

COLORADO SCIENCE AND TECHNOLOGY PARK AT FITZSIMONS

SHEET No.



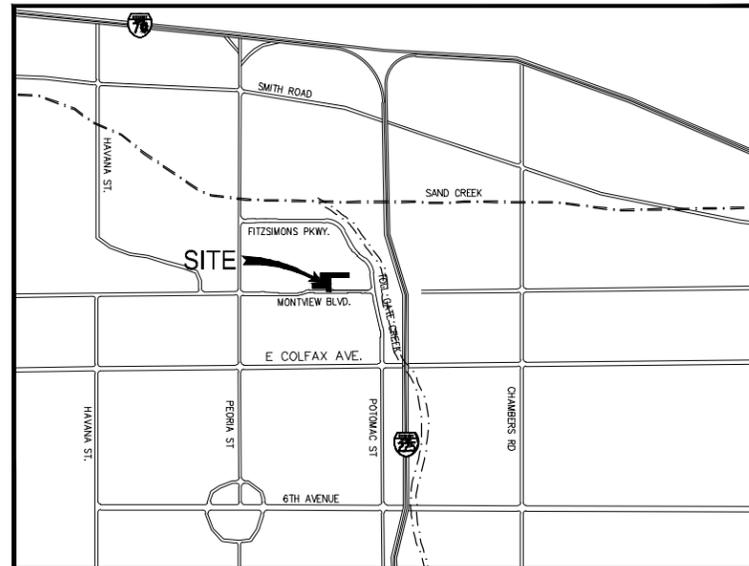
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BIOSCIENCE I - WEST PARKING LOT CONSTRUCTION DOCUMENTS OCTOBER 2017

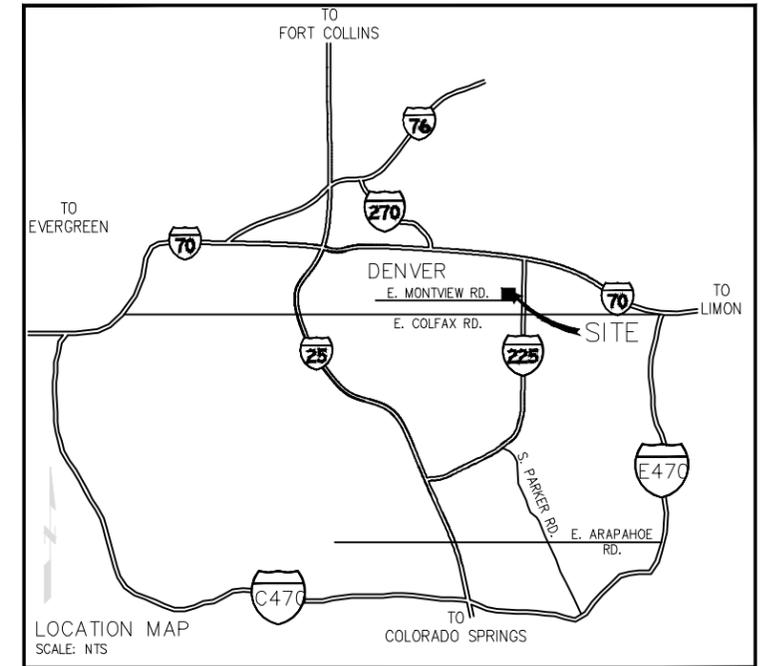
CITY OF AURORA GENERAL NOTES:

- CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
- ALL ROADWAY CONSTRUCTION WILL CONFORM TO THE CITY OF AURORA "ROADWAY DESIGN AND CONSTRUCTION SPECIFICATIONS," LATEST REVISION.
- ALL WATER DISTRIBUTION, SANITARY SEWER, AND STORM DRAINAGE CONSTRUCTION WILL CONFORM TO CITY OF AURORA "PUBLIC UTILITY IMPROVEMENTS RULES AND REGULATIONS REGARDING STANDARDS AND SPECIFICATIONS," LATEST REVISION.
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE CITY STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC IMPROVEMENT INSPECTIONS DIVISIONS, 303-739-7350, 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT UTILITY NOTIFICATION CENTER OF COLORADO, 1-800-922-1987.
- THE CONTRACTOR SHALL HAVE ONE SIGNED COPY OF THE PLANS (APPROVED BY THE CITY OF AURORA), ONE COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, AND A COPY OF ANY PERMIT AND EXTENSION AGREEMENTS NEEDED AT THE JOB SITE AT ALL TIMES.
- IT IS THE CONSULTANT'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ON-SITE, AND OFF-SITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NEEDED DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS EITHER ON-SITE OR OFF-SITE, THAT ARISE IN THE FIELD, WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY. THE COST TO RECTIFY ANY ADVERSE SITUATION TO MEET THE CITY STANDARDS AND SPECIFICATIONS AND THE CITY CODE SHALL BE BORNE SOLELY BY THE DEVELOPER.
- THE OWNER/DEVELOPER MUST OBTAIN THE WRITTEN PERMISSION OF THE ADJACENT PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE GRADING OR CONSTRUCTION.
- CONCRETE SHALL NOT BE PLACED UNTIL THE FORMS HAVE BEEN INSPECTED AND POUR SLIP ISSUED. POUR SLIPS WILL NOT BE ISSUED UNLESS THE CONTRACTOR HAS, AT THE JOB SITE, A COPY OF THE APPROVED PLANS BEARING THE SIGNATURE OF THE CITY ENGINEER AND WITH THE "APPROVED FOR CURB AND GUTTER ONLY" BLOCK INITIALED BY THE CITY ENGINEER'S REPRESENTATIVE.
- PAVING SHALL NOT START UNTIL A SOILS REPORT AND PAVEMENT DESIGN IS APPROVED BY THE CITY ENGINEER AND SUB-GRADE COMPACTION TESTS ARE TAKEN BY THE DEVELOPER'S GEOTECH ARE APPROVED BY THE PUBLIC IMPROVEMENTS INSPECTIONS.
- MODIFIED STANDARD CITY OF AURORA CURB RAMPS ARE TO BE CONSTRUCTED AT ALL INTERSECTIONS, AND ALL CURBSIDE KIOSKS OR CLUSTERS.
- ALL STATIONING IS BASED ON CENTERLINE OF ROADWAYS UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS ARE TO CENTERLINE UNLESS OTHERWISE NOTED.
- THE CITY OF AURORA SHALL NOT BE LIABLE FOR THE MAINTENANCE OF ANY PRIVATE ONSITE DETENTION PONDS, PRIVATE STORM SEWER SYSTEMS, PRIVATE WATER QUALITY SYSTEMS, PRIVATE PARKING, PRIVATE DRIVE LANES, PRIVATE SIDEWALKS, OR PRIVATE LANDSCAPE FEATURES. THESE FACILITIES MAY NOT MEET CITY STANDARDS AND ARE TO REMAIN IN PRIVATE MAINTENANCE IN PERPETUITY.
- THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR CONTACTING CDOT TO ENSURE THAT ALL WORK ON OR ADJACENT TO STATE HIGHWAYS OR CDOT R.O.W. MEETS CDOT REQUIREMENTS.
- THE STREETLIGHT INSTALLATION COST IS FUNDED BY THE DEVELOPER/OWNER.
- THE OWNER/CONTRACTOR MUST OBTAIN AN N.P.D.E.S STORM WATER DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF HEALTH, IF REQUIRED.
- THE OWNER/CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARMY CORP OF ENGINEERS FOR WETLAND MITIGATION OR WORK WITHIN THE WATERS OF THE U.S., IF REQUIRED. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO INFORM THE CITY OF AURORA OF THE ARMY CORP OF ENGINEER'S REQUIREMENTS. CITY APPROVAL OF THE CONSTRUCTION PLANS IS SUBJECT TO THE OWNER/CONTRACTOR OBTAINING A 404 PERMIT, IF APPLICABLE.

SITUATED IN SECTION 29, TOWNSHIP 5 SOUTH, RANGE 66 WEST OF THE 6TH. P.M. CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



VICINITY MAP
SCALE 1" = 4000'



LOCATION MAP
SCALE: NTS

FIRE DEPARTMENT UTILITY NOTES:

- ALL FIRE HYDRANTS WILL BE LOCATED NOT LESS THAN THREE FEET-SIX INCHES (3'-6") AND NOT MORE THAN EIGHT (8') FEET FROM THE BACK OF CURB TO THE CENTER OF THE HYDRANT AND BE UNOBSTRUCTED ON THE STREET SIDE. MINIMUM CLEARANCE ON ALL OTHER SIDES WILL BE FIVE (5') FEET.
- ALL FIRE LINES AND COMMERCIAL WATER SERVICE LINES WILL REQUIRE REDUCED PRESSURE BACK FLOW PREVENTER OR DOUBLE CHECK VALVES AS REQUIRED BY THE CITY OF AURORA UTILITY DEPARTMENT. CONTACT THE BUILDING DIVISION AT (303) 739-7420 TO SCHEDULE FLOW TESTS FOR PRIVATE FIRE LINES PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- ALL FIRE SERVICE LINES MUST BE INSTALLED, IN THEIR ENTIRETY, BY A STATE OF COLORADO LICENSED CONTRACTOR. LICENSING CAN BE OBTAINED FROM THE STATE OF COLORADO DIVISION OF FIRE SAFETY AT (303) 239-4463.

BASIS OF BEARINGS:

AT THE SOUTHWEST CORNER OF THE SQUARE AT FITZSIMONS SUBDIVISION FILING NO. 1, A SUBDIVISION RECORDED AT RECEPTION NO. 2006001005834 OF THE RECORDS IN THE OFFICE OF THE CLERK AND RECORDER OF SAID ADAMS COUNTY, FROM WHICH THE NORTHWEST CORNER THEREOF BEARS NORTH 00d16°54" EAST, A DISTANCE OF 409.00 FEET.

BASIS OF BEARINGS:

THE NORTH LINE OF THE NORTHWEST ONE-QUARTER OF SECTION 36, TOWNSHIP 3 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF AURORA, COUNTY OF ADAMS, STATE OF COLORADO, ASSUMED TO BEAR SOUTH 89°40'29" EAST.

BENCHMARK:

THE VERTICAL INFORMATION ON THIS MAP IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988. A FOUND CITY OF AURORA 3" BRASS CAP ON INLET STAMPED "COA BM SCP 028.3" WITH A PUBLISHED ELEVATION OF 5375.665 FEET WAS USED TO REFERENCE THIS VERTICAL DATUM. THE BENCHMARK IS LOCATED AT THE SOUTHWEST CORNER OF EAST 17TH AVENUE AND FITZSIMONS PARKWAY ON AN INLET AT THE WESTERLY PCR.

REFERENCE COA ID: 3S6736SE003

INDEX OF SHEETS

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OGP01	OVERALL GRADING & UTILITY PLAN	5

SITE PLAN DATA		
LAND AREA WITHIN PROPERTY LINES	1.909	AC
TOTAL BUILDING COVERAGE AND GFA (SF)	33,951	40.8%
HARD SURFACE AREA (SF)	23,105	27.8%
LANDSCAPE AREA (SF)	26,082	31.4%
PARKING SPACES REQUIRED	1 per 225 gfa	
PARKING SPACES PROVIDED	46	
ACCESSIBLE SPACES REQUIRED	3	
ACCESSIBLE SPACES PROVIDED	3	

Approved for One Year From this Date

City Engineer _____ Date _____
Water Department _____ Date _____

REFERENCE DRAWINGS	No.	DATE	DESCRIPTION	BY
X:\MDG22x34\Bioscience I				
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PLOT DATE:	October 11, 2017 3:30:56 PM			
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SEAL

PRELIMINARY
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FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 17.062.022

FITZSIMONS REDEVELOPMENT AUTHORITY

CITY OF AURORA
CONSTRUCTION DOCUMENTS

BIOSCIENCE I
TITLE SHEET

DESIGNED BY: _____ SCALE: _____ DATE ISSUED: OCTOBER 2017 DRAWING No. _____
CHECKED BY: _____ HORIZ. SHEET: _____ VERT. SHEET: 1 OF 5 TS01



Know what's below. Call before you dig.

CITY OF AURORA UTILITY NOTES:

- ALL MATERIALS, WORKMANSHIP, CONSTRUCTION DETAILS, AND TESTING FOR WATER LINE CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS FOR WATER DISTRIBUTION LINES AS SET FORTH BY THE CITY OF AURORA, DEPARTMENT OF UTILITIES, LATEST REVISION.
- ALL FIRE HYDRANTS MUST BE GRADE STAKED IN THE FIELD WHENEVER CURB AND GUTTER HAS NOT BEEN INSTALLED.
- ALL UTILITY EASEMENTS MUST REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR MAINTENANCE EQUIPMENT.
- WATER MAIN RESTRAINT SHALL BE IN ACCORDANCE WITH THE CITY OF AURORA PUBLIC UTILITY IMPROVEMENTS RULES AND REGULATIONS REGARDING STANDARDS AND SPECIFICATIONS, LATEST EDITION, MEGALUGS OR UN-FLANGE MAY BE USED IN PLACE OF RODS AND CLAMPS.
- WATER LINE VALVES ARE NOT ALLOWED IN CROSS PANS.
- ALL WATER METERS, WATER SERVICE LINES AND SANITARY SEWER SERVICE LINES ARE NOT ALLOWED IN OR UNDER DRIVEWAYS.
- ALL SANITARY SERVICE LINES SHALL BE TEES OFF OF MAINS.
- NO CONNECTIONS ARE ALLOWED TO THE FIRE LINE BETWEEN THE GATE VALVE AT THE WATER LINE MAIN AND THE BACK FLOW PREVENTER (WITHIN THE BUILDING).
- FITZSIMONS IS LOCATED IN AURORA PRESSURE ZONE 2A. PRESSURES AT THE CONNECTION POINTS RANGE FROM 85 TO 110 PSI. ZERO (0) PSI AT ELEV 5565 STATIC. PRV IS REQUIRED WHEN THE PRESSURE AT THE UNIT IS GREATER THAN EIGHTY (80) PSI.
- ADJUST ALL MANHOLES, FIRE HYDRANTS, AND VALVE BOXES TO GRADE PER CITY OF AURORA STANDARDS AND SPECIFICATIONS, LATEST REVISION, AS NECESSARY.
- THE CONTRACTOR SHALL CONTACT THE C.O.A. WASTEWATER CONTROL DIVISION AT (303) 326-8050 FOR INSPECTION OF ANY REQUIRED GREASE TRAPS OR SAND/OIL INTERCEPTORS PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
- ALL FIRE LINES AND COMMERCIAL WATER SERVICE LINES WILL REQUIRE REDUCED PRESSURE BACK FLOW PREVENTER OR DOUBLE CHECK VALVE AS REQUIRED BY THE CITY OF AURORA UTILITY DEPARTMENT. CONTACT THE BUILDING DIVISION AT (303) 739-7420 TO SCHEDULE FLOW TESTS FOR PRIVATE FIRE LINES PRIOR TO THE ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- THE CONTRACTOR SHALL CONTACT THE C.O.A. WASTEWATER CONTROL DIVISION AT (303) 326-8050 FOR INSPECTION OF ANY REQUIRED GREASE TRAPS OR SAND/OIL INTERCEPTORS PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

ROADWAY, PAVING, SIGNING AND STRIPING NOTES:

- CORES SHOWING ADEQUACY OF PAVEMENT IN ACCORDANCE WITH AN APPROVED SOILS REPORT AND PAVEMENT DESIGN ARE REQUIRED PRIOR TO ISSUANCE OF STREET PERMITS. IF THE DEVELOPER CANNOT PROVE ADEQUACY HE SHALL BE RESPONSIBLE FOR THE REMOVAL OF EXISTING PAVEMENT AND REPLACEMENT WITH THE PROPERLY DESIGNED PAVEMENT. ANY CONSTRUCTION BEYOND CENTERLINE OF THE STREET IN ORDER TO MATCH EXISTING GRADES AND TO MAKE A SAFE, DRIVEABLE SURFACE WILL ALSO BE THE DEVELOPER'S RESPONSIBILITY.
- CONTRACTOR SHALL REMOVE ALL EXISTING SIGNING AND STRIPING, WITHIN THE PROJECT LIMITS, THAT CONFLICTS WITH THIS PLAN SET.
- CROSSWALK PLACEMENT PER CITY OF AURORA STANDARD DETAIL TE-14.
- ALL REMOVED TRAFFIC SIGNS SHALL BE RETURNED TO THE CITY OF AURORA TRAFFIC OPERATIONS, JEFF DAVIS, (303) 326-8230.
- ALL REMOVED DEVELOPMENT, REAL ESTATE, OR BILLBOARD ADVERTISING SIGNS SHALL BE RETURNED TO THE APPROPRIATE OWNER.
- CONTRACTOR TO COORDINATE ALL SIGNALIZATION WORK WITH THIS PLAN SET.
- ALL STREET NAME SIGNS WILL BE INSTALLED BY THE CITY OF AURORA.
- ALL SHADED DIRECTIONAL ARROWS WILL BE INSTALLED AS PAVEMENT MARKINGS.
- CONCRETE DECK AND SIDEWALK JOINTING SHOWN IS SCHEMATIC. REFERENCE THE LANDSCAPE PLANS AND ARCHITECTURAL PLANS AND SPECIFICATIONS FOR CONSTRUCTION DETAILS.

MARKING MATERIALS

CONCRETE PAVEMENT: WHITE SKIP/DASH: USE STAMARK 3801-5 CONTRAST TAPE, YELLOW: USE EPOXY MARKINGS, SOLID WHITE: USE EPOXY MARKINGS.

ASPHALT PAVEMENT: ALL COLORS: USE THERMOPLASTIC MARKINGS.

STORM SEWER NOTES:

- ON ALL INLETS, IN A SUMP CONDITION, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 0.5% GRADE AT FLOWLINE INTO THE INLET.
- RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS.
- STORM MANHOLE STATION, OFFSET AND RIM ELEVATIONS LISTED ARE REFERENCED TO THE CENTER OF THE MANHOLE.
- STORM INLET STATION, OFFSET, AND ELEVATIONS LISTED ARE REFERENCED TO THE -C OF THE BOX @ THE FLOWLINE.
- ALL REINFORCED CONCRETE PIPE BEDDING SHALL BE CLASS B PER C.O.A. STANDARD DETAIL 101.
- ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED.
- SEE C.O.A. STANDARD DETAILS S12.11 OR 400 FOR INLETS GREATER THAN 15' IN LENGTH.
- ALL BOX BASE MANHOLES SHALL CONFORM TO CDOT STANDARD PLAN NO. M-604-20.
- WHEN IT IS NECESSARY TO LOWER WATERLINES AT STORM DRAINS AND OTHER UTILITY CROSSINGS, A MINIMUM CLEARANCE OF 2.0 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES OR USE C.O.A. DETAIL 402 AT LOCATIONS SHOWN ON PLANS.

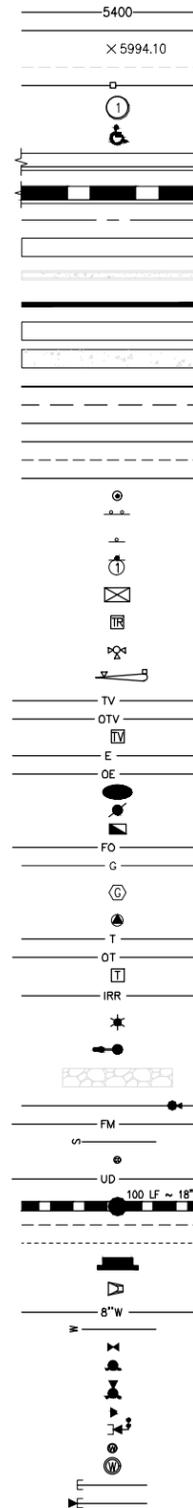
WATER NOTES:

- WATER MAIN SHALL BE PVC C800 CLASS 200 IN CONFORMANCE WITH AWWA C-151 AND JOINTS TO BE IN ACCORDANCE WITH THE AWWA C-111, OR APPROVED SUBSTITUTE. ALL FITTINGS SHALL BE MADE FROM DUCTILE IRON AND FURNISHED WITH MECHANICAL JOINTS. ALL FITTINGS SHALL HAVE A PRESSURE RATING OF 250 PSI.
- ELECTRONIC MARKER SYSTEM: P.V.C. WATER PIPE SHALL BE INSTALLED WITH ELECTRONIC MARKERS AT A SPACING OF 1 MARKER FOR EVERY 60 LINEAL FEET OF PIPE OR AT EVERY BEND, TEE OR DEFLECTION IN THE PIPE. THESE MARKERS SHALL BE BLUE IN COLOR AND AS MANUFACTURED BY 3M SCOTCHMARK OR APPROVED EQUAL. THE CONTRACTOR SHALL PLACE THE APPROPRIATE BALL MID-RANGE (UP TO 6 FEET) OR FULL-RANGE (UP TO 8 FEET) MARKER AS NECESSARY DEPENDING ON THE ACTUAL DEPTH OF THE MAIN.
- PLUMBING CONTRACTOR SHALL CONTACT LOCAL PUBLIC WATER/WATER DEPARTMENT TO DETERMINE AVAILABLE WATER PRESSURE AND WATER HARDNESS
- REFER TO CITY OF AURORA STANDARD 24.07 FOR WATER MAIN TAPS.

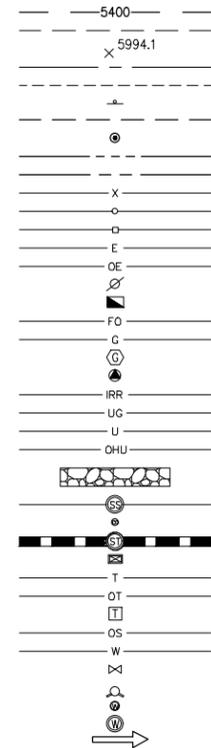
SANITARY SEWER NOTES:

- ALL SEWER MAINS SHALL BE POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS CONFORMING TO ASTM D-3034, SDR 35 AS MANUFACTURED BY J-M MANUFACTURING CERTAINTED, DIAMOND PLASTICS, VINYL TECH, OF ULTRA-RIB BY E.T.I.
- PVC PIPE USED FOR SANITARY SEWER SERVICES WILL MEET OR EXCEED ASTM D3034-SDR35. ALL JOINTS WILL BE WATERTIGHT. FITTINGS, SADDLES, BENDS, ETC. WILL BE PVC TYPE. PRESSURE RATE PVC PIPE CAN BE USED UP TO, BUT NO MORE THAN, 5 FEET OUTSIDE OF THE FOUNDATION WALL FOR CONNECTION TO THE SDR-35 PIPE.
- PRIOR TO CONSTRUCTION OR STAKING OF SANITARY SEWER, THE CONTRACTOR AND A SURVEY CREW SHALL VERIFY INVERT ELEVATIONS OF EXISTING SEWER MAINS AND MANHOLES FOR PROPER CONNECTION OF PROPOSED SANITARY SEWER SYSTEM.
- THE CITY OF AURORA REQUIRES PRECAST SANITARY SEWER MANHOLES OR APPROVED SUBSTITUTE. BENCHES AND CHANNELS SHALL BE CAST IN PLACE.
- ALL SANITARY SERVICE LINES SHALL BE TEES OFF OF MAINS. WYES SHALL BE USED FOR LOTS AT BACK OF CUL-DE-SACS.
- THE CONTRACTOR SHALL CONTACT THE C.O.A. WASTEWATER CONTROL DIVISION AT (303) 326-8050 FOR INSPECTION OF ANY REQUIRED GREASE TRAPS OR SAND/OIL INTERCEPTORS PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

LEGEND (PROPOSED)



LEGEND (EXISTING)



ABBREVIATIONS

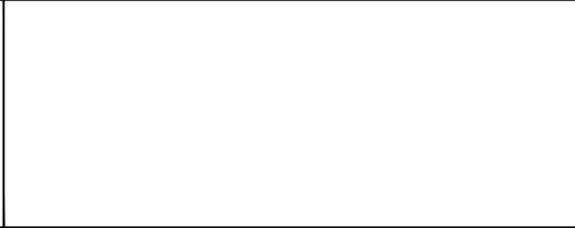
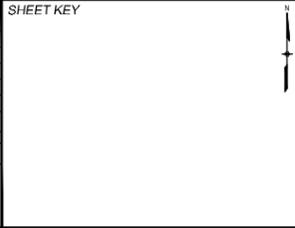
BLDG	BUILDING	-P	PROPERTY LINE
B.O.C.	BACK OF CURB	PC	POINT OF CURVATURE
BOW	BOTTOM OF WALL	PCC	POINT OF COMPOUND CURVATURE
BW	BOTTOM OF WALL	PCR	POINT OF CURB RETURN
-C	CENTERLINE	PI	POINT OF INTERSECTION
CFS	CUBIC FEET PER SECOND	PRC	POINT OF REVERSE CURVATURE
CMP	CORRUGATED METAL PIPE	PT	POINT OF TANGENCY
CY	CUBIC YARD	PVC	POLYVINYL CHLORIDE PIPE/
DIA	DIAMETER		POINT OF VERTICAL CURVATURE
DIP	DUCTILE IRON PIPE	PVI	POINT OF VERTICAL INTERSECTION
E	EASTING/EAST	PVT	POINT OF VERTICAL TANGENCY
EGL	ENERGY GRADE LINE	R	RADIUS
ELEV	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EOA	EDGE OF ASPHALT	ROW	RIGHT-OF-WAY
EOC	EDGE OF CONCRETE	SAN	SANITARY SEWER
EOP	EDGE OF PAVEMENT	SF	SQUARE FEET
ESMT	EASEMENT	SSMH	SANITARY SEWER MANHOLE
FES	FLARED END SECTION	STA	STATION
FF	FINISHED FLOOR	SDMH	STORM MANHOLE
FG	FINISHED GRADE	SDWK	SIDEWALK
FL	FLOWLINE	SY	SQUARE YARD
FT	FEET	TBC	TOP BACK OF CURB
GV	GATE VALVE	TBR	TO BE REMOVED
GB	GRADE BREAK	TC	TOP OF CURB
HBP	HOT BITUMINOUS PAVEMENT	TG	TOP OF GRATE
HGL	HYDRAULIC GRADE LINE	TOP	TOP OF PIPE
HP	HIGH POINT	TOW	TOP OF WALL
INV	INVERT	TW	TOP OF WALL
IRR	IRRIGATION	TYP	TYPICAL
LF	LINEAR FEET	UE	UTILITY EASEMENT
LP	LOW POINT	UTIL	UTILITY
ME	MATCH EXISTING	VC	VERTICAL CURVE
N	NORTHING/NORTH	WSEL	WATER SURFACE ELEVATION
NTS	NOT TO SCALE		

Approved for One Year From this Date

City Engineer Date

Water Department Date

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FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 17.062.022

FITZSIMONS REDEVELOPMENT AUTHORITY

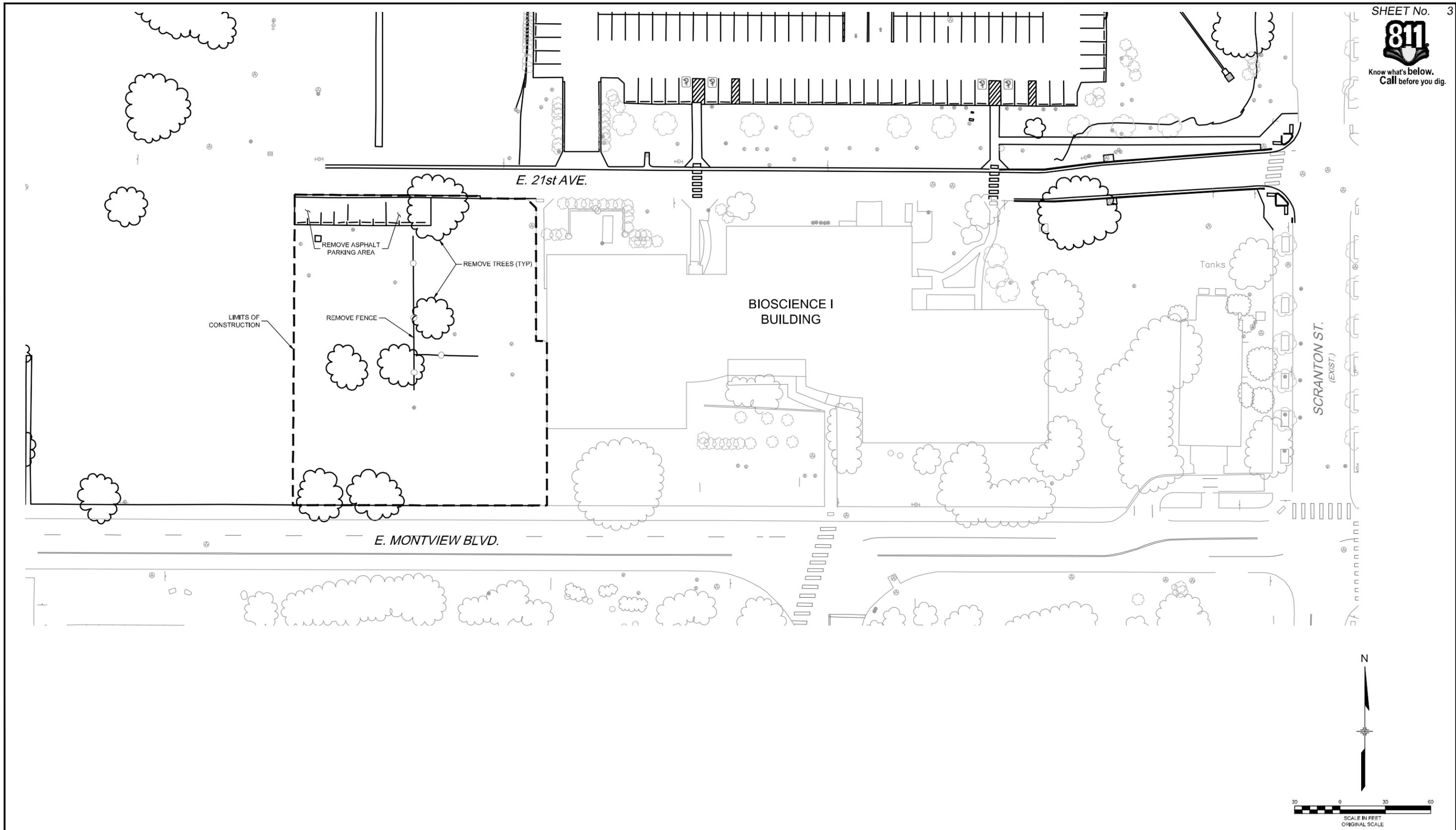
CITY OF AURORA
CONSTRUCTION DOCUMENTS

BIOSCIENCE I
NOTES, LEGEND & ABBREVIATIONS

DESIGNED BY:	SCALE	DATE ISSUED:	OCTOBER 2017	DRAWING No.
CHECKED BY:	HORIZ. / VERT.	SHEET	2 OF 5	LA01



Know what's below.
Call before you dig.



REFERENCE DRAWINGS			
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X:056-EX-BASE			
X:056-EX-TOPG-ANVDB8			
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PREPARED BY:

AN EMPLOYEE-OWNED COMPANY

SEAL

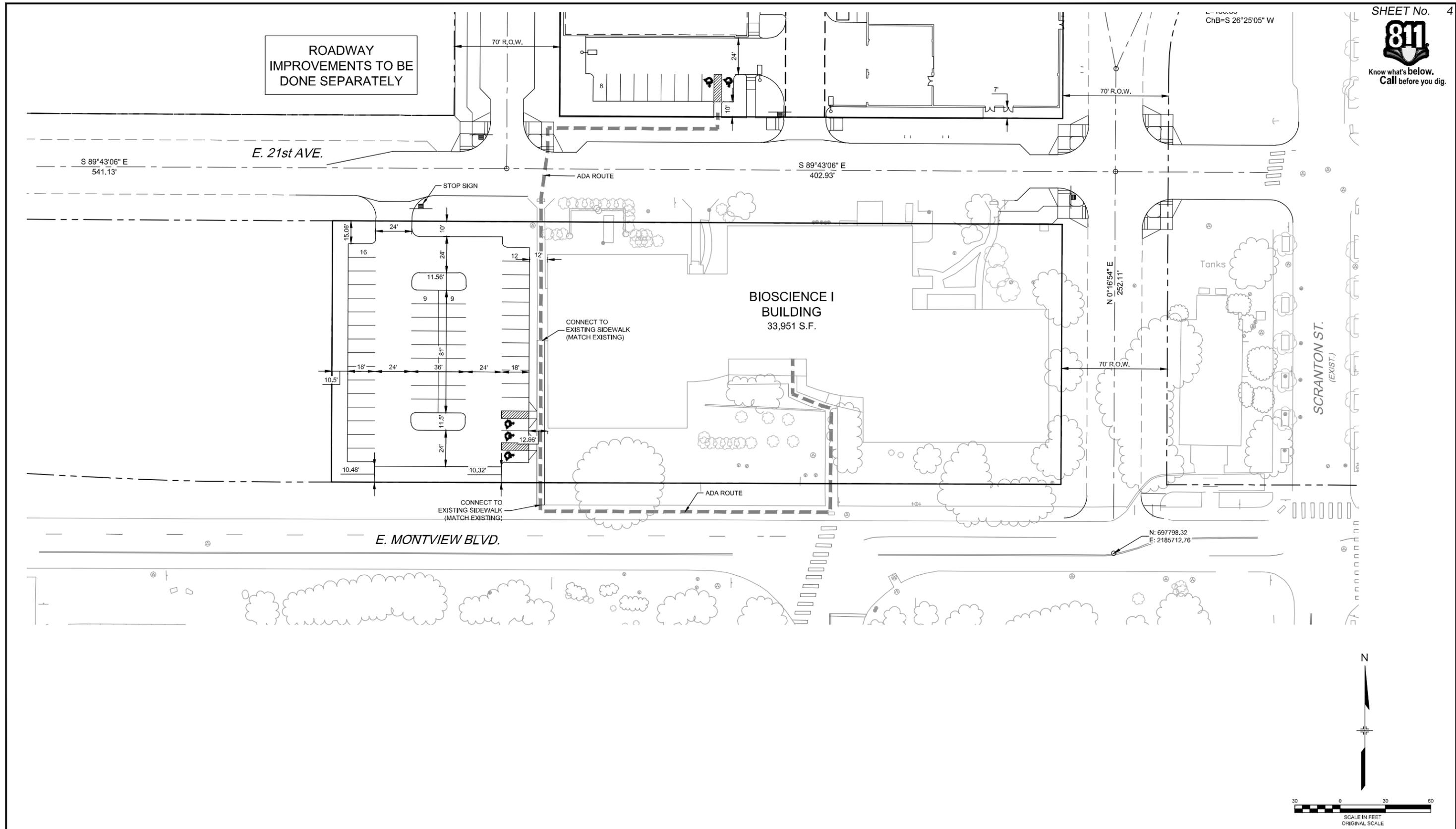
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FITZSIMONS REDEVELOPMENT AUTHORITY

CITY OF AURORA
CONSTRUCTION DOCUMENTS

**BIOSCIENCE I
DEMOLITION PLAN**

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 17.062.022	DESIGNED BY: DRAWN BY: CHECKED BY:	SCALE HORIZ. VERT.	DATE ISSUED: OCTOBER 2017 SHEET 3 OF 5	DRAWING No. DM01
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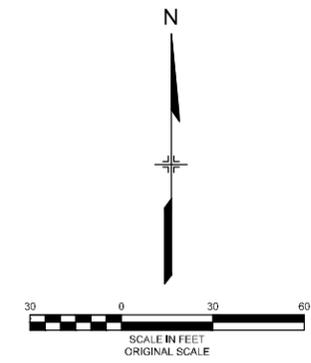
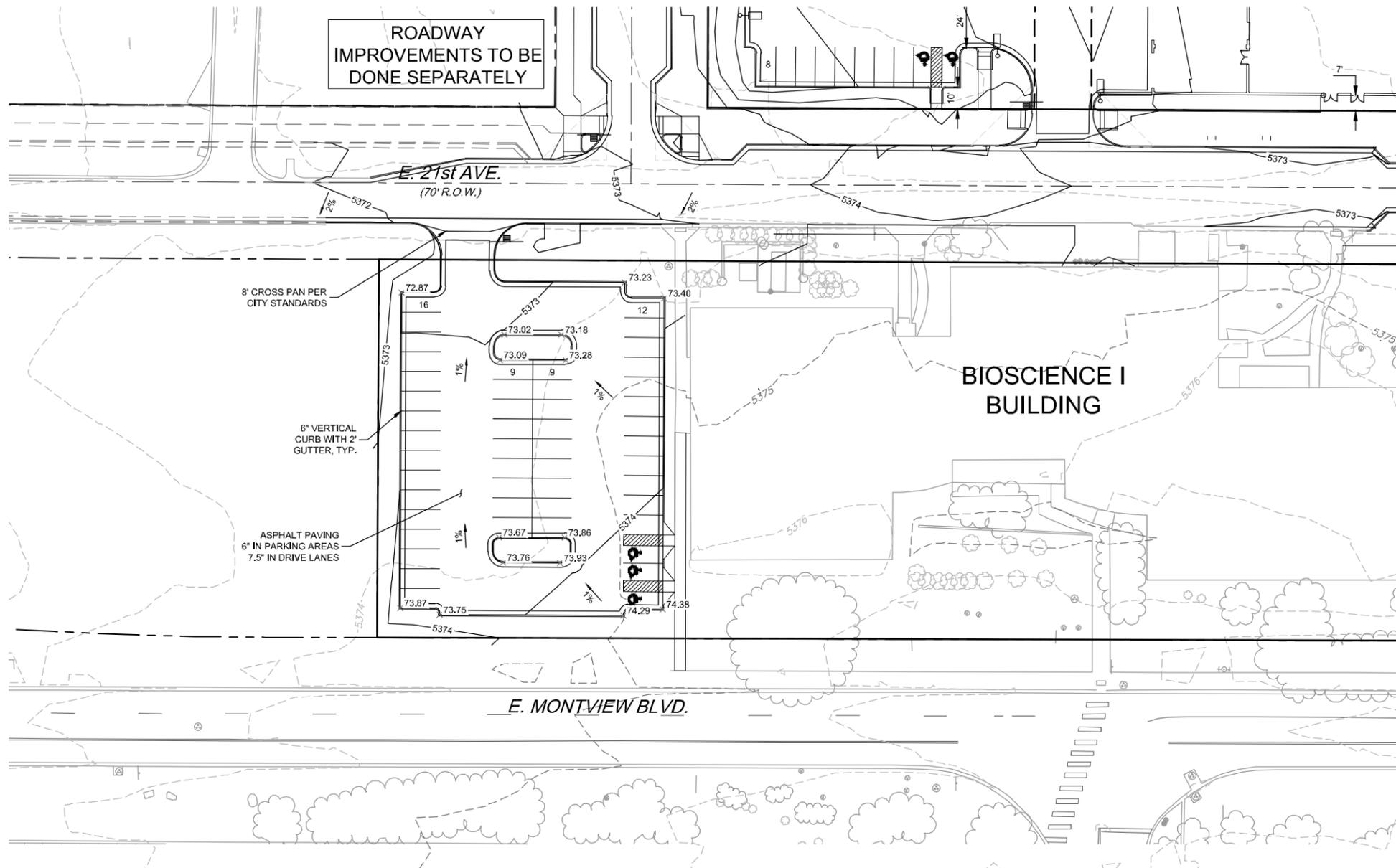
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FITZSIMONS REDEVELOPMENT AUTHORITY			
CITY OF AURORA CONSTRUCTION DOCUMENTS			
BIOSCIENCE I GEOMETRIC LAYOUT PLAN			
DESIGNED BY:	SCALE	DATE ISSUED:	DRAWING No.
CHECKED BY:	HORIZ.	SHEET	4 OF 5
	VERT.		GL01



Know what's below.
Call before you dig.



LEGEND

- 5360 — PROPOSED CONTOUR
- 5359 — EXISTING CONTOUR
- ⊗ 73.40 SPOT ELEVATIONS (ADD 5300 FEET)
- SD — STORM SEWER

NOTES

1. MAXIMUM CROSS-SLOPE NOT TO EXCEED 2.0%.
2. MAXIMUM SLOPE (ALONG TRAVEL LANE) IS 4.99% IN ADA ACCESSIBLE ROUTES.
3. MATCH EXISTING GRADES TO THE BACK OF CURB.

REFERENCE DRAWINGS			
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X:056-EX-TOP-AND-DIM			
Fitzsimons 12-09-2016 Found Measurements			
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PLOT DATE: 10/11/2017 3:33 PM

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PREPARED BY:

AN EMPLOYEE-OWNED COMPANY

SEAL

PRELIMINARY

THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FITZSIMONS REDEVELOPMENT AUTHORITY

CITY OF AURORA
CONSTRUCTION DOCUMENTS

**BIOSCIENCE I
OVERALL GRADING & UTILITY PLAN**

DESIGNED BY:	SCALE	DATE ISSUED:	OCTOBER 2017	DRAWING No.
CHECKED BY:	HORIZ.	SHEET	5 OF 5	OGP01

LANDSCAPE NOTES

- ALL LANDSCAPED AREAS ARE TO HAVE SOIL PREPARATION PER SPECIFICATIONS. (MINIMUM RATE OF 4 CU. YDS. OF ORGANIC MATTER PER 1000 S.F.).
- THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED SITE PLAN OR LANDSCAPE PLAN ON FILE WITH THE PLANNING DEPARTMENT. ALL LANDSCAPING WILL BE INSTALLED AS DELINEATED ON THE PLAN, PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- ALL CROSSINGS OR ENCROACHMENTS BY PRIVATE LANDSCAPE IRRIGATION LINES OR SYSTEMS INTO EASEMENTS AND STREET RIGHTS-OF-WAY OWNED BY THE CITY OF AURORA ARE ACKNOWLEDGED BY THE OWNER AS BEING SUBJECT TO CITY OF AURORA'S USE AND OCCUPANCY OF THE SAID EASEMENTS OR RIGHTS-OF-WAY. THE OWNER, THEIR SUCCESSORS AND ASSIGNS, HEREBY AGREE TO INDEMNIFY THE CITY OF AURORA FOR ANY LOSS, DAMAGE OR REPAIR TO CITY FACILITIES THAT MAY RESULT FROM THE INSTALLATION, OPERATION, OR MAINTENANCE OF SAID PRIVATE IRRIGATION LINES OR SYSTEMS.
- ALL UTILITY EASEMENTS SHALL REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR THE MAINTENANCE EQUIPMENT ENTRY.
- ALL LANDSCAPED AREAS AND PLANT MATERIAL, EXCEPT FOR NON-IRRIGATED NATIVE, RESTORATIVE, AND DRYLAND GRASS AREAS THAT COMPLY WITH REQUIREMENTS FOUND IN SEC. 146-1429, MUST BE WATERED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. IRRIGATION SYSTEM DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE SHALL CONFORM TO REQUIREMENTS FOUND IN THE CITY OF AURORA IRRIGATION ORDINANCE.
- LANDSCAPE MATERIAL PLACEMENT SHALL NOT BE PLACED OR KEPT NEAR FIRE HYDRANTS, FIRE DEPARTMENT INLET CONNECTIONS OR FIRE PROTECTION CONTROL VALVES IN A MANNER THAT WOULD PREVENT SUCH EQUIPMENT OR FIRE HYDRANTS FROM BEING IMMEDIATELY DISCERNIBLE. THE FIRE DEPARTMENT SHALL NOT BE DETERRED OR HINDERED FROM GAINING IMMEDIATE ACCESS TO FIRE PROTECTION EQUIPMENT OR HYDRANTS.
- ALL FIRE HYDRANTS SHALL BE LOCATED NOT LESS THAN THREE FEET-SIX INCHES (3'-6") AND NOT MORE THAN EIGHT (8') FEET FROM THE BACK OF CURB TO THE CENTER OF THE HYDRANT AND SHALL BE UNOBSTRUCTED ON THE STREET SIDE. MINIMUM CLEARANCE ON ALL OTHER SIDES SHALL BE FIVE FEET (5').
- LANDSCAPING MATERIAL SHOWN WITHIN THE SITE PLAN CANNOT ENCROACH INTO ROADWAYS THAT ARE DEDICATED (OR DESIGNATED) AS FIRE LANE EASEMENTS (OR CORRIDORS).

LANDSCAPE REQUIREMENTS

AREA DESCRIPTION	REQUIREMENT	AREA/ LENGTH	# OF TREES REQUIRED	# OF TREES PROVIDED	# OF MITIGATION TREES PROVIDED	MITIGATION INCHES PROVIDED	# OF SHRUBS REQUIRED	# OF SHRUBS PROVIDED
E. 21ST AVENUE FRONTAGE	1 TE PER 35 LF	589 L.F.	17	10	0	0.0	0	92 SHRUBS; 6 GRASSES
MONTVIEW BOULEVARD FRONTAGE	1 TE PER 35 LF	139 L.F.	4	6+ EXISTING	2	8.0	0	4 SHRUBS; 0 GRASSES
PARKING LOT BUFFER	5' MIN. WIDTH	428 L.F.		3+ 1 EXISTING	0	0.0	0	96 SHRUBS; 106 GRASSES
BUILDING PERIMETER (NORTH)	1 TE PER 40 LF	105 L.F.	3	0	0	0.0	0	30 SHRUBS; 28 GRASSES
BUILDING PERIMETER (SOUTH)	1 TE PER 40 LF	121 L.F.	4	0	0	0.0	0	51 SHRUBS; 27 GRASSES
BUILDING PERMETER (EAST)	1 TE PER 40 LF	45 L.F.	2	0	0	0.0	0	11 SHRUBS; 24 GRASSES
BUILDING PERIMETER (WEST)	1 TE PER 40 LF	116 L.F.	3	0	0	0.0	0	25 SHRUBS; 27 GRASSES
DETENTION POND*	1 TREE AND 10 SHRUBS PER 4000 SF	NA	0	0	0	0.0	0	0 SHRUBS;
* REMOVED AS A PART OF BIOSCIENCE 3 DEVELOPMENT						TOTAL:	8.0	

WATER USE TABLE

AREA DESCRIPTION	WATER CONSERVING IRRIGATION (NON-SOD)	NON-WATER CONSERVING IRRIGATION (SOD)
E. 21ST AVENUE FRONTAGE	2,764 S.F.	15,467 S.F.
MONTVIEW BOULEVARD FRONTAGE	0 S.F.	1,004 S.F.
PARKING LOT	6,228 S.F.	0 S.F.
BUILDING PERIMETER	4,900 S.F.	309 S.F.
DETENTION POND	12,755 S.F.	0 S.F.

LANDSCAPE PLANT LIST

(AMENDMENT)	SYM.	COMMON NAME	BOTANICAL NAME	SIZE & COND.	WATER REQMT.
DECIDUOUS TREES					
0	10	MAR	MARSHALL'S SEEDLESS ASH	FRAXINUS PENNSYLVANICA 'MARSHALL'S ASH'	3" CAL. B&B L
3	6	RAD	RADIANT CRABAPPLE	MALUS x 'RADIANT'	2.5" CAL. B&B M
4	0	IMP	IMPERIAL HONEYLOCUST	GLEDITSIA TRIACANTHOS INERMIS 'IMPERIAL'	3" CAL. B&B M
1	0	SWO	SWAMP WHITE OAK	QUERCUS BICOLOR	3" CAL. B&B L
ORNAMENTAL GRASSES					
45	0	AVG	BLUE AVENA GRASS	HELICTOTRICHON SEMPERVIRENS	#1 CONT. L
0	26	DMG	DWARF MAIDEN GRASS	MISCANTHUS SINENSIS 'YAKU JIMA'	#1 CONT. L
0	62	FRV	VARIEGATED FEATHER REED GRASS	CALAMAGROSTIS ARUNDINACEA 'AVALANCHE'	#1 CONT. L
0	42	GHM	HEAVY METAL SWITCH GRASS	PANICUM VIRGATUM 'HEAVY METAL'	#1 CONT. L
0	3	ISG	INDIAN STEEL INDIAN GRASS	SORGHASTRUM NUTANS 'INDIAN STEEL'	#1 CONT. L
0	93	KFG	KOREAN FEATHER REED GRASS	CALAMAGROSTIS BRACHYTRICHA	#1 CONT. L
42	10	MAG	MAIDEN GRASS	MISCANTHUS SINENSIS 'GRACILLIMUS'	#1 CONT. L
0	3	PAH	PAMPAS GRASS	ERIANTHUS RAVENNAE	#1 CONT. L
19	21	RSG	RED SWITCH GRASS	PANICUM VIRGATUM 'SHENANDOAH'	#1 CONT. L
46	0	LBG	LITTLE BLUESTEM GRASS	SCHIZACHYRIUM SCOPARIUM	#1 CONT. L
DECIDUOUS SHRUBS					
16	8	AWS	ANTHONY WATERER SPIREA	SPIRAEA JAPONICA 'ANTHONY WATERER'	#5 CONT. L
0	11	BEA	BEAUTYBUSH	KOLWITZIA AMABILIS	#5 CONT. L
16	122	MKL	MISS KIM LILAC	SYRINGA PATULA 'MISS KIM'	#5 CONT. L
0	61	MLL	LITTLELEAF MOCKORANGE	PHILADELPHUS MICROPHYLLUS	#5 CONT. L
9	32	MSN	SNOWBELLE MOCKORANGE	PHILADELPHUS 'SNOWBELLE'	#5 CONT. L
10	4	NSW	SUMMER WINE NINEBARK	PHYSOCARPUS OPULIFOLIUS 'SEWARD'	#5 CONT. L
0	31	RSE	REGENT SERVICEBERRY	AMELANCHIER ALNIFOLIA 'REGENT'	#5 CONT. L
0	12	TLS	THREE LEAF SUMAC	RHUS TRILOBATA	#5 CONT. L
17	15	VLA	WAYFARING VIBURNUM	VIBURNUM LANTANA	#5 CONT. L
6	36	VMO	MOHICAN VIBURNUM	VIBURNUM LANTANA 'MOHICAN'	#5 CONT. L
0	26	WSC	WESTERN SAND CHERRY	PRUNUS BESSEYI	#5 CONT. L
11	0	QTS	TEXAS SCARLET FLOWERING QUINCE	CHAENOMELES X SUPERBA 'TEXAS SCARLET'	#5 CONT. L
EVERGREEN SHRUBS					
5	76	ARC	ARCADIA JUNIPER	JUNIPERUS SABINA 'ARCADIA'	#5 CONT. L
24	24	CCJ	CALGARY CARPET JUNIPER	JUNIPERUS SABINA 'CALGARY CARPET'	#5 CONT. L
7	11	MBT	BIG TUNA MUGO PINE	PINUS MUGO 'BIG TUNA'	#5 CONT. L
0	22	MCO	COMPACT OREGON GRAPE HOLLY	MAHONIA AQUIFOLIUM 'COMPACTA'	#5 CONT. L
0	4	PBR	BREPO PINE	PINUS NIGRA 'BREPO'	#5 CONT. L
0	6	TAB	TABLE TOP BLUE JUNIPER	JUNIPERUS SCOPULORUM 'TABLE TOP BLUE'	#5 CONT. L
6	0	SPA	SPARTAN JUNIPER	JUNIPERUS CHINENSIS 'SPARTAN'	#5 CONT. L
PERENNIALS					
0	42	BGO	BASKET OF GOLD	AURINIA SAXATILIS	#1 CONT. L
0	20	COZ	ZAGREB COREOPSIS	COREOPSIS VERTICILLATA 'ZAGREB'	#1 CONT. L
0	37	DDY	STELLA D'ORO DAYLILY	HEMEROCALLIS 'STELLA D'ORO'	#1 CONT. L
0	29	PCW	WHITE CREEPING PHLOX	PHLOX SUBULATA	#1 CONT. L

IRRIGATED SEED MIX

COMMON NAME	SCIENTIFIC NAME	VARIETY	PLS LBS PER ACRE	OUNCES PER ACRE
SAND BLUESTEM	ANDROPOGON HALLII	GARDEN	3.5	
SIDEOATS GRAMA	BOUTELOUA CURTIPENDULA	BUTTE	3	
PRAIRIE SANDREED	CALAMOVILFA LONGIFOLIA	GOSHEN	3	
INDIAN RICEGRASS	ORYZOPSIS HYMENOIDES	PALOMA	3	
SWITCHGRASS	PANICUM VIRGATUM	BLACKWELL	4	
WESTERN WHEATGRASS	PASCOPYRUM SMITHII	ARIBA	3	
LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	PATURA	3	
ALKALI SACATON	SPOROBOLUS AIROIDES		3	
SAND DROPSIDE	SPOROBOLUS CRYPTANDRUS		3	
*PASTURE SAGE	ARTEMISIA FRIGIDA			2
*BLUE ASTER	ASTER LAEVIS			4
*BLANKET FLOWER	GAILLARDIA ARISTATA			8
*PRAIRIE CONEFLOWER	RATIBIDA COLUMNIFERA			4
*PURPLE PRAIRIECLOVER	DALEA (PETALOSTEMUM) PURPUREA			4
TOTAL			27.5	22

NON-IRRIGATED SEED MIX

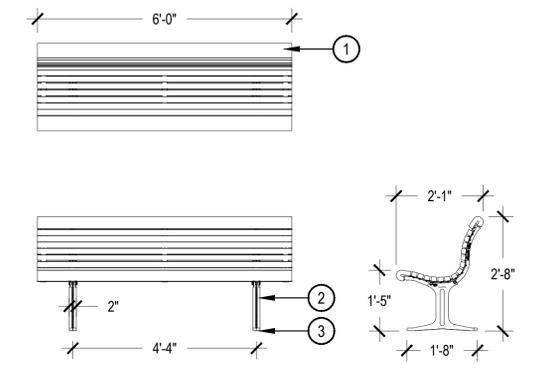
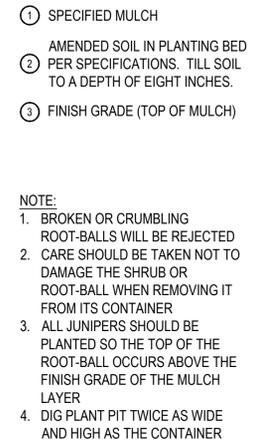
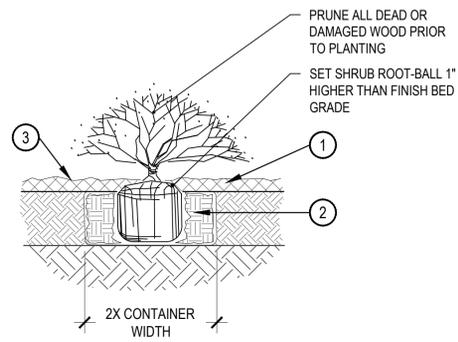
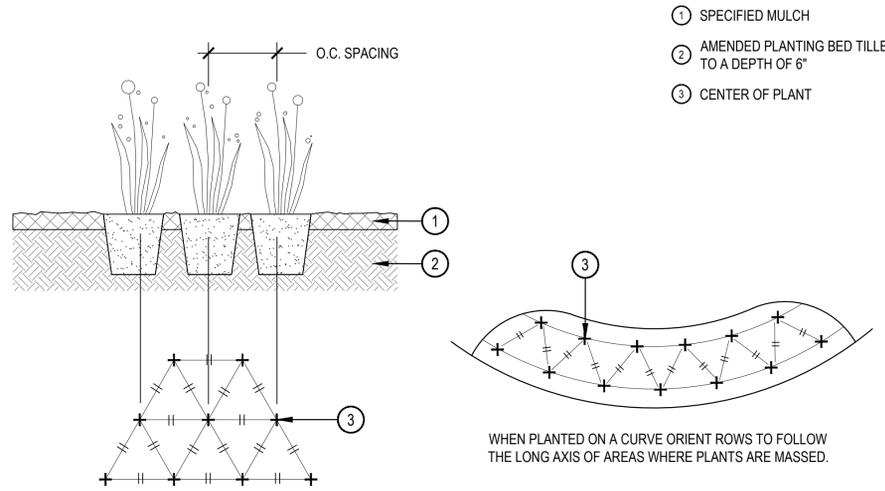
COMMON NAME	SCIENTIFIC NAME	% OF TOTAL	PLS PER ACRE
WESTERN WHEATGRASS	AGROPYRON SMITHII	25%	
BLUE GRAMA	BOUTELOUA GRACILIS	25%	
BUFFALOGRASS	BUCHLOE DACTYLOIDES	10%	
GREEN NEEDLEGRASS	BOUTELOUA GRACILIS	20%	
SIDEOATS GRAMA	BOUTELOUA CURTIPENDULA	20%	
TOTAL		100%	22.0 LBS.

IRRIGATED TURF SEED

COMMON NAME	% OF TOTAL	PLS PER ACRE
ELDORADO FESCUE	20%	6 LBS.
SILVERADO FESCUE	20%	6 LBS.
MONARCH TALL FESCUE	20%	6 LBS.
MONARCH SMOOTH BROME	30%	9 LBS.
BLUEGRASS MIX	10%	3 LBS.
TOTAL	100%	30.0 LBS.

TURF GRASS BLEND: SOD

TEXAS BLUEGRASS BLEND BY BITTERSWEET TURF FARMS, INC., OR APPROVED EQUAL



NOTE:
 1. BROKEN OR CRUMBLING ROOT-BALLS WILL BE REJECTED
 2. CARE SHOULD BE TAKEN NOT TO DAMAGE THE SHRUB OR ROOT-BALL WHEN REMOVING IT FROM ITS CONTAINER
 3. ALL JUNIPERS SHOULD BE PLANTED SO THE TOP OF THE ROOT-BALL OCCURS ABOVE THE FINISH GRADE OF THE MULCH LAYER
 4. DIG PLANT PIT TWICE AS WIDE AND HIGH AS THE CONTAINER

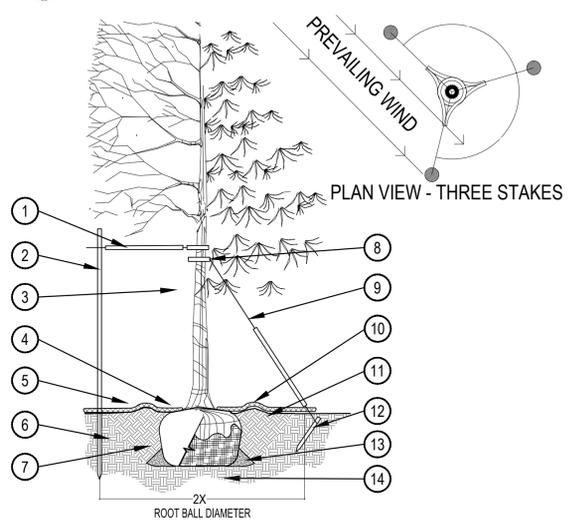
Drawing: GR133-07
 Date: 6/29/2011
 Dimensions are in inches

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1 PERENNIAL PLANT LAYOUT
 SCALE: 1" = 1'-0"

2 SHRUB PLANTING
 SCALE: 1-1/2" = 1'-0"

3 BENCH - LANDSCAPE FORMS GRETCHEN
 SCALE: 1/2" = 1'-0"

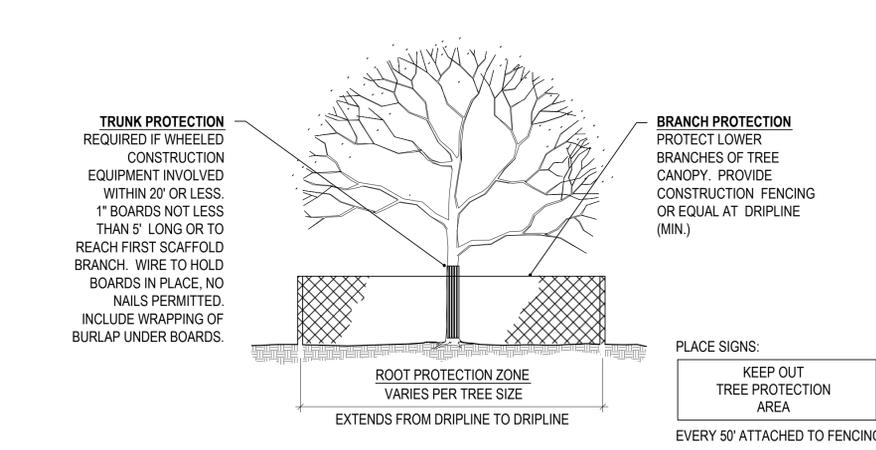


PRUNING NOTES:
 1. ALL PRUNING SHALL COMPLY WITH ANSI A300 STANDARDS.
 2. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS AND BROKEN BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED. HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

STAKING NOTES:
 1. STAKE TREES PER FOLLOWING SCHEDULE, THEN REMOVE AT END OF FIRST GROWING SEASON.
 1.1 1-1/2" CALIPER SIZE - MIN. 1 STAKE ON SIDE OF PREVAILING WIND (GENERALLY N.W. SIDE)
 1.2 1-1/2" - 3" CALIPER SIZE - MIN. 2 STAKES - ONE ON N.W. SIDE, ONE ON S.W. SIDE (OR PREVAILING WIND SIDE AND 180° FROM THAT SIDE)
 1.3 3" CALIPER SIZE AND LARGER - 3 STAKES PER DIAGRAM
 2. WIRE OR CABLE SHALL BE MIN. 12 GAUGE, TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. NYLON STRAPS SHALL BE LONG ENOUGH TO ACCOMMODATE 1-1/2" OF GROWTH AND BUFFER ALL BRANCHES FROM WIRE.

- 1 PLACE MIN. 1/2" PVC PIPE AROUND EACH WIRE. EXPOSED WIRE SHALL BE MAX. 2" EACH SIDE
- 2 6 FT. UNTREATED WOOD POST (MIN. 1.5" DIAMETER). ALL SHALL BE DRIVEN OUTSIDE ROOTBALL AND IN UNDISTURBED SOIL.
- 3 TREE WRAP TO BE INSTALLED ONLY FROM OCTOBER 1 THROUGH APRIL 30. (DECIDUOUS ONLY)
- 4 PLANT TREE SO THAT FIRST ORDER MAJOR ROOT IS 1"-2" ABOVE FINAL GRADE.
- 5 3" DEEP MULCH RING PLACED A MINIMUM OF 4 FT. IN DIAMETER. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK (FINISHED GRADE REFERENCES TOP OF MULCH).
- 6 1:1 SLOPE ON SIDES OF PLANTING HOLE.
- 7 REMOVE ALL TWINE, ROPE, BURLAP AND WIRE FROM ENTIRE ROOT BALL AND TRUNK
- 8 GROMMETED NYLON STRAPS
- 9 GALVANIZED WIRE, MIN. 12 GAUGE CABLE - TWIST WIRE ONLY TO KEEP FROM SLIPPING.
- 10 4-6" HIGH WATER SAUCER IN NON-TURF AREAS.
- 11 BACKFILL WITH BLEND OF EXISTING SOIL AND A MAXIMUM 20% (BY VOLUME) ORGANIC MATERIAL. WATER THOROUGHLY WHEN BACKFILLING
- 12 2 FT. STEEL T-POST. ALL SHALL BE DRIVEN BELOW GRADE AND OUTSIDE ROOTBALL IN UNDISTURBED SOIL.
- 13 PLACE SOIL AROUND ROOT BALL FIRMLY, DO NOT COMPACT OR TAMP. SETTLE SOIL WITH WATER TO FILL ALL AIR POCKETS.
- 14 PLACE ROOT BALL ON UNDISTURBED SOIL TO PREVENT SETTLEMENT.

4 TREE PLANTING DETAIL
 SCALE: 3/16" = 1'-0"



TREE PROTECTION NOTES
 1. ALL TREES AND SHRUBS TO BE PROTECTED AND PRESERVED SHALL BE PER DETAIL. GROUPING OF MORE THAN ONE TREE MAY OCCUR.
 2. TREES AND SHRUBS TO BE PROTECTED AND PRESERVED SHALL BE IDENTIFIED ON THE TRUNK WITH WHITE SURVEY TAPE.
 3. TO PREVENT ROOT SMOTHERING, SOIL STOCKPILES, SUPPLIES, EQUIPMENT OR ANY OTHER MATERIAL SHALL NOT BE PLACED OR STORED WITHIN THE DRIP LINE OR WITHIN 15 FEET OF A TREE OR SHRUB TRUNK, WHICHEVER IS GREATER.
 4. TREE AND SHRUB ROOTS SHALL NOT BE CUT UNLESS CUTTING IS UNAVOIDABLE. A MAXIMUM OF TWO 3-INCH DIAMETER ROOTS PER TREE ARE PERMITTED FOR REMOVAL. THE REMOVAL OF ADDITIONAL ROOTS 3-INCHES OR GREATER IN DIAMETER REQUIRES APPROVAL OF CITY FORESTER DESIGNEE.
 5. TRENCHES SHALL BE HAND DUG WITHIN THE DRIP LINE IN AREAS WHERE ROOTS TWO INCHES IN DIAMETER AND GREATER ARE PRESENT, OR WHEN IN CLOSE PROXIMITY TO LOW BRANCHING TREES. WHENEVER POSSIBLE, ROOTS TWO INCHES OR GREATER IN DIAMETER SHALL BE TUNNELED OR BORED UNDER AND SHALL BE COVERED TO PREVENT DEHYDRATION.
 6. WHEN ROOT CUTTING IS UNAVOIDABLE, A CLEAN SHARP CUT SHALL BE MADE TO AVOID SHREDDING OR SMASHING. ROOT CUTS SHOULD BE MADE BACK TO A LATERAL ROOT. WHENEVER POSSIBLE, ROOTS SHOULD BE CUT BETWEEN LATE FALL AND BUD OPENING, WHEN ROOT ENERGY SUPPLIES ARE HIGH AND CONDITIONS ARE LEAST FAVORABLE FOR DISEASE CAUSING AGENTS. EXPOSED ROOTS SHALL BE COVERED IMMEDIATELY TO PREVENT DEHYDRATION. ROOTS SHALL BE COVERED WITH SOIL OR BURLAP AND KEPT MOIST.
 7. WATERING OF PROTECTED TREES IN WHICH ROOTS WERE CUT SHALL BE PROVIDED BY THE CONTRACTOR.
 8. AUGER TUNNELING RATHER THAN TRENCHING SHOULD BE USED FOR UTILITY PLACEMENT WITHIN DRIP LINE.
 9. FENCING MATERIAL SHALL ENCIRCLE ANY TREE OR SHRUB WHOSE OUTER DRIP LINE EDGE IS WITHIN 20 FEET OF ANY CONSTRUCTION ACTIVITIES.
 10. FENCING MATERIAL SHALL BE BRIGHT, CONTRASTING COLOR, DURABLE, AND A MINIMUM OF FOUR FEET IN HEIGHT.
 11. FENCING MATERIAL SHALL BE SET AT THE DRIP LINE OR 15 FEET FROM TREE TRUNK, WHICHEVER IS GREATER, AND MAINTAINED IN AN UPRIGHT POSITION THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
 12. ANY GRADE CHANGES (SUCH AS THE REMOVAL OF TOPSOIL OR ADDITION OF FILL MATERIAL) WITHIN THE DRIP LINE SHOULD BE AVOIDED FOR EXISTING TREES TO REMAIN. RETAINING WALLS AND TREE WELLS ARE ACCEPTABLE ONLY WHEN CONSTRUCTED PRIOR TO GRADE CHANGE.
 13. LIMB REMOVAL SHALL BE ACCOMPLISHED BEFORE CONSTRUCTION BEGINS. A PROFESSIONAL COMPANY THAT IS LICENSED BY THE CITY OF AURORA FORESTRY DIVISION SHALL COMPLETE ALL PRUNING.

5 TREE AND SHRUB PROTECTION
 SCALE: 1/8" = 1'-0"

OWNER:
 FITZSIMONS REDEVELOPMENT AUTHORITY
 12635 E MONTVIEW BLVD.
 AURORA, CO 80045
 720.589.4100

NOT FOR CONSTRUCTION

DATE:
 8.31.2017 - MINOR AMENDMENT
 10.11.2017 - RESPONSE TO CITY COMMENTS

SHEET TITLE:
 LANDSCAPE DETAILS

**COLORADO SCIENCE AND TECHNOLOGY
 PARK AT FITZSIMONS
 BIOSCIENCE PARK CENTER EXPANSION
 AURORA, COLORADO**

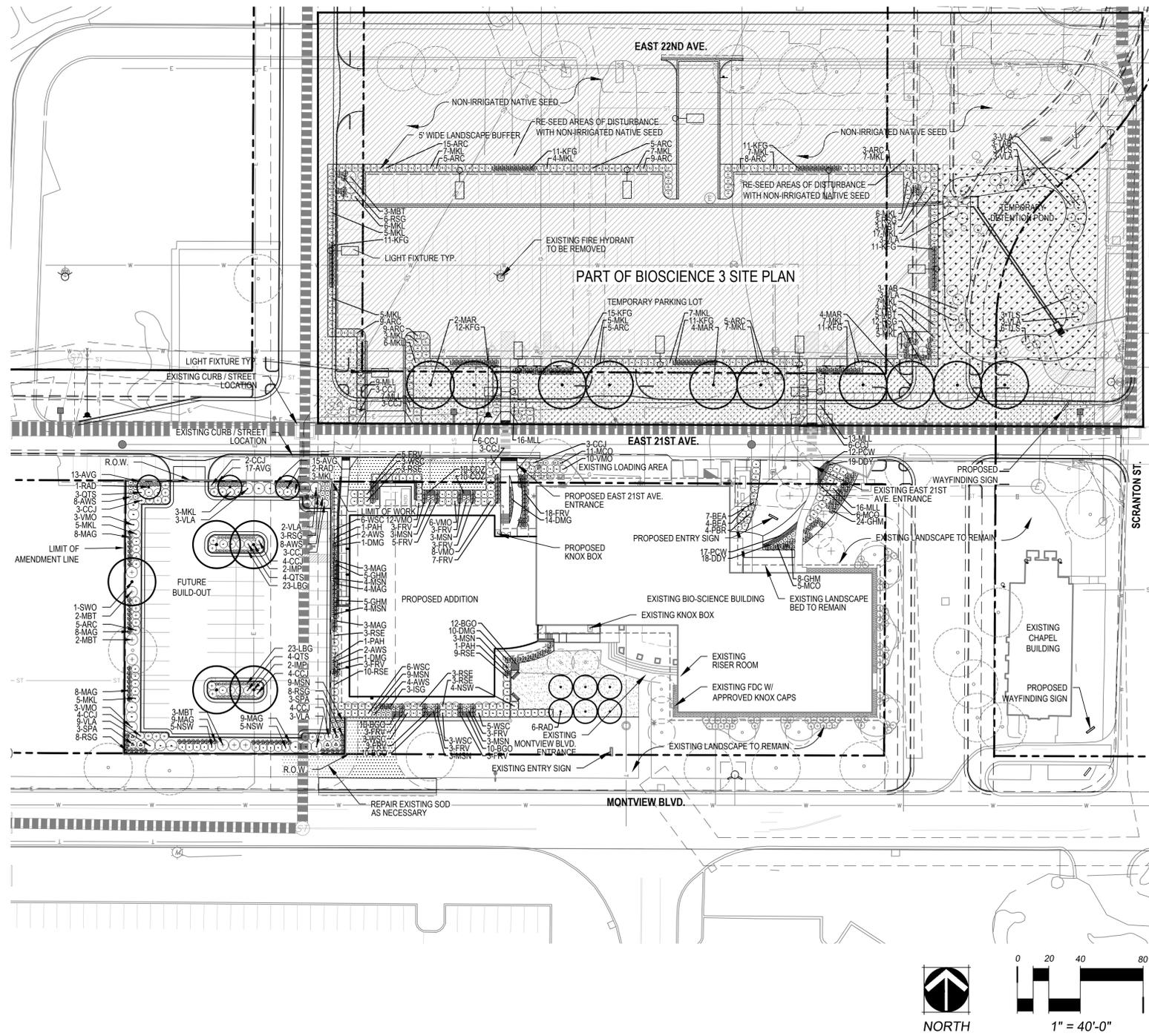
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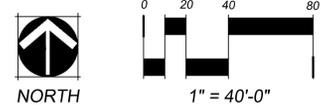
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 LANDSCAPE
 PLAN

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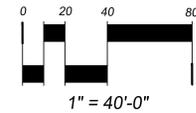
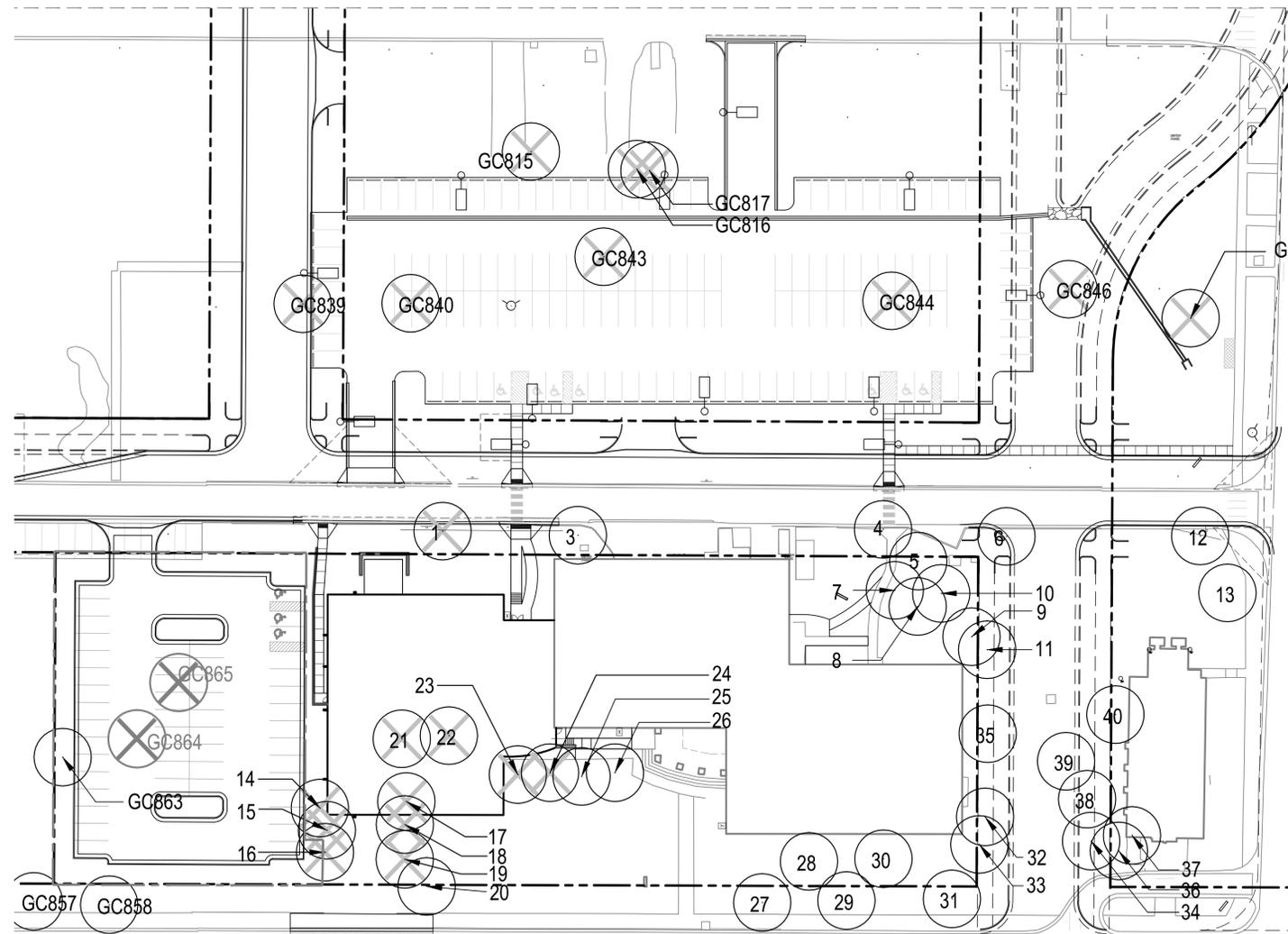
LANDSCAPE LEGEND

	EXISTING CANOPY TREE
	EXISTING EVERGREEN TREE
	DECIDUOUS CANOPY TREE
	DECIDUOUS ORNAMENTAL TREE
	EVERGREEN SHRUBS
	DECIDUOUS SHRUBS
	ORNAMENTAL GRASSES
	CRUSHER FINES
	IRRIGATED TURF SEED
	IRRIGATED SOD
	IRRIGATED SEED
	PERENNIALS/ANNUALS
	LIGHT FIXTURES
	SIGN
	PROPOSED FIRE HYDRANT
	EXISTING FIRE HYDRANT
	PROPOSED BENCH



CHECKED BY:
 DRAWN BY:

XX
 XX



TREE MITIGATION

		SITE PLAN NO.	FRA EXP
INCHES NOT MITIGATED ON PREVIOUS SITE PLANS:		602.5	
(CSTP SITE PLANS 1, 2, 3, 4, TCH ECC)			
TREES REMOVED WITH THIS SITE PLAN			
TREE NO.	DBH	CONDITION VALUE	MITIGATION INCHES
1	13	0.35	5
14	10	0.6	6
15	4	0.85	3
16	4	0.85	3
17	13	0.35	5
18	3	0.85	0
19	3	0.85	0
21	6	0.85	5
22	17	0.6	10
23	4	0.85	3
24	4	0.85	3
GC815	5	0.6	3
GC816	18	0.35	6
GC817	24	0.35	8
GC839	12	0.35	4
GC840	12	0.35	4
GC843	28	0.35	10
GC844	12	0.35	4
GC846	12	0.35	4
GC848	14	0.85	12
TOTAL			98
EXISTING INCHES REMOVED FROM SITE BY THIS SITE PLAN:			98
INCHES TO BE MITIGATED:			700.5
MITIGATION INCHES PROVIDED BY TREES IN SITE PLAN FRA EXP:			8
MITIGATION INCHES CARRIED OVER TO FUTURE SITE PLANS:			692.5

		SITE PLAN NO.	FRA EXP - AMEND 1
MITIGATION INCHES CARRIED OVER ON ORIGINAL SITE PLAN:		692.5	
TREES REMOVED WITH THIS SITE PLAN			
TREE NO.	DBH	CONDITION VALUE	MITIGATION INCHES
GC864	10	0.6	6
GC865	7	0.6	4
TOTAL			10
MITIGATION INCHES PROVIDED BY TREES:			0
MITIGATION INCHES CARRIED OVER TO FUTURE SITE PLANS:			702.5

TREE MITIGATION NOTES

FOR TREES REQUIRING PROTECTION, CITY OF AURORA PARK AND OPEN SPACE DEPARTMENT TREE PROTECTION NOTES AND DETAILS SHALL BE APPLIED.