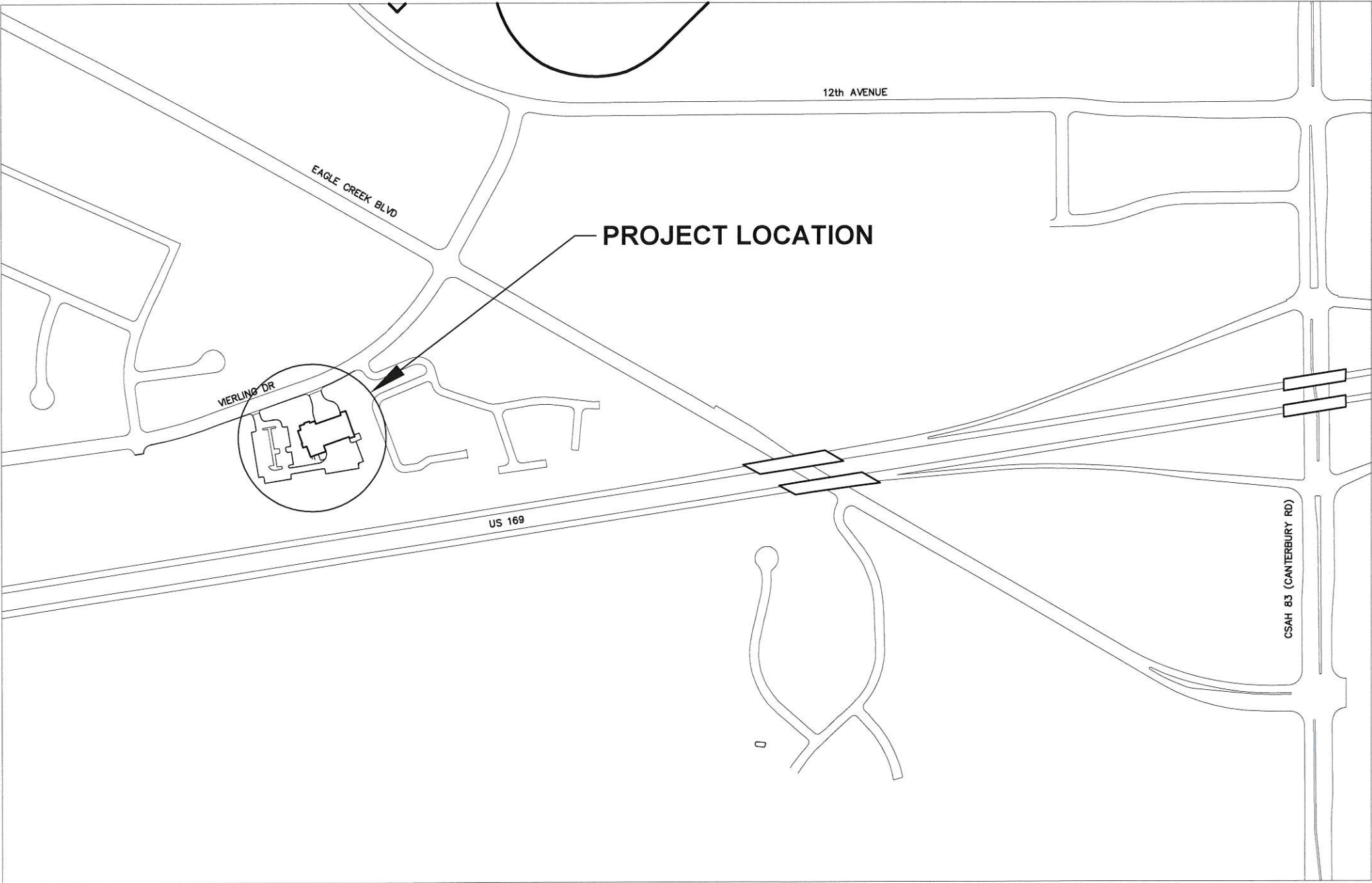


FIRE STATION NO. 1 - 2017 CONCRETE PAVEMENT
SHAKOPEE, MN
CITY PROJECT NO. 2017-5
CONSTRUCTION PLAN FOR
CONCRETE PAVEMENT AND APPURTENANT WORK



THE LOCATIONS OF EXISTING SURFACE STRUCTURES AND UNDERGROUND UTILITIES THAT ARE SHOWN, ARE SHOWN IN AN APPROXIMATE WAY ONLY. IT IS NOT GUARANTEED THAT ANY OR ALL EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES AND SURFACE STRUCTURES.
NOTIFY GOPHER STATE ONE-CALL
1-800-252-1166 OR 651-454-0002



PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

GOVERNING SPECIFICATIONS

THE PROJECT SPECIFICATIONS, THE 2016 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION", SHAKOPEE STANDARD PLATES, MINNESOTA CONCRETE FLATWORK SPECIFICATIONS AND THE LATEST EDITION OF THE CEAM STANDARD UTILITY SPECIFICATIONS SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MN MUTCD INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

ALL TRAFFIC CONTROL DEVICES SHALL HAVE RETROREFLECTIVE SHEETING.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	NOTES AND DETAILS
3	EXISTING CONDITIONS AND REMOVALS
4	CONSTRUCTION PLAN

THIS PLAN CONTAINS 4 SHEETS

APPROVED FOR ONE YEAR FROM THIS DATE

Bruce Sony
CITY ENGINEER

02/16/17
DATE

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

DESIGN ENGINEER: I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

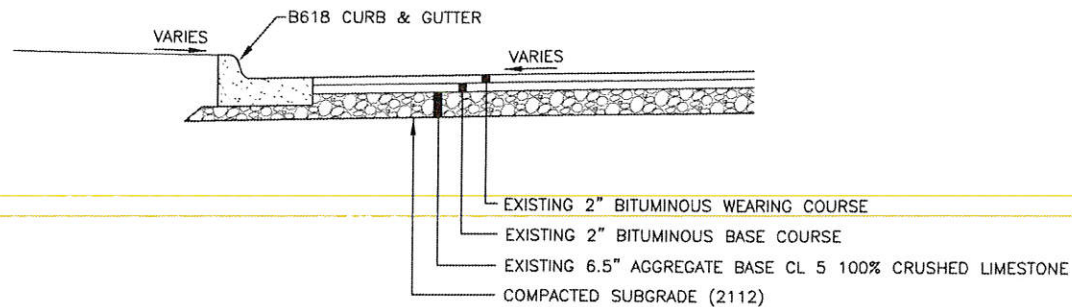
PRINT NAME: RYAN HALVERSON LIC. NO. 49803

DATE 02/16/17 SIGNATURE: *Ryan Halverson*

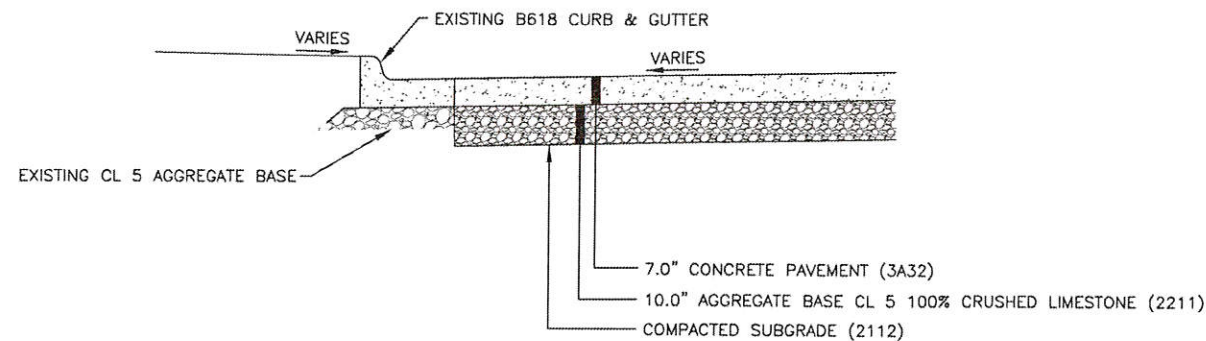


SHAKOPEE
COMMUNITY PRIDE SINCE 1857

CITY OF SHAKOPEE, MN
129 SOUTH HOLMES ST
SHAKOPEE, MN 55379
(952) 233-9300 phone
(952) 233-3801 fax



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

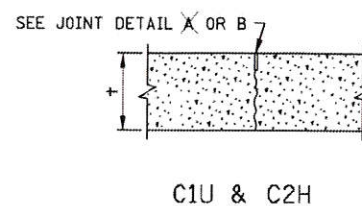
CONTRACTION JOINT
REFERENCE, DETAIL
& SEALER SPEC. TABLE

JOINT REFERENCE		JOINT DETAIL	JOINT SEALER SPEC.	JOINT WIDTH
WITHOUT DOWELS	WITH DOWELS			
C1U	C1U-D	A	UNSEALED	1/8"
C2H	C2H-D	B	3725	1/8"
C3P	C3P-D	C	3721	3/8"
C4S	C4S-D	D	3722	3/8"
C5H	C5H-D	E	3725	3/8"

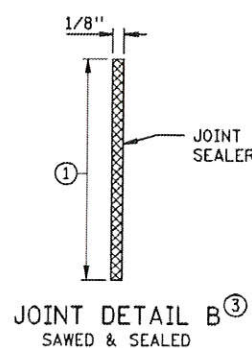
LEGEND
 C = CONTRACTION JOINT
 NO. = JOINT REFERENCE
 U = UNSEALED
 H = HOT POURED
 P = PREFORMED
 S = SILICONE
 -D = DOWEL BARS

EXAMPLE
 C2H-D

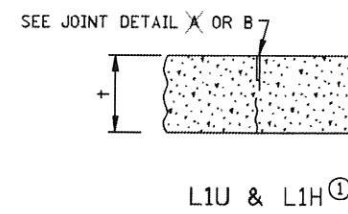
- JOINT DEPTH SHALL BE:
FOR CONCRETE OVERLAYS - 1/3 THE PAVEMENT THICKNESS
FOR CONCRETE PAVEMENT - 1/4 THE PAVEMENT THICKNESS
- SEE CONTRACTION JOINT SEALER DETAIL.
WHEN USING PREFORMED JOINT SEALER, THE DEPTH SHALL BE 1/4" MORE THAN THE PREFORMED SEALER, WHEN COMPRESSED, TO FIT THE JOINT DESIGN WIDTH. "d" DIMENSION SHALL APPLY AT ANY POINT THROUGHOUT "c" DEPTH. SHARP INTERNAL CORNERS WILL NOT BE PERMITTED. ALL CORNERS SHALL BE PROVIDED WITH SUITABLE FILLET.
- WHEN SEALING, THE JOINT FACES SHALL BE CLEANED AND DRIED BY SANDBLASTING AND AIR BLASTING.



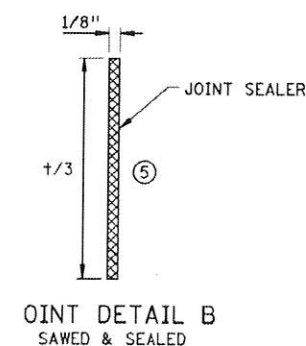
C1U & C2H



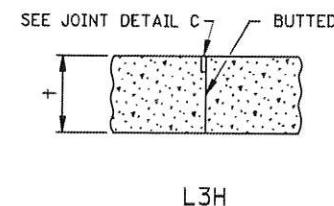
JOINT DETAIL B
SAWED & SEALED



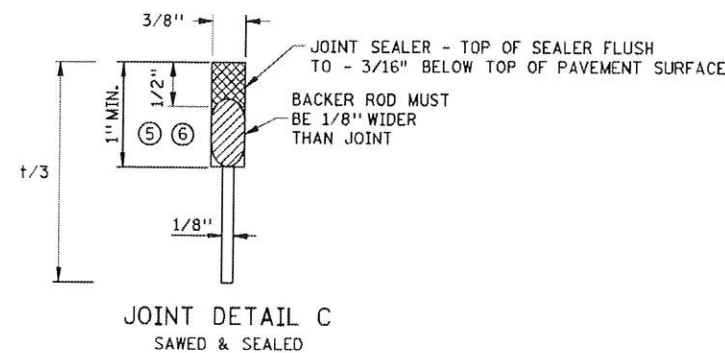
L1U & L1H



JOINT DETAIL B
SAWED & SEALED



L3H



JOINT DETAIL C
SAWED & SEALED

NOTES:

- THE CONTRACTOR SHALL SUBMIT A PAVEMENT JOINTING LAYOUT PLAN TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. MAXIMUM PANEL LENGTH SHALL BE 15' AND MAXIMUM PANEL WIDTH SHALL BE 12'-14'. ALL JOINTS SHALL BE SAWED, NO TOOLING OF JOINTS WILL BE ALLOWED. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LAYOUT OF THE JOINTS IN THE FIELD PRIOR TO SAWING.
- ALL JOINTS SHALL BE SEALED BY THE HOT POUR METHOD.
- LONGITUDINAL JOINTS SHALL BE PARALLEL WITH EACH OTHER AND TRANSVERSE JOINTS SHALL BE PERPENDICULAR TO THE LONGITUDINAL JOINTS. DEVIATION GREATER THAN 1" SHALL NOT BE ALLOWED.
- PAVEMENT EDGES SHALL BE FINISHED WITH AN 1/8" RADIUS EDGING TOOL.
- IF CONCRETE PLACEMENT IS DELAYED FOR MORE THAN 60 MINUTES OR AT THE END OF EACH DAY, CONSTRUCT A HEADER TRANSVERSE CONSTRUCTION JOINT WITHIN 5' OF A PLANNED TRANSVERSE CONTRACTION JOINT. CONSTRUCT HEADER JOINT PER MNDOT STANDARD PLATE NUMBER 1150R.
- PAVEMENT EDGES SHALL BE FINISHED WITH AN 1/8" RADIUS EDGING TOOL.
- TEXTURE THE FINISHED PAVEMENT SURFACE WITH AN ARTIFICIAL TURF OR BROOM TO PRODUCE A MINIMUM DEPTH OF 0.03". THE TEXTURING DEVICE SHALL BE PULLED ALONG THE PAVEMENT IN A LONGITUDINAL DIRECTION AND SHALL PRODUCE A TIGHT AND UNIFORMLY TEXTURED SURFACE.
- THE CONCRETE CONTRACTOR, OR SUBCONTRACTOR, SHALL HAVE AT LEAST ONE PERSON WITH A CURRENT ACI CONCRETE FLATWORK TECHNICIAN OR FLATWORK FINISHER CERTIFICATION AND MUST BE ONSITE FOR ALL CONCRETE POURS.
- CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL A TRAFFIC CONTROL PLAN AND CONSTRUCTION PHASING PLAN PRIOR TO ANY CONSTRUCTION. ENGINEER SHALL HAVE A MINIMUM OF 48 HOURS TO REVIEW. NO WORK SHALL COMMENCE UNTIL THESE PLANS ARE APPROVED TO THE SATISFACTION OF THE ENGINEER.
- ALL TRAFFIC CONTROL DEVICES SHALL BE IN COMPLIANCE WITH THE MN MUTCD MANUAL GUIDELINES. ALL LAYOUTS SHALL CONFORM WITH THE LATEST MNMUTCD FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS. IF NECESSARY, THE CONTRACTOR SHALL SUPPLY A FLAG PERSON(S) PER THE MNMUTCD FIELD MANUAL.
- ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE CITY OF SHAKOPEE & MNDOT STANDARD SPECIFICATIONS AND DETAIL PLATES.
- THE CONTRACTOR SHALL PROTECT THE EXISTING PAVEMENTS, CURB & GUTTER, VALLEY GUTTER, SIDEWALK, PATHWAY, ETC., NOT SCHEDULED FOR REMOVAL, FROM DAMAGE DUE TO CONSTRUCTION ACTIVITIES. ALL ITEMS TO BE REMOVED SHALL BE DISPOSED OF OFF SITE AT A LOCATION SECURED BY THE CONTRACTOR. DISPOSAL OFFSITE SHALL BE INCIDENTAL TO THE REMOVAL BID ITEM.
- PRIOR TO PLACEMENT OF NEW CONCRETE CURB & GUTTER, ALL EXISTING EDGES SHALL BE STRAIGHT AND EXPANSION JOINT MATERIAL SHALL BE PLACED AGAINST THE ABUTTING EDGE, AS DIRECTED. SAW CUTTING WILL BE REQUIRED AND IS INCIDENTAL TO THE REMOVAL OF EXISTING CURB.
- WHERE SOD PLACEMENT IS NECESSARY, PLACE 6-INCHES OF TOPSOIL AND NEATLY CUT ALL EDGES OF EXISTING SOD PRIOR TO PLACING NEW SOD. RESTORATION OF TURF AREAS SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE CURB & GUTTER.
- STREETS USED AS HAUL ROUTES SHALL BE SWEEPED/CLEANED DAILY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PAVING.

LONGITUDINAL JOINT REFERENCE,
DETAIL & SEALER SPECIFICATION TABLE

JOINT REFERENCE			JOINT DETAIL	JOINT SEALER SPEC	JOINT WIDTH
WITHOUT TIE BARS	WITH TIE BARS	WITH KEYWAY & TIE BARS			
L1U	L1U		A	UNSEALED	1/8"
L1H	L1H		B	3725	1/8"
	L2TU	L2KTU	NONE	UNSEALED	
	L2TH	L2KTH	C	3725	3/8"
L3U			NONE	UNSEALED	
L3H			C	3725	3/8"

LEGEND
 L = LONGITUDINAL JOINT
 NO. = JOINT REFERENCE
 1 = PAVED CONSTRUCTION JOINT
 2 = TIED/KEYED CONSTRUCTION JOINT
 3 = BUTTED CONSTRUCTION JOINT
 K = KEYWAY
 T = TIE BARS
 U = UNSEALED
 H = HOT POURED

EXAMPLE
 L2KTH

- SEE THE LONGITUDINAL JOINT REFERENCE, DETAIL & SEALER SPECIFICATION TABLE TO DETERMINE JOINT DETAIL.
- CONCRETE PAVEMENTS LESS THAN 7" SHALL USE L2TU AND L2TH JOINTS UNLESS OTHERWISE ALLOWED BY THE ENGINEER.
- CONCRETE PAVEMENTS GREATER THAN OR EQUAL TO 7" SHALL USE L2KTU AND L2KTH JOINTS UNLESS OTHERWISE ALLOWED BY THE ENGINEER.
- THE JOINT FACES SHALL BE CLEANED WITH WATER DURING THE SAW CUTTING OPERATION OR BY WATER BLASTING AFTER SAWING.
- THE JOINT FACES SHALL BE CLEANED AND DRIED BY SANDBLASTING AND AIR BLASTING.
- PRIOR TO SEALING THE JOINT, A 1/2" DIAMETER CLOSED CELL BACKER ROD CAPABLE OF WITHSTANDING SEALANT TEMPERATURES OF 400 DEGREES F. SHALL BE PLACED 1/2" BELOW THE TOP OF THE PAVEMENT.

REVISIONS

FIRE STATION NO. 1
2017 CONCRETE PAVEMENT

NOTES & DETAILS



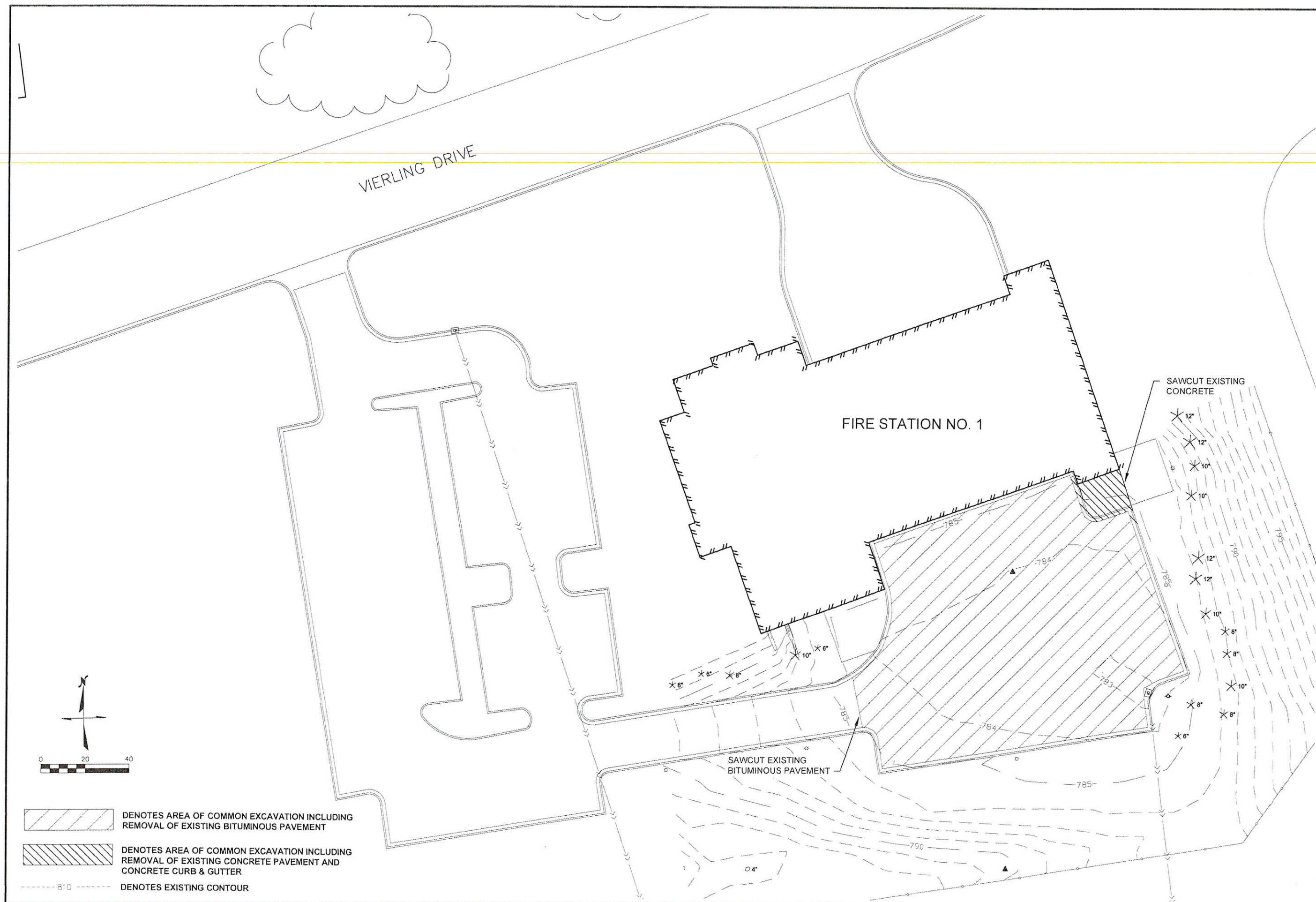
SHEET NO.

2

DESIGNED BY:	RT	DATE:	JAN 2017
DRAWN BY:	RT	PROJECT #:	
CHECKED BY:	RH	SHEET:	2 OF 4

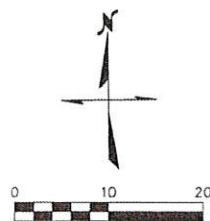
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a Licensed Professional Engineer under the laws of the State of Minnesota.

RYAN HALVERSON
Lic. No. 49803
Date JANUARY XX, 2017



-  DENOTES AREA OF COMMON EXCAVATION INCLUDING REMOVAL OF EXISTING BITUMINOUS PAVEMENT
-  DENOTES AREA OF COMMON EXCAVATION INCLUDING REMOVAL OF EXISTING CONCRETE PAVEMENT AND CONCRETE CURB & GUTTER
-  DENOTES EXISTING CONTOUR

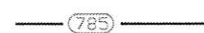
REVISIONS	I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.			
	DESIGNED BY:	RH	DATE:	JAN 2017
	DRAWN BY:	RT	PROJECT #:	
FIRE STATION NO. 1 2017 CONCRETE PAVEMENT EXISTING CONDITIONS & REMOVALS		CHECKED BY:	RH	SHEET: 3 OF 4
		Date: JANUARY XX, 2017		
		RYAN HALVERSON Lic. No. 49803		



FIRE STATION NO. 1



DENOTES PROPOSED CONCRETE PAVEMENT



DENOTES PROPOSED CONTOUR

F&I EXPANSION JOINT

CONSTRUCT B618 C & G

EXISTING B618 C & G

EXISTING B618 C & G

REVISIONS

FIRE STATION NO. 1
2017 CONCRETE PAVEMENT
PROPOSED IMPROVEMENTS
CONCRETE PAVEMENT



SHEET NO.
4

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Date: JANUARY XX, 2017
Lic. No. 49803
RYAN HALVERSON

DESIGNED BY:	RT	DATE:	JAN 2017
DRAWN BY:	RT	PROJECT #:	
CHECKED BY:	PH	SHEET:	4 OF 4