

PROCEEDINGS OF THE BOARD OF COUNTY COMMISSIONERS

Date: December 19, 2022

3:00 p.m.

Place: Commissioners Room, Courthouse, Caledonia, MN

Members Present:

Dewey Severson, Eric Johnson, Robert Burns, Teresa Walter and Greg Myhre

Others Present:

Auditor/Treasurer Donna Trehus, Board Clerk/EDA Director Allison Wagner,
and Zoning Administrator Amelia Meiners

Presiding: Chairperson Myhre

Call to order.

Pledge of Allegiance.

A motion was made by Commissioner Severson, seconded by Commissioner Johnson, motion unanimously carried to approve the agenda.

Public Comment:

None.

APPOINTMENTS

A motion was made by Commissioner Severson, seconded by Commissioner Johnson, motion unanimously carried to go into closed session pursuant to Minn. Stat. 13D.05, Subd. 3 for end of probation review. All the Commissioners and Auditor/Treasurer Trehus attended the closed session.

At 3:25 p.m. a motion was made by Commissioner Walter, seconded by Commissioner Myhre, motion carried unanimously to come out of closed session.

Commissioner Severson moved, Commissioner Walter seconded, to move Environmental Services Director Martin Herrick from probationary to regular employment pending that he passed a septic test. The probationary period would be extended for up to six months. The motion passed three to two with Commissioners Johnson and Myhre voted no. Commissioners Severson, Walter, and Burns voted yes. Commissioner Burns explained his vote saying that two senior members of the department had expressed their opinion that Herrick should stay working for the County. One junior member and someone else had disagreed. Commissioner Burns said there was a continuing learning process, and that Herrick was learning.

DISCUSSION ITEMS

None.

Closing Public Comment:

None.

Commissioner Severson moved, Commissioner Walter seconded, motion unanimously carried to adjourn the meeting at 3:30 p.m. The next meeting would be a regular meeting on December 20, 2022.

BOARD OF COUNTY COMMISSIONERS

HOUSTON COUNTY, MINNESOTA

By: _____
Greg Myhre, Chairperson

Attest: _____
Donna Trehus, Auditor/Treasurer

PROCEEDINGS OF THE BOARD OF COUNTY COMMISSIONERS

Date: December 20, 2022

9:00 a.m.

Place: Commissioners Room, Courthouse, Caledonia, MN

Members Present:

Dewey Severson (arrived at 9:02 a.m.), Eric Johnson, Robert Burns, and Greg Myhre

Others Present:

Auditor/Treasurer Donna Trehus, Reporter Charlene Selbee, Finance Director Carol Lapham, Board Clerk/EDA Director Allison Wagner, Recorder Mary Betz, Public Health and Human Services Director John Pugleasa, Engineer Brian Pogodzinski, Environmental Services Director Martin Herrick, Human Resource Technician Ann Diersen, and Bob Schuldt

Presiding: Chairperson Myhre

Call to order.

Pledge of Allegiance.

A motion was made by Commissioner Johnson, seconded by Commissioner Burns, motion unanimously carried to approve the agenda.

Motion was made by Commissioner Johnson, seconded by Commissioner Burns, motion unanimously carried to approve the meeting minutes from December 13, 2022.

Public Comment:

None.

APPOINTMENTS

None.

Motion by Commissioner Burns, seconded by Commissioner Severson, motion unanimously carried to approve the consent agenda. See consent agenda below.

CONSENT AGENDA

- 1) Hire Mark Schroeder as a Dropsite Supervisor, 67 day casual employee at an hourly rate of \$15.49, conditioned upon successful completion of a background check.

- 2) Approve searching for a Planning Commission community member 3 year appointment (posting period 12/21/22 -4:30 PM 1/4/23).
- 3) Reappoint Ken Visger to the Board of Adjustment for a 3-year term ending 12/31/2025.
- 4) Reappoint Franklin Hahn to the Board of Adjustment for a 3-year term ending 12/31/2025.
- 5) Reappoint Wayne Feldmeier to the Planning Commission for a 3-year term ending 12/31/2025.

ACTION ITEMS

File No. 1 – Commissioner Johnson moved, Commissioner Severson seconded, motion unanimously carried to adopt the non-represented wage and salary pay scale 3% for 2023.

File No. 2 – Commissioner Johnson moved, Commissioner Burns seconded, motion unanimously carried to adjust D range non-represented employee pay rates for 2023 to that of the represented pay rate adjustments of the represented D range employees for 2023, whose pay status was grandfathered subsequent to the compensation study.

File No. 3 – Commissioner Johnson moved, Commissioner Severson seconded, motion carried unanimously to approve adjusting the temporary/seasonal employee wage scales for seasonal workers, Veterans Service Drivers and Sheriff's Office Transport Officers 3% for 2023.

File No. 4 – Commissioner Severson moved, Commissioner Burns seconded, motion carried unanimously to approve agreement and Resolution No. 22-57 Agency Agreement for Federal Participation in Construction. See Resolution below.

RESOLUTION NO. 22-57

Agency Agreement for Federal Participation in Construction.

December 2022

BE IT RESOLVED, that pursuant to Minnesota Stat. Sec. 161.36, the Commissioner of Transportation be appointed as Agent of **Houston County** to accept as its agent, federal aid funds which may be made available for eligible transportation related projects.

BE IT FURTHER RESOLVED, the **Houston County Board Chairman** and the **County Auditor-Treasurer** are hereby authorized and directed for and on behalf of **Houston County** to execute and enter into an agreement with the Commissioner of Transportation prescribing the terms and conditions of said federal aid participation as set forth and contained in "Minnesota Department of Transportation Agency Agreement No. **1052054**, a copy of which said agreement was before the County Board and which is made a part hereof by reference.

File No. 5 – Commissioner Johnson moved, Commissioner Severson seconded, motion carried unanimously to approve Resolution No. 22-58 Final Acceptance for SAP 028-592-007, Contract #328 with Dunn Blacktop for South Ridge Road. The total cost was \$599,413.87. See resolution below.

RESOLUTION NO. 22-58

**FINAL ACCEPTANCE FOR SAP 028-592-007
South Ridge Road Paving**

CONTRACT # 328 – DUNN BLACKTOP

December 20, 2022

WHEREAS, Contract No. 328 has in all things been completed, and the County Board being fully advised in the premises,

NOW, THEN BE IT RESOLVED, That we do hereby accept said completed project for and in behalf of the County of Houston and authorize final payment as specified herein.

File No. 6 – Commissioner Burns moved, Commissioner Johnson seconded, motion carried unanimously to approve Resolution No. 22-59 Final Acceptance for SAP 028-030-008, Contract #320 with Dunn Blacktop for Paving on CSAH's 1, 4, and 10 in Houston County. The total cost was \$3,392,301.58. See resolution below.

RESOLUTION NO. 22-59

**FINAL ACCEPTANCE FOR SAP 028-030-008
Paving on CSAH's 1, 4, and 10**

CONTRACT # 320 – DUNN BLACKTOP

December 20, 2022

WHEREAS, Contract No. 320 has in all things been completed, and the County Board being fully advised in the premises,

NOW, THEN BE IT RESOLVED, That we do hereby accept said completed project for and in behalf of the County of Houston and authorize final payment as specified herein.

File No. 7 – Commissioner Severson moved, Commissioner Myhre seconded, motion carried unanimously to approve the MFIP/DWP contract with Workforce Development Inc. (WDI) for required employment and training services.

File No. 8 – Commissioner Johnson moved, Commissioner Severson seconded, motion carried unanimously to approve the 2023 contract with Woods Psychological Service to provide reflective supervision for our Child Protection Social Workers.

File No. 9 – Commissioner Burns moved, Commissioner Johnson seconded, motion carried unanimously to approve the Multi County SNAP Employment & Training agreement.

File No. 10 – Commissioner Burns moved, Commissioner Severson seconded, motion carried unanimously to approve the 2023 Hiawatha Valley Mental Health Center HVMHC contract and rates for adult and children’s mental health services. The rates for 2023 reflected a 5% increase.

DISCUSSION ITEMS

Commissioners discussed the 2023 budget and ARPA dollars with Finance Director Lapham.

Commissioners discussed recent meetings they had attended including a First Children’s Finance Core Team Grant meeting, finance meeting, Hiawatha Valley Mental Health Meeting, and a Personnel Committee meeting.

The newly elected officials at the County would be sworn in at a ceremony at 8:30 a.m. on Tuesday, January 3, 2022 at the Historic Courthouse Building Room 222.

Closing Public Comment:

None.

Commissioner Severson moved, Commissioner Burns seconded, motion unanimously carried to adjourn the meeting at 10:20 a.m. The next meeting would be regular meeting on December 27, 2022.

BOARD OF COUNTY COMMISSIONERS

HOUSTON COUNTY, MINNESOTA

By: _____
Greg Myhre, Chairperson

Attest: _____
Donna Trehus, Auditor/Treasurer

2022 Employee Recognition Awards

40 Year Awards

Carolyn J Olson	6/2/1982
-----------------	----------

30 Year Awards

Mary A Zaffke	2/27/1992
---------------	-----------

Sharen K Lapham	6/22/1992
-----------------	-----------

Cynthia E Melbostad	9/2/1992
---------------------	----------

20 Year Award

Matthew Q Papenfuss	1/14/2002
---------------------	-----------

Nancy A Welsh	1/8/2002
---------------	----------

Mary B Betz	4/1/2019	Includes Non-Consecutive
-------------	----------	--------------------------

15 Year Awards

Janet A Becker	7/30/2007
----------------	-----------

10 Year Award

Jason B Quandahl	1/20/2012
------------------	-----------

Nathan P Smith	7/30/2012
----------------	-----------

Jacquelyn M Snodgrass	4/4/2012
-----------------------	----------

Tammy M Petersen	5/29/2012
------------------	-----------

Heather A Berger	7/23/2012
------------------	-----------

Heidi L Harms	10/1/2012
---------------	-----------

Lisa K Arneson	4/8/2014	Includes Non-Consecutive
----------------	----------	--------------------------

**HOUSTON COUNTY
AGENDA REQUEST FORM
December 27, 2022**

Date Submitted: December 20, 2022

On behalf of Tess Kruger, HRD/Facilities Mgr.

ACTION

Elected Officials 2023 Salaries – Recorder, Sheriff and Commissioners

- **Set the 2023 Recorder's annual salary at \$76,273.60**
- **Set the 2023 Sheriff's annual salary at \$113,042.50**
- **Consider the 2023 –Board of Commissioners annual salary. Current salary is \$19,016.34 and has been since 2014. (3% increase = \$19,586.83)**

APPOINTMENT REQUEST

- **None**

<u>Reviewed by:</u>	☒	HR Director	☒	Sheriff	
	☒	Finance Director	☐	Engineer	
	☐	IS Director	☐	PHHS (indicate other dept)	
	☐	County Attorney	☒	Recorder	
	☐	Environmental Svcs	☐		
<u>Recommendation:</u>					
<u>Decision:</u>					

**HOUSTON COUNTY
AGENDA REQUEST FORM
December 27, 2022**

Date Submitted: 12/21/2022

By: Carol Lapham, Finance Director

CONSENT AGENDA REQUEST

APPOINTMENT REQUEST

2022 Employee Recognition

ACTION REQUEST

Adopt 2023 Tax Levy Resolution 22-XX

Adopt 2023 Operating Budget Resolution 22-XX.

Approve the final transfer of funds in the amount of \$110,644.72 from the Highway fund to the Capital Projects fund effective 12/31/2022.

Approve the designation of the major funds for 2023 as General, Road & Bridge, and Human Services with Debt Service designated as a minor fund.

Approve 2022 budget amendments to include General Fund, Road & Bridge, Recorder's Technical Equipment, and Compliance Fund adjustments.

Reviewed by:

____ HR Director

____ Finance Director

____ IS Director

____ County Attorney

____ Environmental Svcs

____ Sheriff

____ Engineer

____ PHHS

____ (indicate
other dept)

Recommendation:

Decision:



CAROLL
12/20/22 11:10AM

37 Capital Projects Fund

TRIAL BALANCE REPORT
As of 12/2022

Report Basis: Cash

Account

Beginning Actual Actual
Balance Month Year-To-Date

Current
Balance

809 CAPITAL PROJECT-HIGHWAY FACILITY

1001 CASH -----Assets-----

Total Assets

-----Liabilities and Balance-----

Liabilities

Total Liabilities

Fund Balance

2881 FUND BALANCE (UNRESERVED/UNDESIGN)

2885 Revenue Control

2887 Expenditure Control

Total Fund Balance

Total Liabilities and Balance

37 Capital Projects Fund

		472.19	8,473.25-	111,116.91-	110,644.72-
		472.19	8,473.25-	111,116.91-	110,644.72-
		0.00	0.00	0.00	0.00
		472.19-	0.00	0.00	472.19-
		0.00	0.00	608,624.99-	608,624.99-
		0.00	8,473.25	719,741.90	719,741.90
		472.19-	8,473.25	111,116.91	110,644.72
		472.19-	8,473.25	111,116.91	110,644.72
		0.00	0.00	0.00	0.00

Houston County Agenda Request Form

Date Submitted: December 21, 2022

Board Date: December 27, 2022

Person requesting appointment with County Board: Brian Pogodzinski

Issue:

The Board previously discussed applying for Transportation Alternatives funds to pave the shoulders along CSAH 21 between Houston and La Crescent to be used as a bicycle route. A "Sponsoring Agency Resolution" and "Resolution Agreeing to Maintain Facility" are required to be submitted with the Transportation Alternatives application for the project.

Attachments/Documentation for the Board's Review:

Sponsoring Agency Resolution

Resolution Agreeing to Maintain Facility

Justification:

Required resolutions to go along with application.

Action Requested:

Approval of the two resolutions.

For County Use Only

Reviewed by:

____ County Auditor

____ County Attorney

____ Zoning Administrator

____ Finance Director

____ County Engineer

____ Environmental Services

____ IS Director

____ Other (indicate dept)

Recommendation:

Decision:

All agenda request forms must be submitted to the County Auditor by 4:00 p.m. on Monday in

RESOLUTION NO. 22-62

Agreement for Sponsoring Agency of Paved Shoulders along CSAH 21

Be it resolved that Houston County agrees to act as sponsoring agency for the project identified as SAP 028-621-016 CSAH 21 Paving seeking Transportation Alternatives funds and has reviewed and approved the project as proposed. Sponsorship includes a willingness to secure and guarantee the local share of costs associated with this project and responsibility for seeing this project through to its completion, with compliance of all applicable laws, rules, and regulations.

Be it further resolved that Brian Pogodzinski, County Engineer is hereby authorized to act as agent on behalf of this sponsoring agency.

*******CERTIFICATION*******

STATE OF MINNESOTA

COUNTY OF HOUSTON

I, Donna Trehus, do hereby certify that the foregoing Resolution is a true and correct copy of the Resolution presented to and adopted by Houston County at a duly authorized meeting thereof held on the 27th day of December 2022, as shown by the minutes of said meeting in my possession.

WITNESS my hand and seal of my office the 27th of December 2022.

(SEAL)

Donna Trehus, County Auditor-Treasurer

RESOLUTION NO. 22-63

Agreement to Maintain Paved Shoulders along CSAH 21

WHEREAS: The Federal Highway Administration (FHWA) requires that states agree to operate and maintain facilities (paved shoulders) constructed with federal transportation funds for the useful life of the improvement and not change the use of right of way or property ownership acquired without prior approval from the FHWA; and

WHEREAS: Transportation Alternatives projects receive federal funding; and

WHEREAS: the Minnesota Department of Transportation (MnDOT) has determined that for projects implemented with alternative funds, this requirement should be applied to the project proposer; and

WHEREAS: Houston County is the sponsoring agency for the transportation alternatives project identified as SAP 028-621-016 CSAH 21 Paving.

THEREFORE BE IT RESOLVED THAT: the sponsoring agency hereby agrees to assume full responsibility for the operation and maintenance of property and facilities related to the aforementioned transportation alternatives project.

*******CERTIFICATION*******

STATE OF MINNESOTA

COUNTY OF HOUSTON

I, Donna Trehus, do hereby certify that the foregoing Resolution is a true and correct copy of the Resolution presented to and adopted by Houston County at a duly authorized meeting thereof held on the 27th day of December 2022, as shown by the minutes of said meeting in my possession.

WITNESS my hand and seal of my office the 27th of December 2022.

(SEAL)

Donna Trehus, County Auditor-Treasurer

Houston County Agenda Request Form

Date Submitted: December 14, 2022

Board Date: December 27, 2022

Person requesting appointment with County Board: Brian Pogodzinski

Issue:

Board discussion on the Courthouse West parking lot project. Requesting approval to proceed with bidding the project.

Attachments/Documentation for the Board's Review:

Plans for the parking lot are attached.

Justification:

Action Requested:

Vote to proceed.

For County Use Only

Reviewed by:

_____ County Auditor	_____ County Attorney	_____ Zoning Administrator
_____ Finance Director	_____ County Engineer	_____ Environmental Services
_____ IS Director	_____ Other (indicate dept)	

Recommendation:

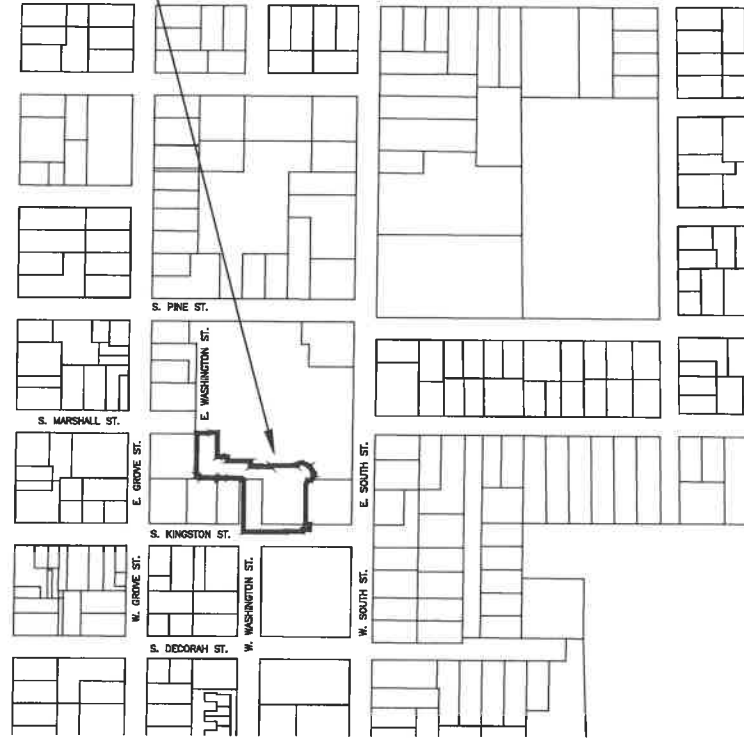
Decision:

All agenda request forms must be submitted to the County Auditor by 4:00 p.m. on Monday in order to be considered for inclusion on the following week's agenda. The Board will review all requests and determine if the request will be heard at a County Board meeting.

HOUSTON COUNTY COURTHOUSE WEST PARKING LOT RECONSTRUCTION

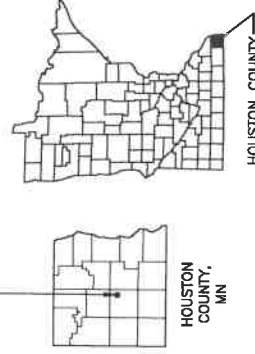
304 S. MARSHALL ST.
CALEDONIA, MN 55921

CONSTRUCTION PLANS FOR CONCRETE CURB & GUTTER, ADA IMPROVEMENTS, STORM SEWER, LIGHTING, ALTERNATE REMOVALS, AND BIT SURFACING
LOCATED AT THE JCT OF E. WASHINGTON STREET AND S. KINGSTON STREET IN CALEDONIA, MN



PROJECT LOCATION
CP 2022-08

PROJECT LOCATION



THE FOLLOWING UTILITY OWNERS HAVE FACILITIES WITHIN THE PROJECT LIMITS OF THIS PROJECT:

- COASTAL LINK - UNDERGROUND COMMUNICATIONS
- ADRENEX - UNDERGROUND COMMUNICATIONS
- EDWARDS - UNDERGROUND COMMUNICATIONS
- ST. LOUIS - UNDERGROUND COMMUNICATIONS
- MINNESOTA ENERGY RESOURCES - GAS

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL 1. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASSE 38-02 ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MAINTOOL, INCLUDING THE FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
"STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

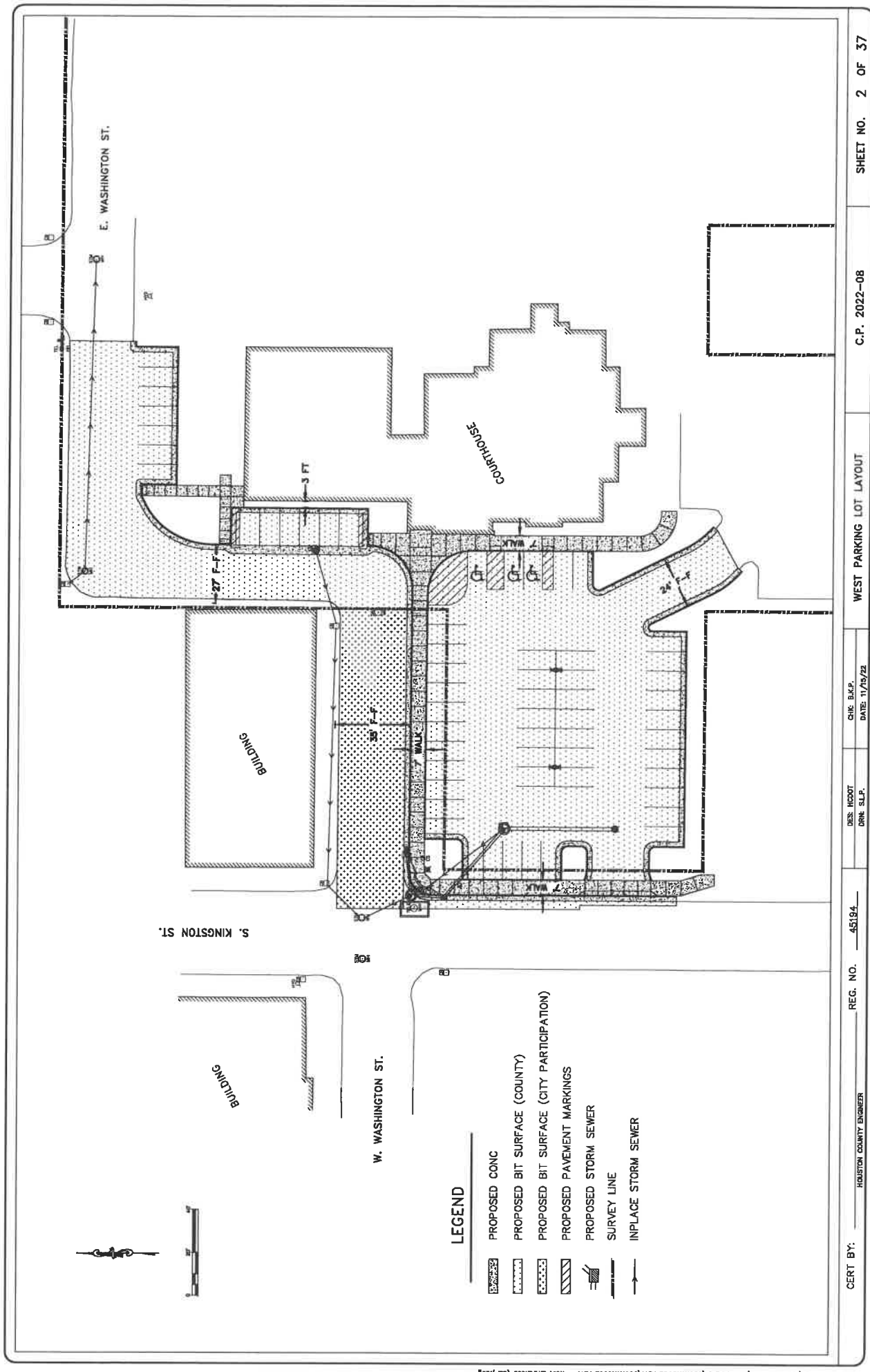
SHEET NO. 1	TITLE SHEET
SHEET NO. 2	LAYOUT PLAN
SHEET NO. 3	ESTIMATED QUANTITIES
SHEET NO. 4	TYPICAL SECTIONS
SHEET NO. 5-6	QUANTITY TABULATIONS
SHEET NO. 7-8	MISC. DETAILS
SHEET NO. 9-10	TRAFFIC CONTROL PLAN & DETAILS
SHEET NO. 11	PAVEMENT MARKING PLAN & DETAILS
SHEET NO. 12	STORM DRAIN INLET PROTECTION DETAILS
SHEET NO. 13-18	FIG. 5-297.405
SHEET NO. 19-22	PED. CURB RAMP DETAILS FIG. 5-297.250
SHEET NO. 23	DRIVEWAY AND SIDEWALK DETAILS FIG. 5-297.254
SHEET NO. 24-25	EXISTING UTILITY LAYOUT
SHEET NO. 26-28	REMOVAL PLANS
SHEET NO. 29	LIGHTING PLANS & DETAILS
SHEET NO. 30	GRADING PLAN
SHEET NO. 31-32	SUBGRADE EXCAVATION PLAN
SHEET NO. 33	ALIGNMENT PLAN & DETAILS
SHEET NO. 34-36	STORM SEWER UTILITY PLAN & DETAILS
SHEET NO. 37	EROSION CONTROL PLAN

THIS PLAN CONTAINS 37 SHEETS

TOTAL CONSTRUCTION AREA: 0.92 AC

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.

APPROVED: HOUSTON COUNTY ENGINEER L.C. NO. 46184, DATE 10/1/2022
BRIAN K. FORDZISER



H:\Project Shared\DWG CIVIL\DWG COURTHOUSE ADA - West Entrance (SLP).dwg

SCHEDULE OF ESTIMATED QUANTITIES

LINE NO.	TAB	NOTES	ITEMS	DESCRIPTION	UNITS	HOUSTON COUNTY W/ PARKING LOT / E. WASHINGTON ST.	CITY OF CALEDONIA E. WASHINGTON ST.	TOTAL ESTIMATED QTY
1			2104.502	REMOVE CATCH BASIN	EACH	3		3
2			2104.502	REMOVE LIGHT FOUNDATION	EACH	1		1
3			2104.502	SALVAGE CASTING	EACH	1		1
4			2104.502	SALVAGE LIGHTING UNIT	EACH	1		1
5			2104.503	SAVING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	163	48	231
6			2104.503	REMOVE SEWER PIPE (STORAGE)	LIN FT	55		55
7			2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD		476	476
8			2105.607	COMMON EXCAVATION	CU YD	80		80
9			2112.604	SUBGRADE PREPARATION	SQ YD	2877	476	3353
10	B	5	2211.509	AGGREGATE BASE CLASS 5	TON	446	50	496
11			2300.500	TYPE SP 12.5 WEARING COURSE (W/12 C)	TON	486	81	567
12	A		2503.503	12" RC PIPE SEWER	LIN FT	130		130
13			2504.602	ADJUST VALVE BOX - WATER	EACH	2		2
14			2506.502	ADJUST CASTING	EACH	1	1	2
15	A		2506.502	CONSTRUCT DRAINAGE STRUCTURE TYPE 1	EACH	2		2
16	A		2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SD-48	EACH	1		1
17	A		2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN H	EACH	2		2
18	A		2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020	EACH	1		1
19	B		2521.518	4" CONCRETE WALK	SQ FT	1225		1225
20	B		2521.518	INTEGRAL WALK AND CURB	SQ FT	1701		1701
21	B		2531.504	8" CONCRETE DRIVEWAY PAVEMENT	SQ YD	35		35
22	B	2	2531.504	CONCRETE WALK ADA	SQ FT	429		429
23	B		2531.604	8" CONCRETE VALLEY GUTTER	SQ YD	28		28
24	B		2531.603	CONCRETE CURB AND GUTTER	LIN FT	910		910
25	B		2531.618	TRUNCATED DOMES	SQ FT	75		75
26			2545.602	ADJUST MANHOLE	EACH	1		1
27			2545.503	2" NON-METALLIC CONDUIT	LIN FT	158		158
28			2545.502	LIGHT FOUNDATION DESIGN E	EACH	1		1
29			2545.502	LIGHT FOUNDATION DESIGN E MODIFIED	EACH	2		2
30		9	2545.502	LIGHT UNIT TYPE SPECIAL	EACH	2		2
31			2545.602	INSTALL LIGHTING UNIT	EACH	1		1
32	C	1	2583.601	TRAFFIC CONTROL	LUMP SUM	0.94	0.08	1
33			2573.502	STORM DRAIN INLET PROTECTION	EACH	5		5
34			2574.507	COMMON TOPSOIL BORROW	CU YD	43		43
35			2575.501	TURF ESTABLISHMENT	LUMP SUM	1		1
36		10	2582.503	4" SOLID LINE PAINT	LIN FT	1436		1436
37		11	2582.503	8" SOLID LINE PAINT	LIN FT	64	67	131
38		4	2532.518	PAVEMENT MESSAGE PAINT	SQ FT	11		11

REMOVALS & ALTERNATE								
39		3, 6	2101.501	CLEARING & GRUBBING	LUMP SUM	1		1
40		8	2104.503	REMOVE CURB AND GUTTER	LN FT	681		681
41		8	2104.503	REMOVE WOOD EDGER	LN FT	220		220
42		8	2104.503	REMOVE CONCRETE CURB	LN FT	199		199
43		8	2104.504	REMOVE BITUMINOUS PAVEMENT (ALTERNATE)	SQ YD	2965		2965
44		8	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	46		46
45		8	2104.516	REMOVE CONCRETE WALK	SQ FT	2057		2057

QUANTITY NOTES:

- PRO RATA ITEM.
- SEE SPECIAL PROVISIONS.
- SEE SHEET NO. 25 FOR DETAILS.
- PROVIDED FOR 3 HANDCAP PARKING SYMBOLS (24" X 28")
- PROVIDED FOR THE FOLLOWING CONSTRUCTION ITEMS:
 - 42 TON ~ BASE RESTORATION FOR STORM SEWER
 - 11 TON ~ BASE RESTORATION FOR LIGHTING CONSTRUCTION
 - 293 TON ~ BASE FOR CONCRETE CONSTRUCTION
 - 150 TON ~ SUBGRADE PREPARATION
- PROVIDED FOR EXCAVATION OF EXISTING AND PROPOSED PARKING LOT ISLANDS.
- DELIVER TO THE CITY OF CALEDONIA'S MAINTENANCE YARD.
- THE COUNTY RESERVES THE RIGHT TO NOT AWARD THESE ITEMS AND PERFORM THE WORK.
- SEE SHEET NO. 27 FOR DETAILS.
- YELLOW.
- WHITE.
- PROVIDED FOR SHAPING PRIOR TO THE BITUMINOUS WEARING COURSE PLACEMENT.
- TO BE INSTALLED ON NEW FOUNDATION LOCATION.

CERT. BY: _____ REG. NO. 45194 DES. HODOT DATE: 11/17/22 CH. B.A.P. DRG. SLP.

CONSTRUCTION NOTES:

SELECTED GRADING MATERIALS SHALL BE USED FOR ALL EMBANKMENT CONSTRUCTION AND SHALL CONSIST OF ALL SOILS ENCOUNTERED EXCEPT TOPSOILS, HIGHLY ORGANIC SOILS, DEBRIS, AND OTHER SUITABLE MATERIALS. IF SELECTED GRADING MATERIAL IS NOT AVAILABLE OR CANNOT BE OBTAINED FROM THE ONSITE EXCAVATIONS, BORROW MATERIALS SHALL BE FURNISHED FROM SOURCES SELECTED BY THE CONTRACTOR AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO BEING DELIVERED TO THE PROJECT.

THE DENSITY OF THE SUBGRADE AND THE AGGREGATE BASE SHALL BE ATTAINED BY THE METHOD OF QUALITY COMPACTION IN ACCORDANCE WITH THE REQUIREMENTS OF 2106.3G.2.

130% SHRINKAGE FACTOR USED FOR EMBANKMENT CONSTRUCTION.

WHEREVER THE WORD "INCIDENTAL" IS USED IN THIS PLAN, IT SHALL MEAN NO DIRECT COMPENSATION WILL BE MADE.

STANDARD PLATES

THE FOLLOWING STANDARD PLATES AS APPROVED BY F.H.W.A. SHALL APPLY ON THIS PROJECT	
PLATE NO.	DESCRIPTION
3000M	REINFORCED CONCRETE PIPE
3006H	GASKET JOINT FOR R.C. PIPE
4006L	MANHOLE OR CATCH BASIN PRECAST (DESIGNS G AND H)
4010I	CONCRETE ADJUSTING RINGS
4011E	PRECAST CONCRETE BASE
4020J	MANHOLE OR CATCH BASIN (FOR USE WITH OR WITHOUT TRAFFIC LOADS)
4024A	48" DIA. PRECAST SHALLOW DEPTH CATCH BASIN - DESIGN SD
7008A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
7100H	CONCRETE CURB AND GUTTER (DESIGN B & DESIGN V)
7111J	INSTALLATION OF CATCH BASIN CASTINGS (CONCRETE CURB AND GUTTER)
8000K	STANDARD BARRICADES
8127E	LIGHT FOUNDATION - DESIGN E CAST IN PLACE 40" POLE OR LESS

TABULATION INDEX

TAB	SHEET NO.	DESCRIPTION
A	5	STORM SEWER TABULATION
B	6	CONCRETE TABULATION
C	10	ESTIMATE OF TRAFFIC CONTROL DEVICES

BASIS OF QUANTITIES:

AGGREGATE BASE = 138 LBS/CU FT
BITUMINOUS = 113 LBS/INCH/SQ YD

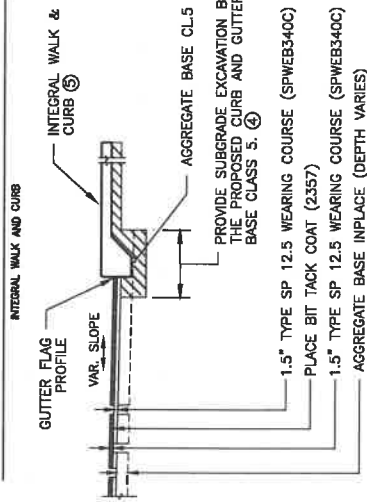
ESTIMATED QUANTITIES C.P. 2022-08

SHEET NO. 3 OF 37

NOTES

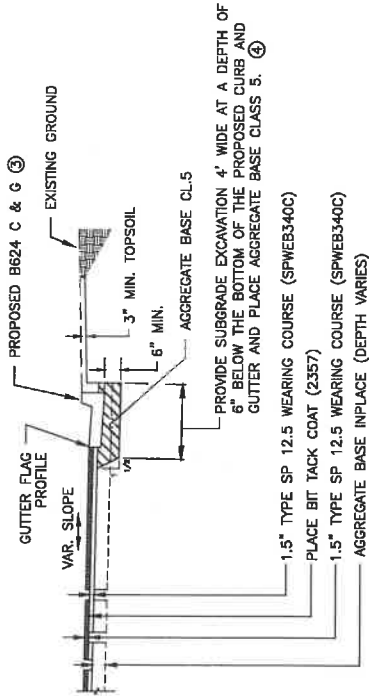
- ① APPLIES TO BOTH E. BOUND AND W. BOUND SIDES.
- ② SIDEWALK AND C & G DETAIL APPLIES TO EAST BOUND LANE ONLY.
- ③ SEE SHEET NO 29 OF 37 FOR REVERSE OUTFLOW GUTTER LOCATIONS.
- ④ SUBGRADE EXCAVATION REQUIRED FOR ALL CONCRETE CONSTRUCTION ITEMS IS INCIDENTAL.
- ⑤ SEE SHEET NO. 8 OF 37 FOR INTEGRAL WALK AND CURB DETAIL
- ⑥ BITUMINOUS MATERIAL FOR TACK COAT SHALL BE PLACED PRIOR TO EACH CONSECUTIVE LIFT OF BITUMINOUS MIXTURE.
- ⑦ ALL DIMENSIONS AND SLOPES ARE APPROXIMATE; TYPICAL SECTIONS ARE NOT DRAWN TO SCALE.
- ⑧ WHERE CONNECTING TO THE INPLACE ROADWAY AT THE TERMINI OF PROPOSED NEW CONSTRUCTION PROVIDE FOR A 1:400 VERTICAL PAVEMENT TAPER.

TYPICAL PARKING LOT SECTION



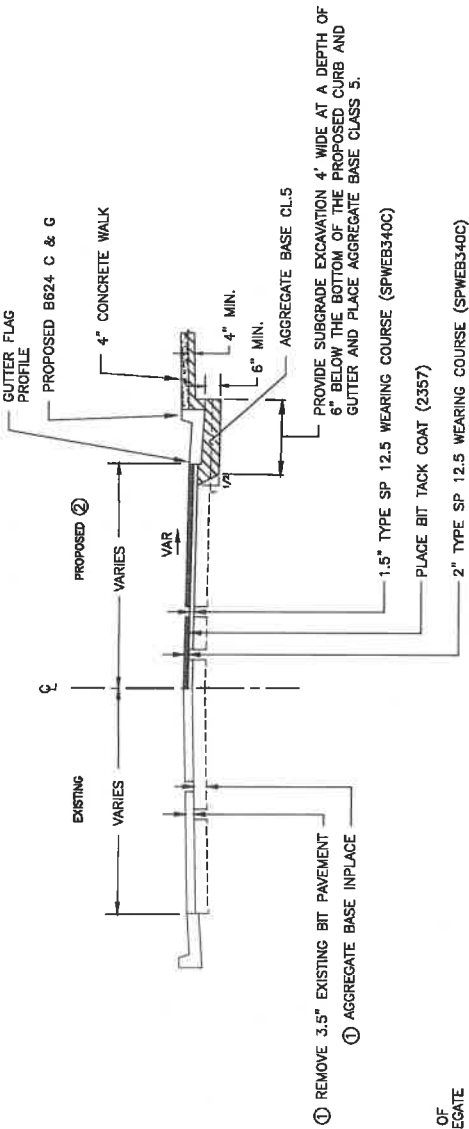
TYPICAL PARKING LOT SECTION

C & G WITH BOULEVARD



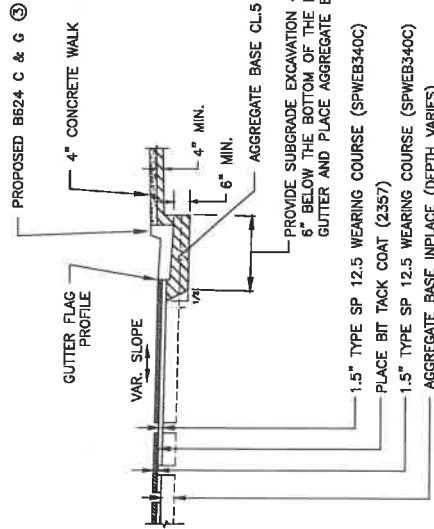
TYPICAL STREET SECTION

EAST WASHINGTON ST. EB & WB



TYPICAL PARKING LOT SECTION

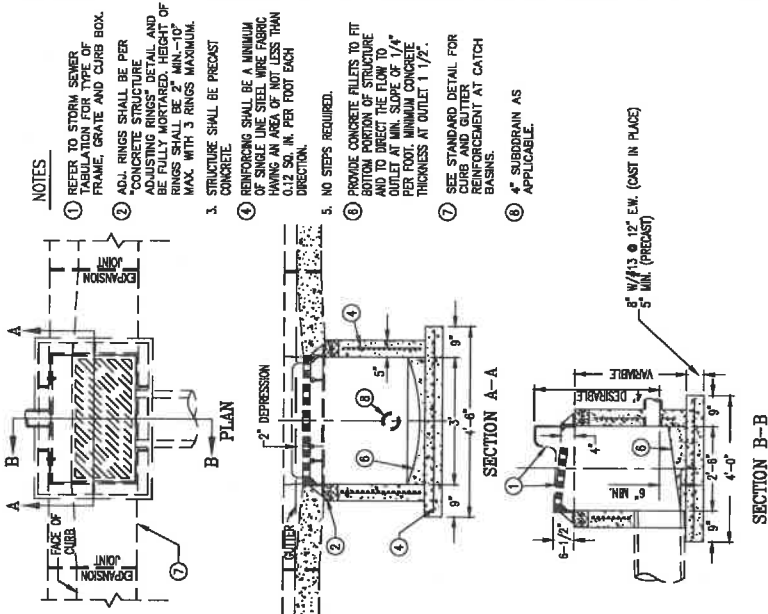
C & G WITH SIDEWALK DETAIL



STORM SEWER TABULATION														A		
STRUCTURE NO.	FLOWS TO	STRUCTURE LOCATION (1)			STRUCTURE DESIGN (5)						TOP OF CASTING & BEARING TO	INLET ELEV. & BEARING FROM	% SLOPE	12" RC PIPE SEWER	REMARKS	
		ALIGNMENT	STATION	OFFSET	TYPE 1 (2)	DESIGN H	DESIGN SD-48	DESIGN EACH	EACH	CASTING ASSEMBLY						PRECAST MANHOLE COVER (4)
5-1	5-2	STORM SEWER	0+00.00	0'			1			NEENAH R-2535-A		1372.94	1170.35 - N	1.00	52	
5-2	5-3	STORM SEWER	0+51.62	0'				1		NEENAH R-2535-A	OFFSET	1177.65	1169.77 - NW	1.00	42	
5-3	5-4	STORM SEWER	0+99.63	0'		1				NEENAH R-246-AL		1172.68	1165.25 - N	1.00	35	
5-5	5-4	STORM SEWER	1+06.83	0'		1				NEENAH R-246-AL		1173.37	1169.30 - W	1.00	21	
5-4	EXISTING	STORM SEWER WASHINGTON ST CURB FLAG	1+25.63	0'					1	NEENAH R-1726-A	OFFSET	1173.20	1169.00 - NW	1.00		CONNECT TO EXISTING 12" RC PIPE SEWER
5-6	EXISTING		3+18.09	0.17' RT.		1				NEENAH R-2535-A		1175.65	1173.73 - W			CONNECT TO EXISTING 8" PVC PIPE SEWER
TOTALS					2	2	1	1								130

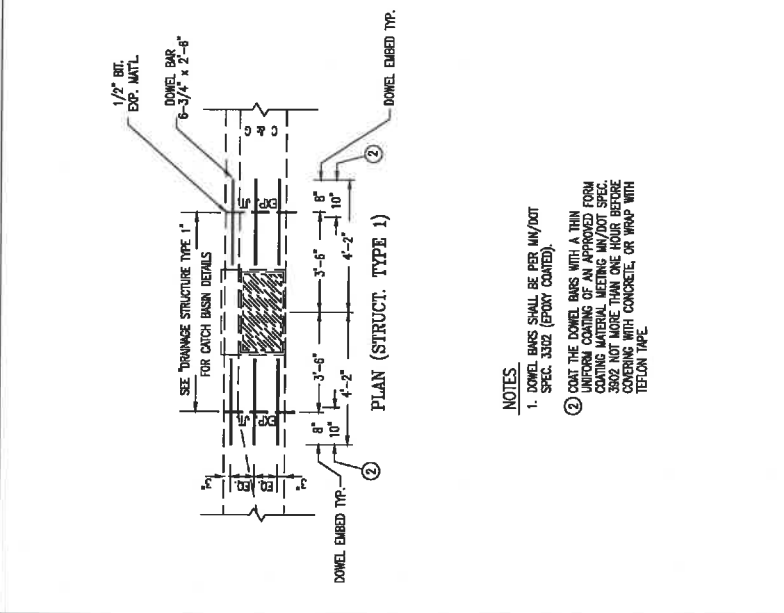
- (1) LOCATION IS GIVEN TO THE CENTER OF THE STRUCTURE.
 (2) SEE SHEET 7 OF 37 FOR DETAILS.
 (3) CONSTRUCT PRECAST MANHOLE COVER OPENING OFFSET AND STEP LOCATIONS ON THE OUTLET SIDE OF STRUCTURE.
 (4) SEE MANDOT STANDARD PLATE 4020A.
 (5) INCLUDES CASTING ASSEMBLY.

C.P. 2022-08



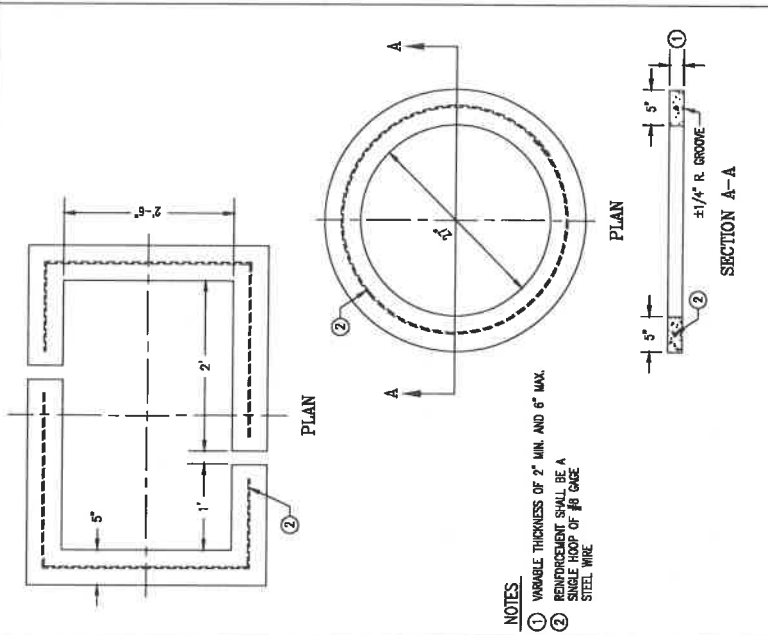
- NOTES**
1. REFER TO STORM SEWER TABULATION FOR TYPE OF FRAME, GRATE AND CURB BOX.
 2. "CONCRETE STRUCTURE ADJUSTING RINGS" DETAIL AND REINFORCEMENT SHALL BE PER DETAIL OF ADJUSTING RINGS. RINGS SHALL BE 2" MIN. TO MAX. WITH 3 RINGS MAXIMUM.
 3. STRUCTURE SHALL BE PRECAST CONCRETE.
 4. REINFORCING SHALL BE A MINIMUM OF SINGLE LINE STEEL WIRE FABRIC 0.12 SQ. IN. PER FOOT EACH DIRECTION.
 5. NO STEPS REQUIRED.
 6. PROVIDE CONCRETE RILLETS TO FIT BOTTOM PORTION OF STRUCTURE AND TO DIRECT THE FLOW TO OUTLET AT MIN. SLOPE OF 1/4" PER FOOT. MINIMUM CONCRETE THICKNESS AT OUTLET 1 1/2".
 7. SEE STANDARD DETAIL FOR CURB AND GUTTER REINFORCEMENT AT CATCH BASINS.
 8. 4" SUBGRADE AS APPLICABLE.

DRAINAGE STRUCTURE TYPE 1



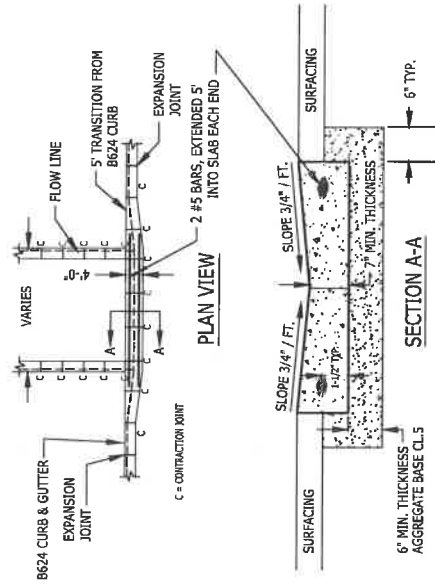
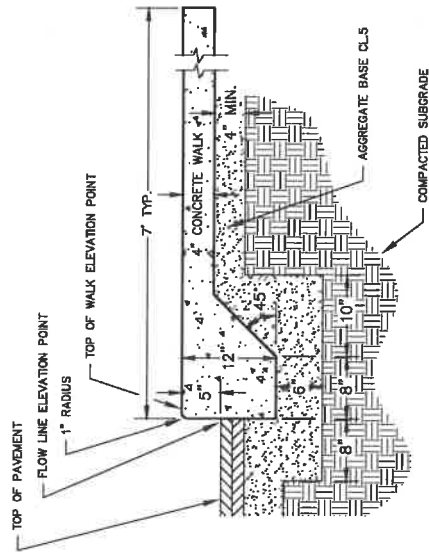
- NOTES**
1. DOWEL BARS SHALL BE PER MW/DOT SPEC. 302 (SPOT COATED).
 2. COAT THE DOWEL BARS WITH A THIN UNIFORM COATING OF AN APPROVED FORM COATING MATERIAL MEETING MW/DOT SPEC. 3022 NOT MORE THAN ONE HOUR BEFORE COVERING WITH CONCRETE, OR WRAP WITH TEF-ON TAPE.

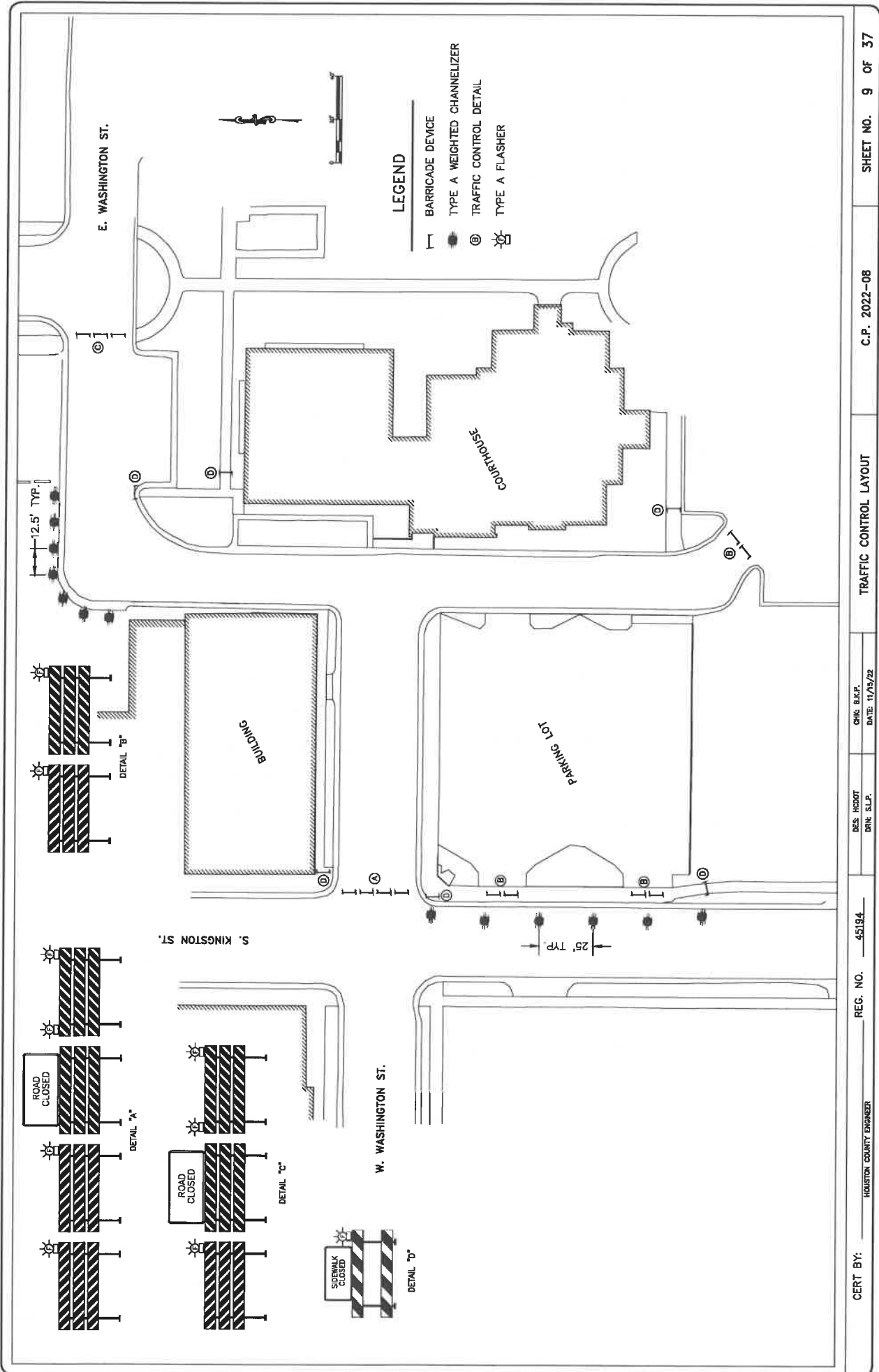
CURB & GUTTER REINFORCEMENT AT CATCH BASINS



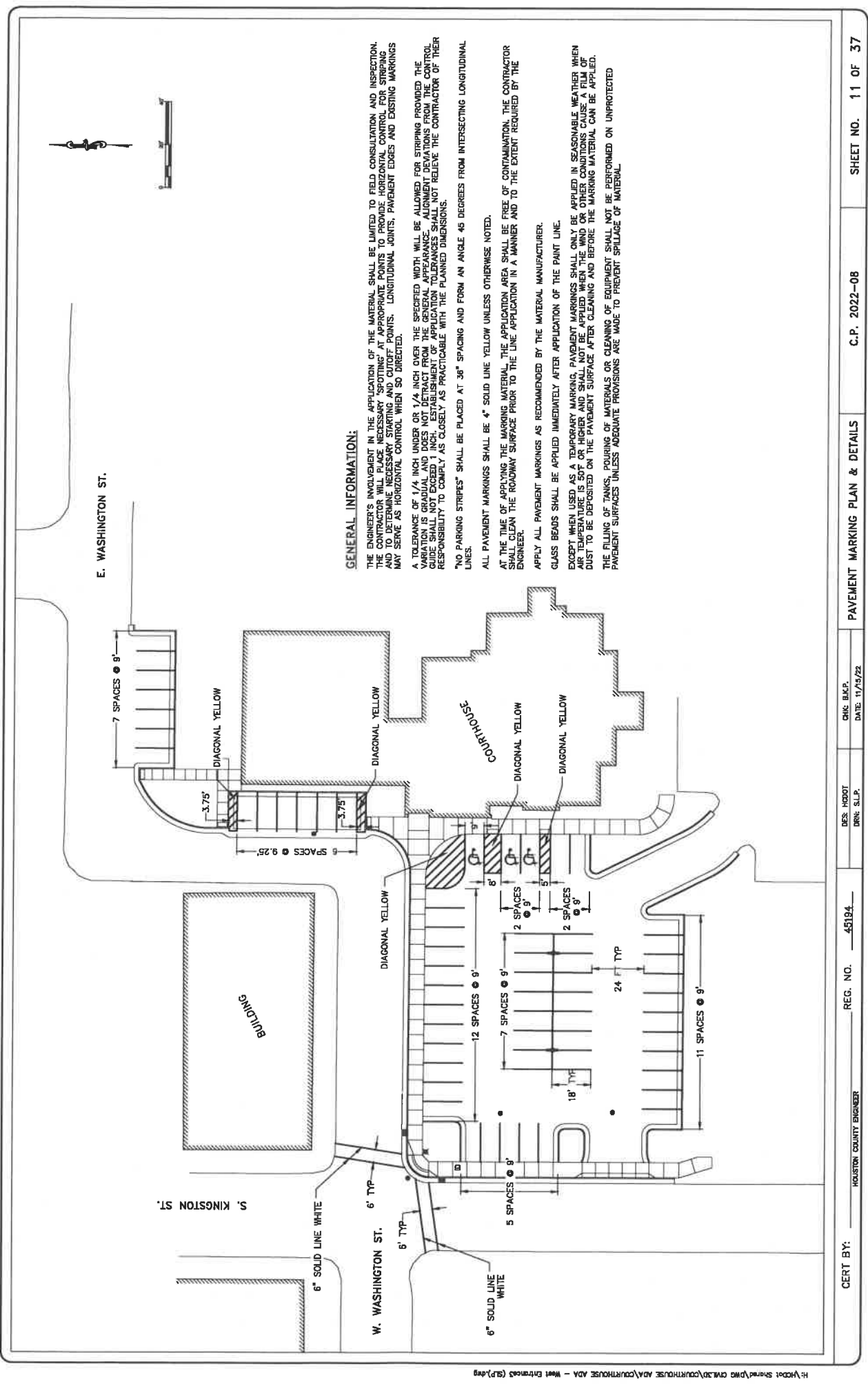
- NOTES**
1. VARIABLE THICKNESS OF 2" MIN. AND 6" MAX.
 2. REINFORCEMENT SHALL BE A SINGLE HOOP OF #6 GAGE STEEL WIRE.

CONCRETE STRUCTURE ADJUSTING RINGS





H:\V\CDOT Shared\DWG CHL3D\COURTHOUSE ADA\COURTHOUSE ADA - West Entrance (RFP).dwg



GENERAL INFORMATION:

THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPLICATION OF THE MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS AND TO DETERMINE NECESSARY STARTING AND STOPPING POINTS, LONGITUDINAL JOINTS, PAVED EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.

A TOLERANCE OF 1/4 INCH UNDER OR 1/4 INCH OVER THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE MATERIAL IS APPLIED IN ACCORDANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPLICATION OF THE MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS AND TO DETERMINE NECESSARY STARTING AND STOPPING POINTS, LONGITUDINAL JOINTS, PAVED EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.

"NO PARKING STRIPES" SHALL BE PLACED AT 36" SPACING AND FORM AN ANGLE 45 DEGREES FROM INTERSECTING LONGITUDINAL LINES.

ALL PAVEMENT MARKINGS SHALL BE 4" SOLID LINE YELLOW UNLESS OTHERWISE NOTED.

AT THE TIME OF APPLYING THE MARKING MATERIAL, THE APPLICATION AREA SHALL BE FREE OF CONTAMINATION. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE PRIOR TO THE LINE APPLICATION IN A MANNER AND TO THE EXTENT REQUIRED BY THE ENGINEER.

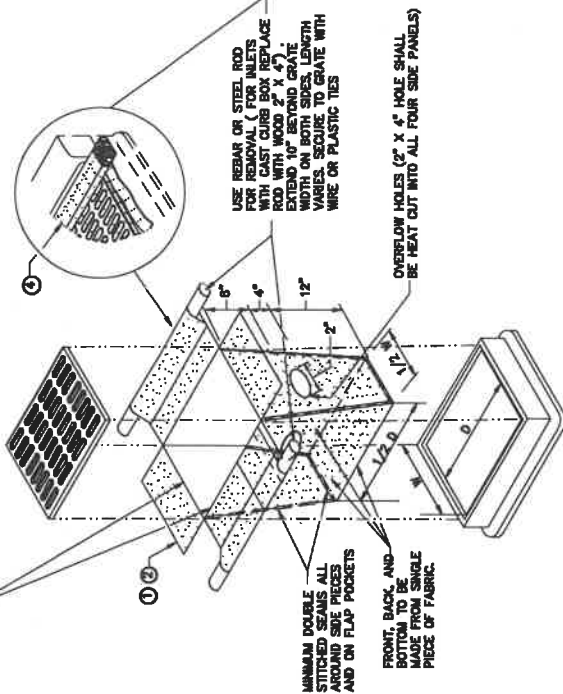
APPLY ALL PAVEMENT MARKINGS AS RECOMMENDED BY THE MATERIAL MANUFACTURER.

GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE PAINT LINE.

EXCEPT WHEN USED AS A TEMPORARY MARKING, PAVEMENT MARKINGS SHALL ONLY BE APPLIED IN SEASONABLE WEATHER WHEN THE AIR TEMPERATURE IS 50°F OR HIGHER AND SHALL NOT BE APPLIED WHEN THE WIND OR OTHER CONDITIONS CAUSE A FILM OF DUST TO BE DEPOSITED ON THE PAVEMENT SURFACE AFTER CLEANING AND BEFORE THE MARKING MATERIAL CAN BE APPLIED.

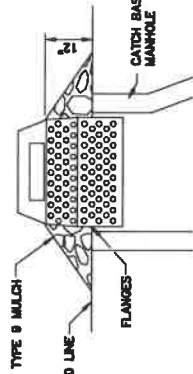
THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF MATERIAL.

INLET SPECIFICATIONS AS PER THE PLAN
DIMENSION LENGTH AND WIDTH TO MATCH
FLAP POCKET



FILTER BAG INSERT ③

(CAN BE INSTALLED IN ANY INLET TYPE
WITH OR WITHOUT A CURB BOX)



SEDIMENT CONTROL INLET HAT

NOTE:
THE SEDIMENT CONTROL BARRIER SHALL BE A METAL
OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE
THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW
FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING,
FLANGES AND A LB/CORNER.

ENDS SECURELY CLOSED TO
PREVENT LOSS OF OPEN GRADED
AGGREGATE FILL. SECURED WITH
50 PSL ZIP TIE.

3/16" THICK (MIN.)
STEEL COVER

6" DIAMETER
POLYETHYLENE

2" 2 1/2"

8"

D=2"

TUBE RISER

ADJUST LEVEL OF FILTER
SOCK TO BE BELOW ROAD
SURFACE ELEV. ⑤

3/16" THICK (MIN.)
STEEL PLATE

PERSPECTIVE VIEW

8" DIA.

3/16" THICK (MIN.)
STEEL PLATE

TUBE RISER

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

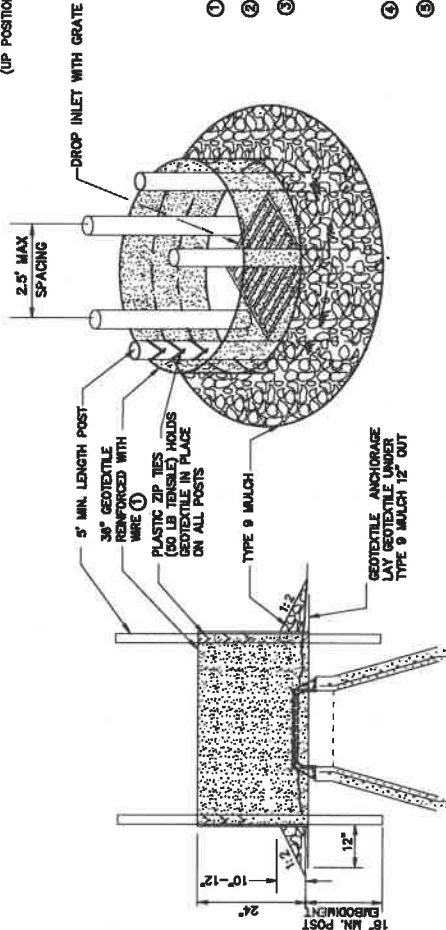
SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

SILT FENCE RING AND ROCK FILTER BERM
USE WHERE INLET DRAINS IN AN AREA WITH SLOPES AT 1:3 OR LESS



ROCK LOG/COMPOST LOG

ENDS SECURELY CLOSED TO
PREVENT LOSS OF OPEN GRADED
AGGREGATE FILL. SECURED WITH
50 PSL ZIP TIE.

3/16" THICK (MIN.)
STEEL COVER

6" DIAMETER
POLYETHYLENE

2" 2 1/2"

8"

D=2"

TUBE RISER

ADJUST LEVEL OF FILTER
SOCK TO BE BELOW ROAD
SURFACE ELEV. ⑤

3/16" THICK (MIN.)
STEEL PLATE

PERSPECTIVE VIEW

8" DIA.

3/16" THICK (MIN.)
STEEL PLATE

TUBE RISER

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

POP-UP HEAD

SECTION
(UP POSITION)

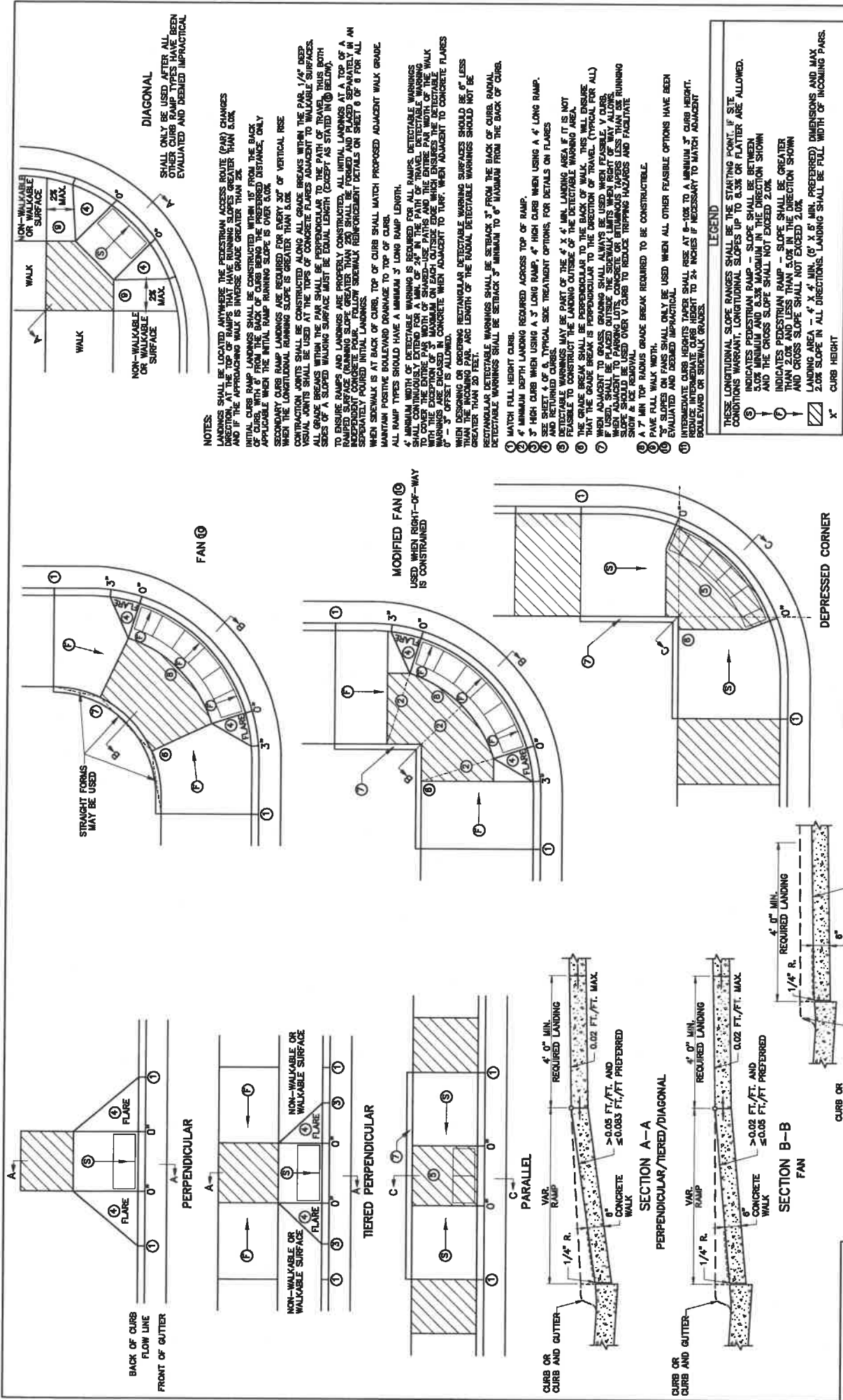
SECTION
(DOWN POSITION)

POP-UP HEAD

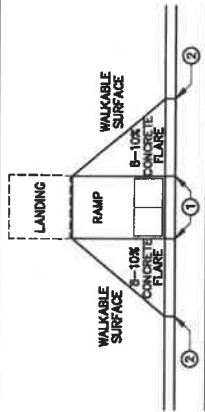
SECTION
(UP POSITION)

SECTION
(DOWN POSITION)

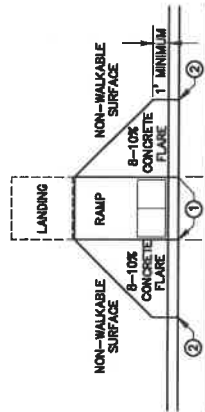
POP-UP HEAD



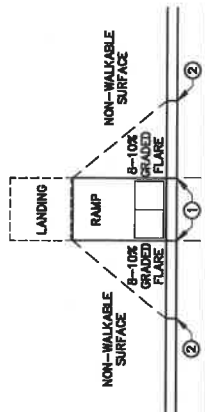
STANDARD PLAN 5-287.250		1 OF 6
APPROVED: 11-04-2021		REVISION: 11-04-2021
DESIGNED: <i>[Signature]</i>		STATE DESIGN ENGINEER
TRANSPORTATION		C.P. 2022-08
PEDESTRIAN CURB RAMP DETAILS		SHEET NO. 13 OF 37 SHEETS



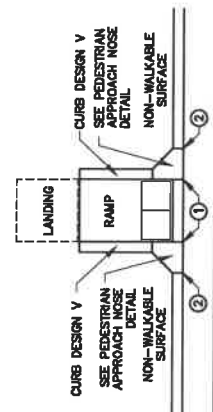
PAVED FLARES
ADJACENT TO WALKABLE SURFACE



PAVED FLARES
ADJACENT TO NON-WALKABLE SURFACE

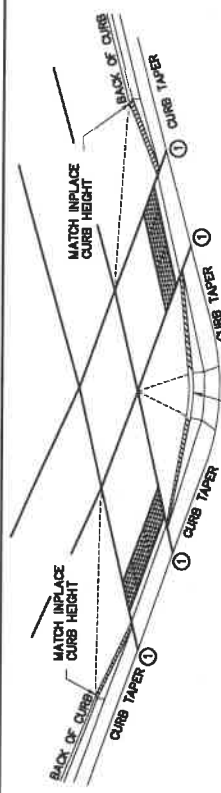


GRADED FLARES



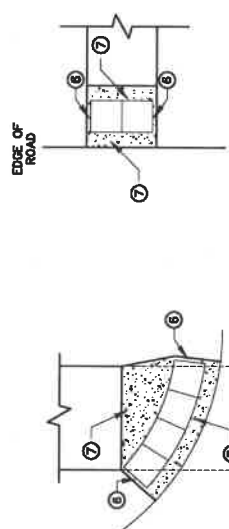
RETURNED CURB ⑤

TYPICAL SIDE TREATMENT OPTIONS ③ ④ ⑤



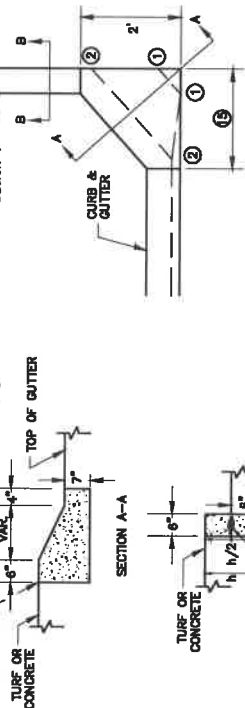
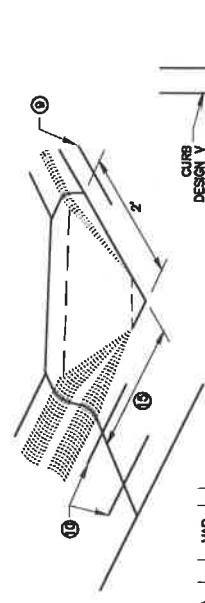
DETECTABLE EDGE WITH CURB AND GUTTER
3" MINIMUM CURB HEIGHT, 4" PREFERRED
(MEASURED AT FRONT FACE OF CURB)
FOR A MIN. 6' LENGTH (MEASURED ALONG FLOW LINE)

DETECTABLE EDGE WITH CURB AND GUTTER

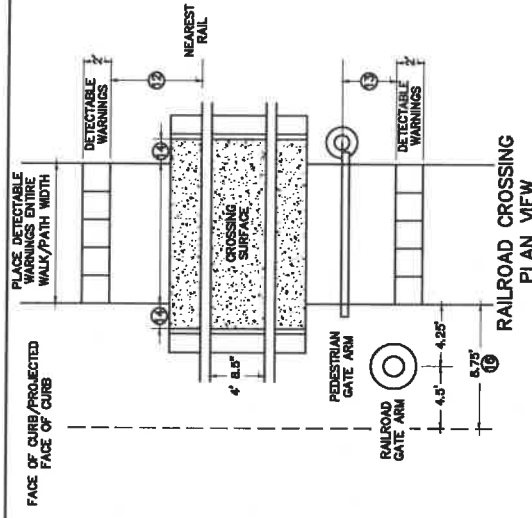


RADIAL DETECTABLE WARNING
DETECTABLE EDGE WITHOUT CURB AND GUTTER

RECTANGULAR DETECTABLE WARNING
DETECTABLE EDGE WITHOUT CURB AND GUTTER



PEDESTRIAN APPROACH NOSE DETAIL
(FOR RETURNED CURB SIDE TREATMENT)



RAILROAD CROSSING PLAN VIEW

NOTES:

SEE STANDARD PLATE 7038 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.
WHETHER A SURFACE IS WALKABLE OR NOT SHALL BE DETERMINED BY THE ENGINEER.
CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 6' LONG
MEASURED ALONG THE RAMP FROM THE BACK OF CURB.

- ① 0" CURB HEIGHT.
- ② FULL CURB HEIGHT.
- ③ SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE MOST APPROPRIATE SIDE TREATMENT BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALKS, ADVANTAGE PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.
- ④ TYPICALLY USED FOR MEDIAN AND ISLANDS.
- ⑤ WHEN NO CONCRETE FLARES ARE PROVIDED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 3" MAX. BETWEEN EDGE OF DOWNS AND EDGE OF CONCRETE.
- ⑥ IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS, DETECTABLE WARNINGS SHALL BE PLACED 1' FROM THE EDGE OF BRIDGEOUS ROADWAY AND/OR BRIDGEOUS SHARED-USE PATH TO PROVIDE VISUAL CONTRAST.
- ⑦ ALL CONCRETE DETECTABLE WARNINGS SHALL BE CONSTRUCTED WITH A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNINGS TO BE PLACED WITHIN 3" OF THE EDGE OF THE WALKABLE SURFACE TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TAPER AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.
- ⑧ DRILL AND GROUT 1 - NO. 4, 12" LONG REINFORCEMENT BAR (EPOXY COATED) WITH 3" MIN. COVER.
- ⑨ REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE V CURB.
- ⑩ BARS AND GROUT 2 - NO. 4, 12" LONG REINFORCEMENT BARS (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE CURB AND GUTTER.
- ⑪ SIDE TREATMENT EXAMPLES SHOWN ARE WHEN THE INITIAL LANDING IS APPROXIMATELY LEVEL WITH THE FULL HEIGHT CURB. SHEETS 1 & 2 TO MODIFY THE CURB HEIGHT AND TAPER. SHEETS 1 & 2 TO MODIFY THE CURB HEIGHT AND TAPER. SHEETS 1 & 2 TO MODIFY THE CURB HEIGHT AND TAPER.
- ⑫ NEAREST RAIL FOR SKEWED RAILWAYS IN NO INSTANCE SHALL THE DETECTABLE WARNING BE CLOSER THAN 12' MEASURED PERPENDICULAR TO THE NEAREST RAIL.
- ⑬ WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL 2' FROM THE APPROACHING SIDE OF THE GATE ARM. THIS CRITERIA GOVERNS OVER NOTE ⑩.
- ⑭ CROSSING SURFACE SHALL EXTEND 2' MINIMUM PAST THE OUTSIDE EDGE OF WALK OR SHARED-USE PATH.
- ⑮ SIDEWALKS TO BE PLACED 8.75" MIN. FROM THE FACE OF CURB/PROJECTED FACE OF CURB.
- ⑯ BETWEEN THE SIDEWALK AND GATE ARM COUNTERWEIGHT SUPPORTS.
- ⑰ CONSTRUCT WITH REINFORCED MATERIAL PER INDOT SPECIFICATION 37022 TYPES A-E.
- ⑱ EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE.

STANDARD PLAN 5-297.250 4 OF 6

APPROVED: 11-04-2021
REVISION: 11-04-2021



MINNESOTA
DEPARTMENT OF TRANSPORTATION
STATE DESIGN ENGINEER

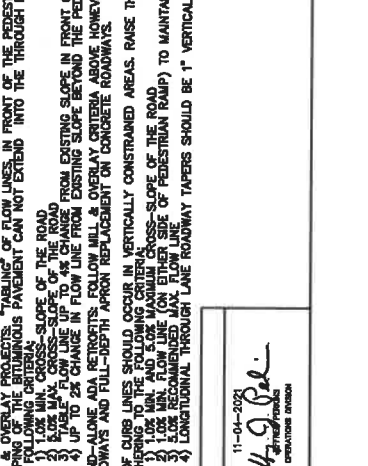
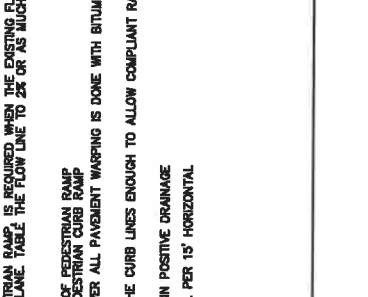
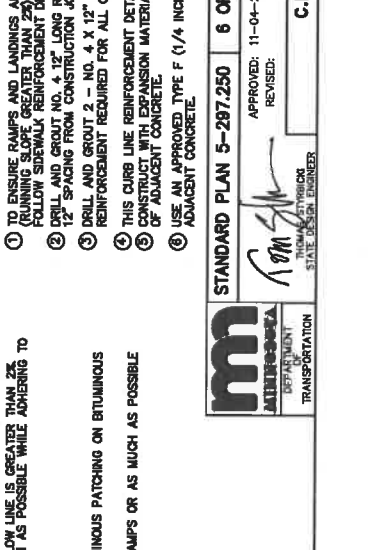
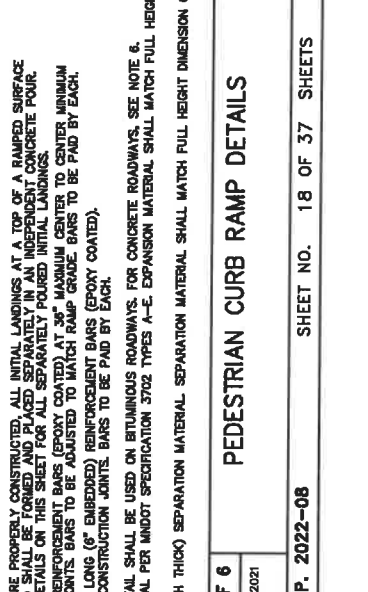
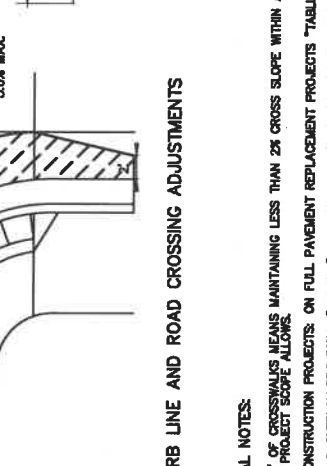
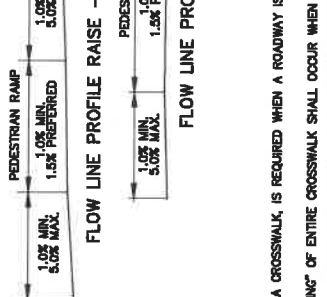
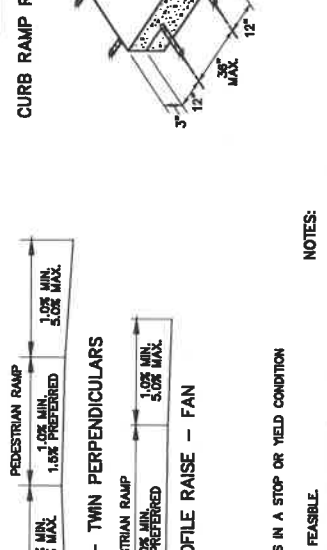
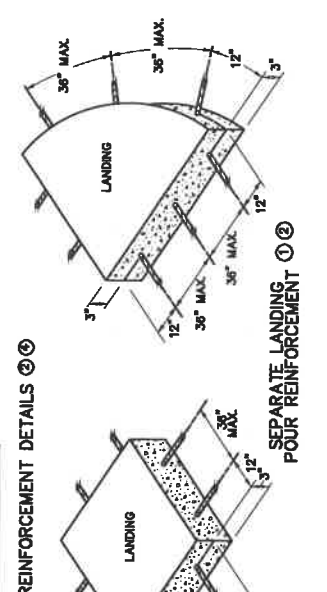
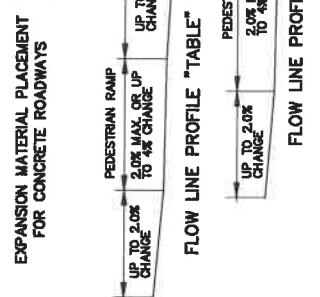
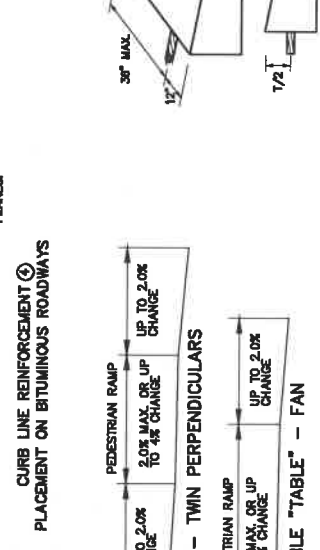
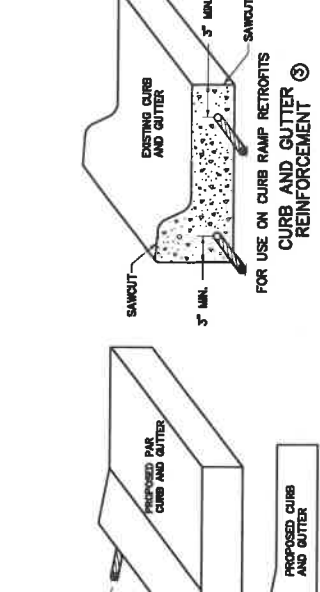
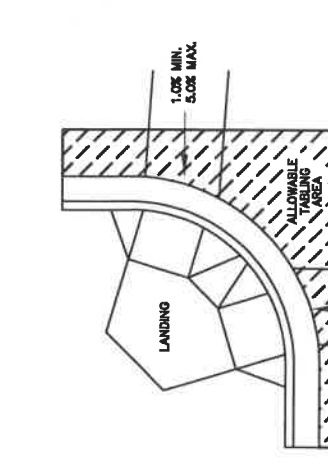
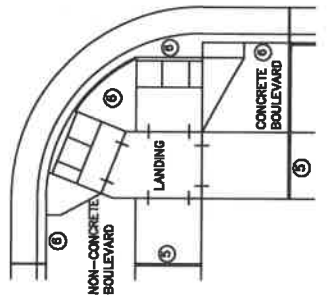
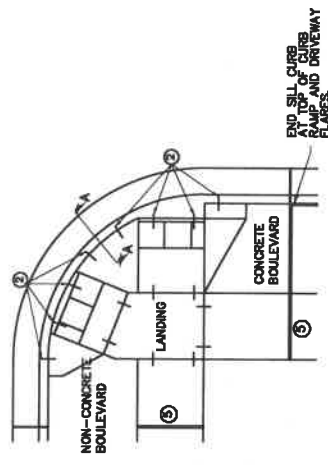
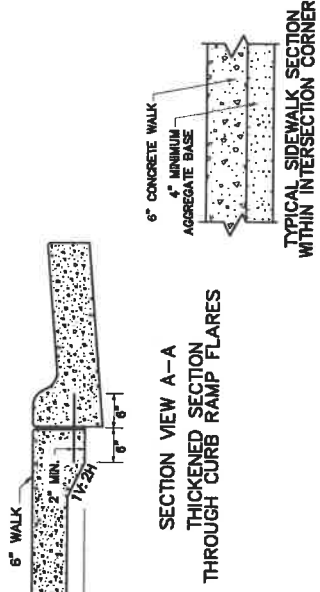
PEDESTRIAN APPROACH NOSE DETAIL
(FOR RETURNED CURB SIDE TREATMENT)

REVISION: 11-04-2021
APPROVED: 11-04-2021
DESIGNED BY: J. G. B. (J. G. B. Design)
OPERATIONS DIVISION

PEDESTRIAN CURB RAMP DETAILS

C.P. 2022-08

SHEET NO. 16 OF 37 SHEETS



SECTION VIEW A-A
THROUGH CURB RAMP FLARES

END SILL CURB
AT TOP OF CURB
RAMP AND DRIVEWAY

EXPANSION MATERIAL PLACEMENT
FOR CONCRETE ROADWAYS

CURB LINE REINFORCEMENT
PLACEMENT ON BITUMINOUS ROADWAYS

FLOW LINE PROFILE "TABLE" - TWIN PERPENDICULARS

FLOW LINE PROFILE "TABLE" - FAN

FLOW LINE PROFILE RAISE - TWIN PERPENDICULARS

FLOW LINE PROFILE RAISE - FAN

CURB LINE AND ROAD CROSSING ADJUSTMENTS

GENERAL NOTES:

"TABLING" OF CROSSWALKS MEANS MAINTAINING LESS THAN 2% CROSS SLOPE WITHIN A CROSSWALK, IS REQUIRED WHEN A ROADWAY IS IN A STOP OR YIELD CONDITION AND THE PROJECT SCOPE ALLOWS.

RECONSTRUCTION PROJECTS: ON FULL PAVEMENT REPLACEMENT PROJECTS "TABLING" OF ENTIRE CROSSWALK SHALL OCCUR WHEN FEASIBLE.

MILL & OVERLAY PROJECTS: "TABLING" OF FLOW LINES, IN FRONT OF THE PEDESTRIAN RAMP, IS REQUIRED WHEN THE EXISTING FLOW LINE IS GREATER THAN 2% WHILE MAINTAINING THE EXISTING CROSS SLOPE OF THE ROAD.

SEPARATE LANDING REINFORCEMENT: FOLLOW MILL & OVERLAY CRITERIA ABOVE HOWEVER ALL PAVEMENT WARPING IS DONE WITH BITUMINOUS PATCHING ON BITUMINOUS ROADWAYS AND FULL-DEPTH PATCH REINFORCEMENT ON CONCRETE ROADWAYS.

RAISING OF CURB LINES SHOULD OCCUR IN VERTICALLY CONSTRAINED AREAS. RAISE THE CURB LINES ENOUGH TO ALLOW COMPLIANT RAMPS OR AS MUCH AS POSSIBLE WHILE MAINTAINING THE EXISTING CROSS-SLOPE OF THE ROAD.

1. 1.0% MIN. 5.0% MAX. CROSS-SLOPE OF THE ROAD

2. 1.0% MIN. 5.0% MAX. CROSS-SLOPE OF THE ROAD

3. 1.0% MIN. 5.0% MAX. CROSS-SLOPE OF THE ROAD

4. 1.0% MIN. 5.0% MAX. CROSS-SLOPE OF THE ROAD

STANDARD PLAN 5-297.250 6 OF 6

APPROVED: 11-04-2021

REVISION:

PEDESTRIAN CURB RAMP DETAILS

SHEET NO. 18 OF 37 SHEETS

C.P. 2022-08

STATE DESIGN ENGINEER

REVISION:

APPROVED: 11-04-2021

REVISION:

PEDESTRIAN CURB RAMP DETAILS

SHEET NO. 18 OF 37 SHEETS

C.P. 2022-08

STATE DESIGN ENGINEER

REVISION:

APPROVED: 11-04-2021

REVISION:

PEDESTRIAN CURB RAMP DETAILS

SHEET NO. 18 OF 37 SHEETS

C.P. 2022-08

STATE DESIGN ENGINEER

REVISION:

APPROVED: 11-04-2021

REVISION:

PEDESTRIAN CURB RAMP DETAILS

SHEET NO. 18 OF 37 SHEETS

C.P. 2022-08

STATE DESIGN ENGINEER

REVISION:

APPROVED: 11-04-2021

REVISION:

PEDESTRIAN CURB RAMP DETAILS

SHEET NO. 18 OF 37 SHEETS

C.P. 2022-08

STATE DESIGN ENGINEER

REVISION:

APPROVED: 11-04-2021

NOTES:

ALL SIDEWALK AND BOULEVARD WIDTHS SHALL BE MEASURED FROM BACK OF CURB.

IN URBAN ROADWAY SECTIONS, 6" CURB HEIGHT SHOULD BE USED WHEN 6' OR GREATER BOULEVARD WIDTH IS PROPOSED. WHEN BOULEVARD IS LESS THAN 6' WIDE, 4" CURB HEIGHT SHOULD BE USED.

MAINTAIN EXISTING DRAINAGE PATTERNS FLOWING TO PUBLIC RIGHT OF WAY.

ACQUIRE ADEQUATE L.S. TO ALLOW FOR A CONTINUOUS PAR PROFILE (UNIFORM TYPICAL SIDEWALK SECTION) THROUGH THE DRIVEWAY APRON.

IN NO CASE SHALL SIDEWALK PROFILES EXCEED 0.0% EXCEPT SIDEWALK PROFILES CAN MATCH ROADWAY PROFILE.

CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER DRAINAGE THROUGH DRIVEWAY APRON AND ABOVE SIDEWALK CRITERIA.

CONTRACTOR JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PEDESTRIAN ACCESS ROUTE (PAR). 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

DRIVEWAY TYPES FROM MOST PREFERRED TO LEAST PREFERRED ARE AS FOLLOWS: PERPENDICULAR, TIERED PERPENDICULAR, OFFSET PERPENDICULAR, PARALLEL, INTEGRAL DRIVEWAY, AND TIED PERPENDICULAR.

PERPENDICULAR, TIERED PERPENDICULAR, AND TIED PERPENDICULAR DRIVEWAYS ARE REQUIRED TO FOLLOW THE CONSTRUCTION SEQUENCE AND STAIR STEP CRITERIA FOR DRIVEWAY PAR PROFILES.

TO OBTAIN A PERPENDICULAR DRIVEWAY DESIGN BECOMES MORE CRITICAL WITH STEEP ROADWAY PROFILES.

TO BE USED WHEN PERPENDICULAR DRIVEWAY DESIGN CANNOT BE ACHIEVED, THE DRIVEWAY PAR IS BELOW ROADWAY CURB HEIGHT. THIS DRIVEWAY TYPE CAN BE USED FOR BOTH PAVED (AS SHOWN) AND GRASS BOULEVARDS.

TO BE USED WHEN PERPENDICULAR AND TIERED PERPENDICULAR DRIVEWAY DESIGN CANNOT BE ACHIEVED, CAN BE USED FOR STEEP NEGATIVE SLOPED DRIVEWAYS. DR CURB TYPE 2 SHOULD BE USED TO RAISE PAR ABOVE GUTTER AND REDUCE "ROLLER COASTER" EFFECT. 4" HIGH ROADWAY CURB SHOULD BE USED TO REDUCE "ROLLER COASTER" EFFECT ESPECIALLY WHEN MULTIPLE DRIVEWAYS ARE PRESENT.

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

5% STANDARD, 10% MAX. FOR COMMERCIAL AND 12% MAX. FOR RESIDENTIAL. SEE GENERAL NOTES ON SHEET 2 FOR MORE INFORMATION.

5% MAX. MAXIMUM, IF THE SLOPE IS EXCEEDED OR CONTINUED FOR MORE THAN 5', ANALYZE VEHICLE TEMPLATES FOR VERTICAL CLEARANCE. IF EXISTING DRIVEWAY IS NEGATIVELY DRAINING, S3 CAN BECOME SLIGHTLY MORE POSITIVE TO ACHIEVE PERPENDICULAR DRIVEWAY DESIGN IF THE VERTICAL CLEARANCE IS ACHIEVED IN VEHICLE TEMPLATES.

1:1.3 MIN. 1:5 PREFERRED FOR DRIVEWAY RETROFIT PROJECTS. 1:10 PREFERRED FOR SIDEWALK REPLACEMENT PROJECTS.

5.0' MIN. PAR WIDTH IS THE STANDARD. THROUGH DRIVEWAYS, IF FEASIBLE WHEN DRIVEWAY PAR WIDTH TO MATCH EXISTING SIDEWALK PAR WIDTHS, IN VERTICALLY CONSTRAINED AREAS PAR WIDTHS CAN INCREMENTALLY BE REDUCED TO 3'.

THE PEDESTRIAN ACCESS ROUTE (PAR) SHALL NOT EXCEED 5' FROM THE DRIVEWAY PAR.

SIDEWALK OFFSET TO BE LESS THAN OR EQUAL TO HALF THE APPROACHING SIDEWALK WIDTH.

INTEGRAL DRIVEWAY APRON TO BE POURED MONOLITHICALLY/INTEGRAL WITH THE CURB AND GUTTER.

SEE SHEET 2 FOR MORE INFORMATION.

SEE SHEET 2 FOR CURB TYPE INFORMATION.

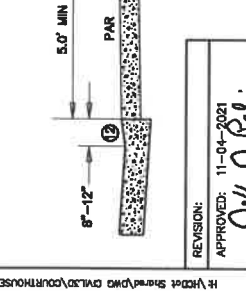
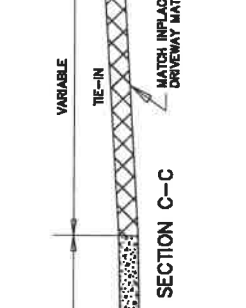
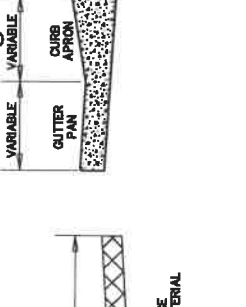
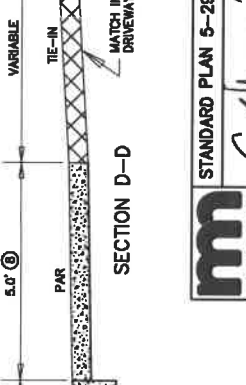
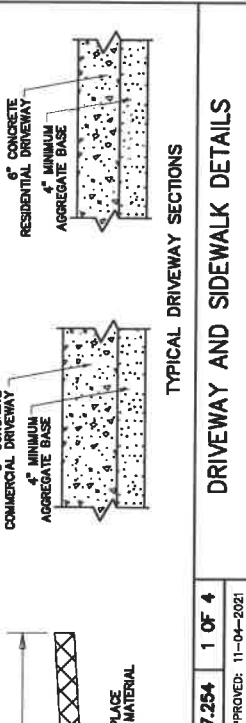
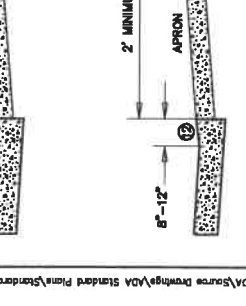
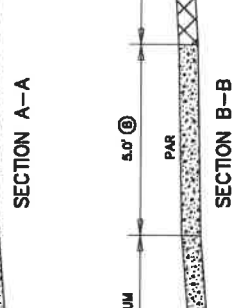
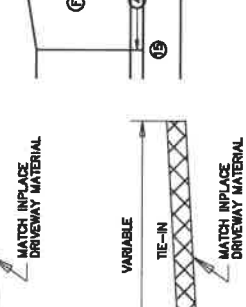
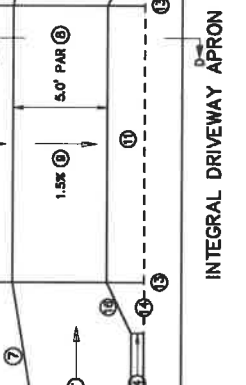
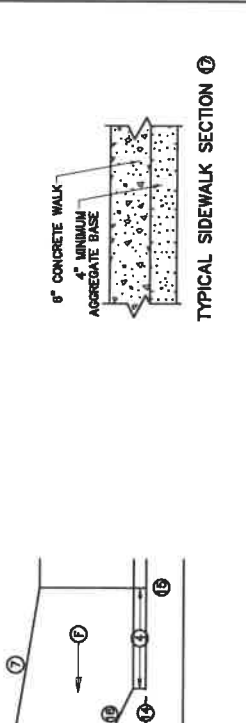
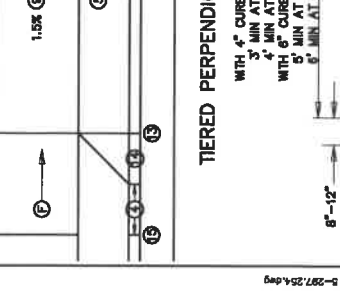
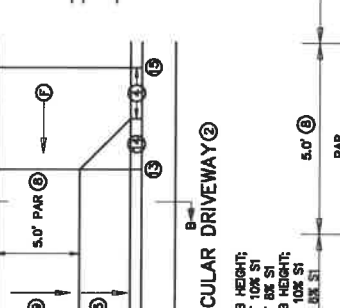
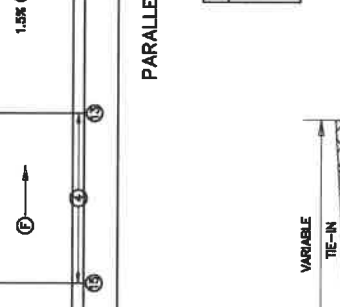
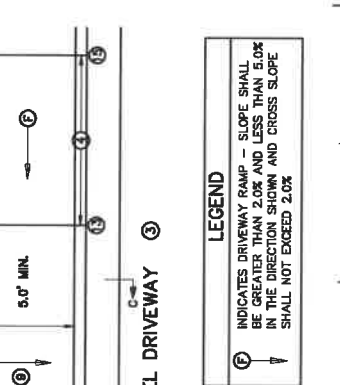
6" CURB IS AT FLOW LINE. SEE DRIVEWAY TABLE FOR BACK OF CURB HEIGHTS.

4" LONG AT 1:2-1:4 PREFERRED FOR INITIAL CURB TAPER. REDUCE CURB TAPER SLOPE IF NECESSARY TO MATCH WALKABLE SURFACE.

1:2 TAPER RATE ON INTEGRAL DRIVEWAY APRONS.

SEE SHEET 4 FOR WHEN 6" WALK IS REQUIRED.

- 1 PERPENDICULAR DRIVEWAY
- 2 TIERED PERPENDICULAR DRIVEWAY
- 3 PARALLEL DRIVEWAY
- 4 INTEGRAL DRIVEWAY
- 5 TIED PERPENDICULAR DRIVEWAY
- 6 COMMERCIAL DRIVEWAY
- 7 RESIDENTIAL DRIVEWAY
- 8 6" CONCRETE WALK
- 9 4" MINIMUM AGGREGATE BASE
- 10 6" CONCRETE DRIVEWAY
- 11 4" MINIMUM AGGREGATE BASE
- 12 6" CONCRETE DRIVEWAY
- 13 4" MINIMUM AGGREGATE BASE
- 14 6" CONCRETE DRIVEWAY
- 15 4" MINIMUM AGGREGATE BASE
- 16 6" CONCRETE DRIVEWAY
- 17 4" MINIMUM AGGREGATE BASE
- 18 6" CONCRETE DRIVEWAY
- 19 4" MINIMUM AGGREGATE BASE
- 20 6" CONCRETE DRIVEWAY
- 21 4" MINIMUM AGGREGATE BASE
- 22 6" CONCRETE DRIVEWAY
- 23 4" MINIMUM AGGREGATE BASE
- 24 6" CONCRETE DRIVEWAY
- 25 4" MINIMUM AGGREGATE BASE
- 26 6" CONCRETE DRIVEWAY
- 27 4" MINIMUM AGGREGATE BASE
- 28 6" CONCRETE DRIVEWAY
- 29 4" MINIMUM AGGREGATE BASE
- 30 6" CONCRETE DRIVEWAY
- 31 4" MINIMUM AGGREGATE BASE
- 32 6" CONCRETE DRIVEWAY
- 33 4" MINIMUM AGGREGATE BASE
- 34 6" CONCRETE DRIVEWAY
- 35 4" MINIMUM AGGREGATE BASE
- 36 6" CONCRETE DRIVEWAY
- 37 4" MINIMUM AGGREGATE BASE
- 38 6" CONCRETE DRIVEWAY
- 39 4" MINIMUM AGGREGATE BASE
- 40 6" CONCRETE DRIVEWAY
- 41 4" MINIMUM AGGREGATE BASE
- 42 6" CONCRETE DRIVEWAY
- 43 4" MINIMUM AGGREGATE BASE
- 44 6" CONCRETE DRIVEWAY
- 45 4" MINIMUM AGGREGATE BASE
- 46 6" CONCRETE DRIVEWAY
- 47 4" MINIMUM AGGREGATE BASE
- 48 6" CONCRETE DRIVEWAY
- 49 4" MINIMUM AGGREGATE BASE
- 50 6" CONCRETE DRIVEWAY
- 51 4" MINIMUM AGGREGATE BASE
- 52 6" CONCRETE DRIVEWAY
- 53 4" MINIMUM AGGREGATE BASE
- 54 6" CONCRETE DRIVEWAY
- 55 4" MINIMUM AGGREGATE BASE
- 56 6" CONCRETE DRIVEWAY
- 57 4" MINIMUM AGGREGATE BASE
- 58 6" CONCRETE DRIVEWAY
- 59 4" MINIMUM AGGREGATE BASE
- 60 6" CONCRETE DRIVEWAY
- 61 4" MINIMUM AGGREGATE BASE
- 62 6" CONCRETE DRIVEWAY
- 63 4" MINIMUM AGGREGATE BASE
- 64 6" CONCRETE DRIVEWAY
- 65 4" MINIMUM AGGREGATE BASE
- 66 6" CONCRETE DRIVEWAY
- 67 4" MINIMUM AGGREGATE BASE
- 68 6" CONCRETE DRIVEWAY
- 69 4" MINIMUM AGGREGATE BASE
- 70 6" CONCRETE DRIVEWAY
- 71 4" MINIMUM AGGREGATE BASE
- 72 6" CONCRETE DRIVEWAY
- 73 4" MINIMUM AGGREGATE BASE
- 74 6" CONCRETE DRIVEWAY
- 75 4" MINIMUM AGGREGATE BASE
- 76 6" CONCRETE DRIVEWAY
- 77 4" MINIMUM AGGREGATE BASE
- 78 6" CONCRETE DRIVEWAY
- 79 4" MINIMUM AGGREGATE BASE
- 80 6" CONCRETE DRIVEWAY
- 81 4" MINIMUM AGGREGATE BASE
- 82 6" CONCRETE DRIVEWAY
- 83 4" MINIMUM AGGREGATE BASE
- 84 6" CONCRETE DRIVEWAY
- 85 4" MINIMUM AGGREGATE BASE
- 86 6" CONCRETE DRIVEWAY
- 87 4" MINIMUM AGGREGATE BASE
- 88 6" CONCRETE DRIVEWAY
- 89 4" MINIMUM AGGREGATE BASE
- 90 6" CONCRETE DRIVEWAY
- 91 4" MINIMUM AGGREGATE BASE
- 92 6" CONCRETE DRIVEWAY
- 93 4" MINIMUM AGGREGATE BASE
- 94 6" CONCRETE DRIVEWAY
- 95 4" MINIMUM AGGREGATE BASE
- 96 6" CONCRETE DRIVEWAY
- 97 4" MINIMUM AGGREGATE BASE
- 98 6" CONCRETE DRIVEWAY
- 99 4" MINIMUM AGGREGATE BASE
- 100 6" CONCRETE DRIVEWAY



TYPICAL DRIVEWAY SECTIONS

DRIVEWAY AND SIDEWALK DETAILS

STANDARD PLAN 5-297.254

1 OF 4

APPROVED: 11-04-2021
REVISED:

DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

C.P. 2022-08

SHEET NO. 19 OF 37 SHEETS

REVISION:

APPROVED: 11-04-2021
[Signature]
DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

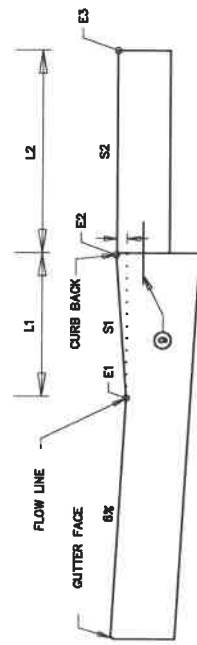
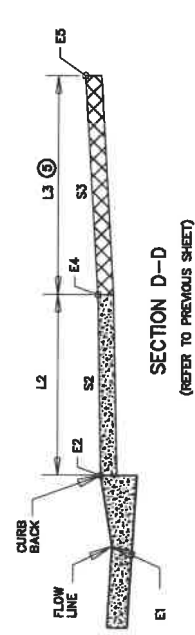
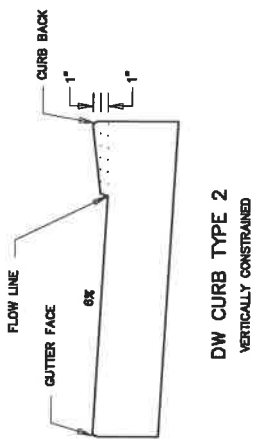
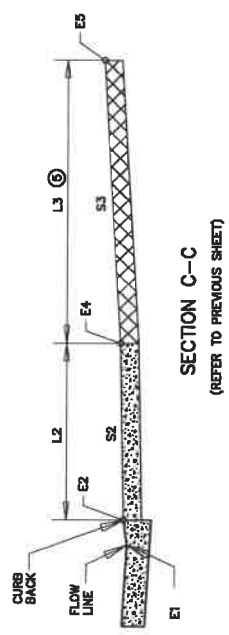
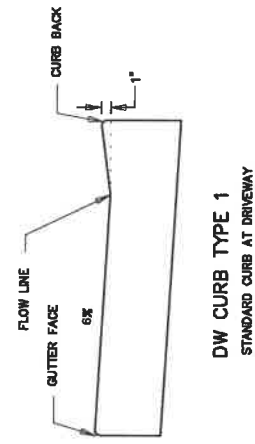
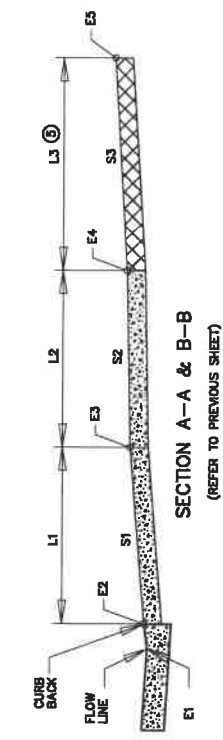
DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

DESIGNED BY: [Signature]
STATE DESIGN ENGINEER

DRIVEWAY TABLE ①

STATION	ALIGNMENT	SIDE	DRIVEWAY TYPE ②	CURB TYPE ③	E1	E2	L1 FT	S1 %	E3	L2 FT	S2 %	E4	L3 ⑤ FT	S3 %	EXISTING ⑥ %	COMMENTS
04+27.18	WASHINGTON ST - GUTTER FLAG	RT	TERRED PERPENDICULAR	TYPE 1	1173.10	1173.18	2.0	8.0	1173.34	5.0	1.5	1173.42	23.6	-2.0		L3 = BITUMINOUS SURFACE



TYPICAL INTEGRAL DRIVEWAY APRON ⑦

CURB TYPE	L1	E2	S1 ⑥	S2
IDA 216	1.33	+0.18		12.5
IDA 220	1.87	+0.18		10
IDA 324	2	+0.24		12.5
IDA 432	2.67	+0.33		12.5

NOTES:

ALL SIDEWALK AND BOULEVARD WIDTHS SHALL BE MEASURED FROM BACK OF CURB.

DW CURB TYPE 1 SHALL BE USED WHEN THE DRIVEWAY ACTS AS A PEDESTRIAN RAMP. THE WALK APRON SLOPE MUST ADHERE TO ADA CRITERIA AS WELL DW CURB TYPE 1 SHOULD BE USED IF THERE IS ON STREET PARKING.

WHERE ROADWAY DRAINAGE IS A CONCERN (NEGATIVE SLOPED APRON) DW CURB TYPE 2 CAN BE USED TO HELP KEEP THE WATER ON PUBLIC RIGHT OF WAY.

S1 IS STANDARD, 10% MAX. COMMERCIAL AND 12% MAX. RESIDENTIAL IF EXISTING GRADES ARE USED. S2 IS MAXIMUM SLOPE FOR DRIVEWAY CURB HEIGHTS, EXTENDING L3 AND/OR STEEPEN S3.

S3 IS MAXIMUM IF THIS DRIVEWAY IS CONTINUED OR FOR MORE THAN 5'. ANALYZE VEHICLE TRAJECTORIES FOR VERTICAL CLEARANCE. SEE FACILITY DESIGN GUIDE, CHAPTER 6, FOR GEOMETRIC DESIGNS OF DRIVEWAYS.

① EXAMPLE SHOWN TO BE INCLUDED IN PLAN FOR EACH DRIVEWAY THAT HAS PAR THROUGH IT.

② REFERS TO THE FOLLOWING TYPES: PERPENDICULAR DRIVEWAY, TIERED PERPENDICULAR DRIVEWAY, TIERED PERPENDICULAR DRIVEWAY, PARALLEL DRIVEWAY, AND INTEGRAL DRIVEWAY APRON.

③ DW CURB TYPE 1 IS THE STANDARD AND SHALL BE THE STARTING POINT FOR ALL DRIVEWAY TYPES. DW CURB TYPE 2 SHALL ONLY BE USED AFTER UTILIZING BEST PRACTICES SUCH AS WASHINGTON ST, S3, AND L3.

④ SHOULD BE DESIGNED AT 1.5%.

⑤ ACQUIRE ADEQUATE L3 TO ALLOW FOR CONTINUOUS PAR PROFILE (UNIFORM SIDEWALK SECTION) THROUGH THE DRIVEWAY APRON.

⑥ PROVIDE IN-PLACE TE-IN SLOPE INFORMATION AT BACK OF PROPOSED WALK (S3 AREA).

⑦ INFORMATION TO BE INCORPORATED INTO DRIVEWAY TABLE WHEN INTEGRAL DRIVEWAY APRON IS USED. OTHER CURB HEIGHTS & CURB APRON LENGTHS CAN BE USED.

⑧ L1 & S1 FOR INTEGRAL DRIVEWAY APRON IS TO FLOWLINE. 12.5% IS MAXIMUM PREFERRED SLOPE.

⑨ THE ADJACENT SECTIONS, CONCRETE DRIVEWAY APRON AND CONCRETE DRIVEWAY SIDEWALK SHALL BE CONSTRUCTED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. DRILL AND GROUT OR CAST IN-PLACE THROUGH HOLES IN THE FORMS NO. 4 X 12" LONG TE BARS (EPOXY COATED). 36" MAXIMUM SPACING WITH 2" MINIMUM CONCRETE COVER PLACED 1" MINIMUM FROM ADJACENT CONSTRUCTION JOINT.

REVISION:
APPROVED: 11-04-2021
John G. Pel...
OPERATIONS DIVISION

m MINNESOTA
DEPARTMENT OF
TRANSPORTATION

STANDARD PLAN 5-287.254 2 OF 4
APPROVED: 11-04-2021
REVISED:
John G. Pel...
STATE DESIGN ENGINEER

DRIVEWAY AND SIDEWALK DETAILS



FOR 4" CONCRETE ONLY: CAST IN PLACE BARS MUST BE SUPPORTED WITH P-STAKES FOR REINFORCEMENT BASKETS FOR FULL WIDTH CONCRETE PLACEMENTS.

APPROVED: 11-04-2021

0.11 0.00

100

APPROVED: 11-04-2021

1111

THOMAS STYBICKI
STATE DESIGN ENGINEER

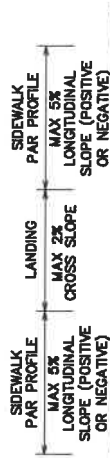
THOMAS STYBICKI
STATE DESIGN ENGINEER

DEPARTMENT
OF
TRANSPORTATION

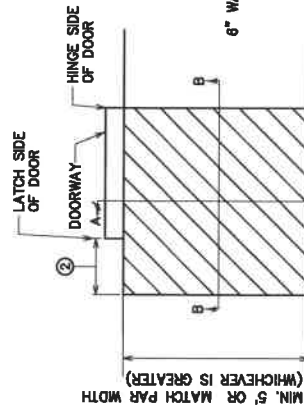
OF TRANSPORTATION

C.P. 2022-08

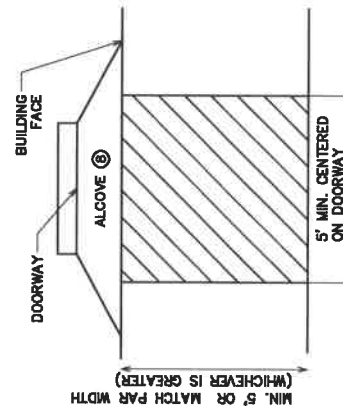
SHEET NO. 21 OF 37 SHEETS



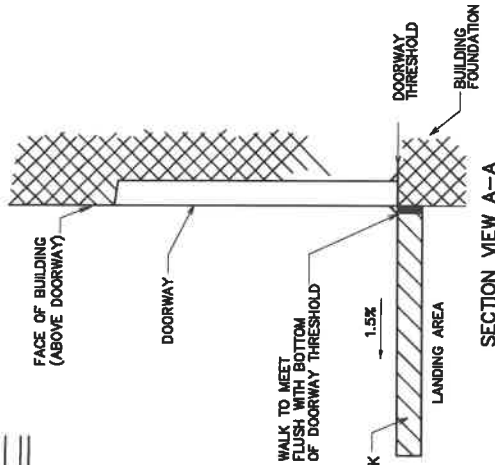
SECTION VIEW B-B



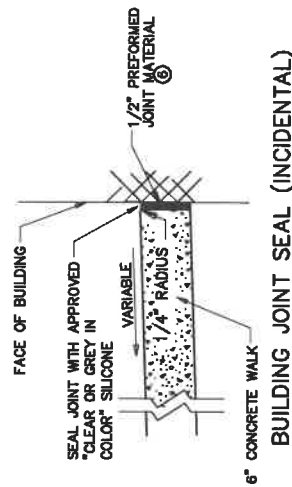
PLAN VIEW DOORWAY



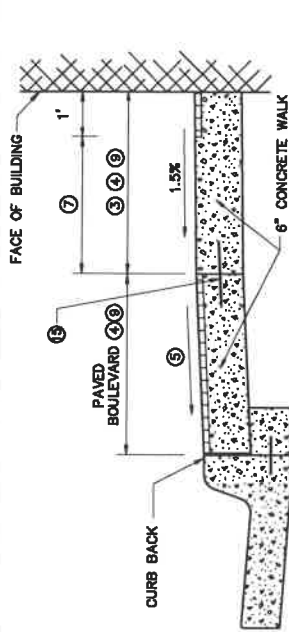
PLAN VIEW DOORWAY WITH ALCOVE
SIDEWALK LANDING REQUIREMENTS



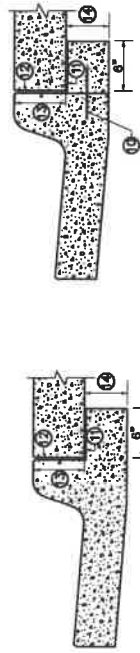
SECTION VIEW A-A



BUILDING JOINT SEAL (INCIDENTAL)



DOWNTOWN SIDEWALK TYPICAL SECTION



SLIP FORM SILL

FIXED FORM SILL

SILL CURB SHOULD BE USED AT ALL LOCATIONS WHEN CONCRETE WALK IS AT BACK OF CURB, INCLUDING PAVED BOULEVARD.
SILL CURB SHALL NOT BE USED IN CURB RAMP AND DRIVEWAY AREAS, INCLUDING CONCRETE FLARES.
SILL CURB WITH 4\"/>

NOTES:

- 6\"/>
- 1) IN ALL SIDEWALK LOCATIONS WHERE VARIABLE SLOPED CONCRETE BOULEVARDS ARE PAVED, SUCH AS COMMERCIAL (STORE FRONT, DOWNTOWN) AREAS, ANYTIME DRILL AND REINFORCEMENT IS USED TO TIE LONGITUDINAL JOINTS TOGETHER.
- 3) TO ELIMINATE LONGITUDINAL JOINT WHEN INCREASING PANEL SIZE OVER 36\"/>
- 4) AT LOCATIONS WHERE MAINTENANCE EQUIPMENT WILL SUBJECT CONCRETE TO HEAVY LOADS, ALL SIDEWALK AND BOULEVARD WIDTHS SHALL BE MEASURED FROM BACK OF CURB.
- FIELD ADJUST SIDEWALK PROFILES TO MEET ALL DOORWAY THRESHOLDS.
- SIDEWALK MUST MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING TO THE ROADWAY.
- SEE SPECIAL PROVISIONS FOR SILICONE SPECIFICATIONS.
- LANDING PROFILES ARE REQUIRED FOR ALL DOORS, STEPS, AND PRIVATE WALKS. FEASIBILITY DECREASES WITH NARROWER BOULEVARDS AND STEEPER SIDEWALK PROFILES.
- 18\"/>
- 6\"/>
- 2/3 PAR REQUIRED WHEN ADJACENT TO BUILDINGS.
- 15-25% FOR THE MAJORITY OF THE BLOCK, WITH EXCEPTIONS UP TO 5% IN CONSTRAINED AREAS.
- CONSTRUCT USING APPROVED EXPANSION MATERIAL PER MINOT TYPE A-E EXPANSION. LEAVE A MINIMUM 1/2\"/>
- TO MINIMIZE VIBRATION AND ROLLING RESISTANCE, AREA SHALL BE FREE OF PAVERS, STAMPED CONCRETE, AND/OR EXCESSIVE JOINTING.
- 23\"/>
- FORM CONTRACTION JOINTS AS NEEDED TO PRODUCE APPROXIMATELY SQUARE PANEL SIZE. CONCRETE PANEL SIZE SHOULD NOT EXCEED 11/2\"/>
- DRILL AND GROUT NO. 4 X 8\"/>
- MINIMUM FROM ADJACENT CONSTRUCTION JOINTS. 36\"/>
- CONSTRUCT AND INSTALL THE FULL WIDTH OF THE TOP OF SILL. A MINIMUM 24\"/>
- USE AN APPROVED TYPE F (1/4\"/>
- DIMENSION TO BE SAME AS SIDEWALK THICKNESS. 4\"/>
- 6\"/>
- 6\"/>
- DRILL AND GROUT NO. 4 X 12\"/>
- 1\"/>

REVISION:

APPROVED: 11-04-2021

John G. Red
OPERATIONS DIVISION

m
METRO
DEPARTMENT
TRANSPORTATION

STANDARD PLAN 5-297.254 4 OF 4

APPROVED: 11-04-2021

REVISD:

John G. Red
METRO
STATE DESIGN ENGINEER

DRIVEWAY AND SIDEWALK DETAILS

C.P. 2022-08

SHEET NO. 22 OF 37 SHEETS

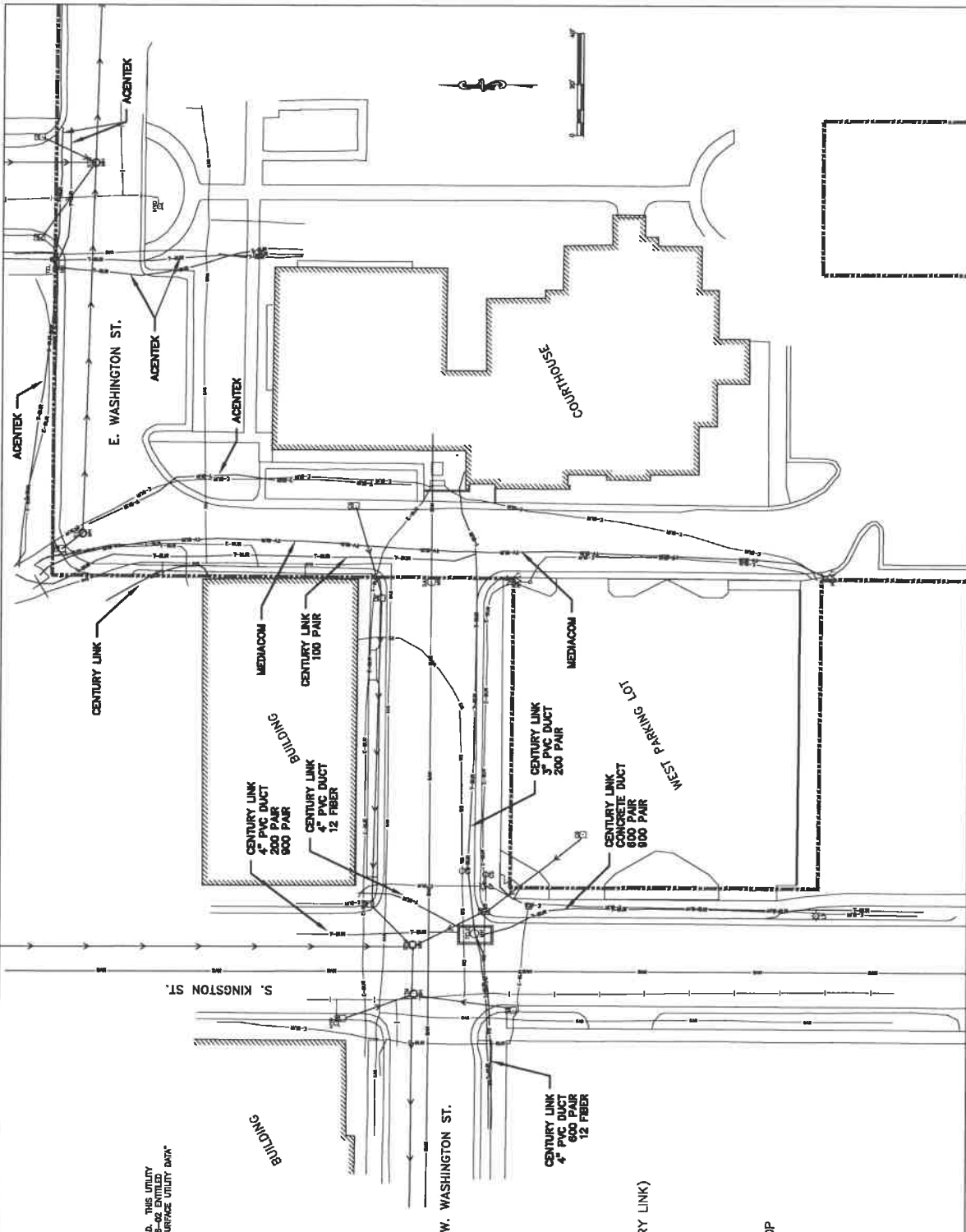
THE FOLLOWING UTILITY OWNERS HAVE FACILITIES WITHIN THE PROJECT LIMITS OF THIS PROJECT:

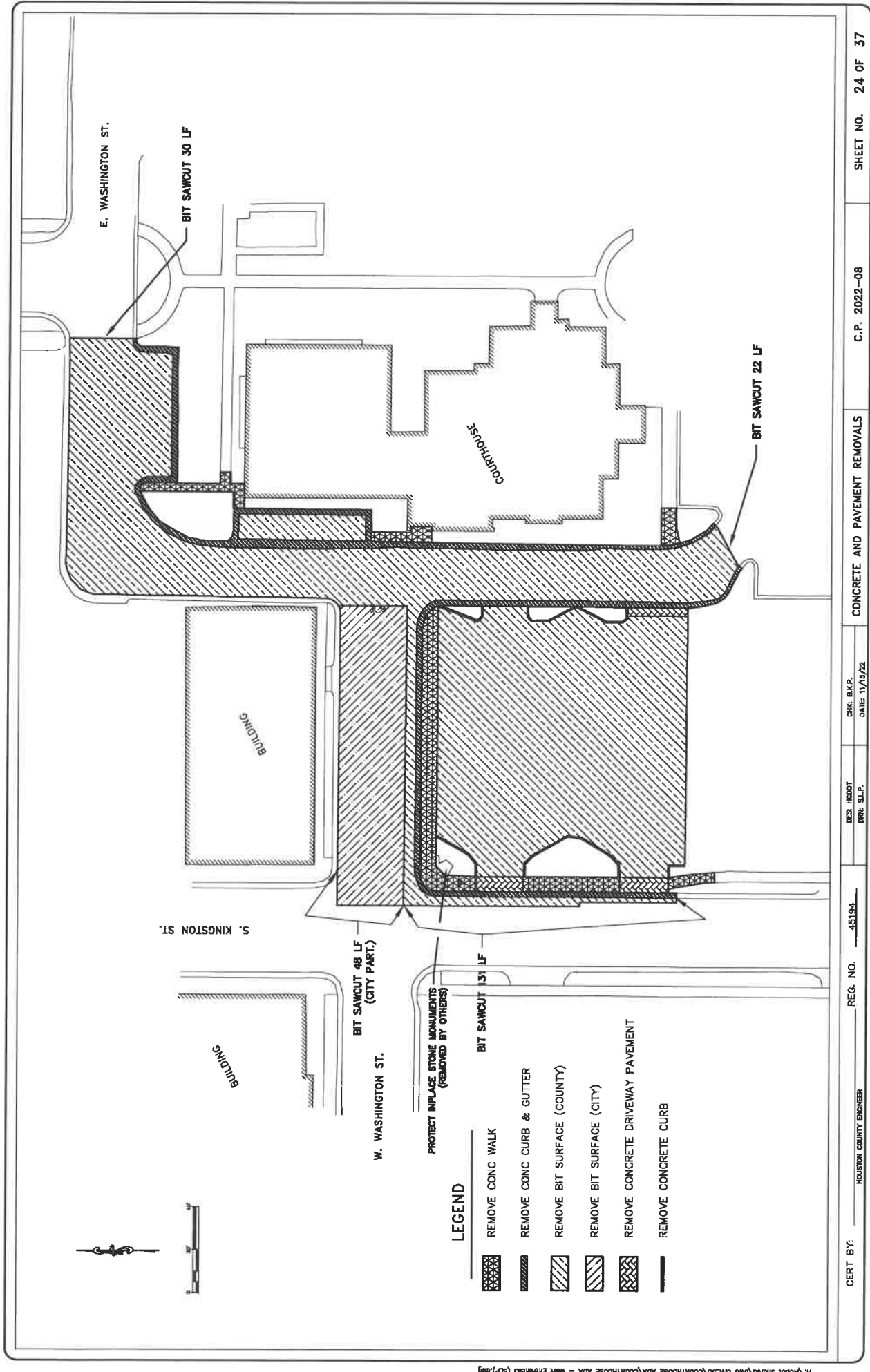
CENTURY LINK - UNDERGROUND COMMUNICATIONS
 PH: (877)386-8344
 CENTURY LINK - UNDERGROUND COMMUNICATIONS
 PH: (865)443-2840
 MEDACOM - UNDERGROUND COMMUNICATIONS
 PH: (865)443-2840
 CITY OF CALEDONIA - SEWER, WATER, LIGHTING
 PH: (507)460-8880
 MINNESOTA ENERGY RESOURCES - GAS
 PH: (650)888-4808

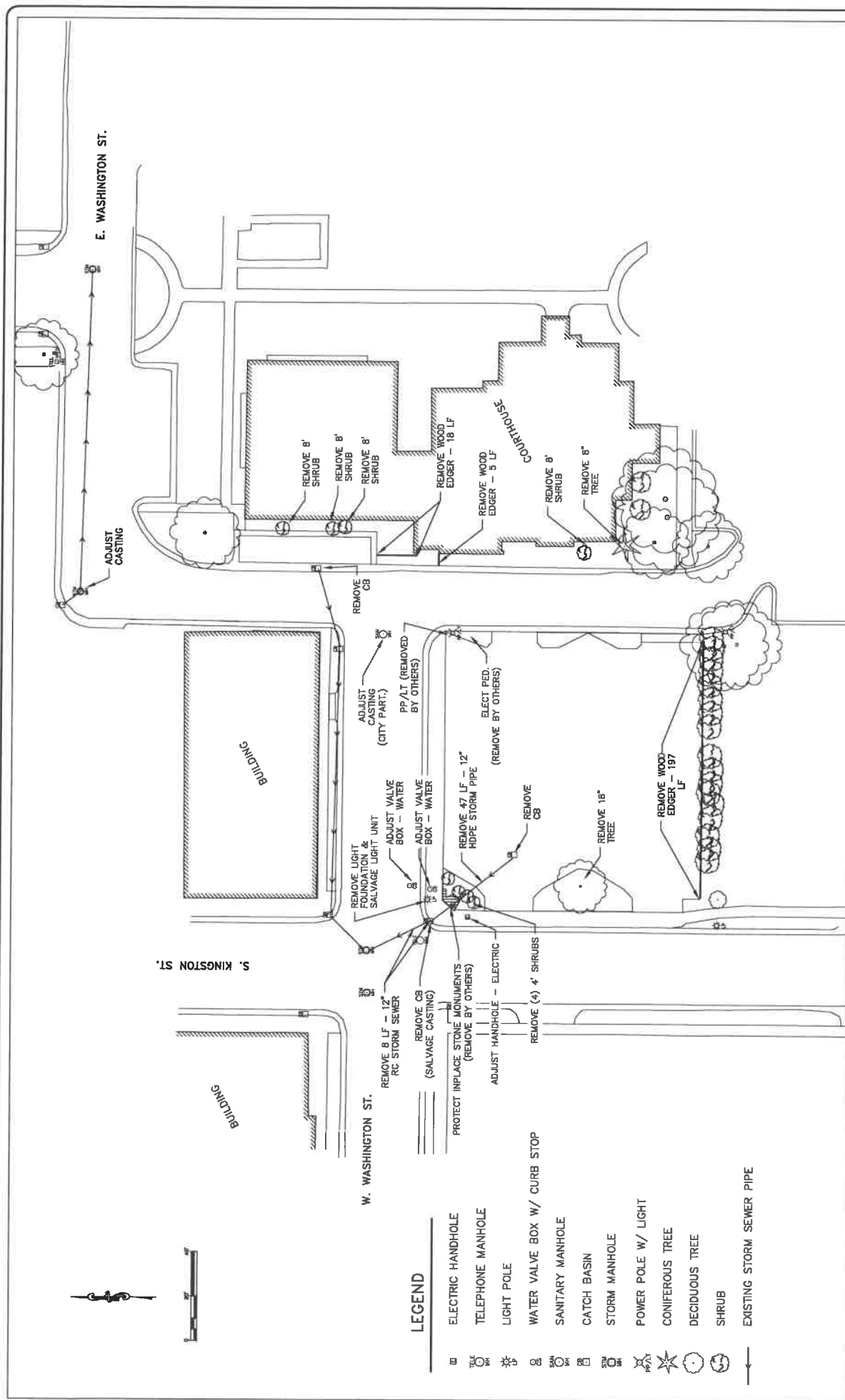
THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CLASS 3B-42 ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA"

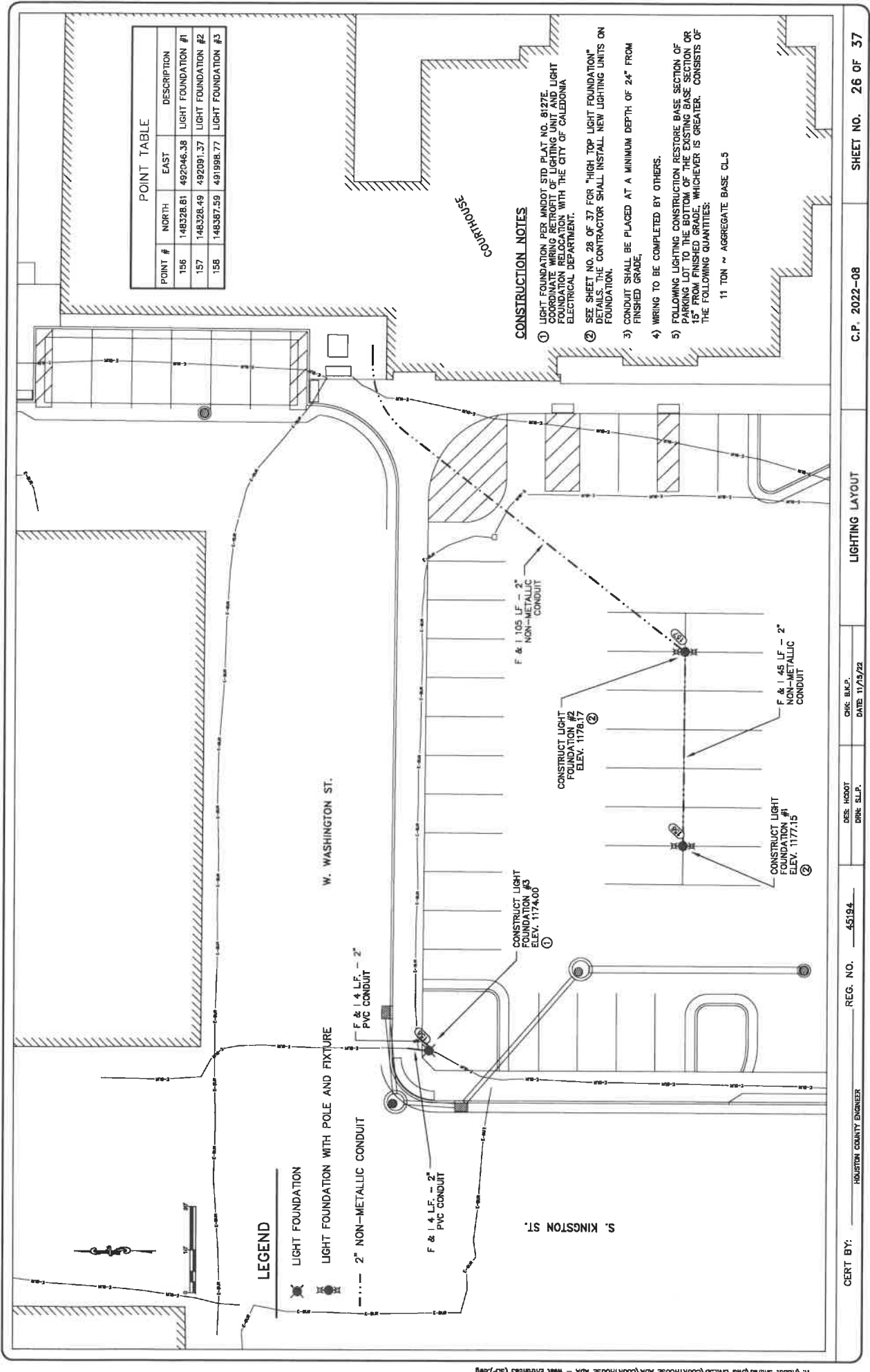
LEGEND

- 4" PVC BURIED
- WATER SERVICE
- WATERMAIN
- GAS LINE BURIED
- FIBER OPTIC BURIED
- TELEVISION BURIED
- TELEPHONE BURIED
- SURVEY LINE
- INPLACE STORM SEWER
- INPLACE SANITARY SEWER
- COMMUNICATIONS VAULT (CENTURY LINK)
- ELECTRIC HANDHOLE
- ⊕ TELEPHONE MANHOLE
- ⊕ LIGHT POLE
- ⊕ WATER VALVE BOX W/ CURB STOP
- ⊕ SANITARY MANHOLE
- ⊕ CATCH BASIN
- ⊕ STORM MANHOLE
- ⊕ POWER POLE W/ LIGHT
- ⊕ TELEPHONE HANDHOLE









POINT TABLE			
POINT #	NORTH	EAST	DESCRIPTION
156	148328.81	492046.38	LIGHT FOUNDATION #1
157	148328.49	492091.37	LIGHT FOUNDATION #2
158	148387.59	491998.77	LIGHT FOUNDATION #3

CONSTRUCTION NOTES

- 1) LIGHT FOUNDATION PER MNDOT STD PLAT NO. 8127E. COORDINATE WIRING RETROFIT OF LIGHTING UNIT AND LIGHT FOUNDATION RELOCATION WITH THE CITY OF CALEDONIA ELECTRICAL DEPARTMENT.
- 2) SEE SHEET NO. 28 OF 37 FOR "HIGH TOP LIGHT FOUNDATION" DETAILS. THE CONTRACTOR SHALL INSTALL NEW LIGHTING UNITS ON FOUNDATION.
- 3) CONDUIT SHALL BE PLACED AT A MINIMUM DEPTH OF 24" FROM FINISHED GRADE.
- 4) WIRING TO BE COMPLETED BY OTHERS.
- 5) FOLLOWING LIGHTING CONSTRUCTION RESTORE BASE SECTION OF PARKING LOT TO THE BOTTOM OF THE EXISTING BASE SECTION OR 15" FROM FINISHED GRADE, WHICHEVER IS GREATER. CONSISTS OF THE FOLLOWING QUANTITIES:

11 TON ~ AGGREGATE BASE CL5

LEGEND

LIGHT FOUNDATION

LIGHT FOUNDATION WITH POLE AND FIXTURE

--- 2" NON-METALLIC CONDUIT

F & I 4 LF - 2" PVC CONDUIT

CONSTRUCT LIGHT FOUNDATION #3
ELEV. 1174.00

CONSTRUCT LIGHT FOUNDATION #2
ELEV. 1178.17

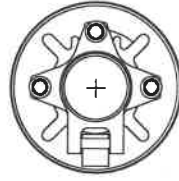
CONSTRUCT LIGHT FOUNDATION #1
ELEV. 1177.15

F & I 105 LF - 2" NON-METALLIC CONDUIT

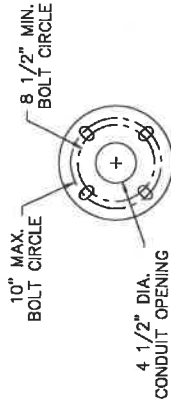
F & I 45 LF - 2" NON-METALLIC CONDUIT

BEGA 1708HR POLE

POLE BASE INCLUDES
3/8"-16 TAPPED HOLE
FOR GROUND CONNECTOR

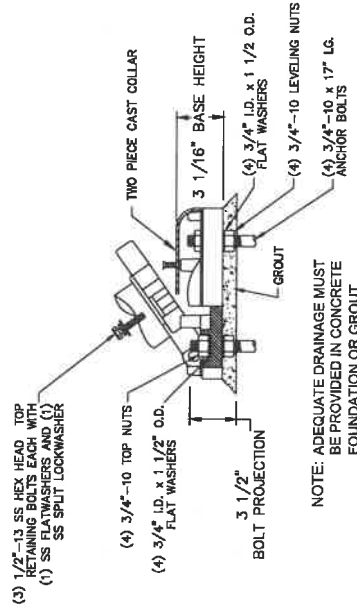


NOTE: TWO PIECE
COLLAR NOT SHOWN

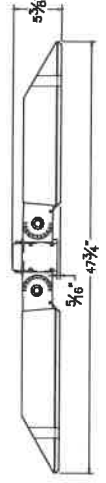
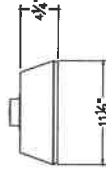
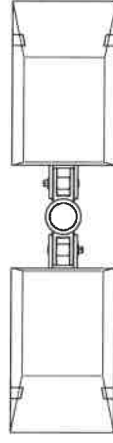
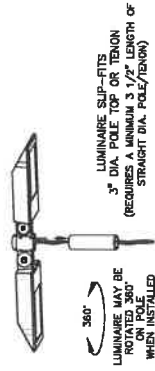


BASE DETAIL
STANDARD (4) 3/4" x 17"
ANCHOR BOLTS & MTC. TEMPLATE
SUPPLIED WITH POLE
OR IN ADVANCE.

3" TO 5" OD TAPERED ALUM. POLE
W/HINGED BASE, BY BEGA
EXT. FINISH: BRONZE - MATTE



BEGA LUMINAIRE # 84 124



(2) 23.6 W
120-277V AC
LED LUMINAIRES
EXT. FINISH: BRONZE-
MATTE
LED COLOR TEMP: 4000K

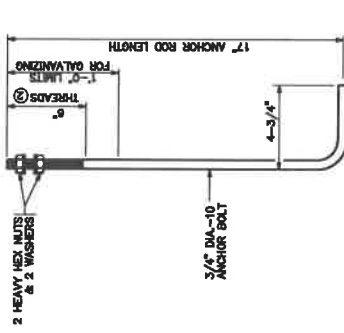


SHOWN ON 1308HR

NAME: BRIAN K. POGODZINSKI LIC. NO. 45194
 LICENSED PROFESSIONAL ENGINEER DATE

DEB HCDOT	DR: SLP.
CHG: SLP.	DATE: 11/1

SHEET NO. 28 OF 37 SHEETS



BILL OF REINFORCEMENT				
BAR	QTY.	LENGTH	SHAPE	LOCATION
F801	6	7'-6"	—	SHAFT VERTICALS
F302	9	5'-3"	TIES	SHAFT TIES

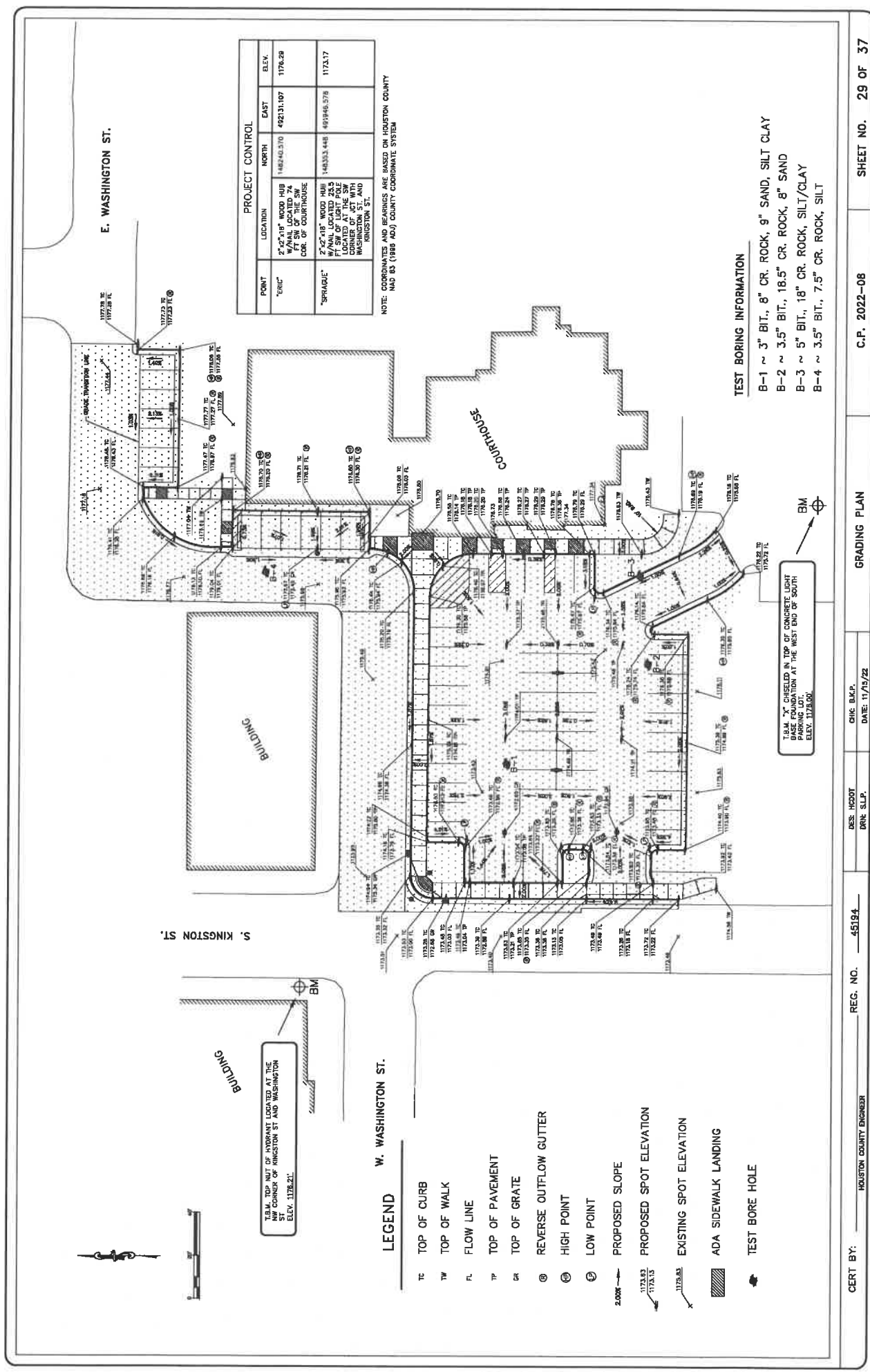
BENT BAR DIMENSIONS GIVEN ARE OUT-TO-OUT. DETERMINE ACTUAL BAR LENGTHS BASED ON THE DETAIL DIMENSIONS SHOWN IN THE BAR BENDING DIAGRAMS.

* DENOTES STANDARD STIRRUP HOOK

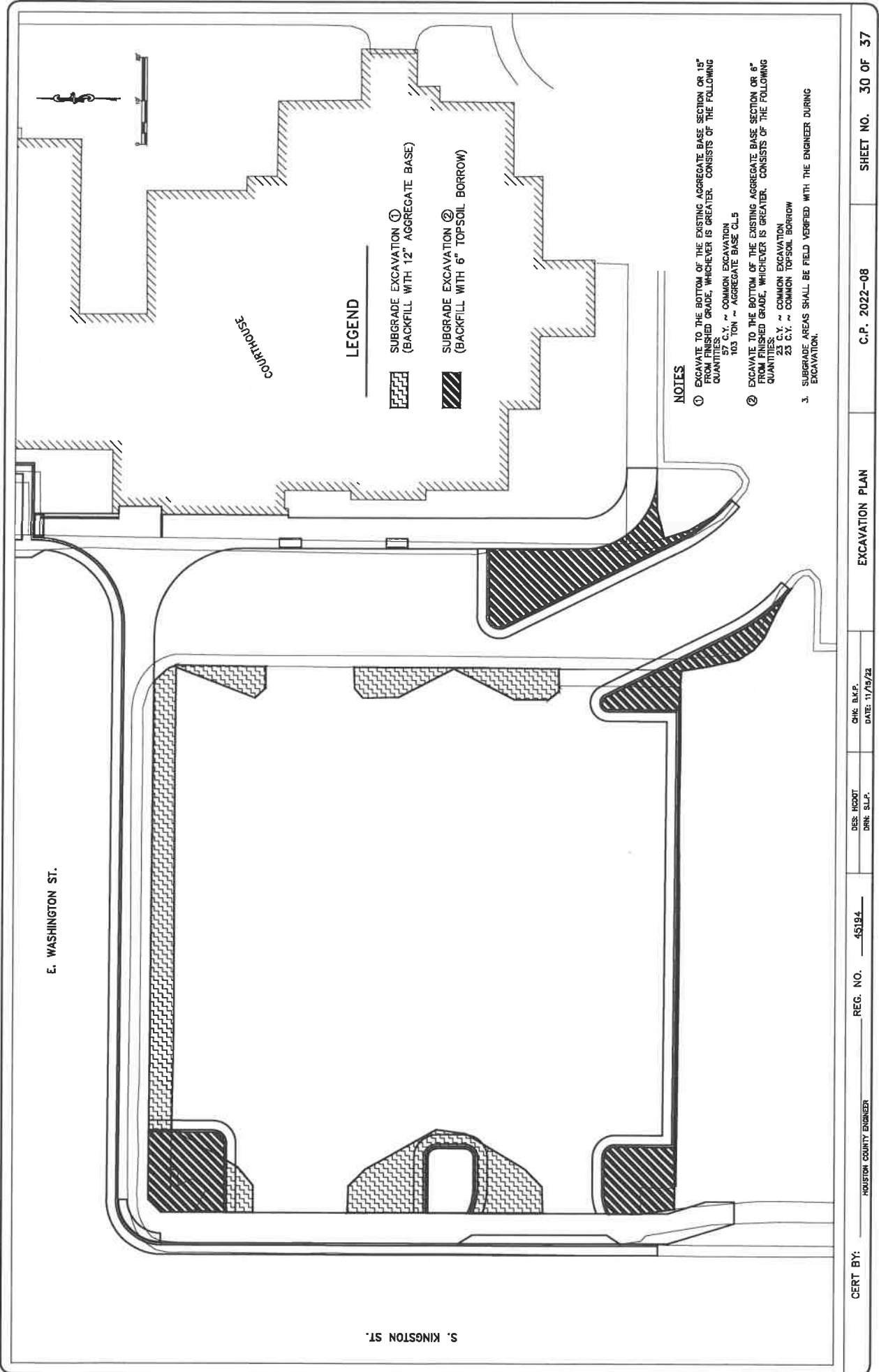
USE 3060 60 WELDABLE REINFORCING BARS IN ACCORDANCE WITH ASTM A 706 AND STEEL BE STAMPED "W" ON THE SURFACE. ATTACH REINFORCING BARS BY TYING, WELDING, OR COMBINATION THEREOF. WELD REBAR TOGETHER IN ACCORDANCE WITH AWS D1.4. FINALLY SUPPORT AND SECURELY TIE REINFORCING BARS, CONDUITS, GROUND ROD, AND ANCHOR ROD ASSEMBLY IN PROPER POSITION INTO THE FORM AND SHOOT. OBTAIN ENGINEER'S APPROVAL BEFORE CONCRETE PLACEMENT OPERATIONS. FURNISH AND INSTALL 3062 CONCRETE MIX IN ACCORDANCE WITH MNDOT SPEC. 2461. PLACE PREFORMED JOINT FILLER BETWEEN FOUNDATION AND SIDEWALK OR CONCRETE AREAS. FURNISH AND INSTALL TYPE B ANCHOR RODS IN ACCORDANCE WITH MNDOT SPEC. 3366. GALVANIZE ANCHOR ROD ASSEMBLY TEMPLATES IN ACCORDANCE WITH MNDOT SPEC. 3364.

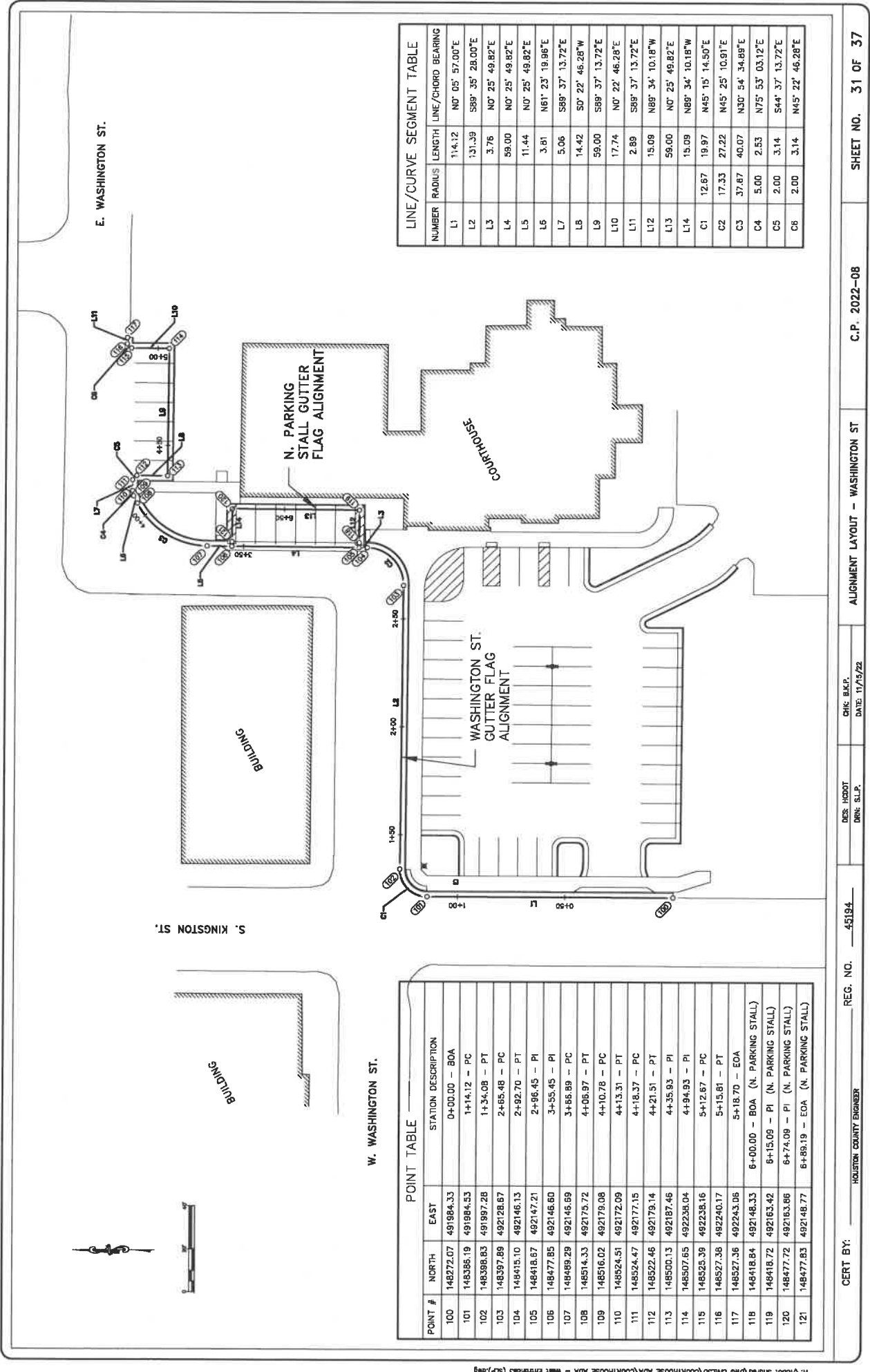
① IF THE FOUNDATION IS PLACED ON A SLOPE STEEPER THAN 1V:5H, THEN INCREASE THE MINIMUM SLOPE STEEPER THAN 1V:5H. REINFORCEMENT ANCHORMENT IS NOT REQUIRED. SLOPE STEEPER THAN 1V:5H REQUIRES ANCHORMENT. SEE SECTION 3060 FOR ANCHORMENT DETAILS.

- ① IF THE FOUNDATION IS PLACED ON A SLOPE STEEPER THAN 1V:2H, THEN INCREASE THE MINIMUM FOUNDATION DEPTH BY 12 INCHES. ADDITIONAL REINFORCEMENT IS NOT REQUIRED. SLOPES STEEPER THAN 1V:2H REQUIRE A SPECIAL DESIGN.
- ② PROTECT ANCHOR ROD THREADS AND LEVELING FROM CONCRETE CONTAMINATION.
- ③ SURFACE FINISH EXPOSED CONCRETE PER MINDOT SPEC. 2401.3F.2.B.



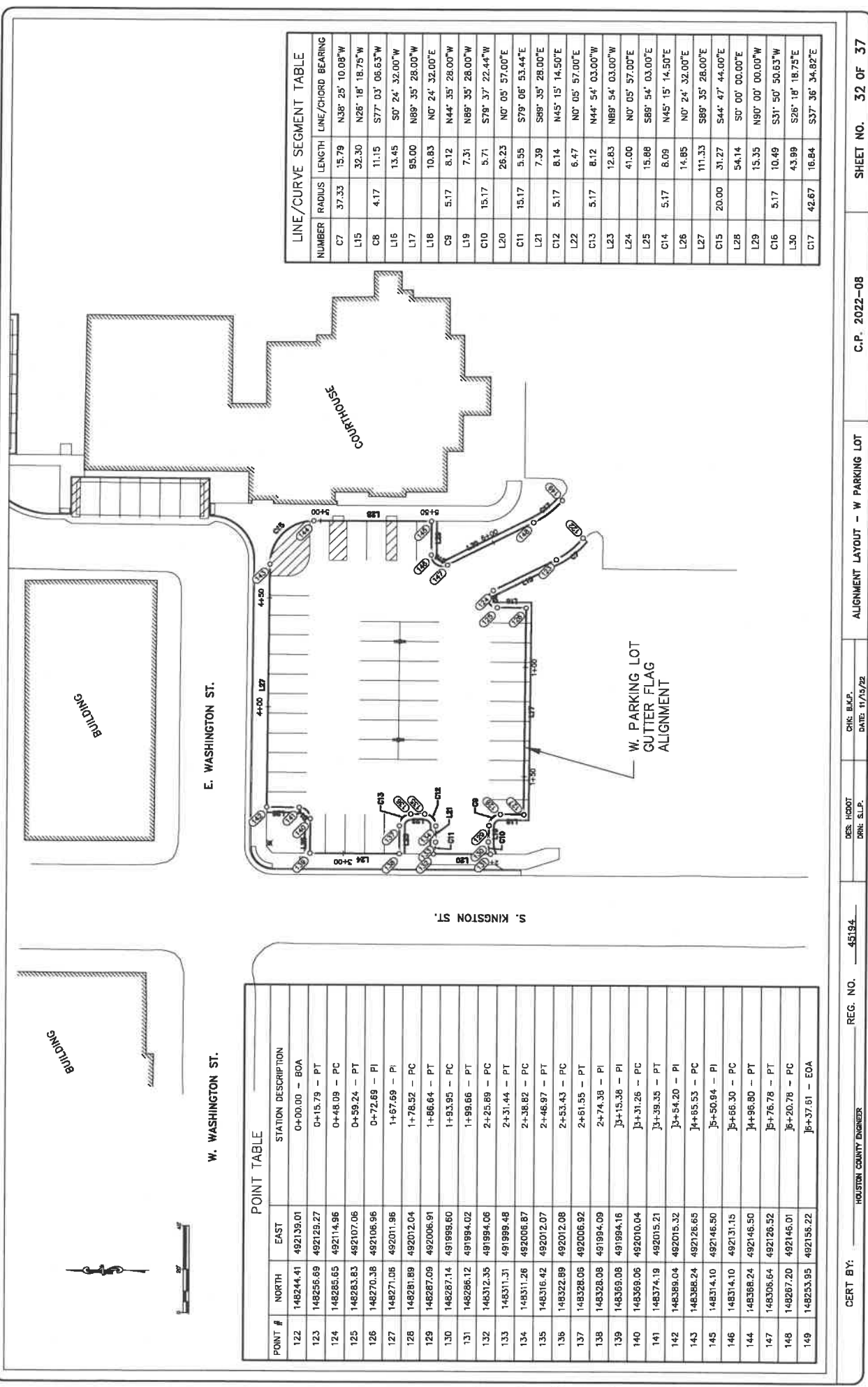
H:\Project Shared\PMO CHLSD\CHLSD\COURTHOUSE ADA - West Entrance (SLP).dwg





POINT TABLE			
POINT #	NORTH	EAST	STATION DESCRIPTION
100	148272.07	491984.33	0+00.00 - BOA
101	148385.19	491984.33	1+14.12 - PC
102	148388.83	491987.28	1+34.08 - PT
103	148397.89	492128.67	2+65.48 - PC
104	148415.10	492146.13	2+92.70 - PT
105	148418.67	492147.21	2+96.45 - PI
106	148477.85	492146.60	3+55.45 - PI
107	148489.29	492145.59	3+55.89 - PC
108	148514.33	492175.72	4+06.97 - PT
109	148516.02	492179.08	4+10.78 - PC
110	148524.51	492172.09	4+13.31 - PT
111	148524.47	492177.15	4+18.37 - PC
112	148522.46	492179.14	4+21.51 - PT
113	148500.13	492187.45	4+35.83 - PI
114	148507.65	492238.04	4+94.93 - PI
115	148525.39	492238.16	5+12.67 - PC
116	148527.38	492240.17	5+15.81 - PT
117	148527.36	492243.05	5+18.70 - EOA
118	148418.84	492148.33	6+00.00 - BOA (N. PARKING STALL)
119	148418.72	492163.42	6+15.09 - PI (N. PARKING STALL)
120	148477.72	492163.66	6+74.09 - PI (N. PARKING STALL)
121	148477.83	492148.77	6+89.19 - EOA (N. PARKING STALL)

LINE/CURVE SEGMENT TABLE			
NUMBER	RADIUS	LENGTH	LINE/CHORD BEARING
L1		114.12	N0° 05' 57.00"E
L2		131.39	S89° 35' 28.00"E
L3		3.76	N0° 25' 49.82"E
L4		59.00	N0° 25' 49.82"E
L5		11.44	N0° 25' 49.82"E
L6		3.81	N61° 23' 19.96"E
L7		5.06	S89° 37' 13.72"E
L8		14.42	S0° 22' 46.28"W
L9		59.00	S89° 37' 13.72"E
L10		17.74	N0° 22' 46.28"E
L11		2.89	S89° 37' 13.72"E
L12		15.09	N89° 34' 10.18"W
L13		59.00	N0° 25' 49.82"E
L14		15.09	N89° 34' 10.18"W
C1	12.67	19.97	N45° 15' 14.50"E
C2	17.33	27.22	N45° 25' 10.91"E
C3	37.87	40.07	N30° 54' 34.89"E
C4	5.00	2.53	N75° 53' 03.12"E
C5	2.00	3.14	S44° 37' 13.72"E
C6	2.00	3.14	N45° 22' 46.28"E

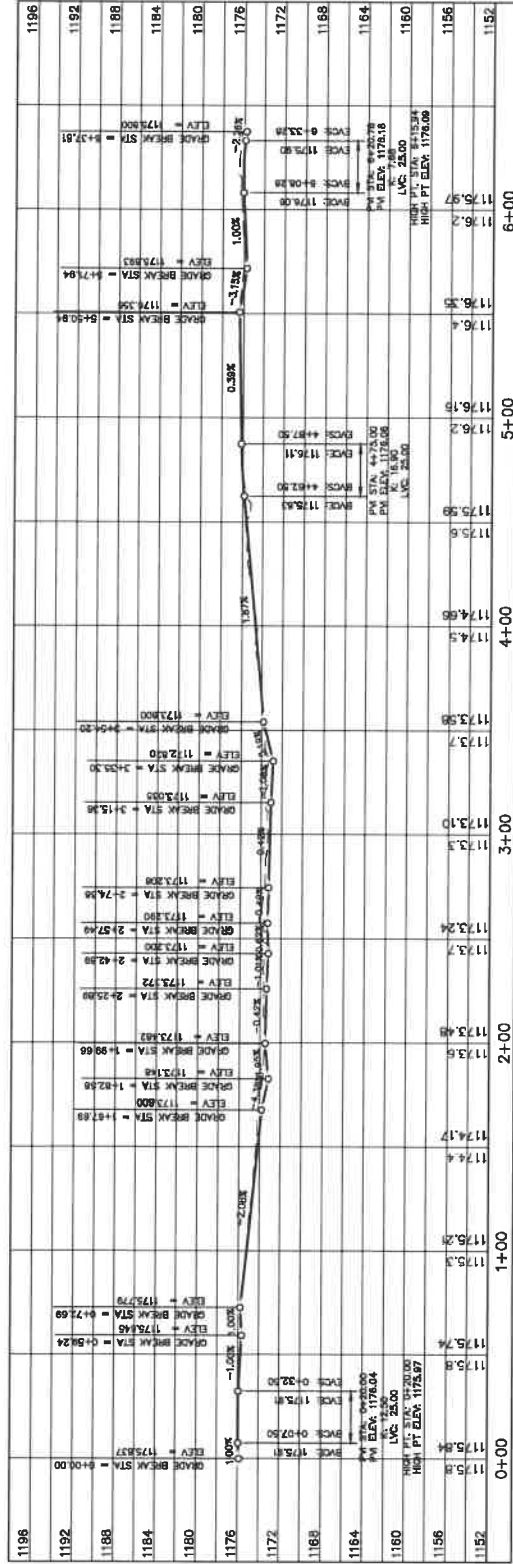


POINT TABLE			STATION DESCRIPTION	
POINT #	NORTH	EAST		
122	148244.41	492139.01	0+00.00 - BOA	
123	148256.69	492129.27	0+15.79 - PT	
124	148285.65	492114.96	0+48.09 - PC	
125	148283.83	492107.06	0+59.24 - PT	
126	148270.38	492106.96	0+72.89 - PI	
127	148271.06	492011.96	1+57.69 - PI	
128	148281.89	492012.04	1+78.52 - PC	
129	148287.09	492006.91	1+86.64 - PT	
130	148287.14	491995.60	1+93.95 - PC	
131	148286.12	491994.02	1+99.66 - PT	
132	148312.35	491994.06	2+25.89 - PC	
133	148311.31	491999.48	2+31.44 - PT	
134	148311.26	492006.87	2+38.82 - PC	
135	148316.42	492012.07	2+46.97 - PT	
136	148322.89	492012.08	2+53.43 - PC	
137	148328.05	492006.92	2+61.55 - PT	
138	148328.08	491994.09	2+74.38 - PI	
139	148359.08	491994.16	3+15.38 - PI	
140	148359.05	492010.04	3+31.26 - PC	
141	148374.19	492015.21	3+39.35 - PT	
142	148389.04	492015.32	3+54.20 - PI	
143	148388.24	492126.65	3+65.53 - PC	
145	148314.10	492146.50	3+50.94 - PI	
146	148314.10	492131.15	3+65.30 - PC	
144	148368.24	492146.50	3+96.80 - PT	
147	148305.64	492126.52	3+76.78 - PT	
148	148267.20	492146.01	3+20.78 - PC	
149	148253.95	492156.22	3+37.61 - EOA	

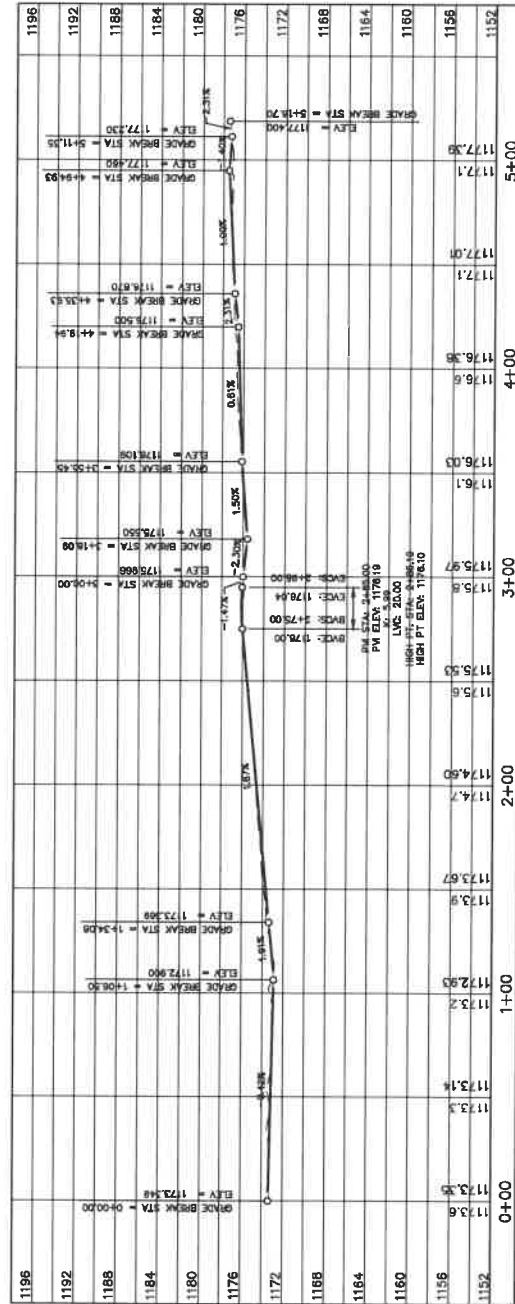
LINE/CURVE SEGMENT TABLE			
NUMBER	RADIUS	LENGTH	LINE/CHORD BEARING
C7	37.33	15.79	N38° 25' 10.08"W
L15	32.30	32.30	N26° 18' 18.75"W
C8	4.17	11.15	S77° 03' 06.63"W
L16		13.45	S0° 24' 32.00"W
L17		95.00	N89° 35' 28.00"W
L18		10.83	N0° 24' 32.00"E
C9	5.17	8.12	N44° 35' 28.00"W
L19		7.31	N89° 35' 28.00"W
C10	15.17	5.71	S79° 37' 22.44"W
L20		26.23	N0° 05' 57.00"E
C11	15.17	5.55	S79° 06' 53.44"E
L21		7.39	S89° 35' 28.00"E
C12	5.17	8.14	N45° 15' 14.50"E
L22		6.47	N0° 05' 57.00"E
C13	5.17	8.12	N44° 54' 03.00"W
L23		12.83	N89° 54' 03.00"W
L24		41.00	N0° 05' 57.00"E
L25		15.68	S89° 54' 03.00"E
C14	5.17	8.09	N45° 15' 14.50"E
L26		14.95	N0° 24' 32.00"E
L27		111.33	S89° 35' 28.00"E
C15	20.00	31.27	S44° 47' 44.00"E
L28		54.14	S0° 00' 00.00"E
L29		15.35	N90° 00' 00.00"W
C16	5.17	10.49	S31° 50' 50.63"W
L30		43.99	S26° 18' 18.75"E
C17	42.67	16.84	S37° 36' 34.82"E

H:\Project Shared\DWG\DWG\DWG\COURTHOUSE ADA - West Entrance.dwg (S&P).dwg

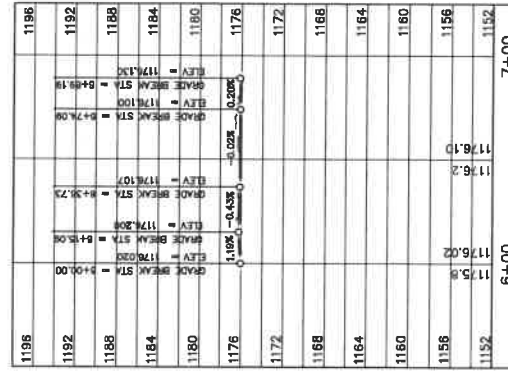
W. PARKING LOT - GUTTER FLAG PROFILE

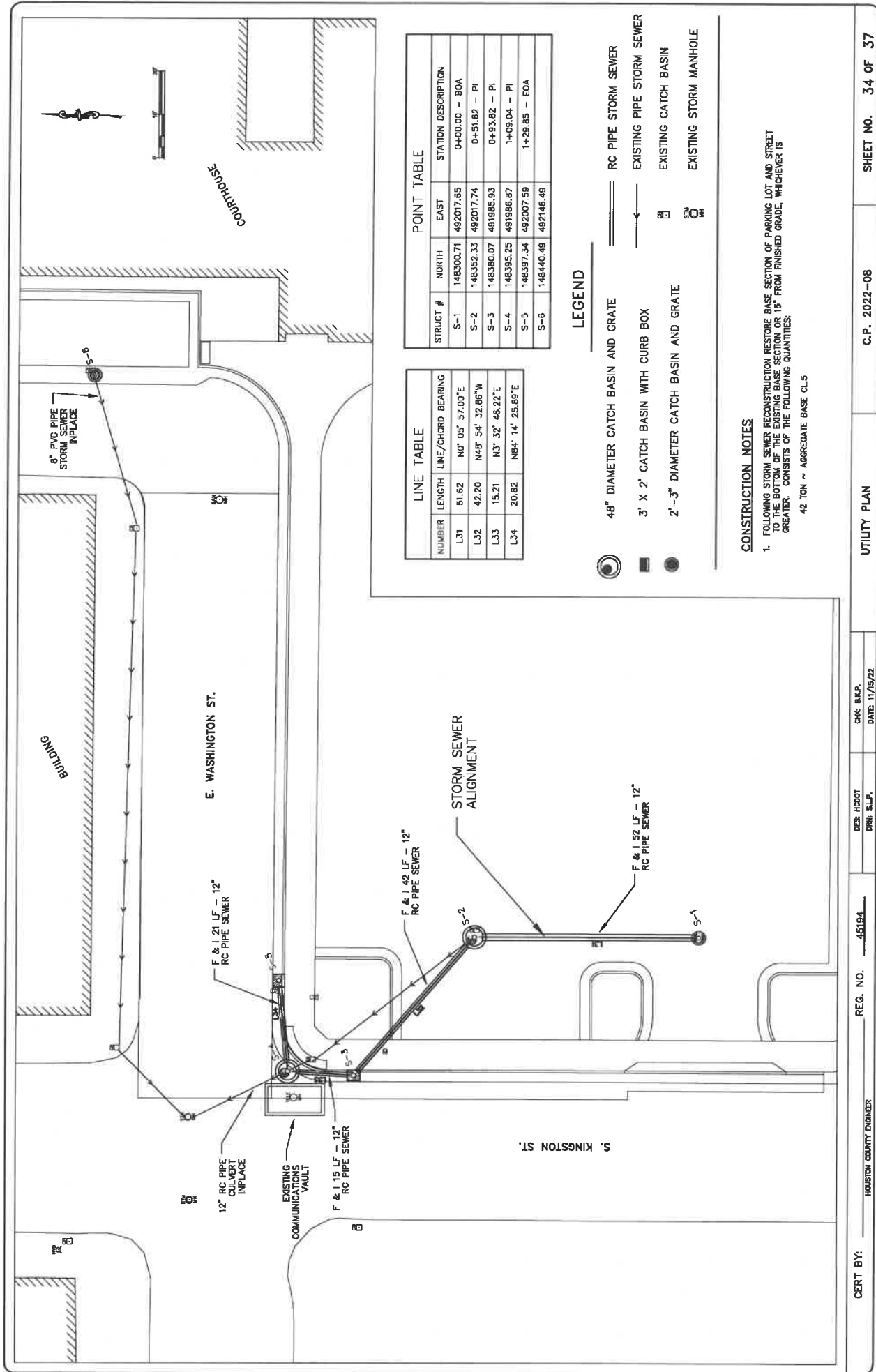


WASHINGTON ST - GUTTER FLAG PROFILE

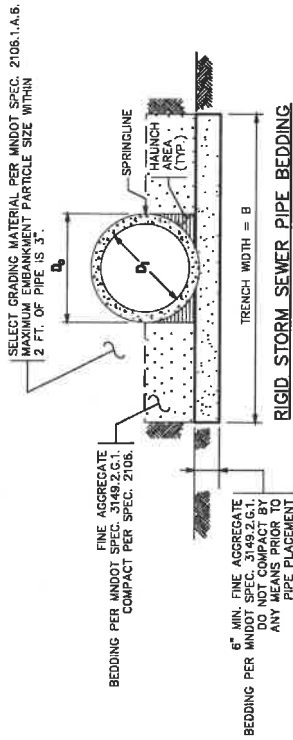


N. PARKING - GUTTER FLAG PROFILE





H:\Michael Sherrill\DWG\CIVIL\DWG\COURTHOUSE ADA\COURTHOUSE ADA.dwg (S.P.)



TRENCH BASE WIDTH (1)	
PIPE DIA. D ₁ OR S ₁	TRENCH WIDTH B
< 42"	D ₂ + 24"
42" TO 54"	1.5 x D ₂
> 54"	D ₂ + 36"

—LEGEND—

D₁ = INSIDE DIAMETER OF ROUND PIPE (INCHES).
D₂ = OUTSIDE DIAMETER OF ROUND PIPE (INCHES).
S₁ = INSIDE SPAN OF PIPE-ARCH (INCHES).
S₂ = OUTSIDE SPAN OF PIPE-ARCH (INCHES).
H = FILL COVER HEIGHT OVER PIPE (FEET).
= UNDISTURBED SOIL
= COMPACTED BEDDING
= LOOSE BEDDING, COMPACTED
AFTER PIPE PLACEMENT

CONSTRUCTION SEQUENCE

1. LOOSELY PLACE 6" OF FINE AGGREGATE BEDDING MATERIAL TO GRADE. DO NOT COMPACT PRIOR TO PIPE PLACEMENT.
2. FOR PIPES WITH BELL, REMOVE MATERIAL IN BELL AREA PRIOR TO PLACEMENT.
3. FURNISH AND INSTALL PIPE TO GRADE.
4. AFTER PLACEMENT OF THE PIPE, PLACE ADDITIONAL FINE AGGREGATE BEDDING AND COMPACT THE FULL LENGTH ON BOTH SIDES OF THE PIPE UNDERNEATH THE HAUNCH AREA BY FIRST SHOVEL SLICING (MANUALLY SHOVEL THE BLADE END OF SHOVEL AT AN ANGLE DOWN THE ENTIRE LENGTH OF HAUNCH UNDER THE PIPE). THEN COMPACT THE HAUNCH AT AN ANGLE USING A POWERED MECHANICAL OR PNEUMATIC DEVICE (I.E. POLE TAMPER, JUMPING JACK, OR SIMILAR).
5. COMPACT THE REMAINING MATERIAL OUTSIDE THE HAUNCH AREA TO THE REQUIREMENTS OF SPEC. 2106 ENSURING THAT THE ENTIRE LENGTH OF PIPE IS SUPPORTED UNIFORMLY BY BEDDING.
6. PLACE AND COMPACT BACKFILL EVENLY AND SIMULTANEOUSLY IN 6" LIFTS ON EACH SIDE OF THE PIPE UP TO THE SPRINGLENE FOR RIGID PIPE AND 12" ABOVE THE TOP OF THE PIPE FOR FLEXIBLE PIPE WHEN COMPACTED.
7. COMPLETE REMAINING BACKFILL.

NOTES

- EXCAVATE & CONSTRUCT ALL TRENCHES AND SLOPES PER OSHA REQUIREMENTS.
- PIPE SIZE IS BASED ON THE NOMINAL INSIDE DIAMETER OR SPAN.
- PROTECT ALL PIPE DURING CONSTRUCTION PER MNDOT SPEC. 2503.
- WHEN RIPRAP IS REQUIRED AT THE APRON END, SEE STANDARD PLATE OR PLAN FOR RIPRAP INSTALLATION AND QUANTITIES. FOR APRONS WITHOUT RIPRAP PLACE 6" MIN. FINE AGGREGATE BEDDING UNDER APRONS. USE A TRENCH WIDTH EQUAL TO THE PIPE TRENCH WIDTH.
- FINE AGGREGATE BEDDING INCLUDING THE COST OF EXCAVATION, PLACEMENT AND COMPACTION IS INCLUDED IN THE CONTRACT UNIT PRICE OF THE RELEVANT STORM SEWER PAY ITEM.
- EXCAVATION AND BACKFILL WITH SELECT GRADING MATERIAL ARE NOT TABULATED SEPARATELY BUT ARE INCLUDED IN THE CONTRACT UNIT PRICE OF THE RELEVANT STORM SEWER PAY ITEM.
- RIGID PIPE INCLUDES CONCRETE FLEXIBLE PIPE INCLUDES METAL AND PLASTIC MATERIALS SUCH AS CORRUGATED POLYPROPYLENE (PP), CORRUGATED POLYETHYLENE (CP) AND POLYVINYL CHLORIDE (PVC).
- ① MODIFY TRENCH WIDTH & SLOPE AS NECESSARY TO COMPLY WITH OSHA REQUIREMENTS.

CERTIFIED BY DESIGNED PROFESSIONAL ENGINEER NAME: BRIAN K. POGODZINSKI	DATE DATE: 11/19/22	SHEET NO. 35 OF 37 SHEETS

STORM SEWER PROFILE

