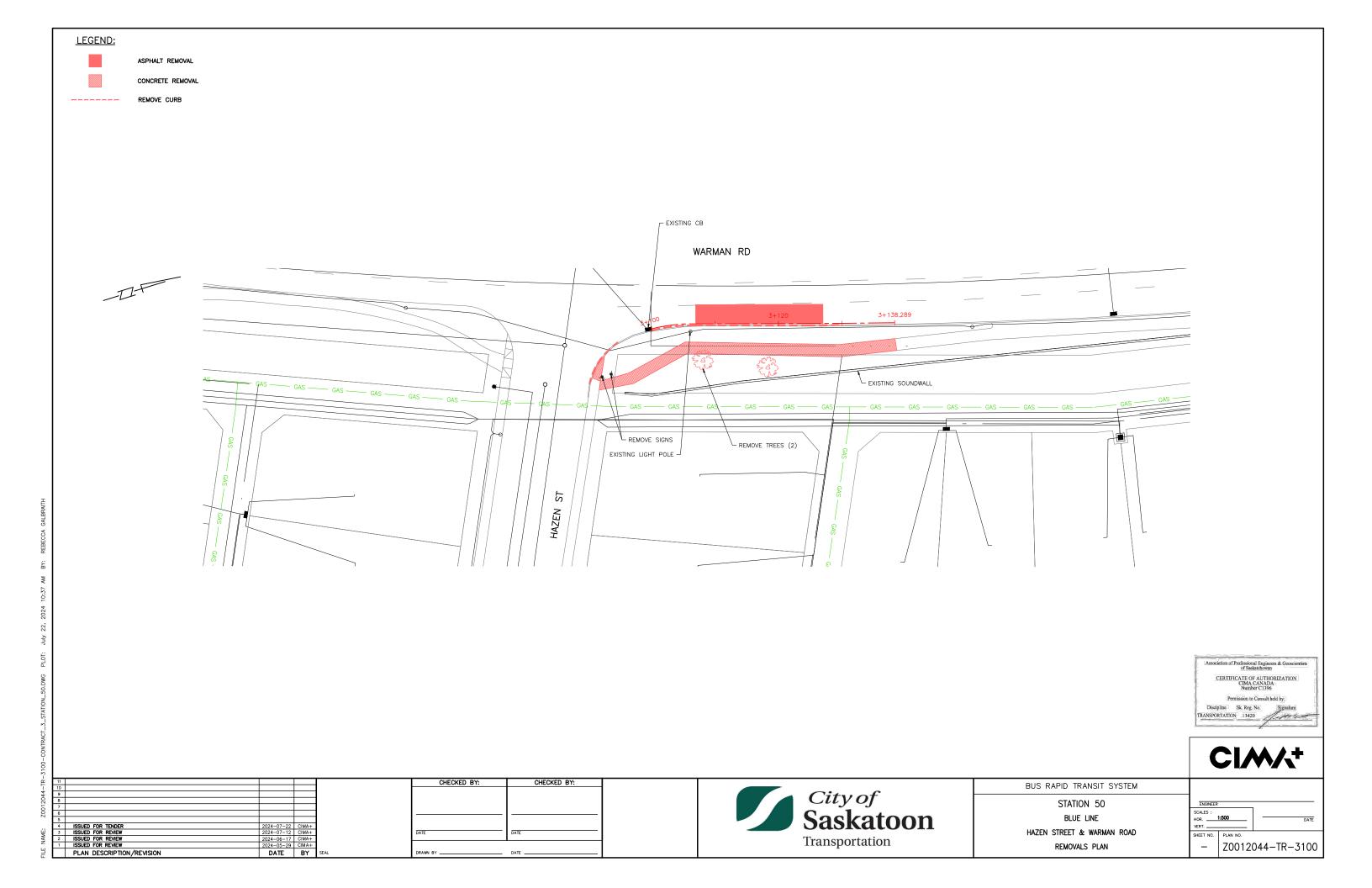
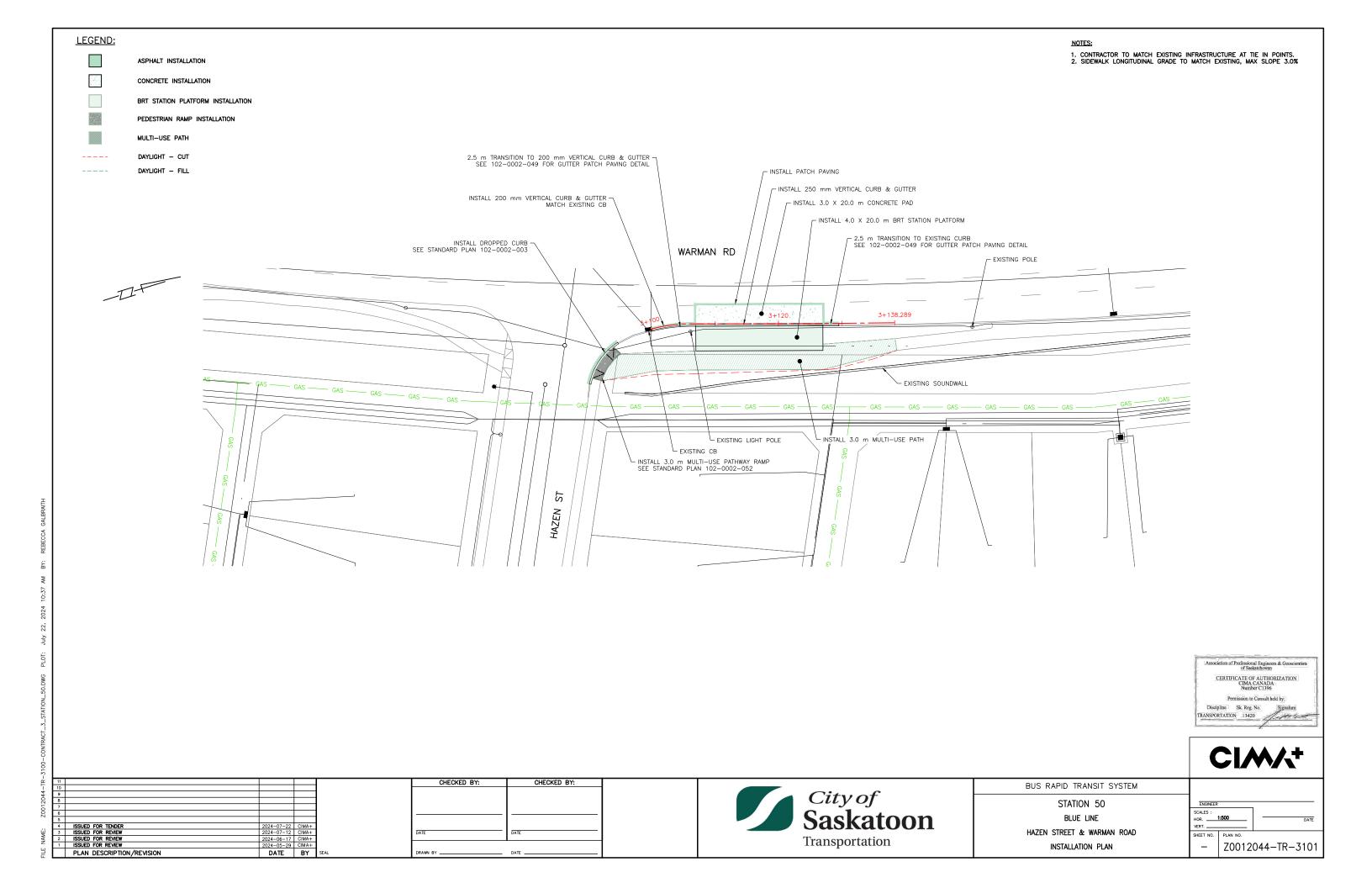


	DRAWING INDEX		DRAWING INDEX
PLAN NO.	DESCRIPTION	PLAN NO.	DESCRIPTION
Z0012044-TR-3000	COVER PAGE	Z0012044-TR-3700	STANDARD DETAILS UNDERGROUND ELECTRICAL CONNECTIONS
Z0012044-TR-3001	INDEX OF DRAWINGS	Z0012044-TR-3701	STANDARD DETAILS RIGID PAVEMENT TYPICAL JOINT DETAILS
		Z0012044-TR-3702	STANDARD DETAILS PLATFORM STRUCTURAL DETAILS
Z0012044-TR-3100	STATION 50 BLUE LINE HAZEN STREET & WARMAN ROAD REMOVALS PLAN	Z0012044-TR-3703	STANDARD DETAILS TREE COLLAR / PAVING STONE DETAILS
Z0012044-TR-3101	STATION 50 BLUE LINE HAZEN STREET & WARMAN ROAD INSTALLATION PLAN	Z0012044-TR-3704	STANDARD DETAILS BOLLARD DETAIL
Z0012044-TR-3102	STATION 50 BLUE LINE HAZEN STREET & WARMAN ROAD CROSS SECTIONS	Z0012044-TR-3705	STANDARD DETAILS GARBAGE RECEPTACLE BASE DETAIL
Z0012044-TR-3103	STATION 50 BLUE LINE HAZEN STREET & WARMAN ROAD PLATFORM DETAILS	Z0012044-TR-3706	STANDARD DETAILS TREE PLANTING DETAIL
		Z0012044-TR-3707	STANDARD DETAILS AMENITY STRIP DETAIL
Z0012044-TR-3200	STATION 51 BLUE LINE HAZEN STREET & WARMAN ROAD REMOVALS PLAN		
Z0012044-TR-3201	STATION 51 BLUE LINE HAZEN STREET & WARMAN ROAD INSTALLATION PLAN	Z0012044-TR-3800	STATION 50 & 51 BLUE LINE HAZEN STREET & WARMAN ROAD TRAFFIC SIGNALS
Z0012044-TR-3202	STATION 51 BLUE LINE HAZEN STREET & WARMAN ROAD CROSS SECTIONS	Z0012044-TR-3801	STATION 50 & 51 BLUE LINE HAZEN STREET & WARMAN ROAD TRAFFIC SIGNALS
Z0012044-TR-3203	STATION 51 BLUE LINE HAZEN STREET & WARMAN ROAD PLATFORM DETAILS		
Z0012044-TR-3300	STATION 54 BLUE LINE 33RD STREET & QUEBEC AVENUE REMOVALS PLAN		
Z0012044-TR-3301	STATION 54 BLUE LINE 33RD STREET & QUEBEC AVENUE INSTALLATION PLAN		
Z0012044-TR-3302	STATION 54 BLUE LINE 33RD STREET & QUEBEC AVENUE CROSS SECTIONS		
Z0012044-TR-3303	STATION 54 BLUE LINE 33RD STREET & QUEBEC AVENUE PLATFORM DETAILS		
Z0012044-TR-3400	STATION 55 BLUE LINE 33RD STREET & QUEBEC AVENUE REMOVALS PLAN		
Z0012044-TR-3401	STATION 55 BLUE LINE 33RD STREET & QUEBEC AVENUE INSTALLATION PLAN		
Z0012044-TR-3402	STATION 55 BLUE LINE 33RD STREET & QUEBEC AVENUE CROSS SECTIONS		
Z0012044-TR-3403	STATION 55 BLUE LINE 33RD STREET & QUEBEC AVENUE PLATFORM DETAILS		
Z0012044-TR-3500	STATION 60 BLUE LINE 25TH STREET EAST & ONTARIO AVENUE REMOVALS PLAN		
Z0012044-TR-3501	STATION 60 BLUE LINE 25TH STREET EAST & ONTARIO AVENUE INSTALLATION PLAN		
Z0012044-TR-3502	STATION 60 BLUE LINE 25TH STREET EAST & ONTARIO AVENUE CROSS SECTIONS		
Z0012044-TR-3503	STATION 60 BLUE LINE 25TH STREET EAST & ONTARIO AVENUE PLATFORM DETAILS		
Z0012044-TR-3600	STATION 61 BLUE LINE 25TH STREET EAST & ONTARIO AVENUE REMOVALS PLAN		Association of Professional Engineers & Geoscientists of Saskatchewan
	STATION 61 BLUE LINE 25TH STREET EAST & ONTARIO AVENUE INSTALLATION PLAN		CERTIFICATE OF AUTHORIZATION CIMA CANADA Number C1396
	STATION 61 BLUE LINE 25TH STREET EAST & ONTARIO AVENUE CROSS SECTIONS		Permission to Consult held by: Discipline Sk. Reg. No. TRANSPORTATION 13420
Z0012044-TR-3603	STATION 61 BLUE LINE 25TH STREET EAST & ONTARIO AVENUE PLATFORM DETAILS		
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City of
Saskatoon
Transportation

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Transportation

BUS RAPID TRANSIT SYSTEM

STATION 50

BLUE LINE

HAZEN STREET & WARMAN ROAD

CROSS SECTIONS

ENGINEER

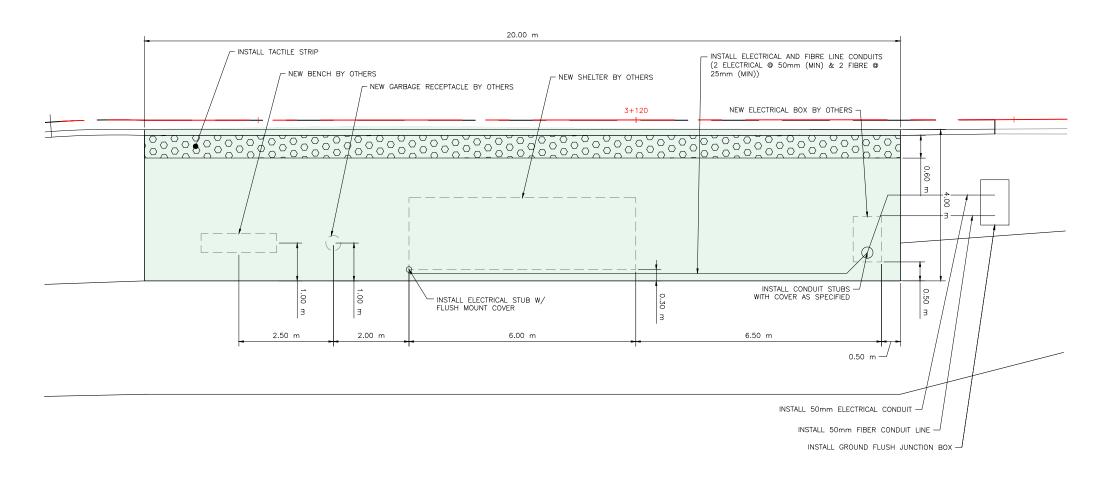
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VERT. DATE

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3	ISSUED FOR REVIEW	2024-07-12	CIMA+
2	ISSUED FOR REVIEW	2024-06-17	CIMA+
1	ISSUED FOR REVIEW	2024-05-29	CIMA+
	PLAN DESCRIPTION / REVISION	DATE	RY

-71-



Association of Professional Engineers & Geoscientists of Saskatchewan

CERTIFICATE OF AUTHORIZATION CIMA CANADA Number C1396

Permission to Consult held by:

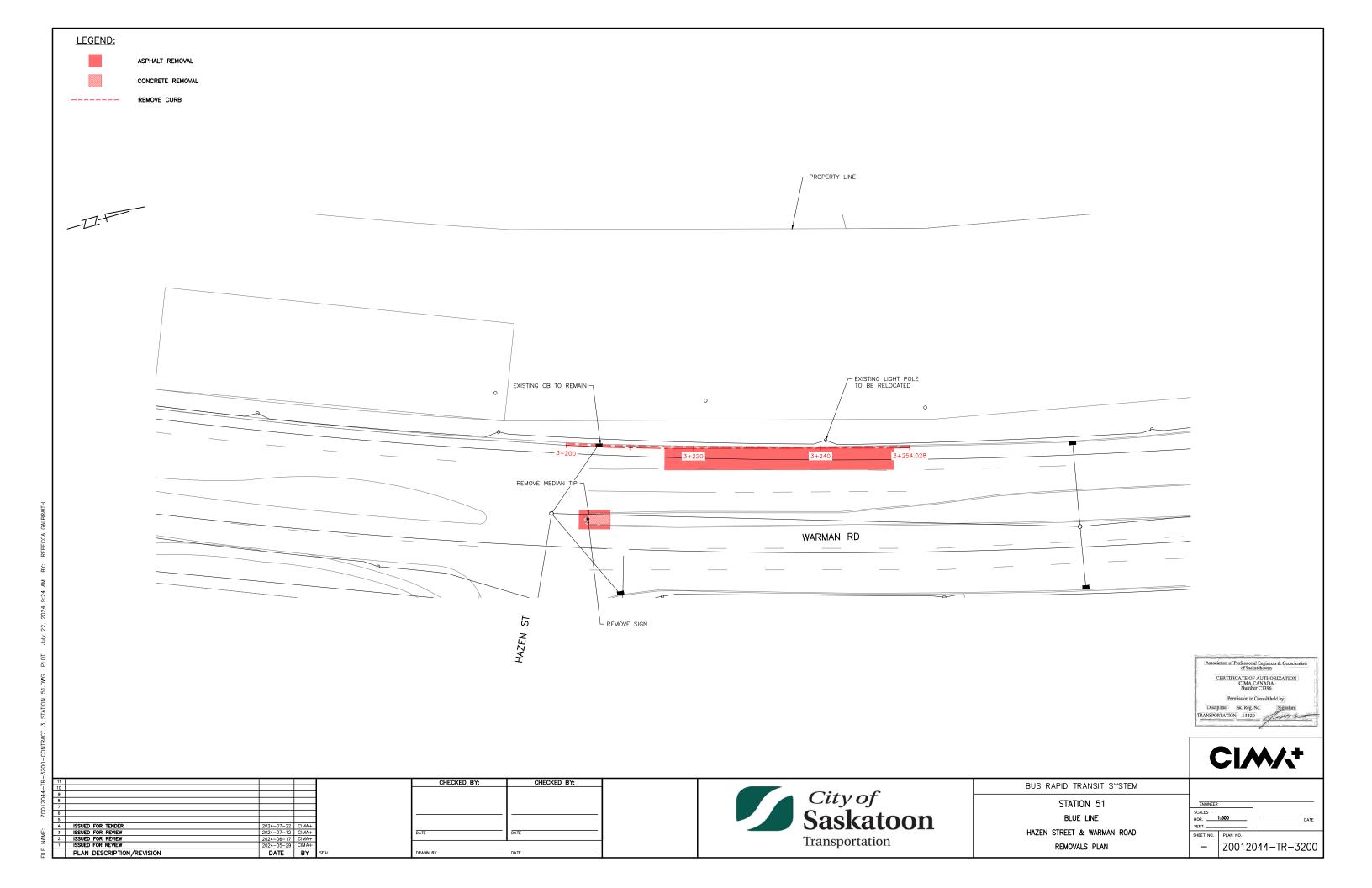
Discipline Sk. Reg. No. Signature

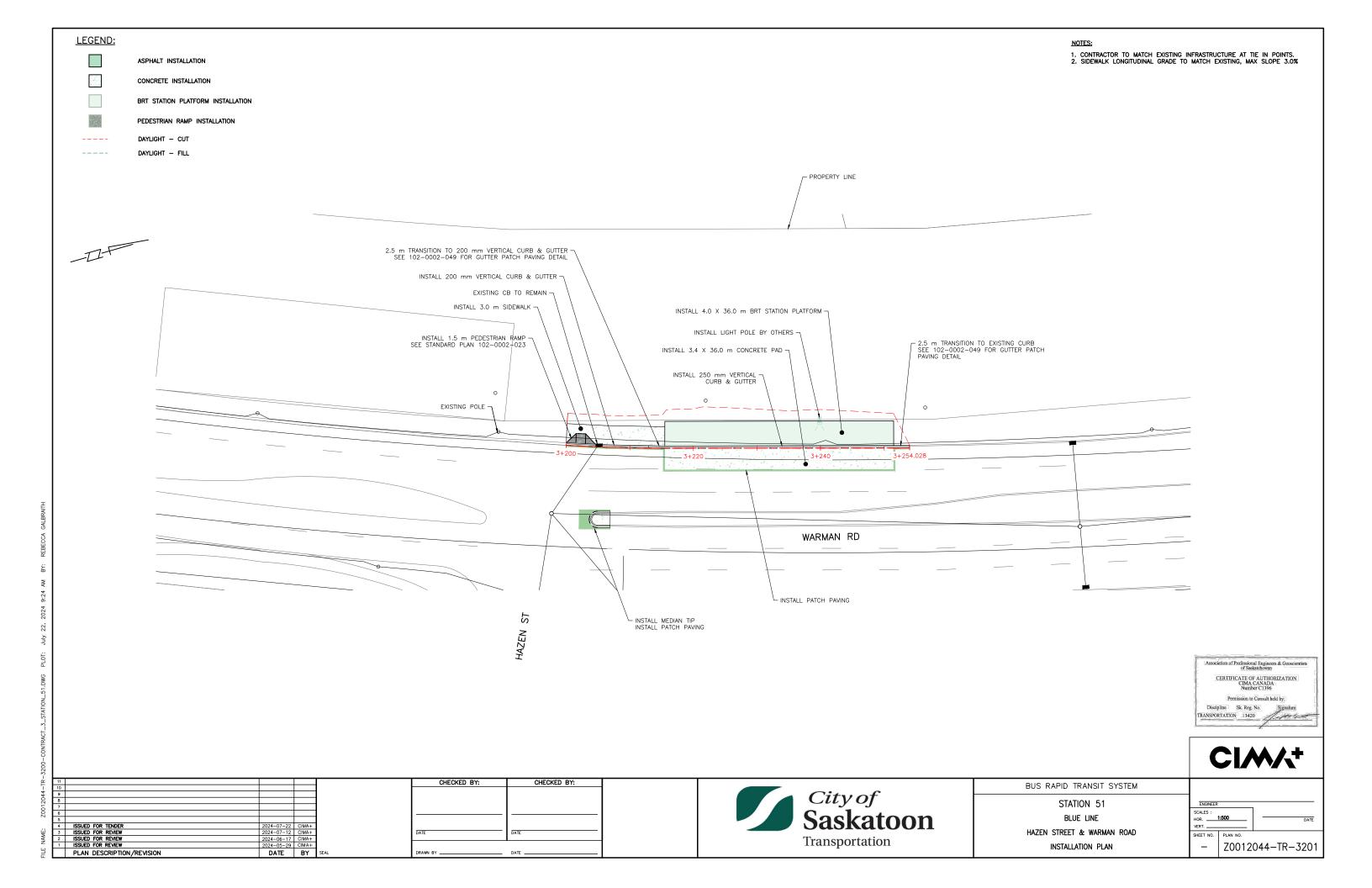
TRANSPORTATION 13420

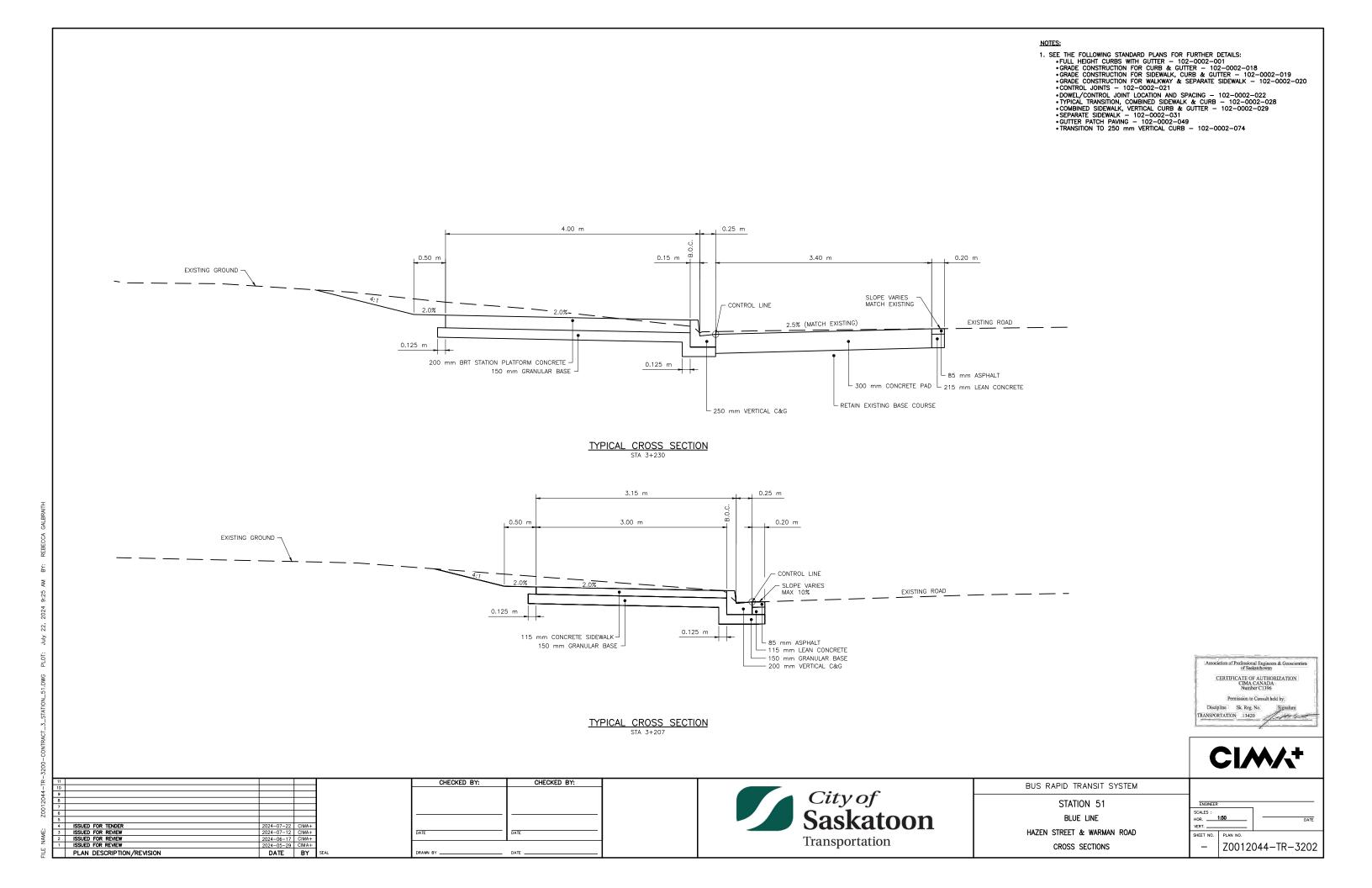
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City of Saskatoon	STATION 50 BLUE LINE	ENGINEER SCALES: HOR

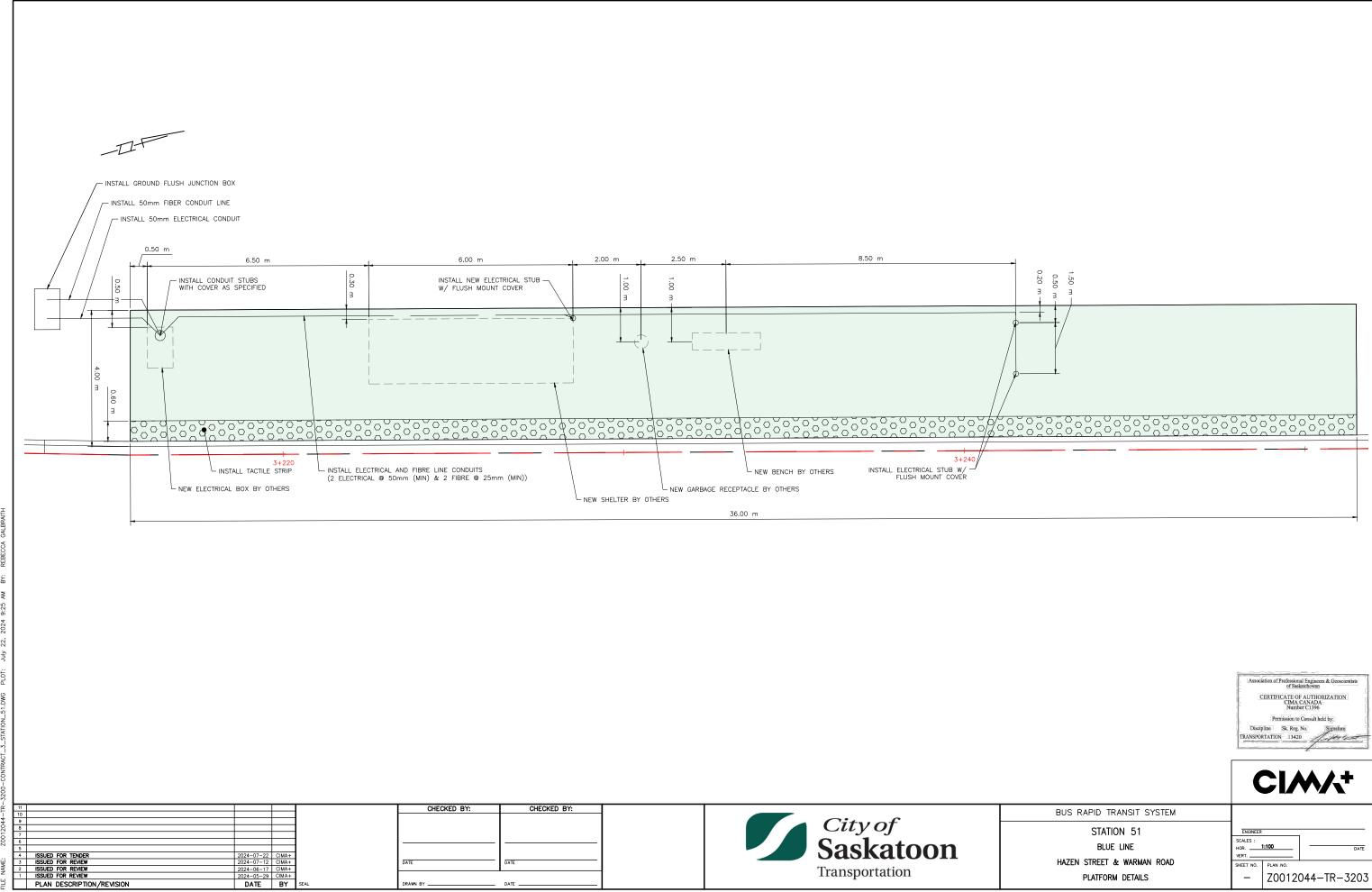
Saskatoon
Transportation

BLUE LINE
HAZEN STREET & WARMAN ROAD
PLATFORM DETAILS

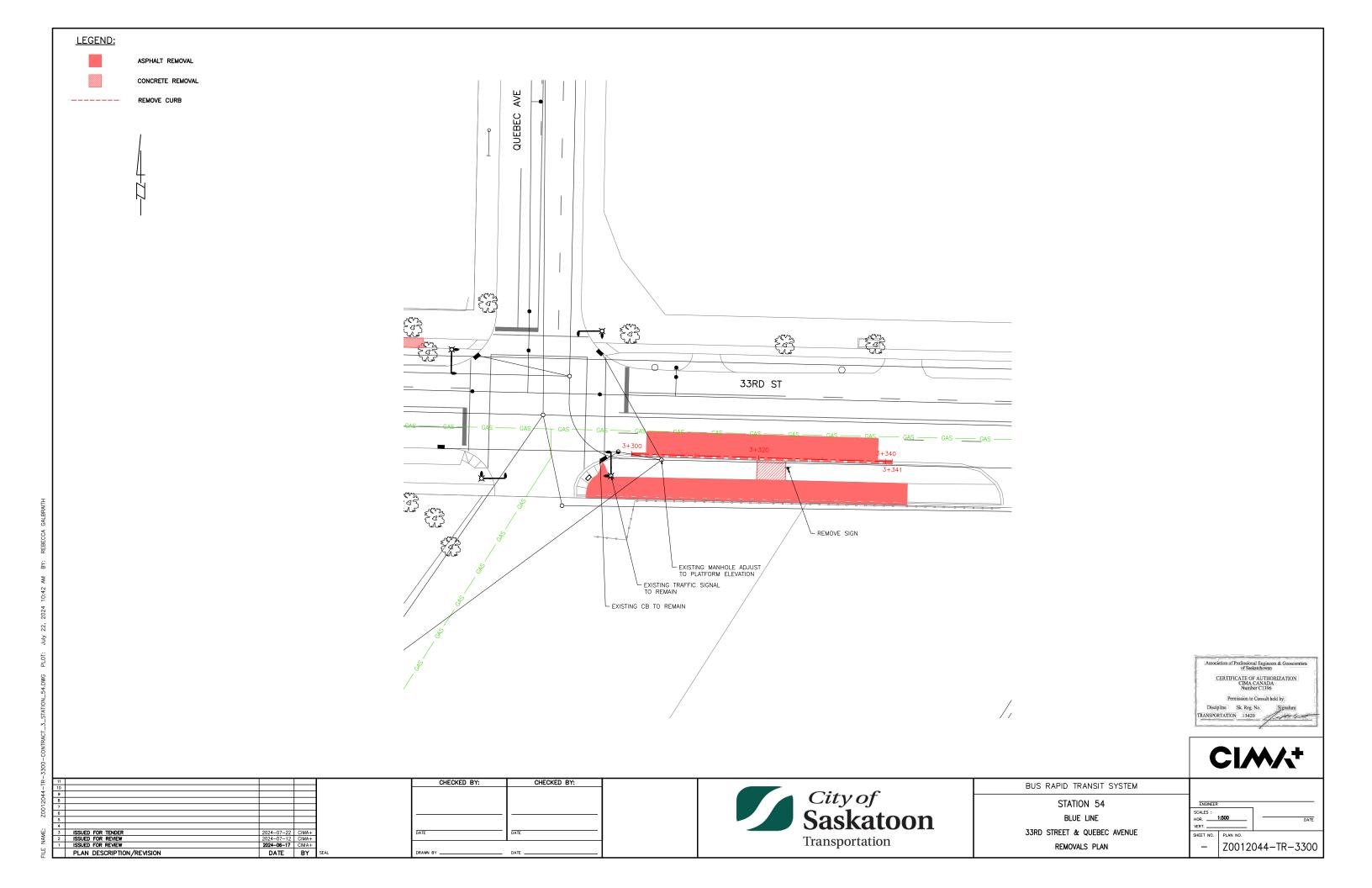


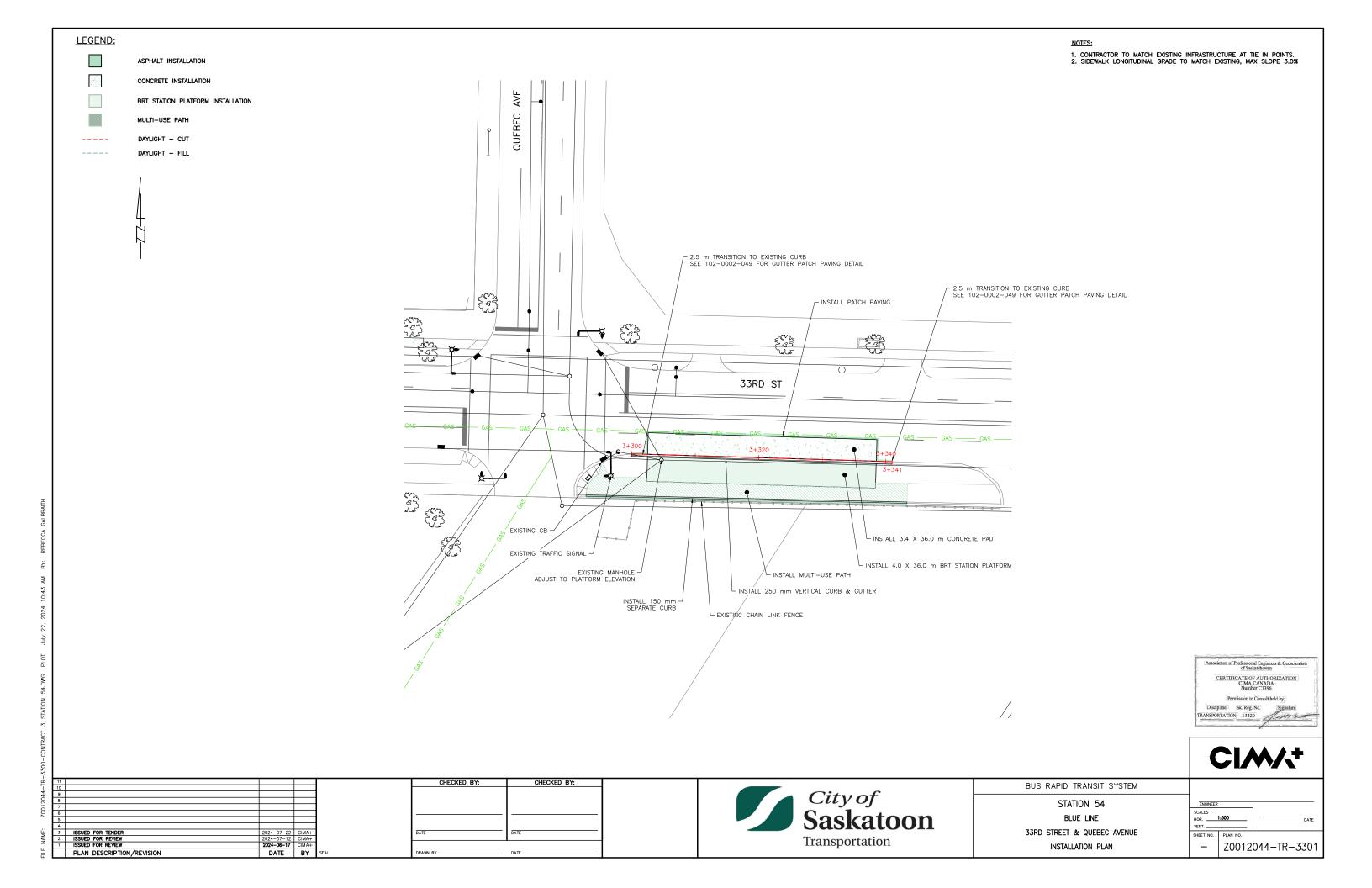






PLAN DESCRIPTION/REVISION





- 1. SEE THE FOLLOWING STANDARD PLANS FOR FURTHER DETAILS:

 •FULL HEIGHT CURBS WITH GUTTER 102-0002-001

 •SEPARATE DROPPED CURB CROSSING 102-0002-003

 •GRADE CONSTRUCTION FOR CURB & GUTTER 102-0002-018

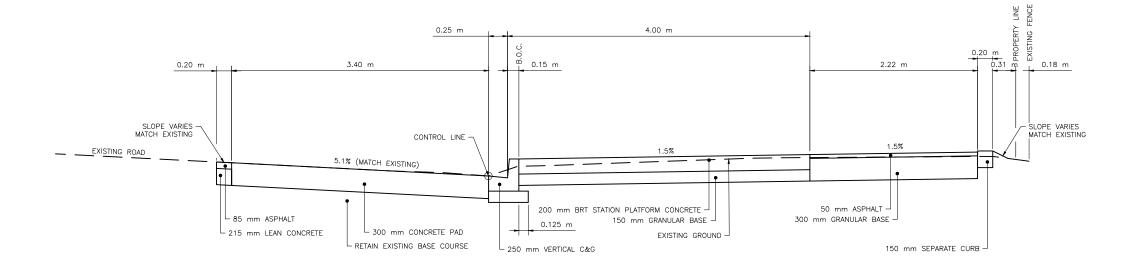
 •COMBINED SIDEWALK, VERTICAL CURB & GUTTER 102-0002-029

 •SEPARATE SIDEWALK 102-0002-031

 •GUTTER PATCH PAVING 102-0002-049

 •3000 MULTI-USE PATHWAY 102-0002-055

 •TRANSITION TO 250 mm VERTICAL CURB 102-0002-074



TYPICAL CROSS SECTION

Association of Professional Engineers & Geoscientists of Saskatchewan CERTIFICATE OF AUTHORIZATION CIMA CANADA Number C1396 Discipline Sk. Reg. No. TRANSPORTATION 13420

CIWA+

City of Saskatoon	
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BUS RAPID TRANSIT SYSTEM STATION 54 BLUE LINE 33RD STREET & QUEBEC AVENUE CROSS SECTIONS

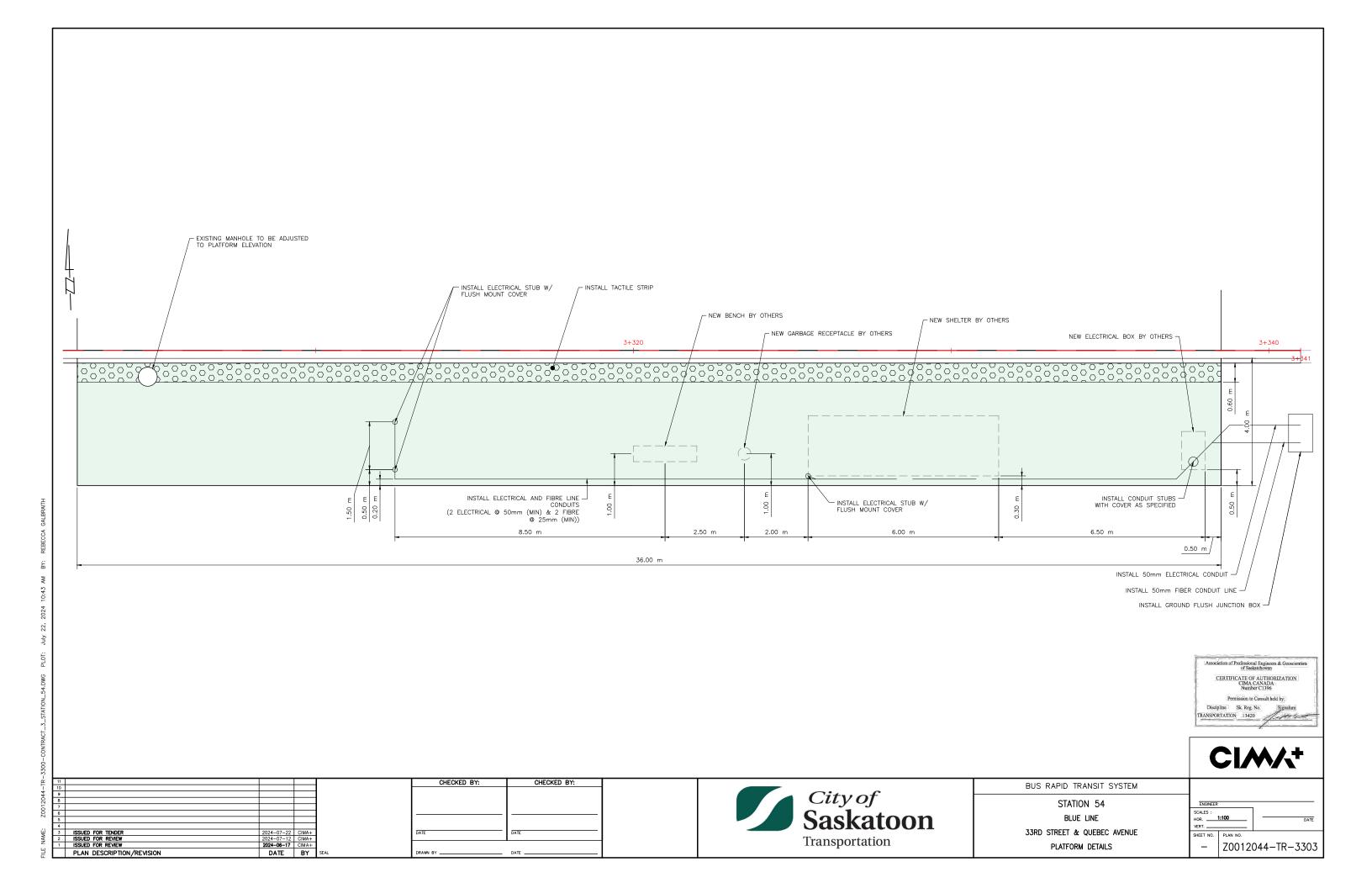
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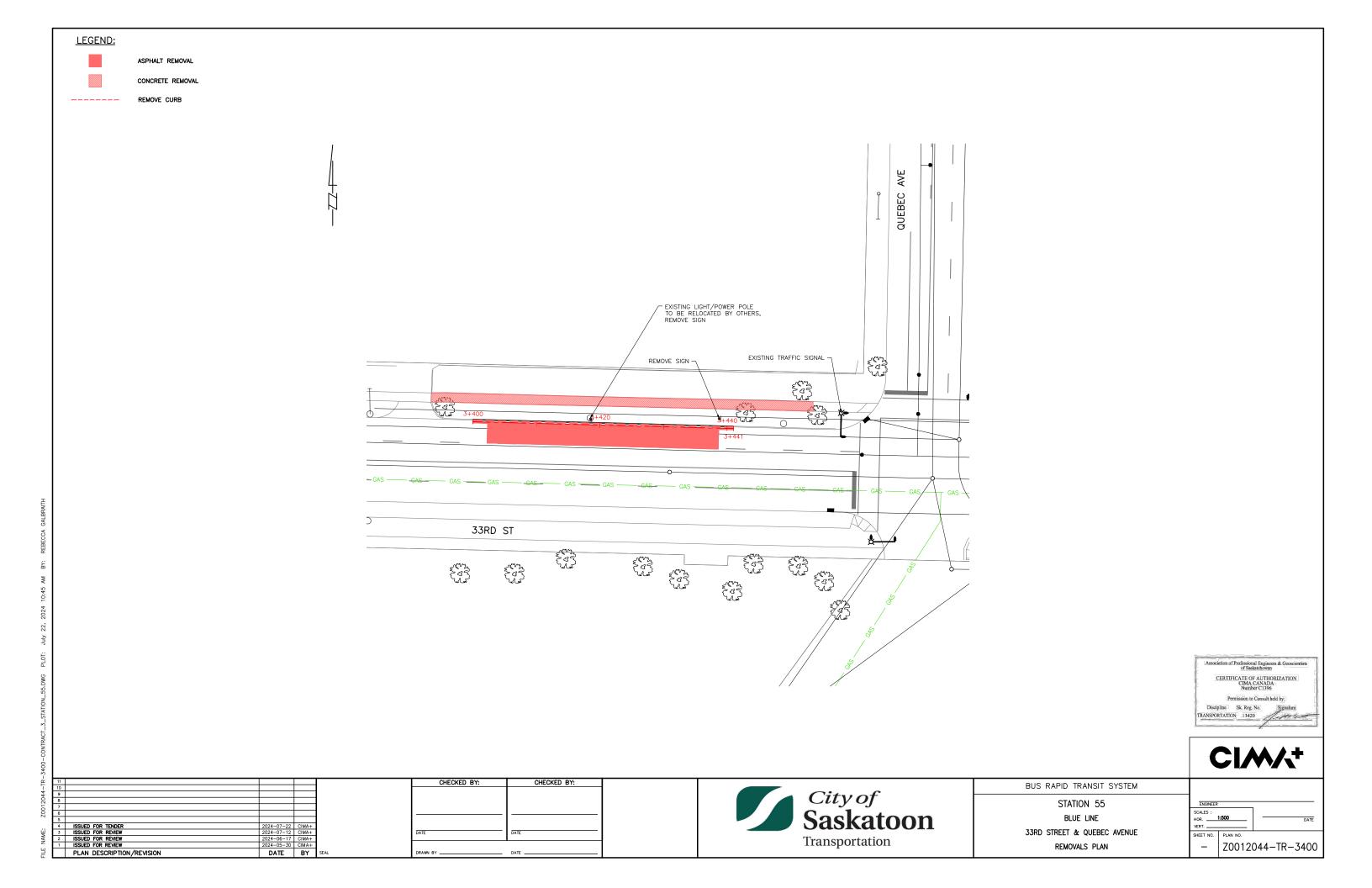
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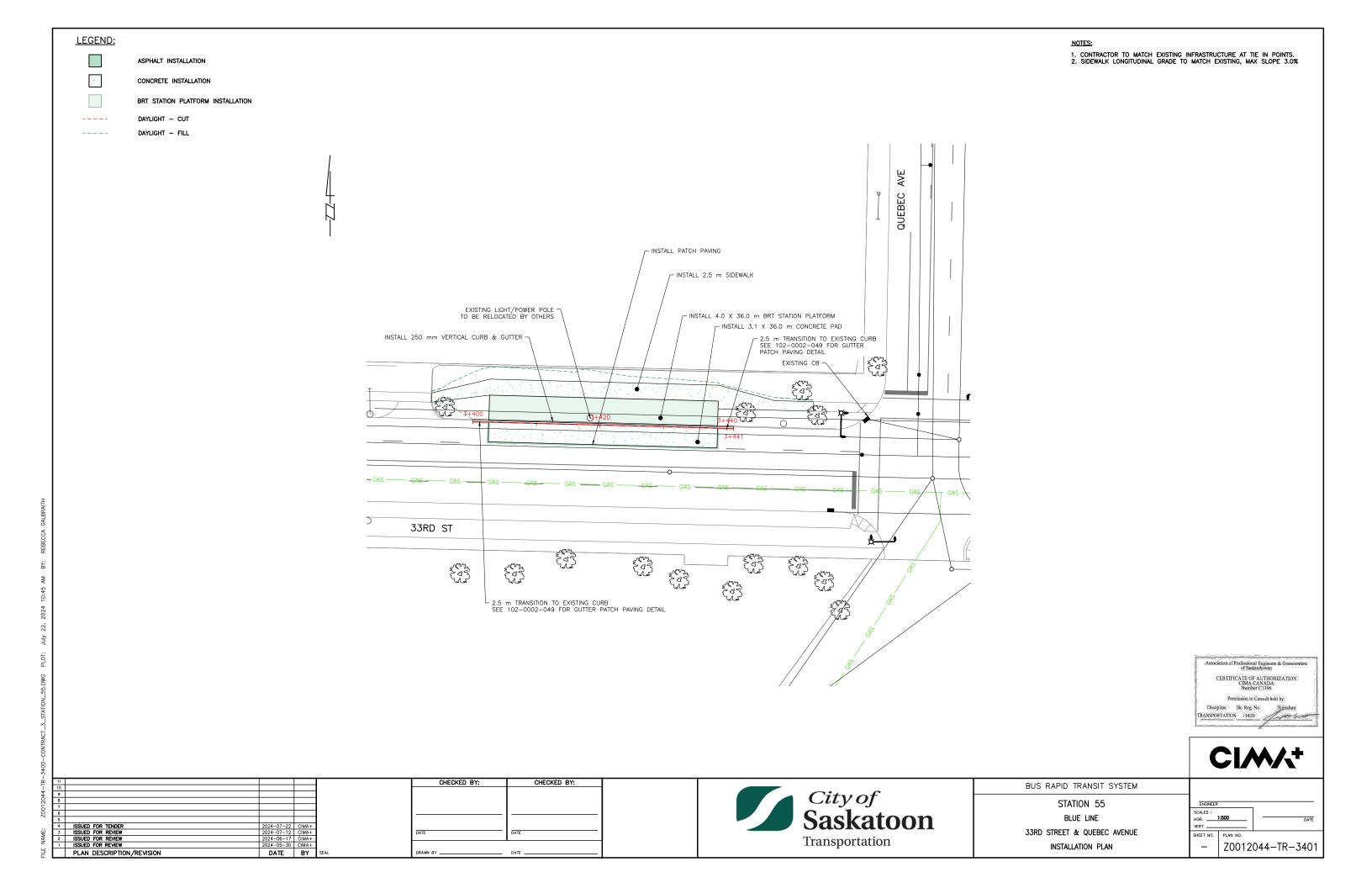
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Transportation







NOTES:

- NOTES:

 1. SEE THE FOLLOWING STANDARD PLANS FOR FURTHER DETAILS:

 FULL HEIGHT CURBS WITH GUTTER 102–0002–001

 GRADE CONSTRUCTION FOR CURB & GUTTER 102–0002–018

 GRADE CONSTRUCTION FOR SIDEWALK, CURB & GUTTER 102–0002–019

 GRADE CONSTRUCTION FOR WALKWAY & SEPARATE SIDEWALK 102–0002–020

 CONTROL JOINTS 102–0002–021

 DOWEL/CONTROL JOIN LOCATION AND SPACING 102–0002–022

 TYPICAL TRANSITION, COMBINED SIDEWALK & CURB 102–0002–028

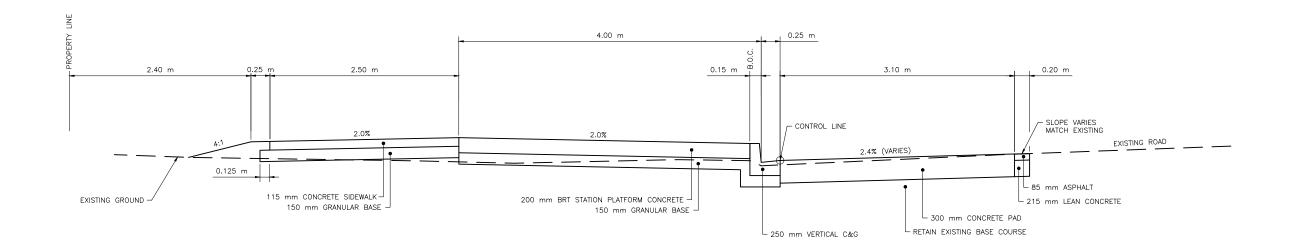
 COMBINED SIDEWALK, VERTICAL CURB & GUTTER 102–0002–029

 SEPARATE SIDEWALK 102–0002–031

 GUTTER PATCH PAVING 102–0002–049

 TRANSITION TO 250 mm VERTICAL CURB 102–0002–074

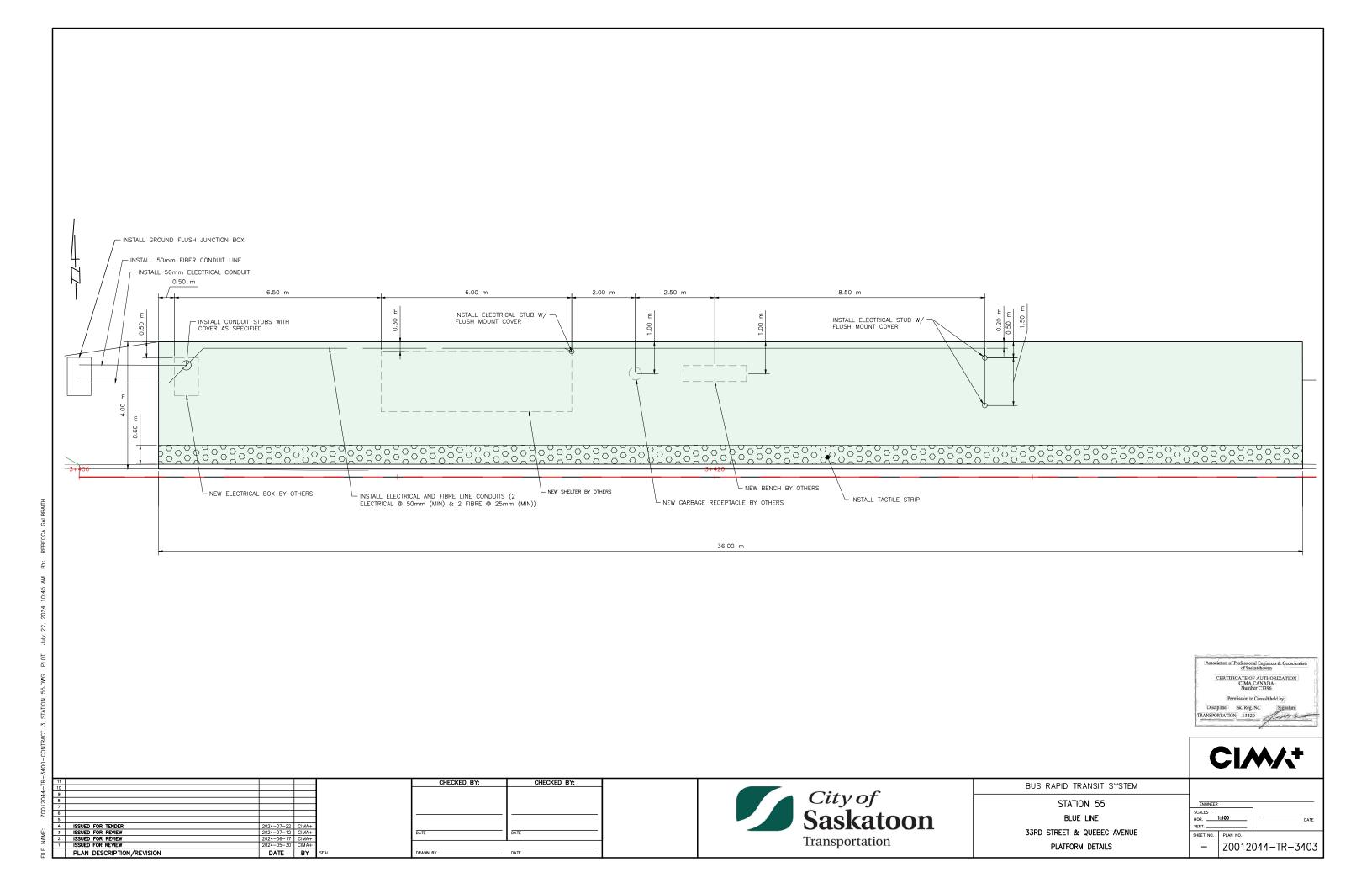
 - 2. SIDESLOPE TO BE STEEPENED TO 3:1 WHERE RESTRICTED BY RIGHT-OF-WAY

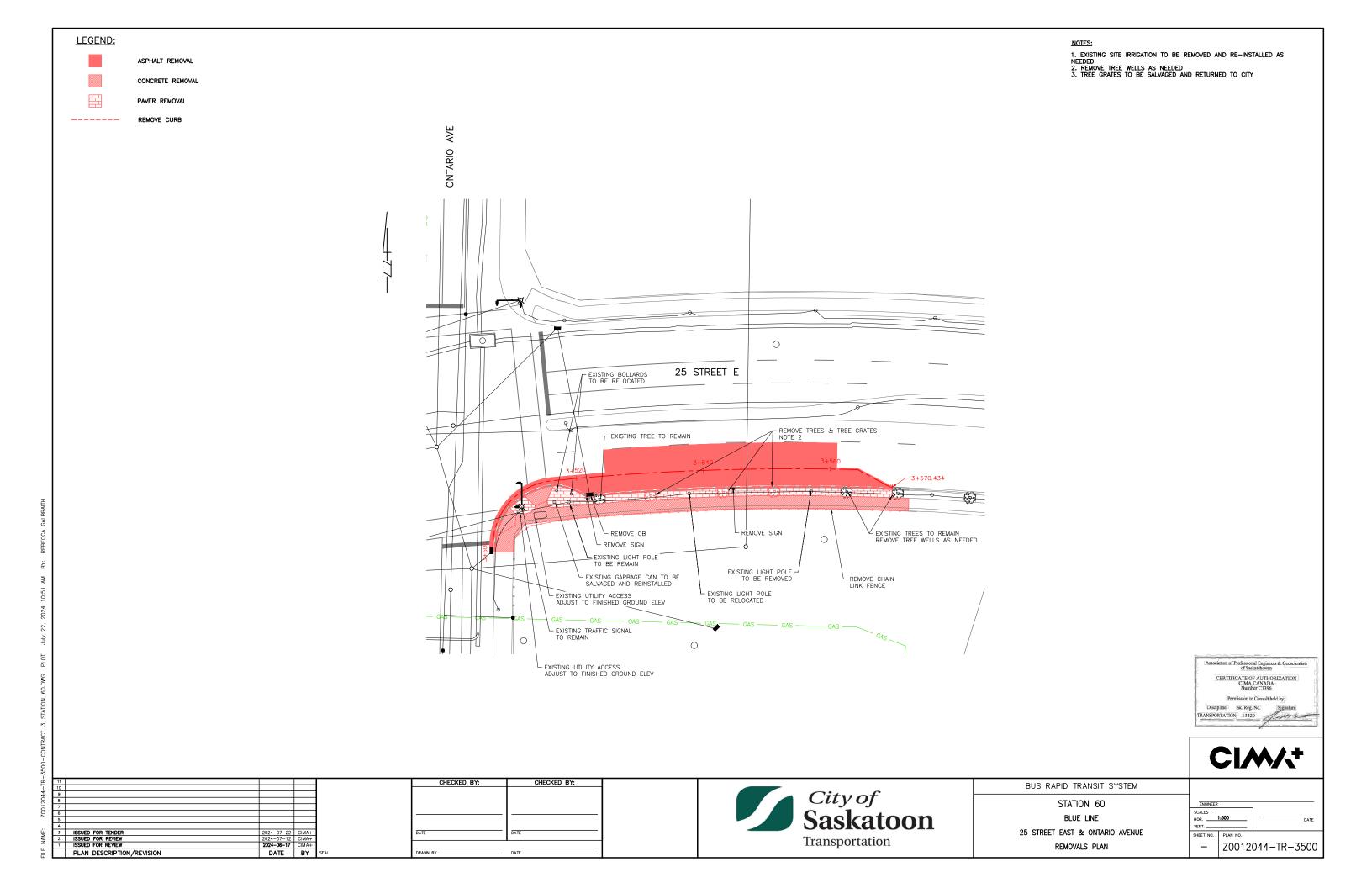


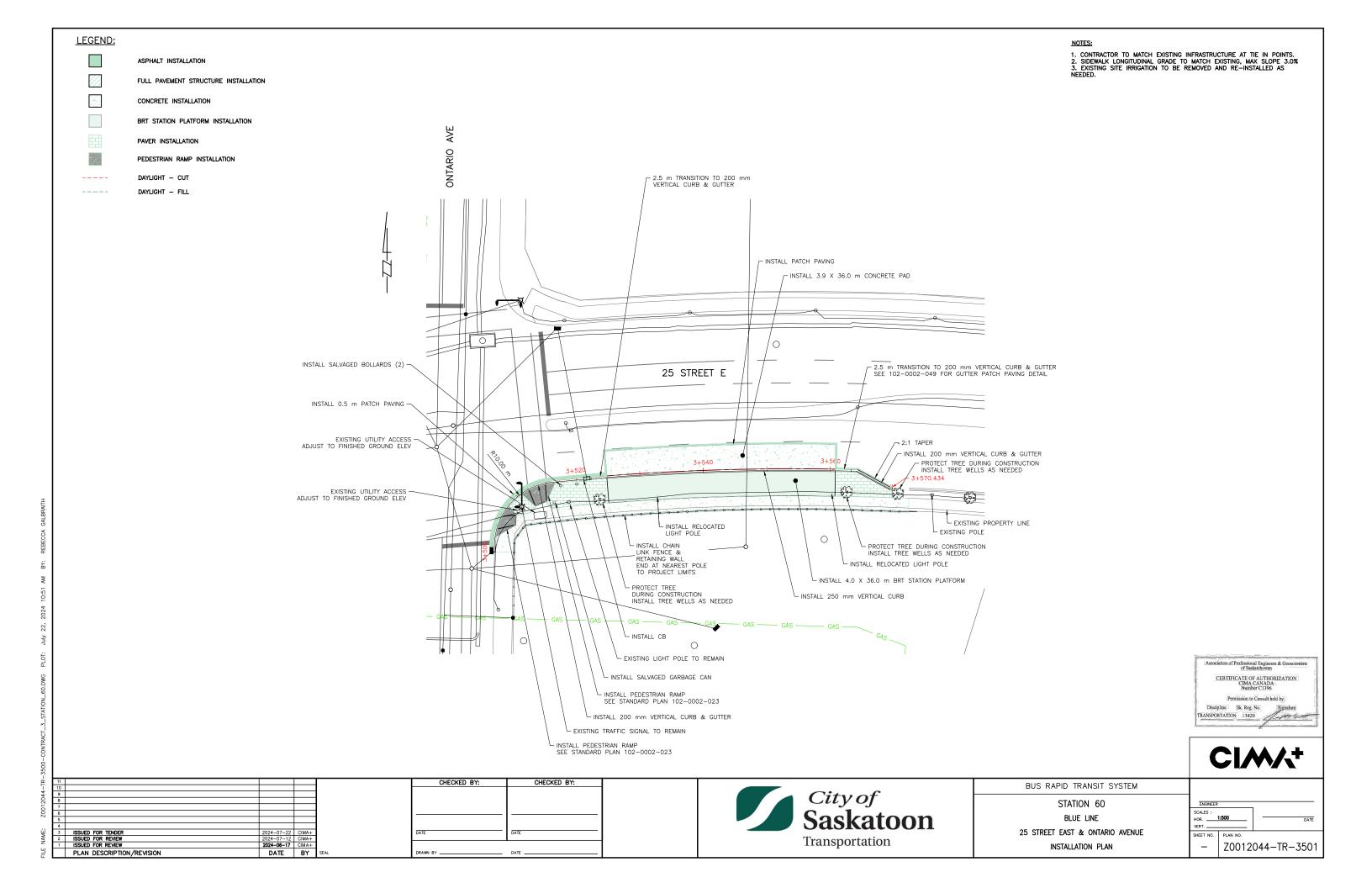
TYPICAL CROSS SECTION STA 3+425

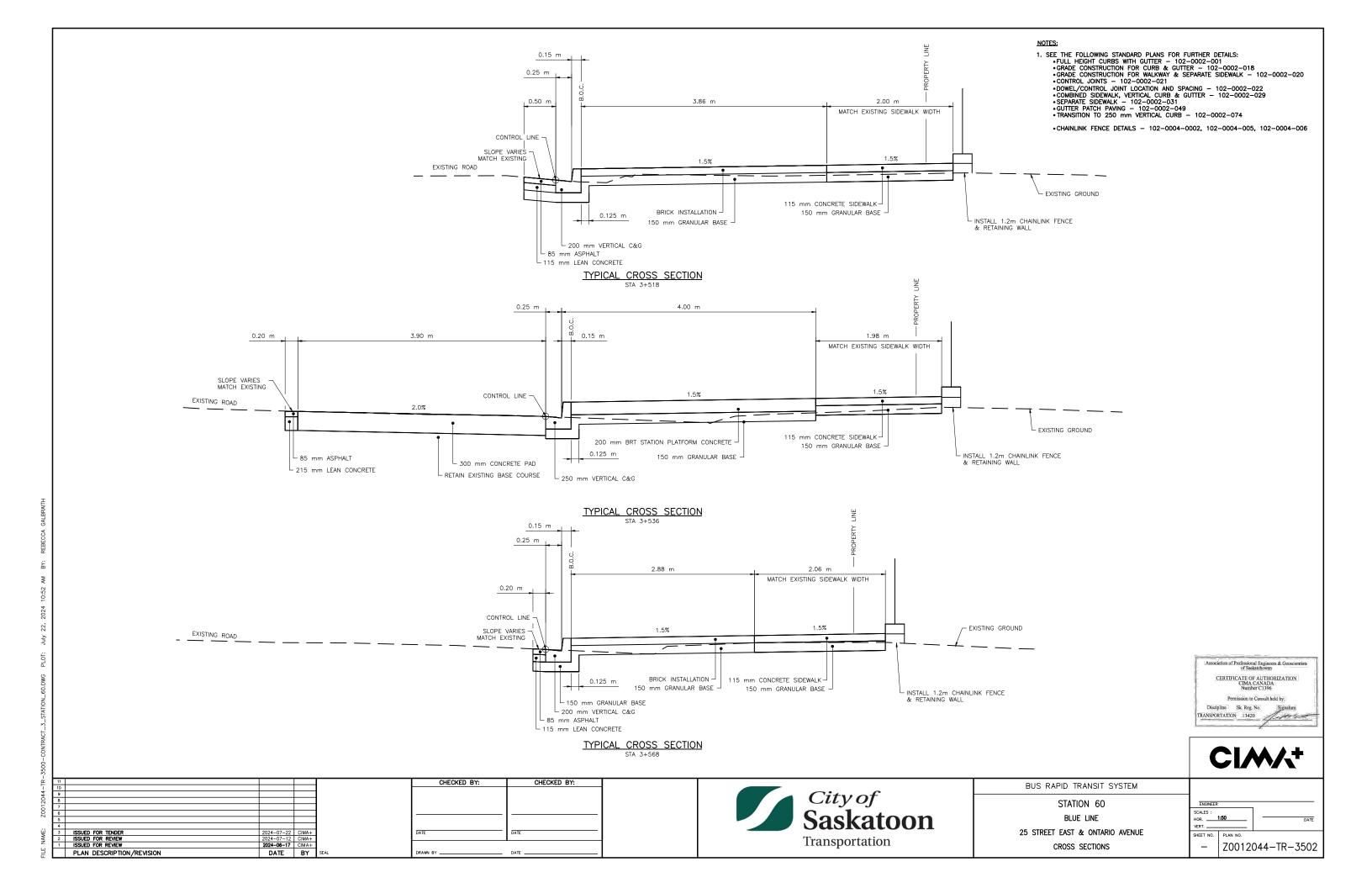


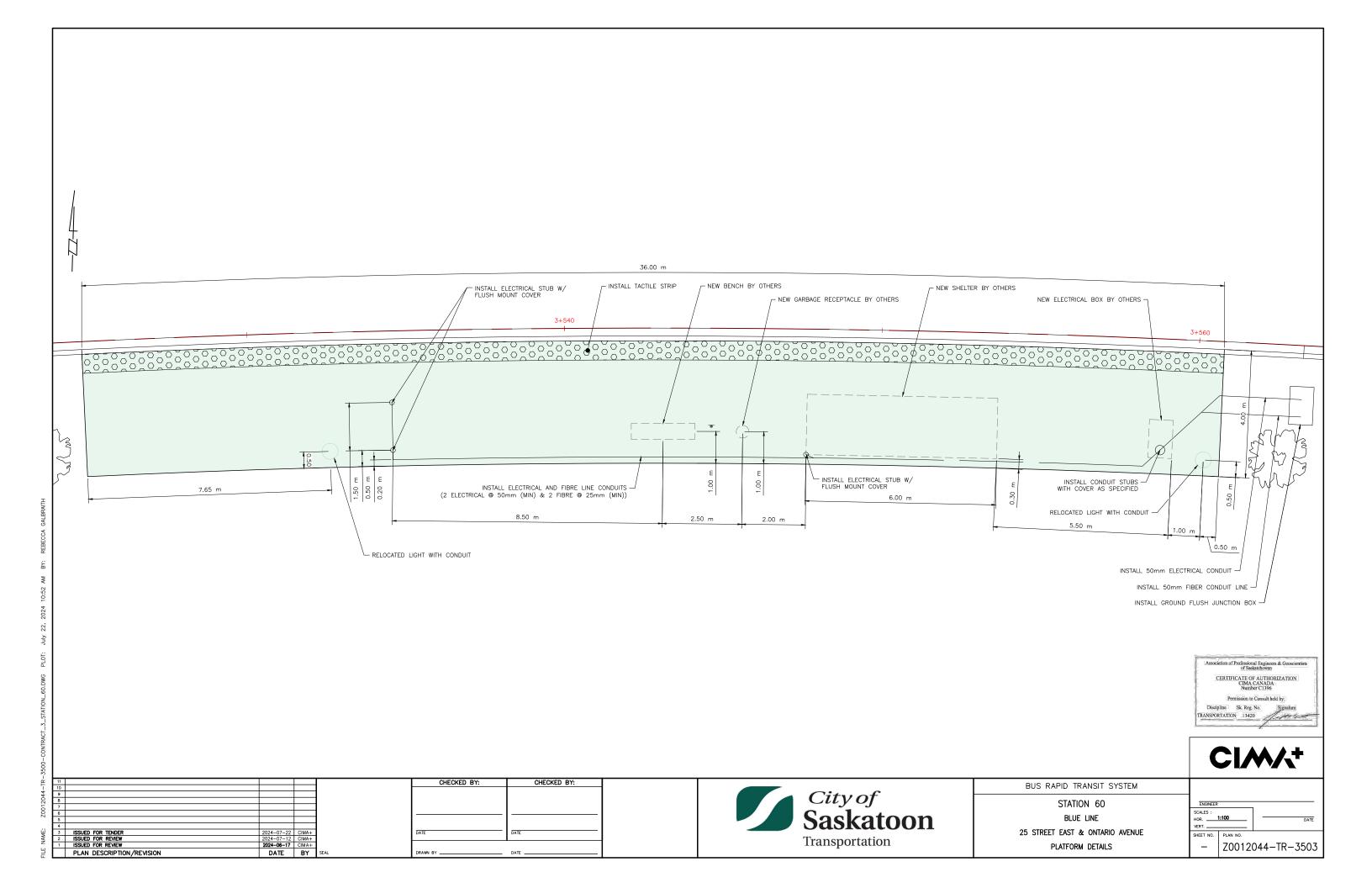
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5	ISSUED FOR TENDER 202	24-07-22 CII	MA+			_	Saskatoon	BLUE LINE	SCALES : HOR
2	ISSUED FOR REVIEW 202-	24-07-12 CII 24-06-17 CII 24-05-30 CII	HAN-	DATE	DATE		Transportation	33RD STREET & QUEBEC AVENUE	SHEET NO. PLAN NO.
Ė			BY SE	EAL DRAWN BY	DATE		portuitor	CROSS SECTIONS	- Z0012044-TR-3402

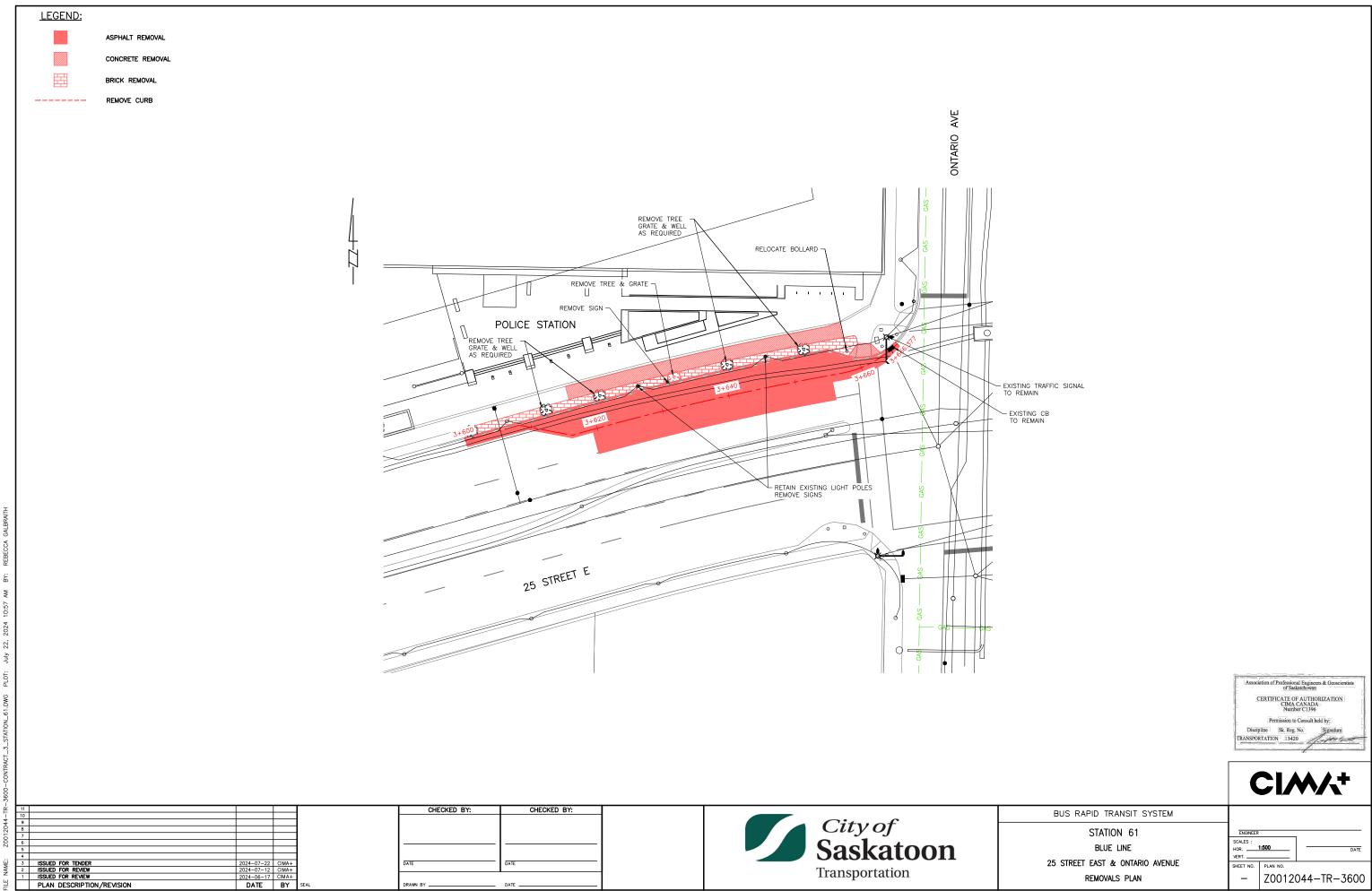


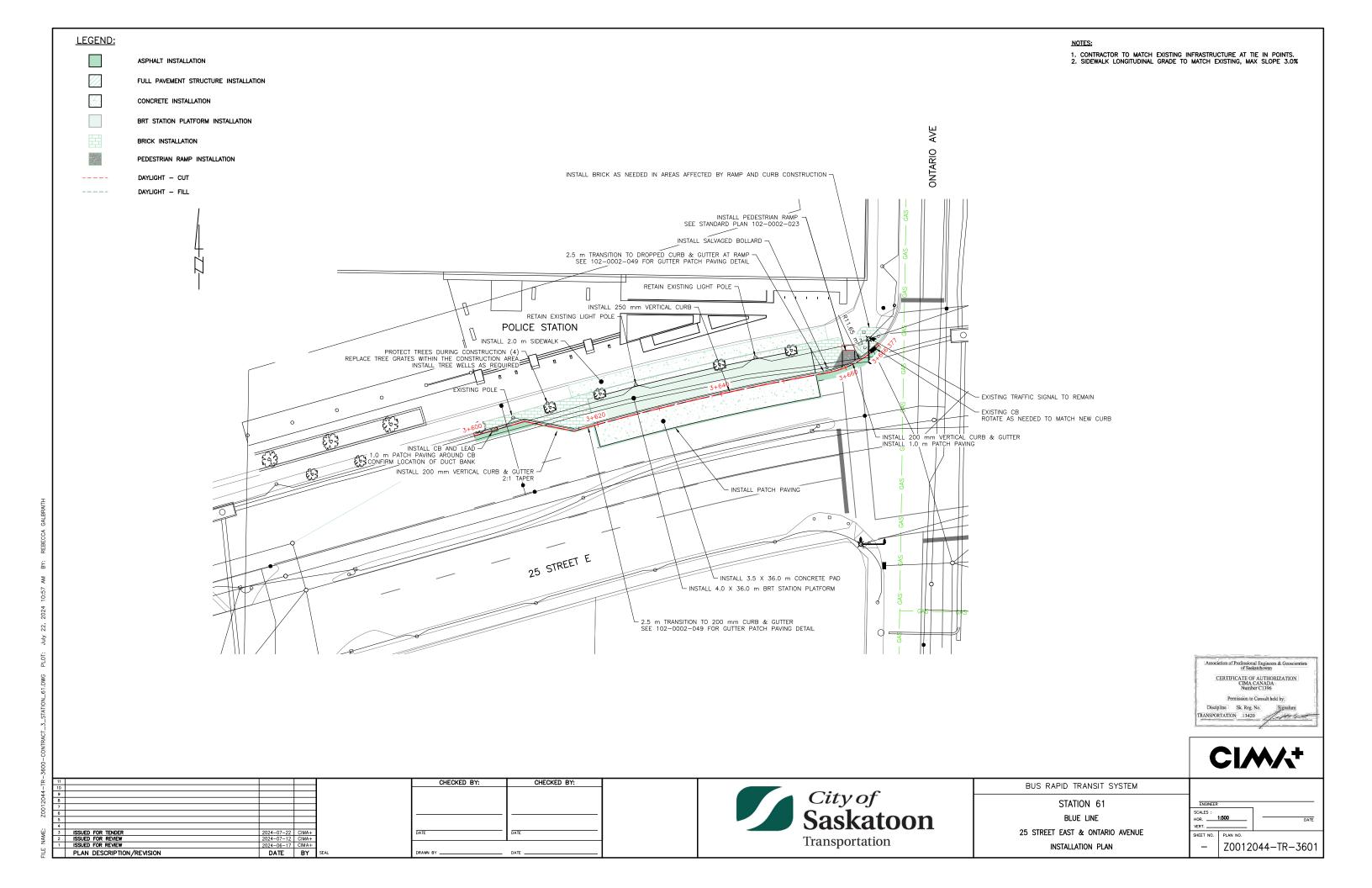


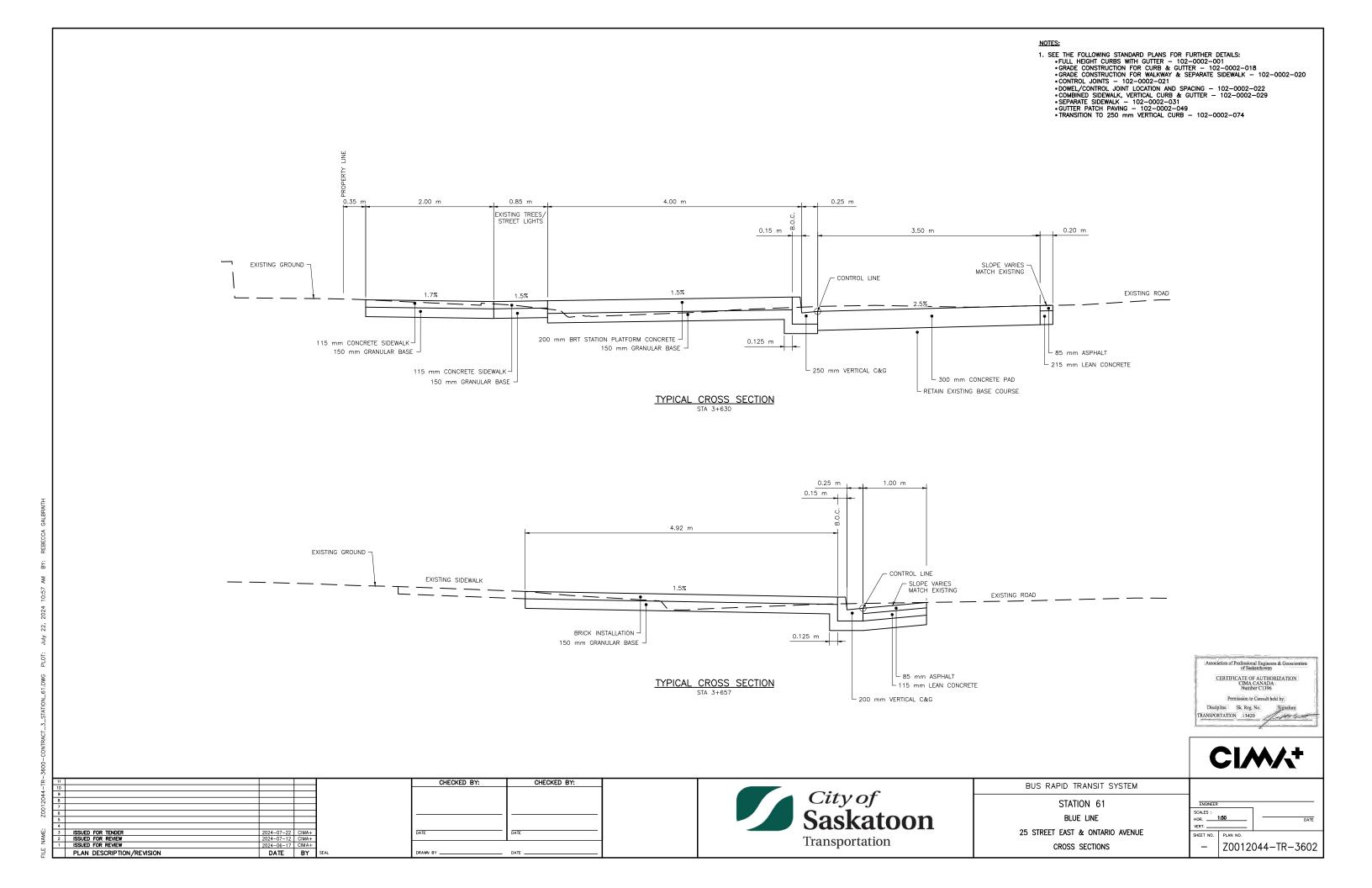


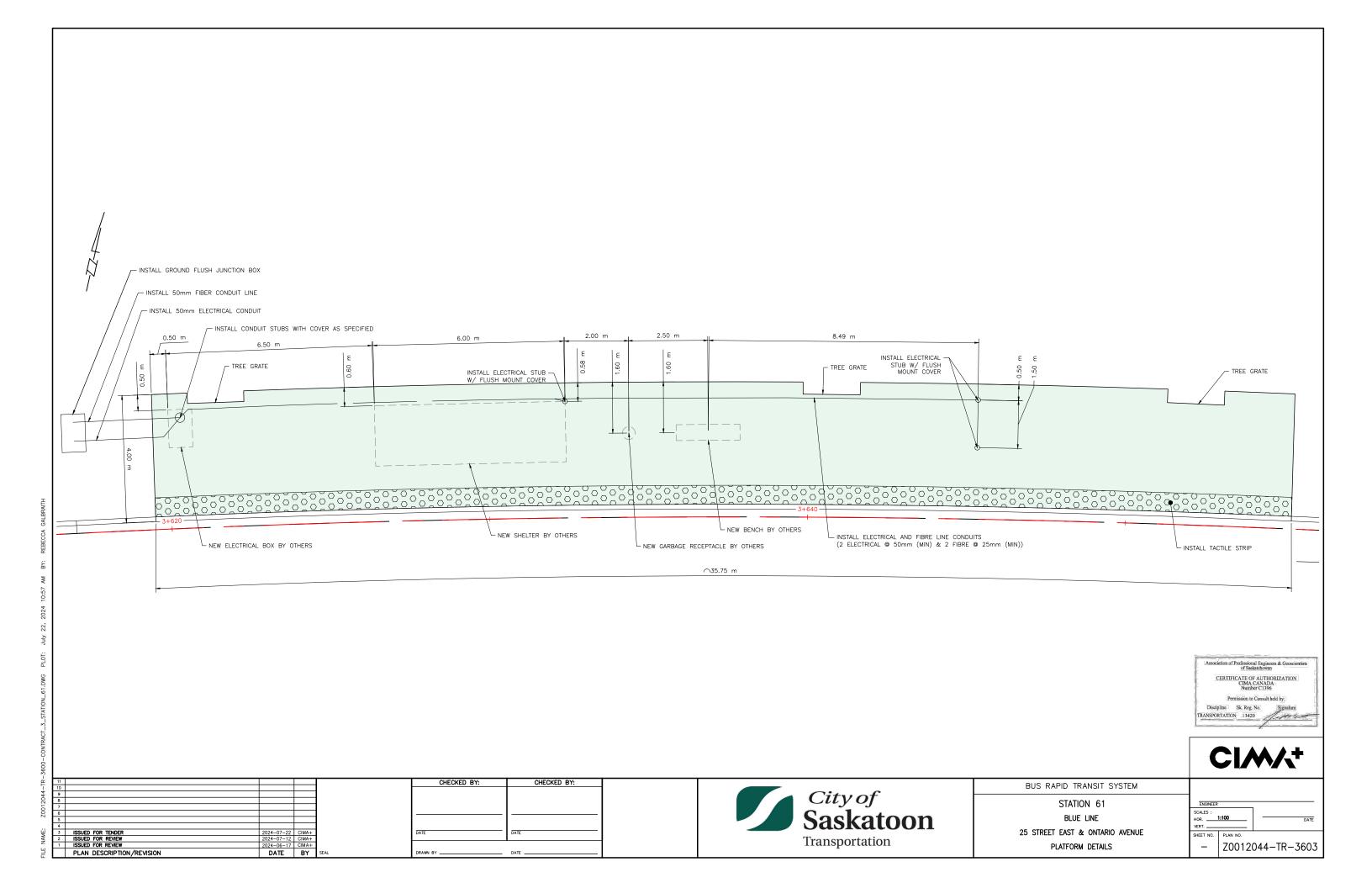












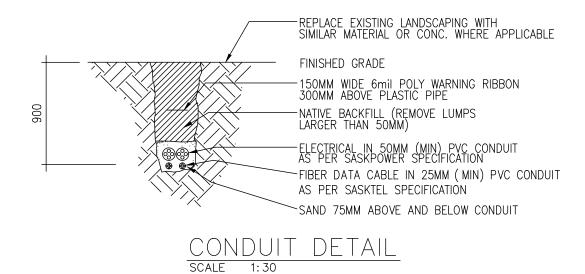
NOTE:

1. EXTEND PULL STRING 300 mm PAST THE END OF THE CONDUIT. PROTECT PULL STRING.

2. INSTALL FLUSH MOUNT COVER TO PROTECT ELECTRICAL

3. A GRADUAL INCREASE IN DEPTH REDUCES THE CHANGE OF KINKING

ELECTRICAL END LOCATIONS
SCALE 1: 30



TRACER WIRE TO BE INSTALLED IN ALL CONDUIT.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES.



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BUS RAPID TRANSIT SYSTEM

STANDARD DETAILS

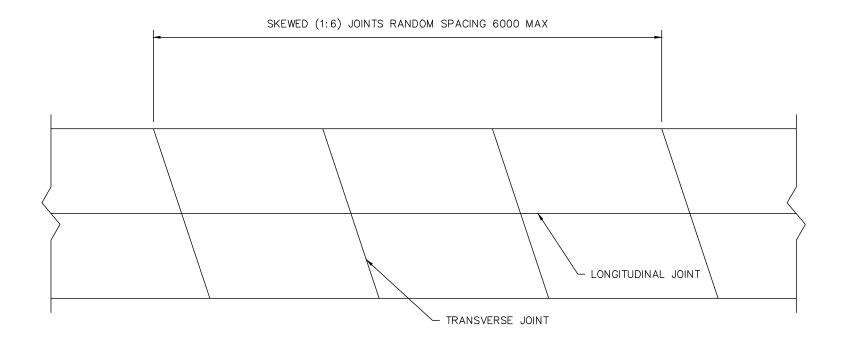
UNDERGROUND ELECTRICAL CONNECTIONS

ENGINEER

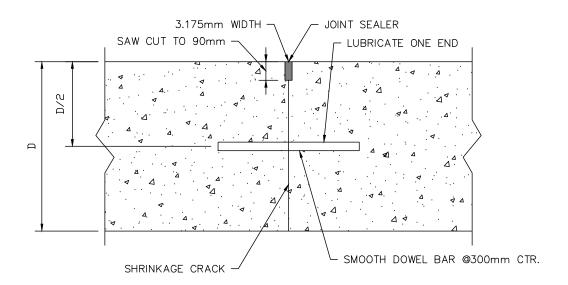
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SHEET NO. PLAN NO.

Z0012044—TR—3700



CONCRETE PAVEMENT TYPICAL JOINT ARRANGEMENT



STANDARD DETAILS RIGID PAVEMENT TYPICAL JOINT DETAILS

BUS RAPID TRANSIT SYSTEM

CALES : Z0012044-TR-3701

Association of Professional Engineers & Geoscientists of Saskatchewan

CERTIFICATE OF AUTHORIZATION
CIMA CANADA
Number C1396

CIMA+

NOTES:

- ALL CONCRETE USED SHALL BE HS OR HSb CEMENT (SULPHATE RESISTANT) AND IN ACCORDANCE WITH CAN/CSA A23.1-04

- A MINIMUM 56 DAY COMPRESSIVE STRENGTH OF 35MPa AND A MAXIMUM WATER/CEMENT RATIO OF 0.4 IS REQUIRED

- AIR ENTERTAINMENT OF 4 TO 7% AND CONCRETE MADE WITH 14 TO 20mm CONCRETE AGGREGATE IS REQUIRED

CONCRETE PAVEMENT TYPICAL JOINT ARRANGEMENT SHOWN IN MILLIMETERS

DOWELS 30 TO 40mm IN DIAMETER

EPOXY-COATED SMOOTH BARS

- 0.6m LONG

PLACED IN CENTER OF SLAB

RANDOM SPACING BETWEEN 4 TO 6 METERS

- 300mm OC SPACING

- NEED JOINTS TOOLED AND/OR CUT AT LEAST 90mm DEEP IN CENTER OF THESE DOWELS (FOR 300mm SLAB)

HOT POUR SEALANT AFTER (BY OTHERS)

LONGITUDINAL JOINTS ARE DESIGNED WITH TIE BARS TO CONNECT THE SLABS, ALL TRANSVERSE JOINTS ARE TO BE DOWELED

TRANSVERSE JOINTS SHALL BE HAND TROWELED AFTER PLACEMENT TO A DEPTH OF OF AT LEAST 25mm AND THEN SAW CUT TO A MINIMUM DEPTH OF 90mm AND NO MORE THAN 18 HOURS AFTER PLACMENT

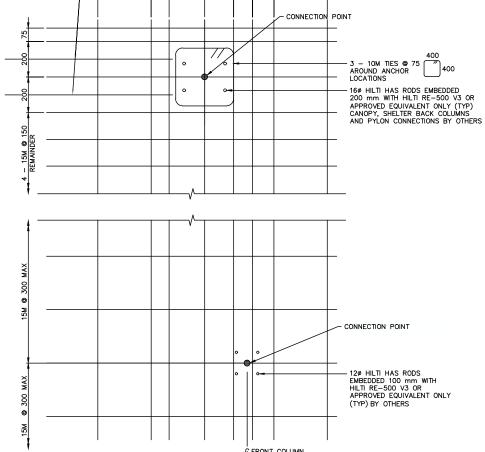
DOWELED TRANSVERSE JOINT

2024-06-14 CIMA+

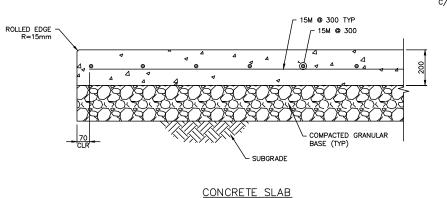
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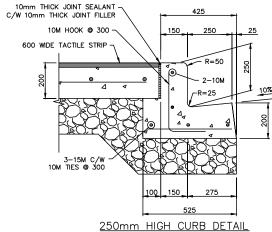
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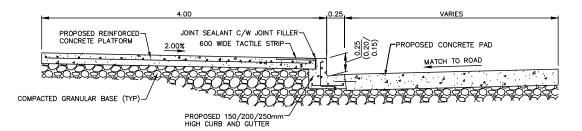




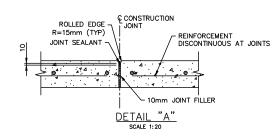
TYPICAL REINFORCING LAYOUT







BRT STATION STANDARD PLATFORM CROSS SECTION (4.00m WIDTH @ 0.15m/0.20m/0.25m HEIGHT)



SLAB GENERAL NOTES:

- 1. CONCRETE SHALL BE EXPOSURE CLASS C-1 IN ACCORDANCE WITH CSA STANDARD A23.1.
- 2. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 30 MPa.
- 3. MINIMUM CONCRETE COVER SHALL BE 60mm UNLESS OTHERWISE NOTED.
- 4. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CSA STANDARD G30 18 GRADE 400W.
- 5. SEE SPECIFICATIONS FOR ADDITIONAL MATERIAL AND FABRICATION REQUIREMENTS.
- 6. SEE SITE-SPECIFIC LAYOUT DRAWINGS, SHELTER AND CANOPY DETAILS FOR LOCATION OF FUTURE CONNECTION POINTS.
- 7. CONNECTION POINTS SHALL BE SURVEYED IN PLACE AND REINFORCEMENT ADJACENT TO CONNECTION POINTS SHALL BE CAREFULLY LOCATED RELATIVE TO THESE POINTS AND IN ACCORDANCE WITH THE DETAILS SHOWN.
- 8. PROVIDE A DIRECT MEANS OF VISUALLY LOCATING EACH CONNECTION POINT AFTER COMPLETION OF THE SLAB, THROUGH PROJECTING A NON-CORROSIVE MARKER THROUGH THE SURFACE AT EACH CONNECTION POINT OR BY ANOTHER APPROVED METHOD. SUBMIT DETAILS OF THE PROPOSED METHOD FOR REVIEW AT LEAST 5 WORKING DAYS PRIOR TO THE FIRST SLAB POUR.
- 9. LOCATE CONSTRUCTION JOINTS SYMMETRICALLY AND CENTERED BETWEEN SHELTER AND CANOPY SUPPORTS.



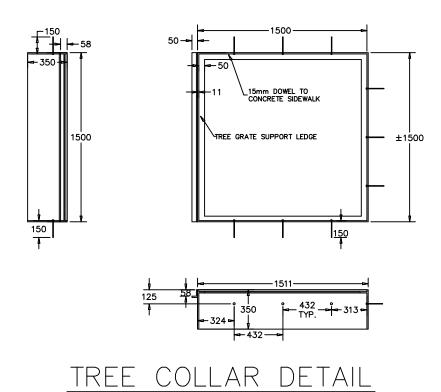
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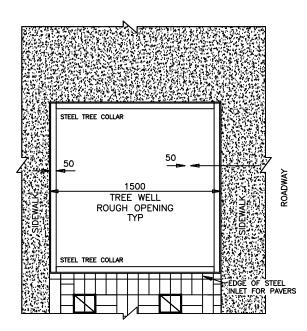


BUS RAPID TRANSIT SYSTEM STANDARD DETAILS PLATFORM STRUCTURAL DETAILS

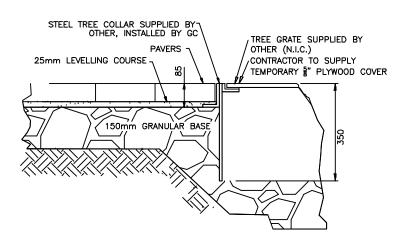
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TREE COLLAR PAVERS CONNECTION DETAIL



TREE COLLAR PAVERS CONNECTION DETAIL

THE CONTRACTOR IS TO TIE INTO AND MATCH ADJACENT PAVING STONE PATTERNS FOR NEW PAVING STONE INSTALLATION AREAS.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES.



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BUS RAPID TRANSIT SYSTEM

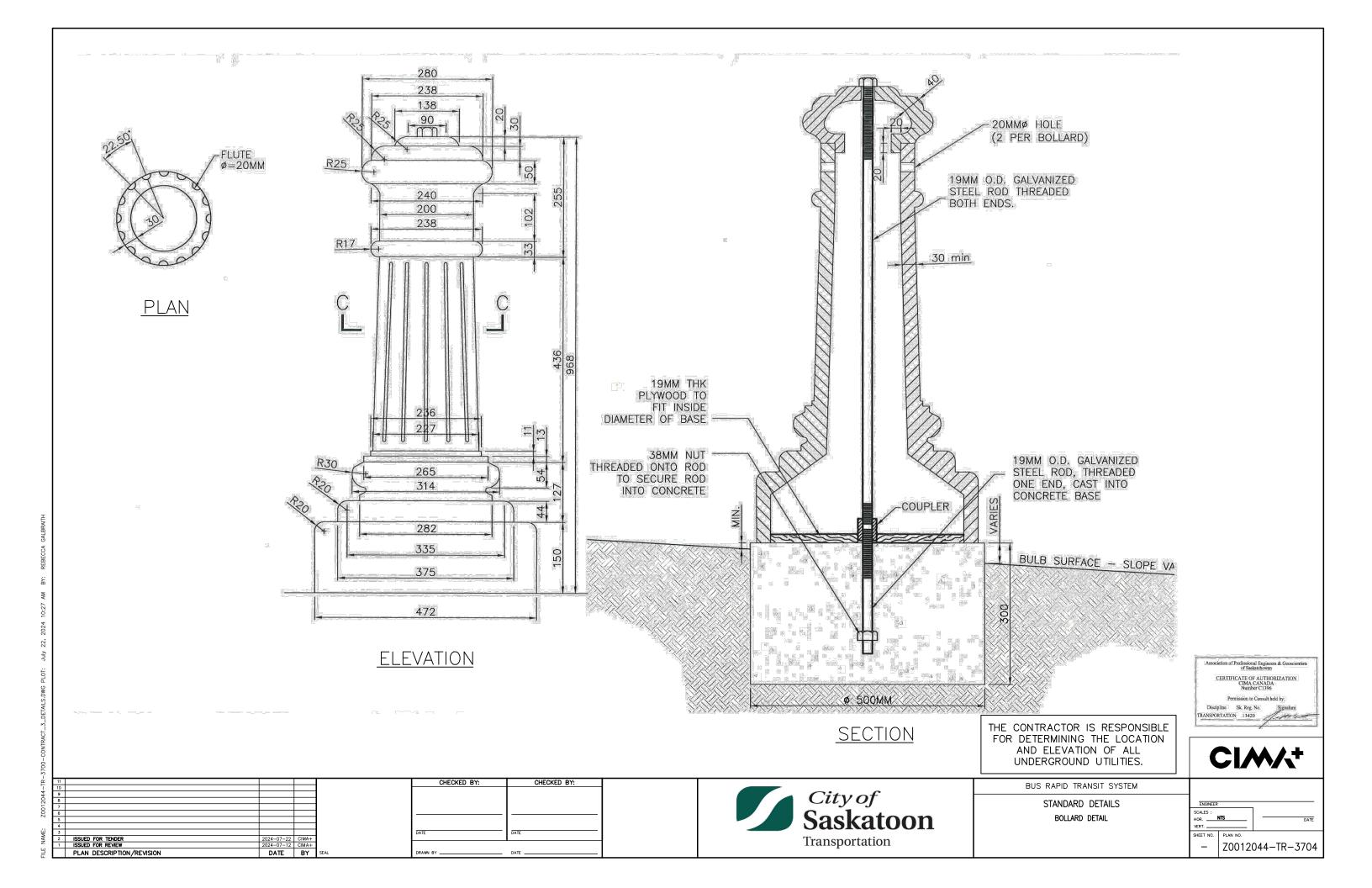
STANDARD DETAILS

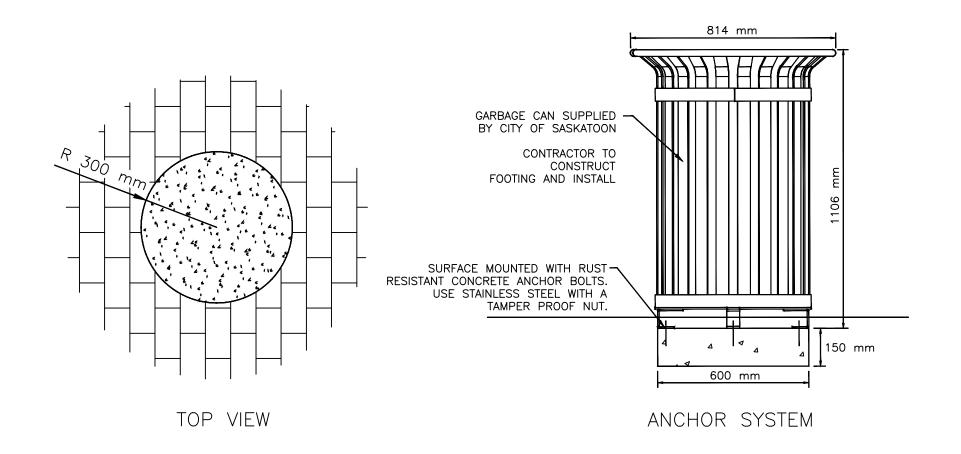
TREE COLLAR/PAVING STONE DETAILS

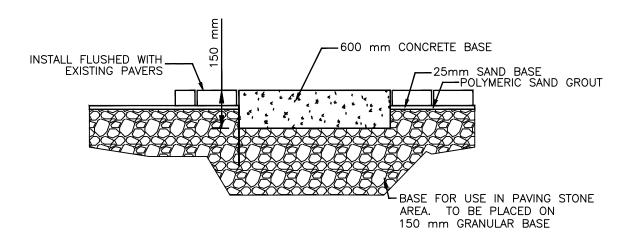
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SCALES:
HOR. NTS
VERT. DATE

SHEET NO. PLAN NO.
- Z0012044—TR—3703







SECTION VIEW

THE CONTRACTOR IS TO TIE INTO AND MATCH ADJACENT PAVING STONE PATTERNS FOR NEW PAVING STONE INSTALLATION AREAS.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES.

CIWY+

Discipline Sk. Reg. No.

ssociation of Professional Engineers & Geoscientists of Saskatchewan

BUS RAPID TRANSIT SYSTEM STANDARD DETAILS GARBAGE RECEPTACLE BASE DETAIL

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				DATE	DATE
ISSUED FOR REVIEW	2024-07-12	CIMA+			
PLAN DESCRIPTION/REVISION	DATE	BY	SEAL	DRAWN BY	DATE

City of **Saskatoon** Transportation

TREE PLANTING DETAILS

THE CONTRACTOR IS TO TIE INTO AND MATCH ADJACENT PAVING STONE PATTERNS FOR NEW PAVING STONE INSTALLATION AREAS.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES.

CIWA

Discipline Sk. Reg. No.

Association of Professional Engineers & Geoscientists of Saskatchewan

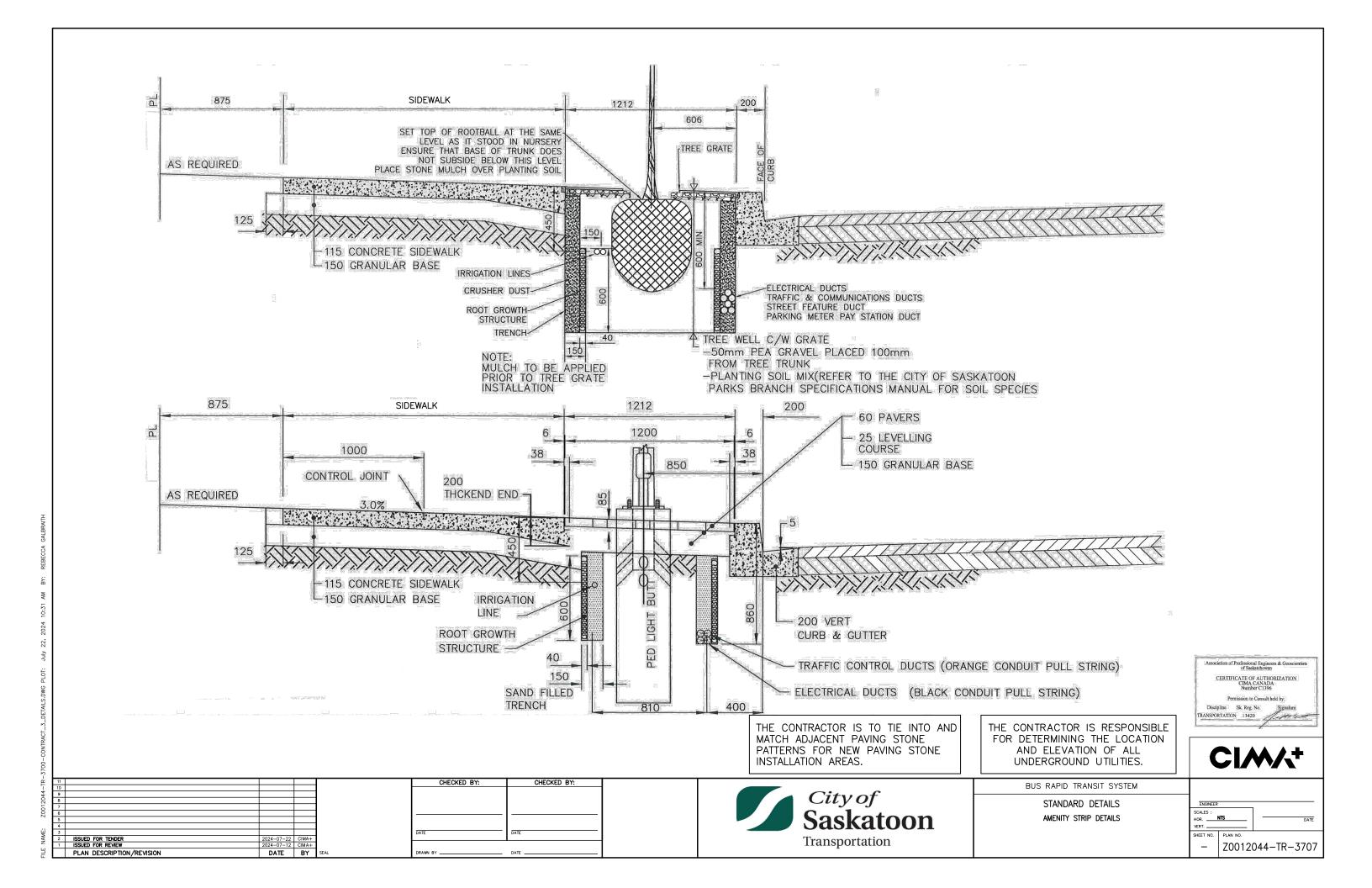
City of Saskatoon
Transportation

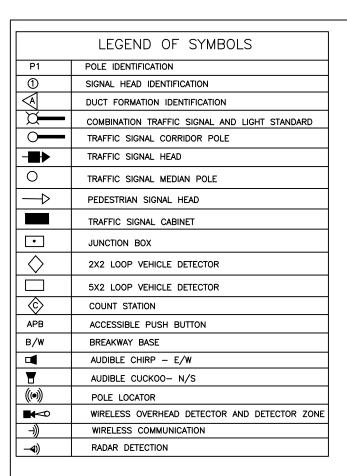
BUS RAPID TRANSIT SYSTEM

STANDARD DETAILS
TREE PLANTING DETAILS

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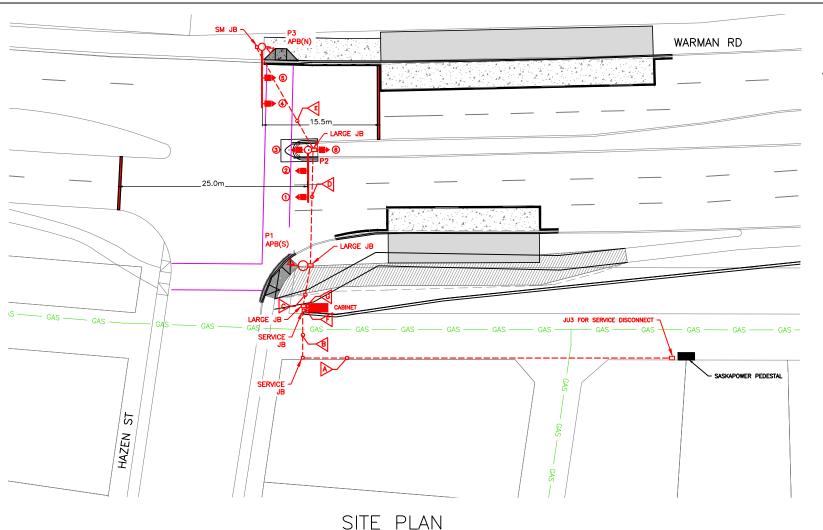
Z0012044-TR-3700-CONTRACT_3_DETAILS.DWG PLOT: July 22, 2024 10:30 AM





PEDESTRIAN HEAD	POLE NO:
300X300 DOUBLE PED	
300X300 SINGLE PED	
450 SINGLE PED	
450 DOUBLE PED	
LED SINGLE PED	P1, P3
LED DOUBLE PED	
TOUCHLESS PUSHBUTTON	P1, P3
PUSHBUTTONS & SIGN	
AUDIBLE (CHIRP / CUCKOO)	
POLE LOCATOR	
AUDIBLE PUSHBUTTONS	
CYCLIST LED	
CYCLIST PUSHBUTTON & SIGN	

SIGNAL DESCRIPTION	SIGNALS			BACK
	PRIMARY	SECONDARY	AUXILIARY	BOARD NO.
LED-RD LED-AB LED-GR 300 300 300	1,4	2,5	3,6	1,2,4,5
LED-RD LED-AB LED-AR 300 300 300				
LED-RD LED-AB LED-GR BI-MODAL 300 300 300 300				
LED-RD LED-AB LED-GR LED-AR 300 300 300 300				



POLE DESCRIPTION	EXTENSION ARM	POLE	NO.	BREAKWAY BASE
MEDIAN POLE		P1		
PUSHBUTTON POLE				
STREET POLE				
DAVIT POLE				
WOOD POLE				
	2.0 m			
	3.0 m			
CORRIDOR POLE	4.0 m	P2		
	5.0 m	P3		
	2.0 m			
9 m COMBINATION	3.0 m			
POLE	4.0 m			
	5.0 m			
	11.0 m			
TYPE L CANTILEVER	12.0 m			
POLE	13.0 m			

TRENCH LENGTH(m)	OF DUCTS	DUCT CONTENTS
50.0	1-2"	
6.4	1-2"	
6.0	4-2"	
15.5	3-2"	
16.5	2-2"	
1.0	1-2"	
1.0	1-4" 4-2"	
	ENGTH(m) 50.0 6.4 6.0 15.5 16.5	LENGTH(m) DUCTS 50.0 1-2" 6.4 1-2" 6.0 4-2" 15.5 3-2" 16.5 2-2" 1.0 1-2"

PUSH OR WAVE AT BUTTON FOR

PUSH BUTTON & SIGN

CROSSING DISTANCE=28m

ALL UTILITIES EXCEPT GAS HAVE BEEN OMITTED





| CHECKED BY: CHECKED BY: | CH



BUS RAPID TRANSIT SYSTEM

STATION 50 & 51

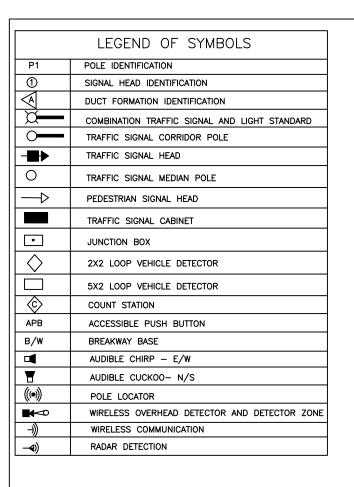
BLUE LINE

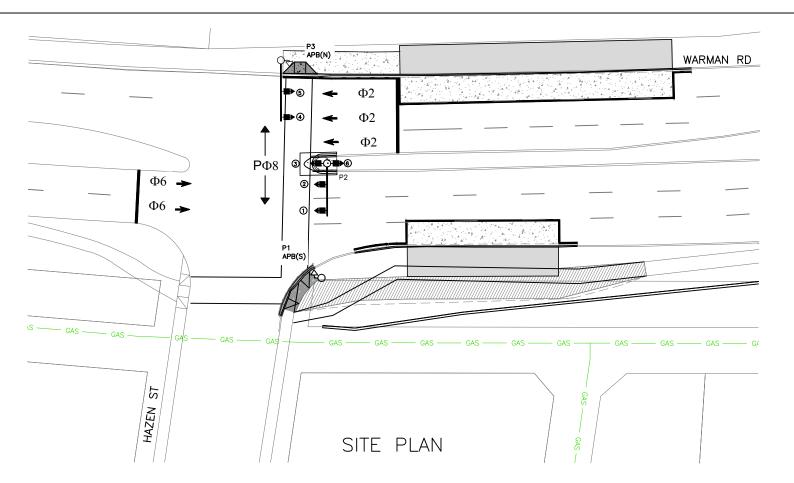
HAZEN STREET & WARMAN ROAD

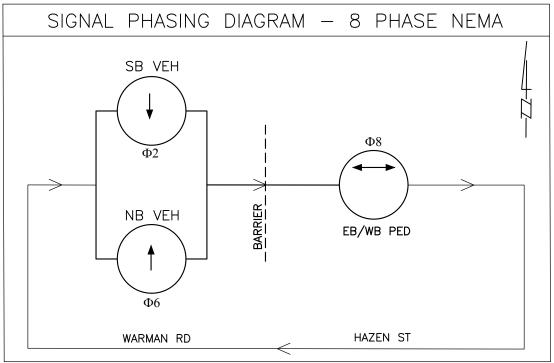
INTERSECTION #3355

TRAFFIC SIGNAL - CONSTRUCTION

ENGINEER			
SCALES : HOR1:500		DATE	
SHEET NO.	PLAN NO.		
1 OF 2	Z0012044-TR-3800		







CROSSING DISTANCE= 28m



CHECKED BY:

NOT FOR CONSTRUCTION

CHECKED BY:

Transportation

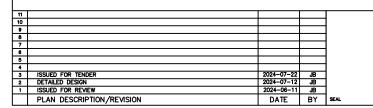
BUS RAPID TRANSIT SYSTEM

Powerloop Consulting

STATION 50 & 51 BLUE LINE HAZEN STREET & WARMAN ROAD INTERSECTION #3355 TRAFFIC SIGNALS - PHASING

ENGINEER		
SCALES : HOR1:500 VERTN.T.S.		DATE
SHEET NO.	PLAN NO.	
2 OF 2	Z0012044-TR-3801	

CIWY+



City of Saskatoon