

# CITY OF AURORA

## CONSTRUCTION PLANS FOR

# 2024 CENTRAL AVENUE PAVEMENT REPAIRS

AGGREGATE BASE, BITUMINOUS PAVEMENT

MARCH 2024

**RESOURCE LIST**

CITY OF AURORA

Aurora City Clerk  
16 W 2ND AVENUE N  
AURORA, MN 55705

City Administrator: Lucas Heikkila

Mayor: Doug Gregor

City Council Members:  
John Miklausch  
Dan Goette  
Bob Hanson  
Richard Hess

City Engineer:  
JOSHUA STIER, PE

Bolton & Menk, Inc.  
4960 Miller Trunk Highway  
Duluth, MN 55811

Public Works Supervisor:  
Russel Siltman

Water/Wastewater Supervisor:  
Jim Gentilini

UTILITIES

GAS

Minnesota Energy Resources  
Kyle Lee, Lindsay Lyle  
800-889-4970

TELEPHONE

Consolidated Telephone  
Eddie Dolezal  
218-368-8640

Frontier Communications  
Chris Pollack  
800-778-9140

CABLE

Mediacom Cablevision  
Bob Frazer, Scott Sandquist  
800-778-9140

Zito Media  
Skyfar Thompson  
218-340-1243

ELECTRIC

Minnesota Power  
Deb Kellner, Beau Pocquette  
608-223-2014

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL, 1-800-252-1166 OR 651-454-0002.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."



PROJECT LOCATION

SHEET NUMBER	SHEET TITLE
G0.01-G0.02	TITLE SHEET, LEGEND
C1.01	CONSTRUCTION DETAILS
C6.01 - C6.02	PROPOSED CONSTRUCTION PLAN
THIS PLAN SET CONTAINS <u>5</u> SHEETS.	



**MAP LEGEND**

- PROJECT LIMITS
- BID LOCATION

MAP OF THE CITY OF AURORA  
ST. LOUIS COUNTY, MN

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JOSHUA G. STIER  
LIC. NO. 54171 DATE 03/27/2024



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CITY OF AURORA, MINNESOTA  
2024 CENTRAL AVENUE PAVEMENT REPAIRS  
TITLE SHEET

SHEET  
G0.01

**EXISTING TOPOGRAPHIC SYMBOLS**

	ACCESS GRATE		REGULATION STATION GAS
	AIR CONDITION UNIT		SATELLITE DISH
	ANTENNA		SIGN TRAFFIC
	AUTO SPRINKLER CONNECTION		SIGNAL CONTROL CABINET
	BARRICADE PERMANENT		SOIL BORING
	BASKETBALL POST		SIREN
	BENCH		TELEPHONE BOOTH
	BIRD FEEDER		TILE INLET
	BOLLARD		TILE OUTLET
	BUSH		TILE RISER
	CATCH BASIN RECTANGULAR CASTING		TRANSFORMER-ELECTRIC
	CATCH BASIN CIRCULAR CASTING		TREE-CONIFEROUS
	CURB STOP		TREE-DEAD
	CLEAN OUT		TREE-DECIDUOUS
	CULVERT END		TREE STUMP
	DRINKING FOUNTAIN		TRAFFIC ARM BARRIER
	DOWN SPOUT		TRAFFIC SIGNAL
	ELECTRIC CAR CHARGE STATION		TRASH CAN
	FILL PIPE		UTILITY MARKER
	FIRE HYDRANT		VALVE
	FLAG POLE		VALVE POST INDICATOR
	FLARED END / APRON		VALVE VAULT
	FUEL PUMP		VAULT
	GRILL		VENT PIPE
	GUY WIRE ANCHOR		WATER SPIGOT
	HANDHOLE		WELL
	HANDICAP SPACE		WETLAND DELINEATED MARKER
	IRRIGATION SPRINKLER HEAD		WETLAND
	IRRIGATION VALVE BOX		WET WELL
	LIFT STATION CONTROL PANEL		YARD HYDRANT
	LIFT STATION		
	LIGHT POLE		
	MAILBOX		
	MANHOLE-COMMUNICATION		
	MANHOLE-ELECTRIC		
	MANHOLE-GAS		
	MANHOLE-HEAT		
	MANHOLE-RECLAIMED WATER		
	MANHOLE-SANITARY SEWER		
	MANHOLE-STORM SEWER		
	MANHOLE-UTILITY		
	MANHOLE-WATER		
	METER		
	DRIVE-THRU MICROPHONE		
	PARKING METER		
	PAVEMENT MARKING		
	PEDESTAL-COMMUNICATION		
	PEDESTAL-ELECTRIC		
	PEDESTRIAN PUSH BUTTON		
	PICNIC TABLE		
	POLE-UTILITY		
	POST		
	RAILROAD SIGNAL POLE		

**PROPOSED TOPOGRAPHIC SYMBOLS**

	CLEANOUT
	MANHOLE
	LIFT STATION
	STORM SEWER CIRCULAR CASTING
	STORM SEWER RECTANGULAR CASTING
	STORM SEWER FLARED END / APRON
	STORM SEWER OUTLET STRUCTURE
	STORM SEWER OVERFLOW STRUCTURE
	CURB BOX
	FIRE HYDRANT
	WATER VALVE
	WATER REDUCER
	WATER BEND
	WATER TEE
	WATER CROSS
	WATER SLEEVE
	WATER CAP / PLUG
	RIP RAP
	DRAINAGE FLOW
	TRAFFIC SIGNS

**SURVEY SYMBOLS**

	BENCHMARK LOCATION		CAST IRON MONUMENT
	CONTROL POINT		STONE MONUMENT
	MONUMENT FOUND		

**EXISTING TOPOGRAPHIC LINES**

	RETAINING WALL
	FENCE
	FENCE-DECORATIVE
	GUARD RAIL
	TREE LINE
	BUSH LINE

**SURVEY LINES**

	CONTROLLED ACCESS BOUNDARY
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	SETBACK LINE
	SECTION LINE
	QUARTER LINE
	SIXTEENTH LINE
	TEMPORARY EASEMENT

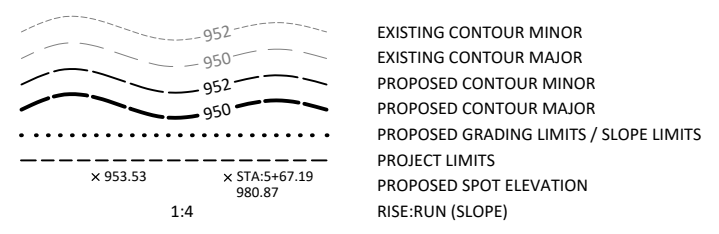
**EXISTING UTILITY LINES**

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	RECLAIMED WATER

**PROPOSED UTILITY LINES**

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	PIPE CASING
	TRENCHLESS PIPE (PLAN VIEW)
	TRENCHLESS PIPE (PROFILE VIEW)

**GRADING INFORMATION**



**HATCH PATTERNS**

	BITUMINOUS		GRAVEL
	CONCRETE		

**EXISTING PRIVATE UTILITY LINES**

**NOTE:**  
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	UNDERGROUND FIBER OPTIC
	UNDERGROUND ELECTRIC
	UNDERGROUND GAS
	UNDERGROUND COMMUNICATION
	OVERHEAD ELECTRIC
	OVERHEAD COMMUNICATION
	OVERHEAD UTILITY

**UTILITIES IDENTIFIED WITH A QUALITY LEVEL:**

LINE TYPES FOLLOW THE FORMAT: UTILITY TYPE - QUALITY LEVEL  
EXAMPLE: G-A UNDERGROUND GAS, QUALITY LEVEL A  
UTILITY QUALITY LEVEL (A,B,C,D) DEFINITIONS CAN BE FOUND IN CI/ASCE 38-22.

**UTILITY QUALITY LEVELS:**

**QUALITY LEVEL D:** PROVIDES THE MOST BASIC LEVEL OF INFORMATION. IT INVOLVES COLLECTING DATA FROM EXISTING UTILITY RECORDS. RECORDS MAY INCLUDE AS-BUILT DRAWINGS, DISTRIBUTION AND SERVICES MAPS, EXISTING GEOGRAPHIC INFORMATION SYSTEM DATABASES, CONSTRUCTION PLANS, ETC.

**QUALITY LEVEL C:** INVOLVES SURVEYING VISIBLE SUBSURFACE UTILITY STRUCTURES SUCH AS MANHOLES, HAND-HOLES, UTILITY VALVES AND METERS, FIRE HYDRANTS, PEDESTALS AND UTILITY MARKERS, AND THEN CORRELATING THE INFORMATION WITH EXISTING UTILITY RECORDS TO CREATE COMPOSITE DRAWINGS. INCLUDES QUALITY LEVEL D ACTIVITIES.

**QUALITY LEVEL B:** INVOLVES DESIGNATING THE HORIZONTAL POSITION OF SUBSURFACE UTILITIES THROUGH SURFACE DETECTION METHODS AND COLLECTING THE INFORMATION THROUGH A SURVEY METHOD. INCLUDES QUALITY LEVEL C AND D TASKS.

**QUALITY LEVEL A:** PROVIDES THE HIGHEST LEVEL OF ACCURACY. IT INVOLVES LOCATING OR POTHOLING UTILITIES AS WELL AS ACTIVITIES IN QUALITY LEVELS B, C, AND D. THE LOCATED FACILITY INFORMATION IS SURVEYED AND MAPPED AND THE DATA PROVIDES PRECISE PLAN AND PROFILE INFORMATION.

**ABBREVIATIONS**

A	ALGEBRAIC DIFFERENCE	GRAV	GRAVEL	RSC	RIGID STEEL CONDUIT
ADJ	ADJUST	GU	GUTTER	RT	RIGHT
ALT	ALTERNATE	GV	GATE VALVE	SAN	SANITARY SEWER
B-B	BACK TO BACK	HDPE	HIGH DENSITY POLYETHYLENE	SCH	SCHEDULE
BIT	BITUMINOUS	HH	HANDHOLE	SERV	SERVICE
BLDG	BUILDING	HP	HIGH POINT	SHLD	SHOULDER
BMP	BEST MANAGEMENT PRACTICE	HWL	HIGH WATER LEVEL	STA	STATION
BR	BEGIN RADIUS	HYD	HYDRANT	STD	STANDARD
BV	BUTTERFLY VALVE	I	INVERT	STM	STORM SEWER
CB	CATCH BASIN	K	CURVE COEFFICIENT	TC	TOP OF CURB
C&G	CURB AND GUTTER	L	LENGTH	TE	TEMPORARY EASEMENT
CIP	CAST IRON PIPE	LO	LOWEST OPENING	TEMP	TEMPORARY
CIPP	CURED-IN-PLACE PIPE	LP	LOW POINT	TNH	TOP NUT HYDRANT
CL	CENTER LINE	LT	LEFT	TP	TOP OF PIPE
CL	CLASS	MAX	MAXIMUM	TYP	TYPICAL
CLVT	CULVERT	MH	MANHOLE	VCP	VITRIFIED CLAY PIPE
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	VERT	VERTICAL
C.O.	CHANGE ORDER	MR	MID RADIUS	VPC	VERTICAL POINT OF CURVE
COMM	COMMUNICATION	NIC	NOT IN CONTRACT	VPI	VERTICAL POINT OF INTERSECTION
CON	CONCRETE	NMC	NON-METALLIC CONDUIT	VPT	VERTICAL POINT OF TANGENT
CSP	CORRUGATED STEEL PIPE	NTS	NOT TO SCALE	WM	WATERMAIN
DIA	DIAMETER	NWL	NORMAL WATER LEVEL		
DIP	DUCTILE IRON PIPE	OHW	ORDINARY HIGH WATER LEVEL		
DWY	DRIVEWAY	PC	POINT OF CURVE	AC	ACRES
E	EXTERNAL CURVE DISTANCE	PCC	POINT OF COMPOUND CURVE	CF	CUBIC FEET
ELEC	ELECTRIC	PE	PERMANENT EASEMENT	CV	COMPACTED VOLUME
ELEV	ELEVATION	PED	PEDESTRIAN, PEDESTAL	CY	CUBIC YARD
EOF	EMERGENCY OVERFLOW	PERF	PERFORATED PIPE	EA	EACH
ER	END RADIUS	PERM	PERMANENT	EV	EXCAVATED VOLUME
ESMT	EASEMENT	PI	POINT OF INTERSECTION	LB	POUND
EX	EXISTING	PL	PROPERTY LINE	LF	LINEAR FEET
FES	FLARED END SECTION	PRC	POINT OF REVERSE CURVE	LS	LUMP SUM
F-F	FACE TO FACE	PT	POINT OF TANGENT	LV	LOOSE VOLUME
FF	FINISHED FLOOR	PVC	POLYVINYL CHLORIDE PIPE	SF	SQUARE FEET
F&I	FURNISH AND INSTALL	PVMT	PAVEMENT	SV	STOCKPILE VOLUME
FM	FORCEMAIN	R	RADIUS	SY	SQUARE YARD
FO	FIBER OPTIC	R/W	RIGHT-OF-WAY		
F.O.	FIELD ORDER	RCP	REINFORCED CONCRETE PIPE		
GRAN	GRANULAR	RET	RETAINING		

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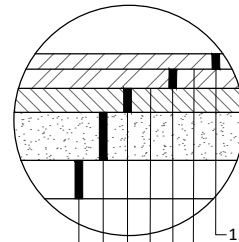
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<b>CITY OF AURORA, MINNESOTA</b>	
2024 CENTRAL AVENUE PAVEMENT REPAIRS	
<b>LEGEND</b>	

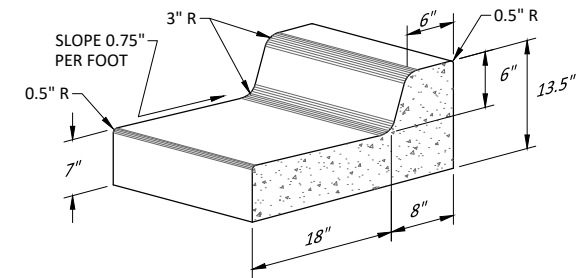
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- 1.5" TYPE SP9.5 WEARING COURSE (2,B) (SPWEA240B) (2360)
- BITUMINOUS TACK COAT (2357) (INCIDENTAL)
- 2" TYPE SP12.5 NON-WEARING COURSE (2B) (SPNWB230B) (2360)
- BITUMINOUS TACK COAT (2357) (INCIDENTAL)
- 2.5" TYPE SP12.5 NON-WEARING COURSE (2B) (SPNWB230B) (2360)
- 12" AGGREGATE BASE, CL 5 (2211) (CV)
- GEOTEXTILE FABRIC TYPE 7 (3733)
- 6" SUBGRADE PREPARATION (2112) (INCIDENTAL)

XX  
X.XX  
NOT TO SCALE

**BITUMINOUS PATCH**



**CONCRETE CURB & GUTTER**  
**DESIGN B618**  
NOT TO SCALE

LAST REVISION:  
04-2021  
PLATE NO.  
7-000

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JOSHUA G. STIER  
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CITY OF AURORA, MINNESOTA  
2024 CENTRAL AVENUE PAVEMENT REPAIRS  
DETAILS & SEQ

SHEET  
C1.01

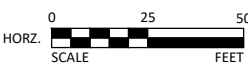




**LEGEND**

-  REMOVE AND REPLACE PAVEMENT
-  SAW BITUMINOUS PAVEMENT
-  ADJUST FRAME AND RING CASTING
-  ADJUST GATE VALVE & BOX

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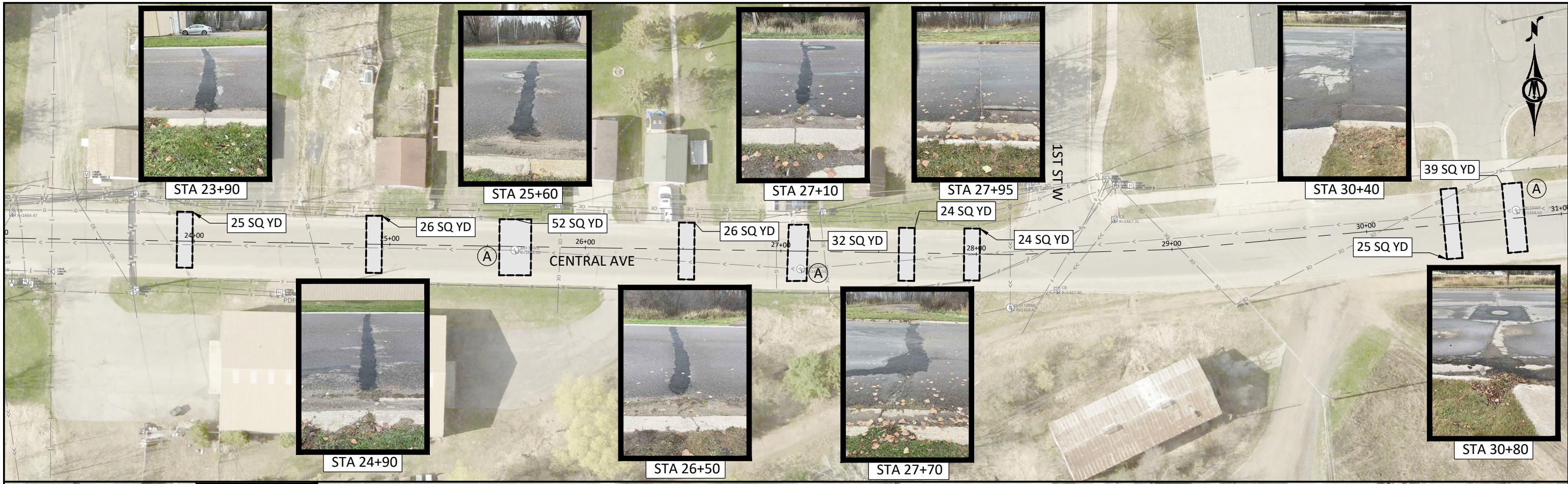
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CITY OF AURORA, MINNESOTA  
 2024 CENTRAL AVENUE PAVEMENT REPAIRS  
 PROPOSED CONSTRUCTION PLAN

SHEET  
**C6.01**

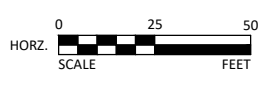




**LEGEND**

- REMOVE AND REPLACE PAVEMENT
- SAW BITUMINOUS PAVEMENT
- A ADJUST FRAME AND RING CASTING
- B ADJUST GATE VALVE & BOX

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CITY OF AURORA, MINNESOTA  
 2024 CENTRAL AVENUE PAVEMENT REPAIRS  
 PROPOSED CONSTRUCTION PLAN

SHEET  
**C6.02**