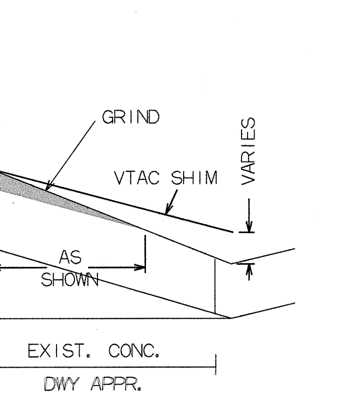
NOTES :

- (I), (II), (III), DENOTES RAMP TYPE.
- CONSTRUCT ALL CARRIAGE WALKS AND DRIVEWAYS PER CITY OF MILWAUKEE SPECIFICATIONS.
- OFFSET MEASUREMENTS TO TREES, WOOD POLES AND LIGHT POLES ARE TAKEN TO EDGE NEAREST THE CENTERLINE.
- OFFSET MEASUREMENTS TO HYDRANTS ARE TAKEN TO THE OPERATING NUT.
- IN AREAS OF GRINDING, GRIND TO ACHEIVE 0.12'MIN. COVER AT FLANGES, 0.17'MIN. AT BUTT JOINTS AND 0.21'MIN. ELESWHERE.
- PROJECT IS DESIGNED FOR TWO ASPHALT PASSES USING A 0.10' CROWN IN EACH PASS.
- REMOVE ALL ASPHALT PATCHES WITHIN CONSTRUCTION LIMITS.
- ANY TREES TO BE REMOVED AS PART OF THIS PROJECT WILL BE INDICATED IN THE CONTRACT SPECIAL PROVISIONS.
- INTERNAL MANHOLE SEALS ARE REQUIRED IN ALL MANHOLES MARKED 'SAN' (SANITARY).
- GRADE AND PLACE 1½' WIDE SOD IN LAWN AREAS.



TYPICAL SECTION
ASPHALT SHIM ON DRIVEWAYS

CONDITION OF CONCRETE
B BROKEN
BL BLUE LINED
BP BACK PITCHED
C CRACKED
EP EXCESSIVE PITCH
H HEAVED
JF JOINT FAILURE
MJ MUD JACKED
P PATCHED
PC POOR CONDITION
S SETTLED
SP SPALLED
VGC VERY GOOD
VPC VERY POOR

ESTIMATE / CERTIFICATE QUANTITIES

	DESCRIPTION	UNIT	ASSESS.	X-ING			PLAN TOT.	PROJ.TOT.
X	MOBILIZATION	L.S.						
X	FINISHING ROADWAY	L.S.						
X	BARRICADING AND SIGNING	L.S.						
	CUTTING	C.Y.						
	ROADWAY CUTTING	C.Y.						
	FILLING	C.Y.						
	ROADWAY FILLING	C.Y.						
	PAVEMENT REMOVAL	S.Y.						
X	BITUMINOUS SURFACE REMOVAL	S.Y.						
X	CURB &/OR CURB & GUTTER REMOVAL	L.F.						
X	CONC.WALK &/OR DRIVEWAY REMOVAL	S.F.						
	SAWING (FULL DEPTH)	L.F.						
X	SAWING	L.F.						
	TREES CLEARING	I.D.						
	TREES GRUBBING	I.D.						
X	31" CONCRETE CURB & GUTTER	L.F.						
	V.T. CONC.WALK &/OR DRIVEWAY	C.Y.						
X	5" CONCRETE WALK	S.F.						
X	7" CONCRETE DRIVEWAY	S.F.						
	CONCRETE PAVEMENT	S.Y.						
X	7" CONCRETE ALLEY PAVEMENT	S.Y.						
X	V.T. CONCRETE BASE	C.Y.						
	CONCRETE BASE	S.Y.						
X	TACK COAT	GAL.						
X	BASE PREP. FOR ASPHALT SURFACE	L.S.						
X	V.T.ASPH.CONC.PAV'T.(MAX.)	S.Y.						
	CRUSHED STONE BASE							
	CRUSHED GRAVEL BASE							
X	GRAVEL FILLING	TON						
X	SODDING	S.Y.						
X	TOPSOIL	C.Y.						
	PAVEMENT GRINDING (ASPHALT)	S.Y.						
X	PAVEMENT GRINDING (CONCRETE)	S.Y.						
X	SEALING PAV'T JOINTS & CRACKS	S.Y.						
	MANHOLE RINGS	EACH						
X	SEWER FRAME ADJUSTMENT	V.F.						
X	MANHOLE SEAL (CITY FURNISHED)	EACH						
X	EROSION CONTROL (TYPE M)	EACH						
X	CRACK AND JOINT REPAIR	L.F.						2800
X	CRK & SEAT PAV'T	S.Y.						

FILE NO. 449

DEPARTMENT OF PUBLIC WORKS
INFRASTRUCTURE SERVICES DIVISION
FIELD OPERATIONS
FIELD & DESIGN ENGINEERING
MILWAUKEE, WISCONSIN

PLAN OF: N. 70TH ST.
W. CAPITOL DR. TO W. CONGRESS ST.
THIS SECTION: W. CAPITOL DR. TO STA. 9+00

DRAWN BY	D.BEKELE	DATE: 2/20/14	PROJECT NO. ST211140131
DESCRIPTIONS BY	D.BEKELE	DATE: 2/20/14	SHEET 1 OF 3
LEVELS BY	SCHULTZ	DATE: 12/12/12	SCALE 1"=10'
LEVELS TRANSF. BY	SCHULTZ	DATE: 1/3/14	1/4 SEC. 251 / ALD.DIST. 2
DESIGNED BY	WALCZAK	DATE: 4/7/14	OBSTRUCTIONS - SEE OBSTRUCTION LIST
GRADES TRANSF. BY	W. SNYDER	DATE: 6/2/14	REVISED:
CHECKED BY	D. Walczak	DATE: 9/12/14	REVISED:
APPROVED BY	[signature]	DATE: 9/15/14	REVISED:

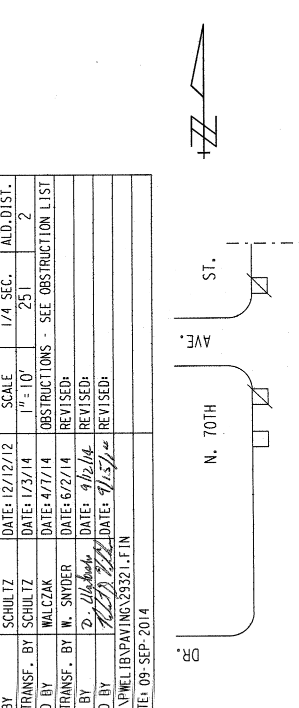
FILE: V:\PWELIB\PAVING\29321.FIN
PLOT DATE: 09-SEP-2014

THIS SHEET
STORM DRAINAGE UNITS

C.B.W.- 0	RESET- 2	ABANDON- 0

PROJECT IN SEPARATED AREA

DATE TO		
ESTIMATING	1	
HOLLOW WALKS	1	
PUBLIC HEARING	1	
CONSTRUCTION	1	6
SEWER	1	
WATER	1	
STREET LIGHTING	1	
BLDG. SEWERS		
MEASURING		1
FIELD		
DISTRICT FILE	2	
FORESTRY	1	
W.E. / G.O.		
WIS. GAS CO.		
TRANSIT SYSTEM		
CABLE TV		
UND. GRD. COND.	1	
WATER DIST.	1	
WEPCO N/S		
WEPCO S/S		
SEWER SERVICES		
UTILITY COOR.	1	
Traffic Eng RM 506		6
PLAN SIZE		



EROSION CONTROL AND C.B. REQUISITION PLAN

	TYPE M	☒-CBW	☐-RESET	X-ABANDON	☒ NO WORK
THIS SHEET	6	0	2	0	
PROJECT TOTAL	15	0	11	0	

N. 70TH ST. - W. CAPITOL DR. TO W. CONGRESS ST.
W. CAPITOL DR. TO STA. 9+00
ST211140131
12" X 12"
29321 (1 OF 3)

ESTIMATE / CERTIFICATE QUANTITIES

DESCRIPTION	UNIT	ASSESS.	X-ING			PLAN TOT.	PROJ. TOT.
MOBILIZATION	L.S.						
FINISHING ROADWAY	L.S.						
BARRICADING AND SIGNING	L.S.						
CUTTING	C.Y.						
ROADWAY CUTTING	C.Y.						
FILLING	C.Y.						
ROADWAY FILLING	C.Y.						
PAVEMENT REMOVAL	S.Y.						
BITUMINOUS SURFACE REMOVAL	S.Y.						
CURB &/OR CURB & GUTTER REMOVAL	L.F.						
CONC. WALK &/OR DRIVEWAY REMOVAL	S.F.						
SAWING (FULL DEPTH)	L.F.						
SAWING	L.F.						
TREES CLEARING	I.D.						
TREES GRUBBING	I.D.						
CONCRETE CURB & GUTTER	L.F.						
V.T. CONC. WALK &/OR DRIVEWAY	C.Y.						
5' CONCRETE WALK	S.F.						
7' CONCRETE DRIVEWAY	S.F.						
CONCRETE PAVEMENT	S.Y.						
7' CONCRETE ALLEY PAVEMENT	S.Y.						
V.T. CONCRETE BASE	C.Y.						
CONCRETE BASE	S.Y.						
TACK COAT	GAL.						
BASE PREP. FOR ASPHALT SURFACE	L.S.						
V.T. ASPH. CONC. PAV'T. (MAX.)	S.Y.						
CRUSHED STONE BASE							
CRUSHED GRAVEL BASE							
GRAVEL FILLING	TON						
SODDING	S.Y.						
TOPSOIL	C.Y.						
PAVEMENT GRINDING (ASPHALT)	S.Y.						
PAVEMENT GRINDING (CONCRETE)	S.Y.						
SEALING PAV'T JOINTS & CRACKS	S.Y.						
MANHOLE RINGS	EACH						
SEWER FRAME ADJUSTMENT	V.F.						
MANHOLE SEAL (CITY FURNISHED)	EACH						
EROSION CONTROL (TYPE M)	EACH						

DEPARTMENT OF PUBLIC WORKS
INFRASTRUCTURE SERVICES DIVISION
FIELD OPERATIONS
FIELD & DESIGN ENGINEERING
MILWAUKEE, WISCONSIN

PLAN OF: N. 70TH ST.
W. CAPITOL DR. TO W. CONGRESS ST.
THIS SECTION: STA. 9+00 TO STA. 18+00

DRAWN BY	D. BEKELE	DATE: 2/20/14	PROJECT NO. ST211140131
DESCRIPTIONS BY	D. BEKELE	DATE: 2/20/14	SHEET 2 OF 3
LEVELS BY	SCHULTZ	DATE: 12/12/12	SCALE 1" = 10'
LEVELS TRANSF. BY	SCHULTZ	DATE: 1/3/14	1/4 SEC. 251 ALD. DIST. 2
DESIGNED BY	WALCZAK	DATE: 4/7/14	OBSTRUCTIONS - SEE OBSTRUCTION LIST
GRADES TRANSF. BY	W. SNYDER	DATE: 6/2/14	REVISED:
CHECKED BY		DATE: 9/12/14	REVISED:
APPROVED BY		DATE: 9/15/14	REVISED:

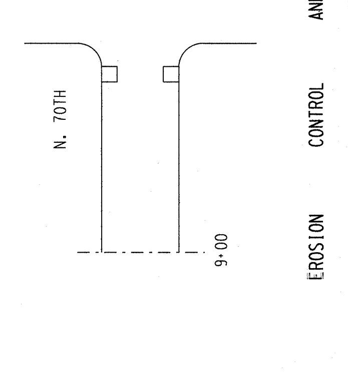
FILE: V:\PWELIB\PAVING\29321.FIN
PLOT DATE: 09-SEP-2014

FILE NO.

THIS SHEET

STORM DRAINAGE UNITS		
C.B.W. - 0	RESET - 4	ABANDON - 0
PROJECT IN SEPARATED AREA		

TO	DATE
ESTIMATING	1
HOLLOW WALKS	1
PUBLIC HEARING	1
CONSTRUCTION	1 6
SEWER	1
WATER	1
STREET LIGHTING	1
BLDG. SEWERS	1
MEASURING	1
FIELD	
DISTRICT FILE	2
FORESTRY	1
W.E. / G.O.	
WIS. GAS CO.	
TRANSIT SYSTEM	
CABLE TV	
UND. GRD. COND.	1
WATER DIST.	1
WEPCO N/S	
WEPCO S/S	
SEWER SERVICES	1
UTILITY COOR.	1
Traffic Eng / RM 506	1
PLAN SIZE	6



EROSION CONTROL AND C.B. REQUISITION PLAN

	TYPE M	☒ - CBW	☐ - RESET	X - ABANDON	☒ NO WORK
THIS SHEET	4	0	4	0	

N. 70TH ST. - W. CAPITOL DR. TO W. CONGRESS ST.
STA. 9+00 TO STA. 18+00
(2 OF 3) # 29321 ST211140131

ESTIMATE / CERTIFICATE QUANTITIES

DESCRIPTION	UNIT	ASSESS.	X-ING			PLAN TOT.	PROJ. TOT.
MOBILIZATION	L.S.						
FINISHING ROADWAY	L.S.						
BARRICADING AND SIGNING	L.S.						
CUTTING	C.Y.						
ROADWAY CUTTING	C.Y.						
FILLING	C.Y.						
ROADWAY FILLING	C.Y.						
PAVEMENT REMOVAL	S.Y.						
BITUMINOUS SURFACE REMOVAL	S.Y.						
CURB &/OR CURB & GUTTER REMOVAL	L.F.						
CONC. WALK &/OR DRIVEWAY REMOVAL	S.F.						
SAWING (FULL DEPTH)	L.F.						
SAWING	L.F.						
TREES CLEARING	I.D.						
TREES GRUBBING	I.D.						
CONCRETE CURB & GUTTER	L.F.						
V.T. CONC. WALK &/OR DRIVEWAY	C.Y.						
5" CONCRETE WALK	S.F.						
7" CONCRETE DRIVEWAY	S.F.						
CONCRETE PAVEMENT	S.Y.						
7" CONCRETE ALLEY PAVEMENT	S.Y.						
V.T. CONCRETE BASE	C.Y.						
CONCRETE BASE	S.Y.						
TACK COAT	GAL.						
BASE PREP. FOR ASPHALT SURFACE	L.S.						
V.T. ASPH. CONC. PAV'T. (MAX.)	S.Y.						
CRUSHED STONE BASE							
CRUSHED GRAVEL BASE							
GRAVEL FILLING	TON						
SODDING	S.Y.						
TOPSOIL	C.Y.						
PAVEMENT GRINDING (ASPHALT)	S.Y.						
PAVEMENT GRINDING (CONCRETE)	S.Y.						
SEALING PAV'T JOINTS & CRACKS	S.Y.						
MANHOLE RINGS	EACH						
SEWER FRAME ADJUSTMENT	V.F.						
MANHOLE SEAL (CITY FURNISHED)	EACH						
EROSION CONTROL (TYPE M)	EACH						

THIS SHEET

STORM DRAINAGE UNITS		
C.B.W. - 0	RESET - 5	ABANDON - 0
PROJECT IN SEPARATED AREA		

FILE NO. 451

DEPARTMENT OF PUBLIC WORKS
INFRASTRUCTURE SERVICES DIVISION
FIELD OPERATIONS
FIELD & DESIGN ENGINEERING
MILWAUKEE, WISCONSIN

PLAN OF: N. 70TH ST.
W. CAPITOL DR. TO W. CONGRESS ST.
THIS SECTION: STA. 18+00 TO W. CONGRESS ST.

DRAWN BY D.BEKELE	DATE: 2/20/14	PROJECT NO. ST211140131	SHEET 3 OF 3
DESCRIPTIONS BY D.BEKELE	DATE: 2/20/14		
LEVELS BY SCHULTZ	DATE: 12/12/12	SCALE 1" = 10'	1/4 SEC. 251 / ALD. DIST. 2
LEVELS TRANSF. BY SCHULTZ	DATE: 1/3/14		
DESIGNED BY WALCZAK	DATE: 4/7/14	OBSTRUCTIONS - SEE OBSTRUCTION LIST	
GRADES TRANSF. BY W. SNYDER	DATE: 6/2/14	REVISED:	
CHECKED BY	DATE: 9/12/14	REVISED:	
APPROVED BY	DATE: 9/15/14	REVISED:	

FILE: V:\PWELIB\PAVING\29321.FIN
PLOT DATE: 09-SEP-2014

DATE / TO		
ESTIMATING	1	9/19/14
HOLLOW WALKS	1	
PUBLIC HEARING	1	
CONSTRUCTION	1	
SEWER		