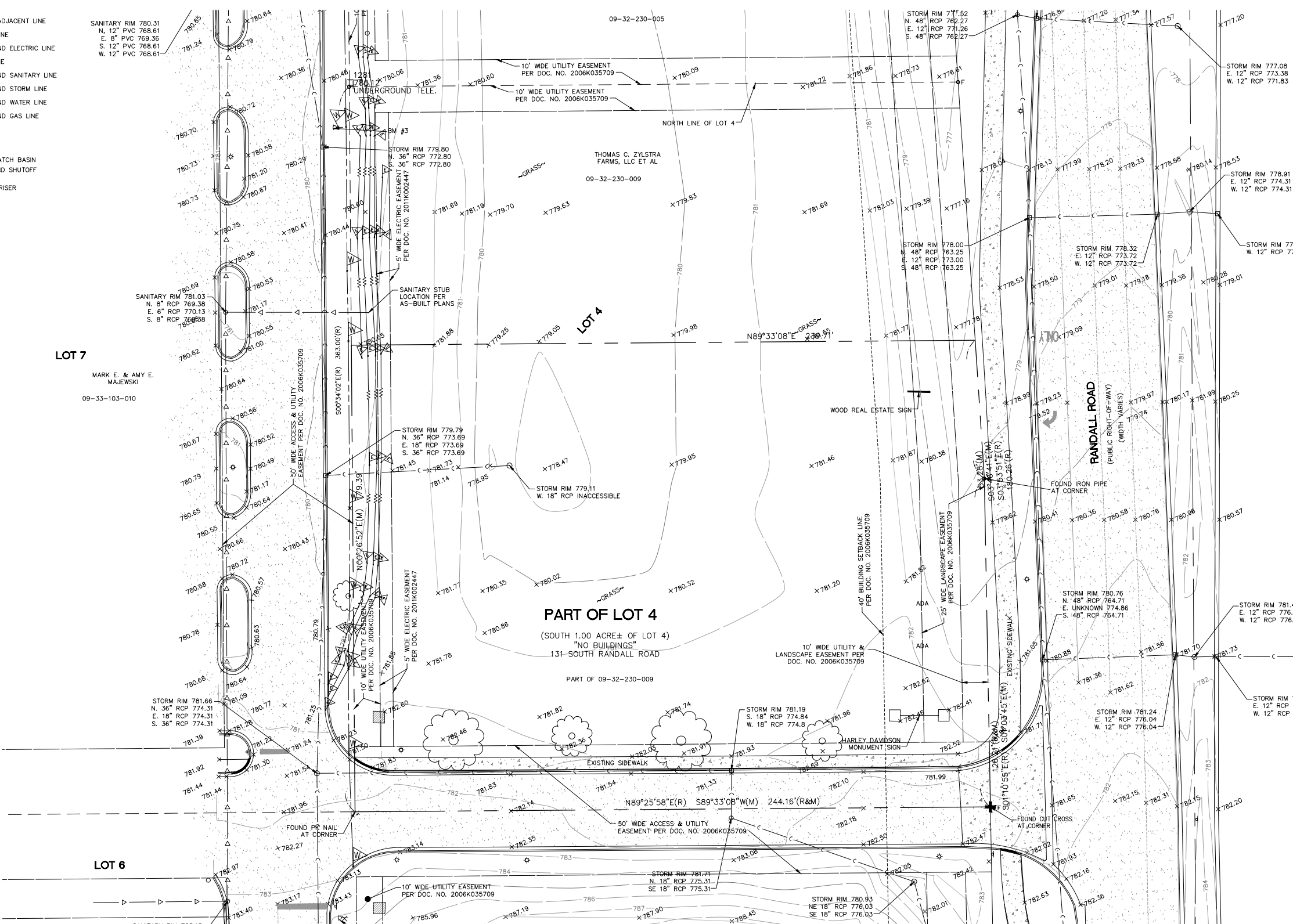


THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE ENGINEER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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BENCHMARKS

- SITE BM# 3 = SET BENCHMARK ON ARROW FLANGE BOLT OF HYDRANT NEAR THE NORTHWEST CORNER OF LOT 4.
ELEVATION = 782.62 (NAD83)
- SITE BM# 4 = SET BENCHMARK ON ARROW FLANGE BOLT OF HYDRANT NEAR THE SOUTHEAST CORNER OF THE INTERSECTION OF ENTRANCE DRIVE.
ELEVATION = 786.19 (NAD83)

SOURCE BM = TOP OF ARROW BOLT ON HYDRANT LOCATED AT ±30 FEET EAST OF THE WEST LINE OF LOT 2 IN THE NORTH RIGHT OF WAY OF THE SITE ACCESS DRIVE.
ELEVATION = 783.34 (NGVD29)

Land Development & Real Estate
Power & Energy
Telecommunications
Infrastructure & Transportation
Environmental & Solid Waste
Water & Natural Resources



SECTION 32
TOWN 40 NORTH, RANGE 8 EAST
CITY OF ST. CHARLES
KANE COUNTY, ILLINOIS

DISCOUNT TIRE COMPANY
131 SOUTH RANDALL ROAD
ST. CHARLES, IL
PRELIMINARY ENGINEERING
EXISTING CONDITIONS PLAN

DATE 09/13/2012

10/07/2012
REVISED LAYOUT
07/06/2012
CITY SUBMITTAL





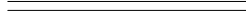





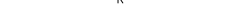

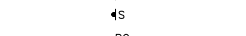
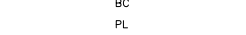

REVISIONS



SCALE 0 10 20
1" = 20 FEET

DR. REK
CH. BH
P.M. T. MOSHER
CAD FILE:
12001457C-02-EC.DWG
JOB 12001457
FILE CODE: --
SHEET NO.
C-02

LEGEND

	PROPERTY LINE
	EXIST. CURB AND GUTTER
	PROP. CURB AND GUTTER
	EASEMENT LINE
	PARKING SPACE COUNT
	ADA RAMP WITH DETECTABLE WARNING
	PROP. SIGN
	PROP. ACCESSIBLE PARKING SPACE SIGN
	PROP. STOP SIGN
	DIMENSION TO BACK OF CURB
	DIMENSION TO PROPERTY LINE
	STANDARD DUTY ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK

DEMOLITION

- THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL WASTE MATERIAL IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES INCLUDING, BUT NOT LIMITED TO, STRUCTURES, FOUNDATIONS, CONCRETE, ASPHALT, STEEL, UTILITIES, DRAINAGE STRUCTURES, ETC.
- CONTRACTOR TO DEMOLISH THE SITE SUCH THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS CAN BE CONSTRUCTED.
- ALL UNSUITABLE MATERIAL THAT WOULD CONFLICT WITH THE PROPER CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REMOVED.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM ALL GOVERNING AGENCIES PRIOR TO THE START OF SITE DEMOLITION.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL EXISTING UTILITY SERVICES ARE DISCONNECTED OR PROTECTED PRIOR TO THE START OF DEMOLITION OF THE SITE.
- THE CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES ASSOCIATED WITH UTILITY COORDINATION.
- THE EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN LOCATED BASED ON THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY.
- PRIOR TO THE START OF ANY SITE DEMOLITION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.
- ALL UTILITIES THAT ARE REQUIRED TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO THE START OF DEMOLITION.
- SITE DEMOLITION SHALL NOT CONFLICT WITH ACCESS TO ADJACENT SITES OR TRAFFIC AND PEDESTRIAN FLOW IN ADJACENT PUBLIC R.O.W.'S.
- ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITY.
- ANY IMPROVEMENTS, STRUCTURES, PAVEMENTS, UTILITIES, OR PROPERTY, EITHER ON-SITE OR OFF-SITE, THAT BECOMES DAMAGED DURING SITE CONSTRUCTION SHALL BE REPLACED BACK TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

GENERAL CONSTRUCTION NOTES

- ALL SITE WORK AND GRADING OPERATIONS WITHIN THE LIMITS OF THIS PROJECT SHALL BE DONE IN ACCORDANCE WITH THE CURRENT EDITION, AND ALL REVISIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE CONTRACTOR SHALL ALSO FOLLOW ALL STATE, COUNTY AND LOCAL JURISDICTIONAL ORDINANCES AND REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OF ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF IDOT STANDARD TRAFFIC CONTROL AND PROTECTION DEVICES TO INFORM AND PROTECT THE PUBLIC, IN COMPLIANCE WITH IDOT STANDARD TRAFFIC CONTROL AND PROTECTION SPECIFICATIONS.
- EASEMENTS FOR EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITH PUBLIC RIGHT OF WAY ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION AVAILABLE IN THE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE OWNER SO THAT THE CONFLICT MAY BE RESOLVED.
- BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER AND MUNICIPALITY.
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL MUNICIPAL REGULATIONS, CODES AND O.S.H.A. STANDARDS.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDING.
- ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY PREPARED BY ATWELL, LLC DATED 10-2-2012.
- TOTAL PROPERTY IS 1.00 ACRES.
- REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING ELECTRICAL PLANS.
- ALL STRIPING SHALL BE 4" WHITE UNLESS OTHERWISE NOTED.
- THE BUILDING AND PARKING ARE PARALLEL AND/OR PERPENDICULAR TO THE NORTH PROPERTY LINE, N89°33'08"E.



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SITE DATA

ZONING	BR-REGIONAL BUSINESS PLANNED UNIT DEVELOPMENT
ACREAGE	1.00 ACRES (43,560 S.F.)
BUILDING HEIGHT	26' (ONE STORY)

	REQUIRED	PROVIDED
FRONT BUILDING SETBACK (SOUTH)	20'	100.7'
SIDE BUILDING SETBACK (WEST)	20'	71.8'
SIDE BUILDING SETBACK (EAST)	40'	41.1'
REAR BUILDING SETBACK (NORTH)	20'	22'

PARKING DATA

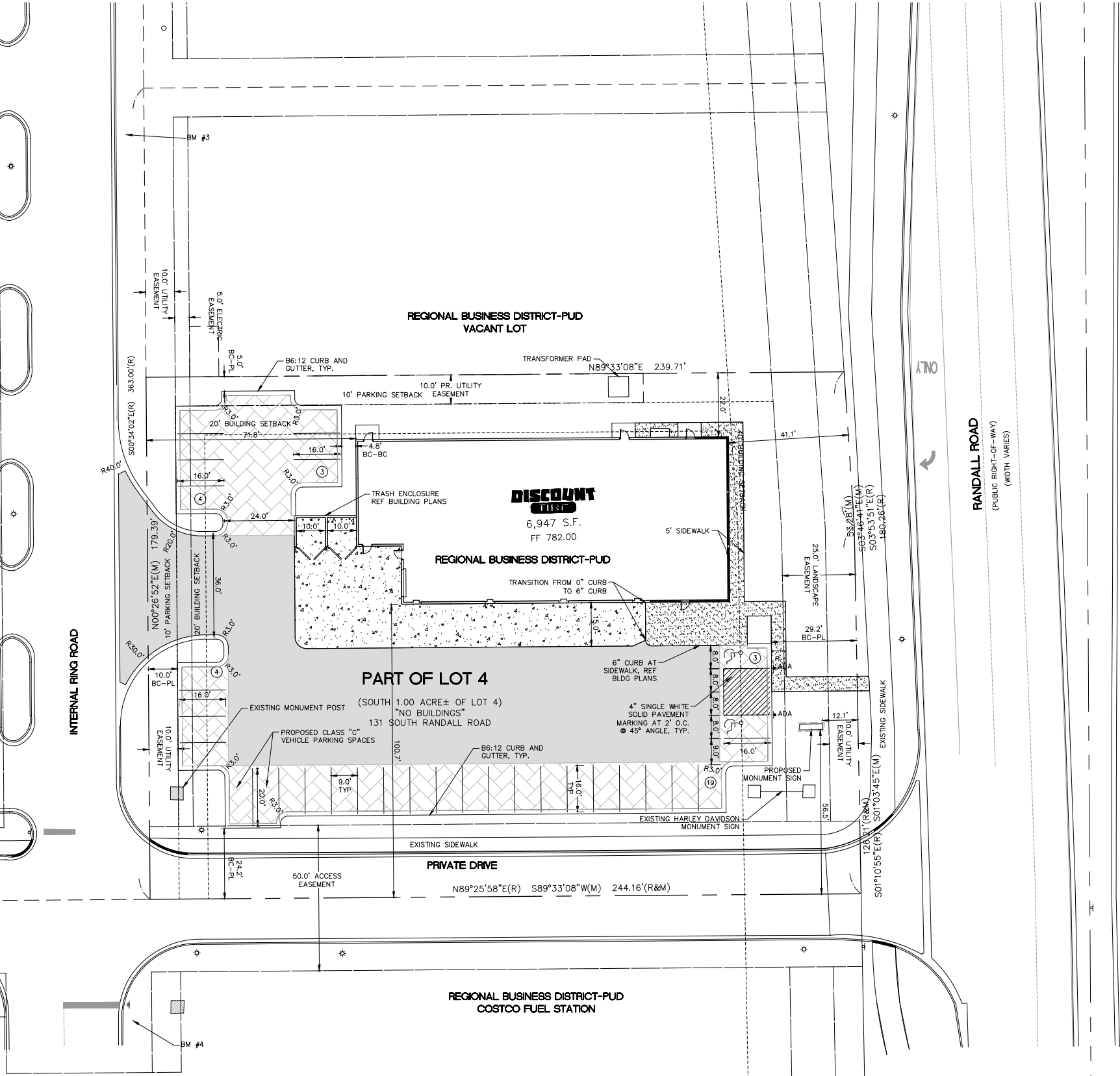
DISCOUNT TIRE	6,947 S.F.
PARKING REQUIRED*	26
PARKING PROVIDED	33

*PARKING REQUIREMENTS

2 SPACES/BAY PLUS
2 SPACES/1000 SF
=6 BAYS X 2 + 6,947 SF/1000 X 2
=26

REGIONAL BUSINESS DISTRICT-PUD
HARLEY DAVIDSON

INTERNAL RING ROAD



Land Development & Real Estate
Power & Energy
Telecommunications
Infrastructure & Transportation
Environmental & Solid Waste
Water & Natural Resources



SECTION 32

TOWN 40 NORTH, RANGE 8 EAST

CITY OF ST. CHARLES

KANE COUNTY, ILLINOIS

DISCOUNT TIRE COMPANY

131 SOUTH RANDALL ROAD
ST. CHARLES, IL

PRELIMINARY ENGINEERING

SITE LAYOUT PLAN

CLIENT

DATE

09/13/2012

10/07/2012
REVISED LAYOUT
11/05/2012
CITY SUBMITTAL

REVISIONS



SCALE 0 10 20
1" = 20 FEET

DR. REK

CH. BH

P.M. T. MOSHER

CAD FILE:
12001457C-03-LDWG

JOB 12001457

FILE CODE: --

SHEET NO.

C-03

LEGEND	
	PROPERTY LINE
	EXIST. CONTOUR
	PROP. CONTOUR
	PROP. RIDGE LINE
	PROP. RIDGE LINE
	PROP. PITCH OUT CURB AND GUTTER
	EXIST. STORM SEWER
	PROP. STORM SEWER
	EXIST. MANHOLE
	PROP. MANHOLE
	PROP. CATCHBASIN/INLET
	PROP. WATER VALVE
	DRAINAGE FLOW ARROW
	PROP. SPOT ELEVATION
	PROP. RIM ELEVATION
	MATCH EXISTING ELEVATION
	PROP. TOP OF SIDEWALK ELEVATION
	EMERGENCY OVERFLOW ROUTE

GRADING NOTES

- EARTH EXCAVATION SHALL INCLUDE CLEARING, STRIPPING AND STOCKPIILING TOPSOIL, REMOVING UNSUITABLE MATERIALS, THE CONSTRUCTION OF EMBANKMENTS, CONSTRUCTING NONSTRUCTURAL FILLS, AND FINAL SHAPING AND TRIMMING TO THE LINES GRADES AND CROSS SECTIONS SHOWN IN THE PLANS. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE PROVISIONS OF DIVISION 200 OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL UNSUITABLE OR EXCESS MATERIAL SHALL BE DISPOSED OF AS REQUIRED, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER. PROOF ROLLING, DISING AND DEWATERING ARE EXCAVATORS RESPONSIBILITY AND CONSIDERED INCIDENTAL.
- THE GRADING AND CONSTRUCTION OF PROPOSED IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE.
- THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISH GRADE. A MINIMUM OF SIX (6)" INCHES OF TOPSOIL IS TO BE PLACED BEFORE FINISH GRADE ELEVATIONS ARE ACHIEVED IN AREAS TO RECEIVE VEGETATIVE COVER.
- GEOTECHNICAL REPORTS AS PREPARED BY OWNER (OR OWNER'S REPRESENTATIVE) SHALL BE REFERRED TO PRIOR TO EARTH MOVING AND UTILITY INSTALLATION.
- THE SELECTED FILL MATERIAL SHALL BE FREE OF ORGANIC MATTER, FROZEN SOIL, CLODS, OR OTHER DELICTERIOUS MATERIAL. FILL SHALL BE PLACED IN UNIFORM HORIZONTAL LAYERS, NOT MORE THAN NINE INCHES (9)" IN LOOSE THICKNESS. EACH LIFT SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM D 1557).
- ALL BUILDING PADS SHALL HAVE A MINIMUM BEARING CAPACITY OF 2,000 P.S.F. FOR BUILDING SUPPORT.
- OVERLAND DRAINAGE ROUTING AND SWALES SHALL BE CONSTRUCTED AS SHOWN ON PLANS.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
- ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 4H:1V OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH STATE, LOCAL AND COUNTY SPECIFICATIONS, INCLUDING IN ACCORDANCE WITH THE N.P.D.E.S. GENERAL PERMIT, UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
- PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
- ALL SPOT GRADES ARE FLOWLINE/TOP OF PAVEMENT GRADES UNLESS OTHERWISE NOTED. ALL RIM ELEVATIONS ARE FLOWLINE ELEVATIONS.
- ALL STORM SEWER AND UTILITY STRUCTURE RIMS SHALL BE FLUSH WITH PAVEMENT OR FINISHED GRADE.
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- AT THE START OF EARTHWORK OPERATIONS, ANY VEGETATION, TOPSOIL, UNSUITABLE MATERIAL, AND DEBRIS FROM ANY DEMOLITION SHALL BE ENTIRELY REMOVED FROM PROPOSED BUILDING AND PAVEMENT AREAS.
- THE SELECTED FILL MATERIAL SHALL BE FREE OF ORGANIC MATTER, FROZEN SOIL, CLODS, OR OTHER DELICTERIOUS MATERIAL. FILL SHALL BE PLACED IN UNIFORM HORIZONTAL LAYERS, NOT MORE THAN NINE INCHES (9)" IN LOOSE THICKNESS. FILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM D 1557). LOAD BEARING FILL SHALL BE CA-6.
- SOILS INFORMATION TAKEN FROM A GEOTECHNICAL INVESTIGATION REPORT DATED 10/09/2012, PREPARED BY G2 CONSULTING GROUP, LLC.



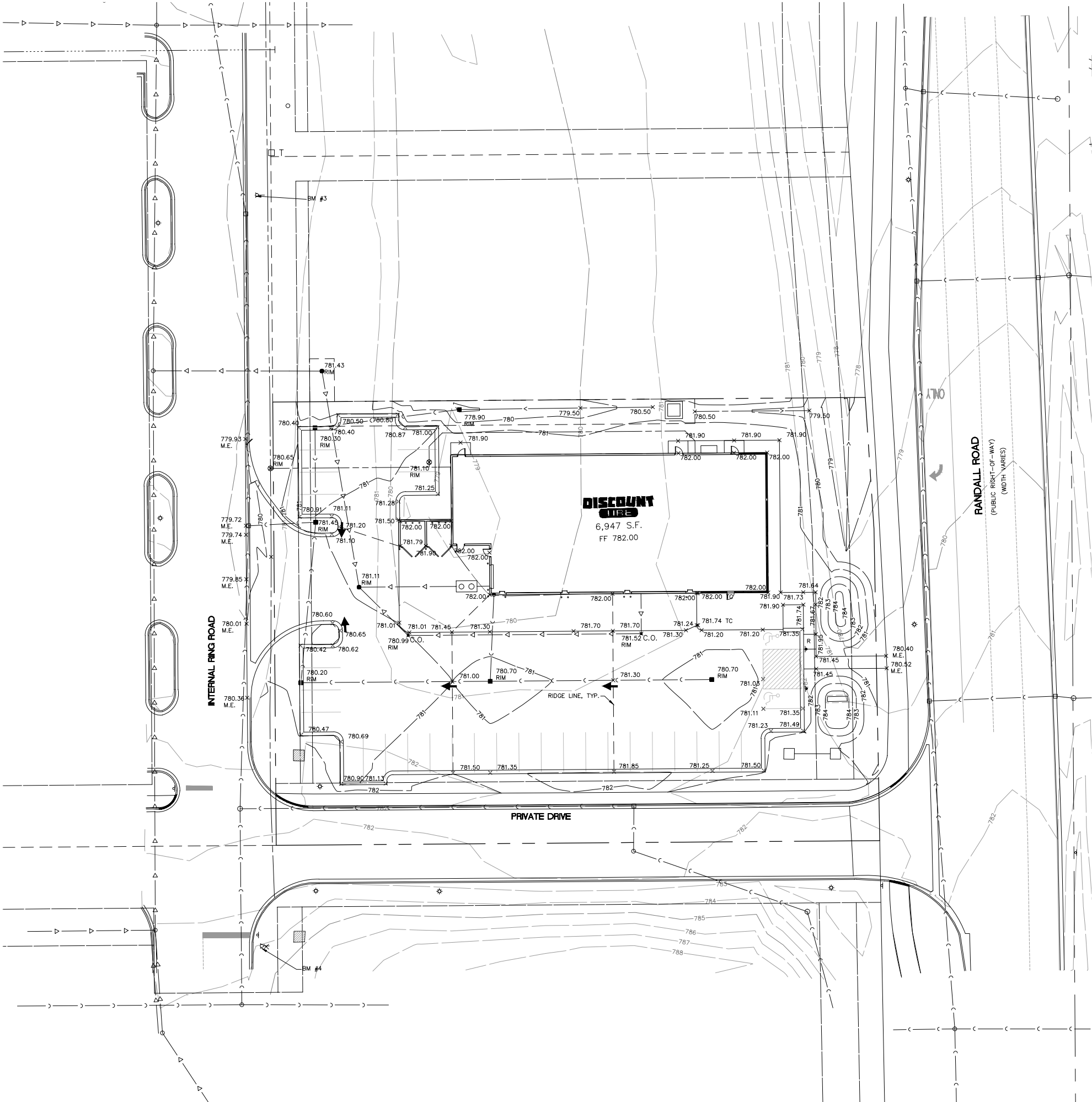
Know what's below.
Call before you dig.

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Power & Energy
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Infrastructure & Transportation
Environmental & Solid Waste
Water & Natural Resources



SECTION 32
TOWN 40 NORTH, RANGE 8 EAST
CITY OF ST. CHARLES
KANE COUNTY, ILLINOIS

CLIENT
DISCOUNT TIRE COMPANY
131 SOUTH RANDALL ROAD
ST. CHARLES, IL
PRELIMINARY ENGINEERING
GRADING PLAN

DATE
09/13/2012

10/07/2012
REVISED LAYOUT
11/05/2012
DT SUBMITTAL

REVISIONS



SCALE
0 10 20
1" = 20 FEET

DR. REK
CH. BH
P.M. T. MOSHER

CAD FILE:
12001457C-04-G.DWG

JOB 12001457

FILE CODE: --

SHEET NO.
C-04

	PROPERTY LINE
	PROP. EASEMENT
	EXIST. STORM SEWER
	PROP. STORM SEWER
	EXIST. OVERHEAD ELECTRIC
	EXIST. UNDERGROUND ELECTRIC
	EXIST. GAS LINE
	EXIST. TELEPHONE
	EXIST. WATERMAIN
	EXIST. SANITARY SEWER
	PROP. GAS
	PROP. UNDERGROUND ELECTRIC
	PROP. TELEPHONE
	PROP. SANITARY SEWER
	PROP. WATERMAIN
	EXIST. MANHOLE/CATCH BASIN
	PROP. MANHOLE
	PROP. CATCH BASIN/INLET
	PROP. DOWNSPOUT
	EXIST. HYDRANT
	PROP. HYDRANT
	EXIST. GATE VALVE IN MANHOLE
	PROP. WATER VALVE
	PROP. CLEANOUT

1. REFER TO CITY OF ST. CHARLES SANITARY SEWER, STORM SEWER, AND WATERMAIN SPECIFICATIONS ON SHEET C-10.
2. WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH ALL STATE, COUNTY AND LOCAL GOVERNING JURISDICTIONS AND IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS".
3. CONTRACTOR TO PROVIDE A 2' x 2' x 8" CONCRETE COLLAR AROUND ALL CLEANOUTS OUTSIDE OF THE BUILDING.
4. ALL STORM SEWER SHALL BE CONSTRUCTED WITH "O" RING JOINTS PER ASTM C-443.
5. ALL STORM SEWER PIPE TO BE REINFORCED CONCRETE PIPE C-76 CL III UNDER NON PAVED AREAS AND C-76 CL IV UNDER PAVED SURFACES UNLESS OTHERWISE NOTED
6. ALL STORM STRUCTURE LIDS SHALL BE IMPRINTED "STORM".



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1245 EAST DIEHL ROAD, SUITE 100
NAPERVILLE, IL 60563
DESIGN FIRM #184-005876

SECTION 32

W 40 NORTH, RANGE 8 EAST

CITY OF ST. CHARLES

KANE COUNTY, ILLINOIS

DISCOUNT TIRE COMPANY
31 SOUTH RANDALL ROAD
ST. CHARLES, IL
PRELIMINARY ENGINEERING
UTILITY PLAN

[illegible]

DATE 09/13/2012

0/09/2012
REVISED LAYOUT
1/05/2012
CITY SUBMITTAL

REVISIONS



ATWELL

SCALE 0 10
1" = 20 FEET

R. REK

CH. BH

M. T. MOSHER

HEAD FILE:

12001457C-05-U.DWG

08 12001457

FILE CODE: — —

SHEET NO. _____

C-05

LEGEND

	BOUNDARY LINE
	EXISTING EASEMENT
	EXISTING R.O.W.
	LIMITS OF DISTURBANCE
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	EX. CONTOUR
	PR. CONTOUR
	TEMPORARY SILT FENCE
	PERMANENT SWALE
	PROPOSED RIDGE LINE
	PROP. MANHOLE/CATCH BASIN
	EXIST. MANHOLE/CATCH BASIN
	EX. DRAINAGE ARROW WITH SLOPE
	DROP-IN INLET PROTECTION
	FABRIC DROP INLET PROTECTION
	ROCK CHECK DAM-COARSE AGGREGATE
	TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
	PERMANENT SOIL STABILIZATION PER LANDSCAPE PLAN WITH EROSION CONTROL BLANKET
	PERMANENT SOIL STABILIZATION PER LANDSCAPE PLAN

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED IN ACCORDANCE WITH THE CONDITIONS OF APPLICABLE IL GENERAL NPDES PERMIT.
- EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED AND REPLACED AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
- THE EROSION CONTROL MEASURES INCLUDED IN THE SOIL EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE INSTALLED PRIOR TO INITIAL LAND DISTURBANCE ACTIVITIES OR AS SOON AS PRACTICAL. SEDIMENT SHALL BE PREVENTED FROM DISCHARGING FROM THE PROJECT SITE BY INSTALLING AND MAINTAINING SILT FENCE, SEDIMENT BASINS, ETC. AS SHOWN ON THIS PLAN. IF SHOWN ON THESE PLANS, ENERGY-DISSIPATION DEVICES OR EROSION CONTROL AT THE OUTFALL OF THE STORM SEWER SYSTEM SHALL BE INSTALLED AT THE TIME OF THE CONSTRUCTION OF THE OUTFALL.
- THE CONTRACTOR SHALL CONTROL WASTES, GARBAGE, DEBRIS, WASTEWATER, AND OTHER SUBSTANCES ON THE SITE IN SUCH A WAY THAT THEY SHALL NOT BE TRANSPORTED FROM THE SITE BY THE ACTION OF WINDS, STORM WATER RUNOFF, OR OTHER FORCES. PROPER DISPOSAL OR MANAGEMENT OF ALL WASTES AND UNUSED BUILDING MATERIAL, APPROPRIATE TO THE NATURE OF THE WASTE OR MATERIAL IS REQUIRED. COMPLIANCE IS REQUIRED WITH ALL STATE OR LOCAL REGULATIONS REGARDING WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC SYSTEMS.
- PUBLIC OR PRIVATE ROADWAYS SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. CLEARED SEDIMENT SHALL BE RETURNED TO THE POINT OF LIKELY ORIGIN OR OTHER SUITABLE LOCATION.
- ALL ON-SITE STORM DRAIN INLETS SHALL BE PROTECTED AGAINST SEDIMENTATION WITH FILTER FABRIC, OR EQUIVALENT BARRIERS AS SHOWN ON THESE PLANS.
- EXCEPT AS PREVENTED BY INCLEMENT WEATHER CONDITIONS, ALL DISTURBED AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED BY SEEDING, SODDING, MULCHING, COVERING, OR BY OTHER EQUIVALENT EROSION CONTROL MEASURES WITHIN SEVEN (7) DAYS. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN 7 DAYS AFTER FINAL GRADE IS ESTABLISHED.
- THIS EROSION CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED UNDER THE GUIDANCE OF QUALIFIED PERSONNEL EXPERIENCED IN EROSION CONTROL, AND FOLLOWING THE PLANS AND SPECIFICATIONS INCLUDED HEREIN.
- DURING THE PERIOD OF CONSTRUCTION ACTIVITY, ALL SEDIMENT BASINS AND OTHER EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR. AT COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES, IF REQUIRED, WITH THE OWNER. MAINTENANCE SHALL BE IN ACCORDANCE WITH THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND THE SOIL EROSION AND SEDIMENTATION CONTROL PLAN.
- EXISTING VEGETATION SHALL BE PROTECTED AS MUCH AS PRACTICAL.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN THIRTY DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION.
- THIS EROSION CONTROL PLAN MUST BE RETAINED ON-SITE AT ALL TIMES DURING THE PERIOD OF CONSTRUCTION.

CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

GENERAL CONTRACTOR NAME	_____	SUBCONTRACTOR NAME	_____
GENERAL CONTRACTOR ADDRESS	_____	SUBCONTRACTOR ADDRESS	_____
GENERAL CONTRACTOR TELEPHONE	_____	SUBCONTRACTOR TELEPHONE	_____
GENERAL CONTRACTOR SIGNATURE	_____	SUBCONTRACTOR SIGNATURE	_____
DATE	_____	DATE	_____
SITE ADDRESS	_____		



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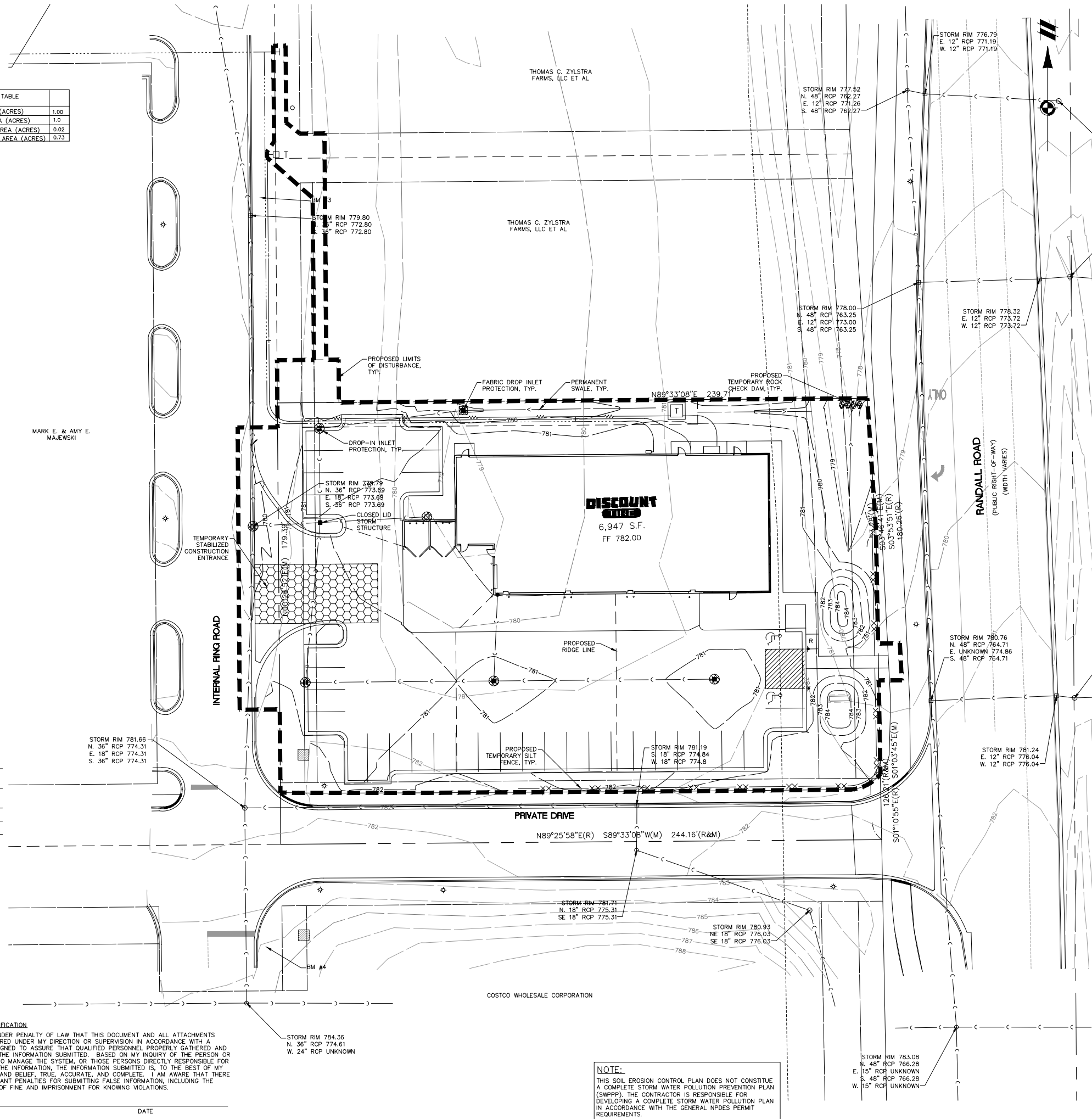
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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SITE DATA TABLE	
TOTAL PROJECT AREA (ACRES)	1.00
TOTAL DISTURBED AREA (ACRES)	1.0
EXISTING IMPERVIOUS AREA (ACRES)	0.02
PROPOSED IMPERVIOUS AREA (ACRES)	0.73



OWNER CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER

DATE

NOTE:

THIS SOIL EROSION CONTROL PLAN DOES NOT CONSTITUTE A COMPLETE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING A COMPLETE STORM WATER POLLUTION PLAN IN ACCORDANCE WITH THE GENERAL NPDES PERMIT REQUIREMENTS.

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SECTION 32

TOWN 40 NORTH, RANGE 8 EAST

CITY OF ST. CHARLES

KANE COUNTY, ILLINOIS

DISCOUNT TIRE COMPANY

131 SOUTH RANDALL ROAD

ST. CHARLES, IL

PRELIMINARY ENGINEERING

SOIL EROSION CONTROL PLAN

CLIENT

DATE

09/13/2012

10/07/2012
REVISED LAYOUT
11/06/2012
C.D. SUBMITTAL

REVISIONS



SCALE 0 10 20
1" = 20 FEET

DR. REK

CH. BH

P.M. T. MOSHER

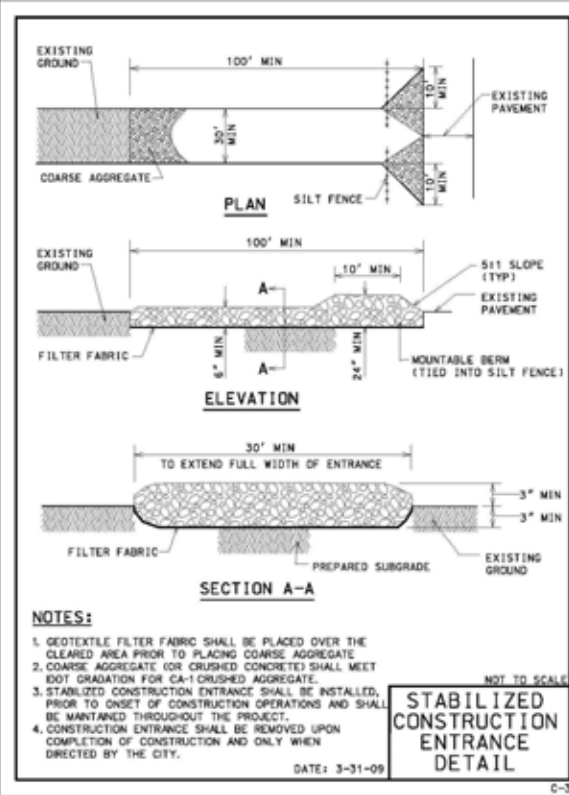
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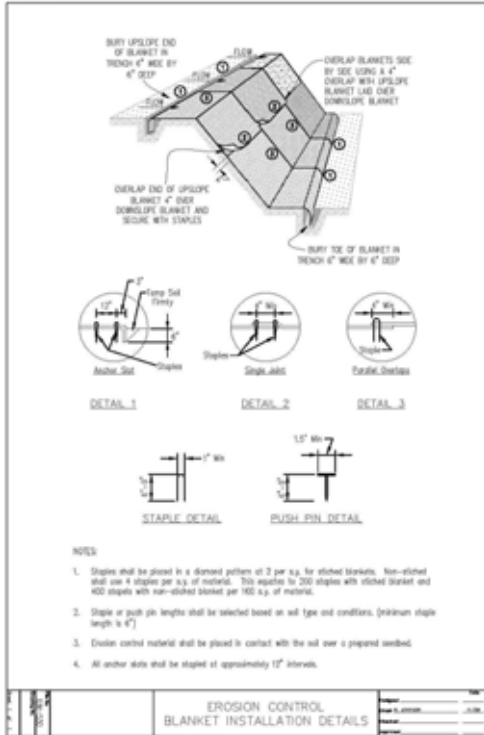
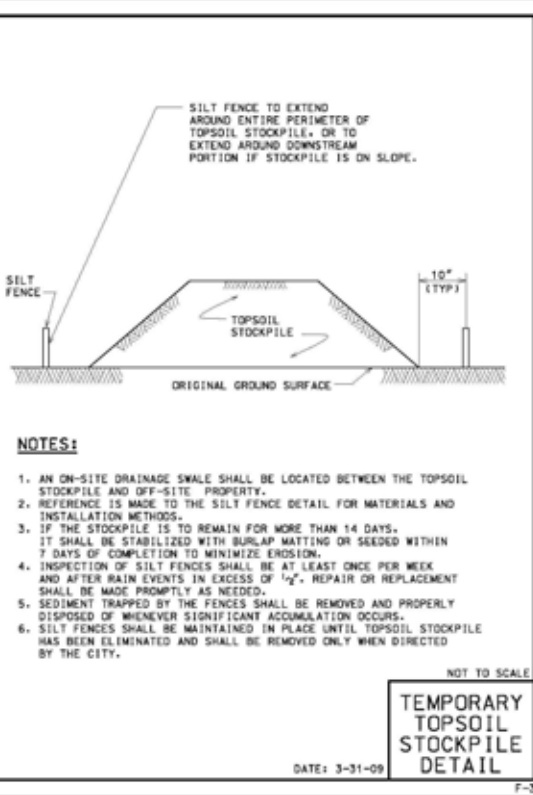
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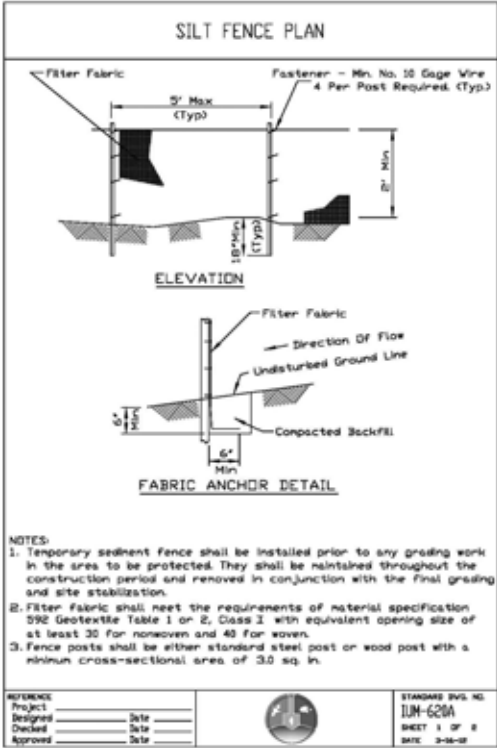
MAINTENANCE:

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS OR STREETS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL AGGREGATE. ALL SEDIMENT SPILLED, DROPPED, OR WASHED ONTO PUBLIC RIGHT-OF-WAYS OR STREETS MUST BE REMOVED IMMEDIATELY. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



MAINTENANCE:

INSPECT ALL EROSION CONTROL BLANKETS PERIODICALLY AND AFTER RAINSTORMS TO CHECK FOR DAMAGE DUE TO WATER RUNNING UNDER THE BLANKET OR IF THE BLANKETS THAT HAVE BEEN DISPLACED BY WIND. ANY AREAS WHERE WATER SEEPED UNDER THE BLANKET, MORE STAPLES MAY BE NEEDED PER GIVEN AREA OR MORE FREQUENT ANCHORING TRENCHES INSTALLED WITH BETTER COMPACTION. IF SIGNIFICANT EROSION HAS OCCURRED UNDER THE BLANKET THEN GRADING AND RESEEDING MAY ALSO BE NECESSARY. ANY EROSION CONTROL BLANKETS THAT HAVE BEEN DISPLACED WILL NEED TO BE RE-INSTALLED AND RE-STAPLED. THIS MAY INDICATE THAT THE WRONG TYPE OF BLANKET WAS CHOSEN. ONE MAY NEED TO REVISIT THE SITE CHARACTERISTICS AND THEN SELECT A DIFFERENT TYPE OF EROSION CONTROL BLANKET OR CHOSE A DIFFERENT PRACTICE.



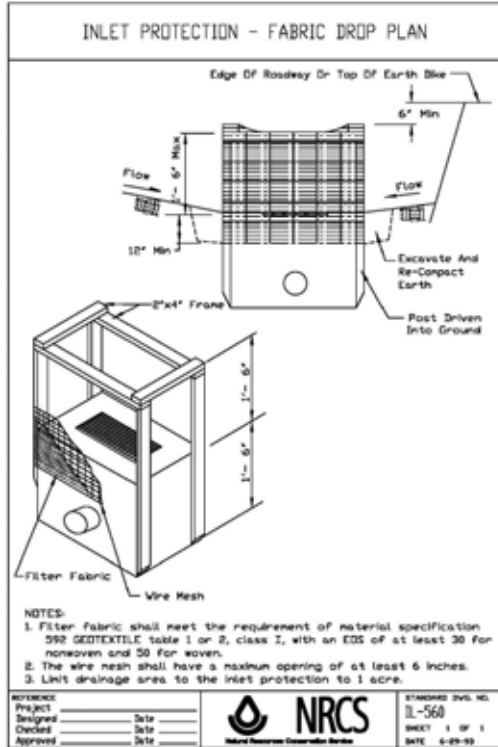
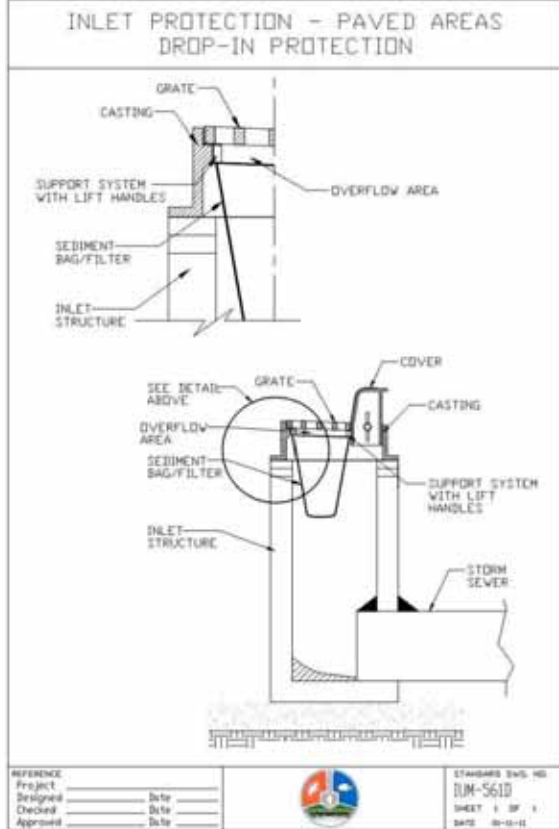
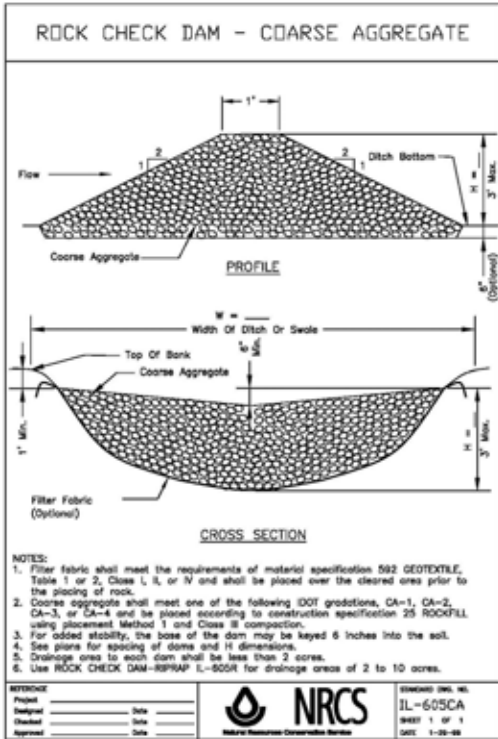
MAINTENANCE:

SILT FENCE SHALL BE REMOVED ONCE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILT FENCE SHALL BE INSPECTED NO LESS FREQUENTLY THAN EVERY WEEK DURING CONSTRUCTION. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE FENCE STILL IS NECESSARY, THE FABRIC OR THE ENTIRE SYSTEM SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE SILT FENCE.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, A SEEDBED PREPARED AND THE SITE VEGETATED.

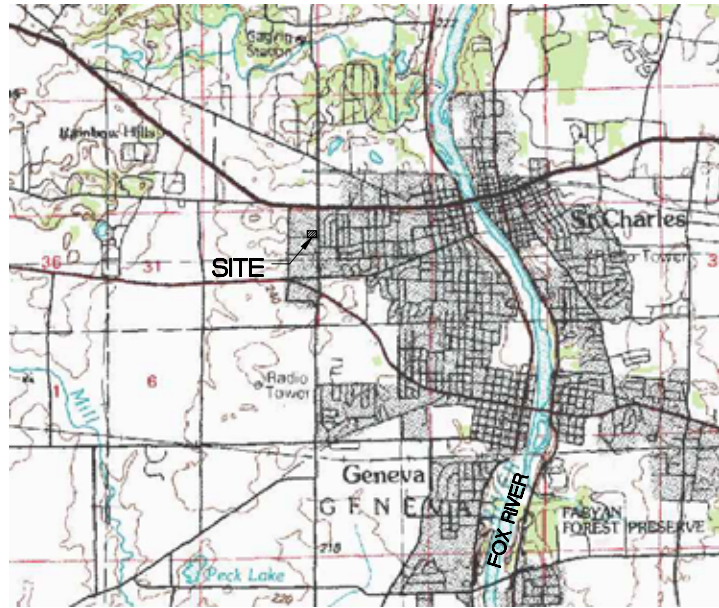


MAINTENANCE:

INSPECT THE FABRIC BARRIER AFTER EACH RAIN AND MAKE REPAIRS AS NEEDED.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. THE SEDIMENT MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. BE CAREFUL NOT TO DAMAGE OR UNDERCUT THE FABRIC DURING SEDIMENT REMOVAL.

WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SEDIMENT AND DISPOSE OF THEM PROPERLY. BRING THE DISTURBED AREA TO THE GRADE OF THE DROP INLET AND SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.



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SECTION 32

TOWN 40 NORTH, RANGE 8 EAST

CITY OF ST. CHARLES

KANE COUNTY, ILLINOIS

CLIENT

DISCOUNT TIRE COMPANY

131 SOUTH RANDALL ROAD

ST. CHARLES, IL

PRELIMINARY ENGINEERING

SOIL EROSION CONTROL DETAILS

DATE

09/13/2012

REVISIONS



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DR. REK

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LEGEND

	PROPOSED MULCH
	PROPOSED SOD
	PROPOSED PARKING LOT AREA

SITE PLANT SCHEDULE

SHADE TREES

KEY	QTY.	GENUS/SPECIES	SIZE
AR	4	<i>Acer rubrum</i> 'Red Sunset' Red Sunset Red Maple	2.5" CAL.
CO	5	<i>Celtis occidentalis</i> Common Hackberry	2.5" CAL.
TC	5	<i>Tilia cordata</i> 'Green Spire' Green Spire Little Leaf Linden	2.5" CAL.

EVERGREEN TREE

KEY	QTY.	GENUS/SPECIES	SIZE
PP	4	<i>Picea pungens</i> Colorado Spruce	6" (ht.)

ORNAMENTAL TREE

KEY	QTY.	GENUS/SPECIES	SIZE
AG	6	<i>Amelanchier 'Grandiflora'</i> Apple Serviceberry	6"-7" Clump

DECIDUOUS SHRUBS

KEY	QTY.	GENUS/SPECIES	SIZE
EA	10	<i>Euonymus alata 'compactum'</i> Dwarf Burning Bush	30"
RA	49	<i>Rhus aromatica</i> 'Gro Low' Gro Low Fragrant Sumac	24"-30"
SM	26	<i>Syringa patula</i> 'Miss Kim' Miss Kim Lilac	20"
HP	7	<i>Hydrangea paniculata</i> 'DVPinky' Pinky Winky Hydrangeas	36"

PERENNIALS

KEY	QTY.	GENUS/SPECIES	SIZE
HS	79	<i>Hemerocallis</i> 'Stella de Oro' Stella de Oro Daylily	1 Gal. (18" O.C.)
MS	12	<i>Miscanthus sinensis</i> 'purpurascens' Flame Grass	1 Gal. (24" O.C.)

LANDSCAPING REQUIREMENTS

ACREAGE	1.00 ACRES (43,560 S.F.)
TOTAL LANDSCAPE AREA	11,888 SF (27.3%)
PARKING LOT AREA	16,224 SF
PARKING LOT LANDSCAPING	1,979 SF (12.2%)



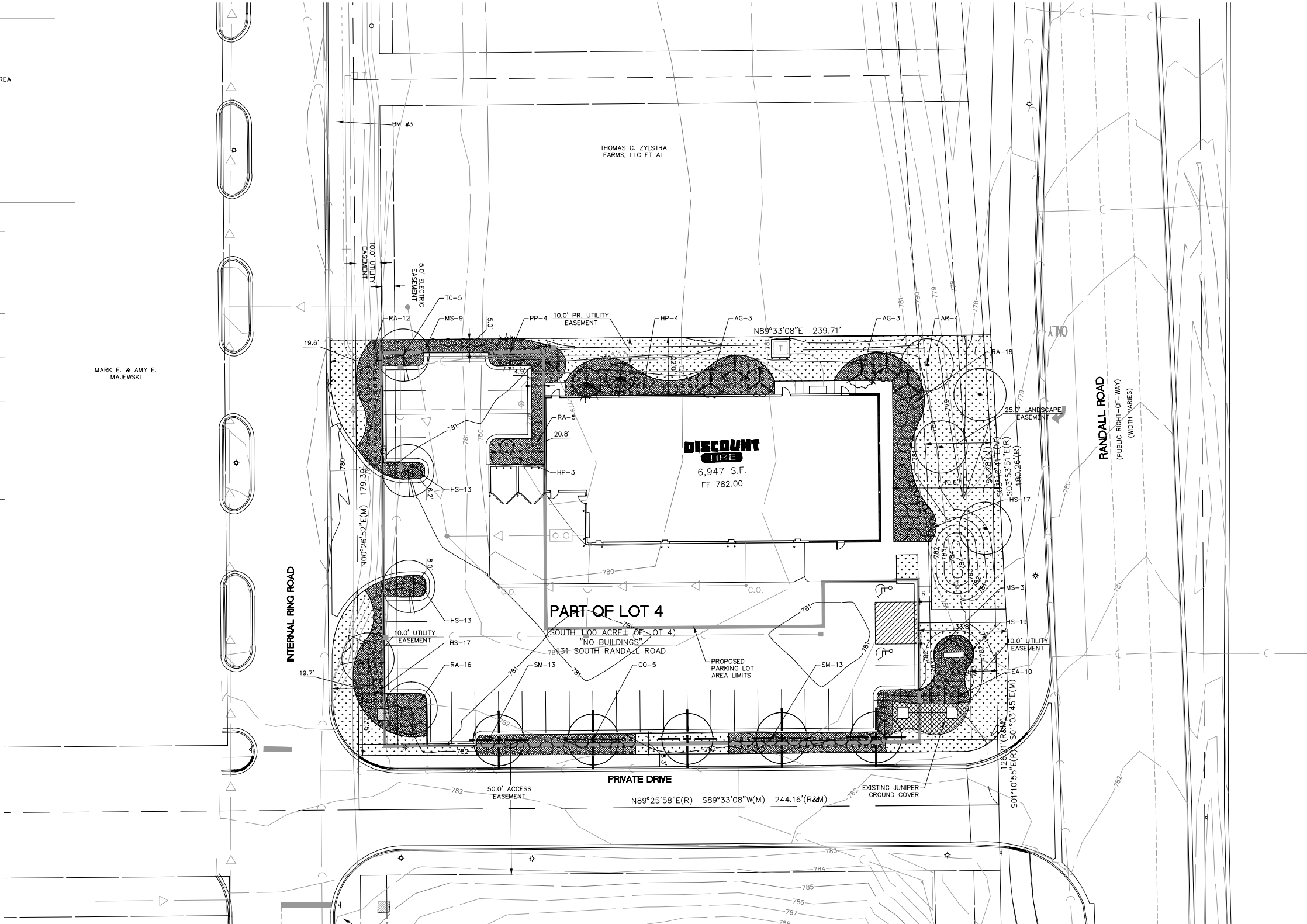
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SECTION 32
TOWN 40 NORTH, RANGE 8 EAST
CITY OF ST. CHARLES
KANE COUNTY, ILLINOIS

DISCOUNT TIRE COMPANY
131 SOUTH RANDALL ROAD
ST. CHARLES, IL
PRELIMINARY ENGINEERING
LANDSCAPE PLAN

DATE 09/13/2012

10/07/2012
REVISED LAYOUT
11/05/2012
CITY SUBMITTAL

REVISIONS



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1" = 20 FEET

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CH. BH
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JOB 12001457
FILE CODE: --
SHEET NO.

C-08

GENERAL NOTES:

- LANDSCAPE CONTRACTOR (CONTRACTOR) SHALL VISIT SITE, INSPECT EXISTING CONDITIONS AND REVIEW PROPOSED PLANTINGS AND RELATED WORK. LANDSCAPE CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS ON PROPERTY WITH THE GENERAL CONTRACTOR AND BY CALLING 811 PRIOR TO STAKING PLANT LOCATIONS. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES CONTACT LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE WITH ANY CONCERNS. SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE INSTALLED.
- PRIOR TO ANY LAND CLEARING OR CONSTRUCTION, TREE PROTECTION FENCING IS TO BE INSTALLED BY THE CONTRACTOR. THIS FENCING SHALL BE INSTALLED AT THE DRIP LINE OF ALL TREES AND SHRUBS AND MUST BE MAINTAINED AS APPROVED FOR THE DURATION OF THE PROJECT. NO CUTTING, FILLING OR TRESPASSING SHALL OCCUR INSIDE THE FENCED AREAS.
- LANDSCAPE CONTRACTOR SHALL COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATIONS WITH OTHER CONTRACTORS WORKING ON SITE.
- WHERE EXISTING TREES AND/OR SIGNIFICANT SHRUBS MASSINGS ARE FOUND ON SITE, WHETHER SHOWN ON THE DRAWING OR NOT, THEY SHALL BE PROTECTED AND SAVED UNLESS NOTED TO BE REMOVED AND/OR ARE IN AN AREA TO BE GRADED, ANY QUESTION REGARDING WHETHER PLANT MATERIAL SHOULD REMAIN OR NOT SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
- ALL EXISTING TREES TO REMAIN TO BE FERTILIZED AND PRUNED TO REMOVE DEAD WOOD AND DAMAGED OR RUBBING BRANCHES.
- NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT AND OWNER BY THE LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION.
- ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSEYMEN. ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE STANDARDS OF THE AUTHORITY HAVING JURISDICTION AND IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS IN A NEAT, HEALTHY AND WEED FREE CONDITION.
- CONTRACTOR WILL SUPPLY FINISHED GRADE AND EXCAVATE AS NECESSARY TO SUPPLY 6" TOPSOIL DEPTH IN ALL PLANTING BEDS AND 6" TOPSOIL DEPTH IN ALL LAWN AREAS. BACKFILL AND CROWN PARKING LOT ISLANDS 6" ABOVE ADJACENT CURBS WITH TOPSOIL. BACKFILL DIRECTLY BEHIND ALL CURBS AND ALONG SIDEWALKS AND COMPACT TO TOP OF CURB OR WALK TO SUPPORT VEHICLE AND PEDESTRIAN WEIGHT WITHOUT SETTLING.
- ACCEPTANCE OF GRADING AND SOD/SEED SHALL BE BY LANDSCAPE ARCHITECT AND/OR PROJECT REPRESENTATIVE. THE LANDSCAPE CONTRACTOR SHALL ASSUME MAINTENANCE RESPONSIBILITY UNTIL FINAL ACCEPTANCE HAS BEEN RECEIVED. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REPLACEMENT OF WASH-OUTS AND OTHER OPERATIONS NECESSARY TO KEEP SOD/SEED IN A THRIVING CONDITION. UPON FINAL ACCEPTANCE BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE, THE OWNER WILL ASSUME ALL MAINTENANCE RESPONSIBILITIES.
- PLANT MATERIAL LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY BE SUBJECT TO CHANGE IN THE FIELD AS REQUIRED.
- REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO THE OWNER.
- OWNER OR OWNER'S REPRESENTATIVE SHALL INSPECT LANDSCAPE INSTALLATION AND HAVE THE RIGHT TO REJECT AND WITHHOLD PAYMENT ON ANY PLANT MATERIAL(S) OF DAMAGED OR POOR QUALITY OR NOT MEETING SPECIFICATIONS.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP OF SITE AT THE COMPLETION OF LANDSCAPING EACH DAY. AT ALL TIMES THE SIDEWALKS SHALL BE MAINTAINED CLEAN AND FREE OF DEBRIS. REMOVE SURPLUS SOIL AND WASTE MATERIAL, TRASH AND DEBRIS FROM THE SITE AND LEGALLY DISPOSE OF SAME IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODES AND REGULATIONS.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR SOIL, EROSION AND DUST CONTROL MEASURES PRIOR TO AND DURING CONSTRUCTION. THE LANDSCAPE CONTRACTOR SHALL PREVENT EROSION OF SOIL AND ENTRY OF SOIL-BEARING WATER AND AIRBORNE DUST ONTO ADJACENT PROPERTIES AND INTO THE PUBLIC STORMWATER FACILITIES. REFER TO EROSION CONTROL PLANS FOR DETAILS

PLANTING SPECIFICATIONS:

- PLANTING BED PREPARATION: ALL MASS PLANTING BEDS SHALL BE TILED TO A MINIMUM DEPTH OF 10". AMENDMENT (LEAF MOLD OR SPHAGNUM PEAT MOSS) SHALL BE APPLIED DURING CULTIVATION. ALL BEDS ARE TO BE GRADED SMOOTH BEFORE PLANTING. PLANT GROUND COVER TO WITHIN 12" OF TREES OR SHRUBS. REMOVE ALL STONES LARGER THAN 2", ALL STICKS, ROOTS, RUBBISH AND ANY OTHER EXTRANEOUS MATERIALS. LANDSCAPE AREAS, PARKING LOT ISLANDS AND LANDSCAPE BEDS NEXT TO BUILDINGS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND POOR SOILS TO A DEPTH OF 18" AND BACKFILLED WITH GOOD, MEDIUM TEXTURED PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY). ADD 4" OF TOPSOIL OVER FILL MATERIAL AND CROWN A MINIMUM OF 6" ABOVE TOP OF CURBS AND/OR WALKS AFTER EARTH SETTLING UNLESS OTHERWISE NOTED ON THE GRADING PLAN.
- BACKFILL SOIL: USE SOIL EXCAVATED FROM PLANTING HOLES AND PROPOSED AMENDMENTS (1 PART LEAF MOLD OR SPHAGNUM PEAT MOSS AND 3 PARTS EXCAVATED SOIL). ALL NEW TOPSOIL USED SHALL BE FREE OF WEEDS AND OTHER FOREIGN VEGETATION, AS WELL AS, STONES LARGER THAN 2", ALL STICKS, ROOTS, RUBBISH AND ANY OTHER EXTRANEOUS MATERIALS.
- FERTILIZATION: ALL PLANT MATERIALS SHALL BE FERTILIZED UPON INSTALLATION WITH DRIED BONE MEAL OR OTHER SPECIFIED FERTILIZER MIXED IN WITH THE PLANTING SOIL PER THE MANUFACTURER'S INSTRUCTIONS UNLESS NOTED OTHERWISE.
- MULCH MATERIAL: AS SPECIFIED ON THE LANDSCAPE PLANS. MASS MULCH ALL PLANTING BEDS TO 3" DEPTH. ALL SHRUB PLANTING BEDS TO RECEIVE 3" DEEP MULCH. ALL EVERGREEN AND DECIDUOUS TREES (IF USED) TO RECEIVE 6" DEEP SHREDDED HARDWOOD MULCH WITH NO MULCH IN DIRECT CONTACT WITH TREE TRUNK. EXTENT OF MULCH TO BE 5'-0" DIA. AT TREES AND 18" BEYOND SHRUB DRIP LINES.
- TREE STAKING: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO STAKE AND/OR GUY THE TREES ACCORDING TO THE DETAILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE EVERY STEP NECESSARY TO MAINTAIN THE TREES AND SHRUBS IN AN UPRIGHT AND PLUMB POSITION AT ALL TIMES UNTIL THE END OF THE PLANT GUARANTEE PERIOD ESPECIALLY WHERE VANDALISM, SOIL OR WIND CONDITIONS ARE A PROBLEM. AT END OF GUARANTEE PERIOD ALL STAKES SHALL BE REMOVED BY LANDSCAPE CONTRACTOR. ALL STAKES USED FOR TREE SUPPORTS SHALL POINT AWAY FROM ANY AND ALL CIRCULATION ROUTES.
- TREE WRAPPING: WRAPPING MATERIAL SHALL BE QUALITY, HEAVY WATERPROOF CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAP ALL DECIDUOUS TREES AND PLANTINGS IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE OVER NOTES. RESPECT STATED DIMENSIONS. DO NOT SCALE DRAWINGS.
- EDGING: EDGING SHALL BE SPADE EDGED.
- FERTILIZER: JUMP-SHOT ROOT STIMULATOR AS MANUFACTURED BY ACME, OR APPROVED EQUAL, SHALL BE APPLIED TO THE SOIL BACKFILL OF EACH PLANT DURING INSTALLATION.
- PLANT SIZING: MEASURE TREES AND SHRUBS ACCORDING TO ANSI Z60.1 STANDARDS. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVE GROUND FOR TREES UP TO 4" CALIPER AND 12 INCHES ABOVE GROUND FOR LARGER TREES. ALWAYS HANDLE BALLED AND BURLAPPED MATERIAL BY THE ROOT BALL. PLANT MATERIAL SHALL BE DELIVERED TO THE SITE AND PLANTED THE SAME DAY.
- PLANTING PLAN: ALL PROPOSED PLANTS SHALL BE LOCATED CAREFULLY AS SHOWN ON THE PLANS. PLAN TAKES PRECEDENCE OVER PLANT SCHEDULES. ANY DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE OVER NOTES. RESPECT STATED DIMENSIONS. DO NOT SCALE DRAWINGS.

PLANT MATERIALS:

- PROVIDE PLANTS OF QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY SHOWN AND SCHEDULED AND IN CONFORMANCE WITH THE REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". PLANTS SHALL BE FREE OF DISEASE, INJURY, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT.
 - ALL PLANTS SHALL BE FULL, WELL-BRANCHED PLANTS CHARACTERISTIC OF THE SPECIES. PLANTS SHALL BE FREE OF DISEASE, INJURY, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT.
 - PLANT STOCK SHALL HAVE BEEN GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO CONDITIONS IN THE LOCALITY OF THE PROJECT.
 - LABEL AT LEAST ONE PLANT OF EACH KIND WITH A SECURELY ATTACHED WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAME.
 - PROVIDE FRESHLY DUG BALLED & BURLAPPED PLANT MATERIALS. DO NOT DROP BALLED & BURLAPPED STOCK DURING DELIVERY.
 - DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS UNTIL PLANTING TIME.
- PLANT MATERIALS: 90 DAYS AFTER SUBSTANTIAL COMPLETION
LAWN AREAS: 60 DAYS AFTER SUBSTANTIAL COMPLETION
- TREES, SHRUBS, AND GROUND COVERS: ONE YEAR AFTER FINAL ACCEPTANCE
SOD AND SEEDS AREAS: 90 DAYS AFTER FINAL ACCEPTANCE
PERENNIALS: 90 DAYS AFTER FINAL ACCEPTANCE

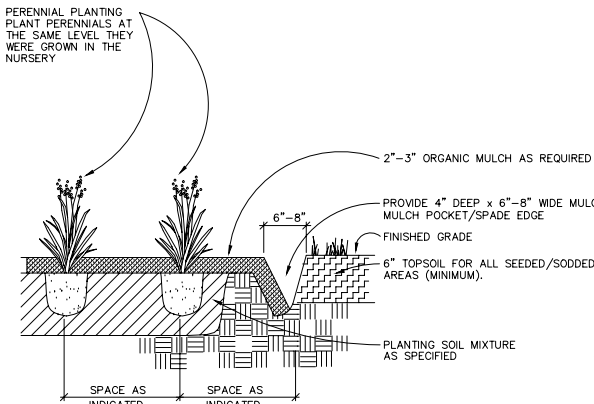
MAINTENANCE AND WARRANTY:

- MAINTENANCE OF PLANT MATERIALS AND LAWN AREAS SHALL BEGIN IMMEDIATELY AFTER INSTALLATION AND SHALL CONTINUE UNTIL FINAL ACCEPTANCE, BUT IN NO CASE, LESS THAN THE FOLLOWING STATED PERIODS:
PLANT MATERIALS: 90 DAYS AFTER SUBSTANTIAL COMPLETION
LAWN AREAS: 60 DAYS AFTER SUBSTANTIAL COMPLETION
- AFTER REQUIRED MAINTENANCE PERIOD, THE OWNER, UPON REQUEST, WILL MAKE AN INSPECTION TO DETERMINE ACCEPTABILITY. UNACCEPTABLE WORK SHALL BE REPAIRED OR REPLACED AND REINSPECTED BEFORE FINAL ACCEPTANCE IS GRANTED.
- A WRITTEN WARRANTY SHALL BE PROVIDED TO THE OWNER GUARANTEEING THAT ALL PLANT MATERIALS, SOD, AND/OR SEEDS AREAS WILL BE THRIVING FOR THE FOLLOWING STATED PERIODS:
TREES, SHRUBS, AND GROUND COVERS: ONE YEAR AFTER FINAL ACCEPTANCE
SOD AND SEEDS AREAS: 90 DAYS AFTER FINAL ACCEPTANCE
PERENNIALS: 90 DAYS AFTER FINAL ACCEPTANCE
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH WRITTEN INSTRUCTIONS REGARDING MAINTENANCE OF EACH TYPE OF VEGETATION. THE OWNER IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE MATERIALS DURING THE WARRANTY PERIOD AS OUTLINED IN THE MAINTENANCE INSTRUCTIONS. THE CONTRACTOR SHALL MAKE PERIODIC INSPECTIONS OF THE SITE AND WILL INFORM THE OWNER OF ANY LACK OF PROPER MAINTENANCE IN WRITING. OWNER'S FAILURE TO COMPLY WITH THE MAINTENANCE PROGRAM SHALL RENDER THE WARRANTY NULL AND VOID.
- THE CONTRACTOR IS NOT RESPONSIBLE FOR ACTS OF NATURE INCLUDING ABNORMAL WEATHER CONDITIONS, EROSION, VANDALISM, NOR DAMAGES BY OTHERS. IF ANY CONDITIONS BEYOND THE CONTROL OF THE CONTRACTOR SHOULD OCCUR, THE MATERIALS AFFECTED WILL NO LONGER BE COVERED BY THE WARRANTY.

PLANTING NOTES:

- NO PLANTING TO BE INSTALLED UNTIL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- SEE CIVIL/SITE PLAN FOR ALL SITE DIMENSIONS, SQUARE FOOTAGES, PARKING CALCULATIONS, AND DETAILS OF ALL SITE IMPROVEMENTS.
- IF THE LANDSCAPE CONTRACTOR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS, SOIL CONDITIONS, OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT MATERIAL ESTABLISHMENT, SURVIVAL, OR GUARANTEE, THEY SHALL BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- PRIOR TO ANY LAND CLEARING OR CONSTRUCTION, TREE PROTECTION FENCING IS TO BE INSTALLED BY THE CONTRACTOR. THIS FENCING SHALL BE INSTALLED AT THE DRIP LINE OF ALL TREES AND SHRUBS (TO BE PROTECTED) ACCORDING TO THE TREE PROTECTION DETAIL AND MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT. NO CUTTING, FILLING OR TRESPASSING SHALL OCCUR INSIDE THE FENCED AREAS WITHOUT APPROVAL.
- ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS. PLANT MATERIALS ARE TO BE PLANTED IN THE SAME RELATIONSHIP TO GRADE AS WAS GROWN IN NURSERY CONDITIONS. IF WET, CLAY SOILS OR POOR DRAINING SOILS ARE EVIDENT, PLANT HIGHER. REMOVE ALL TWINE, WIRE AND BURLAP FROM TOP 1/3 OF ROOT BALL AND FROM TREE TRUNKS.
- ONE SHRUB PER TYPE AND SIZE IN EACH PLANTING BED AND EVERY TREE SHALL BE CLEARLY IDENTIFIED (COMMON OR LATIN NAME). ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND. REFER TO PLAN FOR SOD/SEED LOCATIONS.
- SEED AND/OR SOD ALL AREAS DISTURBED DUE TO GRADING AND CONSTRUCTION ACTIVITIES. WHERE SOD/SEED AREAS ARE PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND. REFER TO PLAN FOR SOD/SEED LOCATIONS.
- PRUNE, THIN AND SHAPE TREES AND SHRUBS ACCORDING TO STANDARD HORTICULTURAL PRACTICES. APPLY MINIMUM 4" MULCH CUP AT ALL TREES NOT PLANTED IN PLANTING BEDS.
- EXISTING LAWN AREAS TO BE SAVED AND AREAS THAT ARE DAMAGED DURING CONSTRUCTION MUST BE INSPECTED TO DETERMINE VIABILITY. IF THE EXISTING LAWN IS FOUND TO BE LEVEL, HEALTHY, DENSE & FREE FROM WEEDS, LAWN MAY NOT REQUIRE REPLACEMENT OR RENOVATION. IF RENOVATION IS REQUIRED OR IS PART OF THE APPROVED PLAN, THEN THE FOLLOWING REQUIREMENTS WILL APPLY:
EXISTING LAWN FOUND TO BE IN POOR CONDITION MUST FIRST BE SPRAYED WITH ROUND-UP (OR EQUAL) TO KILL THE EXISTING LAWN AND WEED AREAS. WAIT A MIN. OF (10) DAYS FOR THE HERBICIDE TO TAKE EFFECT, THEN REMOVE ALL DEAD SOD & WEEDS TO A MIN. DEPTH OF (2) INCHES. ADD A MIN. OF 6 INCHES OF NEW TOPSOIL TO ALL LAWN AREAS. BACKFILL AND COMPACT TOPSOIL TO THE TOP OF ALL CURBS & WALKS PRIOR TO SODDING. REGRADE TO ELIMINATE ALL BUMPS & DEPRESSIONS AND RESOD ALL AREAS.
EXISTING LAWN FOUND TO BE IN GOOD CONDITION, BUT WITH BARE, SPARSE OR WEEDY AREAS MUST BE RENOVATED BY FILLING IN LOW AREAS, RAKING, OVERSEEDING AND TOP DRESSING ALL SPARSE AND BARE SPOTS AND BY INITIATING A WEED AND FEED PROGRAM.
- CONVERSION OF ALL ASPHALT AND GRAVEL AREAS TO LANDSCAPE SHALL BE DONE IN THE FOLLOWING MANNER:
A. REMOVE ALL ASPHALT, GRAVEL AND COMPACTED EARTH TO A DEPTH OF 24"-30" DEPENDING ON THE DEPTH OF SUB BASE AND DISPOSE OF OFF SITE.
B. REPLACE EXCAVATED MATERIAL W/ GOOD, MEDIUM TEXTURED PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY) TO A MIN. OF 2" ABOVE TOP OF CURB AND SIDEWALK, ADD 4"-6" OF TOPSOIL AND CROWN TO A MIN. OF 6" ABOVE ADJACENT CURB AND WALK AFTER EARTH SETTLING, UNLESS NOTED OTHERWISE ON THE PLANS.

- ALL TREE PITS MUST BE TESTED FOR PROPER DRAINAGE PRIOR TO PLANTING TREES. A DRAINAGE SYSTEM MUST BE INSTALLED IF PLANTING PIT DOES NOT DRAIN SUFFICIENTLY. (REQUIRED IN HEAVY CLAY SOILS)
- ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESS WATER FROM STANDING ON LAWN AREAS OR AROUND TREES & SHRUBS.
- ALL MULCH RINGS AND SHRUB BEDS IN LAWN AREAS SHALL BE EDGED WITH A MANICURED EDGE OR WITH MANUFACTURED EDGING AS INDICATED.
- MULCHING AND WATERING OF ALL PLANTS & TREES SHALL BE IMMEDIATELY OR WITHIN 16 HOURS AFTER INSTALLATION.

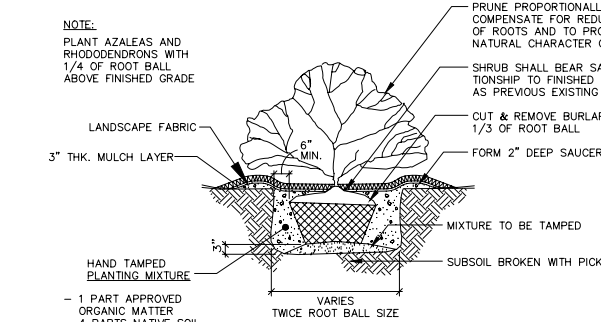


SHRUB/PERENNIAL BEDS DETAIL

1
C-06.1 SCALE: NTS

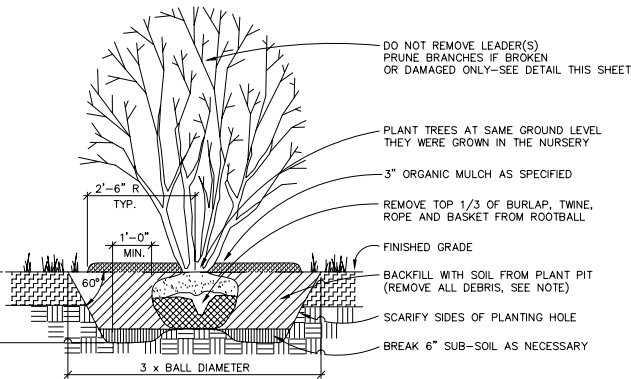
LAWN INSTALLATION:

- LAWN AREAS SHALL BE PREPARED ACCORDING TO THE SECTION BELOW ENTITLED "SEEDBED PREPARATION".
- LOCALLY-GROWN SOD SHALL BE PROVIDED IN AREAS WHERE SEEDING IS NORMALLY UNSUCCESSFUL OR WILL BE UNSUCCESSFUL DUE TO CLIMATE, SEASON, OR OTHER TEMPORARY CONSTRAINT. SOD SHALL BE STRONGLY ROOTED, FREE OF WEEDS, AND OF UNIFORM THICKNESS WITH NO MORE THAN 1.5 INCHES OR LESS THAN 1 INCH OF SOIL.
- SOD SHALL BE TIGHTLY-FITTED TOGETHER. ENDS AND EDGES SHALL MEET WITHOUT OVERLAP AND JOINTS SHALL BE STAGGERED WITH ADJACENT ROWS. AFTER INSTALLATION, SOD SHALL BE THOROUGHLY WATERED. ON SLOPES STEEPER THAN 2:1, SOD SHALL BE HELD IN PLACE WITH WOODEN STAKES MEASURING 1 INCH SQUARE BY 6 INCHES LONG. STAKES SHALL BE DRIVEN FLUSH WITH THE TOP OF THE SOD'S SOIL LAYER.
- PROVIDE GRASS SEED THAT IS FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE FOR PURITY AND GERMINATION. ESTABLISHED BY OFFICIAL SEED ANALYSTS OF NORTH AMERICA. PROVIDE SEED TYPE OR SEED MIX WITH BEST RECORD OF SUCCESS IN LOCALITY OF PROJECT OR PER PROJECT SPECIFICATIONS. REFER TO PLAN.
- APPLY SEED AT THE APPROPRIATE RATE, PER I.D.O.T. SPECIFICATIONS. FOR ESTABLISHING A NEW LAWN, SOW SEED USING A SPREADER OR SEEDING MACHINE. DISTRIBUTE SEED EVENLY OVER ENTIRE AREA BY SOWING EQUAL QUANTITY IN 2 DIRECTIONS AT RIGHT ANGLES TO EACH OTHER TO SEED LAYERS. RAKE TO A 1/8-INCH OF SOIL, ROLL LIGHTLY, AND WATER WITH A FINE SPRAY.



BALLED AND BURLAPPED SHRUB PLANTING DETAIL

6
C-06.1 SCALE: NTS

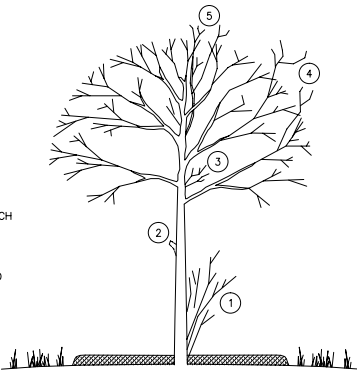


GENERAL NOTES:

IF ROOTBALL IS WRAPPED IN NON-BIODEGRADEABLE BURLAP, REMOVE ENTIRE WRAP AFTER PLACED IN PIT. WHEN BACKFILLING PLANT PIT, PLACE PLANTING SOIL IN TWO LIFTS. AFTER FIRST LIFT, PUDDLE SOIL IN WITH WATER TO REMOVE ALL AIR POCKETS. PLACE SECOND LIFT AND REPEAT. CONTINUE TO PUDDLE AND FILL AS NECESSARY.

MULTI-STEMMED TREE PLANTING DETAIL

4
C-06.1 SCALE: NTS



GENERAL NOTES:

DASHED LINES ILLUSTRATE BRANCHES AND STUMPS THAT ARE TO BE REMOVED.
DO NOT REMOVE THE LEADER.

DECIDUOUS TREE PRUNING DETAIL

2
C-06.1 SCALE: NTS

LAWN INSTALLATION (CONT.):

- PROTECT ALL SEEDS AREAS AGAINST EROSION BY SPREADING A CLEAN, SEED FREE SALT HAY OR THRESHED STRAW OF WHEAT, RYE, OATS, OR BARLEY. SPREAD UNIFORMLY TO FORM A CONTINUOUS BLANKET NOT LESS THAN 1.5 INCHES LOOSE MEASUREMENT OVER SEEDED AREA.
- TREATMENTS SUCH AS JUTE MESH, EXCELSIOR MATTING, OR FIBERGLASS ROVING SHALL BE USED TO STABILIZE DITCHES OR STEEP SLOPES SUSCEPTIBLE TO EROSION. THE TREATMENT SHALL BE INSTALLED PRIOR TO THE MULCHING OPERATION.

SEEDBED PREPARATION:

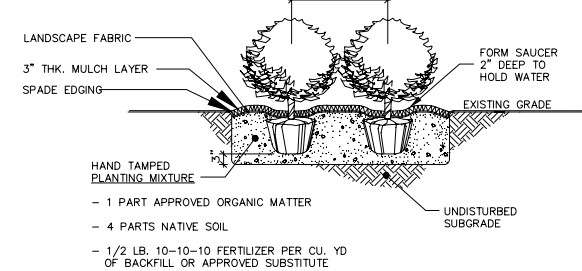
- ALL DISTURBED AREAS SHALL BE DRESSED TO THE TYPICAL SECTIONS AND/OR GRADES SHOWN AND PLOWED TO A DEPTH OF 5 INCHES. THE TOP 2 INCHES SHALL BE PULVERIZED TO PROVIDE A UNIFORM SEEDBED.
- REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER DEBRIS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM. SOIL LEVEL SHALL BE APPROXIMATELY 1 INCH BELOW ALL TOPS OF CURBS AND WALKWAYS.
- APPLY LIME AND FERTILIZER WITH NECESSARY EQUIPMENT TO ENSURE UNIFORM DISTRIBUTION OF THE MATERIALS. THE HAND/BUCKET METHOD IS NOT ACCEPTABLE. THE RATES AND TYPES OF MATERIALS TO BE APPLIED ARE AS FOLLOWS:

SEEDBED PREPARATION (CONT.):

- TURFGRADE FERTILIZER WITH SLOW RELEASE NITROGEN (E.G. 18-24-10) - RATE THAT WILL PROVIDE 5 LBS. OF PHOSPHORUS PER 1000 SQUARE FEET LIMESTONE - 75 LBS. PER 1000 SQUARE FEET
(LIMESTONE MAY BE WAIVED IF EXISTING PH IS GREATER THAN 5.5.)
- MOISTEN PREPARED LAWN AREAS BEFORE PLANTING IF SOIL IS DRY. ALLOW SURFACE MOISTURE TO DRY BEFORE PLANTING LAWNS. DO NOT CREATE A MUDDY SOIL CONDITION.

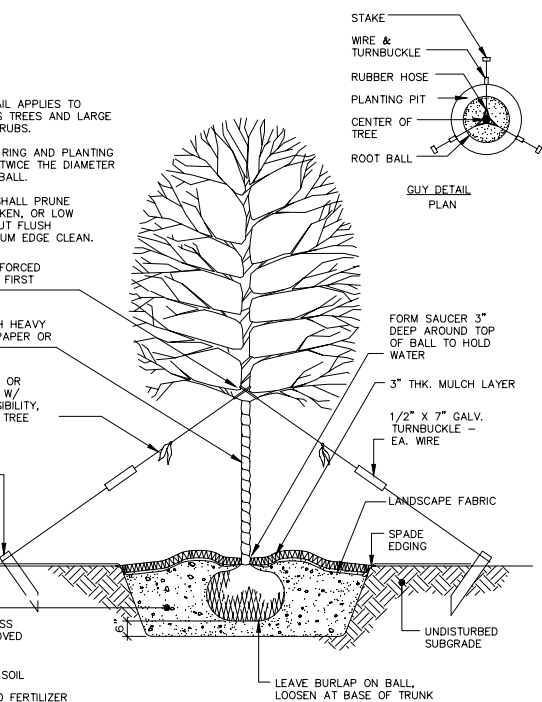
NOTE:

CONTRACTOR SHALL PRUNE CROWDED, BROKEN, OR STRAY BRANCHES. CUT FLUSH, LEAVING CAMBIUM EDGE CLEAN.



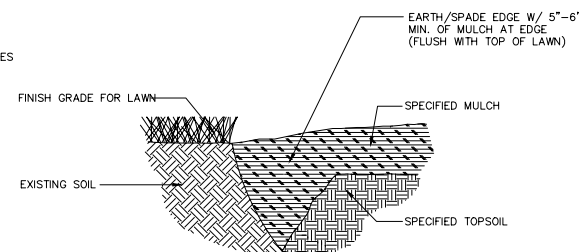
CONTAINER SHRUB PLANTING DETAIL

7
C-06.1 SCALE: NTS



DECIDUOUS CANOPY TREE PLANTING DETAIL (2" cal. or greater)

5
C-06.1 SCALE: NTS



GENERAL NOTES:

USE WHEREVER MULCHED PLANTINGS TRANSITION TO TURF AREAS, INCLUDING ALL TREE MULCH RINGS, SHRUB BEDS, MASS PLANTING BEDS, ETC...

EARTH/SPADE EDGE DETAIL

3
C-06.1 SCALE: NTS



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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Land Development & Real Estate
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1245 EAST DEHL ROAD, SUITE 100
NAPERVILLE, IL 60563
DESIGN FIRM #484-008976

SECTION 32

TOWN 40 NORTH, RANGE 8 EAST

CITY OF ST. CHARLES

KANE COUNTY, ILLINOIS

CLIENT
DISCOUNT TIRE COMPANY

131 SOUTH RANDALL ROAD
ST. CHARLES, IL

PRELIMINARY ENGINEERING

LANDSCAPE NOTES AND DETAILS

DATE

09/13/2012

REVISION

17/05/2012
CEN SUBMITTAL

REVISIONS



SCALE

NTS

DR. REK

CH. BH

P.M. T. MOSHER

CAD FILE:

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JOB

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FILE CODE:

SHEET NO.

C-09

SANITARY SEWERS – STANDARD SPECIFICATIONS FOR GRAVITY SEWERS.

- A. INSTALLATION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, FOURTH EDITION (HEREAFTER THE "STANDARD SPECIFICATIONS"). THREE COPIES OF WHICH WERE FILED WITH THE CITY CLERK MORE THAN 30 DAYS PRIOR TO THE PASSAGE OF THE ORDINANCE ADOPTING THIS PROVISION, AND APPLICABLE PROVISIONS OF THE ST. CHARLES MUNICIPAL CODE SHALL GOVERN. THE SANITARY SEWER SYSTEM DESIGNS SHALL HAVE A MINIMUM USABLE, WATERTIGHT SERVICE LIFE OF FIFTY (50) YEARS.
- B. SEWERS SHALL BE OF ADEQUATE SIZE TO SERVE THE ENTIRE DEVELOPMENT PROPOSED. THE MINIMUM SIZE OF STREET SEWERS SHALL BE EIGHT (8) INCHES INSIDE DIAMETER. THE MINIMUM SIZE OF SEWER SERVICE CONNECTION IS SIX (6) INCHES, INSIDE DIAMETER.
- C. BEFORE COMMENCING THE SEWER LAYOUT, THE SUBDIVIDER SHALL CONFER WITH THE CITY TO DETERMINE THE REQUIRED SIZE AND GRADES FOR ANY TRUNK SEWERS TRAVERSING THE SUBDIVISION TO FIT THE CITY'S OVERALL PLAN. THESE SHALL BE INSTALLED BY THE SUBDIVIDER UNDER ARRANGEMENTS AS PROVIDED IN THE SUBDIVISION CONTROL ORDINANCE.
- D. A REGISTERED ILLINOIS PROFESSIONAL ENGINEER MUST CERTIFY CONFORMANCE TO APPLICABLE PROVISIONS OF 16.44.090 THROUGH 16.44.120.
- E. REGISTERED ILLINOIS PROFESSIONAL ENGINEER MUST CERTIFY CONFORMANCE TO APPLICABLE INSTALLATION PROVISIONS OF 16.44.130 THROUGH 16.44.330.
- F. SANITARY SEWER SERVICE LATERALS SHALL BE PROVIDED FOR EACH LOT, PARCEL OR TRACT. THE LATERAL SHALL EXTEND TO THE RIGHT-OF-WAY LINE.
- G. SANITARY SEWER SERVICE CONNECTIONS SHALL CONSIST OF A 1/8 SEWER PIPE CURVE SET IN THE BELL OF A Y FITTING OR A COMBINATION T-Y MOLDED FITTING. THE NECESSARY LENGTHS OF STRAIGHT PIPE MAY EXTEND TO WITHIN FIVE (5) FEET OF THE BUILDING FOUNDATION. ALL REQUIREMENTS FOR MATERIAL AND INSTALLATION FOR SEWER MAINS ARE APPLICABLE TO SEWER SERVICE CONNECTION PIPES. TESTING OF SEWER SERVICE CONNECTION PIPES SHALL BE DONE AS PART OF SEWER MAIN TESTS AS DEFINED IN SECTION 16.44.260 FOR INFILTRATION OF WATER AND EXFILTRATION OF AIR UNDER PRESSURE. PVC SEWER SERVICE PIPE IS NOT REQUIRED TO HAVE DEFLECTION TESTS. TELEVISION TESTING OF SEWER SERVICE PIPE IS NOT REQUIRED.
- H. ON COMPLETION OF THE SEWER, THE CONTRACTOR SHALL PROVIDE FACILITIES AT THE LOW END OF THE MAIN SEWER FOR TEMPORARILY Dewatering THE SEWER. WATER PUMPED OUT SHALL BE DISPOSED OF IN A MANNER ACCEPTABLE TO THE CITY ENGINEER.
- I. NO CONSTRUCTION SHALL COMMENCE UNTIL A COPY OF A PERMIT FROM THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY IS FILED WITH THE CITY.
- J. MANHOLES SHALL CONFORM TO STANDARD DRAWING NUMBER 16.44.060.J (SEE DETAIL SHEET) FRAME; NEEHAH R-1713 LID; NEEHAH R-1713 OR R-1916C TYPE "B" WITH THE WORDS "CITY OF ST. CHARLES – SANITARY" CAST INTO SURFACE.
- K. MINIMUM WEIGHT OF COVER SHALL BE AS FOLLOWS:
- ON COLLECTOR STREETS, FIVE HUNDRED FORTY POUNDS.
 - ON MINOR STREETS AND CUL-DE-SACS, FOUR HUNDRED POUNDS.
- L. THE FLUID FLOW DESIGN CHARACTERISTICS OF ALL SEWER PIPE SHALL USE A MANNING "N" FACTOR OF .013.
- M. ALL PVC PIPE AND FITTINGS SHALL CONFORM TO ASTM D-3034 FOR SIZES SIX (6) THROUGH FIFTEEN (15) INCHES. THE MINIMUM SDR IS TWENTY-SIX (26) FOR PIPE AND SDR THIRTY-FIVE FOR FITTINGS. FOR PIPE DIAMETERS EIGHTEEN (18) TO TWENTY-SEVEN (27) INCHES, PIPE AND FITTINGS SHALL CONFORM TO ASTM F-679. ALL PVC PLASTIC SHALL HAVE A CELL CLASSIFICATION OF 12454-B. PURCHASE ORDERS SHALL SPECIFY WRITTEN REPORT OF TEST RESULTS AND CERTIFICATION OF MATERIAL BY MANUFACTURER PER ASTM SPECIFICATIONS.
- N. JOINTS SHALL CONFORM TO ASTM D-3212. SOLVENT JOINTS ARE NOT PERMITTED.
- O. TESTING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTIONS 31.1.11 AND 31.1.11A THROUGH 31.1.11D. THE SEWER SHALL MEET THE REQUIREMENTS OF:
- INFILTRATION OF WATER,
 - EXFILTRATION OF AIR UNDER PRESSURE,
 - TELEVISION INSPECTION.
- IN ADDITION, PVC SEWER PIPE MUST MEET FIVE (5) PERCENT DEFLECTION TEST REQUIREMENTS.
- P. ALL TESTS MUST BE CONDUCTED IN THE PRESENCE OF REPRESENTATIVES OF THE CITY OF ST. CHARLES AND THE ENGINEER. WRITTEN CERTIFICATION OF TEST CONFORMANCE SHALL BE PROVIDED BY AN ILLINOIS REGISTERED PROFESSIONAL ENGINEER.
- Q. ALL SEWER MAINS SHALL BE FULLY TESTED.

STORM SEWER NOTES:

1. FRAMES AND GRATES SHALL BE PROVIDED AS APPROPRIATE FOR THE STRUCTURE LOCATION (I.E.: DEPRESSED CURB, BARRIER CURB, OVERFLOW ROUTE, REAR YARD...). ALL GRATES TO BE LOCATED NEAR A PAVED SURFACE SHALL BE "BICYCLE SAFE".
- | | | |
|-------------------------------|-------------------------------------|-------------------------------------|
| CURB INLET/C.B.: | HIGH BACK: | NEENAH R-3281-A OR R-3278-1 |
| | NEENAH R-3506-A2 | |
| C.B., "BEHIND THE CURB TYPE": | NEENAH R-3305 | |
| | NEENAH R 1713 (REFER TO LID DETAIL) | |
| C.B./M.H., TYPE "D": | GRATE: | NEENAH R 1713 (REFER TO LID DETAIL) |
| | FRAME: | NEENAH R-1713 |
| C.B., "BEEHIVE TYPE": | | NEENAH R-4340-B |
2. SEWER PIPE, MATERIALS: MAIN LINE STORM SEWER SHALL BE CONSTRUCTED OF ONE OF THE FOLLOWING:
- PRE-CAST REINFORCED CONCRETE PIPE, WITH "O-RING" JOINTS;
 - PVC PIPE, RIGID, (MIN. SDR 26, PUSH-ON GASKET JOINTS);
 - ALL JOINTS SHALL CONFORM TO ANSI 21.11 FOR DUCTILE IRON PIPE.
 - DUCTILE IRON PIPE, (CLASS 52), MINIMUM;



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NOTICE:

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WATER DISTRIBUTION SYSTEMS – STANDARD SPECIFICATIONS.

- A. WATER MAIN PIPE SHALL HAVE A MINIMUM DIAMETER TO SATISFY FIRE FLOW REQUIREMENTS OR EIGHT (8) INCHES UNLESS THE TOTAL LENGTH OF THE PUBLIC MAIN IS 300 FEET OR LESS AND AS APPROVED BY THE DIRECTOR OF PUBLIC WORKS. THE MINIMUM DIAMETER SHALL BE SIX (6) INCHES. WATER MAIN PIPE SHALL BE DUCTILE IRON MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENT OF ANSI/AWWA C151/A21.51. PUSH-ON JOINTS AND MECHANICAL JOINTS FOR SUCH PIPE SHALL BE IN ACCORDANCE WITH ANSI/AWWA C111/A21.11. PIPE THICKNESS SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/AWWA C150/A21.50 AND SHALL BE BASED ON LAYING CONDITIONS AND INTERNAL PRESSURES SPECIFIED IN THE PROJECT PLANS WITH A MINIMUM THICKNESS CLASS OF 10. ALL SIDE YARD AND REAR YARD WATER MAINS SHALL BE DIRECTLY ADJACENT TO A PUBLIC ROADWAY OR PAVED SURFACE SHALL HAVE A MINIMUM THICKNESS CLASS OF 55 WITH A TYPE FIVE LAYING CONDITION, AS DEFINED IN ANSI/AWWA C/600/A21.50 SECTION 3.3.7. SEE CITY STANDARD DRAWING NO. 16.44.070.03. PIPE SHALL HAVE CEMENT MORTAR LINING AND SEAL COATING IN ACCORDANCE WITH ANSI/AWWA C104/A21.4.
- B. INSTALLATION OF DUCTILE-IRON WATER MAINS AND THEIR APPURTENANCES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA C600/A21.50, INCLUDING LUBRICATING MECHANICAL JOINT GASKETS WITH PIPE LUBRICANT AND APPLYING A MINIMUM OF 75 FOOT POUNDS OF TORQUE TO BOLTING SYSTEMS. WATER MAIN SHALL HAVE A MINIMUM TYPE THREE LAYING CONDITIONS, AS DEFINED IN ANSI/AWWA C600/A21.50 SECTION 3.3.7. SEE CITY STANDARD DRAWING NO. 16.44.070.01, ATTACHED. POLYETHYLENE ENCASEMENT IS REQUIRED IN ALL INSTALLATIONS IN ACCORDANCE WITH ANSI/AWWA C105/A21.5. POLYETHYLENE ENCASEMENT MAY BE DELETED IF SOIL ANALYSIS, FROM THE SITE, PERFORMED BY A PROFESSIONAL ENGINEER, APPROVED BY THE CITY, INDICATED THAT POLYETHYLENE ENCASEMENT IS NOT REQUIRED. TO INSURE ELECTRIC CONDUCTIVITY, BRASS WEDGES SHALL BE INSTALLED PER SECTION 41.205C OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, DATED MAY 1996, AS AMENDED. WATER MAIN SHALL HAVE A MINIMUM COVER OF 5 (FIVE) FEET AND MAXIMUM BURY DEPTH OF 10 (TEN) FEET, UNLESS APPROVED BY THE CITY COUNCIL. WATER MAIN AND PUBLICLY OWNED WATER APPURTENANCES SHALL BE LOCATED A MINIMUM OF 20 (TWENTY) FEET FROM BUILDINGS OR STRUCTURES. IF SITE CONDITIONS WILL NOT ALLOW FOR THE MINIMUM SEPARATION APPROVAL MUST BE RECEIVED FROM THE CITY COUNCIL.
- C.
- MECHANICAL JOINT FITTINGS SHALL BE RESTRAINED BY A DEVICE, WHICH CONSISTS OF MULTIPLE INDIVIDUALLY ACTIVATED GRIPPING SURFACES BUILT INTO A MECHANICAL JOINT FOLLOWER GLAND. DEVICE SHALL BE MANUFACTURED FROM DUCTILE IRON CONFORMING TO ASTM A536-80. THE RESTRAINING DEVICE SHALL BE SUCH THAT IT CAN REPLACE A STANDARDIZED MECHANICAL JOINT GLAND AND CAN BE USED WITH ANY STANDARD MECHANICAL JOINT BEEF CONFORMING TO ANSI/AWWA C111/A21.11 AND TO ANSI/AWWA C153/A21 OF THE LATEST REVISION. THE DEVICE SHALL UTILIZE TORQUE SENSITIVE, "TWIST OFF NUTS" THAT SHALL BE INCORPORATED IN THE DESIGN OR THE WEDGE ACTIVATION SCREWS TO INSURE PROPER TORQUE. THE RESTRAINED DEVICE SHALL HAVE A PUBLISHED WORKING PRESSURE RATING 350 PSI IN SIZES THROUGH 16" AND 250 PSI ABOVE 20". A 2.0 SAFETY FACTOR WILL BE BUILT IN TO THE WORKING PRESSURE RATING. RESTRAINT DEVICE FOR MECHANICAL JOINTS SHALL BE UNI-FLANGE SERIES 1400 MANUFACTURED BY THE FORD METER BOX COMPANY OF WABASH, INDIANA OR 1100 OR 3000 SERIES MEGALUG MANUFACTURED BY EBAA IRON SALES, INC. OF EASTLAND, TEXAS.
 - PIPE FROM MECHANICAL JOINT RESTRAINT SPECIFIED IN 16.44.070 C.1. SHALL BE RESTRAINED IN ACCORDANCE WITH THE MINIMUM GUIDELINES STATED IN CITY STANDARDS DRAWING NO. 16.44.070.04 ATTACHED. PUSH JOINT PIPE RESTRAINT SHALL BE FIELD LOK 350 GASKET AS MANUFACTURED BY UNITED STATES PIPE AND FOUNDRY COMPANY OF BIRMINGHAM, ALABAMA OR SERIES 1700 MEGALUG BY EBAA IRON SALES IN. OF EASTLAND, TEXAS OR SERIES 1390 PIPE RESTRAINT AS MANUFACTURED BY FORD METER BOX CO., INC. OF WABASH, INDIANA.
- D. DUCTILE-IRON COMPACT FITTINGS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA C153/A21.53. DUCTILE-IRON AND GRAY-IRON FITTINGS MATERIAL AND MANUFACTURE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA C11/A21.10.
- E. DISTRIBUTION SYSTEM VALVES SHALL BE RESILIENT WEDGE GATE VALVE, EPOXY COATED, NON-RISING STEM, O-RING SEAL, OPEN LEFT WITH A 2" SQUARE OPERATING NUT, MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA C509-87. ALL DISTRIBUTION VALVES SHALL BE HOUSED IN VALVE MANHOLES IN ACCORDANCE WITH THE DETAIL PROVIDED IN THE EXHIBIT ENTITLED "VALVE DETAIL" CHAPTER TO THIS CHAPTER EXCEPT THOSE VALVES ON HYDRANT LEADS WHICH SHALL BE FURNISHED WITH CAST IRON BOXES AND COVERS, VALVES WITH A NOMINAL PIPE DIAMETER UNDER 10 INCHES SHALL BE HOUSED IN VALVE MANHOLES WITH AN INSIDE DIAMETER OF 4 FEET, VALVES 10 INCHES AND LARGER SHALL BE HOUSED IN VALVE MANHOLES WITH AN INSIDE DIAMETER OF 5 FEET. THE WEIGHT ON THE MANHOLE'S CAST IRON COVER AND LID SHALL BE NOT LESS THAN FOUR HUNDRED POUNDS, EXCEPT WHERE THE MANHOLE LIES WITH THE PAVED SURFACE AREA OF A COLLECTOR STREET IN WHICH CASE THE MANHOLE COVER AND LID SHALL WEIGH NOT LESS THAN FIVE HUNDRED FORTY POUNDS. MANHOLE LIDS SHALL HAVE "WATER" IMPRINTED ON THE LID. WATER MAIN WITH A BURY DEPTH OF 6.0' AND GREATER SHALL HAVE STEPS INSTALLED IN VALVE VAULTS.
- F. FIRE HYDRANTS SHALL BE EITHER CLOW MEDALLION FIRE HYDRANTS, AS MANUFACTURED BY THE CLOW VALVE COMPANY OF OSKALOOSA, IOWA, OR MUELLER SUPER CENTURION 200 FIRE HYDRANTS, AS MANUFACTURED BY MUELLER COMPANY, DECATUR, ILLINOIS, OR WATERLOO HYDRANT MODELS 86-67-250, OR EQUAL AS APPROVED BY CITY COUNCIL. HYDRANTS WILL HAVE TWO, TWO AND ONE-HALF INCH HOSE NOZZLES AND ONE, FOUR AND ONE-HALF INCH STEAMER NOZZLE THREADED FOR ST. CHARLES THREAD. ALL THREADS SHALL BE NATIONAL STANDARD. ALL HYDRANTS SHALL BE FOR SIX-INCH PIPE CONNECTION AND SHALL HAVE A FIVE-INCH VALVE OPENING. HYDRANTS SHALL BE OF SUFFICIENT LENGTH TO ALLOW FOR FIVE FEET OF COVER OVER THE HYDRANT LEAD. AN AUXILIARY SIX-INCH VALVE AND VALVE BOX SHALL BE INSTALLED ON EACH HYDRANT LEAD. ALL HYDRANTS SHALL HAVE TWO COATS OF PAINT MATCHING THE CITY STANDARD FOR COLOR; COMMONLY KNOWN AS ROYAL RED. HYDRANTS SHALL HAVE INSTALLED "HYDRAFINDER STANDARD" HYDRANT LOCATORS AS MANUFACTURED BY THE RADON CORPORATION OF ST. CHARLES, ILLINOIS, OR EQUAL APPROVED BY THE CITY COUNCIL.
- G. VALVE BOXES ON HYDRANT LEADS SHALL BE BUFFALO-TYPE, THREE PIECE, MUELLER NO. H-10357, CLOW F-2450, OR EQUAL AS APPROVED BY THE CITY COUNCIL. ALL VALVE BOXES SHALL HAVE A VALVE BOX STABILIZER INSTALLED.
- H. AFTER THE WATER MAINS HAVE BEEN TESTED IN ACCORDANCE WITH SECTION 16.44.290 AND DISINFECTED IN ACCORDANCE WITH SECTION 16.44.330 THE WATER SERVICE LINE SHALL BE OPEN TRENCH. INSPECTORS SHALL BE OPEN TRENCH CONTRACTORS REQUESTING CURB STOP. FOR EACH LOT, THE COPPER SERVICE PIPE SHALL BE SOFT TEMPER, TYPE-K COPPER TUBING, ONE-INCH DIAMETER MINIMUM. APPROVED FITTINGS SHALL BE OF COMPRESSION TYPE MANUFACTURED BY THE FORD METER BOX CO. INC., OF WABASH, INDIANA, THE MUELLER CO. OF DECATUR, ILLINOIS, OR EQUAL AS APPROVED BY CITY COUNCIL, AS FOLLOWS:
- | |
|---|
| ONE INCH CORPORATION STOP:
FORD NO. FB 1000-4-Q
MUELLER NO. B-25008 |
| ONE INCH CURB STOP:
FORD NO. B-44-444-Q
MUELLER NO. B-25155 |
- EVERY WATER SERVICE LINE FROM THE CORPORATION TO THE CURB STOP SHALL BE INSPECTED BY THE WATER DIVISION FOREMAN OR HIS DESIGNEE. ALL INSPECTIONS SHALL BE OPEN TRENCH. CONTRACTORS REQUESTING SERVICE LINE INSPECTIONS SHALL CONTACT THE WATER DIVISION 48 HOURS PRIOR TO REQUESTED INSPECTION TIME.
- I. EACH CURB STOP SHALL BE PROVIDED WITH A CAST IRON SERVICE BOX MUELLER NO. H-10300 OR EQUAL APPROVED BY THE CITY COUNCIL. COMPLETE WITH LID. SERVICE BOX SHALL BE OF SUFFICIENT LENGTH TO PERMIT THE TOP TO BE INSTALLED APPROXIMATELY THREE INCHES ABOVE FINISH GRADE. EACH SERVICE BOX SHALL BE PROVIDED WITH A CAP WITH THE WORD "WATER" CAST IN THE TOP.
- J. TAPPING SLEEVES, FOR SIZES UP TO EIGHT-INCH, SHALL BE STAINLESS STEEL MANUFACTURED BY ROMAC INDUSTRIES, INC., OF SEATTLE, WASHINGTON, MODEL NO. SST-845 OR MUELLER CO. OF DECATUR, ILLINOIS, MODEL NO. H-615 OR EQUAL APPROVED BY THE CITY COUNCIL. ALL CITY COUNCIL. ALL FASTENERS USED TO CONNECT TAPPING SLEEVE TO TAPPING VALVE SHALL BE 304 GRADE STAINLESS STEEL FASTENERS.
- K. UNLESS SPECIFICALLY APPROVED, ALL WATER MAINS AND SERVICES SHALL BE LAID IN SEPARATE TRENCHES FROM SEWER AND SEWER SERVICES, AS OUTLINED IN SECTIONS 16.44.130 THROUGH 16.44.140.
- L. NO PUBLIC WATER MAIN CONSTRUCTION SHALL COMMENCE UNTIL A PUBLIC WATER SUPPLY CONSTRUCTION PERMIT IS OBTAINED FROM THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, AND A COPY OF SUCH PERMIT IS FILED WITH THE CITY.
- M. LANDSCAPE PLANTINGS SHALL NOT INTERFERE WITH OPERATIONS AND MAINTENANCE OF WATER APPURTENANCES. TREES SHALL NOT BE PLANTED WITHIN TEN FEET OF ALL HYDRANTS, VALVE VAULTS, OR CURB BOXES. BUSHES AND SHRUBS SHALL BE MAINTAINED FIVE FEET FROM WATER APPURTENANCES. SOD IS REQUIRED AROUND HYDRANTS FOR TEN FEET. HYDRANT PLANTS SHALL FOLLOW THE GUIDELINES DEPICTED IN CITY STANDARD DRAWING NO. 16.44.070.02, ATTACHED.
- N. ALL BELOW GRADE, FACTORY INSTALLED BOLTS AND FASTENERS SHALL BE 304 GRADE STAINLESS STEEL.
- O. THE PIPE LINE SHALL BE TESTED FOR LEAKAGE BETWEEN POINTS AS DESIGNATED BY THE ENGINEER. TESTS SHALL BE MADE WITH ALL THE JOINTS UNCOVERED. TESTING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA C600-87 SECTION 4, WITH A MINIMUM TEST PRESSURE OF 150 PSI.
- P. THE CONTRACTOR SHALL GIVE THE CITY ENGINEER A MINIMUM OF TWENTY-FOUR HOURS ADVANCE NOTICE OF THE TIME HE CONTEMPLATES MAKING THE TEST IN ORDER THAT THE CITY ENGINEER OR HIS DESIGNEE IS PRESENT TO OBSERVE THE TEST.
- Q. THE UTMOST OF CARE SHALL BE TAKEN DURING THE FILLING OPERATION TO PREVENT ANY POSSIBLE CONTAMINATION TO THE EXISTING WATER DISTRIBUTION SYSTEM.
- R. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE NECESSARY EQUIPMENT AND APPARATUS, AS DETERMINED BY THE CITY, FOR MAKING THE TEST.
- S. BEFORE BEING PLACED IN SERVICE, ALL NEW WATER MAINS SHALL BE CLEANED AND CHLORINATED WITH LIQUID CHLORINE, ACCORDING TO THE A.W.W.A. PUBLICATION, "A STANDARD PROCEDURE FOR DISINFECTING WATER MAINS – AWWA C651-86," AS AMENDED. (ORD. 1997-M-103 § 1; ORD. 1990-M-17 § 1).
- T. THE CONTRACTOR SHALL GIVE THE ENGINEER AT LEAST TWENTY-FOUR HOURS' NOTICE AHEAD OF THE TIME HE CONTEMPLATES DISINFECTION IN ORDER THAT THE ENGINEER MAY BE PRESENT AND OBSERVE THE WORK.
- U. FOLLOWING THE CHLORINATION, THE CONTRACTOR WILL COLLECT AND SUBMIT FOR BACTERIOLOGICAL ANALYSIS TWO SETS OF SAMPLES. EACH SET BE COLLECTED ON SUCCESSIVE DAYS. MAINS WILL NOT BE ACCEPTED OR PLACED IN SERVICE UNTIL SATISFACTORY REPORTS ARE OBTAINED FOR TWO SETS COLLECTED ON SUCCESSIVE DAYS AND THE ENGINEER HAS BEEN PROVIDED WITH COPIES OF ALL TEST RESULTS SATISFACTORILY EVIDENCING THE MAINS TO BE READY FOR SERVICE.
- V. THE CONTRACTOR SHALL INCLUDE THE ENTIRE COSTS OF DISINFECTING MAINS AND APPURTENANCES IN THE CONTRACT PRICE FOR WATER MAINS.
- W. FRAME AND COVERS: ALL VALVE VAULT STRUCTURES SHALL HAVE A NEEHAH FOUNDRY COMPANY R-1713 FRAME AND TYPE "B" LID WITH CONCEALED PICK HOLE. LIDS SHALL BE FURNISHED WITH "CITY OF ST. CHARLES – WATER" CAST INTO THE TOP SURFACE (REFER TO CITY STANDARD DETAIL).
- X. CONNECTING TO EXISTING WATER MAINS: CONNECTION TO THE END OF AN EXISTING A WATER MAIN SHALL BE WITH A VALVE ONLY. NO NEW WATER MAIN SHOULD BE CONNECTED TO THE EXISTING WATER MAIN UNLESS THE NEW WATER MAIN CAN BE PRESSURE TESTED SEPARATELY. CONNECTION TO AN EXISTING WATER MAIN SHALL BE DONE BY PRESSURE CONNECTION ONLY UNLESS AUTHORIZED BY THE APPROPRIATE ENGINEERING DIVISION. PRESSURE CONNECTION AND VALVE SHALL BE LOCATED WITHIN THE VALVE VAULT. NO PRESSURE CONNECTION SHALL BE WITHIN 3 FEET OF AN EXISTING WATER MAIN JOINT. IF PRESSURE CONNECTION CANNOT BE DONE, USE A CUT IN SLEEVE AND TEE CONNECTION. ALL FITTINGS WILL BE SWABBED OUT WITH A CHLORINE SOLUTION OF AT LEAST 50 MG/L. A CITY REPRESENTATIVE MUST TEST THIS SOLUTION.
- Y. SERVICE TAPS: SERVICE TAPS TO WATER MAINS ARE NOT PERMITTED UNTIL AFTER BACTERIOLOGICAL SAMPLING AND ANALYSIS HAS BEEN COMPLETED TO THE SATISFACTION OF THE APPROPRIATE ENGINEERING DIVISION. NO WATER SERVICE CONNECTION SHALL BE MADE BY ANY PERSON OR FIRM OTHER THAN A STATE OF ILLINOIS LICENSED CONTRACTOR, WITH A STATE OF ILLINOIS LICENSED PLUMBER ON THE JOB, BONDED WITH THE CITY.

UTILITY NOTES:

1. 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. ALL PUBLIC MAINS SHALL BE VIDEOTAPE. 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 EXISTING SANITARY SEWER SYSTEM ADJUTING THE PROPERTY, THE EXISTING SEWER MUST ALSO BE TELEVIEWED AND REPORTED. THE CONTRACTOR SHALL COORDINATE THE TELEVIEWING OF EXISTING CONTIGUOUS SEWERS WITH THE CITY OF ST CHARLES. ALL LINES SHALL BE FLUSHED AND CLEANED PRIOR TO VIDEOTAPING.
2. TRENCH BACKFILL: ALL UTILITY AND SERVICE TRENCHES WITHIN (3) FEET OF PAVED SURFACES, OR AT A DISTANCE SPECIFIED BY THE ENGINEER, SHALL BE BACKFILLED WITH CA-7 (VIRGIN CRUSHED LESTONE), FA-6 (CLEAN BEACH SAND) MATERIAL SHALL BE USED IN ALL OTHER UNPAVED LOCATIONS. ALL BACKFILL MATERIAL SHALL BE PROPERLY COMPACTED UNLESS OTHERWISE DIRECTED BY THE APPROPRIATE ENGINEERING DIVISION. BACKFILL UNDER EXISTING PAVEMENTS, WHERE AN OPEN CUT OF THE PAVEMENT HAS BEEN APPROVED, SHALL BE FLOWABLE FILL THAT MEETS THE DOT STANDARDS OF CONTROLLED LOW STRENGTH MATERIAL (CLSM) MIXTURE #1. NO FLY ASH WILL BE PERMITTED IN THIS MIX (REFER TO CITY PIPE TRENCH DETAIL).
3. WATER MAINS – HORIZONTAL CLEARANCE.
- WHENEVER POSSIBLE, A WATER MAIN SHOULD BE LAID AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN OR SEWER LINE.
 - SHOULD LOCAL CONDITIONS PREVAIL WHICH WOULD PREVENT A LATERAL SEPARATION OF TEN FEET, A WATER MAIN MAY BE LAID CLOSER THAN TEN FEET TO, OR IN THE SAME TRENCH AS, A STORM OR SANITARY SEWER, PROVIDED THE MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER AND AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST EIGHTEEN INCHES ABOVE THE TOP OF THE SEWER. THIS DEVIATION MUST BE APPROVED IN WRITING BY THE CITY ENGINEER.
 - IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED IN SUBPARAGRAPH 1 AND 2 OF THIS SUBSECTION, BOTH THE WATER MAIN AND SEWER SHOULD BE CONSTRUCTED OF DUCTILE-IRON PIPE AND BE PRESSURE-TESTED TO ASSURE WATERTIGHTNESS BEFORE BACKFILLING. SUCH TESTS TO BE CONDUCTED IN THE PRESENCE OF THE CITY ENGINEER.
2. WATER MAINS – VERTICAL CLEARANCE.
- WHENEVER WATER MAINS MUST CROSS HOUSE SEWERS, STORM DRAINS, OR SANITARY SEWERS, THE WATER MAIN SHOULD BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS EIGHTEEN INCHES ABOVE THE TOP OF THE DRAIN OR SEWER. THIS VERTICAL SEPARATION SHOULD BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN TEN FEET, HORIZONTALLY, OF ANY SEWER OR DRAIN CROSSED, SAID TEN FEET TO BE MEASURED AS THE NORMAL DISTANCE FROM THE WATER MAIN TO THE DRAIN OR SEWER.
 - WHERE CONDITIONS EXIST THAT THE MINIMUM VERTICAL SEPARATION SET FORTH IN SUBPARAGRAPH 1 OF THIS SUBSECTION CANNOT BE MAINTAINED, OR IT IS NECESSARY FOR THE WATER MAIN TO PASS UNDER A SEWER OR DRAIN, THE SEWER MAIN SHOULD BE LAID WITH DUCTILE-IRON PIPE, AND THE PIPE SHOULD EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN FEET. IN MAKING SUCH CROSSINGS, IT IS PREFERABLE TO CENTER A LENGTH OF WATER MAIN PIPE OVER THE SEWER TO BE CROSSED SO THAT THE JOINTS WILL BE EQUIDISTANT FROM THE SEWER AND AS REMOTE THEREFROM AS POSSIBLE. WHERE A WATER MAIN MUST CROSS UNDER A SEWER, A VERTICAL SEPARATION OF EIGHTEEN INCHES BETWEEN THE BOTTOM OF THE SEWER AND THE TOP OF THE WATER MAIN SHOULD BE MAINTAINED, ALONG WITH MEANS TO SUPPORT THE LARGER-SIZED SEWER LINES TO PREVENT THEIR SETTLING AND BREAKING THE WATER MAIN.
2. WATER SERVICE LINES – CLEARANCES. THE HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER SERVICE LINES AND ALL SANITARY SEWERS, STORM SEWERS, OR ANY DRAIN SHOULD BE THE SAME AS FOR WATER MAINS, AS DETAILED IN SUBSECTIONS A AND B OF THIS SECTION, EXCEPT THAT WHEN MINIMUM HORIZONTAL AND VERTICAL SEPARATION CANNOT BE MAINTAINED, BRASS, COPPER OR DUCTILE-IRON PIPE SHALL BE USED FOR WATER SERVICE LINES.

Land Development & Real Estate
Power & Energy
Telecommunications
Infrastructure & Transportation
Environmental & Solid Waste
Water & Natural Resources



SECTION 32
TOWN 40 NORTH, RANGE 8 EAST
CITY OF ST. CHARLES
KANE COUNTY, ILLINOIS

CLIENT
DISCOUNT TIRE COMPANY
131 SOUTH RANDALL ROAD
ST. CHARLES, IL
PRELIMINARY ENGINEERING
CITY SPECIFICATIONS

DATE
09/13/2012

10/09/2012
REVISION
11/09/2012
CITY SUBMITTAL



SCALE
NTS
DR. REK
CH. BH
P.M. T. MOSHER
CAD FILE:
12001457C-10-NT.DWG
JOB 12001457
FILE CODE: --
SHEET NO.
C-10



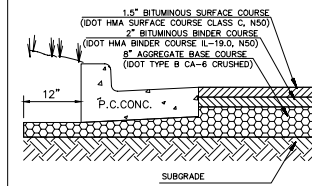
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THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

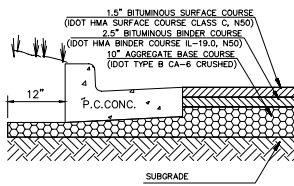
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CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

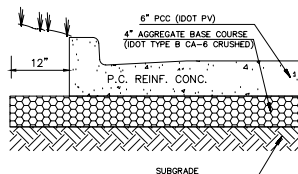
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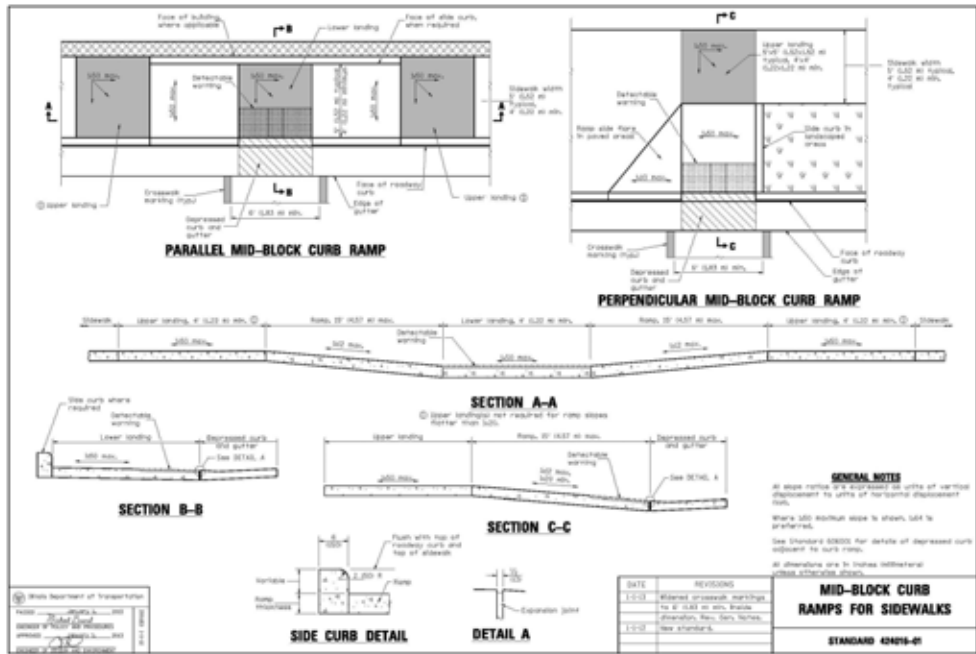
STANDARD DUTY
ASPHALT PAVING



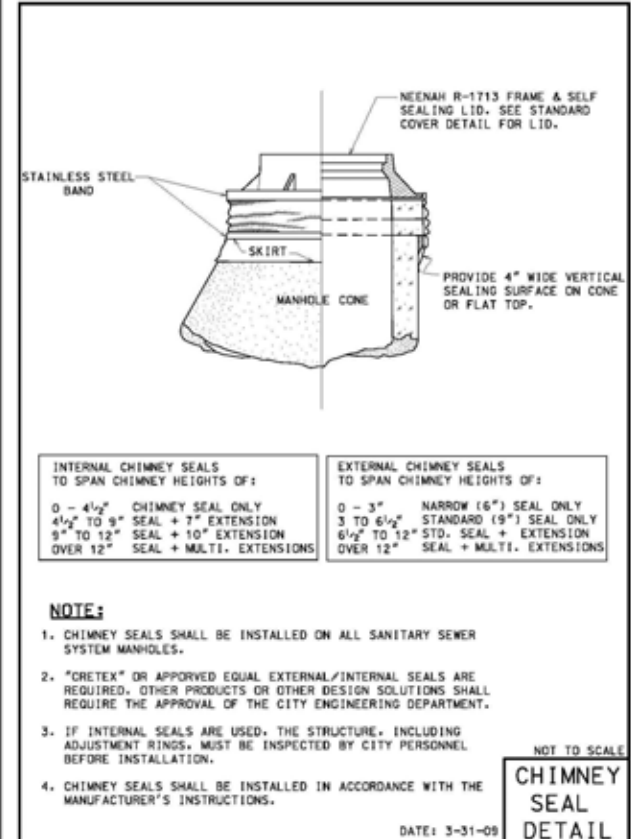
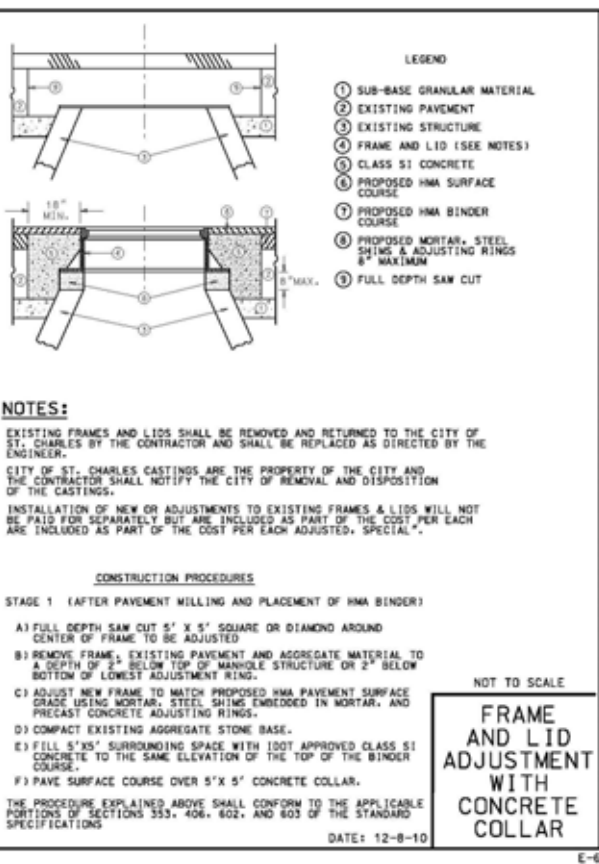
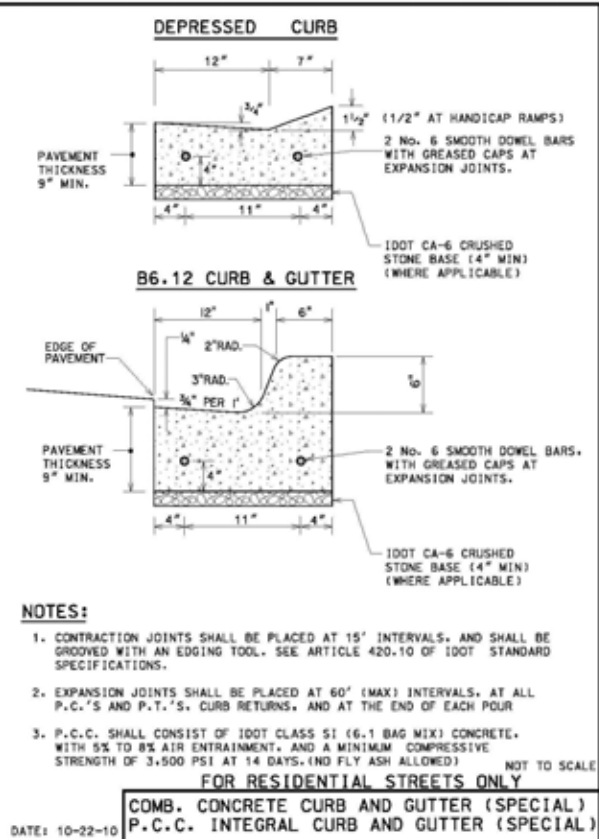
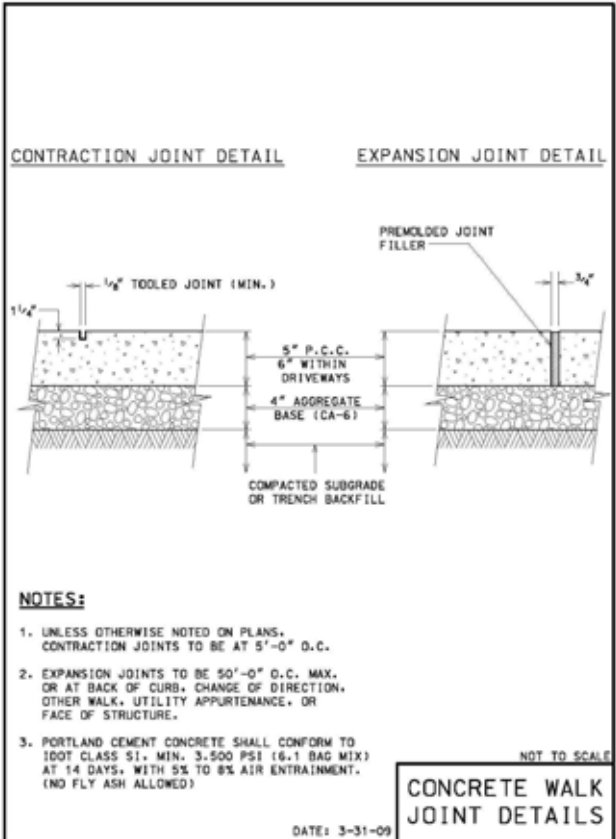
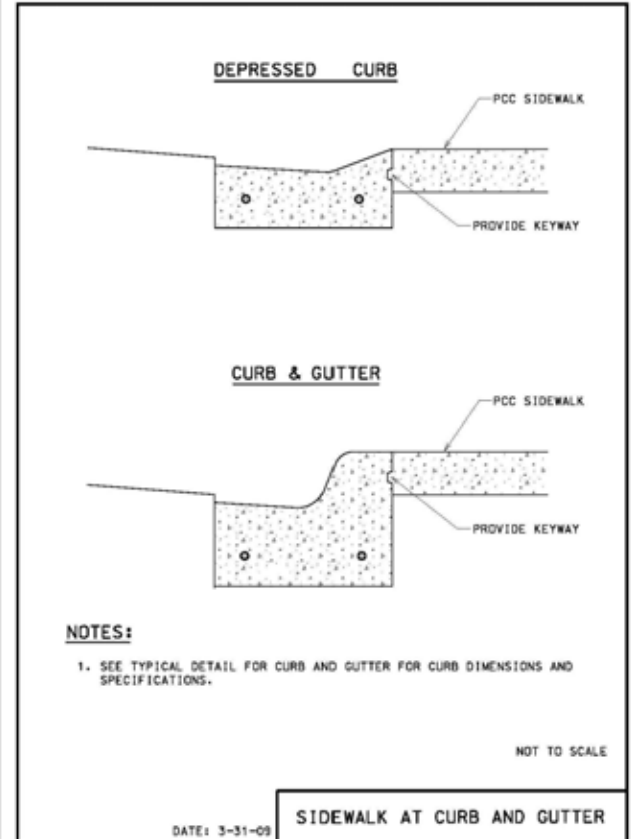
HEAVY DUTY
ASPHALT PAVING



HEAVY DUTY
CONCRETE PAVING



MID-BLOCK CURB
RAMPS FOR SIDEWALKS
STANDARD 420216-01



Land Development & Real Estate
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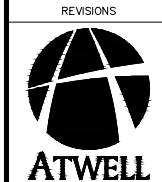


SECTION 32
TOWN 40 NORTH, RANGE 8 EAST
CITY OF ST. CHARLES
KANE COUNTY, ILLINOIS

DISCOUNT TIRE COMPANY
131 SOUTH RANDALL ROAD
ST. CHARLES, IL
PRELIMINARY ENGINEERING
STANDARD DETAILS

DATE 09/13/2012

REVISIONS



SCALE
NTS
DR. REK
CH. BH
P.M. T. MOSHER
CAD FILE:
12001457C-11-DT.DWG
JOB 12001457
FILE CODE: --
SHEET NO.
C-11



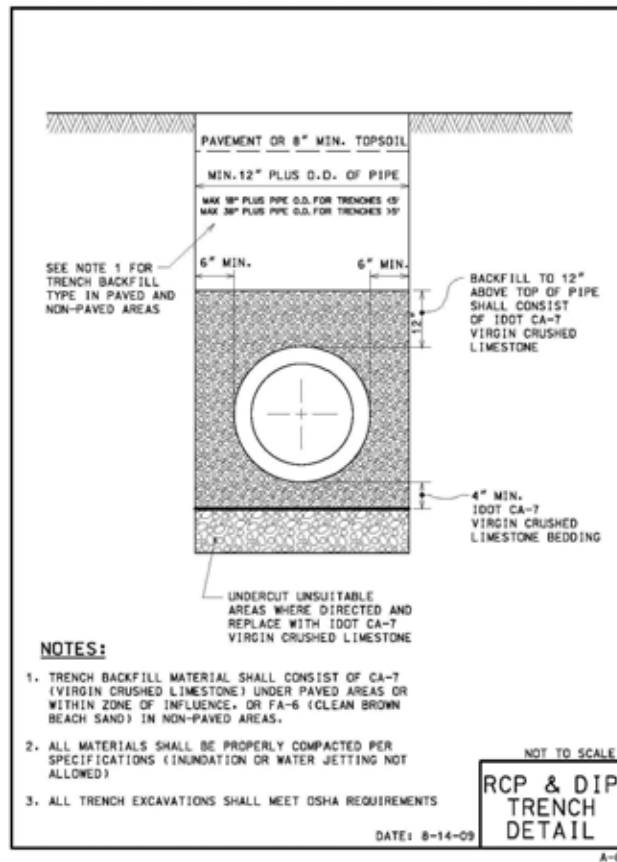
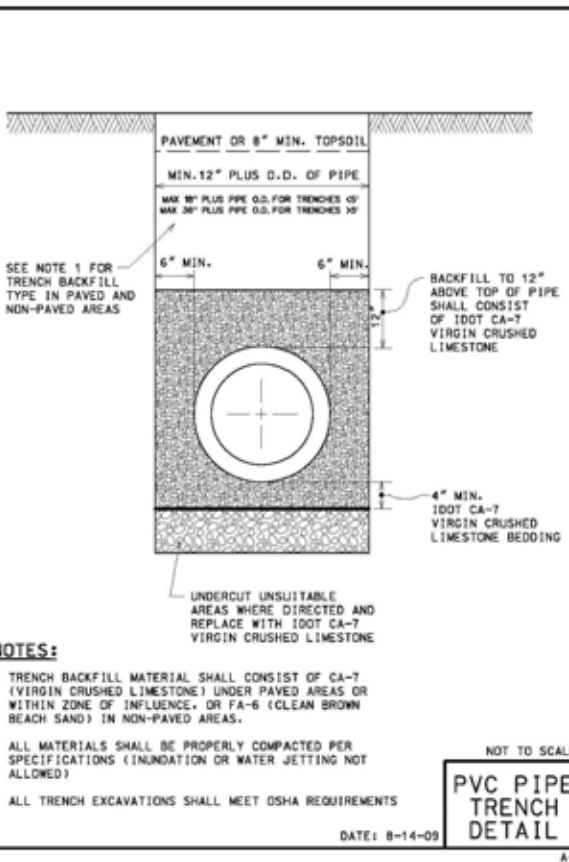
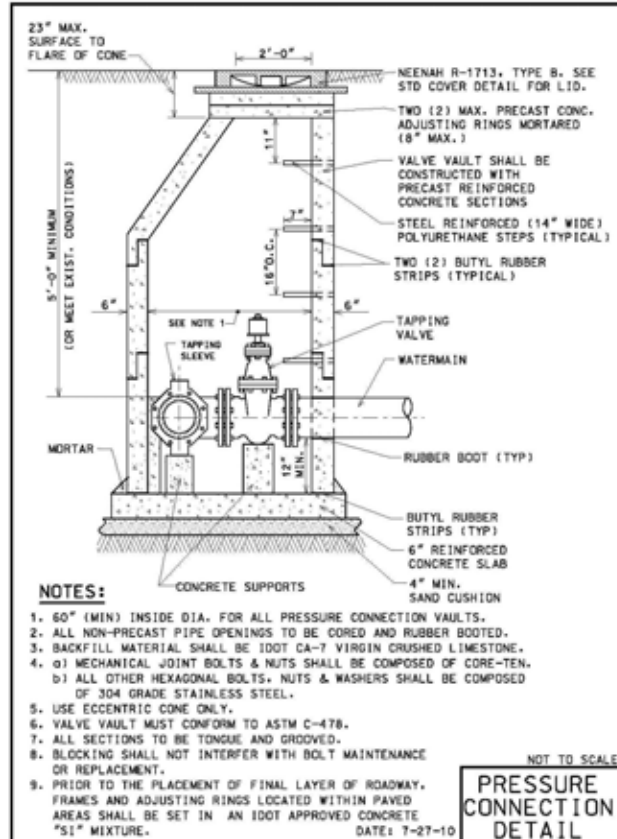
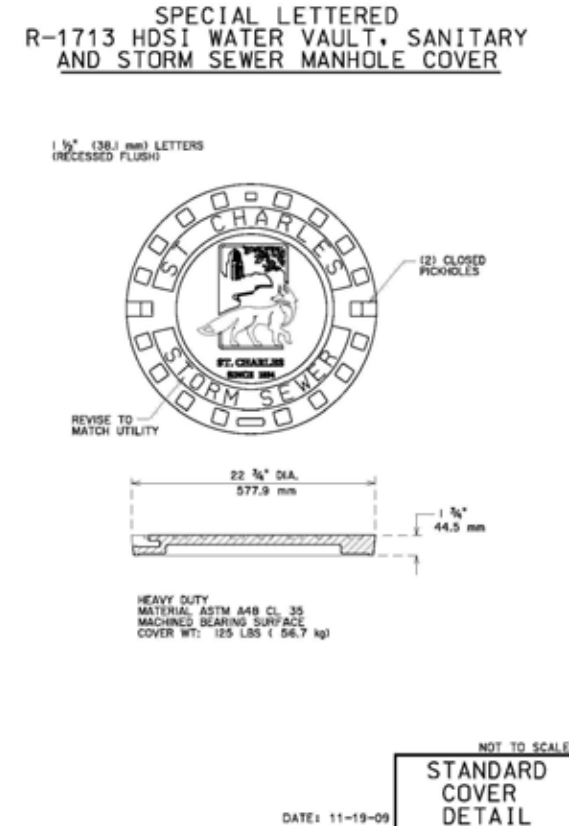
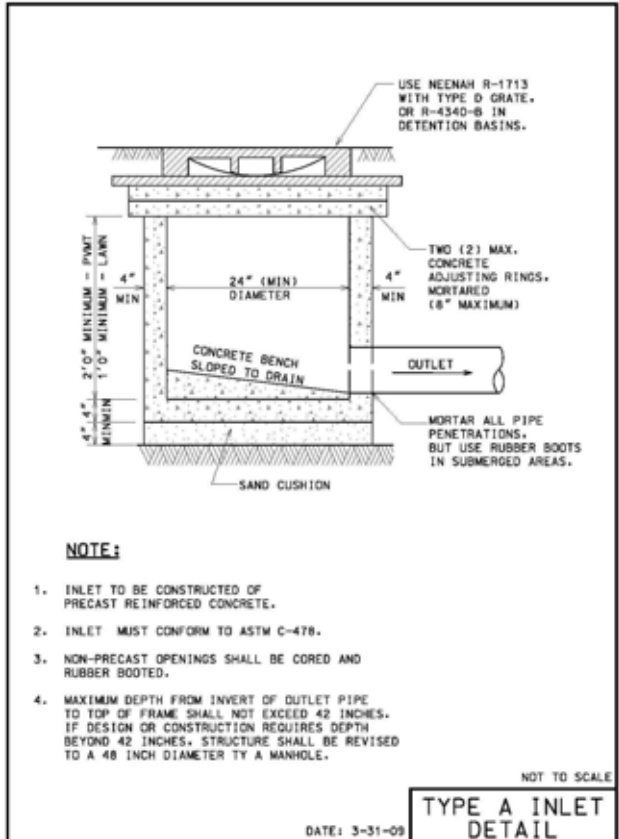
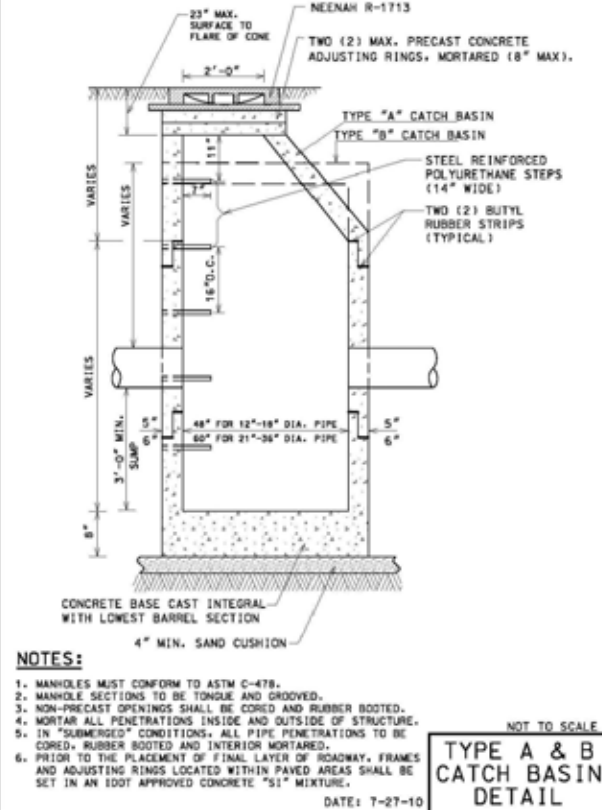
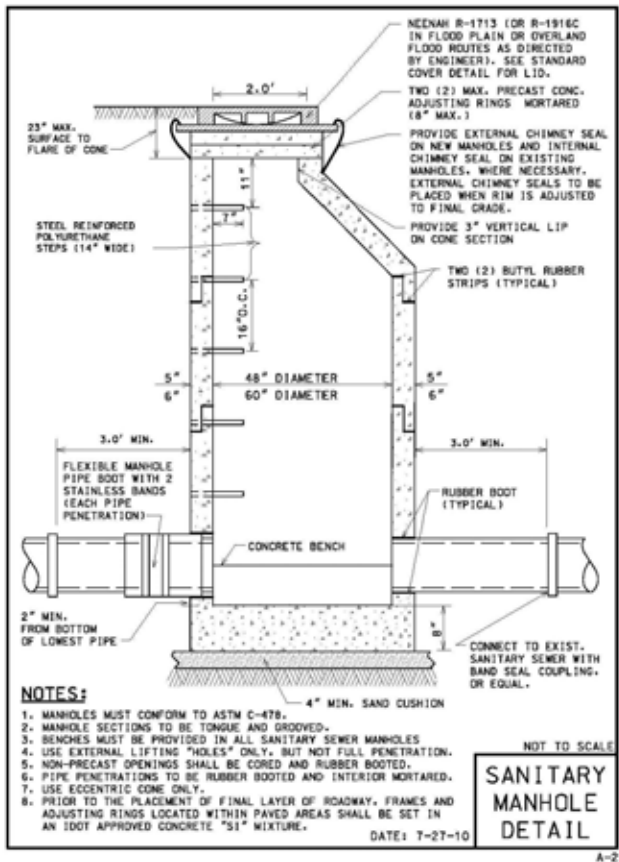
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NOTICE:

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SECTION 32
TOWN 40 NORTH, RANGE 8 EAST
CITY OF ST. CHARLES
KANE COUNTY, ILLINOIS

DISCOUNT TIRE COMPANY
131 SOUTH RANDALL ROAD
ST. CHARLES, IL
PRELIMINARY ENGINEERING
STANDARD DETAILS

DATE 09/13/2012

10/07/2012
REVISED LAYOUT
07/05/2012
CIV. SUBMITAL

REVISIONS



SCALE
NTS

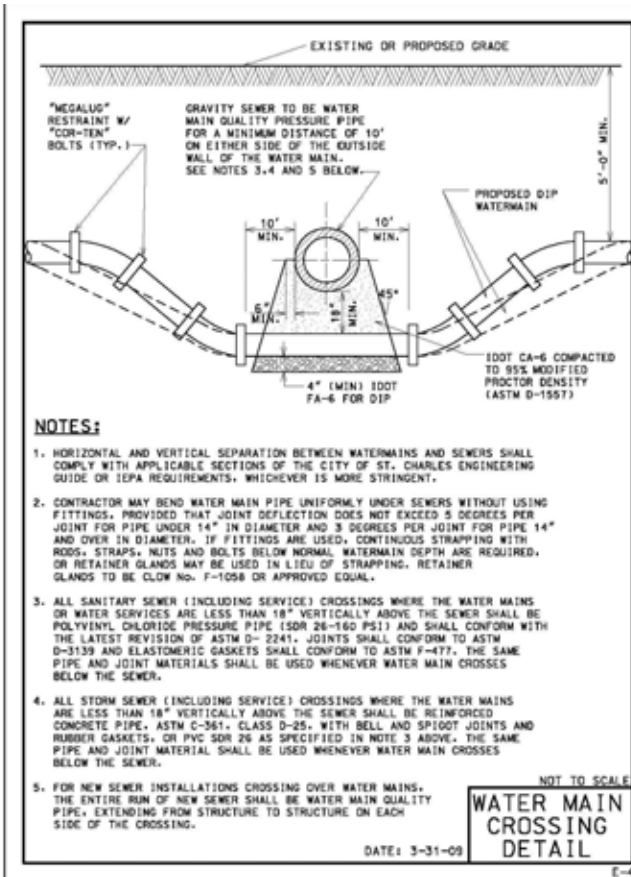
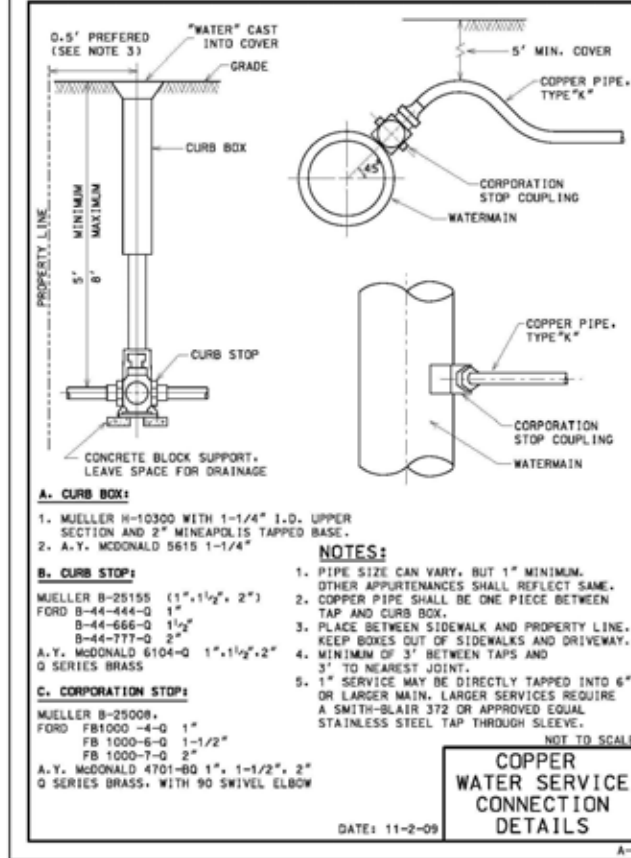
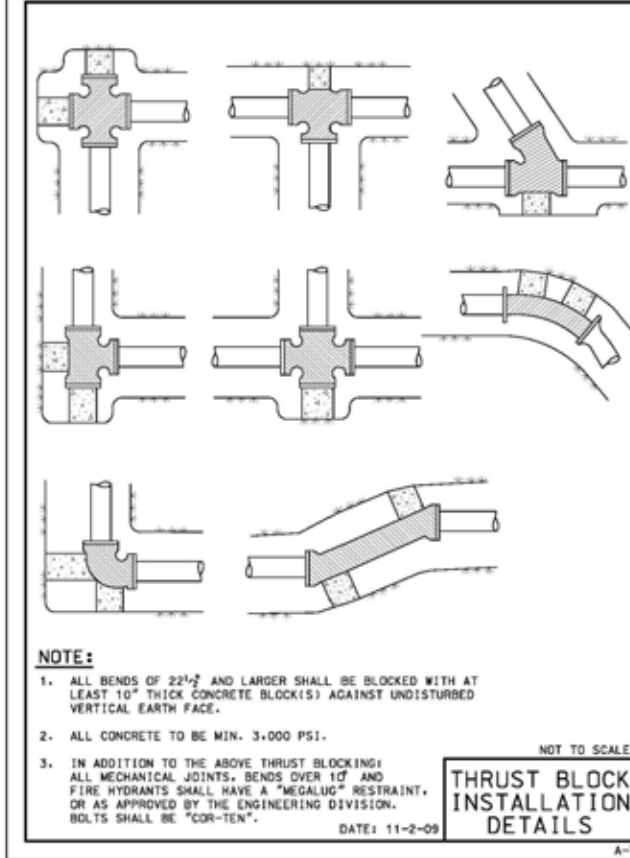
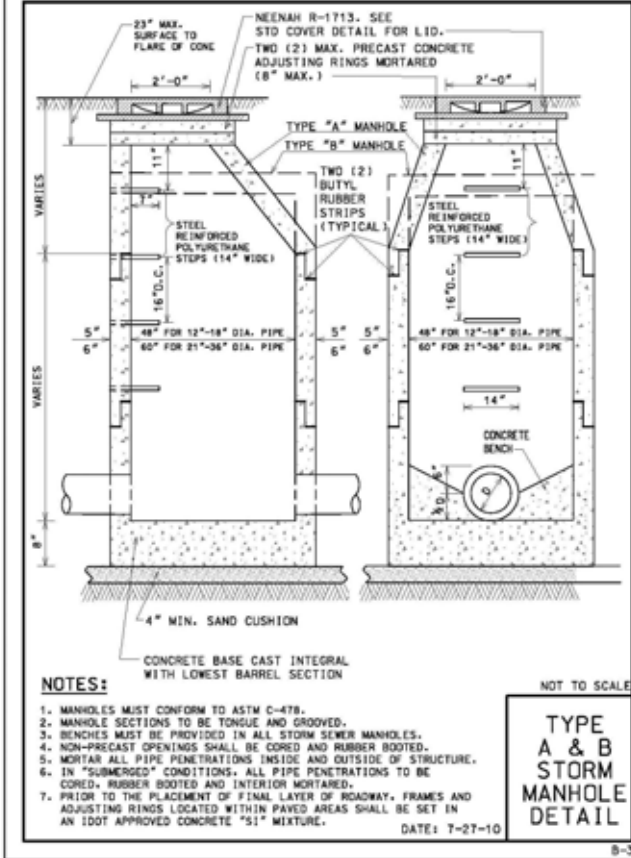
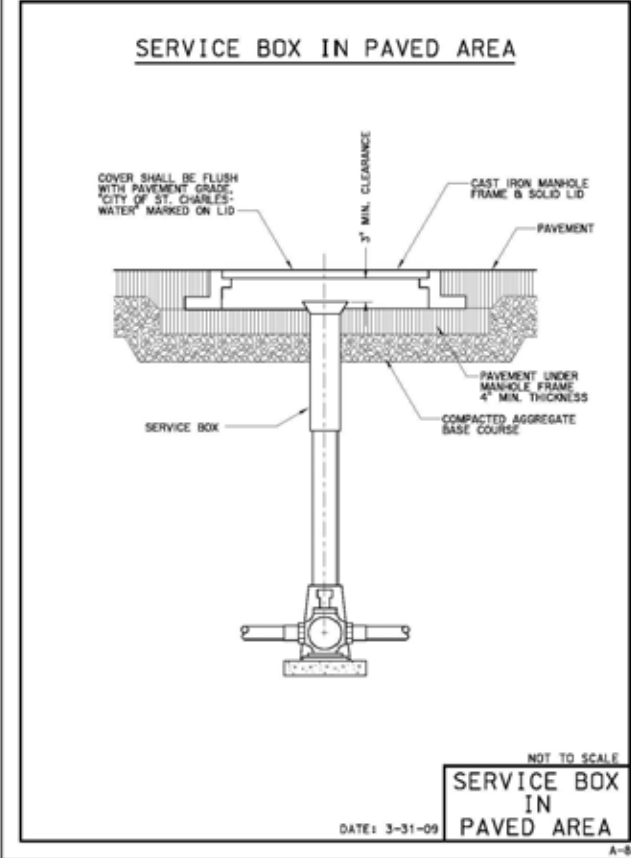
DR. REK
CH. BH
P.M. T. MOSHER

CAD FILE:
12001457C-11-DT.DWG

JOB 12001457

FILE CODE: --

SHEET NO.



Minimum Restrained Lengths (in feet) back from both sides of fitting

Fitting type/nominal size	4"	6"	8"	10"	12"	16"
90 Degree Bend	17	25	32	38	45	59
45 Degree Bend	7	10	13	16	19	24
22.5 Degree Bend	3	5	6	8	9	12
11.25 Degree Bend	2	2	3	4	4	6
Dead End	39	55	73	87	103	134
Top Side Vertical Offset * (45 Degree)	16	23	30	36	43	55
Bottom Side Vertical Offset * (45 Degree)	4	6	8	10	11	15
Tee Run X Branch **	6" by	1	17			
Tee Run X Branch **	8" by	1	5	34		
Tee Run X Branch **	10" by	1	1	24	49	
Tee Run X Branch **	12" by	1	1	15	41	65
Tee Run X Branch **	16" by	1	1	1	26	52
Reducer ***	6" by	28				
Reducer ***	8" by	52	30			
Reducer ***	10" by	71	54	29		
Reducer ***	12" by	90	75	55	51	
Reducer ***	16" by	123	113	97	94	54

* Vertical offset with minimum 10' of solid pipe between upper and lower bend.

** Tee with MINIMUM 10" solid pipe on both sides of run. Number indicates length of branch to be restrained.

*** Length back from Large End of Reducer.

DATE: 3-31-09

WATER MAIN RESTRAINT

C-7

811 Know what's below. Call before you dig.

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